

## **FACILITY PROGRAM PLAN**

NURSING, HEALTH  
TECHNOLOGY & SCIENCE  
BUILDING IMPROVEMENTS





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## I) OVERVIEW

### A. Executive Summary

Morgan Community College is a public two-year college that is part of the Colorado Community College System (CCCS), the largest system of higher education in Colorado. MCC serves a rural geographic area of 11,500 square miles, the largest service area of any of Colorado's thirteen community colleges.

Current physical facilities of Morgan Community College do not meet the educational delivery needs of the institution. The instructional areas currently occupied by these programs are undersized and utilized by several programs. A 2002 Facilities Master Plan produced by Bennett, Wagner & Grody Architects indicates a campus-wide space deficit of 117% based on projected 757 FTE for 2006. This deficit increases to approximately 158% based on the actual 2006 FTE of 1,020. The proposed changes in this Program Plan are consistent with the Facilities Master Plan which projects additional campus space requirements, interior space renovation, and site circulation improvements.

Increased enrollment in all health programs has impacted General Education class sizes as well as program dedicated spaces. Nursing, Health and Science student enrollment at the Fort Morgan campus has grown 173% from 107 FTE in 2002 to 186 FTE in 2006, yet there is only one biology and one chemistry laboratory space. There is no physics laboratory and the extent of office/storage/support space is insufficient. MCC began the Medical Assistant Program in Fall 2006, and intends to add Psychiatric Aide, Respiratory Therapy Technician, Medical Lab Assistant, Radiology Technician, and Pharmacy Assistant programs once space is available for these courses of study.

The proposed Nursing, Health Technology and Science additions of approximately 11,880 sq. ft., and reconfiguration of approximately 5,150 sq. ft., will serve students of Morgan Community College in providing additional student capacity for various health-related programs and improved educational delivery of additional Health, Science and related courses of study. The proposed plan provides an addition to the existing structure and a partial renovation of the existing building, including additional parking and reconfiguration of the main entrance loop drive.

This Program Plan includes a preliminary estimate of project costs totaling \$4,852,800. The best use of funding is to reconfigure poorly organized spaces in Spruce Hall. The additional space would be built adjacent to the renovated space to create an integrated nursing, health and science program area. The combination of renovated and new space will create a more functional area while reducing construction cost by reusing the existing building shell.

The implementation of this plan will provide a better learning environment for students, allow for the increase in programs which are of high demand and contribute to the well-being of the communities served by the college. The improvements directly relate to the college's mission. It is estimated that the improvements in this plan will meet the Nursing, Health Technology and Science programs needs at Morgan Community College for 10 years.

## II) JUSTIFICATION

Nursing, Health Technology and Science programs have been a part of Morgan Community College educational offerings since 1970. Distance education connects these programs with five centers throughout the area. In general the college's organization depends on the connectivity provided by contemporary technological communication solutions.

The objective of the Nursing, Health Technology and Science programs is to prepare students for careers in various medical/science fields. Morgan Community College currently offers accredited programs in Nursing (LPN and RN), Nursing Assistant, Physical Therapy Assistant, Emergency Medical Services and Medical Technology. Additional certificates are offered in Medical Prep (a health program for secondary students), Medical Assisting, Massage Therapy, and Medical Transcription.

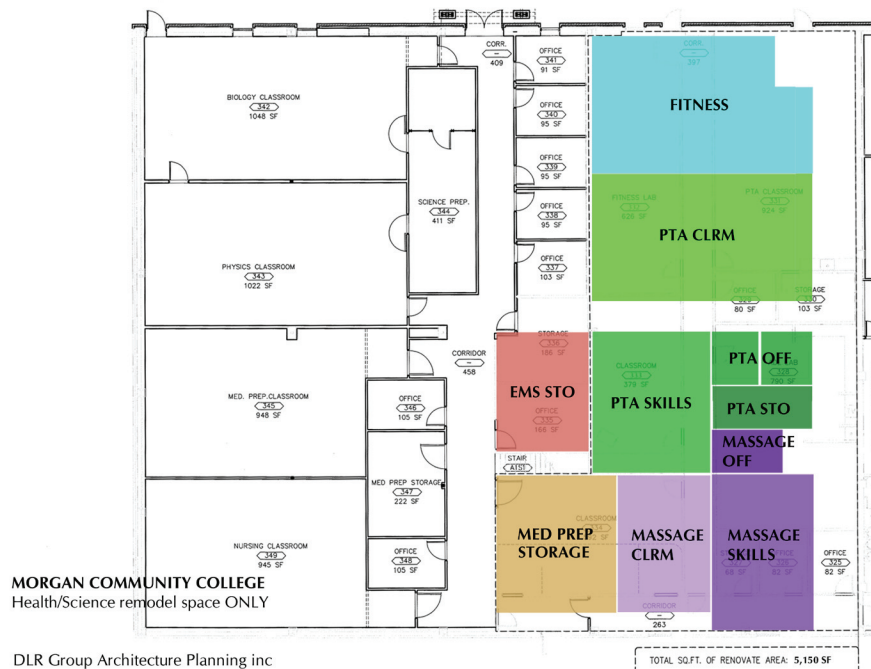
**A. Existing Conditions**

**i. Current Program Enrollment**

The enrollment in nursing programs has grown over 327%, from 22 FTE in 2002 to 72 FTE in 2006. MCC has experienced a 25% growth in total enrollment in the last ten years, and the college enrollment is expected to increase 4.4% from its current level of 1,020 FTE to a total of 1,065 FTE by fall 2011. While predicted enrollment growth is moderate, current facilities for programs are inadequate.

**ii. Assessment of Space Functionality**

Nursing, Health Technology and Science programs currently occupy a portion of the spaces to be reconfigured. The instructional areas are utilized by more than one program and are undersized for current student enrollment. The syncopation of class scheduling requires students and staff to be extremely diligent in setting up and breaking down furniture nearly every class period. This routine takes away from learning and instructional time.





The MCC Academic Planning Report indicates that in addition to existing program, a new Medical Assistant program began Fall 2006. A Radiology Technician program begins Summer 2007. In addition, MCC has interest in development of several more health technology programs as outlined in Section B ii. New or modified academic programs once space for these expanded curriculums is available. The addition of these programs will add to instructional space that is already congested.

The existing spaces do not function well for instruction of health and science programs. Classrooms double as laboratory space, while instructors need to accommodate students and teach around equipment such as washers/dryers, tubs, dishwashers, stoves, refrigerators and other equipment generally found in storage areas.

Current facilities limit any new high-tech programs requiring additional plumbing, electrical and HVAC needs or those requiring storage.

### **iii. Current space utilization**

Through the process of developing this facilities program plan, a tabulation of current spaces and utilization in their existing configuration has been prepared and included in Appendix A.

### **iv. Facilities Condition Index**

The areas affected by this Program Plan are located in Spruce Hall. The last Facility Audit for Spruce Hall was completed in 2003 resulting in a Facility Condition Index (FCI) of 98.6. The building has been 95% remodeled and undergone major repairs through Capital Construction and Controlled Maintenance funding, in addition to routine and scheduled preventative maintenance. The proposed renovation area includes space in Spruce Hall that was last remodeled in 1996. A copy of the Facility Audit is included in the Appendix.

### **v. Specific deficiencies**

There are several deficiencies of the existing facilities. First, there is inadequate space for current and projected nursing enrollment. Two small labs currently exist but they are of inadequate size given current program enrollment. The National League for Nursing Accrediting Commission (NLNAC) guidelines limit 6-10 students per faculty member in a laboratory for clinical courses which requires more dedicated space. Space available for related health technology programs is also undersized for current enrollment while requiring the same student-faculty ratio as NLNAC guidelines. Continued enrollment growth in these programs will be limited by facilities if additional space is not made available.

Physical Therapy Assistant students do not have separate classroom and laboratory spaces. The classroom has to be rearranged daily for lab demonstration and practice. The configuration of the long, narrow classroom does not provide good classroom instruction. The two health labs are also configured similarly, further inhibiting effective teaching.

Storage for all health and science programs is limited, and space is shared by multiple programs. For instance, massage therapy students carry their treatment tables and massage chairs from an upper level storage area to the main level classroom each class period. EMS students cannot set up their gurneys, resuscitation equipment and manikins for skill station rotation without overflowing into the hallways, thus blocking access.

There are insufficient spaces to set up lab areas that meet universal precaution and environmental guidelines outlined in accreditation standards for healthcare programs. The college does not have medication rooms, IV preparation rooms or other special treatment areas.

Microbiology is currently being offered in a lab that is not equipped for this subject area. Equipment missing includes such items as autoclaves, incubators, etc. that take up additional space and require additional electrical wiring. Biology offerings are reduced due to the lack of available science lab space and other biology related courses that transfer to other four-year institutions cannot be offered due to lack of space and equipment.

Student support spaces are virtually nonexistent. There are no spaces for students to conduct small group study, no meeting spaces or locker rooms. There is only one 10-station computer lab located near the health and science programs for all enrolled students to share.

Currently there are no additional faculty offices or workspace for adjunct or clinical instructors. This shortage will become more critical when new programs and faculty are added starting Summer 2007.

We have no space that can be used for individual student experimentation, observation or practice in a particular field of study. There are no demonstration rooms or public waiting areas.

Because of the limitations of our laboratories, the scheduling is so tight that it prevents any after-hours use of the teaching labs by students.

Existing campus parking is inadequate which results in random parking along the north and east boundaries adjacent to the Upper Platte and Beaver Canal. Parking in this area presents property, life-safety and ADA liabilities (in its current undeveloped condition).

## **B. Changes And Projections**

### **i. Enrollment projections by program or department**

Enrollment trends for MCC are included on CCHE Table C2-a in the appendix of this plan.

The enrollment data indicates a 23% growth in the Health Technology and Science programs at the Fort Morgan campus. Enrollment projections are conservative and limited by classroom and laboratory space, clinical placements, accreditation guidelines, and qualified faculty.

### **ii. New or modified academic programs/instructional methodology**

Nursing, Health Technology and Science programs are vital to the college's academic and institutional plans. Expansion of health care career instructional programs is a priority as our industry partners in health care show an increasing demand for ancillary healthcare services. There are shortages in all areas that we are not addressing as the focus has been on nursing. The aging population demographic and labor projections indicate that health care vacancies will continue to grow over the next 10 years, perhaps in areas we have not yet identified.

Current and projected enrollment in nursing programs already exceeds facility capacities available for these programs, and MCC may not be able to accommodate further increased interest in Health Science programs. The National League for Nursing Accrediting Commission (NLNAC) requires the offering of Microbiology for program accreditation. Pre-Engineering programs and Associate of Science Degrees requires more biology and math courses. Projected enrollment growth, program accreditation requirements, and expanding certificate course requirements will continue to create an increased need for additional and a wider variety of instructional space needs: formal instruction, specialty labs, skills labs, simulation labs, and informal learning areas.



The addition of the Microbiology Lab will create more availability of the biology and chemistry laboratory space. The expanded availability will provide severely needed core instructional space for the currently planned Respiratory Therapy, Radiology Technician, and Medical Lab Technician curriculums which will be implemented in 2007-08, and Pharmacy Assistant which will begin at a later date.

The availability of on-campus health simulation labs will reduce clinical placement needs by 15%. The hospital environment created by these simulation labs would serve all the new health technology programs.

Collaborative learning delivery methodologies will require additional instructional and student support spaces that do not currently exist on the Fort Morgan campus.

### **iii. Changes to class sizes**

Both existing science labs are limited to 16 student stations. This means students must often share space which limits individual achievement.

We currently do not have a space to house all 80 nursing students in one classroom. Therefore, material must be repeated and collaborative learning efforts such as shared workshops cannot occur. This reduces efficiency and efficacy.

All current program enrollments are near maximum capacity for the facilities available. We often exceed space limitations putting occupants at risk for life, health and safety issues.

As we explore implementing new health technology programs, class sizes will be limited by existing classroom spaces and configuration. These specialty areas will require dedicated space for their laboratories and skill areas.

## **C. Total Space Requirements**

### **i. Planned program space utilization and ii. Total asf and gsf needed**

Colorado Department of Higher Education guidelines have been utilized in determining necessary spatial requirement for this program. MCC establishes specific space requirements for unique programs based on reasonable functional layouts, optimum class size and budget constraints. None of the proposed program spaces are overly generous. Please refer to "Summary, Total Space Requirements" (CCHE Table C1-a), "Summary, New Space by Growth Phase" (CCHE Table C1-b), and "Programmed Space Summary" (CCHE Table C2-b) included in this facility program plan. All of these tables are supported by the enrollment information projected in "Enrollment Trends" (CCHE Table C2-a).

The Nursing Simulation Lab (1378 SF net) is unique instructional space that should not be shared with other course offerings. The simulation lab with its simulated patient room, video control room, disposable equipment room, and movable storage room are complimentary instructional spaces to the Nursing program. The simulated hospital setting creates a high fidelity learning environment that can only be delivered in a specialty space with patient beds, utility headwalls, video cameras and visibility from the control room. Standard utilization rates should not apply since class enrollment is limited to 12 students due to the faculty, simulated patient, and faculty interactivity.

The Nursing Skills Labs (960 SF net) are unique instructional spaces that should not be shared with other course offerings. The skills labs include patient beds, hospital equipment, and hospital related peripherals. This equipment is large enough that it cannot be moved and stored while other laboratory course offering are being held.

The proposed resident instructional and adjunct Nursing Faculty Offices will accommodate the staffing levels of the proposed programs. Due to HIPPA requirements as they relate student, patient, and faculty privacy these faculty offices allow the College to maintain compliance with Federal regulations.

Physical Therapy Assisting, Emergency Medical Services, MED Prep, and Fitness have shared instructional spaces. The spaces are flexibly design to accommodate enrollment bubbles and the addition of related health science program.

#### **D. Alternatives Analysis**

Existing Nursing, Health Technology and Science programs require unique technology, various teaching methods, and limited class size in determining the required delivery models. The college's additional sites are unable to provide or support the unique facilities, faculty, equipment, licensure approvals, or student enrollment to efficiently supplement the academic program space required.

MCC previously considered other existing facilities in Fort Morgan to relocate some of the Nursing, Health Technology and Science programs; however, additional space is not available. The only option is to expand and reconfigure the existing space. Off-site lease space might be available; however, the integrated and overlapping instructional requirements would not be a practical strategy.

The planning process considered and evaluated a "stand alone" Nursing and Health Science Building; however, the higher capital costs and program separation were not consistent with the institutional or educational goals of MCC.

### **III) IMPLEMENTATION AND DESIGN CRITERIA**

This project considers reconfiguration of existing spaces and addition of new spaces to address the physical needs of MCC. The attached space program has been developed to meet both the instructional requirements, class schedules/utilization and budget constraints developed for Morgan Community College.

The space program (Table C2-b) is separated into two categories. Category I includes Nursing, Health and Science programs; and Category II indicates the shared areas included as part of the Building Crossing Factor.

The space program lists the actual spaces included in the conceptual diagrammatic floor plan, and building efficiency factors are included in Category II Space Program Summary (Table C2-b). The efficiency factor is appropriate for a building of this limited size and scope and includes the space allocated to circulation, mechanical, electrical, technology and wall/partition thickness.

#### **A. Spatial Relationships**

Conceptual floor and site plans are included in the appendix. The concept plan is a simple organization of spaces which would be easily designed into a very efficient floor plan. Similarly, the concept plan meets the functional and operational goals of the College as determined during the FPP process. The combination of reconfigured and new space will address the needs of the College as it develops strong nursing, health and science programs. The conceptual floor and site plans are subject to further development in the schematic and design development phases that will occur upon funding of this project.

Information/Administrative Support, Faculty Resource Area, Tutoring Center, Resource Area, and laundry facilities are to be shared Nursing, Health Technology and Science programs which require a central, accessible location for these uses. Restrooms are required to be accessible for all building users and are indicated in the central core as well. The uses surrounding the central core are organized into nodes of educational program curriculum with direct access via circulation routes to the shared uses in the central area.

## **B. Site Improvements And Requirements**

The proposed site is on the campus of Morgan Community College in Fort Morgan, Colorado. The proposed addition is illustrated on the west side of the existing building. The location of the addition allows for the expansion of an existing structure and integration with existing/reconfigured building areas. The existing building system will be extended when possible. The capacity of existing mechanical, electrical and plumbing infrastructure will require additional investigation to determine suitability of extension. Should existing systems prove inadequate for the expanded improvements, a new linkage to municipal utilities will be required. The development plan will comply with applicable land-use requirements.

### **Pedestrian and Vehicular Access**

The proposed improvements will be an addition along the northwest elevation of existing Spruce Hall and a reconfigured portion of Spruce Hall.

The proposed plan provides 54 additional parking spaces and will require renovation of the existing circular drive-thru and pedestrian drop-off. Student access to the nursing and health science program will be facilitated by an entry directly from the new parking area on the north side of the proposed addition. MCC indicates a need to double parking capacity on campus to address current parking inadequacies, which are further compounded by the new and relocated spaces. The dispersed parking area will alleviate congestion at the primary parking area on the east side of the building.

### **Topography**

The proposed site slopes gradually to the north at an approximately 3 to 4% grade. Minor re-grading of the site will be required to facilitate drainage, establish the building pad, parking areas and accessible routes in compliance with the requirements of ADA.

### **Soils, Surface and Subsurface Drainage**

The geotechnical engineering report prepared in 2001 by Kumar and Associates, Inc. for the Automotive Programs Building is referenced for this project. Although subsurface investigation information is not available at this time for the area beneath the proposed addition, it is believed that the soils on the Morgan Community College campus are relatively uniform. Additional soil borings will be performed prior to final design and engineering for this building, and incorporated as an addendum to the existing report.

The geotechnical engineering report states there is 4 to 12 inches of topsoil, up to 4 feet of silty sand, overlying the natural poorly graded sand that extends to the maximum depth studied of approximately 50 feet. Ground water was noted at a depth of approximately 26 feet beneath the location for the new Automotive Programs Building, but was not problematic during construction of that project. Removal of the topsoil and any unsuitable soils along with the over excavation and re-compaction of existing soils to provide a bearing capacity of 3,000 psf will be required to support conventional spread footings and slab-on-grade construction, similar to what was provided for the Automotive Programs Building.

Drainage will be primarily overland to collection points that will conduct the storm water to the campus retention pond. There do not appear to be any subsurface drainage issues.

## **Vegetation**

Existing vegetation consists of grasses, weeds and scrub oak indigenous to the rangeland of this part of the State. Proposed vegetation will include lawn areas and a modest number of plantings that will compliment the existing campus landscaping and address any jurisdictional landscaping requirements.

## **C. Design Requirements**

### **i. New utilities required**

Water, sanitary sewer, natural gas and electrical services exist on campus southeast of existing Cottonwood Hall (between the two design schemes). It is anticipated that the services will be extended directly north or east to either respective development location. Existing sanitary sewer exits the site along the north property boundary.

### **ii. Building systems**

The new building is envisioned to be either conventional construction using concrete masonry unit bearing walls, brick veneer, along with steel post-and-beam techniques, or a pre-engineered steel structure with a brick veneer. It is the College's intent to construct the new building in quality and material compatible with existing campus structures. The following narrative applies to either prospective design alternative:

A single story conventional 11,880 square feet plus modest canopies at entrances are proposed. Roofing finish material will be a combination of 3:12 standing seam roof and eave system along with single-ply membrane roofing at interior low slope areas. The following materials and features are being considered:

- Full brick exterior to match color/texture of brick on other campus buildings.
- Roof insulation R=38, Wall insulation R=19.
- Minimum 12 lf windows in each instructional area.
- Minimum 6 lf windows in offices.
- Brick window sills.
- Aluminum entrances and side lights.
- Clerestory lighting along the corridor between the existing and new construction.
- Steel stud partitions with 5/8 inch drywall.
- Partitions to extend full height to underside of roof.
- Hallway partitions and partitions forming file/storage rooms to be 1 hour rated.
- Acoustical insulation in all partitions.
- Interior borrowed lights, doors and frames to be hollow metal, rated where required.
- All hardware to be lockset with keys. Schlage institutional series or equal.
- All doors to have closers equal to LCN.
- All interior borrowed light glazing to be fire rated.
- Room Finishes:
  - 9' A.F.F. lay-in 2' x 4' ceilings
  - VCT floor and vinyl base in all rooms except office suites, toilet rooms, mechanical/ electrical rooms and janitor closet.
  - Carpet and vinyl base at all office suites.
  - Ceramic Tile floor and base in toilet rooms.
  - Sealed concrete and vinyl base in mechanical/electrical and janitor closet.
  - Latex painted walls in all rooms except toilets which shall be epoxy.

- All casework to have plastic laminate faces, interiors and counter tops; except in science laboratories which shall be solid phenolic.
- All casework doors and drawers will have locks.
- Allow \$ 21.25 / sf for mechanical system.
- Allow \$18.75 / sf for electrical system including technology raceway and cabling.

### **iii. Architectural design features**

The proposed improvements are designed to respond to the program needs of Morgan Community College and the medical employment demands of the State of Colorado. These programs complement each other by helping MCC achieve its mission “to partner with students in imagining, believing, and achieving their goals” while continuing to be community and employer connected. This project strengthens connectivity between local/regional medical professionals and MCC. This exposure can lead to career placement opportunities for MCC students, and fosters positive relationships between MCC and surrounding communities.

Considering the future vitality and growth of the region, the proposed project is an important component to the communities and students it will serve over 11,500 square miles and 70,000 residents of Eastern Colorado. The project will nurture new and support existing partnerships with regional healthcare providers, 25 public high schools, and Colorado 4-year institutions.

In 2002 Spruce Hall’s building interior was modified to accommodate the nursing and health science program. At that time the exterior envelope – exterior walls, windows and roofing were improved. Therefore, a detailed assessment of the existing building was not conducted. Basic review of observable building systems indicates that no exterior renovations of the existing building will be required for the reconfiguration of interior space uses.

The Facility Program Plan is designed to minimize cost by reconfiguring undersized program areas that are currently shared by expanding Fitness, Medical Assisting, Nurse Aide, Emergency Medical Services and Massage programs. The equipment, scheduling constraints and instructional requirements of these programs will be best served by larger allocation of space. These programs will expand into nursing program areas that are in immediate need of modernization. In lieu of modernizing undersized nursing program areas, the FPP proposes new space for an expanding nursing and health science curricula.

This project will be designed to comply with the requirements of the Americans with Disabilities Act, International Building Code and the State Fire Marshal for a classroom building serving higher education occupancies. Anticipated construction type is Type IIA including 11,880 sq. ft. in a single story.

Parking improvements will address the current liability issues inherent to student parking in its current undeveloped condition. ADA accessible spaces will be provided including compliant pathways to the existing and new buildings. Stormwater drainage will be directed for appropriate collection.

## **D. Project Schedule, Cost Estimates And Financing**

For the past six years since 2001, Colorado has experienced a revitalized economy and a vibrant, booming construction industry. Projects in public and private sectors that had been contemplated but held back for lack of funding or developer hesitation have returned to the forefront and are proceeding aggressively. Consequently, regional construction resources are very active, and builders are able to be more selective of project types, locations and scope than they would be in a slower market. Builders are able to remain busy with local work in Denver, so costs for projects in outlying areas will be higher due to transportation costs and commuting expenses. Reduced contractor competition is evident in higher prices for construction projects, which are likely to remain on the rise until developers at large choose to reduce investment in new or expanded facilities and competition by builders increases.

Depending upon consulted sources, inflationary pressures in Denver and the surrounding areas continue to add at least 6.5%, and (according to some builders) 9% to 12% per annum to the mid-point of projected construction. While a slowed rate of increase is being forecast by some sources and is being seen currently in residential construction activity, high volumes of work will continue to keep upward pressure on costs of construction.

For the purposes of this Program Plan, a more typical estimated rate of inflation of 6.5% per annum to the mid-point of construction has been assumed.

The current and projected need for programs at MCC also remains high. If this project is not funded or delayed, the result will be limited expansion of the ancillary health programs requested by our healthcare industry partners and the communities we serve. It will also limit the capacity of the college to grow, prosper and fill needed jobs projected in rural Colorado. Waiting for inflationary pressures to subside is unreasonable, and will unacceptably delay MCC's ability to adequately serve its current and future students.

### **i. Project Schedule and Phasing**

SBCCOE Board of Approval	July 2007
CCHE Approval	October 2007
Legislative Funding	July 2008
Architect Selection	8 Weeks
Preliminary Design	6 Weeks
MCC Plan Review	2 Weeks
Final Design	10 Weeks
MCC & Code Plan Review	4 Weeks
Bid / Award	8 Weeks
Construction Funding	July 2009
Construction	13 Months
Occupancy	August 2010

### **ii. Cost Estimate**

An estimate of probable costs has been developed to evaluate each site option in terms of potential financial impact. These estimates are included in the Appendix along with form CC-C.



## ii. Financing Explanation

This project would be funded with a capital construction appropriation from the State of Colorado. Year 1 funding is for Architect/Engineer Planning and Year 2 funding is for Construction. An inflationary factor was included to the anticipated midpoint of construction at 6.5% per Annum for 1.5 years.

## IV. APPENDIX

- A. Current Space Utilization
- B. Conceptual Block Diagram
- C. Conceptual Floor Plan
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- E. Project Budget - Estimate of Probable Cost
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Planning Notes

Classroom Space

ASF per Student Station = 31.5  
Room Utilization Rate = 60 hr/week  
Station Occupancy Rate = 70%  
WSCH = 510 x FTE / 12 weeks

Laboratory Space

ASF per Student Station (Health Sciences) = 85\*  
ASF per Student Station (General) = 60\*  
Room Utilization Rate = 40 hr/week  
Station Occupancy Rate = 80%  
WSCH = (# student x Lab hours) / 12 weeks

## A. CURRENT SPACE UTILIZATION

\* ASF per CEFPPI Space Planning For Institutions of Higher Learning

Course Number	Course Title	head count	Lecture Hours	FTE	WSCH	Space Factor	Classroom Space	Lab Hours	Station Module Size	WSCH	Space Factor	Laboratory Space
		<b>fall enr</b>										
<b>Astronomy</b>												
AST 101	Astronomy I	21	45					30		1.24		
AST 102	Astronomy II		45					30				
		<b>Total</b>	<b>90</b>	<b>0.4</b>	<b>17</b>	<b>0.75</b>	<b>12.75</b>	<b>60</b>	<b>60</b>	<b>1.24</b>	<b>1.875</b>	<b>138.97</b>
<b>Biology</b>												
BIO 090	Basic Biology Concepts											
BIO 105	Science of Biology	4	45					30		0.24		
BIO 106	Basic Anatomy & Physiology	17	60							0.00		
BIO 111	General College Biology I / Lab	18	60					30		1.06		
BIO 112	General College Biology II / Lab		60					30				
BIO 201	Human Anatomy & Physiology I	22	45					30		1.29		
BIO 202	Human Anatomy & Physiology II	13	45					30		0.76		
BIO 204	Microbiology	25	45					30		1.47		
BIO 211	Cell Biology		45					30				
BIO 216	Pathophysiology	22	60							0.00		
		<b>Total</b>	<b>465</b>	<b>21.97</b>	<b>933.73</b>	<b>0.75</b>	<b>700.29</b>	<b>210</b>	<b>60</b>	<b>4.82</b>	<b>1.875</b>	<b>542.65</b>
<b>Chemistry</b>												
CHE 101	Introduction to Chemistry I		60					30				
CHE 102	Introduction to Chemistry II		60					30				
CHE 111	General College Chemistry I	8	60					30		0.47		
CHE 112	General College Chemistry II		60					30				
CHE 205	Introduction to Organic Chemistry		45					30				
CHE 211	Organic Chemistry I		60					30				
CHE 212	Organic Chemistry II		60					30				
		<b>Total</b>	<b>405</b>	<b>2.83</b>	<b>120.28</b>	<b>0.75</b>	<b>90.21</b>	<b>210</b>	<b>60</b>	<b>0.47</b>	<b>1.875</b>	<b>52.94</b>
<b>Emergency Medical Services</b>												
EMS 112	Emergency Medical Dispatch		30					11				
EMS 115	First Responder	6	45									
EMS 125	EMT - Basic	9	115					60		1.06		
EMS 126	EMT - Basic Refresher	5	30					23		0.23		
EMS 130	EMT Intravenous Therapy	7	20					15		0.21		
EMS 170	EMT Basic Clinical	9										
EMS 178	EMS Seminar	6										
EMS 185	EMS: Independent Study											
EMS 203	EMT Intermediate I	7	75					30		0.41		
EMS 205	EMT Intermediate II		75					30				
EMS 206	EMT Intermediate Refresher	4	30					23		0.18		
EMS 214	Basic Trauma Life Support		15					5				
EMS 270	EMT Intermediate Clinical							45				
EMS 275	Special Topics											
		<b>Total</b>	<b>435</b>	<b>5.67</b>	<b>240.98</b>	<b>0.75</b>	<b>180.73</b>	<b>242</b>	<b>85</b>	<b>2.08</b>	<b>2.6563</b>	<b>470.16</b>
<b>Health and Wellness</b>												
HWE 100	Human Nutrition	6	45									
HWE 101	CPR	37	15									
HWE 102	CPR Recertification	12	7.5									
HWE 103	Community First Aid & CPR	13	15									
HWE 122	Responding to Emergencies	4	30									
HWE 124	Fitness and Willness	22	30									
		<b>Total</b>	<b>142.5</b>	<b>3.97</b>	<b>168.73</b>	<b>0.75</b>	<b>126.54</b>	<b>0</b>	<b>85</b>	<b>0</b>	<b>2.6563</b>	<b>0.00</b>

Morgan Community College                      CALCULATED SPACE UTILIZATION REQUIREMENTS  
 NURSING, HEALTH TECHNOLOGY, and SCIENCE

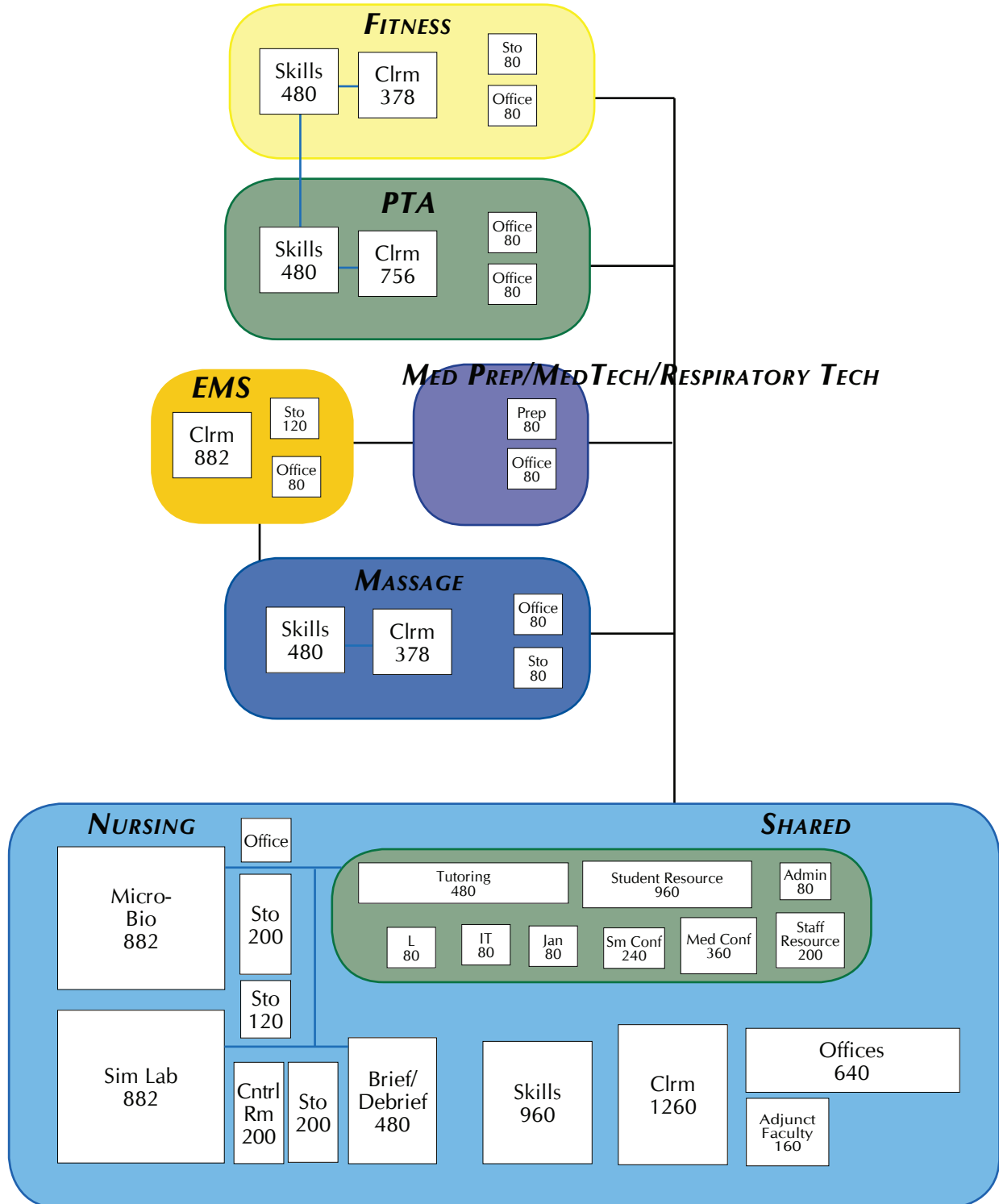
Course Number	Course Title	head count	Lecture Hours	FTE	WSCH	Space Factor	Classroom Space	Lab Hours	Station Module Size	WSCH	Space Factor	Laboratory Space
		fall enr										
<b>Health Professional</b>												
HPR 100	Introduction to Health	25	45									
HPR 102	CPR for Professionals	20	15									
HPR 106	Law & Ethics for Health Professions		30									
HPR 108	Dietary Nutrition	19	18					5		0.19		
HPR 120	Advanced Cardiac Life Support		10					5				
HPR 130	Pediatric Advanced Life Support		10					5				
HPR 178	Seminar: Medical Terminology	24	30									
HPR 190	Basic EKG Interpretation		22					11				
HPR 217	Kinesiology		45					30				
HPR 226	I.V. Therapy											
	<b>Total</b>		<b>225</b>	<b>9.98</b>	<b>424.15</b>	<b>0.75</b>	<b>318.11</b>	<b>56</b>	<b>85</b>	<b>0.19</b>	<b>2.6563</b>	<b>42.06</b>
<b>Massage Therapy</b>												
MST 105	Lifestyle Wellness	8	8					45		0.71		
MST 111	Basic Massage Therapy	8	30					45		0.71		
MST 113	Professional Massage		23					45				
MST 184	Clinical Massage		25					50				
MST 204	MST Business Practices	8	30									
MST 275	Special Topics: Massage Therapy											
MST 285	Massage Therapy: Independent Study											
	<b>Total</b>		<b>116</b>	<b>1.57</b>	<b>66.73</b>	<b>0.75</b>	<b>50.04</b>	<b>185</b>	<b>85</b>	<b>1.41</b>	<b>2.6563</b>	<b>318.75</b>
<b>Medical Office Technology</b>												
MOT 120	Medical Office Financial Management		45									
MOT 130	Insurance Billing and Coding		45									
MOT 132	Medical Transcription I	3	15					45		0.26		
MOT 140	Medical Assisting Clinical Skills	3	60									
MOT 175-177	Special Topics: MOT											
MOT 182	Clinical Internship							45				
MOT 188	Practicum											
MOT 280	Internship							45				
	<b>Total</b>		<b>165</b>	<b>2.72</b>	<b>115.6</b>	<b>0.75</b>	<b>86.7</b>	<b>135</b>	<b>60</b>	<b>0.26</b>	<b>1.875</b>	<b>29.78</b>
<b>Nursing</b>												
NUR 109: Fund	Fundamentals of Nursing	40	52.5					15		1.18		
NUR 112: Pharm	Basics of Pharmacology	40	30					0				
MAT 103	Math for Clinical Calculations	40	30									
NUR 106	Medical & Surgical Nursing Concepts		45					30				
NUR 206: M/S	Advanced Concepts of Med -sug Nus	32	45					15		0.94		
NUR 212	Pharmacology II	32	15					20		1.25		
NUR 171	Clinical II							30				
NUR 150	Nursing Care of OB/PEDS		30					90				
NUR 206	Advanced Concepts of Medical-Surgical Nursing I		45					45				
NUR 210	Nursing Care of Complex OB & Ped Clients	32	45					45		2.82		
NUR 211	Nursing Care of Psychiatric Clients	32	45					45		2.82		
NUR 216	Advanced Concepts of Medical-Surgical Nursing II		30					45				
NUR 230	Leadership for Professional Nursing Practice	32	15					8		0.50		
NUR 199	Transition											
NUR 289	Capstone: Comprehensive Nursing Internship		15									
	<b>Total</b>		<b>390</b>	<b>29.19</b>	<b>1240.58</b>	<b>0.75</b>	<b>930.43</b>	<b>373</b>	<b>85</b>	<b>9.52</b>	<b>2.6563</b>	<b>2149.79</b>
<b>Nursing Assistant</b>												
NUA 101	Certified Nurse Aide Health Care Skills	10	45					22.5		0.44		
NUA 170	Nurse Assistant Clinical Experience	6						30		0.35		
NUA 171	Advanced Nurse Aide Clinical							23				
	<b>Total</b>		<b>45</b>	<b>4.22</b>	<b>179.35</b>	<b>0.75</b>	<b>134.51</b>	<b>75.5</b>	<b>85</b>	<b>0.79</b>	<b>2.6563</b>	<b>179.30</b>
<b>Physical Therapy Assistant</b>												
PTA 110	Basic Patient Care in Physical Therapy	10	30					90		1.76		
PTA 115	Principles & Practice of Physical Therapy	10	30									
PTA 120	Modalities in Physical Therapy	9	30					90		1.59		
PTA 135	Principles of Electrical Stimulation	10	15					30		0.59		
PTA 175	Special Topics: PTA											
PTA 230	Orthopedic Assessment & Management Tech	12	30					68		1.60		
PTA 240	Neurologic Assessment & Management Tech	12	30					68		1.60		
PTA 278	PTA Seminar		30									
PTA 280	PTA Internship I											
PTA 281	PTA Internship II											
PTA 282	PTA Internship III											
	<b>Total</b>		<b>195</b>	<b>7.14</b>	<b>303.45</b>	<b>0.75</b>	<b>227.59</b>	<b>346</b>	<b>85</b>	<b>7.14</b>	<b>2.6563</b>	<b>1612.34</b>

Course Number	Course Title	head count	Lecture Hours	FTE	WSCH	Space Factor	Classroom Space	Lab Hours	Station Module Size	WSCH	Space Factor	Laboratory Space
		fall enr										
<b>Physics</b>												
PHY 105	Conceptual Physics		45					22.5				
PHY 111	Physics: Algebra-Based I / Lab		60					30				
PHY 112	Physics: Algebra-Based II / Lab		60					30				
PHY 211	Physics: Calculus-Based I / Lab		60					30				
PHY 212	Physics: Calculus-Based II / Lab		60					30				
	<b>Total</b>		<b>285</b>					<b>142.5</b>	<b>60</b>	<b>0</b>	<b>1.875</b>	<b>0.00</b>
<b>Science</b>												
SCI 155	Integrated Science I	4	60									
SCI 156	Integrated Science II		60									
	<b>Total</b>		<b>120</b>	<b>0.67</b>	<b>28.48</b>	<b>0.75</b>	<b>21.36</b>	<b>0</b>	<b>60</b>	<b>0</b>	<b>1.875</b>	<b>0.00</b>
	<b>Grand Totals</b>	<b>778</b>	<b>3078.5</b>				<b>2879.27</b>	<b>2035</b>				<b>5536.73</b>





## B. CONCEPTUAL BLOCK DIAGRAM





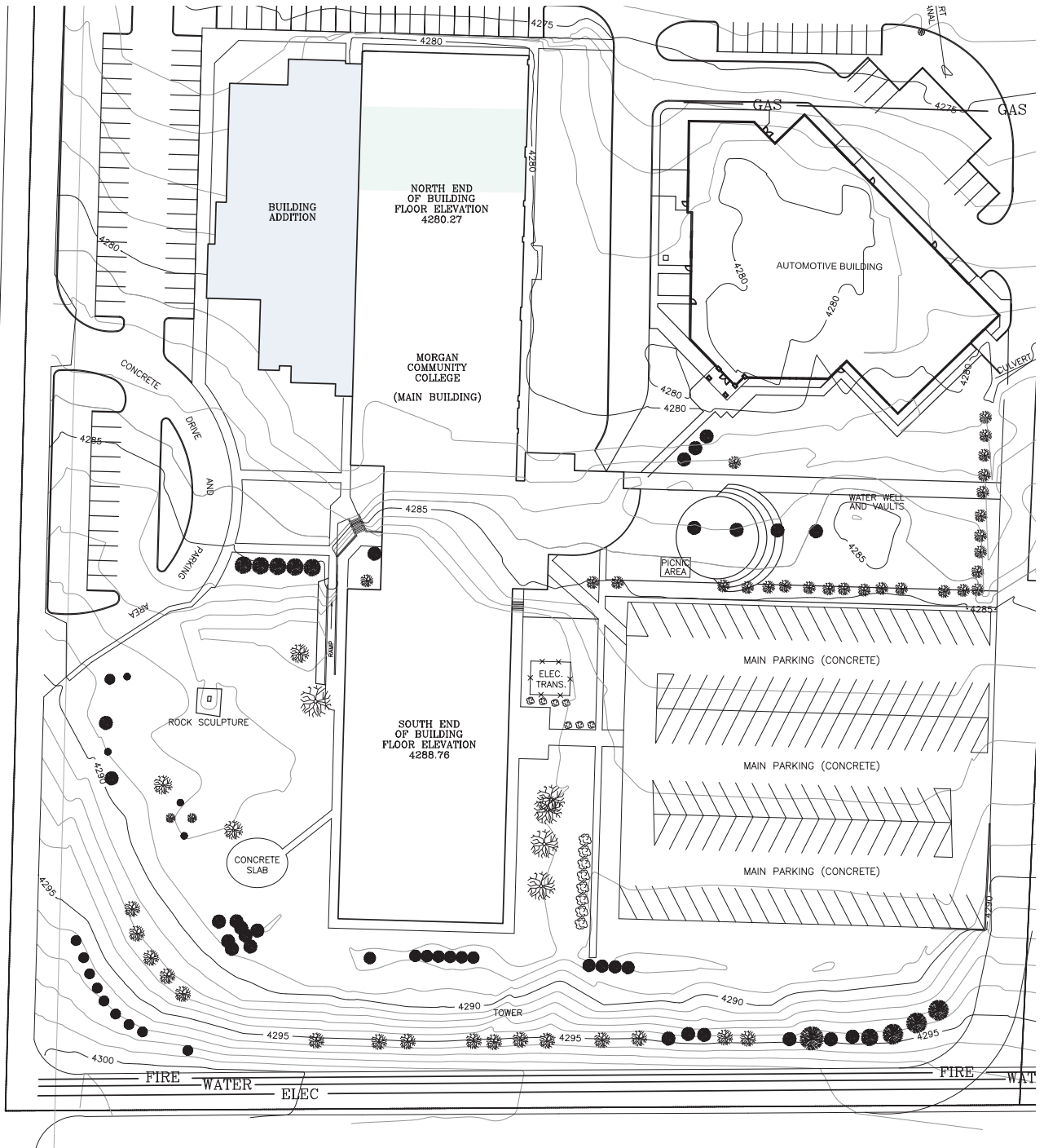
# C. CONCEPTUAL FLOOR PLAN





# D. SITE PLAN

BARLOW ROAD / MORGAN COUNTY ROAD 20







## E. PROJECT BUDGET- ESTIMATE OF PROBABLE COST



**PROJECT BUDGET - ESTIMATE OF PROBABLE COST**  
**Morgan Community College**  
**Nursing, Health Technology and Science Addition & Renovation**

DESCRIPTION	QUANTITY (GSF)	UNITS (GSF)	COST/UNIT	TOTAL COST
<b>A. Land Acquisition / Site Development Costs</b>				
1 Land Acquisition (None, Existing Property)				\$0
<b>B. Professional Services</b>				
1 Master Plan / Program Planning Services				\$0
2 Architectural & Engineering Fees (10% C1-C10)				\$382,110
3 Other A/E Fees (Interior Design, Technology, etc.)				\$57,317
4 Site Surveys, Geotech Investigations & Construction Testing				\$76,422
5 Other Professional Services (Plan Reviews, Inspections)				\$95,528
<b>TOTAL PROFESSIONAL SERVICES</b>				<b>\$611,376</b>
<b>C. Construction</b>				
1 New Construction (Addition)	11875	SF	\$160	\$1,898,064
2 Remodel, Reconfiguration	5148	SF	\$107	\$553,014
3 Site Development	20195	SF	\$10	\$201,950
4 Site Demolition	1	LS	\$10,000	\$10,000
5 Landscaping (minimal)	1	LS	\$20,000	\$20,000
6 Utilities / Telecommunications / Infrastructure	1	LS	\$100,000	\$100,000
7 Walkways	3000	SF	\$3.50	\$10,500
8 Parking (54 spaces) & Drives (200lf x 26')	24100	SF	\$3.50	\$84,350
9 Contractor Overhead, Fees, Bonds, Insurance				\$503,629
10 Anticipated Inflation (6.5%/year x 2 years)				\$439,596
<b>SUBTOTAL BASIC CONSTRUCTION</b>				<b>\$3,821,103</b>
Percent for Art in Public Places (1% BASIC CONSTRUCTION)				\$38,211
Contingency (10% C1-C10)				\$382,110
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$4,241,424</b>
<b>D. Moveable Equipment</b>				
1 New Equipment / Furnishings				\$0
2 Relocation Costs				\$0
3 Communications				\$0
<b>TOTAL EQUIPMENT COSTS</b>				<b>\$0</b>
<b>Total Project Costs</b>				<b>\$4,852,800</b>

# F. SUMMARY, TOTAL SPACE REQUIREMENTS

Morgan Community College  
NURSING, HEALTH TECHNOLOGY SCIENCE

## SUMMARY, TOTAL SPACE REQUIREMENTS

CCHE Table C1-a

BUILDING SPACE PROJECTION CATEGORY	Existing Areas (ASF)	Existing Enrollment ASF**	Existing Surplus / Deficit ( )	Program Plan Area (ASF)	Projected Enrollment ASF*	Surplus / Deficit ( )
NURSING, HEALTH TECHNOLOGY & SCIENCE						
A. NHT&S CLASSROOMS	1869	2879	(1010)	3339	3541	(202)
B. NHT&S LABORATORIES	5405	5537	(132)	6698	6811	(113)
C. NHT&S FACULTY OFFICES	1167	NA	-	1729	NA	-
D. NHT&S STORAGE/UTILITY/CIRCULATION	2449	NA	-	5449	NA	-
SUB-TOTAL						

\*\* Existing Enrollment ASF based "TOTAL SPACE REQUIREMENTS - CALCULATIONS"

\* Projected Enrollment ASF interpolated based upon Enrollment Trends C2-a

## G. SUMMARY, NEW SPACE BY GROWTH PHASE

Morgan Community College      SUMMARY, NEW SPACE BY GROWTH PHASE  
NURSING, HEALTH TECHNOLOGY SCIENCE

CCHE Table C1-b

SPACE DESCRIPTION	ENROLLMENT				
	No. of Spaces	No. of Stations	ASF / Person	ASF / Space	TOTAL ASF
<b>NURSING, HEALTH TECHNOLOGY &amp; SCIENCE</b>					
Health Science Classrooms	3	76	31.5		2394
Nursing	1	40	31.5	1260	
PTA	1	24	31.5	756	
Massage Therapy	1	12	31.5	378	
Health Science Laboratories	5	104	40		3680
PTA Skills	1	12	40	480	
Fitness	1	20	40	800	
Massage Therapy	1	12	40	480	
Med Prep	0	12	40	0	
Nursing Skills	1	24	40	960	
Micro-Biology	1	24	40	960	
Health Science Offices	12	8	80		1040
Nursing FT Faculty	8	1	80	640	
Nursing PT Faculty	1	4	40	160	
Micro-Bio Faculty	1	1	80	80	
PTA Faculty	1	1	80	80	
Massage Therapy Faculty	1	1	80	80	
Health Science Specialty	3	36			1236
Simulation Lab	1	12	40	480	
Micro-Simulation Lab	1	12	31.5	378	
Briefing/De-briefing Room	1	12	31.5	378	
Health Science Storage / Utility	5				800
SIM LAB equip	1			320	
SIM LAB Control Rm	2			200	
Micro-Bio Prep	1			200	
PTA equip	1			80	
Shared Spaces	6				1720
Admin Support/Info	1	1	80	80	
Faculty Resource Center	1			200	
Group Instruction	2	12	20	480	
Student Resource Area	1	12	40	480	
Tutoring Center	1	12	40	480	
	<b>TOTAL</b>				10870

# H. ENROLLMENT TRENDS

Morgan Community College  
NURSING, HEALTH TECHNOLOGY SCIENCE

## ENROLLMENT TRENDS

CCHE Table C2-a

ENROLLMENT CATEGORY	Actual FY 2006	Projected FY 2007	Projected FY 2008	Projected FY 2009	Projected FY 2010	Projected FY 2011	% Change
<b>CAMPUS WIDE ENROLLMENT</b>							
Equivalent Students Master Plan Projection Legislative Authorized FTE*							
Enrollment (FTE)	1020	1025	1035	1045	1055	1065	4%
Enrollment (Headcount)	2701	2715	2740	2765	2790	2815	
Resident (FTE)	984	1010	1020	1030	1040	1045	
Non-resident (FTE)	36	15	15	15	15	20	
<b>NURSING, HEALTH TECHNOLOGY &amp; SCIENCE</b>							
Astronomy	9.87	9.90	9.90	9.90	9.95	9.97	1%
Biology	46.19	46.50	46.50	47.00	47.50	48.04	4%
Chemistry	7.18	7.20	7.20	7.30	7.40	7.47	4%
Emergency Medical Services	7.73	7.80	7.80	7.90	8.00	8.04	4%
Geology	3.30	3.30	3.30	3.35	3.40	3.43	4%
Health and Wellness	11.57	11.80	11.90	12.00	12.00	12.03	4%
Health Professional	16.05	16.20	16.40	16.50	16.60	16.69	4%
Massage Therapy	5.74	5.60	5.70	5.80	5.90	5.97	4%
Medical Lab Technology			4.00	5.00	7.00	8.00	100%
Medical Office Technology	3.11	3.12	3.13	3.15	3.20	3.24	4%
Nursing	62.34	62.10	63.00	64.00	64.50	64.83	4%
Nursing Assistant	6.17	6.20	6.30	6.30	6.40	6.42	4%
Pharmacy Aide				3.00	5.00	6.00	100%
Psychiatric Tech				3.00	5.00	6.00	100%
Physical Therapy Assistant	12.92	13.00	13.10	13.20	13.30	13.44	4%
Physics	0.30	0.30	0.30	0.30	0.31	0.31	4%
Radiology Technology			6.00	8.00	8.00	8.00	100%
Respiratory Care			6.00	6.00	7.00	8.00	100%
Science	0.13	0.13	0.13	0.13	0.14	0.14	4%
<b>SUB-TOTAL</b>	<b>192.60</b>				<b>SUB-TOTAL</b>	<b>236.01</b>	<b>23%</b>

# I. PROGRAMMED SPACE SUMMARY

Morgan Community College  
NURSING, HEALTH TECHNOLOGY SCIENCE

PROGRAMMED SPACE SUMMARY  
By Organizational Unit

CCHE Table C2-b

Space Description	EXISTING TO REMAIN					PROPOSED					
	# Spaces	# Stations	ASF/ Person	ASF/Space	Total ASF	# Spaces	# Stations	ASF/ Person	ASF/Space	Total ASF	
<b>NEW CONSTRUCTION</b>											
<b>Nursing</b>											
Classroom (formal instruction)	1				945	1	40	31.5		1260	
Skills Lab						1	24	40		960	
<b>SIM LAB</b>											
Simulation Lab						1	12	40		480	
Control Room						1				200	
Briefing/Debriefing Room						1	12	31.5		378	
Disposal equipment storage						1				120	
Equipment storage						1				200	
Micro-SIM Lab						1	12	40		480	
Faculty Offices	3				293	8	1	80		640	
Adjunct Faculty Offices						1	4	40		160	
<b>Micro-Biology</b>											
Lab Space						1	24	40		960	
Prep Room						1	1	200		200	
Faculty Offices						1	1	80		80	
<b>Health/Science Shared Spaces</b>											
Information/Administrative Support						1	1	80		80	
Faculty Resource Area						1	1	200		200	
Medium Group Instruction						2	12	20		480	
Student Resource Area						1	12	40		480	
Tutoring Center						1	12	40		480	
Laundry						1	1	80		80	
Data Distribution						1	1	80		80	
Janitorial Storage						1	1	80		80	
<b>NEW CONSTRUCTION</b>											
					Total Assigned Area	SUB-TOTAL ASF					8078 sf
					Allowed Building Efficiency Factor (68% per CCHE)						0.47
					Allowed Building Grossing Factor						3801
						SUB-TOTAL GSF					11879 sf
<b>RENOVATED SPACE</b>											
<b>Physical Therapy Assistant</b>											
Classroom (formal instruction)						1	24	31.5		756	
Skills Lab						1	12	40		480	
Equipment storage						1	1	80		80	
Faculty Offices						2	1	80		160	
<b>Fitness</b>											
Skills Lab						1	20	40		800	
<b>Massage Therapy</b>											
Classroom (formal instruction)						1	12	31.5		378	
Skills Lab						1	12	40		480	
Faculty Offices						1	1	80		80	
<b>Emergency Medical Services</b>											
Formal Instruction (classroom)						NA	NA	NA		NA	
Skills Lab						NA	NA	NA		NA	
Equipment storage						1	1	288		288	
Faculty Offices					105					existing	
<b>Medical Prep</b>											
Classroom (formal instruction)					948					existing	
Storage					222					existing	
Faculty Office					105					existing	
<b>Health &amp; Science Technology</b>											
Biology	1				1048					existing	
Physics	1				1022					existing	
Faculty Offices	2				186					existing	
Science Prep	1				411					existing	
TOTAL to remain					5285						
<b>RENOVATED SPACE</b>											
					Total Assigned Area	SUB-TOTAL ASF					3502 sf
					Allowed Building Efficiency Factor (68% per CCHE)						0.47
					Allowed Building Grossing Factor						1648
					Actual Building Efficiency	SUB-TOTAL GSF					5150 sf
					Actual Building Grossing Factor						





## J. FACILITY AUDIT PROGRAM

### MORGAN COMMUNITY COLLEGE FACILITY AUDIT PROGRAM

<b>BUILDING NAME</b>	SPRUCE HALL
<b>BUILDING TYPE</b>	STEEL STRUCTURE / BRICK VENEER
<b>BUILDING USE</b>	CLASSROOM, OFFICE, HEALTH, OTA, PTA
<b>LOCATION</b>	17800 CR 20
<b>GROSS SQUARE FOOTAGE</b>	26,624
<b>NET ASSIGNABLE SQUARE FOOTAGE</b>	17,205
<b>REPLACEMENT COST</b>	\$3,488,809
<b>YEAR CONSTRUCTED</b>	1985
<b>MOST RECENT RENOVATIONS</b>	2003
<b>NUMBER OF LEVELS</b>	2
<b>FACILITY CONDITION INDEX</b>	<span style="border: 1px solid black; padding: 2px;">99</span>

#### **General Conditions**

The Spruce Hall building has been 95% remodeled (Capitol Construction project P-30 2001-2003). The building has had major repairs and preventative maintenance on a scheduled program. The North exterior wall has been brick veneered through the Control Maintenance project (M90054) with the East wall has been completed.

#### **Mechanical**

The HVAC in this building has been completed with this project. A Controlled Maintenance project (M-62) has been funded which replace existing units to improve operating efficiency. One unit was not replaced due to any construction scope for the OTA-PTA area.

#### **Electrical**

Based on an electrical audit conducted in May 2000, modifications to the electrical distribution system took place with the new Automotive/Vocational Technology Building construction project (P-30 and M-62).

#### **Fire Alarm and Sprinkler System**

Though the fire alarm system has been connected to the new panel, (project M-80072) the Spruce building has been retrofitted with new project. The renovation of this building has addressed most of the fire detection; however the area should be retrofitted with a Fire Suppression System to fully maximize the protection of this building.

**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

<b>BUILDING NAME</b>	SPRUCE HALL
<b>BUILDING TYPE</b>	STEEL STRUCTURE / BRICK VENEER
<b>BUILDING USE</b>	CLASSROOMS, OFFICES, MULTI PURPOSE ROOM, HEALTH SCIENCES
<b>LOCATION</b>	17800 CR 20
<b>GROSS SQUARE FOOTAGE</b>	26,624
<b>NET ASSIGNABLE SQUARE FOOTAGE</b>	17,205
<b>REPLACEMENT COST</b>	\$3,488,809
<b>YEAR CONSTRUCTED</b>	1985
<b>MOST RECENT RENOVATIONS</b>	2003
<b>NUMBER OF LEVELS</b>	2

**COMPONENT MULTIPLIER PER BUILDING TYPE 2002 EDITION MEANS SQ FT COSTS**

FOUNDATION/SUBSTRUCTURE (Excavation, strip and spread footings, foundation walls, slab on grade)	0.117
SUPERSTRUCTURE (Columns & beams, structure walls, roof deck)	0.069
EXTERIOR CLOSURE (Exterior walls and wall finishes, exterior doors, windows, face brick)	0.075
ROOFING (Roof coverings, insulation, and skylight)	0.043
INTERIOR CONSTRUCTION (Partitions, interior doors, walls and finishes, floor finishes, ceilings and Interior surface of exterior walls)	0.226
MECHANICAL (Plumbing [including fixtures], heating and cooling systems)	0.357
ELECTRICAL (Service distribution, lighting and power, alarm systems, emergency lighting)	0.095
SPECIAL CONSTRUCTION (Cabinets, casework, acid top tables, fume hoods, lockers)	0.018
AE/OP	0.15



**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

INSPECTOR: TIM CUNNINGHAM  
SURVEY DATE: 7/03

**BUILDING: SPRUCE HALL**

**FOUNDATION/SUBSTRUCTURES**

EVALUATION	DAMAGE		ENVIR	AESTHETICS		RENEWAL
	SAFTEY	CODES		ENERGY		
	1	2	3	4	5	6
CRACKED WALLS						
SETTLEMENT	.01					\$ 4,081.91
DETERIORATION						
DESIGN LOAD						
SURFACE CONDITION						
MAINTAINABILITY						
DRAINAGE						

**RATING SUB TOTALS**

.01						\$ 4,081.91
-----	--	--	--	--	--	-------------

TOTAL RATING	0.01
COMPONENT MULTIPLIER	0.117
COMPONENT DEFICIENCY	.00117
BUILDING REPLACEMENT COST	\$ 3,488,809
RENEWAL COST FOR COMPONENTS	\$ 4,081.91

**SYSTEM TYPE:**

EXTERIOR COLUMNS: STEEL STRUCTURE

FOUNDATION MATERIALS: REINFORCED CONCRETE

INTERIOR FOOTINGS: REINFORCED CONCRETE AT INTERIOR COLUMNS

FOUNDATION WALLS: REINFORCED CONCRETE ON STRIP FOOTINGS (VARIED HEIGHT OF 4 TO 6 FOOT)

SLAB ON GRADE: WIRE REINFORCED CONCRETE (4 INCHES DEPTH)

**OTHER INFORMATION AND RATING EXPLANATIONS:**



**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

INSPECTOR: TIM CUNNINGHAM  
SURVEY DATE: 7/03

BUILDING: **SPRUCE HALL**

**SUPER STRUCTURE**

EVALUATION	DAMAGE		ENVIR	AESTHETICS		RENEWAL
	SAFTEY	CODES		ENERGY		
	1	2	3	4	5	6
STRUCTURAL CONDITION						
COLUMNS AND BEAMS						
ROOF STRUCTURE						
VIBRATION						
SUB-FLOOR						
DESIGN LOAD						
MAINTAINABILITY						
STAIRS AND STAIRWELLS						
RATING SUB TOTALS						

TOTAL RATING	0.00
COMPONENT MULTIPLIER	0.069
COMPONENT DEFICIENCY	.00
BUILDING REPLACEMENT COST	<u>\$ 3,488,809</u>
RENEWAL COST FOR COMPONENTS	<u>\$ 00000</u>

**SYSTEM TYPE:**

CLASSIFICATION: STEEL I BEAM COLUMNS WITH O SUPPORT COLUMNS, STEEL PERLINS

STRUCTURE TYPE: METAL SIDING GIRTS WITH SAG RODS AND CONNECTOR ANGLES

SUB-FLOOR REINFORCED CONCRETE: SLAB ON GRADE

**OTHER INFORMATION AND RATING EXPLANATIONS:**

**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

INSPECTOR: TIM CUNNINGHAM  
SURVEY DATE: 7/03

**BUILDING:            **SPRUCE HALL****

**EXTERIOR CLOSURE**

EVALUATION	DAMAGE		ENVIR	AESTHETICS		RENEWAL
	SAFTEY	CODES		ENERGY		
	1	2	3	4	5	6
EXTERIOR WALLS						
EXTERIOR WALL FINISHES						
EXTERIOR DOORS					.01	\$ 2,616.61
WINDOWS						
FACE BRICK						
MAINTAINABILITY						.01 \$ 2,616.61

**RATING SUB TOTALS**

				.01	.01	\$ 5,233.22
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TOTAL RATING	0.02
COMPONENT MULTIPLIER	0.075
COMPONENT DEFICIENCY	.0015
BUILDING REPLACEMENT COST	<u>\$3,488,809</u>
RENEWAL COST FOR COMPONENTS	<u>\$ 5,233.21</u>

**SYSTEM TYPE:**

- EXTERIOR WALL TYPE:           METAL STUD/GYPBOARD BACKING WITH BRICK VENEER ON 3" ANGLE WEIGHT BEARING IRON
- EXTERIOR WALL FINISH:       GYPSUM DRYWALL WITH INSULATION (3.5 IN)
- EXTERIOR DOOR TYPE:         ALUMINUM FRAMED SAFETY GLASS
- WINDOWS TYPE:                ALUMINUM FRAMED TINTED SAFETY GLASS

**OTHER INFORMATION AND RATING EXPLANATIONS:** Rating based on Project # P-30 and M-62

**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

INSPECTOR: TIM CUNNINGHAM  
SURVEY DATE: 7/03

<b>BUILDING:</b>	<b>SPRUCE HALL</b>
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**ROOFING**

EVALUATION	DAMAGE		ENVIR	AESTHETICS		RENEWAL	
	SAFTEY	CODES		ENERGY			
	1	2	3	4	5	6	
PHYSICAL CONDITION		.04				.01	\$ 7,500.94
LEAKS							
DRAINAGE							
INSULATION							
DISSIMILAR TYPES							
FIRE RATING							
DESIGN LOAD							
OPENING SPECIALTIES							
MAINTAINABILITY							

**RATING SUB TOTALS**

	.04					.01	\$ 7,500.94
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TOTAL RATING	0.05
COMPONENT MULTIPLIER	<u>0.043</u>
COMPONENT DEFICIENCY	.00215
BUILDING REPLACEMENT COST	<u>\$3,488,809</u>
RENEWAL COST FOR COMPONENTS	\$ <u>7,500.94</u>

**SYSTEM TYPE:**

FLAT: STEEL DECK, 1IN. PERLITE, ¼ PLWOOD, BUILT UP 2 PLY GLASS FIBERS, MOPPED

PITCHED: ¼ IN. PER FOOT

INSULATION: R-30 UNDER DECK FIBERGLASS

ROOF MATERIAL: ROCK WEAR AND WIND BLOWN

PARAPETS:

**OTHER INFORMATION AND RATING EXPLANATIONS: Project # P-30 Replaced Rain Gutters**

## FACILITY AUDIT PROGRAM

INSPECTOR: TIM CUNNINGHAM  
 SURVEY DATE: 7/03

<b>BUILDING:</b>	<b>SPRUCE HALL</b>
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### INTERIOR CONSTRUCTION

EVALUATION	DAMAGE		ENVIR	AESTHETICS		RENEWAL
	SAFETY	CODES		ENERGY		
	1	2	3	4	5	6
PARTITIONS						
INTERIOR DOORS			.005			\$ 3,942.35
WALL FINISHES						
FLOOR FINISHES						.005 \$ 3,942.35
CEILING FINISHES						
INTERIOR SURFACE OF EXTERIOR WALLS						

#### RATING SUB TOTALS

		.005			.005	\$ 7,884.70
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TOTAL RATING	0.01
COMPONENT MULTIPLIER	0.226
COMPONENT DEFICIENCY	.00226
BUILDING REPLACEMENT COST	\$3,488,809
RENEWAL COST FOR COMPONENTS	\$ 7,884.71

#### SYSTEM TYPE:

GYPSUM BOARD AND STUDS: 5/8 GYPSUM WITH 2 1/2 IN. METAL STUDS @ 16 IN. O.C.

INTERIOR DOORS: HOLLOW METAL FRAME - 2HR F.R. PRIME SKIN SLAB (PAINTED AND OAK VENEER)

FLOOR COVERING MATERIALS: 98% CARPET 26 oz. 2% VCT TILE

CEILING FINISH TYPE: 2 X 4 GRID T-BAR SUSPENDED

WALL FINISH: PAINTED SMOOTH FINISH

#### OTHER INFORMATION AND RATING EXPLANATIONS:



**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

INSPECTOR: TIM CUNNINGHAM  
SURVEY DATE: 7/03

**BUILDING:            **SPRUCE HALL****

**MECHANICAL (PLUMBING AND HVAC SYSTEMS)**

EVALUATION	DAMAGE		ENVIR		AESTHETICS		RENEWAL
	SAFTEY	CODES			ENERGY		
	1	2	3	4	5	6	
CAPACITY							
CONTROLS					.003		\$ 3,736.51
PIPING/ DUCTWORK							
DRAINS AND WASTE							
ENERGY CONSUMPTION							
AIR CIRCULATION							
RELIABILITY					.003		\$ 3,736.51
ECONOMIZER CYCLE INST							
FILTRATION							
HEAT REJECTION							
MAINTAINABILITY					.003		\$ 3,736.51

**RATING SUB TOTALS**

					.009		\$ 11,209.53
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TOTAL RATING	0.009
COMPONENT MULTIPLIER	0.357
COMPONENT DEFICIENCY	.003213
BUILDING REPLACEMENT COST	\$ 3,488,809
RENEWAL COST FOR COMPONENTS	\$ 11,209.54

**SYSTEM TYPE:**

UNIT TYPE EQUIPMENT:        CARRIER ROOF TOP HVAC

REFRIGERATION TYPE:         R-134

ENERGY SOURCE:               ELECTRIC

HEATING FUEL:                 NAT. GAS

SYSTEM CAPACITY:             1 TON THRU 6 TON

CONTROL TYPE:                 JOHNSON CONTROLS INSTALLED IN M-2 PROJECT

**OTHER INFORMATION AND RATING EXPLANATIONS**

**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

INSPECTOR: TIM CUNNINGHAM  
SURVEY DATE: 7/03

**BUILDING:            **SPRUCE HALL****

**ELECTRICAL**

EVALUATION	DAMAGE			ENVIR	AESTHETICS		RENEWAL
	SAFETY	CODES			ENERGY		
	1	2	3	4	5	6	
POWER SYSTEM							
SAFETY							
SERVICE							
SWITCHGEAR CAPACITY							
FEEDER CAPACITY							
PANEL CAPACITY							
CONVERSION OUTLET							
BRANCH CIRCUITS							
LIGHTING					.006		\$ 1,988.62
LIGHT LEVELS							
FIXTURES							
EMERGENCY							
EXIT LIGHTING							
MAINTAINABILITY							

**RATING SUB TOTALS**

					.006		\$ 1,988.62
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TOTAL RATING	0.006
COMPONENT MULTIPLIER	0.095
COMPONENT DEFICIENCY	.00057
BUILDING REPLACEMENT COST	\$3,488,809
RENEWAL COST FOR COMPONENTS	\$ 1,988.62

**SYSTEM TYPE:**

POWER SYSTEM:            460 VOLT 3 PHASE  
 SERVICE VOLTAGE:        277 VOLT  
 AMPERAGE:                20 AMP  
 DIST. VOLTAGE:  
 WATTS/SQ FT:             2 WATTS/ S.F.  
 LIGHTING SYSTEM:        RECESSED FLUORESCENT  
 LAMP TYPE:               F40C50  
 BASIC FIXTURE TYPE:     RECESSED GRID TYPE, 2X4 FIXTURE /4 LAMPS, 2 MAG  
                                   BALLAST

**OTHER INFORMATION AND RATING EXPLANATIONS:**

**MORGAN COMMUNITY COLLEGE  
FACILITY AUDIT PROGRAM**

INSPECTOR: TIM CUNNINGHAM  
SURVEY DATE: 7/03

<b>BUILDING:</b>	<b>SPRUCE HALL</b>
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**SPECIAL CONSTRUCTION**

EVALUATION	SAFTEY	DAMAGE	ENVIR	AESTHETICS	RENEWAL		
	1	2	3	4		5	6
TABLES AND CHAIRS (CLASSROOM)		.01					\$ 627.99
DESKS, BOOKCASES AND OFFICE EQUIPMENT		.01					\$ 627.99
CABINETS, LOCKERS, ACID TABLES & LAB EQUIP.							
APPLIANCES (WASHERS, DRYERS, OVENS, REFER)		.01					\$ 627.99
TECHNOLOGY AND COMMUNICATION EQUIP.					.04		\$ 2,511.94

**RATING SUB TOTALS**

	.03			.04		\$ 4,395.91
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TOTAL RATING	0.07
COMPONENT MULTIPLIER	<u>0.018</u>
COMPONENT DEFICIENCY	.00126
BUILDING REPLACEMENT COST	<u>\$ 3,488,809</u>
RENEWAL COST FOR COMPONENTS	<u>\$ 4,395.90</u>

**SYSTEM TYPE:**

- CLASSROOM FURNISHINGS: 6 AND 8 FOOT TABLES X 18 INCHES, STACKABLE CLOTH COVERED CHAIRS
- OFFICE FURNISHINGS: VENEER DESKS AND BOOKCASES WITH OFFICE CHAIR
- SPECIAL FURNISHINGS: CONFERENCE TABLES, CHAIRS AND MISC. SCIENCE TABLES
- APPLIANCES: MICROWAVE OVENS, REFRIGERATORS and AUTOCLAVE EQUIPMENT
- TECHNOLOGY AND COMMUNICATIONS: MISC AUDIO AND VIDEO EQUIPMENT

**OTHER INFORMATION AND RATING EXPLANATIONS:**





## K. IMAGES



**SKILLS LAB**



**SKILLS LAB**



FITNESS



PTA MASSAGE