

**MEMORANDUM**

**To:** Board of Regents

**From:** Board Office

**Subject:** Register of Iowa State University Capital Improvement Business Transactions for Period of June 20, 2003, Through July 17, 2003

**Date:** July 7, 2003

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**Recommended Actions:**

1. Approve the following items for the major capital projects, as defined by Board policy adopted in June 2003, included on the Register of Capital Improvement Business Transactions for Iowa State University.
    - a. **Memorial Union Renovation** project (see pages 3 through 12);
      1. Acknowledge receipt of the University's submission of information to address the Board's capital project evaluation criteria (pages 10 through 12);
      2. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration; and
      3. Approve the program statement for the Phase 1 project, and architectural agreement with Herbert Lewis Kruse Blunck, Des Moines, Iowa (\$1,276,585) to provide schematic through construction phase design services for the Phase 1 project.
    - b. **Physics Hall Auditoriums** component of the **General Classrooms and Auditoriums** project (see pages 12 through 16);
      1. Acknowledge receipt of the University's submission of information to address the Board's capital project evaluation criteria (pages 15 and 16);
      2. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration; and
      3. Approve the schematic design for this project component, with the understanding that this approval will constitute final Board approval and authorization to proceed with construction.
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**Executive Summary:**

Background            The University requests approval of actions on two major capital projects for which the Board authorized permission to proceed, and other project approvals, prior to adoption of the policy for major capital projects in June 2003.

Therefore, the Board is asked to approve continuing with each project based on analysis related to the evaluation criteria provided for each project within this docket memorandum.

Requested Approvals            Phase 1 program statement and architectural agreement with Herbert Lewis Kruse Blunck, Des Moines, Iowa (\$1,276,585) for the **Memorial Union Renovation** project which would construct an addition and renovate existing space for the University Book Store, provide circulation, accessibility and life safety improvements to include construction of an access link to the parking garage, upgrade meeting rooms and building systems, and provide roof repairs (see page 3).

- In November 2002, the Board approved a Memorandum of Agreement between the Iowa State Memorial Union Corporation, the Government of the Student Body at Iowa State University, and the Board of Regents, State of Iowa, for the transfer of the Iowa State Memorial Union to Iowa State University.
- The transfer of the Memorial Union allows the University to finance an extensive renovation of the facility.
- The renovation project has strong support from Iowa State University students; in November 2002, the Board approved a new \$15 per student per semester mandatory building fee (\$30 per academic year), for the 2003-2004 academic year, to fund improvements to the Union.

Schematic design for the Physics Hall Auditoriums component of the **General Classrooms and Auditoriums** project, which would provide modern instructional facilities to address various deficiencies in existing classroom areas (see page 12).

- The Physics Hall Auditoriums project component (see Attachment A for location) would upgrade two auditoriums by reconfiguring the seating areas to improve accessibility, installing new fixed and flexible seating to accommodate non-traditional teaching styles and instructional technologies, and providing technology and mechanical upgrades.
  - The existing and proposed floor plans are included as Attachments B and C to this docket memorandum.
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**Background and Analysis:**

**Memorial Union Renovation**

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Jan. 2002	Approved
Architectural Agreement—Pre-Design Services (Herbert Lewis Kruse Blunck, Des Moines, IA)	\$ 116,400	April 2002	Approved
Architectural Amendment #1	18,200		Not Required*
Architectural Amendment #2 (Herbert Lewis Kruse Blunck, Des Moines, IA)	51,500	June 2003	Not Required**
Program Statement—Phase 1		July 2003	Requested
Architectural Agreement—Phase 1 Schematic Through Construction Phase Design Services (Herbert Lewis Kruse Blunck, Des Moines, IA)	1,276,585	July 2003	Requested

\* Approved by University in accordance with Board procedures.

\*\* Approved by Executive Director in accordance with Board procedures.

**Background**

The Iowa State Memorial Union was established in 1922 as a non-profit corporation separate from the University; the corporate structure was necessary at that time because Iowa State University, through the Board of Regents, lacked authority to borrow the money.

The Memorial Union Corporation constructed the original student union facility under agreements originally approved in 1925 by the Board of Education (predecessor to the Board of Regents); the intent of the agreements was to transfer the Memorial Union to the University once the debts were paid off.

Since the original facility was completed in 1928, the Corporation borrowed funds to construct additions to the building and to make renovations; the debt was never paid off in its entirety.

- In 1978, the last major addition to the Union completed the area between the main building and the parking ramp.
- In 1995, the Memorial Union remodeled the ground floor of the facility (excluding the Book Store area, which was renovated in 1992), renovated the food service area to provide a food court and modern kitchen facilities to support the Union's catering and food service operations, and renovated student office space throughout the facility.

- In 2000, the Board approved the issuance of the \$4,890,000 First Mortgage Note, Series 2000, by the Memorial Union, for the purpose of fully refunding the outstanding principal of a Promissory Note dated November 1, 1995; the Note is based on a 20-year amortization schedule with a balloon payment due December 1, 2005; the existing principal amount is approximately \$4.5 million.

Board Action –  
November 2002

In November 2002, the Board approved a Memorandum of Agreement between the Iowa State Memorial Union Corporation, the Government of the Student Body at Iowa State University, and the Board of Regents, State of Iowa, for the transfer of the Iowa State Memorial Union to Iowa State University.

- Student leaders initiated the proposal to transfer the Memorial Union to the University because the corporate structure did not allow enough fund raising or bonding ability to finance an extensive renovation of the facility, which was a high priority of the students.
- The University administration, students and the Memorial Union Board agreed that the Union needed to be brought up to current standards, including various building and accessibility codes.
- The Memorandum of Agreement provides for the Board to assume the current outstanding debt and other obligations of the Memorial Union, accept transfer of the property owned by the Memorial Union, and transfer to Iowa State University the authority to manage the property as a resource for the University community.
- The resolution by the Government of the Student Body ratifying the proposed agreement, noted that to serve the growing demand students have placed on the Memorial Union it had become necessary to seek alternate sources of management and funding.

Board action in November 2002 also established a self-liquidating Memorial Union Facility.

- The Union is now being operated as a self-supporting entity of the Board, in accordance with Iowa Code Chapter 262, which authorizes the Board to construct, equip, maintain and operate self-liquidating and revenue producing facilities at the universities, and borrow money to construct or improve the facilities; bonds supported by student fees can now be issued.

- In November 2002, as part of the approval of tuition and mandatory fees, the Board also approved a new \$15 per student per semester mandatory building fee (\$30 per academic year), for the 2003-2004 academic year, to fund improvements to the Union (building renovations or debt service).
- This will supplement the existing student fee revenue, which currently provides \$5.26 for future improvements and \$3.90 for debt service, per student per semester, for improvements to the Union.
- The University estimates that annual revenue designated for improvements to the Union from student fees would total approximately \$1.3 million.

Renovation  
Project Goals

The University's goals for the Memorial Union Renovation project, which is envisioned to include at least three phases, are as follows:

- Reorganizing and improving circulation routes throughout the building to address accessibility, wayfinding and life safety issues.
- Providing an access link to the adjacent parking garage at the Ground Level and Levels 1 and 2.
- Updating the existing meeting spaces and public areas to provide technological, mechanical and other upgrades to accommodate current needs.
- Expanding the University Book Store to increase revenues and operating efficiencies by providing additional retail space and eliminating off-site leased storage space for the Book Store's inventory.
- Creating unity between the various building additions to provide a more unified image for the Union.
- Providing a strong Iowa State University presence in the building.
- Providing additional student office space based on current and future expansion needs.
- Renovating guest rooms to provide high quality spaces with amenities similar to contemporary hotel facilities.
- Expanding the Commons seating area to meet current and future student needs, and possible development of a multi-purpose room for meetings, dances, dining, etc.

- Providing a multi-cultural center (possibly consisting of a gathering room, study lounge, kitchen and small café), that would accommodate open discussions, formal meetings, study space, and occasional food preparation.
- Providing a gateway to campus from Lincoln Way with development of a new south entry and exterior façade renovation.
- Providing additional meeting spaces of various sizes to meet current and future demand.
- Providing mechanical, electrical, communication and security upgrades throughout the building.

Program  
Statement  
Overview

The main focus of the Phase 1 project is to reorganize and improve the existing circulation routes in the building to provide barrier-free access to all spaces, improve wayfinding throughout the building, and increase the effectiveness of signage. Associated with the circulation improvements, the project would also provide life safety upgrades consisting of improved fire protection, egress routes, and elevator service.

The proposed Phase 1 project would include the circulation, accessibility and life safety improvements; the Book Store addition and renovation; the upgrade of selected meeting room areas; and mechanical upgrades and roof repairs.

Circulation/Accessibility/Life Safety Improvements

The project would construct a new pedestrian access link between the parking garage and the Ground Level and Levels 1 and 2. This link would provide building users with a clear and direct circulation route that connects with the other proposed circulation improvements. The access link would consist of a three-story addition of approximately 6,000 net square feet (7,500 gross square feet) and would include two elevators.

The project would also improve existing circulation routes by renovating 5,930 net square feet of existing Level 1 corridor space, which would include the upgrade of two elevators.

Book Store Addition/Renovation

The project would construct an addition to the University Book Store to expand the existing Ground Level retail space, reconfigure and remodel the existing Book Store space, and temporarily relocate the Book Store offices and storage functions into space to be vacated by the Alumni Association.

The proposed addition would consist of approximately 10,000 net square feet (12,000 gross square feet), which would increase the total size of the Book Store from 19,802 net square feet to approximately 30,000 net square feet (an increase of approximately 50 percent).

- The proposed expansion is expected to increase Book Store revenues and reduce expenses by approximately \$300,000 per year by eliminating lease costs and reducing inventory handling costs.

The renovation work would address the 19,802 net square feet of existing Book Store space on the Basement and Ground Levels, and 6,909 net square feet of Alumni Association office space on Level 1.

- The Alumni Association space would be vacated to provide temporary office and storage areas for the Book Store during the renovation project.
- The Alumni Association is currently reviewing relocation options and plans to vacate the space in the summer of 2004 to accommodate the renovation project.

#### Meeting Room Upgrades

The project would modernize up to 19,844 net square feet of space in 14 ballroom and meeting areas on Levels 1 and 2. The improvements would consist of upgrades to mechanical and electrical systems, lighting, communications, technological systems and interior finishes.

#### Mechanical Upgrades/Roof Repairs

Additional work throughout the building would include mechanical system upgrades, asbestos removal, and roof repairs.

A copy of the complete Phase 1 building program is on file in the Board Office.

Future Phases      The University anticipates that future phases of the project would include the following:

- Phase 2—Upgrade of additional meeting room space, expansion of student office and commons seating areas, renovation of the Level 2 corridor and oval stair, and development of a south building entrance.
- Phase 3—Renovation of lounge areas, upgrade of additional meeting room space, and improvements to recreation areas.

Phases 2 and 3 would be undertaken as funding is identified; the University plans to explore the use of private funds as a potential fund source for some of the work.

The program for Phases 2 and 3 would be further defined and presented to the Board for approval.

Anticipated Cost/  
Funding      The Phase 1 project cost is estimated at \$16 million, as outlined below.

Circulation/Accessibility/Life Safety Improvements	\$ 4,400,000
Book Store Addition/Renovation	5,000,000
Meeting Room Renovations	3,700,000
Mechanical/Roof Upgrades	<u>2,900,000</u>
 TOTAL	 <u>\$ 16,000,000</u>

Memorial Union Revenue Bonds would be sold to finance most of the estimated \$16 million in improvements, with available Book Store and student fee revenue used to reduce the amount needed to be financed.

The sale of the bonds would also refinance the existing Union debt of approximately \$4.5 million that was assumed with the transfer of the Union to the University.

The debt service on the bonds will be repaid by existing student fees and rent by the Book Store to the Memorial Union that will cover both the capital cost and the operating costs of the new and renovated Book Store space.

The University hopes to sell bonds for the project early in calendar year 2004; the Banking Committee and Board will consider the calendar year 2004 bond issuance schedule in November 2003.

Square Footage  
Table – Phase 1

The following table provides the detailed square footages for the Phase 1 project.

<u>Detailed Building Program</u>			
<u>Circulation/Accessibility/Life Safety Improvements</u>			
<u>New Construction</u>			
Link to Parking Garage – Ground Level and Levels 1 and 2	6,000		
<u>Renovation</u>			
Level 1 Corridor – West	2,200		
Level 1 Corridor – East and Ballroom Entry	2,100		
Level 1 Main Corridor and Information Desk	<u>1,630</u>		
		11,930	nsf
<u>University Book Store</u>			
<u>Renovation</u>			
Existing Book Store Space	19,802		
Level 1 Temporary Space (current Alumni Association Offices)	6,909		
<u>New Construction</u>			
Ground Level Addition	<u>10,000</u>		
		36,711	nsf
<u>Meeting Room Renovations</u>			
Great Hall, including foyer and corridor (to be bid as alternate)	6,362		
Level 2 Meeting Rooms (9)	4,500		
South Ballroom	3,179		
Gallery	2,000		
Pioneer Room	2,000		
Oak Room	<u>1,803</u>		
		<u>19,844</u>	nsf
Total Net Assignable Space		<u>68,485</u>	nsf

Design Services

The agreement with Herbert Lewis Kruse Blunck would provide schematic through construction phase design services for the Phase 1 project for a fee of \$1,276,585, including reimbursables.

**Evaluation Criteria** Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

**Institutional Mission/Strategic Plan** The Iowa State University Memorial Union functions as a "University Community Center." It exists primarily to serve students. It also serves faculty/staff, alumni and guests. The Memorial Union provides opportunities, conveniences, services and amenities to facilitate personal, cultural, leisure and group needs as well as to enhance the day-to-day educational and social activities of the University Community. The Memorial Union supports the mission of Iowa State University. It offers a wide range of social, recreational and developmental programs. These programs foster leadership, personal and skill development, citizenship and social responsibility aimed at complementing the student's living and learning experiences while at the University.

The project will include space reallocation, remodeling and expansion of the Memorial Union to meet a number of goals. Those goals may be summarized in the following categories:

- Update existing and/or expanded facilities to meet the current and anticipated programmatic needs of the building occupants and guests.
- Improve access to the building as well as circulation systems within the building to provide barrier-free access to all spaces, and to improve wayfinding throughout the building improving the appearance to provide an updated and more user-friendly environment.
- Provide mechanical, electrical, communication and security system updates throughout the building.

**Other Alternatives Explored** The Planning Committee developed a Space Analysis that identified the program needs of the building occupants and assesses the building's capacity to meet those needs. Consideration was given to existing uses for all areas of the building. The space assessment determined that current available space in the building was not adequate to meet the identified needs. New and expanding program needs will be met through reallocation of space and a building addition. Based on the information collected, a phasing plan is proposed as follows:

Phase I

- Address ADA accessibility, wayfinding, and life safety issues
- Remodel University Book Store and construct addition to the building
- Upgrade select meeting rooms to modern standards
- Upgrade existing elevators and the mechanical and electrical systems

Phase 2

- Provide additional meeting room improvements
- Develop entry to building from the south
- Expand Commons seating
- Expand student office areas
- Provide Level 2 corridor and oval stair renovations

Phase 3

- Renovate Study Lounge
- Provide additional meeting room improvements
- Provide recreation area improvements

Impact on Other  
Facilities and  
Square Footage

The building is a large complex of approximately 270,000 gross square feet constructed over the last 80 years with a number of additions. The Parking Ramp has an additional 272,000 gross square feet. Large amounts of space within the building will be remodeled for current occupants and functions. Some reallocation of space will result in remodeled space for new or expanding program activities.

Two additions will be part of the first phase of the project. The Book Store addition of 12,000 gross square feet will allow the Book Store to move from off-campus leased space where they now store books and supplies. This will allow the Book Store to reduce their operating expenses by consolidating staff in one location and will provide additional retail space for products that cannot currently be displayed on the retail floor.

A 7,500 gross square foot addition is also an important part of the solution to improve access and interior circulation to the building from the parking ramp.

Financial  
Resources for  
Construction  
Project

Funds will be provided from a Memorial Union enterprise bond issue. The source of the debt service payment will be provided by existing Memorial Union revenue, Book Store rental fees and previously approved student fees. The bond issue will include refinancing the existing debt of approximately \$4.5 million.

Financial  
Resources for  
Operations and  
Maintenance

Operation and Maintenance funding at the Memorial Union is funded by the general fund and user charges. Some of the users of the building are self-supporting programs leasing space in the building so the rental rates include operation and maintenance costs for the space they occupy. The additional space to be constructed for the Book Store will result in an estimated operation and maintenance increase of \$61,000 annually to be funded by the Book Store. It is projected that the improved operating efficiencies and expanded selling area will provide a positive cash flow to assist in further Memorial Union renovations.

External Forces A large part of the work in the first phase of the project is intended to address life safety and accessibility requirements to meet federal and state mandates. As was outlined when the Board approved the transfer of ownership of the Memorial Union, Phases II and III are dependent upon the development of a financial plan over the next several years including completing a fund raising feasibility study by the ISU Foundation.

**General Classrooms and Auditoriums**

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Sept. 2002	Approved
Project Description and Total Budget	\$ 14,238,500	Jan. 2003	Approved
Architectural Agreement—Pre-Design and Schematic Design Services (Baldwin White Architects, Des Moines, IA)	175,000	Jan. 2003	Approved
Program Statement (LeBaron Hall Auditorium and Physics Hall Auditoriums)		April 2003	Approved
Schematic Design (LeBaron Hall Auditorium)		June 2003	Approved
Architectural Agreement—Design Development Through Construction Phase (Baldwin White Architects, Des Moines, IA)	600,000	June 2003	Approved
Schematic Design (Physics Hall Auditoriums)		July 2003	Requested

Background The University currently operates and maintains a total of 233 classrooms, including 13 auditoriums; these facilities do not provide the necessary capacity, media technology, space flexibility and specialized classroom components for modern instructional programs.

In addition, the facilities suffer from accessibility and mechanical/electrical deficiencies.

Project Scope The improvements would provide air conditioning, improved lighting and lighting control, and classroom furniture, to create an environment that supports instructional technology.

The project includes the following:

- Physics Hall Rooms 3 and 5, which would remodel two general university auditoriums at an estimated project cost of \$1.5 million.

- LeBaron Hall Auditorium, which will demolish the existing auditorium and construct a larger general classroom auditorium at the same location, and replace the building's heating, ventilating and air conditioning systems, at a project cost of \$5 million.
- The demolition of the existing auditorium and schematic design for the new auditorium were approved by the Board in June 2003.
- Remodeling and installation of media technology in various existing general classrooms.

Project Cost/  
Funding

The total project budget of \$14,238,500 (approved in January 2003) will be funded by capital appropriations authorized by the 2002 General Assembly; the cost of the Physics Hall project component is estimated at \$1.5 million.

Physics Hall  
Rooms 3 and 5

Physics Hall, constructed in 1923, is located directly north of LeBaron Hall. (A map indicating the location of the facility is included as Attachment A.)

Rooms 3 and 5 in Physics Hall are general university auditoriums, which provide fixed seating for 122 individuals and 266 individuals, respectively.

- The two auditoriums are located adjacent to each other, with shared workroom areas in the central portion of the building; Room 3 consists of 1,420 net square feet, and Room 5 consists of 2,468 net square feet.

The auditoriums have received no major improvements since the building's construction and suffer from a number of fire and life safety code deficiencies, which must be corrected for continued use.

Proposed  
Remodeling  
Project

The Physics Hall project component would upgrade Rooms 3 and 5 by reconfiguring the seating areas and stairways to comply with life safety and accessibility codes, and installing new fixed and flexible seating to accommodate non-traditional teaching styles and instructional technologies.

The project would also install new mechanical systems to upgrade and reconfigure the air conditioning service for the new seating areas, and provide technology upgrades and new interior finishes. In addition, the project would reconfigure the basement corridors directly below the auditoriums to meet egress requirements from the basement level.

Schematic  
Design

The existing and proposed floor plans are included as Attachments B and C to this docket memorandum.

The following are highlights of the **interior design**:

The proposed design reflects the removal of the existing workroom area between the two auditoriums to allow expansion of each auditorium, and reconfiguration of the seating areas and stairways.

- The Room 3 auditorium would provide a flexible seating arrangement for 107 individuals in 2,115 net square feet of space.
  - This would include a combination of fixed and rotating seating to accommodate the standard lecture setting and small group discussions (to facilitate modern instructional programs).
  - The proposed design would increase the square footage of the auditorium by 695 net square feet, and reduce its seating capacity by 15 seats since additional space is needed for improved accessibility and to accommodate the flexible seating arrangement.
- The Room 5 auditorium would provide a fixed seating arrangement for 264 individuals in 3,875 net square feet of space to accommodate a standard lecture setting.
  - The proposed design would increase the size of the auditorium by 1,407 net square feet, and reduce its seating capacity by two seats due to the reconfiguration of the space for improved accessibility.
- The primary entrances to the auditoriums would be provided from the building's first floor south corridor, and from the building's second floor east and west corridors.

Operating Costs

The University reports that operating costs are expected to increase slightly due to the installation of new mechanical systems to upgrade the air conditioning service for the rooms.

Construction  
Schedule

The University plans to bid the project in June 2004; construction completion is anticipated by August 2005.

Square Footage Table

The following table compares the auditorium square footages for the schematic design with the square footages in the building program. (The numbers are unchanged.)

Detailed Building Program

	<u>Building Program</u>		<u>Schematic Design</u>	
Room 5	3,875		3,875	
Room 3	2,115	*	2,115	
Staging/Storage Areas	<u>750</u>		<u>750</u>	
Total Net Assignable Space	<u>6,740</u>		<u>6,740</u>	nsf

\* Corrected from April 2003 program

Evaluation Criteria

Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

Institutional Mission/Strategic Plan

Physics Hall rooms 3 and 5 are general university auditoriums. The student capacities of these rooms are 122 and 266. In addition to meeting the general university need for large lecture facilities, these rooms also meet the specialized need for the Department of Physics where demonstrations are used to illustrate principles of the curricula.

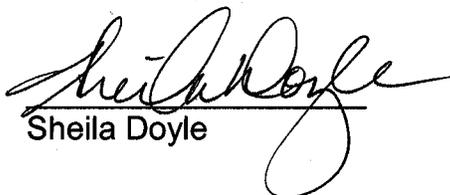
The remodeling project presents a significant opportunity to pursue the university's strategic plan goal #1 - Enhance Learning Through Exceptional Learner-Centered Teaching, Services, and Enrichment Opportunities. An important characteristic of this goal is innovative teaching and learning programs supported by faculty development programs. The remodeling of these rooms will create a small room environment in a large room atmosphere to allow small groups to interact at important times during a large lecture class. The large class will break up into small discussion groups without leaving the rooms for brief sessions. Faculty will be able to move freely about the room to participate in these small group venues.

The Center for Teaching Excellence has promoted this kind of student-to-student interaction as a student learning enhancement under large lecture conditions, but lack of facilities to adequately support this innovation has restricted faculty opportunities to use these new teaching techniques.

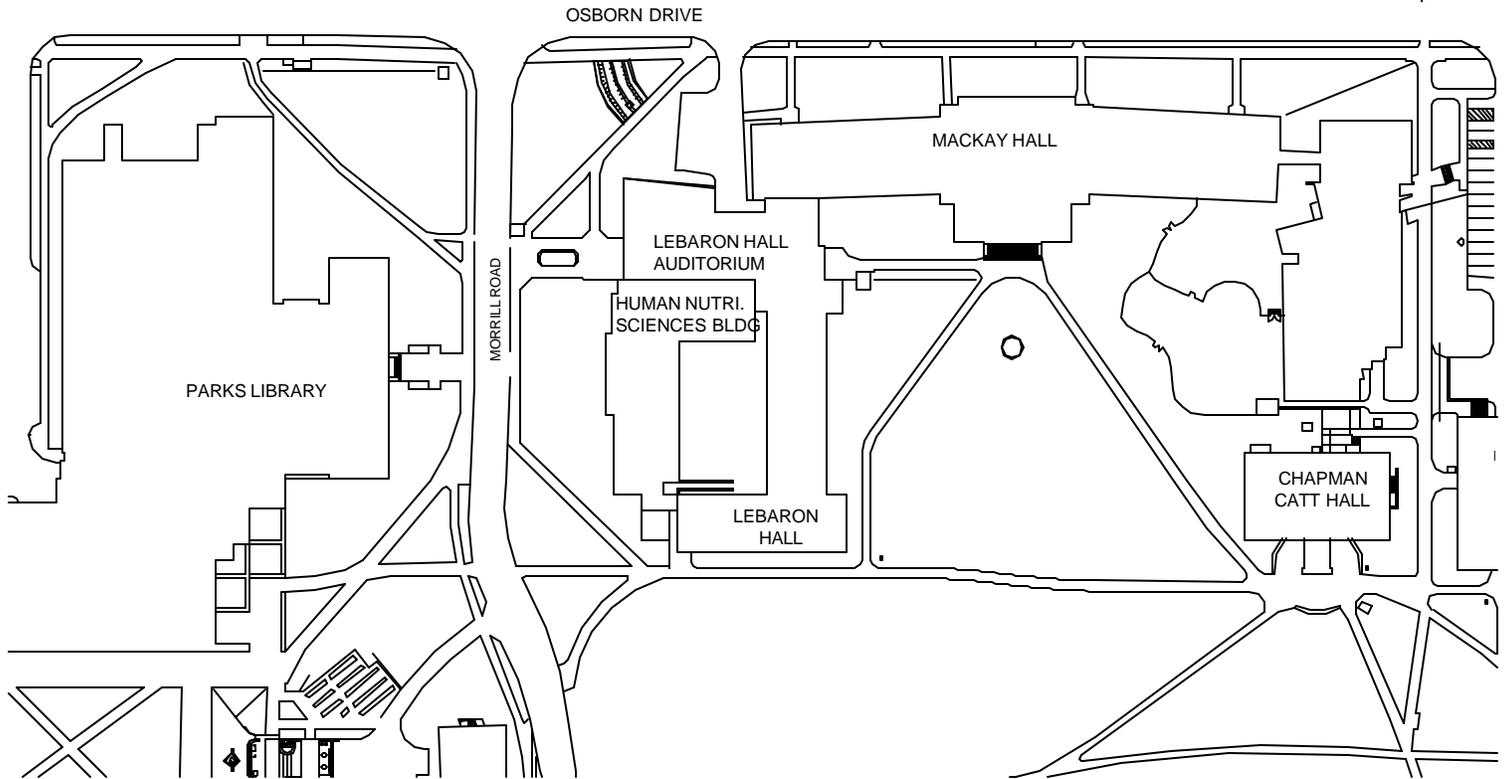
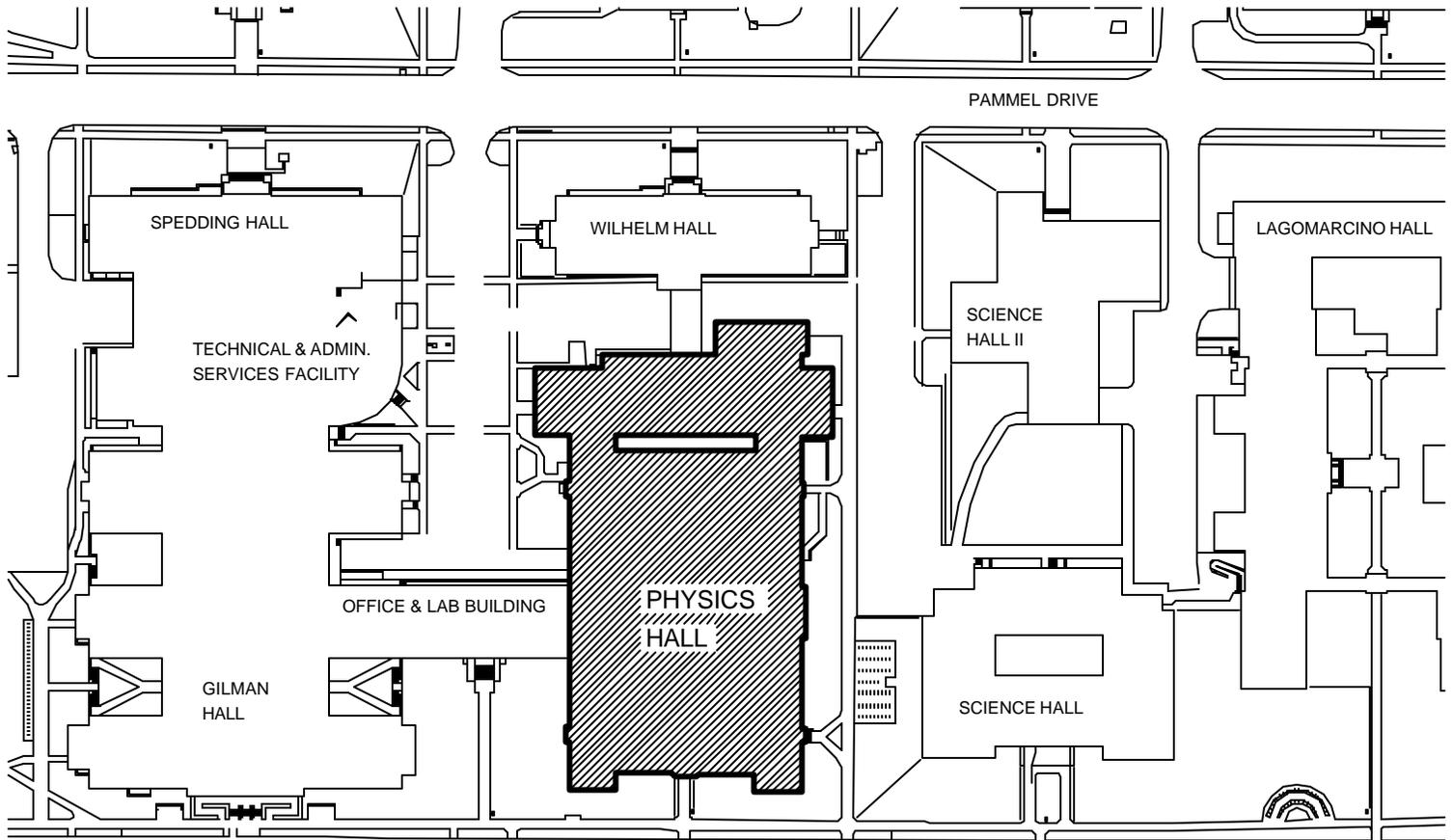
Other Alternatives Explored	<p>In 1994, a feasibility study looked at the need to modernize these two auditoriums. They are located in the center of Physics Hall and have not changed significantly since the building was constructed in 1923. Both of the rooms still have the original student seating, and with the exception of new video projection systems, there have been no major improvements in more than 75 years.</p> <p>The only possible alternative to the project is to discontinue use of these rooms, even though they are regularly scheduled for many large classes. There are a number of fire and life safety code deficiencies in the rooms that need to be addressed if they are to continue in service.</p>
Impact on Other Facilities and Square Footage	<p>6,740 net assignable square feet will be impacted by this remodeling project to recreate two large lecture rooms. Several small support spaces will need to be eliminated between these rooms to maintain existing capacities while complying with new building codes.</p>
Financial Resources for Construction Project	<p>This project is being funded by a legislative appropriation.</p>
Financial Resources for Operations and Maintenance	<p>Cost of operations and maintenance will increase slightly because new mechanical systems will be installed to provide air conditioning. The operations and maintenance costs will continue to be funded by the general fund.</p>
External Forces	<p>An important part of the remodeling of these rooms will be development of adequate egress routes in the event of a fire, and improved access for the disabled.</p>

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Also presented for Board ratification are eight project budgets approved by the University, one construction contract awarded by the Executive Director, the acceptance of one completed construction contract, and ten final reports. The register prepared by the University is included in the Regent Exhibit Book.

  
Sheila Doyle

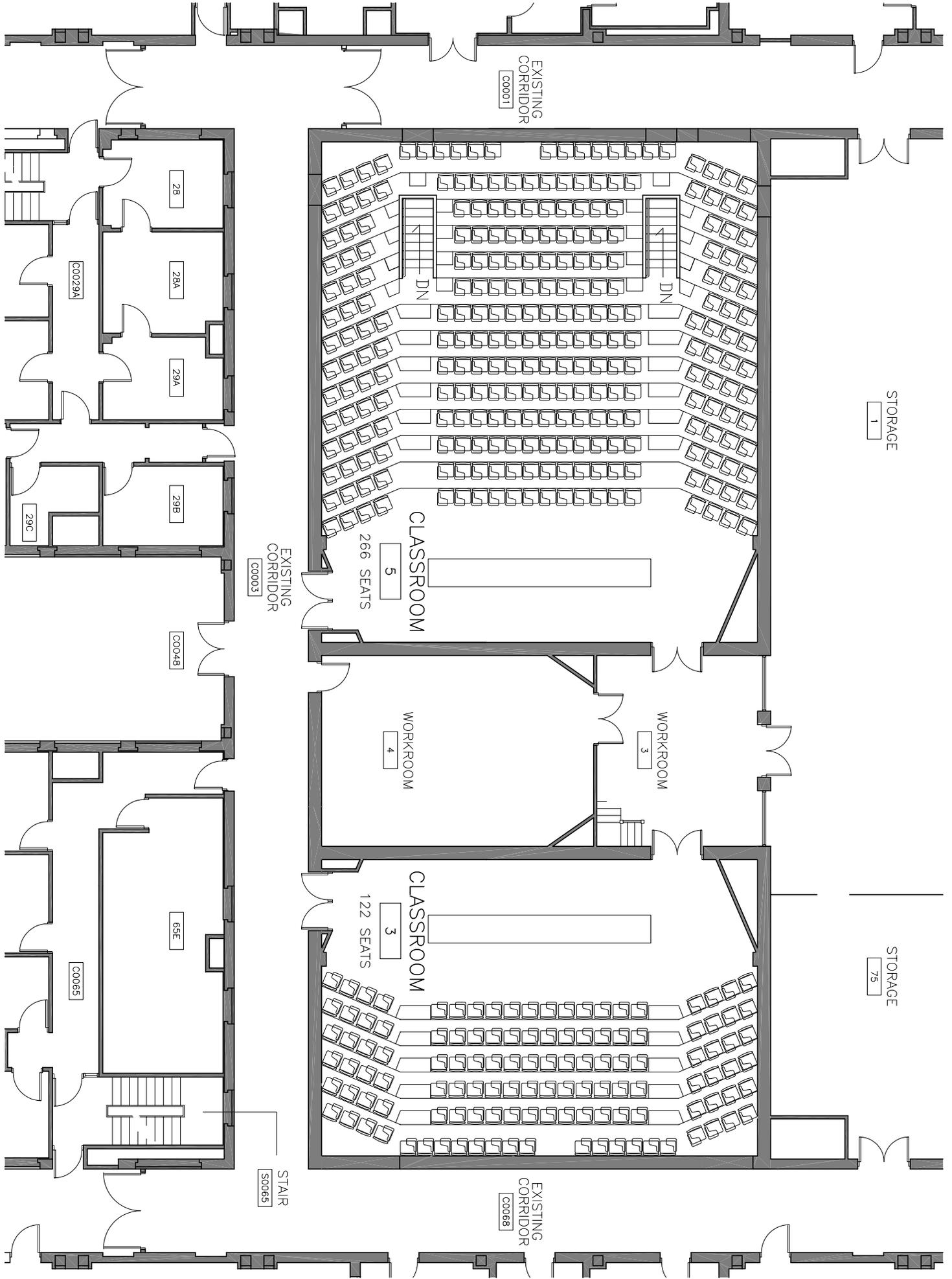
Approved:   
Gregory S. Nichols



REVISIONS: 	<b>GENERAL CLASSROOMS &amp; AUDITORIUMS</b> PHYSICS HALL AUDITORIUM	APPROVED BY:
COMPLETED:		CHECKED BY:
ISSUED:	<b>FACILITIES PLANNING AND MANAGEMENT</b> IOWA STATE UNIVERSITY	DESIGNED BY:
DATE: APRIL 23, 2003		SCALE: Not to scale
		REQUEST NO.
	AMES, IOWA	SHEET NO. A101

# PHYSICS HALL

EXISTING AUDITORIUM FLOOR PLAN  
266 seats @ Auditorium, 122 seats @ Classroom

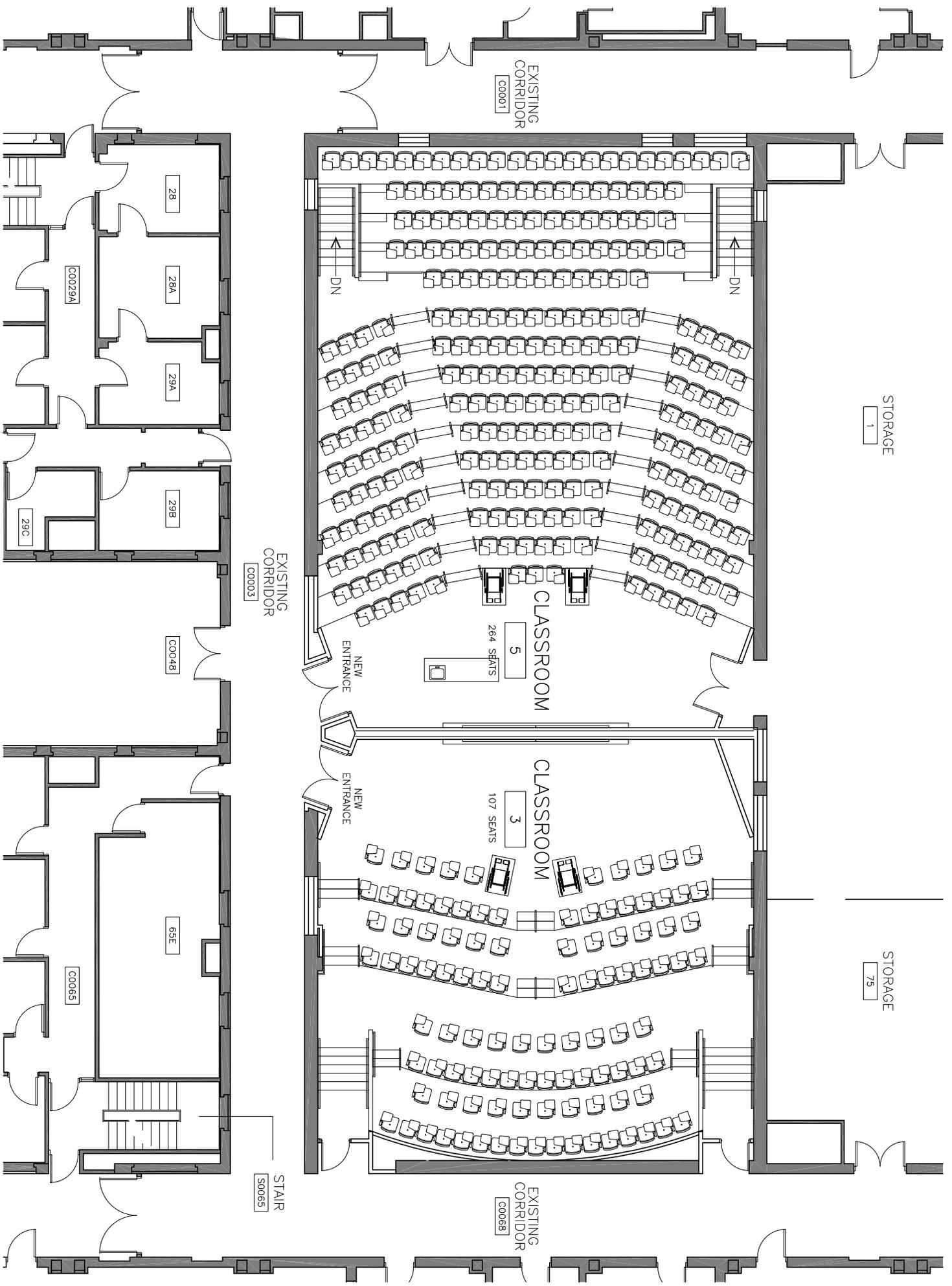


Scale: 1/4" = 1'-0"  
Baldwin White Architects  
3 July 2003

# PHYSICS HALL

## PROPOSED AUDITORIUM FLOOR PLAN

264 seats @ Auditorium, 107 seats @ Classroom



Scale: 1/4" = 1'-0"  
Baldwin White Architects  
3 July 2003