



# Schoolcraft College®

## FY 2024 FIVE-YEAR CAPITAL OUTLAY PLAN

### I. MISSION STATEMENT

Schoolcraft is a comprehensive, open door, community-based College. The mission of the College is to provide a transformational learning experience designed to increase the capacity of individuals and groups to achieve intellectual, social, and economic goals.

**The Vision:** The College wishes to be a first-choice provider of educational services, a competent organization, functioning with integrity, behaving strategically, and providing value beyond expectations.

#### College Values:

- We recognize the students are our reason for existence and that student success is paramount to our mission.
- We pledge to follow ethical practices in the classroom, boardroom, business operations, and all other areas of the College.
- We value diversity in our students, staff, and programming.
- We are committed to having a positive intellectual, social, and economic impact on the communities we serve.
- We strive to achieve leadership in academics, management practices, employee relations, and institutional innovation.
- We strive to maintain a supportive, cordial, and aesthetically pleasing environment for our students, staff, and community.
- We encourage lifelong learning for our students and staff by providing the most current programs, utilizing the most effective instructional delivery methods.
- We believe that higher education should be accessible to the greatest number of our constituents.

### II. INSTRUCTIONAL PROGRAMMING

- a) ***Description of various existing academic programs and projected programming changes during the next five (5) years, as far as academic programs are affected by specific structural considerations (i.e., laboratories, classrooms, current and future distance learning initiatives, etc.).***

#### Traditional Classrooms and Labs

Schoolcraft College offers certificate and associate degree programs in career areas such as Nursing, Culinary Arts, Computer Information Systems, Public Safety/Homeland Security, and Business. Student majors are roughly 47% career and 53% transfer.<sup>1</sup> Schoolcraft College also offers a Bachelor of Science Degree in Culinary and Dietary Operations Management. In addition, the College offers nine major areas of study that include Arts, Humanities and Communications, Business and Information Technology, Culinary Arts, Brewing & Distillation Technology, Education, Healthcare and Health Sciences, Manufacturing and Technology, Natural Sciences, Public Safety, and Social Sciences. The programs and their courses are

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<sup>1</sup> From Total Pre-Programs, Skills, Career and Post-Certificate Enrollment and Transfer Programs tables, later in this report

offered at three locations: Main Campus, the Manufacturing Engineering Center, and the Public Safety Training Complex, all located in Livonia, Michigan.

For Fall 2022, Schoolcraft College has 7,964<sup>2</sup> credit students enrolled with 67%<sup>3</sup> seats filled.

Fall 2022 classes began August 29. As of September 22, 2022, the number of late starting classes were as follows:<sup>4</sup>

| Modality                       | # Late Starting 12-week classes | # Late Starting 7-week classes |
|--------------------------------|---------------------------------|--------------------------------|
| Traditional and Hybrid Classes | 75                              | 27                             |
| Online Classes                 | 130                             | 35                             |
| Remote Synchronous Classes     | 9                               | 2                              |

Enrollment is monitored daily from the first day of registration through the last day to enroll for the second 7-week courses to identify trends and courses filling early and/or throughout the registration process. Just-in-time courses are added to the current offerings, when possible, to meet the needs of students. For Fall 2022, 44 additional courses were offered after registration began.<sup>5</sup>

The new Health Sciences Center (HS) is a 35,000 sq. ft. expansion and 30,000 sq. ft. renovation of our existing Applied Sciences building. In addition to the programs originally housed in the Applied Sciences building, the additional space has provided us the opportunity to centralize all our Health Professions programs, including existing and new programs. The health professions programs that are now held at the Health Sciences Center include Computed Tomography, Diagnostic Medical Sonography, Emergency Medical Technology/Paramedic, Health Information Technology, Health Coding/Specialist, Magnetic Resonance Imaging, Mammography, Medical Assisting, Nursing, Radiologic Technology, Sterile Processing, Surgical Technology and Pharmacy Technician. Schoolcraft College is a Michigan Department of Community Health approved sponsor for EMT programs, enabling the College to increase college credit offerings and provide continuing education courses. Additionally, the Pharmacy Technician program has earned expanded recognition by the Pharmacy Technician Certification Board (PTCB) as a Compounded Sterile Preparation Technician (CSPT) Advanced-level program.<sup>6</sup>

## Distance Learning

Schoolcraft College actively supports flexible deliveries of instruction that meet the needs of a diverse student population. In addition to traditional classroom delivery, the College offers online, hybrid (a combination of face-to-face and online), and remote synchronous modalities. The College offers variable length (e.g., 5, 7, 12, and 15-week) courses. Accelerated courses have created a demand for flexible scheduling and more course options.

In Fall 2022, over 7,860 seats were filled in online courses. This semester offered 124 unique online courses comprising 366 sections.<sup>7</sup> We attribute this small decline in online seats from the previous year due to previous years' numbers being skewed due to students choosing online options during the elevated levels of COVID infections.

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<sup>2</sup> SC Reports: Student Profile Report, Fall 2022, as of 09/22/2022

<sup>3</sup> YRAC: Last page of Fall 2022 report, exclude Grants, include everything else

<sup>4</sup> Informer, Summary of Classes: Fall 2022, Active Sections, excludes MCO.

<sup>5</sup> M:\Group\Instructional Operations\Just-In-Time Schedule Building\JIT Documentation\2022, Count of Fall JIT

<sup>6</sup> Dr. Robert Leadley, Dean of Occupational Programs & Economic Development, David Kesler, D.C., Assoc. Dean, Health Professions

<sup>7</sup> Lori M. Timmis, Dean of Distance Learning & Faculty Development (*source: 2022/04 SC. DL. COUNT (Y082) Report, Duplicated Count; STIS 3.21 (Credit Class by Term and Modality) Fall 2022, Distance Learning*)

In Fall 2022, the College offered 14 hybrid courses comprising 27 sections. Remote synchronous courses were first offered in Fall of 2020 in response to Covid-19. In Fall 2022, the College offered 36 remote synchronous courses comprising 55 sections.<sup>8</sup>

***b) Identify unique characteristics of each institution's academic mission: (i.e., two-year degree and certificated technical/vocational training; workforce development training activities; adult education focus; continuing or lifelong educational programming; partnerships with intermediate school district(s), community activities; geographic service delivery area(s), articulation agreements or partnerships with four-year institutions, etc.).***

Schoolcraft College is a two-year community college offering one bachelor's degree and a variety of associate degrees and certificates, as well as skill-specific certifications. For the 2021/2022 academic year, there were 13,431 credit students who attended the College and 9,340<sup>9</sup> students who were registered for continuing education, professional development, or adult education programs. The Business Development Center (BDC) has been in existence since 1985 and through its Procurement Technical Assistance Center (PTAC), it has been one of the largest contributors for new government contracts awarded to Michigan businesses with over \$2.8 billion infused into the local economy. Since 2011, the Center has also helped small businesses obtain over \$83 million in financing and has helped launch over 108 small businesses. In 2021, the Center also provided training to 1,168 workers (duplicated) in technical and professional areas to enhance their skills on the job.<sup>10</sup>

Schoolcraft College has also coordinated efforts with the Michigan Works! Agency to deliver many “boot camps” to prepare unemployed and under-employed citizens quickly and successfully for jobs in machining and welding.

Schoolcraft College offers educational programs leading directly to third party certifications in areas such as Welding (American Welding Society), Machining (National Institute for Metalworking Skills), Mechatronics (Smart Automation Certification Alliance) and Computer Information Systems (Cisco Academy). Other programs provide education and training to prepare for third party certification in areas such as Nursing (NCLEX), Criminal Justice (MCOLES), and EMT/Paramedic. Schoolcraft continues to create new programs to meet the needs of the local economy. For example, Schoolcraft recently initiated programs in Mechatronics, Plastic Technology, Computer Cybersecurity, and Networking. An innovative program to certify individuals for K-12 teaching in Michigan (Alternative Route to Teacher Certification) has experienced continual increases in enrollment throughout the state and is being modified to meet the new state standards.

The College's official geographic boundaries consist of several Michigan school districts: Livonia, Plymouth-Canton, Northville, Garden City, and Clarenceville. The College has three locations in Livonia.

The College maintains articulation agreements and partnerships with many Michigan universities and the K-12 districts within and near the College's district boundaries. In partnership with Michigan universities, Schoolcraft has more than 60 articulation agreements with 17 colleges, universities, and technical institutions. Several of the articulation agreements are generous plans that allow students to complete up to 90 credits at the community college and the final 30 credits at a university, resulting in great monetary savings for students, as well as transferring very well-prepared students who can complete their bachelor's degree. The College has 34 articulation agreements with eleven career technical centers or secondary schools for 40 Schoolcraft College courses. These agreements provide students college credit for entry-level courses in career

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<sup>8</sup> Informer: Summary of Classes, 2022/04, Credit Students, Location = Hybrid and RMT

<sup>9</sup> SC RS: STIS.3.11 – (State Report 1) Reporting Year: 2021, PPL and Credit by Academic Year

<sup>10</sup> Tammy Thomson, Director of Business & Community Services

pathways such as computer graphics technology, culinary arts, engineering technology, criminal justice, or welding. The College will continue to build partnerships with area high schools and four-year universities to create pathways for students to progress seamlessly toward a certificate or degree leading to employment or higher education credentials.<sup>11</sup>

In addition to traditional articulations with colleges, universities, and technical institutions, the College has four articulations created in partnership with the Medical Education Training Center (METC) in Texas. These articulations provide military personnel (and traditional students) college credit for prior learning toward credentials in Health Information Technology at the associate degree level, Pharmacy Technician at certificate levels, and the newly approved Health Professions Management associate option for Pharmacy Technicians. This articulation opportunity not only honors prior training and learning, but also provides great monetary and time savings for students.

**c) Identify other initiatives which may impact facilities usage.**

Opened in Fall 2020, Schoolcraft College's new Manufacturing & Engineering Center (MEC) is a 48,000 sq. ft. state-of-the-art facility that more than doubles the previous space that was on our main campus. Faculty in these programs are industry experts, facilitating an interactive, hands-on learning experience and preparing students for the workplace. MEC is in Livonia, only minutes away from the Main Campus. This location increases opportunities for dual enrollment/middle college, apprenticeship training, and non-credit training for businesses, university partnerships, and workforce development such as boot camps. As we look to increase opportunities for learning in the automotive electronics industry, we will need to consider reconfiguring existing space and add equipment to provide the necessary new courses.

Healthcare simulation technology facilities are available and impact facility use by making possible the development of cross-discipline activities between Nursing, Emergency Medical Technology, and Allied Health programs. Our enrollment growth in these areas has increased demand for student use on this simulation lab. In addition, the growing partnerships fostered between the College and local hospitals and healthcare professionals wishing to make use of the Health Professions Simulation Lab expose our students to encounters with industry professionals.

The Public Safety Training Complex (PSTC) is home to state-of-the-art law enforcement training facilities and simulators. The complex is equipped with many unique features, including a maze room, configurable to different room layouts to practice standoff and rescue techniques; a 4,500 square foot training room, allowing students to practice entering dark homes with hazards; a gun range with total blackout capability; a FATS system (FireArms Training Simulator), which allows for a wide variety of scenarios to be programmed for de-escalation and 360-degree awareness training; an 11-acre driving facility; and a 4-story fire tower that can produce fire at several hundred degrees and simulate high-angle rescues. Several areas, state, and national agencies frequently use the PSTC for continued skills training. Additionally, we have dual enrollment opportunities in some of our programs at PSTC.

**d) *Demonstration of economic development impact of current and future programs (i.e., technical training centers, life science corridor initiatives, etc.).***

Having a trained workforce is critical to the economic development of Michigan. Businesses choose to locate and expand in areas where there is a pool of people with the needed job skills, and where communities are safe and supportive of business. Schoolcraft, through its Business Development Center, Procurement Technical Assistance Center, and Workforce Training Solutions, helps entrepreneurs as well as established businesses grow their markets, secure new funds, and train their workforce. For several years the College has offered a "Small Business for Entrepreneurs Associate Degree" and a "One-Year Certificate."

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<sup>11</sup> Rachael Szymanski, Advising - Transfer Coordinator

Schoolcraft College offers many career and technical programs for students seeking an education and the skills to enter the job market or to advance their current careers. The College's career programs are based on students' interests and community employment needs. Advisory Boards for each career and technical education area are composed of industry leaders and professionals. Advisory board input is critical to the continued improvement of career programs and preparation of our students for their occupations. Competencies and program outcomes incorporated into occupational programs prepare students to enter challenging specialized careers after two years of college or less. Instructors emphasize job-specific knowledge, and students can pursue most programs full- or part-time. Schoolcraft tracks job placement in high demand, high skill, and high wage employment to ensure students find jobs.

Current programs, certificates, and courses are continually reviewed and updated for modernization and continuous quality improvement as well as to meet changing business and industry requirements. Job market sites, business needs, assessment surveys, advisory committee input, and Department of Labor job forecasting help Schoolcraft stay current with job market demands and provide valuable information/data to drive program initiation and revision. Newly developed environmental scans produced by the College's Research and Analytics department have provided a wealth of information about the prospects and outlook for viability of new educational programs based on reliable data. Enrollment trends are evaluated on a semester-by-semester basis to determine student interest and are reviewed for program expansion or contraction.

To increase access for all students to career and technical education programs, many of the courses in these programs are offered through the College's various modalities such as online, remote, and hybrid, as well as traditional classrooms. For students balancing work, life, and an education, the availability of flexible scheduling affords them the opportunity to complete their education.

The College's Business Development Center and Personal and Professional Learning (PPL) department, offer classes aimed at preparing people for the workplace and building career and technical skills. This includes certificate programs, such as digital sculpting, program management, and computer classes geared toward workplace applications. Additionally, courses in specific content areas such as accounting, event planning, and nursing continuing education are offered through PPL. Still more credit and non-credit programs have been submitted to the state for approval for funding through the Michigan Works! agencies. A growing partnership with the surrounding K-12 districts has resulted in additional course offerings in teacher professional development and certification.

With health care emerging as Michigan's number one private employer, Schoolcraft had added numerous new programs: Computed Tomography, Diagnostic Medical Sonography, Magnetic Resonance Imaging, Mammography, Occupational Therapy Assistant, Radiologic Technology, Surgical Technology, and Sterile Processing. These added to our existing offerings that we continue to grow including Phlebotomy, Medical Assisting, Medical Billing, Health Information Technology and Coding Specialist, Nursing Assistant Training, Biomedical Engineering Technology, Pharmacy Technician, Movement Science, Emergency Medical Services, and the Nursing Career Ladder Curriculum program.

National employment forecasts through 2031 project employment requiring an associate degree will increase by 8.8%, compared to 2.9% for a high school diploma or equivalent, 6.7% for postsecondary non-degree awards, 8.2% for a bachelor's degree, and 13.6% for a master's degree. The highest growth "hot" occupations (favorable mix of projected long-term job growth, projected annual job openings, and median wages) in Southeast Michigan through 2028 that require an associate's degree or vocational training include Electricians, Carpenters, Heavy and Tractor-Trailer Truck Drivers, Sales Representatives, Police Officers, Paralegals and Legal Assistants, Plumbers, Pipefitters and Steamfitters, Industrial Machinery Mechanics and Engineering Technicians, HVAC and Refrigeration Mechanics and Installers, Bus and Truck Mechanical and Diesel Engine Specialists, Millwrights, Licensed Practical and Licensed Vocational Nurses, Physical Therapy Assistants, Diagnostic Medical Sonographers,

Schoolcraft College actively participates with several Economic Development organizations including:<sup>13</sup>

- Advance Michigan Center for Apprenticeship Innovation (AMCAI)
- Ann Arbor Spark
- Ann Arbor/Ypsilanti Regional Chamber
- Association of Procurement Technical Assistance Centers (APTAC)
- Association of Small Business Development Centers (ASBDC)
- Automation Alley
- Canton Chamber of Commerce
- Detroit Regional Chamber of Commerce
- Garden City Business Alliance
- HR Manufacturing Roundtable Plymouth
- I-275 Industrial Council
- Learning Resources Network (LERN)
- Livonia Chamber of Commerce
- Michigan Alliance for Greater Mobility Advancement (MAGMA)
- Michigan Association of Continuing Education and Training (MACET)
- Michigan Chamber of Commerce
- Michigan College Access Network (MCAN)
- Michigan Department of Licensing and Regulatory Affairs (LARA)
- Michigan Department of Labor and Economic Opportunity (LEO)
- Michigan Economic Developers Association (MEDA)
- Michigan Economic Development Corporation (MEDC)
- Michigan Educational Apprenticeship Training Association (MEATA)
- Michigan Energy Workforce Development Consortium (MEWDC)
- Michigan International Technology Center (MITC)
- Michigan Manufacturing Technology Center (MMTC)
- Michigan Small Business Development Center (MI-SBDC)
- Michigan Workforce Development Agency
- Midwest Higher Education Compact (MHEC)
- National Center for Women & Information Technology (NCWIT)
- National Contract Management Association (NCMA)
- National Council for Continuing Education and Training (NCCET)
- National Defense Industrial Association (NDIA)
- Northville Chamber of Commerce
- Novi Chamber of Commerce
- Novi Economic Development
- Plymouth Chamber of Commerce
- Procurement Technical Assistance Centers (PTACs) of Michigan
- Small Business Association of Michigan (SBAM)
- Southeast Michigan Community Alliance (SEMCA)
- Southeast Michigan Council of Governments (SEMCOG)
- Health Care Alliance of Southeast Michigan (HCA)
- US Department of Labor

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<sup>12</sup> Michelle Stando, Director of Research and Analytics, <https://www.bls.gov/emp/tables/education-summary.htm>  
[https://www.milmi.org/docs/publications/CareerOutlook2028/Region10\\_CareerOutlook\\_2028.pdf](https://www.milmi.org/docs/publications/CareerOutlook2028/Region10_CareerOutlook_2028.pdf),  
U:\Institutional Research\Marketing Research\Labor Market Information\Hot50Jobs\_Statewide\_Through2028.pdf

<sup>13</sup> Gerald Champagne, Assoc. Dean Public Safety; Amy Jones, Assoc. Dean Occupational Programs; Tammy Thomson, Dir. Business Development; Dr. Robert Leadley, Dean of Occupational Programs & Economic Development; David Kesler, D.C., Assoc. Dean, Health Professions

- Wayne County Economic Development Corporation (WCEDC)
- Westland Chamber of Commerce
- Workforce Intelligence Network for Southeast Michigan (WIN)

### III. STAFFING AND ENROLLMENT

- a) ***Describe current full- and part-time student enrollment levels by academic program and define how the programs are accessed by the student (i.e., main or satellite campus instruction, collaboration efforts with other institutions, internet, or distance learning, etc.).***

Enrollment for Fall 2022 late-starting classes continues through November 1, 2022.<sup>14</sup> As of September 22, enrollment for Fall 2022 had reached 7,964.<sup>15</sup> For the full 2021/2022 academic year, Schoolcraft College had 13,431<sup>16</sup> credit students enrolled. As of Fall 2022, 68% of Schoolcraft College's credit students attend on a part-time basis (less than 12 credit hours) and 32% attend on a full-time basis (12 credit hours or more); 48% of Schoolcraft College's credit students reside within our college district and 52% reside outside of the College's district (including international students).<sup>17</sup>

In addition to credit students, Schoolcraft College has a large base of students in Personal and Professional Learning (PPL) formerly known as Continuing Education & Personal Development, enrolling 9,340<sup>18</sup> students during the same academic year. PPL non-credit courses include contracted training, certification programs, professional development, and personal development.

Our credit student population can be defined by attendance type as follows:<sup>19</sup>

| Student Attendance by Type                                   | Number of Students |
|--|--------------------|
| Day Only   | 1,459              |
| Evening Only   | 767                |
| Distance Learning (Online) Only                              | 2,081              |
| Distributed Learning (Hybrid) Only                           | 233                |
| Combination (traditional, online, day, evening, and weekend) | 3,424              |

As shown in the following charts, 49% of Schoolcraft College's credit students are enrolled in transfer programs. Another 32% are enrolled in associate or certificate career programs, and 19% are enrolled in special programs such as post-certificate programs, skills certificate programs, and pre-programs (completing course requirements for admissions into Associate Degree programs).

The five largest populated career programs are Criminal Justice, Business, Nursing, Culinary Arts, and Marketing. Some programs limit their enrollment based upon available resources (space, staffing, clinical sites, etc.), such as Culinary Arts, Nursing, Criminal Justice, and several new health professions programs such as Surgical Technology.

Students can gain access to academic programs through multiple venues. In addition to our main campus in Livonia, the Public Safety Training Complex, located in Livonia, houses the Wayne

<sup>14</sup> Important Dates Fall 2022, Last Day for Schedule Adjustment/Refund, 2<sup>nd</sup> 7-week classes

<sup>15</sup> SC RS: Student Profile Report, 2022/04

<sup>16</sup> SC RS: STIS.3.11 – (State Report 1) Reporting Year: 2021, PPL and Credit by Academic Year

<sup>17</sup> SC RS: Student Profile Report, 2022/04

<sup>18</sup> SC RS: STIS.3.11 – (State Report 1) Reporting Year: 2021, PPL and Credit by Academic Year

<sup>19</sup> SC RS: Student Profile Report, 2022/04

County Regional Police Training Academy, Schoolcraft Fire Academy, Fire Technology, Homeland Security, and Criminal Justice programs. Schoolcraft College's new Manufacturing & Engineering Center (MEC), also located in Livonia, houses engineering and technology programs such as Mechatronics Technology, Robotics, Computer Aided Design (CAD), Manufacturing, and Welding, to name a few. Students can also access programs through a combination of traditional, hybrid, remote, and online courses.

Currently active sections available for Fall 2022 comprise 812 traditional sections, 18 independent learning, 55 remote synchronous sections, 28 hybrid sections, and 338 online sections.<sup>20</sup> Distance learning delivery (i.e., online format) has experienced the fastest growth over the last year, increasing the number of sections by 19%.

### Enrollment in Fall 2022 by Program Majors and Full-time/Part-time

For the charts below, enrollment is divided into part-time students (less than 12 credit hours), full-time students (12 or more credit hours), and others (18 or more credit hours).

#### Pre-Programs<sup>21</sup>

| Code                  | Program Name  | Full-time | Part-time | Other | Total |
|-----------------------|---|-----------|-----------|-------|-------|
| P000                  | Pre-Nursing (RN)                                    | 126       | 503       | 0     | 629   |
| P017                  | Pre-Nursing PN*                                     | 16        | 46        | 0     | 62    |
| P024                  | Pre-Emergency Medical Technology (1 yr.)            | 1         | 6         | 0     | 7     |
| P026                  | Pre-Medical Assisting Certificate                   | 6         | 8         | 0     | 14    |
| P079                  | Pre-Culinary Arts (1 yr.) *                         | 1         | 7         | 0     | 8     |
| P087                  | Pre-Culinary Arts (AAS)*                            | 9         | 23        | 0     | 32    |
| P128                  | Pre-Biomedical Engineering Technology               | 5         | 9         | 0     | 14    |
| P153                  | Pre-Health Info Tech                                | 5         | 28        | 0     | 33    |
| P216                  | Pre-Occupational Therapy Assistant                  | 1         | 2         | 0     | 3     |
| P234                  | Pre-Pharmacy Technician Certificate*                | 0         | 1         | 0     | 1     |
| P240                  | Pre-Health Coding Specialist                        | 2         | 6         | 0     | 8     |
| P247                  | Pre-Culinary Baking and Pastry Arts                 | 2         | 3         | 0     | 5     |
| P249                  | Pre-Pharmacy One-Year Certificate                   | 1         | 5         | 0     | 6     |
| P250                  | Pre-Emergency Medical Technology                    | 5         | 2         | 1     | 8     |
| P281                  | Pre-Diagnostic Medical Sonography                   | 28        | 93        | 0     | 121   |
| P283                  | Pre-Radiology Technology                            | 9         | 43        | 0     | 52    |
| P286                  | Pre-Surgical Technology**                           | 1         | 6         | 0     | 7     |
| P397                  | Pre-Culinary & Dietary Operations Mgmt BS           | 0         | 3         | 1     | 4     |
| P398                  | Pre-Professional Culinary Arts Skills Certificate** | 0         | 1         | 0     | 1     |
| P399                  | Pre-Professional Culinary Arts Certificate**        | 2         | 4         | 0     | 6     |
| P400                  | Pre-Professional Culinary Arts Degree**             | 9         | 25        | 0     | 34    |
| Pre-Programs Totals   |   | 229       | 824       | 2     | 1,055 |
| % Of Total Enrollment |   | 3%        | 10%       | 0.03% | 13%   |

\*Program Inactive, \*\*New Program

#### Skills Programs: Certificates<sup>22</sup>

| Code | Program Name                    | Full-time | Part-time | Other | Total |
|------|---------------------------------|-----------|-----------|-------|-------|
| 238  | CAD Mechanical Design           | 0         | 3         | 0     | 3     |
| 271  | Engineering Technology          | 3         | 1         | 0     | 4     |
| 285  | Sterile Processing**            | 0         | 2         | 0     | 2     |
| 290  | Real Estate Property Management | 0         | 1         | 0     | 1     |

<sup>20</sup> Informer: Summary of Classes, 2022/04, TR, Active Sections, excludes VLC

<sup>21</sup> SC RS: Enrollment by Program, 2022/04 as of 9/26/2022

<sup>22</sup> SC RS: Enrollment by Program, 2022/04 as of 09/26/2022

|                                       |   |      |       |    |       |
|---------------------------------------|---|------|-------|----|-------|
| 315                                   | Child Development Associate                     | 0    | 8     | 0  | 8     |
| 316                                   | Autism Education Skills Certificate             | 0    | 1     | 0  | 1     |
| 320                                   | Electronic Technology                           | 0    | 1     | 0  | 1     |
| 321                                   | Nursing Assistant                               | 2    | 2     | 0  | 4     |
| 324                                   | Emergency Medical Technology                    | 3    | 8     | 0  | 11    |
| 325                                   | Phlebotomy                                      | 1    | 7     | 0  | 8     |
| 328                                   | Information Technology                          | 1    | 6     | 0  | 7     |
| 337                                   | Advanced Manufacturing                          | 0    | 4     | 0  | 4     |
| 340                                   | Plastic Technology                              | 1    | 1     | 0  | 2     |
| 345                                   | Music Keys for Piano Teacher                    | 0    | 3     | 0  | 3     |
| 349                                   | Pharmacy Technician Certificate                 | 1    | 0     | 0  | 1     |
| 350                                   | Medical Biller/Receptionist                     | 0    | 8     | 0  | 8     |
| 364                                   | Computer Graphics Technology                    | 7    | 7     | 0  | 14    |
| 365                                   | Accounting for Small Business                   | 0    | 13    | 0  | 13    |
| 366                                   | Application Developer                           | 4    | 8     | 0  | 12    |
| 398                                   | Professional Culinary Arts Skills Certificate** | 0    | 1     | 0  | 1     |
| Total (Skills Programs: Certificates) |   | 23   | 85    | 0  | 108   |
| % Of Total Enrollment                 |   | .29% | 1.07% | 0% | 1.36% |

\*\*New Program

### Career Programs: One-Year Certificates<sup>23</sup>

| Code | Program Name                        | Full-time | Part- time | Other | Total |
|------|-------------------------------------|-----------|------------|-------|-------|
| 001  | Accounting                          | 2         | 13         | 0     | 15    |
| 002  | Basic Business                      | 11        | 23         | 0     | 34    |
| 004  | Programming                         | 1         | 11         | 0     | 12    |
| 017  | Practical Nursing                   | 1         | 7          | 0     | 8     |
| 024  | Emergency Medical Technology        | 1         | 10         | 2     | 13    |
| 026  | Medical Assisting                   | 1         | 14         | 0     | 15    |
| 031  | Early Childhood Education           | 2         | 17         | 0     | 19    |
| 032  | Special Needs Para Educator         | 0         | 1          | 0     | 1     |
| 079  | Culinary Arts                       | 0         | 1          | 0     | 1     |
| 084  | Brewing and Distillation Technology | 1         | 16         | 0     | 17    |
| 115  | Piano Teacher                       | 0         | 1          | 0     | 1     |
| 125  | Electronic Technology               | 0         | 5          | 0     | 5     |
| 127  | Welding Fabrication                 | 7         | 23         | 0     | 30    |
| 129  | Welding Pre-Apprenticeship          | 2         | 15         | 0     | 17    |
| 131  | Web and Interactive Media           | 0         | 2          | 0     | 2     |
| 132  | 3D and Video Graphics               | 1         | 1          | 0     | 2     |
| 136  | Computer Graphics Technology        | 1         | 8          | 0     | 9     |
| 144  | Sound Recording Technology          | 3         | 9          | 0     | 12    |
| 149  | Fire Fighter Technology             | 3         | 9          | 6     | 18    |
| 170  | Elementary Education                | 0         | 13         | 0     | 13    |
| 171  | Secondary Education                 | 0         | 20         | 0     | 20    |
| 213  | Small Business for Entrepreneurs    | 3         | 10         | 1     | 14    |
| 214  | Movement Science                    | 1         | 1          | 0     | 2     |
| 223  | Mechatronics Technology             | 0         | 1          | 0     | 1     |
| 225  | Mechatronics                        | 0         | 3          | 0     | 3     |
| 230  | Computer Systems Support            | 0         | 6          | 1     | 7     |
| 231  | Networking Specialist               | 0         | 2          | 0     | 2     |
| 232  | Cybersecurity                       | 5         | 6          | 0     | 11    |
| 237  | Advanced Manufacturing              | 0         | 6          | 0     | 6     |
| 240  | Health Coding Specialist            | 0         | 16         | 0     | 16    |
| 241  | Web Specialist                      | 0         | 1          | 0     | 1     |
| 242  | Business Information Technology     | 2         | 7          | 0     | 9     |

<sup>23</sup> SC RS: Enrollment by Program, 2022/04 as of 09/26/2022

|   |  |       |       |       |       |
|---|--|-------|-------|-------|-------|
| 247   | Culinary Baking & Pastry Arts            | 12    | 4     | 10    | 26    |
| 248   | CAD Mechanical Design                    | 3     | 6     | 0     | 9     |
| 249   | Pharmacy Technician Certificate          | 3     | 3     | 0     | 6     |
| 270   | Networking Technology Integration*       | 0     | 2     | 0     | 2     |
| 272   | Engineering Technology                   | 3     | 3     | 0     | 6     |
| 276   | Environmental Science Technician         | 0     | 4     | 0     | 4     |
| 291   | Real Estate Property Management          | 0     | 1     | 0     | 1     |
| 339   | Supply Chain Management                  | 0     | 1     | 0     | 1     |
| 346   | Music Entrepreneurship                   | 0     | 2     | 0     | 2     |
| 399   | Professional Culinary Arts Certificate** | 0     | 5     | 0     | 5     |
| Totals (Career Programs: One-Year Certificates) |  | 71    | 310   | 20    | 401   |
| % Of Total Enrollment                           |  | 0.89% | 3.89% | 0.25% | 5.04% |

\* Program Inactive, \*\*New Program

#### Career Programs: Associate and Bachelor's Degree<sup>24</sup>

| Code | Program Name   | Full-time | Part- time | Other | Total |
|------|--|-----------|------------|-------|-------|
| 000  | Registered Nursing                                       | 5         | 352        | 0     | 357   |
| 005  | Accounting   | 32        | 73         | 0     | 105   |
| 007  | Networking Specialist                                    | 6         | 9          | 0     | 15    |
| 008  | General Business   | 80        | 94         | 1     | 175   |
| 009  | Marketing & Applied Management                           | 21        | 32         | 1     | 54    |
| 010  | Cosmetology Management                                   | 6         | 13         | 0     | 19    |
| 011  | Small Business Entrepreneur                              | 21        | 36         | 0     | 57    |
| 012  | Programming  | 54        | 66         | 0     | 120   |
| 014  | Computer Systems Support                                 | 5         | 24         | 0     | 29    |
| 020  | Early Childhood Education                                | 24        | 65         | 0     | 89    |
| 021  | Special Needs Para Educator                              | 2         | 10         | 0     | 12    |
| 028  | Computer Graphics Technology                             | 14        | 24         | 0     | 38    |
| 031  | Web and Interactive Media                                | 4         | 7          | 0     | 11    |
| 032  | 3D and Video Graphics                                    | 9         | 20         | 0     | 29    |
| 041  | Broadcast Communications                                 | 1         | 5          | 0     | 6     |
| 066  | Cybersecurity  | 55        | 49         | 0     | 104   |
| 068  | Special Study - Career                                   | 7         | 42         | 0     | 49    |
| 082  | Welding Fabrication Technology                           | 22        | 29         | 0     | 51    |
| 086  | Criminal Justice   | 75        | 97         | 28    | 200   |
| 087  | Culinary Arts  | 2         | 15         | 0     | 17    |
| 120  | Electronics Technology                                   | 11        | 20         | 0     | 31    |
| 128  | Biomedical Engineering Technology                        | 1         | 8          | 0     | 9     |
| 135  | Advanced Manufacturing                                   | 5         | 20         | 0     | 25    |
| 153  | Health Information Technology                            | 1         | 19         | 0     | 20    |
| 170  | Computer Aided Mechanical Design                         | 0         | 1          | 0     | 1     |
| 176  | Environmental Studies                                    | 7         | 14         | 0     | 21    |
| 177  | Fire Technology  | 9         | 17         | 7     | 33    |
| 184  | Metallurgy and Materials Science                         | 1         | 7          | 0     | 8     |
| 217  | Fire and Emergency Services                              | 1         | 3          | 3     | 7     |
| 220  | Plastics Technology                                      | 0         | 1          | 0     | 1     |
| 224  | Mechatronics**   | 2         | 3          | 0     | 5     |
| 226  | Mechatronics   | 5         | 12         | 0     | 17    |
| 229  | Health Professionals Management for Pharmacy Technicians | 2         | 1          | 1     | 4     |
| 244  | Sound Recording Technology                               | 16        | 19         | 0     | 35    |
| 250  | Emergency Medical Technology                             | 3         | 11         | 0     | 14    |
| 252  | Homeland Security  | 5         | 4          | 1     | 10    |
| 258  | CAD Mechanical Design                                    | 9         | 14         | 0     | 23    |
| 273  | Engineering Technology                                   | 16        | 15         | 0     | 31    |

<sup>24</sup> SC RS: Enrollment by Program, 2022/04 as of 09/26/2022

|   |   |     |       |    |       |
|---|---|-----|-------|----|-------|
| 275   | Web Specialist                                | 0   | 2     | 0  | 2     |
| 277   | Business Information Technology               | 20  | 31    | 0  | 51    |
| 281   | Diagnostic Medical Sonography                 | 16  | 0     | 0  | 16    |
| 283   | Radiologic Technology                         | 9   | 0     | 0  | 9     |
| 284   | Movement Science                              | 19  | 21    | 0  | 40    |
| 292   | Real Estate Property Management               | 8   | 14    | 0  | 22    |
| 341   | Supply Chain Management                       | 13  | 20    | 0  | 33    |
| 347   | Music Entrepreneurship                        | 4   | 4     | 0  | 8     |
| 397   | B.S. Culinary & Dietary Operations Management | 3   | 2     | 0  | 5     |
| 400   | Professional Culinary Arts**                  | 45  | 66    | 0  | 111   |
| Totals (Career Programs: Associate/Bachelor's degree) |   | 676 | 1,411 | 42 | 2,129 |
| % Of Total Enrollment                                 |   | 8%  | 18%   | 1% | 27%   |

\*\*New Program

#### Career Programs: Total Bachelor's Degree, Associate Degree, and One-Year Certificate<sup>25</sup>

|                       | Full-time | Part-time | Other | Total |
|-----------------------|-----------|-----------|-------|-------|
| Enrollment            | 747       | 1,721     | 62    | 2,530 |
| % Of Total Enrollment | 9%        | 22%       | 1%    | 32%   |

#### Career Programs: Post-Certificates<sup>26</sup>

| Code  | Program Name                 | Full-time | Part-time | Other | Total |
|---|------------------------------|-----------|-----------|-------|-------|
| 155   | Computer Information Systems | 1         | 0         | 0     | 1     |
| Totals (Career Programs: Post-Certificates) |                              | 1         | 0         | 0     | 1     |
| % Of Total Enrollment                       |                              | 0.01%     | 0         | 0     | 0.01% |

#### Career Programs: Total Pre-Programs, Skills, and Post-Certificate Enrollment<sup>27</sup>

|                       | Full-time | Part-time | Other | Total |
|-----------------------|-----------|-----------|-------|-------|
| Enrollment            | 253       | 909       | 2     | 1,164 |
| % Of Total Enrollment | 3%        | 11%       | 0.03% | 15%   |

#### Transfer Programs<sup>28</sup>

| Code                       | Program Name                         | Full-time | Part-time | Other | Total |
|----------------------------|--------------------------------------|-----------|-----------|-------|-------|
| 039                        | Associate in Engineering             | 113       | 107       | 0     | 220   |
| 042                        | Associate in Arts                    | 133       | 235       | 1     | 369   |
| 042                        | Associate In General Studies         | 572       | 819       | 6     | 1397  |
| 042                        | Associate in Science                 | 187       | 246       | 0     | 433   |
| 167                        | Guest Transfer                       | 58        | 387       | 2     | 447   |
| 268                        | Dual Enrollment                      | 25        | 413       | 1     | 439   |
| 368                        | Early College                        | 0         | 36        | 0     | 36    |
| 401                        | Associate in Business Administration | 294       | 296       | 1     | 591   |
| 402                        | Associate in Fine Arts               | 13        | 34        | 0     | 47    |
| 403                        | Pre-Pharmacy Associate Degree        | 3         | 6         | 0     | 9     |
| 600                        | Health Transfer*                     | 1         | 1         | 0     | 2     |
| 700                        | Education Transfer                   | 13        | 25        | 0     | 38    |
| 900                        | Non-Degree Seeking                   | 29        | 151       | 4     | 184   |
| Totals (Transfer Programs) |                                      | 1,441     | 2,756     | 15    | 4,212 |
| % Of Total Enrollment      |                                      | 18%       | 35%       | 0.2%  | 53%   |

\* Program Inactive

<sup>25</sup> SC RS: Enrollment by Program, 2022/04 as of 09/26/2022

<sup>26</sup> SC RS: Enrollment by Program, 2022/04 as of 09/26/2022

<sup>27</sup> SC RS: Enrollment by Program, 2022/04 as of 09/26/2022

<sup>28</sup> SC RS: Enrollment by Program, 2022/04 as of 09/26/2022

## Total Enrollment for Certificates, Associate Degrees, and Transfer<sup>29</sup>

|                                  | Full-time | Part-time | Other | Total |
|----------------------------------|-----------|-----------|-------|-------|
| Pre-Programs                     | 229       | 824       | 2     | 1055  |
| Skills Certificates              | 23        | 85        | 0     | 108   |
| One-Year Certificates            | 71        | 310       | 20    | 401   |
| Associate and Bachelor's Degrees | 676       | 1411      | 42    | 2129  |
| Post-Associate Certificates      | 1         | 0         | 0     | 1     |
| Transfer                         | 1441      | 2756      | 15    | 4212  |
| Totals                           | 2442      | 5386      | 79    | 7906  |
| % Of Total Enrollment            | 31%       | 68%       | 1%    |       |

NOTE: This report reflects students enrolled in more than one major.

### ***b) Projected enrollment pattern for the next five (5) years (includes distance-learning initiatives).***

The following chart shows annual unduplicated student credit enrollments and the projections for the next five years.

| Academic Year   | Credit Enrollment    |
|---|----------------------|
| 2012-2013   | 20,411               |
| 2013-2014   | 19,419               |
| 2014-2015   | 18,966               |
| 2015-2016   | 18,181               |
| 2016-2017   | 20,765               |
| 2017-2018   | 17,066               |
| 2018-2019   | 16,531               |
| 2019-2020   | 15,685               |
| 2020-2021   | 14,070               |
| 2021-2022   | 13,431 <sup>30</sup> |
| 2022-2023*  | 13,275 <sup>31</sup> |
| 2023-2024   | 12,515               |
| 2024-2025   | 11,756               |
| 2025-2026   | 10,996               |
| 2026-2027   | 10,237               |
| *2022-2023 data not yet available<br>Average 4% decline |                      |

*Italics = forecast based on past enrollment*

### **Distance Learning Courses: Current Enrollment/Future Growth**

The growth of distance learning courses (i.e., online, hybrid, and remote synchronous) continues to increase over the past several years. Students have and continue to seek distance-learning modalities to accommodate their varied schedules.

| Students Enrolled Exclusively In: <sup>32</sup> | Fall 2022 |
|---|-----------|
| Online Courses                                  | 2,252     |

### ***c) Evaluate enrollment patterns over the last five years.***

The table below provides the headcount for each Fall Semester for the past five years taken at

<sup>29</sup> Consists of the total lines from the category tables above

<sup>30</sup> SC RS: STIS.3.11 – (State Report 1) Reporting Year: 2021, PPL and Credit by Academic Year

<sup>31</sup> FORECAST.LINEAR(2023,20,411;13,431;2013:2022)

<sup>32</sup> Lori M. Timmis, Dean of Distance Learning (Online courses: Source: 2022/04 SC. DL. COUNT (Y082) Report, Students and Guest Students)

the end of the late registration/schedule adjustment period (Fall 2022 as of 09/27/2022).<sup>33</sup>

|                       | 2022  | 2021  | 2020  | 2019  | 2018   |
|-----------------------|-------|-------|-------|-------|--------|
| <b>Fall Headcount</b> | 7,909 | 8,656 | 8,402 | 9,867 | 10,135 |

**d) Provide instructional staff/student and administrative staff/student ratios for major academic programs or colleges.**

For the 2021/2022 academic year, the student (13,431)<sup>34</sup> to instructional staff (441) ratio was 30:1. Instructional staff includes both full-time and part-time faculty members. The ratio for students to administrative staff (67) was 200:1. Administrative staff includes executives and administrators.<sup>35</sup>

**e) Project future staffing needs based on 5-year enrollment estimates and future programming changes.**

The following chart shows annual staffing figures (includes both full-time and part-time employees for Fall 2020) and the projections for the next five years.

| Year      | Staffing (FT & PT) |
|-----------|--------------------|
| 2012-2013 | 854                |
| 2013-2014 | 841                |
| 2014-2015 | 845                |
| 2015-2016 | 832                |
| 2016-2017 | 830                |
| 2017-2018 | 802                |
| 2018-2019 | 827                |
| 2019-2020 | 818                |
| 2020-2021 | 754                |
| 2021-2022 | 756 <sup>36</sup>  |
| 2022-2023 | 760                |
| 2023-2024 | 750                |
| 2024-2025 | 740                |
| 2025-2026 | 729                |
| 2026-2027 | 719                |

*\*Italics = Linear Forecast, Average 1% decline<sup>37</sup>*

**f) Identify current average class size and projected average class size based on the institution's mission and planned programming changes.**

In general, class size has been a result of negotiated contracts between the College and faculty union. While the previous contracts allowed for a degree of flexibility, no major modifications occurred in the 31:1 maximum class size ratio. Section size may vary depending on room capacity and may be discipline specific. For example, the Computer Information Systems class sizes are determined by computer workstations in the lab, with a seat count in most of these courses ranging from 20-24 seats.

The average class size for 2021 was 17 students per course and included enrollment in

<sup>33</sup> STIS 3.11 Credit Classes by Term as of 09/27/2022

<sup>34</sup> SC RS: STIS.3.11 – (State Report 1) Reporting Year: 2021, PPL and Credit by Academic Year

<sup>35</sup> SC Staffing Summary Report, Fall 2021 as of 09/27/2022

<sup>36</sup> SC Staffing Summary Report, Fall 2021 as of 09/27/2022

<sup>37</sup> SC Staffing Summary Report, Fall 2021 as of 09/27/2022

#### IV. Facility Assessment

- a) *Summary description of each facility according to categories outlined in “net-to-gross ratio guidelines for various building types,” DMB-Office of Design and Construction Major Project Design Manual, appendix 7. If a facility is of more than one “type,” please identify the percentage of each type within a given facility.*

See Exhibit A.

- b) *Building and/or classroom utilization rates to industry standards.*

##### Room Utilization Methodology

Like many colleges, our goal is to deliver quality instruction while keeping the safety of our students and staff a top priority. Because of this, Schoolcraft College offers a variety of course formats. For Fall 2022, 66% are offered face-to-face, 27% of classes are offered online, and 6% are offered in either a hybrid or remote synchronous format.<sup>39</sup>

During a normal semester, the heaviest demand by students for classes falls into two categories: Daytime - Monday through Thursday, 7:00 a.m. – 2:00 p.m., Evenings - Monday through Thursday, 6:00 p.m. – 10:00 p.m. However, we have reported room utilization in this section of the capital outlay as follows:

- Peak Monday through Friday 10:00 a.m. – 3:00 p.m.
- Off Peak Monday through Friday 7:00 a.m. – 10:00 a.m.
- Off Peak Monday through Friday 3:00 p.m. – 5:00 p.m.
- Evening Monday through Thursday 5:00 p.m. – 10:00 p.m.
- Weekends Friday 5:00 p.m. – 10:00 p.m.
- Saturday & Sunday 8:00 a.m. – 10:00 p.m.

#### Main Campus Fall Semester 2022 Facility Usage<sup>40</sup>

| Building/Room Type                      | Peak     | Off Peak |         | Evening  | Weekend  |          |
|---|----------|----------|---------|----------|----------|----------|
|   | M-F      | M-F      | M-F     | M-Th     | F        | Sa/Sun   |
|   | 10am-3pm | 7am-10am | 3pm-5pm | 5pm-10pm | 5pm-10pm | 7am-10am |
| <b>Classrooms</b>                       |          |          |         |          |          |          |
| Biomedical Technology Center Classrooms | 56%      | 35%      | 49%     | 51%      | 100%     | 100%     |
| Bradner Library Classrooms              | 37%      | 11%      | 23%     | 12%      | 0%       | 1%       |
| Elite Sport Center Classrooms           | 48%      | 7%       | 9%      | 0%       | 6%       | 17%      |
| Forum Classrooms                        | 38%      | 34%      | 29%     | 37%      | 28%      | 37%      |
| Health Sciences Classrooms              | 29%      | 17%      | 14%     | 28%      | 24%      | 2%       |
| Jeffress Center Classrooms              | 21%      | 22%      | 4%      | 10%      | 4%       | 5%       |
| Liberal Arts Classrooms                 | 42%      | 21%      | 26%     | 26%      | 3%       | 19%      |
| McDowell Center Classrooms              | 28%      | 17%      | 24%     | 16%      | 0%       | 0%       |
| Physical Education Classrooms           | 11%      | 0%       | 27%     | 24%      | 0%       | 6%       |
| VisTaTech Center Classrooms             | 45%      | 48%      | 58%     | 59%      | 46%      | 39%      |

<sup>38</sup> SC Reports: STIS 3.21 Credit Classes by Term, 2021/03 – 2022/02, (Total Amount of Students / Number of Sections), Active Sections Only, exclude sections with 0 enrollment, include primary section only for COMBO sections.

<sup>39</sup> Informer: Summary of Classes, 2022/04, exclude VLC - as of 09/27/2022

<sup>40</sup> EMS Room Utilization Report – Fall 2022

| Labs                                       |      |      |      |      |      |      |
|--|------|------|------|------|------|------|
| Biomedical Technology Center Labs***       | 30%  | 24%  | 33%  | 15%  | 16%  | 1%   |
| Elite Sport Center Labs***                 | 11%  | 0%   | 0%   | 0%   | 0%   | 0%   |
| Forum Labs***                              | 35%  | 29%  | 36%  | 33%  | 35%  | 6%   |
| Health Sciences Labs***                    | 36%  | 21%  | 23%  | 16%  | 55%  | 25%  |
| Jeffress Center Labs***                    | 23%  | 4%   | 34%  | 35%  | 37%  | 9%   |
| Liberal Arts Labs - Theater ****           | 15%  | 0%   | 18%  | 32%  | 0%   | 0%   |
| McDowell Center Labs **                    | 38%  | 22%  | 27%  | 0%   | 0%   | 0%   |
| Physical Education Labs                    | 41%  | 20%  | 37%  | 45%  | 69%  | 22%  |
| VisTaTech Center Labs ***                  | 48%  | 61%  | 42%  | 24%  | 15%  | 11%  |
| Computer Labs**                            |      |      |      |      |      |      |
| Biomedical Technology Center Computer Labs | 100% | 100% | 100% | 100% | 100% | 100% |
| Forum Computer Labs                        | 100% | 100% | 100% | 100% | 100% | 100% |
| Jeffress Center Computer Labs              | 100% | 100% | 100% | 100% | 100% | 100% |
| Health Sciences Computer Labs              | 100% | 100% | 100% | 100% | 100% | 100% |
| Liberal Arts Computer Labs                 | 100% | 100% | 100% | 100% | 100% | 100% |
| McDowell Center Computer Labs              | 100% | 100% | 100% | 100% | 100% | 100% |
| VisTaTech Center Computer Labs             | 100% | 100% | 100% | 100% | 100% | 100% |

\*\*When not scheduled for classes, computer labs are open for faculty to work with students from 8:00AM to 10:00PM, as such, shown as having 100% utilization.

\*\*\*These are very specialized labs that are only open when a class is being held or an instructor is present in the lab because of the equipment present.

\*\*\*\*Theater is used for performances, plays, stage set-up, rehearsals, etc. when not scheduled for classes.

## Manufacturing & Engineering Center - Fall Semester 2022 Facility Usage<sup>41</sup>

| Building/Room Type                              | Peak     | Off Peak |         | Evening  | Weekend  |          |
|---|----------|----------|---------|----------|----------|----------|
|   | M-F      | M-F      | M-F     | M-Th     | F        | Sa/Sun   |
|   | 10am-3pm | 7am-10am | 3pm-5pm | 5pm-10pm | 5pm-10pm | 7am-10am |
| Classrooms                                      |          |          |         |          |          |          |
| Manufacturing & Engineering Center Classrooms   | 24%      | 8%       | 22%     | 25%      | 57%      | 10%      |
| Labs  |          |          |         |          |          |          |
| Manufacturing & Engineering Center Labs***      | 13%      | 4%       | 18%     | 20%      | 14%      | 7%       |
| Computer Labs**                                 |          |          |         |          |          |          |
| Manufacturing & Engineering Center Computer Lab | 100%     | 100%     | 100%    | 100%     | 100%     | 100%     |

\*\*When not scheduled for classes, computer labs are open for faculty to work with students from 8:00AM to 10:00PM, as such, shown as having 100% utilization.

\*\*\*These are very specialized labs that are only open when a class is being held or an instructor is present in the lab because of the equipment present.

## Public Safety Training Complex Fall Semester 2021 Facility Usage<sup>42</sup>

| Building/Room Type                | Peak     | Off Peak |         | Evening  | Weekend  |          |
|-----------------------------------|----------|----------|---------|----------|----------|----------|
|                                   | M-F      | M-F      | M-F     | M-Th     | F        | Sa/Sun   |
|                                   | 10am-3pm | 7am-10am | 3pm-5pm | 5pm-10pm | 5pm-10pm | 7am-10am |
| Classrooms                        |          |          |         |          |          |          |
| Academy Training Center Classroom | 63%      | 53%      | 60%     | 21%      | 5%       | 18%      |

<sup>41</sup> EMS Room Utilization Report – Fall 2022

<sup>42</sup> EMS Room Utilization Report – Fall 2022

|  |      |      |      |      |      |      |
|--|------|------|------|------|------|------|
| Firearms Training Center Classrooms    | 38%  | 13%  | 36%  | 29%  | 0%   | 7%   |
| <b>Labs</b>                            |      |      |      |      |      |      |
| Academy Training Center Labs           | 55%  | 42%  | 53%  | 19%  | 6%   | 33%  |
| Firearms Training Center Labs          | 29%  | 23%  | 11%  | 1%   | 0%   | 9%   |
| <b>Computer Labs**</b>                 |      |      |      |      |      |      |
| Firearms Training Center Computer Labs | 100% | 100% | 100% | 100% | 100% | 100% |

\*\*When not scheduled for classes, computer labs are open for faculty to work with students from 8:00AM to 10:00PM, as such, shown as having 100% utilization.

### Fall 2022 - Classroom and Lab Usage - All Campus Buildings<sup>43</sup>

| Building/Room Type                       | Peak     | Off Peak |         | Evening  | Weekend  |          |
|--|----------|----------|---------|----------|----------|----------|
|  | M-F      | M-F      | M-F     | M-Th     | F        | Sa/Sun   |
|  | 10am-3pm | 7am-10am | 3pm-5pm | 5pm-10pm | 5pm-10pm | 7am-10am |
| <b>Classrooms</b>                        |          |          |         |          |          |          |
| Total classroom hours for all Buildings  | 14,450   | 4,815    | 4,028   | 8,352    | 545      | 5,204    |
| Total Utilization Rate for all Buildings | 39%      | 24%      | 29%     | 30%      | 32%      | 20%      |
| <b>Labs</b>                              |          |          |         |          |          |          |
| Total lab hours for all Buildings        | 23,200   | 3,203    | 2,595   | 4,264    | 518      | 1,388    |
| Total Utilization Rate for all Buildings | 33%      | 27%      | 31%     | 25%      | 27%      | 11%      |

**c) Mandated facility standards for specific programs, where applicable.**

Many of our programs require specialized classrooms/labs such as Welding, Robotics, Plastic Technology, Manufacturing, Metallurgy, Nursing, Recording Technology, Pharmacy Technician, Medical Imaging, Police and Fire Academies, EMT, and Medical Assisting.

**d) Functionality of existing structures and space allocation to program areas served.**

See Renovation Priorities and Major Maintenance Priorities (under Section V, part b) and Exhibit A.

**e) Replacement value of existing facilities (insured value of structures to the extent available).**

Annually R.A. Schettler, Inc., an independent certified appraisal service, establishes the replacement value of the College's buildings. The most recently completed version was on October 1, 2022, and the summation is included in Exhibit B.

**f) Utility system condition.**

See Exhibit A.

**g) Facility infrastructure condition.**

See Exhibit A.

**h) Adequacy of existing utilities and infrastructure systems to current and 5-year projected programmatic needs.**

The IT (Information Technology) Infrastructure project is complete. Expansion of the wireless system is ongoing. Utilities and other infrastructure systems will need to be extended to

<sup>43</sup> EMS Room Utilization Report – Fall 2022

incorporate additional parking and buildings anticipated over the next five years.

- i) ***Does the institution have an enterprise-wide energy plan? What are its goals? Have energy audits been completed on all facilities, if not, what is the plan/timetable for completing such audits?***

The College has a written 5-year Energy Plan with the goals of providing energy savings and associated cost avoidance. We are constantly evaluating and updating campus systems.

- j) ***Land owned by the institution; include a determination of whether capacity exists for future development, if additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose.***

The College has performed a long-range master planning exercise identifying several building sites on the main campus.

- k) ***What portions of existing buildings, if any, are currently obligated to the State Building Authority and when are these State Building Authority leases set to expire.***

The Business and Industry Training Center and Waterman Campus Center Expansion (VisTaTech) is leased to the State. The Technical Services Facility (Biomedical Technology Center) is leased to the State and will expire approximately November 1, 2043.

## V. IMPLEMENTATION PLAN

- a) ***Prioritize major capital projects requested from the State, including a brief project description and estimated cost, in the format provided.***

The College was approved and is presently working on a capital outlay project for our Applied Sciences building to become a Health Science Center.

- b) ***Define the impact of addressing deferred maintenance and structural repairs, including programmatic impact, immediately versus over the next five years.***

Exhibit A outlines the total deferred maintenance backlog of the College by building showing the costs of doing the repairs immediately and the additional cost that is accrued the longer the repairs are deferred. This information is taken from our 10-year Deferred Maintenance plan that has been created by Schoolcraft with the help of an outside architectural firm and is maintained by Schoolcraft's Department of Construction and Design.

Continuing to defer the maintenance needed in these buildings limits the opportunities that Schoolcraft can offer to its students. With limited lab and classroom space for particular programs, wait lists must be created instead of allowing more students into the in-demand programs. Additionally, some of the classrooms need an update in technology to bring the classrooms to current Schoolcraft standards.

### Major Maintenance (2021 - 2025)

| Year 2021                                      |    |            |
|--|----|------------|
| Secondary Electrical Replacement Phase 1 (WCC) | \$ | 200,000.00 |
| PE Roof Replacement - NE Mechanical            | \$ | 107,000.00 |
| Replace Forum Entry/Ramp Tile                  | \$ | 25,000.00  |
| Service Building Windows                       | \$ | 65,000.00  |
| Replace LA Interior Doors and Hardware         | \$ | 100,000.00 |
| Parking Lot Sealcoating                        | \$ | 50,000.00  |
| Campus Sidewalk Replacements                   | \$ | 30,000.00  |

|                   |    |            |
|-------------------|----|------------|
| <b>Year Total</b> | \$ | 577,000.00 |
|-------------------|----|------------|

|  |    |            |
|--|----|------------|
| <b>Year 2022</b>                         |    |            |
| Waterman Wing Roof Replacement           | \$ | 75,000.00  |
| Rebuild Parking Lot - Main Campus Center | \$ | 300,000.00 |
| Water Main Replacements                  | \$ | 150,000.00 |
| Secondary Electrical Phase 2 (A/F)       | \$ | 150,000.00 |
| Campus Sidewalk Replacements             | \$ | 30,000.00  |
| Parking Lot Sealcoating                  | \$ | 50,000.00  |
| <b>Year Total</b>                        | \$ | 755,000.00 |

|   |    |              |
|---|----|--------------|
| <b>Year 2023</b>                        |    |              |
| Fascia Replacement (SB/WCC)             | \$ | 100,000.00   |
| Secondary Electrical Phase 3            | \$ | 250,000.00   |
| Secondary Electrical Subpanels          | \$ | 250,000.00   |
| Rebuild Parking Lot - Main Campus South | \$ | 1,500,000.00 |
| Parking Lot Sealcoating                 | \$ | 60,000.00    |
| Campus Sidewalk Replacements            | \$ | 60,000.00    |
| <b>Year Total</b>                       | \$ | 2,220,000.00 |

|  |    |            |
|--|----|------------|
| <b>Year 2024</b>                                     |    |            |
| PE North Roof Replacements - Pool/NE Mechanical Room | \$ | 220,000.00 |
| Service Building Roof Replacement                    | \$ | 115,000.00 |
| Grote Flat Roof & Fascia Replacement                 | \$ | 55,000.00  |
| <b>Year Total</b>                                    | \$ | 390,000.00 |

|   |    |              |
|---|----|--------------|
| <b>Year 2025</b>                        |    |              |
| Rebuild Parking Lot - Main Campus North | \$ | 1,250,400.00 |
| <b>Year Total</b>                       | \$ | 1,250,400.00 |

## Renovation Priorities (2021 - 2025)

|   |    |               |
|---|----|---------------|
| <b>Year 2021</b>  |    |               |
| Capital Outlay - Forum Science and Humanities Renovation & Addition | \$ | 22,500,000.00 |
| <b>Year Total</b>   | \$ | 22,500,000.00 |

|   |    |              |
|---|----|--------------|
| <b>Year 2022</b>                        |    |              |
| Liberal Arts Classroom Renovations (20) | \$ | 1,400,000.00 |
| Computer Room Upgrades - Phase 2        | \$ | 200,000.00   |
| <b>Year Total</b>                       | \$ | 1,600,000.00 |

|  |    |              |
|--|----|--------------|
| <b>Year 2023</b>                                 |    |              |
| FTC and ATC Parking Lot Replacements             | \$ | 750,000.00   |
| Renovate DDC (Duplication/Design Center)         | \$ | 100,000.00   |
| Waterman Student Activities - Phase 3 Renovation | \$ | 500,000.00   |
| Renovate 4 BTC Classrooms                        | \$ | 240,000.00   |
| <b>Year Total</b>                                | \$ | 1,590,000.00 |

| Year 2024                  |           |                   |
|----------------------------|-----------|-------------------|
| Waterman Wing Atrium       | \$        | 250,000.00        |
| Renovate Campus Classrooms | \$        | 600,000.00        |
| <b>Year Total</b>          | <b>\$</b> | <b>850,000.00</b> |

| Year 2025                             |           |                     |
|---------------------------------------|-----------|---------------------|
| BTC Simulation Upgrade                | \$        | 850,000.00          |
| Expand Cold Storage and Add Utilities | \$        | 150,000.00          |
| Renovate Campus Classrooms            | \$        | 600,000.00          |
| <b>Year Total</b>                     | <b>\$</b> | <b>1,600,000.00</b> |

- c) Include the status of on-going projects financed with State Building Authority resources and explain how completion coincides with the overall 5-year plan.***

We are at the 600 phase of our currently approved Capital Outlay project.

- d) Identify, to the extent possible, a rate of return on planned expenditures.***

Not applicable.

- c) Where applicable, consider alternatives to new infrastructure, such as distance learning.***

We currently offer a wide variety of online and hybrid courses. We are planning to launch a new remote synchronous modality in Spring 2023 to address consumer interest.


- f) Identify a maintenance schedule for major maintenance items in excess of \$1,000,000 for fiscal year 2021 through fiscal year 2025.***

See Major Maintenance Priorities and Renovation Priorities (under section V, part b).

## EXHIBIT A

## SCHOOLCRAFT COLLEGE; ACADEMY TRAINING CENTER - SCHEDULED MAINTENANCE PROGRAM

|  |  |                    |                     |      |           |
|--|--|--------------------|---------------------|------|-----------|
| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: |  |                    |                     | 2013 |           |
| BUILDING SECTION (BUILDING TYPE)           |  | BUILDING AGE (YRS) | BUILDING AREA (GSF) |      |           |
| ACADEMY TRAINING CENTER (CLASSROOM)        |  | 1988               | 23,063              |      |           |
|  |  |                    |                     |      |           |
|  |  |                    |                     |      |           |
|  |  |                    |                     |      |           |
| YEAR: 2023                                 |  |                    |                     |      |           |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:    |  |                    |                     | \$   | 35,388    |
| REPLACEMENT VALUE FOR THE BUILDING:        |  |                    |                     | \$   | 6,268,800 |
| FACILITY CONDITION INDEX (FCI):            |  |                    |                     | 1%   |           |



Schoolcraft  
College

| FCI          | BUILDING CONDITION |
|--------------|--------------------|
| FCI < 5%     | GOOD               |
| 5%< FCI< 10% | FAIR               |
| 10% < FCI    | POOR               |

| ITEM NO. CODES                |  |
|-------------------------------|--|
| AI: ACCESSIBILITY IMPROVEMENT |  |
| BE: BUILDING EXTERIOR         |  |
| BI: BUILDING INTERIOR         |  |
| BS: BUILDING SYSTEM           |  |
| ES: ELECTRICAL SYSTEM         |  |
| MS: MECHANICAL SYSTEM         |  |
| PS: PLUMBING SYSTEM           |  |
| SG: SITE GROUNDS              |  |
| SE: SPECIALTY EQUIPMENT       |  |

| LEGEND                     |  |
|----------------------------|--|
| AVG: AVERAGE               |  |
| CF: CUBIC FEET             |  |
| CY: CUBIC YARDS            |  |
| EA: EACH                   |  |
| EUL: ESTIMATED USEFUL LIFE |  |
| GSF: GROSS SQUARE FEET     |  |
| LOC: LOCATION (SITE/BLDG)  |  |
| PV: PRESENT VALUE          |  |
| RUL: ESTIMATED USEFUL LIFE |  |
| SF: SQUARE FEET            |  |
| SY: SQUARE YARDS           |  |
| YRS: YEARS                 |  |

REMAINING USEFUL LIFE (RUL) BAROMETER

RUL = 1 YEAR OR LESS

RUL = 5 YEARS

RUL = 10 YEARS OR GREATER

| SCHEDULED MAINTENANCE PLAN YEAR                         |          |   |   |                                |                     |            |               |                   |                |                |                 |           |           |           |           |           |        |    |        |    |        |
|---|----------|---|---|--------------------------------|---------------------|------------|---------------|-------------------|----------------|----------------|-----------------|-----------|-----------|-----------|-----------|-----------|--------|----|--------|----|--------|
| LOC   | ITEM NO. | ITEM  | FICM CODE   | YEAR ITEM WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | ITEM RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | 6 2019    | 7 2020    | 8 2021    | 9 2022    | 10 2023   |        |    |        |    |        |
| BUILDING ENVELOPE (includes items exterior to building) |          |   |   |                                |                     |            |               |                   |                |                |                 | \$        | 3,426     | \$        | 3,487     | \$        | 3,550  | \$ | 3,614  | \$ | 3,679  |
| ATC-  | BE001    | ROOF REPLACEMENT.   | MMM16   | 2012                           | --                  | --         | 25            | 1                 | 24             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | BE002    | STEEL LINTEL MAINTENANCE.   | MMM16   | 1988                           | 110                 | LF         | 15            | 25                | -10            | \$10.80        | \$ 1,188        | \$ 1,322  | \$ 1,346  | \$ 1,370  | \$ 1,395  | \$ 1,420  |        |    |        |    |        |
| ATC-  | BE003    | OVERHEAD DOOR SEAL REPAIRS. COMPLETED                               | 780   | 2018                           | 1                   | LS         | 15            | 0                 | 15             | \$0.00         | \$ -            | \$ -      | \$ -      | \$ -      | \$ -      | \$ -      |        |    |        |    |        |
| ATC-  | BE004    | CONCRETE WALK REPLACEMENTS  | SSS18   | 1988                           | 200                 | SF         | 25            | 25                | 0              | \$9.45         | \$ 1,890        | \$ 2,104  | \$ 2,141  | \$ 2,180  | \$ 2,219  | \$ 2,259  |        |    |        |    |        |
| BUILDING INTERIOR                                       |          |   |   |                                |                     |            |               |                   |                |                |                 | \$        | -         | \$        | -         | \$        | -      | \$ | -      | \$ | -      |
| ATC-  | BI001    | WALL FINISH UPDATES - ALLOWANCE.                                    | 110, 310, 550, 555, 590, W05, W06 AND X03   | VARIOUS                        | --                  | --         | --            | --                | --             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | BI002    | FLOOR FINISH UPDATES - ALLOWANCE.                                   | 110, 310, 550, 555, 590, W05, W06 AND X03 TRAINING ROOM / 2018 - PULASTIC TRAINING ROOM FLOOR RECOATED. | VARIOUS                        | --                  | --         | --            | --                | --             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |          |   |   |                                |                     |            |               |                   |                |                |                 | \$        | -         | \$        | -         | \$        | -      | \$ | -      | \$ | -      |
| ATC-  | PS001    | DOMESTIC HOT WATER RETURN CIRCULATING PUMP MAINTENANCE/REPLACEMENT. | UUU24   | 2012                           | --                  | --         | 20            | 1                 | 19             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | PS002    | PLUMBING FIXTURE REPLACEMENTS.                                      | UUU24   | 2012                           | --                  | --         | 20            | 1                 | 19             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | PS003    | DOMESTIC HOT WATER HEATER REPLACEMENT.                              | UUU24   | 2012                           | --                  | --         | 10            | 1                 | 9              | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |          |   |   |                                |                     |            |               |                   |                |                |                 | \$        | 29,525    | \$        | 30,057    | \$        | 30,598 | \$ | 31,149 | \$ | 31,709 |
| ATC-  | MS001    | RAPID AIR HANDLING UNIT REPLACEMENT.                                | UUU25   | 2012                           | --                  | --         | 20            | 1                 | 19             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS002    | VAV/CAV BOX MAINTENANCE/REPLACEMENTS.                               | UUU25   | 2012                           | --                  | --         | 20            | 1                 | 19             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS003    | EXHAUST AIR FAN MAINTENANCE/REPLACEMENT.                            | UUU25   | 2012                           | --                  | --         | 20            | 1                 | 19             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS004    | PACKAGED SMALL ROOFTOP AIR HANDLING UNIT REPLACEMENTS.              | UUU25   | 2012                           | --                  | --         | 20            | 1                 | 19             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS005    | CABINET UNIT HEATER REPLACEMENT.                                    | UUU25   | 2010                           | --                  | --         | 20            | 3                 | 17             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS006    | SPLIT-SYSTEM DX A/C UNIT REPLACEMENT.                               | UUU25   | 2010                           | --                  | --         | 15            | 3                 | 12             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS007    | REFRIGERANT CONDENSING UNIT REPLACEMENT.                            | UUU25   | 2010                           | --                  | --         | 15            | 3                 | 12             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS008    | AIR COMPRESSOR MAINTENANCE/REPLACEMENT.                             | UUU25   | 2010                           | --                  | --         | 20            | 3                 | 17             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS009    | MAIN JCI ROOFTOP UNIT.  | UUU25   | 2010                           | --                  | --         | 20            | 3                 | 17             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS010    | MAIN JCI ROOFTOP UNIT CONDENSER.                                    | UUU25   | 2010                           | --                  | --         | 20            | 3                 | 17             | \$0.00         | --              |           |           |           |           |           |        |    |        |    |        |
| ATC-  | MS011    | DUCT CLEANING.  | UUU25   | 2010                           | 23,068              | SF         | 10            | 3                 | 7              | \$1.15         | \$ 26,528       | \$ 29,525 | \$ 30,057 | \$ 30,598 | \$ 31,149 | \$ 31,709 |        |    |        |    |        |



# SCHOOLCRAFT COLLEGE; ACADEMY TRAINING CENTER - SCHEDULED MAINTENANCE PROGRAM

| ITEM   |       | FICM   | YEAR ITEM       | ITEM TOTAL | ITEM  | TIME  |        |       | ITEM | SCHEDULED MAINTENANCE PLAN YEAR |           |           |           |           |           |   |      |   |
|--|-------|--|-----------------|------------|-------|-------|--------|-------|------|---------------------------------|-----------|-----------|-----------|-----------|-----------|---|------|---|
| LOC  | NO.   |  | WAS PUT         |            |       | EUL   | IN USE | RUL   | UNIT | ITEM                            | 6         | 7         | 8         | 9         | 10        |   |      |   |
|  |       | CODE   | INTO SERVICE    | QUANTITY   | UNITS | (YRS) | (YRS)  | (YRS) | COST | FIRST COST                      | 2019      | 2020      | 2021      | 2022      | 2023      |   |      |   |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope)    |       |  |                 |            |       |       |        |       |      |                                 | \$ -      | -         | \$ -      | -         | \$ -      | - | \$ - | - |
| ATC-   | ES001 | BUILDING SERVICE TRANSFORMER (OWNED BY DTE).           | UUU04           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES002 | MAIN SWITCHBOARD.                                      | UUU05           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES003 | STANDBY GENERATOR.                                     | UUU25           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES004 | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).           | UUU25           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES005 | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS). | UUU25           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES006 | ELECTRICAL DISTRIBUTION EQUIPMENT.                     | UUU05           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES007 | VARIABLE FREQUENCY DRIVE (VFD).                        | UUU25           | 2012       | --    | --    | 15     | 1     | 14   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES008 | LIGHTING AND RECEPTACLE PANELBOARDS.                   | UUU05           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES009 | EXTERIOR BUILDING MOUNTED LIGHTING.                    | UUU25           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES010 | EXIT LIGHTING.   | U06             | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES011 | CORRIDOR LIGHTING.                                     | W06             | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES012 | CLASSROOM LIGHTING                                     | 100             | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES013 | OFFICE LIGHTING.                                       | 300             | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES014 | GARAGE LIGHTING.                                       | 740             | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES015 | PARKING LOT LIGHTING.                                  | UUU10 AND UUU11 | 2010       | --    | --    | 30     | 3     | 27   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES016 | STORAGE AND UTILITY ROOM LIGHTING.                     | X01 AND Y04     | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES017 | VACANCY SENSOR LIGHTING CONTROLS (CLASSROOMS).         | 110 AND 210     | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | ES018 | VACANCY SENSOR LIGHTING CONTROLS (CORRIDORS)           | W05 AND W06     | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |       |  |                 |            |       |       |        |       |      |                                 | \$ -      | -         | \$ -      | -         | \$ -      | - | \$ - | - |
| ATC-   | BS001 | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.              | UUU07           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | BS002 | FIRE ALARM DEVICES.                                    | UUU07           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | BS003 | BOILER EPO SYSTEM.                                     | Y04             | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | BS004 | PRIMAX CLOCK SYSTEM.                                   | UUU25           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | BS005 | SECURITY SURVEILLANCE SYSTEM.                          | UUU14           | 2010       | --    | --    | 20     | 3     | 17   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | BS006 | SECURITY ACCESS SYSTEM. COMPLETED 2021.                | UUU14           | 2021       | --    | --    | 20     | 0     | 20   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ATC-   | BS007 | IT SYSTEMS   | UUU02           | 2010       | --    | --    | 20     | --    | --   | \$0.00                          | --        |           |           |           |           |   |      |   |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops)   |       |  |                 |            |       |       |        |       |      |                                 | \$ -      | -         | \$ -      | -         | \$ -      | - | \$ - | - |
| ATC-   | SE001 | POLICE/FIRE TRAINING MAZE MAJOR MAINTENANCE.           | 550             | 2010       | --    | --    | 25     | 3     | 22   | \$0.00                          | --        |           |           |           |           |   |      |   |
| ACCESSIBILITY IMPROVEMENTS                                 |       |  |                 |            |       |       |        |       |      |                                 | \$ -      | -         | \$ -      | -         | \$ -      | - | \$ - | - |
| ATC-   |       | NONE   |                 |            |       |       |        | --    | --   |                                 |           |           |           |           |           |   |      |   |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                     |       |  |                 |            |       |       |        |       |      |                                 | \$ 32,951 | \$ 33,544 | \$ 34,148 | \$ 34,763 | \$ 35,388 |   |      |   |

# SCHOOLCRAFT COLLEGE; BIOTECHNOLOGY CENTER - SCHEDULED MAINTENANCE PROGRAM

| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: |                    | 2013                |
|--|--------------------|---------------------|
| BUILDING SECTION (BUILDING TYPE)           | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
| BIOTECHNOLOGY CENTER (CLASSROOM)           | 2008               | 50,128              |
|  |                    |                     |
|  |                    |                     |
|  |                    | YEAR: 2023          |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:    |                    | \$ 151,146          |
| REPLACEMENT VALUE FOR THE BUILDING:        |                    | \$ 19,787,400       |
| FACILITY CONDITION INDEX (FCI):            |                    | 1%                  |



|                |                    |
|----------------|--------------------|
| FCI            | BUILDING CONDITION |
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

|                     |      |
|---------------------|------|
| INFLATION RATE (%): | 1.8% |
|---------------------|------|

|                               |
|-------------------------------|
| ITEM NO. CODES                |
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

|                            |
|----------------------------|
| LEGEND                     |
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

|                                       |                           |
|---------------------------------------|---------------------------|
| REMAINING USEFUL LIFE (RUL) BAROMETER |                           |
|                                       | RUL = 1 YEAR OR LESS      |
|                                       | RUL = 5 YEARS             |
|                                       | RUL = 10 YEARS OR GREATER |

| ITEM  |       | FICM  | YEAR ITEM                                 | ITEM TOTAL           | ITEM     | AVG   | TIME      |              | ITEM      | DEFERRED MAINTENANCE PLAN YEAR |                 |              |              |              |              |              |    |        |    |        |
|---|-------|---|---|----------------------|----------|-------|-----------|--------------|-----------|--------------------------------|-----------------|--------------|--------------|--------------|--------------|--------------|----|--------|----|--------|
| LOC   | NO.   | ITEM  | CODE                                      | WAS PUT INTO SERVICE | QUANTITY | UNITS | EUL (YRS) | IN USE (YRS) | RUL (YRS) | UNIT COST                      | ITEM FIRST COST | 6 2019       | 7 2020       | 8 2021       | 9 2022       | 10 2023      |    |        |    |        |
| BUILDING ENVELOPE (includes items exterior to building) |       |   |   |                      |          |       |           |              |           |                                | \$              | -            | \$           | -            | \$           | -            | \$ | -      | \$ | -      |
| BTC-  | BE001 | ROOF REPLACEMENT.   | MMM16                                     | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE002 | MASONRY MAINTENANCE.  | MMM16                                     | 2008                 | --       | --    | 50        | 5            | 45        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE003 | EXTERIOR SEALANT MAINTENANCE.   | MMM16                                     | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE004 | WINDOW REPLACEMENTS.  | MMM16                                     | 2008                 | --       | --    | 30        | 5            | 25        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE005 | WEST ENTRY SLIDER DOOR MAINTENANCE/REPLACEMENTS.                                | W06                                       | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE006 | CLERESTORY MAINTENANCE.   | MMM16                                     | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE007 | EAST PATIO MAINTENANCE.   | SSS18                                     | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE008 | BREAKOUT AREA (OUTSIDE OF BTC300) LOUNGE FURNITURE UPDATES/REPAIRS/REPLACEMENTS | 650                                       | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BE009 | CORRECT GRADE DRAINAGE PROBLEM.   | SSS18                                     | 2017                 | 1        | LS    | 20        | 0            | 20        | \$10,000.00                    | \$0             | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |    |        |    |        |
| BTC-  | BE010 | PAVEMENT REPAIRS AT EXTERIOR BREAKOUT AREAS.                                    | SSS18                                     | 2017                 | 25       | SF    | 20        | 0            | 20        | \$300.00                       | \$0             | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |    |        |    |        |
| BUILDING INTERIOR                                       |       |   |   |                      |          |       |           |              |           |                                | \$              | 55,927       | \$           | 56,934       | \$           | 57,959       | \$ | 59,002 | \$ | 60,064 |
| BTC-  | BI001 | LAB STOOL REPLACEMENTS.   | 210                                       | 2008                 | 40       | EA    | 10        | 5            | 5         | \$200.00                       | \$8,000         | \$ 8,903.83  | \$ 9,064.09  | \$ 9,227.25  | \$ 9,393.34  | \$ 9,562.42  |    |        |    |        |
| BTC-  | BI002 | LABORATORY SHEET FLOORING REPLACEMENTS.   | 210 AND 215                               | 2008                 | 2,400    | SF    | 20        | 5            | 15        | \$8.00                         | \$19,200        | \$ 21,369.18 | \$ 21,753.83 | \$ 22,145.40 | \$ 22,544.01 | \$ 22,949.81 |    |        |    |        |
| BTC-  | BI003 | INTERIOR WOOD DOOR ASSESSMENT/MAINTENANCE/REPLACEMENTS.                         | 110, 210, 215, 310 AND 410                | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BI004 | WALL FINISH UPDATES - ALLOWANCE.  | 110, 210, 215, 310, 410, 650, W05 AND W06 | 2008                 | --       | --    | 15        | 5            | 10        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BI005 | FLOOR FINISH UPDATES - ALLOWANCE.   | 110, 210, 215, 310, 410, 650, W05 AND W06 | 2008                 | --       | --    | 15        | 5            | 10        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BI006 | ENTRANCE MAT REPLACEMENT.   | W05 AND W06                               | 2008                 | 1,270    | SF    | 10        | 5            | 5         | \$15.00                        | \$19,050        | \$ 21,202.24 | \$ 21,583.88 | \$ 21,972.39 | \$ 22,367.89 | \$ 22,770.51 |    |        |    |        |
| BTC-  | BI007 | STUDY ROOM GYPSUM BOARD WALL REPAIRS/PROTECTION TO ADDRESS DAMAGE FROM CHAIRS.  | 410                                       | NONE                 | 100      | LF    | 20        | --           | --        | \$40.00                        | \$4,000         | \$ 4,451.91  | \$ 4,532.05  | \$ 4,613.62  | \$ 4,696.67  | \$ 4,781.21  |    |        |    |        |
| BTC-  | BI008 | FURNITURE UPDATES IN VENDING AREA.  | 650                                       | 2008                 | --       | --    | 15        | 5            | 10        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | BI009 | CORRIDOR BENCH REPAIRS/REPLACEMENTS/UPDATES.                                    | W05 AND W06                               | 2008                 | --       | --    | 15        | 5            | 10        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |       |   |   |                      |          |       |           |              |           |                                | \$              | -            | \$           | -            | \$           | -            | \$ | -      | \$ | -      |
| BTC-  | PS001 | DOMESTIC HOT WATER PUMP MAINTENANCE/REPLACEMENT.                                | UUU24                                     | 2008                 | --       | --    | 20        | 5            | 15        | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |
| BTC-  | PS002 | ACID WASTE TANK MAJOR MAINTENANCE.  | 210 AND 215                               | 2008                 | --       | --    | 10        | 5            | 5         | \$0.00                         | --              |              |              |              |              |              |    |        |    |        |

**SCHOOLCRAFT COLLEGE; BIOTECHNOLOGY CENTER - SCHEDULED MAINTENANCE PROGRAM**

| ITEM   |       | FICM CODE  | YEAR ITEM            | ITEM TOTAL | ITEM | AVG TIME |           |              | ITEM UNIT | ITEM        | DEFERRED MAINTENANCE PLAN YEAR |              |              |              |              |              |
|--|-------|--|----------------------|------------|------|----------|-----------|--------------|-----------|-------------|--------------------------------|--------------|--------------|--------------|--------------|--------------|
| LOC  | NO.   |  | WAS PUT INTO SERVICE |            |      | UNITS    | EUL (YRS) | IN USE (YRS) |           |             | RUL (YRS)                      | 6 2019       | 7 2020       | 8 2021       | 9 2022       | 10 2023      |
| MECHANICAL SYSTEMS (may be packaged with BI item scope)    |       |  |                      |            |      |          |           |              |           |             | \$ 3,339                       | \$ 3,399     | \$ 3,460     | \$ 3,523     | \$ 3,586     |              |
| BTC-   | MS001 | WEATHER CAPS ON BOILER STACKS.                                 | UUU22                | 2008       | 2    | EA       | 40        | 5            | 35        | \$1,500.00  | \$3,000                        | \$ 3,338.93  | \$ 3,399.04  | \$ 3,460.22  | \$ 3,522.50  | \$ 3,585.91  |
| BTC-   | MS002 | BOILER REPLACEMENT.  | UUU22                | 2008       | --   | --       | 30        | 5            | 25        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS003 | HEATING HOT WATER PUMP MAINTENANCE/REPLACEMENTS.               | UUU22                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS004 | CHILLED WATER PUMP MAINTENANCE/REPLACEMENTS.                   | UUU20                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS005 | AHU-1 CIRCULATING PUMP MAINTENANCE/REPLACEMENTS.               | Y04                  | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS006 | VF-1 CIRCULATING PUMP MAINTENANCE/REPLACEMENTS.                | Y04                  | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS007 | UNIT HEATER REPLACEMENTS.                                      | Y04                  | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS008 | CHILLER MAINTENANCE/REPLACEMENT/INDOOR UNIT.                   | UUU20                | 2008       | --   | --       | 25        | 5            | 20        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS009 | GENERAL EXHAUST FAN MAINTENANCE/REPLACEMENTS.                  | UUU25                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS010 | LABORATORY EXHAUST FAN MAINTENANCE/REPLACEMENTS.               | 210                  | 2008       | --   | --       | 25        | 5            | 20        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS011 | VAV BOX MAINTENANCE/REPLACEMENTS.                              | UUU25                | VARIOUS    | --   | --       | 20        | --           | --        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS012 | LABORATORY AIRFLOW TERMINAL UNIT MAINTENANCE/REPLACEMENTS.     | 210 AND 215          | 2008       | --   | --       | 25        | 5            | 20        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS013 | AIR-COOLED CONDENSER.  | UUU20                | 2008       | --   | --       | 15        | 5            | 10        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS014 | JCI BAS CONTROLS.  | UUU06                | VARIOUS    | --   | --       | 15        | --           | --        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | MS015 | CLEAN AIR DUCT.  | UUU25                | 2008       | --   | --       | 10        | 5            | 5         | \$0.00      | --                             |              |              |              |              |              |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope)    |       |  |                      |            |      |          |           |              |           |             | \$ 74,013                      | \$ 75,345    | \$ 76,702    | \$ 78,082    | \$ 79,488    |              |
| BTC-   | ES001 | BUILDING SERVICE TRANSFORMER.                                  | UUU04                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES002 | MAIN SWITCHBOARD.  | UUU05                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES003 | STANDBY GENERATOR.   | UUU25                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES004 | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).                   | UUU25                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES005 | STANDBY POWER SYSTEMS ATS.                                     | UUU25                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES006 | ELECTRICAL DISTRIBUTION EQUIPMENT.                             | UUU05                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES007 | VARIABLE FREQUENCY DRIVE (VFD).                                | UUU25                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES008 | LIGHTING AND RECEPTACLE PANELBOARDS.                           | UUU05                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES009 | EXTERIOR BUILDING MOUNTED LIGHTING.                            | UUU25                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES010 | EXIT LIGHTING.   | W05 AND W06          | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES011 | SECONDARY CORRIDOR LIGHTING.                                   | W05 AND W06          | 2008       | 1    | LS       | 20        | 5            | 15        | \$2,500.00  | \$2,500                        | \$ 2,782.45  | \$ 2,832.53  | \$ 2,883.52  | \$ 2,935.42  | \$ 2,988.26  |
| BTC-   | ES012 | MAIN CORRIDOR LIGHTING.  | W05 AND W06          | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | ES013 | CLASSROOMS/MEETING ROOM LIGHTING.                              | 110, 210 AND 680     | 2008       | 1    | LS       | 20        | 5            | 15        | \$5,000.00  | \$5,000                        | \$ 5,564.89  | \$ 5,665.06  | \$ 5,767.03  | \$ 5,870.84  | \$ 5,976.51  |
| BTC-   | ES014 | OFFICE LIGHTING.   | 310                  | 2008       | 1    | LS       | 20        | 5            | 15        | \$2,500.00  | \$2,500                        | \$ 2,782.45  | \$ 2,832.53  | \$ 2,883.52  | \$ 2,935.42  | \$ 2,988.26  |
| BTC-   | ES015 | STORAGE AND UTILITY ROOM LIGHTING.                             | Y04                  | 2008       | 1    | LS       | 20        | 5            | 15        | \$1,500.00  | \$1,500                        | \$ 1,669.47  | \$ 1,699.52  | \$ 1,730.11  | \$ 1,761.25  | \$ 1,792.95  |
| BTC-   | ES016 | VACANCY SENSOR LIGHTING CONTROLS.                              | 110 AND 210          | 2008       | 1    | LS       | 20        | 5            | 15        | \$20,000.00 | \$20,000                       | \$ 22,259.56 | \$ 22,660.24 | \$ 23,068.12 | \$ 23,483.35 | \$ 23,906.05 |
| BTC-   | ES017 | DAYLIGHT SENSORS.  | W06                  | NONE       | 1    | LS       | 20        | --           | --        | \$35,000.00 | \$35,000                       | \$ 38,954.24 | \$ 39,655.41 | \$ 40,369.21 | \$ 41,095.86 | \$ 41,835.58 |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |       |  |                      |            |      |          |           |              |           |             | \$ 6,344                       | \$ 6,458     | \$ 6,574     | \$ 6,693     | \$ 6,813     |              |
| BTC-   | BS001 | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.                      | UUU07                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | BS002 | FIRE ALARM DEVICES.  | UUU07                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | BS003 | BOILER ROOM EPO SYSTEM.  | Y04                  | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | BS004 | PRIMAX CLOCK SYSTEM.   | UUU25                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | BS005 | SECURITY SURVEILLANCE SYSTEM.                                  | UUU14                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | BS006 | SECURITY ACCESS SYSTEM. IMPROVEMENTS WERE MADE IN 2016 & 2019. | UUU14                | 2008       | --   | --       | 20        | 5            | 15        | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | BS007 | IT SYSTEMS.  | UUU02                | 2008       | 14   | EA       | 10        | 5            | 5         | \$300.00    | \$4,200                        | \$ 4,674.51  | \$ 4,758.65  | \$ 4,844.31  | \$ 4,931.50  | \$ 5,020.27  |
| BTC-   | BS008 | IT SYSTEMS.  | UUU02                | 2008       | --   | --       | 10        | 5            | 5         | \$0.00      | --                             |              |              |              |              |              |
| BTC-   | BS009 | IT SYSTEMS.  | UUU02                | 2008       | 5    | EA       | 10        | 5            | 5         | \$300.00    | \$1,500                        | \$ 1,669.47  | \$ 1,699.52  | \$ 1,730.11  | \$ 1,761.25  | \$ 1,792.95  |
| BTC-   | BS010 | IT SYSTEMS.  | UUU02                | 2008       | --   | --       | 10        | 5            | 5         | \$0.00      | --                             |              |              |              |              |              |

# SCHOOLCRAFT COLLEGE; BIOTECHNOLOGY CENTER - SCHEDULED MAINTENANCE PROGRAM

|  |          | YEAR ITEM |   |                     | AVG TIME   |           |              | ITEM      |           | DEFERRED MAINTENANCE PLAN YEAR |            |            |             |             |             |
|--|----------|-----------|---|---------------------|------------|-----------|--------------|-----------|-----------|--------------------------------|------------|------------|-------------|-------------|-------------|
| LOC  | ITEM NO. | FICM CODE | WAS PUT INTO SERVICE  | ITEM TOTAL QUANTITY | ITEM UNITS | EUL (YRS) | IN USE (YRS) | RUL (YRS) | UNIT COST | ITEM FIRST COST                | 6 2019     | 7 2020     | 8 2021      | 9 2022      | 10 2023     |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops) |          |           |   |                     |            |           |              |           |           |                                | \$ -       | \$ -       | \$ -        | \$ -        | \$ -        |
| BTC-   | SE001    |           | EXTERIOR BUILDING SIGNAGE UPGRADE (COMPLIANCE WITH CURRENT COLLEGE BRANDING STANDARDS). | SSS16               | 2008       | 1         | LS           | 20        | 5         | 15                             | \$0.00     | \$0        | \$ -        | \$ -        | \$ -        |
| ACCESSIBILITY IMPROVEMENTS                               |          |           |   |                     |            |           |              |           |           |                                | \$ 1,113   | \$ 1,133   | \$ 1,153    | \$ 1,174    | \$ 1,195    |
| BTC-   | AI001    |           | DISPLAY CASE IMPROVEMENTS.  | W06                 | 2012       | 1         | LS           | 20        | 1         | 19                             | \$1,000.00 | \$1,000    | \$ 1,112.98 | \$ 1,133.01 | \$ 1,153.41 |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                   |          |           |   |                     |            |           |              |           |           |                                | \$ 140,736 | \$ 143,269 | \$ 145,848  | \$ 148,473  | \$ 151,146  |

# SCHOOLCRAFT COLLEGE; BRADNER LIBRARY - SCHEDULED MAINTENANCE PROGRAM

SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: 2013

INFLATION RATE (%): 1.8%

## LEGEND

|                            |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

## REMAINING USEFUL LIFE (RUL) BAROMETER

|  |                           |
|--|---------------------------|
|  | RUL = 1 YEAR OR LESS      |
|  | RUL = 5 YEARS             |
|  | RUL = 10 YEARS OR GREATER |

| BUILDING SECTION (BUILDING TYPE)  | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
|-----------------------------------|--------------------|---------------------|
| BRADNER LIBRARY - TOTAL (LIBRARY) |                    | 24,236              |
| BRADNER LIBRARY - ORIGINAL        | 1963               | 22,011              |
| FLOOR AREA INCREASE AT NORTH END  | 2005               | 2,225               |

YEAR: 2023

MAINTENANCE BACKLOG VALUE FOR BUILDING: \$ 509,514

REPLACEMENT VALUE FOR THE BUILDING: \$ 7,996,600

FACILITY CONDITION INDEX (FCI): 6%



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| DEFERRED MAINTENANCE PLAN YEAR                          |       |  |                                      |                      |          |       |           |              |           |            |                 |            |            |            |            |            |
|---|-------|--|--------------------------------------|----------------------|----------|-------|-----------|--------------|-----------|------------|-----------------|------------|------------|------------|------------|------------|
| ITEM  |       | FICM   | YEAR ITEM                            | ITEM TOTAL           | ITEM     | AVG   | TIME      |              | ITEM      |            |                 |            |            |            |            |            |
| LOC   | NO.   | ITEM   | CODE                                 | WAS PUT INTO SERVICE | QUANTITY | UNITS | EUL (YRS) | IN USE (YRS) | RUL (YRS) | UNIT COST  | ITEM FIRST COST | 6 2019     | 7 2020     | 8 2021     | 9 2022     | 10 2023    |
| BUILDING ENVELOPE (includes items exterior to building) |       |  |                                      |                      |          |       |           |              |           |            |                 | \$ 305,991 | \$ 311,498 | \$ 317,105 | \$ 322,813 | \$ 328,624 |
| L-  | BE001 | EXTERIOR WING WALL LIMESTONE CAP REPAIRS.                                      | MMM16                                | 1963                 | 100      | LF    | 50        | 50           | 0         | \$10.80    | \$ 1,080        | \$ 1,202   | \$ 1,224   | \$ 1,246   | \$ 1,268   | \$ 1,291   |
| L-  | BE002 | EXTERIOR SOFFIT AND FASCIA PAINTING / SIDING RESTAINING.                       | MMM16                                | 2020                 | 0        | SF    | 15        | 0            | 15        | \$8,500.00 | \$ -            |            |            |            |            |            |
| L-  | BE003 | NE AND NW SLIDER DOOR REPLACEMENT .  | W06                                  | 2021                 | 0        | EA    | 15        | 0            | 15        | \$0.00     | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| L-  | BE004 | EAST EXTERIOR EXIT RECONFIGURATION.  | W06                                  | 1963                 | 300      | SF    | 30        | 50           | -20       | \$4.73     | \$ 1,419        | \$ 1,579   | \$ 1,608   | \$ 1,637   | \$ 1,666   | \$ 1,696   |
| L-  | BE005 | SOUTH SATELLITE YARD FENCING REPLACEMENT AND LANDSCAPING.                      | MMM05                                | 2013                 | 0        | LF    | 30        | 0            | --        | \$137.70   | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| L-  | BE006 | MEDIA SERVICE ASPHALT DRIVE REPAIRS / REPAVING.                                | SSS09                                | 2013                 | 0        | SF    | 15        | 0            | 15        | \$9.45     | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| L-  | BE007 | REPAIR BRICK MORTAR  | MMM16                                | VARIOUS              | --       | --    | 10        | --           | --        | \$0.00     | --              |            |            |            |            |            |
| L-  | BE008 | REMOVE AND REPLACE EXTERIOR SEALANT AT MASONRY CONTROL AND EXPANSION JOINTS.   | MMM16                                | 2005                 | 100      | LF    | 20        | 8            | 12        | \$4.73     | \$ 473          | \$ 526     | \$ 536     | \$ 546     | \$ 555     | \$ 565     |
| L-  | BE009 | NORTH WINDOW SYSTEM MAINTENANCE/REPLACEMENT.                                   | MMM16                                | 2005                 | 1,750    | SF    | 25        | 8            | 17        | \$0.00     | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| L-  | BE010 | REROOFING OF VALLEYS (ADHERED, REINF. EPDM).                                   | MMM16                                | 1997                 | 3,850    | SF    | 25        | 16           | 9         | \$22.95    | \$ 88,358       | \$ 98,340  | \$ 100,110 | \$ 101,912 | \$ 103,746 | \$ 105,614 |
| L-  | BE011 | REROOFING OF FLAT ROOF AREA (WHITE, SINGLE-PLY MEMBRANE).                      | MMM16                                | 1994                 | 8,500    | SF    | 25        | 19           | 6         | \$21.60    | \$ 183,600      | \$ 204,343 | \$ 208,021 | \$ 211,765 | \$ 215,577 | \$ 219,458 |
| L-  | BE012 | STANDING SEAM METAL ROOFING MAINTENANCE/REPLACEMENT.                           | MMM16                                | 1997                 | 9,150    | SF    | 50        | 16           | 34        | \$0.00     | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| L-  | BE013 | NORTH END SECTION REROOFING.   | MMM16                                | 2005                 | --       | --    | 25        | 8            | 17        | \$0.00     | --              |            |            |            |            |            |
| BUILDING INTERIOR                                       |       |  |                                      |                      |          |       |           |              |           |            |                 | \$ 111,737 | \$ 113,748 | \$ 115,796 | \$ 117,880 | \$ 120,002 |
| L-  | BI001 | WALL FINISH UPDATES - ALLOWANCE.   | 110, 300, 410, 420, 430, 440 AND 455 | VARIOUS              | --       | --    | --        | --           | --        | \$0.00     | --              |            |            |            |            |            |
| L-  | BI002 | FLOOR FINISH UPDATES - ALLOWANCE.  | 110, 300, 410, 420, 430, 440 AND 456 | VARIOUS              | --       | --    | --        | --           | --        | \$0.00     | --              |            |            |            |            |            |
| L-  | BI003 | NE, NW, AND W VESTIBULE MAINTENANCE (EXCLUDING SLIDER DOOR REPLACEMENT COSTS). | W06                                  | 2005                 | --       | --    | 15        | 8            | 7         | \$0.00     | --              |            |            |            |            |            |

# SCHOOLCRAFT COLLEGE; BRADNER LIBRARY - SCHEDULED MAINTENANCE PROGRAM

| LOC  | ITEM NO. | ITEM   | FICM CODE                            | YEAR ITEM WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |            |
|--|----------|--|--------------------------------------|--------------------------------|---------------------|------------|---------------|-------------------|-----------|----------------|-----------------|--------------------------------|------------|------------|------------|------------|
|  |          |  |                                      |                                |                     |            |               |                   |           |                |                 | 6                              | 7          | 8          | 9          | 10         |
|  |          |  |                                      |                                |                     |            |               |                   |           |                |                 | 2019                           | 2020       | 2021       | 2022       | 2023       |
| L-   | BI004    | REPLACE CARPET   | 110, 300, 410, 420, 430, 440 AND 456 | VARIOUS                        | 14,160              | SF         | 12            | --                | --        | \$7.09         | \$ 100,394      | \$ 111,737                     | \$ 113,748 | \$ 115,796 | \$ 117,880 | \$ 120,002 |
| PLUMBING SYSTEMS (may be packaged with BI item scope)      |          |  |                                      |                                |                     |            |               |                   |           |                |                 | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| L-   | PS001    | PLUMBING FIXTURE REPLACEMENTS, FAUCETS, FLUSH VALVES, & TMV'S. | X03                                  | 2005                           | --                  | --         | 15            | 8                 | 7         | \$0.00         | --              |                                |            |            |            |            |
| L-   | PS002    | PLUMBING FIXTURE REPLACEMENTS, SINKS, TOILETS AND URINALS.     | X03                                  | 2005                           | --                  | --         | 40            | 8                 | 32        | \$0.00         | --              |                                |            |            |            |            |
| MECHANICAL SYSTEMS (may be packaged with BI item scope)    |          |  |                                      |                                |                     |            |               |                   |           |                |                 | \$ 43,851                      | \$ 44,641  | \$ 45,444  | \$ 46,262  | \$ 47,095  |
| L-   | MS001    | AIR HANDLING UNIT REPLACEMENT.                                 | UUU25                                | 2005                           | --                  | --         | 40            | 8                 | 32        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS002    | STEAM HUMIDIFIER REPLACEMENT.                                  | UUU25                                | 2005                           | 1                   | EA         | 15            | 8                 | 7         | \$10,800.00    | \$ 10,800       | \$ 12,020                      | \$ 12,237  | \$ 12,457  | \$ 12,681  | \$ 12,909  |
| L-   | MS003    | BOILER REPLACEMENT.  | UUU22                                | 2005                           | --                  | --         | 25            | 8                 | 17        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS004    | HEATING HOT WATER BOILER PUMPS.                                | UUU22                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS005    | HEATING SYSTEM PUMP REPLACEMENTS.                              | UUU22                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS006    | COOLING SYSTEM PUMP REPLACEMENTS.                              | UUU20                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS007    | DOMESTIC HOT WATER HEATER PUMP REPLACEMENT.                    | UUU24                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS008    | EXHAUST FAN MAINTENANCE/REPLACEMENTS.                          | UUU25                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS009    | RETURN AIR FAN REPLACEMENT.                                    | UUU25                                | 2005                           | --                  | --         | 25            | 8                 | 17        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS010    | VAV BOX MAINTENANCE/REPLACEMENTS.                              | UUU25                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS011    | UNIT HEATER REPLACEMENTS.                                      | UUU25                                | 2005                           | --                  | --         | 25            | 8                 | 17        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS012    | CABINET UNIT HEATER REPLACEMENTS.                              | UUU25                                | 2005                           | --                  | --         | 25            | 8                 | 17        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS013    | HVAC SYSTEM CLEANING.  | UUU25                                | 2005                           | 24,000              | SF         | 10            | 8                 | 2         | \$1.15         | \$ 27,600       | \$ 30,718                      | \$ 31,271  | \$ 31,834  | \$ 32,407  | \$ 32,990  |
| L-   | MS014    | SPLIT SYSTEM A/C UNIT REPLACEMENT.                             | UUU25                                | 2011                           | --                  | --         | 15            | 2                 | 13        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS015    | BAS UPGRADE  | UUU06                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | MS016    | INCREASE BOILER AND WATER HEATER STACK HEIGHT TO MEET CODE     | UUU22                                | 2005                           | 1                   | LS         | 0             | 8                 | -8        | \$1,000.00     | \$ 1,000        | \$ 1,113                       | \$ 1,133   | \$ 1,153   | \$ 1,174   | \$ 1,195   |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope)    |          |  |                                      |                                |                     |            |               |                   |           |                |                 | \$ 12,621                      | \$ 12,848  | \$ 13,080  | \$ 13,315  | \$ 13,555  |
| L-   | ES001    | BUILDING SERVICE TRANSFORMER                                   | UUU04                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES002    | MAIN SWITCHBOARD.  | UUU05                                | 2004                           | --                  | --         | 20            | 9                 | 11        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES003    | STANDBY GENERATOR.   | UUU25                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES004    | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS)                    | UUU25                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES005    | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS)          | UUU25                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES006    | ELECTRICAL DISTRIBUTION EQUIPMENT.                             | UUU05                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES007    | VARIABLE FREQUENCY DRIVE (VFD)                                 | UUU25                                | 2005                           | --                  | --         | 15            | 8                 | 7         | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES008    | LIGHTING AND RECEPTACLE PANELBOARDS.                           | UUU05                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES009    | EXTERIOR BUILDING MOUNTED LIGHTING.                            | UUU25                                | 2005                           | 16                  | EA         | 20            | 8                 | 12        | \$708.75       | \$ 11,340       | \$ 12,621                      | \$ 12,848  | \$ 13,080  | \$ 13,315  | \$ 13,555  |
| L-   | ES010    | EXIT LIGHTING.   | W06                                  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES011    | CORRIDOR LIGHTING.   | W06                                  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES012    | CLASSROOMS/MEETING ROOM LIGHTING.                              | 110, 410, 420, 430 AND 440           | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES013    | OFFICE LIGHTING.   | 300, 400 AND 455                     | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES014    | STORAGE AND UTILITY ROOM LIGHTING.                             | Y04                                  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | ES015    | VACANCY SENSOR LIGHTING CONTROLS.                              | 110, 300, 410, 420, 430, 440 AND 455 | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |          |  |                                      |                                |                     |            |               |                   |           |                |                 | \$ 223                         | \$ 227     | \$ 231     | \$ 235     | \$ 239     |
| L-   | BS001    | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.                      | UUU07                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| L-   | BS002    | FIRE ALARM DEVICES.  | UUU07                                | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |

# SCHOOLCRAFT COLLEGE; BRADNER LIBRARY - SCHEDULED MAINTENANCE PROGRAM

| DEFERRED MAINTENANCE PLAN YEAR                           |       |  |           |              |            |       |       |        |       |          |            |            |            |            |            |            |
|--|-------|--|-----------|--------------|------------|-------|-------|--------|-------|----------|------------|------------|------------|------------|------------|------------|
| ITEM   |       | FICM                                       | YEAR ITEM | AVG          | TIME       | ITEM  |       |        |       |          |            |            |            |            |            |            |
| LOC  | NO.   | ITEM                                       | CODE      | WAS PUT      | ITEM TOTAL | ITEM  | EUL   | IN USE | RUL   | UNIT     | ITEM       | 6          | 7          | 8          | 9          | 10         |
|  |       |  |           | INTO SERVICE | QUANTITY   | UNITS | (YRS) | (YRS)  | (YRS) | COST     | FIRST COST | 2019       | 2020       | 2021       | 2022       | 2023       |
| L-   | BS003 | BOILER ROOM EPO SYSTEM.                    | Y04       | 2005         | --         | --    | 20    | 8      | 12    | \$0.00   | --         |            |            |            |            |            |
| L-   | BS004 | PRIMAX CLOCK SYSTEM.                       | UUU25     | 2005         | --         | --    | 20    | 8      | 12    | \$0.00   | --         |            |            |            |            |            |
| L-   | BS005 | SECURITY SURVEILLANCE SYSTEM.              | UUU14     | 2005         | --         | --    | 20    | 8      | 12    | \$0.00   | --         |            |            |            |            |            |
| L-   | BS006 | SECURITY ACCESS SYSTEM.                    | UUU14     | 2005         | --         | --    | 20    | 8      | 12    | \$0.00   | --         |            |            |            |            |            |
| L-   | BS007 | NETWORK CABLING.                           |           |              | 1          | LS    | 20    | 0      | 20    | \$200.00 | \$ 200     | \$ 223     | \$ 227     | \$ 231     | \$ 235     | \$ 239     |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops) |       |  |           |              |            |       |       |        |       |          |            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| L-   | SE001 | LIBRARY FURNITURE REPLACEMENT - ALLOWANCE. | 430       | VARIOUS      | --         | --    | --    | --     | --    | \$0.00   | --         |            |            |            |            |            |
| ACCESSIBILITY IMPROVEMENTS                               |       |  |           |              |            |       |       |        |       |          |            |            |            |            |            |            |
| L-   | AI001 | NONE                                       |           |              |            |       | --    | --     |       |          |            |            |            |            |            |            |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                   |       |  |           |              |            |       |       |        |       |          |            | \$ 474,422 | \$ 482,962 | \$ 491,655 | \$ 500,505 | \$ 509,514 |

# SCHOOLCRAFT COLLEGE; CHILDREN'S CENTER - SCHEDULED MAINTENANCE PROGRAM

|  |      |
|--|------|
| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: | 2013 |
|--|------|

|                     |      |
|---------------------|------|
| INFLATION RATE (%): | 1.8% |
|---------------------|------|

| BUILDING SECTION (BUILDING TYPE)      | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
|---------------------------------------|--------------------|---------------------|
| CHILDREN'S CENTER - TOTAL (CLASSROOM) | 1995               | 9,597               |
|                                       |                    |                     |
|                                       |                    |                     |

|  |
|--|
| YEAR: 2023   |
| MAINTENANCE BACKLOG VALUE FOR BUILDING: \$ 506,974 |
| REPLACEMENT VALUE FOR THE BUILDING: \$ 1,726,900   |
| FACILITY CONDITION INDEX (FCI): 29%                |



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

| REMAINING USEFUL LIFE (RUL) BAROMETER |
|---------------------------------------|
| RUL = 1 YEAR OR LESS                  |
| RUL = 5 YEARS                         |
| RUL = 10 YEARS OR GREATER             |

| ITEM  |       | YEAR ITEM  |                            | AVG                  |                     | TIME       |           | ITEM         |           | DEFERRED MAINTENANCE PLAN YEAR |                 |            |            |            |            |            |
|---|-------|--|----------------------------|----------------------|---------------------|------------|-----------|--------------|-----------|--------------------------------|-----------------|------------|------------|------------|------------|------------|
| LOC   | NO.   | ITEM   | FICM CODE                  | WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | EUL (YRS) | IN USE (YRS) | RUL (YRS) | UNIT COST                      | ITEM FIRST COST | 6 2019     | 7 2020     | 8 2021     | 9 2022     | 10 2023    |
| BUILDING ENVELOPE (includes items exterior to building) |       |  |                            |                      |                     |            |           |              |           |                                |                 | \$ 7,035   | \$ 7,162   | \$ 7,291   | \$ 7,422   | \$ 7,556   |
| CC-   | BE001 | EXTERIOR FENCING REPLACEMENT.  | MMM05                      | 2012                 | --                  | --         | 30        | 1            | 29        | \$0.00                         | --              |            |            |            |            |            |
| CC-   | BE002 | REDESIGN / REPAIR PAVEMENT IN CHILDREN'S CENTER DROP-OFF AREA TO ELIMINATE TRIP HAZARD POTENTIAL.              | SSS09                      | 2014                 | 100                 | LF         | 15        | 0            | 15        | \$141.75                       | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| CC-   | BE003 | BRICK TUCKPOINTING.  | MMM16                      | 1995                 | 10                  | SF         | 10        | 18           | -8        | \$10.80                        | \$ 108          | \$ 120     | \$ 122     | \$ 125     | \$ 127     | \$ 129     |
| CC-   | BE004 | EXTERIOR SIDING AND COPING MAINTENANCE.  | MMM16                      | 1995                 | --                  | --         | 15        | 18           | -3        | \$0.00                         | --              |            |            |            |            |            |
| CC-   | BE005 | SEALANT MAINTENANCE AROUND EXTERIOR WINDOWS.   | MMM16                      | 1995                 | 600                 | LF         | 20        | 18           | 2         | \$4.73                         | \$ 2,838        | \$ 3,159   | \$ 3,215   | \$ 3,273   | \$ 3,332   | \$ 3,392   |
| CC-   | BE006 | SPALLING BRICK REPAIRS NEAR MAIN ENTRANCE.   | MMM16                      | 1995                 | 3                   | MMF        | 10        | 18           | -8        | \$945.00                       | \$ 2,835        | \$ 3,155   | \$ 3,212   | \$ 3,270   | \$ 3,329   | \$ 3,389   |
| CC-   | BE007 | ROOFING REPLACEMENT.   | MMM16                      | 1995                 | --                  | --         | 25        | 18           | 7         | \$0.00                         | --              |            |            |            |            |            |
| CC-   | BE008 | SEAL AROUND CONCRETE FLATWORK AT NORTHEAST EXTERIOR CORNER OF CHILDREN'S CENTER TO PREVENT WATER INTRUSION.    | SSS18                      | 1995                 | 8                   | LF         | 15        | 18           | -3        | \$67.50                        | \$ 540          | \$ 601     | \$ 612     | \$ 623     | \$ 634     | \$ 645     |
| CC-   | BE009 | MAIN ENTRY SLIDER DOOR REPLACEMENT.  | W06                        | 1995                 | --                  | --         | 15        | 18           | -3        | \$0.00                         | --              |            |            |            |            |            |
| CC-   | BE010 | MAIN CORRIDOR SKYLIGHT MAINTENANCE.  | W06                        | 1995                 | 100                 | SF         | 25        | 18           | 7         | \$0.00                         | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| CC-   | BE011 | EXTERIOR DOOR REPLACEMENTS.  | 640 AND W06                | 1995                 | --                  | --         | 25        | 18           | 7         | \$0.00                         | --              |            |            |            |            |            |
| BUILDING INTERIOR                                       |       |  |                            |                      |                     |            |           |              |           |                                |                 | \$ 155,933 | \$ 158,740 | \$ 161,597 | \$ 164,506 | \$ 167,467 |
| CC-   | BI001 | CC105 - STORAGE ROOM VCT FLOOR FINISH REPLACEMENT.   | 645                        | 1995                 | 700                 | SF         | 35        | 18           | 17        | \$7.09                         | \$ 4,963        | \$ 5,524   | \$ 5,623   | \$ 5,724   | \$ 5,827   | \$ 5,932   |
| CC-   | BI002 | REPLACEMENT OF CORRIDOR VCT FLOORING WITH HIGHER GRADE SOLID SURFACE FLOOR FINISH.                             | W06                        | 1995                 | 1,400               | SF         | 35        | 18           | 17        | \$4.73                         | \$ 6,622        | \$ 7,370   | \$ 7,503   | \$ 7,638   | \$ 7,775   | \$ 7,915   |
| CC-   | BI003 | STAFF TOILET ROOM FLOORING REPLACEMENT.  | X03                        | 1995                 | 160                 | SF         | 20        | 18           | 2         | \$28.01                        | \$ 4,482        | \$ 4,988   | \$ 5,078   | \$ 5,169   | \$ 5,262   | \$ 5,357   |
| CC-   | BI004 | STAFF TOILET ROOM COUNTER AND SINK REPLACEMENT.  | X03                        | 2014                 | 8                   | LF         | 15        | 0            | 15        | \$214.65                       | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| CC-   | BI005 | PAINTING ALLOWANCE - ENTIRE BUILDING ON 5 YR CYCLE.  | 310, 640, 645, W06 AND X03 | VARIOUS              | --                  | --         | --        | --           | --        | \$0.00                         | --              |            |            |            |            |            |
| CC-   | BI006 | MAIN CORRIDOR COAT/BOOT STORAGE UPGRADES.  | W06                        | 1995                 | 80                  | LF         | 25        | 18           | 7         | \$432.00                       | \$ 34,560       | \$ 38,465  | \$ 39,157  | \$ 39,862  | \$ 40,579  | \$ 41,310  |
| CC-   | BI007 | ALLOWANCE FOR CLASSROOM MILLWORK REPLACEMENTS.   | 640 AND 645                | VARIOUS              | 30                  | LF         | 25        | --           | --        | \$432.00                       | \$ 12,960       | \$ 14,424  | \$ 14,684  | \$ 14,948  | \$ 15,217  | \$ 15,491  |
| CC-   | BI008 | MAIN CORRIDOR WOOD DOOR REPLACEMENTS/UPGRADE TO LAMINATE COVERED DOOR FOR CLEANING EASE AND IMPACT PROTECTION. | 310, 640 AND 645           | 1995                 | 18                  | EA         | 50        | 18           | 32        | \$1,431.00                     | \$ 25,758       | \$ 28,668  | \$ 29,184  | \$ 29,709  | \$ 30,244  | \$ 30,789  |
| CC-   | BI009 | MAINTENANCE/REPLACEMENT OF FRONT ENTRANCE SLIDER DOORS.  | W06                        | 1995                 | 2                   | EA         | 15        | 18           | -3        | \$11,070.00                    | \$ 22,140       | \$ 24,641  | \$ 25,085  | \$ 25,536  | \$ 25,996  | \$ 26,464  |
| CC-   | BI010 | MAIN CORRIDOR WALK-OFF MATTING SYSTEM REPLACEMENT.   | W06                        | 2008                 | 240                 | SF         | 5         | 5            | 0         | \$62.10                        | \$ 14,904       | \$ 16,588  | \$ 16,886  | \$ 17,190  | \$ 17,500  | \$ 17,815  |
| CC-   | BI011 | ROOM CC100 CARPET REPLACEMENT.   | 640                        | 2019                 | 0                   | SF         | 12        | 0            | 12        | \$7.09                         | \$ -            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |

**SCHOOLCRAFT COLLEGE; CHILDREN'S CENTER - SCHEDULED MAINTENANCE PROGRAM**

| ITEM<br>LOC  | ITEM<br>NO. | ITEM  | FICM<br>CODE               | YEAR ITEM<br>WAS PUT<br>INTO SERVICE | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG<br>EUL<br>(YRS) | TIME<br>IN USE<br>(YRS) | RUL<br>(YRS) | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |            |
|--|-------------|---|----------------------------|--------------------------------------|------------------------|---------------|---------------------|-------------------------|--------------|----------------------|--------------------|--------------------------------|------------|------------|------------|------------|
|  |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    | 6<br>2019                      | 7<br>2020  | 8<br>2021  | 9<br>2022  | 10<br>2023 |
| CC-  | BI012       | ROOM CC110 CARPET REPLACEMENT.  | 640                        | 2019                                 | 0                      | SF            | 12                  | 0                       | 12           | \$7.09               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| CC-  | BI013       | GYPSUM BOARD WALL DAMAGE REPAIR   | 645                        | 1995                                 | 6                      | SF            | 15                  | 18                      | -3           | \$13.50              | \$ 81              | \$ 90                          | \$ 92      | \$ 93      | \$ 95      | \$ 97      |
| CC-  | BI014       | MILLWORK CABINET REPLACEMENT  | 645                        | 2008                                 | 20                     | LF            | 25                  | 5                       | 20           | \$681.75             | \$ 13,635          | \$ 15,175                      | \$ 15,449  | \$ 15,727  | \$ 16,010  | \$ 16,298  |
| PLUMBING SYSTEMS (may be packaged with BI item scope)      |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| CC-  | PS001       | CENTRALIZED DOMESTIC HOT WATER HEATER REPLACEMENT.  | UUU24                      | 2019                                 | 0                      | EA            | 10                  | 0                       | 10           | \$5,562.00           | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| MECHANICAL SYSTEMS (may be packaged with BI item scope)    |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    | \$ 134,670                     | \$ 137,094 | \$ 139,562 | \$ 142,074 | \$ 144,632 |
| CC-  | MS001       | HVAC DUCT CLEANING.   | UUU25                      | 1995                                 | 9,500                  | SF            | 10                  | 18                      | -8           | \$1.15               | \$ 10,925          | \$ 12,159                      | \$ 12,378  | \$ 12,601  | \$ 12,828  | \$ 13,059  |
| CC-  | MS002       | HVAC SYSTEMS REPLACEMENT. INCLUDES A/C CONDENSING UNITS AND HUMIDIFIERS. REPLACED HVAC SYSTEM FURNACE / CONDENSING UNIT #2 IN 2019. REPLACED (1) FURNACE IN 2021. TWO (2) OTHER REPLACEMENTS REMAINING. | UUU25                      | 1995                                 | 2                      | EA            | 15                  | 18                      | -3           | \$16,200.00          | \$ 32,400          | \$ 36,060                      | \$ 36,710  | \$ 37,370  | \$ 38,043  | \$ 38,728  |
| CC-  | MS003       | TEMPERATURE CONTROLS UPGRADE FROM STAND-ALONE ELECTRICAL TO NETWORKED DDC.  | UUU06                      | 1995                                 | 9,000                  | SF            | 20                  | 18                      | 2            | \$6.08               | \$ 54,720          | \$ 60,902                      | \$ 61,998  | \$ 63,114  | \$ 64,250  | \$ 65,407  |
| CC-  | MS004       | ADD VENTILATION AND HEATING EQUIPMENT FOR EAST STORAGE ROOM USED FOR STORING PLAYGROUND EQUIPMENT.  | 645                        | NONE                                 | 1                      | LS            | 15                  | --                      | --           | \$6,750.00           | \$ 6,750           | \$ 7,513                       | \$ 7,648   | \$ 7,785   | \$ 7,926   | \$ 8,068   |
| CC-  | MS005       | VENT GAS PRESSURE REGULATOR TO THE OUTDOORS.  | 645                        | NONE                                 | 1                      | LS            | 30                  | --                      | --           | \$5,000.00           | \$ 5,000           | \$ 5,565                       | \$ 5,665   | \$ 5,767   | \$ 5,871   | \$ 5,977   |
| CC-  | MS006       | STAFF KITCHEN EXHAUST FAN.  | 645                        | NONE                                 | 1                      | LS            | 25                  | --                      | --           | \$11,205.00          | \$ 11,205          | \$ 12,471                      | \$ 12,695  | \$ 12,924  | \$ 13,157  | \$ 13,393  |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope)    |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    | \$ 138,755                     | \$ 141,253 | \$ 143,795 | \$ 146,383 | \$ 149,018 |
| CC-  | ES001       | MAIN SWITCHBOARD.   | UUU05                      | 1995                                 | 1                      | EA            | 20                  | 18                      | 2            | \$81,000.00          | \$ 81,000          | \$ 90,151                      | \$ 91,774  | \$ 93,426  | \$ 95,108  | \$ 96,819  |
| CC-  | ES002       | ELECTRICAL DISTRIBUTION EQUIPMENT   | UUU05                      | 1995                                 | 2                      | EA            | 20                  | 18                      | 2            | \$10,000.00          | \$ 20,000          | \$ 22,260                      | \$ 22,660  | \$ 23,068  | \$ 23,483  | \$ 23,906  |
| CC-  | ES003       | LIGHTING AND RECEPTACLE PANELBOARDS.  | UUU05                      | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | ES004       | EXTERIOR BUILDING MOUNTED LIGHTING.   | UUU25                      | 1995                                 | 8                      | EA            | 20                  | 18                      | 2            | \$708.75             | \$ 5,670           | \$ 6,311                       | \$ 6,424   | \$ 6,540   | \$ 6,658   | \$ 6,777   |
| CC-  | ES005       | EXIT LIGHTING.  | W06                        | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | ES006       | CORRIDOR LIGHTING.  | W06                        | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | ES007       | CLASSROOM LIGHTING.   | 640                        | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | ES008       | OFFICE LIGHTING.  | 310                        | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | ES009       | STORAGE AND UTILITY ROOM LIGHTING.  | X01 AND Y04                | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | ES010       | VACANCY SENSOR LIGHTING CONTROLS (CLASSROOMS).  | 640                        | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | ES011       | VACANCY SENSOR LIGHTING CONTROLS (CORRIDORS).   | W06                        | NONE                                 | 1                      | LS            | 20                  | --                      | --           | \$18,000.00          | \$ 18,000          | \$ 20,034                      | \$ 20,394  | \$ 20,761  | \$ 21,135  | \$ 21,515  |
| CC-  | ES012       | EMERGENCY LIGHTING  | 310, 640, 645, W06 AND X03 | 2014                                 | 1                      | LS            | 20                  | 0                       | 20           | \$27,000.00          | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    | \$ 35,663                      | \$ 36,305  | \$ 36,958  | \$ 37,624  | \$ 38,301  |
| CC-  | BS001       | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.   | UUU07                      | 2022                                 | --                     | --            | 20                  | -9                      | 29           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | BS002       | FIRE ALARM DEVICES.   | UUU07                      | 2006                                 | --                     | --            | 20                  | 7                       | 13           | \$0.00               | --                 |                                |            |            |            |            |
| CC-  | BS003       | BOILER EPO SYSTEM.  |                            | NONE                                 | 1                      | LS            | 20                  | --                      | --           | \$5,000.00           | \$ 5,000           | \$ 5,565                       | \$ 5,665   | \$ 5,767   | \$ 5,871   | \$ 5,977   |
| CC-  | BS004       | CLOCK SYSTEM.   | UUU25                      | 1995                                 | 1                      | LS            | 20                  | 18                      | 2            | \$8,421.37           | \$ 8,421           | \$ 9,373                       | \$ 9,542   | \$ 9,713   | \$ 9,888   | \$ 10,066  |
| CC-  | BS005       | SECURITY SURVEILLANCE SYSTEM.   | UUU14                      | 2004                                 | 1                      | LS            | 20                  | 9                       | 11           | \$8,421.37           | \$ 8,421           | \$ 9,373                       | \$ 9,542   | \$ 9,713   | \$ 9,888   | \$ 10,066  |
| CC-  | BS006       | SECURITY ACCESS SYSTEM.   | UUU14                      | 2004                                 | 1                      | LS            | 20                  | 9                       | 11           | \$10,000.00          | \$ 10,000          | \$ 11,130                      | \$ 11,330  | \$ 11,534  | \$ 11,742  | \$ 11,953  |
| CC-  | BS007       | COMMUNICATIONS SYSTEMS.   |                            |                                      | 1                      | LS            | 10                  | 2013                    | --           | \$100.00             | \$ 100             | \$ 111                         | \$ 113     | \$ 115     | \$ 117     | \$ 120     |
| CC-  | BS008       | NETWORK CABLING.  |                            |                                      | 2                      | EA            | 10                  | 2013                    | --           | \$50.00              | \$ 100             | \$ 111                         | \$ 113     | \$ 115     | \$ 117     | \$ 120     |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops)   |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    | \$ 51,536                      | \$ 52,464  | \$ 53,408  | \$ 54,370  | \$ -       |
| CC-  | SE001       | OUTDOOR PLAY SURFACE/STRUCTURE REPAIRS/REPLACEMENTS. REMOVED OUTDOOR PLAY STRUCTURE 2022.   | SSS18                      | VARIOUS                              | 3,500                  | SF            | 15                  | --                      | --           | \$13.23              | \$ 46,305          | \$ 51,536                      | \$ 52,464  | \$ 53,408  | \$ 54,370  | \$ -       |
| ACCESSIBILITY IMPROVEMENTS                                 |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    |                                |            |            |            |            |
| CC-  |             | NONE  |                            |                                      |                        |               |                     | --                      | --           |                      |                    |                                |            |            |            |            |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                     |             |   |                            |                                      |                        |               |                     |                         |              |                      |                    | \$ 523,593                     | \$ 533,018 | \$ 542,612 | \$ 552,379 | \$ 506,974 |

# SCHOOLCRAFT COLLEGE; FIREARMS TRAINING CENTER - SCHEDULED MAINTENANCE PROGRAM

| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: |                    |                     | 2013       |
|--|--------------------|---------------------|------------|
| BUILDING SECTION (BUILDING TYPE)           | BUILDING AGE (YRS) | BUILDING AREA (GSF) |            |
| FIREARMS TRAINING CENTER (CLASSROOM)       |                    | 26,512              |            |
|  |                    |                     |            |
|  |                    |                     |            |
| YEAR: 2023                                 |                    |                     |            |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:    |                    | \$                  | 8,068      |
| REPLACEMENT VALUE FOR THE BUILDING:        |                    | \$                  | 10,330,600 |
| FACILITY CONDITION INDEX (FCI):            |                    |                     | 0%         |



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

| INFLATION RATE (%): | 1.8% |
|---------------------|------|
|---------------------|------|

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

| REMAINING USEFUL LIFE (RUL) BAROMETER |                           |
|---------------------------------------|---------------------------|
|                                       | RUL = 1 YEAR OR LESS      |
|                                       | RUL = 5 YEARS             |
|                                       | RUL = 10 YEARS OR GREATER |

| ITEM LOC  | ITEM NO. | ITEM  | FICM CODE                       | YEAR ITEM WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | 6 2019   | 7 2020   | 8 2021   | 9 2022   | 10 2023  |
|---|----------|---|---------------------------------|--------------------------------|---------------------|------------|---------------|-------------------|-----------|----------------|-----------------|----------|----------|----------|----------|----------|
| BUILDING ENVELOPE (includes items exterior to building) |          |   |                                 |                                |                     |            |               |                   |           |                |                 | \$ -     | \$ -     | \$ -     | \$ -     | \$ -     |
| FTC-  | BE001    | ROOF REPLACEMENT.   | MMM16                           | 2012                           | --                  | --         | 25            | 1                 | 24        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | BE002    | OVERHEAD DOOR FRAME MAINTENANCE. COMPLETE                           | 730                             | 2018                           | 2                   | EA         | 10            | 0                 | 10        | \$0.00         | \$ -            | \$ -     | \$ -     | \$ -     | \$ -     | \$ -     |
| BUILDING INTERIOR                                       |          |   |                                 |                                |                     |            |               |                   |           |                |                 | \$ 7,513 | \$ 7,648 | \$ 7,785 | \$ 7,926 | \$ 8,068 |
| FTC-  | BI001    | FIRING RANGE ARCHITECTURAL MAINTENANCE.                             | 550                             | 2012                           | 1                   | LS         | 5             | 1                 | 4         | \$6,750.00     | \$ 6,750        | \$ 7,513 | \$ 7,648 | \$ 7,785 | \$ 7,926 | \$ 8,068 |
| FTC-  | BI002    | WALL FINISH UPDATES - ALLOWANCE.                                    | 110, 310, 550, 555, W06 AND X03 | 2012                           | --                  | --         | 15            | 1                 | 14        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | BI003    | FLOOR FINISH UPDATES - ALLOWANCE.                                   | 110, 310, 550, 555, W06 AND X03 | 2012                           | --                  | --         | 15            | 1                 | 14        | \$0.00         | --              |          |          |          |          |          |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |          |   |                                 |                                |                     |            |               |                   |           |                |                 | \$ -     | \$ -     | \$ -     | \$ -     | \$ -     |
| FTC-  | PS001    | DOMESTIC HOT WATER RETURN CIRCULATING PUMP MAINTENANCE/REPLACEMENT. | UUU24                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | PS002    | PLUMBING FIXTURE REPLACEMENTS.                                      | X03                             | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | PS003    | DOMESTIC HOT WATER HEATER REPLACEMENT.                              | UUU24                           | 2012                           | --                  | --         | 10            | 1                 | 9         | \$0.00         | --              |          |          |          |          |          |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |          |   |                                 |                                |                     |            |               |                   |           |                |                 | \$ -     | \$ -     | \$ -     | \$ -     | \$ -     |
| FTC-  | MS001    | AIR HANDLING UNIT REPLACEMENTS (YORK FAN WALL).                     | UUU25                           | 2012                           | --                  | --         | 25            | 1                 | 24        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS002    | AIR HANDLING UNIT REPLACEMENTS (YORK DIRECT FIRED).                 | UUU25                           | 2012                           | --                  | --         | 25            | 1                 | 24        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS003    | VAV/CAV BOX MAINTENANCE/REPLACEMENTS.                               | UUU25                           | 2012                           | --                  | --         | 25            | 1                 | 24        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS004    | SPLIT-SYSTEM DX A/C UNIT REPLACEMENTS.                              | UUU25                           | 2012                           | --                  | --         | 15            | 1                 | 14        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS005    | REFRIGERANT CONDENSING UNIT REPLACEMENTS.                           | UUU25                           | 2012                           | --                  | --         | 15            | 1                 | 14        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS006    | ELECTRIC DUCT HEATER MAINTENANCE/REPLACEMENTS.                      | UUU25                           | 2012                           | --                  | --         | 10            | 1                 | 9         | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS007    | UNIT HEATER REPLACEMENTS.   | UUU25                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS008    | CABINET UNIT HEATER REPLACEMENT.                                    | UUU25                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS009    | EXHAUST AIR FAN MAINTENANCE/REPLACEMENTS.                           | UUU25                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS010    | BOILER REPLACEMENT.   | UUU22                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | MS011    | DUCT CLEANING.  | UUU25                           | 1989                           | --                  | --         | 10            | 24                | -14       | \$0.00         | --              |          |          |          |          |          |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope) |          |   |                                 |                                |                     |            |               |                   |           |                |                 | \$ -     | \$ -     | \$ -     | \$ -     | \$ -     |
| FTC-  | ES001    | BUILDING SERVICE TRANSFORMER.                                       | UUU04                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | ES002    | MAIN SWITCHBOARD.   | UUU05                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | ES003    | STANDBY GENERATOR.  | UUU25                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |
| FTC-  | ES004    | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).                        | UUU25                           | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |          |          |          |          |          |

**SCHOOLCRAFT COLLEGE; FIREARMS TRAINING CENTER - SCHEDULED MAINTENANCE PROGRAM**

| ITEM   |       | FICM   | YEAR ITEM   | WAS PUT      | ITEM TOTAL | ITEM  | AVG       | TIME         | ITEM      | DEFERRED MAINTENANCE PLAN YEAR |                 |          |          |          |          |          |
|--|-------|--|---|--------------|------------|-------|-----------|--------------|-----------|--------------------------------|-----------------|----------|----------|----------|----------|----------|
| LOC  | NO.   | ITEM   | CODE  | INTO SERVICE | QUANTITY   | UNITS | EUL (YRS) | IN USE (YRS) | RUL (YRS) | UNIT COST                      | ITEM FIRST COST | 6 2018   | 7 2019   | 8 2020   | 9 2021   | 10 2022  |
| FTC-   | ES005 | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS). | UUU25   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES006 | ELECTRICAL DISTRIBUTION EQUIPMENT.                     | UUU05   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES007 | VARIABLE FREQUENCY DRIVE (VFD).                        | UUU25   | 2012         | --         | --    | 15        | 1            | 14        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES008 | LIGHTING AND RECEPTACLE PANELBOARDS.                   | UUU05   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES009 | EXTERIOR BUILDING MOUNTED LIGHTING.                    | UUU25   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES010 | EXIT LIGHTING.   | W06   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES011 | CORRIDOR LIGHTING.                                     | W06   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES012 | CLASSROOM LIGHTING                                     | 110   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES013 | OFFICE LIGHTING.                                       | 310   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES014 | SHOOTING RANGE LIGHTING.                               | 550   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES015 | PARKING LOT LIGHTING.                                  | UUU10 AND UUU11   | 2012         | --         | --    | 30        | 1            | 29        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES016 | STORAGE AND UTILITY ROOM LIGHTING.                     | X01 AND Y04   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES017 | VACANCY SENSOR LIGHTING CONTROLS (CLASSROOMS).         | 110   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | ES018 | VACANCY SENSOR LIGHTING CONTROLS (CORRIDORS)           | W05 AND W06   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |       |  |   |              |            |       |           |              |           |                                |                 | \$ -     | \$ -     | \$ -     | \$ -     | \$ -     |
| FTC-   | BS001 | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.              | UUU07   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | BS002 | FIRE ALARM DEVICES.                                    | UUU07   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | BS003 | BOILER EPO SYSTEM.                                     | Y04   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | BS004 | PRIMAX CLOCK SYSTEM.                                   | UUU25   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | BS005 | SECURITY SURVEILLANCE SYSTEM.                          | UUU14   | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | BS006 | SECURITY ACCESS SYSTEM. COMPLETED 2021.                | UUU14   | 2021         | --         | --    | 20        | 0            | 20        | \$0.00                         | --              |          |          |          |          |          |
| FTC-   | BS007 | IT SYSTEMS.  | UUU02   | 2012         | --         | --    | 20        | --           | --        | \$0.00                         | --              |          |          |          |          |          |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops)   |       |  |   |              |            |       |           |              |           |                                |                 | \$ -     | \$ -     | \$ -     | \$ -     | \$ -     |
| FTC-   | SE001 | FIRING RANGE SYSTEM MAINTENANCE/REPLACEMENT.           | 550 /<br>2018 - PEPP BALLISTIC<br>PANELS LAYOUT<br>MODIFIED WITH<br>SELECT PANEL<br>REPLACEMENTS.<br>2019 - FIRING RANGE<br>BULLET TRAPS<br>REBUILT | 2012         | --         | --    | 20        | 1            | 19        | \$0.00                         | --              |          |          |          |          |          |
| ACCESSIBILITY IMPROVEMENTS                                 |       |  |   |              |            |       |           |              |           |                                |                 |          |          |          |          |          |
| FTC-   |       | NONE   |   |              |            |       |           | --           | --        |                                |                 |          |          |          |          |          |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                     |       |  |   |              |            |       |           |              |           |                                |                 | \$ 7,513 | \$ 7,648 | \$ 7,785 | \$ 7,926 | \$ 8,068 |

# SCHOOLCRAFT COLLEGE; FORUM - SCHEDULED MAINTENANCE PROGRAM

| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO:      |                    |                     | 2013         |
|---|--------------------|---------------------|--------------|
| BUILDING SECTION (BUILDING TYPE)                | BUILDING AGE (YRS) | BUILDING AREA (GSF) |              |
| FORUM - TOTAL (CLASSROOM)                       |                    | 54,891              |              |
| FORUM - ORIGINAL                                | 1963               | 53,805              |              |
| FORUM (PUMP HOUSE)                              | 2004               | 1,086               |              |
| FORUM (GREEN HOUSE - NOT INCLUDED IN FORUM GSF) | 2006               | 563                 |              |
| FORUM (KILN SHEDS - NOT INCLUDED IN FORUM GSF)  | 2006               | 855                 |              |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:         |                    | \$ 1,610,747        | - YEAR: 2023 |
| REPLACEMENT VALUE FOR THE BUILDING:             |                    | \$ 22,817,900       |              |
| FACILITY CONDITION INDEX (FCI):                 |                    | 7%                  |              |



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

| INFLATION RATE (%): | 1.8% |
|---------------------|------|
|---------------------|------|

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

## REMAINING USEFUL LIFE (RUL) BAROMETER

|  |                           |
|--|---------------------------|
|  | RUL = 1 YEAR OR LESS      |
|  | RUL = 5 YEARS             |
|  | RUL = 10 YEARS OR GREATER |

| ITEM  |       | FICM  | YEAR ITEM                                   | ITEM TOTAL   | ITEM     | AVG   | TIME  | ITEM  | DEFERRED MAINTENANCE PLAN YEAR |             |            |            |            |            |            |            |
|---|-------|---|---|--------------|----------|-------|-------|-------|--------------------------------|-------------|------------|------------|------------|------------|------------|------------|
| LOC   | NO.   |   | WAS PUT                                     |              |          |       |       |       | UNIT                           | EUL         | IN USE     | RUL        | UNIT       | ITEM       | 6          | 7          |
|   |       | ITEM  | CODE  | INTO SERVICE | QUANTITY | UNITS | (YRS) | (YRS) | (YRS)                          | COST        | FIRST COST | 2019       | 2020       | 2021       | 2022       | 2023       |
| BUILDING ENVELOPE (includes items exterior to building) |       |   |   |              |          |       |       |       |                                |             |            | \$ 147,747 | \$ 150,406 | \$ 153,113 | \$ 155,870 | \$ 158,675 |
| F-  | BE001 | EXTERIOR SEALANT MAINTENANCE.   | MMM16                                       | 2004         | 1,000    | LF    | 20    | 9     | 11                             | \$4.73      | \$ 4,730   | \$ 5,264   | \$ 5,359   | \$ 5,456   | \$ 5,554   | \$ 5,654   |
| F-  | BE002 | EXTERIOR MASONRY MAINTENANCE.   | MMM16                                       | 1963         | 500      | SF    | 10    | 50    | -40                            | \$1.89      | \$ 945     | \$ 1,052   | \$ 1,071   | \$ 1,090   | \$ 1,110   | \$ 1,130   |
| F-  | BE003 | LIMESTONE CAPS AND SILLS REPAIRS / REPLACEMENTS.  | MMM16                                       | 2015         | 115      | SF    | 50    | 0     | 50                             | \$104.96    | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| F-  | BE004 | PAINTING SLOPED SOFFITS AND STRUCTURAL WOOD BEAMS.  | MMM16                                       | VARIOUS      | --       | --    | 15    | --    | --                             | \$0.00      | --         |            |            |            |            |            |
| F-  | BE005 | ENTRANCE SOFFITS  | MMM16                                       | 2005         | 1,200    | SF    | 15    | 8     | 7                              | \$3.38      | \$ 4,056   | \$ 4,514   | \$ 4,595   | \$ 4,678   | \$ 4,762   | \$ 4,848   |
| F-  | BE006 | EAST AND WEST ENTRANCE EIFS REPAIRS.  | MMM16                                       | 2005         | --       | --    | 20    | 8     | 12                             | \$0.00      | --         |            |            |            |            |            |
| F-  | BE007 | NORTH AND SOUTH EXTERIOR DOOR REPLACEMENTS.   | W06   | 2005         | 8        | EA    | 25    | 8     | 17                             | \$11,340.00 | \$ 90,720  | \$ 100,969 | \$ 102,787 | \$ 104,637 | \$ 106,520 | \$ 108,438 |
| F-  | BE008 | EXTERIOR WINDOW MAINTENANCE/REPLACEMENT.  | 210 AND W06                                 | 2005         | --       | --    | 30    | 8     | 22                             | \$0.00      | --         |            |            |            |            |            |
| F-  | BE009 | EXTERIOR DOOR MAINTENANCE/REPLACEMENT (EXCLUDES DOORS MENTIONED ELSEWHERE IN THIS SECTION THAT ARE DETERIORATING FASTER THAN DOORS IN GENERAL). | 215 AND W06 / 2018 - KILN #4 DOOR REPLACED. | 2001         | --       | --    | 25    | 12    | 13                             | \$0.00      | --         |            |            |            |            |            |
| F-  | BE010 | SINGLE-PLY MEMBRANE REROOFING - GENERAL.  | MMM16                                       | 2001         | --       | --    | 25    | 12    | 13                             | \$0.00      | --         |            |            |            |            |            |
| F-  | BE011 | SINGLE-PLY MEMBRANE REROOFING - PUMP HOUSE.   | MMM16                                       | 2004         | --       | --    | 25    | 9     | 16                             | \$0.00      | --         |            |            |            |            |            |
| F-  | BE012 | STANDING SEAM METAL ROOFING MAINTENANCE/REPLACEMENT.  | MMM16                                       | 2001         | --       | --    | 50    | 12    | 38                             | \$0.00      | --         |            |            |            |            |            |
| F-  | BE013 | KILN SHED WEST WALL EXTERIOR GUTTER AND BRICK CLEANING OF MOLD ON FACE BRICK.   | 580   | 2006         | 600      | SF    | 15    | 7     | 8                              | \$1.89      | \$ 1,134   | \$ 1,262   | \$ 1,285   | \$ 1,308   | \$ 1,332   | \$ 1,355   |
| F-  | BE014 | GREENHOUSE MAINTENANCE WITH BRICK/SILL BASE CLEANING AND MAINTENANCE.   | 580   | 2006         | --       | --    | 15    | 7     | 8                              | \$0.00      | --         |            |            |            |            |            |
| F-  | BE015 | SOUTH COURT DOUBLE-DOOR REPLACEMENT INCLUDING DOOR FRAME REPLACEMENT.   | W06   | 1963         | 1        | EA    | 25    | 50    | -25                            | \$2,808.00  | \$ 2,808   | \$ 3,125   | \$ 3,181   | \$ 3,239   | \$ 3,297   | \$ 3,356   |
| F-  | BE016 | ENTRANCE SOFFITS  |   | 1963         | 1,200    | SF    | 15    | 50    | -35                            | \$23.63     | \$ 28,356  | \$ 31,560  | \$ 32,128  | \$ 32,706  | \$ 33,295  | \$ 33,894  |
| BUILDING INTERIOR                                       |       |   |   |              |          |       |       |       |                                |             |            | \$ 467,946 | \$ 476,369 | \$ 484,944 | \$ 493,673 | \$ 502,559 |
| F-  | BI001 | REPLACE FLOOR TILE ON CORRIDOR RAMPS.   | W06   | 1963         | 1,450    | SF    | 35    | 50    | -15                            | \$31.05     | \$ 45,023  | \$ 50,109  | \$ 51,011  | \$ 51,929  | \$ 52,864  | \$ 53,816  |
| F-  | BI002 | REPLACE BENCHES AND BOOTHS IN CORRIDORS ADDING LAPTOP POWER.  | W05 AND W06                                 | VARIOUS      | 60       | LF    | 20    | --    | --                             | \$344.25    | \$ 20,655  | \$ 22,989  | \$ 23,402  | \$ 23,824  | \$ 24,252  | \$ 24,689  |
| F-  | BI003 | VCT CORRIDOR FLOOR TILE REPLACEMENT.  | W06   | VARIOUS      | 9,670    | SF    | 35    | --    | --                             | \$4.73      | \$ 45,739  | \$ 50,907  | \$ 51,823  | \$ 52,756  | \$ 53,705  | \$ 54,672  |
| F-  | BI004 | INTERIOR WOOD DOOR REPLACEMENTS. DOOR HARDWARE - COMPLETED 2019.  | 110, 115, 210, 215, 310, 315, X01 AND X03   | VARIOUS      | 35       | EA    | 50    | --    | --                             | \$904.50    | \$ 31,658  | \$ 35,234  | \$ 35,868  | \$ 36,514  | \$ 37,171  | \$ 37,840  |
| F-  | BI005 | CORRIDOR CEILING AND LIGHTING UPGRADES.   | W05 AND W06                                 | 2002         | 12,920   | SF    | 35    | 11    | 24                             | \$5.67      | \$ 73,256  | \$ 81,533  | \$ 83,000  | \$ 84,494  | \$ 86,015  | \$ 87,564  |

# SCHOOLCRAFT COLLEGE; FORUM - SCHEDULED MAINTENANCE PROGRAM

| ITEM<br>LOC   | ITEM<br>NO. | ITEM  | FICM<br>CODE                              | YEAR ITEM<br>WAS PUT<br>INTO SERVICE | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG<br>EUL<br>(YRS) | TIME<br>IN USE<br>(YRS) | RUL<br>(YRS) | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |            |
|---|-------------|---|---|--------------------------------------|------------------------|---------------|---------------------|-------------------------|--------------|----------------------|--------------------|--------------------------------|------------|------------|------------|------------|
|   |             |   |   |                                      |                        |               |                     |                         |              |                      |                    | 6<br>2019                      | 7<br>2020  | 8<br>2021  | 9<br>2022  | 10<br>2023 |
| F-  | BI006       | FLOOR FINISH REPLACEMENTS.  | 110, 115, 210, 215, 310, 315 AND 610      | VARIOUS                              | 6,134                  | SF            | 15                  | --                      | --           | \$7.09               | \$ 43,490          | \$ 48,403                      | \$ 49,275  | \$ 50,162  | \$ 51,065  | \$ 51,984  |
| F-  | BI007       | INTERIOR WALL FINISH UPDATES - ALLOWANCE.                                       | 110, 115, 210, 215, 310, 315, X01 AND X03 | VARIOUS                              | --                     | --            | --                  | --                      | --           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | BI008       | CORRIDOR LOCKER MAINTENANCE/REPLACEMENTS.                                       | W06                                       | 2007                                 | --                     | --            | 25                  | 6                       | 19           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | BI009       | FLOOR FINISH UPDATES - ALLOWANCE.   | 110, 115, 210, 215, 310, 315, X01 AND X03 | VARIOUS                              | --                     | --            | --                  | --                      | --           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | BI010       | ASBESTOS FLOORING ABATEMENT / FLOOR FINISH REPLACEMENT IN ROOM F21.             | Y04                                       | 1963                                 | 15                     | SF            | 35                  | 50                      | -15          | \$3.71               | \$ 56              | \$ 62                          | \$ 63      | \$ 64      | \$ 65      | \$ 67      |
| F-  | BI011       | ASBESTOS FLOORING ABATEMENT / FLOOR FINISH REPLACEMENT IN ROOM F81.             | Y04                                       | 1963                                 | 40                     | SF            | 35                  | 50                      | -15          | \$3.71               | \$ 148             | \$ 165                         | \$ 168     | \$ 171     | \$ 174     | \$ 177     |
| F-  | BI012       | REPLACE ASBESTOS CONTAINING DOOR FROM F81 TO RETURN AIR TUNNEL.                 | Y04                                       | 1963                                 | 1                      | EA            | 50                  | 50                      | 0            | \$1,350.00           | \$ 1,350           | \$ 1,503                       | \$ 1,530   | \$ 1,557   | \$ 1,585   | \$ 1,614   |
| F-  | BI013       | TOILET ROOM UPDATES.  | X03                                       | 2002                                 | 700                    | SF            | 25                  | 11                      | 14           | \$54.00              | \$ 37,800          | \$ 42,071                      | \$ 42,828  | \$ 43,599  | \$ 44,384  | \$ 45,182  |
| F-  | BI014       | EAST AND WEST LOBBY FLOORING REPLACEMENT.                                       | W05 AND W06                               | 2012                                 | --                     | --            | 35                  | 1                       | 34           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | BI015       | ENTRY MAT REPLACEMENT   | W06                                       | 2008                                 | 1,880                  | SF            | 5                   | 5                       | 0            | \$62.10              | \$ 116,748         | \$ 129,938                     | \$ 132,277 | \$ 134,658 | \$ 137,082 | \$ 139,549 |
| F-  | BI016       | LAB SINK AND COUNTER REPLACEMENT.   | 210                                       | 2002                                 | 5                      | LF            | 25                  | 11                      | 14           | \$418.50             | \$ 2,093           | \$ 2,329                       | \$ 2,371   | \$ 2,414   | \$ 2,457   | \$ 2,501   |
| F-  | BI017       | CORRIDOR DOOR HARDWARE UPGRADES.  | W06                                       | VARIOUS                              | 6                      | EA            | 50                  | --                      | --           | \$405.00             | \$ 2,430           | \$ 2,705                       | \$ 2,753   | \$ 2,803   | \$ 2,853   | \$ 2,905   |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |             |   |   |                                      |                        |               |                     |                         |              |                      |                    | \$ 101,570                     | \$ 103,399 | \$ 105,260 | \$ 107,155 | \$ 109,083 |
| F-  | PS001       | SANITARY DRAINAGE PIPING MAINTENANCE.   | UUU13                                     | 1963                                 | 50,000                 | SF            | 50                  | 50                      | 0            | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| F-  | PS002       | BIOLOGY/CHEMISTRY LABORATORY ACID WASTE SYSTEM INSPECTION/MAINTENANCE.          | UUU25                                     | VARIOUS                              | 5,000                  | SF            | 10                  | --                      | --           | \$6.75               | \$ 33,750          | \$ 37,563                      | \$ 38,239  | \$ 38,927  | \$ 39,628  | \$ 40,341  |
| F-  | PS003       | GEOLOGY LABORATORY ACID WASTE SYSTEM INSPECTION/MAINTENANCE.                    | UUU25                                     | 2002                                 | 5,000                  | SF            | 10                  | 11                      | -1           | \$6.75               | \$ 33,750          | \$ 37,563                      | \$ 38,239  | \$ 38,927  | \$ 39,628  | \$ 40,341  |
| F-  | PS004       | TOILET FIXTURES   | X03                                       | VARIOUS                              | 44                     | EA            | 40                  | --                      | --           | \$540.00             | \$ 23,760          | \$ 26,444                      | \$ 26,920  | \$ 27,405  | \$ 27,898  | \$ 28,400  |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |             |   |   |                                      |                        |               |                     |                         |              |                      |                    | \$ 327,063                     | \$ 332,950 | \$ 338,943 | \$ 345,044 | \$ 351,255 |
| F-  | MS001       | REPLACE ELECTRICAL HALL HEATERS AND PNEU CONTROLS WITH DDC.                     | UUU06 AND UUU25                           | 1963                                 | 10                     | EA            | 20                  | 50                      | -30          | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| F-  | MS002       | REPLACE REMAINING ORIG ELECTRIC DUCT HEATERS WITH PNEU TO DDC CONTROLS UPGRADE. | UUU06 AND UUU25                           | 1963                                 | 10                     | EA            | 20                  | 50                      | -30          | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| F-  | MS003       | ADDRESS AIR HANDLING UNIT 3 CONDENSATE DRAINAGE ISSUES.                         | UUU25                                     | 2004                                 | 1                      | LS            | 30                  | 9                       | 21           | \$13,200.00          | \$ 13,200          | \$ 14,691                      | \$ 14,956  | \$ 15,225  | \$ 15,499  | \$ 15,778  |
| F-  | MS004       | CHEMISTRY LAB VACUUM PUMP MAINTENANCE/REPLACEMENT.                              | 210                                       | 2003                                 | 1                      | LS            | 10                  | 10                      | 0            | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| F-  | MS005       | CONVERSION OF REMAINING PNEUMATIC TEMPERATURE CONTROLS TO DDC.                  | UUU06                                     | 2004                                 | 15,000                 | SF            | 10                  | 9                       | 1            | \$6.08               | \$ 91,200          | \$ 101,504                     | \$ 103,331 | \$ 105,191 | \$ 107,084 | \$ 109,012 |
| F-  | MS006       | ELECTRIC DUCT HEATER REPLACEMENTS IN FACULTY OFFICE BAYS.                       | 310                                       | 2004                                 | 2,000                  | SF            | 20                  | 9                       | 11           | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| F-  | MS007       | EAST MECHANICAL ROOM EXPOSED DUCT INSULATION REPAIRS.                           | UUU25                                     | 1963                                 | 100                    | SF            | 25                  | 50                      | -25          | \$40.50              | \$ 4,050           | \$ 4,508                       | \$ 4,589   | \$ 4,671   | \$ 4,755   | \$ 4,841   |
| F-  | MS008       | HVAC SYSTEMS CLEANING.  | UUU25                                     | 2007                                 | 50,000                 | SF            | 10                  | 6                       | 4            | \$1.15               | \$ 57,500          | \$ 63,996                      | \$ 65,148  | \$ 66,321  | \$ 67,515  | \$ 68,730  |
| F-  | MS009       | KILN SHED EXHAUST FAN REPLACEMENTS.   | 210                                       | 2005                                 | --                     | --            | 20                  | 8                       | 12           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | MS010       | WEST MECHANICAL ROOM EXPOSED DUCT INSULATION REPAIRS.                           | UUU25                                     | 2006                                 | 100                    | SF            | 25                  | 7                       | 18           | \$40.50              | \$ 4,050           | \$ 4,508                       | \$ 4,589   | \$ 4,671   | \$ 4,755   | \$ 4,841   |
| F-  | MS011       | LABORATORY/TEMPERATURE CONTROLS AIR COMPRESSOR REPLACEMENT.                     | UUU25                                     | 1963                                 | 1                      | EA            | 20                  | 50                      | -30          | \$56,025.00          | \$ 56,025          | \$ 62,355                      | \$ 63,477  | \$ 64,620  | \$ 65,783  | \$ 66,967  |
| F-  | MS012       | PRIMARY CHILLED WATER LOOP PUMP MAINTENANCE/REPLACEMENTS.                       | UUU20                                     | 2014                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | MS013       | CAMPUS CHILLED WATER DISTRIBUTION PUMP REPLACEMENTS.                            | UUU20                                     | 2004                                 | --                     | --            | 20                  | 9                       | 11           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | MS014       | BOILER CIRCULATING WATER PUMP REPLACEMENTS.                                     | UUU22                                     | 2004                                 | --                     | --            | 20                  | 9                       | 11           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | MS015       | FORUM BUILDING HEATING WATER PUMP REPLACEMENTS.                                 | UUU22                                     | 2004                                 | --                     | --            | 20                  | 9                       | 11           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | MS016       | AIR HANDLING UNIT REPLACEMENTS AHU-1, 2 AND 3.                                  | UUU25                                     | 2004                                 | --                     | --            | 30                  | 9                       | 21           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | MS017       | CABINET UNIT HEATER REPLACEMENTS.   | UUU25                                     | 2004                                 | --                     | --            | 25                  | 9                       | 16           | \$0.00               | --                 |                                |            |            |            |            |
| F-  | MS018       | EXHAUST FAN MAINTENANCE/REPLACEMENTS.   | UUU25                                     | 2004                                 | 5                      | EA            | 25                  | 9                       | 16           | \$6,412.50           | \$ 32,063          | \$ 35,685                      | \$ 36,327  | \$ 36,981  | \$ 37,647  | \$ 38,324  |
| F-  | MS019       | BOILER REPLACEMENTS.  | UUU22                                     | 2004                                 | --                     | --            | 25                  | 9                       | 16           | \$0.00               | --                 |                                |            |            |            |            |

# SCHOOLCRAFT COLLEGE; FORUM - SCHEDULED MAINTENANCE PROGRAM

| ITEM<br>LOC   | ITEM<br>NO. | ITEM   | FICM<br>CODE  | YEAR ITEM<br>WAS PUT<br>INTO SERVICE | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG<br>EUL<br>(YRS) | TIME<br>IN USE<br>(YRS) | RUL<br>(YRS) | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |              |              |              |              |
|---|-------------|--|---|--------------------------------------|------------------------|---------------|---------------------|-------------------------|--------------|----------------------|--------------------|--------------------------------|--------------|--------------|--------------|--------------|
|   |             |  |   |                                      |                        |               |                     |                         |              |                      |                    | 6<br>2019                      | 7<br>2020    | 8<br>2021    | 9<br>2022    | 10<br>2023   |
| F-  | MS020       | PUMP HOUSE SPLIT SYSTEM A/C REPLACEMENT.   | UUU25   | 2004                                 | --                     | --            | 15                  | 9                       | 6            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | MS021       | FUME HOOD BALANCING AND SAFETY INSPECTION  | 210   | 2004                                 | 1                      | LS            | 2                   | 9                       | -7           | \$35,775.00          | \$ 35,775          | \$ 39,817                      | \$ 40,533    | \$ 41,263    | \$ 42,006    | \$ 42,762    |
| <b>ELECTRICAL SYSTEMS (may be packaged with BI item scope)</b>    |             |  |   |                                      |                        |               |                     |                         |              |                      |                    | \$ 227,891                     | \$ 231,993   | \$ 236,169   | \$ 240,420   | \$ 244,747   |
| F-  | ES001       | BUILDING SERVICE TRANSFORMER.  | UUU04   | 2007                                 | --                     | --            | 20                  | 6                       | 14           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES002       | MAIN SWITCHBOARD.  | UUU05   | 1963                                 | 1                      | EA            | 20                  | 50                      | -30          | \$81,000.00          | \$ 81,000          | \$ 90,151                      | \$ 91,774    | \$ 93,426    | \$ 95,108    | \$ 96,819    |
| F-  | ES003       | STANDBY GENERATOR.   | UUU25   | 2007                                 | --                     | --            | 20                  | 6                       | 14           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES004       | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).   | UUU25   | 2007                                 | --                     | --            | 20                  | 6                       | 14           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES005       | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS).   | UUU25   | 2007                                 | --                     | --            | 20                  | 6                       | 14           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES006       | ELECTRICAL DISTRIBUTION EQUIPMENT.   | UUU05   | 1963                                 | 2                      | EA            | 20                  | 50                      | -30          | \$1,000.00           | \$ 2,000           | \$ 2,226                       | \$ 2,266     | \$ 2,307     | \$ 2,348     | \$ 2,391     |
| F-  | ES007       | VARIABLE FREQUENCY DRIVE (VFD).  | UUU25   | 2004                                 | --                     | --            | 15                  | 9                       | 6            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES008       | LIGHTING AND RECEPTACLE PANELBOARDS.   | UUU05   | 1963                                 | 1                      | LS            | 20                  | 50                      | -30          | \$81,000.00          | \$ 81,000          | \$ 90,151                      | \$ 91,774    | \$ 93,426    | \$ 95,108    | \$ 96,819    |
| F-  | ES009       | EXTERIOR BUILDING MOUNTED LIGHTING.  | UUU25   | 1963                                 | 18                     | EA            | 20                  | 50                      | -30          | \$708.75             | \$ 12,758          | \$ 14,199                      | \$ 14,454    | \$ 14,715    | \$ 14,979    | \$ 15,249    |
| F-  | ES010       | EXIT LIGHTING.   | W06   | 2002                                 | --                     | --            | 2                   | 11                      | -9           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES011       | CORRIDOR LIGHTING.   | W06   | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES012       | CLASSROOM LIGHTING   | 110 AND 210 /<br>2018 - F470 TRACK /<br>TRACK LIGHTING HEADS<br>REPLACED. | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES013       | OFFICE LIGHTING.   | 310   | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES014       | STORAGE AND UTILITY ROOM LIGHTING.   | X01 AND Y04   | 1963                                 | 1                      | LS            | 20                  | 50                      | -30          | \$0.00               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| F-  | ES015       | VACANCY SENSOR LIGHTING CONTROLS (CLASSROOMS).   | 110 AND 210   | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | ES016       | VACANCY SENSOR LIGHTING CONTROLS (CORRIDORS)   | W05 AND W06   | NONE                                 | 1                      | LS            | --                  | --                      | --           | \$28,000.00          | \$ 28,000          | \$ 31,163                      | \$ 31,724    | \$ 32,295    | \$ 32,877    | \$ 33,468    |
| <b>BUILDING SYSTEMS (fire, security, IT/media infrastructure)</b> |             |  |   |                                      |                        |               |                     |                         |              |                      |                    | \$ 136,916                     | \$ 139,380   | \$ 141,889   | \$ 144,443   | \$ 147,043   |
| F-  | BS001       | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.  | UUU07   | 2022                                 | --                     | --            | 20                  | -9                      | 29           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | BS002       | FIRE ALARM DEVICES.  | UUU07   | 2007                                 | --                     | --            | 20                  | 6                       | 14           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | BS003       | BOILER EPO SYSTEM.   | Y04   | NONE                                 | 1                      | EA            | 20                  | --                      | --           | \$3,375.00           | \$ 3,375           | \$ 3,756                       | \$ 3,824     | \$ 3,893     | \$ 3,963     | \$ 4,034     |
| F-  | BS004       | CLOCK SYSTEM.  | UUU25   | 1963                                 | 1                      | LS            | 20                  | 50                      | -30          | \$48,221.26          | \$ 48,221          | \$ 53,669                      | \$ 54,635    | \$ 55,619    | \$ 56,620    | \$ 57,639    |
| F-  | BS005       | SECURITY SURVEILLANCE SYSTEM.  | UUU14   | 2004                                 | 1                      | LS            | 20                  | 9                       | 11           | \$48,221.26          | \$ 48,221          | \$ 53,669                      | \$ 54,635    | \$ 55,619    | \$ 56,620    | \$ 57,639    |
| F-  | BS006       | SECURITY ACCESS SYSTEM. IMPROVEMENTS WERE MADE IN 2019. FURTHER UPGRADES FROM GALAXY ACCESS SYSTEM TO LENELL S2 SYSTEM CHANGE IN 2020. | UUU14   | 2004 W/ 2019 & 2020 CHANGES          | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | BS007       | THEATER LIGHTING AND CONTROL EQUIPMENT.  | 590   | 1963                                 | 1                      | LS            | 20                  | 50                      | -30          | \$0.00               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| F-  | BS008       | NETWORK CABLING.   | UUU02   | VARIOUS                              | 1                      | LS            | 10                  | --                      | --           | \$400.00             | \$ 400             | \$ 445                         | \$ 453       | \$ 461       | \$ 470       | \$ 478       |
| F-  | BS009       | NETWORK CABLE.   | UUU02   | VARIOUS                              | 106                    | EA            | 10                  | --                      | --           | \$200.00             | \$ 21,200          | \$ 23,595                      | \$ 24,020    | \$ 24,452    | \$ 24,892    | \$ 25,340    |
| F-  | BS010       | NETWORK SYSTEMS.   | UUU02   | VARIOUS                              | 2                      | EA            | 10                  | --                      | --           | \$300.00             | \$ 600             | \$ 668                         | \$ 680       | \$ 692       | \$ 705       | \$ 717       |
| F-  | BS011       | TP COMMUNICATION CABLE.  | UUU02   | VARIOUS                              | 10                     | EA            | 10                  | --                      | --           | \$100.00             | \$ 1,000           | \$ 1,113                       | \$ 1,133     | \$ 1,153     | \$ 1,174     | \$ 1,195     |
| <b>SPECIALTY EQUIPMENT (food service, theatre, labs, shops)</b>   |             |  |   |                                      |                        |               |                     |                         |              |                      |                    | \$ 48,081                      | \$ 48,946    | \$ 49,827    | \$ 50,724    | \$ 51,637    |
| F-  | SE001       | F200 FUME HOODS RECONDITIONING/REPLACEMENT.  | 210   | 2007                                 | --                     | --            | 20                  | 6                       | 14           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | SE002       | F210 FUME HOODS RECONDITIONING/REPLACEMENT.  | 210   | 2004                                 | --                     | --            | 20                  | 9                       | 11           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | SE003       | F270 FUME HOODS RECONDITIONING/REPLACEMENT.  | 210   | 1997                                 | --                     | --            | 20                  | 16                      | 4            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | SE004       | F400 SPRAY BOOTH RECONDITIONING/REPLACEMENT.   | 110   | 2001                                 | --                     | --            | 20                  | 12                      | 8            | \$0.00               | --                 |                                |              |              |              |              |
| F-  | SE005       | F410 CERAMICS GLAZING SPRAY BOOTH RECONDITIONING/REPLACEMENT.  | 210   | 2010                                 | --                     | --            | 20                  | 3                       | 17           | \$0.00               | --                 |                                |              |              |              |              |
| F-  | SE006       | EXTERIOR BUILDING SIGNAGE UPGRADE (COMPLIANCE WITH CURRENT COLLEGE BRANDING STANDARDS).  | SSS16   | 1963                                 | 1                      | LS            | 25                  | 50                      | -25          | \$43,200.00          | \$ 43,200          | \$ 48,081                      | \$ 48,946    | \$ 49,827    | \$ 50,724    | \$ 51,637    |
| <b>ACCESSIBILITY IMPROVEMENTS</b>                                 |             |  |   |                                      |                        |               |                     |                         |              |                      |                    | \$ 42,597                      | \$ 43,364    | \$ 44,144    | \$ 44,939    | \$ 45,748    |
| F-  | AI001       | ADA WHEELCHAIR LIFT FOR IMPROVED ACCESS BETWEEN UPPER AND LOWER HALVES OF FORUM..  | W06   | NONE                                 | 60                     | LF            | 20                  | --                      | --           | \$637.88             | \$ 38,273          | \$ 42,597                      | \$ 43,364    | \$ 44,144    | \$ 44,939    | \$ 45,748    |
| <b>ANNUAL FUNDING REQUIREMENTS (ROUNDED):</b>                     |             |  |   |                                      |                        |               |                     |                         |              |                      |                    | \$ 1,499,810                   | \$ 1,526,806 | \$ 1,554,289 | \$ 1,582,266 | \$ 1,610,747 |

# SCHOOLCRAFT COLLEGE; GROTE CENTER - SCHEDULED MAINTENANCE PROGRAM

| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: |                    |                     |
|--|--------------------|---------------------|
| 2013                                       |                    |                     |
| BUILDING SECTION (BUILDING TYPE)           | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
| GROTE CENTER - TOTAL (ADMIN)               | 1963               | 15,076              |
| [FORMERLY NAMED ADMINISTRATION BUILDING]   |                    |                     |
|  |                    |                     |

|   |              |
|---|--------------|
| YEAR: 2023                              |              |
| MAINTENANCE BACKLOG VALUE FOR BUILDING: | \$ 862,429   |
| REPLACEMENT VALUE FOR THE BUILDING:     | \$ 5,210,600 |
| FACILITY CONDITION INDEX (FCI):         | 17%          |



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

|                     |      |
|---------------------|------|
| INFLATION RATE (%): | 1.8% |
|---------------------|------|

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

## REMAINING USEFUL LIFE (RUL) BAROMETER

|  |                           |
|--|---------------------------|
|  | RUL = 1 YEAR OR LESS      |
|  | RUL = 5 YEARS             |
|  | RUL = 10 YEARS OR GREATER |

| ITEM  |       | YEAR ITEM  |                       | AVG TIME   |       | ITEM  |        | SCHEDULED MAINTENANCE PLAN YEAR |      |             |            |            |            |            |            |           |
|---|-------|--|-----------------------|------------|-------|-------|--------|---------------------------------|------|-------------|------------|------------|------------|------------|------------|-----------|
| LOC   | NO.   | FICM   | WAS PUT               | ITEM TOTAL | ITEM  | EUL   | IN USE | RUL                             | UNIT | ITEM        | 6          | 7          | 8          | 9          | 10         |           |
|   |       | CODE   | INTO SERVICE          | QUANTITY   | UNITS | (YRS) | (YRS)  | (YRS)                           | COST | FIRST COST  | 2019       | 2020       | 2021       | 2022       | 2023       |           |
| BUILDING ENVELOPE (includes items exterior to building) |       |  |                       |            |       |       |        |                                 |      |             | \$ 82,662  | \$ 84,150  | \$ 85,665  | \$ 87,206  | \$ 88,776  |           |
| GC-   | BE001 | EXTERIOR PAINTING (SOFFITS, FASCIA, WOOD BEAMS).                                 | MMM16                 | 2020       | 1     | EA    | 15     | 0                               | 15   | \$12,100.00 | \$ 12,100  |            |            |            |            |           |
| GC-   | BE002 | EXTERIOR METAL DOOR FRAME / DOOR REPLACEMENTS (FRAME CORROSION INVOLVED).        | W06                   | VARIOUS    | 3     | EA    | 25     | --                              | --   | \$2,754.00  | \$ 8,262   | \$ 9,195   | \$ 9,361   | \$ 9,529   | \$ 9,701   | \$ 9,876  |
| GC-   | BE003 | FROST SLAB REPLACEMENTS AT EXTERIOR DOORS.                                       | W06                   | 1963       | 30    | SF    |        | 50                              | -50  | \$117.00    | \$ 3,510   | \$ 3,907   | \$ 3,977   | \$ 4,048   | \$ 4,121   | \$ 4,196  |
| GC-   | BE004 | LIMESTONE WING WALL CAP REPLACEMENTS.  | MMM16                 | 1963       | 40    | SF    | 50     | 50                              | 0    | \$36.11     | \$ 1,444   | \$ 1,608   | \$ 1,637   | \$ 1,666   | \$ 1,696   | \$ 1,726  |
| GC-   | BE005 | EXTERIOR SEALANT MAINTENANCE.  | MMM16                 | 1963       | 150   | LF    | 20     | 50                              | -30  | \$4.73      | \$ 710     | \$ 790     | \$ 804     | \$ 818     | \$ 833     | \$ 848    |
| GC-   | BE006 | BELL TOWER PAINTING.   | MMM16                 | 2011       | --    | --    | 15     | 2                               | 13   | \$0.00      | --         |            |            |            |            |           |
| GC-   | BE007 | EXTERIOR WINDOWS REPLACEMENT.  | MMM16                 | 2006       | --    | --    | 30     | 7                               | 23   | \$0.00      | --         |            |            |            |            |           |
| GC-   | BE008 | CLEAN BRICK EFFLORESCENCE.   | MMM16                 | 1963       | --    | --    | 10     | 50                              | -40  | \$0.00      | --         |            |            |            |            |           |
| GC-   | BE009 | MASONRY MAINTENANCE.   | MMM16                 | 1963       | --    | --    | 10     | 50                              | -40  | \$0.00      | --         |            |            |            |            |           |
| GC-   | BE010 | EAST AND WEST LOBBY STOREFRONT WINDOW SYSTEM MAINTENANCE.                        | W05                   | VARIOUS    | --    | --    | 30     | --                              | --   | \$0.00      | --         |            |            |            |            |           |
| GC-   | BE011 | WINDOW MAINTENANCE (EXCLUDING EAST AND WEST LOBBY STOREFRONT WINDOW SYSTEM).     | MMM16                 | 2006       | --    | --    | 30     | 7                               | 23   | \$0.00      | --         |            |            |            |            |           |
| GC-   | BE012 | ASPHALT BUILT-UP ROOFING MAINTENANCE/REPLACEMENT.                                | MMM16                 | 1993       | 3,400 | SF    | 20     | 20                              | 0    | \$16.20     | \$ 55,080  | \$ 61,303  | \$ 62,406  | \$ 63,530  | \$ 64,673  | \$ 65,837 |
| GC-   | BE013 | STANDING SEAM METAL ROOFING MAINTENANCE/REPLACEMENT.                             | MMM16                 | 1998       | --    | --    | 50     | 15                              | 35   | \$0.00      | --         |            |            |            |            |           |
| GC-   | BE014 | PRESSURE LAMINATED STRUCTURAL WOOD BEAM RE-FINISHING.                            | MMM16                 | 2005       | 650   | SF    | 15     | 8                               | 7    | \$2.70      | \$ 1,755   | \$ 1,953   | \$ 1,988   | \$ 2,024   | \$ 2,061   | \$ 2,098  |
| GC-   | BE015 | PROVIDE CONCRETE PAD AT EXTERIOR EXIT DOOR                                       | W06                   | 2006       | 15    | SF    | 20     | 7                               | 13   | \$234.00    | \$ 3,510   | \$ 3,907   | \$ 3,977   | \$ 4,048   | \$ 4,121   | \$ 4,196  |
| BUILDING INTERIOR                                       |       |  |                       |            |       |       |        |                                 |      |             | \$ 154,059 | \$ 156,832 | \$ 159,655 | \$ 162,529 | \$ 165,454 |           |
| GC-   | BI001 | CORRIDOR VCT TILE REPLACEMENT.   | W05 AND W06           | 2000       | 5,460 | SF    | 35     | 13                              | 22   | \$4.73      | \$ 25,826  | \$ 28,744  | \$ 29,261  | \$ 29,788  | \$ 30,324  | \$ 30,870 |
| GC-   | BI002 | INTERIOR WOOD DOOR / DOOR HARDWARE REPLACEMENT.                                  | 310 AND 350           | VARIOUS    | 14    | EA    | 50     | --                              | --   | \$1,350.00  | \$ 18,900  | \$ 21,035  | \$ 21,414  | \$ 21,799  | \$ 22,192  | \$ 22,591 |
| GC-   | BI003 | UPDATE INFORMATION / BROCHURE RACK AT NORTHEAST CORRIDOR.                        | W05                   | 1963       | 40    | SF    | 15     | 50                              | -35  | \$67.50     | \$ 2,700   | \$ 3,005   | \$ 3,059   | \$ 3,114   | \$ 3,170   | \$ 3,227  |
| GC-   | BI004 | TOILET ROOM RENOVATIONS (FLOOR TILE, WALL TILE, ADA COMPLIANCE ISSUES INCLUDED). | X03                   | 1963       | 350   | SF    | 25     | 50                              | -25  | \$54.00     | \$ 18,900  | \$ 21,035  | \$ 21,414  | \$ 21,799  | \$ 22,192  | \$ 22,591 |
| GC-   | BI005 | UPDATE / REPLACE CORRIDOR BENCH SEATING.   | W05                   | 1963       | 32    | LF    | 20     | 50                              | -30  | \$344.25    | \$ 11,016  | \$ 12,261  | \$ 12,481  | \$ 12,706  | \$ 12,935  | \$ 13,167 |
| GC-   | BI006 | FLOOR FINISH UPDATES - ALLOWANCE.  | 310 AND 350           | VARIOUS    | --    | --    | --     | --                              | --   | \$0.00      | --         |            |            |            |            |           |
| GC-   | BI007 | WALL FINISH UPDATES - ALLOWANCE.   | 310, 350, W05 AND W06 | VARIOUS    | --    | --    | --     | --                              | --   | \$0.00      | --         |            |            |            |            |           |

# SCHOOLCRAFT COLLEGE; GROTE CENTER - SCHEDULED MAINTENANCE PROGRAM

| LOC  | ITEM NO. | ITEM   | FICM CODE   | YEAR ITEM WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | SCHEDULED MAINTENANCE PLAN YEAR |            |            |            |            |
|--|----------|--|-------------|--------------------------------|---------------------|------------|---------------|-------------------|-----------|----------------|-----------------|---------------------------------|------------|------------|------------|------------|
|  |          |  |             |                                |                     |            |               |                   |           |                |                 | 6                               | 7          | 8          | 9          | 10         |
|  |          |  |             |                                |                     |            |               |                   |           |                |                 | 2019                            | 2020       | 2021       | 2022       | 2023       |
| GC-  | BI008    | A13 - PHONE SWITCHGEAR ASBESTOS FLOORING ABATEMENT AND REPLACEMENT.                        | Y04         | 2015                           | --                  | SF         | --            | 0                 | --        | \$5.06         | --              |                                 |            |            |            |            |
| GC-  | BI009    | A13 - PHONE SWITCHGEAR ASBESTOS DOOR ABATEMENT AND REPLACEMENT.                            | Y04         | 1963                           | 1                   | EA         | 50            | 50                | 0         | \$1,485.00     | \$ 1,485        | \$ 1,653                        | \$ 1,683   | \$ 1,713   | \$ 1,744   | \$ 1,775   |
| GC-  | BI010    | BOARD ROOM KITCHENETTE REPLACEMENT.  | 355         | 2012                           | --                  | --         | 20            | 1                 | 19        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | BI011    | REPLACE OFFICE CARPETING   | 310 AND 350 | VARIOUS                        | 3,150               | SF         | 15            | --                | --        | \$7.09         | \$ 22,334       | \$ 24,857                       | \$ 25,304  | \$ 25,760  | \$ 26,223  | \$ 26,695  |
| GC-  | BI012    | REPLACE ENTRANCE MATS  | W06         | 2009                           | 600                 | SF         | 5             | 4                 | 1         | \$62.10        | \$ 37,260       | \$ 41,470                       | \$ 42,216  | \$ 42,976  | \$ 43,749  | \$ 44,537  |
| PLUMBING SYSTEMS (may be packaged with BI item scope)      |          |  |             |                                |                     |            |               |                   |           |                |                 | \$ -                            | \$ -       | \$ -       | \$ -       | \$ -       |
| GC-  |          | NONE   |             |                                |                     |            | --            | --                |           |                | \$ -            | \$ -                            | \$ -       | \$ -       | \$ -       | \$ -       |
| MECHANICAL SYSTEMS (may be packaged with BI item scope)    |          |  |             |                                |                     |            |               |                   |           |                |                 | \$ 255,216                      | \$ 259,810 | \$ 264,486 | \$ 269,247 | \$ 274,094 |
| GC-  | MS001    | HVAC SYSTEM CLEANING.  | UUU25       | 1999                           | 15,000              | SF         | 10            | 14                | -4        | \$1.15         | \$ 17,250       | \$ 19,199                       | \$ 19,544  | \$ 19,896  | \$ 20,254  | \$ 20,619  |
| GC-  | MS002    | MECHANICAL SUMP PUMP MAINTENANCE / REPLACEMENT.  | UUU16       | VARIOUS                        | 1                   | LS         | 15            | --                | --        | \$1,080.00     | \$ 1,080        | \$ 1,202                        | \$ 1,224   | \$ 1,246   | \$ 1,268   | \$ 1,291   |
| GC-  | MS003    | AIR HANDLING UNIT REPLACEMENT (ORIGINAL UNIT HOUSING MODIFIED AND RECOMMISSIONED IN 2006). | UUU25       | 2006                           | --                  | --         | 25            | 7                 | 18        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS004    | CABINET UNIT HEATER REPLACEMENTS.  | UUU25       | 2006                           | --                  | --         | 25            | 7                 | 18        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS005    | FINNED TUBE RADIATION MAINTENANCE.   | UUU25       | 2006                           | --                  | --         | 25            | 7                 | 18        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS006    | INDUCED DRAFT FAN (HOT WATER BOILER STACK) MAINTENANCE.                                    | UUU22       | 2006                           | --                  | --         | 15            | 7                 | 8         | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS007    | RETURN AIR FAN MAINTENANCE.  | UUU25       | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS008    | ELECTRIC DUCT HEATER REPLACEMENTS.   | UUU25       | 2006                           | --                  | --         | 10            | 7                 | 3         | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS009    | CHILLED WATER DISTRIBUTION PUMP REPLACEMENTS.  | UUU20       | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS010    | HEATING HOT WATER DISTRIBUTION PUMP REPLACEMENTS.  | UUU22       | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | MS011    | HEATING HOT WATER BOILER CIRCULATING PUMPS.  | UUU22       | 2006                           | 2                   | EA         | 20            | 7                 | 13        | \$6,750.00     | \$ 13,500       | \$ 15,025                       | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |
| GC-  | MS012    | HEATING HOT WATER BOILER REPLACEMENTS.   | UUU22       | 2006                           | 2                   | EA         | 20            | 7                 | 13        | \$47,250.00    | \$ 94,500       | \$ 105,176                      | \$ 107,070 | \$ 108,997 | \$ 110,959 | \$ 112,956 |
| GC-  | MS013    | BAS UPGRADE.   | UUU06       | 2006                           | 15,000              | SF         | 20            | 7                 | 13        | \$6.08         | \$ 91,200       | \$ 101,504                      | \$ 103,331 | \$ 105,191 | \$ 107,084 | \$ 109,012 |
| GC-  | MS014    | UPGRADE TOILET ROOM FIXTURES.  | X03         | VARIOUS                        | 3                   | EA         | 40            | --                | --        | \$2,700.00     | \$ 8,100        | \$ 9,015                        | \$ 9,177   | \$ 9,343   | \$ 9,511   | \$ 9,682   |
| GC-  | MS015    | CHW BUTTERFLY VALVES.  | UUU20       | 2004                           | 2                   | EA         | 15            | 9                 | 6         | \$1,350.00     | \$ 2,700        | \$ 3,005                        | \$ 3,059   | \$ 3,114   | \$ 3,170   | \$ 3,227   |
| GC-  | MS016    | RIGID INSULATION ON DUCTWORK.  | UUU25       | 1963                           | 50                  | SF         | 15            | 50                | -35       | \$19.58        | \$ 979          | \$ 1,090                        | \$ 1,109   | \$ 1,129   | \$ 1,150   | \$ 1,170   |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope)    |          |  |             |                                |                     |            |               |                   |           |                |                 | \$ 147,623                      | \$ 150,280 | \$ 152,985 | \$ 155,739 | \$ 158,542 |
| GC-  | ES001    | BUILDING SERVICE TRANSFORMER.  | UUU04       | 2007                           | --                  | --         | 20            | 6                 | 14        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES002    | MAIN SWITCHBOARD.  | UUU05       | 1963                           | 1                   | EA         | 20            | 50                | -30       | \$54,000.00    | \$ 54,000       | \$ 60,101                       | \$ 61,183  | \$ 62,284  | \$ 63,405  | \$ 64,546  |
| GC-  | ES003    | STANDBY GENERATOR.   | UUU25       | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES004    | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).   | UUU25       | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES005    | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS).                                     | UUU25       | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES006    | ELECTRICAL DISTRIBUTION EQUIPMENT.   | UUU05       | 1963                           | 2                   | EA         | 20            | 50                | -30       | \$20,250.00    | \$ 40,500       | \$ 45,076                       | \$ 45,887  | \$ 46,713  | \$ 47,554  | \$ 48,410  |
| GC-  | ES007    | VARIABLE FREQUENCY DRIVE (VFD).  | UUU25       | 2006                           | --                  | --         | 15            | 7                 | 8         | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES008    | LIGHTING AND RECEPTACLE PANELBOARDS.   | UUU05       | 1963                           | 1                   | LS         | 20            | 50                | -30       | \$13,500.00    | \$ 13,500       | \$ 15,025                       | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |
| GC-  | ES009    | EXTERIOR BUILDING MOUNTED LIGHTING.  | UUU25       | 2006                           | 10                  | EA         | 20            | 7                 | 13        | \$708.75       | \$ 7,088        | \$ 7,888                        | \$ 8,030   | \$ 8,175   | \$ 8,322   | \$ 8,472   |
| GC-  | ES010    | EXIT LIGHTING.   | W05 AND W06 | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES011    | CORRIDOR LIGHTING.   | W05 AND W06 | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES012    | MEETING/CONFERENCE ROOM LIGHTING.  | 350         | 1999                           | --                  | --         | 20            | 14                | 6         | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES013    | OFFICE LIGHTING.   | 310         | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES014    | STORAGE AND UTILITY ROOM AND ATTIC LIGHTING.   | Y04         | 1963                           | 1                   | LS         | 20            | 50                | -30       | \$13,500.00    | \$ 13,500       | \$ 15,025                       | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |
| GC-  | ES015    | LIGHTING CONTROLS (OFFICES/MEETING ROOMS).   | 310 AND 350 | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | ES016    | VACANCY SENSOR LIGHTING CONTROLS (CORRIDORS).  | W05 AND W06 | NONE                           | 1                   | LS         | 20            | --                | --        | \$4,050.00     | \$ 4,050        | \$ 4,508                        | \$ 4,589   | \$ 4,671   | \$ 4,755   | \$ 4,841   |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |          |  |             |                                |                     |            |               |                   |           |                |                 | \$ 87,805                       | \$ 89,386  | \$ 90,995  | \$ 92,632  | \$ 94,300  |
| GC-  | BS001    | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.  | UUU07       | 2022                           | --                  | --         | 20            | -9                | 29        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | BS002    | FIRE ALARM DEVICES.  | UUU07       | 2006                           | --                  | --         | 20            | 7                 | 13        | \$0.00         | --              |                                 |            |            |            |            |
| GC-  | BS003    | BOILER EPO SYSTEM.   | Y04         | NONE                           | 1                   | EA         | 20            | --                | --        | \$3,375.00     | \$ 3,375        | \$ 3,756                        | \$ 3,824   | \$ 3,893   | \$ 3,963   | \$ 4,034   |

# SCHOOLCRAFT COLLEGE; GROTE CENTER - SCHEDULED MAINTENANCE PROGRAM

|  |       |   | YEAR ITEM   |              |            | AVG TIME |       |        | ITEM  |             | SCHEDULED MAINTENANCE PLAN YEAR |            |            |            |            |            |
|--|-------|---|-------------|--------------|------------|----------|-------|--------|-------|-------------|---------------------------------|------------|------------|------------|------------|------------|
|  | ITEM  |   | FICM        | WAS PUT      | ITEM TOTAL | ITEM     | EUL   | IN USE | RUL   | UNIT        | ITEM                            | 6          | 7          | 8          | 9          | 10         |
| LOC  | NO.   | ITEM  | CODE        | INTO SERVICE | QUANTITY   | UNITS    | (YRS) | (YRS)  | (YRS) | COST        | FIRST COST                      | 2019       | 2020       | 2021       | 2022       | 2023       |
| GC-  | BS004 | CLOCK SYSTEM.   | UUU25       | 1963         | 1          | LS       | 20    | 50     | -30   | \$13,229.00 | \$ 13,229                       | \$ 14,724  | \$ 14,989  | \$ 15,258  | \$ 15,533  | \$ 15,813  |
| GC-  | BS005 | SECURITY SURVEILLANCE SYSTEM.   | UUU14       | 2004         | 1          | LS       | 20    | 9      | 11    | \$45,588.00 | \$ 45,588                       | \$ 50,738  | \$ 51,652  | \$ 52,581  | \$ 53,528  | \$ 54,491  |
| GC-  | BS006 | SECURITY ACCESS SYSTEM. COMPLETED 2021.   | UUU14       | 2021         | 1          | LS       | 20    | 0      | 20    | \$0.00      | \$ -                            | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| GC-  | BS007 | NETWORK LABELING  | UUU02       | VARIOUS      | 1          | LS       | 10    | --     | --    | \$200.00    | \$ 200                          | \$ 223     | \$ 227     | \$ 231     | \$ 235     | \$ 239     |
| GC-  | BS008 | NETWORK CABLE   | UUU02       | 2015         | --         | EA       | --    | --     | --    | \$200.00    | --                              |            |            |            |            |            |
| GC-  | BS009 | NETWORK CABLE   | UUU02       | 2015         | --         | EA       | --    | --     | --    | \$25.00     | --                              |            |            |            |            |            |
| GC-  | BS010 | T.P. COMMUNICATION CABLE  | UUU02       | 2015         | --         | EA       | --    | --     | --    | \$100.00    | --                              |            |            |            |            |            |
| GC-  | BS011 | NETWORK SYSTEMS   | UUU02       | VARIOUS      | 1          | LS       | 10    | --     | --    | \$12,000.00 | \$ 12,000                       | \$ 13,356  | \$ 13,596  | \$ 13,841  | \$ 14,090  | \$ 14,344  |
| GC-  | BS012 | NETWORK CABLE   | UUU02       | VARIOUS      | 12         | EA       | 10    | --     | --    | \$200.00    | \$ 2,400                        | \$ 2,671   | \$ 2,719   | \$ 2,768   | \$ 2,818   | \$ 2,869   |
| GC-  | BS013 | NETWORK CABLE   | UUU02       | VARIOUS      | 24         | EA       | 10    | --     | --    | \$25.00     | \$ 600                          | \$ 668     | \$ 680     | \$ 692     | \$ 705     | \$ 717     |
| GC-  | BS014 | NETWORK SYSTEMS   | UUU02       | VARIOUS      | 15         | EA       | 10    | --     | --    | \$100.00    | \$ 1,500                        | \$ 1,669   | \$ 1,700   | \$ 1,730   | \$ 1,761   | \$ 1,793   |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops) |       |   |             |              |            |          |       |        |       |             |                                 | \$ 75,126  | \$ 76,478  | \$ 77,855  | \$ 79,256  | \$ 80,683  |
| GC-  | SE001 | EXTERIOR BUILDING SIGNAGE UPGRADE (COMPLIANCE WITH CURRENT COLLEGE BRANDING STANDARDS). | SSS16       | 1963         | 1          | LS       | 25    | 50     | -25   | \$43,200.00 | \$ 43,200                       | \$ 48,081  | \$ 48,946  | \$ 49,827  | \$ 50,724  | \$ 51,637  |
| GC-  | SE002 | ENTRY ELECTRONIC KIOSK.   | W05         | NONE         | 1          | EA       | 15    | --     | --    | \$24,300.00 | \$ 24,300                       | \$ 27,045  | \$ 27,532  | \$ 28,028  | \$ 28,532  | \$ 29,046  |
| ACCESSIBILITY IMPROVEMENTS                               |       |   |             |              |            |          |       |        |       |             |                                 | \$ 541     | \$ 551     | \$ 561     | \$ 571     | \$ 581     |
| GC-  | AI001 | FIRE EXTINGUISHER ACCESSIBILITY   | W05 AND W06 | 1963         | 4          | EA       | 50    | 50     | 0     | \$121.50    | \$ 486                          | \$ 541     | \$ 551     | \$ 561     | \$ 571     | \$ 581     |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                   |       |   |             |              |            |          |       |        |       |             |                                 | \$ 803,031 | \$ 817,486 | \$ 832,201 | \$ 847,180 | \$ 862,429 |

# SCHOOLCRAFT COLLEGE; HEALTH SCIENCES CENTER (FORMERLY APPLIED SCIENCE) - SCHEDULED MAINTENANCE PROGRAM

| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO:                          |                    | 2013                |
|---|--------------------|---------------------|
| NOTE: THIS BUILDING WAS RENAMED 2022 FROM APPLIED SCIENCE BUILDING. |                    |                     |
| BUILDING SECTION (BUILDING TYPE)                                    | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
| HEALTH SCIENCES CENTER - TOTAL (CLASSROOM)                          |                    | 101,707             |
| APPLIED SCIENCE - ORIGINAL  | 1965               | 46,755              |
| APPLIED SCIENCE - NORTH WING  | 1972               | 27,345              |
| HEALTH SCIENCES CENTER - BUILDING EXPANSIONS                        | 2021               | 27,607              |
| YEAR: 2023  |                    |                     |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:                             |                    | \$ 2,944,726        |
| REPLACEMENT VALUE FOR THE BUILDING:                                 |                    | \$37,059,300        |
| FACILITY CONDITION INDEX (FCI):                                     |                    | 8%                  |



|                |                    |
|----------------|--------------------|
| FCI            | BUILDING CONDITION |
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

|                     |      |
|---------------------|------|
| INFLATION RATE (%): | 1.8% |
|---------------------|------|

|                               |
|-------------------------------|
| ITEM NO. CODES                |
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

|                            |
|----------------------------|
| LEGEND                     |
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

## REMAINING USEFUL LIFE (RUL) BAROMETER

|  |                           |
|--|---------------------------|
|  | RUL = 1 YEAR OR LESS      |
|  | RUL = 5 YEARS             |
|  | RUL = 10 YEARS OR GREATER |

|   |       |  |           |              |          |       |       |       |       | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |            |            |            |  |    |  |
|---|-------|--|-----------|--------------|----------|-------|-------|-------|-------|--------------------------------|------------|------------|------------|------------|------------|------------|--|----|--|
| ITEM  |       | FICM   | YEAR ITEM | ITEM TOTAL   | ITEM     | AVG   | TIME  |       | ITEM  | 6                              |            | 7          |            | 8          |            | 9          |  | 10 |  |
| LOC   | NO.   | ITEM   | CODE      | INTO SERVICE | QUANTITY | UNITS | (YRS) | (YRS) | (YRS) | COST                           | FIRST COST | 2019       | 2020       | 2021       | 2022       | 2023       |  |    |  |
| BUILDING ENVELOPE (includes items exterior to building) |       |  |           |              |          |       |       |       |       |                                |            | \$ 531,414 | \$ 540,979 | \$ 550,717 | \$ 560,630 | \$ 570,721 |  |    |  |
| HS-   | BE001 | SOUTHWEST RETAINING WALL MASONRY AND LIMESTONE CAP REPAIRS.  | MMM16     | 1965         | 18       | LF    | 50    | 48    | 2     | \$33.75                        | \$ 608     | \$ 676     | \$ 688     | \$ 701     | \$ 713     | \$ 726     |  |    |  |
| HS-   | BE002 | NORTHWEST RETAINING WALL LIMESTONE CAP REPAIRS.  | MMM16     | 2017         | 30       | LF    | 50    | 0     | 50    | \$14.85                        | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |  |    |  |
| HS-   | BE003 | NORTHWEST CONCRETE STEP TREADS REPLACEMENT   | MMM16     | 2014         | 150      | LF    | 25    | 0     | 25    | \$60.75                        | \$ 9,113   | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |  |    |  |
| HS-   | BE004 | SPALLING FACE BRICK REPAIRS (ESPECIALLY EAST EXPOSURE).  | MMM16     | 1965         | 700      | SF    | 75    | 48    | 27    | \$17.55                        | \$ 12,285  | \$ 13,673  | \$ 13,919  | \$ 14,170  | \$ 14,425  | \$ 14,684  |  |    |  |
| HS-   | BE005 | EXTERIOR DOOR REPLACEMENTS (ACCELERATED DETERIORATION AT EAST DOORS).  | W06       | 2006         | --       | --    | 25    | 7     | 18    | \$0.00                         | --         |            |            |            |            |            |  |    |  |
| HS-   | BE006 | EXTERIOR WINDOW REPLACEMENTS.  | MMM16     | 2007         | --       | --    | 30    | 6     | 24    | \$0.00                         | --         |            |            |            |            |            |  |    |  |
| HS-   | BE007 | EXTERIOR SEALANT MAINTENANCE.  | MMM16     | VARIOUS      | 2,000    | LF    | 20    | --    | --    | \$4.73                         | \$ 9,460   | \$ 10,529  | \$ 10,718  | \$ 10,911  | \$ 11,108  | \$ 11,308  |  |    |  |
| HS-   | BE008 | <del>NORTH WING THEATRE SCENE SHOP ROLL-UP DOOR REPLACEMENT. INCLUDES NEW GARAGE DOOR OPENER. -- ELIMINATED.</del> | 210       | 2016         | 80       | SF    | 25    | 0     | 25    | \$4,252.00                     | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |  |    |  |
| HS-   | BE009 | REPLACE DOOR AND DOOR HARDWARE ON AS84 - MEZZ MECHANICAL ROOM TO EXTERIOR.   | Y04       | 1972         | 1        | EA    | 15    | 41    | -26   | \$5,643.00                     | \$ 5,643   | \$ 6,281   | \$ 6,394   | \$ 6,509   | \$ 6,626   | \$ 6,745   |  |    |  |
| HS-   | BE010 | REPLACE EXTERIOR BENCHES IN NORTHWEST PATIO AREA WITH COLLEGE STANDARD LANDSCAPING FURNITURE.                      | SSS02     | 1972         | 50       | LF    | 20    | 41    | -21   | \$499.50                       | \$ 24,975  | \$ 27,797  | \$ 28,297  | \$ 28,806  | \$ 29,325  | \$ 29,853  |  |    |  |
| HS-   | BE011 | REPLACE EXTERIOR BENCHES IN SOUTHWEST PATIO AREA WITH COLLEGE STANDARD LANDSCAPING FURNITURE.                      | SSS02     | 1965         | 32       | LF    | 20    | 48    | -28   | \$499.50                       | \$ 15,984  | \$ 17,790  | \$ 18,110  | \$ 18,436  | \$ 18,768  | \$ 19,106  |  |    |  |
| HS-   | BE012 | EXTERIOR SOFFIT REPAIRS AND PAINTING.  | MMM16     | VARIOUS      | 6,500    | SF    | 15    | --    | --    | \$23.63                        | \$ 153,595 | \$ 170,948 | \$ 174,025 | \$ 177,157 | \$ 180,346 | \$ 183,592 |  |    |  |
| HS-   | BE013 | CLEAN EXTERIOR BRICK EFFLORESCENCE.  | MMM16     | 1965         | 200      | SF    | 75    | 48    | 27    | \$1.89                         | \$ 378     | \$ 421     | \$ 428     | \$ 436     | \$ 444     | \$ 452     |  |    |  |
| HS-   | BE014 | EXTERIOR MORTAR JOINT REPAIRS.   | MMM16     | VARIOUS      | --       | --    | 50    | --    | --    | \$0.00                         | --         |            |            |            |            |            |  |    |  |
| HS-   | BE015 | NORTH WING REROOFING (WHITE, SINGLE-PLY MEMBRANE).   | MMM16     | 1997         | 15,400   | SF    | 25    | 16    | 9     | \$16.20                        | \$ 249,480 | \$ 277,666 | \$ 282,664 | \$ 287,752 | \$ 292,931 | \$ 298,204 |  |    |  |
| HS-   | BE016 | EMT LAB ADDITION REROOFING.  | MMM16     | 2003         | --       | --    | 25    | 10    | 15    | \$0.00                         | --         |            |            |            |            |            |  |    |  |
| HS-   | BE017 | TAN, SINGLE-PLY REROOFING.   | MMM16     | 2003         | --       | --    | 25    | 10    | 15    | \$0.00                         | --         |            |            |            |            |            |  |    |  |
| HS-   | BE018 | STANDING SEAM METAL ROOFING.   | MMM16     | 2003         | --       | --    | 50    | 10    | 40    | \$0.00                         | --         |            |            |            |            |            |  |    |  |
| HS-   | BE019 | PENTHOUSE EXTERIOR LOUVER  | Y04       | 1972         | 50       | SF    | 40    | 41    | -1    | \$101.25                       | \$ 5,063   | \$ 5,634   | \$ 5,736   | \$ 5,839   | \$ 5,944   | \$ 6,051   |  |    |  |

# SCHOOLCRAFT COLLEGE; HEALTH SCIENCES CENTER (FORMERLY APPLIED SCIENCE) - SCHEDULED MAINTENANCE PROGRAM

| ITEM  |       | FICM  | YEAR ITEM                | ITEM TOTAL                          | ITEM  | TIME  |        |       | ITEM | DEFERRED MAINTENANCE PLAN YEAR |              |              |              |              |              |           |
|---|-------|---|--------------------------|-------------------------------------|-------|-------|--------|-------|------|--------------------------------|--------------|--------------|--------------|--------------|--------------|-----------|
| LOC   | NO.   |   | WAS PUT                  |                                     |       | EUL   | IN USE | RUL   |      | UNIT                           | 6            | 7            | 8            | 9            | 10           |           |
|   | ITEM  | CODE  | INTO SERVICE             | QUANTITY                            | UNITS | (YRS) | (YRS)  | (YRS) | COST | FIRST COST                     | 2019         | 2020         | 2021         | 2022         | 2023         |           |
| BUILDING INTERIOR                                       |       |   |                          |                                     |       |       |        |       |      |                                | \$ 167,967   | \$ 170,990   | \$ 174,068   | \$ 177,201   | \$ 180,391   |           |
| HS-   | BI001 | INTERIOR DOOR REPLACEMENTS (MOSTLY WOOD DOORS).<br>DOOR HARDWARE - COMPLETED 2019.                                      | 110, 210 AND 310         | VARIOUS                             | 40    | EA    | 50     | --    | --   | \$1,153.24                     | \$ 46,130    |              |              |              |              |           |
| HS-   | BI002 | CORRIDOR BENCH SEATING / BOOTHS UPGRADES. POWER AND<br>USB PORTS FOR STUDENT LAPTOPS ADDED 2013.                        | W05                      | VARIOUS / 2013<br>PWR & USB<br>ADDS | 260   | LF    | 20     | --    | --   | \$344.25                       | \$ 89,505    |              |              |              |              |           |
| HS-   | BI003 | SOUTH WING TOILET ROOM UPGRADES (INCLUDES PLUMBING<br>FIXTURES, ADA COMPLIANCE IMPROVEMENTS, AND LIGHTING<br>UPGRADES). | X03                      | 2004                                | 760   | SF    | 25     | 9     | 16   | \$54.00                        | \$ 41,040    | \$ 45,677    | \$ 46,499    | \$ 47,336    | \$ 48,188    | \$ 49,055 |
| HS-   | BI004 | NORTH WING TOILET ROOM UPGRADES (INCLUDES PLUMBING<br>FIXTURES, ADA COMPLIANCE IMPROVEMENTS, AND LIGHTING<br>UPGRADES). | X03                      | VARIOUS                             | 430   | SF    | 25     | --    | --   | \$54.00                        | \$ 23,220    | \$ 25,843    | \$ 26,309    | \$ 26,782    | \$ 27,264    | \$ 27,755 |
| HS-   | BI005 | LAY-IN CEILING TILE REPLACEMENTS - ALLOWANCE.<br>COMPLETED 2021.  | 100, 200, 300 AND<br>W06 | 2021                                | 0     | SF    | 35     | --    | --   | \$4.32                         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -      |
| HS-   | BI006 | FLOOR FINISH UPDATES - ALLOWANCE.   | 100, 200, 300 AND<br>W06 | VARIOUS                             | --    | --    | --     | --    | --   | \$0.00                         | --           |              |              |              |              |           |
| HS-   | BI007 | WALL FINISH UPDATES - ALLOWANCE.  | 100, 200, 300 AND<br>W06 | VARIOUS                             | --    | --    | --     | --    | --   | \$0.00                         | --           |              |              |              |              |           |
| HS-   | BI008 | SOUTH WING CORRIDOR DISPLAY CASE UPGRADES.  | W05 AND W06              | 1965                                | 1     | LS    | 40     | 48    | -8   | \$0.00                         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -      |
| HS-   | BI009 | NORTH WING LOBBY EAST WALL UPGRADE (WALL WITH DATED<br>LOOK MOSAIC TILE).   | W05                      | 1972                                | 160   | SF    | 25     | 41    | -16  | \$40.50                        | \$ 6,480     | \$ 7,212     | \$ 7,342     | \$ 7,474     | \$ 7,609     | \$ 7,746  |
| HS-   | BI010 | MAIN COMPUTER ROOM UPGRADES.  | 710                      | 2010                                | --    | --    | 25     | 3     | 22   | \$0.00                         | --           |              |              |              |              |           |
| HS-   | BI011 | WATER-PROOF AS90 WHERE ELECTRICAL SERVICE FOR NORTH-<br>WING OF APPLIED SCIENCE ENTERS THE BUILDING.--<br>ELIMINATED.   | UUU05                    | 1972                                | 0     | LS    | 15     | 41    | -26  | \$6,750.00                     | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -      |
| HS-   | BI012 | NON-FIRE STOPPED FLOOR PENETRATIONS.  | Y04                      | 1965                                | 5     | SF    | 50     | 48    | 2    | \$135.00                       | \$ 675       | \$ 751       | \$ 765       | \$ 779       | \$ 793       | \$ 807    |
| HS-   | BI013 | PAINTED CONCRETE FLOOR.   | Y04                      | 1965                                | 700   | SF    | 15     | 48    | -33  | \$2.03                         | \$ 1,421     | \$ 1,582     | \$ 1,610     | \$ 1,639     | \$ 1,668     | \$ 1,699  |
| HS-   | BI014 | ENTRANCE CARPETS.   | W06                      | 2016                                | 1,300 | SF    | 5      | 0     | --   | \$62.10                        | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -      |
| HS-   | BI015 | FOLDING PARTITIONS.   | 110 AND 210              | 2001                                | 450   | SF    | 20     | 12    | 8    | \$9.86                         | \$ 4,437     | \$ 4,938     | \$ 5,027     | \$ 5,118     | \$ 5,210     | \$ 5,304  |
| HS-   | BI016 | CARPET REPLACEMENT  | 110                      | VARIOUS                             | 7,150 | SF    | 12     | --    | --   | \$7.09                         | \$ 50,694    | \$ 56,421    | \$ 57,436    | \$ 58,470    | \$ 59,523    | \$ 60,594 |
| HS-   | BI017 | MASONRY WALL REPAIR   | 110                      | 1972                                | 1     | LS    | 50     | 41    | 9    | \$22,950.00                    | \$ 22,950    | \$ 25,543    | \$ 26,003    | \$ 26,471    | \$ 26,947    | \$ 27,432 |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |       |   |                          |                                     |       |       |        |       |      |                                | \$ 11,130    | \$ 11,330    | \$ 11,534    | \$ 11,742    | \$ 11,953    |           |
| HS-   | PS001 | DOMESTIC HOT WATER HEATER REPLACEMENT - SOUTH WING.   | UUU24                    | 2008                                | --    | --    | 10     | 5     | 5    | \$0.00                         | --           |              |              |              |              |           |
| HS-   | PS002 | DOMESTIC HOT WATER HEATER REPLACEMENT - NORTH WING  | UUU24                    | 2010                                | --    | --    | 10     | 3     | 7    | \$0.00                         | --           |              |              |              |              |           |
| HS-   | PS003 | METALLURGY LABORATORY ACID WASTE SYSTEM-<br>INSPECTION/MAINTENANCE--METALLURGY MOVED TO "MEC"-<br>BUILDING IN 2020--    | UUU25                    | 2010                                | --    | --    | 10     | 3     | 7    | \$0.00                         | --           |              |              |              |              |           |
| HS-   | PS004 | PLUMBING FIXTURES - SOUTH   | X03                      | VARIOUS                             | --    | --    | 40     | --    | --   | \$0.00                         | --           |              |              |              |              |           |
| HS-   | PS005 | PLUMBING FIXTURES - NORTH   | X03                      | VARIOUS                             | --    | --    | 40     | --    | --   | \$0.00                         | --           |              |              |              |              |           |
| HS-   | PS006 | INVESTIGATE SLOW FLUSHING URINALS IN NORTH GANG<br>TOILETS - ALLOWANCE  | X03                      | UNKNOWN                             | 1     | LS    | 1      | --    | --   | \$10,000.00                    | \$ 10,000    | \$ 11,130    | \$ 11,330    | \$ 11,534    | \$ 11,742    | \$ 11,953 |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |       |   |                          |                                     |       |       |        |       |      |                                | \$ 1,556,453 | \$ 1,584,469 | \$ 1,612,990 | \$ 1,642,023 | \$ 1,671,580 |           |
| HS-   | MS001 | MAIN COMPUTER ROOM BACK-UP A/C SYSTEM AND<br>ASSOCIATED ROOF MOUNTED CONDENSER  | 710                      | 2010                                | --    | --    | 20     | 3     | 17   | \$0.00                         | --           |              |              |              |              |           |
| HS-   | MS002 | MAIN COMPUTER ROOM PRIMARY A/C SYSTEM AND<br>ASSOCIATED ROOF MOUNTED CONDENSER.   | 710                      | 2017                                | --    | --    | 20     | 0     | 20   | \$0.00                         | --           |              |              |              |              |           |
| HS-   | MS003 | HS100 MEDICAL ASSISTING LAB AIR COMPRESSOR (FOR<br>OXYGEN SIMULATION) REPLACEMENT.                                      | 210                      | 2005                                | --    | --    | 10     | 8     | 2    | \$0.00                         | --           |              |              |              |              |           |
| HS-   | MS004 | HS100 MEDICAL ASSISTING LAB VACUUM PUMP<br>REPLACEMENT (SOUTH WING).  | 210                      | 2005                                | --    | --    | 10     | 8     | 2    | \$0.00                         | --           |              |              |              |              |           |
| HS-   | MS005 | NATP NURSING LAB VACUUM PUMP REPLACEMENT (NORTH<br>WING).   | 210                      | 2011                                | --    | --    | 10     | 2     | 8    | \$0.00                         | --           |              |              |              |              |           |

# SCHOOLCRAFT COLLEGE; HEALTH SCIENCES CENTER (FORMERLY APPLIED SCIENCE) - SCHEDULED MAINTENANCE PROGRAM

| ITEM<br>LOC   | ITEM<br>NO. | ITEM   | FICM<br>CODE | YEAR ITEM<br>WAS PUT<br>INTO SERVICE | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG<br>EUL<br>(YRS) | TIME<br>IN USE<br>(YRS) | RUL<br>(YRS) | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |            |
|---|-------------|--|--------------|--------------------------------------|------------------------|---------------|---------------------|-------------------------|--------------|----------------------|--------------------|--------------------------------|------------|------------|------------|------------|
|   |             |  |              |                                      |                        |               |                     |                         |              |                      |                    | 6<br>2019                      | 7<br>2020  | 8<br>2021  | 9<br>2022  | 10<br>2023 |
| HS-   | MS006       | REPLACEMENT OF FIVE (5) INDOOR AIR HANDLING UNITS<br>INSTALLED UNDER MECHANICAL SYSTEMS UPGRADE PROJECT.                       | UUU25        | 2008                                 | --                     | --            | 10                  | 5                       | 5            | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | MS007       | REPLACEMENT OF OUTDOOR / SOUTH WING AIR HANDLING<br>UNIT INSTALLED UNDER MECHANICAL SYSTEMS UPGRADE<br>PROJECT (CLIMATECRAFT). | UUU25        | 2008                                 | --                     | --            | 25                  | 5                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | MS008       | <del>REPLACEMENT OF WELDING LAB DIRECT-FIRED, ROOF-<br/>MOUNTED AIR HANDLING UNIT. ELIMINATED.</del>                           | 210          | 2008                                 | 0                      | EA            | 25                  | 5                       | 20           | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| HS-   | MS009       | <del>REPLACEMENT OF METALLURGY LAB INTERIOR, SUSPENDED-<br/>MAKE UP AIR UNIT. ELIMINATED.</del>                                | 210          | 2003                                 | 0                      | EA            | 15                  | 10                      | 5            | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| HS-   | MS010       | <del>METALLURGY LAB FUME HOODS. METALLURGY MOVED TO-<br/>"MEC" BUILDING IN 2020.</del>   | 210          | 1965                                 | 0                      | EA            | 20                  | 48                      | -28          | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| HS-   | MS011       | REPLACE OF FOUR (4) RETURN AIR FANS.   | UUU25        | 2008                                 | 4                      | EA            | 20                  | 5                       | 15           | \$6,075.00           | \$ 24,300          | \$ 27,045                      | \$ 27,532  | \$ 28,028  | \$ 28,532  | \$ 29,046  |
| HS-   | MS012       | <del>WELDING LAB EXHAUST FAN REPLACEMENTS. ELIMINATED.</del>   | 210          | 2003                                 | 0                      | EA            | 15                  | 10                      | 5            | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| HS-   | MS013       | AIR-COOLED CHILLER REPLACEMENTS.   | UUU20        | 2008                                 | 2                      | EA            | 20                  | 5                       | 15           | \$143,775.00         | \$ 287,550         | \$ 320,037                     | \$ 325,798 | \$ 331,662 | \$ 337,632 | \$ 343,709 |
| HS-   | MS014       | HEATING HOT WATER BOILER REPLACEMENTS.   | UUU22        | 2008                                 | 2                      | EA            | 20                  | 5                       | 15           | \$44,550.00          | \$ 89,100          | \$ 99,166                      | \$ 100,951 | \$ 102,768 | \$ 104,618 | \$ 106,501 |
| HS-   | MS015       | CHILLED WATER SYSTEM PUMPS REPLACEMENT.  | UUU20        | 2008                                 | 2                      | EA            | 20                  | 5                       | 15           | \$31,725.00          | \$ 63,450          | \$ 70,618                      | \$ 71,890  | \$ 73,184  | \$ 74,501  | \$ 75,842  |
| HS-   | MS016       | HEATING HOT WATER SYSTEM PUMPS REPLACEMENT.  | UUU22        | 2008                                 | 2                      | EA            | 20                  | 5                       | 15           | \$31,725.00          | \$ 63,450          | \$ 70,618                      | \$ 71,890  | \$ 73,184  | \$ 74,501  | \$ 75,842  |
| HS-   | MS017       | DOMESTIC HOT WATER CIRCULATION PUMP REPLACEMENT.   | UUU24        | 2008                                 | 1                      | EA            | 20                  | 5                       | 15           | \$4,725.00           | \$ 4,725           | \$ 5,259                       | \$ 5,353   | \$ 5,450   | \$ 5,548   | \$ 5,648   |
| HS-   | MS018       | ELECTRIC DUCT HEATER REPLACEMENTS.   | UUU25        | 2008                                 | 10                     | EA            | 10                  | 5                       | 5            | \$8,775.00           | \$ 87,750          | \$ 97,664                      | \$ 99,422  | \$ 101,211 | \$ 103,033 | \$ 104,888 |
| HS-   | MS019       | CABINET UNIT HEATER REPLACEMENTS.  | UUU25        | 2008                                 | 12                     | EA            | 20                  | 5                       | 15           | \$6,075.00           | \$ 72,900          | \$ 81,136                      | \$ 82,597  | \$ 84,083  | \$ 85,597  | \$ 87,138  |
| HS-   | MS020       | HOT WATER UNIT HEATER REPLACEMENTS.  | UUU25        | 2008                                 | 2                      | EA            | 20                  | 5                       | 15           | \$4,725.00           | \$ 9,450           | \$ 10,518                      | \$ 10,707  | \$ 10,900  | \$ 11,096  | \$ 11,296  |
| HS-   | MS021       | VAV BOXES WITH ELECTRIC REHEAT REPLACEMENTS.   | UUU25        | 2008                                 | 24                     | EA            | 20                  | 5                       | 15           | \$6,075.00           | \$ 145,800         | \$ 162,272                     | \$ 165,193 | \$ 168,167 | \$ 171,194 | \$ 174,275 |
| HS-   | MS022       | EXHAUST FAN REPLACEMENTS FOR THOSE INSTALLED UNDER<br>MECHANICAL SYSTEMS UPGRADE PROJECT.                                      | UUU25        | 2008                                 | 4                      | EA            | 20                  | 5                       | 15           | \$4,725.00           | \$ 18,900          | \$ 21,035                      | \$ 21,414  | \$ 21,799  | \$ 22,192  | \$ 22,591  |
| HS-   | MS023       | HVAC SYSTEMS CLEANING - SOUTH BUILDING.  | UUU25        | 2000                                 | 46,000                 | SF            | 10                  | 13                      | -3           | \$1.15               | \$ 52,900          | \$ 58,877                      | \$ 59,936  | \$ 61,015  | \$ 62,113  | \$ 63,231  |
| HS-   | MS024       | HVAC SYSTEMS CLEANING - NORTH BUILDING.  | UUU25        | 2010                                 | 24,000                 | SF            | 10                  | 3                       | 7            | \$1.15               | \$ 27,600          | \$ 30,718                      | \$ 31,271  | \$ 31,834  | \$ 32,407  | \$ 32,990  |
| HS-   | MS025       | SUMP PUMP.   | UUU16        | 2010                                 | --                     | --            | 15                  | 3                       | 12           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | MS026       | JCI BUILDING CONTROL SYSTEM.   | UUU06        | 2002                                 | 74,109                 | SF            | 15                  | 11                      | 4            | \$6.08               | \$ 450,583         | \$ 501,489                     | \$ 510,516 | \$ 519,705 | \$ 529,060 | \$ 538,583 |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope) |             |  |              |                                      |                        |               |                     |                         |              |                      |                    | \$ 194,215                     | \$ 197,711 | \$ 201,269 | \$ 204,892 | \$ 176,307 |
| HS-   | ES001       | BUILDING SERVICE TRANSFORMER. REPLACED 2020.   | UUU04        | 2020                                 | --                     | --            | 20                  | -7                      | 27           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES002       | MAIN SWITCHBOARD.  | UUU05        | 2008                                 | --                     | --            | 20                  | 5                       | 15           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES003       | <del>STANDBY GENERATOR (OLYMPIA). ELIMINATED 2016.</del>   | UUU25        | --                                   | 1                      | EA            | --                  | --                      | --           | \$136,350.00         | --                 |                                |            |            |            |            |
| HS-   | ES004       | <del>STANDBY GENERATOR (CUMMINS). REPLACED 2016.</del>   | UUU25        | 2016                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES005       | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS). REPLACED<br>2016.   | UUU25        | 2016                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES006       | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH<br>(ATS). REPLACED 2016.   | UUU25        | 2016                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES007       | ELECTRICAL DISTRIBUTION EQUIPMENT.   | UUU05        | 1965                                 | 2                      | EA            | 20                  | 48                      | -28          | \$30,000.00          | \$ 60,000          | \$ 66,779                      | \$ 67,981  | \$ 69,204  | \$ 70,450  | \$ 71,718  |
| HS-   | ES008       | VARIABLE FREQUENCY DRIVE (VFD).  | UUU25        | 2008                                 | --                     | --            | 15                  | 5                       | 10           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES009       | <del>WELDING LAB VARIABLE FREQUENCY DRIVE. ELIMINATED</del>  | 210          | 2003                                 | 0                      | 0             | 15                  | 10                      | 5            | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| HS-   | ES010       | LIGHTING AND RECEPTACLE PANELBOARDS.   | UUU05        | 1965                                 | 1                      | LS            | 20                  | 48                      | -28          | \$74,000.00          | \$ 74,000          | \$ 82,360                      | \$ 83,843  | \$ 85,352  | \$ 86,888  | \$ 88,452  |
| HS-   | ES011       | EXTERIOR BUILDING MOUNTED LIGHTING. COMPLETED 2021.  | UUU25        | 2021                                 | 22                     | EA            | 20                  | 0                       | 20           | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| HS-   | ES012       | EXIT LIGHTING. ADDRESSED 2021 - 2022.  | W06          | 2022                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES013       | CORRIDOR LIGHTING. ADDRESSED 2021 - 2022.  | W06          | 2022                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES014       | CLASSROOM LIGHTING. VARIOUS LOCATIONS UPGRADED 2021 -<br>2022.   | 110 AND 210  | 2022                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES015       | OFFICE LIGHTING. VARIOUS LOCATIONS UPGRADED 2021 -<br>2022.  | 310          | 2022                                 | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |            |            |            |            |
| HS-   | ES016       | STORAGE AND UTILITY ROOM LIGHTING.   | X01 AND Y04  | 1965                                 | 1                      | LS            | 20                  | 48                      | -28          | \$13,500.00          | \$ 13,500          | \$ 15,025                      | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |

**SCHOOLCRAFT COLLEGE; HEALTH SCIENCES CENTER (FORMERLY APPLIED SCIENCE) - SCHEDULED MAINTENANCE PROGRAM**

| ITEM<br>LOC   | ITEM<br>NO. | ITEM   | FICM<br>CODE   | YEAR ITEM<br>WAS PUT<br>INTO SERVICE                | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG<br>EUL<br>(YRS) | TIME<br>IN USE<br>(YRS) | RUL<br>(YRS) | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |              |              |              |              |
|---|-------------|--|--|---|------------------------|---------------|---------------------|-------------------------|--------------|----------------------|--------------------|--------------------------------|--------------|--------------|--------------|--------------|
|   |             |  |  |   |                        |               |                     |                         |              |                      |                    | 6<br>2019                      | 7<br>2020    | 8<br>2021    | 9<br>2022    | 10<br>2023   |
| HS-   | ES017       | VACANCY SENSOR LIGHTING CONTROLS (CLASSROOMS).<br>VARIOUS LOCATIONS UPGRADED 2021 - 2022.  | 110 AND 210  | 2022  | --                     | --            | 20                  | 0                       | 20           | \$0.00               | --                 |                                |              |              |              |              |
| HS-   | ES018       | VACANCY SENSOR LIGHTING CONTROLS (CORRIDORS).<br>COMPLETED 2021 - 2022.  | W05 AND W06  | 2022  | 0                      | LS            | 20                  | --                      | --           | \$0.00               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| HS-   | ES019       | DATA CENTER ELECTRICAL SERVICE EQUIPMENT.  | 710  | 2010  | --                     | --            | 20                  | 3                       | 17           | \$0.00               | --                 |                                |              |              |              |              |
| HS-   | ES020       | POWER BUSWAYS. REMOVED IN 2021.  | UUU05  | 1965  | 1                      | LS            | 20                  | 48                      | -28          | \$27,000.00          | \$ 27,000          | \$ 30,050                      | \$ 30,591    | \$ 31,142    | \$ 31,703    | \$ -         |
| <b>BUILDING SYSTEMS (fire, security, IT/media infrastructure)</b> |             |  |  |   |                        |               |                     |                         |              |                      |                    | \$ 300,644                     | \$ 306,056   | \$ 311,565   | \$ 317,173   | \$ 322,882   |
| HS-   | BS001       | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS. COMPLETED<br>2021 - 2022.  | UUU07  | 2021 - 2022   | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |              |              |              |              |
| HS-   | BS002       | FIRE ALARM DEVICES. COMPLETED 2021 - 2022.   | UUU07  | 2021 - 2022   | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |              |              |              |              |
| HS-   | BS003       | BOILER EPO SYSTEM.   | Y04  | 2008  | --                     | --            | 20                  | 5                       | 15           | \$0.00               | --                 |                                |              |              |              |              |
| HS-   | BS004       | CONVERSION TO PRIMAX CLOCK SYSTEM. STARTED 2021.   | UUU25  | 1965  | 1                      | LS            | 20                  | 48                      | -28          | \$65,030.00          | \$ 65,030          | \$ 72,377                      | \$ 73,680    | \$ 75,006    | \$ 76,356    | \$ 77,731    |
| HS-   | BS005       | CLOCK SYSTEM.  | UUU25  | 1972  | 1                      | LS            | 20                  | 41                      | -21          | \$65,030.00          | \$ 65,030          | \$ 72,377                      | \$ 73,680    | \$ 75,006    | \$ 76,356    | \$ 77,731    |
| HS-   | BS006       | SECURITY SURVEILLANCE SYSTEM. COMPLETED 2021 - 2022.   | UUU14  | 2021 - 2022   | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |              |              |              |              |
| HS-   | BS007       | SECURITY ACCESS SYSTEM. COMPLETED 2021 - 2022.   | UUU14 / 2016 -<br>GALAXY PANEL<br>AND AS810<br>INSTALLED. 2017 -<br>CARD ACCESS<br>ADDED TO IT<br>CLOSETS. 2017 -<br>ADDED DEAN'S<br>OFFICE & AS162<br>CODE BLUES PANIC<br>BUTTONS | 2021 - 2022   | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |              |              |              |              |
| HS-   | BS008       | LIGHTNING PROTECTION SYSTEM.   | UUU25  | NONE  | 1                      | LS            | 20                  | --                      | --           | \$140,066.00         | \$ 140,066         | \$ 155,890                     | \$ 158,696   | \$ 161,553   | \$ 164,461   | \$ 167,421   |
| <b>SPECIALTY EQUIPMENT (food service, theatre, labs, shops)</b>   |             |  |  |   |                        |               |                     |                         |              |                      |                    | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| HS-   | SE001       | WELDING LAB DUST COLLECTOR MAINTENANCE/REPLACEMENT.<br>METALLURGY MOVED TO "MEC" BUILDING IN 2020.   | 210  | 2020  | 0                      | LS            | 20                  | -7                      | 27           | \$54,000.00          | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| HS-   | SE002       | EXTERIOR BUILDING SIGNAGE UPGRADE (COMPLIANCE WITH<br>CURRENT COLLEGE BRANDING STANDARDS). COMPLETED 2021.   | SSS16  | 2021  | 0                      | LS            | 25                  | --                      | --           | \$43,200.00          | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| HS-   | SE003       | METALLURGY LABORATORY FUME HOOD<br>MAINTENANCE/REPLACEMENTS. METALLURGY MOVED TO<br>"MEC" BUILDING IN 2020.  | 210  | 2020  | 0                      | LS            | 20                  | -7                      | 27           | \$35,775.00          | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| <b>ACCESSIBILITY IMPROVEMENTS</b>                                 |             |  |  |   |                        |               |                     |                         |              |                      |                    | \$ 10,142                      | \$ 10,325    | \$ 10,510    | \$ 10,700    | \$ 10,892    |
| HS-   | AI001       | EAST COURTYARD REPLACEMENT OF ASPHALT PAVING WITH<br>DIVETS TO CONCRETE PAVED ADA WHEELCHAIR PATH.<br>COMPLETED 2021.  | SSS18  | 2021  | 0                      | SF            | 15                  | --                      | --           | \$9.45               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| HS-   | AI002       | ADA LIFT REPLACEMENT / RECONFIGURATION; SUCH AS LIFT TO<br>ELEVATOR OR LIFT TO WHEELCHAIR RAIL SYSTEM PARALLEL TO<br>EXISTING STAIRS THAT ARE ADJACENT TO WHEEL CHAIR LIFT.<br>ELIMINATED FOR WHEELCHAIR RAMP. | W02  | N/A   | 0                      | EA            | 20                  | --                      | --           | \$27,000.00          | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| HS-   | AI003       | DISPLAY CASE CONSTITUTES PROTRUDING OBJECT   | W06  | 2000  | 8                      | SF            | 40                  | 13                      | 27           | \$126.56             | \$ 1,012           | \$ 1,127                       | \$ 1,147     | \$ 1,168     | \$ 1,189     | \$ 1,210     |
| HS-   | AI004       | BF ACCESSIBLE DRINKING FOUNTAINS. INSTALLED ONE (1) BF<br>COMPLIANT DRINKING FOUNTAIN AT SW CORNER OF SOUTH<br>WING.   | W06  | VARIOUS W/<br>2020<br>REPLACEMENT<br>AT SW LOCATION | 2                      | EA            | 20                  | --                      | --           | \$4,050.00           | \$ 8,100           | \$ 9,015                       | \$ 9,177     | \$ 9,343     | \$ 9,511     | \$ 9,682     |
| <b>ANNUAL FUNDING REQUIREMENTS (ROUNDED):</b>                     |             |  |  |   |                        |               |                     |                         |              |                      |                    | \$ 2,771,964                   | \$ 2,821,860 | \$ 2,872,653 | \$ 2,924,361 | \$ 2,944,726 |

# SCHOOLCRAFT COLLEGE; JEFFRESS CENTER - SCHEDULED MAINTENANCE PROGRAM

| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: |                    | 2013                |
|--|--------------------|---------------------|
| BUILDING SECTION (BUILDING TYPE)           | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
| JEFFRESS CENTER (FORMERLY 7 MILE BUILDING) |                    | 111,622             |
| WINGS A AND B                              | 1980               |                     |
| WING C                                     | 1985               |                     |
|  |                    |                     |
| YEAR: 2023                                 |                    |                     |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:    |                    | \$ 1,002,462        |
| REPLACEMENT VALUE FOR THE BUILDING:        |                    | \$ 34,024,700       |
| FACILITY CONDITION INDEX (FCI):            |                    | 3%                  |



|                |                    |
|----------------|--------------------|
| FCI            | BUILDING CONDITION |
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

|                     |      |
|---------------------|------|
| INFLATION RATE (%): | 1.8% |
|---------------------|------|

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

## REMAINING USEFUL LIFE (RUL) BAROMETER

|  |                           |
|--|---------------------------|
|  | RUL = 1 YEAR OR LESS      |
|  | RUL = 5 YEARS             |
|  | RUL = 10 YEARS OR GREATER |

| ITEM  |       | YEAR ITEM   |              | AVG        |       | TIME  |        | ITEM  |      | DEFERRED MAINTENANCE PLAN YEAR |              |            |            |            |            |            |
|---|-------|---|--------------|------------|-------|-------|--------|-------|------|--------------------------------|--------------|------------|------------|------------|------------|------------|
| LOC   | NO.   | FICM  | WAS PUT      | ITEM TOTAL | ITEM  | EUL   | IN USE | RUL   | UNIT | ITEM                           | 6            | 7          | 8          | 9          | 10         |            |
|   |       | CODE  | INTO SERVICE | QUANTITY   | UNITS | (YRS) | (YRS)  | (YRS) | COST | FIRST COST                     | 2019         | 2020       | 2021       | 2022       | 2023       |            |
| BUILDING ENVELOPE (includes items exterior to building) |       |   |              |            |       |       |        |       |      |                                | \$ 122,208   | \$ 124,408 | \$ 126,647 | \$ 128,927 | \$ 131,248 |            |
| JC-   | BE001 | METAL WALL PANELS                                 | MMM16        | 2014       | 15    | EA    | 50     | 0     | 50   | \$1,350.00                     | \$ 20,250    | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | BE002 | METAL WALL PANEL SEALANT REPLACEMENT              | MMM16        | 2014       | 1     | LS    | 25     | 0     | 25   | \$381,456.00                   | \$ 381,456   | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | BE003 | ENTRANCE DOOR REPLACEMENTS                        | W05 AND W06  | 2014       | 3     | EA    | 25     | 0     | 25   | \$2,120.00                     | \$ 6,360     | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | BE004 | METAL WALL PANEL SOFFIT VENT REPLACEMENT          | MMM16        | 2014       | 15    | EA    | 50     | 0     | 50   | \$540.00                       | \$ 8,100     | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | BE005 | ROOF SCREEN WALL MAINTENANCE                      | MMM16        | 1985       | 300   | SF    | 25     | 28    | -3   | \$42.00                        | \$ 12,600    | \$ 14,024  | \$ 14,276  | \$ 14,533  | \$ 14,795  | \$ 15,061  |
| JC-   | BE006 | DOCK LIFT MAINTENANCE - ELIMINATED                | W04          | --         | 1     | EA    | 15     | --    | -13  | \$21,600.00                    | \$ 21,600    | \$ 24,040  | \$ 24,473  | \$ 24,914  | \$ 25,362  | \$ 25,819  |
| JC-   | BE007 | LOADING DOCK CONCRETE WALL REPLACEMENT - REPAIRED | W04          | 2017       | 30    | LF    | 25     | 0     | -3   | \$63,788.00                    | \$ 1,913,640 | \$ 70,995  | \$ 72,273  | \$ 73,573  | \$ 74,898  | \$ 76,246  |
| JC-   | BE008 | METAL FLASHING REPAIR                             | MMM16        | 1985       | 5     | LF    | 20     | 28    | -8   | \$2,363.00                     | \$ 11,815    | \$ 13,150  | \$ 13,387  | \$ 13,627  | \$ 13,873  | \$ 14,122  |
| BUILDING INTERIOR                                       |       |   |              |            |       |       |        |       |      |                                | \$ 1,803     | \$ 1,835   | \$ 1,869   | \$ 1,902   | \$ 1,936   |            |
| JC-   | BI001 | STAIR WINDOW SAFETY IMPROVEMENTS                  | W07          | 1985       | 3     | EA    | 50     | 28    | 22   | \$540.00                       | \$ 1,620     | \$ 1,803   | \$ 1,835   | \$ 1,869   | \$ 1,902   | \$ 1,936   |
| JC-   | BI002 | STAIR ENCLOSURE IMPROVEMENTS                      | W08          | 2014       | --    | --    | 50     | 0     | 50   | \$0.00                         | --           |            |            |            |            |            |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |       |   |              |            |       |       |        |       |      |                                | \$ -         | \$ -       | \$ -       | \$ -       | \$ -       |            |
|   |       | NONE  |              |            |       |       |        |       |      | \$ -                           |              |            |            |            |            |            |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |       |   |              |            |       |       |        |       |      |                                | \$ 629,105   | \$ 640,429 | \$ 651,957 | \$ 663,692 | \$ 675,639 |            |
| JC-   | MS001 | A/B WING CHILLER.                                 | UUU20        | 1985       | 1     | EA    | 20     | 28    | -8   | \$303,750.00                   | \$ 303,750   | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | MS002 | DEMOLISH AHU-1 HUMIDIFIER                         | UUU25        | 2014       | 1     | EA    | 0      | 0     | 0    | \$1,000.00                     | \$ 1,000     | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | MS003 | CHW PUMPS.  | UUU20        | 1985       | 2     | EA    | 20     | 28    | -8   | \$31,725.00                    | \$ 63,450    | \$ 70,618  | \$ 71,890  | \$ 73,184  | \$ 74,501  | \$ 75,842  |
| JC-   | MS004 | BOILER STACKS.                                    | UUU22        | 1985       | 3     | EA    | 25     | 28    | -3   | \$13,500.00                    | \$ 40,500    | \$ 45,076  | \$ 45,887  | \$ 46,713  | \$ 47,554  | \$ 48,410  |
| JC-   | MS005 | BUILDING CONTROLS.                                | UUU06        | 2014       | 1     | LOT   | 20     | 0     | 20   | \$408,375.00                   | \$ 408,375   | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | MS006 | A/B WING BOILERS.                                 | UUU22        | 1985       | 3     | EA    | 20     | 28    | -8   | \$34,762.50                    | \$ 104,288   | \$ 116,070 | \$ 118,159 | \$ 120,286 | \$ 122,451 | \$ 124,655 |
| JC-   | MS007 | C WING BOILERS.                                   | UUU22        | 1985       | 2     | EA    | 20     | 28    | -8   | \$48,262.50                    | \$ 96,525    | \$ 107,430 | \$ 109,364 | \$ 111,333 | \$ 113,337 | \$ 115,377 |
| JC-   | MS008 | C WING CHILLER.                                   | UUU20        | 2013       | 1     | EA    | 20     | 0     | 20   | \$287,250.00                   | \$ 287,250   | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | MS009 | CHW PUMPS.  | UUU20        | 2014       | 2     | EA    | 20     | 0     | 20   | \$21,262.50                    | \$ 42,525    | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | MS010 | DOMESTIC WATER BOOSTER PUMP.                      | UUU24        | 1985       | 1     | EA    | 10     | 28    | -18  | \$14,512.50                    | \$ 14,513    | \$ 16,152  | \$ 16,443  | \$ 16,739  | \$ 17,040  | \$ 17,347  |
| JC-   | MS011 | CABINET UNIT HEATER.                              | UUU25        | 1985       | 1     | EA    | 25     | 28    | -3   | \$2,295.00                     | \$ 2,295     | \$ 2,554   | \$ 2,600   | \$ 2,647   | \$ 2,695   | \$ 2,743   |
| JC-   | MS012 | FIN TUBE RADIATION.                               | UUU22        | 2014       | 100   | LF    | 25     | 0     | 25   | \$108.00                       | \$ 10,800    | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| JC-   | MS013 | AHU-1 AND AHU-2 - A/B WING.                       | UUU25        | 1985       | 2     | EA    | 40     | 28    | 12   | \$35,775.00                    | \$ 71,550    | \$ 79,634  | \$ 81,067  | \$ 82,526  | \$ 84,012  | \$ 85,524  |
| JC-   | MS014 | AHU-B.  | UUU25        | 1985       | 1     | EA    | 40     | 28    | 12   | \$35,775.00                    | \$ 35,775    | \$ 39,817  | \$ 40,533  | \$ 41,263  | \$ 42,006  | \$ 42,762  |
| JC-   | MS015 | AHU-1.  | UUU25        | 1985       | 1     | EA    | 40     | 28    | 12   | \$35,775.00                    | \$ 35,775    | \$ 39,817  | \$ 40,533  | \$ 41,263  | \$ 42,006  | \$ 42,762  |

**SCHOOLCRAFT COLLEGE; JEFFRESS CENTER - SCHEDULED MAINTENANCE PROGRAM**

| LOC   | ITEM NO. | ITEM   | FICM CODE   | YEAR ITEM WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |              |
|---|----------|--|---|--------------------------------|---------------------|------------|---------------|-------------------|-----------|----------------|-----------------|--------------------------------|------------|------------|------------|--------------|
|   |          |  |   |                                |                     |            |               |                   |           |                |                 | 6                              | 7          | 8          | 9          | 10           |
|   |          |  |   |                                |                     |            |               |                   |           |                |                 | 2019                           | 2020       | 2021       | 2022       | 2023         |
| JC-   | MS016    | AHU-2.   | UUU25   | 1985                           | 1                   | EA         | 40            | 28                | 12        | \$35,775.00    | \$ 35,775       | \$ 39,817                      | \$ 40,533  | \$ 41,263  | \$ 42,006  | \$ 42,762    |
| JC-   | MS017    | AHU-3.   | UUU25   | 1985                           | 1                   | EA         | 40            | 28                | 12        | \$35,775.00    | \$ 35,775       | \$ 39,817                      | \$ 40,533  | \$ 41,263  | \$ 42,006  | \$ 42,762    |
| JC-   | MS018    | AHU-4.   | UUU25   | 1985                           | 1                   | EA         | 40            | 28                | 12        | \$22,275.00    | \$ 22,275       | \$ 24,792                      | \$ 25,238  | \$ 25,692  | \$ 26,155  | \$ 26,625    |
| JC-   | MS019    | ROOF RELIEF LOUVER.  | UUU25   | 1985                           | 1                   | EA         | 25            | 28                | -3        | \$6,750.00     | \$ 6,750        | \$ 7,513                       | \$ 7,648   | \$ 7,785   | \$ 7,926   | \$ 8,068     |
| <b>ELECTRICAL SYSTEMS (may be packaged with BI item scope)</b>    |          |  |   |                                |                     |            |               |                   |           |                |                 | \$ 180,302                     | \$ 183,548 | \$ 186,852 | \$ 190,215 | \$ 193,639   |
| JC-   | ES001    | BUILDING SERVICE TRANSFORMER T-1. ELIMINATED IN 2017. ENTIRE BUILDING NOW SERVICED BY TRANS T-2. | UUU04   | --                             | 1                   | EA         | 20            | --                | -8        | \$101,250.00   | \$ 101,250      |                                |            |            |            |              |
| JC-   | ES002    | BUILDING SERVICE TRANSFORMER T-2. RECONDITIONED AND ELECTRICALLY TESTED IN 2017.                 | UUU04   | 2017                           | 1                   | EA         | 20            | 0                 | -8        | \$101,250.00   | \$ 101,250      |                                |            |            |            |              |
| JC-   | ES003    | MAIN SWITCHBOARD MSB-1.  | UUU05   | 1985                           | 1                   | EA         | 20            | 28                | -8        | \$81,000.00    | \$ 81,000       | \$ 90,151                      | \$ 91,774  | \$ 93,426  | \$ 95,108  | \$ 96,819    |
| JC-   | ES004    | MAIN SWITCHBOARD MSB-2.  | UUU05   | 1985                           | 1                   | EA         | 20            | 28                | -8        | \$81,000.00    | \$ 81,000       | \$ 90,151                      | \$ 91,774  | \$ 93,426  | \$ 95,108  | \$ 96,819    |
| JC-   | ES005    | STANDBY GENERATOR.   | UUU25   | 1985                           | --                  | --         | 20            | 28                | -8        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES006    | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).   | UUU25   | 1985                           | --                  | --         | 20            | 28                | -8        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES007    | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS).   | UUU25   | 1985                           | --                  | --         | 15            | 28                | -13       | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES008    | ELECTRICAL DISTRIBUTION EQUIPMENT.   | UUU05   | 1985                           | --                  | --         | 20            | 28                | -8        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES009    | VARIABLE FREQUENCY DRIVE (VFD)/STARTERS.   | UUU25   | 2014                           | 8                   | EA         | 20            | 0                 | 20        | \$6,750.00     | \$ 54,000       | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -         |
| JC-   | ES010    | LIGHTING AND RECEPTACLE PANELBOARDS.   | UUU05   | 1985                           | --                  | --         | 20            | 28                | -8        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES011    | EXTERIOR BUILDING MOUNTED LIGHTING.  | UUU25   | 2014                           | --                  | --         | 20            | 0                 | -8        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES012    | EXIT LIGHTING.   | W06   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES013    | CORRIDOR LIGHTING.   | W05 AND W06   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES014    | GENERAL AREA LIGHTING.   | 650   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES015    | OFFICE LIGHTING.   | 310   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES016    | STORAGE AND UTILITY ROOM LIGHTING.   | X01 AND Y04   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES017    | VACANCY SENSOR LIGHTING CONTROLS.  | 110, 210, W05 AND W06   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | ES018    | EXTERIOR SITE LIGHTING.  | UUU10   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| <b>BUILDING SYSTEMS (fire, security, IT/media infrastructure)</b> |          |  |   |                                |                     |            |               |                   |           |                |                 | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -         |
| JC-   | BS001    | FIRE ALARM SYSTEM MAIN PANEL.  | UUU07   | 2022                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | BS002    | FIRE ALARM DEVICES.  | UUU07   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | BS003    | BOILER ROOM EPO SYSTEM.  | Y04   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | BS004    | CLOCK SYSTEM.  | UUU25   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | BS005    | SECURITY SURVEILLANCE SYSTEM.  | UUU14   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | BS006    | SECURITY ACCESS SYSTEM. COMPLETED 2021.  | UUU14   | 2021                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| JC-   | BS007    | LIGHTNING PROTECTION SYSTEM  | UUU25   | 2014                           | --                  | --         | 20            | 0                 | 20        | \$0.00         | --              |                                |            |            |            |              |
| <b>SPECIALTY EQUIPMENT (food service, theatre, labs, shops)</b>   |          |  |   |                                |                     |            |               |                   |           |                |                 | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -         |
| JC-   | SE001    | EAST PASSENGER ELEVATORS   | W02   | 2014                           | 1                   | LS         | 25            | 0                 | 25        | \$350,000.00   | \$ 350,000      | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -         |
| <b>ACCESSIBILITY IMPROVEMENTS</b>                                 |          |  |   |                                |                     |            |               |                   |           |                |                 | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -         |
| JC-   | AI001    | DOOR HARDWARE REPLACEMENTS   | 110, 310, 350, 410, 650, 680, W05, W06, W07, X02, X03 AND Y04 | 2014                           | 30                  | EA         | 20            | 0                 | 20        | \$743.00       | \$ 22,290       | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -         |
| JC-   | AI002    | WEST PASSENGER ELEVATOR IMPROVEMENTS   | W02   | 2014                           | 1                   | LS         | 20            | 0                 | --        | \$80,000.00    | \$ 80,000       | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -         |
| JC-   | AI003    | STAIR HANDRAIL IMPROVEMENTS  | W07   | 1985                           | --                  | --         | 25            | 28                | 26        | \$0.00         | --              |                                |            |            |            |              |
| <b>ANNUAL FUNDING REQUIREMENTS (ROUNDED):</b>                     |          |  |   |                                |                     |            |               |                   |           |                |                 | \$ 933,419                     | \$ 950,221 | \$ 967,325 | \$ 984,737 | \$ 1,002,462 |

# SCHOOLCRAFT COLLEGE; LIBERAL ARTS - SCHEDULED MAINTENANCE PROGRAM

|  |      |
|--|------|
| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: | 2013 |
|--|------|

|                     |      |
|---------------------|------|
| INFLATION RATE (%): | 1.8% |
|---------------------|------|

| BUILDING SECTION (BUILDING TYPE) | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
|----------------------------------|--------------------|---------------------|
| LIBERAL ARTS (CLASSROOM)         |                    | 45,475              |
| LIBERAL ARTS - ORIGINAL          | 1967               | 40,071              |
| LIBERAL ARTS - SOUTH ADDITION    | 1972               | 5,404               |

YEAR: 2023

|   |               |
|---|---------------|
| MAINTENANCE BACKLOG VALUE FOR BUILDING: | \$ 1,978,230  |
| REPLACEMENT VALUE FOR THE BUILDING:     | \$ 15,891,800 |
| FACILITY CONDITION INDEX (FCI):         | 12%           |



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

REMAINING USEFUL LIFE (RUL) BAROMETER

|  |                           |
|--|---------------------------|
|  | RUL = 1 YEAR OR LESS      |
|  | RUL = 5 YEARS             |
|  | RUL = 10 YEARS OR GREATER |

| ITEM  |       | FICM   | YEAR ITEM                            | ITEM TOTAL | ITEM   | AVG   | TIME   | ITEM  | DEFERRED MAINTENANCE PLAN YEAR |             |            |            |            |            |            |            |
|---|-------|--|--------------------------------------|------------|--------|-------|--------|-------|--------------------------------|-------------|------------|------------|------------|------------|------------|------------|
| LOC   | NO.   |  | WAS PUT                              |            |        | EUL   | IN USE |       | RUL                            | UNIT        | 6          | 7          | 8          | 9          | 10         |            |
|   |       | CODE   | INTO SERVICE                         | QUANTITY   | UNITS  | (YRS) | (YRS)  | (YRS) | COST                           | FIRST COST  | 2019       | 2020       | 2021       | 2022       | 2023       |            |
| BUILDING ENVELOPE (includes items exterior to building) |       |  |                                      |            |        |       |        |       |                                |             | \$ 36,334  | \$ 36,988  | \$ 37,654  | \$ 38,332  | \$ 39,022  |            |
| LA-   | BE001 | EXTERIOR SOFFIT, FASCIA, AND WINDOW/DOOR HEADER PAINTING.  | MMM16                                | 2020       | 0      | EA    | 15     | 0     | 15                             | \$9,250.00  | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |            |
| LA-   | BE002 | SLIDER DOOR MAINTENANCE / REPLACEMENT. THESE DOORS WERE REPLACED IN 2019.                          | W06                                  | 2019       | --     | --    | 15     | --    | --                             | \$0.00      | --         |            |            |            |            |            |
| LA-   | BE003 | EXTERIOR SEALANT MAINTENANCE.  | MMM16                                | VARIOUS    | 600    | LF    | 20     | --    | --                             | \$4.73      | \$ 2,838   | \$ 3,159   | \$ 3,215   | \$ 3,273   | \$ 3,332   | \$ 3,392   |
| LA-   | BE004 | STEEL DOOR REPLACEMENT AT EAST CUSTODIAL CLOSET.   | X01                                  | 1967       | 1      | EA    | 20     | 46    | -26                            | \$2,808.00  | \$ 2,808   | \$ 3,125   | \$ 3,181   | \$ 3,239   | \$ 3,297   | \$ 3,356   |
| LA-   | BE005 | REPAINTING OF ROOF-MOUNTED AIR HANDLING UNIT AND ASSOCIATED DUCTWORK.                              | UUU25                                | 2005       | 1      | EA    | 15     | 8     | 7                              | \$13,500.00 | \$ 13,500  | \$ 15,025  | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |
| LA-   | BE006 | SLOPED/MEZZ MECHANICAL ROOM SINGLE-PLY MEMBRANE REROOFING.   | MMM16                                | 2000       | --     | --    | 25     | 13    | 12                             | \$0.00      | --         |            |            |            |            |            |
| LA-   | BE007 | STANDING SEAM METAL REROOFING.   | MMM16                                | 2000       | --     | --    | 50     | 13    | 37                             | \$0.00      | --         |            |            |            |            |            |
| LA-   | BE008 | FLAT SINGLE-PLY MEMBRANE REROOFING.  | MMM16                                | 2006       | --     | --    | 25     | 7     | 18                             | \$0.00      | --         |            |            |            |            |            |
| LA-   | BE009 | EXTERIOR DOOR MAINTENANCE/REPLACEMENTS.  | W05 AND W06                          | 2006       | --     | --    | 25     | 7     | 18                             | \$0.00      | --         |            |            |            |            |            |
| LA-   | BE010 | EXTERIOR WINDOW MAINTENANCE/REPLACEMENT.   | 110, 310, W05 AND W06                | 2006       | --     | --    | 30     | 7     | 23                             | \$0.00      | --         |            |            |            |            |            |
| LA-   | BE011 | CLEAN EXTERIOR BRICK EFFLORESCENCE.  | MMM16                                | 1967       | 0      | 0     | 15     | 46    | -31                            | \$0.00      | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| LA-   | BE012 | IMPROVE ACCESS TO ROOF MECHANICAL UNIT.  | Y04                                  | 1967       | 1      | LS    | 20     | 46    | -26                            | \$13,500.00 | \$ 13,500  | \$ 15,025  | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |
| BUILDING INTERIOR                                       |       |  |                                      |            |        |       |        |       |                                |             | \$ 518,180 | \$ 527,507 | \$ 537,002 | \$ 546,668 | \$ 556,508 |            |
| LA-   | BI001 | REPLACEMENT OF LIBERAL ARTS INTERIOR DOOR AND DOOR HARDWARE REPLACEMENTS.                          | 110 AND 310                          | VARIOUS    | 65     | EA    | 50     | --    | --                             | \$1,350.00  | \$ 87,750  | \$ 97,664  | \$ 99,422  | \$ 101,211 | \$ 103,033 | \$ 104,888 |
| LA-   | BI002 | CORRIDOR BRICK CLEANING.   | W06                                  | 1967       | 200    | SF    | 20     | 46    | -26                            | \$1.89      | \$ 378     | \$ 421     | \$ 428     | \$ 436     | \$ 444     | \$ 452     |
| LA-   | BI003 | REPLACE CORRIDOR BENCHES AND BOOTHS WITH POWER FOR LAPTOPS INCLUDED.                               | W05                                  | VARIOUS    | 8      | EA    | 20     | --    | --                             | \$4,050.00  | \$ 32,400  | \$ 36,060  | \$ 36,710  | \$ 37,370  | \$ 38,043  | \$ 38,728  |
| LA-   | BI004 | CORRIDOR CEILING AND LIGHTING UPGRADE.   | W05 AND W06                          | 2000       | 11,000 | SF    | 35     | 13    | 22                             | \$5.67      | \$ 62,370  | \$ 69,416  | \$ 70,666  | \$ 71,938  | \$ 73,233  | \$ 74,551  |
| LA-   | BI005 | TOILET ROOM UPGRADES; INCLUDING EXPANSION OF CENTRAL TOILET ROOMS AND ADA COMPLIANCE IMPROVEMENTS. | X03                                  | VARIOUS    | 880    | SF    | 25     | --    | --                             | \$54.00     | \$ 47,520  | \$ 52,889  | \$ 53,841  | \$ 54,810  | \$ 55,796  | \$ 56,801  |
| LA-   | BI006 | INTERIOR WOOD DOOR AND DOOR HARDWARE REPLACEMENTS.   | 110 AND 310                          | VARIOUS    | 12     | EA    | 50     | --    | --                             | \$877.50    | \$ 10,530  | \$ 11,720  | \$ 11,931  | \$ 12,145  | \$ 12,364  | \$ 12,587  |
| LA-   | BI007 | THEATRE STAGE/BACKSTAGE IMPROVEMENTS/UPGRADES.   | 590                                  | VARIOUS    | 1      | LS    | --     | --    | --                             | \$0.00      | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| LA-   | BI008 | INSTALL PERMANENT STEEL STAIR TREADS FOR MEZZANINE MECHANICAL ROOM DOOR TO ROOF.                   | Y04                                  | NONE       | 1      | EA    | 40     | --    | --                             | \$13,500.00 | \$ 13,500  | \$ 15,025  | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |
| LA-   | BI009 | WALL FINISH UPDATES - ALLOWANCE.   | 110, 210, 310, 590, W05, W06 AND X03 | VARIOUS    | --     | --    | --     | --    | --                             | \$0.00      | --         |            |            |            |            |            |

# SCHOOLCRAFT COLLEGE; LIBERAL ARTS - SCHEDULED MAINTENANCE PROGRAM

| LOC   | ITEM NO. | ITEM  | FICM CODE  | YEAR ITEM WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |            |
|---|----------|---|--|--------------------------------|---------------------|------------|---------------|-------------------|-----------|----------------|-----------------|--------------------------------|------------|------------|------------|------------|
|   |          |   |  |                                |                     |            |               |                   |           |                |                 | 6                              | 7          | 8          | 9          | 10         |
|   |          |   |  |                                |                     |            |               |                   |           |                |                 | 2019                           | 2020       | 2021       | 2022       | 2023       |
| LA-   | BI010    | FLOOR FINISH UPDATES - ALLOWANCE.<br>2019 CARPET REPLACEMENTS WERE PERFORMED IN LA240, LA330, LA410, LA415, LA420, LA465, & LA470.                      | 110, 210, 310, 590, W05, W06 AND X03                 | VARIOUS                        | --                  | --         | --            | --                | --        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | BI011    | ACOUSTICAL CEILING PANEL REPLACEMENT.   | 110, 210, 310, 590, W05, W06 AND X03                 | VARIOUS                        | 12,500              | SF         | 35            | --                | --        | \$3.65         | \$ 45,625       | \$ 50,780                      | \$ 51,694  | \$ 52,624  | \$ 53,571  | \$ 54,536  |
| LA-   | BI012    | ACOUSTICAL CEILING UPGRADE.   | 590  | 1967                           | 1,750               | SF         | 35            | 46                | -11       | \$4.32         | \$ 7,560        | \$ 8,414                       | \$ 8,566   | \$ 8,720   | \$ 8,877   | \$ 9,036   |
| LA-   | BI013    | CORRIDOR DOORS HARDWARE UPGRADE.  | 110  | VARIOUS                        | 10                  | EA         | 50            | --                | --        | \$405.00       | \$ 4,050        | \$ 4,508                       | \$ 4,589   | \$ 4,671   | \$ 4,755   | \$ 4,841   |
| LA-   | BI014    | CORRIDOR BENCHES UPGRADE.   | W06  | VARIOUS                        | 80                  | LF         | 20            | --                | --        | \$452.25       | \$ 36,180       | \$ 40,268                      | \$ 40,992  | \$ 41,730  | \$ 42,481  | \$ 43,246  |
| LA-   | BI015    | ENTRANCE MATS AT EXTERIOR DOORS. (SOUTH ENTRANCE DONE 2017)   | W06  | 2008                           | 360                 | SF         | 5             | 5                 | 0         | \$62.10        | \$ 22,356       | \$ 24,882                      | \$ 25,330  | \$ 25,786  | \$ 26,250  | \$ 26,722  |
| LA-   | BI016    | CARPET REPLACEMENT.   | 110 AND 310  | VARIOUS                        | 13,450              | SF         | 15            | --                | --        | \$7.09         | \$ 95,361       | \$ 106,134                     | \$ 108,045 | \$ 109,989 | \$ 111,969 | \$ 113,985 |
| LA-   | BI017    | DOOR THRESHOLD MAINTENANCE.   | W06  | 2017                           | 1                   | EA         | 25            | 0                 | --        | \$5,562.00     | \$ -            | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |          |   |  |                                |                     |            |               |                   |           |                |                 | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| LA-   | PS001    | INVESTIGATE THEATRE STORM DRAINAGE PIPING WITH INTENT TO ELIMINATE POSSIBILITY OF SANITARY DRAINAGE BACK-UP INTO THEATRE AS OCCURRED IN 2010. COMPLETED | 590  | 2018 - SUMP PIT WAS CREATED.   | 1                   | LS         | 25            | --                | --        | \$0.00         | \$ -            | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| LA-   | PS002    | TOILET ROOM FIXTURES.   | X03  | VARIOUS                        | --                  | --         | 40            | --                | --        | \$0.00         | --              |                                |            |            |            |            |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |          |   |  |                                |                     |            |               |                   |           |                |                 | \$ 719,852                     | \$ 732,809 | \$ 746,000 | \$ 759,428 | \$ 773,098 |
| LA-   | MS001    | REPLACE TOILET ROOM EXHAUST FAN EF-1.   | X03  | 1967                           | 1                   | EA         | 20            | 46                | -26       | \$7,087.50     | \$ 7,088        | \$ 7,888                       | \$ 8,030   | \$ 8,175   | \$ 8,322   | \$ 8,472   |
| LA-   | MS002    | REPLACE RETURN AIR FAN RAF-1.   | UUU25  | 1967                           | 1                   | EA         | 20            | 46                | -26       | \$11,137.50    | \$ 11,138       | \$ 12,396                      | \$ 12,619  | \$ 12,846  | \$ 13,077  | \$ 13,313  |
| LA-   | MS003    | ELIMINATE REDUNDANT HEATING AND COOLING COIL SHUT-OFFS CONVERTING REMAINING GATE VALVES TO QUARTER-TURN BALL VALVES.                                    | UUU25  | 1967                           | 4                   | EA         | 25            | 46                | -21       | \$607.50       | \$ 2,430        | \$ 2,705                       | \$ 2,753   | \$ 2,803   | \$ 2,853   | \$ 2,905   |
| LA-   | MS004    | CHILLED WATER DISTRIBUTION PUMP MAINTENANCE/REPLACEMENTS.   | UUU20  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS005    | BOILER CIRCULATING WATER PUMP MAINTENANCE/REPLACEMENTS.   | UUU22  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS006    | BUILDING HEATING WATER PUMP MAINTENANCE/REPLACEMENTS.   | UUU22  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS007    | AIR HANDLING UNIT, AHR-1 HEATING WATER RECIRCULATING PUMP MAINTENANCE/REPLACEMENT.  | UUU25  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS008    | VAV BOX MAINTENANCE/REPLACEMENTS.   | UUU25  | 2005                           | --                  | --         | 30            | 8                 | 22        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS009    | ELECTRIC DUCT HEATER REPLACEMENTS.  | UUU25  | 2005                           | 24                  | EA         | 15            | 8                 | 7         | \$21,500.00    | \$ 516,000      | \$ 574,297                     | \$ 584,634 | \$ 595,158 | \$ 605,870 | \$ 616,776 |
| LA-   | MS010    | BOILER REPLACEMENTS.  | UUU22  | 2005                           | --                  | --         | 25            | 8                 | 17        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS011    | AIR HANDLING UNIT REPLACEMENTS AH-1.  | UUU25  | 2005                           | 1                   | EA         | 40            | 8                 | 32        | \$28,350.00    | \$ 28,350       | \$ 31,553                      | \$ 32,121  | \$ 32,699  | \$ 33,288  | \$ 33,887  |
| LA-   | MS012    | AIR HANDLING UNIT REPLACEMENTS AHR-1.   | UUU25  | 2005                           | --                  | --         | 40            | 8                 | 32        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS013    | EXHAUST FAN MAINTENANCE/REPLACEMENTS.   | UUU25  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS014    | CABINET UNIT HEATER REPLACEMENTS.   | UUU25  | 2005                           | --                  | --         | 25            | 8                 | 17        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS015    | JCI BUILDING AUTOMATION SYSTEM.   | UUU06  | 2005                           | --                  | --         | 20            | 8                 | 12        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | MS016    | DUCT CLEANING.  | UUU25  | 2005                           | 40,000              | SF         | 10            | 8                 | 2         | \$1.15         | \$ 46,000       | \$ 51,197                      | \$ 52,119  | \$ 53,057  | \$ 54,012  | \$ 54,984  |
| LA-   | MS017    | VERTICAL UNIT VENTILATOR REPLACEMENT.   | W06  | 2002                           | 2                   | EA         | 25            | 11                | 14        | \$17,887.50    | \$ 35,775       | \$ 39,817                      | \$ 40,533  | \$ 41,263  | \$ 42,006  | \$ 42,762  |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope) |          |   |  |                                |                     |            |               |                   |           |                |                 | \$ 236,422                     | \$ 240,677 | \$ 245,009 | \$ 249,420 | \$ 253,909 |
| LA-   | ES001    | BUILDING SERVICE TRANSFORMER.   | UUU04  | 2004                           | --                  | --         | 20            | 9                 | 11        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | ES002    | MAIN SWITCHBOARD.   | UUU05  | 1967                           | 1                   | EA         | 20            | 46                | -26       | \$81,000.00    | \$ 81,000       | \$ 90,151                      | \$ 91,774  | \$ 93,426  | \$ 95,108  | \$ 96,819  |
| LA-   | ES003    | STANDBY GENERATOR.  | UUU25  | 2009                           | --                  | --         | 20            | 4                 | 16        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | ES004    | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).  | UUU25  | 2009                           | --                  | --         | 20            | 4                 | 16        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | ES005    | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS).  | UUU25  | 2009                           | --                  | --         | 20            | 4                 | 16        | \$0.00         | --              |                                |            |            |            |            |
| LA-   | ES006    | ELECTRICAL DISTRIBUTION EQUIPMENT.  | UUU05  | 1967                           | 2                   | EA         | 20            | 46                | -26       | \$0.00         | \$ -            | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| LA-   | ES007    | VARIABLE FREQUENCY DRIVE (VFD).   | UUU25 /<br>2018 CHILLED WATER PUMP # 1 VFD REPLACED. | 2007                           | --                  | --         | 15            | 6                 | 9         | \$0.00         | --              |                                |            |            |            |            |

**SCHOOLCRAFT COLLEGE; LIBERAL ARTS - SCHEDULED MAINTENANCE PROGRAM**

| LOC   | ITEM NO. | ITEM  | FICM CODE  | YEAR ITEM WAS PUT INTO SERVICE | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |                     |                     |                     |                     |
|---|----------|---|--|--------------------------------|---------------------|------------|---------------|-------------------|-----------|----------------|-----------------|--------------------------------|---------------------|---------------------|---------------------|---------------------|
|   |          |   |  |                                |                     |            |               |                   |           |                |                 | 6                              | 7                   | 8                   | 9                   | 10                  |
|   |          |   |  |                                |                     |            |               |                   |           |                |                 | 2019                           | 2020                | 2021                | 2022                | 2023                |
| LA-   | ES008    | LIGHTING AND RECEPTACLE PANELBOARDS.  | UUU05  | 1967                           | 1                   | LS         | 20            | 46                | -26       | \$81,000.00    | \$ 81,000       | \$ 90,151                      | \$ 91,774           | \$ 93,426           | \$ 95,108           | \$ 96,819           |
| LA-   | ES009    | EXTERIOR BUILDING MOUNTED LIGHTING.   | UUU25  | 1967                           | 14                  | EA         | 20            | 46                | -26       | \$708.75       | \$ 9,923        | \$ 11,044                      | \$ 11,242           | \$ 11,445           | \$ 11,651           | \$ 11,860           |
| LA-   | ES010    | EXIT LIGHTING.  | W06  | 2000                           | --                  | --         | 2             | 13                | -11       | \$0.00         | --              |                                |                     |                     |                     |                     |
| LA-   | ES011    | CORRIDOR LIGHTING.  | W06  | 2000                           | --                  | --         | 20            | 13                | 7         | \$0.00         | --              |                                |                     |                     |                     |                     |
| LA-   | ES012    | CLASSROOM LIGHTING.   | 110 AND 210  | VARIOUS                        | --                  | --         | 20            | --                | --        | \$0.00         | --              |                                |                     |                     |                     |                     |
| LA-   | ES013    | OFFICE LIGHTING.  | 310  | VARIOUS                        | --                  | --         | 20            | --                | --        | \$0.00         | --              |                                |                     |                     |                     |                     |
| LA-   | ES014    | STORAGE AND UTILITY ROOM LIGHTING.  | X01 AND Y04  | 1967                           | 1                   | LS         | 20            | 46                | -26       | \$27,000.00    | \$ 27,000       | \$ 30,050                      | \$ 30,591           | \$ 31,142           | \$ 31,703           | \$ 32,273           |
| LA-   | ES015    | VACANCY SENSOR LIGHTING CONTROLS.   | 110 AND 210  | 2002                           | --                  | --         | 20            | 11                | 9         | \$0.00         | --              |                                |                     |                     |                     |                     |
| LA-   | ES016    | VACANCY SENSOR LIGHTING CONTROLS.   | W05 AND W06  | NONE                           | 1                   | LS         | 20            | --                | --        | \$13,500.00    | \$ 13,500       | \$ 15,025                      | \$ 15,296           | \$ 15,571           | \$ 15,851           | \$ 16,137           |
| <b>BUILDING SYSTEMS (fire, security, IT/media infrastructure)</b> |          |   |  |                                |                     |            |               |                   |           |                |                 | <b>\$ 200,476</b>              | <b>\$ 204,085</b>   | <b>\$ 207,758</b>   | <b>\$ 211,498</b>   | <b>\$ 215,305</b>   |
| LA-   | BS001    | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.   | UUU07  | 2022                           | --                  | --         | 20            | -9                | 29        | \$0.00         | --              |                                |                     |                     |                     |                     |
| LA-   | BS002    | FIRE ALARM DEVICES.   | UUU07  | 2007                           | --                  | --         | 20            | 6                 | 14        | \$0.00         | --              |                                |                     |                     |                     |                     |
| LA-   | BS003    | BOILER EPO SYSTEM.  | Y04  | NONE                           | 1                   | EA         | 20            | --                | --        | \$3,375.00     | \$ 3,375        | \$ 3,756                       | \$ 3,824            | \$ 3,893            | \$ 3,963            | \$ 4,034            |
| LA-   | BS004    | CLOCK SYSTEM.   | UUU25  | 1967                           | 1                   | LS         | 20            | 46                | -26       | \$39,904.00    | \$ 39,904       | \$ 44,412                      | \$ 45,212           | \$ 46,026           | \$ 46,854           | \$ 47,697           |
| LA-   | BS005    | SECURITY SURVEILLANCE SYSTEM.   | UUU14  | 2004                           | 1                   | LS         | 20            | 9                 | 11        | \$136,847.00   | \$ 136,847      | \$ 152,308                     | \$ 155,049          | \$ 157,840          | \$ 160,681          | \$ 163,574          |
| LA-   | BS006    | SECURITY ACCESS SYSTEM. IMPROVEMENTS WERE MADE IN 2018. COMPLETED 2021.                 | UUU14 / 2018 EXTERIOR DOOR CARD ACCESS & GALAXY PANEL INSTALLED. | 2021                           | 1                   | LS         | 20            | 0                 | 20        | \$0.00         | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS007    | LIGHTNING PROTECTION SYSTEM.  | UUU25  | NONE                           | 1                   | LS         | 20            | --                | --        | \$0.00         | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS008    | THEATER LIGHTING AND CONTROL EQUIPMENT.   | UUU25  | 2004                           | 1                   | LS         | 20            | 9                 | 11        | \$0.00         | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS009    | NETWORK SYSTEMS. ENTIRE MDF WAS RELOCATED TO LA30.                                      | UUU02  | 2017                           | 1                   | LS         | 25            | --                | --        | \$0.00         | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS010    | NETWORK CABLING. ENTIRE MDF WAS RELOCATED TO LA30.                                      | UUU02  | 2017                           | 2                   | LS         | 25            | --                | --        | \$200.00       | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS011    | TP COMMUNICATION CABLE. ENTIRE MDF WAS RELOCATED TO LA30.                               | UUU02  | 2017                           | 48                  | EA         | 25            | --                | --        | \$100.00       | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS012    | NETWORK SYSTEMS. ENTIRE MDF WAS RELOCATED TO LA30.                                      | UUU02  | 2017                           | 4                   | LS         | 25            | --                | --        | \$2,000.00     | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS013    | NETWORK CABLE. ENTIRE MDF WAS RELOCATED TO LA30.  | UUU02  | 2017                           | 48                  | EA         | 25            | --                | --        | \$200.00       | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| LA-   | BS014    | TELEPHONE SYSTEMS. COMPLETED  | UUU02  | 2017                           | 10                  | EA         | 25            | --                | --        | \$100.00       | \$ -            | \$ -                           | \$ -                | \$ -                | \$ -                | \$ -                |
| <b>SPECIALTY EQUIPMENT (food service, theatre, labs, shops)</b>   |          |   |  |                                |                     |            |               |                   |           |                |                 | <b>\$ 93,156</b>               | <b>\$ 94,833</b>    | <b>\$ 96,540</b>    | <b>\$ 98,278</b>    | <b>\$ 100,047</b>   |
| LA-   | SE001    | EXTERIOR BUILDING SIGNAGE UPGRADE (COMPLIANCE WITH CURRENT COLLEGE BRANDING STANDARDS). | SSS16  | 1967                           | 1                   | LS         | 25            | 46                | -21       | \$43,200.00    | \$ 43,200       | \$ 48,081                      | \$ 48,946           | \$ 49,827           | \$ 50,724           | \$ 51,637           |
| LA-   | SE002    | INSTALL CRANE RAIL FOR CHAIN FALL THAT CAN BE USED TO HOIST EQUIPMENT OVER STAIRS.      | Y04  | NONE                           | 1                   | EA         | 35            | --                | --        | \$40,500.00    | \$ 40,500       | \$ 45,076                      | \$ 45,887           | \$ 46,713           | \$ 47,554           | \$ 48,410           |
| LA-   | SE003    | THEATRE STAGE LIGHTING SYSTEM MAINTENANCE/UPGRADES.                                     | 590  | 2004                           | --                  | --         | 20            | 9                 | 11        | \$0.00         | --              |                                |                     |                     |                     |                     |
| <b>ACCESSIBILITY IMPROVEMENTS</b>                                 |          |   |  |                                |                     |            |               |                   |           |                |                 | <b>\$ 37,563</b>               | <b>\$ 38,239</b>    | <b>\$ 38,927</b>    | <b>\$ 39,628</b>    | <b>\$ 40,341</b>    |
| LA-   | AI001    | BARRIER-FREE IMPROVEMENTS TO FACULTY OFFICE BAYS.                                       | 310  | 1967                           | 2                   | EA         | 20            | 46                | -26       | \$16,875.00    | \$ 33,750       | \$ 37,563                      | \$ 38,239           | \$ 38,927           | \$ 39,628           | \$ 40,341           |
| <b>ANNUAL FUNDING REQUIREMENTS (ROUNDED):</b>                     |          |   |  |                                |                     |            |               |                   |           |                |                 | <b>\$ 1,841,983</b>            | <b>\$ 1,875,139</b> | <b>\$ 1,908,892</b> | <b>\$ 1,943,252</b> | <b>\$ 1,978,230</b> |

# SCHOOLCRAFT COLLEGE; MCDOWELL CENTER - SCHEDULED MAINTENANCE PROGRAM

|  |                    |                     |
|--|--------------------|---------------------|
| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: |                    | 2013                |
| BUILDING SECTION (BUILDING TYPE)           | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
| MCDOWELL CENTER (ADMIN/CLASSROOM)          | 1994               | 66,746              |
|  |                    |                     |
|  |                    |                     |
| YEAR: 2023                                 |                    |                     |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:    |                    | \$ 2,469,656        |
| REPLACEMENT VALUE FOR THE BUILDING:        |                    | \$ 21,447,200       |
| FACILITY CONDITION INDEX (FCI):            |                    | 16%                 |



|                |                    |
|----------------|--------------------|
| FCI            | BUILDING CONDITION |
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

|                     |      |
|---------------------|------|
| INFLATION RATE (%): | 1.8% |
|---------------------|------|

|                               |
|-------------------------------|
| ITEM NO. CODES                |
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

|                            |
|----------------------------|
| LEGEND                     |
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

|                                       |
|---------------------------------------|
| REMAINING USEFUL LIFE (RUL) BAROMETER |
| RUL = 1 YEAR OR LESS                  |
| RUL = 5 YEARS                         |
| RUL = 10 YEARS OR GREATER             |

| ITEM  |       | FICM   | YEAR ITEM                            | ITEM TOTAL | ITEM   | AVG   | TIME  | RUL   | ITEM | SCHEDULED MAINTENANCE PLAN YEAR |            |            |            |            |            |            |
|---|-------|--|--------------------------------------|------------|--------|-------|-------|-------|------|---------------------------------|------------|------------|------------|------------|------------|------------|
| LOC   | NO.   |  | WAS PUT                              |            |        |       |       |       |      | UNITS                           | EUL        | IN USE     | UNIT       | ITEM       | 6          | 7          |
|   |       | CODE   | INTO SERVICE                         | QUANTITY   |        | (YRS) | (YRS) | (YRS) | COST | FIRST COST                      | 2019       | 2020       | 2021       | 2022       | 2023       |            |
| BUILDING ENVELOPE (includes items exterior to building) |       |  |                                      |            |        |       |       |       |      |                                 | \$ 496,889 | \$ 505,833 | \$ 514,938 | \$ 524,207 | \$ 529,465 |            |
| MC-   | BE001 | PRE-CAST STONE CLEANING (WALL PANELS AND WINDOW SILLS).  | MMM16                                | 2014       | 5,500  | SF    | 20    | 0     | 20   | \$1.35                          | \$ 7,425   | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| MC-   | BE002 | EXTERIOR SEALANT MAINTENANCE.  | MMM16                                | 1994       | 8,000  | LF    | 20    | 19    | 1    | \$5.40                          | \$ 43,200  | \$ 48,081  | \$ 48,946  | \$ 49,827  | \$ 50,724  | \$ 51,637  |
| MC-   | BE003 | NORTHEAST PATIO SOFFIT REPAIRS.  | MMM16                                | VARIOUS    | 1,000  | SF    | 20    | --    | --   | \$7.80                          | \$ 7,800   | \$ 8,681   | \$ 8,837   | \$ 8,997   | \$ 9,159   | \$ 9,323   |
| MC-   | BE004 | SLIDING DOOR REPAIRS - LL FLOOR. EAST SLIDING DOOR REPLACED 2022.  | W06                                  | 2022       | 2      | EA    | 15    | 19    | -4   | \$500.00                        | \$ 1,000   | \$ 1,669   | \$ 1,700   | \$ 1,730   | \$ 1,761   | \$ 1,201   |
| MC-   | BE005 | SLIDING DOOR REPAIRS - 1ST FLOOR. INCLUDES WEST MAIN ENTRANCE SLIDER DOOR MODIFICATIONS TO LESSEN AIR INFILTRATION/EXFILTRATION. REPLACED IN 2020. | W06                                  | 2020       | 2      | EA    | 15    | 19    | -4   | \$1,500.00                      | \$ 3,000   | \$ 3,339   | \$ 3,399   | \$ 3,460   | \$ 3,523   | \$ -       |
| MC-   | BE006 | DOCK REPAIRS; INCLUDING BOLLARD REPAIRS/REPLACEMENT AND ADDRESSING OF RAINWATER DRAINAGE ISSUES CONTRIBUTING TO DOCK CORROSION.                    | W04                                  | 2017       | 600    | SF    | 15    | 0     | -4   | \$105.00                        | \$ 63,000  |            |            |            |            |            |
| MC-   | BE007 | DOCK ROLL-UP DOOR REPLACEMENT.   | W04                                  | 1994       | 110    | SF    | 25    | 19    | 6    | \$80.00                         | \$ 8,800   | \$ 9,794   | \$ 9,971   | \$ 10,150  | \$ 10,333  | \$ 10,519  |
| MC-   | BE008 | SKY LIGHT MAINTENANCE.   | MMM16                                | 1994       | 450    | SF    | 25    | 19    | 6    | \$10.00                         | \$ 4,500   | \$ 5,008   | \$ 5,099   | \$ 5,190   | \$ 5,284   | \$ 5,379   |
| MC-   | BE009 | REPLACEMENT OF PARAPET COPING AND FLASHINGS.   | MMM16                                | 1994       | --     | --    | 40    | 19    | 21   | \$0.00                          | --         |            |            |            |            |            |
| MC-   | BE010 | SINGLE-PLY MEMBRANE REROOFING.   | MMM16                                | 1994       | 31,000 | SF    | 25    | 19    | 6    | \$12.00                         | \$ 372,000 | \$ 414,028 | \$ 421,480 | \$ 429,067 | \$ 436,790 | \$ 444,652 |
| MC-   | BE011 | EXTERIOR DOOR MAINTENANCE/REPLACEMENTS.  | W06                                  | 1994       | 4      | EA    | 25    | 19    | 6    | \$550.00                        | \$ 2,200   | \$ 2,449   | \$ 2,493   | \$ 2,537   | \$ 2,583   | \$ 2,630   |
| MC-   | BE012 | EXTERIOR WINDOW REPLACEMENTS.  | MMM16                                | 1994       | --     | --    | 30    | 19    | 11   | \$0.00                          | --         |            |            |            |            |            |
| MC-   | BE013 | STEEL DOOR LINTEL MAINTENANCE  | MMM16                                | 1994       | 1      | EA    | 15    | 19    | -4   | \$750.00                        | \$ 750     | \$ 835     | \$ 850     | \$ 865     | \$ 881     | \$ 896     |
| MC-   | BE014 | DOCK LIFT MAINTENANCE  | W04                                  | 1994       | 1      | EA    | 20    | 19    | 1    | \$1,500.00                      | \$ 1,500   | \$ 1,669   | \$ 1,700   | \$ 1,730   | \$ 1,761   | \$ 1,793   |
| MC-   | BE015 | EXTERIOR BRICK CLEANING  | MMM16                                | 1994       | 300    | SF    | 20    | 19    | 1    | \$4.00                          | \$ 1,200   | \$ 1,336   | \$ 1,360   | \$ 1,384   | \$ 1,409   | \$ 1,434   |
| BUILDING INTERIOR                                       |       |  |                                      |            |        |       |       |       |      |                                 | \$ 341,072 | \$ 347,211 | \$ 353,461 | \$ 359,824 | \$ 366,300 |            |
| MC-   | BI001 | REPLACEMENT OF CORRIDOR BOOTHS AND BENCHES WITH LAPTOP POWER.  | 650 AND W05                          | 2015       | 0      | EA    | 20    | 0     | --   | \$650.00                        | \$ -       |            |            |            |            |            |
| MC-   | BI002 | WALL FINISH UPDATES - ALLOWANCE.   | 110, 210, 310, 350, W05, W06 AND X03 | VARIOUS    | 66,764 | SF    | 15    | --    | --   | \$5.00                          | \$ 333,820 | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| MC-   | BI003 | TOILET ROOM UPGRADES.  | X03                                  | 1994       | 6      | EA    | 25    | 19    | 6    | \$45,000.00                     | \$ 270,000 | \$ 300,504 | \$ 305,913 | \$ 311,420 | \$ 317,025 | \$ 322,732 |
| MC-   | BI004 | FLOOR FINISH UPDATES - ALLOWANCE.  | 110, 210, 310, 350, W05, W06 AND X03 | VARIOUS    | 66,764 | SF    | 15    | --    | --   | \$7.00                          | \$ 467,348 | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |

**SCHOOLCRAFT COLLEGE; MCDOWELL CENTER - SCHEDULED MAINTENANCE PROGRAM**

| ITEM<br>LOC   | ITEM<br>NO. | ITEM   | FICM<br>CODE   | YEAR ITEM<br>WAS PUT<br>INTO SERVICE | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG<br>EUL<br>(YRS) | TIME<br>IN USE<br>(YRS) | RUL<br>(YRS) | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | SCHEDULED MAINTENANCE PLAN YEAR |              |              |              |              |
|---|-------------|--|--|--------------------------------------|------------------------|---------------|---------------------|-------------------------|--------------|----------------------|--------------------|---------------------------------|--------------|--------------|--------------|--------------|
|   |             |  |  |                                      |                        |               |                     |                         |              |                      |                    | 6<br>2019                       | 7<br>2020    | 8<br>2021    | 9<br>2022    | 10<br>2023   |
| MC-   | BI005       | WOOD WALL CAP MAINTENANCE  | W05  | 2015                                 | 0                      | LF            | 15                  | 0                       | 15           | \$15.00              | \$ -               |                                 |              |              |              |              |
| MC-   | BI006       | TOILET ROOM MIRRORS REPLACEMENT  | X03  | 1994                                 | 27                     | EA            | 25                  | 19                      | 6            | \$350.00             | \$ 9,450           | \$ 10,518                       | \$ 10,707    | \$ 10,900    | \$ 11,096    | \$ 11,296    |
| MC-   | BI007       | WOOD DOOR REPLACEMENTS   | 110, 210, 310<br>AND 350   | 1994                                 | 10                     | EA            | 50                  | 19                      | 31           | \$850.00             | \$ 8,500           | \$ 9,460                        | \$ 9,631     | \$ 9,804     | \$ 9,980     | \$ 10,160    |
| MC-   | BI008       | CARPET REPLACEMENT   | 110, 210, 310<br>AND 350   | VARIOUS                              | 3,000                  | SF            | 15                  | --                      | --           | \$6.00               | \$ 18,000          | \$ 20,034                       | \$ 20,394    | \$ 20,761    | \$ 21,135    | \$ 21,515    |
| MC-   | BI009       | ENTRANCE MAT REPAIR  | W06  | 1994                                 | 50                     | SF            | 5                   | 19                      | 5            | \$10.00              | \$ 500             | \$ 556                          | \$ 567       | \$ 577       | \$ 587       | \$ 598       |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |             |  |  |                                      |                        |               |                     |                         |              |                      |                    | \$ 2,309                        | \$ 2,351     | \$ 2,393     | \$ 2,436     | \$ 2,480     |
| MC-   | PS001       | DOMESTIC HOT WATER HEATER REPLACEMENT.   | UUU24  | 2007                                 | 1                      | EA            | 10                  | 6                       | 4            | \$1,500.00           | \$ 1,500           | \$ 1,669                        | \$ 1,700     | \$ 1,730     | \$ 1,761     | \$ 1,793     |
| MC-   | PS002       | DOMESTIC HOT WATER HEATER RECIRCULATION PUMP REPLACEMENT.  | UUU24  | 1994                                 | 1                      | EA            | 10                  | 19                      | -9           | \$575.00             | \$ 575             | \$ 640                          | \$ 651       | \$ 663       | \$ 675       | \$ 687       |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |             |  |  |                                      |                        |               |                     |                         |              |                      |                    | \$ 1,246,814                    | \$ 1,269,257 | \$ 1,292,103 | \$ 1,315,361 | \$ 1,339,037 |
| MC-   | MS001       | CHILLER REPLACEMENTS.  | UUU20  | 1994                                 | 3                      | EA            | 30                  | 19                      | 11           | \$65,000.00          | \$ 195,000         | \$ 217,031                      | \$ 220,937   | \$ 224,914   | \$ 228,963   | \$ 233,084   |
| MC-   | MS002       | BACK-UP A/C SYSTEM FOR TECH CLOSETS ON EACH FLOOR.   | UUU25  | NONE                                 | 3                      | EA            | 15                  | --                      | --           | \$14,050.00          | \$ 42,150          | \$ 46,912                       | \$ 47,756    | \$ 48,616    | \$ 49,491    | \$ 50,382    |
| MC-   | MS003       | HVAC SYSTEMS CLEANING. WORK WAS PERFORMED AT EAST END OF FIRST FLOOR 2018 & 2019.  | UUU25 /<br>2018 - MC105<br>SUITE DUCT<br>SYSTEM<br>CLEANING.<br>2019 - MC175<br>SUITE DUCT<br>SYSTEM<br>CLEANING | NONE                                 | 0                      | SF            | 10                  | --                      | --           | \$0.25               | \$ -               |                                 |              |              |              |              |
| MC-   | MS004       | AIR HANDLING UNIT, AH-1<br>REFURBISHMENT/RECOMMISSIONING.  | UUU25  | 1994                                 | 1                      | EA            | 25                  | 19                      | 6            | \$25,000.00          | \$ 25,000          | \$ 27,824                       | \$ 28,325    | \$ 28,835    | \$ 29,354    | \$ 29,883    |
| MC-   | MS005       | CONVERSION FROM LEGACY/PNEUMATIC TEMPERATURE CONTROLS TO SC STANDARD JCI TEMPERATURE CONTROLS NETWORK (DDC).                 | UUU06  | 1994 / 2014 /<br>2015                | 24,000                 | SF            | 20                  | --                      | --           | \$4.50               | \$ 108,000         | \$ 120,202                      | \$ 122,365   | \$ 124,568   | \$ 126,810   | \$ 129,093   |
| MC-   | MS006       | ROOM MC17 SUMP PUMP MAINTENANCE/REPLACEMENT.   | UUU16  | 1994                                 | 1                      | EA            | 15                  | 19                      | -4           | \$1,500.00           | \$ 1,500           | \$ 1,669                        | \$ 1,700     | \$ 1,730     | \$ 1,761     | \$ 1,793     |
| MC-   | MS007       | AIR HANDLING UNIT, AH-2 HOUSING REFURBISHMENT (SHEETMETAL OXIDATION).  | UUU25  | 1994                                 | 1                      | EA            | 25                  | 19                      | 6            | \$45,000.00          | \$ 45,000          | \$ 50,084                       | \$ 50,986    | \$ 51,903    | \$ 52,838    | \$ 53,789    |
| MC-   | MS008       | AIR HANDLING UNIT, AH-2 HEAT TRANSFER COIL REPLACEMENTS.   | UUU25  | 1994                                 | 2                      | EA            | 25                  | 19                      | 6            | \$3,500.00           | \$ 7,000           | \$ 7,791                        | \$ 7,931     | \$ 8,074     | \$ 8,219     | \$ 8,367     |
| MC-   | MS009       | CABINET UNIT HEATER REPLACEMENTS - STAIRWELLS.   | W07  | 1994                                 | 6                      | EA            | 20                  | 19                      | 1            | \$5,500.00           | \$ 33,000          | \$ 36,728                       | \$ 37,389    | \$ 38,062    | \$ 38,748    | \$ 39,445    |
| MC-   | MS010       | CABINET UNIT HEATER REPLACEMENTS - VESTIBULES.   | W06  | 1994                                 | 6                      | EA            | 20                  | 19                      | 1            | \$5,500.00           | \$ 33,000          | \$ 36,728                       | \$ 37,389    | \$ 38,062    | \$ 38,748    | \$ 39,445    |
| MC-   | MS011       | ZONING OF PERIMETER HOT WATER RADIANT HEATING SYSTEM FOR IMPROVED TEMPERATURE CONTROL IN VARIOUS CLASSROOM AND OFFICE AREAS. | UUU22  | 1994 / 2015                          | 24,000                 | SF            | 20                  | --                      | --           | \$4.00               | \$ 96,000          | \$ 106,846                      | \$ 108,769   | \$ 110,727   | \$ 112,720   | \$ 114,749   |
| MC-   | MS012       | ROOF-MOUNTED EXHAUST FAN, EFR-1 REPLACEMENT.   | UUU25  | 1994                                 | 1                      | EA            | 20                  | 19                      | 1            | \$2,750.00           | \$ 2,750           | \$ 3,061                        | \$ 3,116     | \$ 3,172     | \$ 3,229     | \$ 3,287     |
| MC-   | MS013       | ROOF-MOUNTED EXHAUST FAN, EFR-2 REPLACEMENT.   | UUU25  | 1994                                 | 1                      | EA            | 20                  | 19                      | 1            | \$1,250.00           | \$ 1,250           | \$ 1,391                        | \$ 1,416     | \$ 1,442     | \$ 1,468     | \$ 1,494     |
| MC-   | MS014       | BOILER REPLACEMENTS.   | UUU22  | 1994                                 | 3                      | EA            | 25                  | 19                      | 6            | \$85,500.00          | \$ 256,500         | \$ 285,479                      | \$ 290,618   | \$ 295,849   | \$ 301,174   | \$ 306,595   |
| MC-   | MS015       | HOT WATER HEATING PUMP MAINTENANCE/REPLACEMENTS.   | UUU22  | 1994                                 | 2                      | EA            | 20                  | 19                      | 1            | \$15,750.00          | \$ 31,500          | \$ 35,059                       | \$ 35,690    | \$ 36,332    | \$ 36,986    | \$ 37,652    |
| MC-   | MS016       | CHILLER ROOF-MOUNTED CONDENSING UNIT MAINTENANCE/REPLACEMENTS.   | UUU20  | 1994                                 | 3                      | EA            | 20                  | 19                      | 1            | \$13,500.00          | \$ 40,500          | \$ 45,076                       | \$ 45,887    | \$ 46,713    | \$ 47,554    | \$ 48,410    |
| MC-   | MS017       | CHILLED WATER PUMP MAINTENANCE/REPLACEMENTS.   | UUU20  | 1994                                 | 3                      | EA            | 20                  | 19                      | 1            | \$12,750.00          | \$ 38,250          | \$ 42,571                       | \$ 43,338    | \$ 44,118    | \$ 44,912    | \$ 45,720    |
| MC-   | MS018       | CABINET UNIT HEATER REPLACEMENTS.  | UUU25  | 1994                                 | 18                     | EA            | 20                  | 19                      | 1            | \$1,950.00           | \$ 35,100          | \$ 39,066                       | \$ 39,769    | \$ 40,485    | \$ 41,213    | \$ 41,955    |
| MC-   | MS019       | SUPPLY AIR FAN MAINTENANCE/REPLACEMENT.  | UUU25  | 1994                                 | 1                      | EA            | 25                  | 19                      | 6            | \$25,000.00          | \$ 25,000          | \$ 27,824                       | \$ 28,325    | \$ 28,835    | \$ 29,354    | \$ 29,883    |
| MC-   | MS020       | RETURN AIR FAN MAINTENANCE/REPLACEMENTS.   | UUU25  | 1994                                 | 2                      | EA            | 25                  | 19                      | 6            | \$15,000.00          | \$ 30,000          | \$ 33,389                       | \$ 33,990    | \$ 34,602    | \$ 35,225    | \$ 35,859    |
| MC-   | MS021       | UNIT HEATER REPLACEMENTS.  | UUU25  | 1994                                 | 1                      | EA            | 20                  | 19                      | 1            | \$3,750.00           | \$ 3,750           | \$ 4,174                        | \$ 4,249     | \$ 4,325     | \$ 4,403     | \$ 4,482     |
| MC-   | MS022       | VAV BOX REPLACEMENTS.  | UUU25  | 1994 / 2014<br>/2015                 | 25,714                 | EA            | 20                  | --                      | --           | \$8.70               | \$ 223,714         | \$ 77,908                       | \$ 79,311    | \$ 80,738    | \$ 82,192    | \$ 83,671    |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope) |             |  |  |                                      |                        |               |                     |                         |              |                      |                    | \$ 206,179                      | \$ 209,890   | \$ 213,668   | \$ 217,515   | \$ 221,430   |
| MC-   | ES001       | BUILDING SERVICE TRANSFORMER.  | UUU04  | 1994                                 | 1                      | EA            | 20                  | 19                      | 1            | \$77,500.00          | \$ 77,500          | \$ 86,256                       | \$ 87,808    | \$ 89,389    | \$ 90,998    | \$ 92,636    |

**SCHOOLCRAFT COLLEGE; MCDOWELL CENTER - SCHEDULED MAINTENANCE PROGRAM**

| LOC   | ITEM NO. | ITEM   | FICM CODE  | YEAR ITEM WAS PUT INTO SERVICE    | ITEM TOTAL QUANTITY | ITEM UNITS | AVG EUL (YRS) | TIME IN USE (YRS) | RUL (YRS) | ITEM UNIT COST | ITEM FIRST COST | SCHEDULED MAINTENANCE PLAN YEAR |                     |                     |                     |                     |
|---|----------|--|--|-----------------------------------|---------------------|------------|---------------|-------------------|-----------|----------------|-----------------|---------------------------------|---------------------|---------------------|---------------------|---------------------|
|   |          |  |  |                                   |                     |            |               |                   |           |                |                 | 6                               | 7                   | 8                   | 9                   | 10                  |
|   |          |  |  |                                   |                     |            |               |                   |           |                |                 | 2019                            | 2020                | 2021                | 2022                | 2023                |
| MC-   | ES002    | MAIN SWITCHBOARD.                                      | UUU05  | 1994                              | --                  | --         | 20            | 19                | 1         | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | ES003    | STANDBY GENERATOR.                                     | UUU25  | 2008                              | 0                   | EA         | 20            | 5                 | 1         | \$25,000.00    | \$ -            | \$ 27,824                       | \$ 28,325           | \$ 28,835           | \$ 29,354           | \$ 29,883           |
| MC-   | ES004    | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).           | UUU25  | 2008                              | 0                   | EA         | 20            | 5                 | 1         | \$10,000.00    | \$ -            | \$ 11,130                       | \$ 11,330           | \$ 11,534           | \$ 11,742           | \$ 11,953           |
| MC-   | ES005    | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS). | UUU25  | 2016                              | 0                   | EA         | 20            | 0                 | 1         | \$10,000.00    | \$ -            |                                 |                     |                     |                     |                     |
| MC-   | ES006    | ELECTRICAL DISTRIBUTION EQUIPMENT.                     | UUU05  | 1994                              | --                  | --         | 20            | 19                | 1         | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | ES007    | VARIABLE FREQUENCY DRIVE (VFD).                        | UUU25  | 1994                              | 4                   | EA         | 20            | 19                | 1         | \$15,000.00    | \$ 60,000       | \$ 66,779                       | \$ 67,981           | \$ 69,204           | \$ 70,450           | \$ 71,718           |
| MC-   | ES008    | LIGHTING AND RECEPTACLE PANELBOARDS.                   | UUU05  | 1994                              | 12                  | EA         | 20            | 19                | 1         | \$0.00         | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| MC-   | ES009    | EXTERIOR BUILDING MOUNTING LIGHTING.                   | UUU25  | 1994                              | 15                  | EA         | 20            | 19                | 1         | \$750.00       | \$ 11,250       | \$ 12,521                       | \$ 12,746           | \$ 12,976           | \$ 13,209           | \$ 13,447           |
| MC-   | ES010    | EXIT LIGHTING.   | W06  | 1994 / 2015                       | --                  | --         | 20            |                   |           | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | ES011    | CORRIDOR LIGHTING.                                     | W06  | 1994 / 2015                       | 1                   | LS         | 20            |                   |           | \$500.00       | \$ 500          | \$ 556                          | \$ 567              | \$ 577              | \$ 587              | \$ 598              |
| MC-   | ES012    | CLASSROOMS/MEETING ROOM LIGHTING.                      | 110, 210 AND 350   | 1994 / 2015                       | 1                   | LS         | 20            |                   |           | \$500.00       | \$ 500          | \$ 556                          | \$ 567              | \$ 577              | \$ 587              | \$ 598              |
| MC-   | ES013    | OFFICE LIGHTING.                                       | 310  | 2015                              | 0                   | LS         | 20            | 0                 | 22        | \$500.00       | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| MC-   | ES014    | STORAGE AND UTILITY ROOM LIGHTING.                     | X01 AND Y04  | 1994                              | 1                   | LS         | 20            | 19                | 1         | \$500.00       | \$ 500          | \$ 556                          | \$ 567              | \$ 577              | \$ 587              | \$ 598              |
| MC-   | ES015    | VACANCY SENSOR LIGHTING CONTROLS.                      | 110, 210, W06 AND W07  | 2015                              | 0                   | LS         | 15            | 0                 | 17        | \$50,000.00    | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| <b>BUILDING SYSTEMS (fire, security, IT/media infrastructure)</b> |          |  |  |                                   |                     |            |               |                   |           |                |                 | <b>\$ 5,565</b>                 | <b>\$ 5,665</b>     | <b>\$ 5,767</b>     | <b>\$ 5,871</b>     | <b>\$ 5,977</b>     |
| MC-   | BS001    | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.              | UUU07  | 2022                              | --                  | --         | 20            | 19                | 1         | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | BS002    | FIRE ALARM DEVICES.                                    | UUU07  | 2015                              | --                  | --         | 20            | -2                | 22        | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | BS003    | BOILER ROOM EPO SYSTEM.                                | Y04  | NONE                              | 1                   | --         | 20            | --                | --        | \$5,000.00     | \$ 5,000        | \$ 5,565                        | \$ 5,665            | \$ 5,767            | \$ 5,871            | \$ 5,977            |
| MC-   | BS004    | CLOCK SYSTEM.  | UUU25  | 1994                              | --                  | --         | 20            | 19                | 1         | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | BS005    | SECURITY SURVEILLANCE SYSTEM.                          | UUU14  | 2015                              | --                  | --         | 20            | -2                | 22        | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | BS006    | SECURITY ACCESS SYSTEM.                                | UUU14 / 2018 - CODE BLUE PANIC BUTTONS ADDED TO 2ND FLR VP OFFICE SUITE. | 2015 / 2021                       | --                  | --         | 20            | 0                 | 22        | \$0.00         | --              |                                 |                     |                     |                     |                     |
| MC-   | BS007    | ABATE ABANDONED TWISTED PAIR NETWORK CABLING           | UUU02  | 2015                              | 0                   | --         | 30            | --                | --        | \$0.00         | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| MC-   | BS008    | CABLE TRAY AND CONDUIT PENETRATIONS INTO ROOM          | Y04  | 2015                              | 0                   | --         | 30            | --                | --        | \$7,500.00     | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| MC-   | BS009    | TELEPHONE BACKBOARD                                    | UUU17  | 2015                              | 0                   | --         | 30            | --                | --        | \$0.00         | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| MC-   | BS010    | BACK-UP A/C SYSTEM FOR TECH CLOSETS ON EACH FLOOR.     | Y04  | ONLY FOR MC14. MDF AS OF 9/18/15. | 1                   | --         | 30            | --                | --        | \$0.00         | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| MC-   | BS011    | WORKSPACE CLEARANCE                                    | Y04  | 2015                              | 0                   | --         | 30            | --                | --        | \$0.00         | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| MC-   | BS012    | EXISTING CATEGORY 5 NETWORK CABLING                    | UUU02  | 2015                              | 0                   | --         | 30            | --                | --        | \$0.00         | \$ -            | \$ -                            | \$ -                | \$ -                | \$ -                | \$ -                |
| <b>SPECIALTY EQUIPMENT (food service, theatre, labs, shops)</b>   |          |  |  |                                   |                     |            |               |                   |           |                |                 | <b>\$ -</b>                     | <b>\$ -</b>         | <b>\$ -</b>         | <b>\$ -</b>         | <b>\$ -</b>         |
| MC-   | SE001    | ELEVATOR MAJOR MAINTENANCE.                            | W02  | 2020                              | 1                   | LS         | 25            | 0                 | 25        | \$8,686.00     | \$ 8,686        |                                 |                     |                     |                     |                     |
| <b>ACCESSIBILITY IMPROVEMENTS</b>                                 |          |  |  |                                   |                     |            |               |                   |           |                |                 | <b>\$ 4,624</b>                 | <b>\$ 4,708</b>     | <b>\$ 4,792</b>     | <b>\$ 4,879</b>     | <b>\$ 4,966</b>     |
| MC-   | AI001    | BARRIER FREE DRINKING FOUNTAIN ADJUSTMENTS             | W06  | 1994                              | 6                   | EA         | 20            | 19                | 1         | \$650.00       | \$ 3,900        | \$ 4,341                        | \$ 4,419            | \$ 4,498            | \$ 4,579            | \$ 4,662            |
| MC-   | AI002    | COAT RACK ADJUSTMENTS                                  | X03  | UNKNOWN                           | 1                   | EA         | 20            | --                | --        | \$255.00       | \$ 255          | \$ 284                          | \$ 289              | \$ 294              | \$ 299              | \$ 305              |
| <b>ANNUAL FUNDING REQUIREMENTS (ROUNDED):</b>                     |          |  |  |                                   |                     |            |               |                   |           |                |                 | <b>\$ 2,303,453</b>             | <b>\$ 2,344,915</b> | <b>\$ 2,387,124</b> | <b>\$ 2,430,092</b> | <b>\$ 2,469,656</b> |

# SCHOOLCRAFT COLLEGE; PHYSICAL EDUCATION - SCHEDULED MAINTENANCE PROGRAM

SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO: 2013

INFLATION RATE (%): 1.8%

| BUILDING SECTION (BUILDING TYPE) | BUILDING AGE (YRS) | BUILDING AREA (GSF) |
|----------------------------------|--------------------|---------------------|
| PHYSICAL EDUCATION (CLASSROOM)   | 1968               | 94,045              |
|                                  |                    |                     |
|                                  |                    |                     |

YEAR: 2023

|   |               |
|---|---------------|
| MAINTENANCE BACKLOG VALUE FOR BUILDING: | \$ 3,304,254  |
| REPLACEMENT VALUE FOR THE BUILDING:     | \$ 30,307,800 |
| FACILITY CONDITION INDEX (FCI):         | 11%           |

SPLIT FROM ESC



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

REMAINING USEFUL LIFE (RUL) BAROMETER

|  |                           |
|--|---------------------------|
|  | RUL = 1 YEAR OR LESS      |
|  | RUL = 5 YEARS             |
|  | RUL = 10 YEARS OR GREATER |

| ITEM  |       | YEAR ITEM   |                            | AVG TIME   |        | ITEM  |        | DEFERRED MAINTENANCE PLAN YEAR |      |             |            |            |            |            |            |            |
|---|-------|---|----------------------------|------------|--------|-------|--------|--------------------------------|------|-------------|------------|------------|------------|------------|------------|------------|
| LOC   | NO.   | FICM  | WAS PUT                    | ITEM TOTAL | ITEM   | EUL   | IN USE | RUL                            | UNIT | ITEM        | 6          | 7          | 8          | 9          | 10         |            |
|   |       | CODE  | INTO SERVICE               | QUANTITY   | UNITS  | (YRS) | (YRS)  | (YRS)                          | COST | FIRST COST  | 2019       | 2020       | 2021       | 2022       | 2023       |            |
| BUILDING ENVELOPE (includes items exterior to building) |       |   |                            |            |        |       |        |                                |      |             | \$ 712,025 | \$ 724,841 | \$ 737,888 | \$ 751,170 | \$ 764,691 |            |
| PE-   | BE001 | PE ROOF REPLACEMENT - NORTHEAST MECHANICAL ROOM.  | MMM16                      | 1991       | 14,500 | SF    | 25     | 22                             | 3    | \$22.95     | \$ 332,775 | \$ 370,371 | \$ 377,038 | \$ 383,825 | \$ 390,734 | \$ 397,767 |
| PE-   | BE002 | PE NORTH ROOF REPLACEMENT (POOL)  | MMM16                      | 1993       | 11,500 | SF    | 25     | 20                             | 5    | \$22.95     | \$ 263,925 | \$ 293,743 | \$ 299,030 | \$ 304,413 | \$ 309,892 | \$ 315,470 |
| PE-   | BE003 | SINGLE-PLY MEMBRANE REROOFING.  | MMM16                      | 2002       | --     | --    | 25     | 11                             | 14   | \$0.00      | --         |            |            |            |            |            |
| PE-   | BE004 | STANDING SEAM METAL ROOFING MAINTENANCE/REPLACEMENT.  | MMM16                      | 2002       | --     | --    | 50     | 11                             | 39   | \$0.00      | --         |            |            |            |            |            |
| PE-   | BE005 | POLYURETHANE SPRAY FOAM ROOFING MAINTENANCE/REPLACEMENT.  | MMM16                      | 2007       | --     | --    | 15     | 6                              | 9    | \$0.00      | --         |            |            |            |            |            |
| PE-   | BE006 | IMPROVEMENTS/REPAIRS TO NORTHWEST ENTRY.  | W06                        | 1968       | 1      | LS    | 20     | 45                             | -25  | \$0.00      | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PE-   | BE007 | EXTERIOR MASONRY REPAIRS; INCLUDES ADDRESSING POPPING BRICK FACES AND TUCKPOINTING.                       | MMM16                      | 2006       | 350    | SF    | 15     | 7                              | 8    | \$25.00     | \$ 8,750   | \$ 9,739   | \$ 9,914   | \$ 10,092  | \$ 10,274  | \$ 10,459  |
| PE-   | BE008 | WATERPROOFING NORTH SIDE OF RACQUETBALL COURTS.   | 520                        | 2014       | 1,500  | SF    | 25     | 0                              | 25   | \$6.75      | \$ 10,125  | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PE-   | BE009 | EAST VESTIBULE WITH SLIDER DOOR REDESIGN/REPLACEMENT.   | W06                        | 2021       | 0      | LS    | 15     | 0                              | 8    | \$20,925.00 | \$ -       |            |            |            |            |            |
| PE-   | BE010 | REPLACE ORIGINAL METAL COPINGS/FLASHINGS.   | MMM16                      | 1968       | 1,150  | LF    | 40     | 45                             | -5   | \$20.25     | \$ 23,288  | \$ 25,918  | \$ 26,385  | \$ 26,860  | \$ 27,343  | \$ 27,836  |
| PE-   | BE011 | EXTERIOR DOOR MAINTENANCE/REPLACEMENTS (EXCLUDES WORK ON OTHER EXTERIOR DOORS MENTIONED IN THIS SECTION). | 110, 310, 350, 520 AND W06 | 2006       | --     | --    | 25     | 7                              | 18   | \$0.00      | --         |            |            |            |            |            |
| PE-   | BE012 | EXTERIOR WINDOW REPLACEMENTS.   | MMM16                      | 2007       | --     | --    | 30     | 6                              | 24   | \$0.00      | --         |            |            |            |            |            |
| PE-   | BE013 | MAIN (WEST) ENTRANCE DOORS/DOOR FRAMES REPLACEMENT.   | W05                        | 2006       | --     | --    | 25     | 7                              | 18   | \$0.00      | --         |            |            |            |            |            |
| PE-   | BE014 | PE FITNESS CENTER EXTERIOR WINDOWS MAINTENANCE/REPLACEMENT.   | 520                        | 2011       | --     | --    | 25     | 2                              | 23   | \$0.00      | --         |            |            |            |            |            |
| PE-   | BE015 | EXTERIOR SEALANT REPLACEMENT  | MMM16                      | 2006       | 1      | LS    | 20     | 7                              | 13   | \$10,000.00 | \$ 10,000  | \$ 11,130  | \$ 11,330  | \$ 11,534  | \$ 11,742  | \$ 11,953  |
| PE-   | BE016 | STEEL LINTEL MAINTENANCE.   | MMM16                      | 1968       | 6      | LF    | 15     | 45                             | -30  | \$10.80     | \$ 65      | \$ 72      | \$ 73      | \$ 75      | \$ 76      | \$ 77      |
| PE-   | BE017 | CLEAN EXTERIOR BRICK EFFLORESCENCE  | MMM16                      | 1968       | 500    | SF    | 10     | 45                             | -35  | \$1.89      | \$ 945     | \$ 1,052   | \$ 1,071   | \$ 1,090   | \$ 1,110   | \$ 1,130   |
| BUILDING INTERIOR                                       |       |   |                            |            |        |       |        |                                |      |             | \$ 425,907 | \$ 433,573 | \$ 441,378 | \$ 449,322 | \$ 457,410 |            |
| PE-   | BI001 | INSTALL METAL SERVICE PLATFORMS FOR SUSPENDED EQUIPMENT REQUIRING ROUTINE ACCESS FOR MAINTENANCE.         | Y04                        | NONE       | 4      | EA    | 50     | --                             | --   | \$13,500.00 | \$ 54,000  | \$ 60,101  | \$ 61,183  | \$ 62,284  | \$ 63,405  | \$ 64,546  |
| PE-   | BI002 | INSTALL AT CATWALK SYSTEM ABOVE THE POOL CEILING FOR BETTER/SAFER ACCESS TO MAINTAIN LIGHT FIXTURES.      | 520                        | 1968       | 1      | LS    | 40     | 45                             | -5   | \$27,000.00 | \$ 27,000  | \$ 30,050  | \$ 30,591  | \$ 31,142  | \$ 31,703  | \$ 32,273  |
| PE-   | BI003 | POOL CEILING UPGRADE .  | 520                        | 1968       | 10,640 | SF    | 35     | 45                             | -10  | \$5.67      | \$ 60,329  | \$ 67,145  | \$ 68,353  | \$ 69,584  | \$ 70,836  | \$ 72,111  |

**SCHOOLCRAFT COLLEGE; PHYSICAL EDUCATION - SCHEDULED MAINTENANCE PROGRAM**

| ITEM  |       | FICM  | YEAR ITEM  | ITEM TOTAL   | ITEM     | AVG   | TIME  | ITEM  |       | DEFERRED MAINTENANCE PLAN YEAR |              |            |            |            |            |            |
|---|-------|---|--|--------------|----------|-------|-------|-------|-------|--------------------------------|--------------|------------|------------|------------|------------|------------|
| LOC   | NO.   | ITEM  | CODE   | INTO SERVICE | QUANTITY | UNITS | (YRS) | (YRS) | (YRS) | UNIT                           | ITEM         | 6          | 7          | 8          | 9          | 10         |
|   |       |   |  |              |          |       |       |       |       | COST                           | FIRST COST   | 2019       | 2020       | 2021       | 2022       | 2023       |
| PE-   | BI004 | TOILET ROOM UPGRADES; INCLUDING ADA IMPROVEMENTS.   | X03  | 1968         | 680      | SF    | 25    | 45    | -20   | \$54.00                        | \$ 36,720    | \$ 40,869  | \$ 41,604  | \$ 42,353  | \$ 43,115  | \$ 43,892  |
| PE-   | BI005 | WOOD SPECIALTY FLOOR REFINISHING. MAIN GYM (PE110) EXISTS ONLY NOW.   | 520  | 2022         | 17,200   | SF    | 10    | --    | --    | \$1.69                         | \$ 29,068    | \$ 50,597  | \$ 51,508  | \$ 52,435  | \$ 53,379  | \$ 54,340  |
| PE-   | BI006 | TEAM ROOM UPGRADES.   | 525  | VARIOUS      | --       | --    | 25    | --    | --    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI007 | FACULTY LOCKER ROOM UPGRADES.   | 525  | VARIOUS      | --       | --    | 25    | --    | --    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI008 | WALL FINISH UPDATES - ALLOWANCE.  | 110, 310, 520, 525, W05, W06 AND X03               | VARIOUS      | --       | --    | 15    | --    | --    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI009 | FLOOR FINISH UPDATES - ALLOWANCE.   | 110, 310, 520, 525 AND X03 / 2018 MAIN GYM & PE140 | VARIOUS      | --       | --    | 15    | --    | --    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI010 | MAIN LOBBY CEILING AND LIGHTING UPGRADE.  | W05  | 1968         | 2,500    | SF    | 35    | 45    | -10   | \$17.67                        | \$ 44,175    | \$ 49,166  | \$ 50,051  | \$ 50,952  | \$ 51,869  | \$ 52,802  |
| PE-   | BI011 | WEST TERRAZZO STEP REPAIRS.   | W05  | 2004         | --       | --    | 20    | 9     | 11    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI012 | MAIN GYM PAINTING.  | 520  | UNKNOWN      | 18,400   | SF    | 15    | --    | --    | \$1.35                         | \$ 24,840    | \$ 27,646  | \$ 28,144  | \$ 28,651  | \$ 29,166  | \$ 29,691  |
| PE-   | BI013 | WOMEN'S LOCKER ROOM SHOWER/CHANGING AREA SPECIALTIES UPDATES (I.E. SHOWER CURTAINS, ADA FOLD-DOWN BENCHES, DISPENSERS). | 525  | 2012         | --       | --    | 25    | 1     | 24    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI014 | MEN'S LOCKER ROOM SHOWER/CHANGING AREA SPECIALTIES UPDATES (I.E. SHOWER CURTAINS, ADA FOLD-DOWN BENCHES, DISPENSERS).   | 525  | 2012         | --       | --    | 25    | 1     | 24    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI015 | PE FITNESS CENTER CARPET TILE REPLACEMENT.  | 520  | 2011         | --       | --    | 15    | 2     | 13    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI016 | PE FITNESS CENTER FINISH REPAIRS/UPGRADES - ALLOWANCE.  | 520  | 2011         | --       | --    | 15    | 2     | 13    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | BI017 | VCT FLOOR MAINTENANCE.  | W06  | 2005         | 8        | SF    | 35    | 8     | 27    | \$4.73                         | \$ 38        | \$ 42      | \$ 43      | \$ 44      | \$ 44      | \$ 45      |
| PE-   | BI018 | STAIR HANDRAIL IMPROVEMENTS.  | W07  | 1968         | 60       | LF    | 20    | 45    | -25   | \$135.00                       | \$ 8,100     | \$ 9,015   | \$ 9,177   | \$ 9,343   | \$ 9,511   | \$ 9,682   |
| PE-   | BI019 | ACOUSTICAL CEILING REPLACEMENT.   | 520  | 2013         | 725      | SF    | 35    | 0     | 35    | \$4.32                         | \$ 3,132     | \$ 3,486   | \$ 3,549   | \$ 3,612   | \$ 3,677   | \$ 3,744   |
| PE-   | BI020 | CONDUIT ENTRANCE WATERPROOFING.   | Y04  | 2011         | 1        | LS    | 20    | 2     | 18    | \$13,500.00                    | \$ 13,500    | \$ 15,025  | \$ 15,296  | \$ 15,571  | \$ 15,851  | \$ 16,137  |
| PE-   | BI021 | RACQUETBALL STAIR IMPROVEMENTS.   | 520  | 1968         | 1        | LS    | 25    | 45    | -20   | \$20,250.00                    | \$ 20,250    | \$ 22,538  | \$ 22,943  | \$ 23,356  | \$ 23,777  | \$ 24,205  |
| PE-   | BI022 | POOL MECHANICAL ROOM CONCRETE REPAIRS.  | Y04  | 1968         | 1        | LS    | 25    | 45    | -20   | \$0.00                         | \$ -         | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PE-   | BI023 | DOOR REPLACEMENTS.  | 520, W05 AND Y04                                   | 1968         | 10       | EA    | 50    | 45    | 5     | \$3,037.50                     | \$ 30,375    | \$ 33,807  | \$ 34,415  | \$ 35,035  | \$ 35,665  | \$ 36,307  |
| PE-   | BI024 | DOOR HARDWARE REPAIR.   | W06  | 1968         | 1        | EA    | 30    | 45    | -15   | \$1,282.50                     | \$ 1,283     | \$ 1,427   | \$ 1,453   | \$ 1,479   | \$ 1,506   | \$ 1,533   |
| PE-   | BI025 | CARPET REPLACEMENT.   | 310, 350 AND 520                                   | VARIOUS      | 1,900    | SF    | 15    | --    | --    | \$7.09                         | \$ 13,471    | \$ 14,993  | \$ 15,263  | \$ 15,538  | \$ 15,817  | \$ 16,102  |
| PE-   | BI026 | ENTRANCE MAT REPLACEMENT  | W05 AND W06  | UNKNOWN      | 420      | SF    | 15    | --    | --    | \$0.00                         | \$ -         | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PLUMBING SYSTEMS (may be packaged with BI item scope)   |       |   |  |              |          |       |       |       |       |                                |              | \$ 374,654 | \$ 381,397 | \$ 388,262 | \$ 395,251 | \$ 402,366 |
| PE-   | PS001 | REPLACE PLASTIC PIPING ON POOL FILTRATION SYSTEM.   | 520  | 2004         | 75       | LF    | 25    | 9     | 16    | \$40.50                        | \$ 3,038     | \$ 3,381   | \$ 3,442   | \$ 3,503   | \$ 3,567   | \$ 3,631   |
| PE-   | PS002 | WOMEN'S LOCKER ROOM SHOWER/CHANGING AREA PLUMBING FIXTURE UPDATES.  | 525  | 2012         | --       | --    | 40    | 1     | 39    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | PS003 | MEN'S LOCKER ROOM SHOWER/CHANGING AREA PLUMBING FIXTURE UPDATES.  | 525  | 2012         | --       | --    | 40    | 1     | 39    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | PS004 | GANG TOILET ROOM FIXTURE UPGRADES.  | X03  | 1968         | 31       | EA    | 40    | 45    | -5    | \$10,597.50                    | \$ 328,523   | \$ 365,638 | \$ 372,220 | \$ 378,920 | \$ 385,740 | \$ 392,684 |
| PE-   | PS005 | DOMESTIC WATER PIPE.  | Y04  | 1968         | 150      | LF    | 50    | 45    | 5     | \$33.75                        | \$ 5,063     | \$ 5,634   | \$ 5,736   | \$ 5,839   | \$ 5,944   | \$ 6,051   |
| MECHANICAL SYSTEMS (may be packaged with BI item scope) |       |   |  |              |          |       |       |       |       |                                |              | \$ 223,486 | \$ 227,509 | \$ 231,604 | \$ 235,773 | \$ 240,017 |
| PE-   | MS001 | REPLACE AIR HANDLING UNIT, AH-9 CONVERTING FROM DX COOLING TO CHILLED WATER.  | UUU25  | 2000         | 1        | EA    | 40    | 13    | 27    | \$21,600.00                    | \$ 21,600    | \$ 24,040  | \$ 24,473  | \$ 24,914  | \$ 25,362  | \$ 25,819  |
| PE-   | MS002 | POOL DRAIN TILE PUMP MAINTENANCE/REPLACEMENTS. REPLACED IN 2022.  | UUU25  | 2022         | --       | --    | 20    | 1     | 19    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | MS003 | BOILER LOOP PUMP (POOL HEATER) MAINTENANCE/REPLACEMENTS.  | UUU22  | 2012         | --       | --    | 20    | 1     | 19    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | MS004 | BUILDING HWH LOOP MAINTENANCE/REPLACEMENT.  | UUU22  | 2012         | 80,000   | SF    | 2     | 1     | 1     | \$49.95                        | \$ 3,996,000 | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PE-   | MS005 | POOL WATER PUMP MAINTENANCE/REPLACEMENTS.   | UUU22  | 2012         | 2        | EA    | 20    | 1     | 19    | \$29,025.00                    | \$ 58,050    | \$ 64,608  | \$ 65,771  | \$ 66,955  | \$ 68,160  | \$ 69,387  |
| PE-   | MS006 | BOILER LOOP PUMP (WATER HEATER) MAINTENANCE/REPLACEMENTS.   | UUU22  | 2012         | --       | --    | 20    | 1     | 19    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | MS007 | DOMESTIC HOT WATER PUMP REPLACEMENTS.   | UUU24  | 2012         | --       | --    | 20    | 1     | 19    | \$0.00                         | --           |            |            |            |            |            |
| PE-   | MS008 | LAUNDRY HOT WATER PUMP MAINTENANCE/REPLACEMENT.   | UUU24  | 2012         | --       | --    | 20    | 1     | 19    | \$0.00                         | --           |            |            |            |            |            |

**SCHOOLCRAFT COLLEGE; PHYSICAL EDUCATION - SCHEDULED MAINTENANCE PROGRAM**

| ITEM  |       | FICM  | YEAR ITEM  | ITEM TOTAL   | ITEM     | AVG   | TIME  | ITEM  | DEFERRED MAINTENANCE PLAN YEAR |              |            |            |            |            |            |            |
|---|-------|---|--|--------------|----------|-------|-------|-------|--------------------------------|--------------|------------|------------|------------|------------|------------|------------|
| LOC   | NO.   | ITEM  | CODE   | INTO SERVICE | QUANTITY | UNITS | (YRS) | (YRS) | (YRS)                          | COST         | FIRST COST | 6          | 7          | 8          | 9          | 10         |
|   |       |   |  |              |          |       |       |       |                                |              |            | 2019       | 2020       | 2021       | 2022       | 2023       |
| PE-   | MS009 | LAUNDRY HOT WATER RETURN PUMP MAINTENANCE/REPLACEMENT.  | UUU24  | 2012         | --       | --    | 5     | 1     | 4                              | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS010 | LAUNDRY WATER HEATER REPLACEMENT. <b>REPLACED IN 2022.</b>  | UUU24  | 2022         | --       | --    | 15    | 1     | 14                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS011 | ELECTRIC WATER HEATER REPLACEMENTS  | UUU24  | 2012         | --       | --    | 10    | 1     | 9                              | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS012 | AIR HANDLING UNIT REPLACEMENTS - AH-2 THRU AH-8.  | UUU25  | 2012         | --       | --    | 40    | 1     | 39                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS013 | LAUNDRY ROOM SUPPLY AIR FAN MAINTENANCE/REPLACEMENT.  | UUU25  | 2012         | 1        | EA    | 40    | 1     | 39                             | \$0.00       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PE-   | MS014 | CABINET UNIT HEATER REPLACEMENTS - GENERAL.   | UUU25  | 2012         | 10       | EA    | 30    | 1     | 29                             | \$6,750.00   | \$ 67,500  | \$ 75,126  | \$ 76,478  | \$ 77,855  | \$ 79,256  | \$ 80,683  |
| PE-   | MS015 | UNIT HEATER REPLACEMENTS.   | UUU25  | 2012         | --       | --    | 30    | 1     | 29                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS016 | BOILER REPLACEMENTS.  | UUU22  | 2012         | --       | --    | 30    | 1     | 29                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS017 | CRAWL SPACE PROPELLER FAN REPLACEMENT.  | UUU25  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS018 | SAF-1 SYSTEM DUCT-MOUNTED HEATING COIL REPLACEMENTS.  | UUU25  | 2012         | --       | --    | 25    | 1     | 24                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS019 | POOL WATER HEAT EXCHANGER MAINTENANCE/REPLACEMENT.  | UUU22 /<br>2018 - REPLACED<br>TUBE BUNDLE.                   | 2012         | --       | --    | 25    | 1     | 24                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS020 | CHILLER MAINTENANCE/REPLACEMENTS.   | UUU20 /<br>2018 - REPLACED<br>COMPRESSOR 1 IN<br>CHILLER 1 . | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS021 | DOMESTIC WATER HEAT EXCHANGER.  | UUU24  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS022 | VAV BOX MAINTENANCE/REPLACEMENTS.   | UUU25  | 2011         | --       | --    | 25    | 2     | 23                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS023 | AIR HANDLING UNIT REPLACEMENT, AH-1 THERMAL STORAGE LOOP CHILLED WATER PUMP MAINTENANCE/REPLACEMENTS. | UUU25  | 2011         | --       | --    | 40    | 2     | 38                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS024 | HVAC SYSTEMS CLEANING.  | UUU25  | 2001         | 80,000   | SF    | 10    | 12    | -2                             | \$1.15       | \$ 92,000  | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PE-   | MS025 | JCI BAS SYSTEM.   | UU06   | 2012         | 80,000   | SF    | 20    | 1     | 19                             | \$0.00       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       |
| PE-   | MS026 | HEATING HOT WATER PUMPS.  | UUU22  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS027 | CHW PUMPS.  | UUU20  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | MS028 | SUPPLY AND RETURN AIR GRILLES IN NATATORIUM.  | 520  | 1968         | 150      | SF    | 25    | 45    | -20                            | \$67.50      | \$ 10,125  | \$ 11,269  | \$ 11,472  | \$ 11,678  | \$ 11,888  | \$ 12,102  |
| PE-   | MS029 | RETURN AIR FAN RAF-1.   | UUU25  | 1968         | 1        | EA    | 25    | 45    | -20                            | \$6,075.00   | \$ 6,075   | \$ 6,761   | \$ 6,883   | \$ 7,007   | \$ 7,133   | \$ 7,261   |
| PE-   | MS030 | EXHAUST FAN EF-3.   | UUU25  | 1968         | 1        | EA    | 25    | 45    | -20                            | \$4,725.00   | \$ 4,725   | \$ 5,259   | \$ 5,353   | \$ 5,450   | \$ 5,548   | \$ 5,648   |
| PE-   | MS031 | EXHAUST FAN EF-4.   | UUU25  | 1968         | 1        | EA    | 25    | 45    | -20                            | \$4,725.00   | \$ 4,725   | \$ 5,259   | \$ 5,353   | \$ 5,450   | \$ 5,548   | \$ 5,648   |
| PE-   | MS032 | ROOF MOUNTED HOODS.   | UUU25  | 1968         | 14       | EA    | 20    | 45    | -25                            | \$2,000.00   | \$ 28,000  | \$ 31,163  | \$ 31,724  | \$ 32,295  | \$ 32,877  | \$ 33,468  |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope) |       |   |  |              |          |       |       |       |                                |              |            | \$ 659,200 | \$ 671,066 | \$ 683,145 | \$ 695,442 | \$ 590,163 |
| PE-   | ES001 | BUILDING SERVICE TRANSFORMER.   | UUU04  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES002 | MAIN SWITCHBOARD.   | UUU05  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES003 | STANDBY GENERATOR.  | UUU25  | 2008         | --       | --    | 20    | 5     | 15                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES004 | LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).  | UUU25  | 2008         | --       | --    | 20    | 5     | 15                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES005 | STANDBY POWER SYSTEMS AUTOMATIC TRANSFER SWITCH (ATS). <b>ALL INTERIOR MECHANICS REBUILT 2022.</b>    | UUU25  | 2022         | --       | --    | 20    | 5     | 15                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES006 | ELECTRICAL DISTRIBUTION EQUIPMENT.  | UUU05  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES007 | VARIABLE FREQUENCY DRIVE (VFD) - GENERAL.   | UUU25  | 2012         | --       | --    | 15    | 1     | 14                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES008 | VARIABLE FREQUENCY DRIVE (VFD) - MECHANICAL ROOM.   | UUU25  | 2011         | --       | --    | 15    | 2     | 13                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES009 | LIGHTING AND RECEPTACLE PANELBOARDS.  | UUU05  | 1968         | 1        | LS    | 20    | 45    | -25                            | \$94,000.00  | \$ 94,000  | \$ 104,620 | \$ 106,503 | \$ 108,420 | \$ 110,372 | \$ 112,358 |
| PE-   | ES010 | EXTERIOR BUILDING MOUNTED LIGHTING.   | UUU25  | 2008         | --       | --    | 20    | 5     | 15                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES011 | EXIT LIGHTING.  | W06  | 2008         | --       | --    | 20    | 5     | 15                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES012 | CORRIDOR LIGHTING.  | W06  | 1968         | 1        | LS    | 20    | 45    | -25                            | \$177,660.00 | \$ 177,660 | \$ 197,732 | \$ 201,291 | \$ 204,914 | \$ 208,603 | \$ 212,357 |
| PE-   | ES013 | CLASSROOM LIGHTING.   | 110  | 2009         | --       | --    | 20    | 4     | 16                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES014 | LOCKER ROOM LIGHTING.   | 525  | 2012         | 1        | LS    | 20    | 1     | 19                             | \$141,750.00 | \$ 141,750 | \$ 157,765 | \$ 160,604 | \$ 163,495 | \$ 166,438 | \$ 169,434 |
| PE-   | ES015 | SHOWER ROOM LIGHTING.   | 525  | 2012         | --       | --    | 20    | 1     | 19                             | \$0.00       | --         |            |            |            |            |            |
| PE-   | ES016 | STORAGE AND UTILITY ROOM LIGHTING.  | X01 AND Y04  | 1968         | 1        | LS    | 20    | 45    | -25                            | \$47,250.00  | \$ 47,250  | \$ 52,588  | \$ 53,535  | \$ 54,498  | \$ 55,479  | \$ 56,478  |

**SCHOOLCRAFT COLLEGE; PHYSICAL EDUCATION - SCHEDULED MAINTENANCE PROGRAM**

| ITEM   |       | FICM<br>CODE   | YEAR ITEM               | ITEM TOTAL<br>QUANTITY   | ITEM<br>UNITS | AVG TIME     |                 |              | ITEM         | DEFERRED MAINTENANCE PLAN YEAR |            |                 |                 |                 |                 |                 |
|--|-------|--|-------------------------|--------------------------|---------------|--------------|-----------------|--------------|--------------|--------------------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| LOC  | NO.   |  | WAS PUT<br>INTO SERVICE |                          |               | EUL<br>(YRS) | IN USE<br>(YRS) | RUL<br>(YRS) | UNIT<br>COST | ITEM<br>FIRST COST             | 6<br>2019  | 7<br>2020       | 8<br>2021       | 9<br>2022       | 10<br>2023      |                 |
| PE-  | ES017 | VACANCY SENSOR LIGHTING CONTROLS (CLASSROOMS).   | 110                     | 2009                     | --            | --           | 20              | 4            | 16           | \$0.00                         | --         |                 |                 |                 |                 |                 |
| PE-  | ES018 | VACANCY SENSOR LIGHTING CONTROLS (CORRIDORS).  | W05 AND W06             | 2012                     | 1             | LS           | 20              | 1            | 19           | \$18,900.00                    | \$ 18,900  | \$ 21,035       | \$ 21,414       | \$ 21,799       | \$ 22,192       | \$ 22,591       |
| PE-  | ES019 | AEROBIC STUDIO LIGHTING.   | 520                     | 2008                     | 1             | LS           | 20              | 5            | 15           | \$14,175.00                    | \$ 14,175  | \$ 15,776       | \$ 16,060       | \$ 16,350       | \$ 16,644       | \$ 16,943       |
| PE-  | ES020 | MAIN GYM LIGHTING (PE110). REPLACED 2021.  | 520                     | 2021                     | 1             | LS           | 20              | 45           | -25          | \$98,550.00                    | \$ 98,550  | \$ 109,684      | \$ 111,658      | \$ 113,668      | \$ 115,714      | \$ -            |
| PE-  | ES021 | FITNESS CENTER LIGHTING.   | 520                     | 2012                     | --            | --           | 20              | 1            | 19           | \$0.00                         | --         |                 |                 |                 |                 |                 |
| PE-  | ES022 | POOL LIGHTING.   | 520                     | 2018                     | 1             | LS           | 20              | 0            | 20           | \$0.00                         | \$ -       | \$ -            | \$ -            | \$ -            | \$ -            | \$ -            |
| PE-  | ES023 | RAQUET BALL COURT LIGHTING. IMPROVEMENTS MADE TO THESE EXISTING FIXTURES ARE LIGHTING ELEMENT AND BALLAST CHANGES.   | 520                     | 2012 W/ 2020 MAINTENANCE | --            | --           | 30              | 1            | 29           | \$0.00                         | --         |                 |                 |                 |                 |                 |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |       |  |                         |                          |               |              |                 |              |              |                                |            | \$ 490,700      | \$ 499,532      | \$ 508,524      | \$ 517,677      | \$ 526,996      |
| PE-  | BS001 | MAGNETIC HOLD OPENS FOR CORRIDOR DOORS THAT AUTO RELEASE ON FIRE ALARM SYSTEM ACTIVATION.  | UUU07                   | 2014                     | 8             | EA           | 20              | 0            | 20           | \$22,680.00                    | \$ 181,440 | \$ -            | \$ -            | \$ -            | \$ -            | \$ -            |
| PE-  | BS002 | FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.  | UUU07                   | 2022                     | 0             | 0            | 20              | 4            | 16           | \$0.00                         | \$ -       | \$ -            | \$ -            | \$ -            | \$ -            | \$ -            |
| PE-  | BS003 | FIRE ALARM DEVICES.  | UUU07                   | 2009                     | 0             | 0            | 20              | 4            | 16           | \$0.00                         | \$ -       | \$ -            | \$ -            | \$ -            | \$ -            | \$ -            |
| PE-  | BS004 | BOILER EPO SYSTEM.   | Y04                     | 2012                     | 0             | 0            | 20              | 1            | 19           | \$3,375.00                     | \$ -       | \$ -            | \$ -            | \$ -            | \$ -            | \$ -            |
| PE-  | BS005 | CLOCK SYSTEM.  | UUU25                   | 1968                     | 1             | LS           | 20              | 45           | -25          | \$82,506.00                    | \$ 82,506  | \$ 91,827       | \$ 93,480       | \$ 95,163       | \$ 96,876       | \$ 98,620       |
| PE-  | BS006 | SECURITY SURVEILLANCE SYSTEM.  | UUU14                   | 2004                     | 1             | LS           | 20              | 9            | 11           | \$335,483.00                   | \$ 335,483 | \$ 373,385      | \$ 380,106      | \$ 386,948      | \$ 393,913      | \$ 401,004      |
| PE-  | BS007 | SECURITY ACCESS SYSTEM. COMPLETED 2021.  | UUU14                   | 2021                     | 1             | LS           | 20              | 0            | 11           | \$0.00                         | \$ -       | \$ -            | \$ -            | \$ -            | \$ -            | \$ -            |
| PE-  | BS008 | POOL BASEMENT CONDUITS.  | UUU05                   | 1968                     | 1             | LS           | 20              | 45           | -25          | \$10,000.00                    | \$ 10,000  | \$ 11,130       | \$ 11,330       | \$ 11,534       | \$ 11,742       | \$ 11,953       |
| PE-  | BS009 | COMMUNICATION SYSTEMS.   | UUU02                   | VARIOUS                  | 20            | EA           | 20              | --           | --           | \$200.00                       | \$ 4,000   | \$ 4,452        | \$ 4,532        | \$ 4,614        | \$ 4,697        | \$ 4,781        |
| PE-  | BS010 | COMMUNICATION SYSTEMS.   | UUU02                   | VARIOUS                  | 1             | EA           | 10              | --           | --           | \$3,000.00                     | \$ 3,000   | \$ 3,339        | \$ 3,399        | \$ 3,460        | \$ 3,523        | \$ 3,586        |
| PE-  | BS011 | COMMUNICATION SYSTEMS.   | UUU02                   | VARIOUS                  | 1             | LS           | 20              | --           | --           | \$500.00                       | \$ 500     | \$ 556          | \$ 567          | \$ 577          | \$ 587          | \$ 598          |
| PE-  | BS012 | COMMUNICATION SYSTEMS.   | UUU02                   | VARIOUS                  | 24            | EA           | 20              | --           | --           | \$200.00                       | \$ 4,800   | \$ 5,342        | \$ 5,438        | \$ 5,536        | \$ 5,636        | \$ 5,737        |
| PE-  | BS013 | COMMUNICATION SYSTEMS.   | UUU02                   | VARIOUS                  | 24            | EA           | 20              | --           | --           | \$25.00                        | \$ 600     | \$ 668          | \$ 680          | \$ 692          | \$ 705          | \$ 717          |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops)   |       |  |                         |                          |               |              |                 |              |              |                                |            | \$ 216,147      | \$ 220,144      | \$ 224,107      | \$ 228,141      | \$ 232,247      |
| PE-  | SE001 | REPLACE COMMERCIAL WASHERS AND DRYERS WITH OZONE SYSTEM TO REDUCE WASHER HOT WATER USAGE. REPLACED 1-OF-2 WASHERS 2018 & 2-OF-2 WASHERS 2022. REPLACED 1-OF-2 DRYERS 2018. | 525                     | VARIOUS                  | 1             | LS           | 20              | 45           | -25          | \$35,000.00                    | \$ 35,000  | \$ 38,850       | \$ 39,655       | \$ 40,369       | \$ 41,096       | \$ 41,835       |
| PE-  | SE002 | GYM BLEACHER REPLACEMENTS. WEST BLEACHERS WERE ELIMINATED.   | 520                     | 1968                     | 100           | FT           | 30              | 45           | -15          | \$337.50                       | \$ 33,750  | \$ 75,126       | \$ 76,478       | \$ 77,855       | \$ 79,256       | \$ 80,683       |
| PE-  | SE003 | MAIN GYM BACKBOARD SYSTEM MAINTENANCE/REPLACEMENTS.  | 520                     | 1968                     | 8             | EA           | 30              | 45           | -15          | \$6,075.00                     | \$ 48,600  | \$ 54,091       | \$ 55,064       | \$ 56,056       | \$ 57,065       | \$ 58,092       |
| PE-  | SE004 | MEN'S LOCKER ROOM LOCKER MAINTENANCE/REPLACEMENTS.   | 525                     | 2009                     | --            | --           | 25              | 4            | 21           | \$0.00                         | --         |                 |                 |                 |                 |                 |
| PE-  | SE005 | WOMEN'S LOCKER ROOM LOCKER MAINTENANCE/REPLACEMENTS.   | 525                     | 2011                     | --            | --           | 25              | 2            | 23           | \$0.00                         | --         |                 |                 |                 |                 |                 |
| PE-  | SE006 | PE FITNESS CENTER LOCKER MAINTENANCE/REPLACEMENTS.   | 520                     | 2011                     | --            | --           | 25              | 2            | 23           | \$0.00                         | --         |                 |                 |                 |                 |                 |
| PE-  | SE007 | EXTERIOR BUILDING SIGNAGE UPGRADE (COMPLIANCE WITH CURRENT COLLEGE BRANDING STANDARDS).  | SSS16                   | VARIOUS                  | 1             | LS           | 25              | --           | --           | \$43,200.00                    | \$ 43,200  | \$ 48,081       | \$ 48,946       | \$ 49,827       | \$ 50,724       | \$ 51,637       |
| ACCESSIBILITY IMPROVEMENTS                                 |       |  |                         |                          |               |              |                 |              |              |                                |            | \$ 84,141       | \$ 85,656       | \$ 87,197       | \$ 88,767       | \$ 90,365       |
| PE-  | AI001 | IMPROVE BARRIER-FREE ACCESS TO PE LEVELS AT WEST END OF BUILDING (I.E. WHEELCHAIR LIFTS)   | W05 AND W06             | NONE                     | 1             | LS           | 20              | --           | --           | \$75,600.00                    | \$ 75,600  | \$ 84,141       | \$ 85,656       | \$ 87,197       | \$ 88,767       | \$ 90,365       |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                     |       |  |                         |                          |               |              |                 |              |              |                                |            | \$ 3,186,259.98 | \$ 3,243,718.36 | \$ 3,302,105.50 | \$ 3,361,543.76 | \$ 3,304,253.77 |

# SCHOOLCRAFT COLLEGE; VISTATECH-WATERMAN - SCHEDULED MAINTENANCE PROGRAM

| SCHEDULED MAINTENANCE PROGRAM - YEAR ZERO:           |                    |                     | 2013         |
|--|--------------------|---------------------|--------------|
| BUILDING SECTION (BUILDING TYPE)                     | BUILDING AGE (YRS) | BUILDING AREA (GSF) |              |
| VISTATECH CENTER / WATERMAN WING - TOTAL (MULTI USE) |                    | 137,442             |              |
| WATERMAN - ORIGINAL                                  | 1965               | 35,870              |              |
| WATERMAN - EXPANSION                                 | 1981               | 7,948               |              |
| VISTATECH CENTER - TOTAL                             | 2002               | 93,624              |              |
| VISTATECH CENTER - MEZZANINE MECHANICAL ROOM         | 2002               | 14,060              |              |
| MAINTENANCE BACKLOG VALUE FOR BUILDING:              |                    | \$ 12,224,054       | - YEAR: 2023 |
| REPLACEMENT VALUE FOR THE BUILDING:                  |                    | \$ 75,027,800       |              |
| FACILITY CONDITION INDEX (FCI):                      |                    | 16%                 |              |



| FCI            | BUILDING CONDITION |
|----------------|--------------------|
| FCI < 5%       | GOOD               |
| 5% < FCI < 10% | FAIR               |
| 10% < FCI      | POOR               |

| INFLATION RATE (%): | 1.8% |
|---------------------|------|
|---------------------|------|

| ITEM NO. CODES                |
|-------------------------------|
| AI: ACCESSIBILITY IMPROVEMENT |
| BE: BUILDING EXTERIOR         |
| BI: BUILDING INTERIOR         |
| BS: BUILDING SYSTEM           |
| ES: ELECTRICAL SYSTEM         |
| MS: MECHANICAL SYSTEM         |
| PS: PLUMBING SYSTEM           |
| SG: SITE GROUNDS              |
| SE: SPECIALTY EQUIPMENT       |

| LEGEND                     |
|----------------------------|
| AVG: AVERAGE               |
| CF: CUBIC FEET             |
| CY: CUBIC YARDS            |
| EA: EACH                   |
| EUL: ESTIMATED USEFUL LIFE |
| GSF: GROSS SQUARE FEET     |
| LOC: LOCATION (SITE/BLDG)  |
| PV: PRESENT VALUE          |
| RUL: ESTIMATED USEFUL LIFE |
| SF: SQUARE FEET            |
| SY: SQUARE YARDS           |
| YRS: YEARS                 |

| REMAINING USEFUL LIFE (RUL) BAROMETER |                           |
|---------------------------------------|---------------------------|
|                                       | RUL = 1 YEAR OR LESS      |
|                                       | RUL = 5 YEARS             |
|                                       | RUL = 10 YEARS OR GREATER |

| ITEM  |       | FICM   | YEAR ITEM   | ITEM TOTAL | ITEM    | AVG   | TIME  | RUL   | ITEM | DEFERRED MAINTENANCE PLAN YEAR |              |              |              |              |              |              |    |           |    |           |
|---|-------|--|---|------------|---------|-------|-------|-------|------|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----|-----------|----|-----------|
| LOC   | NO.   |  | WAS PUT   |            |         |       |       |       |      | UNITS                          | EUL          | IN USE       | UNIT         | 6            | 7            | 8            | 9  | 10        |    |           |
|   |       | CODE   | INTO SERVICE  | QUANTITY   |         | (YRS) | (YRS) | (YRS) | COST | FIRST COST                     | 2019         | 2020         | 2021         | 2022         | 2023         |              |    |           |    |           |
| BUILDING ENVELOPE (includes items exterior to building) |       |  |   |            |         |       |       |       |      |                                | \$           | 6,930,764    | \$           | 7,055,518    | \$           | 7,182,517    | \$ | 7,311,803 | \$ | 7,443,415 |
| VT-   | BE001 | WATERMAN WING (ORIGINAL) HIGH BAY REROOF.  | MMM16   | 1996       | 131,000 | SF    | 25    | 17    | 8    | \$22.95                        | \$ 3,006,450 | \$ 3,346,113 | \$ 3,406,343 | \$ 3,467,658 | \$ 3,530,075 | \$ 3,593,617 |    |           |    |           |
| VT-   | BE002 | WATERMAN WING (EXPANSION) REROOF.  | MMM16   | 1997       | 131,000 | SF    | 25    | 16    | 9    | \$22.95                        | \$ 3,006,450 | \$ 3,346,113 | \$ 3,406,343 | \$ 3,467,658 | \$ 3,530,075 | \$ 3,593,617 |    |           |    |           |
| VT-   | BE003 | VISTATECH SINGLE-PLY MEMBRANE REROOFING.   | MMM16   | 2002       | --      | --    | 25    | 11    | 14   | \$0.00                         | --           |              |              |              |              |              |    |           |    |           |
| VT-   | BE004 | VISTATECH STANDING SEAM METAL MAINTENANCE/REPLACEMENT.   | MMM16   | 2002       | --      | --    | 50    | 11    | 39   | \$0.00                         | --           |              |              |              |              |              |    |           |    |           |
| VT-   | BE005 | WATERMAN WING (ORIGINAL) REROOF.   | MMM16   | 2009       | --      | --    | 25    | 4     | 21   | \$0.00                         | --           |              |              |              |              |              |    |           |    |           |
| VT-   | BE006 | WATERMAN WING (ORIGINAL) HIGH BAY STANDING SEAM METAL ROOFING MAINTENANCE/REPLACEMENT.                                   | MMM16   | 2009       | --      | --    | 50    | 4     | 46   | \$0.00                         | --           |              |              |              |              |              |    |           |    |           |
| VT-   | BE007 | WATERMAN FOOD SERVICE DOCK STEEL FASCIA PANEL REPLACEMENT.   | MMM16   | 1981       | 800     | SF    | 25    | 32    | -7   | \$55.00                        | \$ 44,000    | \$ 48,971    | \$ 49,853    | \$ 50,750    | \$ 51,663    | \$ 52,593    |    |           |    |           |
| VT-   | BE008 | WATERMAN ROOF-MOUNTED, STEEL EQUIPMENT SCREEN WALL MAINTENANCE/REPLACEMENT.  | MMM16   | 1981       | 1,700   | SF    | 15    | 32    | -17  | \$48.00                        | \$ 81,600    | \$ 90,819    | \$ 92,454    | \$ 94,118    | \$ 95,812    | \$ 97,537    |    |           |    |           |
| VT-   | BE009 | REPLACE GASKETING SYSTEM ON VT EXTERIOR, ARCHITECTURAL STEEL PANELS.   | MMM16   | 2002       | 4,500   | SF    | 20    | 11    | 9    | \$6.75                         | \$ 30,375    | \$ 33,807    | \$ 34,415    | \$ 35,035    | \$ 35,665    | \$ 36,307    |    |           |    |           |
| VT-   | BE010 | VT MAIN STREET SKY LIGHT MAINTENANCE.  | MMM16   | 2002       | 1,800   | SF    | 25    | 11    | 14   | \$0.00                         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |    |           |    |           |
| VT-   | BE011 | WATERMAN (HENRY'S) SKY LIGHT MAINTENANCE.  | MMM16   | 2002       | 150     | SF    | 25    | 11    | 14   | \$0.00                         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |    |           |    |           |
| VT-   | BE012 | VT PRECAST STONE MAINTENANCE (CLEANING AND SEALING).   | MMM16   | 2002       | 9,000   | SF    | 15    | 11    | 4    | \$3.24                         | \$ 29,160    | \$ 32,454    | \$ 33,039    | \$ 33,633    | \$ 34,239    | \$ 34,855    |    |           |    |           |
| VT-   | BE013 | WATERMAN WING STONE WALL SYSTEM REPAIRS.   | MMM16   | 2011       | --      | --    | 15    | 2     | 13   | \$0.00                         | --           |              |              |              |              |              |    |           |    |           |
| VT-   | BE014 | VT/WATERMAN EXTERIOR, STEEL FASCIA PANEL SYSTEM REGASKETING/GASKETING MAINTENANCE.                                       | MMM16   | 2003       | 900     | SF    | 20    | 10    | 10   | \$6.75                         | \$ 6,075     | \$ 6,761     | \$ 6,883     | \$ 7,007     | \$ 7,133     | \$ 7,261     |    |           |    |           |
| VT-   | BE015 | WATERMAN SOUTH WING WALL LIMESTONE CAP REPLACEMENTS.   | MMM16   | 1965       | 25      | SF    | 50    | 48    | 2    | \$85.00                        | \$ 2,125     | \$ 2,365     | \$ 2,408     | \$ 2,451     | \$ 2,495     | \$ 2,540     |    |           |    |           |
| VT-   | BE016 | PAINTING OF EXTERIOR SOFFIT AND WOOD BEAMS.  | MMM16   | 2002       | 1,600   | SF    | 15    | 11    | 4    | \$2.36                         | \$ 3,776     | \$ 4,203     | \$ 4,278     | \$ 4,355     | \$ 4,434     | \$ 4,513     |    |           |    |           |
| VT-   | BE017 | VT MAIN STREET ENTRANCE CANOPY FASCIA PANEL MAINTENANCE.   | MMM16   | 2002       | 1,230   | SF    | 20    | 11    | 9    | \$0.00                         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |    |           |    |           |
| VT-   | BE018 | VT MAIN STREET ENTRANCE CANOPY SOFFIT MAINTENANCE.   | MMM16   | VARIOUS    | 5,000   | SF    | 20    | --    | --   | \$0.00                         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |    |           |    |           |
| VT-   | BE019 | VT ICE CARVING DECK REPLACEMENT.   | MMM16   | 2002       | --      | --    | 35    | 11    | 24   | \$0.00                         | --           |              |              |              |              |              |    |           |    |           |
| VT-   | BE020 | WATERMAN FOOD SERVICE DOCK EDGE REPAIRS.   | W04   | 2003       | 75      | LF    | 20    | 10    | 10   | \$229.50                       | \$ 17,213    | \$ 19,157    | \$ 19,502    | \$ 19,853    | \$ 20,210    | \$ 20,574    |    |           |    |           |
| BUILDING INTERIOR                                       |       |  |   |            |         |       |       |       |      |                                | \$           | 141,211      | \$           | 143,753      | \$           | 146,341      | \$ | 148,975   | \$ | 151,656   |
| VT-   | BI001 | MAIN STREET NORTH ENTRANCE VESTIBULE CARPET REPLACEMENT.   | W06   | 2015       | 900     | SF    | 5     | 0     | 5    | \$7.09                         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |    |           |    |           |
| VT-   | BI002 | VISTATECH ACOUSTICAL TREATMENTS REPAIR/REPLACEMENT ALONG MAIN STREET.  | W05 AND W06   | 2002       | 800     | SF    | 20    | 11    | 9    | \$35.00                        | \$ 28,000    | \$ 31,163    | \$ 31,724    | \$ 32,295    | \$ 32,877    | \$ 33,468    |    |           |    |           |
| VT-   | BI003 | WALL FINISH UPDATES - ALLOWANCE. 2018 PAINTING WORK IN VT400, VT404, VT404A, VT404B, VT470. 2019 PAINTING WORK IN VT500. | 110, 210, 310, 610, 615, 630, 635, 680, 685, W05, W06 AND X03 | VARIOUS    | --      | --    | --    | --    | --   | \$0.00                         | --           |              |              |              |              |              |    |           |    |           |

**SCHOOLCRAFT COLLEGE; VISTATECH-WATERMAN - SCHEDULED MAINTENANCE PROGRAM**

| ITEM<br>LOC  | ITEM<br>NO. | ITEM   | FICM<br>CODE  | YEAR ITEM<br>WAS PUT<br>INTO SERVICE | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG TIME     |                 |              | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |              |              |              |              |
|--|-------------|--|---|--------------------------------------|------------------------|---------------|--------------|-----------------|--------------|----------------------|--------------------|--------------------------------|--------------|--------------|--------------|--------------|
|  |             |  |   |                                      |                        |               | EUL<br>(YRS) | IN USE<br>(YRS) | RUL<br>(YRS) |                      |                    | 6<br>2019                      | 7<br>2020    | 8<br>2021    | 9<br>2022    | 10<br>2023   |
| VT-  | BI004       | FLOOR FINISH UPDATES - ALLOWANCE. 2018<br>CARPET REPLACEMENT IN VT400, VT402, VT404, VT404A, VT404B, VT470.<br>2019 CARPET<br>REPLACEMENT IN VT500.<br>2020 LOWER<br>WATERMAN STUDENT ACTIVITIES SUITE CARPET REPLACEMENT. | 110, 210, 310, 610, 615,<br>630, 635, 680, 685, W05,<br>W06 AND X03 | VARIOUS                              | --                     | --            | --           | --              | --           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI005       | FURNITURE UPDATES IN VT - ALLOWANCE.   | 110, 210, 310, 610, 630,<br>680, 685, W05 AND W06                   | VARIOUS                              | --                     | --            | --           | --              | --           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI006       | VISTATECH PRESENTATION ROOM FLOORING INSTALLATIONS.  | 610   | 2002                                 | 1,200                  | SF            | 15           | 11              | 4            | \$7.09               | \$ 8,508           | \$ 9,469                       | \$ 9,640     | \$ 9,813     | \$ 9,990     | \$ 10,170    |
| VT-  | BI007       | MAIN STREET INTERIOR, RED STEEL PANEL SYSTEM REGASKETING.  | W05 AND W06   | 2002                                 | 700                    | SF            | 25           | 11              | 14           | \$6.75               | \$ 4,725           | \$ 5,259                       | \$ 5,353     | \$ 5,450     | \$ 5,548     | \$ 5,648     |
| VT-  | BI008       | VISTATECH PRESENTATION ROOM SEATING REPLACEMENT.   | 610   | 2002                                 | --                     | --            | 20           | 11              | 9            | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI009       | REPLACE/UPDATE HENRY'S BOOTHS AND BENCHES.   | 630   | 2013                                 | 125                    | LF            | 20           | 0               | 20           | \$450.00             | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| VT-  | BI010       | WATERMAN WING STONE WALL SYSTEM REPAIRS WITHIN SOUTH ENTRY VESTIBULE.  | W07   | 2003                                 | --                     | --            | 20           | 10              | 10           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI011       | REPLACEMENT OF LOWER WATERMAN STEEL STAIRWELL DOORS.   | W07   | 1965                                 | 2                      | EA            | 50           | 48              | 2            | \$4,800.00           | \$ 9,600           | \$ 10,685                      | \$ 10,877    | \$ 11,073    | \$ 11,272    | \$ 11,475    |
| VT-  | BI012       | LOWER WATERMAN MOVABLE DIVIDER WALL MAINTENANCE/REPLACEMENT.   | 670   | 2009                                 | --                     | --            | 20           | 4               | 16           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI013       | VISTATECH DIPONIO ROOM MOVABLE DIVIDER WALL MAINTENANCE/REPLACEMENT.   | 610   | 2012                                 | --                     | --            | 20           | 1               | 19           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI014       | WATERMAN WING STUDENT ACTIVITIES FURNITURE MAINTENANCE/UPDATES.  | 670   | VARIOUS                              | --                     | --            | --           | --              | --           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI015       | LOWER WATERMAN STORAGE AREA ASBESTOS CONTAINING VCT FLOORING ABATEMENT/REPLACEMENT.  | 730   | --                                   | --                     | SF            | --           | --              | --           | \$4.73               | --                 |                                |              |              |              |              |
| VT-  | BI016       | AMERICAN HARVEST RESTAURANT FLOORING REPLACEMENT.  | 630   | 2003                                 | 2,130                  | SF            | 35           | 10              | 25           | \$4.73               | \$ 10,075          | \$ 11,213                      | \$ 11,415    | \$ 11,620    | \$ 11,830    | \$ 12,043    |
| VT-  | BI017       | DIPONIO ROOM WALL FINISH UPDATES.  | 630   | VARIOUS                              | --                     | --            | --           | --              | --           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI018       | DIPONIO ROOM WALL FINISH UPDATES.  | 630   | VARIOUS                              | --                     | --            | --           | --              | --           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI019       | DIPONIO ROOM FURNITURE UPDATES.  | 630   | VARIOUS                              | --                     | --            | --           | --              | --           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | BI020       | VISTATECH INTERIOR DOOR REPLACEMENT.   | 635   | 2003                                 | 4                      | EA            | 50           | 10              | 40           | \$1,450.00           | \$ 5,800           | \$ 6,455                       | \$ 6,571     | \$ 6,690     | \$ 6,810     | \$ 6,933     |
| VT-  | BI021       | WATERMAN SLIDING GLASS DOOR MAINTENANCE.   | 630   | 2003                                 | 70                     | LF            | 15           | 10              | 5            | \$0.00               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| VT-  | BI022       | WATERMAN CARPET REPLACEMENT.   | 680 AND 685   | 2003                                 | 1,400                  | SF            | 15           | 10              | 5            | \$7.09               | \$ 9,926           | \$ 11,047                      | \$ 11,246    | \$ 11,449    | \$ 11,655    | \$ 11,865    |
| VT-  | BI023       | WATERMAN UPGRADE CEILING.  | 670   | 2003                                 | 1,260                  | SF            | 35           | 10              | 25           | \$4.32               | \$ 5,443           | \$ 6,058                       | \$ 6,167     | \$ 6,278     | \$ 6,391     | \$ 6,506     |
| VT-  | BI024       | WATERMAN FOLDING PARTITION MAINTENANCE / REPLACEMENT   | 680   | 2011                                 | 1,280                  | SF            | 20           | 2               | 18           | \$35.00              | \$ 44,800          | \$ 49,861                      | \$ 50,759    | \$ 51,673    | \$ 52,603    | \$ 53,550    |
| <b>PLUMBING SYSTEMS (may be packaged with BI item scope)</b>   |             |  |   |                                      |                        |               |              |                 |              |                      |                    | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| VT-  | PS001       | WATERMAN TOILET ROOM FIXTURES, LAVATORIES, URINALS AND SINKS   | X03   | 2003                                 | 18                     | EA            | 40           | 10              | 30           | \$0.00               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| VT-  | PS002       | VISTATECH TOILET ROOM FIXTURES, LAVATORIES, URINALS AND SINKS  | X03   | 2002                                 | 64                     | EA            | 40           | 11              | 29           | \$0.00               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| <b>MECHANICAL SYSTEMS (may be packaged with BI item scope)</b> |             |  |   |                                      |                        |               |              |                 |              |                      |                    | \$ 3,483,789                   | \$ 3,546,497 | \$ 3,610,334 | \$ 3,675,320 | \$ 3,741,476 |
| VT-  | MS001       | VT BOILER REPLACEMENTS.  | UUU22   | 2002                                 | 7                      | EA            | 15           | 11              | 4            | \$53,325.00          | \$ 373,275         | \$ 415,447                     | \$ 422,925   | \$ 430,538   | \$ 438,287   | \$ 446,176   |
| VT-  | MS002       | VT HEATING HOT WATER PUMP REPLACEMENTS.  | UUU22   | 2002                                 | 2                      | EA            | 20           | 11              | 9            | \$30,375.00          | \$ 60,750          | \$ 67,613                      | \$ 68,830    | \$ 70,069    | \$ 71,331    | \$ 72,615    |
| VT-  | MS003       | VT CABINET UNIT HEATER REPLACEMENTS.   | UUU25   | 2002                                 | --                     | --            | 25           | 11              | 14           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | MS004       | VT DUCT HEATING COIL REPLACEMENTS.   | UUU22   | 2002                                 | --                     | --            | 25           | 11              | 14           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | MS005       | VT CHILLER REPLACEMENTS.   | UUU20   | 2014                                 | 2                      | EA            | 20           | 0               | 20           | \$379,700.00         | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| VT-  | MS006       | VT CHILLED WATER PUMP REPLACEMENTS.  | UUU20   | 2014                                 | 2                      | EA            | 20           | 0               | 20           | \$36,525.00          | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| VT-  | MS007       | VT AIR HANDLING UNIT REPLACEMENTS.   | UUU25   | 2003                                 | 12                     | EA            | 30           | 10              | 20           | \$0.00               | \$ -               | \$ -                           | \$ -         | \$ -         | \$ -         | \$ -         |
| VT-  | MS008       | VT TOILET EXHAUST FAN MAINTENANCE/REPLACEMENTS.  | X03   | 2003                                 | 2                      | EA            | 20           | 10              | 10           | \$14,025.00          | \$ 28,050          | \$ 31,219                      | \$ 31,781    | \$ 32,353    | \$ 32,935    | \$ 33,528    |
| VT-  | MS009       | VT ELECTRIC ROOM VENTILATION SYSTEM MAINTENANCE/REPLACEMENTS.  | Y04   | 2002                                 | --                     | --            | 20           | 11              | 9            | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | MS010       | VT VAV BOX MAINTENANCE/REPLACEMENTS.   | UUU25   | 2002                                 | --                     | --            | 25           | 11              | 14           | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | MS011       | VT SPLIT SYSTEM A/C REPLACEMENTS FOR TELECOM CLOSETS.  | UUU25   | 2002                                 | --                     | --            | 15           | 11              | 4            | \$0.00               | --                 |                                |              |              |              |              |
| VT-  | MS012       | VT WALK-IN COOLER REFRIGERATION EQUIPMENT MAINTENANCE/REPLACEMENTS.  | 635   | 2002                                 | 25                     | EA            | 15           | 11              | 4            | \$42,625.00          | \$ 1,065,625       | \$ 1,186,017                   | \$ 1,207,366 | \$ 1,229,098 | \$ 1,251,222 | \$ 1,273,744 |
| VT-  | MS013       | VT KITCHEN EXHAUST FAN MAINTENANCE/REPLACEMENTS.   | 635   | 2002                                 | 19                     | EA            | 20           | 11              | 9            | \$14,175.00          | \$ 269,325         | \$ 299,753                     | \$ 305,148   | \$ 310,641   | \$ 316,233   | \$ 321,925   |
| VT-  | MS014       | WATERMAN KITCHEN EXHAUST FAN MAINTENANCE/REPLACEMENTS.   | 635   | 2003                                 | 2                      | EA            | 20           | 10              | 10           | \$14,175.00          | \$ 28,350          | \$ 31,553                      | \$ 32,121    | \$ 32,699    | \$ 33,288    | \$ 33,887    |

# SCHOOLCRAFT COLLEGE; VISTATECH-WATERMAN - SCHEDULED MAINTENANCE PROGRAM

| ITEM<br>LOC   | NO.   | ITEM  | FICM<br>CODE | YEAR ITEM<br>WAS PUT<br>INTO SERVICE | ITEM TOTAL<br>QUANTITY | ITEM<br>UNITS | AVG<br>EUL<br>(YRS) | TIME<br>IN USE<br>(YRS) | RUL<br>(YRS) | ITEM<br>UNIT<br>COST | ITEM<br>FIRST COST | DEFERRED MAINTENANCE PLAN YEAR |            |            |            |            |
|---|-------|---|--------------|--------------------------------------|------------------------|---------------|---------------------|-------------------------|--------------|----------------------|--------------------|--------------------------------|------------|------------|------------|------------|
|   |       |   |              |                                      |                        |               |                     |                         |              |                      |                    | 6<br>2019                      | 7<br>2020  | 8<br>2021  | 9<br>2022  | 10<br>2023 |
| VT-   | MS015 | WATERMAN WALK-IN COOLER REFRIGERATION EQUIPMENT MAINTENANCE/REPLACEMENTS.                       | 635          | VARIOUS                              | 8                      | EA            | 15                  | --                      | --           | \$37,125.00          | \$ 297,000         | \$ 330,555                     | \$ 336,505 | \$ 342,562 | \$ 348,728 | \$ 355,005 |
| VT-   | MS016 | WATERMAN AIRFLOW MEASURING STATION REPLACEMENTS.  | UUU25        | 2003                                 | 2                      | EA            | 10                  | 10                      | 0            | \$52,025.00          | \$ 104,050         | \$ 115,805                     | \$ 117,890 | \$ 120,012 | \$ 122,172 | \$ 124,371 |
| VT-   | MS017 | WATERMAN AIR HANDLING UNIT REPLACEMENTS.  | UUU25        | 1965                                 | 2                      | EA            | 40                  | 48                      | -8           | \$32,025.00          | \$ 64,050          | \$ 71,286                      | \$ 72,569  | \$ 73,876  | \$ 75,205  | \$ 76,559  |
| VT-   | MS018 | WATERMAN DOMESTIC WATER BOILER REPLACEMENTS.  | UUU24        | 2004                                 | 1                      | EA            | 15                  | 9                       | 6            | \$45,225.00          | \$ 45,225          | \$ 50,334                      | \$ 51,240  | \$ 52,163  | \$ 53,102  | \$ 54,058  |
| VT-   | MS019 | HVAC SYSTEMS CLEANING.  | UUU25        | VARIOUS                              | 35,000                 | SF            | 10                  | --                      | --           | \$1.15               | \$ 40,250          | \$ 44,797                      | \$ 45,604  | \$ 46,425  | \$ 47,260  | \$ 48,111  |
| VT-   | MS020 | VT/WATERMAN MECHANICAL SYSTEMS RETRO COMMISSIONING .  | UUU25        | NONE                                 | 130,000                | SF            | 10                  | --                      | --           | \$2.50               | \$ 325,000         | \$ 361,718                     | \$ 368,229 | \$ 374,857 | \$ 381,604 | \$ 388,473 |
| VT-   | MS021 | WATERMAN BOILERS.   |              |                                      | 2                      | EA            | 20                  | --                      | --           | \$42,525.00          | \$ 85,050          | \$ 94,659                      | \$ 96,363  | \$ 98,097  | \$ 99,863  | \$ 101,660 |
| VT-   | MS022 | WATERMAN KITCHEN MAKEUP AIR UNITS.  | 635          | 2003                                 | 2                      | EA            | 20                  | 10                      | 10           | \$125,550.00         | \$ 251,100         | \$ 279,469                     | \$ 284,499 | \$ 289,620 | \$ 294,833 | \$ 300,140 |
| VT-   | MS023 | VISTATECH DOMESTIC WATER HEATER.  | UUU24        | 2002                                 | 2                      | EA            | 10                  | 11                      | -1           | \$46,525.00          | \$ 93,050          | \$ 103,563                     | \$ 105,427 | \$ 107,324 | \$ 109,256 | \$ 111,223 |
| ELECTRICAL SYSTEMS (may be packaged with BI item scope) |       |   |              |                                      |                        |               |                     |                         |              |                      |                    | \$ 637,899                     | \$ 649,381 | \$ 661,070 | \$ 672,969 | \$ 685,083 |
| VT-   | ES001 | VT BUILDING SERVICE TRANSFORMER.  | UUU04        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES002 | VT MAIN SWITCHBOARD.  | UUU05        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES003 | VT STANDBY GENERATOR.   | UUU25        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES004 | VT LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).   | UUU25        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES005 | VT STANDBY POWER SYSTEMS ATS.   | UUU25        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES006 | VT ELECTRICAL DISTRIBUTION EQUIPMENT.   | UUU05        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES007 | VT VARIABLE FREQUENCY DRIVE (VFD). FIVE (5) VFDs WERE REPLACED IN 2014.                         | UUU25        | VARIOUS                              | --                     | --            | 15                  | --                      | --           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES008 | VT LIGHTING AND RECEPTACLE PANELBOARDS.   | UUU05        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES009 | VT PRESENTATION ROOM POWER AT SEATING AREA.   | UUU05        | NONE                                 | 1                      | LS            | 20                  | --                      | --           | \$2,025.00           | \$ 2,025           | \$ 2,254                       | \$ 2,294   | \$ 2,336   | \$ 2,378   | \$ 2,420   |
| VT-   | ES010 | VT EXTERIOR BUILDING MOUNTED LIGHTING.  | UUU25        | 2002                                 | 17                     | EA            | 20                  | 11                      | 9            | \$708.75             | \$ 12,049          | \$ 13,410                      | \$ 13,651  | \$ 13,897  | \$ 14,147  | \$ 14,402  |
| VT-   | ES011 | VT EXIT LIGHTING.   | W06          | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES012 | VT MAIN STREET CORRIDOR AND PUBLIC AREA LIGHTING.   | W05 AND W06  | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES013 | VT TEACHING/WORKSPACE LIGHTING.   | 110 AND 210  | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES014 | VT OFFICE AND MEETING AREA LIGHTING.<br>2020 ETC LIGHTING CONTROLS UPGRADE                      | 310 AND 350  | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES015 | VT MAIN STREET EXTERIOR ENTRANCE CANOPY LIGHTING.   | UUU10        | 2002                                 | 25                     | EA            | 20                  | 11                      | 9            | \$708.75             | \$ 17,719          | \$ 19,721                      | \$ 20,076  | \$ 20,437  | \$ 20,805  | \$ 21,179  |
| VT-   | ES016 | VT MAIN STREET INTERIOR VESTIBULE LIGHTING.   | W06          | 2002                                 | 6                      | EA            | 20                  | 11                      | 9            | \$650.00             | \$ 3,900           | \$ 4,341                       | \$ 4,419   | \$ 4,498   | \$ 4,579   | \$ 4,662   |
| VT-   | ES017 | VT ICE CARVING DECK LIGHTING.   | UUU25        | 2002                                 | 7                      | EA            | 20                  | 11                      | 9            | \$743.00             | \$ 5,201           | \$ 5,789                       | \$ 5,893   | \$ 5,999   | \$ 6,107   | \$ 6,217   |
| VT-   | ES018 | VT AMERICAN HARVEST RESTAURANT LIGHTING.<br>ETC LIGHTING CONTROLS UPGRADE (\$11,140.65)         | 630          | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES019 | VT DIPONIO ROOM LIGHTING. 2020 ETC LIGHTING CONTROLS UPGRADE (\$24,131.97)                      | 610          | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES020 | VT STORAGE AND UTILITY ROOM LIGHTING.   | X01 AND Y04  | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES021 | VT VACANCY SENSOR LIGHTING CONTROLS.  | 610          | NONE                                 | 1                      | LS            | 20                  | --                      | --           | \$25,000.00          | \$ 25,000          | \$ 27,824                      | \$ 28,325  | \$ 28,835  | \$ 29,354  | \$ 29,883  |
| VT-   | ES022 | VT VACANCY SENSOR LIGHTING CONTROLS.  | 110 AND 210  | NONE                                 | 1                      | LS            | 20                  | --                      | --           | \$50,000.00          | \$ 50,000          | \$ 55,649                      | \$ 56,651  | \$ 57,670  | \$ 58,708  | \$ 59,765  |
| VT-   | ES023 | VT MAIN STREET DAY LIGHTING CONTROLS.   | W05 AND W06  | NONE                                 | 1                      | LS            | 20                  | --                      | --           | \$75,000.00          | \$ 75,000          | \$ 83,473                      | \$ 84,976  | \$ 86,505  | \$ 88,063  | \$ 89,648  |
| VT-   | ES024 | W BUILDING SERVICE TRANSFORMER.   | UUU04        | 2002                                 | --                     | --            | 20                  | 11                      | 9            | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES025 | W MAIN SWITCHBOARD.   | UUU05        | 1965                                 | 1                      | EA            | 20                  | 48                      | -28          | \$81,000.00          | \$ 81,000          | \$ 90,151                      | \$ 91,774  | \$ 93,426  | \$ 95,108  | \$ 96,819  |
| VT-   | ES026 | W STANDBY GENERATOR.  |              | NONE                                 | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES027 | W LIFE SAFETY AUTOMATIC TRANSFER SWITCH (ATS).  | UUU25        | 2003                                 | --                     | --            | 20                  | 10                      | 10           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES028 | W STANDBY POWER SYSTEMS ATS.  | UUU25        | 2003                                 | --                     | --            | 20                  | 10                      | 10           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES029 | W ELECTRICAL DISTRIBUTION EQUIPMENT.  | UUU05        | VARIOUS                              | 2                      | EA            | 20                  | --                      | --           | \$81,000.00          | \$ 162,000         | \$ 180,302                     | \$ 183,548 | \$ 186,852 | \$ 190,215 | \$ 193,639 |
| VT-   | ES030 | W VARIABLE FREQUENCY DRIVE (VFD).   | UUU25        | VARIOUS                              | 1                      | LS            | 15                  | --                      | --           | \$0.00               | \$ -               | \$ -                           | \$ -       | \$ -       | \$ -       | \$ -       |
| VT-   | ES031 | W LIGHTING AND RECEPTACLE PANELBOARDS (ORIGINAL).   | UUU05        | 1965                                 | 4                      | LS            | 20                  | 48                      | -28          | \$25,000.00          | \$ 100,000         | \$ 111,298                     | \$ 113,301 | \$ 115,341 | \$ 117,417 | \$ 119,530 |
| VT-   | ES032 | W LIGHTING AND RECEPTACLE PANELBOARDS (NEWER).  | UUU05        | VARIOUS                              | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES033 | W EXTERIOR BUILDING MOUNTED LIGHTING.   | UUU25        | 2003                                 | 6                      | EA            | 20                  | 10                      | 10           | \$708.75             | \$ 4,253           | \$ 4,733                       | \$ 4,818   | \$ 4,905   | \$ 4,993   | \$ 5,083   |
| VT-   | ES034 | W EXIT LIGHTING.  | W05 AND W06  | 2003                                 | --                     | --            | 20                  | 10                      | 10           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES035 | W CORRIDOR LIGHTING.  | W05 AND W06  | 2003                                 | --                     | --            | 20                  | 10                      | 10           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES036 | W CLASSROOM LIGHTING. 2020 LIGHTING CONTROLS UPGRADE (\$17,897.53); INCLUDES HENRY'S CAFETERIA. |              | VARIOUS                              | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES037 | W OFFICE LIGHTING.  | 310          | VARIOUS                              | --                     | --            | 20                  | --                      | --           | \$0.00               | --                 |                                |            |            |            |            |
| VT-   | ES038 | W STORAGE AND UTILITY ROOM LIGHTING.  | X01 AND Y04  | VARIOUS                              | 1                      | LS            | 20                  | --                      | --           | \$20,000.00          | \$ 20,000          | \$ 22,260                      | \$ 22,660  | \$ 23,068  | \$ 23,483  | \$ 23,906  |
| VT-   | ES039 | W VACANCY SENSOR LIGHTING CONTROLS.   | 110 AND 680  | NONE                                 | 1                      | LS            | 20                  | --                      | --           | \$15,000.00          | \$ 15,000          | \$ 16,695                      | \$ 16,995  | \$ 17,301  | \$ 17,613  | \$ 17,930  |

**SCHOOLCRAFT COLLEGE; VISTATECH-WATERMAN - SCHEDULED MAINTENANCE PROGRAM**

| ITEM   |       | FICM<br>CODE  | YEAR ITEM               | ITEM TOTAL | ITEM | AVG | TIME | ITEM | DEFERRED MAINTENANCE PLAN YEAR |             |               |                 |               |               |                    |           |
|--|-------|---|-------------------------|------------|------|-----|------|------|--------------------------------|-------------|---------------|-----------------|---------------|---------------|--------------------|-----------|
| LOC  | NO.   |   | WAS PUT<br>INTO SERVICE |            |      |     |      |      | QUANTITY                       | UNITS       | EUL<br>(YRS)  | IN USE<br>(YRS) | RUL<br>(YRS)  | UNIT<br>COST  | ITEM<br>FIRST COST | 6<br>2019 |
| BUILDING SYSTEMS (fire, security, IT/media infrastructure) |       |   |                         |            |      |     |      |      |                                |             | \$ 7,513      | \$ 7,648        | \$ 7,785      | \$ 7,926      | \$ 8,068           |           |
| VT-  | BS001 | VT FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.  | UUU07                   | 2022       | --   | --  | 20   | -9   | 29                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | BS002 | VT FIRE ALARM DEVICES.  | UUU07                   | 2010       | --   | --  | 20   | 3    | 17                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | BS003 | VT BOILER EPO SYSTEM.   | Y04                     | NONE       | 1    | EA  | 20   | --   | --                             | \$3,375.00  | \$ 3,375      | \$ 3,756        | \$ 3,824      | \$ 3,893      | \$ 3,963           | \$ 4,034  |
| VT-  | BS004 | VT PRIMAX CLOCK SYSTEM.   | UUU25                   | 2002       | --   | --  | 20   | 11   | 9                              | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | BS005 | VT SECURITY SURVEILLANCE SYSTEM.  | UUU14                   | 2004       | --   | --  | 20   | 9    | 11                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | BS006 | VT SECURITY ACCESS SYSTEM. IMPROVEMENTS WERE MADE IN 2019.                              | UUU14                   | 2004       | --   | --  | 20   | 9    | 11                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | BS007 | W FIRE ALARM SYSTEM MAIN AND REMOTE PANELS.   | UUU07                   | 2022       | --   | --  | 20   | -9   | 29                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | BS008 | W FIRE ALARM DEVICES.   | UUU07                   | 2010       | --   | --  | 20   | 3    | 17                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | BS009 | W BOILER EPO SYSTEM.  | Y04                     | NONE       | 1    | EA  | 20   | --   | --                             | \$3,375.00  | \$ 3,375      | \$ 3,756        | \$ 3,824      | \$ 3,893      | \$ 3,963           | \$ 4,034  |
| VT-  | BS010 | W CLOCK SYSTEM.   | UUU25                   | 1965       | 1    | LS  | 20   | 48   | -28                            | \$0.00      | \$ -          | \$ -            | \$ -          | \$ -          | \$ -               | \$ -      |
| VT-  | BS011 | W SECURITY SURVEILLANCE SYSTEM.   | UUU14                   | 2004       | 1    | LS  | 20   | 9    | 11                             | \$0.00      | \$ -          | \$ -            | \$ -          | \$ -          | \$ -               | \$ -      |
| VT-  | BS012 | W SECURITY ACCESS SYSTEM. IMPROVEMENTS WERE MADE IN 2019.                               | UUU14                   | 2004       | 1    | LS  | 20   | 9    | 11                             | \$0.00      | \$ -          | \$ -            | \$ -          | \$ -          | \$ -               | \$ -      |
| SPECIALTY EQUIPMENT (food service, theatre, labs, shops)   |       |   |                         |            |      |     |      |      |                                |             | \$ 180,970    | \$ 184,228      | \$ 187,544    | \$ 190,920    | \$ 194,356         |           |
| VT-  | SE001 | FOOD SERVICE DISHWASHER REPLACEMENT.  | 635                     | 1986       | 1    | EA  | 20   | 27   | -7                             | \$45,025.00 | \$ 45,025     | \$ 50,112       | \$ 51,014     | \$ 51,932     | \$ 52,867          | \$ 53,818 |
| VT-  | SE002 | EXTERIOR BUILDING SIGNAGE UPGRADE (COMPLIANCE WITH CURRENT COLLEGE BRANDING STANDARDS). | SSS16                   | VARIOUS    | 1    | LS  | 25   | --   | --                             | \$44,000.00 | \$ 44,000     | \$ 48,971       | \$ 49,853     | \$ 50,750     | \$ 51,663          | \$ 52,593 |
| VT-  | SE003 | ELEVATOR MAJOR MAINTENANCE.   | W02                     | 1981       | 1    | LS  | 25   | 32   | -7                             | \$40,000.00 | \$ 40,000     | \$ 44,519       | \$ 45,320     | \$ 46,136     | \$ 46,967          | \$ 47,812 |
| VT-  | SE004 | VT/WATERMAN COMMERCIAL KITCHEN EQUIPMENT REPLACEMENTS - ALLOWANCE.                      | 635                     | VARIOUS    | --   | --  | --   | --   | --                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | SE005 | VT CULINARY ARTS DOCK LEVELER REPLACEMENT.  | 635                     | 2018       | 1    | LS  | 20   | 0    | 20                             | \$0.00      | \$ -          | \$ -            | \$ -          | \$ -          | \$ -               | \$ -      |
| VT-  | SE006 | DIPONIO ROOM STAGE LIGHTING SYSTEM UPGRADES.  | 610                     | VARIOUS    | --   | --  | 15   | --   | --                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | SE007 | STAGE LIGHTING UPGRADES.  | 610                     | 2002       | 1    | LS  | 15   | 11   | 4                              | \$5,000.00  | \$ 5,000      | \$ 5,565        | \$ 5,665      | \$ 5,767      | \$ 5,871           | \$ 5,977  |
| VT-  | SE008 | WATERMAN FOOD SERVICE DOCK LEVELER MAINTENANCE  | 635                     | 2003       | 1    | LS  | 20   | 10   | 10                             | \$22,275.00 | \$ 22,275     | \$ 24,792       | \$ 25,238     | \$ 25,692     | \$ 26,155          | \$ 26,625 |
| VT-  | SE009 | WATERMAN IT SYSTEMS   | UUU02                   | VARIOUS    | 24   | EA  | 20   | --   | --                             | \$200.00    | \$ 4,800      | \$ 5,342        | \$ 5,438      | \$ 5,536      | \$ 5,636           | \$ 5,737  |
| VT-  | SE010 | WATERMAN IT SYSTEMS   | UUU02                   | VARIOUS    | 48   | EA  | 20   | --   | --                             | \$25.00     | \$ 1,200      | \$ 1,336        | \$ 1,360      | \$ 1,384      | \$ 1,409           | \$ 1,434  |
| VT-  | SE011 | VISTATECH IT SYSTEMS  | UUU02                   | VARIOUS    | 3    | EA  | 20   | --   | --                             | \$50.00     | \$ 150        | \$ 167          | \$ 170        | \$ 173        | \$ 176             | \$ 179    |
| VT-  | SE012 | VISTATECH IT SYSTEMS  | UUU02                   | VARIOUS    | --   | --  | 20   | --   | --                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | SE013 | VISTATECH IT SYSTEMS  | UUU02                   | VARIOUS    | --   | --  | 20   | --   | --                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | SE014 | VISTATECH IT SYSTEMS  | UUU02                   | VARIOUS    | --   | --  | 20   | --   | --                             | \$0.00      | --            |                 |               |               |                    |           |
| VT-  | SE015 | VISTATECH IT SYSTEMS  | UUU02                   | VARIOUS    | 3    | EA  | 20   | --   | --                             | \$50.00     | \$ 150        | \$ 167          | \$ 170        | \$ 173        | \$ 176             | \$ 179    |
| VT-  | SE016 | VISTATECH IT SYSTEMS  | UUU02                   | VARIOUS    | --   | --  | 20   | --   | --                             | \$0.00      | --            |                 |               |               |                    |           |
| ACCESSIBILITY IMPROVEMENTS                                 |       |   |                         |            |      |     |      |      |                                |             |               |                 |               |               |                    |           |
| VT-  |       | NONE  |                         |            |      |     |      |      |                                |             |               |                 |               |               |                    |           |
| ANNUAL FUNDING REQUIREMENTS (ROUNDED):                     |       |   |                         |            |      |     |      |      |                                |             | \$ 11,382,146 | \$ 11,587,025   | \$ 11,795,591 | \$ 12,007,912 | \$ 12,224,054      |           |

R.A. SCHETTLER, INC  
SUMMATION  
OF

Asset Acct: SCHOOLCRAFT COLLEGE

As of 10/1/22

REAL ESTATE - BUILDING

| Summary<br>by:                        | Replacement<br>Value New | Sound or<br>Depr. Value |
|---------------------------------------|--------------------------|-------------------------|
| GROTE CENTER                          | 5,210,600.00             | 2,865,800.00            |
| HEALTH SCIENCE CTR                    | 37,059,300.00            | 29,276,900.00           |
| BRADNER LIBRARY                       | 7,996,600.00             | 4,078,300.00            |
| CAMPUS GARAGE                         | 348,600.00               | 261,400.00              |
| CHILDRENS' CENTER                     | 1,726,900.00             | 1,329,700.00            |
| FORUM                                 | 22,817,900.00            | 11,408,900.00           |
| LIBERAL ARTS                          | 15,891,800.00            | 7,151,300.00            |
| MCDOWELL CENTER                       | 21,447,200.00            | 16,299,900.00           |
| PHYSICAL EDUCATION/ESC                | 43,310,500.00            | 30,317,300.00           |
| SERVICE BUILDING                      | 10,781,700.00            | 6,792,500.00            |
| WATERMAN CAMPUS/<br>VISTA TECH CENTER | 75,027,800.00            | 59,272,000.00           |
| GREENHOUSE                            | 288,300.00               | 242,200.00              |
| SALT STORAGE                          | 234,000.00               | 177,800.00              |
| KILN SHELTER                          | 247,900.00               | 208,200.00              |
| BIOMEDICAL TECH CTR.                  | 19,787,400.00            | 16,819,300.00           |
| FIRE TRAINING SERVICE                 | 92,100.00                | 82,000.00               |
| FIRE TRAINING TOWER                   | 1,467,400.00             | 1,306,000.00            |

CONTINUED.....

R.A. SCHETTLER, INC  
SUMMATION  
OF

Asset Acct: SCHOOLCRAFT COLLEGE

As of 10/1/22

REAL ESTATE - BUILDING

| Summary<br>by:                          | Replacement<br>Value New | Sound or<br>Depr. Value |
|---|--------------------------|-------------------------|
| ACADEMY                                 | 6,268,800.00             | 5,077,700.00            |
| FIRE ARMS                               | 10,330,600.00            | 8,677,700.00            |
| JEFFRESS CENTER                         | 34,024,700.00            | 24,838,000.00           |
| MASCO                                   | 28,573,900.00            | 26,859,500.00           |
| SOCCER DOME                             | 8,665,400.00             | 8,145,500.00            |
| MANUFACTURING AND<br>ENGINEERING CENTER | 14,976,400.00            | 13,778,300.00           |
| LIVONIA MEDICAL CENTER                  | 45,417,500.00            | 44,509,100.00           |

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|                           |                |                |
|---------------------------|----------------|----------------|
| ASSET ACCOUNT GRAND TOTAL | 411,993,300.00 | 317,775,300.00 |
|---------------------------|----------------|----------------|

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|                      |   |
|----------------------|---|
| PERCENT DEPRECIATION | X |
|----------------------|---|

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**Fiscal Year 2024  
Capital Outlay Project Request**

**Institution Name:** Schoolcraft College

**Project Title:** Forum Building Modernization

**Project Focus:** Academic

**Type of Project:** Renovation

**Program Focus of Occupants:** Sciences with Fine Arts

**Building Area Calculations (approximates):**

Total Renovated Science Classroom & Laboratory Spaces: 8731 Square Feet

5,931 Square Feet with 2,800 Square Feet new, dedicated mezzanine. Equating to four (4) classrooms; two (2) chemistry laboratories; and five (5) chemistry support spaces. Entirely new HVAC & exhaust systems for chemistry laboratories and their support spaces. Mezzanine for housing laboratory mechanical and electrical equipment as well as addressing safety of maintenance personnel outlined elsewhere in this Project Request.

Estimated Total Building Area for Lighting System Upgrades:

5,931 Square Feet of instructional space and all building corridors.

ADA (Barrier-Free) Improvements:

Egress paths and all instructional spaces throughout entire 54,891 Square Feet building.

**Opinion of Probable Total Cost: \$12,042,363**

Base Construction Budget (CM / Construction Trades / General Conditions): \$9,821,242

Professional Services Contract & Accounts for Escalation up to 2025: \$2,062,458

Furnishings & Equipment (laboratory casework, classroom furniture, & instructional aids):  
\$158,663

**Estimated Start / Completion Dates:**

Design (Programming – CDs): October 2023 – April 2024

Bidding: May – June 2024

Construction: July 2024 – August 2025 (sequenced to minimize Chemistry Labs downtime)

Closeout: September – November 2025

**Fiscal Year 2024  
Capital Outlay Project Request**

**Is the Five-Year Plan posted on the institutions public internet site? Yes**

**Is the requested project the top priority in the Five-Year Capital Plan? Yes**

**Is the requested project focused on a single, stand-alone facility? Yes**

**Project Purpose:**

A. To address ADA accessibility issues in egress paths and instructional spaces throughout entire Forum Building using consultant-guided self-study conducted in 2018 under title *Practical Understanding of Accessibility Guidelines & Supporting Practices* (included in Project Request).

B. Address Indoor Environmental Quality (IEQ) issues in chemistry labs and their support spaces that include indoor air quality (e.g. ventilation of fumes); excessively negative room air pressure; and functional aspects of instructional spaces (e.g. improved room layouts, maintenance personnel safety).

C. Reduce consumption of water (laboratory faucets) and electricity (lighting and fume hood exhaust).

**Project Scope:**

General: This project scope has two (2) constraints. The first being 12 to 15 million dollar total budget limitation to ensure Schoolcraft College has adequate funds to finance their half. The second being, to avoid Forum Building renovation in spaces highly probable for repurposing in future.

ADA Improvements: This building has 1963 (pre-ADA) construction issues to address. Schoolcraft College also intends to incorporate non-required barrier-free improvements; such as forward approaching faucets vs. side approach. The most substantial, single investment here will be providing a means for wheelchair travel between upper and lower halves of Forum Building. Original construction uses ramped corridors that are far too steep for ADA compliance. Currently, persons in wheelchairs travel adjacent sidewalks outside Forum Building accessing upper and lower building entrances as accommodation measure.

**Fiscal Year 2024  
Capital Outlay Project Request**

Lighting Upgrades: Renovated classrooms, labs, lab support spaces, and all building corridors – identified on Forum Building plan included in this Project Request – to receive change from T8 fluorescent to LED light fixtures that offer energy use reduction by as much as 30%; a sharp decline in maintenance costs; reduced environmental impact from parts disposal; and preservation of natural resources. In addition, an automated lighting control system will upgrade from stand-alone toggle switches and local occupancy sensors. Lighting will be controlled by application-based schemes in addition to functionality required by current energy code enforced.

Classroom Enlargement & Furniture Replacement: Enlarging two (2) classrooms primarily used for chemistry course lectures. Current room sizes cannot accommodate required class sizes without use of narrow tables. ADA accessibility within these classrooms is not fully possible without furniture rearrangement. Replacing bowed tables in these spaces as part of upgrade.

Chemistry Lab Improvements:

**Issue of Indoor Air Quality & Room Pressurization Control** – There are two (2), 1963 chemistry laboratories that we modified in mid-2000s to increase fume hood quantity from five (5) per lab to eleven (11) per lab. The basis-of-design relied on manufacturer's equipment performance data, passively drawing air back for return air tunnels as means of conditioned make-up air (i.e. maintaining room air pressure); and that exhaust fans discharging into a ridge vent would not derate fan performance. Those assumptions have proven unreliable. Make-up air not only coming from return air tunnels, but adjacent corridors and chemical storage rooms at varying temperatures and introducing odors. The increased demand for exhaust air from original 1963 construction causes negative space pressure sensed on eardrums when corridor doors are closed and fume hoods are operating. This project provides dedicated mechanical equipment to mitigate issues mentioned above. Roofline modifications are involved to discharge fumes high enough into outdoor airstream where they cannot reenter the building.

**Maintenance Staff Safety** – Installing attic space catwalks with handrails and service platforms to mitigate fall risks when servicing fume hood fans, general exhaust fans, and their motor controls. Incorporating a mezzanine in attic space for operating and maintaining new make-up air HVAC equipment and power distribution equipment serving renovated spaces below.

**Space Plan Improvements** – Repositioning fume hoods providing better sight lines towards centralized location for lab introductions and post-lab debriefing.

**Fiscal Year 2024  
Capital Outlay Project Request**

**Upgrading Fume Hoods from CAV to VAV Exhaust** – VAV fume hoods only exhaust air in quantity needed for specific experiment as opposed to CAV fume hoods that exhaust air in fixed quantity anytime the hood is in use. VAV fume hoods are more costly to install, but energy savings they provide (electrical and HVAC) provides a short-term return on investment.

**Water Consumption** – Reducing water use by upgrading 2.2 GPM flow laboratory-plumbing fixtures to high-efficiency 1.5 GPM models (nominal 30% less water per fixture).

**Replacement of Obsolete Exhaust Fan Motor Controllers** – While recently addressing failing electronic motor controllers, used to maintain specified fume hood airflow, College maintenance was informed that the controllers were obsoleted and no longer available in whole or as parts. This project would upgrade those controllers to equipment that is sustainable.

**Additional Information:**

- 1. How does the project enhance Michigan's job creation, talent enhancement, and economic growth initiatives on a local, regional, and/or statewide basis?**
  - a. Environmental scans indicate careers in Health Sciences in Southeast Michigan are high growth/high income fields. Many of these programs, such as Imaging related and Surgical Technology, require course work in Biology and Chemistry, which in turn require specialty classroom and laboratory space.
  - b. Additionally, the opportunity for renovated physics labs would provide better courses and equipment for our future engineers who are often the innovators within industry and the State and global automotive industry. There are numerous opportunities for these students within Southeast Michigan as they complete their program degrees.
  - c. Surrounded by the Great Lakes, Michigan is truly germane to the conversation and research in Earth and Environmental Sciences. Providing lab spaces for this newer discipline to Schoolcraft College, will engage students in the important work that lies ahead of us regionally in this area.

**Fiscal Year 2024  
Capital Outlay Project Request**

**2. How does the project enhance the core academic and/or research mission of the institution?**

- a. All students who earn an Associate's degree, tackle the MTA, earn credit for transfer, or participate in some occupational certificates at Schoolcraft College will need to take at least one Natural Science class. Many are required to take more than one. This strong foundation in general education Natural Sciences aligns directly with the core academic mission of Schoolcraft College.

**3. How does the project support investment in or adaptive re-purposing of existing facilities and infrastructure?**

All project investment in modernizations occurs within 1963 constructed Forum Building structure.

**4. Does the project address or mitigate any current health/safety deficiencies relative to existing facilities? If yes, please indicate.**

Yes, in two ways. One addresses a chemistry lab indoor air quality issue where chemical odors draw into adjacent spaces due to excessive negative room pressure when chemistry fume hood are in full use. The second is mitigating fall risk of maintenance personnel who walk along tops of masonry walls and work from wood planks to service attic-mounted mechanical and electrical equipment.

**5. How does the institution measure utilization of its existing facilities, and how does it compare relative to established benchmarks for educational facilities? How does the project help to improve the utilization of existing space and infrastructure, or conversely how does current utilization support the need for additional space and infrastructure?**

Schoolcraft College utilizes EMS software, an enterprise level scheduling solution to optimize the use of rooms and facilities. Within that software, we use an Academic Utilization Report to measure utilization of our existing facilities. Additionally, we recently used Ad Astra software to benchmark our utilization to national higher educational benchmarks. This project would benefit the college by supporting the recent addition of an array of medical programs that require more sections of courses such as physics, biology, and chemistry.

**Fiscal Year 2024  
Capital Outlay Project Request**

**6. How does the institution intend to integrate sustainable design principles to enhance the efficiency and operations of the facility?**

This project intends, at minimum, to employ these fundamental principles of sustainable building:

- Optimizing Site Potential by reuse of an existing building.
- Optimizing Energy Use by improving energy performance of an existing building. Accomplished by energy efficient light fixtures and automated lighting control schemes.
- Optimize Building Space and Material Use by designing for use and reuse of building materials in a fashion most productive and sustainable.
- Enhancing Indoor Environmental Quality (IEQ) through updated laboratory ventilation systems; optimizing space plans for improved laboratory sight lines; and increased room area per student in lecture classrooms.

**7. Are match resources currently available for the project? If yes, what is the source of the match resources? If no, identify the intended source and the estimated timeline for securing said resources.**

Sources based on Capital Outlay requirements at time of approval.

**8. If authorized for construction, the state typically provides a maximum of 75% of the total cost for university projects and 50% of the total cost for community college projects. Does the institution intend to commit additional resources that would reduce the state share from the amounts indicated? If so, by what amount?**

The college does not have any plans or sources at this time that would reduce the state's share from the amount indicated.

**Fiscal Year 2024  
Capital Outlay Project Request**

- 9. Will the completed project increase operation costs to the institution? If yes, please provide as estimate cost (annually, and over a five-year period) and indicate whether the institution has identified available funds to support the additional cost.**

Custodial & Supplies – unchanged.

Energy Usage – net reduction in electrical and water usage.

Maintenance & Supplies – nominal increase for HVAC category, while substantial reduction in lighting maintenance and supplies.

Insurance – .13 per Square Foot.

Security – unchanged.

- 10. What impact, if any, will the project have on tuition costs?**

Tuition costs will increase by this project. The extent is undetermined at present.

- 11. If this project is not authorized, what are the impacts to the institution and its students?**

If this project was not authorized, Schoolcraft College, students, as well as the community, would be effected for these primary reasons.

- ADA compliance-improvements for instructional spaces and addressing original, ramped corridor floor too steep for barrier-free ramp slope compliance.
- Difficulty providing instruction with modern teaching methodologies and technologies (i.e. student experience impact).

- 12. What alternatives to this project were considered? Why is the requested project preferable to those alternatives?**

This project approach was best option considered. Scaled with consideration of College finances, volatile construction market, and post-Covid trend of higher education enrollment decline.

**Furthermore and specific to reasons above, Schoolcraft College intends to decline their Capital Outlay 2023 Project Request approved in Senate Bill 78 of 2022.** This Project Request is a present moment, fiscally responsible, reduced-scale portion of 2023 Project Request focused on greatest positive impact for Forum Building spaces least to change by future renovation.



- COMPLETE SPACE RENOVATION
- CORRIDOR LIGHTING UPGRADE
- ADA UPGRADES BASED ON PRACTICAL UNDERSTANDING OF ACCESSIBILITY GUIDELINES & SUPPORT PRACTICES BY FISHBECK
- PLATFORM WHEELCHAIR LIFT



# PRACTICAL UNDERSTANDING OF ACCESSIBILITY GUIDELINES & SUPPORTING PRACTICES



**FISHBECK, THOMPSON, CARR & HUBER**  
engineers | scientists | architects | constructors



**MARK P. MITCHELL, AIA, LEED AP**  
SENIOR ARCHITECT



**VINCENT J. MATTINA, III, AIA**  
ARCHITECT

**This presentation is based on observed common trends within instructional spaces of Schoolcraft College Forum, Liberal Arts and Biotech Center buildings. The codes listed are referenced from the ICC A117.1-2009 Accessible and Usable Buildings and Facilities. This presentation is not intended to outline the code in its entirety. Codes may change and this presentation does not cover future code iterations or interoperations.**

# MANEUVERING CLEARANCES

## 304 TURNING SPACE

## 305 CLEAR FLOOR SPACE

Figure 304.3 is the minimum space required to maneuver or turn around in a wheel chair.

Figure 305.3 is the required clear space required for someone to park their wheel chair, to use wall mounted device, sink, desk space, etc.

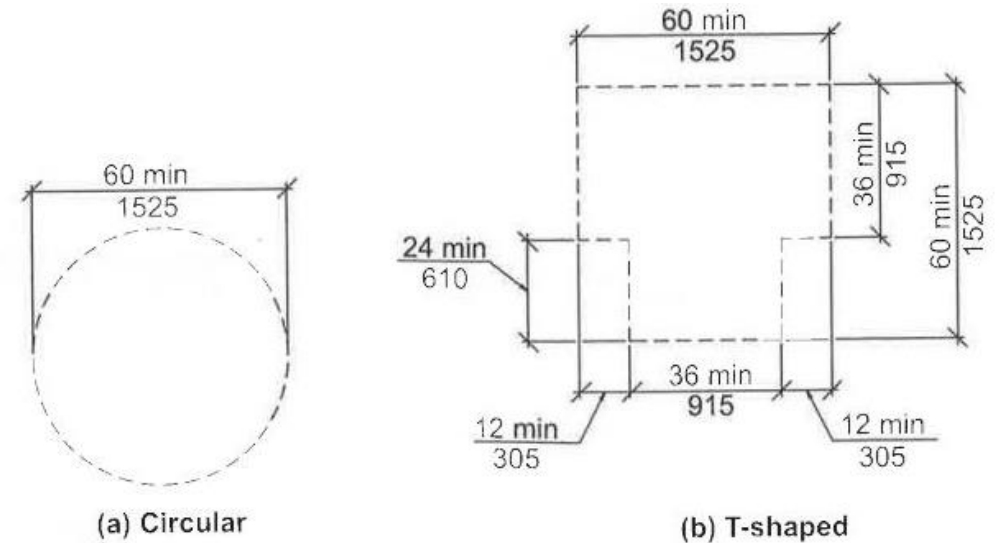


FIG. 304.3

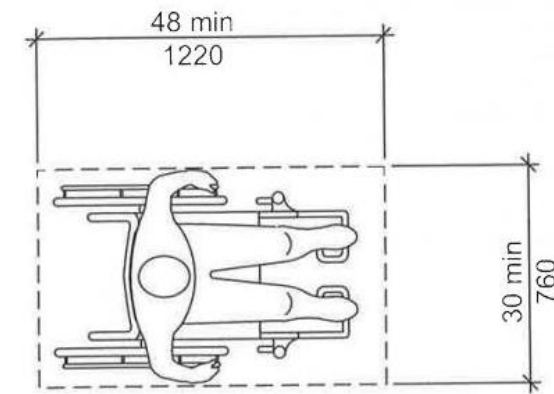


FIG. 305.3  
SIZE OF CLEAR FLOOR SPACE

# MANEUVERING CLEARANCE OBSERVATIONS

304.3 TURNING SPACE  
305.3 CLEAR FLOOR AREA



304.3 TURNING SPACE  
305.3 CLEAR FLOOR AREA



305.3 CLEAR FLOOR AREA



305.3 CLEAR FLOOR AREA



# ACCESSIBLE ROUTES

## ***403 WALKING SURFACES***

### **403.5 CLEAR WIDTH**

---

A 36" wide path is the minimum clear width along an accessible route for any person that is in a wheelchair. In some instances pinch points of 34" or 32" are allowed.

## ***404 DOORS AND DOORWAYS***

### **404.2.2 CLEAR WIDTH**

---

A 32" clear opening width is required at all doorways measured between the door face and stop. No projections (door hardware) should be installed below 34" and may not protrude more than 4" into the clear opening width

# CHANGES IN LEVEL

## 303 CHANGES IN LEVEL

Floor surfaces should primarily be flat.  $\frac{1}{4}$ " maximum vertical height variance is permitted under section 303.2, anything between  $\frac{1}{4}$ " and  $\frac{1}{2}$ " shall be beveled under section 303.3, all others greater than  $\frac{1}{2}$ " are considered a ramp under section 303.4 and shall comply with section 405 and 406.



Ramps are not allowed in maneuvering clearances or clear floor area, level surfaces allow easy maneuvering for the wheelchair bound.

**NON-COMPLIANT FLOOR SLOPE IN LAB**

# DOOR MANEUVERING CLEARANCES

## 404 DOORS AND DOORWAYS

Figures 404.2.3.2, the dashed lines indicate the minimum amount of clear area that someone in a wheelchair would need to operate a door. Items like trash cans, fire extinguishers, and other wall or floor mounted equipment/furniture located in the clear area can prohibit someone a wheel chair from using the door.

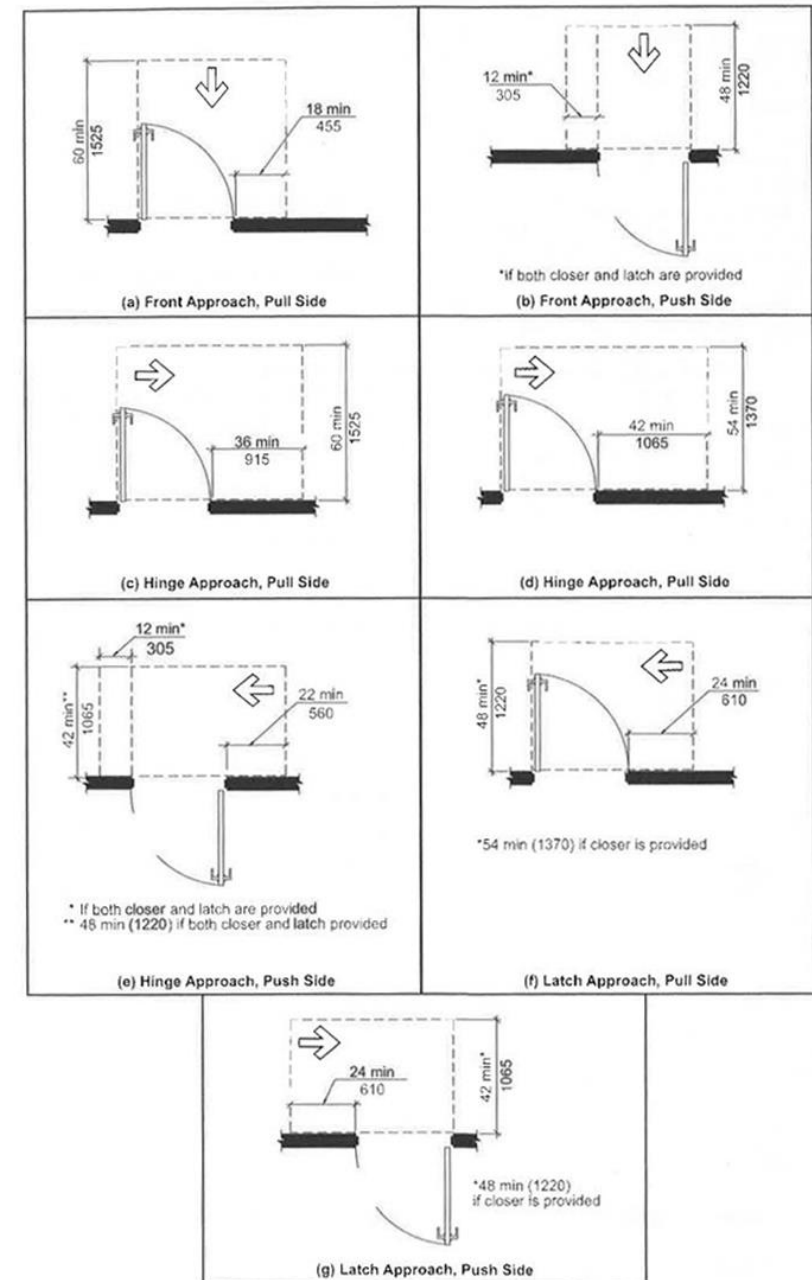


FIG. 404.2.3.2  
MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS

# DOOR MANEUVERING CLEARANCE OBSERVATIONS

FIGURE 404.2.3.2  
(B), (E), (F) & (G)



FIGURE 404.2.3.2  
(B), (E), (F) & (G)



FIGURE 404.2.3.2  
(B), (E), (F) & (G)



FIGURE 404.2.3.2  
(B), (E), (F) & (G)



**FIXED AND NON-FIXED ITEMS CAN PROHIBIT SOMEONE IN A WHEELCHAIR FROM USING THE DOOR.**

# DOOR HARDWARE

## 404.2.6 DOOR HARDWARE

All operable door hardware shall be accessible. The hardware should be easy to grasp with one hand and should avoid requiring a tight grip, pinching or twisting of the wrist.



COMPLIANT

NON-COMPLIANT

# KNEE AND TOE CLEARANCE

## 306 KNEE AND TOE CLEARANCE

Figure 306.2 and 306.3 are used in tandem. Both figures indicate the minimum clear area required for someone wheelchair bound would need to tuck their toe and knee under a desk, sink, or work station.

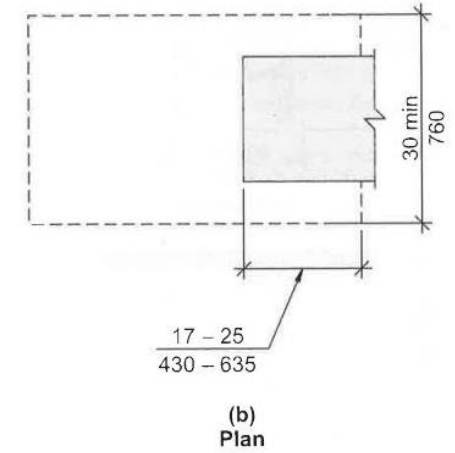
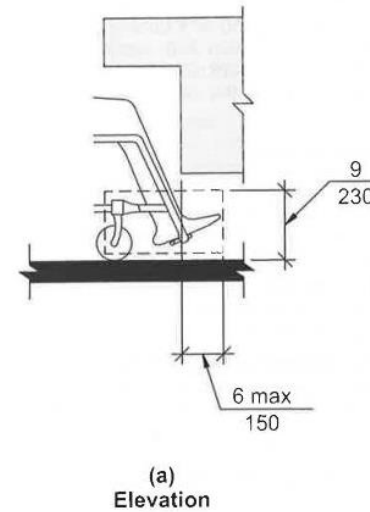


FIG. 306.2  
TOE CLEARANCE

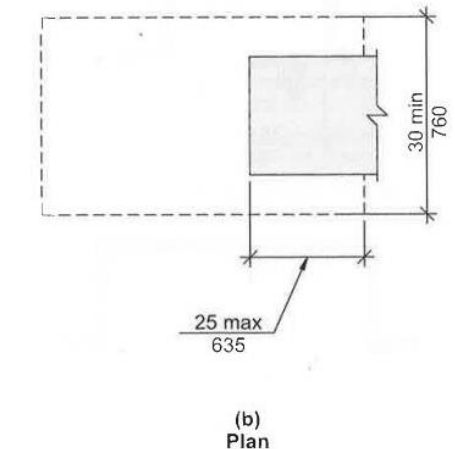
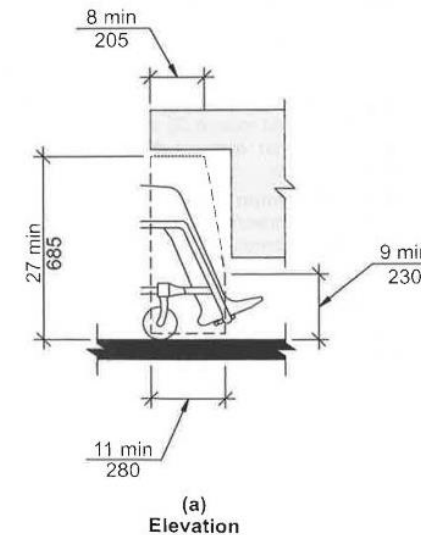


FIG. 306.3  
KNEE CLEARANCE

# KNEE AND TOE CLEARANCE OBSERVATIONS

APPLYING FIGURES 306.2 AND 306.3



ACCEPTABLE KNEE AND TOE CLEARANCE (LEFT) | NON-COMPLIANT KNEE AND TOE CLEARANCE (RIGHT)

# REACH RANGES

## 308 REACH RANGES

All figures show the full extent that someone wheelchair bound could reach to use a phone, pencil sharpener, projector pull cord, wall mounted equipment, etc. Figures 308.2.2 and 308.3.2 shows the limits a wheelchair bound person would be able to reach over a table, desk, counter, etc.

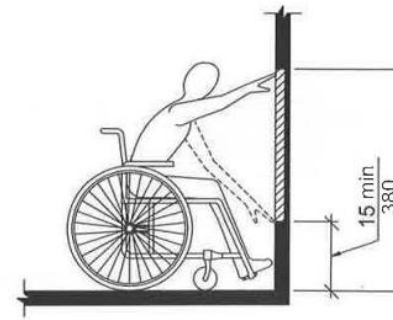


FIG. 308.2.1  
UNOBSTRUCTED FORWARD REACH

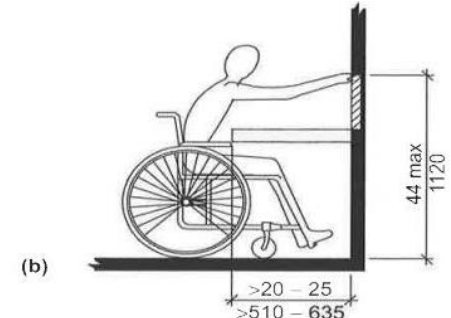
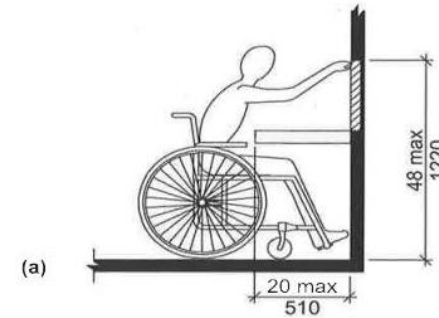


FIG. 308.2.2  
OBSTRUCTED HIGH FORWARD REACH

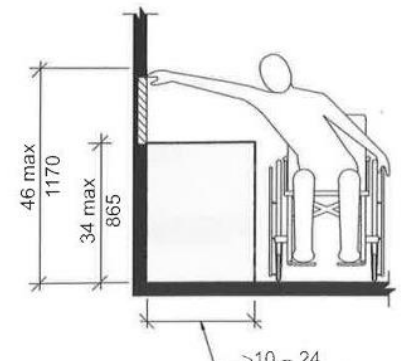
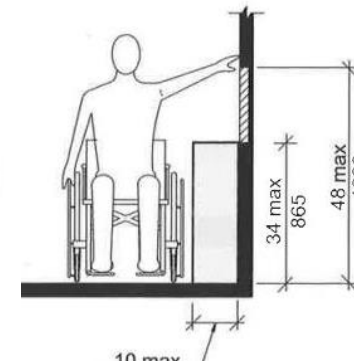
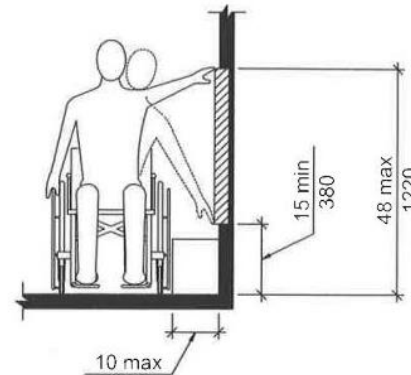


FIG. 308.3.2  
OBSTRUCTED HIGH SIDE REACH

# REACH RANGES OBSERVATIONS

APPLYING FIGURES 308.2.1, 308.2.2 & 308.3.2



THESE PHOTOS DISPLAY SOME OF THE COMMON ITEMS NOT WITHIN ACCESSIBLE REACH RANGES

# ACCESSIBLE SEATING

## CLASSROOMS

---

Within classrooms, accessible seating is required. A minimum of 5% of all seat capacity and not less than one seat must be wheelchair accessible. Ideally, the seats could be dispersed through the classroom for variety of distances from the instructor.



**ACCESSIBLE SEATS SHOULD BE PROVIDED IN ALL CLASSROOMS**

# ACCESSIBLE SEATING

## 802 ASSEMBLY AREAS

Wheelchair space is required in all assembly spaces, one space for 150 occupants and two spaces for 151 to 500 occupants. These seats are required to be dispersed for a variety of distances from the viewing event. However, if the occupancy is less than 300 people, the accessible seats may exclusively be in the front half of the auditorium.



**TWO ACCESSIBLE SPACES ARE REQUIRED IN THE LIBERAL ARTS THEATRE**

# PROTRUDING OBJECTS

## 307.2 PROTRUSION LIMITS

Areas shown in figure 307.2 indicate the allowable limits of protruding objects. These dimensions indicate the “safe” projection limit wall mounted objects. Someone visually impaired would be able to walk past these objects without being obstructed or injured.

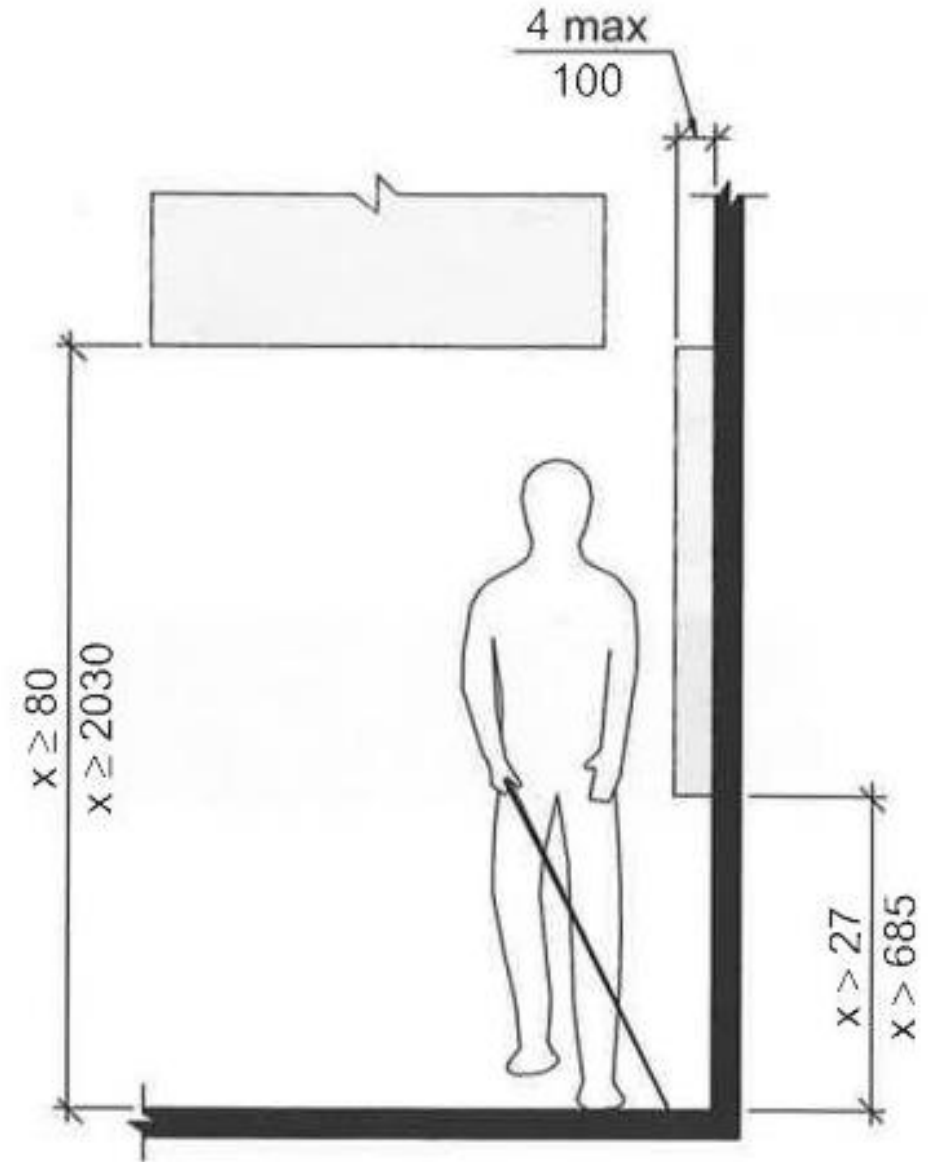
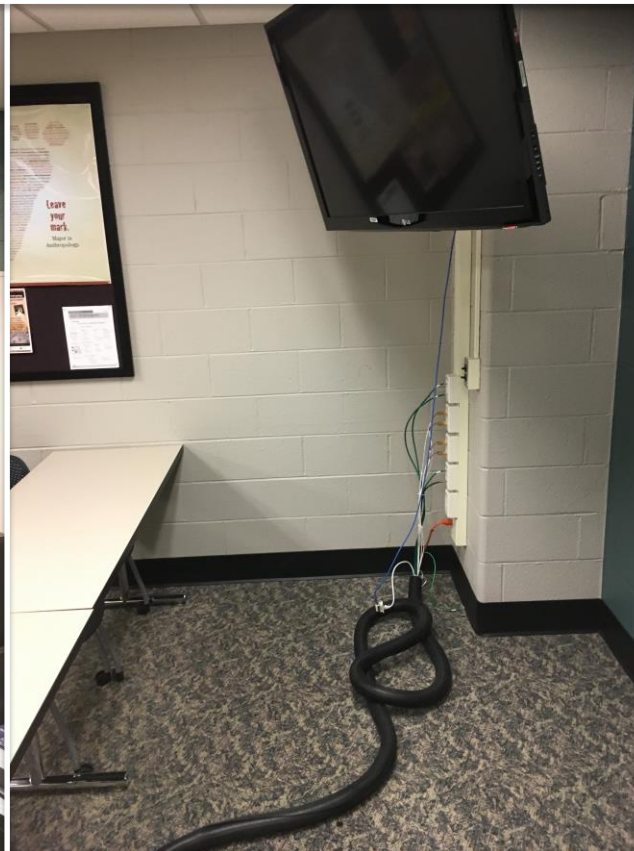


FIG. 307.2  
LIMITS OF PROTRUDING OBJECTS

# PROTRUDING OBJECT OBSERVATIONS

APPLYING FIGURES 307.2

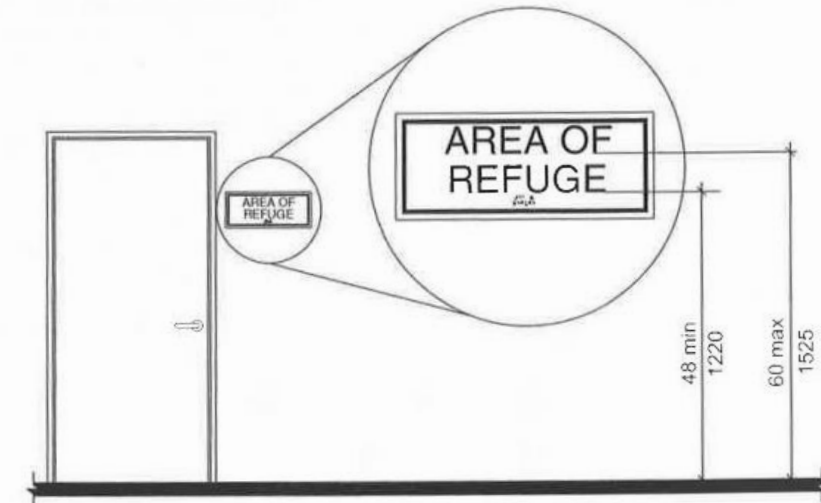


TELEVISION AND WALL MOUNTED ITEMS (ABOVE) DISPLAY NON-COMPLIANT PROTRUDING LIMITS

# SIGNS

## 703 SIGNS

Signs containing raised characters and braille allow a visually impaired person to read the sign. The location of the sign should be located within the 18" x 18" clear area provide adjacent to the latch, and 48" to 60" off the floor. This space allows someone to safely stand outside the swing area and read the sign.



Note: For braille character mounting height see Section 703.4.5

FIG. 703.3.10  
HEIGHT OF RAISED CHARACTERS ABOVE FLOOR

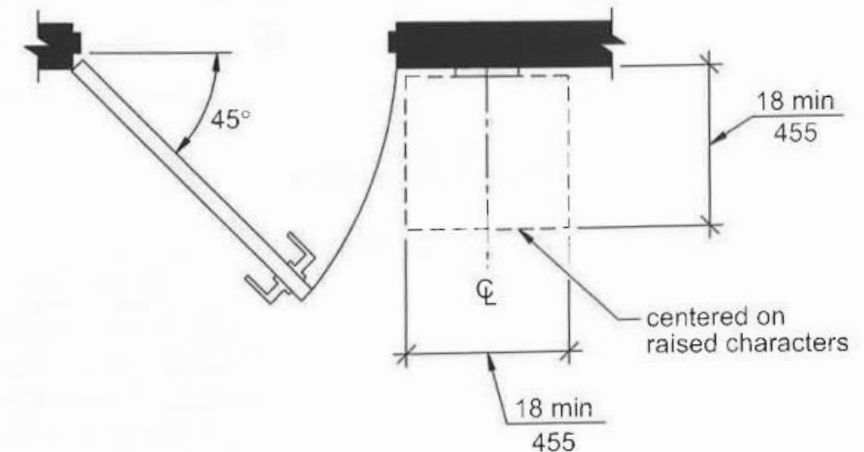
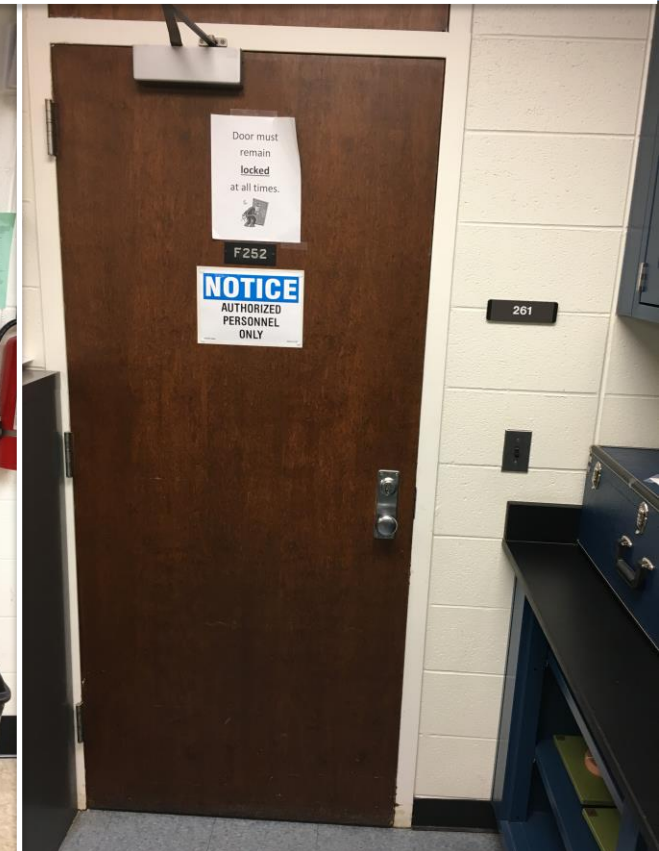


FIG. 703.3.11  
LOCATION OF SIGNS AT DOORS

# SIGNS OBSERVATION

APPLYING FIGURES 703.3.10 & 703.3.11

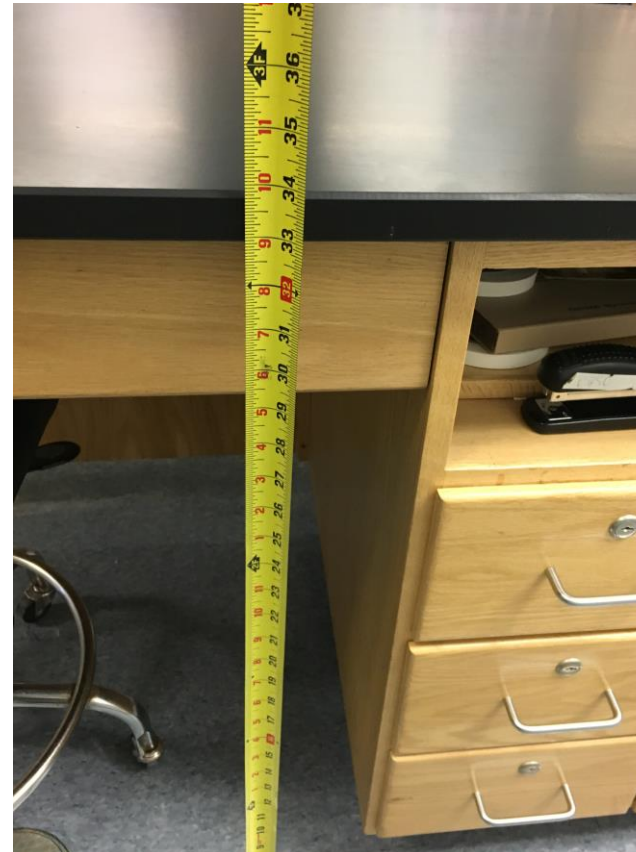


COMPLIANT SIGN MOUNTING HEIGHT (LEFT) | NON-COMPLIANT LOCATIONS (RIGHT)

# WORK SURFACES

## 902 DINING SURFACES AND WORK SURFACES

Section 902.4 outlines that dining or work surfaces must be a minimum of 28" to a maximum of 34" above the finished floor. This height complies with both the required reach ranges and required knee and toe space.



**COMPLIANT (LEFT) | NON-COMPLIANT (RIGHT)**

# ACCESSIBLE COMMUNICATIONS

## ***PASSIVE INFRARED***

---

Hearing impaired persons would wear a necklace that receives a signal from a AV cabinet in the room. The signal is then transmitted from the necklace to ear buds/earphones.

## ***HEARING LOOP SYSTEMS***

---

The room has a loop of wire that wraps around the perimeter of the room (typically embedded but could be surface mounted).

Hearing impaired persons would utilize their hearing aid device to pick up the RF signal in the hearing loop (perimeter loop of wire).

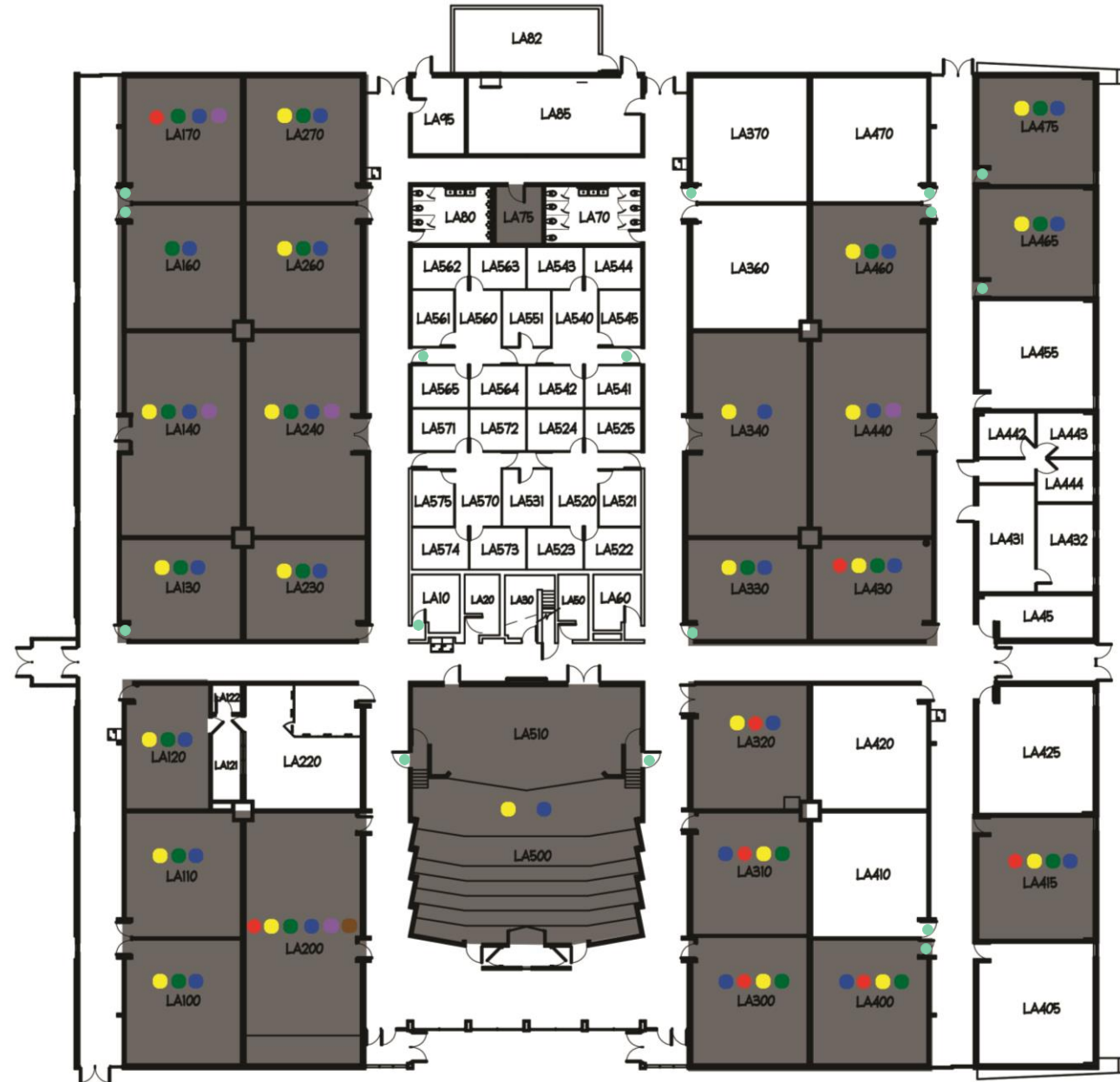
# FORUM BUILDING

- MANEUVERING CLEARANCES, CLEAR FLOOR AREA, ACCESSIBLE ROUTES
- DOOR MANEUVERING CLEARANCES
- DOOR HARDWARE
- REACH RANGE
- PROTRUDING OBJECTS
- WORK SPACES
- KNEE AND TOE CLEARANCES
- FLOOR OBSTRUCTIONS



# LIBERAL ARTS BUILDING

- MANEUVERING CLEARANCES, CLEAR FLOOR AREA, ACCESSIBLE ROUTES
- DOOR MANEUVERING CLEARANCES
- DOOR HARDWARE
- REACH RANGE
- PROTRUDING OBJECTS
- WORK SPACES
- KNEE AND TOE CLEARANCES
- FLOOR OBSTRUCTIONS



- **MANEUVERING CLEARANCES, CLEAR FLOOR AREA, ACCESSIBLE ROUTES**
- **DOOR MANEUVERING CLEARANCES**
- **DOOR HARDWARE**
- **REACH RANGE**
- **PROTRUDING OBJECTS**
- **WORK SPACES**
- **KNEE AND TOE CLEARANCES**
- **FLOOR OBSTRUCTIONS**



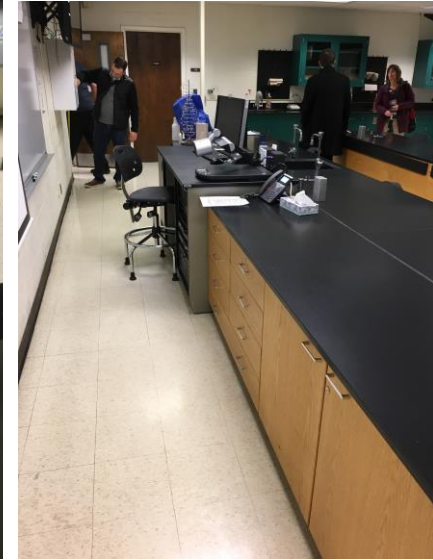
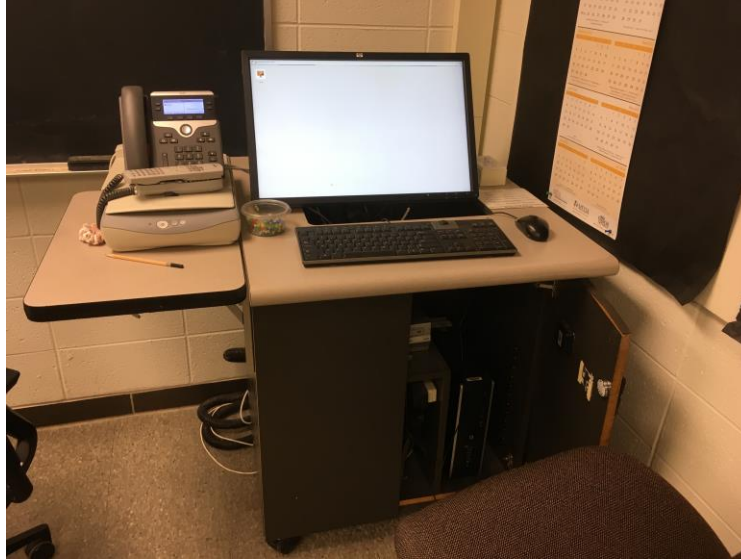
# INSTRUCTOR/PRESENTER

## TEACHING STATIONS

---

Non-compliant work surfaces and insufficient clear floor area and maneuvering clearances will make it difficult for a instructor or presenter to use the teaching stations.

---



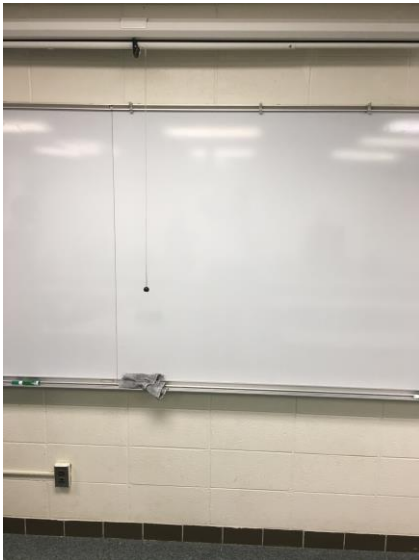
# INSTRUCTOR/PRESENTER

## TEACHING STATIONS

---

Items at the front of the classroom can be above instructor/presenters reach range or in excess of the protruding limit may make it difficult to use these items for instruction.

---



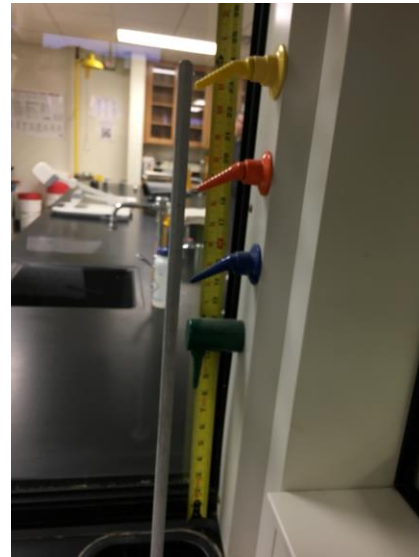
# STUDENT/GUEST

## ACCESSIBLE LAB SPACE

---

This lab work station is accessible for someone wheelchair bound. Some of the gas hookups in the fume hood are outside of the accessible reach range; attaching a hose to some of these hookups will make them accessible.

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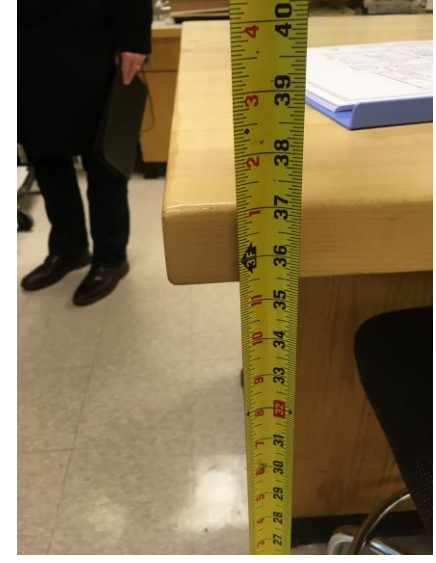
# STUDENT/GUEST

## WORK STATIONS AND EQUIPMENT

---

Non-compliant work surfaces and insufficient clear floor area and maneuvering clearances will make it difficult for a student or guest to use these stations. Many items are above allowable reach ranges or are in excess of the protruding limit.

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**Figures, 304.3, 305.3, 306.2, 306.3, 307.2, 308.2.1, 308.2.2, 308.3.1, 308.3.2, 404.2.3.3, 602.2, 602.5,  
606.3, 703.3.10, 703.3.11, 703.4.4, 703.4.5 | Table 404.2.3.2**

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