

OAKLAND COMMUNITY COLLEGE A VISION OF EXCELLENCE IN THE 21st CENTURY

FIVE YEAR CAPITAL OUTLAY MASTER PLAN

Fiscal Year 2020 (7/1/19 - 6/30/20)

Through

Fiscal Year 2024 (7/1/23 - 6/30/24)

Section I

Mission Statement

Mission Statement

OCC is committed to empowering our students to succeed and advancing our community.

VALUES

- > ACCESSIBLE We welcome people of diverse backgrounds and abilities.
- EXCELLENCT We offer high-quality and relevant educational experiences, and celebrate the accomplishments of our people.
- ETHICAL We act with respect, integrity, and kindness, and carefully steward the resources entrusted to us.

VISION

Excellence in all we do . . .

- Become the college of choice.
- Become the partner of choice.
- Become the employer of choice.

VFOs

Become the college of choice.

- Enhance and innovate educational offerings
- Improve the student experience
- Guide the students to their desired outcomes

Become the partner of choice.

- ➢ Grow partnerships
- Become the employer of choice.
- Increase employee engagement

Section II

Instructional Programming

Instructional Programming

Academic Programs and Projected Changes

As a comprehensive two-year institution of higher education Oakland Community College (OCC) offers more than 800 courses and 85 career and technical programs in art, business, technology, health, science, humanities, public service and advanced manufacturing. The college is committed to offering high quality curriculum that meet the needs of the community while preparing individuals for high wage, high demand occupations, as well as providing pathways for students who wish to pursue advanced study at a four-year university.

Ensuring that curricular offerings align with community need the college employs a system of continual evaluation. In this process, generally referred to as the curriculum life cycle, OCC examines regional labor market and economic trends including occupational demand compared to skilled worker supply, wage levels, and level of required education among other key factors. This process allows the college to rapidly adjust curricular offerings as regional needs shift.

Guided by this information along with a comprehensive assessment of physical plant assets, an evaluation of technology infrastructure, and a long-range financial forecast, the college is able to plan for the continual renewal of the curriculum and fulfil its commitment to the community.

At the present time renovation of the welding, automotive servicing and collision auto repair facilities at the Auburn Hills campus is underway. This project will allow for the installation of state-of-the-art equipment and support major revisions of the curriculum. Meanwhile, construction of a new science building on the Auburn Hills campus will begin in the spring of 2019. The facility will support the natural and physical sciences, as well as programs in computer information systems.

Plans are being developed to renovate and expand classroom and lavatory space in the advanced manufacturing center located on the Auburn Hills campus. When completed this project will directly benefits students in the mechatronics, robotics, and machine tool CNC programs. Additionally, the college is looking to expand programming in workforce training and continuing education which requires an expansion of the MTeC facility.

Programs within the Culinary Arts Institute (Culinary, Baking and Pastry, Hotel/Motel Management, and restaurant Management) are under-going a comprehensive curricular revision with the intent to better align the curriculum with industry needs, and increase rates of student retention and completion. In addition, the college plans to relocate the Institute from the Orchard Ridge campus to a new facility on the Royal Oak campus where it will contribute to the thriving downtown community. Work has begun on a significant redesign of the Nursing program where instruction will be enhanced with increased use of simulation technology and the integration of nursing concepts into every course. These modifications require renovation of existing instructional facilities located at the Highland Lakes campus.

 Recognizing the importance of a global economy and diverse community in Oakland County the college has established a global literacy endorsement. Students in any program can earn the endorsement by participating in a combination of academic courses, life experiences, and local events and activities, all with a global focus. The endorsement helps students develop the competencies necessary to see the world from different perspectives, navigate cultural difference with curiosity, empathy, and humility, and develop the knowledge, skills, and attitudes needed to succeed in a connected world.

In response to the rapid growth of online education, and in fulfilling our mission the college adheres to strict standards with regard to distance learning and has been recognized as a Quality Matters institution. In addition to offering more than 30 courses online, the College offers an online program in Criminal Justice and is developing additional online programs in Business Intelligence, Fire Fighter Technology, and Library Technician (the state's only such program).

Academic Mission for Degree and Certificate Technical Education

The college's 85 career and technical certificate and degree programs are designed to prepare individuals for entry-level employment, acquire professional certification, as well as prepare students to pursue advanced degrees at a four-year institution. In order to optimize student success in these areas it's necessary to ensure that the curricular focus of these programs remain aligned with employer needs, accrediting agency requirements and transfer institution expectations.

To this end the college requires that all degree and certificate programs undergo a comprehensive review once every five years. This internal review process results in a series of action strategies that guide curricular revision, pedagogical modification, capital spending and facility improvement.

Currently 17 career and technical programs are accredited by their professional organization, while 7 additional programs are in the process of seeking external recognition. External validation of our career and technical programs helps to ensure that our programs are in alignment with academic and professional standards that guide the best practices of each profession.

Workforce Development Activities

The college provides a wide range of support services to public and private sector organizations that contribute to the development of an agile and skilled workforce that brings new ideas and creativity to a rapidly changing market and work environment. These services lead towards alignment of employee skills with business goals and objectives.

The college is working with companies to deliver contract training through the <u>Michigan New</u> <u>Jobs Training Program (MNJTP)</u>, which helps community colleges provide training for local employers that are creating new jobs and/or expanding operations in Michigan.

Current Workforce development activities also include:

- The <u>Going PRO Talent Fund</u> (formerly the Skilled Trades Training Fund, or STTF). The Talent Fund helps employers train, develop, and retain current and newly hired employees through programs that focus on industry-recognized, transferable skills leading to a credential.
- <u>America's Promise Catalyst Program</u>, which is funded by the U.S. Department of Labor's Employment and Training Division managed by the Workforce Intelligence Network for Southeast Michigan (WIN) and its partners. Advance Michigan Catalyst aims to train unemployed and underemployed residents of Southeast Michigan to prepare them for careers in robotics and automation. The grant's training industry focus includes robotics technicians and engineers, CAD, CNC/CCMTO technicians, mechatronics, photonics, industrial maintenance, electro-mechanical, industrial and mechanical engineering technicians, commercial/industrial designers and robotic welders/soldering.
- The college is reaching out to professional associations like <u>SME (Society of</u> <u>Manufacturing Engineers)</u>, <u>SAE (Society of Automotive Engineers)</u>, and various labor unions to develop working relationships that lead to new training opportunities. Collaboration alleviates the need for these organizations to offer parallel or duplicative training programs.

Continuing and Lifelong Educational Programming

Continuing Education (CE) courses offered by the College provide individuals with opportunities to enhance their career and personal skill sets. Course offerings such as PMP (Project Management Professional) certification, Excel, grant writing, motorcycle safety, financial literacy, photography, and computer literacy promote professional and personal growth for learners at all stages of their lives.

The college offers continuing education programming in four areas under the Michigan Works! grant, including:

- <u>PowerPath to Education and Employment</u> PowerPath is a program that engages individuals in thinking about how they learn and identifying their strengths and challenges that affect how they process information.
- <u>Career Pathways Development</u> Working with education, community, and regional partners, the College is developing pathways in industry clusters (i.e. advanced manufacturing) that enable individuals to navigate the career cluster, including multiple entry and exit points. Short-term training programs help individuals be "work-ready" for indemand careers in business and industry in the area and region.
- 3. <u>Employer Engagement</u> The College engages with employers and builds relationships to create job training and career pathway programs that meet labor demand.
- 4. <u>Professional Development</u> The College provides and/or facilitates professional development training for Oakland County Michigan Works! Staff members. Working with the liaison for Michigan Works! to determine training needs, sessions that have occurred this past grant year include: Handling Active Shooter Situations in the Career Centers, Team Building, and Managing Change.
 - Working with McLaren Health Care the college will soon launch new non-credit programs in Certified Nursing Assistant (CNA) and Patient Care Technician.

Community Activities

The college is engaged in community outreach activities that provide resources for students and community members, while helping to determine relevant programming. The College sponsors outreach activities that engage the community in social, cultural and educational enrichment. A sampling of these activities include events sponsored by Workforce Development, Student Life, the Culinary Arts Institute, Athletics and Theatre.

Service Delivery Area

Oakland Community College is a multi-campus, two-year comprehensive institution of higher education serving all of Oakland County. The College opened in September 1965, with a record community college enrollment of 3,860 students on two campuses - Highland Lakes, a renovated hospital in what was Union Lake, and Auburn Hills, a former Army Nike missile site in what was Auburn Heights. In September 1967, the award-winning Orchard Ridge Campus opened. First housed in leased facilities in Oak Park, the Southeast Campus System expanded through the purchase and remodeling of buildings at a second site in Royal Oak. In 1980, the Oak Park facilities were replaced by a new campus in Southfield. The Royal Oak buildings were replaced by a new campus which opened in the fall of 1982.

In academic year 2017-18 approximately 84% of students were residents of Oakland County, while the remaining 16% resided out-side of the county. The Highland Lakes campus located in Waterford has the highest proportion (92%) of in-district students, while the Southfield campus had the highest (27%) of out-of-district students.

Partnerships with Intermediate School Districts

Currently OCC has CTE articulation agreements with 34 area school districts each covering up to 14 OCC courses. These agreements offer students the opportunity to earn college credit while enrolled in state approved technical programs while still in high school. Additionally the college supports several early college and dual enrollment programs including:

- Oakland Early College
- Oakland Accelerated College Experience
- Oakland technical Early College
- Detroit Promise Path
- Farmington ELL College Readiness
- Hazel Park Promise Zone
- NILES Dual Enrollment
- Pontiac Dual Enrollment
- Southfield Dual Enrollment
- Troy Schools Dual Enrollment
- Walled Lake College Readiness
- West Bloomfield Early College

The Oakland Early College is a unique program insofar that it is physically located on the Orchard Ridge campus which offers a broader college experience than the other programs. Additionally, in recognition of the critical role these programs have on student success the College is seeking to hire a Director of Secondary School Initiatives who will oversee and coordinate all such programs college-wide.

Articulation and Partnership Agreements with Four-Year Institutions

In order to assist students who wish to pursue advanced study at a four-year institution the College maintains over 52 articulation agreements with 18 post-secondary institutions that cover 216 transfer pathways. These agreements provide for the smooth transfer of course credits earned at OCC and avoids unnecessary repeating of courses at the four-year institution. As a result students are able to complete their advanced study in a more cost effective and timely manner.

Other Initiatives

OCC serves a large geographic region that is economically, demographically and socially diverse and ever changing. With unemployment at historically low levels and a declining high school age population the college has taken steps to restructure administrative and academic offerings while at the same time implementing new technologies to better serve students and the community. The consolidation of academic programs, centralization and modernization of administrative processes, changes in pedagogy, as well as the formation of public and private partnerships are directly impacting the utilization of facilities college-wide.

Multiple outside organizations have a physical presents at OCC. These organizations include:

- Asian Pacific American Chamber of commerce (Orchard Ridge)
- Counsel Core of Michigan (Orchard Ridge)
- Educated Business resource Corporation (Auburn Hills)
- Ferris State University (Auburn Hills)
- Small Business Development Center (Royal Oak)
- Walsh College (Orchard Ridge)
- Wayne State University (Orchard Ridge)

Economic Impact

While nearly 85 percent of OCC students live within the county, work commuting patterns indicate that students work throughout southeast Michigan. As a result, when considering labor market needs, the College examines data from a seven county region: Oakland, Genesee, Lapeer, Livingston, Macomb, Washtenaw, and Wayne Counties. More specifically related to available occupations and college programming, within this region, there are an estimated 149,726 annual job openings across all occupations and education levels. When focusing on just those occupations most likely to need some post-secondary education but less than a bachelor's degree, there are approximately 73,889 job openings projected each year for the next five years in the region (based on the typical distribution educational requirements requested by employers). The college offers programs which prepare individuals for approximately 14,020 of these anticipated job openings.

In addition to considering the local economy, OCC also believes it is important to consider the regional supply in addition to demand; in other words, while there are approximately 14,000 job openings related to programs OCC offers, the regional competition is also supplying graduates for many of the same occupations. Based on regional supply, OCC considers community need to be greatest within the following programs:

- 1. General Accounting
- 2. Library Technician
- 3. Technological Sciences
- 4. International Commerce
- 5. Welding Technology
- 6. Hotel / Motel Management
- 7. Culinary Arts
- 8. Dental Hygiene
- 9. Fire Academy

Sources: Economic Modeling Specialist International; Oakland County Economic Outlook 2017-2022; OCC Institutional Effectiveness 2017

Section III

Staffing and Enrollment

Staffing and Enrollment

Of the 15,779 students enrolled at OCC during fall 2018, 25.4% are considered full-time (taking 12 or more credit hours), while 50.2% are taking between 5 to 11 credit hours and 24.4% are enrolled in four or fewer credit hours. While the majority of students are part-time, the College seeks to optimize scheduling in an effort to accelerate a student's progress through their program of study. Program courses are scheduled so that full time students can complete their degree in normal time, while part-time students are able to complete their program in the most expedient timeframe.

A wide variety of programs are offered at each of the College's five campuses. In academic year 2017-18 enrollment was highest at the Auburn Hills campus which offered coursework in 66 subject areas. Enrollment in Mathematics, English, Computer Information Systems, Biology, Criminal Justice, Psychology, Business and Computer Aided Design accounted for slightly more than half of total credit hour enrollment at the auburn Hills campus.

As the College's second largest campus, Orchard Ridge located in Farmington Hills offers courses in 45 unique subject areas. During 2017-18 approximately half of total credit hour enrollment were in Mathematics, English, Biology, Computer Information Systems, Psychology and English as a Second Language.

The Royal Oak campus located in downtown Royal Oak offers courses in 35 subject areas and is considered to be OCC's third largest campus. During 2017-18 half of total credit hour enrollment on the campus were in Mathematics, English, Psychology and English as a Second Language.

In 2017-18 the Highland Lakes campus located in Waterford offered courses in 35 subject areas of which half of total credit hours were in Mathematics, Nursing, English, biology and Psychology.

The Southfield campus offers course work in 34 subject areas. In 2017-18 credit hour enrollment in four disciplines (Biology, English, Mathematics and Chemistry) comprised nearly half of total enrollment at the campus.

Enrollment Projections

Primarily driven by historically low unemployment and the stagnant to declining high school age population in Oakland County, the college is projecting an 8% enrollment decline during academic year 2018-19 with an additional 6% decline in 2019-20. Beyond this point projections are much less reliable, however the College is anticipating that the decline in enrollment will stabilize over the next three to five years.

Enrollment Patterns

Between 2013-14 and 2017-18 annual credit hour enrollment declined by 36.6 percent. The steepness of the drop is relative to an unnaturally high enrollment spike seen during recession years followed by historically low unemployment rates and the declining college age population in the county.

In fall 2017 class size averaged 22.6 students which was down slightly from the prior year (22.7), but up from fall 2015 when there was an average of 22.2 students per section.

Instructional Staff/Student and Administrative Staff/Student Ratios

The college employs full-time faculty in all its programs and disciplines in order to maintain the quality of curricular offerings. Moreover, faculty hiring decisions are guided by a statistical model which helps to ensure that full-time faculty positions are balanced across all campuses and in all disciplines in relation to trends in instructional credit hours.

Projected Staffing Needs

During fall 2018, 1,648 academic, administrative and support staff were employed at OCC. Of these staff:

- 240 were full time and 577 were adjunct faculty.
- 53 administrative and 108 management staff
- 211 classified
- 77 student workers and 160 tutors
- The remaining 222 are comprised of public safety, operating engineers, maintenance and other support staff.

Given current economic and demographic trends in southeast Michigan the college projects that enrollment will continue to decline, although at a slower rate than what has been experienced in recent years. As a result, the college believes current staffing levels are adequate and will make adjustments as conditions warrant.

Average Class Size

Oakland Community College is committed to empowering student success and advancing our community. In part the accomplishment of this mission is achieved by keeping class sizes low with a maximum of 30 students per section and reduces enrollment further in select course sections to address high-risk populations, accreditation standards and facilities limitations. Using these enrollment limits is seen in the College's average class size of 21.9 students during academic year 2017-18. Having just reaffirmed this mission the College plans to continue with these class size targets for the foreseeable future.

Section IV

Facility Assessment

Facility Assessment

A comprehensive facility condition assessment was completed by ISES Corporation in August 2017. This report was performed to accomplish the following objectives:

- Provide an inventory of the college's facilities in a database format to be easily updated and maintained by OCC personnel and allow for quick access to facilities information.
- Determine the condition of the buildings and grounds at OCC and provide the data in a concise format, allowing quick determination of the current replacement value and condition of each facility.
- Determine a Facilities Condition Index (FCI) for each building, each campus and OCC as a whole. The FCI is a benchmark index that rates the condition of existing college buildings and is used by the facilities managers nationwide to quantify and prioritize deferred maintenance projects for capital planning purposes.
- Assist OCC in meeting the goals of its Mission Statement through timely maintenance of the physical backbone of the college – the buildings of OCC.

The following reports (included herein) were prepared by ISES Corporation.

- 1. ISES Executive Summary Facility Condition Assessment
 - Identifies the summary condition of each facility
 - Replacement value of existing buildings
 - Utility system conditions

OAKLAND COMMUNITY COLLEGE Executive Summary

Facility & Utility Condition Assessments August 2017

> OAKLAND COMMUNITY COLLEGE Community is our middle name. ®



Table of Contents

SECTION 1: OVERVIEW	1
Project Summary	1
Definitions	4
Calculations	7
SECTION 2: SUMMARY OF FINDINGS	
Facility Condition Assessments	
Total 10-Year Renewal Costs	9
FCNI and FCI Calculations	
Renewal Costs Matrices	
All Buildings	16
Auburn Hills	17
District Offices	
Highland Lakes	
Orchard Ridge	20
Royal Oak	21
Southfield	22
Renewal Costs by System Code	23
Renewal Costs by Classification	25
Renewal Costs by Priority	26

Utility Condition Assessments

General Utility Condition	27
Total 10-Year Renewal Costs by Utility	28
Renewal Costs Matrix (All Utilities)	30

Table of Contents

SECTION 3:	AMS FINANCIAL MODELING	31
FCNI Projections		.31
Reinvestment Rate	es	.31

SECTION 4:	CONCLUSIONS	

SECTION 5:	APPENDICES	
Appendix A – Bui	lding List by Building Number	34
Appendix B – Buil	lding List by FCNI	
Appendix C – FCN	II Comparison	43
Appendix D – AM	IS Database Functionality	44

OVERVIEW

Project Summary

In February and March of 2017, Oakland Community College (OCC) contracted with ISES Corporation to perform comprehensive Facility Condition Assessment (FCA) and Utility Condition Assessment (UCA) services for its Auburn Hills, District Office, Highland Lakes, Orchard Ridge, Royal Oak, and Southfield campuses. The overall FCA effort included 73 buildings encompassing 2.1 million square feet of general education, administrative, infrastructure, athletics, and support space. In addition, 40 utility infrastructure assets were assessed as part of the UCA and include heating and chilled water generation and distribution, high voltage electrical, potable and fire water, and sanitary and stormwater systems. Four additional buildings were also inspected as part of the UCA, bringing the total number of buildings inspected to 77.

Twenty-two percent of the 73 inspected buildings (16) are in below average to poor condition. The average FCNI of these 16 buildings is 0.40, which suggests that there are significant renewal needs in these buildings. Furthermore, the average FCI of these 16 buildings, which is a measure of just Deferred Renewal, is 0.15 and well within the poor rating. The overall FCI for all of the facilities inspected by ISES is 0.07. This means that, beyond just the amount of system renewal needed across the buildings, a significant portion of these systems are considered past due for renewal. It is worth noting that the Facilities Operations department and the Chiefs for the Campus Facility Operations at each campus have done an admirable job of keeping these systems operational. Subsequent sections of this report will define these terms and present the relevant data to help OCC determine where resources are most needed.

Construction Dates

Over 49 percent of the square footage (29 buildings) was built before 1980. The vast majority of these older facilities are located on the Auburn Hills, Highland Lakes, and Orchard Ridge campuses.





Facility Usage Types

The following table shows the usage types of the inspected buildings.

USAGE TYPE	BUILDING COUNT	SQUARE FOOTAGE	PERCENT OF TOTAL (%)
Classroom/Academic (CL)	23	822,307	38.6
Parking/Garage (PK)	2	330,975	15.5
Laboratory (LB)	7	270,363	12.7
Student Union (SU)	3	186,276	8.7
Office/Administrative (OF)	7	178,845	8.4
Gymnasium/Athletics (GM)	4	152,788	7.2
Library (LY)	2	51,063	2.4
Theater/Auditorium (TH)	2	43,383	2.0
Warehouse/Storage/Utility (WH)	12	34,549	1.6
Retail (RT)	2	32,909	1.5
Shops/Trade (ST)	4	13,272	0.6
Residential/Single Family (RS)	3	6,573	0.3
Child Care (CC)	1	3,491	0.2
Dormitory/Apartments (DM)	1	3,415	0.2
TOTAL	73	2,130,209	

FCA Inspections

Extensive experience with asset surveys has led ISES to develop a standardized system of data collection that efficiently and effectively utilizes the time spent in each building. Each asset was inspected by a two-person team, which consisted of experienced architectural and engineering inspectors. They inspected the various components in each building and determined what repairs or modifications are necessary to restore the systems and buildings to an acceptable condition, or to a level defined by the college. The team typically starts on the roof, or the highest accessible level, and proceeds to the lowest level, inspecting each of the discrete building categories as the building is walked.

The assessment is an evaluation of the mechanical, electrical and plumbing systems, structural architectural components, vertical transportation systems, and utilities as they relate to each asset in the study. Exterior equipment obviously associated with a building, such as a pad-mounted chiller or loading dock service lot, is



included in the assessment. In addition, the recommendations developed within the reports generated by Carl Walker for the condition of the North and South Parking Structures at the Royal Oak campus have been incorporated into this analysis.

An ISES FCA complies fully with ASTM E2018-15. It includes an evaluation of resource conservation opportunities and addresses compliance with the ADA Accessibility Guidelines. All accessible equipment and building components receive a thorough visual inspection. The inspection team lifts ceiling tiles in suspended ceilings and opens access doors to reveal hidden equipment and building components that are integral to the survey.

The visual nature of this inspection process requires close interaction with your operations and maintenance personnel. Many of the problems inherent in building systems are not visually apparent. ISES field assessors conducted staff interviews to ensure that all known system problems were cataloged and identified. Working as a team with your personnel improves the accuracy of the database and provides the most useful data. Historical documents, building and utility drawings, and the current and previous year's water treatment services were reviewed.

Contacts

Oakland Community College

Dan P. Cherewick Director, Physical Facilities

ISES Corporation

Rob Camperlino Project Manager



Definitions

Facility Renewal Needs

Facility renewal needs are identified during the field inspections and result in recommendations that are intended to bring facilities up to like-new standards and condition. Renewal recommendations can also enhance user safety and mitigate college liability. They replenish the lifecycle of existing assets but do not include updates related to departmental space or program use changes, system replacements as a reaction to failure, or specialized program-related equipment. Routine facilities maintenance and repair activities are also not considered to be facilities renewal efforts.

Recurring vs. Nonrecurring Renewal Needs

Facility renewal needs are divided into two main categories – recurring and nonrecurring. Recurring needs are cyclical and associated with replacement (or renewal) of building components and systems. Examples include roofs, chillers, windows, finishes and air handling units. The tool for projecting the recurring renewal costs is the Lifecycle Component Inventory. Each component has an associated renewal cost, installation date and life expectancy. From this data, a detailed projection of recurring renewal needs is developed for each building. These needs are categorized by UNIFORMAT II classification codes (down to Level 4). The result is a detailed year-by-year projection of recurring renewal needs for a given asset.

Nonrecurring needs pertain to one-time facility repairs and improvements. They typically consist of improvements to accommodate accessibility, address fire life/safety issues, or alter a building for a new use. They also include deficiencies that could negatively affect the structure or systems and components within. For these needs, recommendations are developed with estimated costs to rectify said deficiency. They each have a unique project number and are categorized by system, priority, and classification. The costs are indexed to local conditions and markups applied as the situation dictates. Examples of such needs are repair of building facade damage or a roof section or installing an ADA entrance ramp.

Renewal Need Categories

Renewal needs are divided into appropriate categories, as well as multiple systems, components, and elements within each category. Categories in this study include:

- Immediate Building Site
- Exterior Structure and Roof Systems
- Interior Structure, including Architectural Finishes
- ADA Accessibility
- Energy/Water Conservation
- Health Hazards

- Fire/Life Safety
- Heating, Ventilation, and Air Conditioning Systems
- Plumbing System
- Electrical System
- Vertical Transportation



Recurring Renewal Need Classifications (generated by the Lifecycle Component Inventory)

Deferred Renewal

Recurring needs that are past due for completion and have not yet been accomplished as part of normal maintenance or capital repair efforts. Further deferral of such renewal could impair the proper functioning of the facility. Costs estimated for Deferred Renewal needs should include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to affect the needed repairs.

Projected Renewal

Recurring renewal needs that will be due within the scope of the assessment. These represent regular or normal facility maintenance, repair, or renovation that should be planned in the near future.

Nonrecurring Renewal Need Classifications (stored in the Projects module)

Plant Adaption

Nonrecurring expenditures required to adapt the physical plant to the evolving needs of the organization and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g., accessibility), facility alterations required by changing teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).

Corrective Action

Nonrecurring expenditures for repairs needed to correct random and unpredictable deficiencies that could have an effect on building aesthetics, safety, or usability. Such recommendations are not related to aligning a building with codes or standards.



Prioritization of Nonrecurring Renewal Needs

Recurring renewal needs do not receive individual prioritization, as the entire data set of needs in this category is year-based. Each separate component has a distinct need year, rendering further prioritization unnecessary. Each nonrecurring renewal need, however, has a priority assigned to indicate the criticality of the recommended work. The prioritization utilized for this subset of the data is as follows.

Immediate

Items in this category require immediate action to:

- a. correct a cited safety hazard
- b. stop accelerated deterioration
- c. and/or return a facility to normal operation

Critical

Items in this category include actions that must be addressed in the short-term:

- a. repairs to prevent further deterioration
- b. improvements to facilities associated with critical accessibility needs
- c. potential safety hazards

Noncritical

Items in this category include:

- a. improvements to facilities associated with noncritical accessibility needs
- b. actions to bring a facility into compliance with current building codes as grandfather clauses expire
- c. actions to improve the usability of a facility following an occupancy or use change



Calculations

Current Replacement Value

ISES traditionally calculates Current Replacement Value (CRV) using a cost per gross square foot based on building size and use (e.g. theater, research lab, classroom building, etc.). R.S. Means Section Square Foot costs are used as the starting point. This base number is adjusted for the size of the facility and modified with city cost indices to the local area, with appropriate modifiers for professional fees and demolition of existing structure added. Our standard methodology will prorate the base cost per GSF based on different use types in a building.

Traditional methods of calculating CRV do not take into account the historic significance of a structure. Replacement of a historic structure would only occur in the event of a catastrophic loss of said building. In such occurrences, the normal practice ISES observes is to construct modern facilities that meet the site/campus architectural standards rather than attempt to mimic the historical construction style that has been lost. Calculated CRVs are updated automatically in the AMS software when the annual inflation factor is added to the database.

Facility Condition Index

The Facility Condition Index (FCI) provides a relative measure for an objective comparison of building condition. This is a simple calculation derived by dividing the Deferred Renewal needs by the CRV. The following standards can be applied to assess where a facility falls within a range of conditions.







Facility Condition Needs Index

The Facility Condition Needs Index (FCNI) provides a lifecycle cost comparison. It is a ratio of the 10-year renewal needs (including Deferred Renewal) to the current replacement value of the asset.

The FCNI can be employed at multiple levels for analysis. It is most commonly used to compare buildings to other buildings. The index can be used as an evaluation tool when applying it to a single facility. The lower the FCNI, the better the facility condition. It should also be noted that this is an index, not a percentage. It can, especially in the case of historic facilities, exceed 1.00.

In terms of assessing where a facility falls within a range of conditions, the following standards can be applied.



The above ranges represent averages based upon our extensive FCA experience. The reader is cautioned, however, to examine each facility independently for mitigating factors (i.e., historic structures, temporary structures, facilities with abnormally low replacement costs, such as warehouses, etc.).

The FCNI can also be used for comparing groups of facilities to other groupings, including entire campuses. Comparisons in this vein form the basis of analysis for comparing the overall state of facilities to another comparable grouping. Note that the above ranges *do not* apply to multiple facilities. Variability among groups of buildings is reduced further as sample sets get larger. You can see how your institution ranks among other institutions in Appendix C.



SUMMARY OF FINDINGS

Facility Condition Assessments

All data related to the FCAs was developed in, and is contained within, the ISES AMS (Asset Management System) database. ISES hosts this database system on our servers, and college personnel have access to the system via the Internet. The database is available for ongoing use by the facilities management team.

Total 10-Year Renewal Costs

As illustrated below, the FCA effort identified \$152 million in nonrecurring projects and recurring renewal needs that should be addressed across all campuses over the next 10 years. Recurring renewal needs total more than \$134 million, with the remaining \$18 million being nonrecurring Plant Adaption or Corrective Action projects. Of the recurring costs, Deferred Renewal needs total \$49 million, which is 32 percent of the total 10-year renewal costs.



The charts on the following pages show the renewal cost breakdowns for each campus.



Summary of Findings

Auburn Hills



District Offices





Highland Lakes



Orchard Ridge





Summary of Findings

Royal Oak



Southfield





FCNI and FCI Calculations

FCNI
$$\frac{10 \text{-Year Renewal Needs}}{\text{Current Replacement Value}} = \frac{\$152,046,633}{\$703,295,615} = 0.22$$
FCI
$$\frac{\text{Deferred Renewal Needs}}{\text{Current Replacement Value}} = \frac{\$49,100,650}{\$703,295,615} = 0.07$$

The average FCNI of the 73 inspected buildings is 0.22. Although this is in line with the ISES average of 0.24 (as amassed by 30 years of ISES clients), the high average FCI of 0.07 suggests that there is a significant amount of Deferred Renewal across the campuses and that they are underfunded relative to the national average. This underfunding of colleges and universities is not isolated to the State of Michigan but is systemic problem nationally. As funding becomes limited or is removed altogether, one of the first items removed from annual budgets is resources for continued maintenance and staffing. Limited funding places significant strain on the facilities operations and campus facility operations to try to maintain the operational reliability of aging systems. The lack of funded preventative maintenance programs will reduce the reliable service life of equipment and systems.

Several factors beyond limited funding have a significant impact on the overall and individual campus condition indices and general conditions. The overall age of the assets, particularly at the Auburn Hills, Highland Lakes, and Orchard Ridge campuses, is certainly a factor. Also, several unique assets, such as the Earl M. Anderson facility at Auburn Hills and Tirrell Hall at Orchard Ridge, require significant major repairs over the forecast 10-year period, affecting the needs for the system as a whole.

As stated earlier, the high FCI calculation suggests OCC needs to look at major renovations. Twenty-seven of the 37 buildings constructed before 1981, constituting 41 percent of the inspected square footage, are considered to be in fair to poor condition, and many of the major systems in those buildings were assessed to be original. Planned renovations in the 16 poor and below average buildings will help reduce these major backlogs and will improve the overall campus condition and ratings.

The information on the following pages highlights the needs by campus. These statistics reveal that the areas in most need of an influx of capital are Orchard Ridge and Auburn Hills.



OAKLAND COMMUNITY COLLEGE

				1 C
	hu	rn	ыл	IC.
$\nabla \mathbf{U}$	$\mathbf{D}\mathbf{U}$			13
_				

FCNI	10-Year Renewal Needs Current Replacement Value	=	\$54,030,048 \$214,082,835	=	0.25
FCI	Deferred Renewal Needs Current Replacement Value	- = -	\$18,990,497 \$214,082,835	=	0.09
District Offic	ces				
FCNI	10-Year Renewal Needs Current Replacement Value		\$2,493,356 \$11,227,000	=	0.22
FCI	Deferred Renewal Needs Current Replacement Value	=	\$341,533 \$11,227,000	=	0.03
Highland Lo	akes				
FCNI	10-Year Renewal Needs Current Replacement Value	=	\$15,332,518 \$122,177,228	=	0.13
FCI	Deferred Renewal Needs Current Replacement Value	- = -	\$1,804,997 \$122,177,228	=	0.01
Orchard Rid	dge				
FCNI	10-Year Renewal Needs Current Replacement Value	- = -	\$55,651,756 \$192,003,000	=	0.29
FCI	Deferred Renewal Needs Current Replacement Value	=	\$25,084,078 \$192,003,000	=	0.13



Royal Oak

FCNI -	10-Year Renewal Needs		\$17,837,636	- =	0 20
	Current Replacement Value		\$91,251,000		0.20
FCI	Deferred Renewal Needs Current Replacement Value	=	\$2,701,443 \$91,251,000	- =	0.03
Southfield					
FCNI	10-Year Renewal Needs Current Replacement Value	- = -	\$6,701,319 \$72,555,552	=	0.09
			. , .		
ECI	Deferred Renewal Needs	_	\$178,102		0 00
FCI	Current Replacement Value	_	\$72,555,552	_	0.00

The following tables provide a detailed breakdown of all renewal needs listed by system, priority class (nonrecurring), and year (recurring), with totals for each category. There is one for all of the FCA buildings across all campuses and one for each campus.



RENEWAL COSTS MATRIX

All dollars shown as Present Value

CATEGORY	N F	IONRECURRING PROJECT NEEDS		RECURRING COMPONENT REPLACEMENT NEEDS											
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	615,219	1,600,029	0	0	0	0	0	0	0	0	0	0	0	\$2,215,248
EXTERIOR	1,263,750	857,292	1,941,633	6,157,887	103,652	3,233,629	1,866,312	2,530,659	1,424,054	2,146,900	917,935	46,400	399,454	1,025,234	\$23,914,792
INTERIOR	0	861	27,793	6,287,695	1,734,150	659,889	787,429	4,390,236	615,717	4,055,116	507,968	1,073,120	1,449,167	1,660,738	\$23,249,878
PLUMBING	0	35,739	0	930,741	4,531,805	371,732	74,372	2,101,625	6,472	47,233	20,817	41,714	854,488	7,799	\$9,024,536
HVAC	0	0	0	23,902,676	384,868	237,788	41,299	2,910,536	582,423	3,637,698	1,532,124	1,219,633	9,324,315	2,638,602	\$46,411,962
FIRE/LIFE SAFETY	27,847	129,783	9,831,115	620,671	53,859	191,669	0	92,555	0	974,843	1,372,532	470,426	157,540	3,536,207	\$17,459,046
ELECTRICAL	0	0	1,307,548	7,881,159	3,450,053	659,339	156,494	5,171,144	179,489	438,513	401,519	790,325	3,369,764	165,369	\$23,970,717
SITE	0	0	126,148	76,567	0	0	0	46,436	0	100,367	0	0	62,886	0	\$412,404
VERT. TRANS.	0	0	0	3,176,664	0	0	0	0	0	252,656	252,656	0	252,656	0	\$3,934,631
HEALTH/EQUIP.	0	0	19,886	66,590	0	0	0	0	0	0	19,026	0	1,347,917	0	\$1,453,419
SUBTOTAL	\$1,291,597	\$1,638,894	\$14,854,152	\$49,100,650	\$10,258,386	\$5,354,045	\$2,925,905	\$17,243,190	\$2,808,155	\$11,653,326	\$5,024,575	\$3,641,617	\$17,218,188	\$9,033,950	\$152,046,633
TOTAL NONRECURRING PROJECT NEEDS \$17,784,644 TOTAL RECURRING COMPONENT REPLACEMENT NEEDS \$134,261,989															

CURRENT REPLACEMENT VALUE FACILITY CONDITION NEEDS INDEX	\$703,296,615 0.22	GSF	TOTAL 10-YEAR FACILITY NEEDS	10-YEAR NEEDS/SF
FACILITY CONDITION INDEX	0.07	2,130,209	\$152,046,633	71.38


CATEGORY	N F	IONRECURRING PROJECT NEEDS		RECURRING COMPONENT REPLACEMENT NEEDS											
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	106,771	396,558	0	0	0	0	0	0	0	0	0	0	0	\$503,329
EXTERIOR	0	0	46,649	584,080	0	1,320,216	914,138	1,215,002	627,223	584,436	479,637	31,386	349,523	611,552	\$6,763,843
INTERIOR	0	0	0	1,143,959	47,302	41,411	40,899	1,945,892	15,465	423,692	411,050	78,523	976,353	1,569,883	\$6,694,429
PLUMBING	0	0	0	257,068	4,943	23,467	0	2,100,139	6,472	25,824	11,511	23,309	761,416	3,226	\$3,217,376
HVAC	0	0	0	10,232,741	15,593	162,063	14,715	2,036,152	74,533	24,709	766,021	51,604	3,003,253	312,487	\$16,693,871
FIRE/LIFE SAFETY	0	20,373	1,164,240	419,359	0	191,669	0	92,555	0	0	998,439	0	0	710,871	\$3,597,505
ELECTRICAL	0	0	798,920	5,049,672	20,403	596,243	12,025	4,994,420	44,666	229,850	263,495	13,990	2,427,001	12,025	\$14,462,709
SITE	0	0	51,171	40,340	0	0	0	40,549	0	100,367	0	0	62,886	0	\$295,313
VERT. TRANS.	0	0	0	1,263,279	0	0	0	0	0	0	252,656	0	252,656	0	\$1,768,591
HEALTH/EQUIP.	0	0	14,056	0	0	0	0	0	0	0	19,026	0	0	0	\$33,081
SUBTOTAL	\$0	\$127,145	\$2,471,593	\$18,990,497	\$88,241	\$2,335,069	\$981,777	\$12,424,710	\$768,359	\$1,388,879	\$3,201,835	\$198,812	\$7,833,088	\$3,220,044	\$54,030,048
TOTAL	TOTAL NONRECURRING PROJECT NEEDS \$2,598,		\$2,598,737						TOTAL REC		ONENT REPLA	CEMENT NEE	DS	\$51,431,311	

CURRENT REPLACEMENT VALUE	\$214,082,835	GSF	TOTAL 10-YEAR	10-YEAR NEEDS/SF
FACILITY CONDITION NEEDS INDEX	0.25		FACILITY NEEDS	
FACILITY CONDITION INDEX	0.09	619,653	\$54,030,048	87.19



Cost Summaries and Totals

RENEWAL COSTS MATRIX

CATEGORY	N F	IONRECURRING PROJECT NEEDS	i .	RECURRING COMPONENT REPLACEMENT NEEDS											
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	23,368	18,419	0	0	0	0	0	0	0	0	0	0	0	\$41,787
EXTERIOR	0	0	0	10,634	42,134	475,713	0	0	0	0	0	0	0	0	\$528,481
INTERIOR	0	0	0	201,107	0	0	0	1,210	0	0	0	354,293	96,837	0	\$653,446
PLUMBING	0	0	0	37,494	0	0	0	0	0	0	0	2,095	2,601	0	\$42,189
HVAC	0	0	0	0	0	0	0	41,209	0	123,233	0	0	8,849	144,455	\$317,746
FIRE/LIFE SAFETY	0	7,662	0	0	0	0	0	0	0	0	0	0	157,540	0	\$165,202
ELECTRICAL	0	0	0	92,298	0	1,417	15,086	0	0	96,476	0	359,863	139,280	0	\$704,421
SITE	0	0	40,083	0	0	0	0	0	0	0	0	0	0	0	\$40,083
VERT. TRANS.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
HEALTH/EQUIP.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
SUBTOTAL	\$0	\$31,030	\$58,502	\$341,533	\$42,134	\$477,129	\$15,086	\$42,419	\$0	\$219,710	\$0	\$716,250	\$405,106	\$144,455	\$2,493,356
TOTAL	TOTAL NONRECURRING PROJECT NEEDS \$89		\$89,532						TOTAL REC		ONENT REPLA		DS	\$2,403,824	

CURRENT REPLACEMENT VALUE FACILITY CONDITION NEEDS INDEX	\$11,227,000 0.22	GSF	TOTAL 10-YEAR FACILITY NEEDS	10-YEAR NEEDS/SF
FACILITY CONDITION INDEX	0.03	31,119	\$2,493,356	80.12



CATEGORY	N F	IONRECURRING PROJECT NEEDS	i i	RECURRING COMPONENT REPLACEMENT NEEDS											
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	176,707	146,744	0	0	0	0	0	0	0	0	0	0	0	\$323,451
EXTERIOR	0	0	169,690	31,131	0	111,277	0	456,856	499,048	388,310	438,297	14,454	8,034	403,178	\$2,520,277
INTERIOR	0	0	27,793	236,071	906,314	45,759	0	1,697,887	0	697,398	0	380,482	32,921	0	\$4,024,626
PLUMBING	0	7,966	0	127,882	0	976	0	0	0	0	8,330	0	0	3,241	\$148,395
HVAC	0	0	0	225,937	0	6,890	0	0	0	1,215,107	239,665	534,333	24,831	1,121,208	\$3,367,971
FIRE/LIFE SAFETY	0	6,518	1,726,907	201,313	0	0	0	0	0	0	0	470,426	0	548,739	\$2,953,903
ELECTRICAL	0	0	508,629	368,705	32,475	29,134	0	26,047	38,828	7,713	106,126	110,577	19,572	120,526	\$1,368,331
SITE	0	0	5,719	0	0	0	0	5,887	0	0	0	0	0	0	\$11,606
VERT. TRANS.	0	0	0	613,959	0	0	0	0	0	0	0	0	0	0	\$613,959
HEALTH/EQUIP.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
SUBTOTAL	\$0	\$191,192	\$2,585,482	\$1,804,997	\$938,789	\$194,036	\$0	\$2,186,677	\$537,876	\$2,308,529	\$792,417	\$1,510,272	\$85,357	\$2,196,892	\$15,332,518
TOTAL	TOTAL NONRECURRING PROJECT NEEDS \$2,776		\$2,776,674						TOTAL REC	URRING COMP	ONENT REPLA	CEMENT NEE	DS	\$12,555,844	

	\$122,177,228	GSF	TOTAL 10-YEAR FACILITY NEEDS	10-YEAR NEEDS/S
FACILITY CONDITION INDEX	0.01	307,367	\$15,332,518	49.88



CATEGORY	N F	ONRECURRING	i I	RECURRING COMPONENT REPLACEMENT NEEDS											
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	285,983	796,657	0	0	0	0	0	0	0	0	0	0	0	\$1,082,640
EXTERIOR	0	88,932	63,200	4,678,172	61,518	728,608	0	3,851	0	19,183	0	560	23,586	0	\$5,667,610
INTERIOR	0	861	0	3,424,776	780,533	572,718	672,180	551,453	462,392	826,164	96,918	244,283	167,455	90,855	\$7,890,587
PLUMBING	0	27,772	0	449,085	4,526,862	345,513	1,508	1,486	0	21,409	976	11,086	55,410	0	\$5,441,108
HVAC	0	0	0	13,091,189	6,867	68,835	0	833,175	507,891	2,274,648	507,104	136,789	155,272	8,133	\$17,589,902
FIRE/LIFE SAFETY	10,450	25,075	6,887,803	0	0	0	0	0	0	0	0	0	0	2,276,597	\$9,199,925
ELECTRICAL	0	0	0	2,291,270	3,397,174	27,320	54,821	7,321	95,996	91,920	18,301	13,816	0	0	\$5,997,940
SITE	0	0	29,175	36,227	0	0	0	0	0	0	0	0	0	0	\$65,402
VERT. TRANS.	0	0	0	1,046,769	0	0	0	0	0	252,656	0	0	0	0	\$1,299,425
HEALTH/EQUIP.	0	0	2,710	66,590	0	0	0	0	0	0	0	0	1,347,917	0	\$1,417,218
SUBTOTAL	\$10,450	\$428,623	\$7,779,545	\$25,084,078	\$8,772,954	\$1,742,994	\$728,510	\$1,397,286	\$1,066,278	\$3,485,980	\$623,299	\$406,534	\$1,749,640	\$2,375,584	\$55,651,756
TOTAL	TOTAL NONRECURRING PROJECT NEEDS \$8,218		\$8,218,619						TOTAL REC	URRING COMP	ONENT REPLA		DS	\$47,433,137	

CURRENT REPLACEMENT VALUE FACILITY CONDITION NEEDS INDEX	\$192,148,755 0.29	GSF	TOTAL 10-YEAR FACILITY NEEDS	10-YEAR NEEDS/SF
FACILITY CONDITION INDEX	0.13	476,120	\$55,651,756	116.89



CATEGORY	N F	IONRECURRING PROJECT NEEDS	i	RECURRING COMPONENT REPLACEMENT NEEDS											
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	9,839	227,329	0	0	0	0	0	0	0	0	0	0	0	\$237,168
EXTERIOR	1,263,750	768,360	1,409,482	841,663	0	597,815	202,117	854,950	297,783	103,338	0	0	0	10,504	\$6,349,761
INTERIOR	0	0	0	1,189,174	0	0	72,668	193,794	137,859	276,953	0	15,539	135,443	0	\$2,021,430
PLUMBING	0	0	0	59,213	0	1,776	14,578	0	0	0	0	5,224	35,061	1,332	\$117,183
HVAC	0	0	0	304,927	291,731	0	0	0	0	0	19,334	493,227	6,129,595	3,355	\$7,242,170
FIRE/LIFE SAFETY	4,707	70,155	52,164	0	0	0	0	0	0	974,843	0	0	0	0	\$1,101,869
ELECTRICAL	0	0	0	53,811	0	5,226	0	143,354	0	12,553	13,598	69,852	213,888	0	\$512,281
SITE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
VERT. TRANS.	0	0	0	252,656	0	0	0	0	0	0	0	0	0	0	\$252,656
HEALTH/EQUIP.	0	0	3,120	0	0	0	0	0	0	0	0	0	0	0	\$3,120
SUBTOTAL	\$1,268,457	\$848,354	\$1,692,095	\$2,701,443	\$291,731	\$604,816	\$289,363	\$1,192,098	\$435,642	\$1,367,686	\$32,932	\$583,842	\$6,513,987	\$15,190	\$17,837,636
TOTAL	TOTAL NONRECURRING PROJECT NEEDS \$3,808		\$3,808,905						TOTAL REC	URRING COMP	ONENT REPLA	CEMENT NEE	DS	\$14,028,731	

CURRENT REPLACEMENT VALUE	\$91,251,000 0.20	GSF	TOTAL 10-YEAR FACILITY NEEDS	10-YEAR NEEDS/SF
FACILITY CONDITION INDEX	0.03	531,946	\$17,837,636	33.53



CATEGORY	N P	ONRECURRING					F		OMPONENT	REPLACEMEN	T NEEDS				
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	12,551	14,322	0	0	0	0	0	0	0	0	0	0	0	\$26,874
EXTERIOR	0	0	252,612	12,208	0	0	750,057	0	0	1,051,633	0	0	18,311	0	\$2,084,820
INTERIOR	0	0	0	92,609	0	0	1,681	0	0	1,830,910	0	0	40,159	0	\$1,965,359
PLUMBING	0	0	0	0	0	0	58,285	0	0	0	0	0	0	0	\$58,285
HVAC	0	0	0	47,881	70,677	0	26,584	0	0	0	0	3,679	2,516	1,048,964	\$1,200,302
FIRE/LIFE SAFETY	12,691	0	0	0	53,859	0	0	0	0	0	374,093	0	0	0	\$440,643
ELECTRICAL	0	0	0	25,404	0	0	74,562	0	0	0	0	222,227	570,024	32,819	\$925,036
SITE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
VERT. TRANS.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
HEALTH/EQUIP.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
SUBTOTAL	\$12,691	\$12,551	\$266,934	\$178,102	\$124,536	\$0	\$911,169	\$0	\$0	\$2,882,543	\$374,093	\$225,907	\$631,009	\$1,081,783	\$6,701,319
TOTAL	TOTAL NONRECURRING PROJECT NEEDS \$292,		\$292,176						TOTAL REC		ONENT REPLA	CEMENT NEE	DS	\$6,409,143	

CURRENT REPLACEMENT VALUE FACILITY CONDITION NEEDS INDEX	\$72,555,552 0.09	GSF	TOTAL 10-YEAR FACILITY NEEDS	10-YEAR NE
FACILITY CONDITION INDEX	0.00	164,004	\$6,701,319	40.86



Renewal Costs by System Code

A viable approach to capital planning is to analyze common building systems for needs. The following chart illustrates the system project backlog by weight of total backlog and compares the results at OCC to the average found across the ISES clients.



HVAC is the highest proportion of the overall needs backlog at 30.5 percent, which is only slightly higher than the ISES average. Fifty-two percent (over \$24 million) of the HVAC needs are considered deferred or needed in the next year. Of these near-term needs, HVAC distribution system upgrades account for nearly \$18 million, air handler and fan upgrades \$2.5 million, and control systems upgrades \$2.3 million.

Electrical needs are the second highest proportion (15.8 percent), which is slightly higher than the ISES average. These needs are also the third highest proportion of Deferred Renewal at nearly \$7.9 million. Most of the buildings are in need of near-term interior and exterior lighting upgrades as well as replacement of aging variable speed drives, which provide a measure of investment payback in the form of energy savings if the latest technology is installed.



Interior finish and exterior structure needs account for 15.3 and 15.7 percent, respectively, of the total backlog. Deferred Renewal needs in these categories total \$12.5 million. Most of the deferred needs are for flooring, casework, and doors. While not considered deferred, the \$10.7 million of roofing upgrades are a significant proportion of the exterior systems backlog and should be included in any future budget planning.

Fire/life safety needs are the next highest proportion of the backlog and are higher than the ISES average. Over half of these needs are for the installation of fire suppression systems in the older buildings.

Accessibility makes up less than 1.5 percent of the overall needs, which is drastically lower than the 5.6 percent ISES mean. This can be attributed to the relatively young age of over 40 percent of the building square footage (32 buildings) and the significant renovations and remodeling of the older buildings built prior to modern ADA requirements. Most of the remaining systems are in line with the ISES client averages.

The Auburn Hills campus has a total FCA renewal need estimate of \$54 million, with nearly \$19 million identified as deferred. The majority of these needs are in the HVAC, electrical, interior, and exterior systems.

The District Office has a total FCA renewal need estimate of \$2.5 million, with nearly \$342,000 identified as deferred. The majority of the needs are in interior finish and electrical systems.

The Highland Lakes campus has a total FCA renewal need estimate of \$15.3 million, with nearly \$1.8 million identified as deferred. The majority of these needs are in the vertical transportation, electrical, and interior finish systems. There is a slightly smaller proportion of needs in the fire/life safety and HVAC systems.

The Orchard Ridge campus has a total FCA renewal need estimate of \$55.6 million, with nearly \$25.1 million identified as deferred. The majority of these needs are in the HVAC, exterior, and finish interior systems. There is a significant amount of deferred needs in the electrical and vertical transportation systems.

The Royal Oak campus has a total FCA renewal need estimate of \$17.8 million, with nearly \$2.7 million identified as deferred. The majority of these needs are in the exterior and interior finish systems.

The Southfield campus has a total FCA renewal need estimate of \$6.7 million, with nearly \$178,102 identified as deferred. The majority of these needs are in the interior finish and HVAC systems.



Renewal Costs by Classification

- Nonrecurring Plant Adaption needs make up 8.9 percent of the total cost (\$13,512,794).
- The recurring needs projected to emerge over the next 10 years represent 56.0 percent (\$85,161,339) of the facilities renewal recommendations.
- Recurring Deferred Renewal and nonrecurring Corrective Action needs are 35.1 percent of the recommendations (\$53,372,500).



CLASSIFICATION	PERCENTAGE (%)	COST (\$)
Projected Renewal	56.0	85,161,339
Deferred Renewal/Corrective Action	35.1	53,372,500
Plant Adaption	8.9	13,512,794
	TOTAL	\$152,046,633



Renewal Costs by Priority

The renewal needs have been prioritized to indicate the urgency of the recommendations. Like the previous chart, this also summarizes both the recurring and nonrecurring recommendations.

- Immediate nonrecurring needs are 0.8 percent of the needs and total \$1,291,597.
- Recurring Deferred Renewal and nonrecurring Critical needs combined represent 33.4 percent of the recommendations (\$50,739,544).
- The first four years (2017-2020) of recurring component replacement needs equal \$35,781,527 (23.5 percent).
- The next six years (2021-2026) of recurring component replacement needs combined with the nonrecurring Noncritical needs equal \$64,233,964 or 42.2 percent.



PRIORITY	PERCENTAGE (%)	COST (\$)
Immediate	0.8	1,291,597
Deferred Renewal/Critical	33.4	50,739,544
2017-2020	23.5	35,781,527
Noncritical/2021-2026	42.2	64,233,964
	TOTAL	\$152,046,633



Utility Condition Assessments

General Utility Condition

The Utility Condition Assessment (UCA) performed for the Oakland Community College system included a visual, nondestructive inspection of the heating and chilled water generation and distribution systems, along with high voltage electrical, sanitary distribution, stormwater distribution, and potable/fire water systems. In addition, Facility Condition Assessments were performed at each generational plant and associated pump house facilities.

The UCA results indicate that these systems are overall in relatively fair to good condition. With a total current replacement value of nearly \$137 million, the utility infrastructure represents a significant percentage of the OCC portfolio. In the late 1990s and early 2000s, there was significant funding for the replacement of the aging boilers and chiller at Highland Lakes and Orchard Ridge, as well as energy upgrades at Auburn Hills in the form of high efficiency burner assemblies installed at each of the three boilers. Regular major maintenance and teardown of the principal generation equipment every three to five years (as funding is available) will extend the reliable and efficient service life of this equipment. The Royal Oak plant underwent a major renewal of chilled and heating water systems in 2003, and the Southfield plant was modernized in 1999 and 2010. In summary, the majority of the recommendations at the generation plants are for the ancillary and system support equipment.

Of the nearly \$27 million in total identified needs, approximately 40 percent (\$11 million) are for the upgrade of heating and chilled water piping distribution systems and associated valves and support equipment. The average useful life of a section of steel pipe for hydronic systems is approximately 50 years. This service life is directly impacted by the operational history of the systems as well as the consistency of the water treatment programs. While the operational history, in the form of limited capacity fluxuations, has been consistent, the water treatment program has changed over time due to multiple vendors and strategies. Nonrecurring and recurring needs were developed for the upgrade of approximately 30 percent of the piping systems, specifically at the three largest campuses.

The majority of the high voltage electrical systems at the three larger campuses have been retrofit with new primary switchgear that includes automatic transfer capabilities in the event of a loss of one of the main utility service feeds. There is specific equipment at each campus (primarily load interrupters serving buildings) that will require upgrade within the next ten years, but as a whole, the systems are in good condition. The one priority needs established at each campus is the development of a consistent and extensive preventative maintenance and testing program. The majority of the installed electrical equipment needs to undergo operation, testing, and maintenance services every three to five years. A service contract with detailed maintenance practices needs to be implemented to not only extend the life of the new substation equipment but to also ensure the reliable and, most importantly, safe operation of this equipment.



Within the FCA reports of the individual buildings are recommendations for the installation of emergency generators at 14 Auburn Hills and Highland Lakes facilities. It is prudent to perform an analysis to determine whether or not these two campuses would benefit from the installation of central emergency power systems.

The stormwater and sanitary systems are in proper working condition, but investment in the modernization of the underground systems is recommended specifically at Highland Lakes. These two systems should undergo CCTV inspection in order to develop a more detailed priority needs list for future reinvestment.

Total 10-Year Renewal Costs by Utility

BLDG #	BUILDING NAME	YEAR BUILT	SQUARE FEET	CRV (\$)	RENEWAL COSTS (\$)	FCNI	FCI
AHHCD	HEATING/CHILLED WATER DIST.	1967	NA	17,028,000	4,693,765	0.28	0.00
AHHVE	HIGH VOLTAGE ELECTRICAL	1970	NA	5,451,420	594,308	0.11	0.07
AHP	POWER HOUSE	1970	13,298	15,349,184	4,277,913	0.28	0.01
AHPWF	POTABLE AND FIRE WATER SYS.	1968	.968 NA 2,700,000		206,042	0.08	0.00
AHSAN	SANITARY SEWER SYSTEM	1968	NA 1,625,000		243,248	0.15	0.00
AHSTR	STORMWATER SEWER SYSTEM	1968	NA	4,000,000	367,616	0.09	0.00
HLCP	CENTRAL PLANT	1998	8,135	10,114,400	2,115,344	0.21	0.02
HLHCD	HEATING/CHILLED WATER DIST.	1929	NA	11,136,000	2,363,087	0.21	0.00
HLHVE	HIGH VOLTAGE ELECTRICAL	1929	NA	2,950,000	128,682	0.04	0.03
HLPWF	POTABLE AND FIRE WATER SYS.	1965	NA	NA 1,600,000 91,801		0.06	0.00
HLSAN	SANITARY SEWER SYSTEM	1965	NA	1,500,000	796,926	0.53	0.52
HLSTR	STORMWATER SEWER SYSTEM	1965	NA	2,200,000	1,064,034	0.48	0.47
ORE	POWER HOUSE	1967	17,581	14,079,930	3,507,333	0.25	0.05
ORHCD	HEATING/CHILLED WATER DIST.	1967	NA	19,650,576	3,844,729	0.20	0.00
ORHVE	HIGH VOLTAGE ELECTRICAL	1967	NA	4,474,920	293,152	0.07	0.05
ORPWF	POTABLE AND FIRE WATER SYS.	1967	NA	2,000,000	482,782	0.24	0.07
ORSAN	SANITARY SEWER SYSTEM	1967	NA	1,000,000	316,875	0.32	0.00
ORSTR	STORMWATER SEWER SYSTEM	1967	NA	4,850,000	382,365	0.08	0.00
ROHCD	HEATING/CHILLED WATER DIST.	1982	NA	3,669,000	108,201	0.03	0.00
ROHVE	HIGH VOLTAGE ELECTRICAL	1982	NA	951,400	335,803	0.35	0.00
ROP	POWER HOUSE	1982	3,926	5,214,000	543,637	0.10	0.00
ROPWF	POTABLE AND FIRE WATER SYS.	1982	NA	10,000	0	0.00	0.00
ROSAN	SANITARY SEWER SYSTEM	1982	NA	45,000	0	0.00	0.00



Executive Summary

Summary of Findings

BLDG #	BUILDING NAME	YEAR BUILT	SQUARE FEET	CRV (\$)	RENEWAL COSTS (\$)	FCNI	FCI
ROSTR	STORMWATER SEWER SYSTEM	1982	NA	800,000	0	0.00	0.00
SFHCD	HEATING/CHILLED WATER DIST.	1980	NA	2,027,368	112,872	0.06	0.00
SFHVE	HIGH VOLTAGE ELECTRICAL	1980	NA	574,700	15,966	0.03	0.00
SFPWF	POTABLE AND FIRE WATER SYS.	1980	NA	50,000	0	0.00	0.00
SFSAN	SANITARY SEWER SYSTEM	1980	NA	150,000	0	0.00	0.00
SFSTR	STORMWATER SEWER SYSTEM	1980	NA	1,600,000	0	0.00	0.00
	TOTALS		42,965	\$136,800,898	\$26,886,481	0.20	0.03



CATEGORY	N F	IONRECURRING PROJECT NEEDS	i				F		OMPONENT	REPLACEMEN	T NEEDS				
	Immediate	Critical	Noncritical	Deferred Renewal	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TOTAL
ACCESSIBILITY	0	5,810	35,384	0	0	0	0	0	0	0	0	0	0	0	\$41,194
EXTERIOR	0	0	16,707	14,284	0	0	0	36,623	274,423	531,218	49,184	2,276	0	0	\$924,714
INTERIOR	0	0	0	218,709	1,466	0	0	36,134	41,337	0	2,488	0	15,036	0	\$315,169
PLUMBING	0	595,302	800,062	204,397	128,198	290,834	2,167	21,494	0	0	68,355	5,820	172,359	0	\$2,288,989
нуас	102,982	2,355,769	8,649,904	215,934	151,088	8,727	20,671	0	29,520	2,546,214	195,358	157,469	805,664	458,206	\$15,697,506
FIRE/LIFE SAFETY	0	0	0	199,043	0	0	0	0	50,194	18,120	39,820	0	0	5,980	\$313,156
ELECTRICAL	99,381	133,481	99,705	823,906	219,335	170,176	16,733	463,634	94,987	1,041,241	1,437,138	25,356	10,588	0	\$4,635,661
SITE	0	0	2,448	1,822,926	0	0	0	0	0	590,701	0	0	0	0	\$2,416,075
VERT. TRANS.	0	0	0	252,656	0	0	0	0	0	0	0	0	0	0	\$252,656
HEALTH/EQUIP.	0	0	1,360	0	0	0	0	0	0	0	0	0	0	0	\$1,360
SUBTOTAL	\$202,363	\$3,090,363	\$9,605,571	\$3,751,855	\$500,087	\$469,738	\$39,571	\$557,884	\$490,461	\$4,727,493	\$1,792,342	\$190,921	\$1,003,647	\$464,186	\$26,886,481
TOTAL	TOTAL NONRECURRING PROJECT NEEDS \$12,898,297 TOTAL RECURRING COMPONENT REPLACEMENT NEEDS \$13,988,184														

CURRENT REPLACEMENT VALUE	\$112,332,760	GSF	TOTAL 10-YEAR FACILITY NEEDS	10-YEAR NEEDS/SF
FACILITY CONDITION NEEDS INDEX	0.24			
FACILITY CONDITION INDEX	0.03	42,965	\$26,886,481	625.78



AMS FINANCIAL MODELING

FCNI Projections

The ISES AMS software features a funding modeling tool that can estimate the effects of funding levels on the FCNI. This tool calculates that \$12.7 million would need to be reinvested annually to maintain the current FCNI of 0.22. This is equal to 1.8 percent of plant value on an annual basis. (Note: This figure accounts for 3 percent inflation.) The model also incorporates a 1 percent portfolio growth rate (rate at which square footage is added) and a 1.5 percent plant deterioration rate (the rate at which new capital project needs arise).

Reinvestment Rates

If the reinvestment rate is lower than 1.8 percent of plant value, then the FCNI at the end of the tenth year will be higher than it was in the first year. For instance, if 1 percent of plant value (\$7 million) is reinvested annually, the resultant FCNI after 10 years is estimated to be 0.29. Conversely, if 3.0 percent of plant value (\$21.1 million) is reinvested annually, the resultant FCNI is estimated to be 0.12 after 10 years. The following chart shows sample funding scenarios.





Executive Summary

The calculations in the model above take into account all money that goes towards renewing the facilities and their supporting components. In most cases, not all of the needs are funded by the Facilities Management organization's budget. Programs, donors, schools, and other stakeholders can pay for projects. It is common for projects that are part of major renovation efforts to be funded predominately by other sources besides the Facilities department.

The funding level presented in this section is a steady and annualized rate. It is important to understand that, in most cases, the fulfillment of these needs is ad hoc and the amount reinvested can vary widely from year to year. Not all projects are performed on a piecemeal basis. Projects can include limited renovation projects, gut renovation activities, or full raze and replace measures. These large-scale efforts can eliminate a significant proportion of needs in a relatively short period of time.



CONCLUSIONS

Including all of the inspected buildings and utility systems, Oakland Community College has an asset portfolio value estimated at nearly \$840 million, and the estimated needs developed from the inspections total \$179 million. This results in an overall FCNI of 0.21 for the OCC system (FCA and UCA). Of the total needs, nearly 30 percent (\$53 million) are considered to be deferred. Aged facilities and underground utility systems at the Auburn Hills, Orchard Ridge, and Highland Lakes campuses represent that the vast majority of the needs.

Like most institutions, the most needs are found within aging HVAC and electrical distribution systems and in the modernization of interior finishes and exterior systems. HVAC and electrical distribution systems are critical to the day-to-day operation of a facility. Many are aged and, though functional, require routine and repetitive maintenance. The failure of either system could result in the ineffective use of, or the inability to use, the facility as a whole, especially given the age of a large percentage of the asset catalog.

With regard to FCNI, the most effective method of shrinking the index is to holistically reinvest in existing facilities. This means either razing and rebuilding or gut renovating aging assets. This type of project work has collateral benefits, such as making maintenance organizations more effective. New construction will have a positive effect on the FCNI only if existing buildings are replaced. If new structures are built but the older facilities kept in service, any existing FCNI problems will be exacerbated. Furthermore, if the maintenance staff is not expanded in the event of adding incremental square footage to the portfolio, the FCNI issues will become more difficult to manage.

If it is impossible to fully gut renovate or raze and replace a facility, consider bundling ISES recommendations to achieve economy-of-scale and minimize campus impact. For example, if an expensive HVAC system renewal project is justified and funded, consider undertaking any exterior envelope projects in concert with it. Replacing roofs, windows, and exterior doors will produce maximum energy savings, which will allow for as short a payback period as possible. Also, when common efforts are needed in buildings that are close to each other, consider executing projects over multiple buildings. As plans are developed to address identified needs, the scope of these repairs should be carefully considered to maximize the financial impact of capital reinvestment.

The primary goal of reinvesting in or renewing facilities is to mitigate customer or program downtime, which, of course, results in happier customers. There are many other benefits as well, such as providing more suitable and modern space for schools and programs and making the facilities more attractive to prospective students and programs. When effectively executed, facilities renewal efforts will reduce purchased energy consumption and make the existing maintenance organization more efficient.



Appendices

APPENDIX A Building List by Building Number

Appendix A is a general building inventory sorted by building number. The table includes typical stats such as primary use, year built, and size and also provides valuable information like CRV, total renewal costs, FCNI, and FCI.

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	RENEWAL COSTS (\$)	FCNI	FCI
AHA	EARL M. ANDERSON	CL	1970	104,725	35,575,000	13,895,177	0.39	0.18
AHB	ADMINISTRATION	OF	1975	34,511	12,254,000	3,577,742	0.29	0.10
AHC	JOSEPH E. HILL	CL	1970	56,169	19,819,000	7,935,604	0.40	0.18
AHD	GEORGE R. MOSHER	CL	1975	52,197	18,713,000	7,080,196	0.38	0.07
AHE	BUSINESS, SCIENCE AND ART		1980	28,819	10,900,000	4,433,638	0.41	0.19
AHF1	GENERAL ASSEMBLY - MAIN AND ADDITION	CL	1970	25,550	9,664,000	3,315,206	0.34	0.10
AHF2	GENERAL ASSEMBLY - ADDITION	CL	1998	49,907	17,892,000	1,614,470	0.09	0.03
AHG1	BOOKSTORE, IT, PUBLIC SAFETY	RT	2008	29,909	6,298,000	403,973	0.06	0.00
AHG2	STUDENT UNION ADDITION	SU	2008	36,792	14,330,000	894,345	0.06	0.00
AHGCS	GROUNDS COVERED STORAGE	WH	2008	4,036	755,000	7,453	0.01	0.00
AHGM	GROUNDS MAINTENANCE	WH	2008	3,494	654,000	141,152	0.22	0.00
AHH	HEALTH EDUCATION	GM	1977	35,138	10,989,000	591,411	0.05	0.00
AHH1	WEIGHTLIFTING AND CLASSROOM ADDITION	GM	2010	12,195	4,341,000	83,896	0.02	0.00
AHJ	CRIMINAL JUSTICE	CL	1981	21,378	8,527,000	543,973	0.06	0.05
АНК	CHILD CARE CENTER	CC	1991	3,491	1,367,000	0	0.00	0.00
AHL	LANDSCAPE GREENHOUSE	ST	1993	1,991	298,395	242,014	0.81	0.06



Executive Summary

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	RENEWAL COSTS (\$)	FCNI	FCI
AHMT1	MICHIGAN TECHNICAL EDUCATION CTR - MAIN	CL	2000	27,561	10,425,000	2,608,615	0.25	0.02
AHMT2	MICHIGAN TECHNICAL EDUCATION CTR - ANNEX	WH	2000	10,859	2,032,000	271,684	0.13	0.02
AHS1	CREST - TRAINING CENTER	CL	2002	10,655	4,444,000	465,967	0.10	0.01
AHS10	CREST - RANCH	RS	2001	1,890	374,100	66,706	0.18	0.08
AHS2	CONTROL TOWER	CL	2003	1,352	564,000	48,296	0.09	0.00
AHS3	CREST - POLE BARN METAL BUILDING	WH	2008	1,739	272,850	34,338	0.13	0.00
AHS4	CREST - BURN BUILDING	CL	2003	13,350	5,569,000	283,662	0.05	0.00
AHS5	CREST - MOTEL	DM	2002	3,415	1,607,000	171,250	0.11	0.02
AHS6	CREST - TWO-STORY	RS	2001	2,700	552,470	79,367	0.14	0.05
AHS7	CREST - BANK	OF	2002	1,800	705,000	130,062	0.18	0.00
AHS8	CREST - CONVENIENCE STORE/GAS STATION	RT	2002	3,000	697,000	109,689	0.16	0.01
AHS9	CREST - CAPE COD	RS	2001	1,983	404,440	85,562	0.21	0.08
AHSD	SALT DOME	WH	2008	987	112,580	0	0.00	0.00
AHT	ADVANCED TECHNOLOGY CENTER	CL	1983	38,060	13,947,000	4,914,602	0.35	0.15
DOGB	GEORGE A. BEE ADMINISTRATION CENTER	OF	1965	26,230	9,313,000	1,877,944	0.20	0.00
DOMH	DORIS MOSHER FOUNDATION HOUSE	OF	1925	4,889	1,914,000	615,411	0.32	0.16
HLGB1	GROUNDS BUILDING	ST	1998	3,175	1,102,000	308,886	0.28	0.06
HLGB2	GROUNDS COVERED STORAGE	WH	1998	3,997	748,000	107,296	0.14	0.02
HLGB3	SALT DOME	WH	2005	900	52,720	5,995	0.11	0.00
HLHOH	HIGH OAKS HALL	CL	1929	46,822	16,786,000	2,261,562	0.13	0.02
HLLH	LEVINSON HALL (SCIENCE)	LB	1977	42,327	23,165,000	2,849,954	0.12	0.00
HLLHA	LEVINSON HALL ADDITION (HEALTH)	LB	2006	38,130	20,868,000	1,604,735	0.08	0.00



Executive Summary

Appendices

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	RENEWAL COSTS (\$)	FCNI	FCI
HLMB	METAL BUILDING (OLD SALT STORAGE)	WH	1998	1,200	79,140	21,980	0.28	0.00
HLPAV	PAVILION	WH	1994	2,025	278,368	61,540	0.22	0.09
HLPE	PHYSICAL EDUCATION	GM	1977	35,098	10,976,000	3,303,339	0.30	0.09
HLPH	PUMP HOUSE	WH	1965	1,500	281,000	99,110	0.35	0.03
HLRC	REDWOOD CENTER	ST	1927	4,098	1,422,000	292,981	0.21	0.00
HLSC	STUDENT CENTER	SU	1972	31,120	12,511,000	1,483,546	0.12	0.00
HLWH	WOODLAND HALL (NORTH)	CL	1980	42,505	15,576,000	1,569,187	0.10	0.02
HLWHA	WOODLAND HALL ADDITION (SOUTH)	OF	2008	54,470	18,332,000	1,362,408	0.07	0.00
ORA	CLASSROOM BUILDING A AND ADDITION	LB	1967	36,363	19,684,000	4,062,695	0.21	0.10
ORB	CLASSROOM BUILDING B	LB	1967	26,555	15,001,000	4,246,946	0.28	0.15
ORC	CLASSROOM BUILDING C	LB	1967	26,627	15,042,000	3,567,554	0.24	0.11
ORD	CLASSROOM BUILDING D	LB	1967	28,561	16,134,000	4,720,564	0.29	0.17
ORF	CLASSROOM BUILDING F	CL	1967	28,280	10,697,000	3,462,284	0.32	0.17
ORG	CLASSROOM BUILDING G	CL	1967	26,781	10,130,000	2,469,129	0.24	0.09
ORH	COMMUNITY ACTIVITY	GM	1977	70,357	20,922,000	7,689,514	0.37	0.13
ORJ	TIRRELL HALL	SU	1967	118,364	42,259,000	14,252,443	0.34	0.15
ORK	MARTIN L. KING JR. LIBRARY	LI	1967	40,181	14,437,000	2,903,924	0.20	0.06
ORL	ARTS BUILDING	CL	1967	28,967	10,956,000	4,017,052	0.37	0.19
ORM	ADMINISTRATION	OF	1967	27,383	9,723,000	2,558,008	0.26	0.10
ORN	GROUNDS GARAGE	ST	1972	4,008	1,391,000	523,359	0.38	0.19
ORP	PUMP HOUSE	WH	1967	1,060	198,000	86,169	0.44	0.32
ORT	SMITH THEATRE	TH	1982	12,633	5,429,000	1,092,114	0.20	0.06



36

Executive Summary

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	RENEWAL COSTS (\$)	FCNI	FCI
ROA1	CLASSROOM	CL		28,443	10,758,000	2,578,373	0.24	0.05
ROA2	CLASSROOM ADDITION	CL	1999	21,080	8,408,000	472,162	0.06	0.00
ROB	ADMINISTRATION	CL	1980	38,036	13,938,000	3,264,427	0.23	0.05
ROC	LEARNING RESOURCES CENTER		1980	20,188	8,052,000	515,124	0.06	0.01
ROD	FINE ARTS	CL	1980	30,160	11,408,000	2,822,124	0.25	0.02
ROE	LILA R. JONES-JOHNSON THEATER	TH 1980 30,750 11,983,00		11,983,000	3,100,634	0.26	0.05	
ROG	GROUNDS BUILDING	WH	1935	2,752	955,000	365,615	0.38	0.10
ROM	MALL	OF	1980	29,562	10,496,000	1,653,719	0.16	0.04
ROPS1	PARKING STRUCTURE - NORTH	РК	1983	155,975	7,200,000	1,872,479	0.26	0.00
ROPS2	PARKING STRUCTURE - SOUTH	РК	1999	175,000	8,053,000	1,192,980	0.15	0.00
SFSF1	SOUTHFIELD - BUILDING A	CL	1979	81,322	28,074,000	3,517,384	0.13	0.00
SFSF2	SOUTHFIELD - BUILDING A ADDITION	LI	1999	10,882	7,115,552	1,798,507	0.25	0.01
SFSF3	SOUTHFIELD - BUILDING B	LB	2010	71,800	37,366,000	1,385,427	0.04	0.00
	GRAND TOTAL			2,130,209	\$703,296,615	\$152,046,634	0.22	0.07



APPENDIX B Building List by FCNI

Appendix B provides a building list sorted by FCNI in descending order. This report is useful for directing funding for building renovations. If a building is high on the list and projected to be a relevant part of the campus mission for years to come, it is recommended that the building be sustained to a minimal degree until a major renovation or facility replacement can be funded.

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	TOTAL 10-YR NEEDS (\$)	FCNI			
	>	0.60								
AHL	LANDSCAPE GREENHOUSE	ST	1993	1,991	298,395	242,014	0.81			
	0.60	-0.51								
NONE										
0.50 - 0.31										
ORP	PUMP HOUSE	WH	1967	1,060	198,000	86,169	0.44			
AHE	BUSINESS, SCIENCE AND ART	CL	1980	28,819	10,900,000	4,433,638	0.41			
AHC	JOSEPH E. HILL	CL	1970	56,169	19,819,000	7,935,604	0.40			
AHA	EARL M. ANDERSON	CL	1970	104,725	35,575,000	13,895,177	0.39			
ROG	GROUNDS BUILDING	WH	1935	2,752	955,000	365,615	0.38			
AHD	GEORGE R. MOSHER	CL	1975	52,197	18,713,000	7,080,196	0.38			
ORN	GROUNDS GARAGE	ST	1972	4,008	1,391,000	523,359	0.38			
ORH	COMMUNITY ACTIVITY	GM	1977	70,357	20,922,000	7,689,514	0.37			
ORL	ARTS BUILDING	CL	1967	28,967	10,956,000	4,017,052	0.37			
HLPH	PUMP HOUSE	WH	1965	1,500	281,000	99,110	0.35			



Executive Summary

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	TOTAL 10-YR NEEDS (\$)	FCNI
AHT	ADVANCED TECHNOLOGY CENTER	CL	1983	38,060	13,947,000	4,914,602	0.35
AHF1	GENERAL ASSEMBLY - MAIN AND ADDITION	CL	1970	25,550	9,664,000	3,315,206	0.34
ORJ	TIRRELL HALL	SU	1967	118,364	42,259,000	14,252,443	0.34
ORF	CLASSROOM BUILDING F	CL	1967	28,280	10,697,000	3,462,284	0.32
DOMH	DORIS MOSHER FOUNDATION HOUSE	OF	1925	4,889	1,914,000	615,411	0.32
	0.30	- 0.21					
HLPE	PHYSICAL EDUCATION	GM	1977	35,098	10,976,000	3,303,339	0.30
ORD	CLASSROOM BUILDING D	LB	1967	28,561	16,134,000	4,720,564	0.29
AHB	ADMINISTRATION	OF	1975	34,511	12,254,000	3,577,742	0.29
ORB	CLASSROOM BUILDING B	LB	1967	26,555	15,001,000	4,246,946	0.28
HLGB1	GROUNDS BUILDING	ST	1998	3,175	1,102,000	308,886	0.28
HLMB	METAL BUILDING (OLD SALT STORAGE)	WH	1998	1,200	79,140	21,980	0.28
ORM	ADMINISTRATION	OF	1967	27,383	9,723,000	2,558,008	0.26
ROPS1	PARKING STRUCTURE - NORTH	РК	1983	155,975	7,200,000	1,872,479	0.26
ROE	LILA R. JONES-JOHNSON THEATER	TH	1980	30,750	11,983,000	3,100,634	0.26
SFSF2	SOUTHFIELD - BUILDING A ADDITION	LI	1999	10,882	7,115,552	1,798,507	0.25
AHMT1	MICHIGAN TECHNICAL EDUCATION CTR - MAIN	CL	2000	27,561	10,425,000	2,608,615	0.25
ROD	FINE ARTS	CL	1980	30,160	11,408,000	2,822,124	0.25
ORG	CLASSROOM BUILDING G	CL	1967	26,781	10,130,000	2,469,129	0.24
ROA1	CLASSROOM	CL	1980	28,443	10,758,000	2,578,373	0.24
ORC	CLASSROOM BUILDING C	LB	1967	26,627	15,042,000	3,567,554	0.24



Executive Summary

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	TOTAL 10-YR NEEDS (\$)	FCNI
ROB	ADMINISTRATION	CL	1980	38,036	13,938,000	3,264,427	0.23
HLPAV	PAVILION	WH	1994	2,025	278,368	61,540	0.22
AHGM	GROUNDS MAINTENANCE	WH	2008	3,494	654,000	141,152	0.22
AHS9	CREST - CAPE COD	RS	2001	1,983	404,440	85,562	0.21
ORA	CLASSROOM BUILDING A AND ADDITION		1967	36,363	19,684,000	4,062,695	0.21
HLRC	REDWOOD CENTER		1927	4,098	1,422,000	292,981	0.21
	0.20	-0.11					
DOGB	GEORGE A. BEE ADMINISTRATION CENTER	OF	1965	26,230	9,313,000	1,877,944	0.20
ORT	SMITH THEATRE		1982	12,633	5,429,000	1,092,114	0.20
ORK	MARTIN L. KING JR. LIBRARY		1967	40,181	14,437,000	2,903,924	0.20
AHS7	CREST - BANK		2002	1,800	705,000	130,062	0.18
AHS10	CREST - RANCH		2001	1,890	374,100	66,706	0.18
ROM	MALL	OF	1980	29,562	10,496,000	1,653,719	0.16
AHS8	CREST - CONVENIENCE STORE/GAS STATION	RT	2002	3,000	697,000	109,689	0.16
ROPS2	PARKING STRUCTURE - SOUTH	РК	1999	175,000	8,053,000	1,192,980	0.15
AHS6	CREST - TWO-STORY	RS	2001	2,700	552,470	79,367	0.14
HLGB2	GROUNDS COVERED STORAGE	WH	1998	3,997	748,000	107,296	0.14
HLHOH	HIGH OAKS HALL	CL	1929	46,822	16,786,000	2,261,562	0.13
AHMT2	MICHIGAN TECHNICAL EDUCATION CTR - ANNEX	WH	2000	10,859	2,032,000	271,684	0.13
AHS3	CREST - POLE BARN METAL BUILDING	WH	2008	1,739	272,850	34,338	0.13
SFSF1	SOUTHFIELD - BUILDING A	CL	1979	81,322	28,074,000	3,517,384	0.13



Executive Summary

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	TOTAL 10-YR NEEDS (\$)	FCNI
HLLH	LEVINSON HALL (SCIENCE)	LB	1977	42,327	23,165,000	2,849,954	0.12
HLSC	STUDENT CENTER	SU	1972	31,120	12,511,000	1,483,546	0.12
HLGB3	SALT DOME	WH	2005	900	52,720	5,995	0.11
AHS5	CREST - MOTEL	DM	2002	3,415	1,607,000	171,250	0.11
	0.10	- 0.00					
AHS1	CREST - TRAINING CENTER	CL	2002	10,655	4,444,000	465,967	0.10
HLWH	WOODLAND HALL (NORTH)	CL	1980	42,505	15,576,000	1,569,187	0.10
AHF2	GENERAL ASSEMBLY - ADDITION		1998	49,907	17,892,000	1,614,470	0.09
AHS2	CONTROL TOWER		2003	1,352	564,000	48,296	0.09
HLLHA	LEVINSON HALL ADDITION (HEALTH)		2006	38,130	20,868,000	1,604,735	0.08
HLWHA	WOODLAND HALL ADDITION (SOUTH)		2008	54,470	18,332,000	1,362,408	0.07
AHG1	BOOKSTORE, IT, PUBLIC SAFETY		2008	29,909	6,298,000	403,973	0.06
ROC	LEARNING RESOURCES CENTER		1980	20,188	8,052,000	515,124	0.06
AHJ	CRIMINAL JUSTICE	CL	1981	21,378	8,527,000	543,973	0.06
AHG2	STUDENT UNION ADDITION	SU	2008	36,792	14,330,000	894,345	0.06
ROA2	CLASSROOM ADDITION	CL	1999	21,080	8,408,000	472,162	0.06
AHH	HEALTH EDUCATION	GM	1977	35,138	10,989,000	591,411	0.05
AHS4	CREST - BURN BUILDING	CL	2003	13,350	5,569,000	283,662	0.05
SFSF3	SOUTHFIELD - BUILDING B	LB	2010	71,800	37,366,000	1,385,427	0.04
AHH1	WEIGHTLIFTING AND CLASSROOM ADDITION	GM	2010	12,195	4,341,000	83,896	0.02
AHGCS	GROUNDS COVERED STORAGE	WH	2008	4,036	755,000	7,453	0.01



Executive Summary

BLDG #	BUILDING NAME	BLDG TYPE	YEAR BUILT	SQUARE FEET	CRV (\$)	TOTAL 10-YR NEEDS (\$)	FCNI
AHSD	SALT DOME	WH	2008	987	112,580	0	0.00
АНК	CHILD CARE CENTER	CC	1991	3,491	1,367,000	0	0.00



APPENDIX C FCNI Comparison

Appendix C is a comparison table with a sampling of results from similar FCA efforts to benchmark against Oakland Community College.

CLIENT	FCNI	GSF	ASSET COUNT	AVG YEAR BUILT	AVG AGE AT INSP	RENEWAL COSTS/ SF (\$)	TOTAL RENEWAL COSTS (\$)	FCNI PERCENTILE	AVG AGE PERCENTILE
Georgia College	0.10	1,129,229	21	1991	21	35.09	39,624,804	100%	100%
Columbia College	0.13	452,265	24	1952	61	52.60	23,789,565	92%	9%
San Bernardino Community College District	0.16	1,031,471	54	1991	25	62.50	64,464,728	82%	91%
Kishwaukee College	0.16	576,637	11	1979	38	62.93	36,290,629	84%	42%
North Georgia College & State Univ.	0.20	649,095	9	1989	23	47.86	31,066,394	67%	92%
Oakland Community College	0.22	2,130,209	73	1981	36	71.38	152,046,633	59%	59%
Navarro College	0.25	306,420	14	1967	49	80.65	24,714,139	50%	25%
Notre Dame of Maryland University	0.25	655,037	16	1939	77	92.01	60,268,988	50%	0%
Portland Community College	0.27	2,055,698	39	1983	27	93.49	192,190,548	34%	75%
Morehouse College	0.29	716,619	25	1969	47	97.35	69,765,043	25%	34%
Black Hawk College	0.30	562,976	19	1974	37	114.82	64,639,609	17%	50%
Kenyon College	0.32	825,023	52	1949	58	84.38	69,612,041	9%	17%
University of Nebraska - Omaha	0.36	690,190	6	1971	35	76.81	53,013,995	0%	67%



APPENDIX D AMS Database Functionality

The ISES AMS database is the industry standard for maintaining and managing capital and deferred renewal needs. It was designed inhouse exclusively for the purpose of managing FCA data and is the tool used daily by ISES personnel for data development and report generation. The system accommodates ongoing management and use of FCA information in an efficient manner, allowing facilities professionals to manage their portfolios – instead of being managed by deteriorating facilities conditions.

AMS is cloud-based and user-friendly. It has a menu-driven system for the efficient management and organization of FCA information. It uses a relational database, eliminating the storage of redundant data. From ease of use for data entry to providing reports and graphics utilized to quantify and qualify capital improvement plans, AMS is a powerful and invaluable tool.

All assessment data is stored in AMS. The database is hosted under an ASP model. There are no minimal hardware specifications, and it is accessible via the Internet to anyone designated by the Client as an authorized user. Users can be created with different levels of view and edit capabilities based upon your needs. ISES will provide access via our own web servers and ensure that the system remains available and current. The only requirements for your authorized users are Internet access and web browser software. It is compatible with Windows Internet Explorer 7.0 or higher, as well as comparable browser systems, such as Firefox.

Benefits

The power of AMS lies in its ability to sort data in numerous ways and generate customized reports to meet your needs. AMS allows you to easily track, sort and prioritize facility conditions by building, defined group, site/campus or for all of the buildings in the database. Users will be able to identify needs across multiple assets through utilization of user-defined queries. Results can be exported for integration into presentations, analytical studies, reports, CMMS databases and more.

AMS Access

Your customized AMS database can be accessed by visiting the ISES homepage (http://www.isescorp.com). Click on **My AMS** in the upper right-hand corner to enter your login information.



Executive Summary

Data Sorting and Customized Reporting

The data housed in AMS can be sorted in numerous ways. Project data fields and characteristics enable you to sort and filter electronic data more effectively. Typical sortable fields include, but are not limited to:

- Deficiency Priority
- Facility Type
- Correction Type

- Deficiency Category
- Facility Location
- Repair Cost
- Item/Component
- Types

AMS generates a report listing all of the renewal needs by building, group, or all buildings. Figures 1a and 1b show renewal needs sorted by priority class and priority sequence.



Figure 1b. Priority Class by Priority Sequence report for user-created group called "Academic Buildings".



Lifecycle Component Inventory (Recurring Renewal Needs)

The ISES FCA includes development of a full lifecycle component inventory of each facility. The inventory is based on industry standard life expectancies applied to an inventory of building systems and major components within a facility. This inventory covers the *entire* lifespan of the facility.

Figure 2a displays a typical lifecycle inventory list. Figure 2b shows the detail associated with individual line items in the inventory.



Figure 2b. AMS screenshot of Lifecvcle Component Inventorv detail.



Nonrecurring Renewal Needs

A. Management of Recommended Projects

The user can select an asset for specific data entry; enter, edit, or view various system data and settings, including photographs and CAD; print or view a wide array of reports produced by SAP Crystal Reports; generate on-the-fly search lists; and construct forecasting models of system financial data. Each deficiency is classified by the major property components identified for survey in the field. The user has the ability to edit fields and support tables to allow for owner-specified classifications to be added to the above lists.



Figure 3. AMS screenshot of Project EL03 showing the Information tab of the Project Menu.



Executive Summary

B. Cost Estimates

Costs for nonrecurring renewal needs include multiple tasks, as dictated by circumstances. All costs are estimated and then indexed to local conditions. Markups are applied as the situation dictates.



Figure 4. AMS screenshot of Project EL03's Costs/History tab.

The database also contains a History section that allows you to record any work that is performed on a project. This feature records the date, actual cost, description of work performed, work order number (if applicable) and estimated percentage of completion. If the work is 100% complete, it will remain in the database but is removed from the reporting of outstanding projects.



Executive Summary

C. Project Totals

This summary shows original costs, inflation (as dictated by the base year of the estimate), total markups and work completed to date.

	AMS ISES Demo										
ļ ,	AMS Overvi	ew Asset	Project	Ph	oto Log	Reports		Search	FCNI Details	FCNI Proj	ections
Char	nge Current /	Asset			Projec	t Detail Report	Copy Fi	rom Library Ne	ew Project Sa	ave Project Dele	te Project
1	100	5 - BAKER HALL	ĺ	Information	References	Project Links De	escription/N	Notes Costs/Histor	ry Custom La	abels Totals	
Se	lect Project F	For Viewing									
_	Project #	Title	-	Material	Labor Index	Cost: \$216,3	341.74				
	106AC01	ADD EXTERIOR CONCRETE H	ANDI	GCM:		\$43,2	268.35	GCM:	20%		
	106AC02	LEVER HANDLE DOOR HARD	VARE	Inflation			\$0.00	Base Year:	2006		
	106AC03	INTERIOR HANDRAIL IMPROV	/EME			1					
	106AC04	RESTROOM ACCESS IMPROV	EMEN	Construc	tion Cost:	\$259,6	510.08				
	106AC05	DUAL LEVEL DRINKING FOUN	ITAIN			4252					-
	106AC06	BUILDING SIGNAGE PACKAG	E UP(Construc	tion Cost:	\$259,6	510.08				
	106AC07	REPLACE KITCHENETTE WITH	1 ADA	Professio	onal Fee:	\$51,9	922.02	Professional Fe	e: 20%		
	106AC08	INSTALLATION OF ADA COMP	PLIAN	Site Fee			\$0.00	Site Fee	0%		
	106AC09	INTERIOR ACCESSIBILITY UP	GRAI	NA			\$0.00	NA	0%		
	106EL01	SELECT EXTERIOR LIGHTING	REPI	Project 1	otal:	\$311,5	532.10				
	106EL02	SECONDARY ELECTRICAL DIS	STRIE								
	106EL03	UPDATE INTERIOR LIGHTING		Project 1	otal:	\$311,5	532.10				-
	106EL04	INSTALL EMERGENCY GENER	ATOF	Cost To I	Date:		\$0.00	Est. % Complet	te 0%		
	106ES01	REPLACEMENT OF EXTERIOR	WINI					•			
	106ES02	SELECTIVE CLAY TILE ROOF	REPA	Project 1	otal:	\$311,5	532.10				
	106ES03	EXTERIOR PRESSURE WASHI	NG A 🔻								
•											- .

Figure 5. AMS screenshot of Project EL03's Totals tab.



Photolog

In addition to detailed renewal information, ISES creates a full photographic record of the physical inspection of the building, which is accessible via the database. This provides visual identification of the facility, as well as documentation of renewal needs.

Figure 6a depicts thumbnails of the photographs taken by the field inspectors, together with their description and location. Clicking on the photo will generate a larger popup of the image. The photos in 6b are linked to project EL03 (Upgrade Interior Lighting), showing affected areas in the building.



CAD Drawings

If drawings are provided by the Client, ISES identifies the location of nonrecurring renewal recommendations on the floor plans. These drawings are integrated with the database and included in published facility reports.



Figure 7. CAD for the second floor of the facility. The triangular icon for EL03 indicates that the renewal recommendation pertains to the entire floor.



Facility Reinvestment Modeling

Once the baseline condition of each facility has been established through the FCA process, the built-in modeling capability of AMS allows you to forecast funding requirements to meet target goals of condition. Multi-level financial modeling can be generated by deferred renewal backlog, capital renewal and selected timeframe. The information can be presented both graphically and textually and exported in standardized Microsoft Office formats. ISES will work with you to develop funding scenarios based on differing targets.

Projections can be based on renewal needs for a single building or across the entire facilities portfolio. AMS also calculates various metrics of your asset portfolio and measures the overall Facility Condition Needs Index (FCNI) against a national standard.

Figure 8 depicts economic parameters for setting up the models. It shows the various parameters that are input into the model once the existing condition has been established.



Figure 8. AMS screenshot of the Projection Model feature for the entire campus.


OAKLAND COMMUNITY COLLEGE

Executive Summary

Appendices



Figure 9. AMS screenshot of the Projection Model's Graphic Report.

ISES will work with you to develop several funding scenarios based on differing targets. Using the modeling function, the required levels of funding to achieve target conditions can be established.

The projections in Figure 8 are based on the facilities renewal need across the entire facilities portfolio. They are displayed graphically in Figure 9.



Classroom Utilization

Fall 2017 classroom utilization is based on 30 count seats for enhanced classrooms. The morning is from 8:00am – 11:55am; afternoon 12:00pm – 5:55pm; evening 6:00pm – 9:55pm.

Auburn Hills:

Morning	Monday – Thursday	44%
Afternoon	Monday – Thursday	60%
Evening	Monday – Thursday	42%
-	Friday	23%
	Saturday	1%

Highland Lakes:

Morning	Monday – Thursday	42%
Afternoon	Monday – Thursday	32%
Evening	Monday – Thursday	46%
	Friday	10%

Orchard Ridge:

<u>a mage</u> .		
Morning	Monday – Thursday	63%
	Friday	12%
Afternoon	Monday – Thursday	68%
	Friday	10%
Evening	Monday – Thursday	51%

<u>Royal Oak</u>:

Morning	Monday – Thursday	50%
Afternoon	Monday – Thursday	45%
Evening	Monday – Thursday	50%
-	Friday/Saturday	12%

Southfield:

Morning	Monday – Thursday	40%
Afternoon	Monday – Thursday	23%
Evening	Monday – Thursday	401%
	Friday/Saturday	10%

Mandated Facility Standards & Space Allocation by Campus

Below are the mandated facility standards for specific programs and the campuses square footage distribution for the program areas:

- Ceramics State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- Culinary State/County Health Department, State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- Photo (analogue) State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- All Science Labs State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- Auto and Body Lab State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- Nursing State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- Radiation Therapy Technology State/Local Fire Code Enforcement, OSHA/MIOSHA, NRC & Equipment Certification
- Respiratory Therapy State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- Surgical Technology State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- > Dental State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ
- ➤ Welding Labs State/Local Fire Code Enforcement, OSHA/MIOSHA, EPA/MDEQ

Auburn Hills

- Advanced Engineering & Technology 76,436 Sq. Ft.
- Emergency Services 2,374
- Humanities 10,481
- ▶ Life Science 32,015
- Physical Science 1,215

Highland Lake

- Dental 7,500 Sq. Ft.
- ▶ Nursing 6,340
- Massage Therapy 1,132
- Medical Assist 3,380

Orchard Ridge

- Life Science 26,627 Sq. Ft.
- Business Administration 28,280
- Performing Arts 28,967
- ➢ Culinary 85,500
- Humanities 9,870
- Learning Resources 22,953
- Physical Education 46,765
- Computer Information Systems 6,789

Royal Oak

- Ceramics 7,000 Sq. Ft.
- ➤ CIS 3,600
- Management Technology 7,500
- Photography 5,800

Southfield

- All Science Labs 15,500 Sq. Ft.
- Diagnostic Medical Sonography 750
- ➢ Nursing 5,500
- Radiation Therapy Technology 1,750
- Respiratory Therapy 1,650
- Surgical Technology 1,650

Facility Replacement Values

The 2016 replacement value of the college's facilities was prepared by Michigan Community College Risk Management Authority.

		Replacement
Location No.	Location	Value
	Administrative Center	
1	Admin. Ctr District Office	6,073,300
47	Admin. CtrGuest House	986,400
48	Admin. CtrPump House	8,900
	Auburn Hills Campus	
2	Auburn Hills Building A-G	104,821,800
9	Auburn Hills Building H/J	19,535,300
10	Auburn Hills - High Tech	8,702,700
11	Auburn Hills - Power House	10,284,400
12	Auburn Hills - Crest Vehicle Storage	143,100
49	Auburn Hills-Greenhouse	139,200
72	Auburn Hills Grounds Bldg.	1,101,600
73	Auburn Hills Covered Storage	344,000
74	Auburn Hills New Salt Storage	206,200
50	Auburn Hills Project Brave Storage	0
51	Auburn .Hills Tech Storage Building	26,300
57	Auburn Hills Kiln Shelter	46,200
58	Auburn Hills M-TEC	8,862,700
60	Crest Training Center	3,198,900
61	Crest Bank	545,600
62	Crest Convenience Store	602,400
63	Crest Motel	560,600
64	Crest Cape Cod Residence	263,900

65	Crest Ranch Residence	309,400
66	Crest 2-Story Residence	305,900
67	Crest Detached Garage	48,100
68	Crest Burn Simulator	6,332,000
69	Crest Control Tower	731,600
	Highland Lakes Campus	
13	Highland Hall - Building B	0
14	Highland Lakes Building C - Student Union	7,503,600
15	High Lakes Building D - High Oaks Hall	10,609,200
16	Highland Lakes Building E - Physical Ed	8,455,300
17	Highland Lakes - Levinson Hall/Addition	20,712,300
18	Highland Lakes - Woodland Hall/Addition	22,350,600
19	Highland Lakes Building G - Redwood Center	879,600
20	Highland Lakes Maintenance Pole Barn	28,800
21	Highland Lakes-Pump house	491,100
52	Highland Lakes - Pavilion	146,100
54	Highland Lakes - Central Power Plant	13,340,300
55	Highland Lakes - Grounds Building	1,101,600
56	Highland Lakes - Covered Storage	344,000
71	Highland Lakes - Salt Storage	206,200
	Orchard Ridge Campus	
22	Orchard Ridge - Building A-D	31,992,800
26	Orchard Ridge - Building E-G	26,795,600
29	Orchard Ridge - Building H	13,787,400
30	Orchard Ridge Building J-K & Fine Arts	51,286,400
32	Orchard Ridge - Building L-M	15,047,500
34	Orchard Ridge - Building N	798,600
36	Orchard Ridge - Pump house	241,000
37	Orchard Ridge - Maintenance Storage	80,500
38	Orchard Ridge Utility Tunnels	980,000
53	Orchard Ridge - Kiln Shelter	90,500
	Royal Oak Campus	
40	Royal Oak - Building A-D & Mall	47,887,200
41	Royal Oak - Grounds Storage	272,800
42	Royal Oak - Parking Structure	19,225,800
43	Royal Oak - Power Plant	4,473,500
46	Pontiac Center	0
	Southfield Campus	
39	S.E. Campus-Southfield Building	43,010,600

\$ Grand Total 516,319,400.00

Utility System and Facility Infrastructure Condition

In 2017, the College commissioned a comprehensive facility report from ISES Corporation and Carl Walker, Inc. that assessed infrastructure conditions included on next page.

Enterprise-Wide Energy Plan

The college has an active enterprise-wide energy plan implemented through the Siemens Building Technology, Building Automation System (BAS). The goal of the plan is reduce energy usage, decrease greenhouse gas emissions, and avoid energy costs. Level One energy audits have been completed and no-cost/low-cost energy efficiency measures were implemented.

Land owned by Oakland Community College

Below is the property that OCC possesses along with its acreage. At this time OCC has the capacity for future development.

\triangleright	Auburn Hills Campus, Auburn Hills	170 acres
\triangleright	Highland Lakes Campus, Waterford	157 acres
\triangleright	Orchard Ridge Campus, Farmington Hills	147 acres
\triangleright	Royal Oak Campus, Royal Oak	7 acres
\triangleright	Southfield Campus, Southfield	31 acres
\triangleright	District Office, Bloomfield Hills	8 acres

OCC does not have any State Building Authority leases.





RESTORATION & PRESERVATION Solutions

5136 Lovers Lane, Suite 200, Kalamazoo, MI 49002 269.381.2222 | carlwalker.com Mark Sampson, Project Manager msampson@carlwalker.com





RESTORATION & PRESERVATION Solutions

5136 Lovers Lane, Suite 200, Kalamazoo, MI 49002 269.381.2222 | carlwalker.com Mark Sampson, Project Manager msampson@carlwalker.com

OAKLAND COMMUNITY COLLEGE SOUTH PARKING STRUCTURE

Condition Appraisal Report REPORT | December, 2016



TABLE OF CONTENTS

- I. INTRODUCTION
- II. STRUCTURE DESCRIPTION
- III. DOCUMENT REVIEW
- IV. PREVIOUS REPAIRS
- V. FIELD OBSERVATIONS
- VI. RECOMMENDATIONS
- VII. COST ESTIMATE
- VIII. LIMITATIONS

Carl Walker, Inc. Mark Sampson, Restoration Manager 5136 Lovers Lane, Suite 200 Kalamazoo, MI 49002 P. 269.381.2222 msampson@carlwalker.com



I. INTRODUCTION

In accordance with our proposal dated July 22, 2016, we have completed our limited condition appraisal of the Oakland Community College South Parking Structure formerly known as Parking Structure No. 2. The objective of our investigation was to assess the current condition of the structure, and identify areas in need of repair. We performed the following scope of services for our condition appraisal:

- 1. Review existing documentation, including original design drawings, specifications, previous repair documents, reports, etc.
- 2. Provide a visual review of the structure to determine quantities and locations of items of deterioration such as cracking, scaling, and spalling of concrete structural elements.
- 3. Perform a chain drag in representative areas of the supported slab to identify/quantify top-of-slab delaminations.
- 4. Review the existing joint sealants, expansion joints and waterproofing coatings.
- 5. Provide a general review of other building components such as exposed electrical conduit, light fixtures, plumbing, perimeter rails, barrier cables, and the building exterior.
- 6. Prepare a written report (with photographs) summarizing the field investigation, research, and analysis, and providing recommended repairs. This will include:
 - A. Documentation of observed deficiencies and repair needs relative to the structural, waterproofing, mechanical, electrical, and related systems.
 - B. Develop repair and waterproofing protection options.
 - C. Estimate costs for repairs and any options considered. Advantages and disadvantages of any proposed repair options will be presented.
 - D. Prepare 20-year repair and protection plan for each facility with associated probable construction costs.

II. STRUCTURE DESCRIPTION

There are two parking structures at the Oakland Community College Royal Oak Campus, the North Parking Structure and the South Parking Structure. The parking structures are connected together at each level by two stairtowers and a vehicular bridge, and are located at the corner of Lincoln Ave. and Washington Ave. The North Parking Structure is the original structure and was built in 1980 and the South Parking Structure is the horizontal addition and was built in 1997.

The South Parking Structure has 4 levels with 3 bays per level. The north and south bays are flat while the middle bay is ramped. The overall dimensions of the structure are approximately 239 feet in the east-west direction and 183 feet in the north-south direction yielding a total of 43,000 square feet per complete level. The total parking area of the structure is approximately 165,000 square feet. See the attached drawings for plan views of the facility.

The structural system is composed of precast concrete double-tees, beams, and columns. Each precast concrete double-tee spans 60 feet in the north-south direction across a bay. The double-tees are 10 feet wide, which forms the column spacing of 30 feet in the east-west direction. There is a 3-inch thick cast-in-place concrete topping on the tees. The double-tees are supported by precast lightwalls on the interior and precast spandrel on the exterior. Precast inverted tee beams are used to support the double-tees at the east and west ends of the interior. Precast concrete columns support the beams and spandrels.



Oakland Community College South Parking Structure Royal Oak, Michigan

Functionally, the structure provides one-way traffic on the north and south bays and two-way traffic on the center bay. The parking structure utilizes 90-degree parking and provides 552 parking spaces for employees and students. There is an entrance/exit servicing Washington Street on the west side of Grade Level. The designated clearance height is 7'-0".

There are two stairtowers that service the parking structure. The stairtowers are located between the North and South Parking Structures at the northeast and northwest corners of the South Parking Structure. The northeast stairtower has one elevator in addition to the stairs.

III. DOCUMENT REVIEW

The following documents and drawings were obtained for a review of the structural systems and general dimensioning and detailing:

- Original design drawings prepared by TMP Associates and Carl Walker, Inc., dated March, 1997.
- Oakland Community College Parking Structure No. 2 Maintenance Review by *Carl Walker, Inc.*, 2003
- Plans and Specifications for the "Oakland Community College Royal Oak Campus Parking Structure Renovations 2004" by *Carl Walker, Inc.*, 2004.
- Oakland Community College Parking Structure No. 2 Limited condition Appraisal Report by *Carl Walker, Inc.*, 2008.
- Plans and Specifications for the "Oakland Community College Royal Oak Campus South Parking Structure Stair, Elevator, and Storage Renovation" by **Carl Walker, Inc.**, 2009.

IV. PREVIOUS REPAIRS

The following is a list of previous repairs:

- Miscellaneous concrete repairs, all sealants at the tee to tee joints, cove joints and construction joints were replaced and a concrete sealer was applied to all supported slab surfaces in 2004.
- Miscellaneous concrete repairs and joint sealant repairs were completed in 2009.

V. FIELD OBSERVATIONS

On August 30, 2016 Mark Sampson, Trey Just, and Josh Whitmore of *Carl Walker, Inc.* completed a review of the South Parking Structure. The review included a visual examination of floor and ceiling surfaces, structural members, façade, and stairtowers to assess the current condition and locate areas of deterioration. We performed a limited chain drag survey, focusing on the most vulnerable slab areas, such as areas near the crossovers and edges. These are areas where the reinforcement is located near the top of the slab and more susceptible to chloride related deterioration.



Oakland Community College South Parking Structure Royal Oak, Michigan

<u>Floor Survey</u>

To assess the condition of the floor slabs we performed a limited chain drag in representative areas. A distinct hollow sound results when the chain passes over a delaminated area or an area where the concrete topping has debonded from the underlying precast tees.

For reference, a "delamination" is a horizontal fracture beneath the concrete surface that is generally caused by corrosion of the embedded steel reinforcement. Rust, which is the byproduct of the corrosion process, has a volume several times that of the original steel. The volume change created by corrosion generates pressures on the surrounding concrete that eventually becomes sufficient to cause internal fracturing of the concrete and the loss of bond of the corroded reinforcing steel with the surrounding concrete.

The cast-in-place concrete topping is in good condition. The chain drag survey indicated that the cast-in-place concrete topping delaminations totaled 140 square feet and ranged in size from 1 to 5 square feet. The delaminations are mostly confined to the crossover areas and near the edges of the structure.



Precast Double Tees

The precast double tees are in good condition. A very small amount of delaminations, approximately 10 square feet, were noted at the underside of the tee flanges.

Inverted Tee and Spandrel Beams

The inverted tee and spandrel beams are in good condition. No deterioration was observed during our review.



Columns and Walls

The columns and walls are in good condition overall. Approximately 40 square feet of wall delaminations and 30 square feet of column delaminations were noted in the structure. A number of the exterior columns along the south edge of the structure have developed delaminations right along the ground.



Oakland Community College South Parking Structure Royal Oak, Michigan

Waterproofing

The tee to tee joint sealants vary in condition. At the Roof Level the sealants are in poor condition. At the lower levels the sealants are in fair condition. Failed joint sealants allow the infiltration of moisture and chlorides which can lead to deterioration of the precast elements. The joint sealants are 12 years old, much more than their estimated service life of 8 to 10 years. The sealants need to be completely replaced.



The cove joint sealants vary in condition. At the Roof Level the sealants are in poor condition. At the lower levels the sealants are in fair condition. Failed cove sealants allow the infiltration of moisture and chlorides which can lead to deterioration of the precast elements. The cove joint sealants are 12 years old, much more than their estimated service life of 8 to 10 years. The sealants need to be completely replaced.



Wall sealants along the edges of the columns on the roof level are in poor condition. The sealants are 12 years old, much more than their estimated service life of 8 to 10 years. The sealants need to be completely replaced.



Oakland Community College South Parking Structure Royal Oak, Michigan



Leaks from the tee to tee joints were noted in various spots, indicating that the joint sealants had failed. These joints need to be replaced to prevent infiltration of water and chlorides.

The supported levels had sealer applied in 2004. Sealer has a service life of 8 to 10 years and is therefore in need of a fresh coat of sealer. This sealer will provide protection for the concrete from water and chlorides.

<u>Stairtowers</u>

The Northeast and Northwest stairtowers (same as the Southeast and Southwest stairtowers as referred to in the North Parking Structure Report) are in good condition.



The ribbon seals between the stairtowers and the deck have failed at the entrances to both stairtowers from each supported level. These need to be removed and replaced to protect the structure from water and chlorides.

There were locations of concrete delaminations in the landings in both stairtowers. About 25 square feet of delaminations were noted in the northwest stairtower and about 15 square feet in the northeast stairtower.

Mullion joints along the windows of the northwest stairtower are open and susceptible to moisture and chlorides. Wet sealant in the corners of these windows has also deteriorated, allowing moisture in. The mullions need 123 Tape to seal them and the windows need wet sealant applied in all corners in order to protect them from moisture and chlorides.

The exterior metal-to-metal sealant on the corners of both of the stairtowers have failed. These joints should be replaced to protect the stairtower from moisture related deterioration.





Oakland Community College South Parking Structure Royal Oak, Michigan

Exterior

Overall the exterior sealant of Parking Structure No. 2 is in poor condition. Both the horizontal and vertical exterior sealants have failed and need to be replaced.



Miscellaneous Features

A few non-structural features of the parking structure were observed during our review.

Some of the column connection caps on the Level 4 are missing and need to be replaced.







Several signs are damaged and need to be replaced.

Handrails throughout the structure need to be repainted.

The CMU wall along the north end of Level 1 of the structure has about 40 lineal feet of deteriorated mortar joints that need to be repointed to protect from moisture and chlorides.



Oakland Community College South Parking Structure Royal Oak, Michigan



The lighting system appears to consist of older light fixtures serviced by an external conduit. The lights are typically placed alternatingly between one and two lights per bay per column bay with polemounted lights on Level 4. The lighting system appears to be in good condition.

Newer LED lighting technology is available that could provide energy savings as well as a longer bulb life.

VI. RECOMMENDATIONS

Based on the review of the parking structure we recommend the following repairs to prolong the service life of the structure:

Concrete Repairs

C1 – Topping Repair: Repairs include removal of concrete delaminations and patching in accordance with current state of the art procedures.

C2 – Tee Flange Repair: Repairs are located at the underside of the tee flanges. These repairs include the removal of concrete delaminations, and patching in accordance with current state of the art procedures.

C3 – Wall Repair: Repairs include the removal of the concrete delaminations and patching in accordance with current state of the art procedures.

C4 – Column Repair: Repairs include the removal of concrete delaminations and patching in accordance with current state of the art procedures.

C5 – Stair Landing Repair: Repairs are located in the northeast stairtower at Level 4 and in the northwest stairtower at Level 3. Repairs include the removal of the concrete delaminations and patching in accordance with current state of the art procedures.

<u>Waterproofing</u>

W1 – Rout & Seal Cracks: Involves routing along the length of all leaking cracks and filling them with sealant to help prevent the penetration of moisture and chlorides.

W2 – Ribbon Seal Remove and Replace: Involves removing and replacing the failed ribbon seals at the entrances to both stairtowers at all supported levels.

W3 – Cove Sealant Replacement: Involves removing and replacing all cove sealants to help protect the structure from moisture and chloride related deterioration.



Oakland Community College South Parking Structure Royal Oak, Michigan

W4 – Joint Sealant Replacement: Involves removing and replacing all joint sealants to help protect the structure from moisture and chloride related deterioration.

W5 – Wall Sealant Replacement: Involves removing and replacing all joint sealant along the walls at the columns at the roof level to protect the structure from moisture and chlorides.

W6 – Deck Coating in Stairtowers: Involves the application of a deck coating to the northwest and northeast startowers to help protect the concrete and steel from moisture and chlorides.

W7 – Exterior Wall Sealant Replacement: Involves removing and replacing all exterior wall sealants.

W8 – Exterior Metal-to-Metal Sealant Replacement: Involves removing and replacing the failed vertical sealant on the southwest corner of the Northwest stairtower.

W9 – Install 123 Tape at Mullion Joints: Involves installing sealant tape along the façade where mullion joints come together.

W10 – Exterior Wet Sealant Replacement at Corners: Involves installing sealant in the corners of the windows of the northwest stairtower.

W11 – Concrete Sealer: Involves the application of a concrete sealer to all supported levels.

<u>Finishes</u>

F1 – Repaint Pavement Markings: Involves repainting worn pavement markings.

F2 – Clean and Paint Handrails: Involves cleaning the metal handrails to remove loose paint and corrosion, and repainting them to protect against further deterioration.

Miscellaneous

M1 – Replace Column Connection Caps: Involves replacing all of the column connection caps on Level 4.

M2 – Replace Signage: Involves replacing damaged signs throughout the structure.

M3 – Repoint Deteriorated Mortar Joints: Involves repairing the mortar joints of the CMU walls along the southern façade.

<u>Alternates</u>

A1 – Update Lighting System: Involves replacing the existing lights with updated LED lights.



I. COST ESTIMATE

Oakland Community College South Parking Structure Cost Estimate

Carl Walker, Inc. Project No. R1-2016-175

December, 2016

Work			Factored		
Item	Work Item Description	<u>Units</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>
	Concrete Repairs				
C1	Topping Repair	S.F.	140	\$ 35.00	\$ 4,900.00
C2	Tee Flange Repair	S.F.	10	\$ 100.00	\$ 1,000.00
C3	Wall Delam Repair	S.F.	40	\$ 100.00	\$ 4,000.00
C4	Column Repair	S.F.	30	\$ 100.00	\$ 3,000.00
C5	Stair Landing Repair	S.F.	40	\$ 35.00	\$ 1,400.00
	Waterproofing				
W1	Rout & Seal Cracks	L.F.	1,000	\$ 5.00	\$ 5,000.00
W2	Ribbon Seal Remove and Replace	L.F.	60	\$ 100.00	\$ 6,000.00
W3	Cove Sealant Replacement	L.F.	4,800	\$ 10.00	\$ 48,000.00
W4	Joint Sealant Replacement	L.F.	14,100	\$ 10.00	\$141,000.00
W5	Wall Sealant Replacement	L.F.	300	\$ 10.00	\$ 3,000.00
W6	Deck Coating in Stairtowers	S.F.	2,000	\$ 8.00	\$ 16,000.00
W7	Exterior Wall Sealant Replacement	L.F.	3,500	\$ 10.00	\$ 35,000.00
W8	Exterior Metal-to-Metal Sealant Replacement	L.F.	740	\$ 10.00	\$ 7,400.00
W9	Install 123 Tape at Mullion Joints	EA.	410	\$ 7.50	\$ 3,075.00
W10	Exterior Wet Sealant Replacement	EA.	1,100	\$ 10.00	\$ 11,000.00
W11	Concrete Sealer	S.F.	135,500	\$ 0.50	\$ 67,750.00
	<u>Finishes</u>				
F1	Repaint Pavement Markings	EA.	544	\$ 10.00	\$ 5,440.00
F2	Clean and Paint Handrails	L.S.	1	\$ 4,000.00	\$ 4,000.00
	Miscellaneous				
M1	Replace Column Connection Caps	EA.	2	\$ 100.00	\$ 200.00
M2	Replace Signage	EA.	6	\$ 300.00	\$ 1,800.00
М3	Repoint Deteriorated Mortar Joints	L.F.	40	\$ 30.00	\$ 1,200.00
мов	Mobilization and General Conditions (8%)	L.S.	na	na	\$ 29,700.00
	Total Construction Cos	t			\$399,865.00
	Alternates				

		<u>,</u>						-
	A1	Update Lighting System	S.F.	165,000	\$	1.10	\$181,500.00	ĺ
abla	conc	truction costs are based on historical data and	d ara acti	mated in	2010	dollar	c Coft costs	

The probable construction costs are based on historical data and are estimated in 2016 dollars. Soft costs such as loss of revenue, design fees, construction administration services, etc. are not included in the cost estimate.



Oakland Community College South Parking Structure Royal Oak, Michigan

VII. LIMITATIONS

The recommended restoration and protection of the parking structure can be performed and the rate of further deterioration reduced. However, we cannot guarantee that further deterioration will not take place with continued service-related exposure. Effective ongoing maintenance can significantly reduce long-term maintenance costs. Monitoring of the parking structure can assist in scheduling future maintenance.

Specific repair procedures are not part of this evaluation. This report defines items in need of repair and presents conceptual procedures. Construction Documents are required to address all aspects of materials selection and methods for repair of the parking structure. Repair cost projections are based on deterioration quantities identified during our review. Quantities and costs are not intended to define a guaranteed maximum cost, and variations in final quantities should be anticipated.

The evaluation and restoration of existing structures require that certain assumptions be made regarding existing conditions. Since some of these assumptions may not be confirmed without expending additional sums of money and/or destroying otherwise adequate or serviceable portions of the building, Carl Walker, Inc. cannot be held responsible for latent deficiencies which may exist in the structure, but which have not been discovered within the scope of this evaluation.

OAKLAND COMMUNITY COLLEGE NORTH PARKING STRUCTURE

Condition Appraisal Report REPORT | December, 2016



TABLE OF CONTENTS

- I. INTRODUCTION
- II. STRUCTURE DESCRIPTION
- III. DOCUMENT REVIEW
- IV. PREVIOUS REPAIRS
- V. FIELD OBSERVATIONS
- VI. RECOMMENDATIONS
- VII. COST ESTIMATE
- VIII. LIMITATIONS

Carl Walker, Inc. Mark Sampson, Restoration Manager 5136 Lovers Lane, Suite 200 Kalamazoo, MI 49002 P. 269.381.2222 msampson@carlwalker.com



I. INTRODUCTION

In accordance with our proposal dated July 22, 2016, we have completed our condition appraisal of the Oakland Community College North Parking Structure formerly known as Parking Structure No. 1. The objective of our investigation was to assess the current condition of the structure, and identify areas in need of repair. We performed the following scope of services for our condition appraisal:

- 1. Review existing parking structure documentation, including original design drawings, specifications, previous repair documents, previous reports, etc.
- 2. Provide a visual review of the structure to determine quantities and locations of items of deterioration such as cracking, scaling, and spalling of concrete structural elements.
- 3. Perform a chain drag of the entire supported slab to identify/quantify top-of-slab delaminations.
- 4. Review the existing joint sealants, expansion joints and waterproofing coatings.
- 5. Provide a general review of other building components such as exposed electrical conduit, light fixtures, plumbing, perimeter rails, barrier cables, and the building exterior.
- 6. Prepare a written report (with photographs) summarizing the field investigation, research, and analysis, and providing recommended repairs. This will include:
 - A. Documentation of observed deficiencies and repair needs relative to the structural, waterproofing, mechanical, electrical, and related systems.
 - B. Develop repair and waterproofing protection options.
 - c. Estimated costs for repairs and any options considered. Advantages and disadvantages of any proposed repair options will be presented.
 - D. Prepare 20-year repair and protection plan for each facility with associated probable construction costs.

II. STRUCTURE DESCRIPTION

There are two parking structures at the Oakland Community College Royal Oak Campus, the North Parking Structure and the South Parking Structure. The parking structures are connected together at each level by two stairtowers and a vehicular bridge, and are located at the corner of Lincoln Ave. and Washington Ave. The North Parking Structure is the original structure and was built in 1980 and the South Parking Structure is the horizontal addition and was built in 1997.

The North Parking Structure is composed of 4 levels with 3 bays per level. The north and south bays are flat while the middle bay is ramped. The overall dimensions of the structure are approximately 236 feet in the east-west direction and 180 feet in the north-south direction yielding a total of 41,000 square feet per complete level. The total parking area of the structure is approximately 158,000 square feet. See the attached drawings for plan views of the facility.

The structural system is primarily cast-in-place post-tensioned concrete. The supported post-tensioned slabs are 5 to 6 inches thick with primary tendons running in the east-west direction and temperature tendons running in the north-south direction. There is also conventional reinforcement in the slab, typically #5 bars spaced at 24" on center. The top bars are directly above the beams and the bottom bars are located at midspan. The structural slab spans in the east-west direction over post-tensioned concrete beams spaced at 20'-3". Typically, the beam dimensions are 3' deep by 1'-3" wide. These beams are supported by conventionally reinforced concrete columns. The Grade Level consists of 3.5" thick asphalt.



Functionally, the structure provides one-way traffic on the north and south bays and two-way traffic on the center bay. The parking spaces are at 90 degrees. The parking structure provides approximately 500 parking spaces for employees and students. There is an entrance/exit servicing Washington Street on the west side of the Grade Level. The designated clearance height is 6'-6".

There are three stairtowers that service the parking structure. One stairtower is located at the northwest corner of the structure and the other two stairtowers are located at the southeast and southwest corners between the North and South Parking Structures. The northwest and southeast stairtowers each have one elevator in addition to the stairs.

III. DOCUMENT REVIEW

The following documents and drawings were obtained for a review of the structural systems and general dimensioning and detailing:

- Original design drawings (as-built drawings) prepared by *Straub, VanDine, Associates/Architects*, dated February, 1985.
- Oakland Community College Parking Structure No. 1 Maintenance Review by *Carl Walker, Inc.*, 2003
- Plans and Specifications for the "Oakland Community College Royal Oak Campus Parking Structure Renovations 2004" by **Carl Walker, Inc.**, 2004.
- Oakland Community College Parking Structure No. 1 Limited Condition Appraisal Report by *Carl Walker, Inc.*, 2008.
- Plans and Specifications for the "Oakland Community College Royal Oak Campus North Parking Structure Stair, Elevator, and Storage Renovation" by **Carl Walker, Inc.**, 2009.

IV. PREVIOUS REPAIRS

The following is a list of previous repairs:

- Concrete delamination repairs, slab post-tensioning repairs, deck coating applied to all supported slabs, sealant repairs and portions of the northwest stairtower were repaired in the late 1990's.
- Miscellaneous concrete repairs, slab post-tensioning repairs, sealant repairs, asphalt sealer application at Grade Level, and deck coating recoat application to all supported slabs was completed in 2004 & 2005.
- Miscellaneous concrete repairs, slab post-tensioning repairs, façade gasket repairs along east elevation, sealant repairs, asphalt sealer application at Grade Level, and deck coating recoat application to all supported slabs was completed in 2009.
- Asphalt ramp from Grade Level to Level 2 was removed and replaced with concrete in 2010.
- Barrier cable repairs including replacing damaged cables and repairing damaged sheathing was completed in 2015.



V. FIELD OBSERVATIONS

On August 30, 2016 Mark Sampson, Trey Just, and Josh Whitmore of *Carl Walker, Inc.* completed a review of the North Parking Structure. The review included a visual examination of floor and ceiling surfaces, structural members, façade, and stairtowers to assess the current condition and locate areas of deterioration. We performed a chain drag survey of the entire supported slab surface, focusing on areas above the beams where the reinforcement is near the top of the slab and more susceptible to chloride related deterioration.

<u>Floor Survey</u>

To assess the condition of the floor slabs we performed a chain drag. Dragging a chain across a delaminated area results in a distinct hollow sound. For reference, a "delamination" is a horizontal fracture beneath the concrete surface that is generally caused by corrosion of the embedded steel reinforcement and P/T tendon anchorages. Rust, which is the byproduct of the corrosion process, has a volume several times that of the original steel. The volume change created by corrosion generates pressures on the surrounding concrete that eventually becomes sufficient to cause internal fracturing of the concrete and the loss of bond of the corroded reinforcing steel with the surrounding concrete.

In general, the cast-in-place concrete slab is in good condition. The chain drag survey indicated that the cast-in-place concrete floor delaminations are mostly confined to the areas above the beams. Top of slab delaminations totaled 4,300 square feet, which is approximately 3.5% of the total supported slab area. The delaminated areas noted were of various sizes ranging from 2 square feet to 360 square feet. The majority of delaminations (88%) were located at Level 2.



Ceiling Survey

The underside of the floor slabs appears to be in good condition. Very few leaking cracks and ceiling delaminations were noted. We noted approximately 40 square feet of ceiling delaminations.

The beams are in good condition. No cracks in the beams or other signs of deterioration were noted during our review.



Oakland Community College North Parking Structure Royal Oak, Michigan



Columns and Walls

The columns and walls are in good condition. Few column delaminations were noted, about 60 square feet.

Some cracking was noted near the beam/column connections along the sides of many interior columns. The cracking appears to be caused by restraint. The column is tied at the two slabs creating a "short" column; therefore it has no flexibility to move from thermal expansion or flexural loads. We recommend applying an elastomeric coating on the face of these columns to protect them from moisture.

Waterproofing

The deck coating on the supported slabs is in good condition. During our chain drag survey, we discovered approximately 600 square feet of deck coating that has debonded, mostly on Level 4. A deck coating recoat system was applied to all supported slabs in 2004/2005 and again in 2009. The deck coating is nearing the end of the estimated service life of 8 to 10 years and will most likely need a recoat in 2 to 3 years.



The joint sealants across the top of the CMU wall along the south wall have deteriorated and need to be removed and replaced.

The grout pockets in the columns for the barrier cables at the Roof Level were noted to have efflorescence indicating moisture intrusion. We recommend installing an elastomeric coating over the grout pockets to protect the barrier cable anchoring system from moisture. Also we recommend installing sealant at the opening where the barrier cable enters the columns to protect the anchors from moisture. This would be performed at all levels at the interior column lines.

Mullion joints along the windows of the northwest stairtower are open and susceptible to moisture and chlorides. Wet sealant in the corners of these windows has also deteriorated, allowing moisture in. The mullions need 123 Tape to seal them and the windows need wet sealant applied in all corners in order to protect them from moisture and chlorides.

<u>Stairtowers</u>

The northwest stairtower is in fair condition whereas the southeast and southwest stairtowers are in good condition. The northwest stairs consist of metal pans with concrete infill and the southeast and southwest stairs consist of precast concrete. The southeast and southwest stairtowers are discussed in more detail in the South Parking Structure Report.



Oakland Community College North Parking Structure Royal Oak, Michigan



Corrosion of the steel was noted at the underside of the stair pans in the northwest stairtower, particularly on the south side at the upper levels. There is an open gap between the deck and the Northwest stair tower that may be allowing moisture and chlorides to enter the stairtower and cause corrosion of the steel. An enclosure could be installed at the roof level to cover the gap and prevent the infiltration of moisture and chlorides. Deck coating the stairway would also help protect the steel from moisture and chlorides.



The steel noses of many of the steps are corroded, causing the steel to separate from the concrete, particularly at the upper levels. These are potential trip hazards.



The ribbon seals between the deck and the entrances to the stairtowers have failed at the supported levels. The seals need to be replaced.



Oakland Community College North Parking Structure Royal Oak, Michigan



<u>Exterior</u>

Failure of the gaskets on the metal façade was noted at several locations on the north and east elevations. The failure is due to the continuous thermal movement of the metal panels which over time loosens the gaskets. These gaskets need to be reinstalled and wet sealed to protect them.



Corrosion was noted on a few of the metal façade plates. These were localized to the Grade Level in the southwest corner of the structure. The plates should be repaired or replaced.



The connections attaching the metal façade to the concrete slabs are corroded throughout the structure. These connections need to be cleaned and repainted.

Miscellaneous Features

Several non-structural features of the parking structure were observed including the guardrails, barrier cables and electrical.







The metal guardrails located at the south perimeter of each supported level was noted to have damage painting.

jc

Handrails leading into the southwest stairtower across the expansion joint at Levels 2 and 3 are pulling apart and corroded. These need to be repaired.



Handrails throughout the structure need to be repainted.



Oakland Community College North Parking Structure Royal Oak, Michigan



The southeast floor drain grate at Level 2 was noted to be broken and is a possible trip hazard.



The lighting system appears to consist of older light fixtures serviced by an embedded conduit. The lights are typically located by alternating between one and two lights per column bay with pole-mounted lighting on Level 4. The lighting system appears to be in good condition.

LED lighting technology is available that could provide energy savings as well as a longer bulb life. We also recommend switching from embedded conduits to external conduits when updating the lighting system. By switching to external conduits, the maintenance cost becomes much lower.



There is an old pay phone stand at Level 4 in the north stairtower. The stand could be removed since the phone has been removed.



VI. RECOMMENDATIONS

Based on the review of the parking structure we recommend the following repairs to prolong the service life of the structure:

Concrete Repairs

C1 – Top of Slab Repair: Repairs include removal of concrete delaminations, reconditioning of the tendons as required, and patching in accordance with current state of the art procedures.

C2 – **Underside of Slab Repair:** Repairs include removal of concrete delaminations and patching in accordance with current state of the art procedures.

C3 – Slab Post-Tensioning Repair: We recommend an allowance for repairing tendon damage identified during the slab repairs. We did not observe any damaged or broken tendons during our review.

C4 – Column Repair: Repairs include removal of concrete delaminations and patching in accordance with current state of the art procedures.

<u>Waterproofing</u>

W1 – Rout & Seal Cracks: Involves routing along the length of all leaking cracks and filling them with sealant to help prevent the penetration of moisture and chlorides.

W2 – Ribbon Seal Remove and Replace: Involves removing and replacing the failed ribbon seal all stairtower entrances.

W3 – Deck Coating Repair: Involves removing the debonded deck coating and replacing it with new deck coating.

W4 – Deck Coating at Patches: Involves the application of a deck coating at the floor repairs to protect the concrete from moisture and chloride penetration.

W5 – Deck Coating in Stairtower: Involves the application of a deck coating to the northwest stairtower to help protect the concrete and steel from moisture and chlorides.

W6 – Exterior Gasket Repair: Involves reinstalling the gaskets at the interface of the mullions and the metal panels at various locations along the face of the parking structure. Wet sealant will also be installed to protect the gaskets from further deterioration.

W7 – Install Sealant at Cap Stones: Involves removing and replacing sealant at the capstones of the CMU wall along the south edge of Levels 2, 3, and 4.

W8 – Install Sealant at Barrier Cables: Involves applying a sealant around the cable penetrations into the anchor columns.

W9 – Install 123 Tape at Mullion Joints: Involves installing 123 tape at the northwest stairs and along the façade where mullion joints come together.



W10 – Exterior Wet Sealant Replacement at Corners: Involves installing sealant in the corners of the windows of the northwest stairtower.

<u>Stairs</u>

S1 – Steel Tread Pan Repair: Repairs include repairing or replacing corroded steel pans and concrete infill in the northwest stairtower.

<u>Finishes</u>

F1 – Clean and Paint Steel Guardrail: Involves cleaning the metal guardrails to remove loose paint and corrosion, and repainting them to protect against further deterioration.

F2 – Clean and Paint Steel Handrails: Involves cleaning the metal handrails to remove loose paint and corrosion, and repainting them to protect against further deterioration.

F3 – Clean and Repaint Façade Connections: Involves cleaning and repainting the connections between the façade and the concrete slab.

<u>Miscellaneous</u>

M1 – Repair Handrail Across Expansion Joints: Repairs include repairing the handrails across expansion joints that are corroded and pulled apart.

M2 – Remove & Replace Broken Drain Grate: Involves replacing the corroded and broken grate at Level 2.

M3 – Repair Exterior Panels: Repairs include repairing the exterior façade panels on the southwest corner of Level 1 that have corrosions stains on their outer face.

<u>Alternatives</u>

A1 – Update Lighting System: Updates involve replacing the existing lights with updated LED lights.

A2 – Update Lighting System – External Conduits: Updates involve replacing the existing lights with updated LED lights and abandoning embedded conduits and installing new external conduits for lighting.

A3 – Remove Pay Phone Stand: Removal of unused pay phone stand from Level 4 in the north stairtower.





VII. COST ESTIMATE

Oakland Community College North Parking Structure Cost Estimate

Carl Walker, Inc. Project No. R1-2016-175

December, 2016

Work			Factored				
<u>Item</u>	Work Item Description	<u>Units</u>	<u>Quantity</u>	U	<u>Unit Cost</u>		Cost
	Concrete Repairs						
C1	Top of Slab Repair	S.F.	4,300	\$	35.00	\$	150,500.00
C2	Underside of Slab Repair	S.F.	40	\$	100.00	\$	4,000.00
C3	Slab Post-Tensioning Repair	EA.	20	\$	4,000.00	\$	80,000.00
C4	Column Repair	S.F.	60	\$	100.00	\$	6,000.00
	Waterproofina						
W1	Rout & Seal Cracks	L.F.	300	\$	10.00	\$	3,000.00
W2	Ribbon Seal Nosina Repair	L.F.	60	\$	100.00	\$	6,000.00
W3	Deck Coating Repair	S.F.	590	\$	5.00	\$	3.000.00
W4	Deck Coating at Patches	S.F.	8,500	\$	5.00	\$	42,500.00
W5	Deck Coating in Stairtower	S.F.	3,600	\$	8.00	\$	28,800.00
W6	Exterior Gasket Repair	L.S.	1	\$	2,000.00	\$	2,000.00
W7	Install Sealant at Cap Stones	L.F.	329	\$	30.00	\$	9,900.00
W8	Install Sealant at Barrier Cables	EA.	12	\$	300.00	\$	3,600.00
W9	Install 123 Tape at Mullion Joints	EA.	140	\$	7.50	\$	1,100.00
W10	Exterior Wet Sealant Replacement at Corners	EA.	150	\$	10.00	\$	1,500.00
	<u>Stairs</u>						
\$1	Steel Tread Pan Repair	EA.	4	\$	2,500.00	\$	10,000.00
	<u>Finishes</u>						
F1	Clean & Paint Steel Guardrail	L.S.	1	\$	3,000.00	\$	3,000.00
F2	Clean & Paint Steel Handrail	L.S.	1	\$	2,000.00	\$	2,000.00
F3	Clean & Repaint Façade Connections	EA.	465	\$	43.00	\$	20,000.00
	Miscellaneous						
м1	Repair Handrail Across Expansion Joints	FA.	2	\$	1.000.00	\$	2.000.00
M2	Remove & Replace Broken Drain Grate	EA.	1	\$	200.00	\$	200.00
M3	Repair Exterior Panels	EA.	3	\$	75.00	\$	225.00
			,		,	¢	00, 100, 00
MOR	Mobilization and General Conditions (8%)	L.S.	n/a		n/a	\$	30,400.00
	Total Construction Cost					\$	409,725.00
_	Alternates						
∆1	Lindate Lighting System	S F	158 000	\$	1 10	\$	173 800 00
Δ2	Undate Lighting System - External Conduits	5.1. S F	158 000	Ψ \$	1.10	Ψ \$	237 000 00
A3	Remove Pay Phone Stand	EA.	100,000	₽ \$	200.00	Ψ \$	200.00



The probable construction costs are based on historical data and are estimated in 2016 dollars. Soft costs such as loss of revenue, design fees, construction administration services, etc. are not included in the cost estimate.

VIII. LIMITATIONS

The recommended restoration and protection of the parking structure can be performed and the rate of further deterioration reduced. However, we cannot guarantee that further deterioration will not take place with continued service-related exposure. Effective ongoing maintenance can significantly reduce long-term maintenance costs. Monitoring of the parking structure can assist in scheduling future maintenance.

Specific repair procedures are not part of this evaluation. This report defines items in need of repair and presents conceptual procedures. Construction Documents are required to address all aspects of materials selection and methods for repair of the parking structure. Repair cost projections are based on deterioration quantities identified during our review. Quantities and costs are not intended to define a guaranteed maximum cost, and variations in final quantities should be anticipated.

The evaluation and restoration of existing structures require that certain assumptions be made regarding existing conditions. Since some of these assumptions may not be confirmed without expending additional sums of money and/or destroying otherwise adequate or serviceable portions of the building, Carl Walker, Inc. cannot be held responsible for latent deficiencies which may exist in the structure, but which have not been discovered within the scope of this evaluation.

Section V

Implementation Plan

The Five-Year Capital Outlay Plan should identify the schedule, by which the institution proposes to address major capital deficiencies, and:

a. Prioritize major capital projects requested from the State, including a brief project description and estimated cost, in the format provided. (Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate).

Due to significant changes in our local economic landscape, OCC has redirected its focus as an institution and we will be presenting a new project for consideration in the near future.

b. If applicable, provide an estimate relative to the institution's current deferred maintenance backlog. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impact, immediately versus over the next five years.

Refer to the Major Maintenance and Renovation Priorities document contained on next page.

c. Include the status of on-going projects financed with State Building Authority resources and explain how completion coincides with the overall Five-year Capital Outlay Plan.

There are no on-going projects financed with the State Building Authority at this time.

d. Identify to the extent possible, a rate of return on planned expenditures. This could be expressed as operational "savings" that a planned capital expenditure would yield in future years.

Not applicable.

e. Where applicable, consider alternatives to new infrastructure, such as distance learning.

Currently offer a variety of distance learning classes.

f. Identify a maintenance schedule for major maintenance items in excess of \$1,000,000 for fiscal year 2020 through fiscal year 2024.

Refer to the Major Maintenance and Renovation Priorities document contained on next page.

g. Identify the amount on non-routine maintenance institution has budgeted for in its current fiscal year and relevant sources of financing.

Refer to the Major Maintenance and Renovation Priorities document contained on next page. Sources of financing are funded from the capital operating budget.

Major Renovation / Maintenance Program

Oakland Community College

Campus	Asset Name	Item		Total		2020		2021	2022	2023	2024
AUBURN HILLS	BUILDING A	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	298,777.20			\$	298,777.20			
AUBURN HILLS	BUILDING A	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$	310,640.43			\$	310,640.43			
AUBURN HILLS	BUILDING A	DRINKING FOUNTAIN, DUAL-LEVEL	\$	3,211.30			\$	3,211.30			
AUBURN HILLS	BUILDING A	BACKFLOW PREVENTER (3-4 INCHES)	\$	10,022.88			\$	10,022.88			
AUBURN HILLS	BUILDING A	WATER HEATER - SHELL & TUBE (105-400 GPM)	\$	67,456.14			\$	67,456.14			
AUBURN HILLS	BUILDING A	AIR HANDLING UNIT - INDOORS	\$	505,820.23			\$	505,820.23			
AUBURN HILLS	BUILDING A	AIR HANDLING UNIT - OUTDOOR MAKEUP, GAS (>525 MBH INPUT)	\$	42,161.40			\$	42,161.40			
AUBURN HILLS	BUILDING A	FAN - CENTRIFUGAL ROOF EXHAUST	\$	327,171.06			\$	327,171.06			
AUBURN HILLS	BUILDING A	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY, 2.5" SP (<=30 HP)	\$	23,595.19			\$	23,595.19			
AUBURN HILLS	BUILDING A	HOOD, FUME	\$	175,410.57			\$	175,410.57			
AUBURN HILLS	BUILDING A	UNIT HEATER - INDOOR, GAS, SUSPENDED	\$	44,289.04			\$	44,289.04			
AUBURN HILLS	BUILDING A	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	4,304,495.47			\$	4,304,495.47			
AUBURN HILLS	BUILDING A	HEAT EXCHANGER - SHELL & TUBE WATER TO WATER (85-255 GPM)	\$	62,652.55			\$	62,652.55			
AUBURN HILLS	BUILDING A	PUMP - ELECTRIC	\$	14,194.61			\$	14,194.61			
AUBURN HILLS	BUILDING A	COMPUTER ROOM AC UNIT - CHILLED WATER, A415/A417	\$	102,693.95			\$	102,693.95			
AUBURN HILLS	BUILDING A	AIR COMPRESSOR SYSTEM - HVAC CONTROLS, A110/A400	\$	91,451.15			\$	91,451.15			
AUBURN HILLS	BUILDING A	MAIN SWITCHBOARD W/BREAKERS	\$	149,603.39			Ş	149,603.39			
AUBURN HILLS	BUILDING A	VARIABLE FREQUENCY DRIVE	\$	27,161.01			\$	27,161.01			
AUBURN HILLS	BUILDING A	LIGHTING - EXTERIOR, RECESSED	\$	17,244.72			\$	17,244.72			
AUBURN HILLS	BUILDING A	LIGHTING - EXTERIOR, WALL FLOOD	\$	2,569.94			\$	2,569.94			
AUBURN HILLS	BUILDING A	LIGHTING SYSTEM, INTERIOR - CLASSROOM	Ş	1,122,197.05			Ş	1,122,197.05			
AUBURN HILLS	BUILDING A	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	50,285.73			\$	50,285.73			
AUBURN HILLS	BUILDING A	FAN - CENTRIFUGAL ROOF EXHAUST, UNIT CEF-R02/DEF-4	Ş	9,047.58			Ş	9,047.58			
AUBURN HILLS	BUILDING A	ENTRY DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	Ş	36,249.06			Ş	36,249.06			
AUBURN HILLS	BUILDING A	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	Ş	160,092.16			Ş	160,092.16			
AUBURN HILLS	BUILDING A	SUPPLY PIPING SYSTEM - CLASSROOM	Ş	1,390,455.36			Ş	1,390,455.36			
AUBURN HILLS	BUILDING A	ELECTRICAL DISTRIBUTION NETWORK - CLASSROOM	Ş	3,008,044.97			Ş	3,008,044.97			
AUBURN HILLS	BUILDING A	FAN - UTILITY SET, 1/4" SP (12-17 HP)	Ş	28,026.14	-		Ş	28,026.14			
AUBURN HILLS	BUILDING A	FAN - CENTRIFUGAL ROOF EXHAUST, UNIT CEF-R01	Ş	30,380.15	-		Ş	30,380.15			
AUBURN HILLS			Ş	004,050.73			Ş	0,725,45			
AUBURN HILLS	BUILDING A	BACKFLOW PREVENTER (2-3 INCHES)	Ş	8,735.45			Ş	8,735.45			
AUBURN HILLS		FAN - CENTRIFUGAL ROUF EXHAUST, UNITS F-022/F-023/F-003	Ş	63,446.64			Ş	53,446.64			-
			ې د	22,903.40			ې د	22,903.40			-
			ې د	326,393.22			ې د	2 456 02			-
		CLASS STOREEDONIT	ې د	2,430.02			ې د	2,430.02			
			ç ¢	242 027 47			ې د	243 027 47			
		SERVICE DOORS AND ERAMES EXTERIOR SWINGING HOLLOW METAL	ې د	1/ 285 15			ې د	1/ 285 15			
			ې د	221 215 71			ې د	221 215 71			
			ې د	518 462 54			ې د	518 /62 5/			
			Ś	49 108 39			ې د	49 108 39			
			Ś	10 643 31			ې د	10 643 31			
			Ś	67 034 36			ې د	67 034 36			
	BUILDING A	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	Ś	216 348 02			Ś	216 348 02			
AUBURN HILLS	BUILDING A	ASBESTOS ABATEMENT - INTERIOR FINISH SYSTEMS	Ś	17,281,50			Ś	17,281,50			
AUBURN HILLS	BUILDING A	BUILDING UPGRADE	Ś	14.902.536.62			Ś	14.902.536.62			
AUBURN HILLS	BUILDING A	BUILDING A TOTALS	Ś	30.000.000.00	Ś	-	\$	30.000.000.00	š -	Ś -	Ś -
AUBURN HILLS	BUILDING B	GLASS, STOREFRONT	Ś	60.647.20			Ŧ		Ŧ		•
AUBURN HILLS	BUILDING B	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	\$	28,999.25							
AUBURN HILLS	BUILDING B	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	4,795.05	1						
AUBURN HILLS	BUILDING B	DOOR OPERATOR, POWER-ASSIST	\$	64,710.84	1						
AUBURN HILLS	BUILDING B	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$	16,810.56	1						
AUBURN HILLS	BUILDING B	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$	310,640.43	\$	310,640.43				1	l
AUBURN HILLS	BUILDING B	PLUMBING FIXTURE - EMERGENCY COMBINATION SHOWER/EYEWASH	\$	1,849.65						1	Ì
AUBURN HILLS	BUILDING B	AIR HANDLING UNIT - INDOOR	\$	42,442.03	1						1
AUBURN HILLS	BUILDING B	FAN - CENTRIFUGAL ROOF EXHAUST	\$	24,867.79						1	Ì
AUBURN HILLS	BUILDING B	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	Ś	6.438.17							

Major Renovation / Maintenance Program

Oakland Community College

Campus	Asset Name	Item		Total		2020	2021		2022	2023		2024
AUBURN HILLS	BUILDING B	HVAC CONTROLS SYSTEM - OFFICE	\$	199,349.95	Т							
AUBURN HILLS	BUILDING B	MAIN SWITCHBOARD W/BREAKERS	\$	79,856.68				\$	79,856.68			-
AUBURN HILLS	BUILDING B	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	\$	6,661.47				\$	6,661.47			
AUBURN HILLS	BUILDING B	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	\$	605.08				\$	605.08			
AUBURN HILLS	BUILDING B	LIGHTING SYSTEM, INTERIOR - OFFICE	\$	582,136.94								
AUBURN HILLS	BUILDING B	VARIABLE FREQUENCY DRIVE (30-40 HP)	\$	14,784.34				\$	14,784.34			
AUBURN HILLS	BUILDING B	WALL FINISH - APPLIED, STANDARD	\$	237,513.93								
AUBURN HILLS	BUILDING B	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	399,351.68								
AUBURN HILLS	BUILDING B	BACKFLOW PREVENTER (<=1 INCH)	\$	1,199.68							\$	1,199.68
AUBURN HILLS	BUILDING B	FIRE ALARM SYSTEM - DEVICES	\$	190,430.76							\$	190,430.76
AUBURN HILLS	BUILDING B	SUPPLY PIPING SYSTEM - OFFICE	\$	184,515.30								
AUBURN HILLS	BUILDING B	ELECTRICAL DISTRIBUTION NETWORK - OFFICE	\$	985,466.51								
AUBURN HILLS	BUILDING B	GLASS, CURTAIN WALL, STANDARD	\$	120,001.67								
AUBURN HILLS	BUILDING B	UNIT HEATER - INDOOR, GAS, SUSPENDED (<=40 MBH)	\$	527.60								
AUBURN HILLS	BUILDING B	SIGNAGE ACCESSIBILITY UPGRADES	\$	4,824.98	\$	4,824.98						
AUBURN HILLS	BUILDING B	STAIR SAFETY UPGRADES	\$	26,813.74								
AUBURN HILLS	BUILDING B	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$	100,479.14								
AUBURN HILLS	BUILDING B	BUILDING B TOTALS	\$	3,696,720.40	\$	315,465.40	\$-	\$	101,907.57	\$-	\$	191,630.44
AUBURN HILLS	BUILDING C	WATER HEATER - SHELL & TUBE (105-400 GPM)	\$	67,456.14								
AUBURN HILLS	BUILDING C	GREYWATER SUMP PUMP -SUBMERSIBLE PUMP (<0.5HP)	\$	851.63								
AUBURN HILLS	BUILDING C	AIR HANDLING UNIT - INDOOR	\$	190,335.58								
AUBURN HILLS	BUILDING C	FAN - CENTRIFUGAL ROOF EXHAUST	\$	48,245.04								
AUBURN HILLS	BUILDING C	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY	\$	17,303.14								
AUBURN HILLS	BUILDING C	HOOD, FUME	\$	175,410.57								
AUBURN HILLS	BUILDING C	UNIT HEATER - INDOOR, GAS, SUSPENDED	\$	18,089.10								
AUBURN HILLS	BUILDING C	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	2,404,901.78								
AUBURN HILLS	BUILDING C	HEAT EXCHANGER - SHELL & TUBE WATER TO WATER, UNITS HE-502, HE-501 EAST	\$	100,244.08								
AUBURN HILLS	BUILDING C	PUMP - ELECTRIC (<=10 HP)	\$	2,027.80								
AUBURN HILLS	BUILDING C	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$	6,438.17								
AUBURN HILLS	BUILDING C	HVAC CONTROLS SYSTEM - CLASSROOM	\$	371,340.65								
AUBURN HILLS	BUILDING C	MAIN SWITCHBOARD W/BREAKERS (400-600 AMP)	\$	56,566.35								
AUBURN HILLS	BUILDING C	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$	6,424.85								
AUBURN HILLS	BUILDING C	LIGHTING SYSTEM, INTERIOR - CLASSROOM	\$	759,150.99								
AUBURN HILLS	BUILDING C	LOAD INTERUPTER SWITCH - 15 KV	\$	75,189.59								
AUBURN HILLS	BUILDING C	LOAD INTERUPTER SWITCH, FUSED - 15 KV	\$	95,624.56								
AUBURN HILLS	BUILDING C	TRANSFORMER - OIL-FILLED, 3PH, 5-15KV PRIMARY (300-500 KVA)	\$	58,370.30								
AUBURN HILLS	BUILDING C	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	\$	3,173.49								
AUBURN HILLS	BUILDING C	WALL FINISH - APPLIED, STANDARD	\$	390,761.82								
AUBURN HILLS	BUILDING C	BACKFLOW PREVENTER	\$	11,222.56								
AUBURN HILLS	BUILDING C	SUPPLY PIPING SYSTEM - CLASSROOM	\$	776,841.00								
AUBURN HILLS	BUILDING C	ELECTRICAL DISTRIBUTION NETWORK - CLASSROOM	\$	1,680,580.87								
AUBURN HILLS	BUILDING C	FAN - CENTRIFUGAL ROOF EXHAUST, UNITS EF-1, EXF-RO7, EXF-R05, EXF-RO06	\$	29,301.01								
AUBURN HILLS	BUILDING C	FIRE ALARM SYSTEM - DEVICES	\$	289,662.63								
AUBURN HILLS	BUILDING C	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	\$	28,999.25								
AUBURN HILLS	BUILDING C	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	9,590.10								
AUBURN HILLS	BUILDING C	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$	171,393.47								
AUBURN HILLS	BUILDING C	HEAT EXCHANGER - SHELL & TUBE WATER TO WATER, UNIT HE-1 WEST	\$	37,591.53								
AUBURN HILLS	BUILDING C	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	56,230.58								
AUBURN HILLS	BUILDING C	STAIR SAFETY UPGRADES	\$	17,701.68							<u> </u>	
AUBURN HILLS	BUILDING C	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$	155,040.18				<u> </u>			<u> </u>	
AUBURN HILLS	BUILDING C	FIRE SPRINKLER SYSTEM EXTENSION	\$	492,648.60				<u> </u>			<u> </u>	
AUBURN HILLS	BUILDING C	NEW BUILDING	\$	21,395,290.89								
AUBURN HILLS	BUILDING C	BUILDING C TOTALS	\$	30,000,000.00	\$	-	ş -	Ş	-	ş -	\$	-
AUBURN HILLS	BUILDING D	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$	50,431.68	╢┝─							
AUBURN HILLS	BUILDING D	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$	310,640.43	\$	310,640.43						
AUBURN HILLS	BUILDING D	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	\$	3,252.83	\$	3,252.83						
AUBURN HILLS	BUILDING D	AIR HANDLING UNIT - INDOOR	Ś	21,221 02				1		1	1	
Campus	Asset Name	Item		Total	2020	2021	2022		2023	2024		
--------------	------------	---	----	--------------	---------------	------	---------------	------	------------	-----------------		
AUBURN HILLS	BUILDING D	FAN - CENTRIFUGAL ROOF EXHAUST	\$	9,047.58	\$ 9,047.58							
AUBURN HILLS	BUILDING D	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY	\$	3,146.02	\$ 3,146.02							
AUBURN HILLS	BUILDING D	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$	10,730.29	\$ 10,730.29							
AUBURN HILLS	BUILDING D	HVAC CONTROLS SYSTEM - CLASSROOM	\$	351,982.86								
AUBURN HILLS	BUILDING D	MAIN SWITCHBOARD W/BREAKERS (600-800 AMP)	\$	69,746.71								
AUBURN HILLS	BUILDING D	TRANSFORMER - DRY-TYPE, 3PH, 5-15KV PRIMARY (300-500 KVA)	\$	83,580.85								
AUBURN HILLS	BUILDING D	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$	2,569.94			\$ 2,569.94	t I				
AUBURN HILLS	BUILDING D	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	\$	1,746.43			\$ 1,746.43	3				
AUBURN HILLS	BUILDING D	LIGHTING SYSTEM, INTERIOR - CLASSROOM	\$	719,576.85			\$ 719,576.85	5				
AUBURN HILLS	BUILDING D	LOAD INTERUPTER SWITCH - 15 KV	\$	63,362.30								
AUBURN HILLS	BUILDING D	LOAD INTERUPTER SWITCH, FUSED - 15 KV	\$	80,582.86								
AUBURN HILLS	BUILDING D	TRANSFORMER - DRY-TYPE, 3PH, 480V SECONDARY (500-750 KVA)	\$	56,531.66								
AUBURN HILLS	BUILDING D	WALL FINISH - APPLIED, STANDARD	\$	142,562.46						\$ 142,562.46		
AUBURN HILLS	BUILDING D	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	2,279,535.54						\$ 2,279,535.54		
AUBURN HILLS	BUILDING D	VARIABLE FREQUENCY DRIVE	\$	8,709.20						\$ 8,709.20		
AUBURN HILLS	BUILDING D	VARIABLE FREQUENCY DRIVE (20-25 HP)	\$	11,250.27						\$ 11,250.27		
AUBURN HILLS	BUILDING D	FIRE ALARM SYSTEM - DEVICES	\$	274,562.67						\$ 274,562.67		
AUBURN HILLS	BUILDING D	SUPPLY PIPING SYSTEM - CLASSROOM	\$	736,344.70								
AUBURN HILLS	BUILDING D	ELECTRICAL DISTRIBUTION NETWORK - CLASSROOM	\$	1,592,973.08								
AUBURN HILLS	BUILDING D	VARIABLE FREQUENCY DRIVE (50-75 HP)	\$	18,753.07								
AUBURN HILLS	BUILDING D	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	476,490.03								
AUBURN HILLS	BUILDING D	ELEVATOR ACCESSIBILITY UPGRADES	\$	3,475.59	\$ 3,475.59							
AUBURN HILLS	BUILDING D	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$	30,954.72								
AUBURN HILLS	BUILDING D	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	23,227.71								
AUBURN HILLS	BUILDING D	STAIR SAFETY UPGRADES	\$	81,306.04								
AUBURN HILLS	BUILDING D	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$	150,766.87								
AUBURN HILLS	BUILDING D	FIRE SPRINKLER SYSTEM INSTALLATION	\$	867,657.58								
AUBURN HILLS	BUILDING D	BUILDING D TOTALS	\$	8,536,719.83	\$ 340,292.73	\$-	\$ 723,893.22	2 \$	-	\$ 2,716,620.14		
AUBURN HILLS	BUILDING E	WALL, EXTERIOR, TILT-UP OR PRECAST CONCRETE PANELS - RESTORE NATURAL FINISH	\$	6,278.29				\$	6,278.29			
AUBURN HILLS	BUILDING E	WALL FINISH - APPLIED, STANDARD	\$	140,296.88				\$	140,296.88			
AUBURN HILLS	BUILDING E	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$	310,640.43				\$	310,640.43			
AUBURN HILLS	BUILDING E	BACKFLOW PREVENTER (1-2 INCHES)	\$	2,664.01				\$	2,664.01			
AUBURN HILLS	BUILDING E	BACKFLOW PREVENTER (3-4 INCHES)	\$	10,022.88				\$	10,022.88			
AUBURN HILLS	BUILDING E	WATER HEATER - RESIDENTIAL, ELECTRIC (<=15 GAL)	\$	553.35				\$	553.35			
AUBURN HILLS	BUILDING E	WATER HEATER - SHELL & TUBE (105-400 GPM)	\$	67,456.14				\$	67,456.14			
AUBURN HILLS	BUILDING E	AIR HANDLING UNIT - INDOOR	\$	169,114.57				\$	169,114.57			
AUBURN HILLS	BUILDING E	AIR HANDLING UNIT - OUTDOOR MAKEUP, GAS	\$	125,341.09				\$	125,341.09			
AUBURN HILLS	BUILDING E	FAN - CENTRIFUGAL ROOF EXHAUST	\$	150,542.22				\$	150,542.22			
AUBURN HILLS	BUILDING E	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY	\$	17,303.14				\$	17,303.14			
AUBURN HILLS	BUILDING E	HOOD, FUME	\$	140,328.46				\$	140,328.46			
AUBURN HILLS	BUILDING E	UNIT HEATER - INDOOR, GAS, SUSPENDED (<=40 MBH)	\$	3,014.85				\$	3,014.85			
AUBURN HILLS	BUILDING E	HEAT EXCHANGER - SHELL & TUBE WATER TO WATER (85-255 GPM)	\$	62,652.55				\$	62,652.55			
AUBURN HILLS	BUILDING E	PUMP - ELECTRIC	\$	24,333.61				\$	24,333.61			
AUBURN HILLS	BUILDING E	AIR COMPRESSOR SYSTEM - HVAC CONTROLS	\$	27,442.22				\$	27,442.22			
AUBURN HILLS	BUILDING E	HVAC CONTROLS SYSTEM - CLASSROOM	\$	203,863.04				\$	203,863.04			
AUBURN HILLS	BUILDING E	DUST COLLECTION SYSTEM	\$	18,403.98				\$	18,403.98			
AUBURN HILLS	BUILDING E	MOTOR CONTROL CENTER VERTICAL SECTION, 600V (400-600A) W/STARTERS	\$	546,456.78				\$	546,456.78			
AUBURN HILLS	BUILDING E	VARIABLE FREQUENCY DRIVE	\$	11,990.64				\$	11,990.64			
AUBURN HILLS	BUILDING E	LOAD INTERUPTER SWITCH - 15 KV	\$	63,362.30				\$	63,362.30			
AUBURN HILLS	BUILDING E	LOAD INTERUPTER SWITCH, FUSED - 15 KV	\$	80,582.86				\$	80,582.86			
AUBURN HILLS	BUILDING E	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	\$	1,210.16				\$	1,210.16			
AUBURN HILLS	BUILDING E	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$	1,284.97				\$	1,284.97			
AUBURN HILLS	BUILDING E	LIGHTING SYSTEM, INTERIOR - CLASSROOM	\$	416,767.80				\$	416,767.80			
AUBURN HILLS	BUILDING E	GLASS, STOREFRONT	Ś	211,928.28			1	Ś	211,928.28			
AUBURN HILLS	BUILDING E	FAN - UTILITY SET	\$	49,868.05				\$	49,868.05			
AUBURN HILLS	BUILDING E	MAIN SWITCHBOARD W/BREAKERS (600-800 AMP)	Ś	69,746.71				Ś	69,746.71			
			ć	02 E00 0E		1	1	ć	02 E00 0E	1		

Campus	Asset Name	Item		Total		2020	2021	2022	2023	2024
AUBURN HILLS	BUILDING E	FIRE ALARM SYSTEM - DEVICES	\$	159,022.46					\$ 159,022.46	
AUBURN HILLS	BUILDING E	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	55,354.54					\$ 55,354.54	
AUBURN HILLS	BUILDING E	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	\$	19,923.53					\$ 19,923.53	
AUBURN HILLS	BUILDING E	DOOR AND FRAME, INTERIOR, NON-RATED	\$	39,722.55					\$ 39,722.55	
AUBURN HILLS	BUILDING E	DOOR AND FRAME, INTERIOR, FIRE-RATED	\$	153,344.44					\$ 153,344.44	
AUBURN HILLS	BUILDING E	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	54,773.59					\$ 54,773.59	
AUBURN HILLS	BUILDING E	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	1,320,271.77					\$ 1,320,271.77	
AUBURN HILLS	BUILDING E	ELEVATOR ACCESSIBILITY UPGRADES	\$	15,855.55					\$ 15,855.55	
AUBURN HILLS	BUILDING E	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$	20,636.49					\$ 20,636.49	
AUBURN HILLS	BUILDING E	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	51,118.72					\$ 51,118.72	
AUBURN HILLS	BUILDING E	STAIR SAFETY UPGRADES	\$	9,112.08					\$ 9,112.08	
AUBURN HILLS	BUILDING E	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	Ş	92,033.23					\$ 92,033.23	
AUBURN HILLS	BUILDING E	EXTERIOR MASONRY WALL RENEWAL	\$	49,399.60					\$ 49,399.60	
AUBURN HILLS	BUILDING E	IMPROVE EGRESS PATHWAY DESIGNATION	\$	16,378.10					\$ 16,378.10	
AUBURN HILLS	BUILDING E	BUILDING UPGRADE	Ş	9,926,022.25					\$ 9,926,022.25	
AUBURN HILLS	BUILDING E	BUILDING E TOTALS	Ş	15,000,000.00	Ş	-	ş -	ş -	\$ 15,000,000.00	Ş -
AUBURN HILLS	BUILDING F	DOOR LOCK, COMMERCIAL-GRADE	Ş	21,623.42	Ş	21,623.42				
AUBURN HILLS	BUILDING F	FAN - CENTRIFUGAL ROOF EXHAUST	Ş	20,253.43	Ş	20,253.43		-	-	
AUBURN HILLS	BUILDING F	HVAC DISTRIBUTION NETWORKS - CLASSROOM	Ş	1,170,510.56						\$ 1,170,510.56
AUBURN HILLS	BUILDING F	UNIT HEATER - INDOOR, GAS, SUSPENDED (<=40 MBH)	Ş	12,059.40	_					\$ 12,059.40
AUBURN HILLS	BUILDING F	HVAC CONTROLS SYSTEM - CLASSROOM	Ş	336,540.58	_			-	-	\$ 336,540.58
AUBURN HILLS	BUILDING F	FIRE ALARM SYSTEM - DEVICES	Ş	262,516.99	_			-	-	
AUBURN HILLS	BUILDING F	LIGHTING - EXTERIOR, BOLLARD (SV, MH, ID, LED) COM	Ş	16,929.87						
AUBURN HILLS	BUILDING F	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	Ş	1,512.69						
AUBURN HILLS	BUILDING F		Ş	32,355.42		4.054.65				
AUBURN HILLS	BUILDING F	PLUMBING FIXTURE - SINK, KITCHEN	Ş	1,854.65	\$	1,854.65				
AUBURN HILLS	BUILDING F	BACKFLOW PREVENTER	\$	18,/58.33	Ş	18,758.33				
AUBURN HILLS	BUILDING F		Ş	3,406.53	Ş	3,406.53				
AUBURN HILLS	BUILDING F	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	Ş	4,292.11	Ş	4,292.11				
AUBURN HILLS	BUILDING F		Ş	688,007.39						
AUBURN HILLS		SUPPLY PIPING SYSTEM - CLASSRUUM	> ¢	378,103.01						
AUBURN HILLS		ELECTRICAL DISTRIBUTION NETWORK - CLASSROOM	ې د	817,970.05	_					¢ (2)(11,70
AUBURN HILLS		HEAT EXCHANGER - SHELL & TUBE WATER TO WATER (>255 GPM)	Ş	115 468 06						\$ 63,611.70
			Ş	115,408.90				-		
			ç	05,246.51				-		
AUBURN HILLS			ې د	4 126 40				-	-	
AUBURN HILLS	BUILDING F		Ş	4,130.49	_					
AUBURN HILLS	BUILDING F	DUCILESS DA SPLIT SYSTEM (>2 TON)	\$	5,343.15						
AUBURN HILLS	BUILDING F	FAN - CENTRIFUGAL ROOF EXHAUST	Ş	42,204.62						
AUBURN HILLS	BUILDING F	HVAC CONTROLS SYSTEM - CLASSROOM	\$	180,738.42						
AUBURN HILLS	BUILDING F	FIRE ALARM SYSTEM - DEVICES	\$	140,984.21						
AUBURN HILLS	BUILDING F	DOOR AND FRAME, INTERIOR, NON-RATED	\$	15,889.02						
AUBURN HILLS	BUILDING F	DOOR AND FRAME, INTERIOR, FIRE-RATED	\$	96,387.93						
		FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	Ś	48.958.73						
			Ś	20 636 49						
AUDURN HILLS			ć	2 1 2 2 0 2	ć	2 1 2 2 0 2				
AUBURN HILLS	BUILDING F		ڊ خ	3,122.03	ې د	3,122.03				
AUBURN HILLS	BUILDING F		Ş	36,125.65	>	36,125.65				
AUBURN HILLS	BUILDING F	IIVIPROVE EGRESS PATHWAY DESIGNATION	Ş	8,670.77	Ş	8,670.77				
AUBURN HILLS	BUILDING F	ELEVATOR ACCESSIBILITY UPGRADES	\$	15,855.55	\$	15,855.55				
AUBURN HILLS	BUILDING F	STAIR SAFETY UPGRADES	\$	26,813.74						
AUBURN HILLS	BUILDING F	BUILDING F TOTALS	\$	4,987,530.65	\$	133,962.47	\$-	\$-	\$-	\$ 1,582,722.24
AUBURN HILLS	BUILDING G	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$	2,146.06	\$	2,146.06				
AUBURN HILLS	BUILDING G	WALL FINISH - APPLIED, STANDARD	\$	301,051.62						
AUBURN HILLS	BUILDING G	PLUMBING FIXTURE - SINK, KITCHEN	\$	5,563.95						\$ 5,563.95

Campus	Asset Name	Item		Total	2020	2021	:	2022	2023		2024
AUBURN HILLS	BUILDING G	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	\$	3,252.83						\$	3,252.83
AUBURN HILLS	BUILDING G	FIRE ALARM SYSTEM - DEVICES	\$	165,037.05						Ś	165.037.05
AUBURN HILLS	BUILDING G	VARIABLE FREQUENCY DRIVE	\$	15,370.66						Ś	15,370,66
		LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	\$	1,210.16						Ś	1 210 16
		LIGHTING - EXTERIOR, WALL FLOOD (SV. MH. ID. LED)	Ś	2.569.94						ć	2 560 94
AUBURN HILLS		REERIGERATION SYSTEM - WALK-IN	¢	23 392 11						- -	2,309.94
AUBURN HILLS	BUILDING G		¢	17 200 27						- >	23,392.11
AUBURN HILLS	BUILDING G		ې د	17,200.27							
AUBURN HILLS	BUILDING G	UNIT HEATER - INDOUR, GAS, SUSPENDED (<=40 MBH)	\$	3,014.85						_	
AUBURN HILLS	BUILDING G	VARIABLE FREQUENCY DRIVE	Ş	22,500.53							
AUBURN HILLS	BUILDING G	HVAC CONTROLS SYSTEM	\$	337,536.70							
AUBURN HILLS	BUILDING G	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73							
AUBURN HILLS	BUILDING G	FIRE ALARM SYSTEM - DEVICES	\$	197,325.18							
AUBURN HILLS	BUILDING G	VARIABLE FREQUENCY DRIVE (30-40 HP)	\$	14,784.34							-
AUBURN HILLS	BUILDING G	BOOKSTORE RENOVATION	\$	50,000.00							
AUBURN HILLS	BUILDING G	BUILDING G TOTALS	\$	1,210,914.97	\$ 2,146.06	\$-	\$	-	\$-	\$	216,396.69
		LIGHTING - EXTERIOR. WALL FLOOD (SV. MH. ID. LED)	Ś	6.424.85			-			ć	6 424 85
		UNIT HEATER - INDOOR, GAS, SUSPENDED (40-100 MBH)	Ś	2.738.68						-	0,424.85
		GROUND STORAGE TOTALS	Ś	9,163,53	Ś -	\$ -	Ś	-	\$ -	Ś	6.424.85
			¢	6 424 85	Ŷ	Ŷ	Ŷ		÷	ć	6 424 85
	GROUNDS MAINTENANCE	WALL FINISH - APPLIED STANDARD	Ś	20 356 40						<u> </u>	0,424.05
	GROUNDS MAINTENANCE	HVAC CONTROLS SYSTEM - WAREHOUSE	Ś	8 547 16						+	
AUBURN HILLS	GROUNDS MAINTENANCE	FIRE ALARM PANEL. DIALER. BATTERY. & CHARGER	\$	48.958.73						1	
AUBURN HILLS	GROUNDS MAINTENANCE	FIRE ALARM SYSTEM - DEVICES	\$	11,351.66						1	
AUBURN HILLS	GROUNDS MAINTENANCE	DRINKING FOUNTAIN ACCESSIBILITY UPGRADE	\$	10,318.23			\$	10,318.23			
AUBURN HILLS	GROUNDS MAINTENANCE	FIRE SPRINKLER SYSTEM INSTALLATION	\$	67,589.82							-
AUBURN HILLS	GROUNDS MAINTENANCE	GROUNDS MAINTENANCE TOTALS	\$	173,546.85	\$-	\$-	\$	10,318.23	\$-	\$	6,424.85
AUBURN HILLS	BUILDING H	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$	10,730.29	\$ 10,730.29						
AUBURN HILLS	BUILDING H	WATER HEATER - RESIDENTIAL, ELECTRIC (>100 GAL)	\$	4,002.34	\$ 4,002.34					\perp	
AUBURN HILLS	BUILDING H	WALL FINISH - APPLIED, STANDARD	\$	26,307.78							
AUBURN HILLS	BUILDING H	DUCTLESS DX SPLIT SYSTEM (1-2 TON)	\$	6,043.59						<u> </u>	
AUBURN HILLS	BUILDING H	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	Ş	3,966.86						<u> </u>	
AUBURN HILLS	BUILDING H		Ş	7,880.39						<u> </u>	7,880.39
AUBURN HILLS			Ş	39,698.37	¢ 14 722 62	ć	ć		ć	ė	7 990 20
			>	134 250 10	\$ 14,752.02	Ş -	Ş	-	ş -	\$	7,880.59
		AIR HANDLING LINIT - INDOOR (5-1 25 HP)	ہ د	10 610 51						+	
	BUILDING	LIGHTING SYSTEM INTERIOR - CLASSROOM	Ś	326 495 34						+	
AUBURN HILLS	BUILDING J	DOOR OPERATOR. POWER-ASSIST	\$	16.177.71						1	
AUBURN HILLS	BUILDING J	BUILDING J TOTALS	\$	487,533.65	\$ -	\$-	\$	-	\$-	\$	-
AUBURN HILLS	MTEC	WALL FINISH - APPLIED, STANDARD	\$	158,624.41							
AUBURN HILLS	MTEC	VARIABLE FREQUENCY DRIVE	\$	29,811.82							
AUBURN HILLS	MTEC	LIGHTING - EXTERIOR	\$	49,855.22							
AUBURN HILLS	MTEC	UNIT HEATER - INDOOR, GAS, SUSPENDED	\$	9,044.55							
AUBURN HILLS	MTEC	HVAC CONTROLS SYSTEM - CLASSROOM	\$	194,964.06							
AUBURN HILLS	MTEC	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73			L			\perp	
AUBURN HILLS	MTEC		\$	186,697.88		+				+	
AUBURN HILLS	MILEC	PLUVIBING FIXTURE - SINK, KITCHEN	Ş	927.32			<u> </u>			+	
AUBURN HILLS	IVITEC		Ş	23,3/1.52						+	
AUBURN HILLS	IVITEC		ې د	472,007.27			<u> </u>			+	
AUBURN HILLS	MTEC		Ş	2,037.54		+				+	
AUBURN HILLS	MTEC		Ş	242,167.88						+	
AUBURN HILLS	MTEC	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	Ş	310,640.43			L			\perp	
AUBURN HILLS	MTEC	DRINKING FOUNTAIN, DUAL-LEVEL	ļŞ	12,845.21		1	1				

Campus	Asset Name	Item		Total		2020	20	21		2022		2023		2024
AUBURN HILLS	MTEC	CONDENSER - REFRIGERANT, AIR-COOLED	\$	235,063.26										
AUBURN HILLS	MTEC	DUCTLESS DX SPLIT SYSTEM (1-2 TON)	\$	6,043.59										
AUBURN HILLS	MTEC	FAN - CENTRIFUGAL ROOF EXHAUST	\$	37,680.84										
AUBURN HILLS	MTEC	MOTOR CONTROL CENTER VERTICAL SECTION, 600V (400-600A) W/STARTERS	\$	364,304.52										
AUBURN HILLS	MTEC	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$	163,306.89										
AUBURN HILLS	MTEC	MTEC TOTALS	\$	2,548,952.94	\$	-	\$	-	\$	-	\$	-	\$	-
AUBURN HILLS	CREST - TRAINING CENTER	WALL FINISH - APPLIED, STANDARD	\$	60,562.00	\$	60,562.00								
AUBURN HILLS	CREST - TRAINING CENTER	LIGHTING - EXTERIOR	\$	3,780.10	\$	3,780.10							_	
AUBURN HILLS	CREST - TRAINING CENTER	UNIT HEATER - INDOOR, GAS, SUSPENDED (<=40 MBH)	Ş	9,044.55	Ş	9,044.55			_					
AUBURN HILLS	CREST - TRAINING CENTER	COMPUTER ROOM AC UNIT - REFRIGERANT, EXCL. HEAT REJECTION (<=3 TON)	Ş	46,527.50										
	CREST - TRAINING CENTER	FIRE ALARIVI PANEL, DIALER, BATTERY, & CHARGER	¢ ¢	48,958.73										
	CREST - TRAINING CENTER		ې د	64 710 84										
	CREST - TRAINING CENTER	DUIMBING FIXTURE - SINK KITCHEN	ې د	927 32										
	CREST - TRAINING CENTER	BACKELOW PREVENTER	Ś	18 758 33									-	
AUBURN HILLS	CREST - TRAINING CENTER	LIGHTING SYSTEM. INTERIOR - CLASSROOM	\$	169.928.78										
AUBURN HILLS	CREST - TRAINING CENTER	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	6,898.18										
AUBURN HILLS	CREST - TRAINING CENTER	INTERIOR SIGNAGE ACCESSIBILITY UPGRADES	\$	3,547.76	\$	3,547.76								
AUBURN HILLS	CREST - TRAINING CENTER	CREST - TRAINING CENTER TOTALS	\$	498,482.32	\$	76,934.40	\$	-	\$	-	\$	-	\$	
AUBURN HILLS	CREST - RANCH	WALL FINISH - APPLIED, STANDARD	\$	15,351.84	\$	15,351.84								
AUBURN HILLS	CREST - RANCH	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	\$	2,910.71	\$	2,910.71								
AUBURN HILLS	CREST - RANCH	DOOR, EXTERIOR, OVERHEAD PANEL OR SECTIONAL, PAINTED, LOCK	\$	12,064.36					Ś	12,064,36				
	CREST - BANCH	DOOR OPERATOR. OVERHEAD PANEL DOOR. RESIDENTIAL PADS	Ś	1.072.11					Ś	1 072 11				
		WATER HEATER - RESIDENTIAL GAS (35-45 GAL)	Ś	2.575.30					ć	2 575 20				
		LIGHTING SYSTEM INTERIOR - RESIDENCE	Ś	15 790 75					ې د	15 700 75			-	
	CREST - RANCH		¢	5 444 15					Ş	13,790.75				
AUBURN HILLS	CREST - RANCH		ć	55 209 22	ć	18 262 55	ć	-	ć	21 502 52	ć		ć	
AUBURN HILLS	CREST - KANCH		ب ک	1 660 04	ې د	1 660 04	Ŷ	-	Ļ	31,302.32	Ş	-	ç	
AUBURN HILLS	CREST - CONTROL TOWER		ڊ خ	7,580,12	ې د	7,500.04			_					
AUBURN HILLS	CREST - CONTROL TOWER		ې د	7,569.15	Ş	7,569.15								
AUBURN HILLS	CREST - CONTROL TOWER		\$	21,562.06					_				Ş	21,562.06
AUBURN HILLS	CREST - CONTROL TOWER	WALL FINISH - APPLIED, STANDARD	\$	9,704.80									_	
AUBURN HILLS	CREST - CONTROL TOWER	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	Ş	10,318.23										
AUBURN HILLS	CREST - CONTROL TOWER	CREST - CONTROL TOWER TOTALS	\$	50,834.26	\$	9,249.17	\$	-	\$	-	\$	•	\$	21,562.06
AUBURN HILLS	CREST - POLE BARN	LIGHTING - EXTERIOR, POST LANTERN, (INC, CFL, LED) RES	\$	928.80									\$	928.80
AUBURN HILLS	CREST - POLE BARN	UNIT HEATER - INDOOR, GAS, SUSPENDED (40-100 MBH)	\$	5,477.37										
AUBURN HILLS	CREST - POLE BARN	EXTERIOR WALL FINISH RENEWAL	\$	7,955.46										
AUBURN HILLS	CREST - POLE BARN	INSTALL EMERGENCY LIGHTS	\$	3,536.91	\$	3,536.91								
AUBURN HILLS	CREST - POLE BARN	STABILIZE CRACKED CONCRETE FLOOR SLAB	\$	24,319.56					\$	24,319.56				
AUBURN HILLS	CREST - POLE BARN	CREST - POLE BARN TOTALS	\$	42,218.09	\$	3,536.91	\$	-	\$	24,319.56	\$	-	\$	928.80
AUBURN HILLS	CREST - BURN BUILDING	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$	33,409.22	\$	33,409.22								
AUBURN HILLS	CREST - BURN BUILDING	UNIT HEATER - INDOOR, GAS	\$	25,125.78										
AUBURN HILLS	CREST - BURN BUILDING	LIGHTING SYSTEM, INTERIOR - CLASSROOM	\$	212,909.35									Ś	212,909,35
	CREST - BURN BUILDING	CREST - BURN BUILDING TOTALS	\$	271,444.35	Ś	33.409.22	Ś	-	Ś	-	Ś	-	Ś	212,909.35
	CREST - MOTEL	WALL FINISH - APPLIED. STANDARD	Ś	43.756.13	Ś	43.756.13	•						· ·	,
		WATER HEATER - RESIDENTIAL, ELECTRIC (<=15 GAL)	Ś	691.68	Ś	691.68								
			Ś	4 007 82	Ś	4 007 82								
		PLUMBING FIXTURE - BATHTUB WITH FIXTURES	¢	7 811 10	Ť	.,007.02	1		-					
AUDURIN HILLS	CREST - IVIUTEL		¢ ¢	1 100 60	∎⊢–				+					
AUBURN HILLS	UNEST - WIUTEL		د خ	1,133.00					-		<u> </u>			
AUBURN HILLS	CKEST - MUTEL		ç	30,037.02	∎⊢									
AUBURN HILLS	CREST - MOTEL		>	7,405.40		10	*		6		A		6	
AUBURN HILLS	CREST - MOTEL	CREST - MOTEL TOTALS	Ş	103,728.83	Ş	48,455.63	Ş	-	Ş	-	Ş	-	Ş	-
AUBURN HILLS	CREST - TWO STORY HOUSE	WALL FINISH - APPLIED, STANDARD	Ş	28,911.51	Ş	28,911.51			-		<u> </u>			
AUBURN HILLS	CREST - TWO STORY HOUSE	ILIGHTING - EXTERIOR, WALL LANTERN OF FLOOD (INC, CFL, LED)	Ş	3,492.85	Ş	3,492.85			1		1		1	

Campus	Asset Name	Item		Total		2020	20	21		2022	2023	2024
AUBURN HILLS	CREST - TWO STORY HOUSE	DOOR, EXTERIOR, OVERHEAD PANEL OR SECTIONAL, PAINTED, LOCK	\$	12,064.36					\$	12,064.36		
AUBURN HILLS	CREST - TWO STORY HOUSE	DOOR OPERATOR, OVERHEAD PANEL DOOR, RESIDENTIAL, PADS	\$	1,072.11					\$	1,072.11		
AUBURN HILLS	CREST - TWO STORY HOUSE	WATER HEATER - RESIDENTIAL, GAS (45-55 GAL)	\$	2,690.98					\$	2,690.98		
AUBURN HILLS	CREST - TWO STORY HOUSE	LIGHTING SYSTEM, INTERIOR - RESIDENCE	\$	22,558.21					\$	22,558.21		
AUBURN HILLS	CREST - TWO STORY HOUSE	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	7,777.36								
AUBURN HILLS	CREST - TWO STORY HOUSE	CREST - TWO STORY HOUSE TOTALS	\$	78,567.38	\$	32,404.36	\$	-	\$	38,385.66	\$-	\$-
AUBURN HILLS	CREST - BANK	WATER HEATER - RESIDENTIAL, ELECTRIC (<=15 GAL)	\$	691.68	\$	691.68						
AUBURN HILLS	CREST - BANK	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	\$	907.62	\$	907.62						
AUBURN HILLS	CREST - BANK	BACKFLOW PREVENTER (<=1 INCH)	\$	1,199.68								
AUBURN HILLS	CREST - BANK	LIGHTING SYSTEM, INTERIOR - OFFICE	\$	33,484.08								
AUBURN HILLS	CREST - BANK	WALL FINISH - APPLIED, STANDARD	\$	16,129.58								
AUBURN HILLS	CREST - BANK	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	236.70								
AUBURN HILLS	CREST - BANK	CREST - BANK TOTALS	\$	52,649.34	\$	1,599.30	\$	-	\$	-	\$-	\$-
AUBURN HILLS	CREST - STORE	WALL FINISH - APPLIED, STANDARD	\$	7,980.25	\$	7,980.25						
AUBURN HILLS	CREST - STORE	WATER HEATER - RESIDENTIAL, ELECTRIC (<=15 GAL)	\$	691.68	\$	691.68						
AUBURN HILLS	CREST - STORE	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$	5,139.88	\$	5,139.88						
AUBURN HILLS	CREST - STORE	LIGHTING SYSTEM, INTERIOR - RETAIL	\$	29,080.85								
AUBURN HILLS	CREST - STORE	CREST - STORE TOTALS	\$	42,892.66	\$	13,811.81	\$	-	\$	-	\$-	\$ -
AUBURN HILLS	CREST - CAPE COD	WALL FINISH - APPLIED, STANDARD	\$	14,438.85	\$	14,438.85						
AUBURN HILLS	CREST - CAPE COD	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	\$	1,164.28	\$	1,164.28						
AUBURN HILLS	CREST - CAPE COD	WATER HEATER - RESIDENTIAL, GAS (45-55 GAL)	\$	2,690.98					\$	2,690.98		
AUBURN HILLS	CREST - CAPE COD	LIGHTING SYSTEM, INTERIOR - RESIDENCE	\$	16,567.75					\$	16,567.75		
AUBURN HILLS	CREST - CAPE COD	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	5,714.67								
AUBURN HILLS	CREST - CAPE COD	CREST - CAPE COD TOTALS	\$	40,576.53	\$	15,603.13	\$	-	\$	19,258.73	\$-	\$-
AUBURN HILLS	BUILDING T	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$	355,293.26								
AUBURN HILLS	BUILDING T	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	\$	18,124.53	\$	18,124.53						
AUBURN HILLS	BUILDING T	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	\$	40,023.04	\$	40,023.04						
AUBURN HILLS	BUILDING T	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	\$	5,004.38	\$	5,004.38						
AUBURN HILLS	BUILDING T	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$	310,640.43								
AUBURN HILLS	BUILDING T	WATER HEATER - RESIDENTIAL, ELECTRIC (25-46 GAL)	\$	1,637.35	\$	1,637.35						
AUBURN HILLS	BUILDING T	AIR COMPRESSOR - MEDICAL/LABORATORY PCKG (>40 HP), WITH DRYER	\$	79,630.36	\$	79,630.36			_			
AUBURN HILLS	BUILDING T	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	\$	3,255.56								
AUBURN HILLS	BUILDING T	UNIT HEATER - INDOOR, GAS, SUSPENDED (<=40 MBH)	\$	12,059.40					_			
AUBURN HILLS	BUILDING T	HEAT EXCHANGER - SHELL & TUBE WATER TO WATER (85-255 GPM)	\$	37,591.53								
AUBURN HILLS	BUILDING T	HEAT EXCHANGER - SHELL & TUBE WATER TO WATER (>255 GPM)	\$	57,795.78								
AUBURN HILLS	BUILDING T	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$	10,730.29	\$	10,730.29						
AUBURN HILLS	BUILDING T	HVAC CONTROLS SYSTEM - CLASSROOM	\$	261,684.46	\$	261,684.46						
AUBURN HILLS	BUILDING T	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73					_			
AUBURN HILLS	BUILDING T	FIRE ALARM SYSTEM - DEVICES	\$	204,125.80								
AUBURN HILLS	BUILDING T	MOTOR CONTROL CENTER VERTICAL SECTION, 600V (400-600A) W/STARTERS	\$	546,456.78	<u> </u>				\$	546,456.78		
AUBURN HILLS	BUILDING T	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	Ş	6,661.47	Ş	6,661.47			_			
AUBURN HILLS	BUILDING T	LIGHTING - EXTERIOR	\$	11,050.93					_			\$ 11,050.93
AUBURN HILLS	BUILDING T	LIGHTING SYSTEM, INTERIOR - CLASSROOM	Ş	534,975.13	<u> </u>				_			\$ 534,975.13
AUBURN HILLS	BUILDING T	VARIABLE FREQUENCY DRIVE (20-25 HP)	Ş	11,250.27	Ş	11,250.27			_			
AUBURN HILLS	BUILDING T	DOOR LOCK, COMMERCIAL-GRADE	Ş	7,207.81					_			\$ 7,207.81
AUBURN HILLS	BUILDING T	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	Ş	43,707.45					_			\$ 43,707.45
AUBURN HILLS	BUILDING T	BACKFLOW PREVENTER (<=1 INCH)	\$	1,199.68					_			\$ 1,199.68
AUBURN HILLS	BUILDING T	FAN - CENTRIFUGAL ROOF EXHAUST	Ş	29,391.57					_			\$ 29,391.57
AUBURN HILLS	BUILDING T	PUMP - ELECTRIC	\$	73,000.83					-		l	\$ 73,000.83
AUBURN HILLS	BUILDING T	PLUMBING FIXTURE - SINK, KITCHEN	\$	1,854.65					-		l	
AUBURN HILLS	BUILDING T	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	7,192.57					-		l	
AUBURN HILLS	BUILDING T	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	347,390.43					-		l	
AUBURN HILLS	BUILDING T	FAN - UTILITY SET	\$	19,578.99					<u> </u>		ļ	
AUBURN HILLS	BUILDING T	MAIN SWITCHBOARD W/BREAKERS (400-600 AMP)	\$	56,566.35					\$	50,866.35	ļ	
AUBURN HILLS	BUILDING T	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	Ş	3,651.98					-			
AUBURN HILLS	BUILDING T	DUCTLESS DX SPLIT SYSTEM (<=1 TON)	\$	3,546.29								
AUBURN HILLS	BUILDING T	IAIR HANDLING UNIT - INDOOR	\$	377,880.50					1		1	

Campus	Asset Name	Item		Total	2020	2021	2022		2023		2024
AUBURN HILLS	BUILDING T	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	1,694,738.81							
AUBURN HILLS	BUILDING T	WALL FINISH - APPLIED, STANDARD	\$	47,205.22							
AUBURN HILLS	BUILDING T	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	13,206.96	\$ 13,206.96						
AUBURN HILLS	BUILDING T	RESTROOM ACCESSIBILITY UPGRADES	\$	10,854.71			\$ 10,854	.71			
AUBURN HILLS	BUILDING T	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$	104,297.37							
AUBURN HILLS	BUILDING T	BUILDING T TOTALS	\$	5,399,421.63	\$ 447,953.09	\$-	\$ 608,177.	.85	\$-	\$	700,533.41
AUBURN HILLS	SITE	REMOVE AND REPLACE DAMAGED HW AND CW PIPE INSULATION	\$	116,282.03							
AUBURN HILLS	SITE	REPAIR/REPLACE DAMAGED PIPE SUPPORT STANCHIONS	\$	25,531.43							
AUBURN HILLS	SITE	REMOVE AND REPLACE PIPE, VALVES AND EXPANSION JOINTS	\$	3,209,636.80						\$3,	209,636.80
AUBURN HILLS	SITE	REMOVE AND REPLACE DIRECT BURIED HW PIPE TO BUILDING H	\$	2,319,240.80							
AUBURN HILLS	SITE	PERFORM ULTRASONIC PIPE THICKNESS TESTING ON HW AND CW PIPE	\$	28,033.34	\$ 28,033.34						
AUBURN HILLS	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 1-5	\$	36,417.56	\$ 36,417.56						
AUBURN HILLS	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 6-10	\$	36,417.56							
AUBURN HILLS	SITE	REPAIR OR REPLACE SPLICE BOX #1	\$	4,841.16	\$ 4,841.16						
AUBURN HILLS	SITE	PROVIDE SECONDARY WATER FEED FROM FEATHERSTONE RD	\$	253,329.11							
AUBURN HILLS	SITE	CCTV CRITICAL SANITARY SEWER LINES FOR DEFICIENCIES	\$	25,354.29						\$	25,354.29
AUBURN HILLS	SITE	CCTV CRITICAL STORM WATER SEWER LINES FOR DEFICIENCIES	\$	42,920.43						\$	42,920.43
AUBURN HILLS	SITE	REPLACE SELECT AGED/DEFICIENT STORM WATER STRUCTURES	\$	409,063.22							
AUBURN HILLS	SITE	SANITARY SEWER PIPE - 6" DIAMETER	\$	120,338.72							
AUBURN HILLS	SITE	SANITARY SEWER PIPE - 8" DIAMETER	\$	153,380.82							
AUBURN HILLS	SITE	ELECTRICAL DISTRIBUTION NETWORK - WAREHOUSE	\$	37,191.03	\$ 37,191.03						
AUBURN HILLS	SITE	GREYWATER SUMP PUMP -SUBMERSIBLE PUMP (<0.5HP)	\$	1,703.26	\$ 1,703.26						
AUBURN HILLS	SITE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$	31,662.60	\$ 31,662.60						
AUBURN HILLS	SITE	GREYWATER SUMP PUMP -SUBMERSIBLE PUMP (<0.5HP)	\$	1,703.26							
AUBURN HILLS	SITE	SITE TOTALS	\$	6,853,047.42	\$ 139,848.94	\$-	\$.	•	\$-	\$3,	277,911.52
AUBURN HILLS	POWER HOUSE	WALL, EXTERIOR, TILT-UP OR PRECAST CONCRETE PANELS - RESTORE NATURAL FINISH	\$	7,972.43						\$	7,972.43
AUBURN HILLS	POWER HOUSE	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$	13,448.45						\$	13,448.45
AUBURN HILLS	POWER HOUSE	WALL FINISH - APPLIED, STANDARD	\$	84,029.35						\$	84,029.35
AUBURN HILLS	POWER HOUSE	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	2,276.65						\$	2,276.65
AUBURN HILLS	POWER HOUSE	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	3,651.98						\$	3,651.98
AUBURN HILLS	POWER HOUSE	PLUMBING FIXTURES	\$	4,939.91						\$	4,939.91
AUBURN HILLS	POWER HOUSE	UNIT HEATER - STEAM/HYDRONIC	\$	15,540.73							
AUBURN HILLS	POWER HOUSE	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	\$	3,255.56							
AUBURN HILLS	POWER HOUSE	HVAC DISTRIBUTION NETWORKS - SHOPS / TRADES, DRY LABORATORY	\$	37,285.37							
AUBURN HILLS	POWER HOUSE	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	\$	7,260.94	\$ 7,260.94						
AUBURN HILLS	POWER HOUSE	LIGHTING SYSTEM, INTERIOR - SHOPS / TRADES, DRY LABORATORY	\$	49,925.05							
AUBURN HILLS	POWERHOUSE	INSTALL HANDRAILS AT RAMP	\$	7,143.03							
AUBURN HILLS	POWERHOUSE	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$	3,284.42							
AUBURN HILLS	POWERHOUSE	TEAR DOWN AND REBUILD CHILLED WATER PUMPS	\$	29,405.46	\$ 28,331.46						
AUBURN HILLS	POWERHOUSE	TEAR DOWN AND REBUILD CONDENSER WATER PUMPS	\$	29,405.46							
AUBURN HILLS	POWER HOUSE	BACKFLOW PREVENTER (1-2 INCHES)	\$	2,664.01							
AUBURN HILLS	POWER HOUSE	SUPPLY PIPING SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$	24,723.47							
AUBURN HILLS	POWER HOUSE	ELECTRICAL DISTRIBUTION NETWORK - SHOPS / TRADES, DRY LABORATORY	\$	248,815.19			\$ 371,839	.19			
AUBURN HILLS	POWER HOUSE	VARIABLE FREQUENCY DRIVES	\$	116,786.08							
AUBURN HILLS	POWER HOUSE	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD	\$	387,761.32							
AUBURN HILLS	POWER HOUSE	BOILERS- GAS/OIL	\$	2,562,550.76							
AUBURN HILLS	POWER HOUSE	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$	5,139.88							
AUBURN HILLS	POWER HOUSE	THERMAL STORAGE EXPANSION TANK	\$	44,305.12							
AUBURN HILLS	POWER HOUSE	HVAC CONTROLS SYSTEM - WAREHOUSE	\$	28,504.89							
AUBURN HILLS	POWER HOUSE	SUPPLY PIPING SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$	211,915.49							
AUBURN HILLS	POWER HOUSE	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (25"-30" DIAMETER)	\$	10,126.72							
AUBURN HILLS	POWER HOUSE	HVAC DISTRIBUTION NETWORKS - SHOPS / TRADES, DRY LABORATORY	\$	980,436.79							
AUBURN HILLS	POWER HOUSE	POWER HOUSE TOTALS	\$	4,922,554.52	\$ 35,592.39	\$ -	\$ 371,839.	.19	\$ -	\$	116,318.77
		AUBURN HILLS CAMPUS WIDE - GRAND TOTAI	L\$	115.161.339.00	\$ 1,683,260.20	\$ 30,000,000.00	\$ 1,929,602	.52	\$ 15.000.000.00	Ś 9.	058.263.50

CAMPUS	Asset Name	Item	Total	2020	2021		2022	20	023	2024
DISTRICT OFFICE	BEE CENTER	DOOR, EXTERIOR, SLIDING ENTRANCE SYSTEM, POWERED	\$ 43,937.11							
DISTRICT OFFICE	BEE CENTER	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$ 7,867.21							
DISTRICT OFFICE	BEE CENTER	VARIABLE FREQUENCY DRIVE (<=5 HP)	\$ 1,741.84	\$ 1,741.84						
DISTRICT OFFICE	BEE CENTER	VARIABLE FREQUENCY DRIVE (<=5 HP)	\$ 2,612.76	\$ 2,612.76						
DISTRICT OFFICE	BEE CENTER	VARIABLE FREQUENCY DRIVE (<=5 HP)	\$ 2,612.76	\$ 2,612.76						
DISTRICT OFFICE	BEE CENTER	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	\$ 6,661.47	\$ 6,661.47						
DISTRICT OFFICE	BEE CENTER	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	\$ 6,661.47	\$ 6,661.47						
DISTRICT OFFICE	BEE CENTER	PACKAGE HVAC UNIT, DX, GAS OR ELECTRIC HEAT, SINGLE-ZONE (<= 5 TON	\$ 25,333.23		\$ 25,333.23					
DISTRICT OFFICE	BEE CENTER	PACKAGE HVAC UNIT, DX, GAS OR ELECTRIC HEAT, SINGLE-ZONE (<= 5 TON	\$ 25,333.23		\$ 25,333.23					
DISTRICT OFFICE	BEE CENTER	HVAC CONTROLS SYSTEM - OFFICE	\$ 151,515.43							\$ 151,515.43
DISTRICT OFFICE	BEE CENTER	UNINTERRUPTIBLE POWER SUPPLY - 277/480 VOLTS	\$ 118,617.64							\$ 118,617.64
DISTRICT OFFICE	BEE CENTER	LIGHTING SYSTEM, INTERIOR - OFFICE	\$ 442,451.74							\$ 442,451.74
DISTRICT OFFICE	BEE CENTER	WALL FINISH - APPLIED, STANDARD	\$ 180,502.47							\$ 180,502.47
DISTRICT OFFICE	BEE CENTER	WATER HEATER - RESIDENTIAL, GAS (35-45 GAL)	\$ 2,575.30							\$ 2,575.30
DISTRICT OFFICE	BEE CENTER	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73							
DISTRICT OFFICE	BEE CENTER	FIRE ALARM SYSTEM - DEVICES	\$ 144,736.43							
DISTRICT OFFICE	BEE CENTER	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 16,704.61							
DISTRICT OFFICE	BEE CENTER	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	\$ 582.14							
DISTRICT OFFICE	BEE CENTER	BOILER - GAS (250-2,000 MBH)	\$ 88,803.76			\$	96,870.76			
DISTRICT OFFICE	BEE CENTER	BOILER - GAS (250-2,000 MBH)	\$ 88,803.76							
DISTRICT OFFICE	BEE CENTER	DRINKING FOUNTAIN UPGRADE	\$ 10,377.57							
DISTRICT OFFICE	SITE	SITE WORK & SMALL PROJECTS	\$ 100,000.00	\$ 100,979.22	83719.98				106896	
DISTRICT OFFICE	BEE CENTER	BEE CENTER TOTALS	\$ 1,417,390.64	\$ 121,269.51	\$ 134,386.43	\$	96,870.76	\$ 10	6,896.00	\$ 895,662.59
DISTRICT OFFICE	FOUNDATION HOUSE	CEILING FINISH - ATTACHED ACOUSTICAL TILE	\$ 10,246.78							
DISTRICT OFFICE	FOUNDATION HOUSE	DOOR LOCK, COMMERCIAL-GRADE	\$ 19,821.47			\$	19,821.47			
DISTRICT OFFICE	FOUNDATION HOUSE	DRAIN PIPING SYSTEM - OFFICE	\$ 43,103.17					\$ 4	3,104.00	
DISTRICT OFFICE	FOUNDATION HOUSE	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 2,569.94							\$ 2,569.94
DISTRICT OFFICE	FOUNDATION HOUSE	LIGHTING SYSTEM, INTERIOR - OFFICE	\$ 90,946.48							\$ 90,946.48
DISTRICT OFFICE	FOUNDATION HOUSE	MAIN SWITCHBOARD W/BREAKERS (<400 AMP)	\$ 19,964.17							
DISTRICT OFFICE	FOUNDATION HOUSE	PLUMBING FIXTURE - LAVATORY, COUNTER	\$ 2,068.24		\$ 2,068.24					
DISTRICT OFFICE	FOUNDATION HOUSE	PLUMBING FIXTURE - SINK, KITCHEN	\$ 927.32		\$ 927.32					
DISTRICT OFFICE	FOUNDATION HOUSE	WALL FINISH - APPLIED, STANDARD	\$ 33,307.41			\$	33,307.77			
DISTRICT OFFICE	FOUNDATION HOUSE	WALL FINISH - WOOD PANEL, STANDARD	\$ 65,086.57							
DISTRICT OFFICE	FOUNDATION HOUSE	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$ 13,074.79							
DISTRICT OFFICE	FOUNDATION HOUSE	BOILER - GAS (<=250 MBH)	\$ 10,879.79							
DISTRICT OFFICE	FOUNDATION HOUSE	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$ 14,731.28							
DISTRICT OFFICE	FOUNDATION HOUSE	DOOR AND FRAME, INTERIOR, FIRE-RATED	\$ 52,575.24							
DISTRICT OFFICE	FOUNDATION HOUSE	DOOR AND FRAME, INTERIOR, NON-RATED	\$ 26,481.70							
DISTRICT OFFICE	FOUNDATION HOUSE	ELECTRICAL DISTRIBUTION NETWORK - OFFICE	\$ 153,958.12							
DISTRICT OFFICE	FOUNDATION HOUSE	PLUMBING FIXTURE - WATER CLOSET, TANK-TYPE	\$ 1,560.37		\$ 1,560.37					
DISTRICT OFFICE	FOUNDATION HOUSE	WALL FINISH - TILE, CERAMIC / STONE, STANDARD	\$ 25,272.52							
DISTRICT OFFICE	FOUNDATION HOUSE	WATER HEATER - RESIDENTIAL, ELECTRIC (25-46 GAL)	\$ 1,637.35		\$ 1,637.35	ļ				
DISTRICT OFFICE	FOUNDATION HOUSE	RESTROOM ACCESSIBILITY UPGRADES	\$ 28,730.49	\$ 28,730.49						
DISTRICT OFFICE	FOUNDATION HOUSE	IMPROVE EGRESS PATHWAY DESIGNATION	\$ 9,420.29		\$ 9,420.29					
DISTRICT OFFICE	FOUNDATION HOUSE	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$ 12,268.49							
DISTRICT OFFICE	FOUNDATION HOUSE	FOUNDATION HOUSE TOTALS	\$ 638,631.97	\$ 28,730.49	\$ 15,613.57	\$	53,129.24	\$ 4	3,104.00	\$ 93,516.42
		DISTRICT OFFICE CAMPUS WIDE - GRAND TOTAL	\$ 2,056,022.61	\$ 150,000.00	\$ 150,000.00	\$ 1	50,000.00	\$ 15	0,000.00	\$ 989,179.01

Asset Name	Item	Identifier	2020	2021	2022	2023	2024
COLLEGE WIDE	ROOF UPGRADES		\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-2	Х				
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-1	Х				
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-3	Х				
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A	Х				
Auburn Hills	ROOF - SHINGLE ASPHALT COMPOSITE, PREMIUM, MAIN GARAGE	GARAGE - MAIN	Х				
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	B-2			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	B-1			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	В			Х		
Auburn Hills	ROOF - PANEL, ALUMINUM OR GALVANIZED, STANDING SEAM	B-3			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	С	Х				
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	E-1	Х				
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	E				Х	
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	F-6					
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	F-2					
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	F-3					
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	F-5					
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	F-1					
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	F-4					
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	F					
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	H-2			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	J-4			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	J-1				Х	
Auburn Hills	ROOF - 1-PLY, UNBALLASTED	M-TEC		Х			
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	M-TEC		Х			
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	M-TEC		Х			
Auburn Hills	ROOF - 1-PLY, UNBALLASTED	TRAINING CTR			Х		
Auburn Hills	ROOF - 1-PLY, UNBALLASTED	CONTROL TOWER			Х		
Auburn Hills	ROOF - 1-PLY, UNBALLASTED	CONTROL TOWER			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	MOTEL			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	BANK	Х				
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STORE		Х			
Auburn Hills	ROOF - SHINGLE ASPHALT COMPOSITE, PREMIUM	ALL HOUSES & GARAGE			Х		
Auburn Hills	ROOF - PANEL, ALUMINUM OR GALVANIZED, STANDING SEAM	T-1			Х		
Auburn Hills	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	Т				Х	
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	HIGH OAKS HALL	Х				
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	LEVINSON HALL				Х	
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	LEVINSON HALL					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	LEVINSON HALL					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	LEVINSON HALL					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	LEVINSON HALL					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	PE					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	PE					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	PE					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	REDWOOD CENTER					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	REDWOOD CENTER					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	REDWOOD CENTER					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STUDENT CENTER					Х
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STUDENT CENTER					Х
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STUDENT CENTER					Х
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STUDENT CENTER					Х
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STUDENT CENTER					Х
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STUDENT CENTER					Х
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	WOODLAND HALL					
Highland Lakes	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	WOODLAND HALL NORTH					
Highland Lakes	ROOF - SHINGLE ASPHALT COMPOSITE, PREMIUM	HIGH OAKS HALL				Х	

Asset Name	ltem	Identifier	2020	2021	2022	2023	2024
Highland Lakes	ROOF - BITUMINOUS, 2-PLY, APPLIED MODIFIED BITUMEN, TORCH	CENTRAL PLANT				Х	
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	POWERHOUSE	1	Х			
Orchard Ridge	ROOF - 1-PLY, UNBALLASTED	А	х				
Orchard Ridge	ROOF - 1-PLY, UNBALLASTED	В	Х				
Orchard Ridge	ROOF - 1-PLY, UNBALLASTED	В	Х				
Orchard Ridge	ROOF - 1-PLY, UNBALLASTED	J	İ.				Х
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	GROUNDS	İ.				Х
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	H-E	Х				
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	H-B	Х				
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	H-A	Х				
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	H-C	Х				
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	H-D	Х				
Orchard Ridge	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	H-F	Х				
Orchard Ridge	REPAIR CLAY TILE ROOF	SMITH THEATER		Х			
Royal Oak	ROOF - 1-PLY, UNBALLASTED	A-5					
Royal Oak	ROOF - 1-PLY, UNBALLASTED	B-2					
Royal Oak	ROOF - BITUMINOUS, 2-PLY, APPLIED MODIFIED BITUMEN, TORCH	G			Х		
Royal Oak	ROOF - BITUMINOUS, 2-PLY, APPLIED MODIFIED BITUMEN, TORCH	G	İ.		Х		
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	NA-2				Х	
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	NA-1				Х	
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	E-1	İ.				Х
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	D-4	İ.				
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	D-2	İ.				
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-3	1			Х	
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	C-1	1				
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	B-3	1				
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	B-1	1				
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	D-1	1				
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-4	1			х	
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-1				Х	
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-6	1			Х	
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	A-2	1			х	
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	D-3	1				
Royal Oak	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	STAIRTOWER	1				
Royal Oak	ROOF - BITUMINOUS, 4-PLY, COAL TAR PITCH - R30	BOILER 2 - AGGREGATE BALLASTED	İ.				
Royal Oak	ROOF - BITUMINOUS, 4-PLY, COAL TAR PITCH - R30	BOILER 1- AGGREGATE BALLASTED	1				
Royal Oak	ROOF GUTTER AND LEADER - ALUMINUM OR GALVANIZED, COATED		1				
District Office	ROOF - BITUMINOUS, 2-PLY, APPLIED MODIFIED BITUMEN, TORCH	DORMERS	İ.	Х			
District Office	ROOF - BITUMINOUS, 3-PLY, SBS MODIFIED BITUMEN, MOP	MAIN ENT.	1	Х			
Southfield	ROOF - 1-PLY, UNBALLASTED	ROOFS A - M & CLERESTORY	İ.				
College Wide	PAVING, CATCH BASING & SIDEWALK RESTORATION		\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	G	Х				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	G-1	Х				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	н			Х		
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	H-1	Х				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	M-1	İ.				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	M2	İ.				
Auburn Hills	CONCRETE VEHICULAR PAVING - JOINT MAINTENANCE	BURN BLDG	İ.				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	BURN BLDG					
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	MOTEL	Х				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	MOTEL	Х				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	BANK	Х				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	В	Х				
Auburn Hills	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	STORE	Х				
Auburn Hills	CONCRETE PEDESTRIAN PAVING - JOINT MAINTENANCE	STORE	Х				
Auburn Hills	SITE VEHICULAR PAVING RENEWAL	M-2		Х			

Oakland Community College

Asset Name	Item	Identifier	2020	2021	2022	2023	2024
Highland Lakes	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	GROUNDS	Х				
Highland Lakes	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	SERVICE YARD	Х				
Orchard Ridge	SITE PEDESTRIAN PAVING RENEWAL	J				Х	
Orchard Ridge	SITE VEHICULAR PAVING RENEWAL	GROUNDS		Х			
Royal Oak	URGENT PARKING STRUCTURE REPAIRS AND MAINTENANCE						
Royal Oak	URGENT PARKING STRUCTURE REPAIRS AND MAINTENANCE						Х
Royal Oak	SHORT-TERM PARKING STRUCTURE REPAIRS AND MAINTENANCE						
Royal Oak	SHORT-TERM PARKING STRUCTURE REPAIRS AND MAINTENANCE						
Royal Oak	LONG-TERM PARKING STRUCTURE REPAIRS AND MAINTENANCE						
Royal Oak	LONG-TERM PARKING STRUCTURE REPAIRS AND MAINTENANCE						
District Office	VEHICULAR PAVING RENEWAL				Х		
College Wide	EMERGING NEEDS/CONTINGENCY/EMERGENCY REPAIR		\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00
College Wide	ACADEMIC ENHANCEMENTS		\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00
college Wide	PARKING LOT LIGHT FIXTURE UPGRADE		\$ 400,000.00	\$ 400,000.00	\$ 400,000.00	\$ 400,000.00	
College Wide	CARPET REPLACEMENT		\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 150,000
College Wide	CONSTRUCTION MANAGEMENT CORE STAFF		\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000

COLLEGE WIDE - GRAND TOTAL \$ 5,000,000.00 \$ 5,000,000.00 \$ 5,000,000.00 \$ 5,000,000.00 \$ 4,550,000.00

Campus	Asset Name	Item	Total		2020		2021	202	2		2023		2024
HIGHLAND LAKES	GROUNDS BUILDING	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73									\$	48,958.73
HIGHLAND LAKES	GROUNDS BUILDING	FIRE ALARM SYSTEM - DEVICES	\$ 10,315.26									\$	10,315.26
HIGHLAND LAKES	GROUNDS BUILDING	UNIT HEATER - INDOOR, GAS, SUSPENDED (<=40 MBH)	\$ 3,014.85									\$	3,014.85
HIGHLAND LAKES	GROUNDS BUILDING	WALL FINISH - APPLIED, STANDARD	\$ 15,047.51									\$	15,047.51
HIGHLAND LAKES	GROUNDS BUILDING	BACKFLOW PREVENTER (<=1 INCH)	\$ 1,199.68			\$	1,199.68						
HIGHLAND LAKES	GROUNDS BUILDING	FAN - CENTRIFUGAL ROOF EXHAUST	\$ 26,705.24									\$	26,705.24
HIGHLAND LAKES	GROUNDS BUILDING	HVAC CONTROLS SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$ 12,823.20									\$	12,823.20
HIGHLAND LAKES	GROUNDS BUILDING	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 6,424.85	\$	6,424.85								
HIGHLAND LAKES	GROUNDS BUILDING	SEWAGE LIFT STATION	\$ 10,241.29									\$	10,241.29
HIGHLAND LAKES	GROUNDS BUILDING	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$ 92,122.47									\$	92,122.47
HIGHLAND LAKES	GROUNDS BUILDING	BOILER - GAS (250-2,000 MBH)	\$ 32,265.37										
HIGHLAND LAKES	GROUNDS BUILDING	INTERIOR SIGNAGE ACCESSIBILITY UPGRADES	\$ 993.36									\$	993.36
HIGHLAND LAKES	GROUNDS BUILDING	FIRE SPRINKLER SYSTEM INSTALLATION	\$ 61,418.91									. <u> </u>	
HIGHLAND LAKES	GROUNDS BUILDING	GROUNDS BUILDING TOTALS	\$ 321,530.70	\$	6,424.85	\$	1,199.68	\$	-	\$	-	\$	220,221.90
HIGHLAND LAKES	GROUNDS STORAGE	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 3,854.91									. <u> </u>	
HIGHLAND LAKES	GROUNDS STORAGE	WALL FINISH - APPLIED, STANDARD	\$ 16,061.95									\$	16,061.95
HIGHLAND LAKES	GROUNDS STORAGE	LIGHTING SYSTEM, INTERIOR	\$ 27,029.03									. <u> </u>	
HIGHLAND LAKES	GROUNDS STORAGE	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$ 80,702.33									\$	80,702.33
HIGHLAND LAKES	GROUNDS STORAGE	GROUNDS STORAGE TOTALS	\$ 127,648.21	\$	-	\$	-	\$	-	\$	-	\$	96,764.27
HIGHLAND LAKES	SALT DOME	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 1,284.97	\$	1,284.97	\$	1,284.97						
HIGHLAND LAKES	SALT DOME	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 6,086.10										
HIGHLAND LAKES	SALT DOME	SALT DOME TOTALS	\$ 7,371.07	\$	1,284.97	\$	1,284.97	\$	-	\$	-	\$	-
HIGHLAND LAKES	HIGH OAKS HALL	ELEVATOR MODERNIZATION - TRACTION - LOW RISE 2-8 FLOORS	\$ 444,222.41									\$	444,222.41
HIGHLAND LAKES	HIGH OAKS HALL	FAN - CENTRIFUGAL ROOF EXHAUST	\$ 16,578.52									\$	16,578.52
HIGHLAND LAKES	HIGH OAKS HALL	PLUMBING FIXTURES	\$ 5,632.19										
HIGHLAND LAKES	HIGH OAKS HALL	VARIABLE FREQUENCY DRIVES	\$ 10,658.35									\$	10,658.35
HIGHLAND LAKES	HIGH OAKS HALL	WALL FINISH - APPLIED, STANDARD	\$ 286,105.55							\$ 2	286,105.55	. <u> </u>	
HIGHLAND LAKES	HIGH OAKS HALL	VARIABLE FREQUENCY DRIVE	\$ 8,709.20									\$	8,709.20
HIGHLAND LAKES	HIGH OAKS HALL	LIGHTING - EXTERIOR	\$ 3,477.56	\$	3,477.56							. <u> </u>	
HIGHLAND LAKES	HIGH OAKS HALL	VARIABLE FREQUENCY DRIVES	\$ 14,499.74										
HIGHLAND LAKES	HIGH OAKS HALL	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$ 11,987.62										
HIGHLAND LAKES	HIGH OAKS HALL	BUILDING ENTRY ACCESSIBILITY UPGRADES	\$ 24,480.54										
HIGHLAND LAKES	HIGH OAKS HALL	DOOR HARDWARE UPGRADES	\$ 18,858.34										
HIGHLAND LAKES	HIGH OAKS HALL	RESTROOM ACCESSIBILITY UPGRADES	\$ 6,333.70									\$	6,333.70
HIGHLAND LAKES	HIGH OAKS HALL	STAIR SAFETY UPGRADES	\$ 9,164.63										
HIGHLAND LAKES	HIGH OAKS HALL	FIRE SPRINKLER SYSTEM INSTALLATION	\$ 778,310.32										
HIGHLAND LAKES	HIGH OAKS HALL	REBUILD PLANTER RETAINING WALL	\$ 7,031.54										
HIGHLAND LAKES	HIGH OAKS HALL	HIGH OAKS HALL TOTAL	\$ 1,647,541.04	\$	3,477.56	\$	-	\$	-	\$ 2	286,105.55	\$	486,502.17
HIGHLAND LAKES	LEVINSON HALL	LIGHTING - EXTERIOR	\$ 4,898.51	\$	4,898.51	-							
HIGHLAND LAKES	LEVINSON HALL	PLUMBING FIXTURES	\$ 48,878.34	\$	48,878.34	-							
HIGHLAND LAKES	LEVINSON HALL	UNIT HEATER - INDOOR, GAS, SUSPENDED (40-100 MBH)	\$ 2,738.68			-						\$	2,738.68
HIGHLAND LAKES	LEVINSON HALL	CASEWORK - LABORATORY, INCLUDES REAGENT SHELF AND TOP	\$ 1,057,966.87										
HIGHLAND LAKES	LEVINSON HALL	WALL FINISH - TILE, CERAMIC / STONE, STANDARD	\$ 39,366.81	\$	39,366.81								
HIGHLAND LAKES	LEVINSON HALL	WALL FINISH - APPLIED, STANDARD	\$ 328,103.32			\$ 3	328,103.32						
HIGHLAND LAKES	LEVINSON HALL	LIGHTING - EXTERIOR	\$ 11,051.06	\$	11,051.06								
HIGHLAND LAKES	LEVINSON HALL	VARIABLE FREQUENCY DRIVE	\$ 36,687.35	<u> </u>				\$ 36,	587.35				
HIGHLAND LAKES	LEVINSON HALL	VARIABLE FREQUENCY DRIVE (15-20 HP)	\$ 9,483.48							\$	9,483.48		
HIGHLAND LAKES	LEVINSON HALL	DOOR OPERATOR, POWER-ASSIST	\$ 64,710.84									\$	64,710.84
HIGHLAND LAKES	LEVINSON HALL	DUCTLESS DX SPLIT SYSTEM (1-2 TON)	\$ 6,043.59									\$	6,043.59

Campus	Asset Name	Item	Total		2020	:	2021	2022	2023		2024
HIGHLAND LAKES	LEVINSON HALL	VARIABLE FREQUENCY DRIVE	\$ 30,741.32							\$	30,741.32
HIGHLAND LAKES	LEVINSON HALL	UNIT HEATER - INDOOR, GAS, SUSPENDED (40-100 MBH)	\$ 5,477.37							\$	5,477.37
HIGHLAND LAKES	LEVINSON HALL	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73							\$	48,958.73
HIGHLAND LAKES	LEVINSON HALL	FIRE ALARM SYSTEM - DEVICES	\$ 227,010.85							\$	227,010.85
HIGHLAND LAKES	LEVINSON HALL	VARIABLE FREQUENCY DRIVE (15-20 HP)	\$ 9,483.48								
HIGHLAND LAKES	LEVINSON HALL	WALL FINISH - APPLIED, STANDARD	\$ 269,806.90								
HIGHLAND LAKES	LEVINSON HALL	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73							\$	48,958.73
HIGHLAND LAKES	LEVINSON HALL	FIRE ALARM SYSTEM - DEVICES	\$ 204,501.23							\$	204,501.23
HIGHLAND LAKES	LEVINSON HALL	HVAC CONTROLS SYSTEM - LABORATORY, WET	\$ 656,962.87							\$	656,962.87
HIGHLAND LAKES	LEVINSON HALL	UNINTERRUPTIBLE POWER SUPPLY - 120/208 VOLTS	\$ 93,837.63								
HIGHLAND LAKES	LEVINSON HALL	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$ 9,590.10								
HIGHLAND LAKES	LEVINSON HALL	GREENHOUSE	\$ 124,697.76								
HIGHLAND LAKES	LEVINSON HALL	HVAC CONTROLS SYSTEM - LABORATORY, WET	\$ 729,275.31								
HIGHLAND LAKES	LEVINSON HALL	VARIABLE FREQUENCY DRIVE (30-40 HP)	\$ 14,784.34								
HIGHLAND LAKES	LEVINSON HALL	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$ 10,318.23							\$	10,318.23
HIGHLAND LAKES	LEVINSON HALL	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$ 26,413.89							\$	26,413.89
HIGHLAND LAKES	LEVINSON HALL	RESTROOM ACCESSIBILITY UPGRADES	\$ 47,044.26	\$	47,044.26						
HIGHLAND LAKES	LEVINSON HALL	BACKFLOW PREVENTER INSTALLATION	\$ 9,794.60	Ľ.	,					\$	9,794.60
HIGHLAND LAKES	LEVINSON HALL	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$ 213,260.76								
HIGHLAND LAKES	LEVINSON HALL	EXTERIOR MASONRY WALL RENEWAL	\$ 73,453.12								
HIGHLAND LAKES	LEVINSON HALL	STAIR AND RAILING SAFETY UPGRADES	\$ 29,342.82						\$ 29,342.82		
HIGHLAND LAKES	LEVINSON HALL	LEVINSON HALL TOTALS	\$ 4,494,835.82	\$	151,238.97	\$ 3	28,103.32	\$ 36,687.35	\$ 38,826.30	\$ 1	,342,630.93
HIGHLAND LAKES	METAL BUILDING	DOOR OPERATOR, OVERHEAD PANEL DOOR, RESIDENTIAL, PADS	\$ 2,144.23	· ·							
HIGHLAND LAKES	METAL BUILDING	EXTERIOR WALL FINISH RENEWAL	\$ 6,894.72								
HIGHLAND LAKES	METAL BUILDING	INTERIOR REPAIRS	\$ 15,018.58								
HIGHLAND LAKES	METAL BUILDING	METAL BUILDING TOTALS	\$ 24,057.52	\$	-	\$	-	\$ -	\$ -	\$	-
HIGHLAND LAKES	PAVILION	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$ 9,590.10	· ·						\$	9,590.10
HIGHLAND LAKES	PAVILION	DOOR AND FRAME, INTERIOR, NON-RATED	\$ 2,648.17							\$	2,648.17
HIGHLAND LAKES	PAVILION	DOOR LOCK, RESIDENTIAL-GRADE / INT & EXT	\$ 1,490.84							\$	1,490.84
HIGHLAND LAKES	PAVILION	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	\$ 2,328.57	\$	2,328.57						
HIGHLAND LAKES	PAVILION	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 13,693.72							\$	13,693.72
HIGHLAND LAKES	PAVILION	WALL FINISH - WOOD PANEL, STANDARD	\$ 6,031.19								
HIGHLAND LAKES	PAVILION	WALL, EXTERIOR, SIDING, WOOD BOARD, STANDARD	\$ 17,770.62								
HIGHLAND LAKES	PAVILION	PATH OF TRAVEL ACCESSIBILITY UPGRADES	\$ 22,110.54						\$ 22,110.54		
HIGHLAND LAKES	PAVILION	PAVILION TOTALS	\$ 75,663.75	\$	2,328.57	\$	-	\$ -	\$ 22,110.54	\$	27,422.83
HIGHLAND LAKES	PHYSICAL EDUCATION	AIR HANDLING UNIT - INDOOR	\$ 230,809.37								
HIGHLAND LAKES	PHYSICAL EDUCATION	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$ 26,896.89								
HIGHLAND LAKES	PHYSICAL EDUCATION	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$ 9,028.51								
HIGHLAND LAKES	PHYSICAL EDUCATION	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$ 14,731.28								
HIGHLAND LAKES	PHYSICAL EDUCATION	DOOR LOCK, RESIDENTIAL-GRADE	\$ 596.34								
HIGHLAND LAKES	PHYSICAL EDUCATION	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	\$ 2,502.19								
HIGHLAND LAKES	PHYSICAL EDUCATION	DOOR OPERATOR, POWER-ASSIST	\$ 16,177.71								
HIGHLAND LAKES	PHYSICAL EDUCATION	DOOR PANIC HARDWARE	\$ 22,670.10								
HIGHLAND LAKES	PHYSICAL EDUCATION	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	\$ 10,005.76								
HIGHLAND LAKES	PHYSICAL EDUCATION	FIRE ALARM SYSTEM - DEVICES	\$ 188,239.82								
HIGHLAND LAKES	PHYSICAL EDUCATION	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	\$ 1,210.16	\$	1,210.16						
HIGHLAND LAKES	PHYSICAL EDUCATION	LIGHTING SYSTEM, INTERIOR	\$ 398,449.84								
HIGHLAND LAKES	PHYSICAL EDUCATION	PLUMBING FIXTURES	\$ 61,738.72								
HIGHLAND LAKES	PHYSICAL EDUCATION	UNIT HEATER - INDOOR, GAS, SUSPENDED (40-100 MBH)	\$ 24,648.16								
HIGHLAND LAKES	PHYSICAL EDUCATION	WALL FINISH - APPLIED, STANDARD	\$ 114,225.81								

Campus	Asset Name	Item		Total		2020		2021	2022	2023		2024
HIGHLAND LAKES	PHYSICAL EDUCATION	MAIN SWITCHBOARD W/BREAKERS (<400 AMP)	\$	39,928.34							1	
HIGHLAND LAKES	PHYSICAL EDUCATION	HVAC DISTRIBUTION NETWORKS - GYMNASIUM	\$	1,487,175.12								
HIGHLAND LAKES	PHYSICAL EDUCATION	HVAC CONTROLS SYSTEM - GYMNASIUM	\$	227,039.92							\$	227,039.92
HIGHLAND LAKES	PHYSICAL EDUCATION	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73							\$	48,958.73
HIGHLAND LAKES	PHYSICAL EDUCATION	DOOR AND FRAME, EXTERIOR ALL	\$	44,554.54								
HIGHLAND LAKES	PHYSICAL EDUCATION	INTERIOR AMENITY ACCESSIBILITY UPGRADES	\$	44,253.21								
HIGHLAND LAKES	PHYSICAL EDUCATION	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	28,174.82								
HIGHLAND LAKES	PHYSICAL EDUCATION	RESTROOM ACCESSIBILITY UPGRADES	\$	23,522.13								
HIGHLAND LAKES	PHYSICAL EDUCATION	LOCKER ROOM ACCESSIBILITY UPGRADES	\$	55,080.63							1	
HIGHLAND LAKES	PHYSICAL EDUCATION	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$	101,110.67							1	
HIGHLAND LAKES	PHYSICAL EDUCATION	EXTERIOR MASONRY WALL RENEWAL	\$	112,072.40							1	
HIGHLAND LAKES	PHYSICAL EDUCATION	FIRE SPRINKLER SYSTEM INSTALLATION	\$	596,210.89							1	
HIGHLAND LAKES	PHYSICAL EDUCATION	REPLACE DAMAGED RESTROOM PARTITIONS	\$	19,153.35							1	
HIGHLAND LAKES	PHYSICAL EDUCATION	PHYSICAL EDUCATION TOTALS	\$	3,949,165.38	\$	1,210.16	\$	-	\$ -	\$ -	\$	275,998.65
HIGHLAND LAKES	PUMP HOUSE	ELECTRICAL DISTRIBUTION NETWORK - WAREHOUSE	\$	2,950.28						\$ 2,950.28		
HIGHLAND LAKES	PUMP HOUSE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$	1,352.47						\$ 1,352.47		
HIGHLAND LAKES	PUMP HOUSE	WALL FINISH - APPLIED, STANDARD	\$	2,705.17						-		
HIGHLAND LAKES	PUMP HOUSE	HVAC CONTROLS SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$	8,471.22								
HIGHLAND LAKES	PUMP HOUSE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$	8,791.03						\$ 8,791.03		
HIGHLAND LAKES	PUMP HOUSE	UNIT HEATER - ELECTRIC	\$	6,799.16						\$ 6,799.16		
HIGHLAND LAKES	PUMP HOUSE	PUMP HOUSE TOTALS	\$	37,959.67	\$	-	\$	-	\$ -	\$ 19,892.93	\$	-
HIGHLAND LAKES	REDWOOD CENTER	LIGHTING SYSTEM, INTERIOR - SHOPS / TRADES, DRY LABORATORY	\$	30,739.99							\$	30,739.99
HIGHLAND LAKES	REDWOOD CENTER	FAN - CENTRIFUGAL ROOF EXHAUST	\$	16,578.52							\$	16,578.52
HIGHLAND LAKES	REDWOOD CENTER	WALL FINISH - APPLIED, STANDARD	\$	29,384.91							L	
HIGHLAND LAKES	REDWOOD CENTER	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	\$	8,249.10							L	
HIGHLAND LAKES	REDWOOD CENTER	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73							\$	48,958.73
HIGHLAND LAKES	REDWOOD CENTER	FIRE ALARM SYSTEM - DEVICES	\$	13,313.99							\$	13,313.99
HIGHLAND LAKES	REDWOOD CENTER	HVAC CONTROLS SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$	16,551.01							ļ	
HIGHLAND LAKES	REDWOOD CENTER	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	11,330.04							L	
HIGHLAND LAKES	REDWOOD CENTER	RESTROOM ACCESSIBILITY UPGRADES	\$	11,761.07							L	
HIGHLAND LAKES	REDWOOD CENTER	EXTERIOR WALL FINISH RENEWAL	\$	16,213.97							ļ	
HIGHLAND LAKES	REDWOOD CENTER	FIRE SPRINKLER SYSTEM INSTALLATION	\$	79,273.93							L	
HIGHLAND LAKES	REDWOOD CENTER	REDWOOD CENTER TOTALS	\$	282,355.26	\$	-	\$	-	\$ -	\$ -	\$	109,591.24
HIGHLAND LAKES	STUDENT CENTER	LIGHTING - EXTERIOR	\$	7,500.67	\$	7,500.67					L	
HIGHLAND LAKES	STUDENT CENTER	PLUMBING FIXTURES	\$	38,998.51	\$	38,998.51					L	
HIGHLAND LAKES	STUDENT CENTER	WALL FINISH - APPLIED, STANDARD	\$	169,749.42						\$ 169,749.42	ļ	
HIGHLAND LAKES	STUDENT CENTER	VARIABLE FREQUENCY DRIVE	\$	12,192.87							\$	12,192.87
HIGHLAND LAKES	STUDENT CENTER	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$	7,716.78							µ	
HIGHLAND LAKES	STUDENT CENTER	FAN - CENTRIFUGAL ROOF EXHAUST	\$	20,253.43							ļ	
HIGHLAND LAKES	STUDENT CENTER	UNIT HEATER - INDOOR, GAS	\$	4,246.11							ļ	
HIGHLAND LAKES	STUDENT CENTER	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	\$	3,984.71					\$ 3,984.71		ļ	
HIGHLAND LAKES	STUDENT CENTER	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	8,804.62					\$ 8,804.62		ļ	
HIGHLAND LAKES	STUDENT CENTER	RESTROOM ACCESSIBILITY UPGRADES	\$	49,038.77	\$	49,038.77					ļ	
HIGHLAND LAKES	STUDENT CENTER	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$	96,830.90						\$ 96,830.90	Ļ	
HIGHLAND LAKES	STUDENT CENTER	FIRE SPRINKLER SYSTEM INSTALLATION	\$	545,886.58						\$ 545,886.58		
HIGHLAND LAKES	STUDENT CENTER	STAIR AND RAILING SAFETY UPGRADE	\$	25,898.46					\$ 25,898.46			
	STUDENT CENTER		\$	991,101.84	\$	95,537.96	\$	-	\$ 38,687.79	\$ 812,466.90	\$	12,192.87
HIGHLAND LAKES	WOODLAND HALL	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	Ş	310,640.43	Ş	310,640.43						
HIGHLAND LAKES	WOODLAND HALL	WALL FINISH - APPLIED, STANDARD	Ş	347,614.36		00 F						
HIGHLAND LAKES	WOODLAND HALL	LIGHTING - EXTERIOR	Ş	20,557.30	Ş	20,557.30						

Campus	Asset Name	Item	Total	2020	2021	2022	2023		2024
HIGHLAND LAKES	WOODLAND HALL	VARIABLE FREQUENCY DRIVES	\$ 76,772.83			\$ 76,772.83			
HIGHLAND LAKES	WOODLAND HALL	UNIT HEATER - INDOOR, GAS	\$ 6,029.70			\$ 6,029.70		1	
HIGHLAND LAKES	WOODLAND HALL	FIRE ALARM SYSTEM - DEVICES	\$ 227,965.51					\$	227,965.51
HIGHLAND LAKES	WOODLAND HALL	HVAC CONTROLS SYSTEM - CLASSROOM	\$ 292,246.40			\$ 292,246.40		1	
HIGHLAND LAKES	WOODLAND HALL	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 97,917.46					\$	97,917.46
HIGHLAND LAKES	WOODLAND HALL	FIRE ALARM SYSTEM - DEVICES	\$ 286,518.93			\$ 286,518.93		1	
HIGHLAND LAKES	WOODLAND HALL	HVAC CONTROLS SYSTEM - OFFICE	\$ 299,938.60			\$ 299,938.60		1	
HIGHLAND LAKES	WOODLAND HALL	UNINTERRUPTIBLE POWER SUPPLY - 277/480 VOLTS	\$ 118,617.64			\$ 118,617.64			
HIGHLAND LAKES	WOODLAND HALL	VARIABLE FREQUENCY DRIVE (30-40 HP)	\$ 14,784.34			\$ 14,784.34		1	
HIGHLAND LAKES	WOODLAND HALL	INSTALL EMERGENCY GENERATOR AND POWER NETWORK	\$ 153,212.31						
HIGHLAND LAKES	WOODLAND HALL	WOODLAND HALL TOTALS	\$ 2,252,815.80	\$ 331,197.73	\$-	\$ 1,094,908.44	\$ -	\$	325,882.97
HIGHLAND LAKES	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 1-5	\$ 23,778.65			\$ 22,044.65			
HIGHLAND LAKES	SITE	INSTALL VFDS FOR THE COOLING TOWER FANS	\$ 125,781.10						
HIGHLAND LAKES	SITE	REPLACE OLDEST WATER SERVICE LINES	\$ 112,869.33					1	
HIGHLAND LAKES	SITE	CCTV CRITICAL SANITARY SEWER LINES FOR DEFICIENCIES	\$ 17,817.18			\$ 17,817.18			
HIGHLAND LAKES	SITE	CCTV CRITICAL STORM WATER SEWER LINES FOR DEFICIENCIES	\$ 28,945.26			\$ 28,896.26			
HIGHLAND LAKES	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 6-10	\$ 23,778.65					\$	23,778.65
HIGHLAND LAKES	SITE	REMOVE AND REPLACE DAMAGED HW AND CW PIPE INSULATION	\$ 58,141.01				\$ 59,638.01		
HIGHLAND LAKES	SITE	REMOVE AND REPLACE PIPE, VALVES, AND EXPANSION JOINTS	\$ 2,784,765.86					1	
HIGHLAND LAKES	SITE	EXTERIOR WALL FINISH RENEWAL	\$ 14,385.88					1	
HIGHLAND LAKES	SITE	PAD-MOUNT SWITCH - 15 KV	\$ 110,657.76						
HIGHLAND LAKES	SITE	MANHOLE - 5 TO 10 FT DEEP	\$ 38,045.06						
HIGHLAND LAKES	SITE	MANHOLE - 10 TO 15 FT DEEP	\$ 42,709.22					1	
HIGHLAND LAKES	SITE	SANITARY SEWER PIPE - 8" DIAMETER	\$ 577,239.66						
HIGHLAND LAKES	SITE	SANITARY SEWER PIPE - 12" DIAMETER	\$ 304,008.98					1	
HIGHLAND LAKES	SITE	STORMWATER PIPE - 12" DIAMETER	\$ 586,820.21					1	
HIGHLAND LAKES	SITE	STORMWATER PIPE - 15" DIAMETER	\$ 300,855.01					1	
HIGHLAND LAKES	SITE	STORMWATER PIPE - 18" DIAMETER	\$ 154,647.26						
HIGHLAND LAKES	SITE	STORMWATER PIPE - 24" DIAMETER	\$ 133,788.30						
HIGHLAND LAKES	SITE	COMBO DRAIN - LESS THAN 5 FT DEEP	\$ 74,792.19						
HIGHLAND LAKES	SITE	MANHOLE - LESS THAN 5 FT DEEP	\$ 18,870.87						
HIGHLAND LAKES	SITE	MANHOLE - 5 TO 10 FT DEEP	\$ 9,511.26					Ļ	
HIGHLAND LAKES	SITE	FIRE ALARM SYSTEM - DEVICES	\$ 5,569.54					\$	5,569.54
HIGHLAND LAKES	SITE	FIRE ALARM SYSTEM - DEVICES	\$ 16,708.63					\$	16,708.63
HIGHLAND LAKES	SITE	GREYWATER SUMP PUMP -SUBMERSIBLE PUMP (<0.5HP)	\$ 1,703.26					Ļ	
HIGHLAND LAKES	SITE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 23,381.61					Ļ	
HIGHLAND LAKES	SITE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 7,793.87					Ļ	
HIGHLAND LAKES	SITE	FIRE ALARM SYSTEM - DEVICES	\$ 7,351.80					\$	7,351.80
HIGHLAND LAKES	SITE	SITE WORK / SMALL PROJECTS	\$ 150,000.00					Ļ	
HIGHLAND LAKES	SITE	REDIRECT RUNOFF AWAY FROM FOUNDATION	\$ 3,009.82					Ļ	
HIGHLAND LAKES	GROUNDS BUILDING	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	\$ 1,983.43					ļ	
HIGHLAND LAKES	PUMP HOUSE	STAIR SAFETY UPGRADES	\$ 6,890.35					ļ	
HIGHLAND LAKES	REDWOOD CENTER	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 6,424.85					L	
HIGHLAND LAKES	SITE	SITE TOTALS	\$ 5,754,717.39	\$ -	\$-	\$ 68,758.09	\$ 59,638.01	\$	53,408.62
HIGHLAND LAKES	CENTRAL PLANT	HVAC CONTROLS SYSTEM - WAREHOUSE	\$ 46,883.40	\$ 46,883.40					
HIGHLAND LAKES	CENTRAL PLANT	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73	\$ 48,958.73					
HIGHLAND LAKES	CENTRAL PLANT	FIRE ALARM SYSTEM - DEVICES	\$ 26,429.80	\$ 26,429.80				L	
HIGHLAND LAKES	CENTRAL PLANT	VARIABLE FREQUENCY DRIVES	\$ 75,218.38					L	
HIGHLAND LAKES	CENTRAL PLANT	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 7,709.82					L	
HIGHLAND LAKES	CENTRAL PLANT	BACKFLOW PREVENTER (2-3 INCHES)	\$ 8,735.45	\$ 8,735.45					

Oakland Community College

Campus	Asset Name	Item	Total	2020	2021	2022	2023	202	4
HIGHLAND LAKES	CENTRAL PLANT	DOMESTIC WATER BOOSTER SYSTEM	\$ 75,734.66	\$ 75,734.66					
HIGHLAND LAKES	CENTRAL PLANT	WATER SOFTENER	\$ 271,407.61	\$ 103,460.61					
HIGHLAND LAKES	CENTRAL PLANT	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$ 10,730.29	\$ 10,730.29					
HIGHLAND LAKES	CENTRAL PLANT	LIGHTING SYSTEM, INTERIOR	\$ 58,065.77						
HIGHLAND LAKES	CENTRAL PLANT	WALL FINISH - APPLIED, STANDARD	\$ 15,081.32	\$ 15,081.32					
HIGHLAND LAKES	CENTRAL PLANT	WATER SOFTENER (>200 GPM)	\$ 63,328.44	\$ 63,328.44					
HIGHLAND LAKES	CENTRAL PLANT	SEWAGE LIFT STATION	\$ 3,413.76	\$ 3,413.76					
HIGHLAND LAKES	CENTRAL PLANT	BURNER ASSEMBLY UTILITY	\$ 128,675.17						
HIGHLAND LAKES	CENTRAL PLANT	FAN - CENTRIFUGAL ROOF EXHAUSTS	\$ 67,212.11	\$ 67,212.11					
HIGHLAND LAKES	CENTRAL PLANT	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73	\$ 48,958.73					
HIGHLAND LAKES	CENTRAL PLANT	MOTOR CONTROL CENTER VERTICAL SECTIONS	\$ 1,134,391.09		\$ 908,453.09				
HIGHLAND LAKES	CENTRAL PLANT	UNIT HEATER - STEAM/HYDRONIC	\$ 55,678.45						
HIGHLAND LAKES	CENTRAL PLANT	CENTRAL PLANT TOTALS	\$ 2,146,612.97	\$ 518,927.30	\$ 908,453.09	\$ -	\$ -	\$	-

HIGHLAND LAKES CAMUS WIDE - GRAND TOTALS \$ 22,119,801.28 \$ 1,111,628.06 \$ 1,239,041.06 \$ 1,239,041.67 \$ 1,239,040.23 \$ 2,950,616.44

Campus	Asset Name	Item	Total	2020	2021	2022	2023		2024
ORCHARD RIDGE	BUILDING A	AIR HANDLING UNIT - INDOOR	\$ 21,221.02					_	
ORCHARD RIDGE	BUILDING A	CASEWORK - LABORATORY, INCLUDES REAGENT SHELF AND TOP	\$ 166,696.46						
ORCHARD RIDGE	BUILDING A	DEAERATOR SYSTEM	\$ 3,437.14					\$	3,437.14
ORCHARD RIDGE	BUILDING A	GLASS, STOREFRONT	\$ 126,348.34					\$	126,348.34
ORCHARD RIDGE	BUILDING A	HVAC CONTROLS SYSTEM - LABORATORY, WET	\$ 541,776.85					\$	541,776.85
ORCHARD RIDGE	BUILDING A	HVAC DISTRIBUTION NETWORKS - LABORATORY, WET	\$ 1,453,766.01					\$	1,453,766.01
ORCHARD RIDGE	BUILDING A	PLUMBING FIXTURE - LAVATORY, COUNTER	\$ 8,272.97					\$	8,272.97
ORCHARD RIDGE	BUILDING A	PUMP - ELECTRIC	\$ 7,097.30					\$	7,097.30
ORCHARD RIDGE	BUILDING A	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	\$ 3,984.71						
ORCHARD RIDGE	BUILDING A	SUPPLY PIPING SYSTEM - LABORATORY, WET	\$ 638,863.14						
ORCHARD RIDGE	BUILDING A	HVAC CONTROLS SYSTEM - CLASSROOM	\$ 45,246.59						
ORCHARD RIDGE	BUILDING A	BACKFLOW PREVENTER (<=1 INCH)	\$ 899.76						
ORCHARD RIDGE	BUILDING A	PLUMBING FIXTURE - SINK, KITCHEN	\$ 927.32						
ORCHARD RIDGE	BUILDING A	WALL FINISH - APPLIED, PREMIUM	\$ 561,669.67						
ORCHARD RIDGE	BUILDING A	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$ 7,716.78					\$	7,716.78
ORCHARD RIDGE	BUILDING A	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	\$ 2,749.70						
ORCHARD RIDGE	BUILDING A	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	\$ 28,999.25						-
ORCHARD RIDGE	BUILDING A	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73						
ORCHARD RIDGE	BUILDING A	FIRE ALARM SYSTEM - DEVICES	\$ 195,024.34						
ORCHARD RIDGE	BUILDING A	PUMP - ELECTRIC (<=10 HP)	\$ 2,027.80						
ORCHARD RIDGE	BUILDING A	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$ 34,704.11					\$	34,704.11
ORCHARD RIDGE	BUILDING A	AUDITORIUM ACCESSIBILITY UPGRADES	\$ 33,314.36					\$	33,314.36
ORCHARD RIDGE	BUILDING A	STAIR SAFETY UPGRADES	\$ 13,406.86					\$	13,406.86
ORCHARD RIDGE	BUILDING A	TUNNEL ACCESSIBILITY IMPROVEMENTS	\$ 5,780.21					\$	5,780.21
ORCHARD RIDGE	BUILDING A	FIRE SPRINKLER SYSTEM INSTALLATION	\$ 617,699.47					<u> </u>	
ORCHARD RIDGE	BUILDING A	IMPROVE EGRESS PATHWAY DESIGNATION	\$ 9,634.18					\$	9,634.18
ORCHARD RIDGE	BUILDING A	REPLACE MISSING RESTROOM PARTITIONS	\$ 1.058.57					Ś	1.058.57
ORCHARD RIDGE	BUILDING A	BACKFLOW PREVENTER INSTALLATION	\$ 8.536.52					Ś	8.536.52
ORCHARD RIDGE	BUILDING A	BUILDING A TOTALS	\$ 4,589,818,18	Ś -	Ś -	\$ -	Ś -	Ś	2.254.850.21
ORCHARD RIDGE	BUILDING B	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$ 8,584,23						
ORCHARD RIDGE	BUILDING B	AIR HANDLING UNIT - INDOOR	\$ 12.732.61						
ORCHARD RIDGE	BUILDING B	CASEWORK - LABORATORY. INCLUDES REAGENT SHELF AND TOP	\$ 383.401.86					-	
ORCHARD RIDGE	BUILDING B	CEILING FINISH - SUSPENDED ACOUSTICAL TILE. STANDARD	\$ 160.704.90						
ORCHARD RIDGE	BUILDING B	DEAERATOR SYSTEM	\$ 3.437.14					Ś	3.437.14
ORCHARD RIDGE	BUILDING B	DOOR - OVERHEAD. INTERIOR	\$ 6.253.60					1	
ORCHARD RIDGE	BUILDING B	DOOR, FRAME AND PANIC HARDWARE, EXTERIOR	\$ 20.167.15						
ORCHARD RIDGE	BUILDING B	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	\$ 3,255,56						
ORCHARD RIDGE	BUILDING B	GLASS, STOREFRONT	\$ 443.061.50						
ORCHARD RIDGE	BUILDING B	HVAC DISTRIBUTION NETWORKS - LABORATORY, WET	\$ 1.608.470.95					1	
ORCHARD RIDGE	BUILDING B	PLUMBING FIXTURES	\$ 38.260.21					1	
ORCHARD RIDGE	BUILDING B	PUMP - ELECTRIC	\$ 5,576,45					Ś	5.576.45
ORCHARD RIDGE	BUILDING B	VARIABLE FREQUENCY DRIVES	\$ 11.106.56					Ś	11.106.56
ORCHARD RIDGE	BUILDING B	LOAD INTERRUPTER SWITCH - 15 KV	\$ 143.253.91					Ś	143.253.91
ORCHARD RIDGE	BUILDING B	ELECTRICAL DISTRIBUTION NETWORK - LABORATORY, WET	\$ 297,916,07					Ś	297,916,07
ORCHARD RIDGE	BUILDING B	SUPPLY PIPING SYSTEM - LABORATORY WET	\$ 555,083,30					Ś	555 083 30
ORCHARD RIDGE	BUILDING B	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$ 7,716,78					Ś	7,716,78
	BUILDING B	VARIABLE FREQUENCY DRIVE (20-20 HP)	\$ 14 784 34					Ś	14 784 34
ORCHARD RIDGE	BUILDING B	HVAC CONTROLS SYSTEM - LABORATORY, WET	\$ 470 728 80					Ś	470,728,80
ORCHARD RIDGE	BUILDING B	FAN - PROPELLER WITH LOUVER. 1/4" SP (.5-1 HP)	\$ 3,255,56			1	1	Ť	
ORCHARD RIDGE	BUILDING B	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	\$ 2,749,70			1	1	+	
ORCHARD RIDGE	BUILDING B	DOOR LOCK. SECURITY	\$ 7,006,34			1	1	+	
	BUILDING B	EIRE ALARM SYSTEM - DEVICES	\$ 1/6 529 77			1	1	+-	
	BUILDING B	WALLEINISH - APPLIED STANDARD	ς <u>06</u> 7/3 65					+	
			\$ 61 000 16			1		ć	61 000 /6
			¢ 12 406 96			1	1	د ح	12 406 96
			\$ 15,400.80					<u>د</u>	13,400.00
	BUILDING B		ς α 63/ 18					¢	9 63/ 19
STOL TO THE OL	201201100		- J,0J10		1	1		Y	2,037.10

Campus	Asset Name	Item		т	otal		2020		2021		2022		2023		2024
ORCHARD RIDGE	BUILDING B	BUILDING B TOTALS	\$	5,0	001,541.76	\$			\$-	\$	-	\$	-	\$	1,594,553.84
ORCHARD RIDGE	BUILDING C	AIR HANDLING UNIT - INDOOR	\$		12,732.61									\$	12,732.61
ORCHARD RIDGE	BUILDING C	DEAERATOR SYSTEM	\$		6,874.28									\$	6,874.28
ORCHARD RIDGE	BUILDING C	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	\$		14,499.63									\$	14,499.63
ORCHARD RIDGE	BUILDING C	GLASS, STOREFRONT	\$	2	299,866.72									\$	299,866.72
ORCHARD RIDGE	BUILDING C	HVAC DISTRIBUTION NETWORKS - LABORATORY, WET	\$	1,6	512,832.25									\$	1,612,832.25
ORCHARD RIDGE	BUILDING C	PUMP - ELECTRIC	\$		3,548.65									\$	3,548.65
ORCHARD RIDGE	BUILDING C	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	\$		1,992.35									\$	1,992.35
ORCHARD RIDGE	BUILDING C	SUPPLY PIPING SYSTEM - LABORATORY, WET	\$	5	556,588.32									\$	556,588.32
ORCHARD RIDGE	BUILDING C	WALL FINISH - APPLIED, STANDARD	\$		77,029.72									\$	77,029.72
ORCHARD RIDGE	BUILDING C	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$		7,716.78									\$	7,716.78
ORCHARD RIDGE	BUILDING C	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$	1	310,640.43										
ORCHARD RIDGE	BUILDING C	VARIABLE FREQUENCY DRIVE (20-25 HP)	\$		11,250.27										
ORCHARD RIDGE	BUILDING C	HVAC CONTROLS SYSTEM - LABORATORY, WET	\$	4	472,005.11									\$	472,005.11
ORCHARD RIDGE	BUILDING C	VARIABLE FREQUENCY DRIVE (30-40 HP)	\$		14,784.34									\$	14,784.34
ORCHARD RIDGE	BUILDING C	BACKFLOW PREVENTER (<=1 INCH)	\$		1,199.68										· · ·
ORCHARD RIDGE	BUILDING C	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	\$		2,749.70										
ORCHARD RIDGE	BUILDING C	PLUMBING FIXTURE - SINK, KITCHEN	Ś		927.32										
ORCHARD RIDGE	BUILDING C	REVERSE OSMOSIS SYSTEM (<=5.000 GPD)	Ś		8.424.83										
ORCHARD RIDGE	BUILDING C	WATER SOFTENER (41 - 70 GPM)	Ś		12.657.89									1	
ORCHARD RIDGE	BUILDING C	FIRE ALARM SYSTEM - DEVICES	Ś	1	146.927.06									1	
ORCHARD RIDGE	BUILDING C		Ś	-	27,670,29										
ORCHARD RIDGE			Ś		6 834 07										
ORCHARD RIDGE			Ś		16 370 26									Ś	16 370 26
			¢		5 780 21									Ś	5 780 21
			Ś	/	167 073 33									Ŷ	5,700.21
			Ś	4 0	198 976 11	Ġ			¢ .	¢	-	Ċ	-	Ċ	3 102 621 24
		AIR HANDLING LINIT - INDOOR	Ś	-,,	40 319 93	Ť	•		Ý	Ŷ		Ŷ		Ś	40 319 93
			¢	1	160 934 56									¢	160 934 56
			ç	2	227 521 26									ې د	227 521 26
			ç	2	2 / 27 1/									ر د	227,531.50
			ç		10 1/7 00									ç	5,457.14
			ې خ		0 766 67										
			ې د	3	9,700.07			_							
			ç	3	156 201 22										
			Ş	1	150,591.55										
			Ş	Z,3	4 012 02										
			Ş	-	4,912.03			_							
	BUILDING D		\$	5	567,232.19										
ORCHARD RIDGE	BUILDING D	SUPPLY PIPING SYSTEM - LABORATORY, WEI	\$	5	597,015.03							4	4 000 00		
	BUILDING D	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	\$		1,302.22							Ş	1,302.22		
	BUILDING D	WALL FINISH - APPLIED, STANDARD	\$	1	135,427.58							Ş	135,427.58	6	4 012 00
ORCHARD RIDGE	BUILDING D		\$		1,013.90									Ş	1,013.90
ORCHARD RIDGE	BUILDING D	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	Ş		2,749.70										
ORCHARD RIDGE	BUILDING D	FIRE ALARM SYSTEM - DEVICES	Ş	1	157,598.82									_	
ORCHARD RIDGE	BUILDING D	PUMP - ELECTRIC (<=10 HP)	Ş		1,520.85									_	
ORCHARD RIDGE	BUILDING D		Ş		13,602.66										
ORCHARD RIDGE	BUILDING D	INTERIOR DOOR ACCESSIBILITY UPGRADES	Ş		8,804.62									Ş	8,804.62
URCHARD RIDGE	BUILDING D	STAIR SAFETY UPGRADES	Ş		26,813.74									Ş	26,813.74
ORCHARD RIDGE	BUILDING D	STAIR CLIMBER OR WHEELCHAIR LIFT INSTALLATION	Ş		12,894.66									<u> </u>	
ORCHARD RIDGE	BUILDING D	TUNNEL ACCESSIBILITY IMPROVEMENTS	\$		5,780.21							L		<u> </u>	
ORCHARD RIDGE	BUILDING D	FIRE SPRINKLER SYSTEM INSTALLATION	\$	5	500,998.28									<u> </u>	
ORCHARD RIDGE	BUILDING D	INTERIOR DOOR SAFETY UPGRADES	\$	1	154,858.45				\$ 154,858.45					L	
ORCHARD RIDGE	BUILDING D	BUILDING D TOTALS	\$	5,5	519,649.86	\$	-		\$ 154,858.45	Ş	-	\$	136,729.80	\$	468,855.25
ORCHARD RIDGE	POWER HOUSE	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$		8,584.23									\$	8,584.23
ORCHARD RIDGE	POWER HOUSE	AIR HANDLING UNIT - INDOOR (.5-1.25 HP)	\$		10,610.51									\$	10,610.51
ORCHARD RIDGE	POWER HOUSE	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$		6,724.22									\$	6,724.22
ORCHARD RIDGE	POWER HOUSE	CEILING FINISH - ATTACHED ACOUSTICAL TILE	Ś		7.452.21							I		Ś	7.452.21

```
Oakland Community College
```

Campus	Asset Name	Item	Total	2020	2021	2022	2023		2024
ORCHARD RIDGE	POWER HOUSE	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$ 9,590.10					\$	9,590.10
ORCHARD RIDGE	POWER HOUSE	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$ 310,640.43					\$	310,640.43
ORCHARD RIDGE	POWER HOUSE	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 97,917.46					\$	97,917.46
ORCHARD RIDGE	POWER HOUSE	FIRE ALARM SYSTEM - DEVICES	\$ 54,398.96					\$	54,398.96
ORCHARD RIDGE	POWER HOUSE	HVAC CONTROLS SYSTEM - WAREHOUSE	\$ 51,585.87					\$	51,585.87
ORCHARD RIDGE	POWER HOUSE	PLUMBING FIXTURES	\$ 7,090.06					\$	7,090.06
ORCHARD RIDGE	POWER HOUSE	PUMP - ELECTRIC	\$ 22,305.81					\$	22,305.81
ORCHARD RIDGE	POWER HOUSE	THERMAL STORAGE EXPANSION TANK	\$ 57,596.66					\$	57,596.66
ORCHARD RIDGE	POWER HOUSE	WALL FINISH - APPLIED, STANDARD	\$ 23,670.24					\$	23,670.24
ORCHARD RIDGE	POWER HOUSE	WATER HEATER - SHELL & TUBE (45-93 GPM)	\$ 63,829.86					\$	63,829.86
ORCHARD RIDGE	POWER HOUSE	BACKFLOW PREVENTER	\$ 12,686.89					\$	12,686.89
ORCHARD RIDGE	POWER HOUSE	ELECTRICAL DISTRIBUTION NETWORK - WAREHOUSE	\$ 82,327.56					\$	82,327.56
ORCHARD RIDGE	POWER HOUSE	HEATING SYSTEM, STEAM OR HYDRONIC	\$ 53,784.32					\$	53,784.32
ORCHARD RIDGE	POWER HOUSE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 113,850.85					\$	113,850.85
ORCHARD RIDGE	POWER HOUSE	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	\$ 1,992.35					\$	1,992.35
ORCHARD RIDGE	POWER HOUSE	SUPPLY PIPING SYSTEM	\$ 202,708.17					\$	202,708.17
ORCHARD RIDGE	POWER HOUSE	WATER SOFTENER (41 - 70 GPM)	\$ 12,657.89					\$	12,657.89
ORCHARD RIDGE	POWER HOUSE	VARIABLE FREQUENCY DRIVE	\$ 97,185.11					\$	97,185.11
ORCHARD RIDGE	POWER HOUSE	AIR DRYER - REFRIGERATED (11-25 CFM)	\$ 2,264.63					\$	2,264.63
ORCHARD RIDGE	POWER HOUSE	LIGHTING - EXTERIOR. WALL FLOOD (SV. MH. ID. LED)	\$ 5.139.88					Ś	5.139.88
ORCHARD RIDGE	POWER HOUSE	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	\$ 5.004.38					Ś	5.004.38
ORCHARD RIDGE	POWER HOUSE	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	\$ 40.023.04					Ś	40.023.04
ORCHARD RIDGE	POWER HOUSE	CEILING EINISH - APPLIED PAINT OR STAIN. STANDARD	\$ 50.823.38					Ś	50.823.38
ORCHARD RIDGE	POWER HOUSE	FAN - PROPELLER WITH LOUVER	\$ 17.087.32					Ś	17.087.32
ORCHARD RIDGE	POWER HOUSE	COOLING TOWER (301-550 TONS)	\$ 568.019.24					Ś	568.019.24
ORCHARD RIDGE	POWER HOUSE	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD	\$ 260.575.61					Ś	260.575.61
ORCHARD RIDGE	POWER HOUSE	MOTOR CONTROL CENTER VERTICAL SECTION	\$ 1.275.065.82					Ś	1.275.065.82
ORCHARD RIDGE	POWER HOUSE	HVAC CONTROLS SYSTEM - WAREHOUSE	\$ 109.424.58						_,
ORCHARD RIDGE	POWER HOUSE		\$ 3,603,90					-	
ORCHARD RIDGE	POWER HOUSE	VARIABLE EREQUENCY DRIVE (25-30 HP)	\$ 13,017,45					-	
ORCHARD RIDGE	POWER HOUSE	HVAC DISTRIBUTION NETWORKS	\$ 563,364,64					-	
ORCHARD RIDGE	POWER HOUSE	STAIR SAFETY LIPGRADES	\$ 40,220,60					Ś	40,220,60
ORCHARD RIDGE	POWER HOUSE	ASBESTOS ABATEMENT - INTERIOR FINISH SYSTEMS	\$ 1,672,61					Ť	10,220100
	POWER HOUSE	TEAR DOWN AND REBUILD CHILLED WATER PLIMPS	\$ 29,405,46					Ś	29 405 46
ORCHARD RIDGE	POWER HOUSE	TEAR DOWN AND REBUILD CONDENSER WATER PLIMP	\$ 9,801,82					Ś	9,801,82
		BOILER LIPGRADE	\$ 8,000,000,00					-	5,001.02
	POWER HOUSE	POWER HOUSE TOTALS	\$ 12 303 704 12	Ś .	Ś.,	Ś.,	<u>د</u> .	Ś	3 612 620 94
			\$ 25,465,22	<u> </u>	Ŷ	\$ 25.465.22	Ŷ	Ť	3,012,020.34
			\$ 188 292 58			\$ 188 292 58			
			\$ 3,437.14			\$ 3,437,14		+	
			\$ 14 689 12			\$ 14 689 12			
			\$ 310 640 43			\$ 310 640 43			
			\$ 118,040.45			\$ 118,040.45		+	
			\$ 71/ 28/ 58			\$ 71/ 28/ 58			
			\$ /08 973 01			\$ /08 973 01			
			\$ 400,575.01			\$ 408,573.01			
			\$ 0,272.57			\$ 0,272.37		-	
			\$ 4,302.33			\$ 4,302.33 \$ 122.250.4E		+	
			\$ 132,330.43			\$ 132,330.43 \$ 230,272.50		-	
			¢ 1 007 25		1	γ 239,372.59 ¢ 1 007 25	1	+	
			¢ 1,332.33		1	γ 1,332.33 ¢ /10 EO3 OF	1	+	
			410,503.05 خ 7 712 70		1	410,505.05 نې خ 7712.70	+	+	
			¢ 200.0E0.20		1	\$ 200.0E0.20	+	+	
			÷ 100,000.20		1	÷ 16.096.47	+	+	
			> 16,986.17		<u> </u>	> 16,986.17		+	
			2 1,199.68		<u> </u>	2 1,199.68		+	
		CONDENSER - REFRIGERANT AIR-COOLED (<=10 TON)	, 3,200.50 غ 2,740.70		1	マンジャンション ションション ションション ションション ションション ション・ション ション・ション マンション ション・ション・ション・ション・ション・ション・ション・ション・ション・ション・	<u> </u>	+	

Campus	Asset Name	Item		Total	2020		2021		2022	2023		2024
ORCHARD RIDGE	BUILDING F	FIRE ALARM SYSTEM - DEVICES	\$	156,048.27				\$	156,048.27			
ORCHARD RIDGE	BUILDING F	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$	20,636.49				\$	20,636.49			
ORCHARD RIDGE	BUILDING F	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	32,458.07				\$	32,458.07			
ORCHARD RIDGE	BUILDING F	STAIR SAFETY UPGRADES	\$	22,388.33				\$	22,388.33			
ORCHARD RIDGE	BUILDING F	RESTROOM ACCESSIBILITY IMPROVEMENTS	\$	19,359.62				\$	19,359.62			
ORCHARD RIDGE	BUILDING F	INTERIOR PATH OF TRAVEL ACCESSIBILITY UPGRADES	\$	16,370.26				\$	16,370.26			
ORCHARD RIDGE	BUILDING F	TUNNEL ACCESSIBILITY IMPROVEMENTS	\$	5,780.21				\$	5,780.21			
ORCHARD RIDGE	BUILDING F	FIRE SPRINKLER SYSTEM INSTALLATION	\$	496,069.16				\$	496,069.16			
ORCHARD RIDGE	BUILDING F	INTERIOR DOOR SAFETY UPGRADES	\$	82,591.17				\$	82,591.17			
ORCHARD RIDGE	BUILDING F	BUILDING F TOTALS	\$	4,002,711.18	\$	-	\$-	\$	4,002,711.18	\$-	\$	-
ORCHARD RIDGE	BUILDING G	AIR HANDLING UNIT - INDOOR	\$	29,709.42							\$	29,709.42
ORCHARD RIDGE	BUILDING G	DEAERATOR SYSTEM	\$	3,437.14							\$	3,437.14
ORCHARD RIDGE	BUILDING G	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	\$	18,124.53							\$	18,124.53
ORCHARD RIDGE	BUILDING G	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	\$	3,255.56							\$	3,255.56
ORCHARD RIDGE	BUILDING G	GLASS, STOREFRONT	\$	394,206.81							\$	394,206.81
ORCHARD RIDGE	BUILDING G	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	676,543.41			\$ 676,543.41					,
ORCHARD RIDGE	BUILDING G	PUMP - ELECTRIC	\$	4,380.05							\$	4,380.05
ORCHARD RIDGE	BUILDING G	PLUMBING FIXTURE - SINK. SERVICE/LAUNDRY/UTILITY	Ś	3.984.71							Ś	3.984.71
ORCHARD RIDGE	BUILDING G	SUPPLY PIPING SYSTEM - CLASSROOM	Ś	396.320.02							Ś	396.320.02
ORCHARD RIDGE	BUILDING G	VARIABLE FREQUENCY DRIVE (10-15 HP)	Ś	7.716.78							Ś	7.716.78
ORCHARD RIDGE	BUILDING G	HVAC CONTROLS SYSTEM - CLASSROOM	Ś	189.446.41			\$ 189,446,41				Ŧ	.,
ORCHARD RIDGE	BUILDING G	VARIABLE FREQUENCY DRIVE (40-50 HP)	Ś	16.986.17			+					
ORCHARD RIDGE	BUILDING G	WALL FINISH - APPLIED, STANDARD	Ś	162 682 17								
ORCHARD RIDGE	BUILDING G	FAN - PROPELLER WITH LOUVER, 1/4" SP (5-1 HP)	Ś	3,255,56								
ORCHARD RIDGE	BUILDING G	CONDENSER - REERIGERANT, AIR-COOLED (<=10 TON)	Ś	2 749 70								
ORCHARD RIDGE		EIRE ALARM SYSTEM - DEVICES	Ś	147 776 83								
ORCHARD RIDGE	BUILDING G		Ś	2,326.07								
ORCHARD RIDGE	BUILDING G	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	Ś	14 067 63							Ś	14 067 63
	BUILDING G	STAIR SAFETY LIDGRADES	¢	20 110 30							¢	20 110 30
	BUILDING G		ې د	12 894 66							, ,	20,110.30
ORCHARD RIDGE	BUILDING G		Ś	12,004.00								
			ر د	216 801 84								
			¢ ¢	5 138 52								
			ر د	2 801 689 00	ć	-	\$ 965 090 97	ć		ć .	ć	805 212 07
			ب د	10 008 02	Ş	-	\$ 803,383.82	Ş		- Ç	Ş	855,512.57
			ې د	100.001.20								
		CEILING FINISH - AFFEIED FAINT OK STAIN, STANDARD	ې د	2 427 14								
			Ş	3,437.14								
			Ş	21,749.44								
			ڊ خ	27,029.28								
			Ş	2,502.19								
			Ş	10.005.76								
		DOOR, EATERIOR, OVERHEAD ROLLING WETAL, LOCK	Ş	10,005.76								
	BUILDING H	FAN - AXIAL, RETURN	\$ ¢	79,056.66							_	
	BUILDING H	FAN - CENTRIFUGAL ROUF EXHAUST	Ş	18,095.15								
	BUILDING H		Ş	433,240.47								
ORCHARD RIDGE	BUILDING H		\$	14,893.39								
ORCHARD RIDGE	BUILDING H	LIGHTING SYSTEM, INTERIOR - GYMNASIUM	Ş	377,115.19								
	BUILDING H	IVIOTOK CONTROL CENTER VERTICAL SECTION, 600V (400-600A) W/STARTERS	Ş	637,532.91								
ORCHARD RIDGE	BUILDING H		Ş	1,299.04								
ORCHARD RIDGE	BUILDING H		Ş	282,753.75				<u> </u>			_	
URCHARD RIDGE	BUILDING H		Ş	2,027.80				 			-	
URCHARD RIDGE	BUILDING H	VARIABLE FREQUENCY DRIVE	Ş	16,144.95				 			Ş	16,144.95
URCHARD RIDGE	BUILDING H	WALL, EXTERIOR, SIDING, METAL, HORIZONTAL OR VERTICAL	Ş	143,860.91				 				
ORCHARD RIDGE	BUILDING H	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	45,552.96				 				
ORCHARD RIDGE	BUILDING H	IGLASS, STOREFRONT	\$	30,082.94				 				
ORCHARD RIDGE	BUILDING H	MAIN SWITCHBOARD W/BREAKERS (600-800 AMP)	\$	69,746.71				<u> </u>				
ORCHARD RIDGE	BUILDING H	ITRANSFORMER - DRY-TYPE 3PH 5-15KV PRIMARY (300-500 KVA)	Ś	83 580 85				1		1		

Campus	Asset Name	Item	Total	2020	2021	2022	2023		2024
ORCHARD RIDGE	BUILDING H	WATER HEATER - SHELL & TUBE (>675 GPM)	\$ 424,808.67						
ORCHARD RIDGE	BUILDING H	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$ 93,744.53						
ORCHARD RIDGE	BUILDING H	DOOR - OVERHEAD, INTERIOR	\$ 50,028.80						
ORCHARD RIDGE	BUILDING H	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	\$ 4,523.79						
ORCHARD RIDGE	BUILDING H	HVAC DISTRIBUTION NETWORKS - GYMNASIUM	\$ 2,092,697.34						
ORCHARD RIDGE	BUILDING H	WALL FINISH - APPLIED, STANDARD	\$ 123,660.09						
ORCHARD RIDGE	BUILDING H	AIR HANDLING UNIT - INDOOR (23-27 HP)	\$ 162,098.88						
ORCHARD RIDGE	BUILDING H	PUMP - ELECTRIC	\$ 6,083.40						
ORCHARD RIDGE	BUILDING H	WATER HEATER - SHELL & TUBE (<=45 GPM)	\$ 16,142.10						
ORCHARD RIDGE	BUILDING H	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73						
ORCHARD RIDGE	BUILDING H	FIRE ALARM SYSTEM - DEVICES	\$ 359,201.62						
ORCHARD RIDGE	BUILDING H	INTERIOR AMENITY ACCESSIBILITY UPGRADES	\$ 85,830.36						
ORCHARD RIDGE	BUILDING H	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$ 17,609.27						
ORCHARD RIDGE	BUILDING H	STAIR SAFETY UPGRADES	\$ 4,556.04						
ORCHARD RIDGE	BUILDING H	EXTERIOR MASONRY CLEANING	\$ 22,595.09						
ORCHARD RIDGE	BUILDING H	FIRE SPRINKLER SYSTEM INSTALLATION	\$ 1,137,831.44						
		renovation	\$ 8,000,000.00						
ORCHARD RIDGE	BUILDING H	BACKFLOW PREVENTER INSTALLATION	\$ 8,536.52						
ORCHARD RIDGE	BUILDING H	BUILDING H TOTALS	\$ 15,155,732.84	\$-	\$-	\$-	\$-	\$	16,144.95
ORCHARD RIDGE	BUILDING J	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (>10 TOTAL HP)	\$ 43,579.52			\$43,579.52			
ORCHARD RIDGE	BUILDING J	AIR HANDLING UNIT - INDOOR	\$ 301,913.97			\$301,913.97			
ORCHARD RIDGE	BUILDING J	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$ 6,724.22			\$6,724.22			
ORCHARD RIDGE	BUILDING J	DEAERATOR SYSTEM	\$ 3,437.14			\$3,437.14			
ORCHARD RIDGE	BUILDING J	DOOR, PANIC HARDWARE AND FRAME, EXTERIOR	\$ 138,001.91			\$138,001.91			
ORCHARD RIDGE	BUILDING J	DRINKING FOUNTAIN, DUAL-LEVEL	\$ 3,211.30			\$3,211.30			
ORCHARD RIDGE	BUILDING J	DUMBWAITER	\$ 44,440.77			\$44,440.77			
ORCHARD RIDGE	BUILDING J	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$ 310,640.43			\$310,640.43			
ORCHARD RIDGE	BUILDING J	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$ 310,640.43			\$310,640.43			
ORCHARD RIDGE	BUILDING J	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY	\$ 11,011.09			\$11,011.09			
ORCHARD RIDGE	BUILDING J	FAN - PROPELLER WITH LOUVER	\$ 16,277.78			\$16,277.78			
ORCHARD RIDGE	BUILDING J	FAN - UTILITY SET, 1/4" SP (.4-1.25 HP)	\$ 13,052.66			\$13,052.66			
ORCHARD RIDGE	BUILDING J	GLASS, STOREFRONT	\$ 1,547,315.89			\$1,547,315.89			
ORCHARD RIDGE	BUILDING J	HVAC DISTRIBUTION NETWORKS - STUDENT UNION	\$ 3,858,652.95			\$3,858,652.95			
ORCHARD RIDGE	BUILDING J	LIGHTING SYSTEM, INTERIOR - STUDENT UNION	\$ 295,078.70			\$295,078.70			
ORCHARD RIDGE	BUILDING J	PLUMBING FIXTURES	\$ 84,238.17			\$84,238.17			
ORCHARD RIDGE	BUILDING J	PUMP - ELECTRIC	\$ 2,027.80			\$2,027.80			
ORCHARD RIDGE	BUILDING J	REFRIGERATION SYSTEM - WALK-IN	\$ 81,872.40			\$81,872.40			
ORCHARD RIDGE	BUILDING J	SEATING, FIXED, FOLDING, STANDARD	\$ 188,490.13			\$188,490.13			
ORCHARD RIDGE	BUILDING J	ELECTRICAL DISTRIBUTION NETWORK - STUDENT UNION	\$ 1,668,675.36			\$1,668,675.36			
ORCHARD RIDGE	BUILDING J	SUPPLY PIPING SYSTEM - STUDENT UNION	\$ 1,533,061.99			\$1,533,061.99			
ORCHARD RIDGE	BUILDING J	DEAERATOR SYSTEM	\$ 2,577.85			\$2,577.85			
ORCHARD RIDGE	BUILDING J	VARIABLE FREQUENCY DRIVE	\$ 19,984.40			\$19,984.40			
ORCHARD RIDGE	BUILDING J	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$ 7,716.78			\$7,716.78			
ORCHARD RIDGE	BUILDING J	VARIABLE FREQUENCY DRIVE	\$ 24,267.72			\$24,267.72			
ORCHARD RIDGE	BUILDING J	HVAC CONTROLS SYSTEM - STUDENT UNION	\$ 688,390.26			\$688,390.26			
ORCHARD RIDGE	BUILDING J	VARIABLE FREQUENCY DRIVE (30-40 HP)	\$ 14,784.34			\$14,784.34			
ORCHARD RIDGE	BUILDING J	BOILER - GAS (>2,000 MBH)	\$ 150,465.21			\$150,465.21			
ORCHARD RIDGE	BUILDING J	WALL FINISH - APPLIED, STANDARD	\$ 149,223.95			\$149,223.95			
ORCHARD RIDGE	BUILDING J	BACKFLOW PREVENTER (<=1 INCH)	\$ 1,799.52			\$1,799.52			
ORCHARD RIDGE	BUILDING J	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$ 33,621.12			\$33,621.12			
ORCHARD RIDGE	BUILDING J	COMMERCIAL KITCHEN EQUIPMENT ESTIMATE BY SQUARE FOOT	\$ 1,657,264.53			\$1,657,264.53			
ORCHARD RIDGE	BUILDING J	CONDENSATE RECEIVER, ELECTRIC, 2 PUMPS	\$ 12,677.87			\$12,677.87			
ORCHARD RIDGE	BUILDING J	HOOD, KITCHEN, COMMERCIAL WITH FIRE SUPPRESSION	\$ 140,885.45			\$140,885.45			
ORCHARD RIDGE	BUILDING J	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48.958.73			\$48.958.73			
ORCHARD RIDGE	BUILDING J	FIRE ALARM SYSTEM - DEVICES	\$ 579.881.19			\$579.881.19			
ORCHARD RIDGE	BUILDING J	PTAC, DX/ HP COOL, ELEC HEAT (1.25-2 TON)	\$ 6.450.38			\$6.450.38		1	
ORCHARD RIDGE	BUILDING J	ELEVATOR CAB ACCESSIBILITY UPGRADES	\$ 6,951.19			\$6,951.19			

		·								
Campus	Asset Name	Item		Total	2020	2021	2022	2023		2024
ORCHARD RIDGE	BUILDING J	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$	37,988.54			\$37,988.54			
ORCHARD RIDGE	BUILDING J	AUDITORIUM ACCESSIBILITY UPGRADES	\$	34,514.78			\$34,514.78			-
ORCHARD RIDGE	BUILDING J	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	15,522.47			\$15,522.47			
ORCHARD RIDGE	BUILDING J	UNISEX RESTROOM INSTALLATION	\$	78,897.24			\$78,897.24			
ORCHARD RIDGE	BUILDING J	STAIR SAFETY UPGRADES	\$	46,924.04			\$46,924.04			-
ORCHARD RIDGE	BUILDING J	EXTERIOR CONCRETE WALL JOINT RENEWAL	\$	50,842.89			\$50,842.89			
ORCHARD RIDGE	BUILDING J	FIRE SPRINKLER SYSTEM EXTENSION	\$	1,890,849.29			\$1,890,849.29			
ORCHARD RIDGE	BUILDING J	BUILDING UPGRADE	Ś	9.833.504.00			\$9.833.504.00			
ORCHARD RIDGE	BUILDING J	BUILIDING J TOTALS	\$	16,163,784.34	\$0.00	\$0.00	\$25,997,288.34	\$0	0.00	\$0.00
ORCHARD RIDGE	BUILDING K	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	Ś	6.438.17			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
ORCHARD RIDGE	BUILDING K	AIR HANDLING UNIT - INDOOR	Ś	53.052.54						
ORCHARD RIDGE	BUILDING K	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	Ś	14,793,29						
ORCHARD RIDGE			Ś	3 437 14	-				Ś	3 437 14
ORCHARD RIDGE		DOOR PANIC HARDWARE AND FRAME EXTERIOR	Ś	53 004 90	-				÷	
			ć	3 603 90						
			ر خ	5,667,53						
			ې د	2 255 56					-+	
			ڊ خ	3,233.30		-			\rightarrow	
ORCHARD RIDGE	BUILDING K	FAN - UTILITY SET	\$	13,052.66					<u> </u>	
ORCHARD RIDGE		GLASS, STOREFRONT	Ş	481,808.33					\rightarrow	
ORCHARD RIDGE	BUILDING K		Ş	295,173.21		-				
ORCHARD RIDGE	BUILDING K	PLUMBING FIXTURE - LAVATORY, COUNTER	Ş	18,614.18		-				
ORCHARD RIDGE	BUILDING K	WALL, EXTERIOR, TILT-UP OR PRECAST CONCRETE PANELS - RESTORE NATURAL FINISH	\$	892.91						
ORCHARD RIDGE	BUILDING K	ELECTRICAL DISTRIBUTION NETWORK - LIBRARY	\$	321,623.86						
ORCHARD RIDGE	BUILDING K	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	\$	3,984.71						
ORCHARD RIDGE	BUILDING K	SUPPLY PIPING SYSTEM - LIBRARY	\$	240,874.03						
ORCHARD RIDGE	BUILDING K	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	\$	6,661.47					\$	6,661.47
ORCHARD RIDGE	BUILDING K	PLUMBING FIXTURE - SINK, KITCHEN	\$	1,854.65						
ORCHARD RIDGE	BUILDING K	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$	7,716.78					\$	7,716.78
ORCHARD RIDGE	BUILDING K	HVAC CONTROLS SYSTEM - LIBRARY	\$	282,794.74						
ORCHARD RIDGE	BUILDING K	VARIABLE FREQUENCY DRIVE	\$	29,568.69						
ORCHARD RIDGE	BUILDING K	WALL FINISH - APPLIED, STANDARD	\$	61,441.18						
ORCHARD RIDGE	BUILDING K	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	\$	2,749.70						
ORCHARD RIDGE	BUILDING K	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73						
ORCHARD RIDGE	BUILDING K	FIRE ALARM SYSTEM - DEVICES	\$	215,501.28						
ORCHARD RIDGE	BUILDING K	INTERIOR PATH OF TRAVEL ACCESSIBILITY UPGRADES	\$	3,475.59						
ORCHARD RIDGE	BUILDING K	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	67,589.62						
ORCHARD RIDGE	BUILDING K	STAIR AND RAILING SAFETY UPGRADES	\$	39,801.37						-
ORCHARD RIDGE	BUILDING K	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$	92,864.18						
ORCHARD RIDGE	BUILDING K	FIRE SPRINKLER SYSTEM EXTENSION	\$	625,292.70						
ORCHARD RIDGE	BUILDING K	FIRE RATING COMPROMISE	Ś	7,709.62					Ś	7,709.62
ORCHARD RIDGE	BUILDING K	BUILDING K TOTALS	Ś	3.013.257.23	\$ -	Ś -	\$ -	\$ ·	. s	25,525.01
ORCHARD RIDGE	BUILDING L	AIR HANDLING UNIT - INDOOR	Ś	31.831.53		•	•	\$ 31.831	.53	
ORCHARD RIDGE	BUILDING	CASEWORK - WOOD BASE AND WALL TOP STANDARD	Ś	67,242,24				\$ 67,242	24	
ORCHARD RIDGE	BUILDING I	DEAFRATOR SYSTEM	Ś	3 437 14				\$ 3,437	14	
	BUILDING	DOOR LOCKS PANIC HARDWARE AND ERAME EXTERIOR	Ś	51 785 02	-			\$ 51 785	02	
	BUILDING		Ś	51 007 73	-			\$ 51,007	73	
			ې د	310 640 43				\$ 310.640	/3	
			ر خ	2 255 56				\$ 310,040	56	
		[AN - PROPEELER WITH ECOVER, 1/4 - 3P(.5-1)]PP(-5-1)	ې خ	5,255.50				\$ 5,235 \$ 6,526	22	
			د خ	680 040 69		<u> </u>		γ 0,320 \$ £00.040	68	
			ç	1 150 550 70		<u> </u>		÷ 069,049	70	
			Ş	1,159,558.79				\$ 1,159,558	./9	
			Ş	119,612.00				\$ 119,612		
UKCHAKD RIDGE	BUILDING L	WALL, EXTERIOR, THE OR GLASS BLOCK CLEAN, GROUT, AND REPAIR	Ş	1,765.65				\$ 1,/65	205	
URCHARD RIDGE	BUILDING L	ELECTRICAL DISTRIBUTION NETWORK - CLASSROOM	Ş	511,367.64		ł		\$ 511,367	.64	
URCHARD RIDGE	BUILDING L	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	Ş	19,923.53				\$ 19,923	.53	
ORCHARD RIDGE	BUILDING L	SUPPLY PIPING SYSTEM - CLASSROOM	\$	428,669.66				\$ 428,669	.66	
ORCHARD RIDGE	IBUILDING I	IDUST COLLECTION SYSTEM	Ś	36 807 96		1		S 36.807	96	

Campus	Asset Name	Item		Total		2020	2021		2022		2023	2024
ORCHARD RIDGE	BUILDING L	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$	7,716.78	Т					\$	7,716.78	
ORCHARD RIDGE	BUILDING L	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	\$	3,255.56						\$	3,255.56	
ORCHARD RIDGE	BUILDING L	HVAC CONTROLS SYSTEM - CLASSROOM	\$	204,909.98						\$	204,909.98	
ORCHARD RIDGE	BUILDING L	VARIABLE FREQUENCY DRIVE (30-40 HP)	\$	14,784.34						\$	14,784.34	
ORCHARD RIDGE	BUILDING L	WALL FINISH - APPLIED, STANDARD	\$	72,633.82						\$	72,633.82	
ORCHARD RIDGE	BUILDING L	BACKFLOW PREVENTER (<=1 INCH)	\$	1,199.68						\$	1,199.68	
ORCHARD RIDGE	BUILDING L	AIR COMPRESSOR - UTILITY (< =5 HP)	\$	13,630.62						\$	13,630.62	
ORCHARD RIDGE	BUILDING L	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	165,258.21						\$	165,258.21	
ORCHARD RIDGE	BUILDING L	FAN - CENTRIFUGAL ROOF EXHAUST	\$	18,095.15						\$	18,095.15	
ORCHARD RIDGE	BUILDING L	FIRE ALARM SYSTEM - DEVICES	\$	159,839.12						\$	159,839.12	
ORCHARD RIDGE	BUILDING L	LOAD INTERRUPTER SWITCH - 15 KV	\$	143,253.91						\$	143,253.91	
ORCHARD RIDGE	BUILDING L	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	20,447.48						\$	20,447.48	
ORCHARD RIDGE	BUILDING L	STAIR SAFETY UPGRADES	\$	32,278.27						\$	32,278.27	
ORCHARD RIDGE	BUILDING L	ELEVATOR CAB UPGRADES AND CHAIR LIFT INSTALLATION	\$	16,370.26						\$	16,370.26	
ORCHARD RIDGE	BUILDING L	INTERIOR AMENITY ACCESSIBILITY UPGRADES	\$	20,636.49						\$	20,636.49	
ORCHARD RIDGE	BUILDING L	TUNNEL ACCESSIBILITY IMPROVEMENTS	Ś	11.560.42				T		Ś	11.560.42	
ORCHARD RIDGE	BUILDING L	FIRE SPRINKLER SYSTEM INSTALLATION	Ś	508.120.05				1		Ś	508.120.05	
ORCHARD RIDGE	BUILDING I		Ś	103 238 96				-		Ś	103 238 96	
ORCHARD RIDGE		BACKELOW PREVENTER INSTALLATION	Ś	8 536 52				-		Ś	8 536 52	
ORCHARD RIDGE	BUILDING L	BUILDING LIPGRADE	Ś	3 524 000 00				+		Ś	3,524,000,00	
ORCHARD RIDGE	BUILDINGL	BUILDING LTOTALS	Ś	5.018.246.51		s -	s -		s -	Ś	8,542,246,51	\$ -
ORCHARD RIDGE		AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	Ś	6 438 17		Ŧ	Ŧ	-	Ŧ	Ś	6 438 17	Ŧ
			ć	12 732 61				+		¢	12 732 61	
			¢ ¢	2 689 69				+		¢	2 689 69	
		DEAFRATOR SYSTEM	¢ ¢	3 /37 1/				+		¢	3 /37 1/	
			¢	25 208 04				+		ç	25 208 04	
			ې د	7 084 41				+		ې د	7 084 41	
			ې د	6 511 11				+		ې د	6 511 11	
			ې د	6 5 2 6 2 2				+		ې د	6 5 2 6 2 2 2	
		CLASS STOREDONT	ې د	252 775 25				+		ې د	252 775 25	
			ې خ	555,775.55	-			+		ې د	555,775.55	
			ې خ	14 902 20	-			+		ې د	1/ 902 20	
			Ş	14,695.59				+		ې د	14,695.59	
		DULADING ENTITIES	Ş	73,795.30				+		ې د	73,795.30	
			Ş	44,066.38				+		ې د	44,066.38	
ORCHARD RIDGE	BUILDING M		\$	5,576.45	-			+		\$	5,576.45	
ORCHARD RIDGE	BUILDING M		\$	389,949.55				+		\$	389,949.55	
ORCHARD RIDGE	BUILDING M		\$	3,984.71	-			+		\$	3,984.71	
ORCHARD RIDGE	BUILDING M	SUPPLY PIPING SYSTEM - OFFICE	Ş	146,404.99	-			+		Ş	146,404.99	
ORCHARD RIDGE	BUILDING M	HVAC CONTROLS SYSTEM - OFFICE	Ş	158,175.64				+		Ş	158,175.64	
ORCHARD RIDGE	BUILDING M	VARIABLE FREQUENCY DRIVE (10-15 HP)	Ş	/,/16./8				+		Ş	/,/16./8	
ORCHARD RIDGE	BUILDING M	WALL FINISH - APPLIED, STANDARD	Ş	122,679.46				—		Ş	122,679.46	
ORCHARD RIDGE	BUILDING M	VARIABLE FREQUENCY DRIVE (40-50 HP)	Ş	16,986.17				+		Ş	16,986.17	
ORCHARD RIDGE	BUILDING M	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	Ş	48,958.73				—		Ş	48,958.73	
ORCHARD RIDGE	BUILDING M	FIRE ALARM SYSTEM - DEVICES	Ş	151,098.65				4		Ş	151,098.65	
ORCHARD RIDGE	BUILDING M	INTERIOR AMENITY ACCESSIBILITY UPGRADES	\$	23,616.72				_		\$	23,616.72	
ORCHARD RIDGE	BUILDING M	INTERIOR DOOR ACCESSIBILITY UPGRADES	Ş	35,783.11				4		Ş	35,783.11	
ORCHARD RIDGE	BUILDING M	STAIR SAFETY UPGRADES	\$	46,924.04				4		\$	46,924.04	
ORCHARD RIDGE	BUILDING M	RESTROOM ACCESSIBILITY IMPROVEMENTS	\$	19,359.62				4		\$	19,359.62	
ORCHARD RIDGE	BUILDING M	FIRE SPRINKLER SYSTEM INSTALLATION	\$	480,334.56				\perp		\$	480,334.56	
ORCHARD RIDGE	BUILDING M	IMPROVE EGRESS PATHWAY DESIGNATION	\$	11,561.01				4		\$	11,561.01	
ORCHARD RIDGE	BUILDING M	ASBESTOS ABATEMENT - INTERIOR FINISH SYSTEMS	\$	3,332.29				\bot		\$	35,000.00	
ORCHARD RIDGE	BUILDING M	BUILDING UPGRADE	\$	3,500,000.00				\bot		\$	3,500,000.00	
ORCHARD RIDGE	BUILDING M	BUILDING M TOTALS	\$	2,788,584.09	:	\$-	\$ -	1	\$-	\$	6,320,251.80	\$-
ORCHARD RIDGE	GROUNDS GARAGE	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$	4,034.53			\$ 4,034.53	3				
ORCHARD RIDGE	GROUNDS GARAGE	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	13,289.15			\$ 13,289.15	5				
ORCHARD RIDGE	GROUNDS GARAGE	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	2,397.52			\$ 2,397.52	2				
ORCHARD RIDGE	GROUNDS GARAGE	DOOR LOCK COMMERCIAL-GRADE	Ś	900 98			\$ 900 98	2				

Campus	Asset Name	Item		Total		2020	2021	2022	2023		2024
ORCHARD RIDGE	GROUNDS GARAGE	OVERHEARD DOOR & OPERATOR, EXTERIOR	\$	100,061.35			\$ 100,061.35				
ORCHARD RIDGE	GROUNDS GARAGE	FAN - CENTRIFUGAL ROOF EXHAUST	\$	5,428.55			\$ 5,428.55				
ORCHARD RIDGE	GROUNDS GARAGE	FENCING, PERIMETER SECURITY	\$	42,588.32			\$ 42,588.32				
ORCHARD RIDGE	GROUNDS GARAGE	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD	\$	8,142.99			\$ 8,142.99				
ORCHARD RIDGE	GROUNDS GARAGE	HVAC CONTROLS SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$	1,371.82			\$ 1,371.82				
ORCHARD RIDGE	GROUNDS GARAGE	LIGHTING - EXTERIOR	\$	2,569.94			\$ 2,569.94				
ORCHARD RIDGE	GROUNDS GARAGE	PLUMBING FIXTURES	\$	15,079.44			\$ 15,079.44				
ORCHARD RIDGE	GROUNDS GARAGE	PTAC, DX/ HP COOL, ELEC HEAT (0.5-1.25 TON)	\$	2,731.55			\$ 2,731.55				
ORCHARD RIDGE	GROUNDS GARAGE	VEHICLE GATE, SLIDING OR SWINGING, MOTORIZED	\$	1,952.46			\$ 1,952.46				
ORCHARD RIDGE	GROUNDS GARAGE	PTAC, DX/ HP COOL, ELEC HEAT (0.5-1.25 TON)	\$	2,731.55			\$ 2,731.55				
ORCHARD RIDGE	GROUNDS GARAGE	ELECTRICAL DISTRIBUTION NETWORK - SHOPS / TRADES, DRY LABORATORY	\$	86,981.42			\$ 86,981.42				
ORCHARD RIDGE	GROUNDS GARAGE	SUPPLY PIPING SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$	25,122.62			\$ 25,122.62				
ORCHARD RIDGE	GROUNDS GARAGE	WALL FINISH - APPLIED, STANDARD	\$	12,443.78			\$ 12,443.78				
ORCHARD RIDGE	GROUNDS GARAGE	AIR COMPRESSOR - UTILITY (< =5 HP)	\$	13,630.62			\$ 13,630.62				
ORCHARD RIDGE	GROUNDS GARAGE	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73			\$ 48,958.73				
ORCHARD RIDGE	GROUNDS GARAGE	FIRE ALARM SYSTEM - DEVICES	\$	13,021.59			\$ 13,021.59				
ORCHARD RIDGE	GROUNDS GARAGE	WALL FINISH - TILE, CERAMIC / STONE, STANDARD	\$	12,636.26			\$ 12,636.26				
ORCHARD RIDGE	GROUNDS GARAGE	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	6,134.25			\$ 6,134.25				
ORCHARD RIDGE	GROUNDS GARAGE	RESTROOM ACCESSIBILITY UPGRADES	\$	27,682.23			\$ 27,682.23				
ORCHARD RIDGE	GROUNDS GARAGE	RAILING SAFETY UPGRADES	\$	6,830.65			\$ 6,830.65				
ORCHARD RIDGE	GROUNDS GARAGE	BACKFLOW PREVENTER INSTALLATION	\$	8,536.52			\$ 8,536.52				
ORCHARD RIDGE	GROUNDS GARAGE	GROUNDS GARAGE TOTALS	\$	465,258.80	\$	-	\$ 465,258.80	\$-	\$-	\$	-
ORCHARD RIDGE	PUMP HOUSE	FAN - PROPELLER WITH LOUVER, 1/4" SP (.5-1 HP)	\$	3,255.56	\$	3,255.56					
ORCHARD RIDGE	PUMP HOUSE	FURNACE, OUTDOOR, NATURAL GAS (75-120 MBH)	\$	8,024.20	\$	8,024.20					
ORCHARD RIDGE	PUMP HOUSE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$	7,168.07	\$	7,168.07					
ORCHARD RIDGE	PUMP HOUSE	MAIN SWITCHBOARD W/BREAKERS (<400 AMP)	\$	12,976.71	\$	12,976.71					
ORCHARD RIDGE	PUMP HOUSE	POTABLE WATER STORAGE TANK	\$	20,548.24	\$	20,548.24					
ORCHARD RIDGE	PUMP HOUSE	SUPPLY PIPING SYSTEM - WAREHOUSE	\$	15,484.56	\$	15,484.56					
ORCHARD RIDGE	PUMP HOUSE	WALL FINISH - APPLIED, STANDARD	\$	4,497.35	\$	4,497.35					
ORCHARD RIDGE	PUMP HOUSE	WATER HEATER - RESIDENTIAL, ELECTRIC (15-25 GAL)	\$	1,524.26	\$	1,524.26					
ORCHARD RIDGE	PUMP HOUSE	ELECTRICAL DISTRIBUTION NETWORK - WAREHOUSE	\$	15,636.48	\$	15,636.48					
ORCHARD RIDGE	PUMP HOUSE	SUPPLY PIPING SYSTEM - WAREHOUSE	\$	4,060.40	\$	4,060.40					
ORCHARD RIDGE	PUMP HOUSE	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$	1,284.97	\$	1,284.97					
ORCHARD RIDGE	PUMP HOUSE	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	3,212.39	\$	3,212.39					
ORCHARD RIDGE	PUMP HOUSE	EXTERIOR WALL FINISH RENEWAL	\$	4,266.57	\$	4,266.57					
ORCHARD RIDGE	PUMP HOUSE	PUMP HOUSE TOTALS	\$	101,939.75	\$	101,939.75	\$-	\$-	\$-	\$	-
ORCHARD RIDGE	SMITH THEATER	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	\$	2,146.06						<u> </u>	
ORCHARD RIDGE	SMITH THEATER	DEAERATOR SYSTEM	Ş	3,437.14						\$	3,437.14
ORCHARD RIDGE	SMITH THEATER	DOOR, PANIC HARDWARE AND FRAME, EXTERIOR	Ş	38,752.02						<u> </u>	
ORCHARD RIDGE	SMITH THEATER	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	Ş	605.08						<u> </u>	
ORCHARD RIDGE	SMITH THEATER	MOTOR CONTROL CENTER VERTICAL SECTION,	Ş	221,379.91						<u> </u>	
ORCHARD RIDGE	SMITH THEATER	PLUMBING FIXTURE - LAVATORY, COUNTER	Ş	6,204.73						<u> </u>	
ORCHARD RIDGE	SMITH THEATER	UNINTERRUPTIBLE POWER SUPPLY - 120/208 VOLTS	\$	93,837.63						<u> </u>	
ORCHARD RIDGE	SMITH THEATER	WATER HEATER - RESIDENTIAL, GAS	Ş	3,392.70						<u> </u>	
ORCHARD RIDGE	SMITH THEATER	DOOR LOCK, COMMERCIAL-GRADE	Ş	12,613.66						<u> </u>	
ORCHARD RIDGE	SMITH THEATER		Ş	6,501.06	-						
ORCHARD RIDGE	SMITH THEATER	VARIABLE FREQUENCY DRIVE (15-20 HP)	Ş	28,695.56						Ş	28,695.56
ORCHARD RIDGE	SMITH THEATER	HVAC CONTROLS SYSTEM - THEATER	Ş	136,746.91	-					Ş	136,746.91
ORCHARD RIDGE	SMITH THEATER	GLASS, STUREFRUNT	Ş	23,585.02	_					\$	23,585.02
			\$	1/7,104.82						>	177,104.82
			\$	5,985.19						├──	
			\$ ¢	70,874.85						├───	
			> ~	32,363.70						ć	20 626 40
			>	20,036.49						Ş	20,036.49
			¢ ¢	2,942.02						┝──	
ORCHARD RIDGE	SMITH THEATER	STAIR AND RAILING SAFETY LIPGRADES	د ۲	2,091.03 5 977 17						├	

```
Oakland Community College
```

Campus	Asset Name	Item	Total	2020	2021	2022	2023	2024
ORCHARD RIDGE	SMITH THEATER	UNISEX RESTROOM INSTALLATION	\$ 18,893.01					
ORCHARD RIDGE	SMITH THEATER	FIRE SPRINKLER SYSTEM INSTALLATION	\$ 244,379.59					
ORCHARD RIDGE	SMITH THEATER	SMITH THEATER TOTALS	\$ 1,168,891.75	\$ -	\$-	\$-	\$ -	\$ 390,205.95
ORCHARD RIDGE	SITE	REPLACE OLDEST WATER SERVICE LINES	\$ 379,353.64	\$ 379,353.64				
ORCHARD RIDGE	SITE	CCTV CRITICAL SANITARY SEWER LINES FOR DEFICIENCIES	\$ 19,513.17	\$ 19,513.17				
ORCHARD RIDGE	SITE	CCTV CRITICAL STORMWATER SEWER LINES FOR DEFICIENCIES	\$ 66,370.49	\$ 66,370.49				
ORCHARD RIDGE	SITE	REPLACE SELECT AGED/DEFICIENT STORMWATER STRUCTURES	\$ 321,284.42	\$ 321,284.42				
ORCHARD RIDGE	SITE	REMOVE AND REPLACE DAMAGED HW AND CW PIPE INSULATION	\$ 348,846.08	\$ 134,980.08	214000			
ORCHARD RIDGE	SITE	REMOVE AND REPLACE PIPE AND VALVES	\$ 3,962,954.79					
ORCHARD RIDGE	SITE	REMOVE/REPLACE DIRECT-BURIED HW PIPE TO BUILDING ORH	\$ 309,232.10					
ORCHARD RIDGE	SITE	PERFORM ULTRASONIC PIPE THICKNESS TEST ON HW AND CW	\$ 28,033.34	\$ 28,033.34				
ORCHARD RIDGE	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 1-5	\$ 36,961.07	\$ 36,961.07				
ORCHARD RIDGE	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 6-10	\$ 36,961.07					
ORCHARD RIDGE	SITE	DOMESTIC WATER BOOSTER SYSTEM	\$ 72,705.28	\$ 72,705.28				
ORCHARD RIDGE	SITE	POTABLE WATER STORAGE TANK	\$ 102,741.18	\$ 102,741.18				
ORCHARD RIDGE	SITE	SANITARY SEWER PIPES	\$ 370,084.50		\$ 329,528.50			
ORCHARD RIDGE	SITE	SANITARY SEWER PIPE - 8" DIAMETER - STORMWATER	\$ 82,462.81	\$ 82,462.81				
ORCHARD RIDGE	SITE	SIGNAGE UPGRADE	\$ 125,000.00					
ORCHARD RIDGE	SITE	SITE TOTALS	\$ 6,137,503.93	\$ 1,244,405.47	\$ 543,528.50	\$-	\$-	\$ -
ORCHARD RIDGE	TUNNEL	FIRE ALARM SYSTEM - DEVICES	\$ 17,018.05					\$ 17,018.05
ORCHARD RIDGE	TUNNEL	HVAC CONTROLS SYSTEM - WAREHOUSE	\$ 9,577.64					\$ 9,577.64
ORCHARD RIDGE	TUNNEL	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 15,129.28					\$ 15,129.28
ORCHARD RIDGE	TUNNEL	ELECTRICAL DISTRIBUTION NETWORK - WAREHOUSE	\$ 36,303.44					\$ 36,303.44
ORCHARD RIDGE	TUNNEL	TUNNEL TOTALS	\$ 78,028.41	\$ -	\$ -	\$-	\$ -	\$ 78,028.41

ORCHARD RIDGE CAMPUS WIDE - GRAND TOTALS \$ 88,409,317.86 \$ 1,346,345.22 \$ 2,029,635.57 \$ 29,999,999.52 \$ 14,999,228.12 \$ 12,438,718.76

Campus	Asset Name	Item		Total	2020		2021	2022		2023		2024
ROYAL OAK	BUILDING A	AIR HANDLING UNIT - INDOOR	\$	168,465.18								
ROYAL OAK	BUILDING A	DOOR. LOCK. PANIC HARDWARE AND FRAME. EXTERIOR	Ś	10.984.55		Ś	10.984.55				1	
ROYAL OAK	BUILDING A	DOOR PANIC HARDWARE. INTERIOR	Ś	2.833.76		Ś	2.833.76				(
ROYAL OAK	BUILDING A	FAN - AXIAL, RETURN, 1.5" SP (10-15 HP) 27,000 CFM	\$	35,108.79			,				ł	
ROYAL OAK	BUILDING A	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY	\$	2,359.52							ł	
ROYAL OAK	BUILDING A	PUMP - ELECTRIC (<=10 HP)	\$	2,027.80							i	
ROYAL OAK	BUILDING A	VARIABLE FREQUENCY DRIVES	\$	31,984.50							i i	
ROYAL OAK	BUILDING A	WALL FINISH - WALL COVERING, ROLL	\$	154,281.51							\$:	154,281.51
ROYAL OAK	BUILDING A	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$	268,601.70							\$ 2	268,601.70
ROYAL OAK	BUILDING A	HVAC CONTROLS SYSTEM - CLASSROOM	\$	358,683.05							1	
ROYAL OAK	BUILDING A	BACKFLOW PREVENTERS	\$	13,886.57							1	
ROYAL OAK	BUILDING A	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	2,397.52		\$	2,397.52				1	
ROYAL OAK	BUILDING A	TRANSFORMER - DRY-TYPE, 3PH, 5-15KV PRIMARY (500-750 KVA)	\$	88,127.16		\$	88,127.16				1	
ROYAL OAK	BUILDING A	FIRE ALARM SYSTEM - DEVICES	\$	279,789.12					\$	279,789.12	1	
ROYAL OAK	BUILDING A	WALL FINISH - APPLIED, STANDARD	\$	97,825.71					\$	64,038.71	1	
ROYAL OAK	BUILDING A	LIGHTING - EXTERIOR	\$	19,863.69							1	
ROYAL OAK	BUILDING A	WALL FINISH - APPLIED, STANDARD	\$	19,105.26								
ROYAL OAK	BUILDING A	DRINKING FOUNTAIN, DUAL-LEVEL	\$	6,422.61								
ROYAL OAK	BUILDING A	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	\$	4,523.79								
ROYAL OAK	BUILDING A	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	1,303,046.25							L	
ROYAL OAK	BUILDING A	WATER HEATER - RESIDENTIAL, ELECTRIC (25-46 GAL)	\$	1,637.35							L	
ROYAL OAK	BUILDING A	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	15,390.52				\$ 15,390.52			L	
ROYAL OAK	BUILDING A	STAIR SAFETY UPGRADES	\$	6,703.43				\$ 6,703.43			L	
ROYAL OAK	BUILDING A	EXTERIOR WALL PANEL REPAIR	\$	205,463.29							<u> </u>	
ROYAL OAK	BUILDING A	IMPROVE EGRESS PATHWAY DESIGNATION	\$	1,541.49							<u> </u>	
ROYAL OAK	BUILDING A	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$	3,321.43							\$	3,321.43
ROYAL OAK	BUILDING A	BUILDING A TOTALS	\$	3,104,375.58	\$-	\$	104,343.00	\$ 22,093.96	\$	343,827.84	\$ 4	426,204.65
ROYAL OAK	BUILDING B	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$	8,741.49							 	
ROYAL OAK	BUILDING B	DOOR PANIC HARDWARE	\$	1,416.88							 	
ROYAL OAK	BUILDING B	PLUMBING FIXTURE - SINK, KITCHEN	\$	927.32							⊢	
ROYAL OAK	BUILDING B	WALL FINISH - WALL COVERING, ROLL	\$	483,826.83							⊢	
ROYAL OAK	BUILDING B	WALL, EXTERIOR, PANEL JOINT RESTORATION	\$	190,152.95							⊢	
ROYAL OAK	BUILDING B	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	2,397.52		\$	2,397.52				⊢	
ROYAL OAK	BUILDING B	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73					\$	48,958.73	⊢	
ROYAL OAK	BUILDING B	FIRE ALARM SYSTEM - DEVICES	\$	203,997.08					\$	203,997.08	<u> </u>	
ROYAL OAK	BUILDING B	CONDENSER - REFRIGERANT, AIR-COOLED	\$	12,373.65							\$	12,373.65
ROYAL OAK	BUILDING B	HVAC CONTROLS SYSTEM - CLASSROOM	\$	261,519.44							⊢	
ROYAL OAK	BUILDING B	LIGHTING - EXTERIOR	\$	14,625.62							⊢	
ROYAL OAK	BUILDING B	DOOR - OVERHEAD, INTERIOR	\$	2,501.44							⊢	
ROYAL OAK	BUILDING B	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	Ş	4,523.79							⊢	
ROYAL OAK	BUILDING B	HVAC DISTRIBUTION NETWORKS - CLASSROOM	Ş	1,693,670.14							⊢	
ROYAL OAK	BUILDING B	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	\$	4,124.55				*			⊢	
ROYAL OAK	BUILDING B	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	61,342.46				\$ 61,342.46				
ROYAL OAK	BUILDING B	BUILDING B TOTALS	\$	2,995,099.91	Ş -	Ş	2,397.52	\$ 61,342.46	Ş	252,955.81	Ş	12,373.65
ROYAL OAK	BUILDING C	CEILING FINISH - APPLIED PAINT OR STAIN, STANDARD	\$	28,539.54							⊢	
ROYAL OAK	BUILDING C	WALL FINISH - APPLIED, STANDARD	Ş	44,161.90		<i>.</i>	4 705 05				<u> </u>	
ROYAL OAK	BUILDING C	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	Ş	4,795.05		Ş	4,795.05		<u> </u>		<u> </u>	
ROYAL OAK	BUILDING C	FIRE ALARM SYSTEM - DEVICES	Ş	117,643.39					Ş	117,643.39	<u> </u>	
RUYAL OAK	BUILDING C	CUNDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	Ş	4,124.55							ې د	4,124.55
RUYAL OAK	BUILDING C	VARIABLE FREQUENCY DRIVE (10-15 HP)	Ş	7,716.78							Ş	7,716.78
KUYAL OAK	BUILDING C	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	Ş	8,004.39							<u> </u>	
ROYAL OAK	BUILDING C		Ş	13,017.45							<u> </u>	
			Ş	150,816.04				¢ 20.020.40			<u> </u>	
			>	20,636.49				\$ 20,636.49			<u> </u>	
KUYAL ÜAK	BUILDING C	KAILING SAFETY UPGRADES	Ş	2,049.21				ş 2,049.21			ı	

```
Oakland Community College
```

Campus	Asset Name	Item		Total		2020		2021		2022		2023		2024
ROYAL OAK	BUILDING C	BUILDING C TOTALS	\$	401,504.80	\$	-	\$	4,795.05	\$	22,685.70	\$	117,643.39	\$	11,841.34
ROYAL OAK	BUILDING D	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$	34,293.54										
ROYAL OAK	BUILDING D	DOOR LOCK, COMMERCIAL-GRADE	\$	3,603.90										
ROYAL OAK	BUILDING D	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	\$	7,506.57										
ROYAL OAK	BUILDING D	DOOR OPERATOR, POWER-ASSIST	\$	32,355.42										
ROYAL OAK	BUILDING D	DOOR PANIC HARDWARE	\$	9,918.17										
ROYAL OAK	BUILDING D	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	\$	37,521.60										
ROYAL OAK	BUILDING D	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY	\$	9,438.07										
ROYAL OAK	BUILDING D	HOOD, FUME	\$	23,388.08										
ROYAL OAK	BUILDING D	PLUMBING FIXTURES	\$	14,651.51										
ROYAL OAK	BUILDING D	WALL FINISH - WALL COVERING, ROLL	\$	30,924.87										
ROYAL OAK	BUILDING D	BACKFLOW PREVENTER (<=1 INCH)	\$	1,199.68										
ROYAL OAK	BUILDING D	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$	9,590.10										
ROYAL OAK	BUILDING D	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD	\$	275,775.85										
ROYAL OAK	BUILDING D	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$	48,958.73							\$	48,958.73		
ROYAL OAK	BUILDING D	FIRE ALARM SYSTEM - DEVICES	\$	166,422.06							\$	166,422.06		
ROYAL OAK	BUILDING D	WALL FINISH - APPLIED, STANDARD	\$	129,476.20							\$	129,476.20		
ROYAL OAK	BUILDING D	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	\$	2,749.70									\$	2,749.70
ROYAL OAK	BUILDING D	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	\$	73,655.69										
ROYAL OAK	BUILDING D	LIGHTING - EXTERIOR	\$	5,065.07										
ROYAL OAK	BUILDING D	PUMP - ELECTRIC	\$	12,166.80										
ROYAL OAK	BUILDING D	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	\$	80,352.45										
ROYAL OAK	BUILDING D	HVAC DISTRIBUTION NETWORKS - CLASSROOM	\$	1,381,706.39										
ROYAL OAK	BUILDING D	INTERIOR AMENITY ACCESSIBILITY UPGRADES	\$	17,352.04										
ROYAL OAK	BUILDING D	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$	26,123.92										
ROYAL OAK	BUILDING D	RESTROOM ACCESSIBILITY IMPROVEMENTS	\$	52,097.79					\$	52,097.79				
ROYAL OAK	BUILDING D	EXTERIOR WALL PANEL REPAIR	\$	248,947.59										
ROYAL OAK	BUILDING D	BUILDING EXTERIOR SAFETY UPGRADES	\$	15,146.04									\$	15,146.04
ROYAL OAK	BUILDING D	FIRE RATING COMPROMISE	\$	5,786.88										
ROYAL OAK	BUILDING D	BUILDING D TOTALS	\$	2,756,174.73	\$	-	\$	-	\$	52,097.79	\$	344,856.99	\$	17,895.74
ROYAL OAK	BUILDING E	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	Ş	24,207.21	_									
ROYAL OAK	BUILDING E	DOOR LOCK, COMMERCIAL-GRADE	Ş	900.98	_									
ROYAL OAK	BUILDING E	DOOR PANIC HARDWARE	\$	5,667.53	-									
ROYAL OAK	BUILDING E	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY	Ş	4,719.04	_									
ROYAL OAK	BUILDING E	WALL, EXTERIOR, PANEL JOINT RESTORATION (GREEN BRICK, N.E. SIDE)	Ş	441,416.34	_									
ROYAL OAK	BUILDING E	BACKFLOW PREVENTER (<=1 INCH)	Ş	1,199.68	_									
ROYAL OAK	BUILDING E	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	Ş	21,577.72	_		Ş	21,577.72						
ROYAL OAK	BUILDING E	SEATING, FIXED, FOLDING, STANDARD	\$	151,804.13			\$	151,804.13						
ROYAL OAK	BUILDING E	TRANSFORMER - DRY-TYPE, 3PH, 5-15KV PRIMARY (500-750 KVA)	Ş	88,127.16			Ş	88,127.16			~	100 077 00		
ROYAL OAK	BUILDING E	FIRE ALARM SYSTEM - DEVICES	Ş	169,677.66	-		_				Ş	169,677.66		
ROYAL OAK	BUILDING E	WALL FINISH - APPLIED, STANDARD	\$	109,829.91	-						Ş	109,829.91		
ROYAL OAK	BUILDING E	HEAT EXCHANGER - PLATE FRAME (200-600 GPM)	\$	/3,655.69	-									
ROYAL OAK	BUILDING E		\$	11,957.49			-							
ROYAL OAK	BUILDING E		Ş	10,139.00	-									
ROYAL OAK	BUILDING E		\$	83,673.17			-							
ROYAL OAK	BUILDING E		\$	1,908,113.61			-							
ROYAL OAK	BUILDING E	IRANSFORMER - DRY-TYPE, 3PH, 5-15KV PRIMARY (1000-1500 KVA)	\$	162,510.43			-							
ROYAL OAK	BUILDING E		Ş	2,678.64	-				~					
KUYAL OAK			Ş	10,318.23	⊢				Ş	10,318.23				
			\$	5,942.62	┢				Ş	5,942.62				
			Ş	25,559.35	⊢								ć	0.050.03
KUYAL OAK			Ş	8,850.84			6	264 500 00	-	10 202 07	~	270 507 55	Ş	8,850.84
			Ş	3,322,526.43	Ş	-	Ş	261,509.02	Ş	16,260.85	Ş	279,507.57	\$	8,850.84
	GROUNDS	DOOR ONE AND FRAME, INTERIOR, NON-RATED	Ş	5,296.34	⊢									
KUYAL OAK	GROUNDS	DOOR OPERATOR, OVERHEAD PANEL DOOR, RESIDENTIAL, PADS	Ş	2,144.23			1							

Campus	Asset Name	ltem	Total	2	020		2021		2022		2023		2024
ROYAL OAK	GROUNDS	DOOR, EXTERIOR, OVERHEAD PANEL OR SECTIONAL, PAINTED, LOCK	\$ 19,604.58										
ROYAL OAK	GROUNDS	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD	\$ 5,040.90										
ROYAL OAK	GROUNDS	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 2,569.94										
ROYAL OAK	GROUNDS	LIGHTING SYSTEM, INTERIOR - SHOPS / TRADES, DRY LABORATORY	\$ 11,641.89										
ROYAL OAK	GROUNDS	MAIN SWITCHBOARD W/BREAKERS (<400 AMP)	\$ 19,964.17										
ROYAL OAK	GROUNDS	PLUMBING FIXTURES	\$ 2,397.57										
ROYAL OAK	GROUNDS	UNIT HEATER - INDOOR, GAS, SUSPENDED (>180 MBH)	\$ 5,902.58										
ROYAL OAK	GROUNDS	WALL FINISH - APPLIED, STANDARD	\$ 10,685.42										
ROYAL OAK	GROUNDS	WALL FINISH - WOOD PANEL, STANDARD	\$ 19,852.66										
ROYAL OAK	GROUNDS	WALL, EXTERIOR, SIDING, WOOD BOARD, STANDARD	\$ 1,480.89										
ROYAL OAK	GROUNDS	LIGHTING - EXTERIOR, WALL FLOOD	\$ 6,424.85										
ROYAL OAK	GROUNDS	WATER HEATER - RESIDENTIAL, ELECTRIC (25-46 GAL)	\$ 2,183.13										
ROYAL OAK	GROUNDS	CEILING FINISH - ATTACHED ACOUSTICAL TILE	\$ 13,879.74			\$	13,879.74						
ROYAL OAK	GROUNDS	DOOR OPERATOR, OVERHEAD PANEL DOOR, RESIDENTIAL, PADS	\$ 1,072.11			\$	1,072.11						
ROYAL OAK	GROUNDS	LIGHTING SYSTEM, INTERIOR - SHOPS / TRADES, DRY LABORATORY	\$ 9,001.46									\$	9,001.46
ROYAL OAK	GROUNDS	DRAIN PIPING SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$ 25,857.86										
ROYAL OAK	GROUNDS	ELECTRICAL DISTRIBUTION NETWORK - SHOPS / TRADES, DRY LABORATORY	\$ 66,492.46										
ROYAL OAK	GROUNDS	SUPPLY PIPING SYSTEM - SHOPS / TRADES, DRY LABORATORY	\$ 17,249.86										
ROYAL OAK	GROUNDS	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$ 2,641.38										
ROYAL OAK	GROUNDS	EXTERIOR MASONRY WALL RENEWAL	\$ 21,689.39					\$	21,689.39				
ROYAL OAK	GROUNDS	IMPROVE EGRESS PATHWAY DESIGNATION	\$ 5,302.64										
ROYAL OAK	GROUNDS	FIRE ALARM SYSTEM INSTALLATION	\$ 16,899.63										
ROYAL OAK	GROUNDS	FIRE SPRINKLER SYSTEM INSTALLATION	\$ 44,840.21										
ROYAL OAK	GROUNDS	ASBESTOS ABATEMENT - INTERIOR FINISH SYSTEMS	\$ 3,836.02							\$	3,836.02		
ROYAL OAK	GROUNDS	GROUNDS TOTALS	\$ 343,951.89	\$	-	\$	14,951.85	\$	21,689.39	\$	3,836.02	\$	9,001.46
ROYAL OAK	MALL	AIR HANDLING UNIT - INDOOR	\$ 82,761.97										
ROYAL OAK	MALL	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	\$ 21,749.44										
ROYAL OAK	MALL	DOOR LOCK, COMMERCIAL-GRADE	\$ 1,801.95										
ROYAL OAK	MALL	DOOR LOCK, SECURITY	\$ 10,509.51										
ROYAL OAK	MALL	DOOR PANIC HARDWARE	\$ 5,667.53										
ROYAL OAK	MALL	DRINKING FOUNTAIN, DUAL-LEVEL	\$ 12,845.21							_			
ROYAL OAK	MALL	ELEVATOR MODERNIZATION - HYDRAULIC 2-5 FLOORS	\$ 310,640.43										
ROYAL OAK	MALL	PLUMBING FIXTURES	\$ 40,342.87										
ROYAL OAK	MALL	WATER HEATER - RESIDENTIAL, ELECTRIC (25-46 GAL)	\$ 1,637.35										
ROYAL OAK	MALL	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	\$ 4,795.05			\$	4,795.05			_			
ROYAL OAK	MALL	FIRE ALARM SYSTEM - DEVICES	\$ 163,122.31							\$	163,122.31		
ROYAL OAK	MALL	VARIABLE FREQUENCY DRIVE	\$ 15,433.57							\$	15,433.57		
ROYAL OAK	MALL	WALL FINISH - APPLIED, STANDARD	\$ 3,381.46							\$	3,381.46		
ROYAL OAK	MALL	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	\$ 4,523.79									\$	4,523.79
ROYAL OAK	MALL	HVAC CONTROLS SYSTEM - OFFICE	\$ 170,762.46										
ROYAL OAK	MALL	LIGHTING - EXTERIOR	\$ 13,349.50										
ROYAL OAK	MALL	HVAC DISTRIBUTION NETWORKS - OFFICE	\$ 1,094,461.27										
ROYAL OAK	MALL	VARIABLE FREQUENCY DRIVE	\$ 33,972.35							-			
ROYAL OAK	MALL	ELEVATOR CAB ACCESSIBILITY UPGRADES	\$ 3,475.59										
ROYAL OAK	MALL	DRINKING FOUNTAIN ACCESSIBILITY UPGRADES	\$ 14,041.55			\$	14,041.55						
ROYAL OAK	MALL	INTERIOR DOOR HARDWARE UPGRADES	\$ 10,565.56					\$	10,565.56				
ROYAL OAK	MALL	STAIR ACCESSIBILITY AND SAFETY UPGRADES	\$ 13,406.86										
ROYAL OAK	MALL	MALL TOTALS	\$ 2,033,247.56	\$	-	\$	18,836.60	\$	10,565.56	Ş	181,937.34	Ş	4,523.79
ROYAL OAK	POWER HOUSE	AIR DRYER - REFRIGERATED (11-25 CFM)	\$ 2,264.63			<u> </u>		-					
ROYAL OAK	POWER HOUSE	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	\$ 582.14			<u> </u>		-					
ROYAL OAK	POWER HOUSE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 13,024.24			<u> </u>		ļ					
ROYAL OAK	POWER HOUSE	VARIABLE FREQUENCY DRIVE	\$ 27,701.18			<u> </u>		 					
ROYAL OAK	POWER HOUSE	AIR HANDLING UNIT - INDOOR (12-17 HP)	\$ 116,248.21			<u> </u>		-					
ROYAL OAK	POWER HOUSE	DOOR LOCK, COMMERCIAL-GRADE	\$ 1,801.95			<u> </u>		-					
ROYAL OAK	POWER HOUSE	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY, 2.5" SP (<=30 HP)	\$ 15,730.12										

Campus	Asset Name	Item	Total	2020		2021		2022		2023	2024
ROYAL OAK	POWER HOUSE	PLUMBING FIXTURE - EMERGENCY EYEWASH	\$ 1,299.04					·		·	
ROYAL OAK	POWER HOUSE	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	\$ 8,994.79								
ROYAL OAK	POWER HOUSE	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (6-10 TOTAL HP)	\$ 23,150.11							i	
ROYAL OAK	POWER HOUSE	VARIABLE FREQUENCY DRIVE (10-15 HP)	\$ 15,433.57							i	
ROYAL OAK	POWER HOUSE	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,958.73				\$	48,958.73			
ROYAL OAK	POWER HOUSE	FIRE ALARM SYSTEM - DEVICES	\$ 12,755.18				\$	12,755.18			
ROYAL OAK	POWER HOUSE	HVAC CONTROLS SYSTEM - WAREHOUSE	\$ 19,207.86				\$	19,207.86			
ROYAL OAK	POWER HOUSE	BACKFLOW PREVENTERS	\$ 17,300.08								\$ 17,300.08
ROYAL OAK	POWER HOUSE	LIGHTING SYSTEM, INTERIOR - WAREHOUSE	\$ 13,524.66								\$ 13,524.66
ROYAL OAK	POWER HOUSE	MAIN SWITCHBOARD W/BREAKERS (1600-2500 AMP)	\$ 201,572.14								\$ 201,572.14
ROYAL OAK	POWER HOUSE	AIR COMPRESSOR - UTILITY (< =5 HP)	\$ 5,452.25								
ROYAL OAK	POWER HOUSE	EXTERIOR MASONRY WALL RENEWAL	\$ 6,155.50								
ROYAL OAK	POWER HOUSE	REMOVE AND REPLACE PURGE PUMP ASSEMBLIES AT CHILLERS	\$ 13,700.28		\$	13,700.28					
ROYAL OAK	POWER HOUSE	PERFORM HYDRAULIC ANALYSIS	\$ 63,257.78		\$	63,257.78					
ROYAL OAK	POWER HOUSE	MODIFY CONDENSER WATER SYSTEM	\$ 20,609.44						\$	20,609.44	
ROYAL OAK	POWER HOUSE	POWER HOUSE TOTALS	\$ 648,723.89	\$-	\$	76,958.06	\$	80,921.77	\$	20,609.44	\$ 232,396.87
ROYAL OAK	SITE	NEW CULINARY BUILDING	\$ 30,000,000.00	\$ 30,000,000.00							
ROYAL OAK	SITE	LOAD INTERRUPTER SWITCH, FUSED - 15 KV	\$ 94,597.27								\$ 94,597.27
ROYAL OAK	SITE	LOAD INTERRUPTER SWITCH, FUSED - 15 KV	\$ 94,597.27								\$ 94,597.27
ROYAL OAK	SITE	MC SWGR ENCLOSURE VERT STACK SECT (<800 AMP)	\$ 18,097.40		\$	18,097.40					
ROYAL OAK	SITE	MC SWGR METERING AND INSTRUMENT SYSTEMS	\$ 57,399.27		\$	57,399.27					
ROYAL OAK	SITE	REMOVE AND REPLACE OLDER VALVES THROUGHOUT CAMPUS	\$ 133,032.76				\$	133,032.76			
ROYAL OAK	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 1-5	\$ 15,216.06								
ROYAL OAK	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 6-10	\$ 15,216.06								
ROYAL OAK	SITE	REMOVE AND REPLACE AGING ELECTRICAL CONDUCTOR	\$ 117,746.10				\$	102,784.10			
ROYAL OAK	SITE	SITE WIDE / SMALL PROJECTS	\$ 150,000.00								
ROYAL OAK	BUILDING C	WATER HEATER - RESIDENTIAL, ELECTRIC (25-46 GAL)	\$ 1,637.35								
ROYAL OAK	BUILDING D	PTAC, DX/ HP COOL, ELEC HEAT (0.5-1.25 TON)	\$ 2,731.55								
ROYAL OAK	SITE	HOT/COLD WATER CIRCULATION UPGRADE	\$ 150,000.00								
ROYAL OAK	SITE	SITE TOTALS	\$ 545,902.18	\$ 30,000,000.00	\$	75,496.66	\$	235,816.87	\$	-	\$ 189,194.54
Royal Oak	North Parking Structure	TOP OF SLAB REPAIR	\$ 708,246.00				\$	52,500.00			
Royal Oak	North Parking Structure	UNDERSIDE OF SLAB REPAIR	\$ 28,908.00				\$	4,000.00			
Royal Oak	North Parking Structure	SLAB POST - TENSIONING REPAIR	\$ 385,440.00				\$	24,000.00			
Royal Oak	North Parking Structure	COLUMN REPAIR	\$ 34,328.25				\$	4,500.00			
Royal Oak	North Parking Structure	GROUT AND SEAL CRACKS	\$ 21,681.00				\$	3,000.00			
Royal Oak	North Parking Structure	RIBBON SEAL REMOVE AND REPLACE	\$ 21,681.00								
Royal Oak	North Parking Structure	STRIP SEAL REMOVE AND REPLACE	\$ 37,941.75				\$	10,500.00			
Royal Oak	North Parking Structure	DECK COATING - FULL SYSTEM - REPAIR	\$ 5,781.60								
Royal Oak	North Parking Structure	DECK COATING - RECOAT	\$ 1,057,310.10								\$ 146,300.00
Royal Oak	North Parking Structure	DECK COATING - FULL SYSTEM - AT PATCHES	\$ 201,753.75				\$	15,000.00			
Royal Oak	North Parking Structure	DECK COATING - FULL SYSTEM - AT STAIR TOWER	\$ 34,689.60								
Royal Oak	North Parking Structure	DECK COATING - RECOAT - AT STAIR TOWER	\$ 39,025.80								
Royal Oak	North Parking Structure	EXTERIOR GASKET REPAIR	\$ 14,454.00				\$	2,000.00			
Royal Oak	North Parking Structure	INSTALL SEALANT AT CAP STONES	\$ 35,773.65								
Royal Oak	North Parking Structure	INSTALL SEALANT AT BARRIER CABLE ANCHORS	\$ 13,008.60								
Royal Oak	North Parking Structure	INSTALL 123 TAPE AT MULLION JOINTS	\$ 3,974.85								
Royal Oak	North Parking Structure	EXTERIOR WET SEALANT REPLACEMENT AT CORNERS	\$ 1,806.75		<u> </u>				L		
Royal Oak	North Parking Structure	EXTERIOR WET SEALANT REPLACEMENT	\$ 28,546.65				\$	7,900.00	└──		
Royal Oak	North Parking Structure	MISCELLANEOUS ELECTRICAL REPAIRS	\$ 12,045.00				\$	2,000.00	 		
Royal Oak	North Parking Structure	STEEL TREAD PAN REPAIR - STAIRS	\$ 24,090.00		 		<u> </u>		└──		
Royal Oak	North Parking Structure	CLEAN & PAINT STEEL GUARDRAIL	\$ 10,840.50		 		<u> </u>		└──		
Royal Oak	North Parking Structure	CLEAN & PAINT STEEL HANDRAIL	\$ 7,227.00		<u> </u>		.		L		
Royal Oak	North Parking Structure	CLEAN & PAINT FAÇADE CONNECTIONS	\$ 89,133.00		<u> </u>		\$	10,800.00	L		
Royal Oak	North Parking Structure	REPAIR HANDRAIL ACROSS EXPANSION JOINTS	\$ 4,818.00				L.		└──		
Royal Oak	North Parking Structure	REMOVE & REPLACE BROKEN DRAIN GRATE	\$ 1,445.40		1		\$	200.00	1	ļ	

Oakland Community College

Campus	Asset Name	Item	Total	2020	2021		2022	2023	2024
Royal Oak	North Parking Structure	REPAIR EXTERIOR FAÇADE PANELS	\$ 391.46						
Royal Oak	North Parking Structure	MISCELLANEOUS MECHANICAL REPAIRS	\$ 12,045.00			\$	2,000.00		
Royal Oak	North Parking Structure	UPDATE LIGHTING SYSTEM - INSTALL EXTERNAL CONDUITS	\$ 285,466.50		\$ 285,467.00				
Royal Oak	North Parking Structure	Elevator	\$ 300,000.00						
Royal Oak	North Parking Structure	North Parking Structure Totals	\$ 3,421,853	\$-	\$ 285,467.00	\$:	138,400.00	\$-	\$ 146,300.00
Royal Oak	South Parking Structure	TOPPING REPAIR	\$ 3,493.05			\$	3,200.00		
Royal Oak	South Parking Structure	TEE FLANGE REPAIR	\$ 7,227.00			\$	1,000.00		
Royal Oak	South Parking Structure	WALL DELAMINATION REPAIR	\$ 1,686.30			\$	2,000.00		
Royal Oak	South Parking Structure	COLUMN REPAIR	\$ 1,565.85			\$	2,000.00		
Royal Oak	South Parking Structure	STAIR LANDING REPAIR	\$ 5,902.05			\$	700.00		
Royal Oak	South Parking Structure	GROUT AND SEAL CRACKS	\$ 21,078.75			\$	2,500.00		
Royal Oak	South Parking Structure	RIBBON SEAL REMOVE AND REPLACE	\$ 21,681.00						
Royal Oak	South Parking Structure	STRIP SEAL REMOVE AND REPLACE	\$ -						
Royal Oak	South Parking Structure	COVE SEALANT REPLACEMENT	\$ 173,448.00						
Royal Oak	South Parking Structure	JOINT SEALANT REPLACEMENT	\$ 509,503.50						
Royal Oak	South Parking Structure	WALL SEALANT REPLACEMENT	\$ 10,840.50						
Royal Oak	South Parking Structure	DECK COATING - FULL SYSTEM - AT STAIR TOWER	\$ 19,272.00						
Royal Oak	South Parking Structure	DECK COATING - RECOAT - AT STAIR TOWER	\$ -						
Royal Oak	South Parking Structure	EXTERIOR WALL SEALANT REPLACEMENT	\$ 126,472.50						
Royal Oak	South Parking Structure	EXTERIOR METAL TO METAL SEALANT REPLACEMENT	\$ 26,739.90						
Royal Oak	South Parking Structure	INSTALL 123 TAPE AT MULLION JOINTS	\$ 11,171.74						
Royal Oak	South Parking Structure	EXTERIOR WET SEALANT REPLACEMENT AT CORNERS	\$ 48,782.25			\$	2,500.00		
Royal Oak	South Parking Structure	EXTERIOR WET SEALANT REPLACEMENT	\$ 58,900.05			\$	58,900.00		
Royal Oak	South Parking Structure	CONCRETE SEALER	\$ 244,995.30						
Royal Oak	South Parking Structure	MISCELLANEOUS ELECTRICAL REPAIRS	\$ 12,045.00			\$	2,000.00		
Royal Oak	South Parking Structure	REPAINT PAVEMENT MARKINGS	\$ 39,676.23			\$	5,500.00		
Royal Oak	South Parking Structure	CLEAN AND PAINT HANDRAILS	\$ 14,454.00						
Royal Oak	South Parking Structure	REPLACE COLUMN CONNECTION CAPS	\$ 963.60						
Royal Oak	South Parking Structure	REPLACE SIGNAGE	\$ 6,745.20						
Royal Oak	South Parking Structure	REPOINT DETERIORATED MORTAR JOINTS	\$ 8,431.50			\$	1,000.00		
Royal Oak	South Parking Structure	MISCELLANEOUS MECHANICAL REPAIRS	\$ 12,045.00			\$	2,000.00		
Royal Oak	South Parking Structure	Elevator	\$ 300,000.00						
Royal Oak	South Parking Structure	South Parking Structure Totals	\$ 1,687,120	\$-	\$ -	\$	83,300.00	\$-	\$-

ROYAL OAK CAMPUS WIDE - GRAND TOTALS \$ 21,260,480.45 \$ 30,000,000.00 \$ 844,754.77 \$ 745,174.34 \$ 1,545,174.40 \$1,058,582.88

Oakland Community College

Campus	Asset Name	Item	Tota	ıl		2020	2021 2022			2022		2023		2024
SOUTHFIELD	BUILDING A	AIR HANDLING UNIT - INDOOR	\$ 57,2	296.75	\$	57,296.75								
SOUTHFIELD	BUILDING A	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	\$ 8,0	069.07	\$	8,069.07								
SOUTHFIELD	BUILDING A	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	\$ 2,5	502.19	\$	2,502.19								
SOUTHFIELD	BUILDING A	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	\$ 12,5	507.20	\$	12,507.20								
SOUTHFIELD	BUILDING A	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY, 2.5" SP (<=30 HP)	\$ 1,5	573.01	\$	1,573.01								
SOUTHFIELD	BUILDING A	LIGHTING - EXTERIOR WALL FLOOD	\$ 8,9	994.79	\$	8,994.79								
SOUTHFIELD	BUILDING A	DOOR OPERATOR, POWER-ASSIST	\$ 64,	710.84	\$	64,710.84							1	
SOUTHFIELD	BUILDING A	GLASS, STOREFRONT	\$ 857,4	484.05	\$	325,107.03	\$ 5	532,377.03					1	
SOUTHFIELD	BUILDING A	WALL FINISH - APPLIED, STANDARD	\$ 365,5	569.92	<u> </u>	,		,			\$	365,569.92	1	
SOUTHFIELD	BUILDING A	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	\$ 48,9	958.73							\$	48,958.73		
SOUTHFIELD	BUILDING A	FIRE ALARM SYSTEM - DEVICES	\$ 410,9	988.72							\$	410,988.72		
SOUTHFIELD	BUILDING A	LIGHTING - EXTERIOR LOTS	\$ 29,3	166.96									1	
SOUTHFIELD	BUILDING A	LIGHTING SYSTEM, INTERIOR - CLASSROOM	\$ 571,5	535.04									1	
SOUTHFIELD	BUILDING A	VARIABLE FREQUENCY DRIVE	\$ 15,4	433.57									1	
SOUTHFIELD	BUILDING A	DRINKING FOUNTAIN ACCESSIBILITY IMPROVEMENTS	\$ 9,7	739.71			\$	9,739.71					1	
SOUTHFIELD	BUILDING A	STAIR ACCESSIBILITY IMPROVEMENTS	\$ 5.6	692.08			Ś	5.692.08						
SOUTHFIELD	BUILDING A	EXTERIOR MASONRY WALL RENEWAL	\$ 14.6	661.11				-,						
SOUTHFIELD	BUILDING A	EXTERIOR WALL PANEL REPAIR	\$ 78.5	554.24										
SOUTHFIELD	BUILDING A	INTERIOR DOOR ACCESSIBILITY UPGRADES	\$ 17.6	609.27					Ś	17.609.27				
SOUTHFIELD	BUILDING A	BUILDING A TOTALS	\$ 2,581.0	047.25	Ś	480.760.87	Ś 5	47.808.81	Ś	17.609.27	Ś	825.517.38	Ś	-
SOUTHFIELD	BLDG, A ADDITION	LIGHTING - EXTERIOR	\$ 6.8	805.49	-	,	7 -	,	*			0_0,0_0		
SOUTHFIELD	BLDG. A ADDITION	VARIABLE FREQUENCY DRIVE	\$ 15.4	433.57										
SOUTHEIELD	BLDG, A ADDITION	FIRE ALARM SYSTEM - DEVICES	\$ 66.3	219.59					Ś	66,219,59				
SOUTHFIELD	BLDG, A ADDITION	HVAC CONTROLS SYSTEM - LIBRARY	\$ 86.8	897.64					Ŷ	00,210.00				
SOUTHFIELD	BLDG, A ADDITION	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (>10 TOTAL HP)	\$ 32.6	684.64	Ś	32,684,64								
SOUTHFIELD	BLDG, A ADDITION	BACKELOW PREVENTER	\$ 26.3	221.06	Ś	26,221,06								
SOUTHFIFLD	BLDG, A ADDITION	DOMESTIC WATER BOOSTER SYSTEM	\$ 45.4	440.80	Ś	45,440,80								
SOUTHFIFLD	BLDG, A ADDITION	LIGHTING SYSTEM, INTERIOR - LIBRARY	\$ 91.6	674.53	Ś	91.674.53								
SOUTHFIELD	BLDG, A ADDITION	WALL FINISH - APPLIED, STANDARD	\$ 35.3	234.84	Ť	51,07 1100					Ś	35,234,84		
SOUTHFIELD	BLDG, A ADDITION	EAN - CENTRIEUGAL BOOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	\$ 4.	523.79					Ś	3,371,79	Ŷ	00,20 110 1		
SOUTHFIELD	BLDG, A ADDITION	MOTOR CONTROL CENTER VERTICAL SECTION, 600V (400-600A) W/STARTERS	\$ 273.3	228.39					Ś	273,228,39				
SOUTHFIELD	BLDG. A ADDITION	DEAERATOR SYSTEM	\$ 1.7	718.57					Ś	1.718.57				
SOUTHFIELD			\$ 22	512.96					¢	22 512 96				
SOUTHFIELD			\$ 56.0	066.02					Ś	56,066,02				
SOUTHFIELD	BLDG. A ADDITION	BOILERS - GAS	\$ 1,289	701.83					Ŷ	30,000.02	Ś	213,048,00	Ś 1	076.653.83
SOUTHFIELD	BLDG, A ADDITION	EXTERIOR WALL PANEL REPAIR	\$ 49.0	040.30					Ś	49,040,30	Ŷ	220,010.00	<u> </u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SOUTHFIFLD	BLDG, A ADDITION	BUILDING A ADDITION TOTALS	\$ 2,103,4	404.02	Ś	196.021.03	Ś	-	Ś	472,157.62	Ś	248,282,84	\$ 1	.076.653.83
SOUTHEIELD			\$ 841 9	984 19	+	100,011.00	Ŧ		Ŧ		Ś	841 984 19	<u> </u>	,010,000.00
SOUTHFIELD	BUILDING B		\$ 13	374.86					Ś	1 374 86	Ŷ	011,501.15		
SOUTHFIELD	BUILDING B		\$ 68.9	993.26					Ś	68 993 26				
SOUTHFIELD	BUILDING B	EXTERIOR WALL PANEL REPAIR	\$ 168	330 53					Ś	168 330 53				
SOUTHFIELD			\$ 1.080 (682.83	Ś	-	Ś	-	Ś	238 698 64	Ś	841 984 19	Ś	-
SOUTHEIELD	SITE		\$ 22	140.22	Ś	22 140 22	7		Ŷ	200,000.04	Ŷ	041,504115	<u> </u>	
	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 1-5	\$ 99	815 10	4	9 815 10								
	SITE	IMPLEMENT MAINTENANCE/TESTING PROGRAM YEARS 6-10	\$ 99	815.10	Ļ	5,015.10								
SOOTHILLED	SITE		\$ 150 (000.00			¢ 1	150 000 00	ć	150 000 00	ć	150 000 00	ć	150 000 00
	SITE		\$ 130,0	609 44	⊢		ر ر	130,000.00	Ļ	130,000.00	Ļ	130,000.00	ې	130,000.00
			ب 20,0 خ 154	603.44	⊢									
			¢ 060	026 /1	⊢		ć	28 2/1 /1	ć	57 695 00				
			ې 90,0 د 234.0	000 71	ć	21 055 22	ې د 1	30,341.41	ې خ	207 695 00	ć	150 000 00	ć	150 000 00
SOUTHFIELD	JIL	SHETCHAS	ې 524,0	005.71	Ş	51,355.52	Ş.	100,341.41	Ş	207,085.00	Ş	150,000.00	Ş	130,000.00

SOUTHFIELD CAMPUS WIDE - GRAND TOTALS \$ 6,089,143.80 \$

708,737.22 \$ 736,150.22 \$ 936,150.52 \$ 2,065,784.41 \$ 1,226,653.83