STATE OF WISCONSIN

DIVISION OF FACILITIES DEVELOPMENT

University of Wisconsin-Whitewater
Esker Dining Hall Renovation
Pre-Design Study - 22J1V

November 1, 2023

ASSEMBLAGE ARCHITECTS
RIPPE ASSOCIATES
DESIGN ENGINEERS
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ONEIDA TOTAL INTEGRATED ENTERPRISES

Acknowledgments

The following individuals are acknowledged for their contributions in the development of this Pre-Design Report.

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Executive Summary

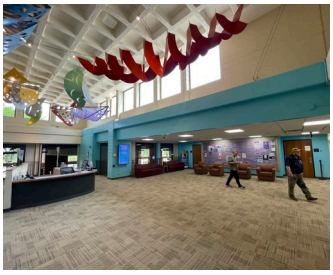
OVERVIEW:
Each year during the fall and spring semesters roughly 1,800 students eat 3 meals a day in Esker Dining Hall. A food service contractor is selected every 7 years to provide the food service at a fixed price, utilizing the original kitchen built in 1967.

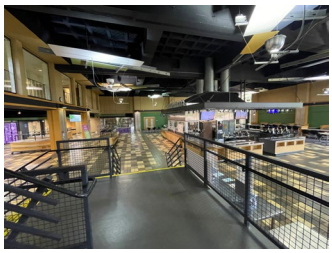
During summer camps, Esker Hall also serves about 4,000 high school students and other groups. Esker Hall's kitchen also functions as a commissary preparing food for other outlets on campus.

The building is fundamentally unchanged since its initial commissioning in 1967. There have been modest renovations over the last 50 years focusing on interior aesthetics, asbestos abatement, and general building maintenance. A major renovation as completed in 1999 that redesigned the layout of the main dining hall, dishwashing, restrooms, freezers and refrigerators on the lower level including associated MEP modifications. With a few isolated exceptions, many of the building's MEP systems and kitchen equipment have passed their expected lifespans. The kitchen and its support spaces are located a floor above the serving areas, creating inefficiencies in food service operation by having to prepare food on one floor and transport it to serve on another that impacts the cost and quality of the food offering.

Improving building utilization will help the campus meet its objectives of providing a diversity of food/ dining options. Students expect improved food quality, food allergy/sensitivity accommodation, and a higher quality building interior.

Esker Dining Hall's location adjacent to a cluster of Residence halls, sound concrete structural frame, size (73,000 SF), utility infrastructure, and open surroundings presents opportunities for a comprehensive renovation while maintaining the building's primary operation and revenue stream.





Existing building:
Clockwise from upper left:
Entrance lobby, upper floor
Esker Hall: East elevation
Dining Hall
Mechanical Room

Proposed:
Top to bottom below:
Exterior view
Entrance Lobby
Resident Dining

Executive Summary
Continued

This study considered a new building option, but a suitable location in the proximity of the north resident hall cluster could not be identified. As a result, this report recommends a complete renovation of the existing building in 3 phases to allow for its continued operation. Once completed, Esker Hall will offer a modern food service experience, with diverse choices for student meal plans, a Retail dining and convenience store offering extend hours, and an shells the upper floor for future programs.

PHASING CONCEPT:
Phase 1:
Selectively demolish partitions on the upper level adjacent to the existing food service kitchen. Re-purposes this area to create a temporary dining area. Relocate the existing ground floor resident dining seating and serving operation to the underutilized upper floor adjacent to the existing kitchen. Allow selective MEP systems to remain operational to maintain continuity of food prep and dining operations. The Campus will relocate the facility maintenance shop prior to the start of the project.

Phase 2:
Renovate lower level including a new loading dock addition, exterior envelope improvements and entrance, resident dining kitchen and dining, 24-hour retail store and cafe, and complete MEP replacement.

Phase 3:
Renovate the upper floor to shell space, and ready to accommodate future programming. The campus will return the facility maintenance shop to the upper floor.

PROBABLE COST:
The cost estimate reflects the cost of the project delivery in 2023, considers design contingencies, and it is escalated to October, 2030, as an anticipated midpoint of construction.

SUGGESTED SCHEDULE:
A/E Selection 2024
Design and Reviews: 2024-2026
Bid: 2027-2028
Construction: 2028-2031

This study is authored by Assemblage Architects and is supported by the following consultants
Food Service Design : Rippe Associates
Mechanical Design: Accendis Consulting Engineers
Electrical Design: Design Engineers
Structural and Civil Design:
Oneida Total Integrated Enterprises (OTIE)

	2023 Cost RS MEANS	Escalated to 2030 at 8% Annually
Building and Site	$33,953,000	$53,880,000
FF&E		$500,000
Design Fees		$4,350,000
Other fees		$544,000
DFD Fees		$2,175,000
Contingencies		$8,157,000
Total		$69,600,000

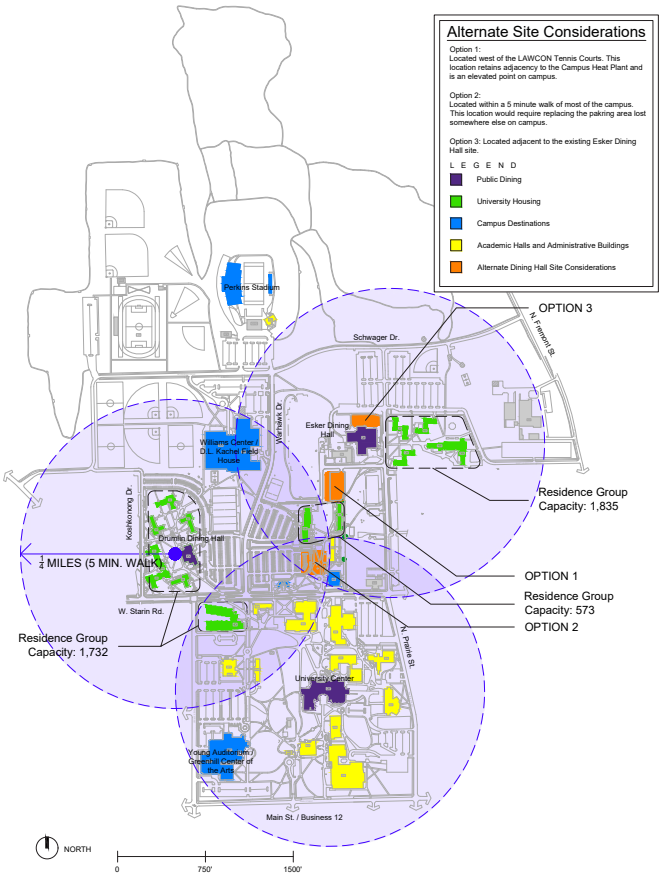
Other Option Considerations:

This study reviewed and considered the possibility of a new building to replace Esker Hall. We focused on providing only the food service components, resident dining, retail dining and store, and associated meeting space requirements.

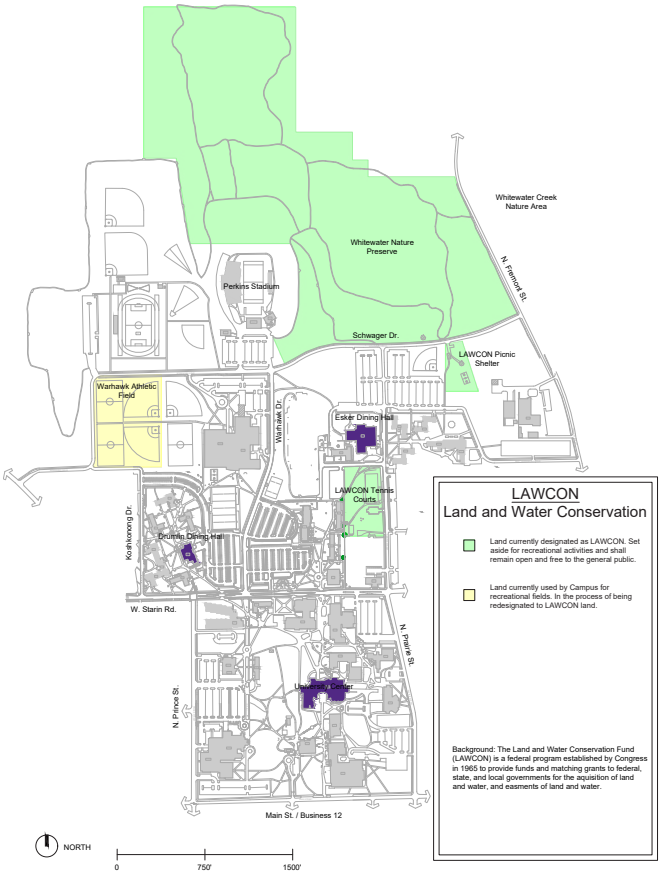
Because of the limitations on land use (see Lawcon map on this page), proximity requirements, truck circulation demands, and existing underground utility corridors, no suitable site was identified.
Option 1: This area is an existing parking lot and the campus has required replacing the parking lot in close proximity of the existing location. No other suitable land to accommodate th parking lot was available.
Option 2: This location is the most remote from the resident hall cluster that Esker Hall serves, and it is relatively close to Drumlin Hall. This location will also require relocation of significant site utilities and parking lots.

Option 3: this option will locate the building directly adjacent to the existing Esker Hall. The existing available land is not large enough to accommodate the entire program on one floor, thus requiring the relocation of the access roadways, and reducing the parking lot area.

The study also considered alternative renovation approaches, including modification of the existing second floor kitchen. But other approaches required the relocation of the existing food service and dining for extended period of time, to a temporary location, at a substantial cost that viewed unfeasible from the campus perspective.



Alternative site consideration for a new building



Methodology and Approach

This study was developed based on a two front approach: first to establish the program demand, and second to evaluate the building's condition, MEP systems, and site attributes.

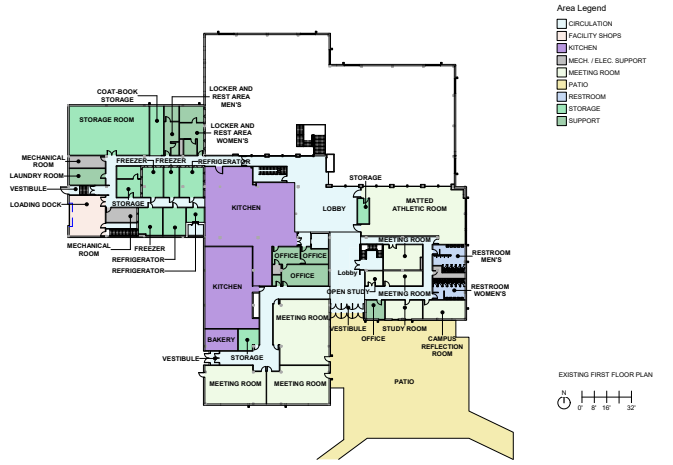
The program was developed with input from a broad range of UW-Whitewater staff in an initial meeting on January 25, 2023. A subsequent meeting was held April 25, 2023 involving the Aladdin Campus Dining regional manager and campus dining manager in addition to UW-Whitewater staff. This meeting also included in-person interviews with representatives of the UW-Whitewater Dining Services Advisory Committee. This committee is comprised of students from the Whitewater Student Government, University Housing student groups, and other student organizations.

Following this meeting a campus wide survey was distributed to all UW-Whitewater students to voice their opinions on Esker Dining Hall and the current food service options available to them.

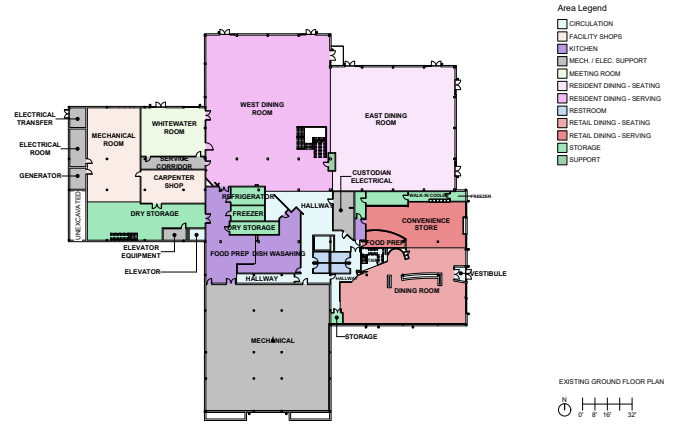
On August 15, 2023 the Design Team presented the findings and proposed solutions to the UW-Whitewater Staff. There was general agreement in the approach taken by the Design Team in response to the program requirements and building design and food service recommendations.

The meeting minutes and the results of the student survey are included as an appendix.

Building organization: The building's main entrance, kitchen, refrigeration, loading dock and meeting rooms are located on the upper floor. Resident dining serving lines, resident dining room seating, dish washing, and a retail dining cafe offering quick food options for extended hours are located on the lower level. This arrangement's inherent inefficiencies, coupled with the septation of the resident kitchen and dining, aging building MEP systems, and student demands for improved food offerings are the primary motivators for the renovation of Esker Dining Hall.



Existing First Floor Plan



Existing Ground Floor Plan

1. Program Requirements

Esker Hall, with its prominent and strategic location, is viewed as a destination node on the campus' north side. The following program identifies the desired functions, and their corresponding support.

The building serves distinctive functions:
1.1. Resident Dining
1.2. Retail Dining and Store
1.3. Event / Conference Center (Future)
1.4. Facility Maintenance Shop.
1.5. Support Functions

1.1. Resident Dining:
This space will accommodate approximately 1800 students that reside in the north resident hall cluster, in about three turns or approximately 600 seats. This group of students are on meal plans and will have access to unlimited food during specific time periods.
The dining will offer diverse meal options including an option to accommodate students with allergies though a dedicated kitchen directly adjacent to the loading dock to minimize cross contamination.

1.2. Retail Dining and Store:
This space will function as a convenience store, coffee shop, sandwich shop with drinks, fresh fruits, and grab and go options. It includes seating and study areas available during extended hours.

1.3. Conference Rooms with Banquet Dining(Future Phase):
The campus has identified the need for surge space to support larger summer camp attendance that require simpler menu offering but faster service. The following space programs are developed as future options. The upper floor space will be shelled, with properly sized MEP systems upgrades to accommodate future build outs. The cost estimate reflects only the cost of MEP system upgrade.

Two large 5,200 SF rooms are provided with one capable of subdividing into two smaller 2,600 SF rooms. Total seating capacity is approximately 500 people.

These spaces are located on the upper floor with a dedicated entrance and lobby and will serve as breakout spaces, and are connected via elevators and stairs to the first floor lobby. A serving kitchen with its supporting dish washing room is capable of supporting events either in banquet type service or as a serving line operation. This space can augment the facilities capacity during busy summer camps, when an additional food service venue is desired.

1.3.a. Student Culinary Kitchen:
A demonstration kitchen with residential equipment adjacent to the large meeting space and is designed to function independently as a place where student groups can cook and eat in small groups, or open to the large conference space to function as a demonstration kitchen. This is an opportunity to enhance the student experience with community and diverse cuisines.

1.4. Facility Maintenance Shop:
The existing facility maintenance shop is located on the lower level and does not have access to a loading dock. The shop will be relocated to the upper floor with direct access to the existing loading dock, adjacent to the mechanical room and a service elevator to the lower level.

1.5. Support Functions:

1.5.a. Main Kitchen and Food Service:
The proposed kitchen is designed to create a seamless flow of material from delivery, preparation, storage, serving and trash removal. It is located on the lower level in strategic proximity to the Resident Dining, Retail Cafe and Store, and via a service elevator to the Banquet Kitchen. This kitchen will also function as a commissary kitchen providing prepared food to other outlets on campus.

1.5.b. Catering Kitchen(future Phase):
Phase one of the project requires a dining room on the upper floor to accommodate the resident dining during the second phase construction. The dish room and its corresponding support spaces will be modified and re purposed to serve as the catering kitchen serving the future event center, and as a overflow of summer camp attendees.

1**.5.c. Loading Docks:**
The existing two bay loading dock is located on the upper floor and will continue to serve the building as the main delivery point for the Facility shops and Conference Rooms. This project proposes a new loading dock with 4 bays. Two will accommodate trash and recycling dumpsters, and the other two will accommodate deliveries and shipping.

1.5.d. Restrooms:
Two groups of binary restrooms are provided. Each group will also provide individual unisex restrooms.

1.5.e. Facility:
Custodial rooms, table and chair storage and other facility support spaces are provided on each floor to increase building efficiencies.

1.5.f. Circulation:
The program reorganizes the building's access and circulation. New elevators and stairs are provided to accommodate access

2. Building History

Original Construction
1965-1967

Acoustical Ceiling Improvements
1975
12”x12”x3/4” Acoustic Ceiling Tiles were adhered to the pan of the typical waffle dome across the entire resident dining seating area. These contained asbestos and were removed in 1999.

Interior Repainting
1975
Interior masonry partitions on the upper and lower levels were repainted 10 years after initial construction.

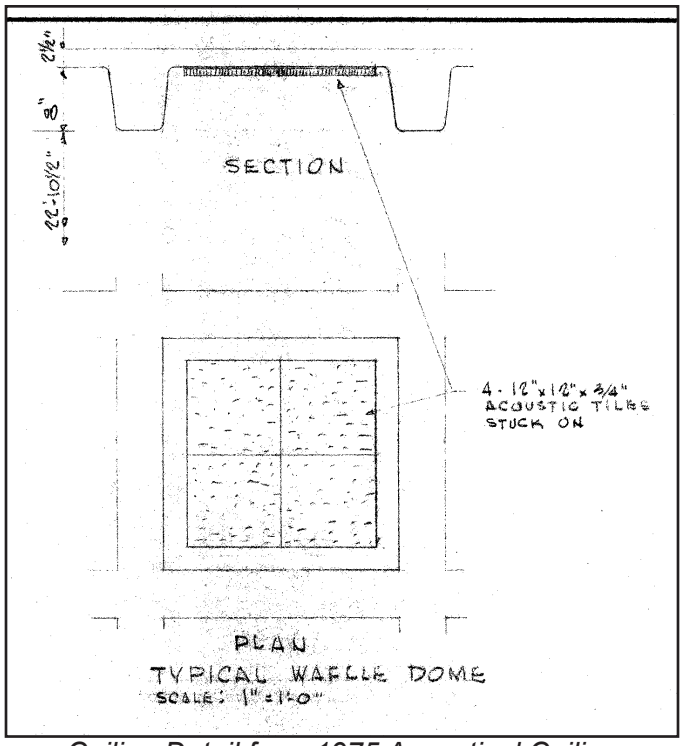
Exhaust Hood Modification
1977
Modifications included a new supply air unit to serve the existing bakery and kitchen.

Roof Replacement
1986
The roof was replaced with a modified asphalt membrane, over 1” overlay board, over tapered insulation, over 1-1/2” nominal isocyanurate insulation.

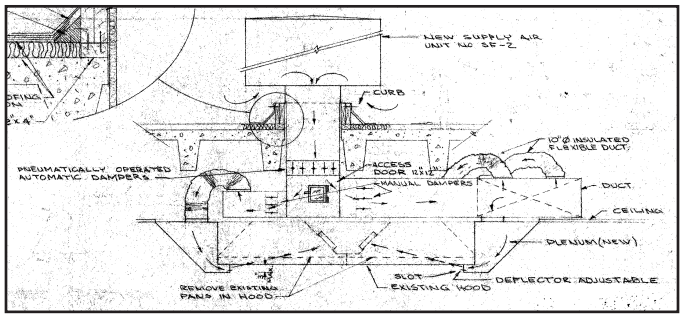
Dining Hall Remodeling
1999
A major renovation of the original resident dining serving lines, new meeting rooms, stair modifications. The wood framed platform, acoustic ceiling tiles, acoustic wall tiles were removed because they contained asbestos. New acoustic ceiling panels were a part of the remodel.

Convenience Store Remodel and Exterior Seating
2001

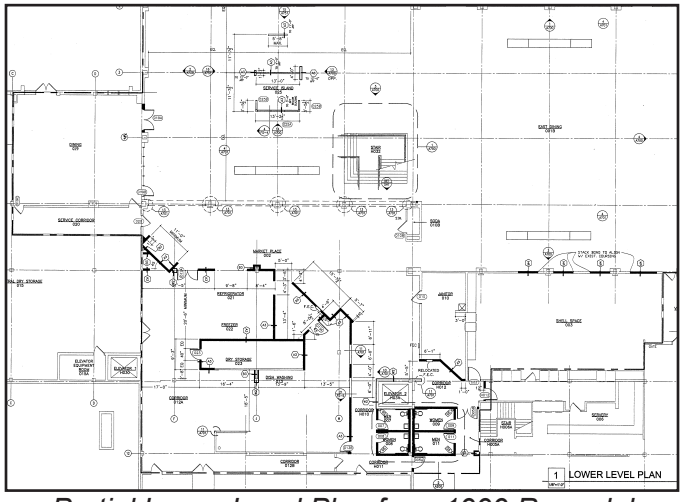
Roof Replacement
2022
New 60mil-EPDM ballasted roof. Life expectancy is 25-30 years and not expected to be a part of the future renovation of Esker.



Ceiling Detail from 1975 Acoustical Ceiling Improvement



Supply Air Unit Section from 1977 Exhaust Hood Modification



Partial Lower Level Plan from 1999 Remodel

3. Existing Conditions

Esker Hall was built in 1967 as a dining facility for the UW-Whitewater Campus. It is located in the northwest corner of the campus, and primarily serves the residents of Tutt Hall, Wellers Hall, Wells West and Wells East Halls, and Knilans Hall.

The building is composed of a cast-in-place concrete structure with masonry back-up walls, 2" of exterior insulation, and a brick veneer. There are cut-stone accent bands along the parapet of the building that are dirty/discolored. The building envelope expresses general deterioration within masonry walls, fenestration and selected areas. In particular the north masonry wall of the building shows an approximately 4" bulge that requires repair. The remainder of the building masonry will require tuck pointing in selected areas.

The concrete columns and exterior walls are supported by a series of micro-pile foundations and grade beams.

The primary roof structure is a cast-in-place waffle slab. The roof system was recently replaced in the summer of 2022 with a ballasted 60mil EPDM system. The mechanical penthouse roof is a open web steel joist system.

Original aluminum storefront glazing systems adorn the building's facade, while vestibules at the main entrances were replaced 25 years ago. However, an entry vestibule on the north side now serves as storage and exhibits exterior damage, possibly incurred during snow removal or facility vehicle operation. There are a series of egress only doors located around the resident dining hall that are original to the building. Hollow metal frames and wood passage doors serve most of the rooms in the building.

A new loading dock project was completed in 2021 on the upper level of the building. There is no direct access for drivers to enter the loading dock, they must enter through a separate vestibule adjacent to the dock.

The interior partitions are painted CMU of varying width and metal stud framing with gypsum wall board or tile finishes. Wall base is typically a 4" vinyl base.

Floor finishes vary throughout the building. Main circulation paths, and seating areas feature carpet tiles. The offices and meeting rooms feature broadloom carpet. The wrestling practice room has a wall-to-wall 2" wrestling mat over carpet tiles. Back of house and kitchen areas are a mix of quarry tile, vinyl composite tiles (VCT), ceramic tiles, seamless epoxy floor, and exposed concrete. The staff locker room was noted to have ACM floor tiles that are intended to be abated prior to a renovation of Esker.

The ceiling systems are typically 2'x2' acoustic ceiling when finished. Limited areas have a hard ceiling. Many areas are exposed to the concrete structure. Previous renovations removed ACM adhered acoustic ceiling tiles from the main resident dining seating area.

The surrounding exterior site elements remain unchanged since the building's inception. Notably, the concrete paving at the south entrance exhibits extensive cracking, crushing, and spalling. All exterior concrete stoops require replacement, and several north-side exterior doors lack proper stoops. The concrete pavers on the east side of the building have settled, posing tripping hazards for pedestrians, while the existing retaining wall on the east side shows signs of deterioration.

Mechanical, electrical, and plumbing systems within the building have reached the end of their useful life. The electrical transformer room experiences water infiltration during heavy rain events, and the mechanical penthouse requires brick tuck pointing.

The building's elevators do not conform to current ADA standards for controls and have exceeded their operational lifespan.

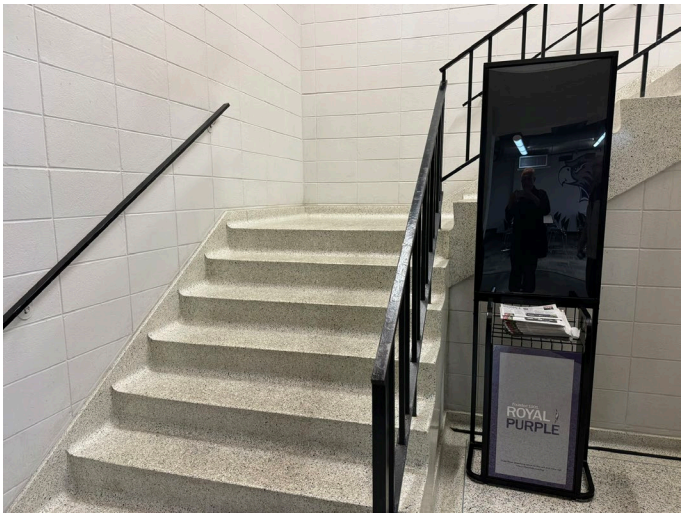
To address accessibility concerns, power actuators have been retrofitted to the main entrance doors on the south and east sides of the building.

Kitchen hoods are painted steel that is failing, ceilings do not meet current kitchen standards

Kitchen hoods fire suppression system location and mounting style do not meet current kitchen standards

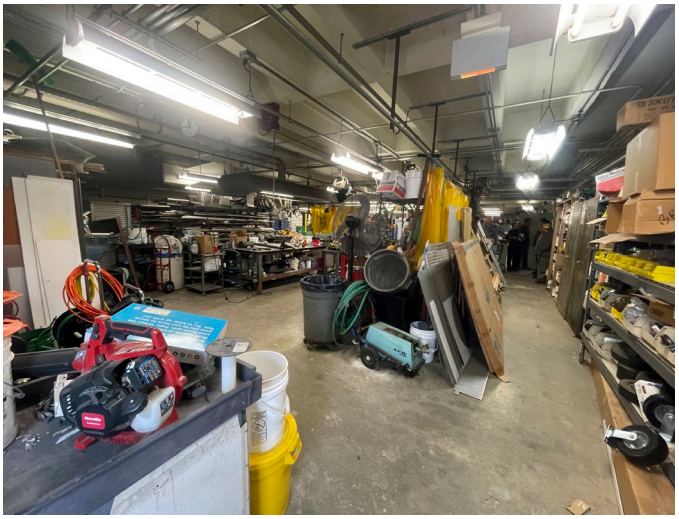
Kitchen finishes are damaged and beyond their expected lifespan

Kitchen hood painted steel is failing creating an unsafe condition for food prep.



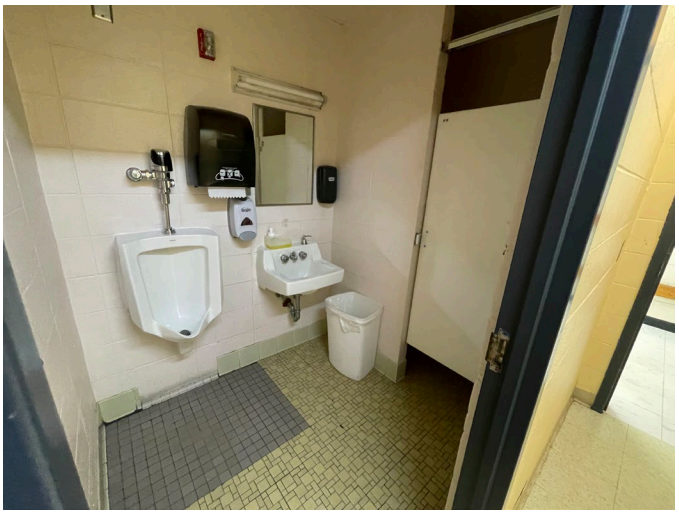
Existing interior stair's handrails and guard rail is not code compliant.

Bathrooms do not meet current ADA accessibility standards or UW Campus Universal Design Guidelines

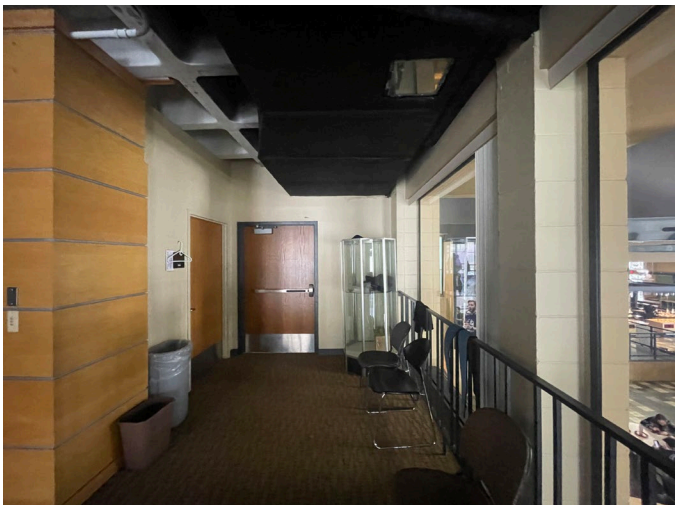


Facility Maintenance Shop currently occupies lower level space that could be used for new kitchen

Underused meeting spaces with limited access to daylight



Building support spaces are dated and in need of repair



Dark circulation paths with no connection between adjacent levels

Floor tiles were identified as Asbestos Containing Material (ACM) by Campus

- The interior spaces of Esker are a collage of materials and styles spanning the many decades of the building's life.
- There have been efforts to remove all Asbestos Containing Materials (ACM) over the last 20 years and those efforts are nearly complete.
- The floor to floor height of the building's lower level requires careful placement of HVAC with coordinated shaft locations.

3.1. Existing Condition Table

Building Category	Existing Condition	Proposed Solution

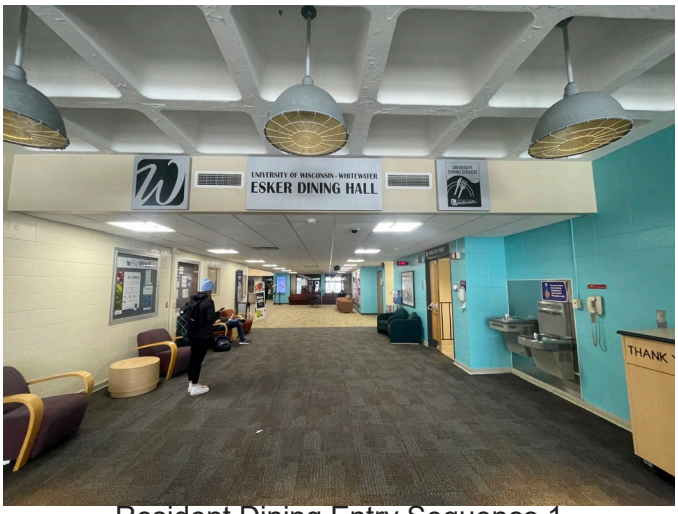
1. Code/ Health & Safety	• Esker Dining Hall is currently non-compliant with the allowable square footage according to 2021 IBC Table 506 based on the building construction type and occupancy type.
	• A-2 Occupancy, Type IIB Construction, NS (Non-Sprinkled)
	• Allowable square footage per floor= 9,500 SF (Table 506)
	• Current square footage
	  • Lower Level = 42,000 SF
	  • Upper Level = 28,941 SF
	• Automatic Sprinkler System is required when fire area is > 5,000 SF or the occupant load is 100 or more. (903.2.1.2)
	• Exit Travel Distance is <200' (Table 1017.2) - Meets Code
		Provide an Automatic Sprinkler System to bring building to current code requirements.
		• 2021 IBC Table 506
		• A-2 Occupancy, Type IIB Construction S-1(Fully Sprinkled)
		• Allowable square footage per floor = 38,000 SF (Table 506)
		• Total Allowable area 76,000 SF

2. Roof	• The roof is in good condition and does not require replacement as a part of this project. • Roof system was replaced in 2022 • 60 mil ballasted roof membrane over tapered insulation	Patch as required after demolition of existing roof top equipment. • The renovation project must maintain the existing roof warranty.
3. Envelope	• 4" Brick veneer over 2" rigid insulation over 6" & 10" CMU backup. • Cut stone facing over windows and spandrel conditions. • North wall shows a significant bulge in the brick. • The exterior brick shows signs of cracking and broken bricks.	• Brick tuckpointing is recommended around the entire building. • Recommend exploring the cause and extent of the brick bulge on the north side of the building. • The renovation project recommends cutting openings in the wall and replacing with curtain wall.
4. Glazing/ Entrance Systems	• Exterior windows are the original aluminum storefront systems. • Entry vestibules were replaced 25 years ago.	• Replace all windows and doors as a part of the proposed renovation with thermally broken window and entry systems.

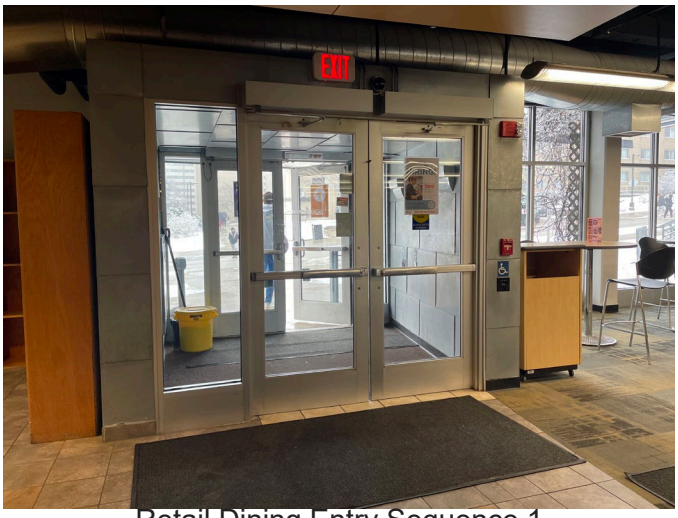
5. Interiors	• Interior partitions consist of CMU or metal stud framing. • Finish faces of the partitions vary throughout the building and include painted GWB (paint is suspected to contain lead due to the age of the building), ceramic tile, painted CMU, acoustic panel treatments. • Ceilings are 2x2 acoustic tiles, painted GWB, or painted structure. • The waffle slab above the main dining hall have acoustic treatments adhered to the concrete pan in each bay. • Previous renovation projects removed Asbestos Containing Material (ACM) from acoustic wall and ceiling treatments • ACM floor tiles have been identified in the staff locker area • Floor finishes are a medley of carpet tile, broadloom carpet, quarry tile, ceramic tile, VCT, seamless epoxy flooring, and exposed concrete. • Some areas do not comply with the ADA Standards for Accessible Design.	• The renovation will demolish all interior partitions and finishes. • Abate all lead paint and ACM throughout the building. • New interiors will comply with ADA and UW-Whitewater Universal Design Guidelines. • Provide non-slip flooring in all kitchen areas. • Provide sufficient number of water closets, urinals, and lavatories to meet the occupancy requirements of the building through a mix of group and single occupant restrooms. • Provide accessible restrooms
6. Circulation	• Open stair between upper and lower level is not considered a means of egress and is acceptable. • Elevator controls do not meet ADA • Campus is providing two elevators in all new projects for redundancy. • Exterior stair does not meet code. There is no handrail, only a guard rail at 42” AFF. The stair risers heights vary along the run. There is a significant tripping hazard at the top of the stair.	• Replace the two existing elevators, shafts to remain. • Provide two new elevators and shafts. • Provide new open stair between upper and lower level. • Replace the existing exterior stair.
6. Food Service Equipment	• All food service equipment is past its useful life. • Hood are aging and does not meet the current food safety standards. • Most surfaces in the kitchen, have deteriorated and exposes the food preparation environment to contamination.	• Replace food service equipment.

7. Structural	• Micro-pile foundations and grade beams • Site cast reinforced concrete columns and beams • Primary roof structure is cast-in-place waffle slab	• Confirm existing structure can support relocating the facility shops from the lower level slab on grade to the upper level. Existing slab is designed to 80 PSF
8. MEP Equipment	• All MEP equipment has reached the end of its useful life.	• Replace MEP systems.
9. Site	• The building is built into a hill. • The site has a significant downslope south to north. • The electrical room on the lower level has water infiltration under the door due to site runoff during heavy rain events.	• Regrade the site on the north side of the building to provide appropriate drainage.

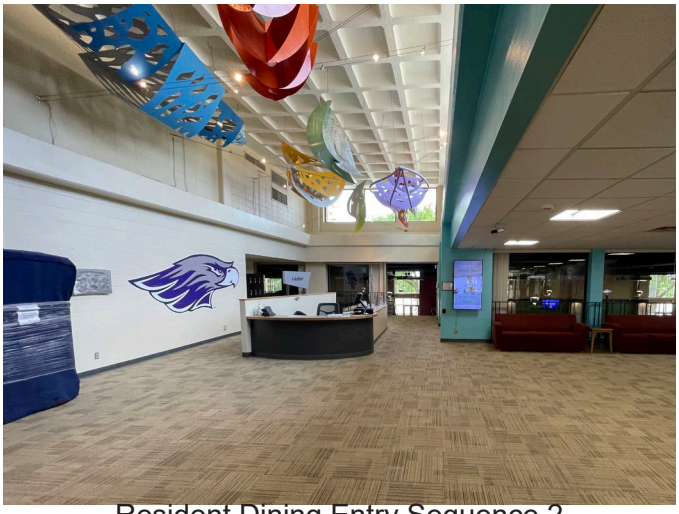
3.2. Entry Sequence



Resident Dining Entry Sequence 1



Retail Dining Entry Sequence 1



Resident Dining Entry Sequence 2

Retail Dining Entry Sequence 2

Resident Dining Entry Sequence 3

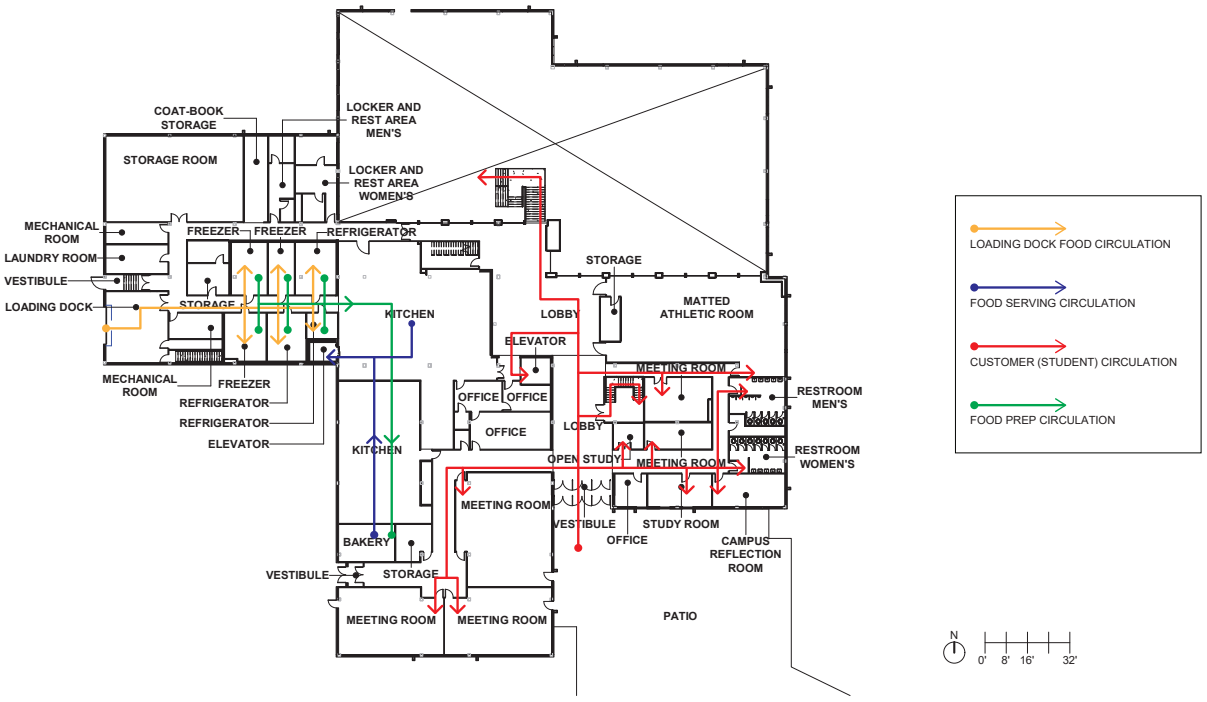
Resident Dining Entry Sequence:

- Currently visitors enter Esker Hall through the upper level on the south side of the building. There is a controlled point of sale (POS) for resident dining. To get to the serving area occupants need to take the stairs or elevator to the ground level.

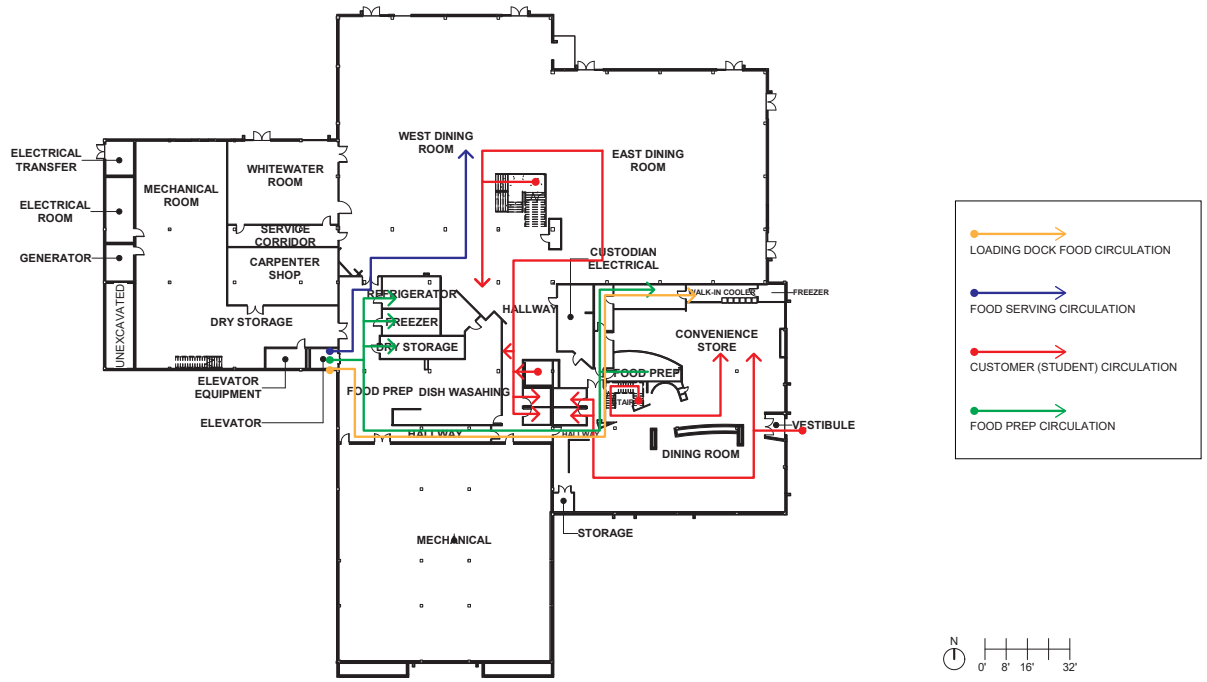
Retail Dining Entry Sequence:

- Retail dining customers may enter through the east side of the building on the lower level and have direct access to a seating area, convenience store, and two made to order food options.
- If a resident dining customer enters through the east side of the building they need to go upstairs, pass through the POS, and then go back downstairs to get their food.

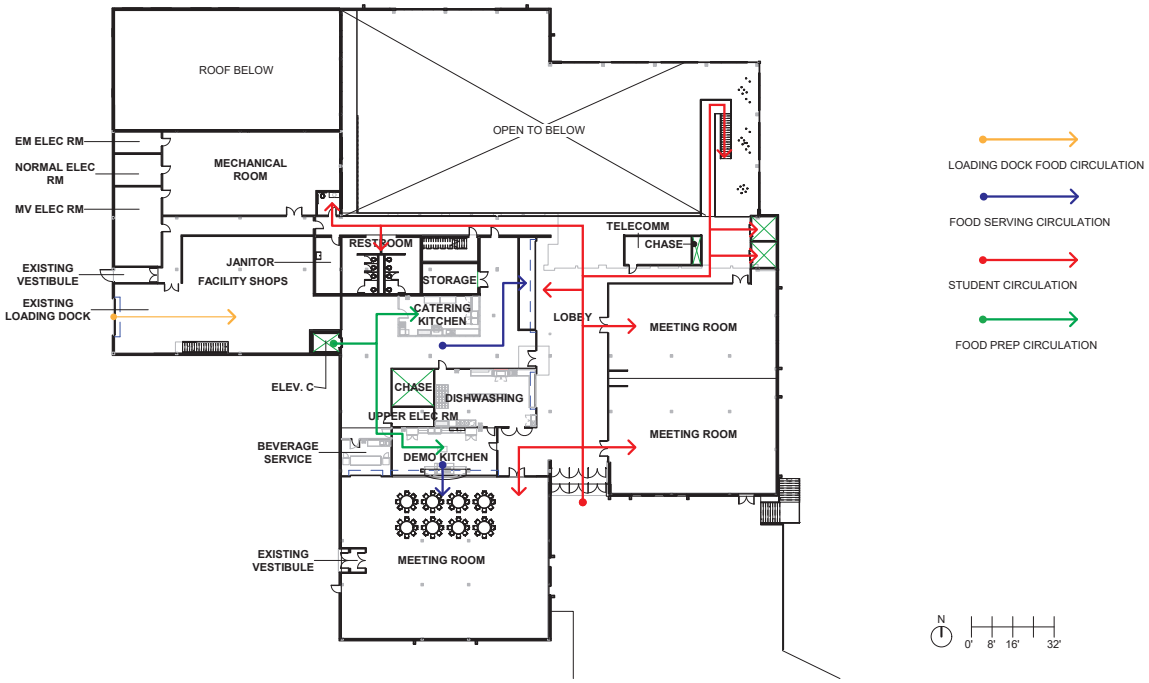
3.3. Circulation Diagrams



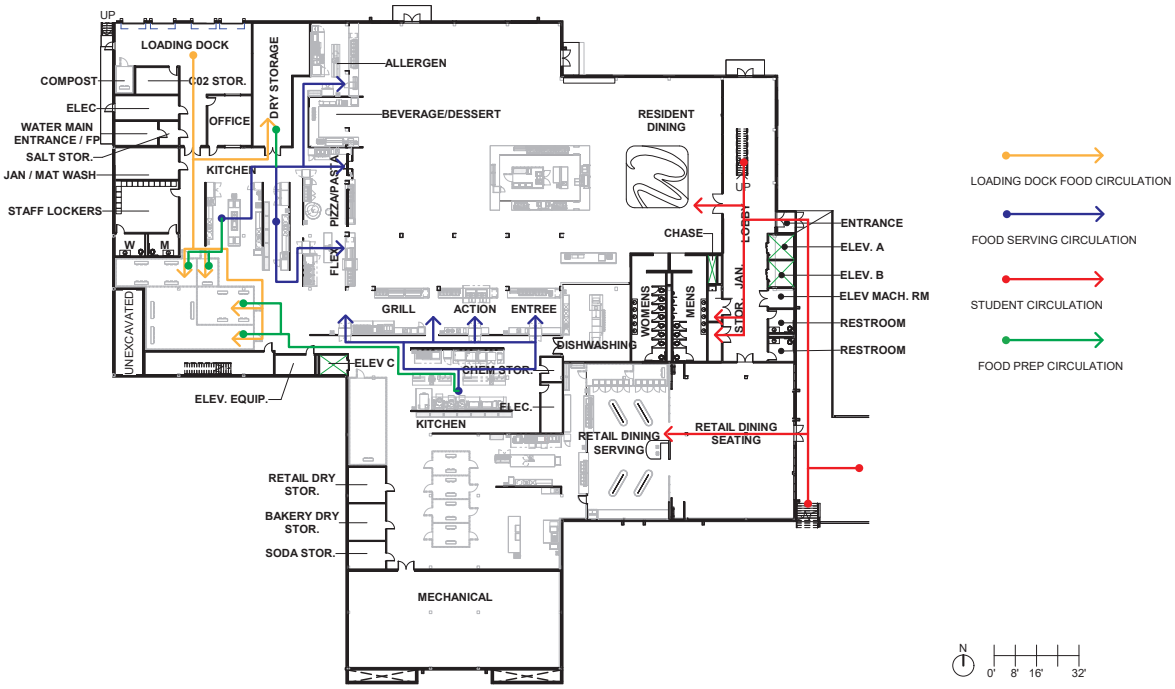
ESKER DINING HALL EXISTING FIRST FLOOR CIRCULATION DIAGRAM



ESKER DINING HALL EXISTING GROUND FLOOR CIRCULATION DIAGRAM

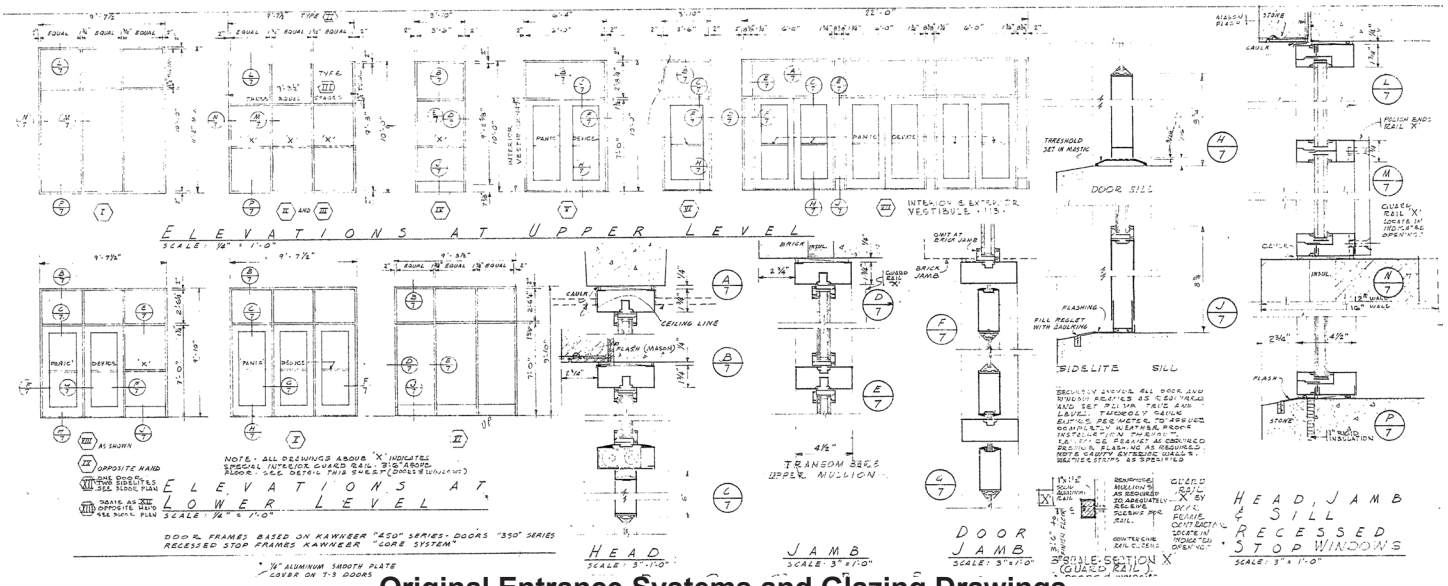


ESKER DINING HALL PROPOSED FIRST FLOOR CIRCULATION DIAGRAM

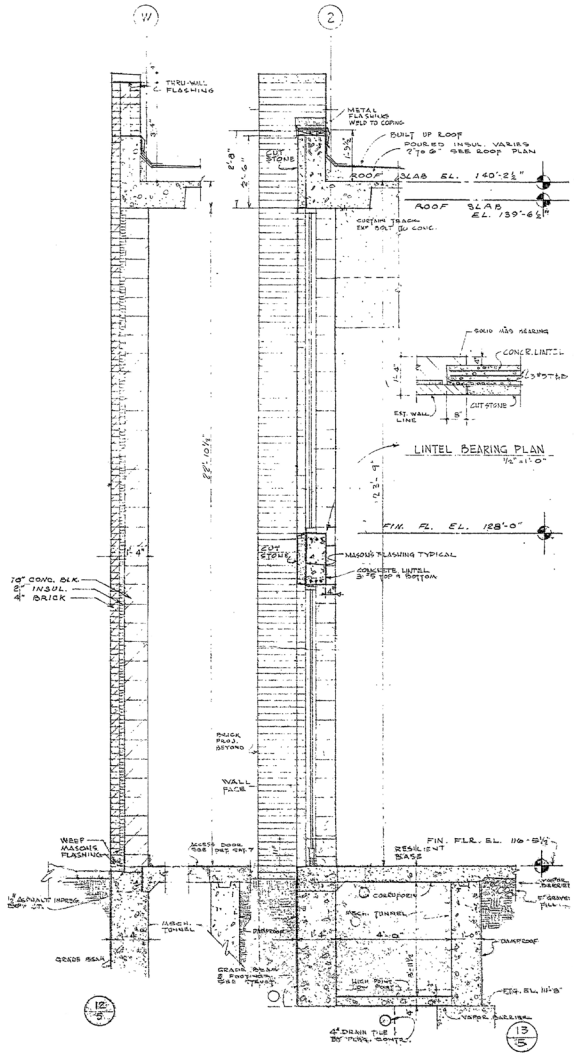


ESKER DINING HALL PROPOSED GROUND FLOOR CIRCULATION DIAGRAM

3.4. Existing Envelope



Original Entrance Systems and Glazing Drawings



Original Wall Section Composition

Exterior
4” Brick
2” Insulation (Assumed mineral wool insulation at R3.5/Inch)
6” & 10” Concrete Block
Interior

R-Value ~9.9
U-Value (1/R) = .1

There is no air cavity in the original wall composition, and no indication of an existing Air and Vapor Barrier (AVB).

Original Storefront Composition:

Basis of Design : Door frames based on Kawneer “450” series doors “350” series recessed stop frames Kawneer “core system”

Aluminum Storefront System
1” Insulated Glass

Roof Composition:

60mil EPDM ballasted roof installed 2022
Roof drains were not replaced at that time.

4. Solution:

The primary function of the building is to prepare and serve food to students in three different venues, and offer more concentrated food service during the summer camp programs.
Resident Dining
Retail Dining and Store
Catering Dining at the Event Center

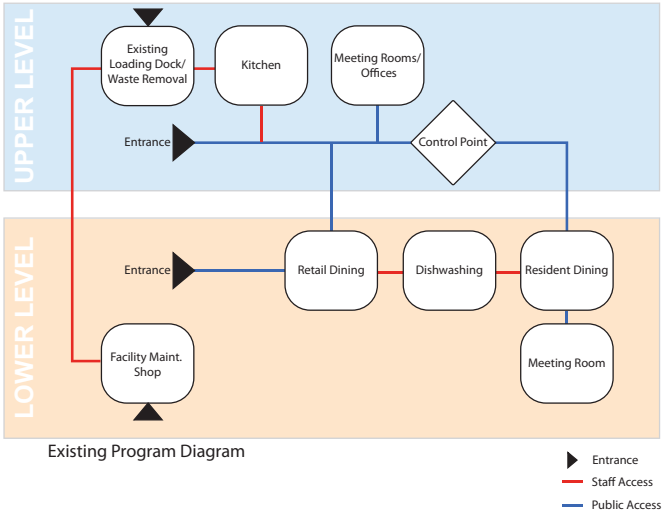
Conceptually, this project proposes to concentrate all food production,on the lower level to streamline the entire process on a single floor, at grade, integrated with resident dinning and retail dinning, and to dedicate the upper floor to all event and conference functions.

4.1. Access and Circulation:
This approach will modify the building's access and circulation path creating a primary entrance on the lower floor to a lobby. From this central lobby, students may enter the resident dining hall, though controlled access, enter retail dining and store, or reach meeting rooms on the upper floor via elevators or stairs.

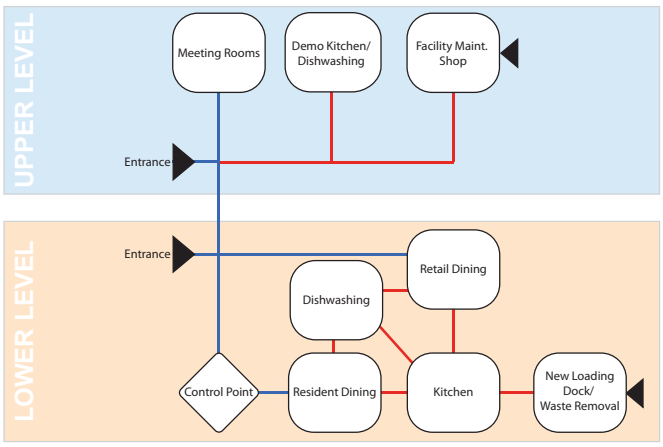
The existing building entrance on the upper floor will function as the primary event and conference center entrance. The lobby that will function as a break out space for three meeting rooms, with access to the banquet serving line and an open balcony to the Resident Dining Hall.

4.2. Functional Groupings:
The proposed modification to the building organization is supported by the following program requirements, and best practices to improve building overall functionality.

4.2.a. Concentrating Food Production and Serving on the Ground Level:
Kitchens benefit from ground level locations to accommodate proper trench drains and corresponding deep under floor plumbing, depressed insulated walk-in floors, and heavy weight of cooking and processing equipments.



Existing Program Diagram



Proposed Program Diagram

4.2.b. Integration of Preparation Kitchen with the Serving Outlets:
Students expect fresh food cooked to order, and the relation of the preparation kitchen and serving outlets are critical in supporting this approach.

4.2.c. Loading Dock, Deliveries and Trash Removal:
A critical component of the food service production and commissary operation is a dedicated and efficient shipping and receiving component. This project proposed a new modern loading dock addition on the building's north side. The loading dock addition will include trash and recycling dumpster access,and two bays for receiving material and shipping prepared food to other outlets on campus.

The new loading dock location on the lower level and adjacent to the primary storage and prep kitchen allows for deliveries to efficiently be received and stored, and packaging to be quickly disposed. The new loading dock takes advantage of the natural site grading to create proper access

without depressing or excessively sloping of grade. Its roof will be designed to accommodate grease fans and other refrigerant condensing units.

The program requirements of locating all food service activities and dining on one floor takes up all available existing areas. All Food service operations' with significant receiving and shipping(this facility will provide food to other outlets on campus) components benefits from proper loading dock size and location, to improve efficiency, and food safety.

The existing loading dock is located on the upper floor and will continue to serve the facility maintenance shop and the Event Center.

4.2.d. Retail Dining and Convenience Store:
This outlet serves as a place where students can buy made to order food, grab and go sandwiches and drinks, coffee and tea, fresh fruits and vegetables and other convenient store type products. It is a multi-function outlet that provides cooked to order meals, convenient store products.

The space is adjacent to the main kitchen and will utilize its infrastructure, including delivery pathways, dish-washing and trash removal.
The space will have seating for about 100 students and is designed to remain open 24 hours a day, operate independently from the rest of the building, with limited access to the lobby and restrooms.

4.3. Event Center: Future Phase:
Due to budget limitations, this project recommends limiting the upper floor renovation to MEP and Fire Protection, and to postpone the interior alteration of the spaces until future opportunities arises and needs are identified. In order to size the MEP system properly, and based on campus comments, this report includes an Event Center on the upper floor. This work is not included in the report's budget, except the main MEP services and complete fire protection as required.

The campus has expressed a desire for large group meeting spaces, mainly to support large summer camp attendees. The project proposes a future Event Center with a banquet kitchen that will serve food, prepared in the main kitchen, and delivered via a service elevator to the upper floor. The event center will use the existing lobby as a breakout space.

The Event Center will offer two large meeting rooms with one capable of subdivision into two smaller spaces.

4.3.a Banquet Kitchen:
This space will utilize the dish-washing room that is constructed as part of the phasing plan and will offer a serving line as well as the opportunity for traditional table serving.

4.3.b. Demonstration and Student Access Kitchen:
Students and the campus has identified a need for student participation in food preparation, as a social and educational activity. This project proposes a kitchen adjacent to the main meeting spaces separated with a retractable partition, capable of functioning independently or as a demonstration kitchen to the larger meeting room.

4.4. Facility Maintenance Shops: The existing building houses the Campus facility shops on the lower level. It will be temporally moved out during construction and will be located on the upper level utilizing the existing loading docks. New shelving and other shop related support equipment will be provided.

4.5: Building Support Spaces:
3.6.a. Restrooms are provided on each floor with individual unisex restrooms for greater privacy.

4.5.b. Custodial Rooms: properly sized custodial rooms are provided on each floor, sized to accommodate floor cleaning equipments, storage and mop sinks.

4.5.c. Mechanical, Electrical, and Plumbing, and Telecomm Spaces: This project proposes a new upper floor mechanical /electrical room adjacent to the new loading dock to room so that some of the existing systems can remain operational during the phasing periods.

This mechanical room location is also favorable to serve the main dining volume, and access to outside air.

Penthouse Mechanical space will be reconfigured to accommodate new equipment.

Lower level south west Mechanical room will be reduced in size and will utilize existing area ways. This mechanical room will also serve as the bumping main entrance and corresponding Fire protection apparatus.

A Telecomm room is designed on the upper level in a central location to serve most of the building. Additional nodes mat be provided as the design progresses and needs are finely defined.

4.6. Building Exterior Architecture Envelope:
Esker Hall reflects the architecture of its 1960's era design approach, brick and block walls with minimal insulation, and limited fenestration. This project proposes improvement to the building exterior architecture by increasing amount of fenestration, improving building's thermal quality where possible.

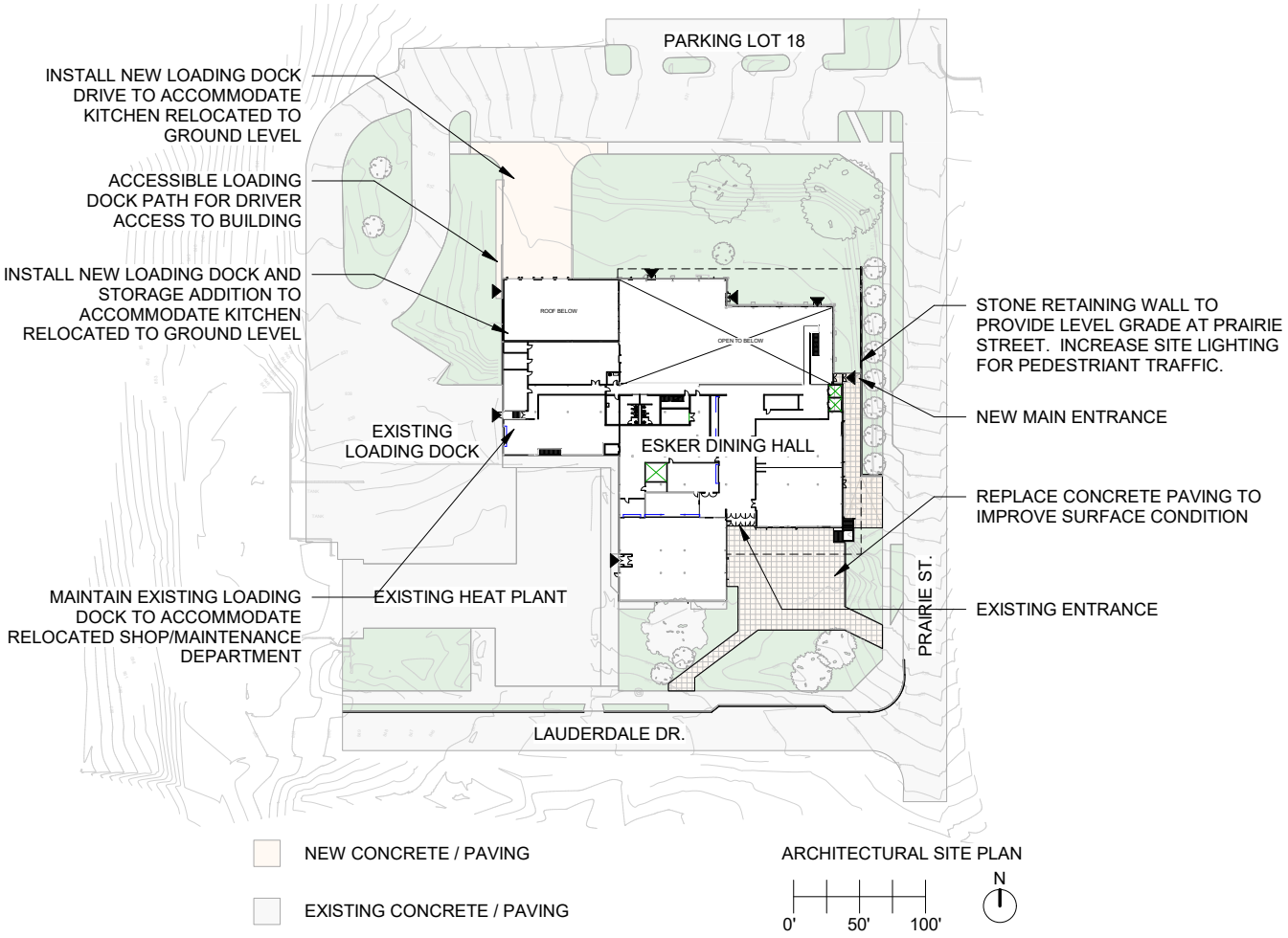
The building's new primary entrance will be located on the east side facing the Resident Hall cluster that it serves, and will lead to a lobby area through a vestibule. A new retaining wall will raise the grade and create entrance plaza, that will connect the two entrances via a reconfigured set of exterior stairs.

4.7. Site Modification to Improve Access:
The project proposes three modifications to the building site

4.7.a: Loading Dock Access Improvement:
The existing roadway to the site will be modified to accommodate larger truck activities, and trash pick up.

4.7.b. Existing Retail Store Entrance:
Will be expanded northward and will become a portico.

4.7.c. Existing site stair:
Will be modified to be closer to the building and within the portico to be protected from the elements and connect the two entrances.



4.8. Phasing:

Esker Hall's existing layout includes a kitchen on the upper floor and serving facilities on the lower level, with meeting and office spaces also situated on the upper level. This adaptable configuration presents a distinctive opportunity for a phased renovation approach, enabling uninterrupted food service operations throughout the construction process.

The project recommends a 3 phase approach to its execution, to maintain occupancy and functionality. The feasibility of this system considered the following factors to support this approach.

Functionally, the existing food service kitchen located on the upper floor can remain operational with a new dishwasher and minor modifications made to the existing upper floor. It can also serve as a resident dining and summer camp dining during the second phase.

The proposed solution recommends a complete replacement of all MEP system with new pathways, mechanical and electrical rooms, and other support systems, thus creating an opportunity to retain the existing systems with limited modifications during construction. The building's substantial concrete structural frame will allow construction activities to proceed with limited disruption to the building occupancy.

The new loading dock will provide a construction path for demolition and new work to occur in relative isolation from student pathways.

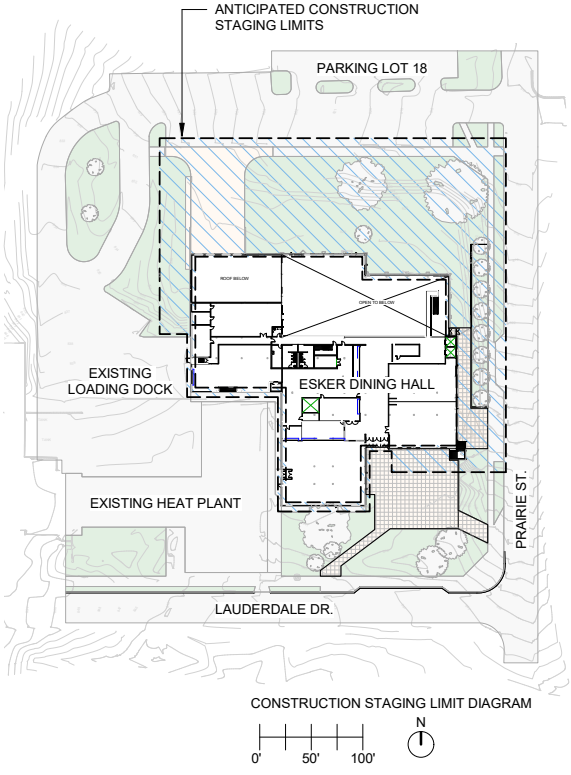
Academic schedules typically offer holiday periods that the contractor can use to perform critical disruptive activities, such as system shutdowns, switch overs, and major relocations. These periods will be identified as part of the construction documents, so that expectations are part of the contractual requirements .

PHASING CONCEPT:

Phase 1:
Selectively demolish partitions on the upper level adjacent to the existing food service kitchen. Repurpose this area to create a temporary dining area. Relocate the existing ground floor resident dining seating and serving to the underutilized upper floor adjacent to the existing kitchen. Allow selective MEP systems to remain operational to maintain continuity of food prep and dining operations. The Campus will relocate the facility maintenance shop prior to the start of the project.

Phase 2:
Renovate lower level including a new loading dock addition, exterior envelope improvements and entrance, resident dining kitchen and dining, 24-hour retail store and cafe, and complete MEP replacement.

Phase 3:
Renovate the upper floor as an event center with a demonstration kitchen for student use. Construct three meeting spaces with a catering kitchen, and ample space for the facility maintenance shop, relocated form the lower level.



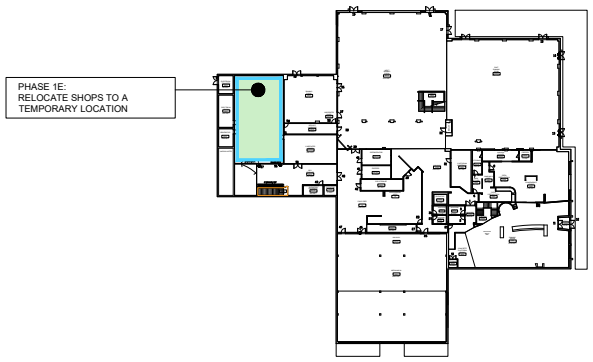
Above: Recommended construction limits.

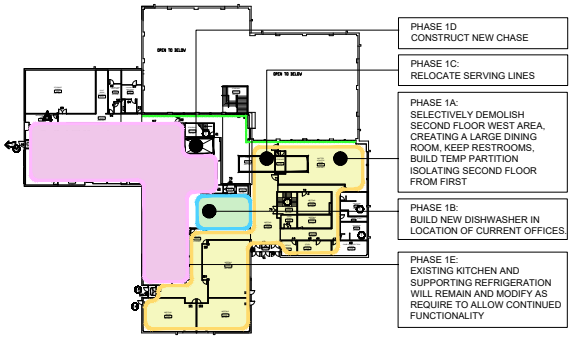
4.8.a. Phasing Diagrams

LOWER LEVEL

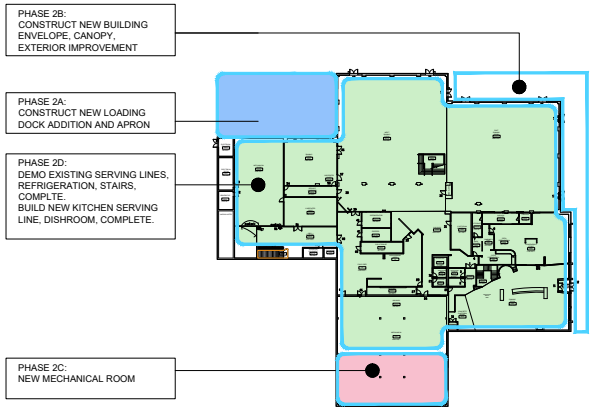
UPPER LEVEL

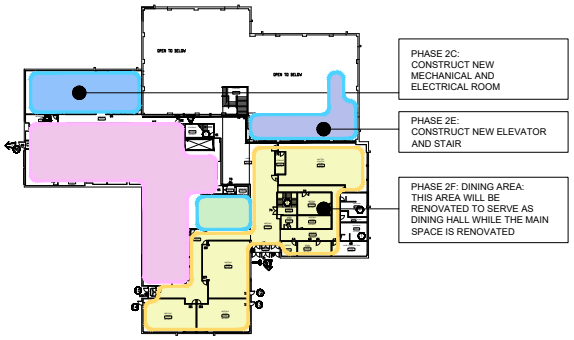
PHASE 1



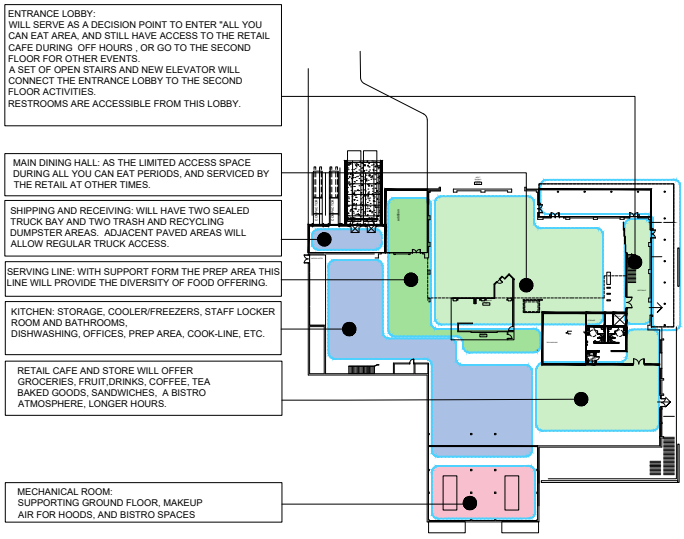


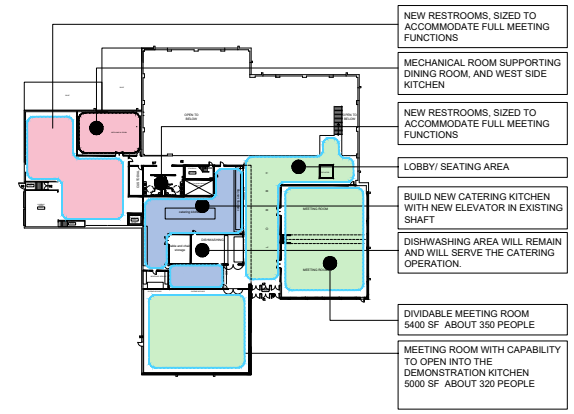
PHASE 2



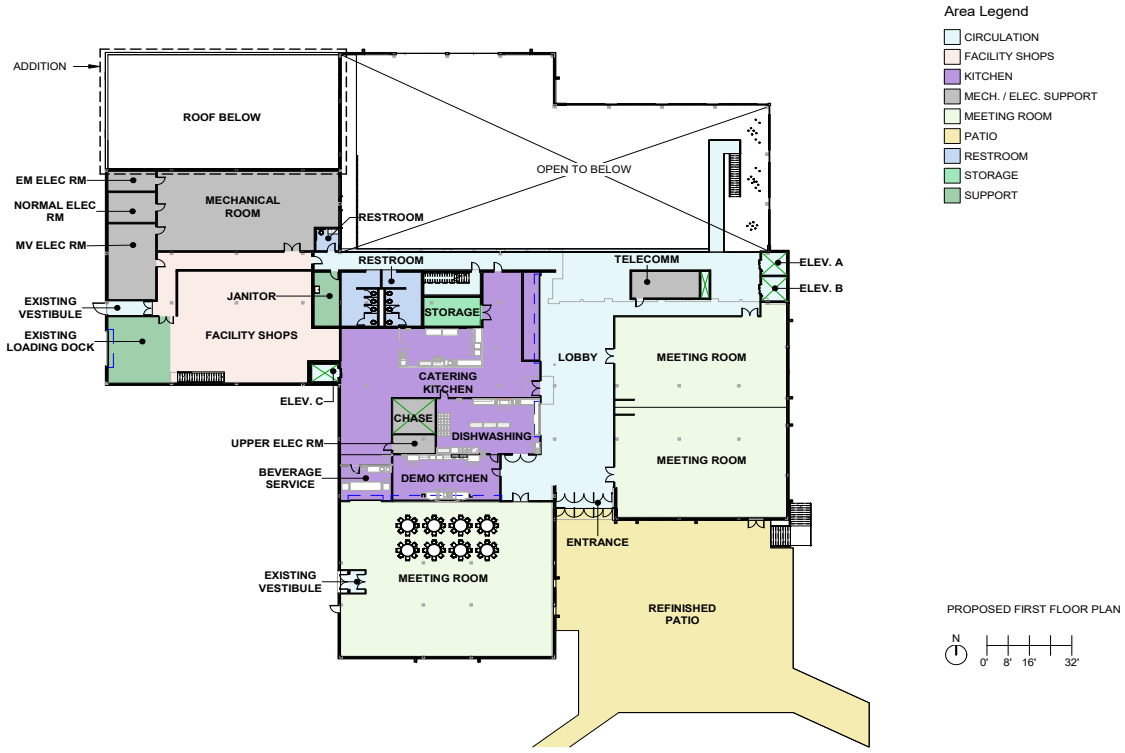


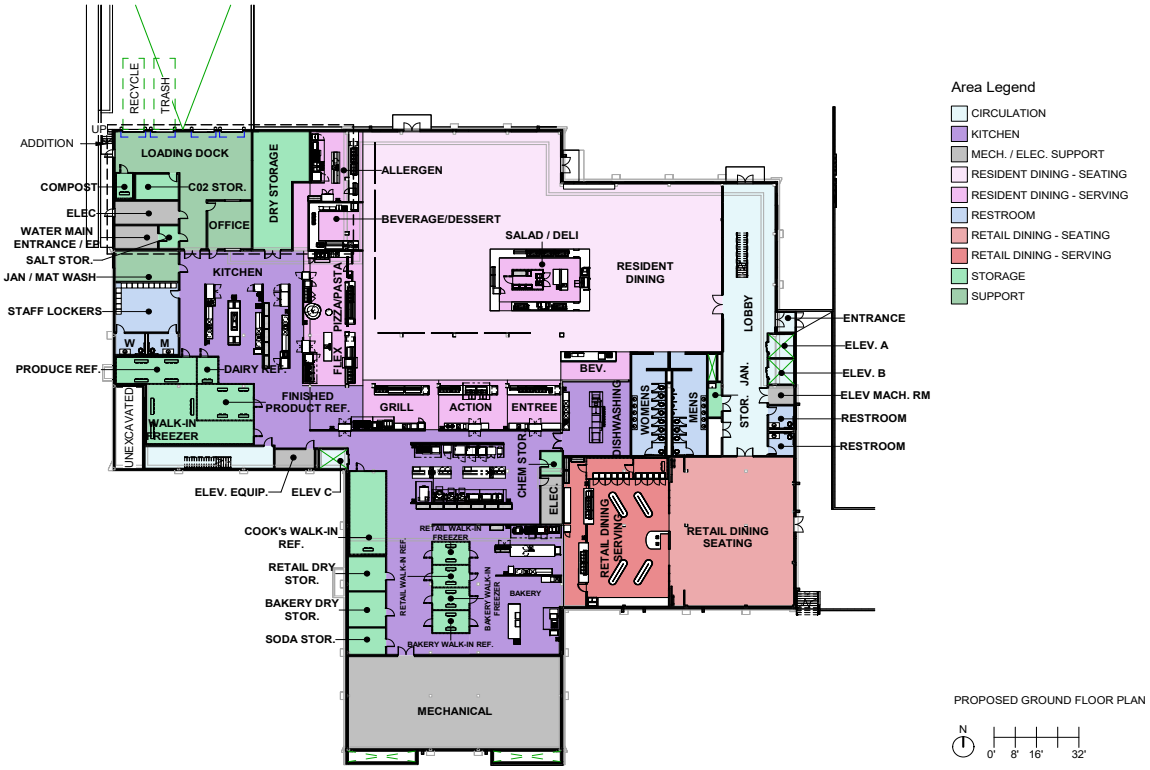
PHASE 3





4.8.b. Proposed Floor Plans

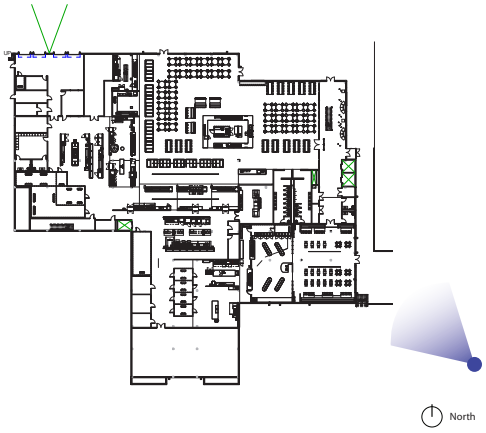




Reconstruct existing site paving to provide accessible entrance free of tripping hazards and uneven surfaces.

Reconstruct existing site access steps to link the lower patio area with the upper patio to create a more connected exterior spaces.

Above: Proposed southeast corner from Prairie St.
Left: Existing east elevation

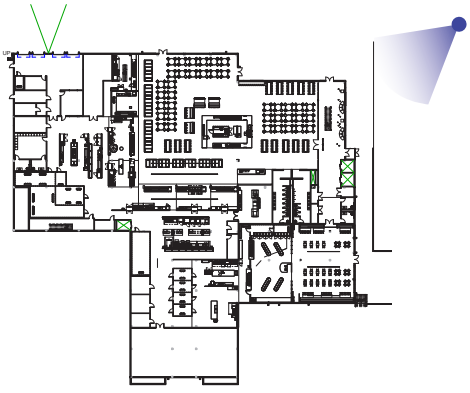


4.9 Renderings

New landscaping and exterior lighting to enhance approach sequence, improve safety, and create buffer between vehicular and pedestrian pathways.

Construct retaining wall with limestone cladding and raise the adjacent grade to create a new entrance. New signage to enhance the building's identity on campus.

Above: Daytime view of the site improvement on Prairie Street. New sidewalks, curbs, and landscaping will connect the building and its outdoor environment.
Left: Existing condition

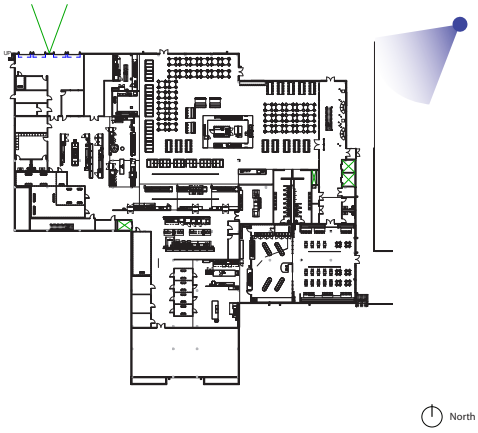


4.9 Renderings

Proposed new building primary entrance. This entrance will lead into a lobby that will connect first and second floor, resident dining and retail dining, as well as create a central gathering space in the building.

Proposed exterior lighting and landscaping will define the building's edge.

Above: Evening view of the site improvements on Prairie Street.
Left: Existing Condition



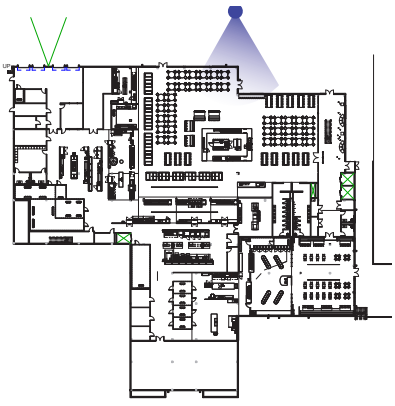
4.9 Renderings

Modify existing masonry envelope to introduce north facing glazing, adding day light into the dining hall. Existing wall exhibits a significant bulge in the masonry that can be resolved with this glazing strategy.

Construct new addition to accommodate loading dock serving shipping and receiving, trash and recycling dumpsters.

Above: Proposed loading dock addition will follow the existing access road and takes advantage of the existing building to road elevation difference.

Left: Existing condition: The location of proposed loading dock addition is used as maintenance parking and patio area.



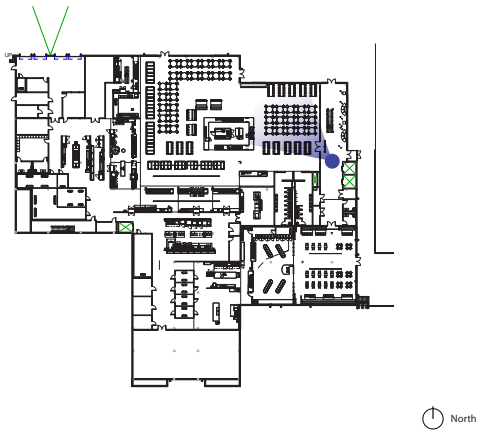
4.9 Renderings

Main entrance to the Resident Dining area.

Stairs and walkway provides access to the second floor event space. The second floor space will function as overflow student seating as well as traditional event destination. Two new elevators provide additional access between levels.

Proposed lobby will function as the main entrance space with controlled access to the Resident Dinning and open access to the second floor and Retail Dining.

Above: Proposed
Left: Existing Condition



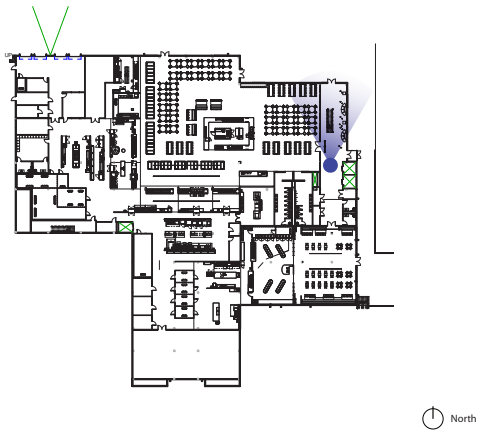
4.9 Renderings

Stair connection to the upper floor event center. Two new elevators provide additional access between levels.

Lobby area with soft lounge seating

Entrance vestibule

Above: Proposed Lobby and Stair to Access Upper Floor
Left: Existing Condition



4.9 Renderings

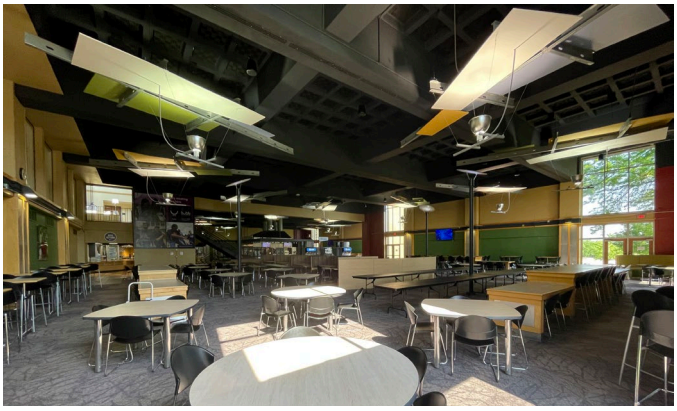
Second floor balcony will overlook the dining space. Wood panels and steel railing will help define the interior architecture of the space.

Provide acoustical sound absorbent material within the pan joist for noise control.

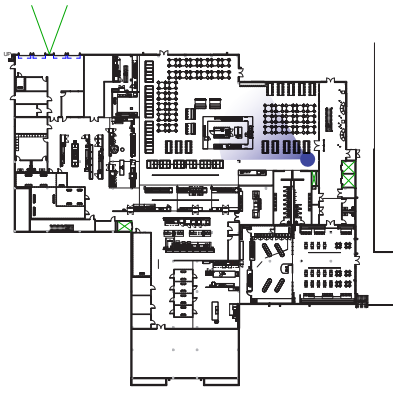
Beverage station and tray drop off area.

Center Island with a walk in refrigerator will function as a focal point, self service grab and go, as well as prepared to order outlet.

Introduce new glazing in existing building envelope to provide greater daylight into the space and enhance the building views and connections to the outdoors.



Above: Proposed Resident Dining Area
Left: Existing Condition



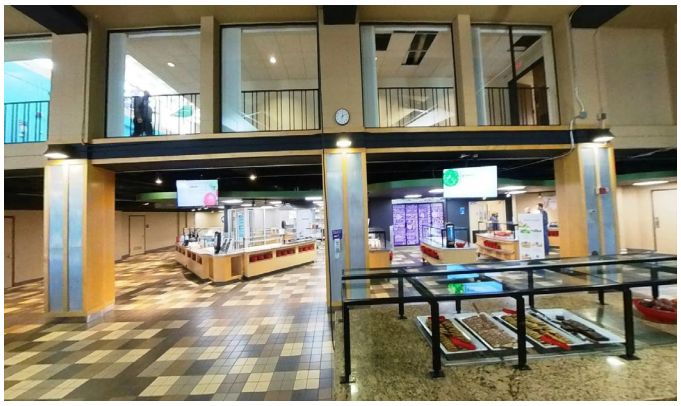
4.9 Renderings

Terrazzo floors in serving areas.

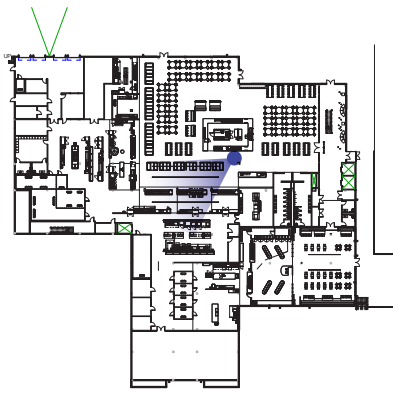
Booth seating along the column line to help define spaces. Accessible seating will be provided throughout the dining area to accommodate UW-Whitewater's students, staff, and visitors.

Food outlets with electronic menu boards

Wood panels covering upper portions of the interior space to help with acoustic quality of the space.



Above: Proposed serving line
Left: Existing Condition



4.9 Renderings

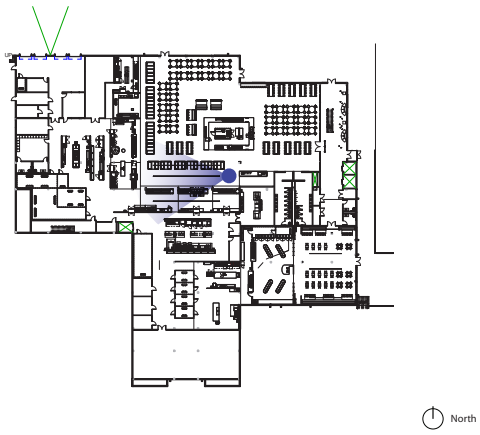
Acoustic ceiling tile for noise control.

Food outlets with electronic menu boards

Serving aisles in front of the food outlets create clear circulation paths through material changes and lighting

This seating area offers a transition from the open double height space of the main dining seating.

Above: Proposed Serving Line
Left: Existing Condition

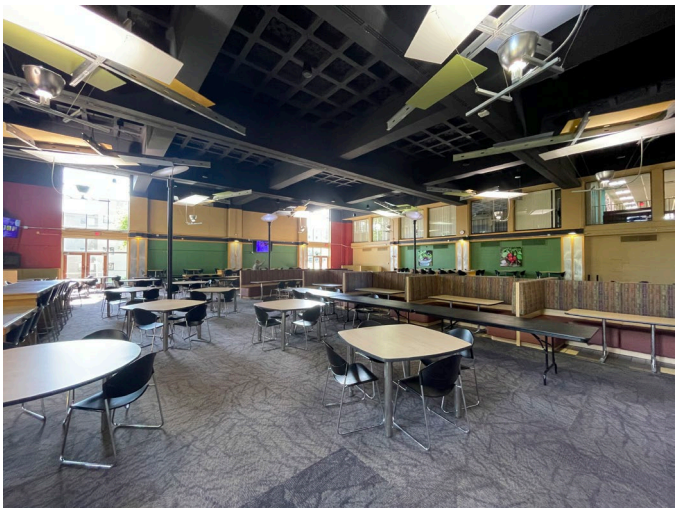


4.9 Renderings

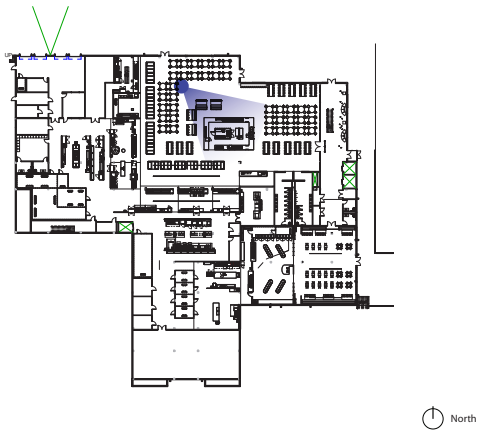
Acoustical ceiling treatment recommended throughout the dining area. Previous renovations adhered acoustic tiles to the pan of the waffle slab.

Center island with a walk in refrigerator will function as a focal point, self service grab and go, as well as prepared to order outlet.

Analog and digital signage to improve user experience.



Above: Proposed Resident Dining Area
Left: Existing Condition



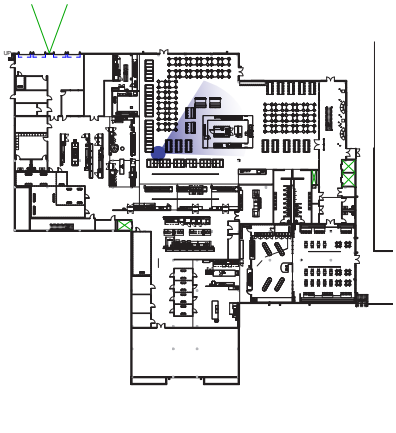
4.9 Renderings

Modify building envelope to allow larger glazed openings to allow daylight and greater connection to the building exterior

Clean and paint existing building waffle slab to enhance indirect lighting strategies.

Center island to provide select served and self service items. Acts as a focal point to define the space.

Above: Proposed Resident Dining Area
Left: Existing Condition

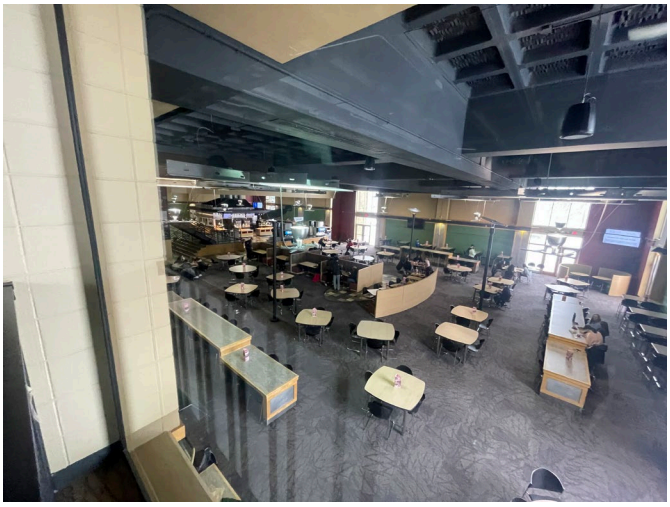


4.9 Renderings

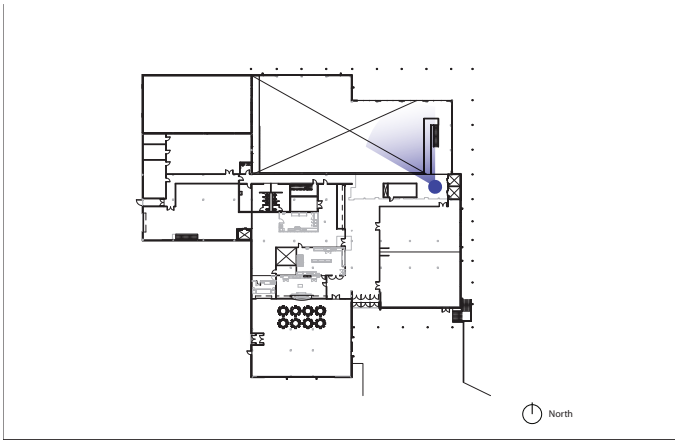
Physical and visual connection between levels

Enlarged curtain wall to provide access to daylight and views to the north

Access to central lobby. Two new passenger elevators provide additional access between levels.



Above: Proposed Catwalk and Stair to Access Lower Floor
Left: Existing Condition

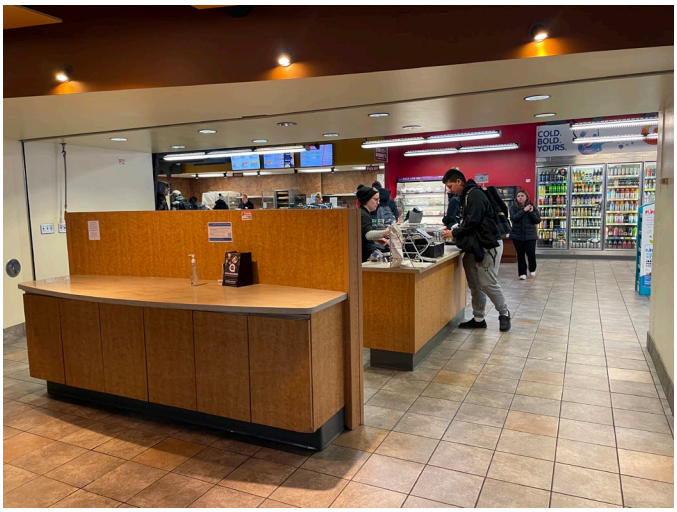


4.9 Renderings

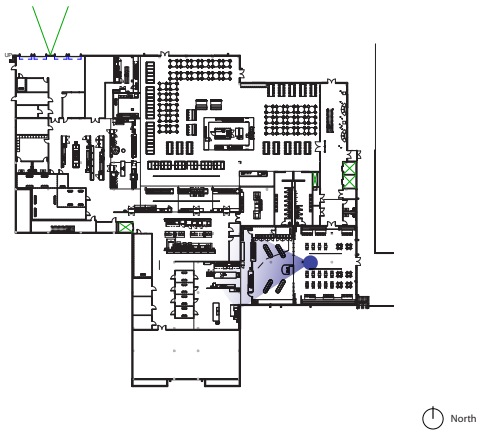
Area available for a self serve coffee/beverage bar

Two retail cooked to order food outlets.

Analog and digital signage to improve user experience.



Above: Proposed Retail Dining and Convenience Store.
Left: Existing Condition

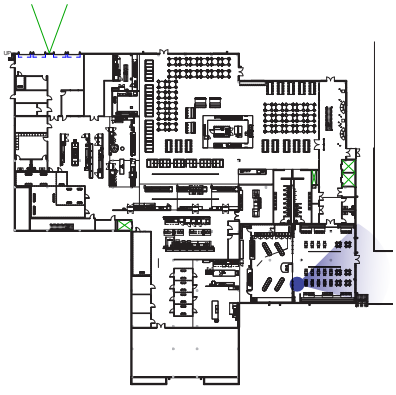


4.9 Renderings

Soft seating and other wood treatments to create a more welcoming space.

Replace existing storefront systems.

Above: Proposed Retail Dining and Convenience Store
Left: Existing Condition



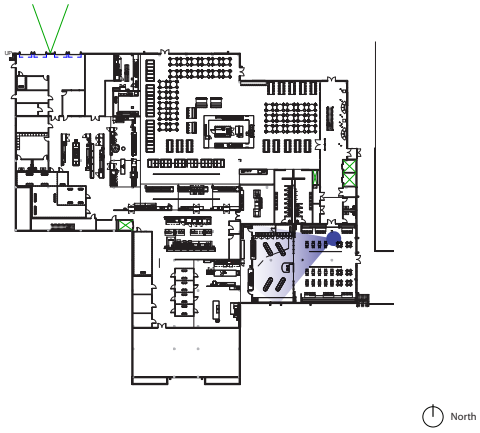
4.9 Renderings

Soft seating and other wood treatments to create a more welcoming space.

Cooked to order food outlets, coffee, and other prepared food.

Acoustical wall and ceiling surface treatments

Above: Proposed retail dining and convenience store



4.9 Renderings

5. Architectural

5.1. Applicable Codes and Design Guidelines

- International Building Code (IBC), 2021
- International Existing Building Code (IEBC), 2021
- ADA Standards for Accessible Design (2010)
- ICC A117.1-2009 Accessibility Standards
- Department of Facilities Development (DFD) Design Guidelines and Integrated Design Review
- Department of Facilities Development (DFD) Accessibility Guidelines
- Department of Facilities Development (DFD) Sustainability Guidelines for Capital Projects
- University of Wisconsin - Whitewater Facilities Management Peer Review
- Wisconsin Food Code (s. 35.93 Wisconsin Statutes 2013)
- National Fire Protection Associate NFPA 96 (2024)
- University of Wisconsin – Whitewater Facilities Management Peer Review
- State of Wisconsin Bureau of Food and Recreational Businesses – Plan Review

Building Occupancy: A-2

Building Construction Type: IIB

(Requires fireproofing of existing penthouse joists)

IBC Table 506.2 Area: UL (Requires Fully sprinkled)

IEBC: Alteration Level 3

Restrooms provided:

Upper level: 4 M, 4 W, 1 Private

Lower level: 8M, 8 W, 2 Private

Staff on lower level locker room: 1M, 1 W

Staff locker room: 40 Lockers are provided

5.2. Building Envelope:

The building's north and east facades offer opportunity to selectively demolish the existing masonry walls and provide curtain wall system to allow daylight reach further into the main Dining Hall, and create a greater relationship with the outdoor environment.

A series of steel columns will support a portico and will serves three purposes It will protect the existing aging masonry which will help extending its life, will create a covered outdoor space for student use, and it will architecturally create a more contemporary presentation.

Selected portion of the masonry requiring repair will be tuck pointed.

The existing roof has been recently installed and will be modified to accommodate new penetrations as required.

New windows will be added to the building west side allow afternoon light to enter the dining room.

All existing doors and windows will be replaced with new thermally improved units.

New Loading Dock addition will use cavity wall construction.

5.3. Elevators and Stairs:

Three new elevators will be provided to accommodate the program requirement: two will be 3500 Lb two stop hydraulic in new shafts and one 5000 LB service hydraulic elevator will utilize a modified the existing elevator shaft.

The program and new configuration will require one new set of stairs connecting the lobby to the upper floor. The stair will be steel (with luminescent fire proofing) , all railing with be painted steel.

5.4. Security and Access:
The campus has identify the Retail Dining and Store as a 24HR outlet, thus requiring access to the building during its operation. It is accommodated by providing access to the lobby, restrooms and the Store. The detail of the kitchen access and other support spaces are to be determined.

Resident Dining access in controlled through an automatic access point from the lobby.
All building doors will utilize campus access system.

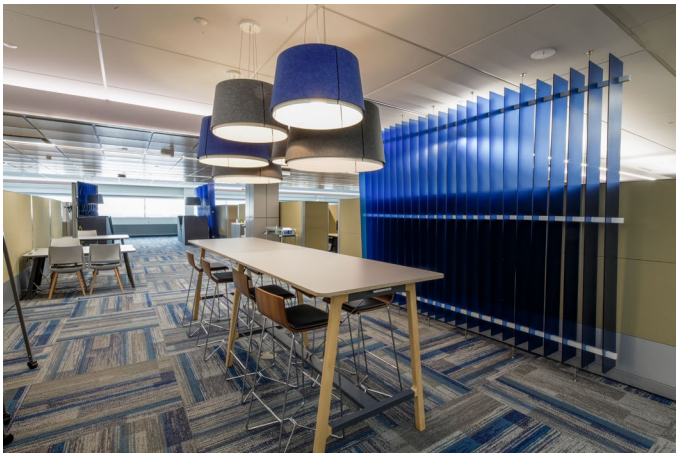
5.5. Finishes:
Generally Food Service and Student Union type buildings benefit from durable, easy to maintain, and timeless finishes. The following outlines are selected as a general direction to help the project cost estimate: Resident Dining / Retail Dining / 4.5.a. Resident dining, and Retail dining, and store: The floor finishes of the main seating area will be a carpet tile system to improve acoustic quality within the voluminous space. Carpet tile allows for easy cleaning and replacement of individual units as required.

Terrazzo floor is recommended in adjacent to the serving areas due to the concentrated traffic patterns, and likely spills. .

The study recommends treating the exposed concrete structure above with an acoustic material such as FilzFelt to improve the spaces acoustic performance. Areas with lower ceiling will utilize Acoustical Panel ceilings.

5.5.a Kitchen:
The floor finish of the kitchens will be a quarry tile system typical in most commercial kitchen settings. Slip resistance is essential in a high traffic and fast-paced environment where worker safety is a high priority consideration.

Wall finishes within the kitchen area will be a porcelain tile system that prioritizes cleanable surfaces for safe food production. A white or lighter color improves cleaning efficiency with the ability to spot spills or splatter more easily than a dark surface. The ceiling will be a drop food grade panel system



Top to bottom: all images are Madison College
Example of terracotta panels on hallway walls
Limestone panels and GWB
Acoustical sound absorbing light fixtures.

5.5.b. Meeting Rooms:
Painted GWB walls with selective acoustical treatments and Acoustical Panel Ceilings are recommended.

5.5.c Lobbies, Circulation Paths, and Common Areas:
Carpet tile systems are a cost efficient material in high traffic pattern areas. Carpet tile allows for opportunities for way finding and branding if desired by UW-Whitewater.

Selected areas that receive greater traffic may benefit from a terrazzo finish.

5.5.d. Restrooms:
Ceramic tile walls and floor are recommended. Solid surface counters are a durable and attractive solution that come in a variety of finishes. The study recommends a lighter color for the ability to spot spills more easily for cleaning.

Top to bottom: all images are Madison College
Example of wood panels on hallway walls
Example of wood panels on hallway walls with display
Demonstration kitchen with residential appliances.

5.6. Furniture :

The following selections are chosen to establish a base of design and cost estimating. They are provided by Interior Investment based on directions from Assemblage Architects.

Interior Investments LLC

Budget Response for UW Whitewater Esker Dining Hall
1 Sept. 2023

Proposed Solutions

DINING HALL FURNITURE

"500 wood chairs with corresponding tables. For the student dining."

Tables can be used in booth settings as well.

Tables QTYs planned for budget:

Booths: 15 Tables
Dining: 142 Tables

- Dining allocations include:
- 300 chairs for 4-seat table = 75 Tables
- 100 chairs for 2-seat tables = 50 Tables
- 100 chairs for 6-seat tables = 17 Tables

OFS | Bistro
Wood outer back.
Upholstered seat and inner-back.
Stool version available.

$995.76 x 500 = $497,880

OFS | Zero
Molded plywood seat and back.
Optional upholstered seat.
No stool version.

Molded seat and back
$806.76 x 500 = 403,380

Molded back, upholstered seat
$912.60 x 500 = 456,300

OFS | Harpin
Molded plywood seat and back.
Optional upholstered seat.
Stool version available.

Molded seat and back
$1,028.16 x 500 = $14,080

Molded back, upholstered seat
$1,178.28 x 500 = $589,140

OFS | Ninteen20
Laminate top.
Metal base.
Variety of sizes and base styles.

$1,000 – $1,600 per table depending on size and base style.
View Base Styles Here

Interior Investments LLC

Proposed Solutions

DINING HALL FURNITURE

"30 Fabric Booths"

OFS | Coact
Plinth Base.
Vertical stitching detail.
Budgeted as 72"W mod-back unit.
Optional integrated power available.
Coact Lite version available.

$3,058.02 x 30 = $91,740.60

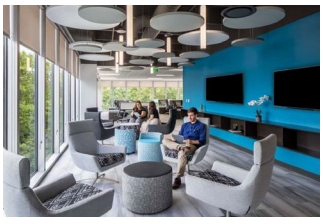
Interior Investments LLC

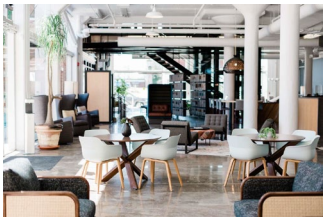
Proposed Solutions

DINING HALL FURNITURE

Furniture inspiration not included in the budget.

Images by OFS





Interior Investments LLC

Proposed Solutions

DINING HALL FURNITURE

"300 stackable chairs for meeting rooms"

OFS | Genus High Density Stacker
Upholstered seat.
Plastic back.
Metal Base
Stacks

$307.80 x 300 = $92,340

OFS | Airus
Upholstered seat.
Back: Plastic, Perforated Plastic, Mesh, Upholstered
Metal Base
Stacks

$475.74 x 300 = $142,722

Interior Investments LLC

Proposed Solutions

DINING HALL FURNITURE

"150 meeting room chairs"

OFS | Pret
Mesh seat and back.

$640.98 x 150 = $96,147

OFS | Sleek
Upholstered seat and back.

$912.06 x 150 = 136,809

Interior Investments LLC

02

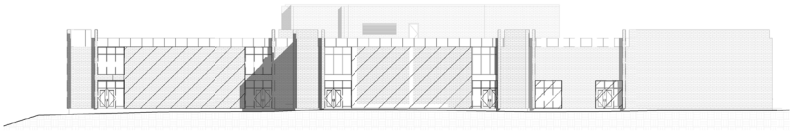
Pricing

Pricing is for budgetary use only.

Additional detail selections required for final pricing.

Interior Investments LLC

5.7. Exterior Elevations



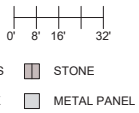
EXISTING NORTH ELEVATION

PROPOSED NORTH ELEVATION

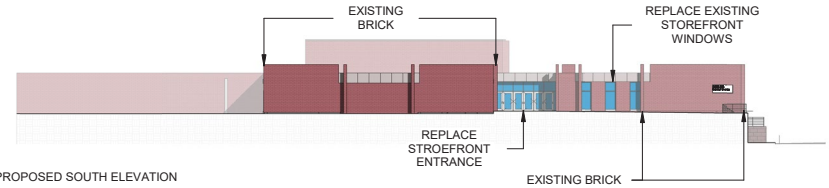
TOTAL SURFACE AREA OF RENOVATION: 7,643 SF

NEW CURTAINWALL: 2,320 SF
CURTAINWALL SPANDREL: 540 SF

2,320 SF/ 7,643 SF = 30% WINDOW TO WALL RATIO (WWR)
NORTH EXPOSURE NOT TO EXCEED 40% WWR PER DFD SUSTAINABILITY GUIDELINES



EXISTING SOUTH ELEVATION

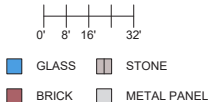


PROPOSED SOUTH ELEVATION

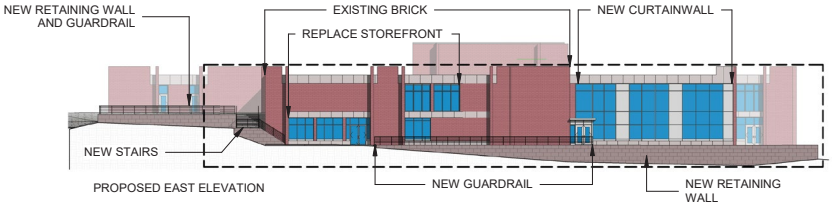
TOTAL SURFACE AREA OF RENOVATION: 4,625 SF

STOREFRONT: 350 SF

350 SF/ 4,625 SF = 8% WINDOW TO WALL RATIO (WWR)
SOUTH EXPOSURE NOT TO EXCEED 30% WWR PER DFD SUSTAINABILITY GUIDELINES



EXISTING EAST ELEVATION



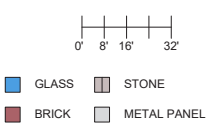
PROPOSED EAST ELEVATION

TOTAL SURFACE AREA EAST: 6,371 SF

CURTAINWALL: 1,092 SF
CURTRAINWALL SPANDREL PANELS: 277 SF
STOREFRONT: 577 SF

1,669 SF/ 6,371 SF = 26% WINDOW TO WALL RATIO (WWR)
EAST EXPOSURE NOT TO EXCEED 30% WWR PER DFD SUSTAINABILITY GUIDELINES

RETAINING WALL: 1,800 SF



6.0 Food Service

6.1 Current Operations:

- Esker Hall was built in 1967 in a time when the menu diversity and expectations for campus dining were much different than today. Receiving, storage, baking, hot and cold production occur on the upper level and food is transported down an elevator through a service kitchen and held for service at serving concepts. Soiled pots and pans from the main production kitchen are transported down the same elevator which transports food for consumption, to the service level for washing. This is also the point where soiled student permanent ware is returned and washed.
- The student entrance to the resident dining space is on the upper level, where controlled access occurs, and students descend a set of stairs to get to the venues.
- The dining room, despite some updates, is a dark and uninviting space, which when compared to Drumlin Hall, the other campus resident dining facility, seems disconnected from the desired UW-Whitewater student dining experience.
- Based on data received from campus, the highest meal participation at Esker occurs on Monday evening during the Spring, where the average door count is 674 students. With 3,750 students living on campus, the majority of which live less than a 5-minute walk from Esker and all live within a 10-minute walk, these counts are extremely low. Based on NACUFS (National Association of College and University Foodservice) standards, an average resident dining program should capture a minimum of 65% of students. Esker numbers should be double what they are currently, and a well-run program in an inviting facility would draw more students from Drumlin, which has a much lower seating capacity than Esker, and could triple current participation numbers.

FY22 Count

	Board	% of combined	Exchanges	% of combined	Combined
Aug	20,087	82.0%	4,413	18.0%	24,500
Sept	36,181	28.5%	90,568	71.5%	126,749
Oct	32,233	25.7%	93,329	74.3%	125,562
Nov	27,048	25.5%	78,856	74.5%	105,904
Dec	15,007	26.2%	42,307	73.8%	57,314
Jan	15,308	26.4%	42,677	73.6%	57,985
Feb	25,141	24.2%	78,568	75.8%	103,709
Mar	21,165	24.0%	67,185	76.0%	88,350
Apr	24,275	22.6%	83,141	77.4%	107,416
May	9,532	21.8%	34,273	78.2%	43,805
Academic Yr Totals:	**225,977**	**26.9%**	**615,317**	**73.1%**	**841,294**

Esker Spring 2022 Summary

Day	Average of Breakfast	Average of Lunch	Average of Dinner
Monday	127	356	674
Tuesday	124	355	625
Wednesday	120	370	626
Thursday	115	337	525
Friday	79	280	313
Grand Total	**113**	**340**	**556**

Retail Dining, along with a small convenience store, is also located on the main floor of Esker, with access on street level directly across from five large residence halls. Students are allowed to “exchange” board plan meals for meals in retail locations on campus and on most days, the retail locations in Esker have higher customer counts than the resident dining location. In fact, there is a much higher participation in exchanges than in actual meals served in dining locations. This is an extremely unprofitable business model, as food cost is much higher in retail dining and to meet the demand, more retail locations are needed to serve not only the commuter students and faculty which these venues are designed for, requiring more labor. A healthy dining program with attractive resident dining locations provides the most value and variety for students. Typical exchanges would be less than 25% of the total board meals served, at UW-Whitewater, this number is the opposite, which is an indication of a program which is not only failing to meet the needs of the campus, but also losing a significant amount of money. A well-run dining program is a profit center for a campus, often able to finance its own capital improvements.

Top to Bottom:
Painted galvanized legs and galvanized base cabinets or undershelves on worktables which do not meet current NSF standards for commercial kitchen standards.

Original tilting steam jacketed kettles which are hazardous due to tilting gear malfunctions which have led to severe burn injuries, litigation, and caused the manufacturer of these kettles to completely change their design.

Walk-in cooler and freezer panels and flooring are beyond their expected service life and are failing.

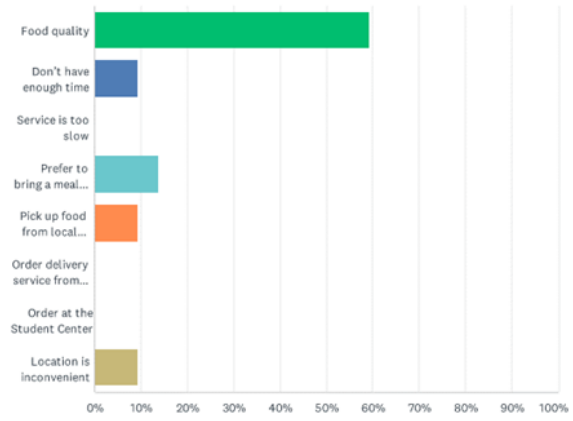
- Summer is an extremely busy and profitable time for campus dining, with UW-Whitewater hosting many large camps and conferences throughout the summer. Some camps have upwards of 1,800 attendees and Esker is the largest dining facility on campus to provide meal service for them. The current seating capacity is about 525, and additional space is needed to accommodate these large groups. Summer camp participants routinely report in surveys that the food is the worst part of their camp experience.

- The Esker main kitchen houses the central bakery for all campus foodservice locations. It also acts as a commissary for retail grab-and-go production. In addition, the kitchen also produces all food shipped to the stadium for game day concessions, which is a very high volume for football games on Saturdays throughout the Fall semester.

- The foodservice operations in Esker occupy a large footprint, over multiple floors, and are extremely inefficient to operate in the current state. Many labor hours are spent moving cooked products from one floor to another, which significantly reduces food quality. A May 2023 online student survey was conducted as part of this study. It shows that food quality is a major factor in the poor meal plan participation in Esker Dining Hall, and overall satisfaction is low.
- Esker has had multiple renovations in the past 25 years, however none of these renovations have addressed the core operational deficiencies, nor have any touched the storage and main productions areas. Some of the key deficiencies in these areas include:

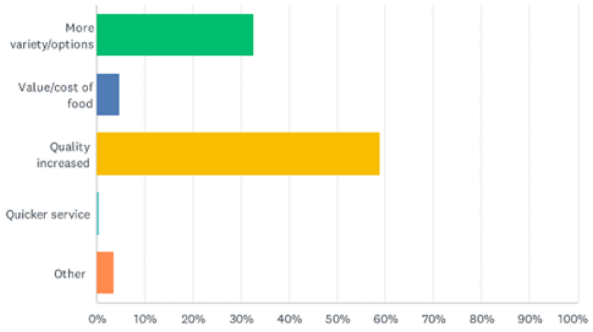
Q3 What is the primary reason (choose one) you do not dine at Esker Dining Center?

Answered: 22 Skipped: 237



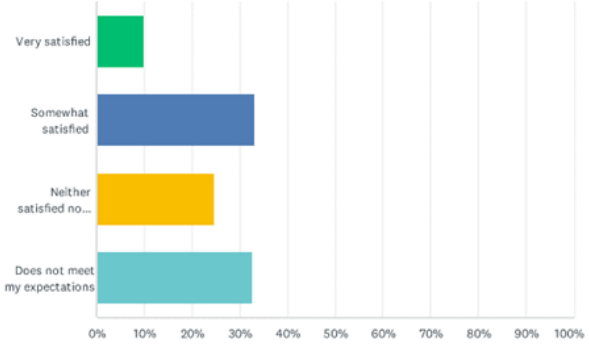
Q13 What could be done to increase your participation in the dining center?

Answered: 236 Skipped: 23



Q12 How satisfied are you with the current operation at Esker Dining Center?

Answered: 236 Skipped: 23



- Kitchen exhaust hoods are not deep enough to provide required overhands, per NFPA 96 (Fig 1)
- The dish room is not properly ventilated causing a work environment which goes against OSHA “Recommendations for the Employer” regarding air quality with temperatures between 68-76 degrees and humidity control in the range of 20-60%. ASHRAE Standard 62 has similar recommendations for Ventilation for Acceptable Indoor Air Quality. This poor ventilation causes heat, humidity, and odors to transfer into the dining room(Fig 2).

Figure 1

Figure 2

6.2. Programming Needs

- Resident dining storage, production, serving concepts, seating, and ware washing should be located on the same floor to improve efficiency for the operator and to increase overall student satisfaction in the program, as having serving concepts adjacent to the production area improves supervision of lines and allows for batch cooking.
- Flexible serving stations to allow concepts to transition easily between dayparts, menu offerings, cuisines, as well as to serve large summer camp or conference groups.
- Multiple retail concepts, to include a large convenience store. Desire for future flexibility so the convenience store could be frictionless (unmanned) to allow for 24/7 student access.
- Maximize seating space in Esker, with potential outdoor seating, to expand capacity for summer camps. 600-plus indoor seats are desired.
- Desire for a space for teaching student groups healthy cooking. Campus dietitian needs a demonstration kitchen to support students and the community.
- Based on similar size projects, student survey data, student focus group and project team programming sessions conducted on April 25, 2023, the below space program illustrates the amount of GSF (Gross Square Footage) before building grossing factors for public spaces, restrooms, circulation, mechanical and support spaces.

Space Program

Area/Equipment	Current Esker	Future Esker Renovation
	Net Sq. Ft.	Net Sq. Ft.
Receiving & Storage		
Receiving	600	400
Returnable	-	100
Dry Storage	875	800
Seasonal Storage	1,700	200
Detergent Storage/	120	120
Soda Storage and System	100	120
Walk-in Freezer	875	900
Walk-in Meat / Cooks' Refrigerator	350	500
Walk-in Dairy Refrigerator	-	120
Walk-in Produce Refrigerator	280	300
Finished Product Refrigerator	242	300
Sub-total Storage & Receiving	5,142	3,860
Kitchen		
Cold Food Prep	800	800
Hot Food Production	1,475	1,250
Baking	1,800	1,200
Ware washing		-
Dish Wash	1,552	1,000
Pot Wash	200	200
Cart Wash	100	60
Mop Closet	139	65
Subtotal Kitchen	6,066	4,575
Employee Spaces		
Lockers	600	100
Rest Rooms	140	320
Uniform and Laundry Storage	80	120
Break/In-service Room	-	-
Student Worker Lockers	80	80
Offices - Manager	783	375
Assistant Managers	-	-
Conference Room	-	-
Subtotal Employee Spaces	1,683	995

Area/Equipment	Current Esker	Future Esker Renovation
Kitchen Total	12,891	9,430
Circulation Factor 33%	4,254	3,112
Kitchen Total w/Circulation	17,145	12,542
Serving Concepts		
Checker Queueing Area	300	400
Serving Concepts (Number of Concepts)	3,500 (7)	5,000 (6)
Salad Bar	300	1,200
Desserts	160	200
Cereal & Waffles	100	200
Beverage, Condiment & Flatware	375	600
Subtotal	4,735	7,600
Circulation Factor 25%	1,184	1,900
Total Resident Dining	5,919	9,500
Dining Room	9,100	11,250
	600 seats	750 seats
Total Resident Dining Spaces	**32,164**	**33,292**
Retail Dining		
Serving Concepts	2,300 (2)	1,000 (2)
Convenience Store	2,100	1,200
Seating	2,200 (150)	-
Storage and Production	230	800
Total Retail Dining Spaces	**6,830**	**3,000**

6.3. Foodservice Design Narrative

- Students dining on campus today have much more sophisticated tastes than ever before. They are more accustomed to dining in restaurants, they compare their campus dining experience with peers at other campuses via social media, they watch television cooking programs, and they are environmentally conscience resulting in much higher expectations for their meal experience, wherever they dine.

- The dining facilities in the Esker Dining space are designed with these new customer expectations in mind. Designed to accommodate resident dining, this distributed concept marketplace offers an open dining space with seating directly adjacent to the food venues to allow easier access to the various concepts and breakdown the scale of the seating area. This concept also provides a more scalable operational model as the individual concepts can be opened separately based on demand and time of day. The six independent menu concepts and salad bar island will have a modern appearance and offer custom, made-to-order menu options prepared in display cooking stations open to the dining area. These concepts will be designed with flexibility in mind with hoods and utility connections to accommodate a variety of equipment allowing menus and concepts to change as student tastes and trends dictate. The main serving concepts will be directly adjacent to the main production space, the grill and pizza concepts will also be open kitchen concepts. The Allergen friendly space will feature an open cooking concept with dedicated prep space adding another layer of security for students with food allergy concerns.

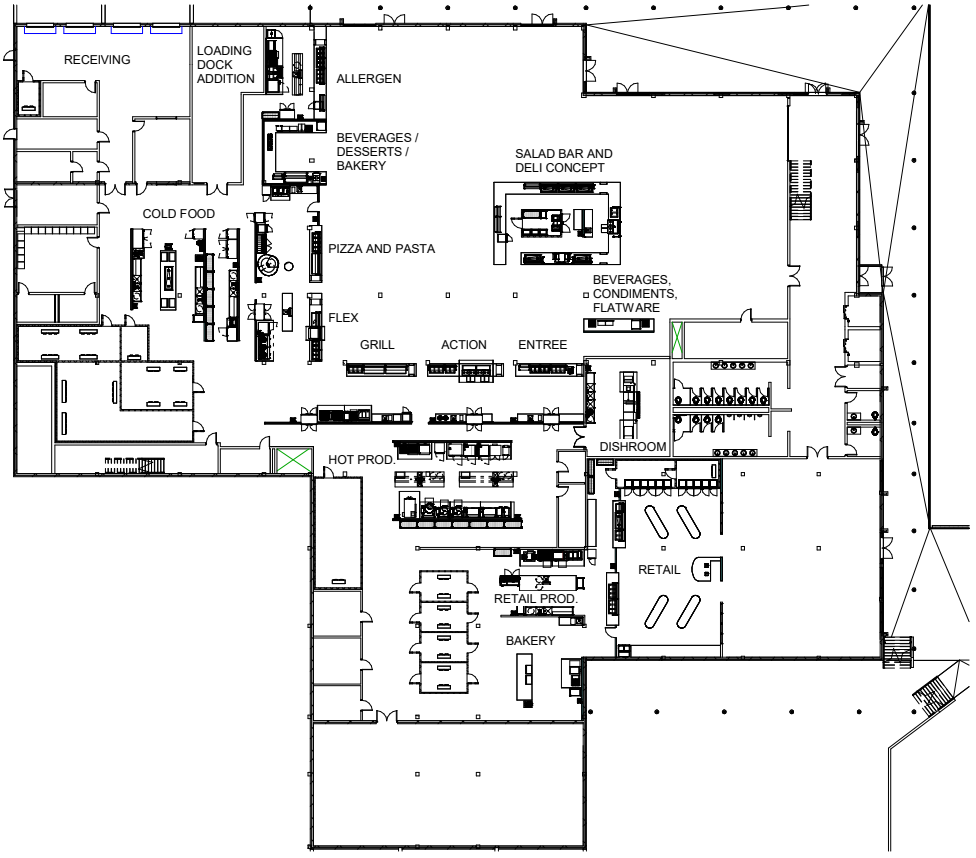
- The Dining area is designed to accommodate a minimum of 600 students in a variety of seating options. The goal of the design team is to provide adequate seating at peak meal periods for up to 1,800 students residing in nearby residence halls, flexibility for large summer camps, as well as off-campus students who will now have an additional reason to purchase a voluntary meal plan option. We anticipate other residential students will utilize this dining facility due to its convenient location, near classrooms, activities, and nearby campus housing.

- The primary kitchen work centers consist of a hot food production area which includes flexible equipment needed to support any menu trend. A robust cold food production area for commissary production is included. The intent is to have most food production take place at the various stations but to prepare things in a manner that provides a faster speed of service than most display cooking venues. Meals will be served on permanent ware, as selected by the customer, with access to a soiled dish return area for the permanent items, waste, compost, and recycling.

- The infrastructure to support owner-provided electronic signage is included to provide up-to-date menu information as well as photographic depictions of the food available at each area. This will allow the Dining Services team to better promote daily specials, identify locally grown and sustainably raised ingredients and menu items, and provide detailed ingredient lists and nutritional information. This also helps students get a better sense of the wide variety of menu options offered each day. Entry to the dining center will utilize electronic gates, to allow technology to augment labor challenges.

- In addition to the meal options offered in this resident dining center, the newly renovated Esker will also include a retail foodservice operation, with outside access for extended hours of operation. This retail space will be adjacent to the dining center, to allow access to the dock for receiving and trash areas.

- The foodservice equipment contractor will be responsible for coordinating all schedules and utility services with the construction team. The scope includes all the production and serving equipment as well as the exhaust hoods, hood fire protection systems, walk-in cold



1 GROUND FLOOR - OVERALL
1" = 40'-0"

10/24/2023 11:39:31 AM

UNIVERSITY OF WI WHITEWATER

Ground Floor - Overall
08/22/23

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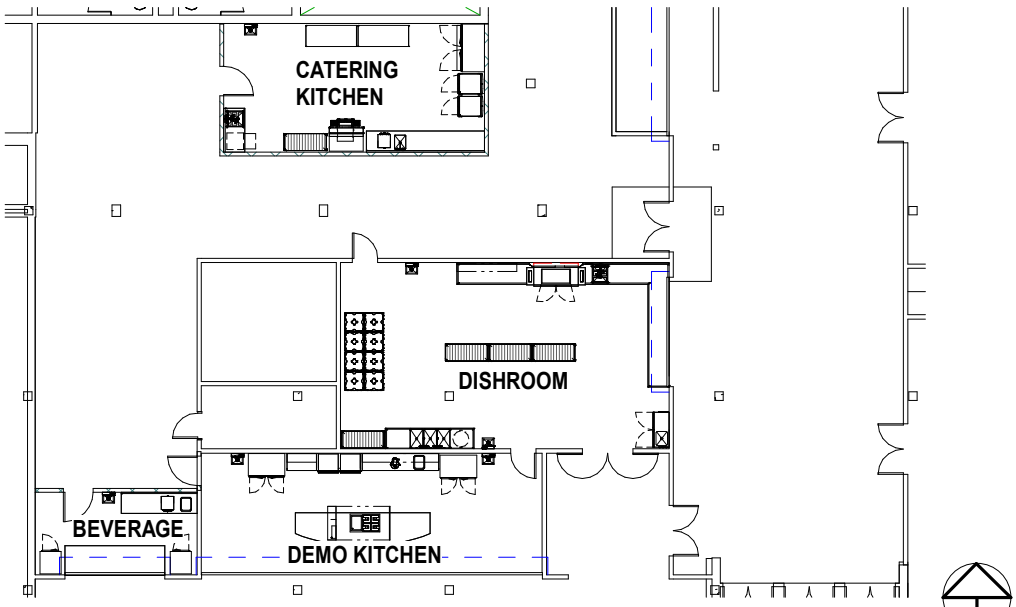
FOODSERVICE DESIGN + CONSULTING
10550 Red Circle Drive, Suite 100, Minneapolis, MN 55343
952-933-0313 | www.RippeAssociates.com



1 FIRST FLOOR - OVERALL
1/16" = 1'-0"

10/24/2023 11:39:26 AM

UNIVERSITY OF WI WHITEWATER

First Floor - Overall
08/22/23

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storage units and ware washing equipment. The foodservice equipment provided in this project will meet local health department and NSF approvals. The front of the house areas will be designed to have a very sophisticated appearance with quartz countertops and tile or millwork counter front panels. The construction of these units will be of stainless steel with a millwork wrap to provide equipment that is very durable as well as attractive. The protector shelves are designed to be nearly invisible with minimal framework and the flexibility to accommodate either served or self-service operation. Most of the beverage equipment and a waste oil receptacle will be provided by the owner's vendors.

- There are several ways in which this new facility will accommodate the students' sensitivity to the environment and the campus need to reduce energy consumption. The dish machine may be specified with integral heat reclaim and an insulated exterior. To further reduce energy consumption, the equipment specified will be Energy Star listed, where available. The exhaust hoods will be UL-approved low volume units with demand control ventilation systems. Faucets on hand sinks and spray rinse nozzles will be low-flow models. Lights within equipment, which typically includes the hoods, walk-ins, and protector shelves, will be LED units, when available.

- A new dedicated loading dock will be constructed to adequately support the entire dining operation. The dock will be designed to handle full semi-trailers, box trucks, and dining services trucks which will distribute products produced in the Esker commissary to other service points on campus. The dock will also be used to store returnable items, bulk CO2 tanks, bulk cooking oil, as well as have a walk-in refrigerator to be used for compost prior to pick-up.

- Cold storage spaces will be sized according to the space program, and located on the perimeter of the building, adjacent to their corresponding work centers, to reduce foot traffic for kitchen staff. Walk-ins will be floorless, with 10" structural recesses to allow for proper insulation for maximized durability. Kitchen flooring material will be used in the walk-ins to allow for a continuous level surface for mobile racks and carts moving in and out of cold storage spaces. Walk-in walls and ceilings are a panelized system with CFC reduced urethane insulation between textured aluminum sheets. The interior ceiling will have a smooth white enamel on aluminum with LED lights, walls will have stainless steel with aluminum diamond tread wainscoting. Door panels will have a diamond tread aluminum kickplate, digital thermometer, view windows, and cylinder locks. A stainless-steel coved floor base will be provided at the interior and exterior of the boxes.

- The custom-fabricated equipment will be constructed of type 304 stainless by an NSF-certified fabricator. Shop drawings will be provided by the Food Service Equipment Contractor (FSEC). The custom-fabricated equipment includes all kitchen food prep counters with and without sinks as well as serving counters. Serving counters will be stainless steel construction with a quartz composite top and decorative counter front. The channel base for solid housekeeping bases below the counters will be provided and installed by the FSEC; the sand fill and concrete cap will be by others.

- The preference for natural gas equipment will be addressed and balanced with the potential reduction of fossil fuel consumption, wherever possible, and with respect to project budget. Information gathering will be required to weigh the benefit of natural gas vs. electricity for all equipment. The electrical system for the building should be upgraded to allow for a future transition to all-electric equipment to future-proof the operation for the next 30 years.

- The walk-in refrigerator and freezer boxes are a panelized system with CFC reduced urethane insulation between textured aluminum sheets. The exterior finish is

stainless steel, and the interior ceiling is smooth white enamel on aluminum with LED lights. The door panels have a diamond tread aluminum kickplate, digital thermometer, view window, and cylinder locks. A stainless-steel coved floor base will be provided at the interior and exterior of the boxes.

- Refrigeration system compressors will be remotely located on the exterior as to not generate additional interior cooling load, and air cooled. Both compressors and coils are provided by the Food Service Equipment Contractor (FSEC). A high-efficiency parallel rack refrigeration system is planned to service all walk-in boxes to not only reduce energy consumption but also to provide redundancy in the event a compressor fails. The refrigeration system should be tied to a backup generator system, to ensure continuous operation in the event of a power outage.

- The walk-in shelving will be an NSF-listed polymer product with removable shelf mats and casters. Dry storage shelving will be adjustable chrome wire. Existing dry storage shelving will be reused.

- 304 stainless steel hand sinks will be provided by the FSEC and installed with wrist blade faucets.

- Utility carts will be constructed of stainless steel.

- Type I exhaust hoods are stainless steel construction with removable grease filters and LED lights. The hood is furnished by the FSEC; fans and ductwork are by mechanical trades. Exhaust hoods do not include a make-up air system by FSEC. The fire protection system is a full coverage wet chemical system. A stainless-steel panel will extend from the underside of the hood to the coved base behind cooking equipment. There will be multiple Type I exhaust hoods.

- All cooking equipment is commercial, NSF-certified, and stainless-steel finish construction. Accessories and manufacturer preferences will be determined during design development. Equipment will require electrical and natural gas. Steam could be used for the dish machine. All cooking equipment on casters will be provided with flexible quick disconnect gas hoses with restraining devices or will be sealed to the floor.

- The dish room will have a soiled bussing conveyor with scrapping sink and spray rinse station. The main dish machine will be a high temperature flight type machine potentially utilizing the campus steam system and heat reclaim options to reduce hot water consumption, and full coverage condensate hood above. Fan, dedicated makeup air, water softener, and ductwork by mechanical contractor. The area includes a 3-compartment sink with drainboards for pot and pan washing.

- Type II exhaust hoods are stainless steel construction and will be placed over ware washing equipment in accordance with ASHRAE Research Project Report 1778-RP which studied heat and moisture load from commercial dish room appliances and equipment. The space will be conditioned to comply with all OSHA and ASHRAE guidance.

- All walls, floors and ceilings will need to be commercial grade and health department approved. These are not included in Section 114000. Walls and corners should be protected in receiving and cart traffic area.

7. Civil

7.1. Existing Conditions

Esker Hall is located on the University of Wisconsin – Whitewater campus at the northwest quadrant of the intersection of West Lauderdale Drive and North Prairie Street. Esker Hall will be expanded approximately 2,700 SF to add a new loading dock, associated pavement, storm drain lines, as well as sewer and water service connections. The site grading will also be modified for the new loading dock located at the northwest corner of the building and additional outdoor dining along the building's frontage with North Prairie Street.

7.2. Water

The existing water service connection is located along the southwest face of the existing hall. No work is anticipated for the water service or mains at this time. Detailed design work will confirm whether any upsizing or relocation is necessary and will be added to the construction drawings if required.

7.3. Sanitary Sewer

The existing sanitary sewer service line is located near the northwest corner of the building near North Prairie Street. This service line will be adjusted to add a proposed grease trap for the new expansion. There is an existing grease trap and sanitary sewer service located along the western side of the building and connects to a sanitary sewer line in West Lauderdale Street. This line and grease trap will be modified as per the plumbing drawings.

7.4. Storm Drainage

The site drains from the west to northeast. The roof drains discharge around the building perimeter. These drains will be extended beyond the new canopy and will maintain their existing drainage patterns. There is a storm drainage connection on the north side of the building that ultimately drains to an existing 48" pipe which crosses North Prairie Street to northeast. The existing loading dock drains to the north and ultimately to North Prairie Street. The discharge is conveyed on the existing pavement and in the existing curb and gutter. No green roof or infiltration garden areas are currently planned.

7.5. Pavement and Curb & Gutter

The site has an existing paved access to the loading dock on the west side of the building accessing the second floor of the building. This access is connected to the existing parking lot to the north which has an entrance to North Prairie Road. This access will be maintained and a new paved access for the proposed loading dock will be connected to the existing parking lot.

7.6. Earthwork

The proposed loading dock will require that the existing grades be modified to connect to the existing parking lot to the north. In addition, the expansion of the building to the east will require a retaining wall behind the existing sidewalk for the required fill material.

7.7. Steam and Chilled Water

The existing steam and chilled water services are expected to increase as a result of this project. Refer to 9.9. New Chilled Water Service Entrance, and 9.10. New/Steam/Hot-Water Service Entrance Work for additional information.

8. Structural

8.1. Applicable Codes and Design Guidelines

Design Code: International Building Code (IBC), 2021
Building Occupancy Category: III
Wind and Seismic: Per requirements of American Society of Civil
Engineers, ASCE 7-16
Wind speed = 114 mph
Site Class = E (to be confirmed by Geotech report)

Snow loading: Per requirements of ASCE-7 for both basic and drift loading; ground snow load = 30 psf
Floor loading: Original building loading 80 PSF. Structural analysis and reinforcement may be required if mechanical shop loading on 1st level requires higher loading.
Building Construction Type: 1 B
Concrete Construction: In conformance with American Concrete Institute (ACI) Standards 301 and 318
Steel Construction: In conformance with American Institute of Steel
Construction (AISC), 13th Edition and Code of Standard Practice

8.2. General Material Strengths

Steel Wide-flange shapes: ASTM A992 – 50 ksi
HSS (Hollow tube) sections: ASTM A500, Gr B – 46 ksi
Other shapes/plates: ASTM A36 – 36 ksi
Concrete footings:3,000 psi
Concrete exterior frost walls:4,000 psi
Concrete interior slab-on-grade:3,500 psi
Concrete exterior slab-on-grade:4,500 psi
Concrete stair/elevator shaft walls:5,000 psi
Concrete masonry:2,500 psi

8.3. Foundations:
A current geotechnical report has not been completed for this site. Original 1966 building column loads are supported on deep foundations. 12” diameter augured piles filled with reinforced concrete were provided, end bearing to local bedrock. Net force was specified at 45 tons per pile. The original building supported perimeter walls on reinforced concrete grade beams spanning between piles. The interior slabs on grade at the lower level were independent of the deep foundation system; the specified minimum allowable bearing was 1,500 PSF.

Renovations to the existing building should not affect foundation loads or loadpaths, for the most part. The existing foundations should be adequate for the majority of the new design.

New deep foundations will likely be required below the new elevator pits. Pit walls and floor will be cast concrete. Elevator shaft above grade will be lightly reinforced 8” CMU construction.

If additional support is required locally at framing modifications- for example if auxiliary supports are introduced at stair landings, new chase openings or the relocation of the mechanical shops to the first level elevated slab, may require additional foundation capacity. Small loads would be accommodated with shallow spread footings at 1,500 PSF if possible or additional deep foundations otherwise.

For new deep foundations inside the existing building, augured micropiles would be the most effective solution.

For the new single story steel framed addition at the loading dock, loads would be supported on new micropile foundations at the columns with perimeter grade beams, unless geotechnical investigation finds subgrade conditions suitable for shallow foundations.

At the new exterior patio, a cantilevered concrete retaining wall will be required at the perimeter grade change. The wall will resist soil pressure via a wide moment resisting continuous strip foundation. Column loads for the existing canopy should be able to be integrated into the retaining wall footing.

The entire interior lower floor slab-on-grade is to be removed to facilitate reconfiguring subgrade utilities and coolers in the new kitchen areas. All new interior slabs-on-grade will be provided. Typical interior slabs will be 5” thick, on 15 mil vapor retarder on 6” compacted fine aggregate. Interior slabs will be reinforced for shrinkage with WWF; macro fiber reinforcement is not recommended for finishes in kitchen applications.

8.4. Loading Dock Addition:
The new 2,600 SF one-story loading dock addition will be steel HSS or WF columns, with WF roof framing and 1.5” steel roof deck. Steel framing would be protected by spray-on fireproofing. Roof framing and deck would not require protection.

Loading dock slab will be 5” thick, on 15 mil vapor retarder on 6” compacted fine aggregate. Slabs will be reinforced with synthetic macrofiber or WWF for shrinkage reinforcement.

The wall at the dock face will be an 8” cast in place wall with reinforcing. The wall will extend to footings placed at frost protected depth relative to the lower surface. The footing’s width will be sized to resist the lateral loads of the retained soil at the elevation change.

8.5. Lateral Force Resistance:
Lateral forces due to wind and seismic movements at the new loading dock will be resisted by connection to the existing building on two sides and by new rod braces on the exterior walls.

8.6. Exterior Walls:
Exterior walls will be a combination of concrete masonry back-up with brick veneer. Exterior walls are typically non-load bearing. Exterior CMU will be intermittently reinforced with vertical reinforcing bars. Typical lintels for openings will be reinforced bond beams with steel angle veneer supports where required.

9. HVAC (Heating, Ventilating & Air Conditioning)

9.1. Applicable Codes, Standards, and Reviewing Authorities

- 2021 International Building Code as amended by the State of Wisconsin
- 2021 International Existing Building Code as amended by the State of Wisconsin
- 2021 International Mechanical Code as amended by the State of Wisconsin
- 2021 International Energy Conservation Code as amended by the State of Wisconsin
- 2019 ASHRAE Standard 90.1 – Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings
- 2019 ASHRAE Standard 62.1 – Ventilation for Acceptable Indoor Air Quality
- DFD HVAC Design Guidelines
- Review by DFD Technical Staff
- Review by UW Whitewater Facilities Management

9.2. HVAC Design Conditions

- Weather Conditions (Per IECC):
  - Summer Design Condition: 89°F dry bulb, 77°F wet bulb
  - Winter Design Condition: -10°F dry bulb
- Use Interior Thermostat Setpoints per the IECC for equipment sizing:
  - 72°F winter, 75°F summer
  - Mechanical Room Systems: 80F and 60% RH Summer, 60F winter
- For Energy Modeling Purposes, use Interior Thermostat Setpoints per the DFD Energy Use Policy:
  - Exterior Zones, Occupied: 68°F winter, 76°F summer
  - Exterior Zones, Unoccupied: 60°F winter, 82°F summer
  - Interior VAV Zones, Occupied & Unoccupied: 68°F winter, 76°F summer
  - Interior CV Zones, Occupied: 68°F winter, 76°F summer
  - Interior CV Zones, Unoccupied: 60°F winter, 82°F summer
  - Vestibules, Stairwells, Mechanical Rooms, Electrical Rooms, Elevator Equipment Rooms, Unoccupied Storage and Similar Spaces: 60°F winter, Uncooled in summer
  - IT Rooms: 76°F summer, 68°F winter, no humidification

9.3. Cooling Energy Source

- The building is connected to campus chilled water. The chilled water plant is directly adjacent to Esker Hall. Chilled water is supplied at 42F.
- The existing chilled water pipe from the central plant is 6".
- The estimated chilled water demand for the renovated building is 475 tons, at a 14F delta-T this would need to be supported with approximately 815 GPM of chilled water. This flow rate is barely beyond the recommended upper end of a 6" pipe's carrying capacity (775 GPM). We recommend replacing the existing chilled water supply and return mains with 8".
- The existing building is not fully air conditioned and uses approximately 200 tons of cooling at 340 GPM as measured on a recent near-100F day with high humidity and lower-occupied space usage (summer camps). The renovated building will add approximately 275 tons to the central cooling plant. Per discussion with Facilities, the central cooling plant should be able to accommodate this.

9.4. Heating Energy Source

- The building is connected to campus steam. A 4"-125# High Pressure Steam line enters the building and a 2" High Pressure Pumped Condensate exits the building. The high-pressure steam is reduced in pressure to 30# and 5# within the Ground Floor Mechanical Room.
- The estimated heating load for the renovated building is approximately 6,000,000 btu/h. This translates to 6,250 lbs/hr. The existing 4" steam line can transport approximately 9,700 lbs/hr of steam at 125#. Therefore, this existing steam line is acceptably sized.
- The existing steam line from the pit is approximately 60 years old. The structural supports have recently been redone. To leave Esker Hall in sound operating condition for a reasonable future duration, we recommend replacing the high-pressure steam and condensate lines between the building and steam pit. The existing lines are within a box conduit and would be replaced with directly buried pipe per most current DFD standards.

9.5. Natural Gas Source

- The building has a gas service entrance and meter at the lower-level mechanical room, 3" after the meter.
- The estimated new gas load for the kitchen equipment is 3,000 MBtu/h. Check with local utility to see if they want to replace the meter with new, assume yes. This pipe size seems appropriate, but replace all gas piping with new due to age.

9.6. Ventilation Design Criteria (From DFD HVAC Guidelines)

- Provide design ventilation rates in compliance with SPS 364.0403 (as found in the 2015 IMC with WI Amendment) except provide 15 cfm per person instead of 7.5 cfm per person (SPS 364.0403 (5)(a). For systems where the ventilation rate calculated using ASHRAE 62.1 results in a lower ventilation rate than calculated using the above method and the calculated rate is in compliance with SPS 364.0403 using the standard 7.5 cfm per person, then the ASHRAE method should be used.
- Given the highly variable occupancy rates many programmed spaces, like Dining Halls and Meeting Rooms:

    - For all applications, where justified by energy savings payback, utilize CO- measurement-based demand control ventilation, occupancy sensing and/ or occupancy level indexing strategies to reduce the outside air ventilation at times when spaces are partially occupied or vacant.
- Provide kitchen hoods with variable speed exhausts (and associated make-up air) that are controlled by heat sensed under the hood.
- Ensure this is coordinated with the Foodservice Consultant.

9.7. Demolition

- Demolish all existing HVAC, per phase. Demolish all air handling equipment including: 3 air handlers in the penthouse and 5 in the lower mechanical room. One of the air handlers in the penthouse is 100% OSA and makes-up air to kitchen exhausts, the other two are single zone constant volume units that serve the two-story dining hall areas. Of the air handlers in the lower mechanical room, one is a constant volume unit that cools the kitchen area on the floor above, one is a constant volume unit that serves the meeting rooms, one is a variable volume unit that serves spaces on the floor above: miscellaneous corridors, grab-and-go kitchen area, meeting rooms, and the atrium space on the upper level, one is a variable volume unit that serves lower level spaces like corridors, kitchen, common spaces, and dispensary area, and the final unit is in the west wing that serves a few meeting rooms.
- Demolish all hydronic heating terminal units, heat exchangers, pumps, and piping.
- Demolish steam system back to building entrance.
- Demolish chilled water system back to building entrance.
- Demolish existing DDC and pneumatic controls and all related piping, wiring, and air compressors.
- Demolish all exhaust and summer ventilation systems.
- Demolish all existing gas piping back to the building entrance.

9.8. Temperature Controls

- The new control system shall be DDC with electronic actuation.
- Tie the new building-level DDC control system into the campus-wide Johnson Controls system.
- Coordinate with plumbing and electrical to provide any desired DDC monitoring, alarms, or controls for elements under those divisions.

9.9. New Chilled Water Service Entrance Work

- The chilled water load to the building is increasing and it is recommended to increase the size of the chilled water piping serving Esker Hall. The existing piping could be replaced along its current route or a new line could be brought into the building at a new location and tied into the existing distribution system to keep components working during phases. In either scenario there will need to be a scheduled interruption to the chilled water service.
- From our conversations with facilities, these increases should easily be able to be accommodated within exiting central plant capacities. Chilled water usage could increase from 200 tons to 475 tons.
- Provide new supply and return water service entrance valves.
- Engineer of Record to study the following chilled water entrance options:
    1. Provide no tertiary chilled water pumping station and rely on the central plant secondary pumps to circulate water to/from Esker
    2. Provide a bypass around the new tertiary pumping station that permits the central plant secondary pumps to circulate water to/from Esker when possible and the tertiary station will supplement the differential pressure only as required.
    3. Provide a variable speed dual tertiary pump station. Analyze pump selection so that the two pumps work in parallel and cover a very high percentage of the design flow should one pump need to be put out of service for maintenance.
- Design system for 14F delta-T (minimum).
- Per Whitewater request, monitor chilled water supply and return water temperatures to/from the central plant and the differential pressure between these mains.

9.10. New Steam/Hot-Water Service Entrance Work

- The steam load to the building is increasing but the existing piping, although appropriately sized, is aged and recommended for replacement , and a scheduled interruption will be necessary.
- Steam usage could increase to be approximately 6,250 lbs/hr. The existing steam usage is unknown, but the amount of make-up air needed to support the new food service plan will result in a net increase of steam demand.
- Provide a single stage PRV station for 120#-30# steam to serve the kitchen and dishwashing equipment and a separate single stage 1/3-2/3 120# to 10# steam station to serve a new twin (redundant) steam-to-hot-water heat exchanger station.
- Run 10# steam to new semi-instantaneous domestic water heating plant.
- Provide three new variable speed pumps. Analyze selection so that the three pumps work in parallel and cover a very high percentage of the design flow should one need to be put out of service for maintenance.
- Design heating water system for a 25F delta-T, minimum.
- Provide a new steam condensate pump to return fluid to the central plant.
- Provide flow meters on chilled water and steam condensate return.

9.11. New Air Handlers (See Summary Table):

- These are initial estimates for appropriate zoning and sizing.
- **AHU-01** is in the Penthouse serving large Meeting Room #1 and Catering Kitchen. Multi-zone VAV with separate Return Fan, 12,300 SA CFM @ 24% OSA, 38 tons, redundantly pumped hot water pre-heat coil, chilled water-cooling coil, MERV 8 and 13 filters, no energy recovery, with demand control ventilation and economizer, and controlled via airflow measurement.

- **AHU-02** is in the Penthouse serving Meeting Rooms #2 & #3 and Entrance Lobby. Multi-zone VAV with separate Return Fan, 11,500 SA CFM @ 20% OSA, 33 tons, redundantly pumped hot water pre-heat coil, chilled water-cooling coil, MERV 8 and 13 filters, no energy recovery, with demand control ventilation and economizer, and controlled via airflow measurement.

- **AHU-03** is in the Upper-Level Mechanical Room serving the Main Dining Hall. Single-Zone VAV with separate Return Fan, 21,000 SA CFM @ 50% OSA, 89 tons, redundantly pumped hot water pre-heat coil, chilled water-cooling coil, hot water dehumidification re-heat coil, MERV 8 and 13 filters, energy recovery, with demand control ventilation and economizer, and controlled via airflow measurement.

- **AHU-04** is in the Upper-Level Mechanical Room serving the Loading Dock, Dry Storage, and the Workshop spaces. Multi-Zone VAV with separate Return Fan, 6,000 SA CFM @ 10% OSA, 15 tons, redundantly pumped hot water pre-heat coil, chilled water-cooling coil, MERV 8 and 13 filters, no energy recovery, no demand control ventilation, economizer, and controlled via airflow measurement.

- **AHU-05** is in the Lower-Level Mechanical Room serving approximately one half of the Main Kitchen space. Single-Zone VAV with separate Return Fan, 22,700 SA CFM @ 100% OSA, 150 tons, redundantly pumped hot water pre-heat coil, chilled water-cooling coil, MERV 8 and 13 filters, no energy recovery, no demand control ventilation, economizer, and controlled via space pressure measurement. This AHU could be up to 100% OSA when all hoods are operating, or it could be up to 100% recirculating when all hoods are off and the space is unoccupied.

- **AHU-06** is in the Upper-Level Mechanical Room serving approximately one half of the Main Kitchen space. Single-Zone VAV with separate Return Fan, 15,000 SA CFM @ 49% OSA, 64.3 tons, redundantly pumped hot water pre-heat coil, chilled water-cooling coil, MERV 8 and 13 filters, no energy recovery, no demand control ventilation, economizer, and controlled via space pressure measurement. This AHU could be up to 50% OSA when all hoods are operating, or it could be up to 100% recirculating when all hoods are off and the space is unoccupied.

- **AHU-07** is in the Lower-Level Mechanical Room serving the Retail Grab-n-Go Station, Small Dining Area, and Entrance Vestibule Volume. Multi-Zone VAV with separate Return Fan, 9,500 SA CFM @ 34% OSA, 33 tons, redundantly pumped hot water pre-heat coil, chilled water-cooling coil, MERV 8 and 13 filters, energy recovery, demand control ventilation, economizer, and controlled via airflow measurement.

9.12. Mechanical Rooms and Penthouse:

- The mechanical rooms and the penthouse are inside of the building vapor barrier and thermal envelope, and they contain sensitive electronic equipment. Rather than introducing untreated, high-moisture, ventilation air into these spaces for summer "cooling", we are recommending 100% recirculating chilled and hot water dehumidification fan coils.
- Each shall be approx. 2,000 CFM and in a downflow configuration.
- They shall contain a MERV 8 pre-filter, cooling coil, re-heat coil, and supply fan. Provide multiples as needed to serve each mechanical space. Initial suggestion is for four in the Lower-Level Mechanical Room, three in the Upper-Level Mechanical Room, and two in the Penthouse.
- These are to maintain the space to 80F/65%RH in summer and 60F in winter. Provide natural ventilation cooling fans at approx. 4 ACH to be used only during the shoulder seasons when partial cooling may be necessary, but the central plant is off.

9.13. Miscellaneous Systems:

- Provide hot water unit heaters at the loading dock garage doors. (Typ. 5)
- Provide hot water cabinet unit heaters at enclosed vestibules. Positively pressurize these spaces with a supply air grille from a nearby AHU.
- Provide custom enclosures as coordinated with architect in high finish areas. Vestibule temperature controls to prohibit heating the space when the outdoor temperature is above 45F.
- Space thermostat setpoints to be not higher than 60F for heating mode and 85F for cooling mode. (Typ. 5)
- Provide custom stainless steel pedestal fin tube enclosures at large perimeter glazing in the Dining Halls, Entrance Vestibules, and Meeting Rooms. Provide two-tier systems at two-story glazing.
  - Provide split-type cooling systems at elevator machine room. (Typ. 2)
  - Walk-in Coolers and Freezers to have their associated air-cooled condensing units located outside the building, on the roof. Monitor temperatures on BAS for alarming
- Standard Air Terminal Units: For air terminal units that fall within pre-manufactured available sizes, use pre-manufactured single-duct butterfly-type damper terminal units with access doors before and after the re-heat coil.
- Large Air Terminal Units: For air terminal sizes that exceed pre-manufactured available sizes, field-construct a terminal device from an airflow measuring station, a field-mounted reheat coil, and a modulating control damper. Locate these in

mechanical rooms for easier serviceability when possible.
- Provide sound attenuation devices on air handlers, return fans, central steam PRV stations, etc. where required to meet or exceed the ASHRAE Handbook suggested noise levels.
- Provide dedicated cooling for all telecommunication rooms.

9.14. Exhaust Fans

- To simplify the ducting and allow for maximum system control flexibility, provide one exhaust fan for each kitchen hood or specialized device.
- Provide fans with speed control switches, ECM motors, or VFDs per the control sequences and/or to assist the airflow balancing efforts.
- Kitchen exhaust fans will be located on the roof. Care must be provided to ensure that they are located appropriately in relation to mechanical intakes and prevailing wind conditions. Per ASHRAE 62.1 (Ventilation Guidelines):
  - Commercial Kitchen Grease Hood Exhaust has an Air Class of 4 and shall discharge 30' horizontally from mechanical intakes. The IMC allows this distance to be reduced to 10' and makes an allowance for the instance where the intake is located below the exhaust. For fans above the penthouse, provide a rooftop exhaust fan with a higher-velocity vertical discharge.
  - Commercial Kitchen Non-Grease Exhaust has an Air Class of 3 and shall discharge 15' horizontally from mechanical intakes. Again, the IMC allows this distance to be reduced to 10' and makes an allowance for the instance where the intake is located below the exhaust. For fans above the penthouse, provide a rooftop exhaust fan with a higher-velocity vertical discharge.
  - Mechanical and Machine Room Exhaust has an Air Class of 2 and shall discharge 10' horizontally from mechanical intakes.
  - General and Bathroom Exhausts have an Air Class of 1 and shall discharge 10' horizontally from mechanical intakes.
  - Commercial Kitchens to have an exhaust rate of at least 0.7 CFM/SF.
  - Classify catering kitchen areas and serveries as "kitchenettes", to have an exhaust rate of at least 0.3 CFM/SF.
  - Jan Closets, Trash Rooms, and Recycling Rooms to have an exhaust rate of at least 1.0 CFM/SF.

9.15. Additional Intake Considerations:

- Keep 25' horizontally from loading docks, to help protect against entrainment of vehicle exhaust fumes.
- Keep 15' from dumpsters and from adjacent cooling tower basins.
- Protect against snow entrainment from prevailing winds. Provide a wind blocking wall if intake louvers need to be located facing anywhere between north and west. Ensure wall design prevents nuisance snow drift locations.
- Provide adequate drainage and cleaning access for intake louver plenums.
- Provide bird screen on intake louvers, as well as a means of which to clean them.

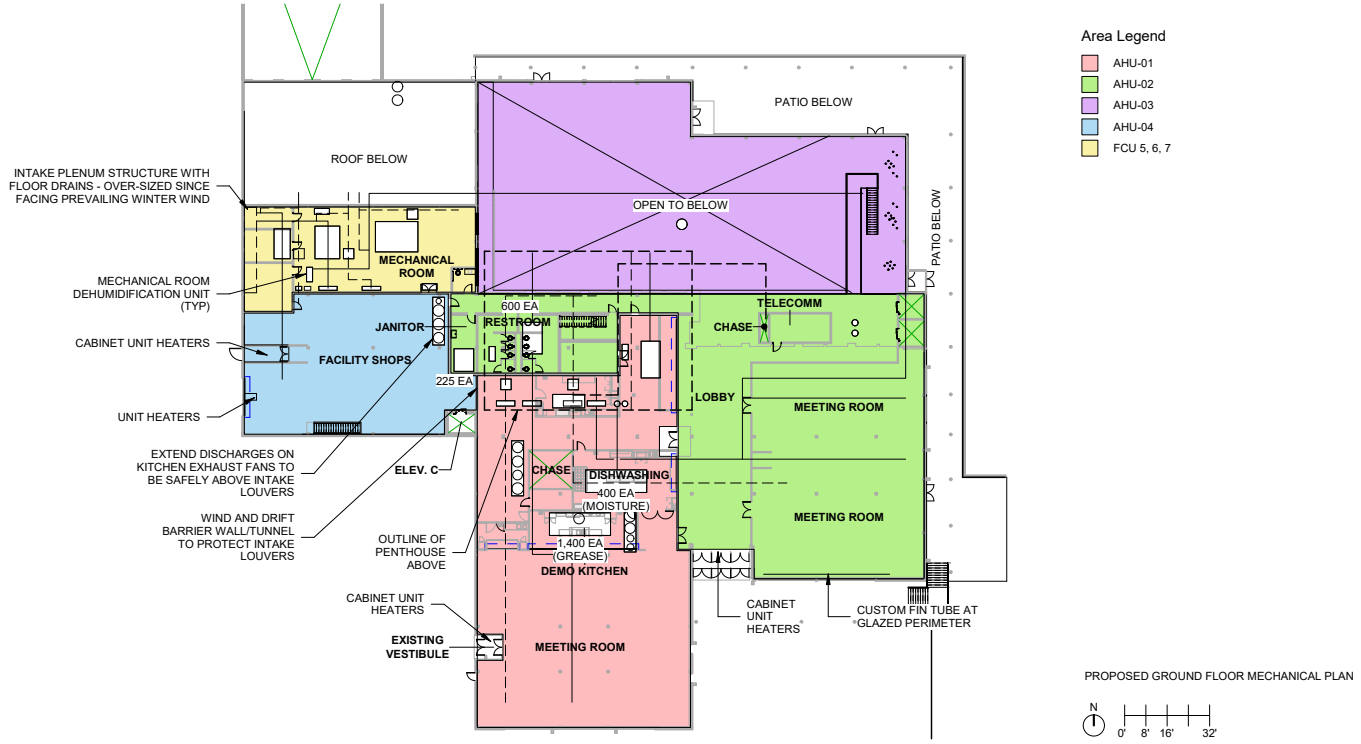
9.16. Filtration

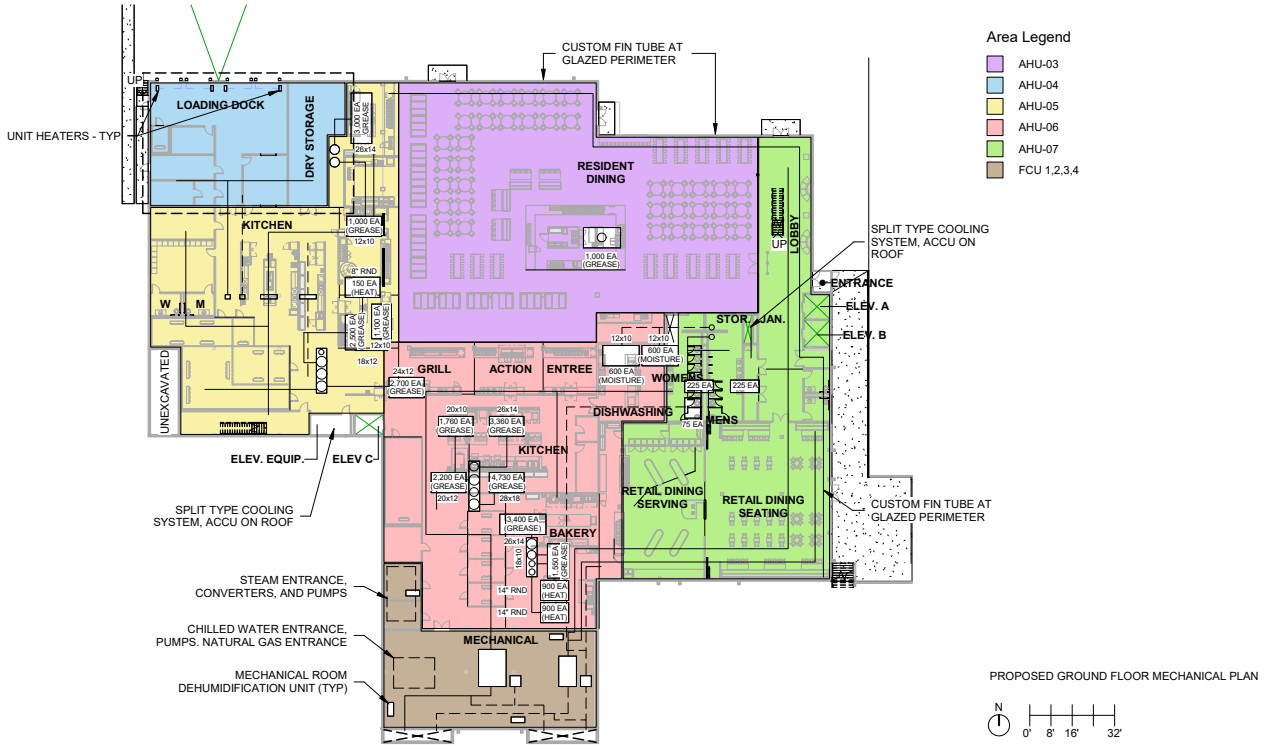
- MERV 8 or Less in cabinet unit heaters, mechanical room units, and elevator room cooling units.
- MERV 8 and 13 pre-filters on recirculating systems serving regularly occupied spaces. This is increased from the DFD standard MERV 11 in consideration of current COVID design recommendations. The MERV 13 filters shall be bag type. Provide space between AHU filter racks for differential pressure sensing tips. Size all fans for dirty filters.

9.17. Duct Routing

- Building floor to floor dimensions create a 10’4” clear space under the floor slab on the lower level. Duct distribution, and the crossing of ductwork, will be very challenging, especially for larger sizes. Grease rated ductwork also has a sloping requirement. It will be most advantageous to route the grease duct to the roof as directly vertical as possible. A series of shafts provide these pathways to minimize duct crossing.
- Most kitchen exhaust ducts will need to be as flat as is reasonable, therefore custom welded black-iron with fire-proof insulation will be required.
- The grease exhaust duct located above the island kitchen in the 2-story main dining hall will need to be treated for aesthetic concerns. Provide a custom painted spiral duct enclosure around the vertical grease duct to roof to enclose it. In this location the grease duct could be welded black-iron with fire-proof insulation, or it could be a round prefabricated system.
- Provide fully ducted return air systems.

9.18. Mechanical Plan Diagrams





10. Plumbing and Fire Suppression

10.1. Existing Building Demolition Work:

Due to the age and condition of the existing plumbing and fire protection systems, and due to the cost that would be associated with relocating, reworking, and coordinating any usable portions of the existing systems to meet new requirements, we recommend completely demolishing these systems back to their existing building entrances and extending new. The existing grease traps should be replaced as well.

The existing water entrance is 4". This service will be ungraded to a combined larger service.

10.2. Piping Materials/Systems:

Fire suppression systems will utilize a mixture of Schedule 40 black steel for piping 2" and smaller and Schedule 10 black steel for piping greater than 2" in size.

All sanitary and grease waste and vent systems will be installed utilizing CPVC piping materials to extend life span of the piping systems and reduce pipe distortion due to more harsh and acidic contents that are draining through system as well as higher temperature discharge temperatures into these systems from kitchen equipment.

Storm systems that are above-grade and interior to the building will be installed utilizing cast iron piping in the public areas, dining rooms, and meeting rooms for sound attenuation considerations and Sch 40 PVC elsewhere, both above and below grade.

Clearwater waste and vent systems will be installed utilizing Sch 40 PVC piping materials as well.

Domestic water piping will utilize, in the majority of cases, a combination of stainless steel and PEX-a piping materials. Copper piping will be mostly limited to where plumbing equipment will require hard-piped connections, limited kitchen areas and at plumbing fixture rough-in stub outs from walls.

10.3. Fire Suppression Systems:

The building will require an ASSE 1015 compliant double check valve assembly on the fire service to protect the domestic water system from backflow concerns. The building will be fully sprinklered and all required components monitored per NFPA requirements.

Fire suppression systems will extend into all addition and renovation areas to provide complete sprinkler coverage along with the installation of any new fire department valves to allow for hose connections required by Code and the local AHJ. Walk-in refrigerators and freezers will be provided with dry sprinkler heads to protect these spaces without concerns for system damage due to pipes and heads freezing.

Neither fire pumps nor standpipes are anticipated to be required at this time based on number of floors and floor-to-floor heights expected for the new building.

10.4. Plumbing Equipment:

10.4.a. Water Heaters

The enlarged and renovated building will be provided with a new domestic hot water generation system. This will be accomplished using dual semi-instantaneous steam hot water heaters,

with each unit sized for 67% total expected load, with additional hot water storage tank(s) to accommodate peak flow and volume requirements for the kitchen hot water supply. The water heaters will heat and store the hot water at a minimum temperature of 140 degrees F. Hot water circulation pump(s) will be installed near these water heater systems to maintain temperatures throughout the facility distribution system and the storage tank(s). ASSE 1017 compliant thermostatic mixing station(s) will be installed downstream of the water heater system to control the 140 degree outlet as well as to provide multiple temperature (Hi Temp and Low Temp) loops to building fixtures as required. Water will be distributed at 140 degrees F and local mixing valves will be provided at fixtures for scald prevention. Return water loops will be provided and balanced per most current energy code.

10.4.b. Water Softener:
A new triplex water softening/conditioning system will need to be sized and controlled to ensure proper operation over the highly diversified flow rate expected for this facility. Review specialty food service equipment specifications to ensure that none require any additional water conditioning.

10.4.c. Grease Interceptor:
All kitchen and food preparation waste to be routed to an exterior grease interceptor. The grease interceptor will be sized to reflect the anticipated number of meals per day, the anticipated drainage load from fixtures/equipment, and will accommodate a reasonable pump-out maintenance schedule. The unit will be installed adjacent to the existing grease interceptor, which will be demolished, and accommodations will be made to ensure ease of access for maintenance and pump out.

10.4.d. Oil Separator:
At the exterior loading dock, some type of structure to allow for oil separation will be required at the loading ramp where semi-trucks will dock at the building exterior.

10.4.e. Backflow Preventer:
Will be installed at items that need water make-up and require additional means of backflow protection such as mechanical equipment, food service equipment and plumbing equipment.

10.4.f. Natural Gas:
Natural gas will be routed from the gas meter location to all pieces of food service equipment requiring natural gas for fuel.

10.4.g. Water Pumps:
Neither domestic water booster pumps nor sewage ejectors are anticipated. Elevator hoistways will have elevator sump pumps installed.

10.5. Plumbing Fixtures:
In general, plumbing fixtures for this building will be selected to match current Campus Standards and attic stock where possible to reduce quantities of different attic stock required to be available for maintenance and repairs.

The enlarged and renovated building will be

provided with appropriate quantities of restrooms and breakroom areas for staff. These areas will have vitreous china handwashing lavatories with sensor faucets, vitreous china water closets with manual dual flush valves, and stainless steel breakroom sinks with manual faucets. In food service areas, stainless steel handwashing sinks with sensor faucets will be placed where appropriate around other food service equipment. Mop basins will be provided in janitor's closets and at relevant kitchen areas.

10.6. Foodservice Equipment:

The remainder of food service equipment will be provided by others and the appropriate plumbing connections to said equipment will be performed by the plumbing contractor.

10.7. Drains:

General floor drains will be provided in all kitchen areas, mechanical rooms, janitor's closets, and restrooms. Trench drains will be provided at food service equipment requiring large drainage needs. Roof drains will convey storm water from the roof level to the storm structures on site and overflow storm drainage will be accomplished through overflow drains and downspout nozzles or through architectural scuppers.

10.8. Exterior Fixtures:

Hose bibs and exterior wall hydrants will be located where the final floor plans dictate.

11. Electrical

11.1 Primary Electrical

The sequence of the project will require the existing 5kV campus feeder from the existing pad mount switch to remain energized throughout construction. A new electrical distribution system will be provided as part of the project, and to support the occupied building, will be constructed while the existing distribution system is operational. The existing pad mounted switchgear (G26, Figure 1) configuration does not allow for an additional feeder. A new pad mount switchgear will be required to allow for a new feeder into the new electrical room while the existing feeder remains energized. (Figure 2). Upon completion of the final phase of construction, the original 5kV feeder from Esker Hall to the pad mounted switchgear will be removed.

During the switchgear replacement, an outage to Feeder #2 will be required. Based upon the loop configuration of the campus primary, opening the Feeder #2 switch at the campus substation and switchgear G28, along with closing the loop Feeder #12 switch at the campus substation and switchgear G40 near Wellers Hall, the outage can be isolated to Esker Hall. Refer to Figure 3.

A new concrete encased duct bank will be extended from the existing signal and primary manholes (P26) to the new medium voltage electrical room and main communications room (MTR). The existing manholes are located adjacent to the pad mounted switchgear serving Esker Hall. Refer to Figure 4.

Figure 1-EXISTING PAD MOUNT SWITCH (G26) & MANHOLES (P26)

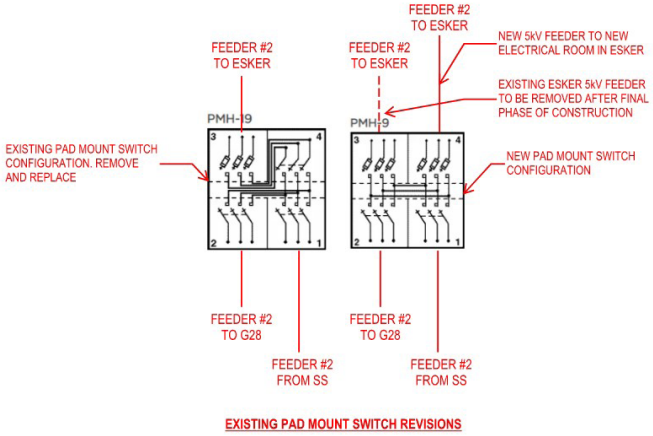


Figure 2-PAD MOUNT SWITCHGEAR G26 REPLACEMENT

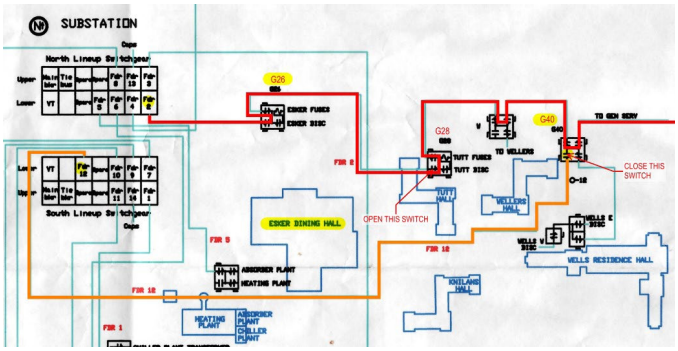


Figure 3-CAMPUS PRIMARY UG, PARTIAL

At the Upper Level of Esker Hall, a new medium voltage electrical room will be constructed. The room will house a new pad mounted 600A fused MVS switch and 4,160V to 480Y/277V, 3 phase, 4 wire dry-type transformer. The transformer secondary will be extended to a separate normal power electrical room with bus duct. A continuous ground bus bar, with driven ground rods, will be installed around the room per DFD standards.

11.2 Building Electrical Distribution

A new electrical distribution system will be provided throughout the building. A new normal power, 480Y/277V, 3 phase, 4 wire, switchboard will be provided within a dedicated electrical room per figure 6. The switchboard will be supplied from the medium voltage transformer secondary with a bus duct connection to a main circuit breaker.

During the final phase of construction, the existing medium voltage transformer, primary switch, and secondary distribution system will be removed completely.

A new grounding electrode system will be provided with all code required and DFD recommended connections. Grounding electrode systems for power distribution, communications and audio visual will all be separate and only interconnected and the main grounding electrode bus bar in the main electrical room.

Outside of this project, the structural capacity of the Esker Hall roof system was evaluated and found there wasn't sufficient structural capacity for a photovoltaic system.

Additional electrical rooms will be provided throughout the building for step-down transformers and branch circuit panels. The goal of the project is to locate all electrical distribution equipment within dedicated electrical rooms. Flush mount branch circuit panelboards within the Kitchen areas are discouraged due to humidity and working clearance concerns.

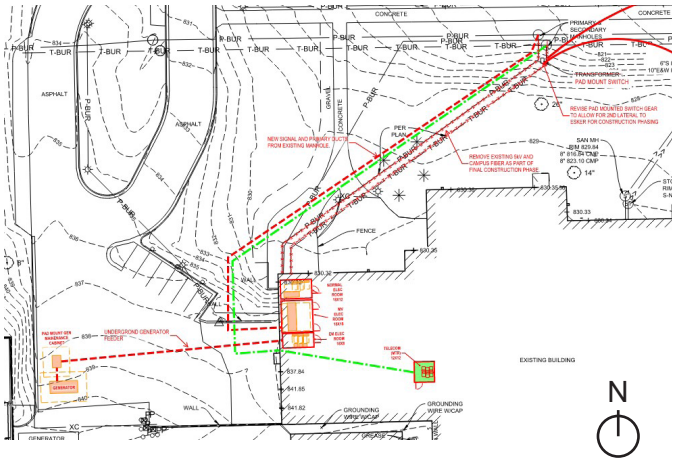


Figure 4-DUCT BANK ROUTE
SCALE: NTS

Figure 5-GRADE CHANGE ALONG PROPOSED DUCT BANK PATH

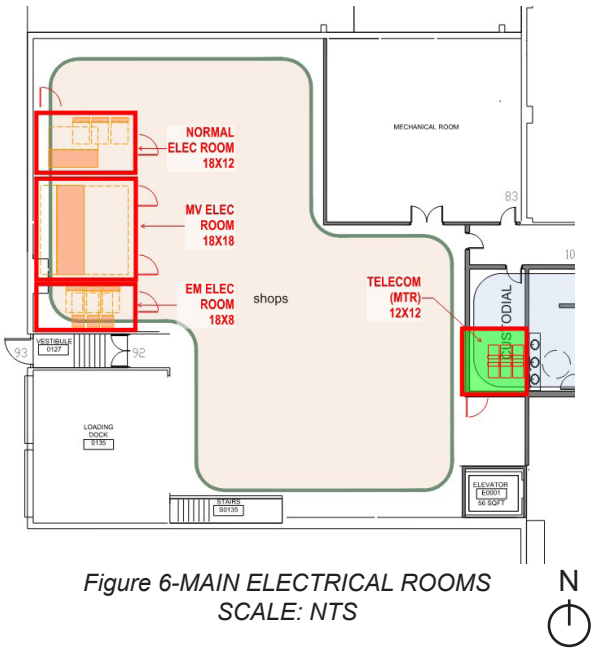


Figure 6-MAIN ELECTRICAL ROOMS
SCALE: NTS

A new generator will be provided to supply NEC 700 (emergency) and NEC 702 (optional standby loads). The generator will be an exterior pad mount with sub-base diesel fuel tank. An adjacent pad mount maintenance connection cabinet to allow for load bank and/or temporary generator provisions.

Three ATS are recommended, each serving dedicated distribution systems.

- ATS-EM: Emergency lighting, fire alarm and similar life safety elements
- ATS-OSB1: HVAC DDC system, building heating pumps, telecom (MTR/TR) rooms, sump pumps, elevator, and other user agency requested loads.
- ATS-OSB2: Freezer/Cooler refrigeration systems.

All ATS and associated disconnects for branch separation will be in a dedicated generator power distribution room.

The cooler and freezer system will be a significant load on the generator. Food product loss is a major concern for the campus and therefore a generator sized to accommodate all the walk-in cooler and freezer units will be required. A control strategy can be implemented to minimize the number of freezer/cooler condensing units that can operate simultaneously while on generator power.

The building elevator(s) are not required to be connected to the generator by code. However, the campus has a large population of individuals with mobility challenges and therefore providing a backup source of power is encouraged.

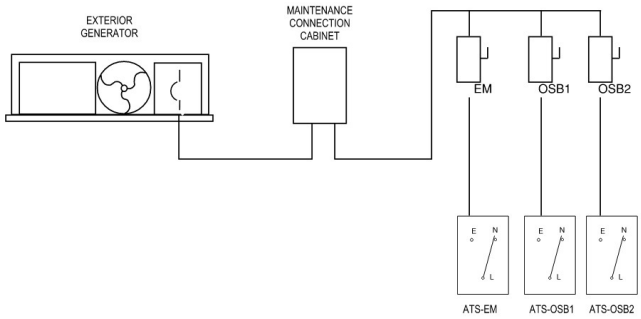


Figure 6-MAIN ELECTRICAL ROOMS

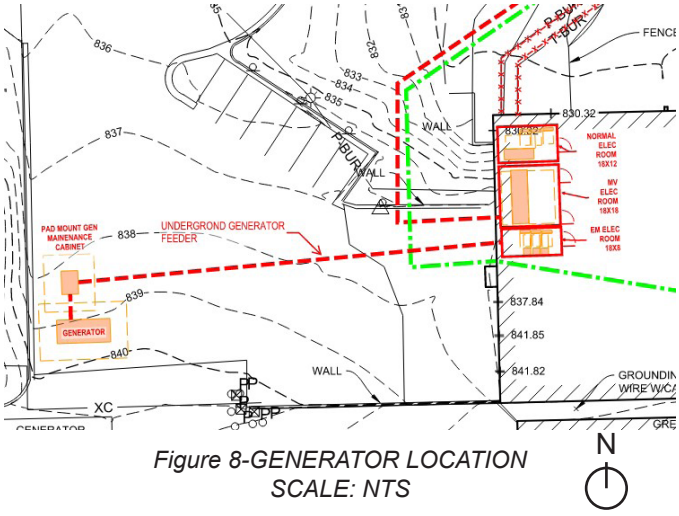


Figure 8-GENERATOR LOCATION
SCALE: NTS

11.3 Equipment Connections and Wiring Devices

The project includes a complete interior renovation. All existing equipment and wiring devices will be removed. New devices and equipment connections will be provided as required. It is expected that the high volume of students and summer camp participants will require a high density of convenience receptacles for device charging. All receptacles within kitchen spaces will be GFCI type which can be either breaker or device depending on accessibility. Consideration should be given to dead-front GFCI sensors remote from the receptacle, when inaccessible, to allow kitchen staff to reset the device. Note that kitchen staff may not have access to electrical rooms to reset GFCI breakers.

11.4 Lighting and Lighting Controls

All existing interior and exterior lighting and lighting controls will be removed. New lighting will be installed to achieve lighting levels in accordance with the requirements of IESNA foot candle levels and ASHRAE Watts/sf for each space type. An overall building wide reduction of 30% better than what is permitted by the energy code will be attempted.

Exterior lighting will be provided at all doors along with architectural lighting on the building. All exterior lighting will be controlled by an astronomical timeclock as part of the lighting control system or integrated into the building DDC system.

All lighting will utilize LED sources.

Lighting controls will utilize a network distributed lighting control system. Common area spaces, within daylight zones, will be configured with automatic sensors to adjust electric light output based upon availability of natural light. Kitchen and dining areas will comply with automatic controls using a timeclock function with local overrides. All other areas will use local controls with wall or ceiling mounted occupancy sensors.

Lighting controls within the upper-level meeting spaces can be provided with preset scene controls.

12. Communications

12.1 Structured Cabling

The phasing of the project will allow for new main communications rooms to be constructed while the existing Telecom Rooms are kept in service. New campus fiber will be extended to the building and terminated in the new upper-level MTR. The inter-building fiber will be routed within a new duct bank from the existing signal manhole on the north side of Esker Hall.

Intra-building fiber will be provided from the MTR on the upper level to the TR on the lower level. Only two telecom rooms, one per floor, are expected as part of the renovation.

Main Telecom Room (MTR) and Telecom Room (TR) will be constructed to agency and DFD standards.

The equipment outlet cabling system was estimated with CAT6 and CAT6A (AP only) for the purpose of this pre-design effort. It is expected that when the project moves into design phase, the structured cabling system type will be reviewed with campus.

A dedicated communications system grounding electrode system will be provided.

12.2 Audio Visual Systems

Systems are expected within the meeting spaces on the upper level. As part of the pre-design efforts, system specifics were not discussed. However, an allowance has been included in the estimate to cover typical standalone AV systems with integrated control systems to manage multiple user inputs and outputs. The AV allowance was determined with the following: Three meeting rooms each room containing an AV Control system, wired and wireless connectivity, overhead program and voice audio, microphones, assisted listening systems and wall mounted displays. Along with all required infrastructure.

It was noted that digital signage, events, ordering kiosks, and wayfinding will be required. During pre-design, a specific system was not discussed, however an allowance has been included in the cost estimate for a network based digital signage system.

12.3 Paging Systems

A new paging system will be provided throughout the facility. Speakers will be ceiling flush mount type or suspended pendant type with cabling routed free-air above accessible ceilings. The system will be either network/IP type or traditional 70V.

13. Electronic Safety and Security

13.1 Access Control

The existing campus-wide system will be utilized in Esker Hall. Controlled doors will be identified by Campus. Door controllers will be located with MTR/TR rooms. For pre-design, we have assumed all exterior doors will be electronically controlled. An allowance for 12 interior doors was included in the cost estimate.

13.2 Video Surveillance

New interior and exterior cameras will be provided. The cameras will be PoE and network connected to the existing campus VMS. An allowance for 8 outdoor cameras and 24 indoor cameras has been included in the estimate.

13.3. Emergency Responder Radio System (ERRS)

Based upon the size of the building, an ERRS has been included in the pre-design estimate. The bi-directional amplifier can be in the upper-level MTR with donor antenna on the roof above. The system will be monitored by the fire alarm system.

13.4. Fire Alarm and Detection

The existing fire alarm system will be removed during the final phase of construction. A new addressable emergency voice evacuation type system will be provided throughout the building. The existing fire alarm system uses a wireless monitoring system. A future discussion with campus is required on whether that technology will continue to be used on the new fire alarm system. Notification appliances and initiation devices will be located as required by code and DFD standards. The fire alarm system will be interlocked with other systems such as: kitchen hood fire suppression, HVAC controls, elevator, building sprinkler system, ERRS, etc.

14. Cost Estimate

The probable cost estimate is developed using diagrammatic floor plans and engineering strategies using 2023 RS Means unit costs with additional adjustments to accommodate the inherent renovation complexities.

Some specific components of the cost estimate revived additional input form other sources:

1. Portion of the plumbing estimate as it relates to Food Service equipment connections is influenced by input from a local plumbing contractor.

2. Furniture cost is provided by a local supplier based on a general selection by Assemblage Architects interior team.

4. Mechanical cost of AHU and other major equipment are provided by a supplier.

5. Food service equipment cost is provided by Rippe with input from manufacturers.

6. Escalation multiplier is based on direction from the UW system, to the mid point of construction. Anticipated 2030.

7. DFD Fee is provided by DFD Guideline.

22J1V Esker Dining Hall Pre-Design Study
UW-Whitewater
Whitewater, WI
Cost Estimate
10/25/2023

Assemblage Architects

Ground Floor	44,336	GSF	
Upper Floor	28,763	GSF	Shell only
Total Renovation Area	73,099	GSF	
Loading Dock Addition	4,217	GSF	
Total	77,316	GSF	

Work	Reference-RS Means 2023	Quantity	Unit	Unit Cost	Subtotal	Total
Site						
Civil	Per OTIE				$586,920	
Architectural Site Including: Stairs, Retaining Wall Treatment, Etc.					$100,000	
Site Architectural Elements - Handrails, Ramps and Stairs					$100,000	
Landscaping					$20,000	
Total Site					**$806,920**	**$806,920**
Building						
Division 2 - Demo and Temporary						
Hazardous Material Abatement	Per DFD recommendation	1	LS	$380,000	$380,000	
Demolish Floor Slab Including Under Floor Plumbing Complete		44,336	SF	$15	$665,040	
Selective Demolish Interior Partition - Upper and Lower Level		16,000	SF	$12	$192,000	
Demolish Partial Exterior Masonry Walls		400	SF	$22	$8,800	
Demolish Stairs		2	EA	$10,000	$20,000	
Excavation For Foundations		320	LF	$160	$51,200	
Demolish Kitchen Equipment, Including Hoods and Dishwashing		8,000	SF	$30	$240,000	
Demolish Walk-In Refrigerators		9	EA	$8,000	$72,000	
Demo Elevators		2	EA	$20,000	$40,000	
Demo Doors and Frames		84	LS	$1,000	$84,000	
Divisionis 3 - Concrete						
Footing Including Excavation and Backfill - 48X16	A1010 110 3450	195	LF	$150	$29,250	
Conc. Foundation Walls - 8' Tall at Loading Dock	A1010 105 3100	136	LF	$182	$24,752	
Conc. Foundation Walls - 5' Deep	A1010 105 3040	59		$160	$9,440	
Elevated Waffle Slab Infill - In Existing Building - Infill - Includes Cutting	B1010 227 3900	750	SF	$80	$60,000	
New 4" Slab Including 15 Mil VB, Sealed Penetrations	A1030 120 2280	44,336	SF	$16	$709,376	
Insulated Slab at Walk-In Freezer and Refrigerators		2,000	SF	$22	$44,000	
Misc. Conc. Paving	A1030 120 3340	800	SF	$14	$11,200	
Division 4 - Masonry						
Modify Existing Masonry Walls		2,000	SF	$85	$170,000	
Masonry Repair and Tuck Pointing		300	SF	$80	$24,000	
Exterior Masonry Cavity Walls - Elevator Shafts and Loading Dock		4,160	SF	$58	$241,280	
Interior CMU Partitions - 8"	B2010 109 1490	26,647	SF	$18	$479,646	
Division 5 - Metals						
Misc. - Steel Including Large Opening Lintels		4	EA	$6,000	$24,000	
Roof Framing - Steel Joists and Deck at Loading Dock	B1020 108 4700	4,273	SF	$14	$59,822	
Interior Floor Framing Infill		1,500	SF	$27	$40,350	
Stairs With Terrazzo Treads and Railing		19	TREADS	$3,000	$57,000	
Steel Guardrails		164	LF	$200	$32,800	
Division 6 - Wood, Plastics, Composites						
Misc. Carpentry		1	LS	$120,000	$120,000	
Architectural Finished Carpentry		1	LS	$40,000	$40,000	
Wood Interior Panels		600	SF	$120	$72,000	
Interior Partition Treatments		1,000	SF	$100	$100,000	
Casework - Excludes Food Service		40	LF	$600	$24,000	
Division 7-Thermal and Moisture Protection						
Foundation Insulation		780	SF	$10	$7,800	
Sealant		1	LS	$80,000	$80,000	
Foundation Water Proofing		1,100	SF	$25	$27,500	
Roof Including Insulation and Associated Flashing	B3010 120 3500	8,800	SF	$35	$308,000	
Roofing Repairs and Roof Drain Replacement		1,200	SF	$80	$96,000	
Aluminum Cladding Or Spandrel		40	SF	$90	$3,600	
Aluminum Soffit Panels		200	SF	$50	$10,000	
Aluminum Facia		140	SF	$50	$7,000	
Fireproofing		11,000	SF	$6	$66,000	
SS Flashing and Other Sheet Metal Specialties		320	LF	$40	$12,800	
Division 8 - Openings						
Counter Shutters - at 24Hr Store		120	SF	$160	$19,200	
Interior Entrance System		1,500	SF	$180	$270,000	
Doors - Wood Or Metal Doors In Hm Frames Including Hardware - Interior	C1020 102 2500	30	EA	$4,000	$120,000	
Overhead Doors at Loading Dock		4	EA	$20,000	$80,000	
Overhead Door - Interior		2	EA	$15,000	$30,000	
Interior Door, Frame and Hardware		30	EA	$3,000	$90,000	
Curtain Wall System	B2030 110 6300	2,794	SF	$120	$335,280	
Exterior Doors and Hardware	B2030 110 6400	12	EA	$7,000	$84,000	
Windows - Including Clearstory		0	SF	$120	$0	
Window Covering		0	SF	$20	$0	

Division 9 - Finishes							
	Gwb With Metal Stud and Sound attenuation Blanket		2,000	SF	$12	$24,000	
	Flooring - Carpet Tile Including Base		5,000	SF	$12	$60,000	
	Lvt Or Other Resilient Type Flooring Including Base		4,000	SF	$12	$48,000	
	Gwb Furring and Partition With Insulation	C1010 126	1,000	SF	$16	$16,000	
	Acoustic Treatments		1,800	SF	$35	$63,000	
	Bathroom Wall Tiles		2,200	SF	$18	$39,600	
	Bathroom Floor Tile		1,200	SF	$18	$21,600	
	Terrazzo - Lobby and Serving Areas		5,764	SF	$24	$138,336	
	Paint - Interior	C3010 230 0100	40,000	SF	$5	$200,000	
	Intumescent Paint		400	SF	$80	$32,000	
	Paint Exposed Ceiling		12,000	SF	$8	$96,000	
	Kitchen Wall Tiles	C3020 410 1679	10,000	SF	$16	$160,000	
	Kitchen Floor Tile	C3020 410 1680	20,000	SF	$23	$464,000	
	Window Shades		400	SF	$10	$4,000	
	Misc. Base and Trim		2,000	LF	$12	$24,000	
	Polished Concrete		2,000	SF	$16	$32,000	
	Sealed Conc. - Loading Dock and Mechanical Room		8,000	SF	$9	$72,000	
	Ceilings - Apc - 2X2 - Kitchen		16,000	SF	$8	$128,000	
	Ceilings - Apc - 2X2	C3020 210 5900	12,000	SF	$10	$120,000	
Division 10 - Specialties							
	Toilet Partitions - Including Urinal		18	EA	$6,000	$108,000	
	Toilet Counter Tops		16	LF	$400	$6,400	
	Toilet Accessories		16	EA	$1,200	$19,200	
	Signage		1	LS	$100,000	$100,000	
	Wood Wall Panels		1,130	SF	$120	$135,600	
	Misc. Architectural Specialties		1	LS	$400,000	$400,000	
Division 11 - Equipment							
	Food Service Equipment	Per Rippe	1	LS	$6,000,100	$6,000,100	
	Temporary Relocation Of Food Service Equipment For Phasing		1	LS	$80,000	$80,000	
	Av Equipment		0	SF	$2	$0	
	Entrance Student Credential Reading System		0		$80,000	$0	
Division 12 - Furnishings							
	See FF&E						
Division 14 - Conveying Equipment			1				
	Hydraulic Elevator - 4000 Lb. - Two Stops	D1010 110 3100	3		$141,500	$424,500	
	Total Building					$14,789,472	$14,789,472
	Subtotal Building and Site						**$15,596,392**
	General Conditions at 15% (Phasing Consideration)						$2,339,459
	Overhead and Profit 5%	01310-620-0150					$779,820
	Total Building and Site						**$18,715,670**
	Total Mechanical	Per Accendis				$5,334,850	
	Total Electrical and Lighting, IT, Generator	Per Design Engineers				$4,000,000	
	Total Plumbing	Per 1901 and Accendis				$1,775,500	
	FP - Including Service Upgrade	Per 1901 and Accendis	77,000	SF	6	$462,000	
	Subtotal Building Systems					$11,572,350	
	GC O/P at 5%					$578,618	
	Total Building Systems						**$12,150,968**
	Total Building, Site, Systems						**$30,866,638**
	Design Contingency at 10%						**$3,086,664**
	Total Excluding Escalation						**$33,953,302**
	Escalation to 2029 at 8% Annual as Anticipated at Midpoint of Construction						**$19,926,321**
	Total Including Escalation						**$53,879,623**
	FF&E						**$500,000**
	Construction Total Including Site, Building, Equipment and FF&E						**$54,379,623**
	Other fees and considerations:						
	Design Fee 8%						**$4,350,370**
	Other Specialty Fees , Commissioning, Geotechnical, Testing 1%						**$543,796**
	DFD Fees 4%						**$2,175,185**
	Owner Contingencies 15%						**$8,156,943**
	Total Fees and Contingencies						**$15,226,294**
	Grand Total						**$69,605,917**

Note:

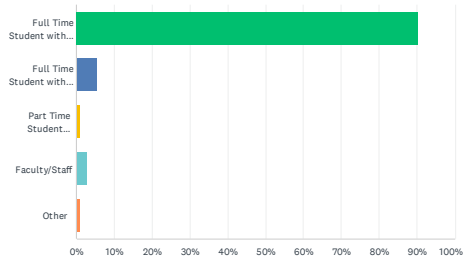
1. This estimate is a reduced scope of the original estimate. It shells the upper floo
with MEP roughed in to accmodate future build outs.

APPENDIX

A.1. Student Foodservice Survey Results
A.2. Meeting Notes
A.3. Alternate Site Considerations
A.4. Existing and Proposed Area Calculations
A.5. Site Survey
A.6. Existing and Proposed Floor Plans

Q1 What best describes your role at UW- Whitewater?

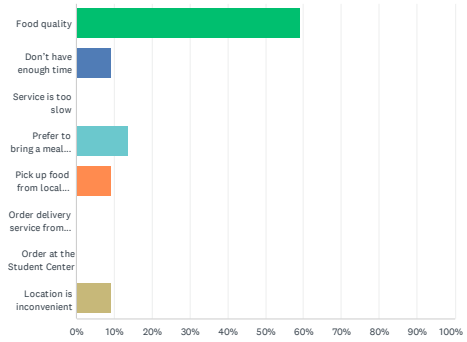
Answered: 259 Skipped: 0



ANSWER CHOICES	RESPONSES	
Full Time Student with Meal Plan	90.35%	234
Full Time Student without a Meal Plan	5.41%	14
Part Time Student commuting from home	0.77%	2
Faculty/Staff	2.70%	7
Other	0.77%	2
TOTAL		259

Q3 What is the primary reason (choose one) you do not dine at Esker Dining Center?

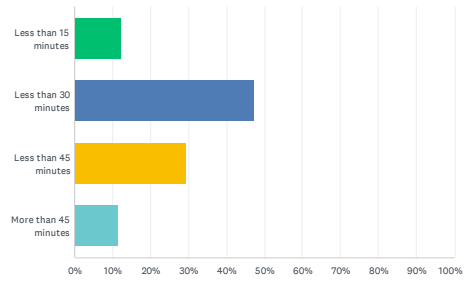
Answered: 22 Skipped: 237



ANSWER CHOICES	RESPONSES	
Food quality	59.09%	13
Don't have enough time	9.09%	2
Service is too slow	0.00%	0
Prefer to bring a meal from home	13.64%	3
Pick up food from local restaurants	9.09%	2
Order delivery service from local restaurants	0.00%	0
Order at the Student Center	0.00%	0
Location is inconvenient	9.09%	2
TOTAL		22

Q5 How long do you typically take for lunch?

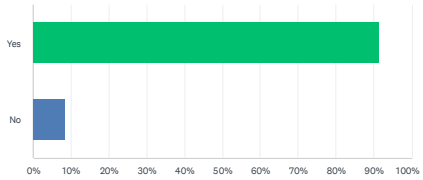
Answered: 230 Skipped: 29



ANSWER CHOICES	RESPONSES	
Less than 15 minutes	12.17%	28
Less than 30 minutes	47.39%	109
Less than 45 minutes	29.13%	67
More than 45 minutes	11.30%	26
TOTAL		230

Q2 Do you currently dine in either the Esker or Drumlin Dining Centers?

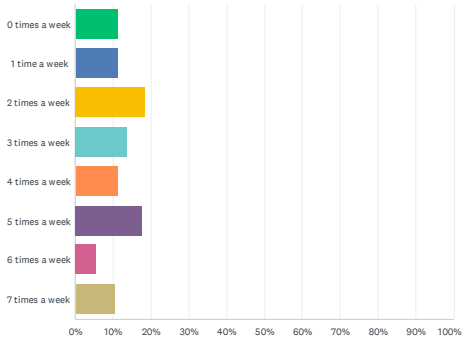
Answered: 255 Skipped: 4



ANSWER CHOICES	RESPONSES	
Yes	91.37%	233
No	8.63%	22
TOTAL		255

Q4 How often do you visit Esker or Drumlin for lunch?

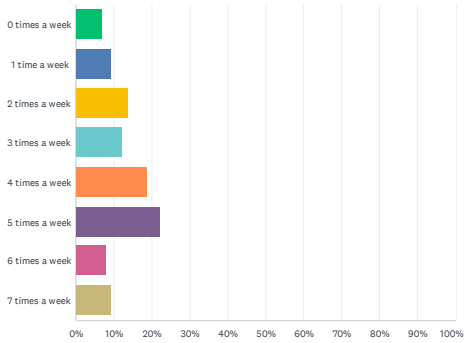
Answered: 231 Skipped: 28



ANSWER CHOICES	RESPONSES	
0 times a week	11.26%	26
1 time a week	11.26%	26
2 times a week	18.61%	43
3 times a week	13.85%	32
4 times a week	11.26%	26
5 times a week	17.75%	41
6 times a week	5.63%	13
7 times a week	10.39%	24
TOTAL		231

Q6 How often do you visit Esker or Drumlin for dinner?

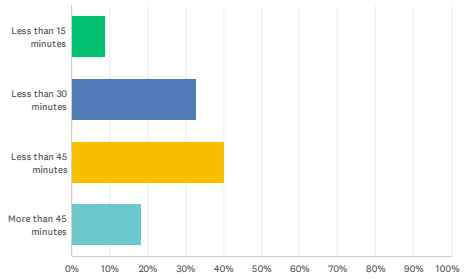
Answered: 230 Skipped: 29



ANSWER CHOICES	RESPONSES	
0 times a week	6.96%	16
1 time a week	9.13%	21
2 times a week	13.91%	32
3 times a week	12.17%	28
4 times a week	18.70%	43
5 times a week	22.17%	51
6 times a week	7.83%	18
7 times a week	9.13%	21
TOTAL		230

Q7 How long do you typically take for dinner?

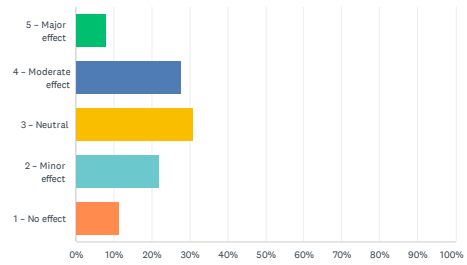
Answered: 229 Skipped: 30



ANSWER CHOICES	RESPONSES	
Less than 15 minutes	8.73%	20
Less than 30 minutes	32.75%	75
Less than 45 minutes	40.17%	92
More than 45 minutes	18.34%	42
TOTAL		229

Q8 How much of an effect do lines at serving counters influence your decision on what you order?

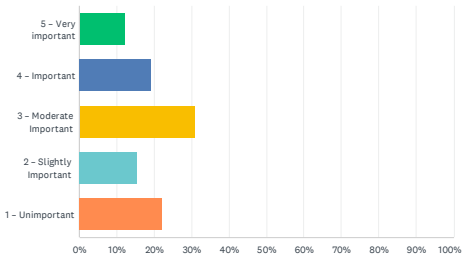
Answered: 227 Skipped: 32



ANSWER CHOICES	RESPONSES	
5 – Major effect	7.93%	18
4 – Moderate effect	27.75%	63
3 – Neutral	30.84%	70
2 – Minor effect	22.03%	50
1 – No effect	11.45%	26
TOTAL		227

Q9 How important is it that you see your food being prepared for you?

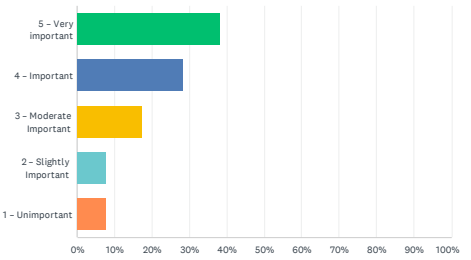
Answered: 239 Skipped: 20



ANSWER CHOICES	RESPONSES	
5 – Very important	12.13%	29
4 – Important	19.25%	46
3 – Moderate Important	30.96%	74
2 – Slightly Important	15.48%	37
1 – Unimportant	22.18%	53
TOTAL		239

Q10 How important is socializing with your friends/peers during your meal?

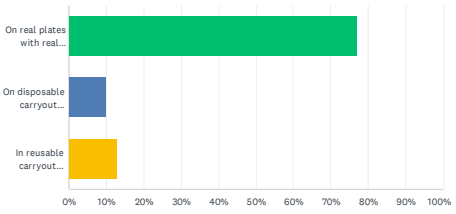
Answered: 239 Skipped: 20



ANSWER CHOICES	RESPONSES	
5 – Very important	38.08%	91
4 – Important	28.45%	68
3 – Moderate Important	17.57%	42
2 – Slightly Important	7.95%	19
1 – Unimportant	7.95%	19
TOTAL		239

Q11 When dining in, how do you like to be served?

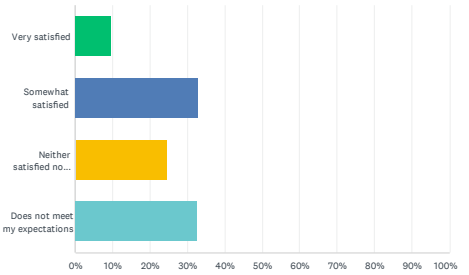
Answered: 239 Skipped: 20



ANSWER CHOICES	RESPONSES	
On real plates with real flatware	76.99%	184
On disposable carryout containers with plastic flatware	10.04%	24
In reusable carryout containers with compostable silverware	12.97%	31
TOTAL		239

Q12 How satisfied are you with the current operation at Esker Dining Center?

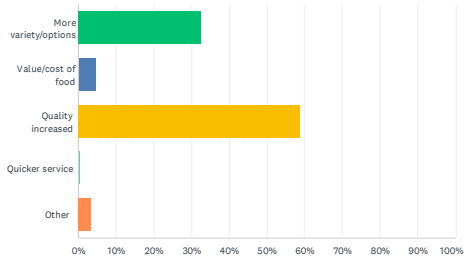
Answered: 236 Skipped: 23



ANSWER CHOICES	RESPONSES	
Very satisfied	9.75%	23
Somewhat satisfied	33.05%	78
Neither satisfied nor dissatisfied	24.58%	58
Does not meet my expectations	32.63%	77
TOTAL		236

Q13 What could be done to increase your participation in the dining center?

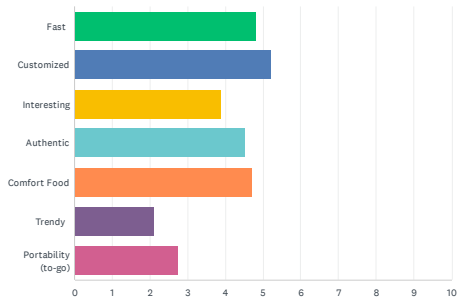
Answered: 236 Skipped: 23



ANSWER CHOICES	RESPONSES	
More variety/options	32.63%	77
Value/cost of food	4.66%	11
Quality increased	58.90%	139
Quicker service	0.42%	1
Other	3.39%	8
TOTAL		236

Q14 Rank in order of importance (1 = most important to 7 = least important.

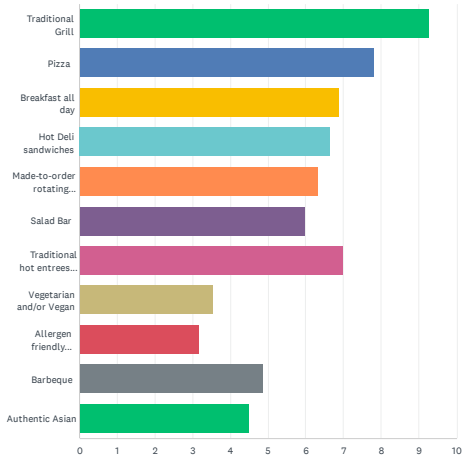
Answered: 214 Skipped: 45



	1	2	3	4	5	6	7	TOTAL	SCORE
Fast	23.36% 50	19.16% 41	17.29% 37	16.82% 36	7.94% 17	9.35% 20	6.07% 13	214	4.81
Customized	23.36% 50	26.17% 56	21.50% 46	15.42% 33	6.54% 14	4.67% 10	2.34% 5	214	5.21
Interesting	4.67% 10	13.55% 29	18.69% 40	15.89% 34	27.10% 58	16.36% 35	3.74% 8	214	3.89
Authentic	19.16% 41	16.82% 36	15.42% 33	17.76% 38	13.55% 29	12.15% 26	5.14% 11	214	4.53
Comfort Food	22.90% 49	16.82% 36	15.42% 33	15.42% 33	16.82% 36	7.48% 16	5.14% 11	214	4.71
Trendy	0.93% 2	1.87% 4	3.74% 8	7.48% 16	12.15% 26	34.58% 74	39.25% 84	214	2.11
Portability (to-go)	5.61% 12	5.61% 12	7.94% 17	11.21% 24	15.89% 34	15.42% 33	38.32% 82	214	2.74

Q15 In the campus dining center, indicate your choices for five stations ranking from 1- most important to 5- least important

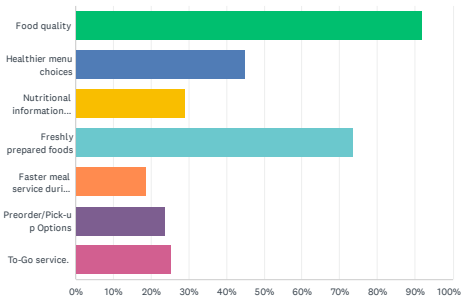
Answered: 208 Skipped: 51



	1	2	3	4	5	6	7	8	9	10	11
Traditional Grill	34.62% 72	25.48% 53	12.98% 27	10.10% 21	6.73% 14	4.33% 9	2.88% 6	0.48% 1	0.96% 2	0.96% 2	0.48% 1
Pizza	10.58% 22	19.23% 40	19.71% 41	10.10% 21	17.31% 36	7.21% 15	4.33% 9	1.92% 4	3.85% 8	2.88% 6	2.88% 6
Breakfast all day	9.62% 20	12.02% 25	14.42% 30	12.02% 25	11.54% 24	9.62% 20	8.17% 17	6.25% 13	4.81% 10	7.21% 15	4.33% 9
Hot Deli sandwiches	6.25% 13	6.25% 13	10.58% 22	20.67% 43	10.10% 21	14.42% 30	10.10% 21	11.06% 23	3.85% 8	3.37% 7	3.37% 7
Made-to-order rotating international concept	5.29% 11	6.73% 14	7.21% 15	11.06% 23	16.35% 34	13.94% 29	14.90% 31	12.50% 26	7.69% 16	2.40% 5	1.92% 4
Salad Bar	3.85% 8	7.21% 15	9.62% 20	8.17% 17	10.10% 21	15.38% 32	15.38% 32	10.10% 21	12.02% 25	6.25% 13	1.92% 4
Traditional hot entrees concept	11.06% 23	9.13% 19	12.02% 25	12.50% 26	8.17% 17	14.90% 31	13.94% 29	10.58% 22	5.77% 12	0.96% 2	0.96% 2
Vegetarian and/or Vegan	4.33% 9	2.40% 5	0.00% 0	2.88% 6	1.44% 3	3.85% 8	6.25% 13	19.23% 40	18.27% 38	22.12% 46	19.23% 40
Allergen friendly concept	5.29% 11	0.00% 0	0.96% 2	1.44% 3	1.92% 4	1.44% 3	6.25% 13	9.62% 20	24.52% 51	24.52% 51	24.04% 50
Barbeque	2.88% 6	5.29% 11	7.21% 15	7.69% 16	10.58% 22	5.77% 12	9.62% 20	11.06% 23	7.21% 15	20.19% 42	12.50% 26
Authentic Asian	6.25% 13	6.25% 13	5.29% 11	3.37% 7	5.77% 12	9.13% 19	8.17% 17	7.21% 15	11.06% 23	9.13% 19	28.37% 59

Q16 If you could make changes to improve the foodservice program in a new dining center, what would be the three most important things to improve? (Select three)

Answered: 211 Skipped: 48



ANSWER CHOICES	RESPONSES	
Food quality	91.94%	194
Healthier menu choices	45.02%	95
Nutritional information being displayed	28.91%	61
Freshly prepared foods	73.46%	155
Faster meal service during peak meal periods	18.48%	39
Preorder/Pick-up Options	23.70%	50
To-Go service.	25.12%	53
Total Respondents: 211		

MEETING MINUTES JANUARY 25th

State of Wisconsin

Department of Administration
Division of Facilities Development and Management (DFDM)

Project Name: Esker Hall Renovation
Project Location/Agency: University of Wisconsin – Whitewater
DSF Project Number: 22J1V
A/E Project Number: 2023-01
Meeting Date/Time/Room – 1-25-2023/ 10:00AM/ Wisconsin Room

Today's Date: 3/09/2023

Attendees:

	Attendee	Organization Role	Phone Number	Email Address
X	Jeremy Hall, P.E.	Division of Facilities Development Project Manager	608-266-1031	Jeremy.Hall1@wisconsin.gov
X	Hamid Noughani, AIA	Assemblage Architects Project Designer	608-827-5047	Noughani@assemblagearchitects.com
X	Scott Jacob, AIA	Assemblage Architects Project Architect	608-827-5047	Jacob@assemblagearchitects.com
X	Brad Biddick	Henneman Engineering Electrical Designer	608-286-2197	bbiddick@henneman.com
X	Jeff Uhrig	Heneman Engineering Mechanical Designer	608-445-0121	juhrig@henneman.com
X	Ben Cashin, P.E.	Oneida Total Integrated Enterprises (OTIE) Structural Engineer	608-576-9492	bcashin@oescgroup.com
X	Logan Weyandt	Oneida Total Integrated Enterprises (OTIE) Civil Engineer	608-287-3859	lweyandt@oescgroup.com
X	Thomas Federer	UW-Whitewater Building and Grounds Superintendent		federert@uww.edu
X	Angela Meldonian	UW-Whitewater UC Executive Director	262-472-1656	meldonia@uww.edu
X	Ben Smith	UW-Whitewater UC Event Service Manager		smithbj@uww.edu
X	Brant Keel	Aladdin Campus Dining UW-Whitewater Resident District Manager	262-472-4987	brant.keel@aladdinfood.com

X	Jeffrey Klamik, P.E.	UW-Whitewater Facilities Engineer	262-472-6729	klamikj@uww.edu
X	Nicole Thompson, MBA	UW-Whitewater Project Coordinator	262-472-5553	thompsnl@uww.edu
X	Eric Goodrich	Rippe Associates Food Service Designer	952-955-8056	egoodrich@rippeassociates.com

Current Conditions:

1. **Divided Functions**
    a. Upper Level

        - Main Entrance (south side)
        - Point of Sale
        - Kitchen
        - Private Offices
        - Conference/Meeting Rooms
        - Wrestling Practice Room
        - Restrooms
        - Loading Dock (newly renovated, 2 bays)
        - Locker Rooms/Showers
        - Access to Mechanical Mezzanine and Rooftop

    b. Lower Level

        - Residence Dining (main dining hall)
        - Prairie Street Market
        - Building Entrance (east side)
        - Outdoor Seating Access (north side)
        - Dishwashing
        - Maintenance/Repair Shop and Storage (serves 4 buildings on campus, all dining related)
        - Electrical Equipment Room

2. **Building Systems**
    a. MEP Systems are functioning, and facility staff plans to repair/maintain all systems throughout this study.
    b. Facilities has been deferring replacement of systems in anticipation of a building renovation.
    c. Structural repairs have been made to a beam.
        i. The facility engineer, Jeffrey Klamik P.E., has provided the design team with the documents from the beam repair completed by GMA Engineers. (Now Pierce Engineering)
    d. A complete 60-mil ballasted roof replacement was completed in summer 2022. Assumed R-25 insulation.

e. Delivery service drive and loading dock turn-around were recently replaced. (Exact date not recorded in meeting)
f. Brick tuckpointing should be considered as a part of this study
g. New loading dock at upper level accommodates 2 trucks, does not have direct access for drivers who use a separate entrance to come inside (west side of building)
h. Windows are original to the building
i. Elevators are functioning
j. Grease traps are functioning
k. Dish room floor drain is regularly clogged.
l. Asbestos Containing Materials (ACM) known to exist in flooring and pipe wraps throughout the building that will require abatement.
m. Site is bound by streets and adjacent buildings and parking lots (Central Utility System is next to Esker)
    i. Design team should not consider replacing the road, curb, parking in the study
n. Water infiltration is currently an issue in the electrical transformer room due to site runoff.

3. Food Service Function:

a. Food is prepared on the second level in the kitchen and brought to the lower level to be served. (Highly inefficient)
b. Esker Hall is one of the two dining halls on Campus.
    i. Drumlin Hall is the other.
    ii. Esker Hall is located on the side of campus with the largest residence hall population.
    iii. UWW Population is ~12,000
    iv. ~3,600 students live in residence halls and these are the population to focus on because they have meal plans.
c. Residence Dining Serves ~1,000 transactions per day during the regular school year(please confirm)
d. Residence Dining Serves ~1,800 in three hours during summer camps
    i. Esker is the only dining hall used for summer camps.
    ii. UW-Whitewater will host upcoming Special Olympics and expects
e. Prairie Street Market serves ~1,000 transactions per day during the regular school year. (please confirm)
f. Residence Dining operates on a staggered service model
    i. Breakfast 7:00 AM-9:30 AM
    ii. Lunch 11:00 AM- 2:00 PM
    iii. Dinner 4:00 PM – 7:30 PM
    iv. There used to be continuous service between all meal periods, but that is no longer offered.
g. Residence Dining has a small kitchen located in the center of the room surrounded by self-served food lines
h. The Prairie Street Market bridges service times not covered in the times above.
i. Esker Hall is operated by a contracted food service organization called Aladdin Campus Dining. None of the kitchen staff is employed by UW-Whitewater.
    i. Food service contracts are on a 7 year cycle.
j. Labor is a major concern and not readily available in the area.
    i. The campus has avoided making Esker a gathering place because of labor shortages that can't keep up with the cleaning required.
k. 4 Meal Plans Available
    i. Weekly (10, 14, 19, 24 meals per week)

ii. Meal Exchange (Limited Hours)
iii. Dining Dollars (Campus Cash)
iv. My Meals (Not available to all students)
v. Residence Dining uses all of the meal plan forms available.

l. Sysco is the main distributor for the campus
m. Pepsi products are served currently
n. Produce is cut and prepared onsite currently.
o. Esker acts as central commissary to bake all products for campus, as well as produce grab and go items for all retail locations.

4. Building Renovation Process:

a. The campus is expecting and preparing for a complete renovation of the existing building and all aspects of food preparation and service.
b. There is no interest in partial improvements to individual building systems or food service components.
c. The DFD project representative, Jeremy Hall P.E., will determine if the design team should consider a complete building replacement as a part of this study.
d. Esker Hall does not need to maintain occupancy or continue service while under construction.
    a. the design team is to consider phasing options in the study.
e. The campus is considering temporary/portable kitchen rentals to continue service and generate revenue.
    a. Hamid Noughani noted that in the design team's experience it may be less expensive to build a temporary kitchen than renting temporary/portable systems.
f. Drumlin Hall can't serve the entire campus while Esker is under construction
    a. It only has ½ the seating capacity as Esker
    b. It can handle the food volume

5. Goals and Objectives

a. Make Esker Hall a destination for students and staff.
b. Food Service
    a. Single level for food production and service to increase efficiency
    b. Be able to produce any kind of menu desired (Flexibility)
    c. Fresh produce should be an option
    d. A student grocery store
    e. Food allergy accommodation
    f. Food service that responds to the availability of the labor market in the area
    g. Support campus sustainability goals
    h. Solve accessibility issues for student access to dining space
    i. Create a destination dining experience
c. Program Spaces
    a. Live music performer space (Piano/Violin/ Bands)
    b. Coffee house style area
    c. Movie/ sporting event gathering space
    d. Outdoor seating (with lighting/ heat sources /rain & sun canopies to extend seasonal use)
    e. Adaptable/ flexible spaces
    f. Teaching kitchen
    g. Spaces that can be rented out for student groups to host their own events
    h. Free Food Pantry
        i. Freezers/ Coolers

ii. Variety of food options
iii. Staffed 2PM-5PM
iv. A 24hour vestibule stocked with food

i. Composting
j. Include a private dining room
k. Restrooms adjacent dining area to support occupancy numbers

6. Building System Improvement

a. Energy efficient MEP systems
b. MEP that can be as "future proof" as possible
c. Energy efficient window systems
d. Elevator replacement
e. Improvement to all building components that affect disabled students/staff/visitors
f. Maintenance and Storage improvements
g. IT Improvements

7. Student Input

a. Currently Esker is considered the least desirable location to eat on campus.
b. Students want options/convenience/technology.
c. Self-serve kiosks
d. Mobile ordering
e. Visibility/Interest

i. Students want to be able to see all of the options available, currently they are picking the first thing they see instead of exploring the options.

f. They are looking for a place to study and get a coffee
g. Customizable, fresh, and authentic serving concepts which offer variety by daypart

8. Schedule

1. Earliest Option
    a. Study to be completed September 2023
    b. Submitted to the 2025-2027 Biennium on November 15, 2023
    c. Could be approved August 2025 for A/E Selection
    d. Possible construction start 2028
2. Later Option If not accepted to the (25-27 Budget)
    a. Study to be completed September 2023
    b. Submitted to the 2027-2029 Biennium
    c. Could be approved for 2027 A/E Selection
    d. Possible construction start 2030

9. Precedents Discussed

- St. Norberts College
    - Fresh fruit
    - Food was cooked in front of you
    - Small Plates
- Madison College Culinary
    - Designed by Assemblage Architects

10. Action Items

1. Design team will order a survey of Esker Hall and coordinate with Jeffrey Klamik
2. Design team will generate a list of specific information they require about the building systems.
3. Design Team will setup a Sharepoint site to exchange project files with UWW and DFD.
4. Hamid Noughani will distribute parking passes to all design team members.
5. Hamid Noughani will submit a proposal to DFD.
    a. Does not need to include Design Options
    b. Needs to include cost estimates
6. Campus (Angela Meldonian) will provide additional data about the total sales of Esker Hall.
7. Jeff Klamik will investigate whether roof drains were replaced or reused during the roof replacement.
8. Jeff Klamik will provide information about the beam replacement to the design team **(Complete)**
9. Nicole Thompson will provide available CAD drawings **(Complete)**
10. Nicole Thompson will provide full scans of existing building drawings as the scans currently provided are cropped.
11. Nicole Thompson will provide past studies of Esker, Campus Master Plan, Campus Planning Process Questionnaire, and Winther Hall Study **(Complete)**

11. Administrative Procedures

1. 3 day notice prior to meetings required by UWW Staff to coordinate schedules/align staff.
2. Copy Hamid Noughani, Scott Jacob, and Jeremy Hall on all correspondence between UWW and design team.
3. During future site visits UWW has provided parking passes to be distributed to the design team. Park in parking lot 4, not in residence hall parking lots. Lot 4 is on the south side of Esker hall across from the tennis courts.

This is my understanding of items discussed and decisions reached during and after the meeting.

If there are any corrections or comments, please notify the architect. Prepared by Scott Jacob, Assemblage Architects. Notes Distributed to Point of Contact persons who may distribute within their respective groups.

MEETING MINUTES APRIL 25th

State of Wisconsin

Department of Administration
Division of Facilities Development (DFD)

Project Name: Esker Hall Renovation
Project Location/Agency: University of Wisconsin – Whitewater
DSF Project Number: 22J1V
A/E Project Number: 2023-01
Meeting Date/Time/Room – 4-25-2023/ 8:00AM-4:00PM/ Wisconsin Room

Today's Date: 5/22/2023

Attendees:

	Attendee	Organization Role	Phone Number	Email Address
X	Jeremy Hall, P.E.	Division of Facilities Development Project Manager	608-266-1031	Jeremy.Hall1@wisconsin.gov
X	Hamid Noughani, AIA	Assemblage Architects Project Designer	608-827-5047	Noughani@assemblagearchitects.com
X	Scott Jacob, AIA	Assemblage Architects Project Architect	608-827-5047	Jacob@assemblagearchitects.com
X	Eric Goodrich	Rippe Associates Food Service Designer	952-955-8056	egoodrich@rippeassociates.com
X	Terry Pellegrino	Rippe Associates Food Service Designer	612-240-4629	terryp@rippeassociates.com
X	Angela Meldonian	UW-Whitewater University Center Executive Director	262-472-1656	meldonia@uww.edu
X	Russel Brown	UW-Whitewater Facilities Technician	262 472-4939	brownrl@uww.edu
X	Terry Tumbarello	UW-Whitewater Executive Director of Housing / Resident Life Director	262-472-5275	tumbaret@uww.edu
X	Jeffrey Klamik, P.E.	UW-Whitewater Facilities Engineer	262-472-6729	klamikj@uww.edu
X	David Halbach	UW-Whitewater University Center Assistant Director – Business Ops	262-472-5749	halbachd@uww.edu
X	Frank Bartlett	UW-Whitewater Student Affairs Assistant Vice Chancellor (Inst)	262-472-1172	bartletf@uww.edu

X	Thomas Federer	UW-Whitewater Building and Grounds Superintendent (Retired)		
X	Steven Godard	Aladdin Campus Dining Resident District Manager	920-424-0773	godards@uwosh.edu
X	Bill Klopp	Aladdin Campus Dining Resident District Manager	262-472-3211	william.klopp@aviands.com kloppw@uww.edu

Start: Introductions/Meeting with UWW Leadership, Rippe Team 8:00-9:15am

1) Enrollment

a) Undergraduate Enrollment projected for Fall 2023 is 8,043
b) Enrollment has been on a decline since 2017
c) Freshman class is growing
d) Upper class size and retention is the main challenge
e) Looking for ways to increase enrollment numbers

2) Housing/Types/Proximity

a) Current population in campus housing is 3,750
b) Goal is 4,100 but unlikely to happen this fall
c) No campus apartments
d) One residence hall (didn't record which building this is) has suite style units, it has kitchenettes including a microwave, sink, countertop, but no stove
e) Freshman housing rate is about 93%
f) All dorms are considered to be within walking distance of Esker Hall with approximately 2,000 students closer to Esker than Drumlin
g) Most Ma'iingan Hall residents go to Esker for food
h) Drumlin Hall is a 10 minute walk from Esker
i) Requests for housing are up

3) **Summer Camps**

a) Up to 1,800 people served for a meal.
b) Athletics teams are choosing to go out in 90 degree heat to get Subway or Rocky Rococo Pizza instead of eating in Esker.
c) Slow and inefficient food service and discourages summer camp customers at Esker.
d) There are more food options available on campus that has created competition
e) Summer Camp participants have reported the worst part of summer camp is the food

4) **Goals/ Objectives**
   - **a)** Prompt question by Rippe: What kind of experience do you want students to have?
     - **i)** Technology for mobile ordering/ kiosks
     - **ii)** Ghost kitchens for late night options/ Grab and Go
   - **b) Campus Community**
     - **i)** Commuting Students
     - **ii)** Experiential instead of transactional
     - **iii)** A place that students want to stay for an extended period of time.
     - **iv)** A gathering place
     - **v)** A destination.
     - **vi)** Wants students to consider all dining options, not just the University Center
     - **vii)** Invite a friend option with meal plans
     - **viii)** Special rate for commuter students
     - **ix)** Encourage students to eat on campus rather than off campus
   - **c) Whitewater Community**
     - i) How can we bring the Whitewater community onto campus?
     - **ii)** UW-Whitewater is committed to not competing with the local food service community.
       - **(1)** Example: Not going to have a Subway on Campus because there is a Subway franchise in town.
     - **iii)** Aldi grocery store may be coming to Whitewater
     - **iv)** No other grocery stores other than Walmart in Whitewater.

   - **d)** Don't lose square footage for maintenance shop, possibly expand some
   - e) Single level for food production and service to increase efficiency
   - f) Be able to produce any kind of menu desired (Flexibility)
   - g) Fresh produce should be an option
   - h) A student grocery store
   - i) Food allergy accommodation
   - j) Food service that responds to the availability of the labor market in the area

5) **Is there a current location on campus that meets these goals/objectives?**
   - a) University Center
   - b) Remodeled in 2008
   - c) Already feels outdated.

6) **Building Specific Comments**
   - a) Accessibility
     - i) Largest growing population on campus is students with disabilities.
     - ii) At least 120 students in single rooms pay the double room rate because of accommodations provided.
   - b) Sustainability
     - i) Composting
     - ii) Changing practice on waste/ landfill diversion
     - iii) Solar Panels

(1) Jeff Klamik has looked into the structural capacity of the Esker roof system and has found there isn't sufficient capacity to support a Photovoltaic (PV) system.
(2) The Esker roof was recently replaced in 2022 with a ballasted EPDM system that approaches the structural capacity of the existing structure.
(3) The mechanical evaporation tower to the south of Esker limits PV array locations.

c) Bathrooms
   i) One bathroom for each gender on the lower level is not sufficient for 1,800 summer camp participants.
d) Adding another door to provide a 24/7 food option.
   i) Vending machines
   ii) Food Pantry
e) Emergency Power
   i) There was a power outage 4/18/23.
   ii) There have been 3 power outages in the last 9 years.
   iii) Esker may be the right project to get a generator that can power food service operations to feed the whole campus.
   iv) A 750-kW generator provided on a recent UW-Whitewater project was $3-400k
   v) This study will consider a generator up to a schematic level, but the actual size will need to be determined during the building design.
f) Redundant elevators are desired.
g) Building Automation System is currently Johnson Controls
h) Campus has steam, but the pressure available was not known during the meeting.
i) Campus has chilled water.
j) Food Service Equipment
   i) Typically included as a part of the project (not Owner Furnished)
   ii) This type of project and funding source would require an open specification.
k) Door hardware must be specified as commercial not residential. (The scope of the study would not include door hardware specs)

7) Question from Rippe: What is the measure of success of this project?

a) Jeff Klamik – Views this project from the building performance perspective.
   i) Well-Constructed
   ii) Building performance (energy efficiency)
   iii) Building envelope is well designed (no leaks)
   iv) Mechanical system is right sized (no overheating/cooling)
   v) Environment that is attractive to students
   vi) 50+ year building lifespan
   vii) Access for students with disabilities
   viii) No unnecessary architectural adornment
b) Angela Meldonian
   i) Cost savings in the building to be able to put more money into the dining elements.
   ii) No one off components that are hard to maintain.
   iii) Outdoor space
   iv) Right equipment in the right place that is reliable and doesn't require a lot of maintenance.
   v) Successful integration with IT department/ technology
   vi) Digital Signage
   vii) Increased student satisfaction
c) David Halbach
   i) Keeps students on campus in housing longer.
   ii) A recruiting tool to show parents/ students there is a fantastic on campus option.

d) Terry Tumbarello
   i) A place he can take pride in
e) Frank Bartlett
   i) Improved flow of traffic through the facility
   ii) Aesthetic appeal that stands the test of time
   iii) Avoids the best/latest trends that go out of style.
   iv) Restrooms that age well
   v) Sustainability
   vi) Natural light

END OF 8:00-9:15am MEETING WITH UWW LEADERSHIP

START OF 9:15am-10:15 MEETING WITH RIPPE, ALADDIN, UWW (REFER TO PROGRAMMING MEETING AGENDA)

Tom Federer, Bill Klopp, Steve Godard joined the meeting.

1) **Aladdin's Experience on Campus Specific to** Esker
   a) Bill Klopp: Provides Summary of current conditions of Esker.
      i) Limited staffing
      ii) The kitchen upstairs and serving area downstairs is a major challenge.
      iii) A very high volume of breakfast is served at University Center compared to Esker.
      iv) A large portion of the equipment in the kitchen is not used in Esker.
      v) Bill likes the current lower-level cooking station at Esker but it is not large enough to handle all the cooking so they still use the upper level kitchen.
      vi) Aladdin has tried rearranging the locations of the "special of the day" to different serving stations to increase traffic flow and generate interest in other dishes. But students still found the special and went straight to it.
      vii) Ventilation in the retail space couldn't handle frying and grilling. It was designed for pizza, they tried cooking burgers, but had to switch to quesadillas.
      viii) Angela would like to see more made to order options to see student satisfaction increase.
2) **Staffing**
   a) Currently there are 6-8 open positions for union employees.
   b) Main staffing during the day is hourly union staff.
   c) Evening shift is mainly students, especially in the retail areas.
   d) Students do an OK job, but they require a lot of direction and supervision.
   e) It has been an increasing challenge getting student labor over the recent years.
      i) Provided an anecdotal story about walking up and down a queue with job applications and got 2 out of ~50 people to fill out an application.
      ii) It was observed during a facility tour that there was help wanted, signing bonus signs posted in several areas.
   f) Students and union staff don't want to work late night hours.

3) **Overview of the dining options around Campus**
   a) University Center (UC)
      i) Einstein Bagels is very popular.
         (1) Students can use their meal plans at this location after 2pm
      ii) h'Eat and Fire – pizza, burgers, and fried foods
         (1) 2pm-10pm is very busy.

iii) Ike Schaffer Commons Breakfast
(1) 350-450 students for breakfast every day
(2) There isn't enough seating to handle that demand.
(3) 7:30-10:30 breakfast
iv) 90% of catering events are held at the UC.
v) One goal of this study is to reduce traffic in the UC.

b) Esker
i) Handles the grab and go meals for the rest of campus.
ii) Handles baking for the rest of campus.
iii) All hot foot provided at football games is cooked at Esker.
(1) Football games can have 6,000-18,000 in attendance.
(2) Food is primarily hot dogs, brats, nachos, pretzels and hot chocolate.
iv) Esker is located on the north side of campus.
(1) School of the Arts is the farthest walk from Esker.
(2) Many students go to the café in the School of the Arts.

Rippe recapped goals and objectives that were discussed in the earlier meeting with UWW Leadership.

4) Navigating

1) Navigation is important and having menu items laid out in a way that students can see options and try different things.
2) Distributed Dining Vs. Dining/Seating Split
a) Distributed Dining
i) Distributed provides speed of service.
ii) Eases navigation
iii) Flow
iv) Reduce food costs.
b) Split Dining
i) Efficient for square footage
ii) Efficient for utility/service connections
3) New students get overwhelmed at the beginning of the semester so finding a way to make the process less intimidating would be helpful.

5) Stakeholder Needs

a) Foodservice team
i) Labor efficient
ii) Easy to supply and resupply.
iii) Flexible by day and over time
iv) Technology to receive orders.
b) Students
i) Proximity to their activities/classes
ii) Technology to order and pay.
iii) Good food, good price
iv) Portability
(1) Mobile ordering
(2) Grab-and-go.
c) Faculty and Staff
i) Menu Variety
ii) Speed of Service

iii) Proximity
iv) Good food, good price

6) Board Plan Take-out

a) 100 take-out dinners/day in Esker
b) Started due to Covid-19 Pandemic and will likely continue into the future.
c) Reusable Containers
   i) UW-Whitewater has looked into using the OZZI reusable container system to improve sustainability.
   ii) OZZI System is expensive.
   iii) OZZI containers use a barcode system, other reusable containers that do not have the barcode system are less expensive.
   iv) Aladdin staff has found that UW-Oshkosh doesn't have a high participation rate.
   v) Aladdin staff found a higher participation rate at Marquette when they switched from Styrofoam containers to compostable containers, but they don't actually compost the containers.
   vi) Reusable containers may require students to put down a refundable deposit.

End of meeting with Rippe, Aladdin, UW-Whitewater.

START OF 10:30am-11:30 Student Focus Group, Rippe Team, Assemblage

Students:

Matt – Associate Director of Student Affairs, Senior, Resident Assistant

Mieko – Senior, has lived in student housing all 4 years at UWW

Isabelle – Senior, has lived on campus the past two years, transferred from another school (not recorded what school)

Chase – Deputy Speaker of the Student Senate

Justin – Speaker of the Student Senate

Question 1: What do you like most about the current campus dining?

Matt: Drumlin is bright, welcoming, students want to study there. The UC gives you that atmosphere too.

Mieko: Drumlin is nice to look out the windows where you see more of campus, likes the variety of food throughout the campus.

Isabelle: Drumlin is open and welcoming, likes the bright colors, likes the lighting. It feels more like a home. Likes the bathroom and fireplace.

Justin: Likes the variety of coffee shops around campus, the quesadilla stand, likes golden corral style buffet, Saigon café. The atmosphere in Drumlin is better, but the size and layout of Esker is better. Less like a high school cafeteria. Likes the Down Under because of the sports theme which is great for Whitewater. Likes the Prairie Street Market concept, but thinks the seating could be better.

Chase: Big fan of retail dining. Doesn't really do the resident dining much. Like the Ike Schaffer Café food court style. Likes the Starbucks café.

Question 2: What makes you like a certain venue? (Focusing on menu, offerings, dining experience)

Matt: UC Down Under has a long line, stanchions, doesn't like to go there. Wants to get in and get out. Not a fan of spicy foods, but knows they can consistently go there for a burger or chicken tenders or salad.

Mieko: Lives in Wells Hall and eats at Esker a lot. Because it's close to the dorm. Like more variety and some of the food gets repetitive.

Isabelle: Accessibility. Get in and get out. Has a busy schedule and needs to use time efficiently. Still looking for quality food even though it's fast. Enjoys variety and spice, pushing the boundary. Gluten free, diary free options helpful.

Chase: Likes American food, pasta, getting the same things every time at esker. Burger, pizza, pasta. Self-proclaimed simple guy. If getting something vegetarian, it's going to be a veggie sandwich.

Justin: Likes breakfast for dinner, like a skillet. Like fresh food, can notice when trays have been sitting out for hours. Production and delivery point being right there. Likes sandwich shop Erbert and Gerbert's. Likes combo options. ½ soup ½ salad. Likes dinner at home where you have multiple sides.

Question 3: Where do you eat most often on campus and why?

Matt: University Center (UC)

Mieko: Esker

Isabelle: Used to be Drumlin, but now UC.

Justin: UC because he lives off campus.

Chase: UC because he lives off campus.

Question 4: Where do you eat most often off campus?

Matt: Culver's. Likes the frozen custard.

Mieko: When with family they go to Second Salem Brewing Company.

Isabelle: Only goes out if they have a coupon. Spends a lot of money on dining program and wants to get their money's worth. Gets kids meals at Culver's.

Justin: Taco Bell. $12 box to get two meals. Heats up well. Volume buy

Chase: goes out a lot and doesn't like that. Culvers or jimmy johns, jersey mikes, toppers at least 2x a week.

Question 5: Where do you eat when you go back home?

Matt: Cooper's Hawk, local places, nicer options, doesn't go to big chains.

Mieko: Lou Malnotti's Pizzeria for deep dish pizza.

Isabelle: Doesn't pick just one, they like to go to different places of all different types of cuisines. They do go to Chik-fil-a a lot to get the big box of chicken.

Justin: Fast Taco for authentic Mexican tacos, steak burritos located in Woodstock, Illinois.

Chase: Mom is a vegetarian, so they accommodate that requirement. Loves Panera Bread. Family goes to Madison or Sun Prairie to find something new.

Question 6: What are your favorite menu offerings at Esker or Drumlin?

Follow-up question: What is something you wouldn't order again?

Matt: Beef stroganoff, chicken tenders, chicken stir fry, burgers.

- Something that you never want again? Anything with fish.

Mieko: When you can build your own food. Taco bar, Pad Thai dish.

- Doesn't like the baked chicken, greasy hands and hard to get bone off meat.

Isabelle: Loves the cookies at the dessert bar. Salad bar, visual appeal is big for them.

- Doesn't like the baked chicken either.

Justin: In-chest ice cream, soups, stews, stroganoffs.

- Fish and meat in the resident dining area is something he will avoid. Pork tenderloin.
- Would like to see more Wisconsin food. Cheese curds, thanksgiving night outside of thanksgiving. Homestyle foods.

Chase: Pizza, burgers (depending on visual appeal), pasta.

- If it looks unappealing on top of the tray he will avoid it. Remove all fish.

Question 7: If you could change one thing about your current dining options what would it be?

Matt: Visited UW Madison (has 3 sisters who went there) and they liked the sports bar in the Union. Would like a place to go for March Madness, NBA playoffs, socialize. There isn't anything like that beyond the UC. Would like Esker to be a second union space on Whitewater Campus.

Mieko: A separate area for 21+ to get drinks on Campus. Chicken wings. Reiterated Matt's comments about a place to socialize.

Isabelle: Likes the image on screen of a coffee shop from *The Roost* food hall in Washington, DC((from Rippe's presentation slide) Would like more vegetarian and gluten free options. Has a friend who brings her own buns to restaurants because she knows the gluten free options will be limited.

Justin: More ethnic food options. Not for himself but for others he knows who want that. For himself….there are not enough drinking options. Looking for a lounge/sports bar on campus instead of going into town. There are places that are themed but don't quite sell the idea fully. Looking for authenticity, fully branded.

Chase: "A sucker for a good brand". Referencing the Roost coffee shop image on screen. Likes to see options. Doesn't think there should be a 21+, but would like a "bar like" atmosphere. Thinks there should be a location that does serve alcohol. Likes a sports bar type space with a loud atmosphere. Like a micro market(convenience store).

Chase: Communication of options. Doesn't want to have to hunt for vegan/vegetarian options.

- Rippe: Opposed to doing a only vegan/vegetarian station options. Feels that people wouldn't go there because they aren't vegetarian.
- Chase: There isn't communication about what is in the food/nutritional information. I don't even know if this option is vegetarian.
- Rippe: Electronic menus, QR can help with that. Putting a designation on the menu item. Doesn't want to dedicate space/manpower to 10% of the population. There is an increase in dietary restriction requirements.
- Angela: We bring in a dietician to do events, they have this protein bowl that can be constructed in any way you want. But we don't get those served.

Justin: People seem to get upset when there are too few meat options.

Question 8: What do you like most about the current dining plans? What would you change?

Matt: Had the 24 meal plan. Can exchange it at the UC on the retail side. It's limited but there is variety. It's confusing to have 3 different meals plans. Would like to see that simplified. Students don't know how to fully use their meal plan. Schedules meals around the plan. UC for breakfast, Einstein's at 2:30 to use meal plans

- Rippe: Madison uses full meal points

Meiko: 2 meal plan. Doesn't like the timing. Went to Down Under to get pizza but had to wait because she couldn't use her meal plan at that time, and didn't want to use dining dollars when she could wait and use meal plan.

Isabelle: 14 meal plan and $100 Dining Dollar option. Reduced down to 10 meal plan. Figured out ways to make pans of brownies and lasagna in pizza ovens to save $. Timing is very confusing. They

have a busy schedule, and getting to their desired food location and be able to use their meal plan is difficult.

Justin: 24 meal plan form freshman year until they moved off campus. This campus is addicted to retail options. They love the flexibility. When he started he really enjoyed Drumlin and Esker, but feels quality has decreased. Time restrictions are an issue. Doesn't like how many options are upcharges.

Chase: 14 meal plan until they moved off campus and now uses My Meals. Likes them because they can use them anywhere. Goes to Ike Schaffer as much as possible. Timing is an issue and doesn't like restrictions on where they can go.

- Angela noted these timing restrictions will be resolved in the next food service contract.

Question 9: What are the key elements a dining service must have to serve the future?

Matt: Open concept, welcoming

Meiko: Natural lighting, windows, open space

Isabelle: Accessibility for everyone. Aesthetically pleasing.

Justin: Good food, staple options, and rotating options. Themed days that can rotate out.

Chase: Modern and open, likes the idea of a performance in there. Live band. Inclusive.

Question 10: How often do you order meals online? How open are you to frictionless or pickup only retail dining?

Matt: Only used Doordash once. Will order ahead for Chik-fil-a or Panera to order ahead.

Mieko: Doesn't often order online unless its somewhere they've been before. Doesn't use Doordash because of QAQC issues. Would rather order food there.

Isabella: Doesn't like to use online ordering. Will do it if her friends use it. Not technology savvy. Open to frictionless dining. Has concerns about people stealing.

Justin: Orders online only if it's quick and convenient. Speed and efficiency required. If there are a large group of people waiting because they all ordered online isn't great. Would like to see kiosk ordering as well for people who don't use cell phones.

Chase: Very open to frictionless retail only if it works for his My Meals. Doesn't order food for delivery, only orders for pickup.

END OF MEETING WITH STUDENT FOCUS GROUP, RIPPE TEAM

Start of Campus Tour with Rippe, UWW, Assemblage.

End of Campus Tour.

Start of 1:30pm-4:00pm Concept Brainstorming with UWW, Rippe, Assemblage.

General Concepts

- Would like to see closer to 83-85% participation rate of adjacent residence halls. Which is about 1,700 students for dinner given the resident population nearby.
- Esker is not close to classroom locations so we don't expect to get to that number
- The goal is to see a higher number for dinner and breakfast

Commissary

- Can save money.
- Aladdin supports the idea of a commissary.
- Skilled labor in multiple locations can be particularly challenging.

Cooking concepts on the island in the lower level of Esker

- Rippe: It's not really what you want in this location.
- Rippe: You would rather have something like Pioneer Hall at the University of Minnesota with refrigeration and preparation happening at that location.
- Rippe: Move prep and production up front so there is no mystery to the customer.

Allergen Free

- Bring it up front in an intentional and responsible way to highlight it.
- Food tends to be higher end
- Has better overall perception on quality
- Project would need utensils, dishwashing, prep ware at that location to prevent allergen contamination.
- Confidence it is what customers expect

Branded Feel

- Create an atmosphere/theme
- Too strongly branded stations do not lend themselves to rotating a type of cuisine in and out.
- Authenticity is a common theme from student input.

Pick up Lockers

- Can be challenging and expensive
- IT integration is key, have to make sure they work with your online app
- Milwaukee Area Technical College uses order pickup lockers

Payment

- Some states may prevent operations from going cashless.
- This may not be the case in Wisconsin
- Going 100% cashless may not be a goal of UW Whitewater
- Good idea to have a concierge type position to accommodate customers who don't use credit/debit, cell phone tap-to-pay (Apple Pay), unbanked individuals.

Seating

- Separated from serving stations vs. integrated
- Access to dining room after hours
- 80 people at most for private dining opportunities.
    - A space that doesn't take from overall seating, but one that can be opened up
    - Market it to campus as a place to come during Esker low lunch occupancy

Retail Dining Concepts

Grab & Go

- For the retail option what is your priority?
    - If we get Resident dining right then we don't have to worry about retail
- This project could separate the grab and go from the retail.
- Once you go above 1200 sf the frictionless options (i.e. Amazon Go) become expensive
- You could still have hot grab & go
- Esker should consider a frictionless/cashier less system as a part of the study

Deli Concept

- Erberts and Gerbert's gets very few complaints
- Esker isn't currently looking to get away from a sandwich concept
- Can't be a Subway because UWW doesn't want to compete with their community in town
- Do consider deli in the study

Salads/ Bowls

- Could be combined with the deli concept

Grill

- There was an attempt to do a grill in this building, but the existing exhaust system couldn't handle the smoke generated from the grill. That location was converted into the quesadilla location in the Prairie Street Market.
- Rippe doesn't know they would necessarily recommend a grill in a retail area within a building with an AYCTE (all you care to eat) student dining center

Southwest

- Chalaca is currently in the Ike Schafer and very popular
- Very cost effective for students

Italian/ Mediterranean

- Esker isn't a great location for a pizza option

Asian Fusion

- This is something typically in in resident dining not retail
- Angela would like to see that option explored in resident dining

American Comfort

- Can be versatile with BBQ one day and baked potatoes and casseroles the next using the same oven without the wood added to the smoker.
- Cook chicken in a combi oven then move the chickens to a rotating warmer for show
- Friend chicken is one of the bestselling items on many campuses - Aladdin

Beverages

- Is the campus over saturated with coffee? – Rippe
- Maybe include in the Convenience store a touch screen espresso machine similar to Kwik Trip (Karuba Gold)
- UWW Not interested in a dedicated coffee shop

Juice/Smoothies

- This may be a self serve smoothie machine similar to Kwik Trip

Desserts

- This is something Esker is lacking
- UWW would like to pursue a retail desert option
- Gelato concept
    - Holds in freezer for 4 months
    - Gelato is on a stick like a popsicle and you can dip it into different dips and topping
    - UWW not really interested in gelato concept at this time

Technology

- Retail Ordering
- Remote Pick-up
    - Where is the right place for this?
    - Esker? Student Center?
    - UWW would like this in a southwest food concept
- Frictionless (Amazon Go)
    - Scans student card
    - Computer follows you and knows what you take
- Self-Pay
    - Self cashier/self checkout
    - Similar to the grocery store/ Target etc.
- Convenience store having its own entrance from the outside and having 24/7 access

Automation Options

- Robotic Coffee machine
- Jamba Blended Option
- Pizza Vending Machine
- Touchless Salad Bar

Back of House Options

- Key is figuring out what food prep to do yourselves and what to purchase pre-prepared and be satisfied with results
- Very simple to do bulk
    - Soups and sauces, marinara sauces
    - Pasta being cooked then bagged and reheated in seconds in boiling water
- In order to maintain quality it is better to have food prepared ahead of time rather than keep up with the rush.
- Advanced prep of produce and freezing.
    - Takes advantage of Farm-to-table but doesn't require students to be here when produce is ripe
    - Making marinara sauce before the fall semester that can be used for weeks/months
- Make good use of the few people you have working by having proper equipment and using central production.
- Economies of scale.
- Smart/Connected equipment
- Multi-function equipment

Cooking Options

- Chillis does every menu item through the same CTX oven
- Equipment needs to be easy enough for students to use as they are the people staffing places at night (2nd Shift)

Dish Room Options

- The dish room at UC had examples of poor humidity conditions, heat, layout
- An option to drop flatware before the plates to help reduce labor requirements
- Tray free belt system is available in a variety of widths

Hood Options

- A lot of options with clean in place hood aka waterwash

<u>Resident Dining Area</u>

American Comfort

- Broader equipment base

- Open kitchen concept and get away from the mystery meat.
- Rippe does more open kitchen concepts today
- Somethings are still hidden

Deli

- UWW would like that to be brought back.
- There will be days where you don't like the hot item
- Should be self-service with soup

Salad Bar/ Bowls

- UWW would like this to be incorporated.

Teaching Kitchen/Chefs' Stage

- UWW really would like this to be incorporated into the residence dining.
- What if the rotating special station could convert to a teaching kitchen, adjacent to a private dining room?
- Tiered seating using different height chairs and tables 30" -> 36" -> 42" AFF would allow for a teaching/demonstration space without a raised floor.

Grill

- UWW Would like to see this incorporated.

Southwest

- Better in retail space

Italian/Mediterranean

- UWW would like this to be incorporated.

Asian Fusion

- UWW would like this to be incorporated.

Allergen Friendly

- UWW would like this to be incorporated.

Beverages

- UWW would like this to be incorporated.

Dessert

- UWW would like this to be incorporated.

Next Steps

Rippe is going to do square footage take off to compare existing areas versus proposed areas. UWW staff needs to review these options.

Hamid Noughani (Assemblage Architects) comments

- Assemblage has approval to study a new building option.
- Will look at what campus is serving all over campus and see how this new project fits in.
- 2 options for renovation and 1 for new
    - That may quickly become one concept for renovation and one for new
- Study lot 7

Hamid Noughani's questions to Rippe and UWW:

1. Do we have an understanding of the campus normal season and summer camp requirements? **Yes.**
2. Do we have a sufficient understanding of the entire campus breakfast, lunch and dinner requirements for a central kitchen?
   Not currently, we need additional information about the retail.
3. Do we have a map of all the outlets and how they are serving? Can UWW generate quantities and geography of all of these locations?
   Yes, UWW can generate more data. Rippe typically generates a map like this as a part of the study.
4. Utilities: Is there enough capacity chilled water and steam to support a new building while keeping Esker?
   Not sure. Will need to follow up with Jeff Klamik.
5. Is the master plan Hamid has current?
   Not Sure. Will need to follow up with Jeff Klamik.

Discussion about the location of a new building option:

- Lawcon – Land and water conservation. Land set aside for recreational use for the public. The tennis courts are lawcon land. Same with the prairie.
- Parking lot 18 and 19 are in lawcon land. Jeff Klamik is currently in the process of taking them out of lawcon land and returning it to campus land. Needs to find reciprocal land to convert to Lawcon land.

<u>Schedule</u>

1. Study to be completed September 1, 2023 and delivered to Angela Meldonian & Jeff Klamik.

Action Items

2. Rippe will provide assumptions and square footages.
3. Jeff Klamik to send generator report. **COMPLETE.**
4. Jeff Klamik to provide current Campus Master Plan
5. Jeff Klamik to provide current campus chilled water and steam capacities.
6. Angela to send student survey complete by Aladdin.
7. Angela will add information about the Prairie Street Market.
8. Angela will get residence hall sales information to see where they are eating.
    a. Ma'iingan Hall info from sales data to see where they are eating too.

Previous Action Items Not Complete

1. Design team will order a survey of Esker Hall and coordinate with Jeffrey Klamik
2. Design team will generate a list of specific information they require about the building systems.
3. Design Team will setup a Sharepoint site to exchange project files with UWW and DFD.
4. Jeff Klamik will investigate whether roof drains were replaced or reused during the roof replacement.

This is my understanding of items discussed and decisions reached during and after the meeting.

If there are any corrections or comments, please notify the architect. Prepared by Scott Jacob, Assemblage Architects. Notes Distributed to Point of Contact persons who may distribute within their respective groups.

MEETING MINUTES AUGUST 15th

State of Wisconsin

Department of Administration

Division of Facilities Development and Management (DFDM)

Project Name: Esker Hall Renovation
Project Location/Agency: University of Wisconsin – Whitewater
DSF Project Number: 22J1V
A/E Project Number: 2023-01
Meeting Date/Time/Room – 8-15-2023/ 10:00AM-12:00PM/ Wisconsin Room

Today's Date: 9/06/2023

Attendees:

	Attendee	Organization Role	Phone Number	Email Address
X	Jeremy Hall, P.E.	Division of Facilities Development Project Manager	608-266-1031	Jeremy.Hall1@wisconsin.gov
X	Hamid Noughani, AIA	Assemblage Architects Project Designer	608-827-5047	Noughani@assemblagearchitects.com
X	Scott Jacob, AIA	Assemblage Architects Project Architect	608-827-5047	Jacob@assemblagearchitects.com
X	Eric Goodrich	Rippe Associates Food Service Designer	952-955-8056	egoodrich@rippeassociates.com
	Terry Pellegrino	Rippe Associates Food Service Designer		terryp@rippeassociates.com
X	Angela Meldonian	UW-Whitewater University Center Executive Director	262-472-1656	meldonia@uww.edu
X	Russel Brown	UW-Whitewater Facilities Technician	262 472-4939	brownrl@uww.edu
X	Terry Tumbarello	UW-Whitewater Executive Director of Housing / Resident Life Director	262-472-5275	tumbaret@uww.edu
X	Jeffrey Klamik, P.E.	UW-Whitewater Facilities Engineer	262-472-6729	klamikj@uww.edu

X	Nicole Thompson, MBA	UW-Whitewater Project Coordinator	262-472-5553	thompsnl@uww.edu
X	David Halbach	UW-Whitewater University Center Assistant Director – Business Ops	262-472-5749	halbachd@uww.edu
	Frank Bartlett	UW-Whitewater Student Affairs Assistant Vice Chancellor (Inst)	262-472-1172	bartletf@uww.edu
	Thomas Federer	UW-Whitewater Building and Grounds Superintendent (Retired)		
	Steven Godard	Aladdin Campus Dining Resident District Manager	920-424-0773	godards@uwosh.edu
	Bill Klopp	Aladdin Campus Dining Resident District Manager	262-472-3211	william.klopp@aviands.com kloppw@uww.edu
X	Ben Smith	UW-Whitewater UC Event Service Manager		smithbj@uww.edu
X	Bred Biddick	Design Engineers Senior Electrical Consultant	608.424.8815 x163	brad.biddick@designengineers.com

Start: Introductions

1) Project Overview

a) Hamid Noughani reviewed the general project requirements and existing conditions of the building.
b) Design Team does not recommend a new building on campus to replace Esker Dining Hall. Renovating Esker Dining Hall in place to accommodate the program requirements is recommended.
c) Design Team presented the proposed options for the renovation of Esker Dining Hall.
d) Design Team presented the proposed Food Service options.

2) General Comments

a) The users agree that the option of a new building on campus to replace Esker Dining Hall is not something they would like to pursue.
b) The users agree with the approach the design team has taken in response to the program requirements.
c) The users agree with the approach of the food service concept in response to user comments, previous meetings, surveys, etc.
d) Items Users would like to see addressed in the final report.
    i) The cost estimate must be detailed and accurate. Design team will provide final PDFs and associated word, excel files for the cost estimate for the use of the Nicole Thompson and Jeff Klamik.
    ii) Two public elevators are provided in the proposed solution for redundancy and consistency with Campus standards.

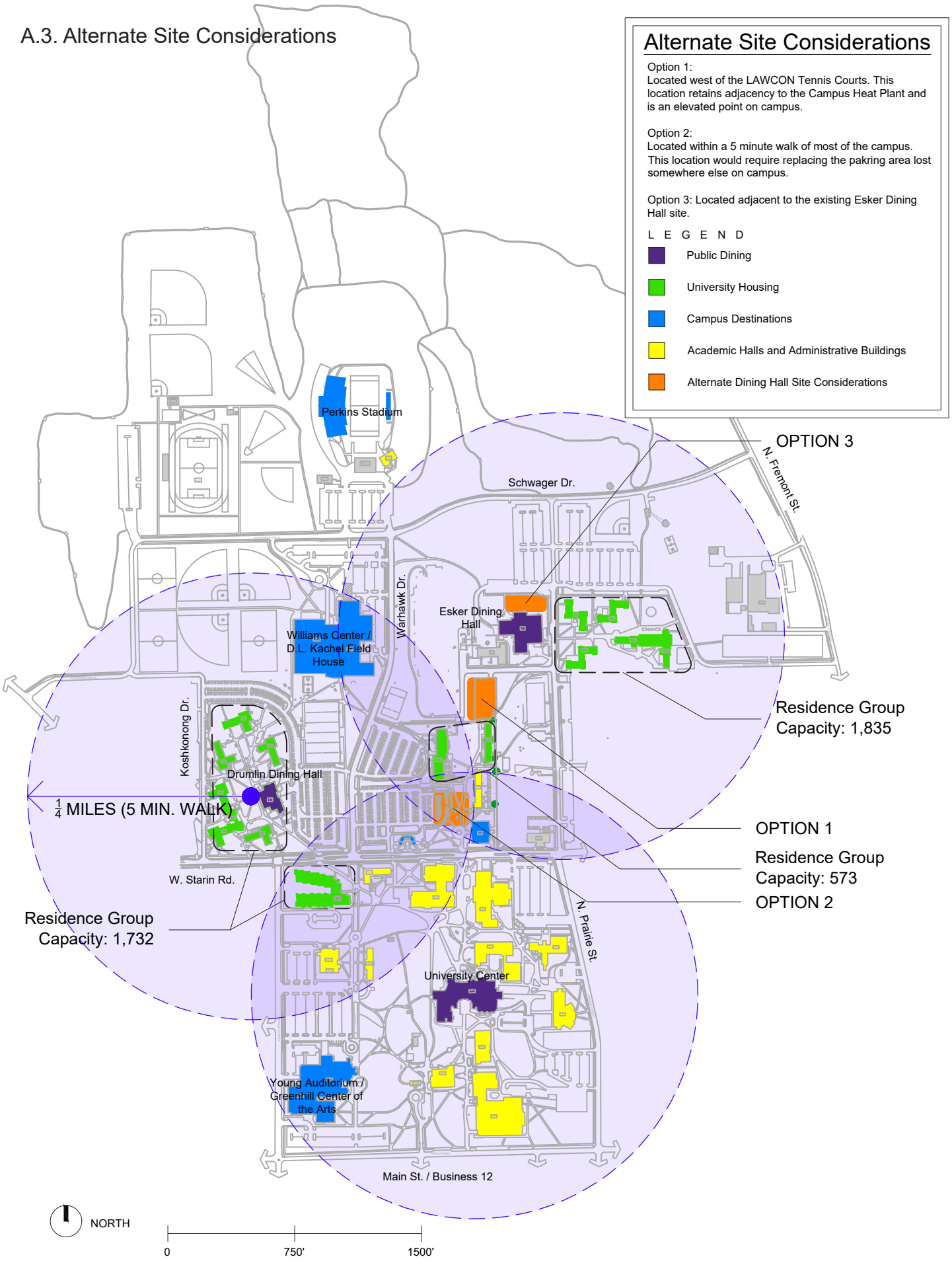
iii) Door hardware specified to be commercial grade, not residential. (Specifications are not within the scope of this study, but the cost estimate reflects commercial grade hardware.)

Schedule

1. Provide the final report in the first week of September 2023 to Angela Meldonian, Jeff Klamik, and Nicole Thompson.

This is my understanding of items discussed and decisions reached during and after the meeting.

If there are any corrections or comments, please notify the architect. Prepared by Scott Jacob, Assemblage Architects. Notes Distributed to Point of Contact persons who may distribute within their respective groups.


Alternate Site Considerations
Option 1:
Located west of the LAWCON Tennis Courts. This location retains adjacency to the Campus Heat Plant and is an elevated point on campus.
Option 2:
Located within a 5 minute walk of most of the campus. This location would require replacing the pakring area lost somewhere else on campus.
Option 3: Located adjacent to the existing Esker Dining Hall site.
L E G E N D
Public Dining
University Housing
Campus Destinations
Academic Halls and Administrative Buildings
Alternate Dining Hall Site Considerations
Perkins Stadium
Schwager Dr.
N. Fremont St.
OPTION 3
Warhawk Dr.
Esker Dining Hall
Williams Center / D.L. Kachel Field House
Residence Group Capacity: 1,835
Koshkonong Dr.
Drumlin Dining Hall
1/4 MILES (5 MIN. WALK)
OPTION 1
Residence Group Capacity: 573
OPTION 2
W. Starin Rd.
Residence Group Capacity: 1,732
N. Prairie St.
University Center
Young Auditorium / Greenhill Center of the Arts
Main St. / Business 12
NORTH
0
750'
1500'

A.4. Existing and Proposed Area Calculation.

LOWER LEVEL - PROPOSED	
CIRCULATION	
ELEV. B	92 SF
ELEV. A	86 SF
CHASE	32 SF
LOBBY	1,977 SF
ELEV C	76 SF
ENTRANCE	54 SF
STAIR	411 SF
	2,728 SF
KITCHEN	
KITCHEN	6,624 SF
DISHWASHING	720 SF
BAKERY	1,759 SF
	9,103 SF
MECH. / ELEC. SUPPORT	
ELEV. EQUIP.	109 SF
MECHANICAL	2,903 SF
WATER MAIN ENTRANCE / FP	144 SF
ELEC.	151 SF
ELEC	215 SF
ELEV MACH. RM	69 SF
	3,591 SF
RESIDENT DINING - SEATING	
RESIDENT DINING	10,414 SF
ALLERGEN	693 SF
BEVERAGE/DESSERT	373 SF
PIZZA/PASTA	728 SF
FLEX	446 SF
ENTREE	393 SF
ACTION	506 SF
GRILL	557 SF
BEV.	285 SF
SALAD / DELI	913 SF
	15,308 SF
RESTROOM	
W	92 SF
M	92 SF
MENS	427 SF
WOMENS	439 SF
RESTROOM	82 SF
RESTROOM	83 SF
	1,215 SF
RETAIL DINING - SEATING	
RETAIL DINING SEATING	2,743 SF
RETAIL DINING - SERVING	
RETAIL DINING SERVING	2,321 SF
STORAGE	
DRY STORAGE	804 SF
COMPOST	76 SF
RETAIL DRY STOR.	188 SF
BAKERY DRY STOR.	192 SF
SODA STOR.	145 SF
CHEM STOR.	73 SF
SALT STOR.	65 SF
C02 STOR.	160 SF
JAN. / STOR.	332 SF
PRODUCE REF.	333 SF
DAIRY REF.	90 SF
FINISHED PRODUCT REF.	317 SF
WALK-IN FREEZER	688 SF
COOK's WALK-IN REF.	486 SF
RETAIL WALK-IN FREEZER	133 SF
RETAIL WALK-IN REF.	128 SF
BAKERY WALK-IN FREEZER	128 SF
BAKERY WALK-IN REF.	133 SF
	4,471 SF
SUPPORT	
OFFICE	305 SF
JAN / MAT WASH	283 SF
STAFF LOCKERS	461 SF
LOADING DOCK	1,302 SF
	2,351 SF
AREA - LOWER FLOOR	**43,831 SF**

UPPER LEVEL - PROPOSED	
CIRCULATION	
ELEV. C	70 SF
STAIRWAY	195 SF
EXISTING VESTIBULE	97 SF
ENTRANCE	132 SF
LOBBY	4,828 SF
EXISTING VESTIBULE	51 SF
	5,373 SF
FACILITY SHOPS	
FACILITY SHOPS	2,477 SF
KITCHEN	
DISHWASHING	862 SF
BEVERAGE SERVICE	189 SF
CATERING KITCHEN	3,098 SF
DEMO KITCHEN	584 SF
	4,733 SF
MECH. / ELEC. SUPPORT	
MECHANICAL ROOM	2,109 SF
CHASE	226 SF
MV ELEC RM	552 SF
NORMAL ELEC RM	216 SF
EM ELEC RM	144 SF
TELECOMM	237 SF
UPPER ELEC RM	120 SF
	3,604 SF
MEETING ROOM	
MEETING ROOM	5,470 SF
MEETING ROOM	2,883 SF
MEETING ROOM	2,415 SF
	10,768 SF
RESTROOM	
RESTROOM	607 SF
RESTROOM	75 SF
	682 SF
STORAGE	
STORAGE	246 SF
SUPPORT	
JANITOR	207 SF
EXISTING LOADING DOCK	631 SF
	838 SF
AREA - UPPER FLOOR	**28,721 SF**

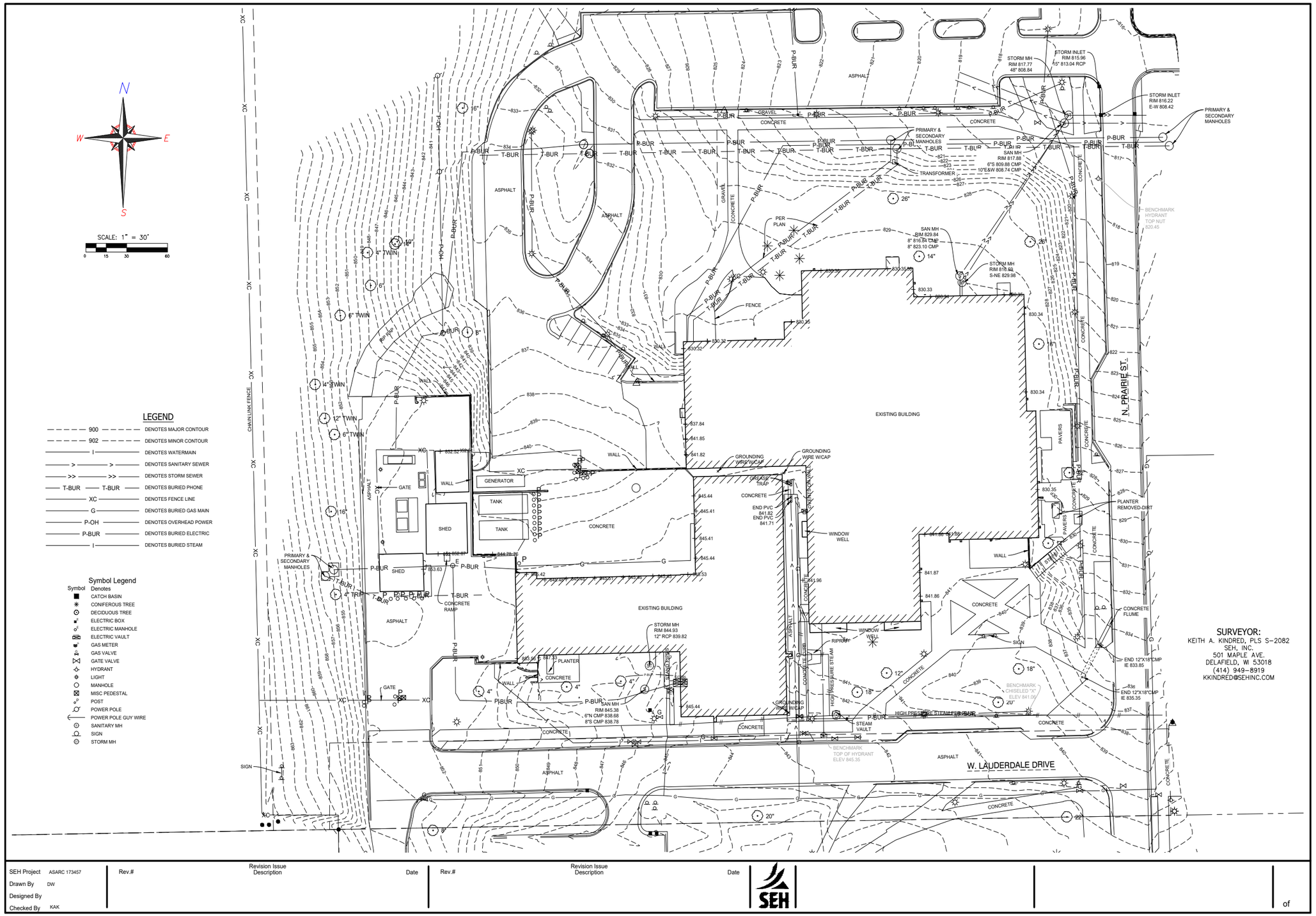
PROPOSED	
AREA - COMBINED	**72,552 SF**

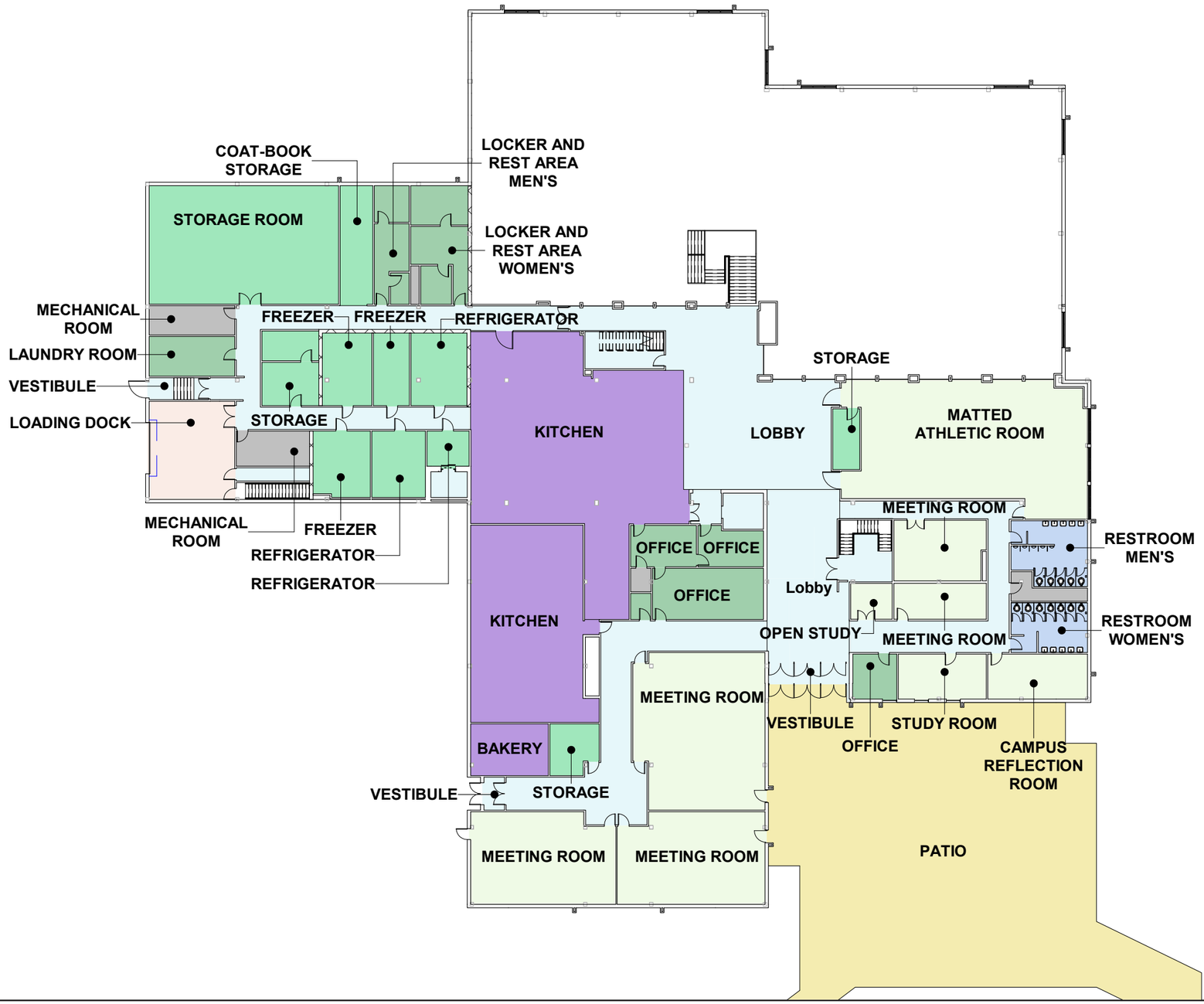
LOWER LEVEL - EXISTING	
CIRCULATION	
ELEVATOR	76 SF
VESTIBULE	63 SF
ELEVATOR	92 SF
HALLWAY	223 SF
HALLWAY	1,423 SF
	1,877 SF
FACILITY SHOPS	
CARPENTER SHOP	892 SF
KITCHEN	
FOOD PREP	2,298 SF
BACK KITCHEN	94 SF
	2,392 SF
MECH. / ELEC. SUPPORT	
ELECTRICAL TRANER	132 SF
ELECTRICAL ROOM	252 SF
MECHANICAL ROOM	2,076 SF
GENERATOR	141 SF
ELEVATOR EQUIPMENT	109 SF
SERVICE CORRIDOR	329 SF
MECHANICAL	6,538 SF
CUSTODIAN ELECTRICAL	353 SF
	9,930 SF
MEETING ROOM	
WHITEWATER ROOM	1,296 SF
RESIDENT DINING - SEATING	
EAST DINING ROOM	6,400 SF
RESIDENT DINING - SERVING	
WEST DINING ROOM	7,973 SF
RESTROOM	
MENS	70 SF
WOMENS	83 SF
WOMENS	63 SF
MENS	77 SF
	293 SF
RETAIL DINING - SEATING	
DINING ROOM	3,752 SF
RETAIL DINING - SERVING	
CONVENIENCE STORE	1,729 SF
FOOD PREP	255 SF
	1,984 SF
STORAGE	
DRY STORAGE	1,608 SF
STORAGE	55 SF
DRY STORAGE	261 SF
FREEZER	213 SF
REFRIGERATOR	254 SF
WALK-IN COOLER	239 SF
STORAGE	118 SF
	2,748 SF
SUPPORT	
CUSTODIAN	47 SF
AREA - LOWER FLOOR	**39,584 SF**

UPPER LEVEL - EXISTING	
CIRCULATION	
HALLWAY	1,166 SF
VESTIBULE	97 SF
CONVEYOR	73 SF
ELEVATOR	70 SF
STAIRWAY	219 SF
STAIRWAY	244 SF
HALLWAY	779 SF
VESTIBULE	129 SF
LOBBY	1,906 SF
ELEVATOR	110 SF
HALLWAY	79 SF
HALLWAY	1,119 SF
VESTIBULE	51 SF
Lobby	980 SF
	7,022 SF
FACILITY SHOPS	
LOADING DOCK	626 SF
KITCHEN	
BAKERY	299 SF
KITCHEN	1,696 SF
KITCHEN	3,081 SF
	5,076 SF
MECH. / ELEC. SUPPORT	
PIPE SPACE	24 SF
MECHANICAL ROOM	187 SF
MECHANICAL ROOM	192 SF
MECHANICAL ROOM	101 SF
IDE	36 SF
PENTHOUSE	2,457 SF
	2,997 SF
MEETING ROOM	
MATTED ATHLETIC ROOM	2,158 SF
MEETING ROOM	404 SF
MEETING ROOM	247 SF
OPEN STUDY	111 SF
CAMPUS REFLECTION ROOM	334 SF
STUDY ROOM	295 SF
MEETING ROOM	1,481 SF
MEETING ROOM	967 SF
MEETING ROOM	986 SF
	6,983 SF
RESTROOM	
RESTROOM MEN'S	341 SF
RESTROOM WOMEN'S	280 SF
	621 SF
STORAGE	
STORAGE ROOM	1,670 SF
COAT-BOOK STORAGE	291 SF
CAGED STORAGE	126 SF
STORAGE	184 SF
FREEZER	267 SF
FREEZER	195 SF
REFRIGERATOR	303 SF
REFRIGERATOR	265 SF
FREEZER	278 SF
REFRIGERATOR	111 SF
STORAGE	122 SF
STORAGE	173 SF
	3,985 SF
SUPPORT	
LOCKER AND REST AREA MEN'S	305 SF
LOCKER AND REST AREA WOMEN'S	474 SF
LAUNDRY ROOM	253 SF
OFFICE	148 SF
OFFICE	185 SF
OFFICE	203 SF
CUSTODIAN	40 SF
OFFICE	423 SF
	2,031 SF
AREA - LOWER FLOOR	**29,341 SF**

EXISTING	
AREA - COMBINED	**68,925 SF**

A.5. Site Survey





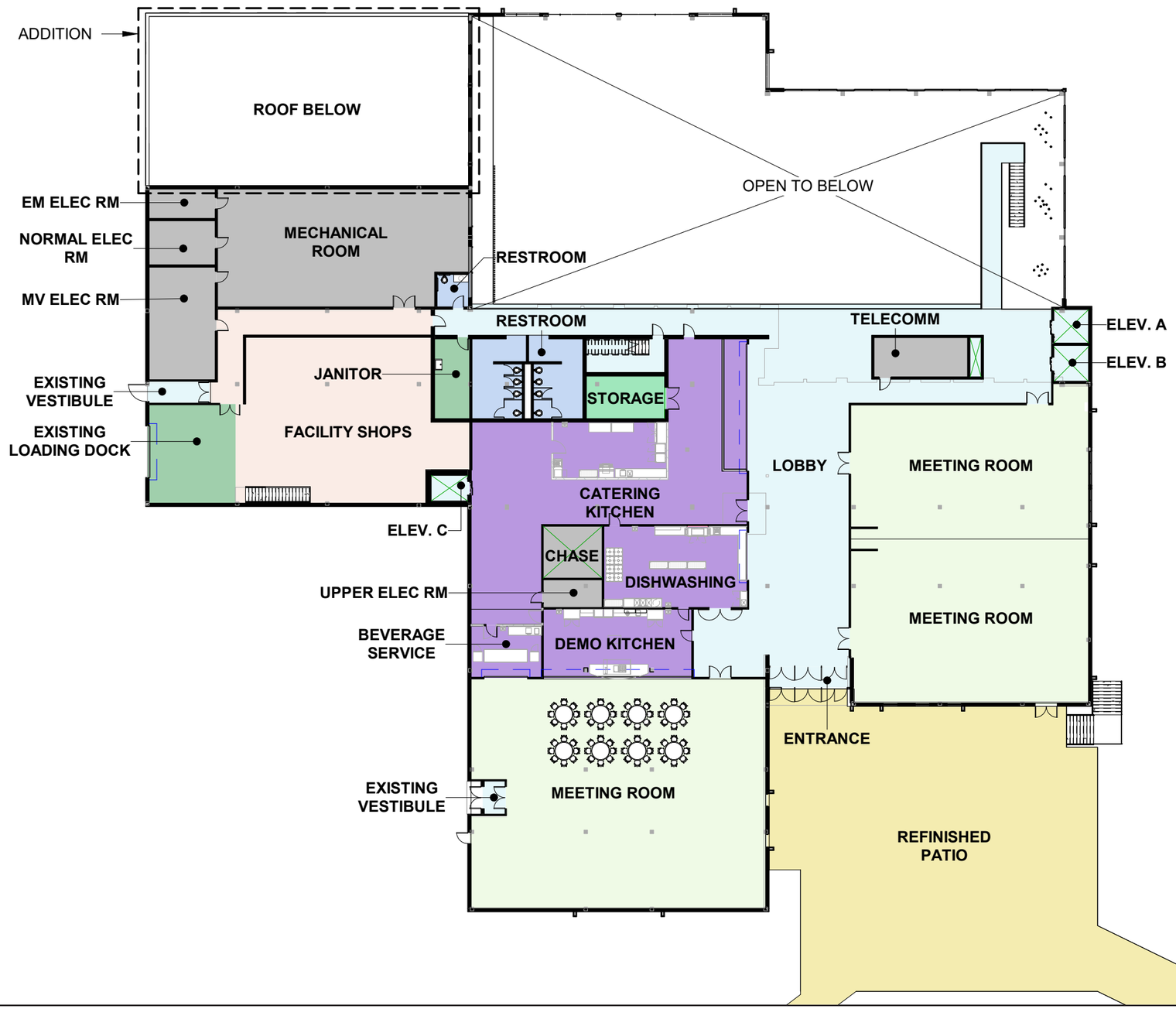
Area Legend

- CIRCULATION
- FACILITY SHOPS
- KITCHEN
- MECH. / ELEC. SUPPORT
- MEETING ROOM
- PATIO
- RESTROOM
- STORAGE
- SUPPORT

EXISTING FIRST FLOOR PLAN

N

0' 8' 16' 32'



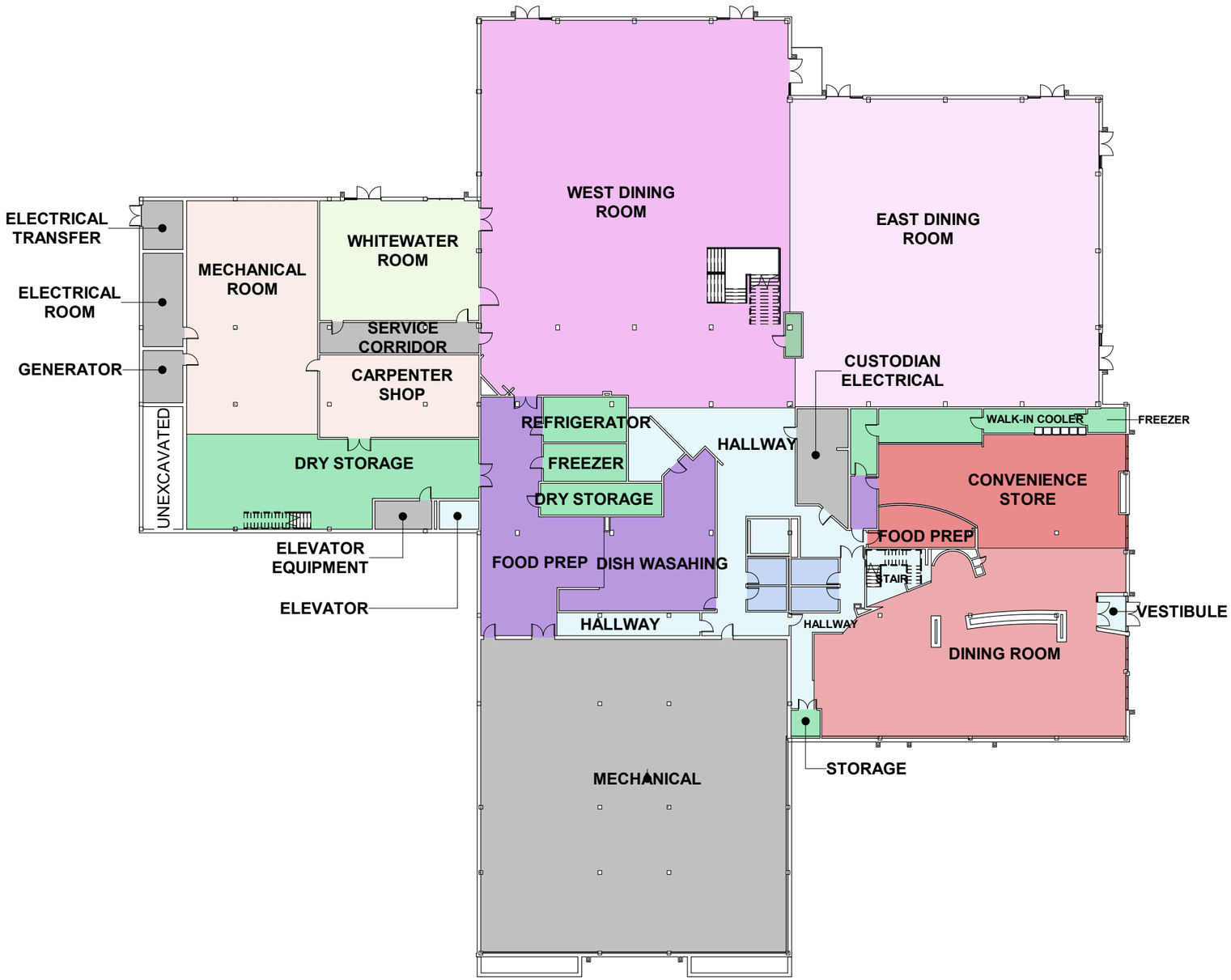
Area Legend

- CIRCULATION
- FACILITY SHOPS
- KITCHEN
- MECH. / ELEC. SUPPORT
- MEETING ROOM
- PATIO
- RESTROOM
- STORAGE
- SUPPORT

PROPOSED FIRST FLOOR PLAN

N

0' 8' 16' 32'



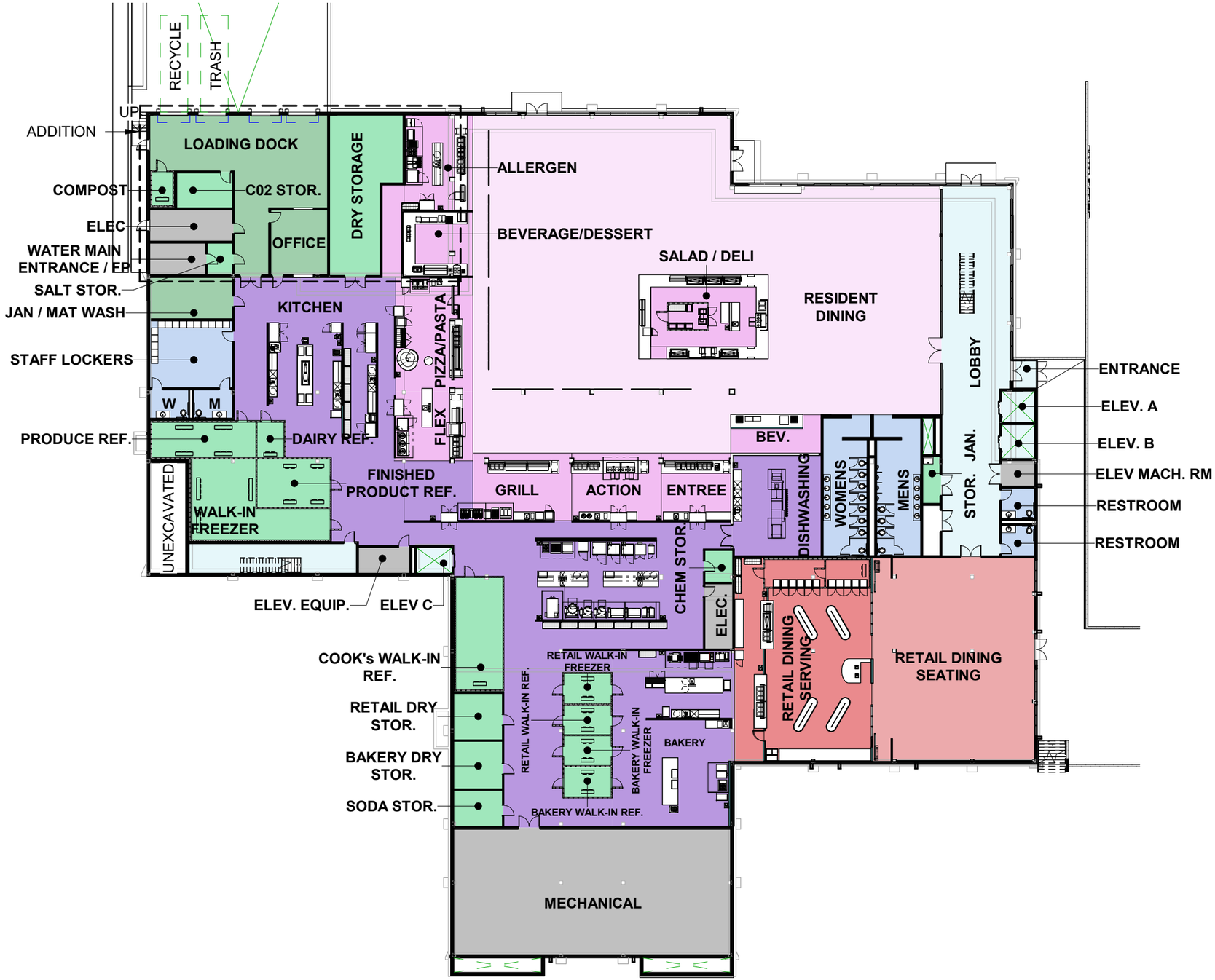
Area Legend

- CIRCULATION
- FACILITY SHOPS
- KITCHEN
- MECH. / ELEC. SUPPORT
- MEETING ROOM
- RESIDENT DINING - SEATING
- RESIDENT DINING - SERVING
- RESTROOM
- RETAIL DINING - SEATING
- RETAIL DINING - SERVING
- STORAGE
- SUPPORT

EXISTING GROUND FLOOR PLAN

N

0' 8' 16' 32'



Area Legend

- CIRCULATION
- KITCHEN
- MECH. / ELEC. SUPPORT
- RESIDENT DINING - SEATING
- RESIDENT DINING - SERVING
- RESTROOM
- RETAIL DINING - SEATING
- RETAIL DINING - SERVING
- STORAGE
- SUPPORT

PROPOSED GROUND FLOOR PLAN

N

0' 8' 16' 32'