The following Motions and Documents were considered by the GFC Facilities Development Committee at its September 27, 2012 meeting:

Agenda Title: **Augustana Campus, Phase 1 - General Space Program**

APPROVED MOTION: THAT the GFC Facilities Development Committee approve, under delegated authority from General Faculties Council, and on the recommendation of Planning and Project Delivery, the proposed Augustana Campus, Phase 1 - General Space Program (as set forth in Attachment 2) as the basis of further planning.

Final Item: 5

Agenda Title: **East Campus Village 89th Avenue Student Residence Project, Phase 1 - Design Development**

APPROVED MOTION: THAT the GFC Facilities Development Committee approve, under delegated authority from General Faculties Council, and on the recommendation of Planning and Project Delivery, the proposed East Campus Village 89th Avenue Student Residence Project, Phase 1 – Design Development, being part of the design build (as set forth in Attachment 2) as the basis for further engineering and development of contract documents.

Final Item: 6

OUTLINE OF ISSUE

Agenda Title: Augustana Campus, Phase 1 - General Space Program

Motion: THAT the GFC Facilities Development Committee approve, under delegated authority from General Faculties Council, and on the recommendation of Planning and Project Delivery, the proposed Augustana Campus, Phase 1 - General Space Program (as set forth in Attachment 2) as the basis of further planning.

Item

Action Requested	☒Approval ☐Recommendation ☐Discussion/Advice ☐Information
Proposed by	Ben Louie, University Architect, Office of the University Architect
Presenters	Dr. Allen Berger, Dean of Augustana Campus Léo Lejeune, Architect, Stantec Architecture Ltd., Prime Consultant Lorna Baker-Perri, Associate Director, Planning, Office of the University Architect
Subject	Augustana Campus, Phase 1 - General Space Program

Details

Responsibility	Vice-President (Facilities and Operations)
The Purpose of the Proposal is (please be specific)	To form the basis of further planning for Augustana Campus.
The Impact of the Proposal is	To provide an analysis of the space requirements; both present and future for Augustana Campus.
Replaces/Revises (eg, policies, resolutions)	Augustana Faculty's General Space Program 2005.
Timeline/Implementation Date	n/a
Estimated Cost	n/a
Sources of Funding	n/a
Notes	n/a

Alignment/Compliance

Alignment with Guiding Documents	Dare to Discover, Dare to Deliver, Academic Unit Review Augustana Faculty February 2011, Long Range Development Plan, 2011 Comprehensive Institutional Plan
Compliance with Legislation, Policy and/or Procedure Relevant to the Proposal (please quote legislation and include identifying section numbers)	1. ***Post-Secondary Learning Act* (*PSLA*):** The *PSLA* gives GFC responsibility, subject to the authority of the Board of Governors, over academic affairs (Section 26(1)) and provides that GFC may make recommendations to the Board of Governors on a building program and related matters (Section 26(1) (o)). Section 18(1) of the PSLA give the Board of Governors the authority to make any bylaws "appropriate for the management, government and control of the university buildings and land." Section 19 of the *Act* requires that the Board "consider the recommendations of the general faculties council, if any, on matters of academic import prior to providing for (a) the support and maintenance of the university, (b) the betterment of existing buildings, (c) the

	construction of any new buildings the board considers necessary for the purposes of the university [and] (d) the furnishing and equipping of the existing and newly erected buildings [.] […]" Section 67(1) of the *Act* governs the terms under which university land may be leased. 2. **GFC Facilities Development Committee (FDC) Terms of Reference – Section 3. Mandate of the Committee**: "[…] 2. Delegation of Authority Notwithstanding anything to the contrary in the terms of reference above, the Board of Governors and General Faculties Council have delegated to the Facilities Development Committee the following powers and authority: **A. Facilities** **1.** To approve proposed General Space Programmes (Programs) for academic units. 2. (i) To approve proposals concerning the design and use of all new facilities and the repurposing of existing facilities and to routinely report these decisions for information to the Board of Governors. (ii) In considering such proposals, GFC FDC may provide advice, upon request, to the Provost and Vice-President (Academic), Vice-President (Facilities and Operations), and/or the University Architect (or their respective delegates) on the siting of such facilities. (GFC SEP 29 2003) **B. Other Matters** The Chair of FDC will bring forward to FDC items where the Office of the Provost and Vice-President (Academic) and/or the Office of the Vice-President (Facilities and Operations), in consultation with other units or officers of the University, is seeking the advice of the Committee. 3. **UAPPOL Space *Management Policy and Space Management Procedure*:** The respective roles of GFC FDC and the Vice-President (Facilities and Operations) with regard to institutional space management are set out in this Board-approved Policy and attendant Procedure. To access this policy suite on line, go to: www.uappol.ualberta.ca .

Routing (Include meeting dates)

Consultative Route (parties who have seen the proposal and in what capacity)	• Dean of Augustana and Staff representatives • Office of the University Architect • Office of the Provost and Vice-President (Academic)
Approval Route (Governance) (including meeting dates)	GFC Facilities Development Committee – September 27, 2012 (for approval)
Final Approver	GFC Facilities Development Committee

Attachments:

1. Attachment 1 (Page 1-2): Briefing Note - Augustana Campus, Phase 1 - General Space Program
2. Attachment 2 (Pages 1-139): Augustana Campus, Phase 1 - General Space Program

Prepared by:
Lorrina Belland, Planner, Office of the University Architect, Facilities and Operations, 780-492-7513
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UNIVERSITY OF ALBERTA Facilities and Operations

Briefing Notes

Planning and Project Delivery

Augustana Campus General Space Program

Phase 1

Presentation for Approval to the FDC Committee

Background

Augustana is a unique faculty of the University of Alberta that operates at a campus in Camrose, Alberta. It offers four-year baccalaureate degrees in Arts, Sciences, Music and Management to students in a rural community. As a residential liberal arts and sciences campus, Augustana is committed to the education of the whole person, producing graduates who are both well-prepared in their academic disciplines and who can seize opportunities wherever they are found. It models the "dynamic, discovery-based learning environment" and community building that are key to the University of Alberta's *Dare to Discover* vision which is to "create an exceptional and life-changing university experience for students through curricular and extra-curricular offerings that integrate learning, discovery and citizenship to develop the intellect and the imagination, educate leaders and enhance a global perspective." About half of Augustana's 1000 students live on campus. Small class sizes translate into one-on-one attention, from locally, nationally and internationally-trained professors who are accessible in and out of the classroom. One in five Augustana students participates in significant international learning experiences, most are active in one or more of the many campus communities and 30% receive scholarships to help pay for their studies.

Augustana's first General Space Program was completed in 2005. Since then, a number of changes have occurred such as the construction of the Forum and the new Library, the demolition of North Hall, the construction of the new Facilities Building and a new Performing Arts Centre with the City of Camrose (currently under construction). Augustana has also undergone several Unit Reviews, the most recent in February 2011. While this Unit Review identified a success story, it stated that infrastructure enhancements were required in order for Augustana to carry out its mission; in particular that the facilities for instruction and research in science were inadequate. Due to the pressures in this area, a new vision and increased enrolment projections by the Dean, the Office of the University Architect made a decision to split the General Space Program into two distinct phases:

- Phase One – detailing space needs for academic, academic support, research, laboratory, classroom use and direct support for students, etc.

- Phase Two – detailing the non-academic related space needs, including campus administration, administrative support, ancillary services, athletics and campus recreation, general storage needs, etc.

Upon the approval of Phase One by Facilities Development Committee, the OUA will complete Phase 2 of the Campus' Functional Program.

Issues

The Augustana Campus General Space Program Phase One, August 2012, represents a collaborative effort by Augustana Faculty, the Office of the University Architect and the consultant. Its core team consulted with representatives from Augustana Faculty, including Dr. Allen Berger, Dean of Augustana Campus, administration, academic chairs and representatives from the Faculties of Nursing and Rehabilitation Medicine and Library

Services. Existing programs and facilities were discussed and future trends and space needs were reviewed. All spaces were toured and the space data base was updated. Oversight was provided by Ric Johnson, Vice-Dean, Augustana Campus and Lorna Baker-Perri, Associate Director, Accommodation Planning and Programming, Office of the University Architect.

The General Space Program seeks to educate the reader about Augustana Campus' lively, collegial academic culture of research, creativity, and public engagement in which students are invited to participate. It outlines the appropriate functional quality and quantity of space needed to successfully deliver current and future programs.

Augustana Campus currently occupies 26,437 net assignable square metres in 21 buildings. The existing Phase One program accounts for 7,905 net assignable square metres in 12 buildings. The General Space Program estimates that by 2016/2017 there is a need for an additional 3,529 net assignable square metres of academic space. This represents a 45% increase in overall net assignable space on campus. This space demand is based on an enrolment projection of 1,200 students, a 20% increase from the current enrollment and program requirements to accommodate and support the faculty's learning outcomes. Enrolment in Science courses has grown 21% in the past five years, with 11% in the past year alone. As a result, the primary space limitations are related to laboratories, lecture class sizes, research space and laboratory preparation space.

Recommendation

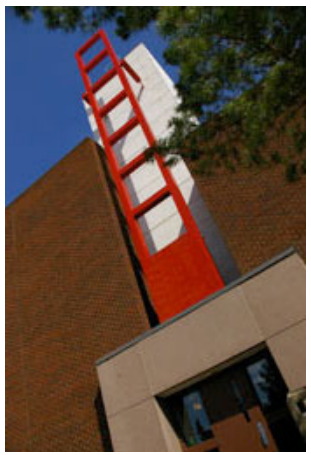
The Augustana Campus Phase One General Space Program, August 2012 be approved as the basis for proceeding to the next phase of planning.

UNIVERSITY OF ALBERTA
AUGUSTANA CAMPUS

Stantec Architecture Ltd.

AUGUSTANA CAMPUS GENERAL SPACE PROGRAM

PHASE ONE

August 30, 2012

UNIVERSITY OF ALBERTA
AUGUSTANA CAMPUS

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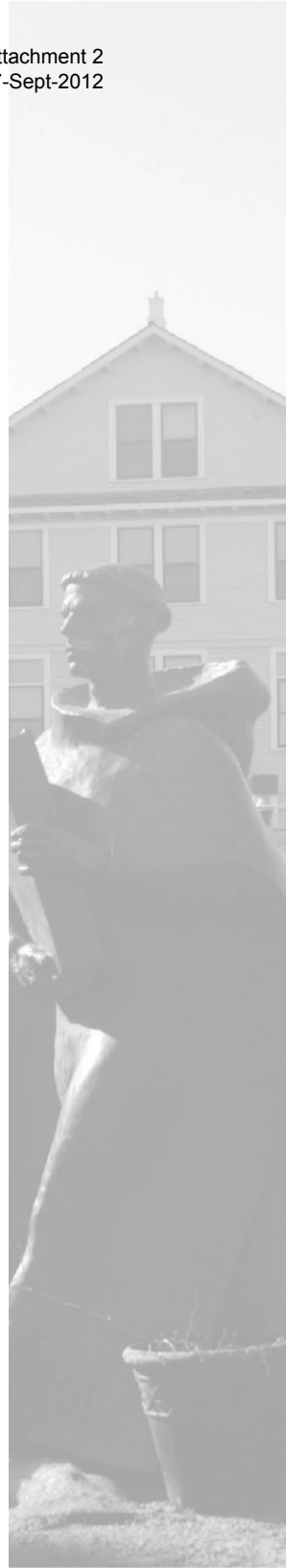

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Letter of Support, Augustana

UNIVERSITY OF ALBERTA

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August 26, 2012

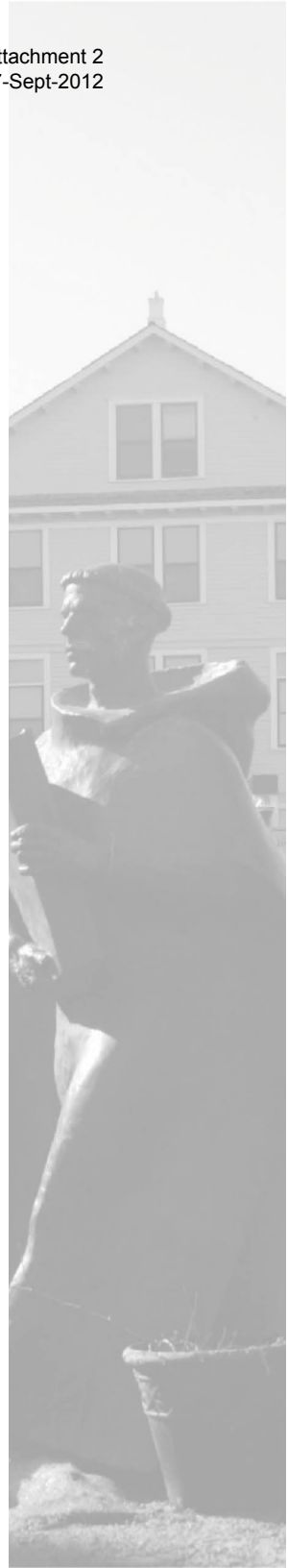
Dr. Colleen Skidmore
Vice-Provost and Associate Vice President (Academic)
2-10 University Hall
University of Alberta
Edmonton AB T6G 2J9

Re: Augustana General Space Program (Phase 1)

Dear Colleen:

I am pleased to present the General Space Program, Phase 1, for the Augustana Campus. We have elected, with full support from the Office of the University Architect, to divide our presentation of Augustana's General Space Program into two phases. Our reasons are: 1) the need to expedite planning for updated and new academic facilities, particularly in the sciences; and 2) the relatively obvious functional separation on a full-service, residential campus between academic and non-academic space requirements. Phase 2 will focus on current space and anticipated needs for administrative support, ancillary services, athletics, etc. I was pleased to collaborate with both Augustana and North Campus colleagues in the preparation of this document, and it has my full support. I would also like to acknowledge the helpful assistance of our consultants from Stantec Architecture Ltd.

This document has been developed in the context of four other texts that have shaped our thinking: 1) Augustana's mission statement; 2) our recent Unit Review; 3) the University of Alberta's academic plan, *Dare to Deliver*, and 4) a Vision for Augustana that Augustana's executive team and I crafted for Provost Carl Amrhein in November 2011.



As you know, Augustana's mission is to provide students an undergraduate education characterized by a focus in the liberal arts and sciences, a commitment to academic rigour, and a concern for the development of the whole person. Like the best liberal arts colleges and universities in North America, we deliver on this mission through the maintenance of an intimate, small-campus community; a commitment to residence-based and co-curricular programming; and personal attention from faculty and staff. In recent years, our efforts have been focused on the following key academic themes: student engagement; undergraduate research; community service learning; and international education. In addition, we have invested significant time and resources in the development of a strong general education Core.

The external reviewers who conducted Augustana's Unit Review in February 2011 praised the "strategic decision that Augustana would not be a satellite (i.e., a small branch-campus of the University of Alberta) but something quite distinct and distinctive: a liberal arts college." Furthermore, they characterized Augustana's recent history as "a remarkable success story," but they also challenged us to "go further." They wrote: "While the programming here is distinctive in comparison with the undergraduate offerings of the typical Canadian multiversity, it would be both desirable and prudent to make it even more distinctive." One obstacle they noted was the inadequacy of our facilities. The most important "infrastructure enhancement" that they identified as a critical campus need was "facilities for instruction in science," which they characterized as currently being "sub-standard by a significant margin."

As our faculty have thought about the various challenges our unit reviewers presented us, our attention has coalesced around a few themes: 1) the need to increase levels of student engagement, especially in first-year courses, through more inquiry-based learning and pedagogical approaches that involve students in more in-class activities and small-group work; 2) the need to more systematically assess our effectiveness in achieving our goals for student learning; and 3) the need to make students full partners in tracking their growth and development, thereby deepening their own learning and helping them articulate the value-added of a liberal education. This work is not only consistent with, it has also been inspired by, the cornerstones of *Dare to Deliver*, particularly those related to Talented People and Learning, Discovery, and Citizenship.

Augustana's focus on student engagement has also been informed by our review of assessment data from the National Survey of Student Engagement. Our NSSE scores are a rich source of helpful information. On a broad level they show two things: 1) fourth-year Augustana students report levels of engagement on all five NSSE indices that are both significantly higher than U of A averages and consistent with averages from our peer institutions in the Council of Public

Liberal Arts Colleges; 2) first-year students report levels of engagement that are quite similar to U of A averages and significantly behind our COPLAC peers. This weakness is undoubtedly implicated in another challenge—the fact that Augustana lags more than 10% behind our COPLAC peers in the retention of students from first to second year.

Given this situation, our faculty are committed to working to improve the quality of the first-year student experience. Many initiatives are already under way. But unfortunately our instructors are hampered in their efforts by Augustana's academic facilities. The most important limitation they face is our general purpose classrooms. Virtually all of these spaces, which serve all four academic departments, were designed and furnished during a time when the sole mode of instruction was lecturing. They are inadequate to support our vision of active learning, dynamic engagement, and flexible furniture arrangements. For this reason, we have attempted to identify in the General Space Program the kinds of classrooms that will be needed in the future. However, the university's space planners and architects will need to assist us during subsequent planning phases by ascertaining the extent to which the current classroom stock can be adapted and/or will need to be replaced by new spaces.

As we look to the future, we also know that Augustana must begin to grow its enrolment. Growth is not only a size issue; it is a quality issue. At its current size (the second smallest in COPLAC), Augustana is unable to support in most academic programs the numbers and diversity of faculty needed to provide students sufficient breadth in course offerings and exposure to multiple disciplinary perspectives. For this reason, our Vision for Augustana cites enrolment growth, along with facilities improvements, as "critical factors necessary to enhance and secure academic quality." Augustana has already grown by approximately 100 students over the last three years. Over the next five years, our goal is to grow by an additional 200 students, to a total enrolment of approximately 1200. More than half of this growth will come from improvements in retention, with the remainder coming largely from enhanced partnerships with two-year colleges. Recent meetings with delegations from Grande Prairie Regional College and Medicine Hat College provide multiple reasons for optimism. We believe there is ample room in our senior courses to accommodate this planned growth provided that investments are made in our science facilities. Our B.Sc. programs are already experiencing increasing demand, and we anticipate that these pressures will continue to expand.

Once Augustana reaches an enrolment of 1200 students, it would be our hope to partner with the university and the province on a vision to reach 1600-2000 students. Based on a scan of enrolments across North American undergraduate, residential, liberal arts colleges and universities, this would appear to be the optimal size. It allows an institution to continue to offer personal attention and close mentoring from faculty and staff but at the same time justifies the creation of a sufficiently large and diverse faculty complement. Augustana's library

and Forum were already built for an enrolment of this size. However, a plan to eventually grow beyond 1200 students will need the financial support of the university and the province.

Arguably one limitation of the design of this first step in infrastructure planning is that the General Space Program focuses narrowly on the quantity of space rather than the quality of spaces. In addition to some of the quality issues already mentioned, I believe it is important to add that some of Augustana's current classrooms lack even the most rudimentary air handling systems, have posts that interrupt sight lines, and lack handicap accessibility. In addition, some are tiered in ways that interfere with collaborative group work.

Another limitation of the process, perhaps one we are contributing to by separating Phase 1 and Phase 2, is that it does not specifically allow us to call attention to ways in which the current allocation of space interferes with plans for the future. This is most visible in two areas. First, Augustana has increasing needs for student housing; yet 10 of our faculty offices are in residence hall spaces, because there is no viable alternative. Second, Augustana needs to re-envision the allocation of space in our iconic building, Founders Hall. Both the Prospective Students Office and the Alumni Office need increased and more attractive space. They should be the well-appointed "living rooms" into which we welcome prospective students, families, alumni, and donors. We will be able to begin to create these spaces with the planned renovations of Founders Hall, set to begin during the summer of 2013. However, this will necessitate displacing additional faculty offices, thereby adding to the demand for spaces in our core academic buildings.

As you well understand, space is a critical variable that is related both to academic quality and to our ability to recruit and retain talented students, faculty, and staff. Augustana is currently stretched beyond the limits of our infrastructure, and many of our academic spaces are both poorly designed and look as if they come straight out of the 1950's or 1960's. I trust you also understand our community's appreciation for the substantial investments the university and the province have already made in Augustana's infrastructure since the 2004 merger. As we now begin to address the additional challenges identified in the General Space Program, I look forward to working with you and other university staff.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Dr. Allen Berger
Dean & Executive Officer

A liberal education is about liberating students from narrow or parochial modes of thinking. Augustana students benefit from interactions with caring faculty and staff and numerous opportunities to participate in community service learning, international study, and undergraduate research.

List of Contributors

Augustana Faculty
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Ric Johnson, Vice Dean of Augustana
Dana Andreassen, Project Officer
Josh Ryder, Assistant Dean, Infrastructure and Technology

Facilities and Operations
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Programming Consultants
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Luc Hong, Architect, Stantec Architecture Ltd., Programming Consultant

1 EXECUTIVE SUMMARY

Augustana is a unique faculty of the University of Alberta that operates at a campus in Camrose, Alberta. It offers four-year baccalaureate degrees in Arts, Sciences, Music and Management to students in a rural community setting. As a residential liberal arts and sciences campus, Augustana is committed to the education of the whole person, producing graduates who are both well-prepared in their academic disciplines and well-rounded people.

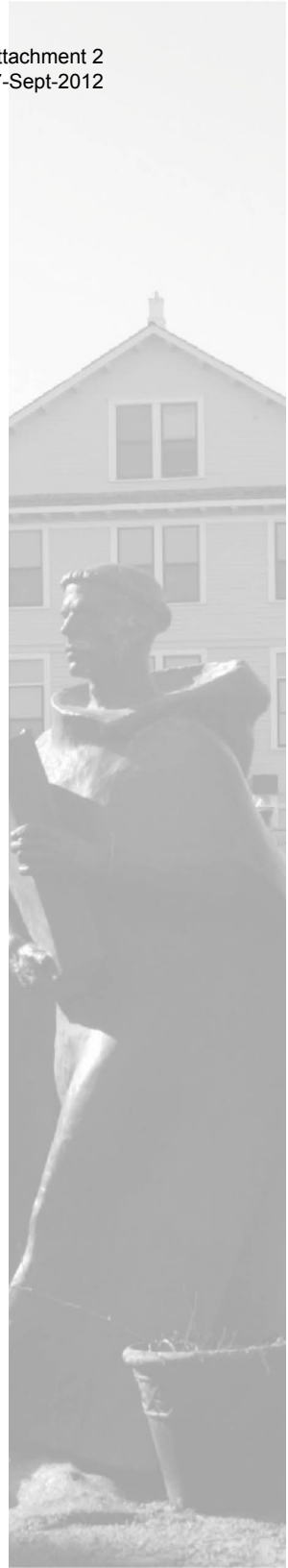
When the Augustana Campus became part of the University of Alberta in 2004, a General Space Program was conducted to properly assess the space needs of this community new to the University. In the years that followed, a number of initiatives were undertaken that completely transformed the physical space of the campus. This included the construction of a new Forum building, construction of a Facilities Building, the demolition of North Hall, and a number of renovations throughout the existing buildings. As a result of all of this change and the supported growth pressures, particularly in Science, the University of Alberta has chosen to re-assess the space needs over the next five years and capture them in an updated General Space Program.

The Campus has four academic departments: Fine Arts, Humanities, Science, and Social Science. But because the campus promotes interdisciplinarity and cross-pollenation, many staff and space assignments on the campus are simply called "Augustana Faculty" – which denotes that they are affiliated with the campus, but not necessarily exclusive to any one of the four departments. Augustana also partners with the Faculties of Nursing and Rehabilitation Medicine at North Campus in Edmonton to offer graduate programs in Camrose. These programs are entirely staffed by the Edmonton faculties and students graduate with a degree in the Faculty of Nursing or the Faculty of Rehabilitation Medicine, while Augustana provides space and helps support technical and other functions.

Because Augustana is more than a Faculty, it is a campus – with residences, library, bookstore, chaplaincy, administration, external relations group, facilities staff, etc – documenting all of the space needs for this campus is a large exercise.

Due to extreme growth pressures within the department of Science, it was the decision of the Office of the University Architect – as sponsor of this exercise – to split the General Space Program (GSP) into two phases:

- **Phase One** – detailing space needs for academic, academic support, research, laboratory, classroom use and direct support for students, etc.



- **Phase Two** – detailing the non-academic related space needs, including campus administration, administrative support, ancillary services, athletics and campus recreation, storage needs, etc.

Therefore, this document comprises the Phase One requirements of the General Space Program. This will enable the University of Alberta to expedite planning of solutions where space pressures are the greatest – namely in the Department of Science.

The Department of Science serves students from across the campus, and offers majors in biology, chemistry, computing science, environmental science, environmental studies, and mathematics and physics In fall 2011, the department initiated a five-year combined BSc/BED program affiliated with the Faculty of Education at North Campus in Edmonton. Enrolment in Science courses has grown by 21% in the past five years (11% in the past year), and the number of Science majors has risen by 34%. As a result of all of this growth and the supported academic plans, the primary space limitations in the Department relate to laboratory and lecture class sizes, research space, laboratory preparation and storage space.

In addition to the needs of the Department of Science, additional space is required in the Department of Fine Arts for studio, exhibition space in Art, for performance space and studios in Drama (due to space functional challenges with the existing Theatre Centre), and for performance and rehearsal space in Music. Looking ahead, there may be limited opportunities to address some of these needs through the Camrose Performing Arts Centre. The Departments of Humanities and Social Sciences have very modest projected space requirements. Augustana's two Academic Centres – Alberta Centre for Sustainable Rural Communities (ACSRC) and the Chester Ronning Centre (CRC) are the only other academic areas projecting space growth over the next five years.

Another key area requiring additional space at Augustana is for dedicated research space for academic faculty, including space for visiting scholars, as the Augustana campus is affiliated with a number of degree-granting institutions across the province and internationally. This space is described under the "Augustana Faculty" component of the General Space Program, as it applies generally to the academic staff appointments.

Classrooms are shared across campus, and so are also listed under the "Augustana Faculty" component. But the majority of the additional classroom space required is in the Department of Science. Current classrooms do not support Augustana's vision of active learning, group work and pedagogical flexibility. Most of the classrooms were constructed and designed when Augustana was a high school and are smaller than current University standard for the number of students that must be accommodated in them.

The Summary Table on the following page highlights the space projection requirements over a five-year planning horizon (projecting to the 2016/17 academic year), department by department.

Overall, the Phase One program projects a space need of an additional 3529 net assignable square meters over the next five years. This represents a 45% increase in space across the Phase One space categories programmed in this document. This space demand responds to the enrolment projection of 1200 students, up from the current student enrolment of approximately 1000 students. Although the Faculty's ultimate ambition is to target an enrolment of 1600 to 2000 students in the long-term, this General Space Program is focused on the 5 year projection of 1200 students, and the majority of this student growth is in Science.

Photograph of statue outside Science Extension

Summary of Space Projections by Department - Phase One

	EXISTING SPACE 2011/12	PROJECTED SPACE 2016/2017	PROJECTED 5 YEAR GROWTH	PERCENTAGE
	Existing Net Assignable Space Based on CAFM Inventory	Projected Total Net Assignable Space Requirements (Including Existing and Additional Spaces)	Projected Net Assignable Space Requirements by 2016/2017	% 5 Year Growth
	Area (Sq.M.)	**Area (Sq.M.)**	**Area (Sq.M.)**	
Augustana Faculty	2,379	3,937	1,557	65%
Department of Fine Arts	1,003	1,591	588	59%
Department of Humanities	260	291	31	12%
Department of Science	1,388	3,428	2,041	147%
Department of Social Sciences	743	781	39	5%
Academic Centres	54	115	60	111%
Learning & Beyond	184	88	(96)	-52%
Student Community and Engagement	498	558	60	12%
Unclassified	751	-	(751)	-100%
Other U of A Programs	646	646	-	0%
Total Space Requirements - Phase One	**7,905**	**11,434**	**3,529**	**45%**

* the overall net assignable space on the campus includes all academic, administrative, and ancillary space, but excludes storage facilities.

"Augustana Faculty" denotes space and/or staff that is affiliated with the Augustana campus broadly, and is not allocated to any one of the four departments.

"Learning and Beyond" shows a net loss in space, as it is currently occupying space in what was once the Augustana Library – a space that is difficult to reconfigure and therefore allocate to other uses.

"Student Community and Engagement" space is student gathering/study space that could be categorized as "General University Space"(eg the open area in the new Forum main floor), but is programmed here separately so that it is not lost in the building gross-up factor

The "Unclassified" space here refers to the Husfloen Centre – which is owned by the University of Alberta, and allocated to Augustana. But due to its location so far from the Augustana campus, the classrooms and office spaces here remain unused, and are programmed as a net zero space projection.

Photograph of the Faith and Life Centre's interior gathering area

2 INTRODUCTION

2.1 What is a General Space Program?

General Space Programs (GSP) describe and quantify the activities of the particular faculty, department or unit (it can be all of these combined) and the student, staffing and support requirements to properly carry out these activities. University Space Standards are used to develop the overall net assignable space that might be required.

The Office of the University Architect (OUA) benchmarks these results against the requirements of other faculties and units at the University of Alberta, as well as against spaces of similar types within our Universities to determine that the space requirements are reasonable, fair and a proper utilization of available resources.

The General Space Program typically identifies space requirements for an entire faculty and can feed into a Functional Program for a particular building intended for the faculty. As the conditions change, the program developed will be tailored to the requirements of the user group.

Planning of facilities at the University begins with a General Space Program. This information is considered by the OUA when developing space plans either for the repurposing of space, allocation of space within the University inventory and/or the development of Business Cases for new buildings. The planning exercise is completed within the context of assessing the overall needs of the University as outlined in the Comprehensive Institutional Plan (CIP) to ensure efficient and effective stewardship and accountability of its land and utilization of space.

Based on a supported need, a Functional Program may be initiated to better define a project scope, assess capacity, assess the space utilization and identify opportunities for repurposing or backfilling space prior to the need for a new building.

2.2 Previous Studies

The Augustana Faculty was formerly a Lutheran College in the City of Camrose, and formally became a part of the University of Alberta in 2004. In order to properly assess the needs of this community, the faculty's first General Space Program was completed in September 2005, and this was coupled with a Functional Program for the construction of new accommodations. However, since those documents were released, a number of capital projects and planning initiatives occurred that have had significant impact on the campus, including:

- Construction of the new Library (2005-2009)
- Construction of the new Forum (2005-2009)
- Purchase of residential properties directly north of the campus
- Acquisition of the Dyck lands (formerly privately owned) on the southwest corner of the campus, and demolition of the house on that property
- Construction of the new Facilities Building (2009)
- Demolition of North Hall (2011)
- Renovations in the Auxiliary Building
- Planning of a new Performing Arts Centre, affiliated with the City of Camrose

2.3 Purpose and Scope

The intent of this document is to describe Augustana's campus, its departments and programs, its current space allocations and projection of future space requirements. The document was developed in the context of other texts: Augustana's mission statement, the 2011 Unit Review, the University of Alberta academic plan *Dare to Deliver*, and a Vision developed by Agustana's executive team and the Dean in November 2011. Future projections are based on current growth trends, and on the 2011 comprehensive unit review that identified opportunities to enhance and improve the quality of Augustana's teaching and research environment.

In the spring of 2011, the Office of the University Architect, on behalf of the Vice President of Facilities and Operations, engaged Stantec Architecture Ltd. to conduct a General Space Program for the Augustana Faculty. A series of user interviews was conducted through the spring and summer of 2011. In late 2011, when a new vision for the Faculty's growth was shared by the new Dean, the OUA elected to split the General Space Program into two distinct phases:

- **Phase One** – detailing space needs for academic, academic support, research, laboratory, classroom use and direct support for students, etc.
- **Phase Two** – detailing the non-academic related space needs, including campus administration, administrative support, ancillary services, athletics and campus recreation, storage needs, etc.

This decision was made to help expedite planning solutions for the urgent space needs currently experienced by the Department of Science. Further space input was solicited internally from departmental stakeholders in January and February 2012.

Once the General Space Program – Phase One has been completed and approved by Facilities Development Committee (FDC), the team will complete the detailed programming for the Phase Two components of Augustana's campus.

2.4 Acknowledgements

The preparation of this document was a collaborative effort with contributions from the following individuals:

Dr. Allen Berger	Dean of Augustana
Ric Johnson	Vice Dean of Augustana
Dana Andreassen	Project Officer
Josh Ryder	Assistant Dean, Infrastructure and Technology
Lorna Baker-Perri	Associate Director, Office of the University Architect, Planning and Project Delivery
Lorrina Belland	Planning Officer, Office of the University Architect, Planning and Project Delivery
Léo Lejeune	Architect, Stantec Architecture Ltd., Prime Consultant
Luc Hong	Architect, Stantec Architecture Ltd., Programming

The Augustana Campus General Space Program – Phase One was developed through consultation with various representatives from Augustana Faculty, including the Dean's office, the administration, the academic chairs, and also representatives from the University of Alberta's north campus in Edmonton, including Library Services and the Office of the University Architect.

The Augustana Campus community was extremely co-operative in sharing their space needs and was insightful in sharing their visions for Augustana's future.

3 PHYSICAL CONTEXT

Although this Phase One portion of the General Space Program is focused on capturing the academic space needs only (classrooms, academic offices, laboratories, research space, etc.), this chapter will describe the context of the entire Augustana campus, including all of its space-types in all of its buildings.

3.1 Augustana's Site

The Augustana Campus is located on an 18.2 hectare site along a ravine in Camrose, Alberta, south-east of Edmonton. It is currently home to approximately 1000 students and approximately 300 faculty and staff.

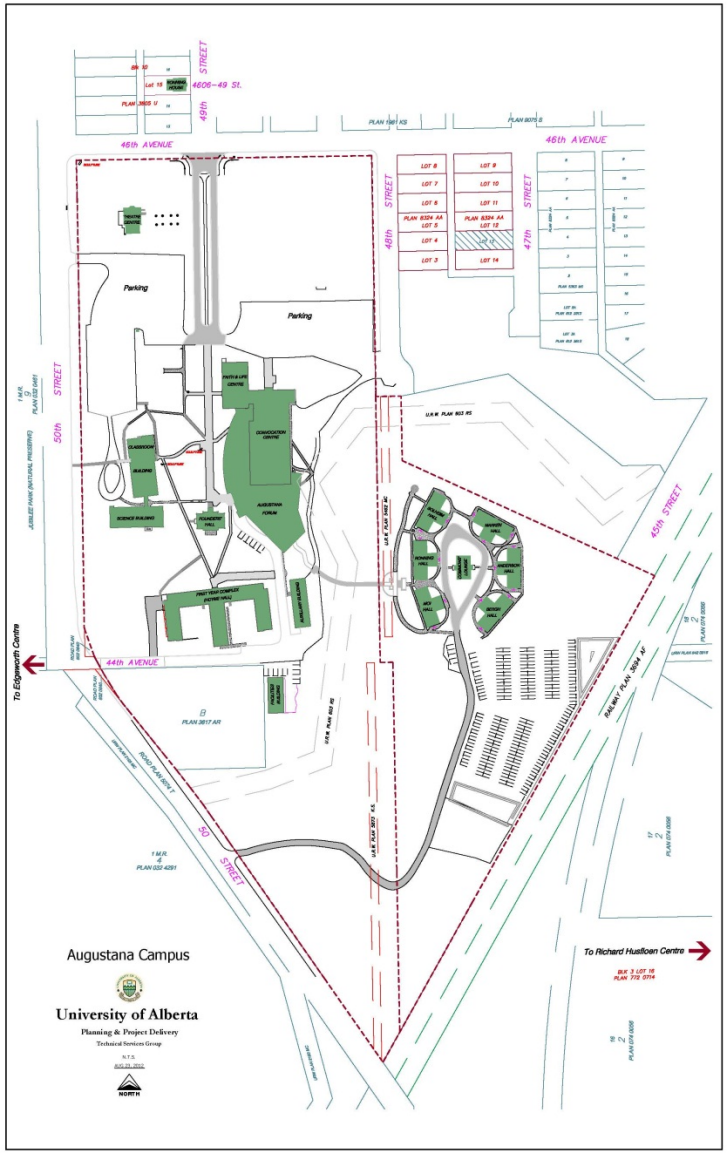
The academic buildings of campus are organized around a central rectangular shaped quadrangle, anchored on one end by the renowned Founders' Hall. Imperative to the culture of this liberal arts and sciences college, located in a small-town setting, is that first-year students are strongly encouraged to live in residence on the campus. Therefore, there are a series of residence buildings at Augustana, accommodating upwards of 400 students.

In addition to the main collection of buildings and residences along the ravine, Augustana also has space in the following locations "off campus":

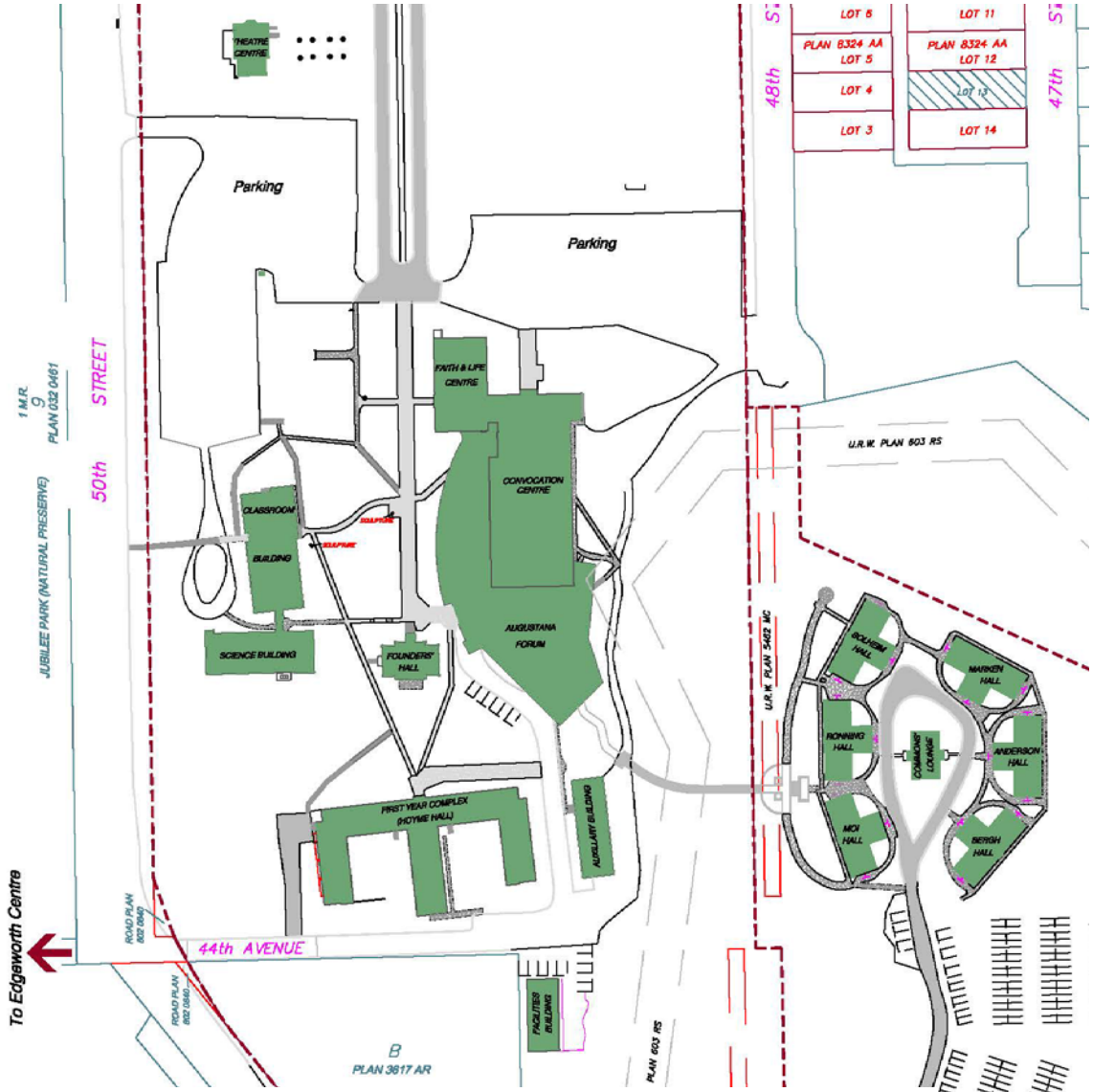
- Richard Husfloen Centre – U of A owned, currently housing the after-degree nursing program sponsored by the Faculty of Nursing
- Ronning House – U of A owned, currently housing the Faculty's advancement operations
- Edgeworth Centre – a portion of the larger community recreation complex is allocated to Augustana, but owned by the City of Camrose,
- Eleven residential properties, directly adjacent to the north-east corner of the campus – U of A owned, currently rented externally, and not directly utilized by the Faculty

Camrose Context Map

Aerial Map of Augustana Campus



Overall Site Plan of Augustana Campus



Enlarged Site Plan of Augustana's Buildings

3.2 Augustana's Buildings

The existing campus is made up the following buildings.

Science Extension

Built in 1981, this building is connected to the adjacent Classroom building. The facility houses classrooms and labs for Biology, Chemistry and Physics, as well as academic offices. This facility is currently undersized for the amount of science lab instruction required at Augustana.

Classroom Building

Built in 1960, this building houses classrooms for general use by Augustana students, but primarily for instruction in Science. The building does house space for the Faculty of Rehabilitation Medicine's physical therapy program affiliated with the North Campus in Edmonton.

Founders' Hall

Founders' Hall, fondly known as "Old Main", is Augustana's signature campus landmark. Designed by the school's first principal, J.P. Tandberg, this registered historic resource was constructed in 1912. For decades, Founders' Hall was the school's only building, serving as classrooms, offices, dorms, library, kitchen and laundry facilities. The building now houses faculty offices, administrative offices and classrooms.

Forum

Built in two stages, between 2006- 2009, this building is the focal point for student activities. It houses a two-storey library, as well as a series of academic and administrative office space. It also houses the Bookstore, the Student's Association, and some food-service operations. It is connected to the Faith and Life Centre, as well as to Convocation Centre. This facility looks over the ravine, and provides the eastern edge to the campus Quadrangle.

Reverend K. Glen Johnson - Faith and Life Centre

Built in 1990, this facility is named in honour of Augustana's thirteenth and longest-serving president. It houses general classrooms, faculty offices, a modern chapel, student services, and music practice rooms. Until the construction of the Forum, this building was the main focal point for student activities. This building is connected to Convocation Centre, as well as to the new Forum. It is considered the front door to public arriving on the north end of campus.

Convocation Centre

Built in 1964, this building provides a variety of spaces, including the gymnasium and affiliated athletic support spaces, the student cafeteria, the main loading dock/shipping/receiving for campus, some classrooms and some office space. The second and third floors on the north end have some code/access issues, rendering them difficult to repurpose. The gymnasium doubles as convocation hall for ceremonial purposes.

First Year Residence (includes Hoyme Complex)

Built in 1987, this building primarily houses first-year residence students in a dormitory style living environment. Due to space pressures on campus, the basement level has been converted over the years to provide space for computer labs, student social space, office space and storage. The ground floor of the central wing is currently utilized for faculty offices.

Richard Husfloen Centre

Built in 1982 and originally owned by TransAlta, this building's name honours Rev. Dr. Richard L. Husfloen who was the President of Augustana University College from 1996 until 2003. Ownership of this building was transferred to the University of Alberta when the Augustana campus became part of the University of Alberta. It is located in an industrial park area of the City of Camrose, and several blocks east of the Augustana campus. This two-storey facility provides labs, office, and classroom space for Nursing, and storage space for Augustana, as well as some unclassified space.

Auxiliary Building

Built in 1986, this building provides space for the Fine Arts program (an art studio and office space), some classrooms, and some maintenance space.

Ronning House

Ronning House is located directly north of the Augustana Campus on 49th street. It was the original home of alumnus, former Augustana president and Canadian diplomat, Chester Ronning. The home was gifted to Augustana and has since become the offices for Advancement.

Theatre Centre

Built in 1928, this building was originally the Camrose Lutheran Church. It was moved to this site in 1993 and converted into a theatre where drama is taught. The theatre can seat approximately 80 people, but the building does not meet current code requirements, and is difficult to use for teaching arts/drama/movement classes due to its configuration. A new Performing Arts Centre is being built on the Campus by the City of Camrose, and is planned in two phases. The current Theatre will remain in use until Phase II can be planned and funded.

Facilities Building

This building was built in 2009 to house the staff and functions of Facilities and Operations personnel. It provides both office space and maintenance space, including vehicle repair, trades-space, and custodial services.

Ravine Residence Complex

This complex of six residences is grouped around the Commons Building, and provides living quarters for upper-level students. The residences are named after significant people in Augustana's history: Bergh Hall, Solheim Hall, Ronning Hall, Moi Hall, Marken Hall and Anderson Hall.

Table 3.2 – Space Summary by Building

The following table summarizes the amount of space provided by each of the buildings at the Augustana Campus.

Building	Net Assignable Area (Sq.M.)
AG01 Founders' Hall	839
AG03 Classroom Building	1,197
AG04 Science Extension	856
AG05 Hoyme Complex*	1,017
AG06 First-Year Residence*	4,579
AG08 Auxiliary Building	530
AG09 Convocation Centre	2,990
AG10 Faith & Life CentreBF	1,618
AG17 Commons Lounge	149
AG18 Richard Husfloen CentreBF	1,438
AG21 Ronning House	72
AG24 Library~BF	4,001
AG25 Theatre Centre	380
AG26 Forum~BF	1,360
AG27 Facilities BuildingBF	325
Ravine Residence Complex	4,194
Edgeworth Centre (Leased)	891
Total	**26,437**

* the First Year Residence and Hoyme Complex are listed here separately with their respective CAFM areas, but are combined as one facility in the text and drawings.
~ the Library are Forum are listed here separately with their respective CAFM areas, but are combined as one facility in the text and drawings.
BF indicates the facilities that currently provide barrier-free access.
The Edgeworth Centre net assignable area is an approximate calculation only, based on data available from the owner's drawings.
The overall net assignable space on the campus includes all academic, campus administration, administrative support, and ancillary space, but excludes general storage facilities.

4 ACADEMIC NARRATIVE

Founded as Camrose Lutheran College by Norwegian settlers in 1910, Augustana has a long and rich history in Alberta, and indeed in Western Canada, for providing a unique educational experience. Although it first began its educational delivery by offering high school courses, by 1959 it was offering first-year university-transfer courses in affiliation with the University of Alberta in Edmonton. The college began conferring university degrees in 1985.

In 1991, the college took its name "Augustana" as a reference to the Scandinavian confession – simply called "the Augustana". In 2004, the college officially became part of the University of Alberta, offering undergraduate courses that focus on the liberal arts and sciences in a residence-based setting.

4.1 Mission and Identity

The mission statement for Augustana's role in post-secondary education, as outlined on its web-site, is as follows:

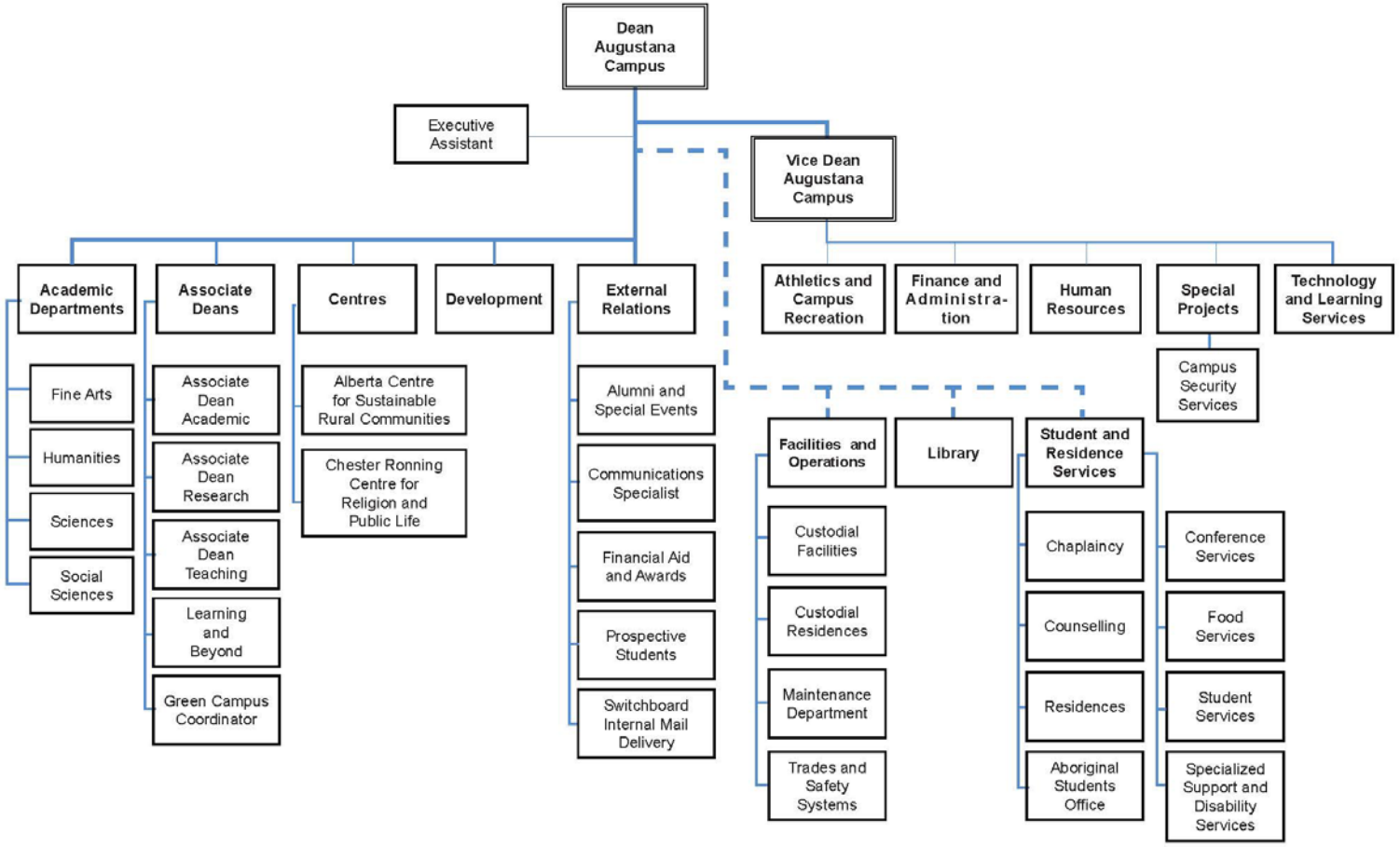
As a Faculty of the University of Alberta, Augustana continues to build on its reputation for high-quality teaching in a friendly, caring, residence-based setting. In doing so, it provides a distinctive small-campus undergraduate experience within one of Canada's leading universities. Augustana remains mindful of its heritage, open to a diversity of perspectives and backgrounds, and responsive to the rural region in which it is located.

Augustana Campus is characterized by a lively, collegial academic culture of research, creativity, and public engagement in which students are invited to participate. It values interdisciplinary inquiry, teaching, and learning. Augustana offers the opportunity of a memorable, life-changing education through small classes, personal attention from professors, a challenging, innovative curriculum founded on the liberal arts and sciences, experiential learning in wilderness and international environments, and a range of campus-life programs. In this academic community, students are more than narrow specialists, spectators, or strangers.

Augustana aspires to educate the whole person in an intimate, small-campus setting so that students and mentors alike are capable of engaging life with intellectual confidence and imaginative insight, equipped for leadership and service, and committed to the betterment of their world.

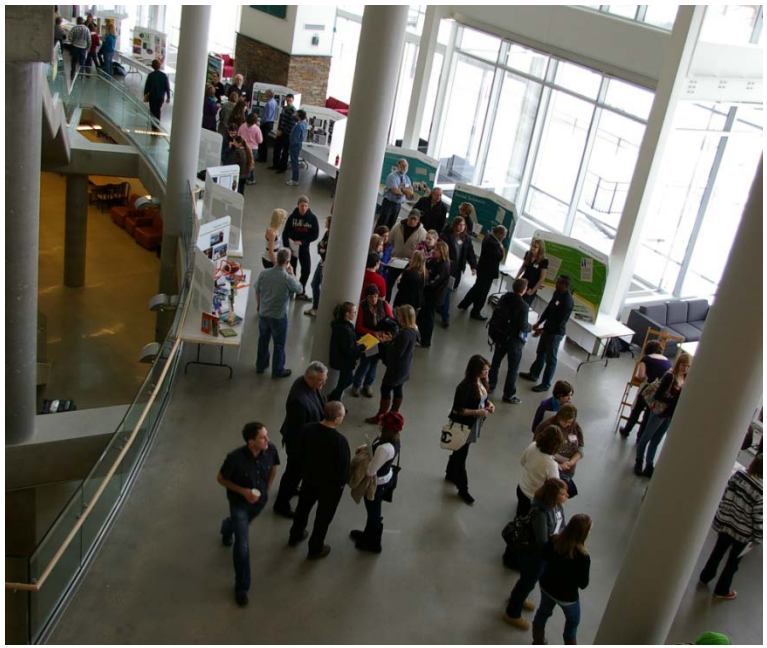
4.2 Augustana's Organizational Structure

To help understand how Augustana has organized itself to deliver on its mission, the following chart reveals the organizational structure of the Faculty, including both its academic and administrative units.



Augustana has a decanal structure with a Vice Dean, reporting to the Dean, responsible for Athletics and Campus Recreation, Finance and Administration, Human Resources, Special Projects, and Teaching and Learning Services. Additionally, the Chairs of the four academic departments, the three associate Deans, Directors of the two Centres, the Directors of Development and External Relations, also all report to the Dean. The Directors of Facilities and Operations, Library, and Student and Resident Services report to the central University of Alberta administration, while having a "dotted-line" relationship to the Dean of Augustana.

There are a handful of additional units who have space and staff at Augustana, but whose reporting relationships are affiliated with departments at the University of Alberta's North Campus, and are therefore not shown on this organizational chart. These include Rehabilitation Medicine/Physical Therapy, Nursing, and the Bookstore.



Student Life at Augustana

Outdoor Education

4.3 Augustana's Academic Programs

The Augustana Campus offers four-year baccalaureate degrees in Arts, Sciences, Music and Management. As a residential liberal arts and sciences campus, Augustana is committed to the education of the whole person, producing graduates who are both well-prepared in their academic disciplines and well-rounded people.

Students' educational experiences are shaped by the holistic blending of learning opportunities both within the classroom and in the field. The campus provides a community for students that is supportive of studies through a broad liberal arts and science curriculum, anchored in the valuable interactions and friendships that form with peers and professors in a small academic community. Through ambitious and innovative experiential learning opportunities that range from placements in the heat of Cuba, to the cold of Norway, or to the wilderness learning in Alberta and beyond, students are provided with life experiences that transcend the conventional boundary of the classroom. Co-curricular settings help to further encourage leadership skills and life interests.

Students at the Augustana Campus can be Chemistry majors, Drama minors, residence assistants and community volunteers all at once. They can be English majors who sing in the award-winning Augustana Choir or play championship hockey, and at the same time, be inspired by a summer course in India to add a minor in Development Studies. In ways they cannot imagine when they start, students are often transformed personally and vocationally by the time they reach graduation.

Augustana is distinct within the University of Alberta as a faculty diverse in their approach to knowledge and how the world is understood. Augustana's coherence is its commitment to the liberal arts and sciences, which orients programs toward broad education, including significant engagement with the Humanities, Social and Natural Sciences, Fine Arts, and Interdisciplinary Studies. A commitment to the liberal arts and sciences fosters Augustana's values to develop skills that assist in the interpretation of the world in which we live, a sensibility oriented toward civic responsibility as part of the educational experience, and the emergence of personal wholeness that occurs with liberal education.

The core curriculum is central to Augustana's liberal arts and sciences degree programs for two reasons: it assures breadth so that students are more than narrow experts, and it inculcates the core values that are shared across the Augustana Faculty. The core curriculum requires exposure to at least three of five areas: integrating knowledge, environmental sustainability, diversity and global studies, experiential learning, and creative and imaginative processes. Students are also required to take courses in each of the four departments. Undergraduate research and community service learning are supported as priorities

in all academic programs. Finally, the curriculum is designed to ensure that all students are challenged to develop skills in information literacy, critical thinking, speaking, and writing.

The breadth of the core requirements means that all departments participate in the education of each student. As enrolment grows in science, for example, classes also grow in English and Art. Space planning must recognize that the close integration of the curriculum implies that growth in one department results in growth in class sizes in all departments.

The diversity of offerings at Augustana requires a variety of specialized teaching and performance spaces. The largest classes are limited to the size of the largest classroom, currently 90-100 seats. There is also a theatre; a chapel/music recital hall; art studios; a gymnasium; a fitness centre; laboratories for biology, chemistry, computing science, and physics; a language laboratory, a library, and technology-based facilities for linking classes taught simultaneously in Camrose and Edmonton.

There is no behavioural laboratory to facilitate research by psychology, business, sociology and other faculty members and students. Additional and updated science labs and associated technical support areas, as well as additional research spaces for science faculty members and undergraduate student researchers in all disciplines are needed. Finally, an art gallery and a performance/rehearsal space for showcasing faculty and student creative works are also required.

Overall, in order to reach its optimal enrolment targets and to enhance its academic quality, significant investment is required to address outdated and functional inadequacies in Augustana's facilities.

4.3.1 Department of Fine Arts

The Department of Fine Arts engages in teaching, research, and creative activity in the Visual Arts, Drama and Music for Augustana. The Arts program is also essential to East-Central Alberta communities. Located in a city that has had no public art gallery and, until 2011, no public theatre or music performance space, the Fine Arts department has been a key player in providing the core cultural experience for this city and its district over the last century. Many of the theatre practitioners, artists, and musicians who take leadership roles in the arts in this region have links to Augustana.

The Visual Arts program offers a major and a minor in studio Art and a minor in Art History. Professors' works have recently been featured in successful exhibits in Texas, Boston, and Ontario, and the monumental landscape installation "gravitas" in southern Alberta has received great acclaim. Faculty members are internationally known and respected for their scholarship, especially on 18th century art.

The three faculty members share two teaching studios; one primarily for Painting and Foundation and one for Drawing and Sculpture. Teaching is conducted in general purpose classrooms equipped, as are all Augustana classrooms, with digital projectors and document cameras. Storage is essential for visual arts, and Augustana's arts program has one secure outdoor storage shed for raw materials and teaching aids, four small secure storage rooms/closets for secure equipment and teaching resources, two secure storage spaces for power and hand tools, one secure closet for the Augustana Art collection storage, and student art locker space.

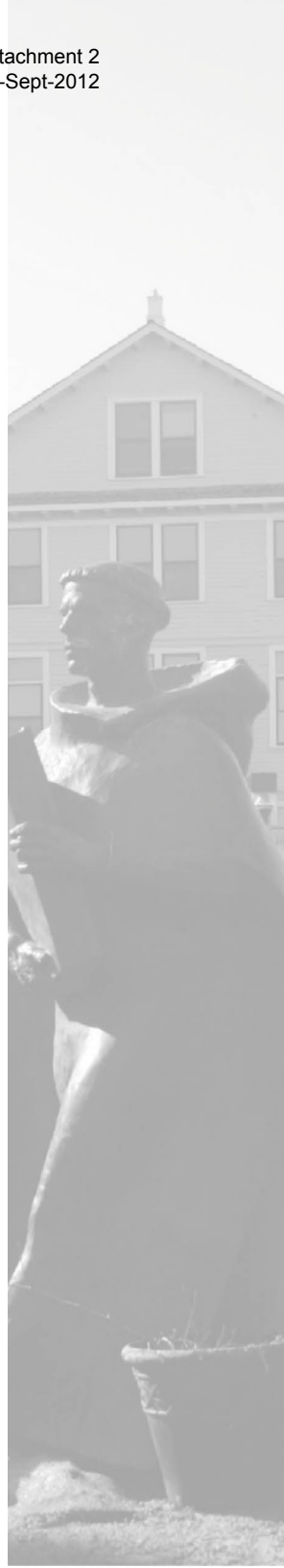
The previous space planning exercise in 2005 resulted in a much needed expansion of studio and storage space, enabling the program to offer more sections of studio courses and support increasing enrolments, especially in the introductory courses. The addition of computer projection has made timetabling easier and more efficient now that art history courses can be taught in a larger number of classrooms of varying sizes.

Visual Arts continues to face space challenges. For example, the small size and irregular footprint of the studios limit their capacity as well as the quality of furniture. Foundation courses squeeze 24 students onto 12 smallish tables, painting courses are full at 13 students with easels and work stations, drawing courses are full at 18 students with drawing benches, and sculpture is full at 12 students with work stations. In addition, unscheduled studio time, which is required by art students for a work space to complete creative work projects, is very difficult to schedule in the two rooms that must serve primarily as classrooms. Similarly, it is extremely difficult to find space for displaying student art for group critique. Looking ahead, there may be limited opportunities to address the last of these needs in the Camrose Performing Arts Centre.

Visual Arts requires an Art Gallery on campus that could showcase student work, visiting artist shows, and bring in art experiences both for the benefit of the campus community and the larger Camrose area.

Some of the scheduling space in the art studios is currently shared with the drama program due to a shortfall of drama teaching space. Although the number of majors in the Visual Arts program is projected to remain at current levels, the number of non-majors taking visual arts classes is increasing and if these pressures continue to grow then this space will be less and less available for drama.

The Drama program offers a BA Degree with a major and a minor. Both faculty members are active performers; one of them recently completed a successful tour of Canada and the United States with his semi-autobiographical one-man show, and the other directed a production for the New York Fringe Festival. They have been internationally recognized for teaching innovation, especially in the Spolin method of improvisational theatre, and Movement and Oral Communication.



Augustana's drama program is predicated on the concept of 'ensemble' according to which faculty and students participate in all aspects of preparing and presenting two productions each year; from stage direction to construction to make-up to studying and teaching the historical background of the discipline. Not only is this consistent with a goal of experiential education, it is a practical necessity for the small program. The fact that the professors are experts in the full range of theatre matters is an anomaly in a discipline that is usually specialized and departmentalized. The greatest need is for a non-academic staff member to provide technical assistance, a hire that would require one additional office space.

The Theatre Centre, located on the northwest corner of campus, has accurately been called "not quite a heritage building." The Theatre Centre houses a stage with seating for about 80, three offices, one classroom, a make-up room with showers, a shop, a light and sound room, a lobby with two bathrooms, a ticket booth, two storage closets, and one outdoor storage shed for raw materials and props.

Since 2005 the theatre building has had considerable structural investment to forestall a condemnation order in the short term. Despite these efforts, this building is reaching the end of its usability. Though it currently serves best as a performance space, the stage and its seating are designated as a lecture hall for fire code purposes; but it cannot be easily scheduled as a teaching space since, for much of each term, it is being prepped for the productions.

The theatre building is woefully inadequate as a teaching space, first because a single classroom cannot accommodate all the courses that need to be timetabled for drama. The more serious limitation is that the classroom is small with a low ceiling and a structural post in the middle. It is poorly appointed and somewhat unsafe for the many kinds of teaching activities required, especially for the highly interactive movement classes. The art studios have been used for drama courses, but the concrete floors and art gear are not conducive to best practices in teaching movement. This is a short term solution as availability is due only to the Visual Art division's ability to combine low enrolment senior classes. Drama needs a classroom that is designed for and dedicated to specialized drama teaching.

The Music program offers a BMus Degree with majors in Piano, Voice, Comprehensive, Liturgical Arts, and Musical Arts as well as a BA Degree with a major and a minor in Music. Faculty members are in demand as performers, as well as teachers and scholars. Three of them have toured and performed in Europe, Asia, and North America. As examples of the cross-disciplinarity that is encouraged and facilitated in a Liberal Arts setting, two music professors have published and presented original research on the psychology of performance and on the connection between psychoanalysis and Schoenberg's compositions. Innovative teaching is a hallmark of the music program.

Most music instruction occurs either in faculty offices or in the 10 Music Practice rooms. The practice rooms are equipped with pianos and one of them is larger to accommodate ensembles; e.g. chamber music or jazz combos. Faculty offices and practice rooms are sound insulated to a degree. Choral courses meet in a larger general classroom with a piano.

Public music performances occur in the Chapel, which is also utilized for repertoire classes, rehearsal space, and practice for organ and piano students.

Storage space for the music program consists of a small storage closet in one office, a small instrument storage room, a room that houses the musical score library, and other shared storage for sound shell, risers, and modular stage units.

The music division experienced a dramatic upgrade to its facilities in the move to its new quarters last year, although deficiencies in sound insulation still need to be addressed.

The greatest space shortfall in music is in performance/rehearsal space. Since the chapel is the only suitable place for performances, it is a growing struggle to avoid conflicts within the Music division and with other chapel users. In peak performance times, which come later in term, the necessity for rehearsal is critical and yet those needs come into conflict with, and sometimes get bumped for, other functions. This results in performance issues for students at critical points in their studies. The Camrose Performing Arts Centre (CPAC) may provide limited opportunities to accommodate some of these needs.

The Chapel is too large for many performances and its acoustics are not designed for smaller ensembles. The primary space need in Music is for a small performance venue that would seat 60 for smaller music events such as student recitals and certain guest artists. It would also serve as a rehearsal space.

Pressure on the practice rooms is expected to grow with enrolment. The best way to address this would be to create spaces that can be used for Applied Music instruction, rather than conducting these teaching sessions in the practice rooms.

4.3.2 Department of Humanities

Members of the Department of Humanities define their scholarly activity as being “interested in what it means to be human.” They investigate this question in terms of the power of language and literature, the ways people talk about their encounter with the divine, the attempt to understand ancient civilizations, and the process of thinking itself. Socrates once said, “The

unexamined life is not worth living." Humanities scholars try to search for meaning in life so that it is worth living, and so that it is rich and challenging.

Disciplines represented in the Department of Humanities include English, Philosophy, Religion, Classical Studies, French, German, Scandinavian Studies, and Spanish. Students may major in English, Philosophy and Religion, or Modern Languages. More than any other department, Humanities supports the liberal arts mission by offering service courses and minors that are popular with students who major elsewhere. For example, Greek and Roman Mythology is one of the most popular courses on campus. Humanities is the only department where minors outnumber majors, currently by 1/3, but in recent years the number of minors has been as much as double the number of majors.

Humanities is home of the campus Writing Centre and the Writing Studies Certificate program and the administrative centre of the Canadian Summer School in Germany.

In the past year, Creative Writing instructor Marina Endicott was nominated for a Giller Prize for her novel Little Shadows and German professor Kim Fordham received a Rutherford Award for excellence in undergraduate teaching. Faculty members serve as journal editors and as presidents and executive board members of national disciplinary associations.

Humanities' demographics point to significant turnover due to retirements in the next five years, suggesting an opportunity to build in certain new directions, such as Spanish, Philosophy/Rhetoric, Cree, or Film Studies. For example, a faculty member in rhetoric might be the cornerstone of a popular new major or minor in the area, while also supporting English and Philosophy. Film Studies is another potential new field that can overlap with existing programs while updating our offerings. Some of these new areas will have implications for space.

The space needs of the Humanities Department tend not to be particularly specialized, requiring only the standard classrooms. An important exception is the language laboratory, which exists in a space that is adequate for current needs. It is hoped that as new spaces are built it might be possible to create a lounge area for language students where they can peruse literature and converse in the language they are studying without the distraction of English being spoken at the same time elsewhere in the room.

4.3.3 Department of Science

The Department of Science emphasizes the natural, mathematical, and physical sciences. Faculty members pride themselves on providing students with sound preparation for the workplace including field, technical, and laboratory skills. This preparation takes the form of training in the scientific process, experiential learning, independent undergraduate research, summer research assistantships, international travel to conduct research in Costa Rica, and an outdoor expedition and field research experiences to the Canadian Arctic and around the world. Such experiences help students to foster a lifelong love of learning.

The Department of Science offers majors in biology, chemistry, computing science, environmental science, environmental studies, and mathematics and physics. The department also offers a stream in outdoor education and additional courses in educational computing and statistics. In 2011, the Department initiated a five-year combined BSc/BEd program in secondary education for which students take three years of study at Augustana and two years of study at the North Campus.

The Department of Science serves students from across the campus, especially those enrolled in pre-professional health science programs (eg. medicine, dentistry, optometry, pharmacy, and veterinary medicine), those taking BSc programs in physical education and psychology, and those non-science students needing to meet core category requirements with science courses. Science students also benefit in return when they take non-science courses that meet their breadth requirements and to meet requirements for their optional minors. Within the department, there is much cross-fertilization. For example, environmental science majors must take courses in biology, chemistry, physics, and mathematics.

Enrolment in Augustana Science courses has grown by 21% in the past five years (11% in the past year), and the number of Science majors has risen by 34%. From a space management perspective, this growth has placed considerable strain on the department's laboratories, technical preparation facilities, classrooms, and storage, creating challenges for faculty and for undergraduate student research.

The primary space limitations in the Department relate to laboratory and lecture class sizes, research space, and storage space. First, class sizes are typically limited to 14-24 students by space in the laboratories, amount of equipment, and safety protocols. In turn, the number of lab sections is limited by capacities in the lecture halls. Second, the ability to recruit and retain science professors, and to facilitate their professional development, depends critically on specialized research facilities. Augustana's facilities are inadequate, especially for scientists working in fields such as genetics, organic chemistry, experimental physics, and field ecology. In addition to traditional bench laboratories, current professors need a field station to support outdoor and field research. A remote research station in Miquelon Lake Provincial Park is in development but it has

been stalled by lack of funding. An enlarged and improved care room for scientific support is also essential. Space is also needed for undergraduate students to conduct research as part of their independent studies courses or summer research assistantships. Augustana also has a shortage of storage, administrative support, and preparation space. Current storage areas are inadequate in size and diversity, resulting in the mixing of equipment from multiple disciplines. In addition, the equipment and materials for many senior courses taught in alternate years need to be stored in those non-teaching years. Additional space for lab preparation and outdoor education expedition equipment is also needed.

4.3.4 Department of Social Sciences

The Department of Social Sciences is a microcosm of the diversity of the larger campus, encompassing disciplines that range from psychology to global and development studies to physical education. Other disciplines in the department include economics, history, management, political studies, and sociology. Majors are offered in all of these disciplines.

The newest programs in the department are Management and Global and Development studies. The Management program was created to address a demand for more business education opportunities, especially in a rural setting. Global and Development Studies offers a unique and societally important opportunity for education and research. It is an interdisciplinary program that examines the interplay of global and local change, focusing on the regional, national and international factors and strategies that threaten or enhance the development of healthy local communities in Canada and abroad.

The department is considered home to the Learning and Beyond program and to the Alberta Centre for Sustainable Rural Communities (ACSRC), as the directors are Social Science faculty members. Disciplines in all academic departments share these centres' commitment to engagement with and service to local, national, and international communities. Students have participated both as paid employees and volunteers in crime prevention, municipal administration, and management consultation for businesses and non-profits. They participate in international tours and service projects, the Model United Nations, and more.

One of the greatest facilities challenges facing the department is the absence of a behavioural research laboratory. Behavioural researchers in psychology, sociology, management, and others do not have a controlled environment for conducting experimental research. Besides controlling for lighting, noise, heat and other environmental variables, these studies often require unobtrusive observation, participant confidentiality, and technology that cannot be obtained in a

classroom. An appropriate laboratory is essential for recruiting, retaining, and advancing the careers of many behavioural scientists.

The second space need is for workstations for student researchers and research assistants. Increasing success with tri-council funding has led to more opportunities to employ research assistants but there is no proper place for them to conduct analyses, review the literature, and write reports. Further, increasing emphasis on Undergraduate Student Research encourages more students every year to engage in self-directed research which, again, requires research space for them.

4.3.5 Academic Centres

4.3.5.A Alberta Centre for Sustainable Rural Communities

Established in 2008, the Alberta Centre for Sustainable Rural Communities (ACSRC) supports efforts to improve the sustainability of rural communities and populations by linking University of Alberta research and teaching initiatives with students, researchers, rural communities, and policy makers across Alberta, Canada, and internationally. To this end, the ACSRC develops partnerships between the University of Alberta and rural communities in Alberta and beyond, fosters constructive dialogue, and promotes interdisciplinary and collaborative research.

The ACSRC anticipates that continuing growth in profile and resources over the next 3-5 years will require a significant expansion of office and research space. Current research projects involve REB-approved research protocols and data, potentially sensitive information and the development of small project and work teams, requiring more workspace and better security than is presently available. In the past, graduate students working for the Centre have worked from home or from their host department on the North Campus, but it is important to be able to host them on the Augustana campus. Looking ahead, additional hiring will place further strain on the facilities.

Additional secure storage space will also be needed over the next five years.

4.3.5.B Chester Ronning Centre for the Study of Religion and Public Life

The Ronning Centre is the first (and only) gathering point in a public university in Canada that focuses on a broad range of themes where religion and public life intersect. To the discussion of vital issues that often call forth deeply emotional responses, it seeks to bring original contributions that embody the highest standards of academic scholarship.

While rooted in the academy, activities relate no less to the public square and the full range of religious communities, bringing the depth and texture of the most varied religious and civil ideas into a hospitable and constructive conversation. Scholars of the Centre are recruited locally, regionally, and nationally. Through partnerships with other institutions, work has become increasingly international in scope.

Work not only crosses boundaries between the community and the academy, it also crosses generational boundaries as events bring in participants of all ages.

The Ronning Centre's activities occur both on campus and in the community. Campus facilities, such as general purpose classrooms and the Chapel, are generally suitable for these events. Visiting scholars are able to use hotelling offices provided by the campus and temporary staff are adequately served with cubicle space.

4.3.6 Learning and Beyond

Augustana's core curriculum requires students to participate in international, outdoor or experiential learning courses that are intended to provide students opportunities to engage local, national and international communities. The Leaning and Beyond (LaB) office provides support for such courses; including risk assessment, supplementary fee calculations, and identifying and monitoring Community Service-Learning opportunities. LaB staff support more than 300 placements per year in Community Service-Learning courses on campus and in the community. Most Augustana graduates take at least one experiential learning course and nearly 30% participate in at least one significant international experience.

The LaB facilities include offices and work-spaces for staff and a large meeting area for events and meeting clients. As the Campus grows, LaB will require space for support staff in addition to the three current employees and for student cohort meetings and group work sessions.

4.3.7 Programs offered by Faculties other than Augustana Faculty

Augustana partners with the Faculties of Nursing and Rehabilitation Medicine to offer graduate programs in Camrose. These programs are entirely staffed by the Edmonton faculties and students graduate with a degree in the Faculty of Nursing or the Faculty of Rehabilitation Medicine. Augustana provides space and helps support technical and other functions.

4.3.7.A Bachelor of Science in Nursing- (BScN) After Degree Program, affiliated with the Faculty of Nursing in Edmonton;

The Faculty of Nursing now has a state-of-the-art dedicated facility in Camrose for the After Degree Program offered there.

When the first cohort of students began in May, 2006, teaching facilities included classroom and skills lab space leased by the University of Alberta at the Camrose Regional Exhibition building, and also Augustana classroom and office space on the 2nd floor of what was, at the time, referred to as the Community Education Building (now the Richard Husfloen Centre).

The new facilities, which Augustana began using in September, 2010, include smart classrooms, a state-of-the-art high-fidelity simulation suite, a nursing skills lab equipped with medium fidelity simulation and a patient care-ready environment modeled after what students experience in a hospital facility.

According to Dean Anita Molzahn, creating a permanent dedicated space for the program in Camrose is an example of the Faculty of Nursing's commitment to being part of a community that welcomes both students and instructors. There are currently three faculty lecturers, one contract lab facilitator, and a part-time program assistant employed by the Faculty and working in Camrose.

The After Degree nursing program has forged some interesting relationships that are characteristic of a rural setting. Some examples are that the local Hutterite community manufactures their nursing scrubs, snow cleaning has been generously done by anonymous passers-by, and seniors in a local retirement residence have stepped up to be assessed by our nursing students in their NURS 304 course, because they believe it is the duty of these seniors to educate the younger generation.

The Camrose After-Degree Nursing program was developed to supply well-qualified, degree-prepared registered nurses to meet the nursing resource requirements of eastern and central Alberta. Local institutions and health authorities have also been strong partners in the education of, to date, 61 students, many of whom have remained in rural settings following completion of the program. The program has also linked with First Nations Inuit Health Branch of Health Canada for clinical placements in aboriginal communities.

Augustana Faculty has also been an integral partner, assisting with education space, library and bookstore services, residence services, support courses, personnel support, student services, IT services, access to recreation and sports facilities for the nursing students.

4.3.7.B Masters of Science in Physical Therapy (MScPT), affiliated with the Faculty of Rehabilitation Medicine in Edmonton.

The Faculty of Rehabilitation Medicine's Department of Physical Therapy offers a Master of Science degree in Physical Therapy (MSc PT) course-based program at three different campuses: Edmonton, Camrose, and Calgary. Of the 110 students admitted to the program yearly, approximately 12 study in Camrose and 16 in Calgary.

MSc PT classes (lectures, seminars and labs) are delivered either face-to-face or by state of the art real-time web/video cast technology, allowing students to interact with professors from the other two campuses. While the majority of classes are broadcast from Edmonton, faculty members broadcast from all campuses throughout the program. All students begin the program with a one-month residency in Edmonton to study anatomy and establish initial face-to-face connections with the colleagues they will be working with via technology throughout the remainder of their program.

With the MScPT program's distributed education model, students at all campuses complete the same core program of required courses as their colleagues enrolled at the other campuses. Each campus offers unique elective opportunities reflective of local expertise and community partnerships in addition to the online electives available to all. Upon successful completion of the program students will receive a MSc degree in Physical Therapy from the University of Alberta and graduates will be eligible to write the Canadian Alliance of Physiotherapy Regulators entry-level proficiency exam.

The distributed learning model used for the Augustana MScPT satellite is truly novel in Canadian PT education. Use of real-time videoconferencing along with a local instructor to teach all aspects of a professional program is not common with other programs at the U of A either. In response to an Alberta Government 2007 workforce planning prediction of a significant shortage of physical therapists in Alberta by 2017, the Department was asked if more applicants could be admitted. With space at Corbett Hall being the main limiting factor, the concept of a satellite campus was explored. In 2009 planning was undertaken for a proof-of-concept project at the Augustana Campus with one cohort of ten students. Shortly after the Augustana students completed their first semester, funding was received to expand the Augustana MScPT satellite and to develop a similar distributed learning model for a Calgary based satellite. It is now expected that funding will continue in perpetuity.

MSc PT students attending the Augustana Campus attend their classes in the classroom building located on the Augustana Campus. The Augustana classroom and lab spaces were renovated in 2009 and 2011 and are fully equipped. The facilities include the classroom, lab, seminar room and two offices. These spaces are sufficient for two cohorts of 12 students with two

faculty and one support staff. The enrolment and therefore space requirements are expected to remain at similar levels until 2016/17. The program will continue to evolve and develop but within the current space.

The Augustana Campus presents unique opportunities to execute the University's Vision and Mission statements. With a unique rural focus, the physical therapy department has had a warm welcome from the Camrose and area communities and builds on these important relationships. Partnerships exist with local physiotherapists, occupational therapists, dietitians, nurses, Alberta Health Services, University of Alberta nursing students, Covenant Health and private rehabilitation clinics. Physiotherapists within the department have also provided their services to the Augustana athletics program, coordinated several successful collaborations with the music faculty, and participated in local programs such as the chronic pain clinics. Student electives have also included partnerships with local physiotherapists, occupational therapists, dietitians, nurses, music students, and CFB Wainwright. The Augustana Physical Therapy program reciprocally improves research opportunities by increasing a rural focus to research in the major centres and bringing research closer to rural areas. Student clinics at Augustana are also in the planning stages.

4.3.8 Specialized Support and Disability Services

Guided by the mandate of the University of Alberta's official Policy for Students with Disabilities of "attracting and retaining qualified students with disabilities," Specialized Support and Disability Services (SSDS) promotes and coordinates the efforts of University departments and off-campus agencies in meeting students' needs and provides services which help to equalize educational opportunities for students.

SSDS serves prospective and current students at the University of Alberta, as well as staff and faculty, whose disabilities involve any number of conditions affecting mobility, vision, hearing, learning, and physical or mental health. Augustana's support includes exam accommodation strategies, such as proctoring and extra time. Adaptive technology and physical changes to the environment are also invoked when appropriate.

The Student Services Resource Room, provides space for group strategy work, exam accommodation, and individual consultations. In the future, they hope to utilize the space for Skype sessions with the North Campus on a range of Student Services areas. SSDS also provides some services in the research space located in the First Year Residence.

5 DRIVERS IMPACTING SPACE

5.1 Enrolment Projections

Following the merger with the University of Alberta in 2004, Augustana's enrolment shrunk for a time. This was largely due to four factors:

1) increases in admissions requirements to place Augustana in alignment with the rest of the University;
2) the elimination of three-year Bachelor's degrees;
3) disappointment in some quarters over the removal of the Lutheran affiliation; and
4) more broadly experienced brand confusion as prospective students and their families gradually shifted their perception of Augustana from a church college to a U of A campus.

Augustana has moved past that era and there is reason to be optimistic about growth over the next five years. The FLE count increased from 772 in 2008-09 to 807 in 2009-10 to 837 in 2010-11 (just two below the agreed-upon target of 839). The FLE target for 2011-12 was 859. The official FLE targets for the next two years are 879 and 899.

While FLE counts are an important measure, at a largely residential campus like Augustana, it also makes sense to look at total student numbers, especially since the balance between full-time and part-time students is weighted heavily toward the former. In addition, full-time students place the same pressures on many campus resources (e.g., library, study spaces, advising services, even classrooms) whether they are enrolled, e.g., in 12 credits per term or 15 credits per term. Approximately 97% of Augustana students are full-time. The total student enrolment for the last two years has been:

	Fall 2010	Fall 2011
Full-time students	911	938
Part-time students	33	30
Total	944	968

Looking ahead over the next five-year period, we have set a target of 1200 total students. This number was presented to the Provost in November 2011 as part of a "Vision for Augustana" that included a longer-term goal to eventually grow the campus

to an enrolment between 1600 and 2000 students. Recent construction projects, such as the Library and the Forum, were designed to accommodate 2000 students.

Provost Amrhein has endorsed 1200 as a reasonable and appropriate interim five-year goal, while recognizing the need to work with Augustana 's leadership to secure additional funding to support an enrolment of that size.

The plan to reach 1200 assumes growth through: 1) improvements in student retention, 2) increased recruitment through new programs such as the recently implemented 3+2 B.Sc./B.Ed. collaboration with the Faculty of Education, and 3) memoranda of understanding leading to an increasing number of "block transfer" agreements with Grande Prairie Regional College, Red Deer College, and Medicine Hat College. In each instance, promising initiatives have already been launched.

The translation of total enrolment into FLE's is not an exact science. Expressed as a decimal, the most recent available FLE count was .89 of the total enrolment. That ratio will increase slightly as Augustana implements planned improvements in academic advising and tracking of students, so it is reasonable to project a FLE count of 1100 in 2017-18 (.92 of 1200).

Enrolment clearly drives facilities needs. Thus current attention is focused on the need to plan appropriate space for 1200 students. But it is also clear that improvements in infrastructure have an impact on student recruitment. The new Forum and Library have already demonstrated that. The Camrose Performing Arts Centre (for which construction begins in August 2012), and the envisioned new science facility and Classroom Building renovation, both of which will likely be shaped by this General Space Program, are themselves additional reasons to be optimistic about enrolment growth.

Fortunately, we do not perceive much risk in planning new science facilities for 1200 when enrolment may subsequently grow to 1600 or more. Growth beyond 1200 will partly be accommodated through greater efficiencies in space utilization—e.g., the scheduling of both morning and afternoon labs as increased student numbers allow us, indeed require us, to add new sections of other courses needed by science majors.

The following tables outline the current student enrolment statistics, broken down by program and major.

5.1.1 Enrolment by Program

Program Name	Current (2011/2012) Number of Students	Projected (2016/2017) Number of Students	Growth Number of Students
Bachelor of Arts	455	486	31
Bachelor of Management	90	110	20
Bachelor of Music	22	26	4
Bachelor of Science	383	528	145
BSc/BEd Combined	5	25	20
Special Students	8	10	2
Visiting Students	6	10	4
Audit Only Students	6	5	-1
Total	**975**	**1200**	**225**

The above table reflects current and projected growth of Augustana Faculty programs. It does not include enrolment and projections for the two programs offered by other Faculties at Augustana Campus. These projections are included below.

Program Name	Current (2011/2012) Number of Students	Projected (2016/2017) Number of Students	Growth Number of Students
BSc (Nursing)	12	25	13
MSc (Physical Therapy)	22	24	2

Each program has experienced growth in the past five years. Enrolment in the Bachelor of Science degree has increased 34% since 2007. Enrolment in science courses increased 11% in the past year alone. The enrolment projections presented here represent a further cumulative growth of 38% in the Bachelor of Science over the next five years.

Enrolment in the Bachelor of Arts degree has grown about 3% over the past five years. Improved retention combined with continued flat or slightly lower recruitment numbers are projected to result in an overall 7% growth in the Bachelor of Arts program in the period covered by this plan.

The Bachelor of Music has shown flat enrolment and our projections reflect that, with one exception. Augustana anticipates receiving 3-5 additional students per year as a result of our MOUs with Red Deer College and Grande Prairie Regional College.

The Bachelor of Management program has been steady at 100 students for the past five years, except for the current year when it dipped to 90. Applications for the coming year have returned to normal levels and Augustana believes the current year's drop was an anomaly. Augustana is projecting a modest increase in Bachelor of Management enrolment that reflects an overall increase in retention.

5.1.2 Enrolment by Major

Program Name	Current (December 2011) Number of Students	Projected (2016/2017) Number of Students	Growth Number of Students
Biology	135	164	29
Chemistry	45	66	21
Comprehensive	6	0	-6
Computing Science	24	44	20
Drama	16	16	0
Economics	7	5	-2
English	58	76	18
Environmental Studies/Science	52	55	3
Global & Development Studies	14	15	1
History	50	47	-3
Management	90	110	20
Math and Physics	39	72	33
Modern Languages	16	35	19
Music	28	40	12
Philosophy and Religion	10	5	-5
Physical Education	160	235	75
Political Studies	29	56	27
Psychology	75	50	-25
Sociology	28	35	7
Visual Art	17	17	0
Total of Declared Majors	**899**	**1143**	**244**
Undeclared	56	32	-24
Special	8	10	2
Visiting	6	10	4
Audit Only	6	5	-1
Overall Total	**975**	**1200**	**225**

- Major numbers include all students with a declared Major in any Augustana degree program, i.e. Biology includes all the BSc streams, students doing a BA in Biology, and any B.Sc/B.Ed students with a declared Biology major. Likewise, Music includes BA students as well as all the majors in the B.Music degree.
- The totals for each major include both students registered as Full-Time and Part-Time
- The overall total is higher than the student enrolment totals due to a number of students registered in double-majors.

The enrolment projections are based on trends observed over the past five years, with some adjustments. For example, the 85% growth in Physical Education for the past five years would project out to an enrolment of 293 five years in the future. Augustana doubts this level of growth is sustainable and have projected a more conservative 235. Augustana has also added to the Music projection to account for additions due to the block transfer agreements as described above, and projected retention increases in Management (ignoring the 2012 anomaly).

Management, a relatively new program still in development, is a potential growth area that may outperform these projections. The program has plateaued at about 100 students, but we believe that strategic hiring will help build a strong and distinctive program that can better recruit and retain students. The greatest challenge for this program is that prospective and current students do not understand the advantages of a liberal arts grounded management program, compared to a traditional commerce program that offers specialized training in functional areas. Many students enter Augustana to take the breadth year that the School of Business requires of all their incoming students, with the intention to transfer to the School of Business in year two. Augustana does not intend to mimic the School of Business's traditional approach; rather, they respond to the marketplace's call for graduates who are broadly trained, skilled communicators and critical thinkers who have an understanding of fundamental business concepts and issues. Communicating the value of this distinctive approach to students and their parents needs to be increased.

Humanities has shown strong percentage growth, with the number of majors increasing from 62 to 83 in the past year alone. Projections reflect the five year trend in enrolment in majors, but since the Humanities Department offers fewer majors than other departments and is characterized by service courses and minors, reliance on the number of majors may understate the actual growth in enrolment for Humanities courses.

5.2 Academic and Non-Academic Staff Projections

5.2.1 Introduction

As a primarily undergraduate, liberal arts and sciences campus and Faculty of the University, in a rural setting 100 km from Edmonton, Augustana has a distinctive identity and mission.

Unlike other Faculties within the University (the closest comparator is the Faculté Saint-Jean), Augustana offers programs of study that lead to Bachelor of Arts, Bachelor of Science, Bachelor of Management (Business Economics) and Bachelor of Music degrees. Additionally, because of the geographic location of the Campus, Augustana must offer all the courses a student requires to complete a degree program. Augustana students cannot easily take classes from faculties located in Edmonton, although there has been very limited use of shared courses through video conferencing. We anticipate modest growth of distance learning through multiple formats in the future. This will expand curricular opportunities for students, but not likely have a significant impact on local staffing needs.

In order to provide the variety of courses needed to meet degree requirements, particularly because Augustana is committed to a core curriculum that requires broad, multidisciplinary study, the Campus employs faculty members across a wide range of disciplines and attempts to provide a sufficient number of faculty within each discipline to allow students exposure to a range of academic approaches within their chosen fields.

Augustana does not have a graduate studies program, which limits the pool of potential employees as teaching assistants, laboratory assistants and research assistants. Graduate students who might fill those roles are not locally available. This does not mean that Augustana faculty members do not participate in supervising graduate students, but the students' course work and physical locations are, to this point, in Edmonton.

Because of the breadth of the curriculum, the frequent need to offer low-enrolled upper-level courses so students can graduate in a timely manner, and the absence of graduate programs, Augustana must employ a significant number of contract academic staff to supplement the limited number of faculty within individual disciplines and to teach the laboratory portions of some courses.

When Augustana entered the University in 2004, faculty members had limited research programs because there were limited resources to support such activities, whether physical (there were and currently are only two rooms on the Campus outfitted as research laboratories, and these are shared spaces), monetary, or time. Faculty taught a 4:4 load; the standard load now is 3:3. Faculty members are now expected to maintain research programs at near the same level as their peers in other SSHRC[1]-funded faculties.

5.2.2 Continuing and Contract Academic Staff

Phase 1 of the General Space Program reflects space needs required to accommodate the work of all faculty and other employees directly involved in the teaching and research functions of the campus and the immediate support of those functions.

As of Fall 2011, the faculty complement for Augustana was 62 tenured or tenure stream faculty and 51 contract academic staff with varying teaching loads. Together, the contract staff represented 23 FTE positions. Additional faculty and support staff members are on the Campus from the Faculties of Nursing and Rehabilitation Medicine.

Augustana's goal is to increase the ratio of full-time faculty to FTE contract academic staff from 2.6 : 1 to 5 : 1. This aspiration is informed by ratios from comparable institutions and by the need to assure that faculty are readily available to students, not only in the classroom, but as research supervisors and informal mentors. Both the Provost and Dean recognize the need for additional provincial funding to reach this goal. This ratio is important in the current context because of its impact on the need for faculty offices, research spaces, etc.

At its current size, Augustana is not as efficient as it would be with a larger enrolment. The current ratio of FLE students : FTE faculty is 10.1 : 1. This is the second lowest in the comparator group that Augustana utilizes (the members of the Council of Public Liberal Arts Colleges) and well below the averages elsewhere in the University. Augustana's goal is eventually to move to a ratio of 14.5 FLE students : 1 FTE faculty. This should be possible once the enrolment reaches 1600 students. At 1200 students, our goal is to reach a ratio of approximately 12.5 : 1.

Utilizing these parameters, we anticipate the following faculty complement and need for offices. In each instance, our assumptions follow university policies regarding private offices for full-time faculty and shared office space for contract

[1] SSHRC is the Social Sciences Humanities Research Council

academic staff. In addition, in each instance we have added four additional offices to accommodate visiting scholars and graduate students whose research may require temporary residency at Augustana.

- At 1200 students, 75 full-time and 14.4 FTE contract academic staff (total of 89.4): 94 faculty offices
- At 1600 students, 90 full-time and 16.5 FTE contract academic staff (total of 106.5); 111 faculty offices
- At 2000 students, 103 full-time and 20.7 FTE contract academic staff (total of 123.7); 128 faculty offices.

Because of the multi-disciplinary nature of a liberal arts and sciences education, the allocation of future faculty positions will not be driven solely by growth in the number of student majors. New faculty positions, as they are funded, will need to be spread among the departments and disciplines. Nonetheless, we anticipate a particular need for investment in faculty positions in the Sciences, because that is where student enrolment is growing the fastest.

For purposes of this General Space Program, we have assumed a total number of continuing faculty members (75) and FTE contract academic staff (rounded to 15) needed for a total enrolment of 1200 (approximately 1100 FLE). In addition to faculty offices, we have indicated in the Science section that research laboratory space will need to increase with growth in the complement of continuing Science faculty members.

5.2.3 Continuing and Casual Support Staff

This phase of the Augustana GSP provides only for the support staff functions directly related to teaching and research, to academic Centres, and to the senior academic administration for the Campus.

Currently, those support functions are minimal. A need to increase in these areas is not anticipated, except as specifically noted in this section.

In the Dean's office, it is foreseen that the Associate Deans of Teaching and Research will need administrative support. An increase of one support staff member in this area is expected.

In the Alberta Centre for Sustainable Rural Communities, programs are in their infancy. Over the next five years, it is anticipated there will be a need for one additional support staff for the Centre. Centre activities are anticipated to expand to include one post-doctoral academic staff member and one or two graduate students. There will be opportunities for student employment in the Centre as well, covered in the section on student employees.

In Science, the faculty anticipates increases in continuing support staff by increasing the number of technicians in Chemistry from 1 to 2 and by moving the Outdoor Education support person from a casual position to a continuing position.

If additional casual support is required as the student population grows, they will be accommodated in existing space.

5.2.4 Student Employees

The greatest increase in employees over the next five years is anticipated to be in the number of undergraduate students employed in part time research assistant (RA) positions.

It is the faculty goal to increase research funding from outside sources to allow for 2 student RAs for every Science faculty member and 40 additional RAs for faculty in other disciplines. Some of these increases may be due to students who volunteer as RAs rather than are employed as RAs. Currently there are as many volunteer student RAs as there are paid RAs.

To meet these goals, research laboratory space must be increased and a significant increase in shared workstations to accommodate student research staff is needed. The 10 student RAs who were employed in March 2011 were accommodated in 6 shared workstations and in faculty members' offices.

Student support staff were employed in a variety of roles, from front of house staff in performance venues (music and theatre) to marking assistants for faculty members. As the number of students on Campus grows, a need for increased part time support staff members who are students through all of the academic Departments is anticipated. Not all student employees require separate workspaces. They can be accommodated in faculty offices, in existing labs, within peer counseling spaces or in teaching laboratories.

As noted earlier, as the programs in ACSRC grow, it is anticipated Augustana will need to accommodate up to 2 graduate student or post-doctoral staff and an additional 7 student RAs or program assistants over the period covered by this plan.

5.2.5 Summary of all staff

Augustana Campus General Space Program - Employee Projection Summary													
	March 2011						Projected (2016/2017)						
	Faculty		Support		Student		Faculty[7]		Support		Student		
	Continuing	Sessional	Continuing	Casual	Research Assistants[6]	Support	Continuing (FTE)	Sessional (FTE)	Continuing	Casual	Research Assistants[6]	Support[9]	Graduate/ Post Docs
Alberta Centre for Sustainable Rural Communities[1]			1			2			2		7	2	2
Chester Ronning Centre[2]		1	1						1				
Dean's Office[3]	1		3						4				
Fine Arts[4]	9	14	2	1		2			2	1		2	
Humanities	12	9	1		2	7			1		8 to 15	7 to 10	
Learning and Beyond[5]			2	1		3			2	1		4	
Science	16	11	6	1	2	7			8		16 to 30	10 to 15	
Social Sciences	24	12	1	1	6	1			1	1	12 to 30	1	
Teaching Support Centres (Writing, Math, Science)									3			10	
Specialized Services for Disabled Students			1						1				
Total	**62**	**47** [8]	**18**	**4**	**10**	**22**	**75**	**15**	**25**	**3**	**25 to 60**	**35 to 40**	**2 to 4**

Notes:
1. ACSRC Director included is in department count
2. Centre Director is a sessional faculty member
3. Vice Dean and three Associate Deans are included in the department counts
4. Additional students are hired throughout the year for event support
5. Director of LaB is included in Social Sciences faculty count
6. Student Research Assistants do not count volunteer students assisting with academic research.
7. Projection of growth for specific faculty member by academic department not included
8. This number is for actual sessional faculty members, who are currently not FTE's. The projection identifies sessional faculty members as FTE's.
9. Part-time/seasonal

6 PROJECTED SPACE REQUIREMENTS

6.1 Overview of Current Facilities

Quantity and Quality of Space

Augustana's campus is made up of facilities of varying size, configuration, and quality. While the recent additions of the Forum and the Facilities Building have helped tremendously with improving both the quantity and the quality of teaching and learning space, there are still some areas for improvement on the campus. Augustana has some aging facilities that need attention for their condition and functionality, including the Theatre Centre, Founders' Hall, the Science Extension and the Classroom Building. Also, due to the isolated location of the Richard Husfloen Centre, and with no public transportation, effective space utilization at this facility is limited.

In terms of quantity, quality, configuration, and size of space, the areas of greatest space pressure (relevant to this Phase One program only) are:

- instructional/lab/office space affiliated with the Science program.
- general classroom space
- faculty office space (since 10 faculty are currently accommodated in a residence hall, and many contract instructors are located in shared open cubicles)
- faculty and undergraduate research space.

Although residences and storage areas are also worthy of review, these areas will be dealt with in Phase Two of the Augustana Campus General Space Program.

The Culture of Space Assignments

In terms of space utilization, it is important to note how uniquely Augustana operates. Unlike other "faculties" on North Campus, Augustana is not simply a faculty, but is a campus – one with a very distinct culture and student body. Faculty offices are deliberately scattered throughout the campus in different buildings, to promote interaction and the cross-fertilization of ideas and values.

The attitude to teaching spaces is similar, in that classrooms (where functionally possible) are deliberately "centrally-scheduled" by Augustana (not by North Campus). In certain circumstances however, like the science laboratories and adjacent science instructional spaces, this is not possible. Overall the proximity of offices for faculty from different disciplines and the sharing of classrooms helps promote the interdisciplinarity of a liberal arts and science college, and breaks down the silos of space ownership that are more common on larger campuses.

The Culture of Scheduling

Another unique feature at Augustana is the way the course timetable is structured. As previously mentioned earlier in this report, all classes are structured such that students and staff can have lunch together in the cafeteria.

Additionally, science lectures are scheduled in the mornings, while the science laboratory sessions are scheduled in the afternoons. This is done due to both space and staffing pressures. With enrolment growth, Augustana will eventually be able to offer afternoon lectures and morning labs, thereby gaining efficiencies in space utilization. But this requires a sufficient enrolment to justify multiple sections of other courses that science students need. Also, in absence of graduate-level students at Augustana, finding lab assistants that will come from Edmonton for both morning and afternoon timeslots remains a challenge.

General Purpose Classrooms: Past, Present and Future

Faculty from all four academic departments at Augustana share a complement of general purpose classrooms. These were all designed for traditional, front-facing lecture-style teaching. The majority of them were developed when Augustana offered both high school and post secondary classes. They are at capacity for the number of students that can be accommodated for a lecture style of pedagogy. The vision of Augustana's Faculty Council is that ALL general purpose classroom spaces in the future should accommodate collaborative and team-based learning to be integrated with or replace traditional lecture/presentation pedagogy. Most of the increase in classroom instruction space in this plan does not reflect growth in the number of general purpose classrooms but instead is driven by the need to provide adequately sized classrooms that will allow expanded opportunities for pedagogical approaches that actively engage students in collaborative group work, simulations, various discussion-based activities, etc.

Summary of Immediate Needs

For the Department of Science, the size and configuration of the classrooms and the laboratories presents a challenge for delivering instruction effectively, as do the deficiencies in research space and storage space. The Science Facilities are inadequate, especially for scientists working in fields such as genetics, organic chemistry, experimental physics, and field ecology. An enlarged care room for scientific support is also essential, as is space for undergraduate students to conduct research. It is Augustana's vision to increase the enrolment in the Science program by providing a positive experience to the student, offering appropriate teaching, laboratory, laboratory-prep, and storage space.

For the Department of Fine Arts, the Visual Arts program needs exhibition space and art-studio space. The Drama proram needs additional rehearsal and performance space, and the existing Theatre Centre facility is inadequate, both on the main floor and in the basement. The Music program needs additional rehearsal and performance space.

The Departments of Humanities and Social Science have modest additional space requests, including a language lab and a behavioural laboratory with an interview/observation area.

The Academic Centres (ACSRC and CRC) have additional space needs, primarily for office and storage use.

Another key area requiring additional space at Augustana is for dedicated research space for academic faculty, including space for visiting scholars, as the Augustana campus is affiliated with a number of degree-granting institutions across the province. This space is described under the "Augustana Faculty" component of the General Space Program, as it applies generally to the academic staff appointments.

6.2 Summary of Space Projections- by Department

The General Space Program outlines the space required for each of the Academic programs at Augustana. This Phase One program focuses on the spaces affiliated with academic use. This includes detailed space needs for academic, academic support, research, laboratory, classroom use and direct support for students.

Summary of Space Projections by Department - Phase One

	EXISTING SPACE 2011/12	PROJECTED SPACE 2016/2017	PROJECTED 5 YEAR GROWTH	PERCENTAGE
	Existing Net Assignable Space Based on CAFM Inventory	Projected Total Net Assignable Space Requirements (Including Existing and Additional Spaces)	Projected Net Assignable Space Requirements by 2016/2017	% 5 Year Growth
	Area (Sq.M.)	Area (Sq.M.)	Area (Sq.M.)	
Augustana Faculty	2,379	3,937	1,557	65%
Department of Fine Arts	1,003	1,591	588	59%
Department of Humanities	260	291	31	12%
Department of Science	1,388	3,428	2,041	147%
Department of Social Sciences	743	781	39	5%
Academic Centres	54	115	60	111%
Learning & Beyond	184	88	(96)	-52%
Student Community and Engagement	498	558	60	12%
Unclassified	751	-	(751)	-100%
Other U of A Programs	646	646	-	0%
Total Space Requirements - Phase One	**7,905**	**11,434**	**3,529**	**45%**

* the overall net assignable space on the campus includes all academic, administrative, and ancillary space, but excludes storage facilities.

"Augustana Faculty" denotes space and/or staff that is affiliated with the Augustana campus broadly, and is not allocated to any one of the four departments.

"Learning and Beyond" shows a net loss in space, as it is currently occupying space in what was once the Augustana Library – a space that is difficult to reconfigure and therefore allocate to other uses.

"Student Community and Engagement" space is student gathering/study space that could be categorized as "General University Space"(eg. the open area in the new Forum main floor), but is programmed here separately so that it is not lost in the building gross-up factor

The "Unclassified" space here refers to the Husfloen Centre – which is owned by the University of Alberta, and allocated to Augustana. But due to its location so far from the Augustana campus, the classrooms and office spaces here remain unused, and are programmed as a net zero space projection.

6.3 Summary of Space Projections - by Department and by Space Category

The following table summarizes further detail for the additional space listed above, and lists it both by space allocation (e.g.: allocated to the Department of Fine Arts) and by Space Category (e.g.: Academic Office Space).

The information is sequenced according to the academic structure of Augustana's departments:

- Augustana Faculty (General)
- Department of Fine Arts
- Department of Humanities
- Department of Science
- Department of Social Sciences
- Academic Centres
- Learning and Beyond
- Student Community and Engagement (Related to Science)
- Unclassified
- Programs offered by Faculties other than Augustana Faculty

Table 6.3 - Summary of Space Projections by Department and by Category - Phase One

		EXISTING SPACE 2011/12	PROJECTED SPACE 2016/2017	PROJECTED 5 YEAR GROWTH
		Existing Net Assignable Space Based on CAFM Inventory	Projected Total Net Assignable Space Requirements (Including Existing and Additional Spaces)	Projected Net Assignable Space Requirements by 2016/2017
	Space Category	**Area (Sq.M.)**	**Area (Sq.M.)**	**Area (Sq.M.)**
Augustana Faculty				**Augustana Faculty**
Augustana Faculty				
	Academic Offices and Related	635	1,016	381
	Assembly and Exhibition	503	503	-
	Classroom - Instruction	1,172	2,307	1,135
	Classroom Support - Instruction	31	31	-
	Research	6	-	(6)
	Research Support	34	80	46
Total Space Requirements - Augustana Faculty		**2,379**	**3,937**	**1,557**
Department of Fine Arts				**Department of Fine Arts**
Art				
	Academic Offices and Related	56	56	-
	Assembly and Exhibition	-	100	100
	Laboratory - Instruction	249	249	-
	Laboratory Support - Instruction	60	60	-
Drama				
	Academic Offices and Related	38	38	-
	Assembly and Exhibition	159	233	74
	Classroom Support - Instruction	43	43	-
	Laboratory - Instruction	100	234	133
	Laboratory Support - Instruction	35	35	-
Music				
	Academic Offices and Related	95	101	6
	Laboratory - Instruction	128	358	230
	Laboratory Support - Instruction	39	84	45
Total Space Requirements -Department of Fine Arts		**1,003**	**1,591**	**588**

"Augustana Faculty" denotes space and/or staff that is affiliated with the Augustana campus broadly, and is not allocated to any one of the four academic departments.

		EXISTING SPACE 2011/12	PROJECTED SPACE 2016/2017	PROJECTED 5 YEAR GROWTH
		Existing Net Assignable Space Based on CAFM Inventory	Projected Total Net Assignable Space Requirements (Including Existing and Additional Spaces)	Projected Net Assignable Space Requirements by 2016/2017
	Space Category	**Area (Sq.M.)**	**Area (Sq.M.)**	**Area (Sq.M.)**
Department of Humanities				**Department of Humanities**
	Academic Offices and Related	195	201	6
	Laboratory - Instruction	65	90	25
Total Space Requirements -Department of Humanities		**260**	**291**	**31**
Department of Science				**Department of Science**
Biology				
	Academic Offices and Related	119	143	24
	Laboratory - Instruction	240	1,049	809
	Laboratory Support - Instruction	223	164	(59)
	Research	-	56	56
Chemistry				
	Academic Offices and Related	38	50	12
	Laboratory - Instruction	255	756	501
	Laboratory Support - Instruction	97	30	(67)
	Research	77	56	(21)
Computing Science				
	Laboratory - Instruction	37	154	117
General Science				
	Academic Offices and Related	27	27	-
	Laboratory Support - Instruction	-	72	72
	Research	-	196	196
	Research Support	-	56	56
Mathematics & Physics				
	Academic Offices and Related	41	47	6
	Laboratory - Instruction	115	-	(115)
	Laboratory Support - Instruction	45	378	333
	Research Support	-	28	28
Outdoor Education				
	Academic Offices and Related	12	16	4
	Laboratory Support - Instruction	62	150	88
Total Space Requirements -Department of Science		**1,388**	**3,428**	**2,041**

		EXISTING SPACE 2011/12	PROJECTED SPACE 2016/2017	PROJECTED 5 YEAR GROWTH
		Existing Net Assignable Space Based on CAFM Inventory	Projected Total Net Assignable Space Requirements (Including Existing and Additional Spaces)	Projected Net Assignable Space Requirements by 2016/2017
	Space Category	**Area (Sq.M.)**	**Area (Sq.M.)**	**Area (Sq.M.)**
Department of Social Sciences				**Department of Social Sciences**
Social Sciences				
	Academic Offices and Related	369	369	0
	Classroom Support - Instruction	67	67	
	Laboratory - Instruction	123	171	48
	Laboratory Support - Instruction	183	162	(21)
	Research Support	-	12	12
Total Space Requirements -Department of Social Sciences		**743**	**781**	**39**
Academic Centres				**Academic Centres**
Alberta Centre For Sustainable Rural Communities (ACSRC)				
	Research Support	28	73	45
Chester Ronning Centre (CRC)				
	Academic Offices and Related	26	42	16
Total Space Requirements -Academic Centres		**54**	**115**	**60**
Learning & Beyond				**Learning & Beyond**
	Academic Offices and Related	184	68	(116)
	Student Community	-	20	20
Total Space Requirements -Learning & Beyond		**184**	**88**	**(96)**
Student Community and Engagement				**Student Community and Engagement**
	Student Community	498	558	60
Total Space Requirements -Student Community and Engagement		**498**	**558**	**60**
Unclassified				**Unclassified**
	Classroom - Instruction	260	-	(260)
	Unclassified	491	-	(491)
Total Space Requirements -Unclassified		**751**	**-**	**(751)**

"General Science" refers to general and/or shared components of the Department that are not affiliated with a specialty of Biology, Chemistry, etc.

		EXISTING SPACE 2011/12	PROJECTED SPACE 2016/2017	PROJECTED 5 YEAR GROWTH
		Existing Net Assignable Space Based on CAFM Inventory	Projected Total Net Assignable Space Requirements (Including Existing and Additional Spaces)	Projected Net Assignable Space Requirements by 2016/2017
	Space Category	**Area (Sq.M.)**	**Area (Sq.M.)**	**Area (Sq.M.)**
Other U of A Programs				**Other U of A Programs**
	Faculty of Nursing			
	Academic Offices and Related	79	79	-
	Classroom - Instruction	168	168	-
	Laboratory - Instruction	155	155	-
	Laboratory Support - Instruction	29	29	-
Faculty of Nursing Subtotal		**431**	**431**	
	Faculty of Rehabilitation Medicine			
	Academic Offices and Related	20	20	-
	Classroom - Instruction	47	47	-
	Laboratory - Instruction	131	131	-
	Laboratory Support - Instruction	18	18	-
Faculty of Rehabilitation Medicine Subtotal		**215**	**215**	
Total Space Requirements -Other U of A Programs		**646**	**646**	**-**
Total Space Requirements - Phase One		**7,905**	**11,434**	**3,529**

7 RECOMMENDATION

Augustana Faculty, together with the Office of the University Architect (OUA), recommend approval of the Augustana Campus General Space Program – Phase One, as the basis for developing accommodation plans for both the immediate and longer term.

APPENDICES

APPENDIX A – Detailed Space Requirements by Department

Augustana Faculty - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Augustana Faculty						
Academic Offices and Related	AG01 Founders' Hall	2-09	Meeting	11.9	11.9	
		M304	Office	8.2	8.2	Sessional; existing
		M404	Meeting	42.7	42.7	
	AG04 Science Extension	C151	Office	14.7	14.7	Sessional; existing
	AG05 Hoyme Complex	142	Workroom	16.2	16.2	Printing
		147	Office	16.2	16.2	Sessional; existing
	AG06 Hoyme Complex - Annex	H060	Laboratory - Computer	105.0	105.0	
		H062	Laboratory - Computer	15.5	15.5	
	AG08 Auxiliary Building	A029	Office	14.0	14.0	Sessional; existing
	AG10 Faith & Life Centre	205	Office	12.1	12.1	Sessional; existing
		211	Conference	50.1	50.1	SSDS Space
		214	Office	12.7	12.7	SSDS Office
	AG24 Library	1-140	Peer Consultation Room	7.4	7.4	Writing Centre
		1-142	Peer Consultation Room	7.4	7.4	Writing Centre
		1-144	Multi Media Prep Room	24.6	24.6	
		2-108A	Workstation	3.6	3.6	
		2-108B	Workstation	3.5	3.5	
		2-108C	Workstation	3.5	3.5	
		2-108D	Workstation	4.5	4.5	
		2-108E	Workstation	4.5	4.5	
		2-108F	Workstation	4.5	4.5	
		2-108G	Workstation	3.5	3.5	
		2-108H	Workstation	3.5	3.5	
		2-108J	Workstation	3.0	3.0	
		2-108K	Workstation	3.0	3.0	Printing
		2-108L	Workstation	4.4	4.4	
		2-116	Workroom	36.2	36.2	
		2-130	Meeting	13.0	13.0	
		2-133	Office	13.6	13.6	Sessional; existing
		2-136	Office	12.1	12.1	Sessional; existing
		2-137	Office	12.1	12.1	Printing
		2-138	Meeting	13.8	13.8	
		2-153	Workroom	6.7	6.7	
	AG26 Forum	2-060	Reception/Waiting	23.4	23.4	

Augustana Faculty - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12 Existing	2016-17 Projected	
		2-062	Office	24.8	24.8	Dean's office; existing
		2-066	Office (Academic Support)	10.6	10.6	Support; existing
		2-070	Meeting	18.0	18.0	
		2-072	Office	18.0	18.0	Associate Dean's office; Existing
		2-076	Office	24.4	24.4	Vice Dean's office; existing
		2-079A	Workstation	8.1	8.1	
	New Request		Office (Faculty)		132.0	75 offices for full time faculty requested. There are 64 existing faculty offices including Augustana Faculty -3, Academic Centres -2, Fine Arts-9, Humanities-11, Science-15 & Social Sciences -24. Only 11 faculty offices @12m2 each are in new request.
			Office (Sessional)		72.0	15 offices for FTE sessionals requested. There are 9 existing sessional offices including Augustana Faculty -7, Fine Arts -2. Only 6 Sessional offices @12 m2 each are in new request.
			Office (Visiting)		48.0	4 Visiting Offices at 12 m2 each
			Workstation		6.0	Support -Associate Deans
			Office		9.0	Writing Centre office
			Workshop		30.0	Reading, study skills development
			Group Space		50.0	Tutoring Centre/Math clinic
			Workroom		16.0	Printing
			Office		9.0	Tutoring Centre
			Office		9.0	Math clinic
Academic Offices and Related			**Subtotal**	**635.1**	**1,016.0**	
Assembly and Exhibition	AG10 Faith & Life Centre	116	Meditation/Assembly	371.1	371.1	Lecture/performance; existing
		222	Spectator Seating	99.5	99.5	
		116A	Assembly	13.7	13.7	
		116B	Storage	18.3	18.3	
	No New Request					
Assembly and Exhibition			**Subtotal**	**502.6**	**502.6**	
Classroom - Instruction	AG01 Founders' Hall	010	Classroom	63.5	-	Included in new request
		020	Classroom	56.5	-	Included in new request
	AG03 Classroom Building	C014	Classroom	86.1	-	Included in new request
		C101	Classroom	85.2	-	Included in new request

Augustana Faculty - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
		C103	Classroom	69.8	-	Included in new request
		C114	Classroom	31.1	-	Included in new request
	AG04 Science Extension	C167	Lecture Theatre	117.2	-	Included in new request
	AG06 Hoyme Complex - Annex	H070	Classroom	65.1	-	Included in new request
		H090	Classroom	77.4	-	Included in new request
	AG08 Auxiliary Building	A024	Classroom	80.1	-	Included in new Music request
		A121	Classroom	45.8	-	Included in new request
		A122	Classroom	63.2	-	Included in new request
	AG09 Convocation Centre	G202	Classroom	70.8	-	Included in new request
		G203	Classroom	38.9	-	Included in new request
		G208	Classroom	35.1	-	Included in new request
	AG10 Faith & Life Centre	103	Classroom	56.6	-	Included in new request
		104	Classroom	45.4	-	Included in new request
	AG24 Library	1-130	Classroom	84.0	84.0	
	New Request		Classroom	-	2,223.0	22 classrooms
Classroom - Instruction			**Subtotal**	**1,171.6**	**2,307.0**	
Classroom Support - Instruction	AG06 Hoyme Complex - Annex	H090A	Storage	13.9	13.9	
	AG24 Library	1-130A	Resource Room	7.3	7.3	
		1-130A1	Storage	9.7	9.7	
	No New Request					
Classroom Support - Instruction			**Subtotal**	**30.9**	**30.9**	
Research	AG06 Hoyme Complex - Annex	H001A	Laboratory - Specialized	5.6	-	Included in new classroom request
	Included in Classroom Request					
Research			**Subtotal**	**5.6**	**-**	
Research Support	AG06 Hoyme Complex - Annex	H001	Workstation	33.6	-	Included in new request
	New Request		Workstation		80.0	20 workstations at 4 m2 each
Research Support			**Subtotal**	**33.6**	**80.0**	
Augustana Faculty Total				**2,379.4**	**3,936.6**	

*"Augustana Faculty" denotes space and/or staff that is affiliated with the Augustana campus broadly, and in not allocated to any one of the for academic departments.

*The colour green in these tables highlights spaces requested directly by the Faculty of Augustana in December 2011. These spaces are typically in addition to or instead of spaces that currently exist.

Department of Fine Arts - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12 Existing	2016-17 Projected	
Art						
Academic Offices and Related	AG05 Hoyme Complex	146	Office	16.2	16.2	Faculty office; existing
	AG24 Library	2-144	Office	11.9	11.9	Faculty office; existing
		2-155	Office (Academic Support)	12.7	12.7	Support; existing
		2-156	Office	15.0	15.0	Faculty office; existing
	No New Request					
Academic Offices and Related			**Subtotal**	**55.8**	**55.8**	
Assembly and Exhibition						
	New Request		Exhibition		100.0	Student work
Assembly and Exhibition			**Subtotal**	**-**	**100.0**	
Laboratory - Instruction	AG08 Auxiliary Building	A001	Studio	142.6	142.6	
		A030	Studio	106.3	106.3	
	No New Request					
Laboratory - Instruction			**Subtotal**	**248.9**	**248.9**	
Laboratory Support - Instruction	AG08 Auxiliary Building	A001A	Support Space	4.8	4.8	
		A001B	Shop	3.7	3.7	
		A001C	Storage	6.7	6.7	
		A001D	Storage	7.2	7.2	
		A024A	Storage	2.0	2.0	
		A028	Storage	5.2	5.2	
		A030A	Storage	4.5	4.5	
		A101	Support Space	10.9	10.9	
		A102	Support Space	15.0	15.0	
	No New Request					
Laboratory Support - Instruction			**Subtotal**	**60.0**	**60.0**	
Art Subtotal				**364.7**	**464.7**	
Drama						
Academic Offices and Related	AG25 Theatre Centre	004	Office	12.1	12.1	Faculty office; existing
		005	Office	12.1	12.1	Faculty office; existing
		006	Office	12.1	12.1	Sessional; existing
		007	Storage	2.2	2.2	
	No New Request					
Academic Offices and Related			**Subtotal**	**38.5**	**38.5**	
Assembly and Exhibition	AG25 Theatre Centre	105	Beverage Bar	11.9	11.9	
		106	Ticket Booth	7.4	7.4	

Department of Fine Arts - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
		107	Storage	13.7	13.7	
		209	Spectator Seating	78.1	-	Included in new request
		109A	Theatre	48.0	-	Included in new request
	New Request		Performance		200.0	
Assembly and Exhibition			**Subtotal**	**159.1**	**233.0**	
Classroom Support - Instruction	AG25 Theatre Centre	012	Workshop	43.0	43.0	
	No New Request					
Classroom Support - Instruction			**Subtotal**	**43.0**	**43.0**	
Laboratory - Instruction	AG25 Theatre Centre	001	Studio	66.7	-	Included in new request
		002	Dressing Room	33.6	33.6	
	New Request		Studio		200.0	2 studios at 100m2 each
Laboratory - Instruction			**Subtotal**	**100.3**	**233.6**	
Laboratory Support - Instruction	AG25 Theatre Centre	202	Theatre Support	15.3	15.3	
		204	Workroom	19.8	19.8	
	No New Request					
Laboratory Support - Instruction			**Subtotal**	**35.1**	**35.1**	
Drama Subtotal				**376.0**	**583.1**	
Music						
Academic Offices and Related	AG10 Faith & Life Centre	112A	Office	26.7	26.7	Faculty office (teaching); existing
		112B	Office	14.0	14.0	Faculty office (teaching); existing
		112C	Office (Academic Support)	10.0	10.0	Support; existing
		112E	Office	19.4	19.4	Faculty office (teaching); existing
		112F	Office	14.5	14.5	Faculty office; existing
		112H	Office	10.3	10.3	Sessional; existing
	New Request		Workstation		6.0	Support
Academic Offices and Related			**Subtotal**	**94.9**	**100.9**	
Laboratory - Instruction	AG10 Faith & Life Centre	B104A	Studio	27.6	27.6	Practice
		B104C	Studio	11.5	11.5	Practice
		B104D	Studio	18.7	18.7	Practice
		B104E	Studio	11.5	11.5	Practice
		B104H	Studio	11.5	11.5	Practice
		B104J	Studio	11.3	11.3	Practice
		B104K	Studio	11.6	11.6	Practice
		B104L	Studio	12.2	12.2	Practice
		B104M	Studio	11.4	11.4	Practice

Department of Fine Arts - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
	New Request		Music/Choral		90.0	60 students; 1.5 sq.m./seat
			Music/Ensemble		140.0	20 performers; 60 audience
Laboratory - Instruction			**Subtotal**	**127.6**	**357.6**	
Laboratory Support - Instruction	AG10 Faith & Life Centre	B104	Waiting	11.4	11.4	
		B104B	Storage	16.7	16.7	
		B104G	Storage	11.4	11.4	
	New Request		Choral breakout		45.0	30 singers
Laboratory Support - Instruction			**Subtotal**	**39.4**	**84.4**	
Music Subtotal				**261.9**	**542.9**	
Department of Fine Arts Total				**1,002.6**	**1,590.8**	

Department of Humanities - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Humanities						
Academic Offices and Related	AG01 Founders' Hall	2-04	Office	11.5	11.5	Faculty office; existing
		2-05	Office	10.2	10.2	Faculty office; existing
		2-07	Office	13.8	13.8	Faculty office; existing
		2-14	Office	13.0	13.0	Faculty office; existing
		M302	Office	21.9	21.9	Faculty office; existing
		M306	Office	20.8	20.8	Faculty office; existing
		M307	Office	19.8	19.8	Faculty office; existing
		M311	Office	20.2	20.2	Faculty office; existing
		M401	Office	20.8	20.8	Faculty office; existing
	AG05 Hoyme Complex	152	Office	16.2	16.2	Faculty office; existing
	AG24 Library	2-147	Office	14.5	14.5	Faculty office; existing
		2-149	Office (Academic Support)	12.7	12.7	Support; existing
	New Request		Workstation		6.0	Support
Academic Offices and Related			**Subtotal**	**195.3**	**201.3**	
Laboratory - Instruction	AG06 Hoyme Complex - Annex	H080	Laboratory - Specialized	64.5	-	Included in new request
	New Request		Laboratory (Language)		90.0	24 seats
Laboratory - Instruction			**Subtotal**	**64.5**	**90.0**	
Department of Humanities Subtotal				**259.8**	**291.3**	

Department of Science - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Biology						
Academic Offices and Related	AG01 Founders' Hall	M309	Office	21.4	21.4	Faculty office; existing
		2-03	Office	11.2	11.2	Faculty office; existing
	AG04 Science Extension	C154	Office	14.7	14.7	Faculty office; existing
		C155	Office	14.7	14.7	Faculty office; existing
		C156	Office	14.1	14.1	Faculty office; existing
		C166	Office	13.6	13.6	Faculty office; existing
		C169	Office	14.4	14.4	Faculty office; existing
	AG10 Faith & Life Centre	200	Office	14.9	14.9	Faculty office; existing
	New Request		Workstation		24.0	Technicians; 4 workstations at 6 m2 each
Academic Offices and Related			**Subtotal**	**119.2**	**143.2**	
Laboratory - Instruction	AG03 Classroom Building	C015	Laboratory - Serviced	55.9	-	Included in new request
		C018	Laboratory - Serviced	17.4	-	Included in new request; Botany
		C022A	Laboratory - Serviced	4.8	4.8	
		C022B	Laboratory - Serviced	6.6	6.6	
	AG04 Science Extension	C058	Laboratory - Serviced	77.8	-	Included in new request
		C059	Laboratory - Serviced	77.6	-	Included in new request
	New Request		Laboratory		756.00	4 labs at 189 m2 each; 24 seats, add 45 m2 for services support
			Laboratory		92.40	GIS; 24 seats
			Laboratory		189.00	24 seats, add 45 m2 for services support; Geography
Laboratory - Instruction			**Subtotal**	**240.1**	**1,048.8**	
Laboratory Support - Instruction	AG03 Classroom Building	C017	Laboratory Storage	29.5	-	Included in new request
		C020	Laboratory Storage	22.4	-	Included in new request
		C020A	Laboratory Support	10.9	10.9	
		C022	Enviro-containment	5.6	5.6	
		C022C	Scientific Support	3.1	3.1	
		C022D	Scientific Support	2.1	2.1	
		C022E	Scientific Support	3.1	3.1	
		C022ZZ	Enviro-containment	6.2	6.2	
		C025	Laboratory Storage	50.9	-	Included in new request
	AG04 Science Extension	C052	Storage	45.0	-	Included in new request
		C053	Laboratory - Storage	44.4	-	Included in new request
	New Request		Scientific Support		68.0	
			Storage		35.0	Bio-Museum

Department of Science - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
			Growth Chamber		30.0	
Laboratory Support - Instruction			**Subtotal**	**223.3**	**164.1**	
Research						
	New Request		Laboratory-Faculty		28.0	2 labs at 14 m2 each; 1 faculty; 2 students -Biology
			Laboratory-Faculty		28.0	2 labs at 14 m2 each; 1 faculty; 2 students -Environmental Science
Research			**Subtotal**	**-**	**56.0**	
Biology Subtotal				**582.5**	**1,412.0**	
Chemistry						
Academic Offices and Related	AG04 Science Extension	C170	Office	14.8	14.8	Faculty office; existing
	AG10 Faith & Life Centre	204	Office	11.6	11.6	Faculty office; existing
		206	Office	11.6	11.6	Faculty office; existing
	New Request		Workstation		12.0	Technicians; 2 workstations at 6 m2 each
Academic Offices and Related			**Subtotal**	**37.9**	**49.9**	
Laboratory - Instruction	AG03 Classroom Building	C104	Laboratory - Serviced	68.4	-	Included in new request
		C105	Laboratory - Serviced	67.1	-	Included in new request
		C105B	Laboratory - Serviced	11.7	-	Included in new request
	AG04 Science Extension	C164	Laboratory - Serviced	107.4	-	Included in new request
	New Request		Laboratory		756.0	4 labs at 189 m2 each; 24 seats, add 45 m2 for services support
Laboratory - Instruction			**Subtotal**	**254.5**	**756.0**	
Laboratory Support - Instruction	AG03 Classroom Building	C102	Laboratory Support	68.4	-	Included in new request
		C106	Chemical/Radioactive Stores	28.7	-	Included in new request
	New Request		Storage - Chemical		30.0	
Academic Offices and Related			**Subtotal**	**97.1**	**30.0**	
Research	AG04 Science Extension	C159	Laboratory - Serviced	38.8	-	Included in new request
		C161	Laboratory - Serviced	38.0	-	Included in new request
	New Request		Laboratory - Faculty		56.0	4 labs at 14 m2 each; 1 faculty; 2 students
Research			**Subtotal**	**76.8**	**56.0**	
Chemistry Subtotal				**466.3**	**891.9**	
Computing Science						
Laboratory - Instruction	AG10 Faith & Life Centre	B101	Laboratory - Computer	36.9	-	Included in new request
	New Request		Laboratory - Computer		92.4	24 seats, computer type
			Laboratory - Computer		61.6	16 seats, computer type
Laboratory - Instruction			**Subtotal**	**36.9**	**154.0**	

Department of Science - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Computing Science Subtotal				**36.9**	**154.0**	
General Science						
Academic Offices and Related	AG24 Library	2-152	Office	13.8	13.8	Faculty office; existing
		2-154	Office (Academic Support)	12.9	12.9	Support; existing
	No New Request					
Academic Offices and Related			**Subtotal**	**26.7**	**26.7**	
Laboratory Support						
	New Request		Laboratory		72.0	3 breakout rooms at 24 m2 each; 12-16 seats
Laboratory Support			**Subtotal**	**-**	**72.0**	
Research						
	New Request		Laboratory - Faculty		56.0	4 labs at 14 m2 each; 1 faculty; 2 students
			Field Station		140.0	Off campus at Miquelon Lake
Research			**Subtotal**	**-**	**196.0**	
Research Support						
	New Request		Workstation		56.0	Research assistants; 14 workstations at 4 m2 each
Research Support			**Subtotal**	**-**	**56.0**	
General Science Subtotal				**26.7**	**350.7**	
Mathematics & Physics						
Academic Offices and Related	AG01 Founders' Hall	2-08	Office	12.0	12.0	Faculty office; existing
	AG04 Science Extension	C152	Office	14.7	14.7	Faculty office; existing
		C171	Office	14.7	14.7	Faculty office; existing
	New Request		Workstation		6.0	Physics - Technicians
Academic Offices and Related			**Subtotal**	**41.4**	**47.4**	
Laboratory - Instruction	AG04 Science Extension	C061	Laboratory - Serviced	79.3	-	Included in New Request
		C063	Laboratory - Serviced	35.9	-	Included in New Request
	Refer to New Laboratory Request					
Laboratory - Instruction			**Subtotal**	**115.2**	**-**	
Laboratory Support - Instruction	AG04 Science Extension	C064	Storage	44.7	-	Included in New Request
	New Request		Laboratory		378.0	2 labs at 189 m2 each; 24 seats, add 45 m2 for services support
Laboratory Support - Instruction			**Subtotal**	44.7	378.0	
Research Support						
	New Request		Laboratory-Faculty		28.0	2 labs at 14 m2 each; 1 faculty; 2 students
Research Support			**Subtotal**	**-**	**28.0**	
Mathematics & Physics Subtotal				**201.3**	**453.4**	

Department of Science - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Outdoor Education						
Academic Offices and Related	AG10 Faith & Life Centre	203	Office	12.1	12.1	Faculty office; existing
	New Request		Workstation		4.0	Assistant
Academic Offices and Related			**Subtotal**	**12.1**	**16.1**	
Laboratory Support - Instruction	AG09 Convocation Centre	G019	Storage	2.6	-	Included in New Request
		G020	Storage	27.0	-	Included in New Request
	AG09 Convocation Centre	G034A	Storage	32.1	-	Included in New Request
	New Request		Laboratory		150.0	Multi-use; laboratory/trip preparation/storage
Laboratory Support - Instruction			**Subtotal**	**61.8**	**150.0**	
Outdoor Education Subtotal				**73.8**	**166.1**	
Department of Science Total				**1,387.6**	**3,428.1**	

*"General Science" refers to general and/or shared components of the Department that are not affiliated with a specialty of Biology, Chemistry, etc.

Department of Social Sciences- Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12 Existing	2016-17 Projected	
Social Sciences						
Academic Offices and Related	AG01 Founders' Hall	2-01	Office	16.3	16.3	Faculty office; existing
		2-02	Office	12.6	12.6	Faculty office; existing
		2-12	Office	10.8	10.8	Faculty office; existing
		2-16	Office	18.6	18.6	Faculty office; existing
		M305	Office	20.8	20.8	Faculty office; existing
		M308	Office	22.6	22.6	Faculty office; existing
		M310	Office	21.3	21.3	Faculty office; existing
		M402	Office	16.9	16.9	Faculty office; existing
	AG03 Classroom Building	C110	Office	13.2	13.2	Faculty office; existing
	AG04 Science Extension	C153	Office	14.7	14.7	Faculty office; existing
	AG05 Hoyme Complex	148	Office	16.2	16.2	Faculty office; existing
		149	Office	16.2	16.2	Faculty office; existing
		150	Office	16.2	16.2	Faculty office; existing
		151	Office	16.2	16.2	Faculty office; existing
		153	Office	16.2	16.2	Faculty office; existing
		154	Office	16.2	16.2	Faculty office; existing
	AG10 Faith & Life Centre	201	Office	13.6	13.6	Faculty office; existing
		202	Office	14.6	14.6	Faculty office; existing
		208	Office	11.5	11.5	Faculty office; existing
	AG24 Library	2-141	Office	12.8	12.8	Faculty office; existing
		2-143	Office	12.1	12.1	Faculty office; existing
		2-146	Office	12.4	12.4	Faculty office; existing
		2-150	Office (Academic Support)	12.9	12.9	Support; existing
		2-151	Office	14.3	14.3	Faculty office; existing
	No New Request					
Academic Offices and Related			**Subtotal**	**369.2**	**369.2**	
Classroom Support - Instruction	AG09 Convocation Centre	G128	Store	49.0	49.0	Physical Education/ Athletics
		G128A	Storage	14.7	14.7	Physical Education/ Athletics
		G209	Storage	2.9	2.9	Physical Education
	No New Request					
Classroom Support - Instruction			**Subtotal**	**66.6**	**66.6**	
Laboratory - Instruction	Edgeworth Centre	1204	Laboratory	123.4	123.4	Kinesiology; 24 seats. (existing leased space in Edgeworth Centre)

Department of Social Sciences- Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12 Existing	2016-17 Projected	
	New Request		Interview/observation		48.0	Research/teaching/lab w/ viewing window; 4 rooms @ 12 m2 ea.
Laboratory - Instruction			**Subtotal**	**123.4**	**171.4**	
Laboratory Support - Instruction	AG09 Convocation Centre	G105B1	Storage	28.7	28.7	Physical Education/External Relations/Augustana Athletics
	AG09 Convocation Centre	G105C1	Storage	33.1	33.1	Physical Education/External Relations/Augustana Athletics
		G207	Equipment Training Room	121.5		Included in new request
	New Request		Weight Room		100.0	Teaching/Athletics; dual purpose
Laboratory Support - Instruction			**Subtotal**	**183.3**	**161.8**	
Research Support						
	New Request		Storage		12.0	
Research Support			**Subtotal**	**-**	**12.0**	
Department of Social Sciences Total				**742.5**	**781.0**	

Academic Centres - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Alberta Centre For Sustainable Rural Communities (ACSRC)						
Research Support	AG24 Library	2-104A	Workstation	3.3	-	Included in new request
		2-104B	Workstation	3.3	-	Included in new request
		2-104E	Workstation	3.4	-	Included in new request
		2-104F	Workstation	3.4	-	Included in new request
		2-134	Office	14.6	14.6	Faculty office; existing
	New Request		Workstation		36.0	9 workstations at 4m2 each
			Office		22.0	2 offices; grad student/post doc
Alberta Centre For Sustainable Rural Communities (ACSRC)			**Subtotal**	**28.1**	**72.6**	
Chester Ronning Centre (CRC)						
Academic Offices and Related	AG24 Library	2-104D	Workstation	3.4	-	Included in new request
		2-131	Storage	8.9	-	Included in new request
		2-132	Office	14.0	14.0	Faculty office; existing
	New Request		Workstation		4.0	
			Office (Academic Support)		12.0	
			Storage		12.0	Shared with ACSRC
Chester Ronning Centre (CRC)			**Subtotal**	**26.3**	**42.0**	
Academic Centres Total				**54.4**	**114.6**	

Learning and Beyond - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Learning and Beyond						
Academic Offices and Related	AG03 Classroom Building	C115	Office	115.8	-	Included in new request
		C115A	Storage	1.9	-	Included in new request
		C115B	Storage	1.9	-	Included in new request
		C115C	Office (Meeting)	31.6	-	Included in new request
		C115D	Office (Meeting)	32.7	-	Included in new request
	New Request		Office/Workstation		40.0	5 spaces at 8 m2 each
			Meeting		18.0	
			Storage		10.0	
Academic Offices and Related			**Subtotal**	**184.0**	**68.0**	
Student Community						
	New Request		Commons		20.0	
Student Community			**Subtotal**	**-**	**20.0**	
Learning & Beyond Total				**184.0**	**88.0**	

Student Community and Engagement (Related to Science) - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
0				Existing	Projected	
Student Community and Engagement						
Student Community	AG26 Forum	1-010	Commons	18.1	18.1	
		1-020	Commons	18.1	18.1	
		1-040	Commons	18.5	18.5	
		1-050	Commons	18.5	18.5	
		1-070	Commons	18.9	18.9	
		1-080	Commons	18.9	18.9	
		L1-040	Commons	37.2	37.2	
		L1-001ZZa	Commons	100.0	100.0	1/3 of room L1-001ZZ
	AG08 Auxiliary Building	A103	Commons	3.1	3.1	
	AG10 Faith & Life Centre	115	Commons	217.0	217.0	
	AG18 Richard Husfloen Centre	140	Commons	29.8	29.8	This space is currently used only by FoN.
	New Request		Commons		60.0	3 new spaces at 20 m2 each
Student Community and Engagement Total				**498.0**	**558.0**	

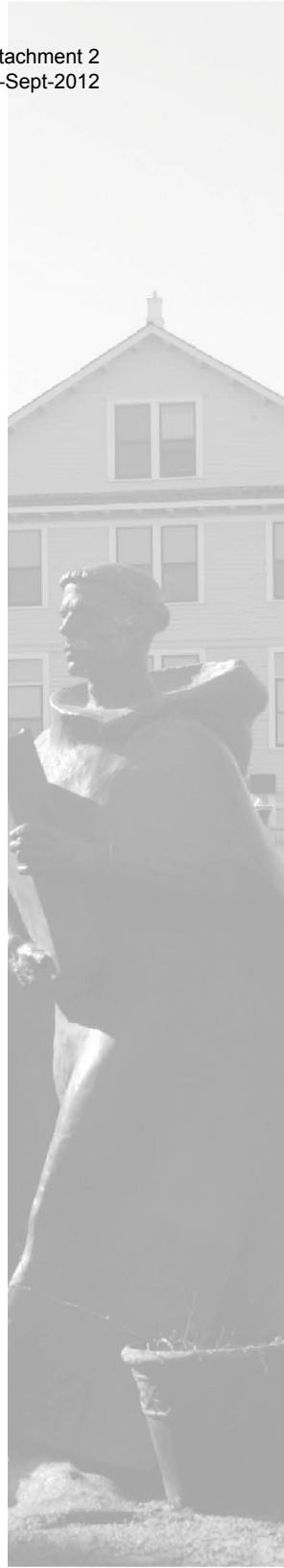
Unclassified - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12	2016-17	
				Existing	Projected	
Unclassified						
Classroom - Instruction	AG18 Richard Husfloen Centre	207	Classroom	26.7		
		219	Classroom	75.9		
		220	Classroom	85.8		
		221	Classroom	35.9		
		222	Classroom	35.7		
	Request for classroom included in Augustana Faculty					
Classroom - Instruction			**Subtotal**	**259.9**	**-**	
Unclassified	AG18 Richard Husfloen Centre	150	To Be Determined	122.4		
		201	Office	12.2		
		202	Office	14.0		
		203	Office	14.0		
		204	Office	17.0		
		205	Office	13.9		
		206	Office	12.7		
		211	Commons	30.9		
		150B	To Be Determined	11.5		
	AG24 Library	2-112	To Be Determined	242.5		Shelled space
	No Request Submitted					
Unclassified			**Subtotal**	**491.2**	**-**	
Unclassified Space Total				**751.1**	**-**	

*"Unclassified" space here refers primarily to the classrooms and offices in Richard Husfloen Centre. Due to the distance from the main Augustana Campus, these spaces do not function to meet the academic need of the Faculty, and so are identified as having no projected space requirement in the future.

Other U of A Programs - Detailed Space

Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.) 2011-12 Existing	Area (Net Assignable Sq.M.) 2016-17 Projected	Comments
Faculty of Nursing						
Academic Offices and Related	AG18 Richard Husfloen Centre	101	Reception	18.2	18.2	
		104	File Room	5.6	5.6	
		107	Office	12.7	12.7	
		109	Office	14.6	14.6	
		111	Office	16.4	16.4	
		129	Kitchen	11.8	11.8	
	Confirmation Required					
Academic Offices and Related			**Subtotal**	**79.3**	**79.3**	
Classroom - Instruction	AG18 Richard Husfloen Centre	115	Classroom	60.3	60.3	
		120	Classroom	30.3	30.3	
		121	Classroom	26.6	26.6	
		133	Classroom	50.3	50.3	
	Confirmation Required					
Classroom - Instruction			**Subtotal**	**167.5**	**167.5**	
Laboratory - Instruction	AG18 Richard Husfloen Centre	125	Laboratory	23.9	23.9	
		130	Laboratory	108.1	108.1	
		125A	Laboratory	9.4	9.4	
		130A	Laboratory	13.9	13.9	
	Confirmation Required					
Laboratory - Instruction			**Subtotal**	**155.2**	**155.2**	
Laboratory Support - Instruction	AG18 Richard Husfloen Centre	131	Laboratory Storage	28.5	28.5	
	Request Not Submitted					
Laboratory Support - Instruction				**28.5**	**28.5**	
Faculty of Nursing Subtotal				**430.6**	**430.6**	
Faculty of Rehabilitation Medicine						
Academic Offices and Related	AG03 Classroom Building	C111	Office	10.4	10.4	
		C108	Office	9.2	9.2	
	No New Request					
Academic Offices and Related			**Subtotal**	**19.6**	**19.6**	
Classroom - Instruction	AG03 Classroom Building	C008	Classroom	47.0	47.0	Shared w/ Augustana Faculty
	New Request included in Augustana Faculty					
Classroom - Instruction			**Subtotal**	**47.0**	**47.0**	
Laboratory - Instruction	AG03 Classroom Building	C007	Laboratory	86.6	86.6	
		C007A	Laboratory	44.0	44.0	

Other U of A Programs - Detailed Space						
Space Category	Building	Room No	Space Use	Area (Net Assignable Sq.M.)		Comments
				2011-12 Existing	2016-17 Projected	
	Confirmation Required					
Laboratory - Instruction			**Subtotal**	**130.6**	**130.6**	
Laboratory Support - Instruction	AG03 Classroom Building	C007A1	Laboratory Storage	18.0	18.0	
	Confirmation Required					
Laboratory Support - Instruction			**Subtotal**	**18.0**	**18.0**	
Faculty of Rehabilitation Medicine				**215.2**	**215.2**	
Other U of A Programs Total				**645.8**	**645.8**	



APPENDIX B – Space Allocation Principles

The following principles shall be applied to the assignment and monitoring of space utilization across the campus. These principles are commonly applied to academic faculties across the University of Alberta campuses.

1. All tenure track faculty will be assigned individual offices.
2. Faculty lecturers will be assigned individual offices.
3. Full-time contract academic instructors will be assigned individual offices. Part-time contract academic instructors will be assigned shared office space with a designated desk and workstation.
4. Administrative Professional Officers will be assigned individual offices if their work involves the supervision of others or any work of a confidential nature
5. Faculty Service Officers will be assigned individual offices.
6. Professors emeriti active in teaching and/or research may be assigned a shared commons room.
7. Graduate students normally will be assigned shared study space in close proximity to their department's faculty offices whenever possible.
8. An additional office may be granted to a faculty member if administrative duties count for a significant percentage of total workload and it is deemed necessary to maintain an office in an administrative area because of the nature of the responsibilities and frequency of interaction with staff and students in that area. It is anticipated that efforts will be made to make that person’s regular office available for temporary assignment to others as needed, such as for graduate students.
9. Department Chairs will be assigned one office. Their academic office will normally be reassigned during the period of their appointment as Chair. The Chair-designate will approve the reassignment.
10. When academic staff are on LWOP or study leave off campus, their offices may be reassigned by the Department Chair or designate as needed for the duration of the leave.
11. Non-academic staff will be assigned a workstation in a location appropriate for their responsibilities.

12. The Dean's Office will administer and allocate additional research space (including project rooms, wet or dry labs, and computing labs) based on the physical needs of the project and the availability of space. Such needs will be identified at the time of application and approved by the Dean's Office and will be assigned for the duration of the grant. Allocation of research space will be based upon the most functional and efficient use of space. Whenever possible for maximum use and efficiency of space and resources, especially computing infrastructure, research space will be shared among complementary or compatible projects.

13. All grant-specific research computing spaces will be assigned and approved by the Dean's Office.

14. Classrooms will be handled in manner similar to the approach taken by Central Registrar, whereby, classrooms will be assigned to adjacent occupants on a priority basis. Once the priority user's needs are met, the rooms will be scheduled to full utilization to ensure the remaining Faculty teaching needs are met.

15. A common area to facilitate academic and social interaction will be provided in each department and unit, as space becomes available.

16. When office space within a department or unit is vacated, it will be reassigned by the department or unit only after the approval of the Department Chair or designate.

17. Allocation of new space or proposed repurposing of space within a department or unit will be undertaken in consultation with the Dean's Office which will approve the occupants and use of new space.

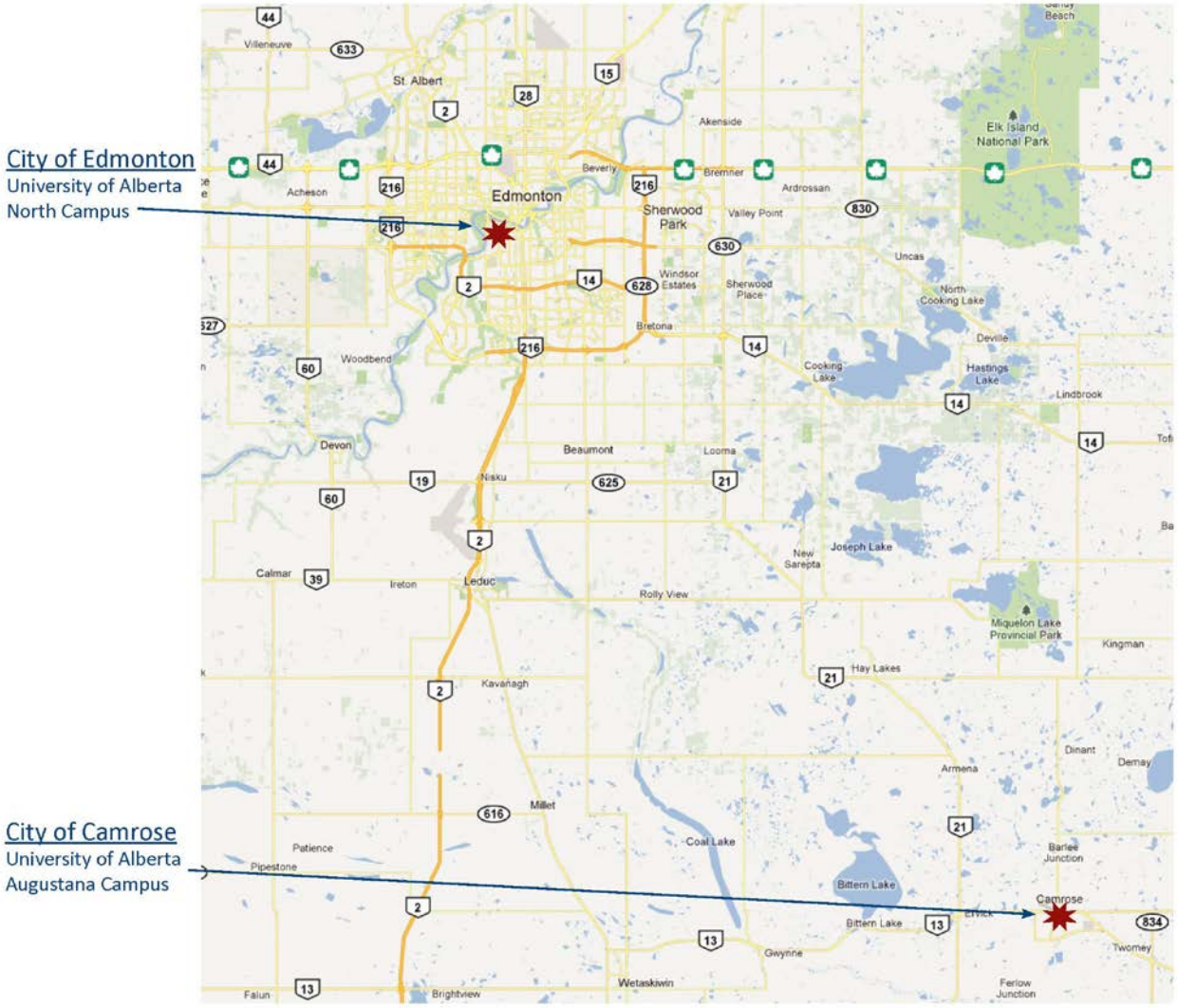
18. Reconfiguration of space within a department or unit will be undertaken with the assistance of Planning and Project Delivery to ensure design proposals facilitate functionality and maximum efficiency of space.

19. The Dean's Office will administer and allocate space for Research Centres based on the physical needs of the Centre and the availability of space. Such needs will be identified at the time of establishment of the Centre and approved by the Dean's Office. Allocation of Centre space will be based upon most efficient use of space.

20. Whenever possible for maximum use and efficiency of space and resources, especially computing infrastructure, Centre space may be shared among complementary or compatible projects.

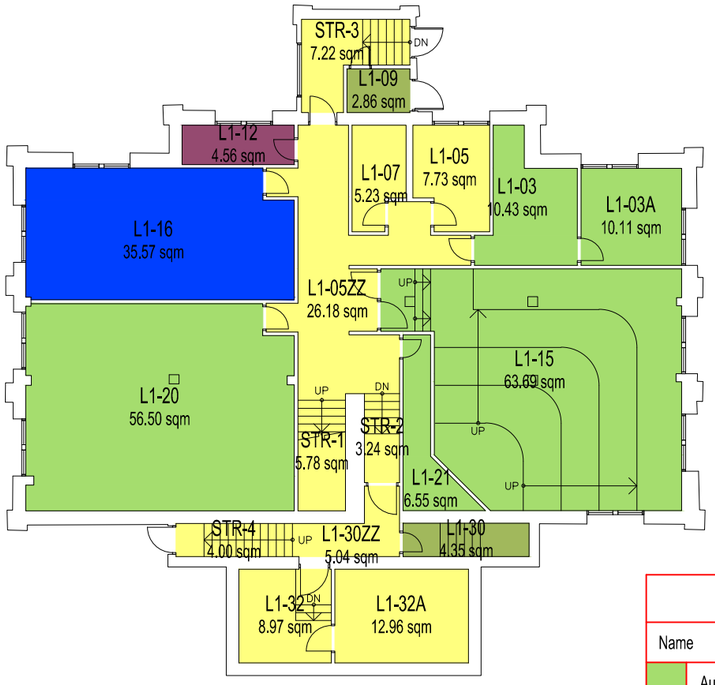
21. Where Augustana space is under the academic jurisdiction of departments from North Campus (e.g.; Libraries, Nursing, and Rehabilitation Medicine), the assignment of space will be administered by Augustana's Dean's Office, and co-ordinated with the academic department and OUA planner from North Campus.

APPENDIX C – Augustana Campus Context Map



Central Alberta Context Map

APPENDIX D – Floor Plans of Buildings

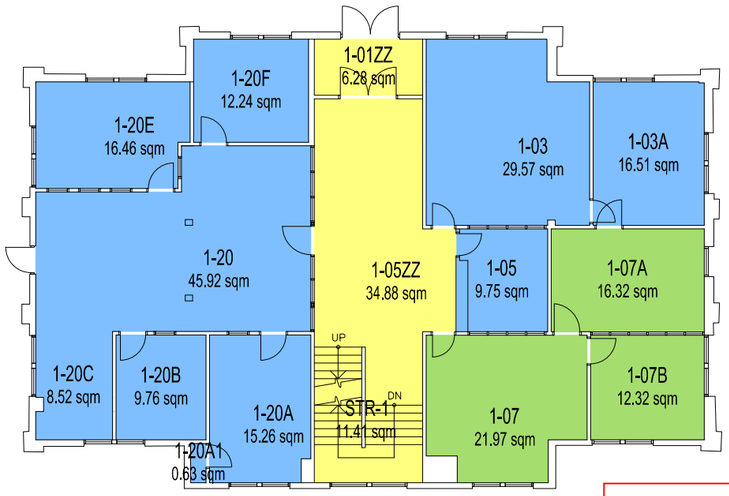


TRIRIGA Legend
Name
Augustana Faculty
Buildings and Grounds Services
General University Space
Technology and Learning Services
University of Alberta Protective Services

Planning & Infrastructure
Planning Services

Lower Level One Floor Plan
Founders' Hall - 58201

August 17, 2012

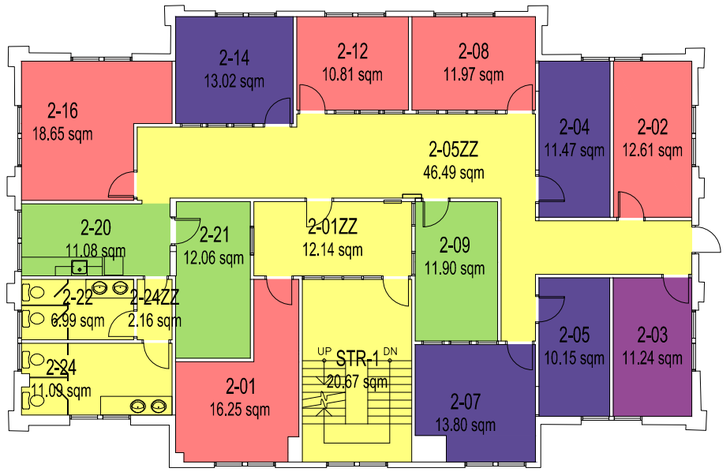


TRIRIGA Legend
Name
Augustana Faculty
External Relations
General University Space

Planning & Infrastructure
Planning Services

First Floor Plan
Founders' Hall - 58201

July 6, 2012

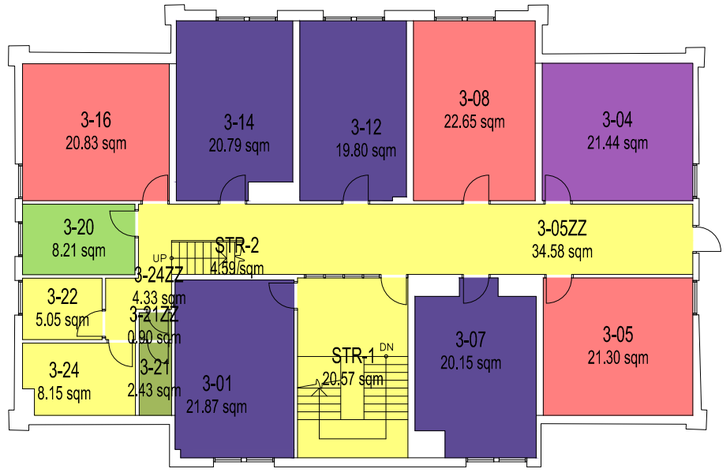


TRIRIGA Legend
Name
Augustana Faculty
Dpt of Humanities
Dpt of Social Science
Environmental Science/Studies
General University Space

Planning & Infrastructure
Planning Services

Second Floor Plan
Founders' Hall - 58201

July 6, 2012

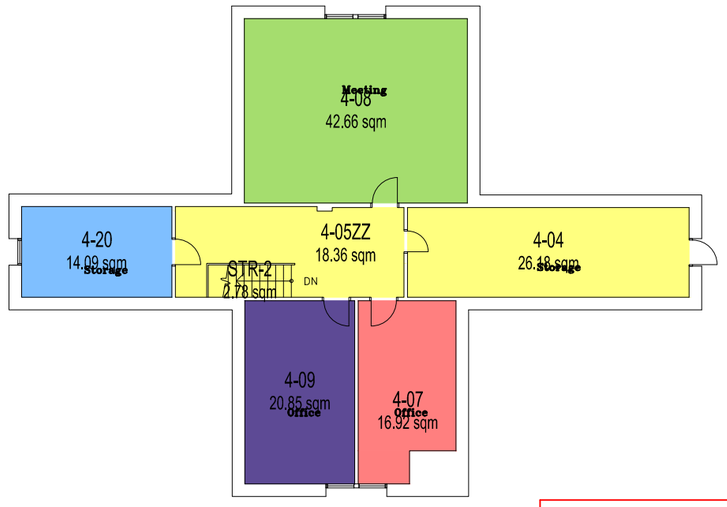


TRIRIGA Legend
Name
Augustana Faculty
Biology
Buildings and Grounds Services
Dpt of Humanities
Dpt of Social Science
General University Space

Planning & Infrastructure
Planning Services

Third Floor Plan
Founders' Hall - 58201

July 6, 2012

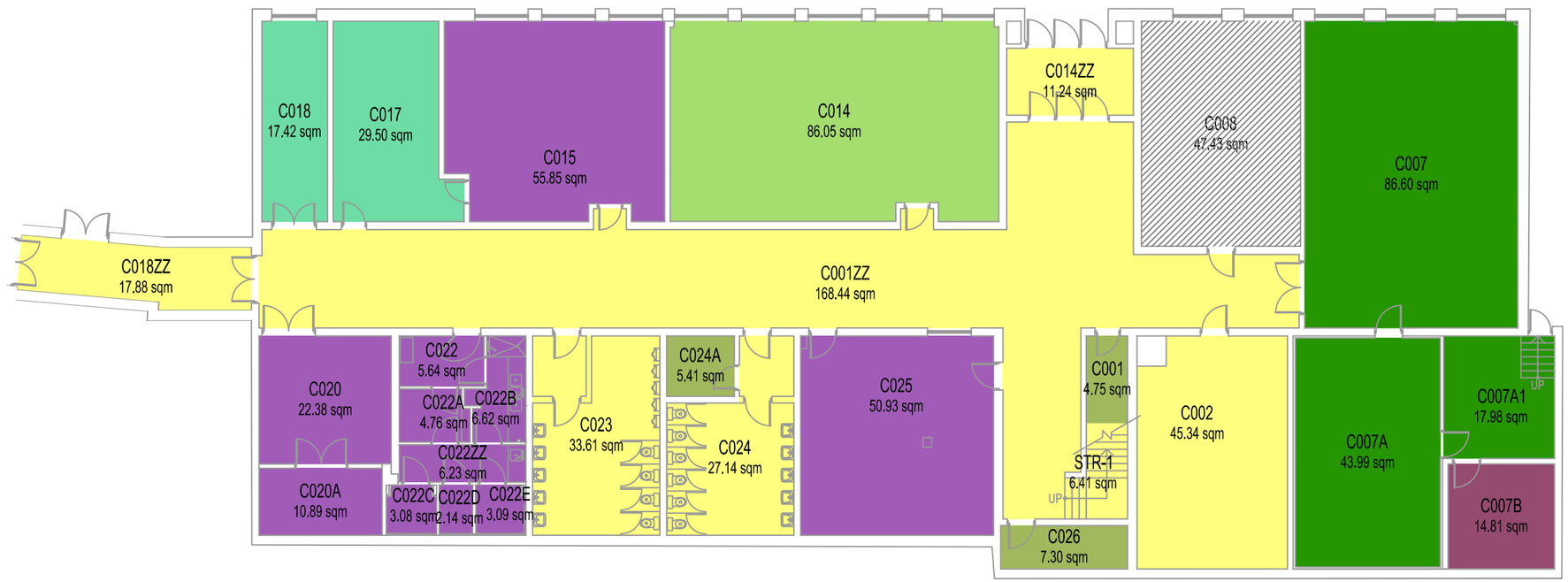


TRIRIGA Legend	
Name	
	Augustana Faculty
	Dpt of Humanities
	Dpt of Social Science
	External Relations
	General University Space

Planning & Infrastructure
Planning Services

Fourth Floor Plan
Founders' Hall - 58201

July 6, 2012

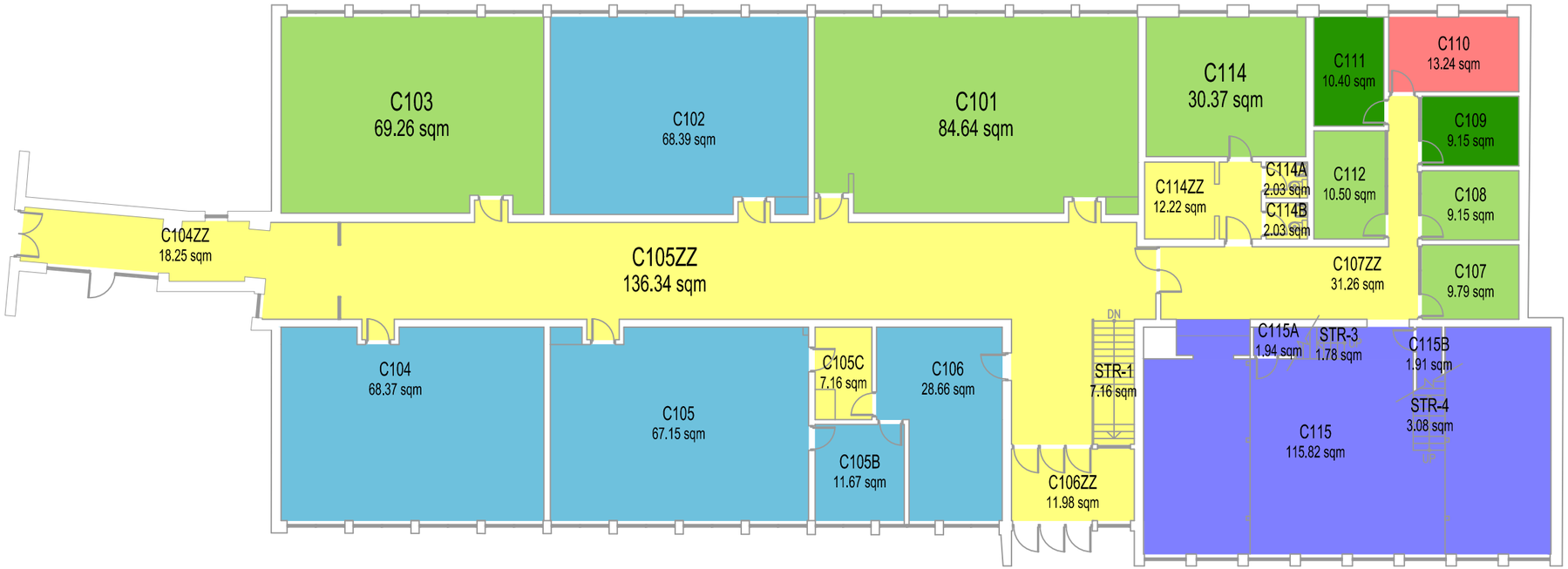


TRIRIGA Legend
Name
Augustana Faculty
Biology
Botany
Buildings and Grounds Services
Faculty of Rehabilitation Medicine
General University Space
Technology and Learning Services
Multiple

Planning & Infrastructure
Planning Services

Basement Floor Plan
Classroom Building - 58203

August 17, 2012

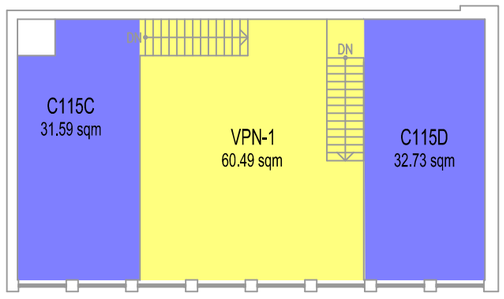


TRIRIGA Legend	
Name	
	Augustana Faculty
	Chemistry
	Dpt of Social Science
	Faculty of Rehabilitation Medicine
	General University Space
	Learning & Beyond

Planning & Infrastructure
Planning Services

First Floor Plan
Classroom Building - 58203

August 17, 2012

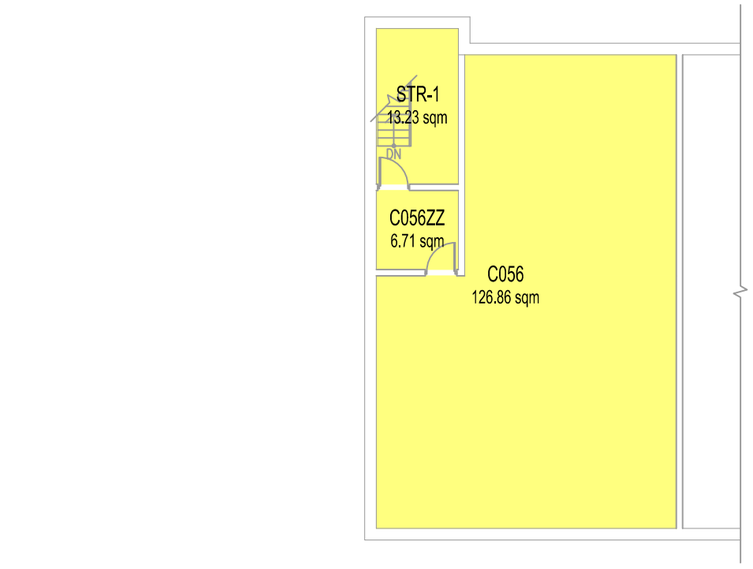


TRIRIGA Legend	
Name	
	General University Space
	Learning & Beyond

Planning & Infrastructure
Planning Services

Mezzanine Floor Plan
Classroom Building - 58203

October 11, 2011

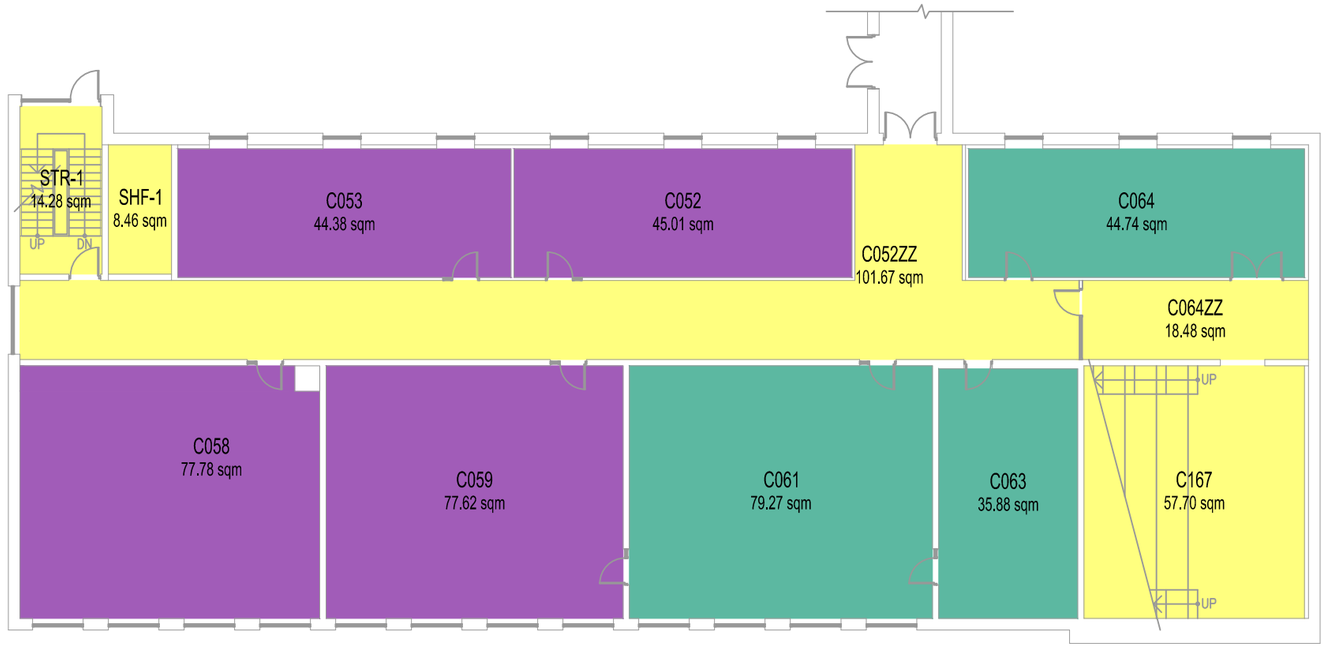


TRIRIGA Legend	
Name	
	General University Space

Planning & Infrastructure
Planning Services

Basement Floor Plan
Science Extension - 58204

August 29, 2011

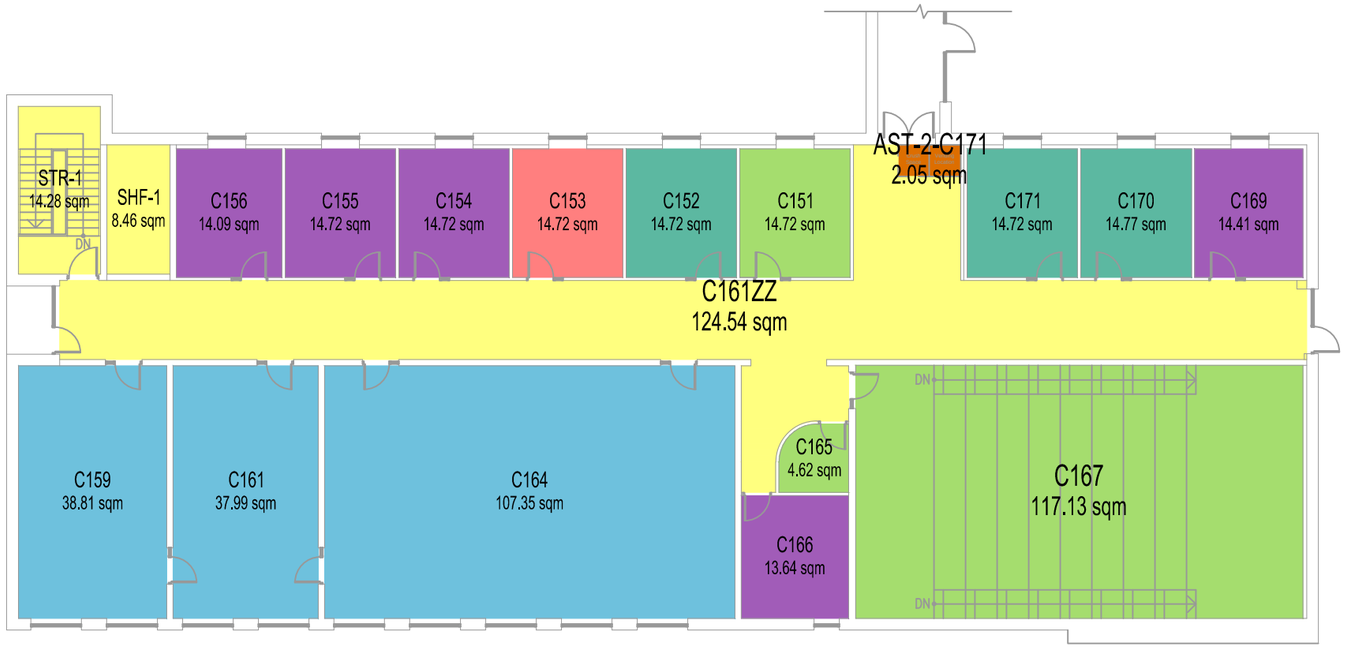


TRIRIGA Legend
Name
Biology
General University Space
Mathematics & Physics

Planning & Infrastructure
Planning Services

First Floor Plan
Science Extension - 58204

August 29, 2011

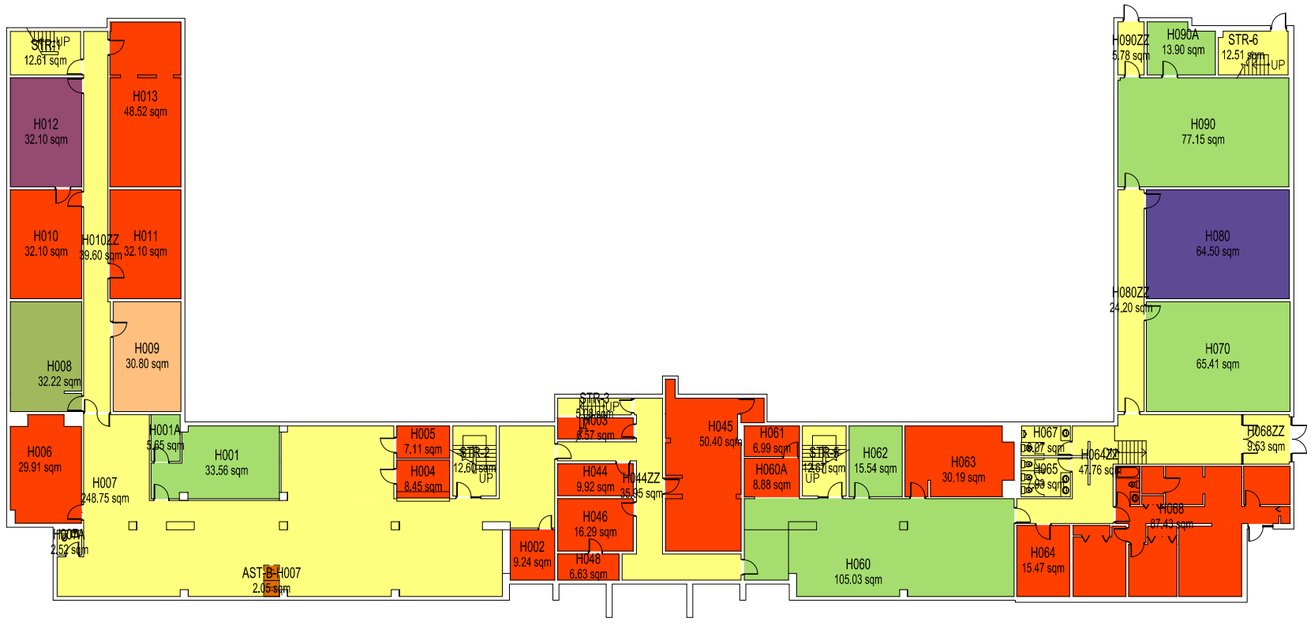


TRIRIGA Legend	
Name	
	Augustana Faculty
	Biology
	Chemistry
	Dpt of Social Science
	General University Space
	Mathematics & Physics
	Support Services

Planning & Infrastructure
Planning Services

Second Floor Plan
Science Extension - 58204

August 17, 2012



TRIRIGA Legend
Name
Augustana Faculty
Augustana Student and Residence Services
Buildings and Grounds Services
Dpt of Humanities
General University Space
Residence Services
Support Services
Technology and Learning Services

Planning & Infrastructure
Planning Services

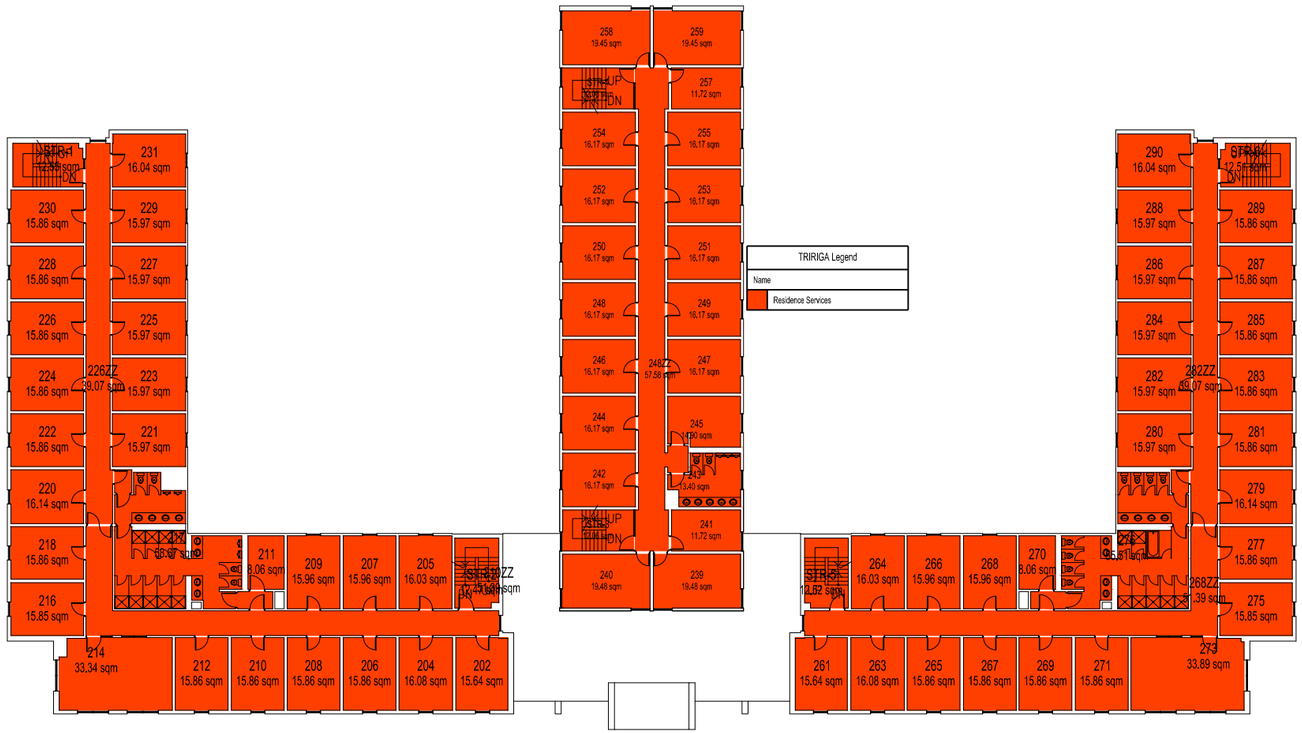
Basement Floor Plan
First Year Residence - 58206

August 17, 2012

Planning & Infrastructure
Planning Services

First Floor Plan
First Year Residence - Bldg # 58205 & 58206

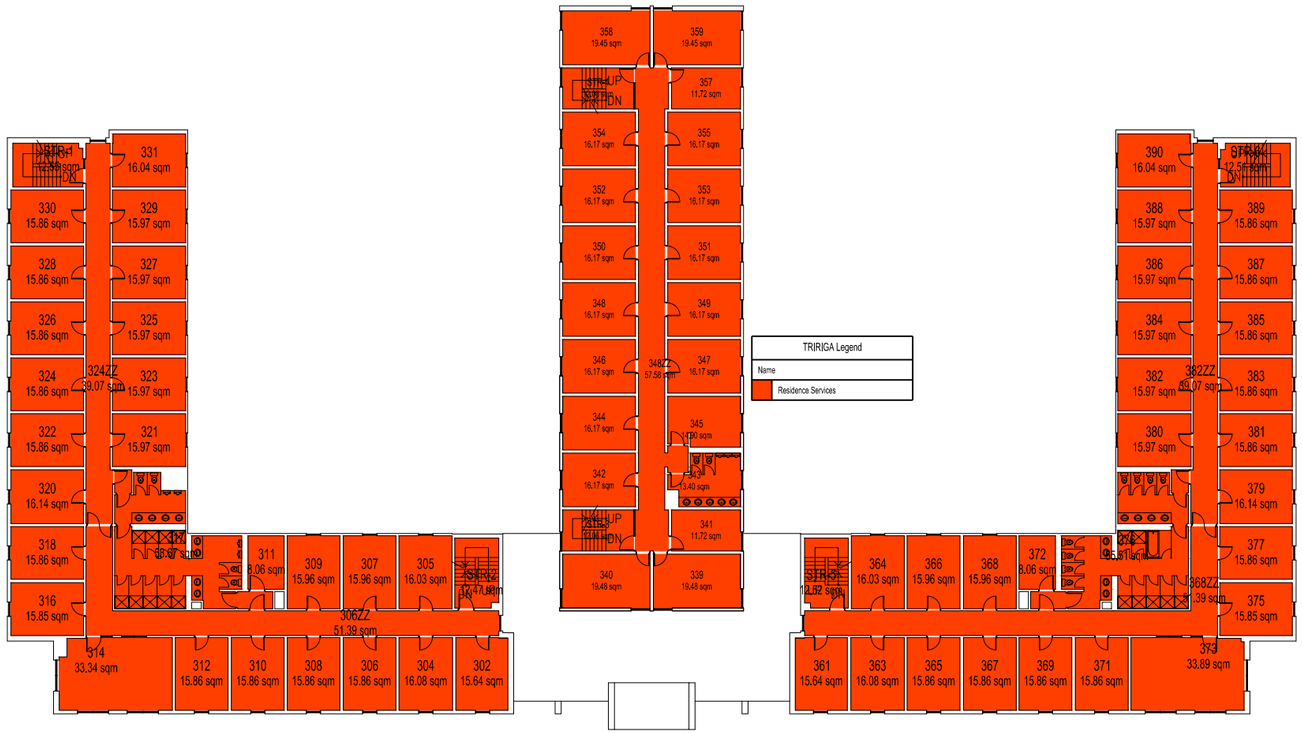
October 13, 2011



Planning & Infrastructure
Planning Services

Second Floor Plan
First Year Residence - Bldg # 58205 & 58206

October 13, 2011

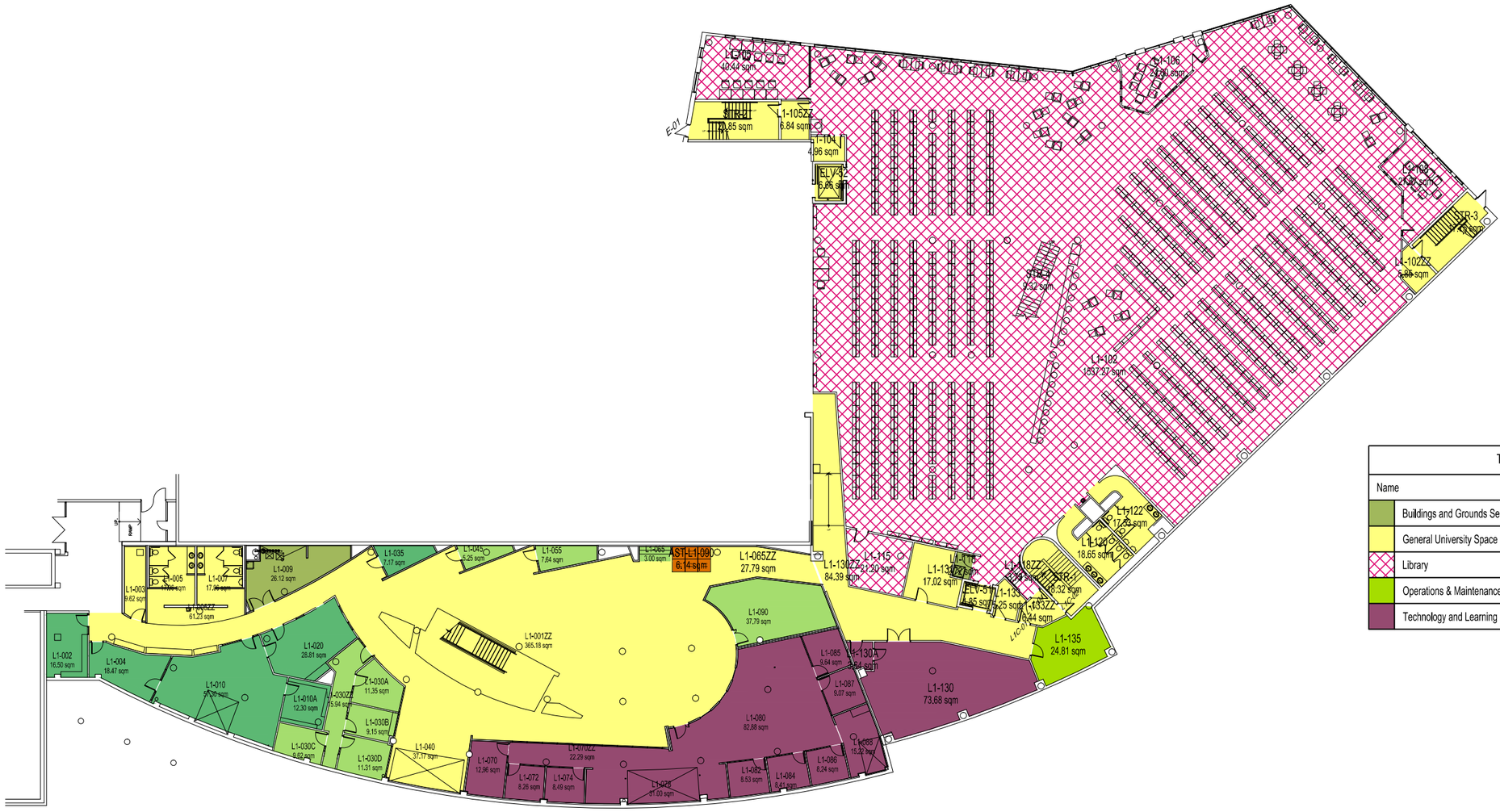


TRIRIGA Legend
Name
Residence Services

Planning & Infrastructure
Planning Services

Third Floor Plan
First Year Residence -
Bldg # 58205 & 58206

October 13, 2011
Scale: 3/32" = 1'-0"



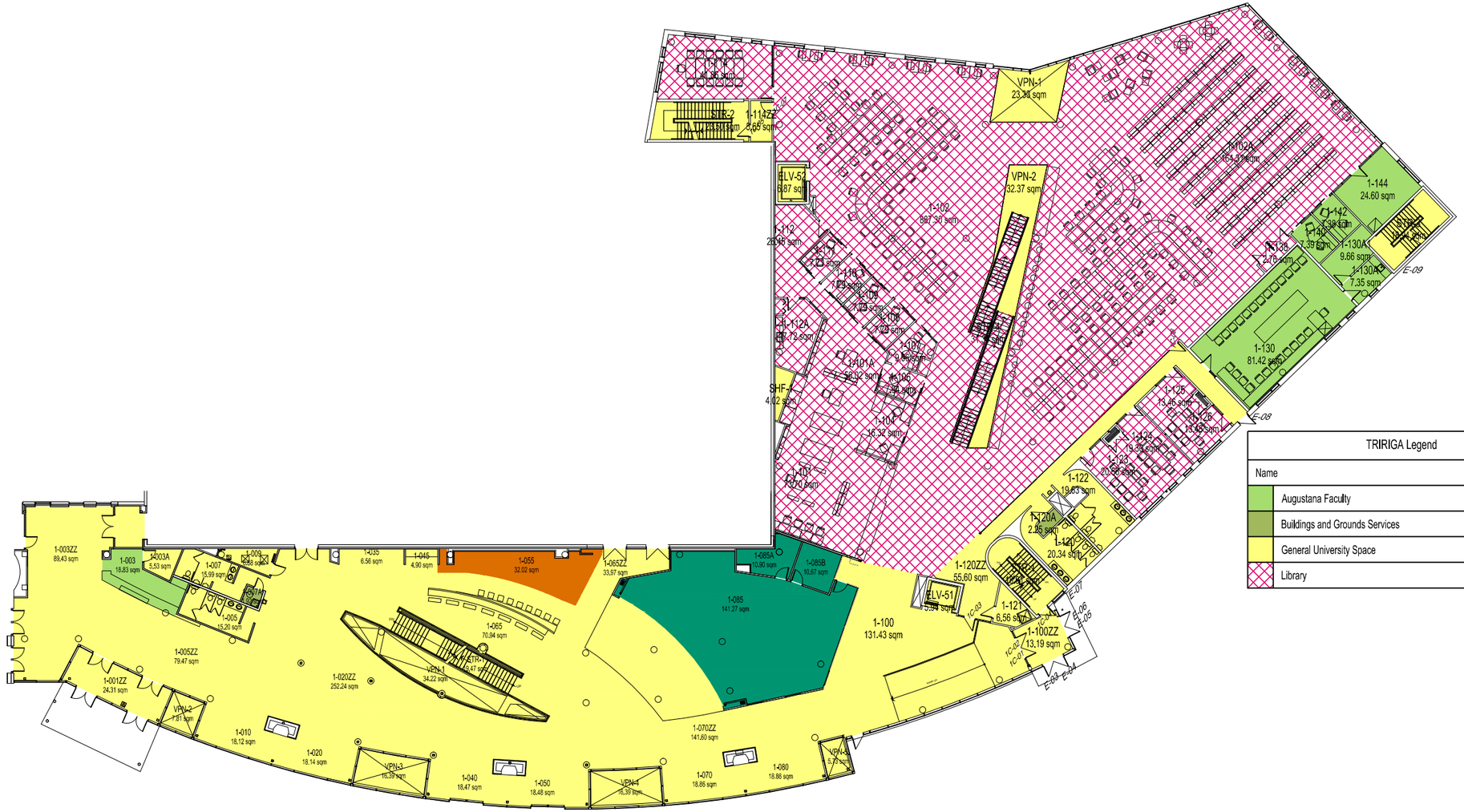
TRIRIGA Legend	
Name	
	Augustana Faculty
	Augustana Student Association
	Buildings and Grounds Services
	General University Space
	Support Services
	Technology and Learning Services

TRIRIGA Legend	
Name	
	Buildings and Grounds Services
	General University Space
	Library
	Operations & Maintenance
	Technology and Learning Services

Planning & Infrastructure
Planning Services

Lower Level One Floor Plan
Augustana Forum - Bldg # 58224 & 58226

October 13, 2011



TRIRIGA Legend
Name
Augustana Faculty
Buildings and Grounds Services
General University Space
Library

TRIRIGA Legend
Name
Augustana Faculty
Bookstore
Buildings and Grounds Services
General University Space
Support Services

Planning & Infrastructure
Planning Services

Level One Floor Plan
Augustana Forum - Bldg # 58224 & 58226

October 13, 2011

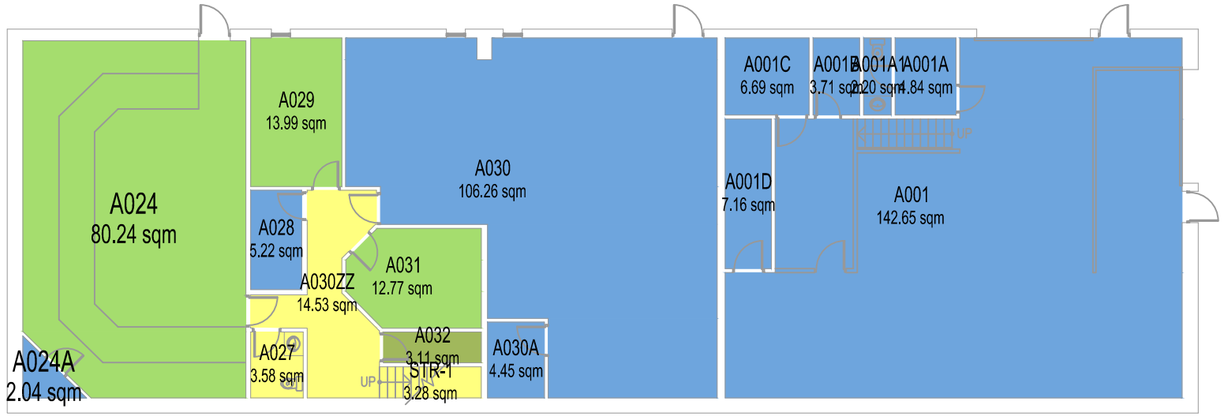
TRIRIGA Legend
Name
Alberta Centre For Sustainable Rural Communities (ACSRC)
Augustana Faculty
Augustana Student and Residence Services
Buildings and Grounds Services
Chester Ronning Centre (CRC)
Dpt of Fine Arts
Dpt of Science
Dpt of Social Science
General University Space
Library
Technology and Learning Services
Vice-President Research
Unassigned

TRIRIGA Legend
Name
Augustana Faculty
General University Space
Registrar and Student Awards

Planning & Infrastructure
Planning Services

Level Two Floor Plan
Augustana Forum - Bldg # 58224 & 58226

October 13, 2011
Scale: 1/32" = 1'-0"

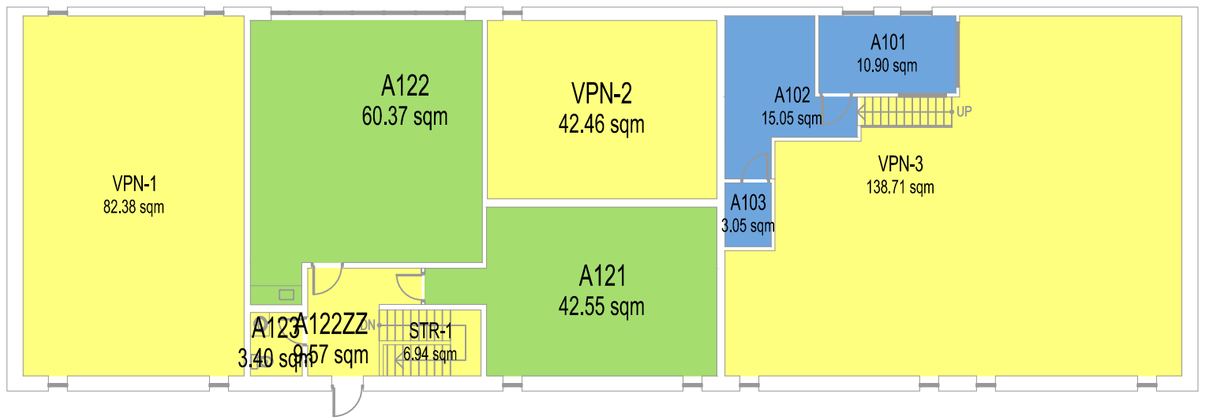


TRIRIGA Legend	
Name	
	Augustana Faculty
	Buildings and Grounds Services
	Dpt of Fine Arts
	General University Space

Planning & Infrastructure
Planning Services

Basement Floor Plan
Auxiliary Building - 58208

August 17, 2012

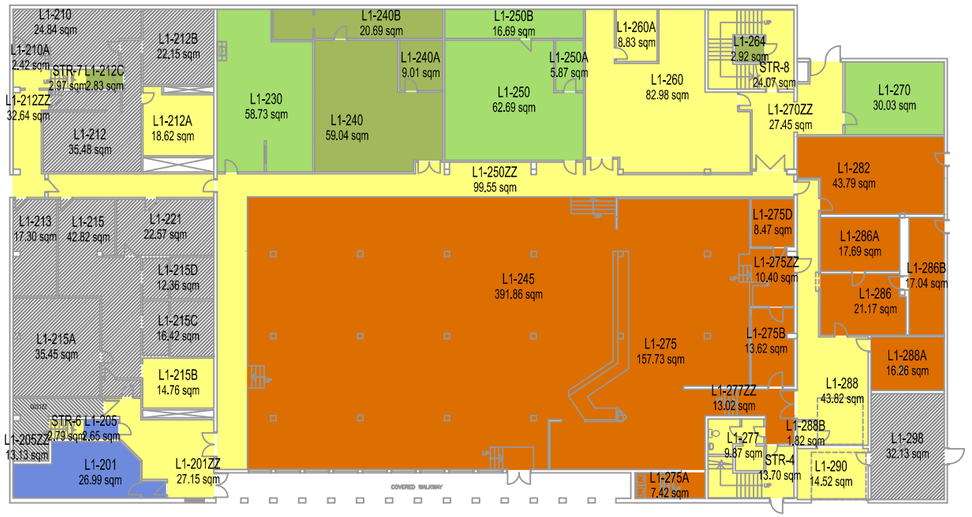


TRIRIGA Legend	
Name	
	Augustana Faculty
	Dpt of Fine Arts
	General University Space

Planning & Infrastructure
Planning Services

First Floor Plan
Auxiliary Building - 58208

August 17, 2012

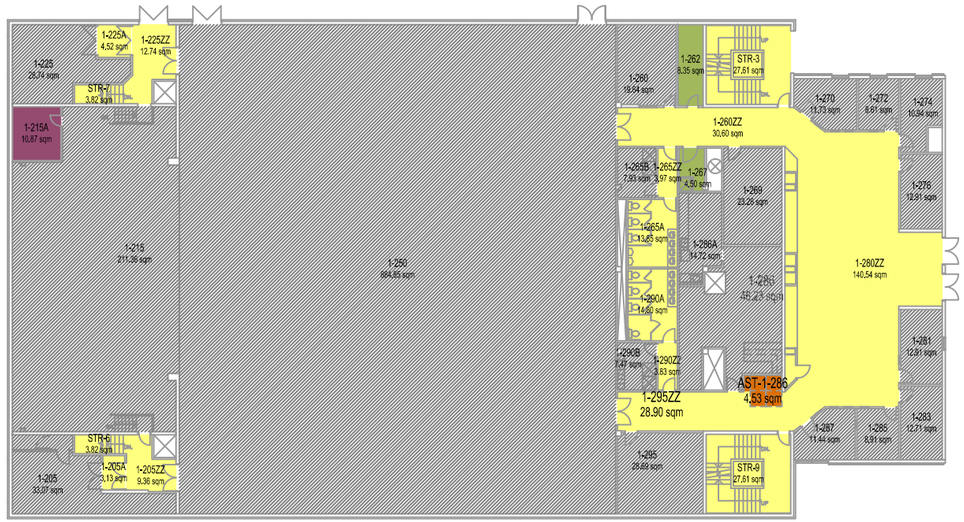


TRIRIGA Legend
Name
Augustana Athletics
Augustana Faculty
Buildings and Grounds Services
General University Space
Outdoor Education
Support Services
Unassigned
Multiple

Planning & Infrastructure
Planning Services

Lower Level One
Convocation Centre - 58209

May 16, 2012

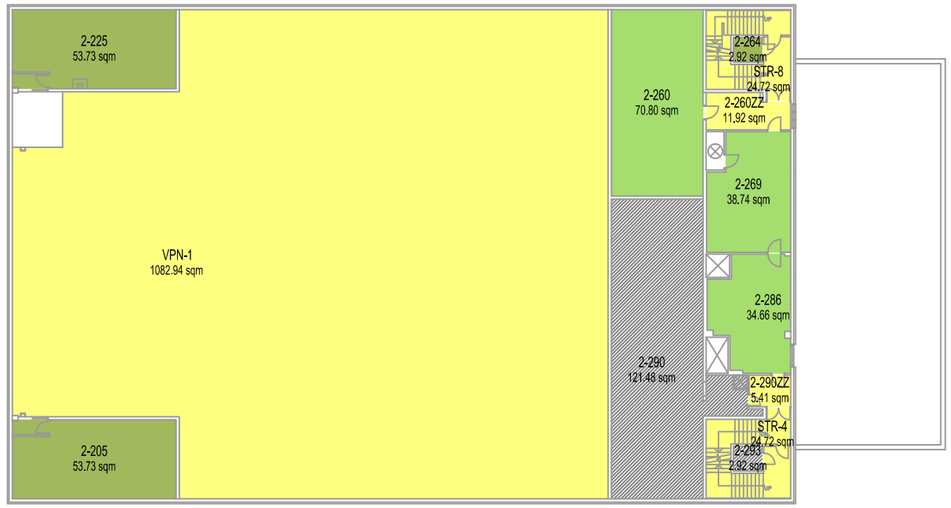


TRIRIGA Legend
Name
Augustana Athletics
Buildings and Grounds Services
External Relations
General University Space
Outdoor Education
Physical Education
Support Services
Technology and Learning Services
Multiple

Planning & Infrastructure
Planning Services

First Floor Plan
Convocation Centre - 58209

July 30, 2012

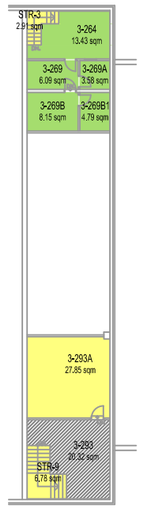


TRIRIGA Legend
Name
Augustana Athletics
Augustana Faculty
Buildings and Grounds Services
General University Space
Physical Education
Multiple

Planning & Infrastructure
Planning Services

Second Floor Plan
Convocation Centre - 58209

August 17, 2012

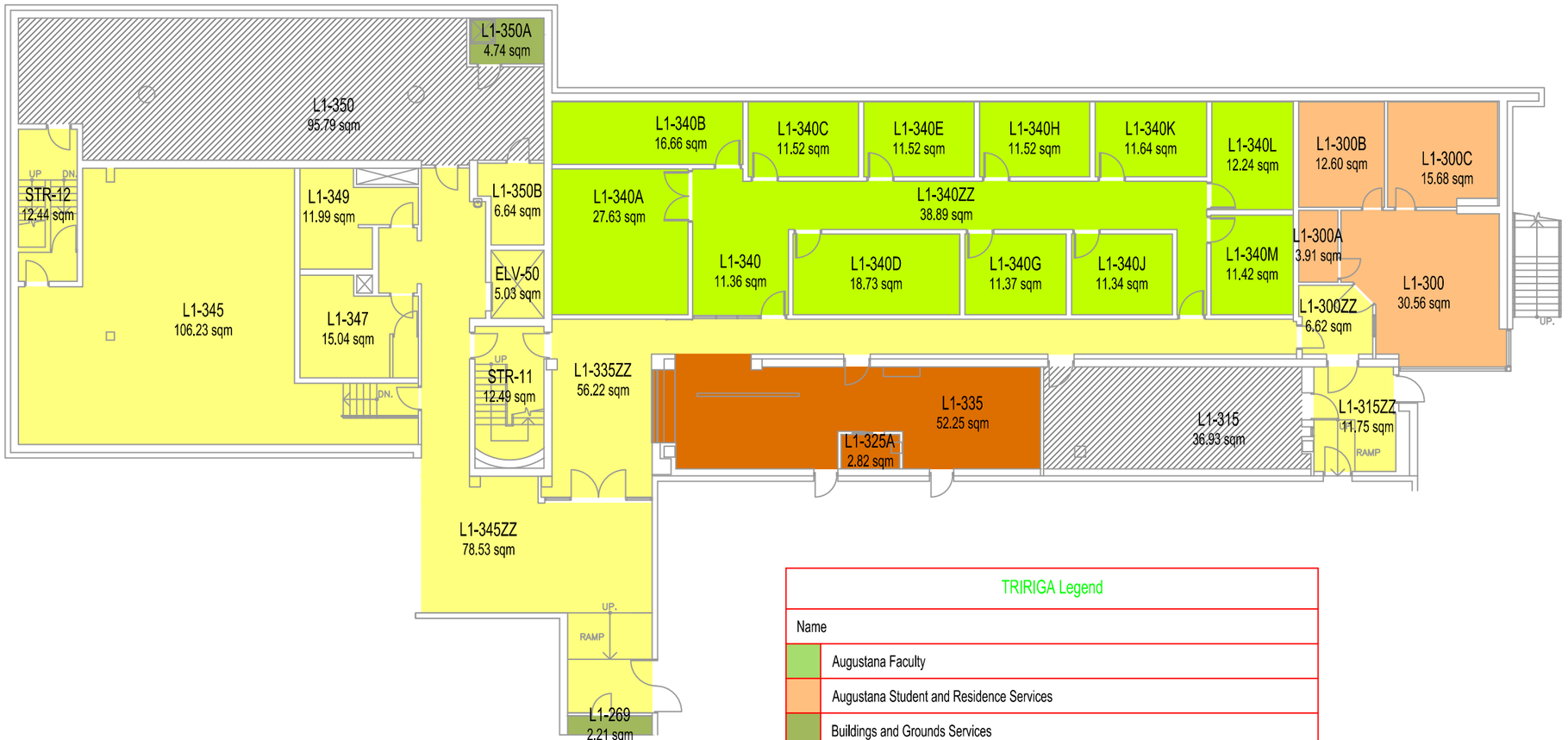


TRIRIGA Legend
Name
Augustana Athletics
Augustana Faculty
General University Space
Physical Education
Multiple

Planning & Infrastructure
Planning Services

Mezzanine Floor Plan
Convocation Centre - 58209

May 16, 2012



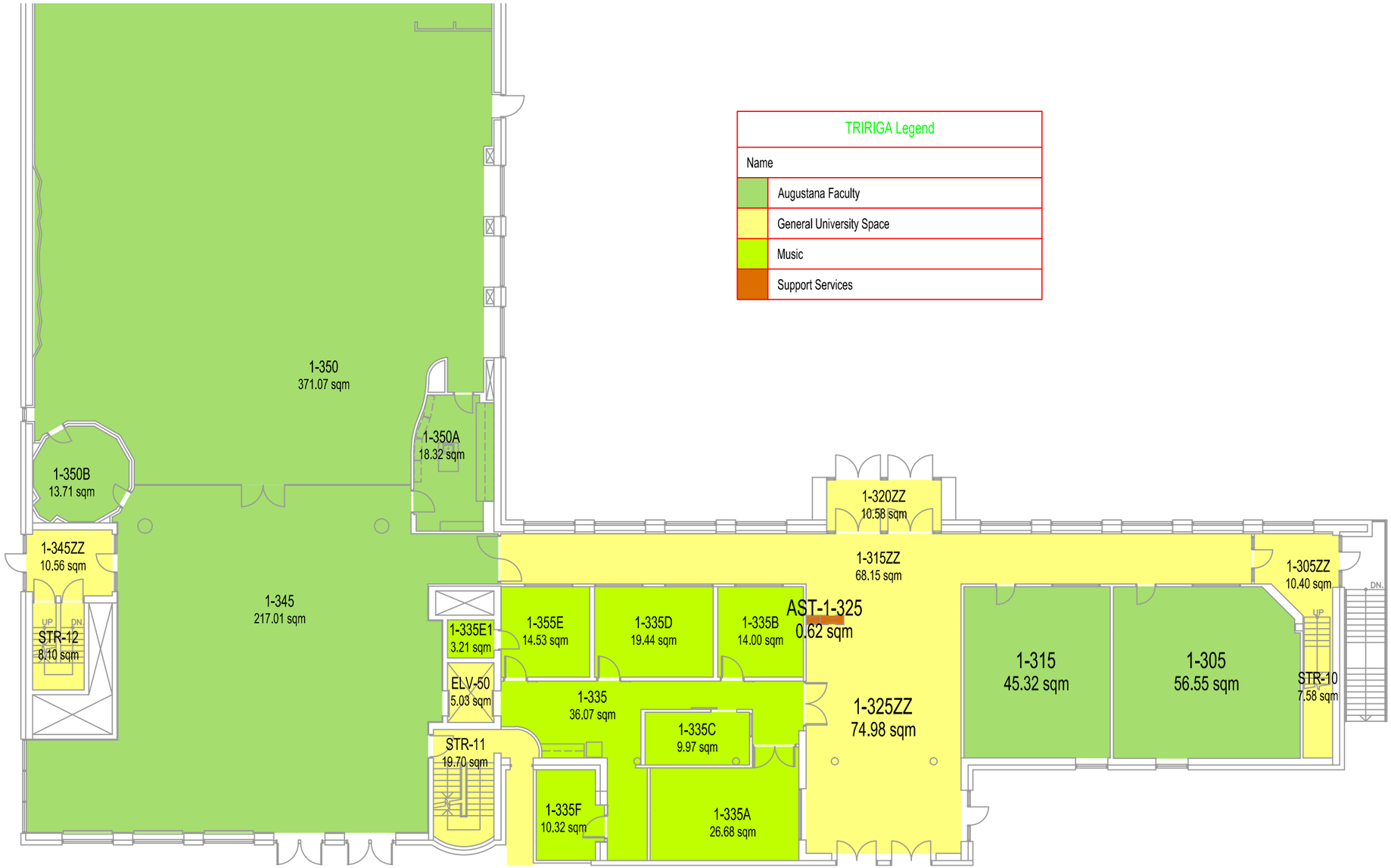
TRIRIGA Legend	
Name	
	Augustana Faculty
	Augustana Student and Residence Services
	Buildings and Grounds Services
	Computing Science
	General University Space
	Music
	Support Services
	Multiple

Planning & Infrastructure
Planning Services

Basement Floor Plan
Faith and Life Centre - 58210

May 15, 2012

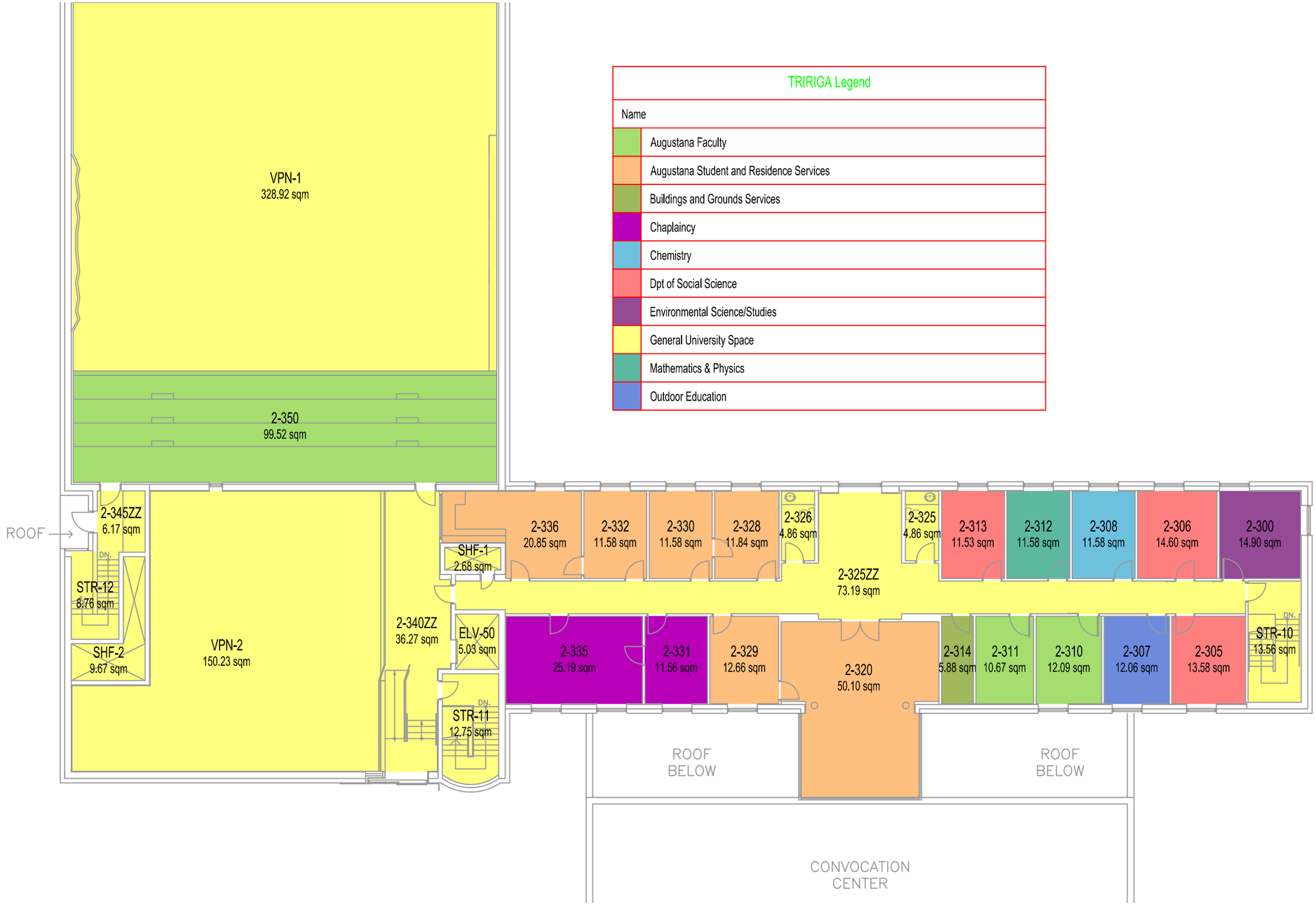
TRIRIGA Legend
Name
Augustana Faculty
General University Space
Music
Support Services



Planning & Infrastructure
Planning Services

First Floor Plan
Faith and Life Centre - 58210

August 17, 2012

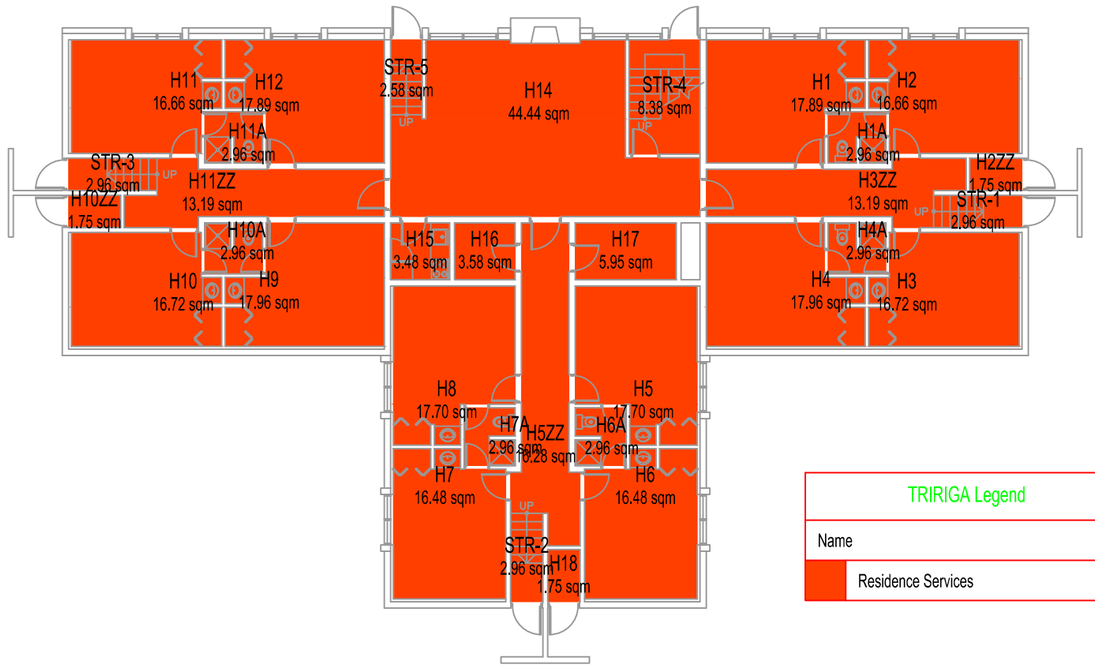


TRIRIGA Legend
Name
Augustana Faculty
Augustana Student and Residence Services
Buildings and Grounds Services
Chaplaincy
Chemistry
Dpt of Social Science
Environmental Science/Studies
General University Space
Mathematics & Physics
Outdoor Education

Planning & Infrastructure
Planning Services

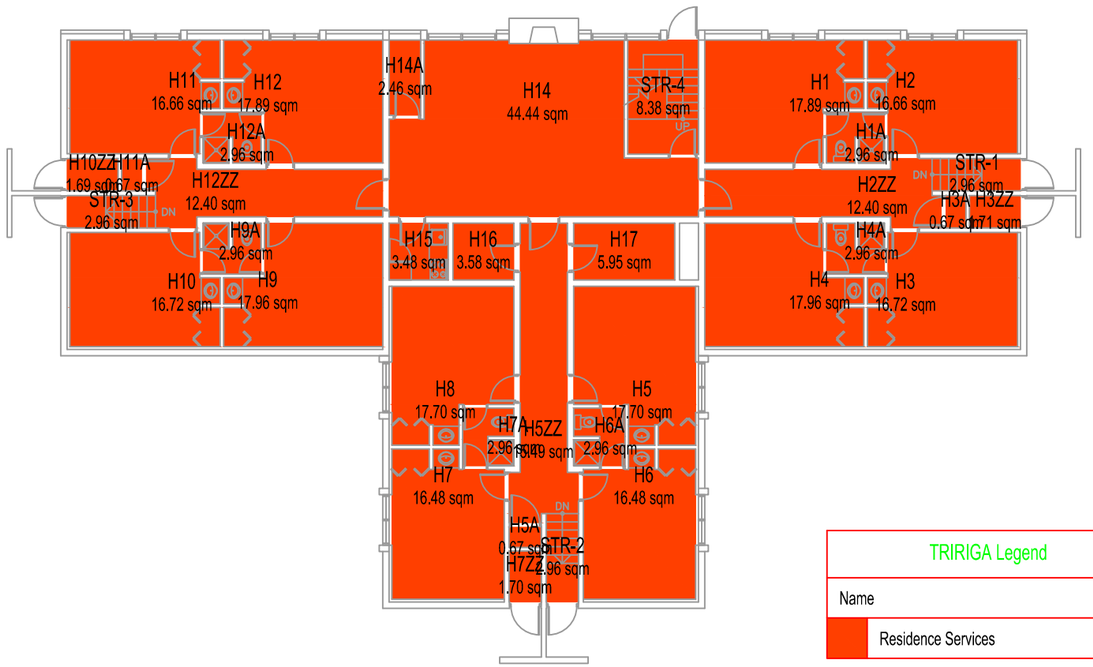
Second Floor Plan
Faith and Life Centre - 58210

May 16, 2012



TRIRIGA Legend
Name
Residence Services

Basement Floor Plan
Solheim Hall - 58211

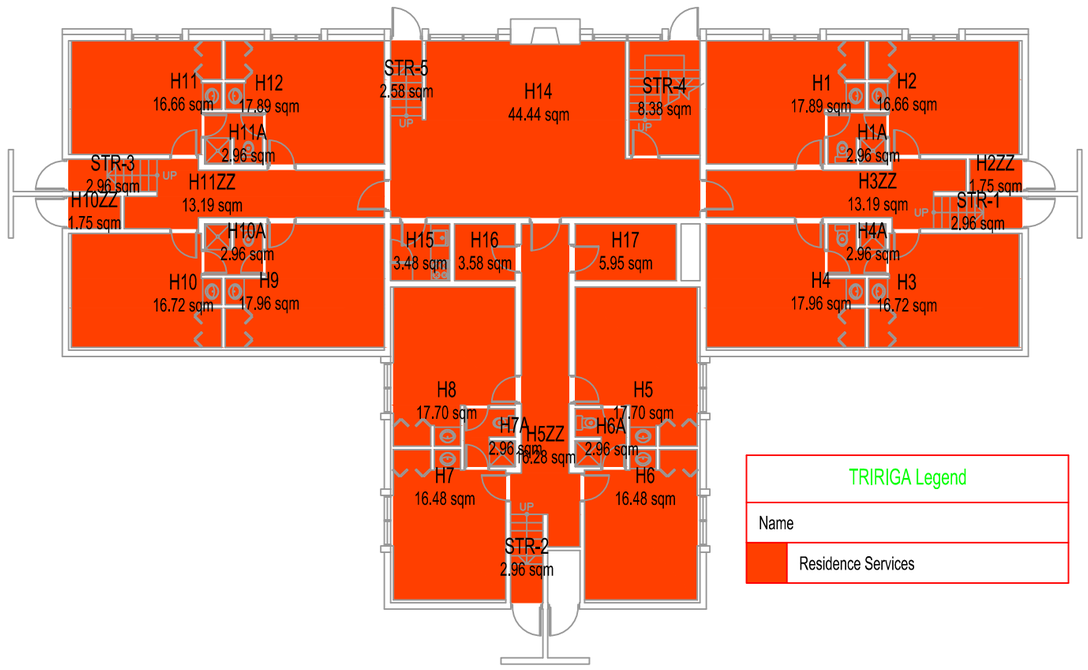


TRIRIGA Legend
Name
Residence Services

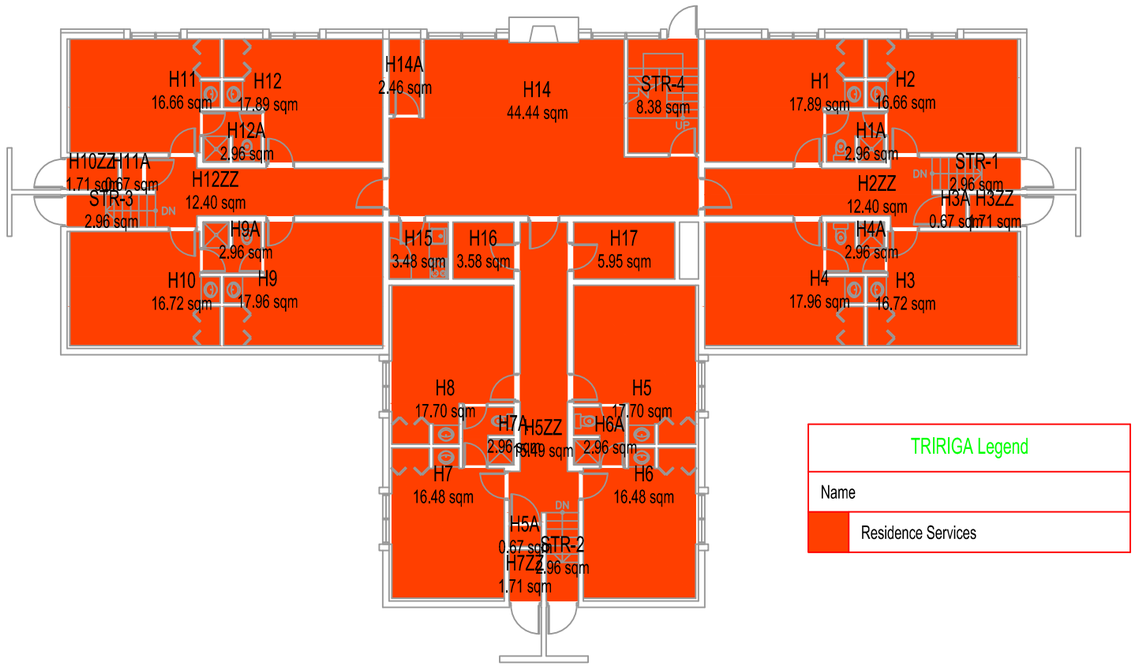
Planning & Infrastructure
Planning Services

First Floor Plan
Solheim Hall - 58211

November 7, 2005



First Floor Plan
Ronning Hall - 58212

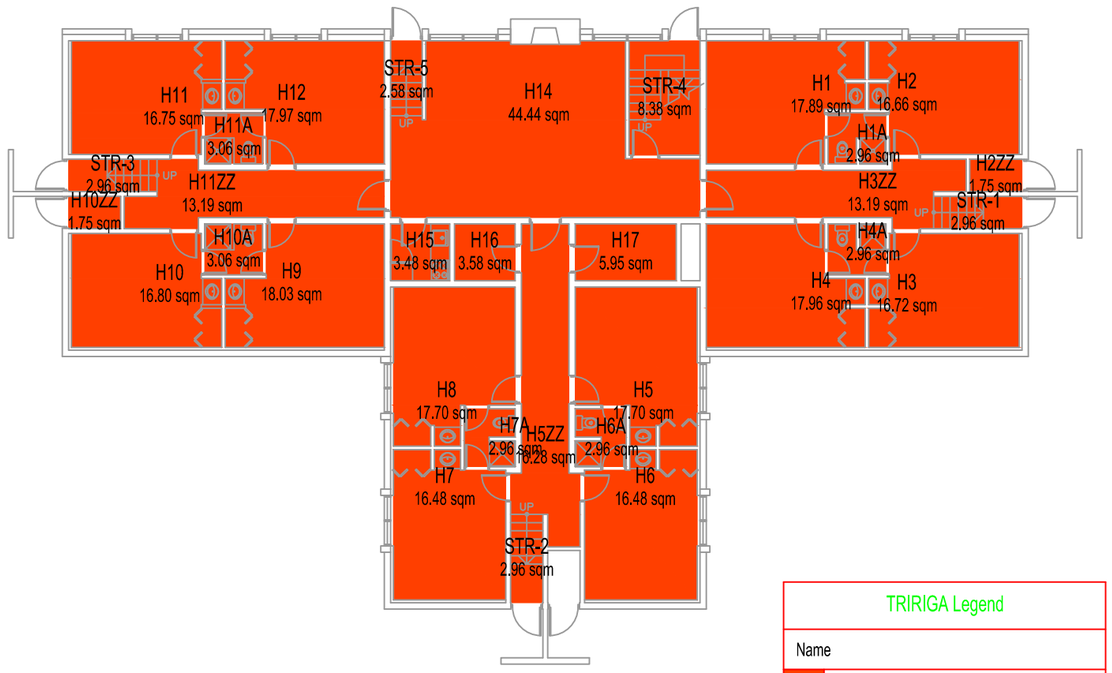


TRIRIGA Legend
Name
Residence Services

Planning & Infrastructure
Planning Services

First Floor Plan
Ronning Hall - 58212

November 7, 2005

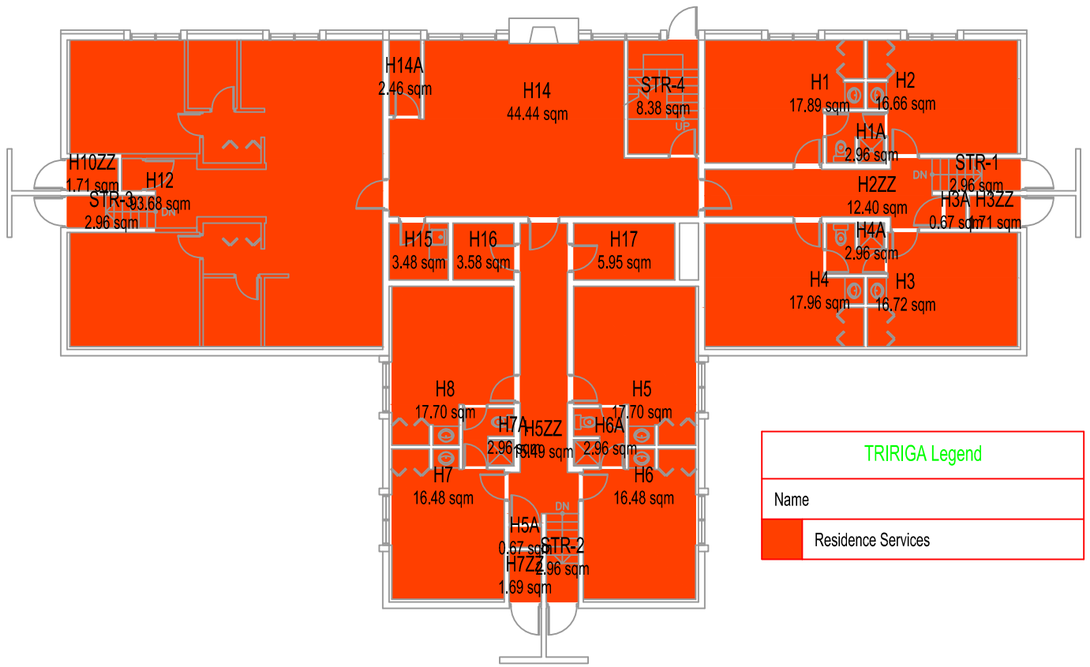


TRIRIGA Legend
Name
Residence Services

Planning & Infrastructure
Planning Services

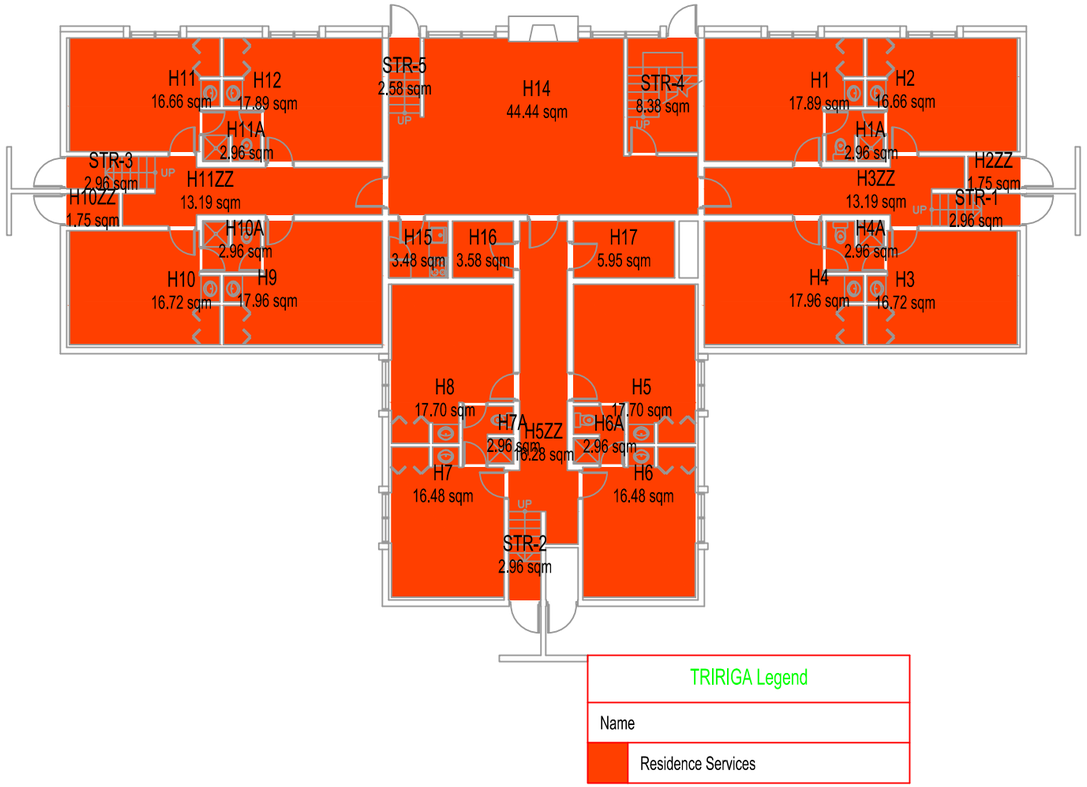
Basement Floor Plan
Moi Hall - 58213

November 17, 2005



TRIRIGA Legend
Name
Residence Services

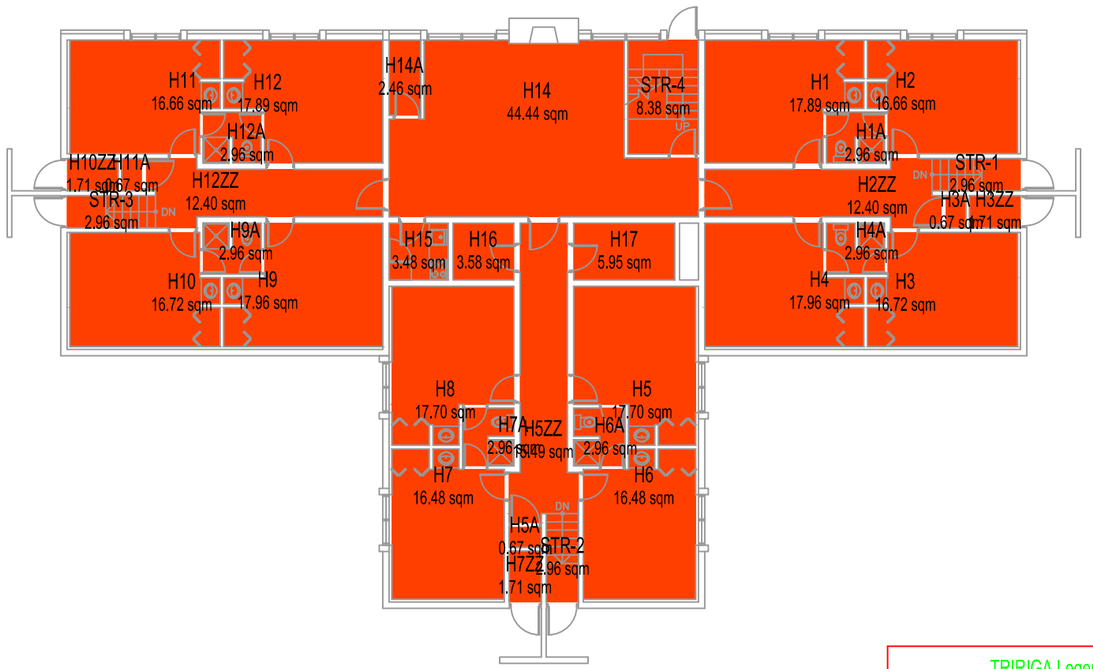
First Floor Plan
Moi Hall - 58213



Planning & Infrastructure
Planning Services

Basement Floor Plan
Marken Hall - 58214

November 17, 2005

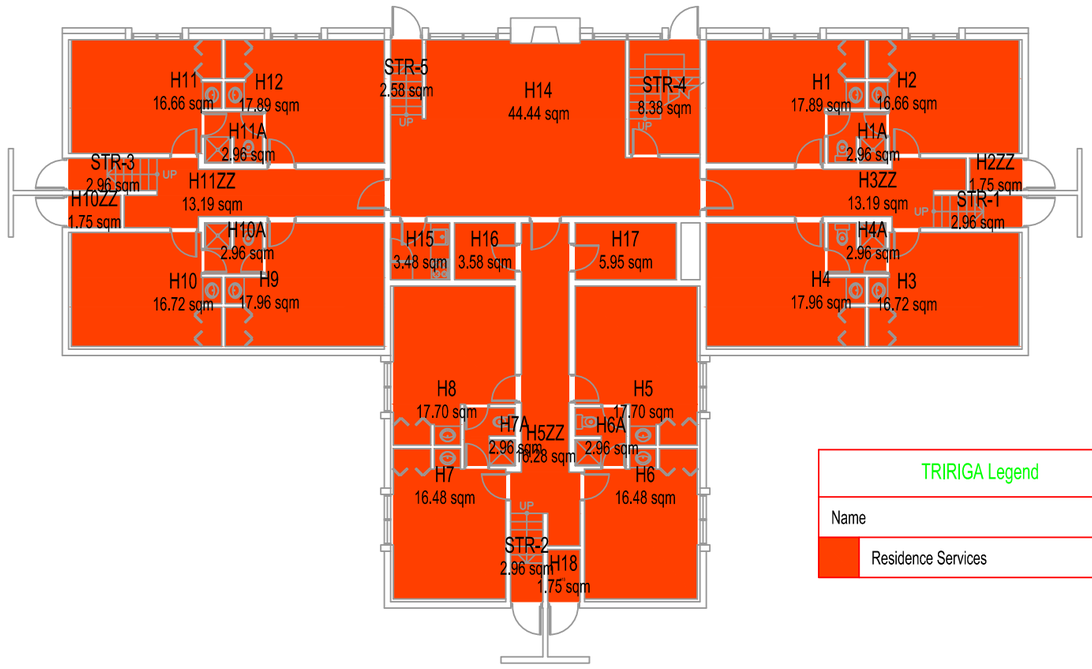


TRIRIGA Legend
Name
Residence Services

Planning & Infrastructure
Planning Services

First Floor Plan
Marken Hall - 58214

November 17, 2005

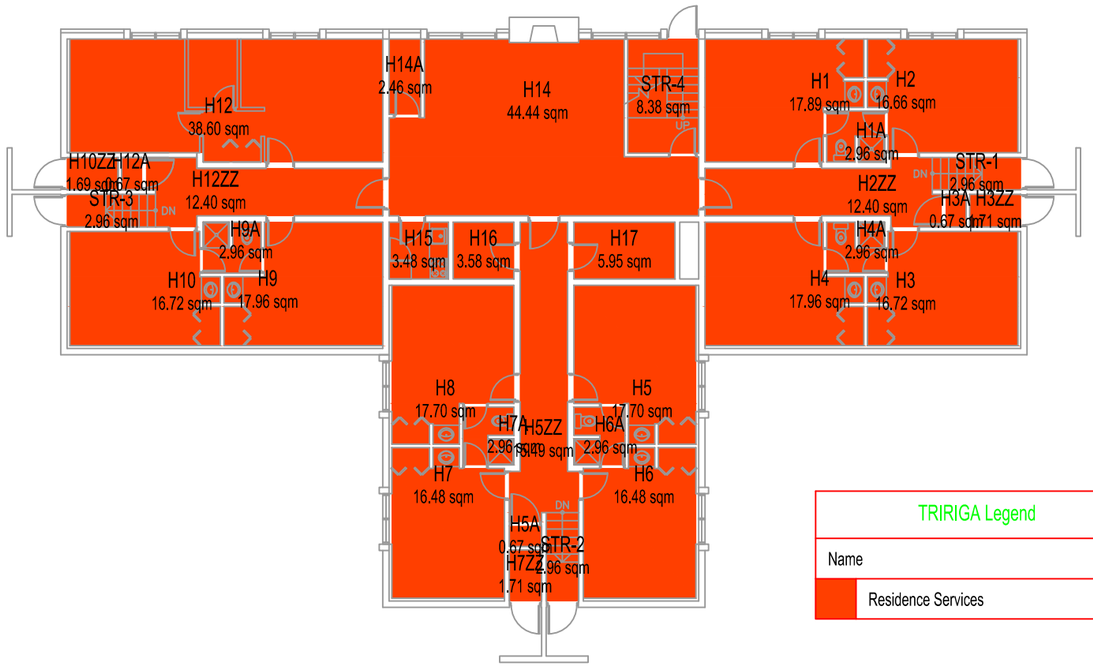


TRIRIGA Legend
Name
Residence Services

Planning & Infrastructure
Planning Services

Basement Floor Plan
Anderson Hall - 58215

November 17, 2005

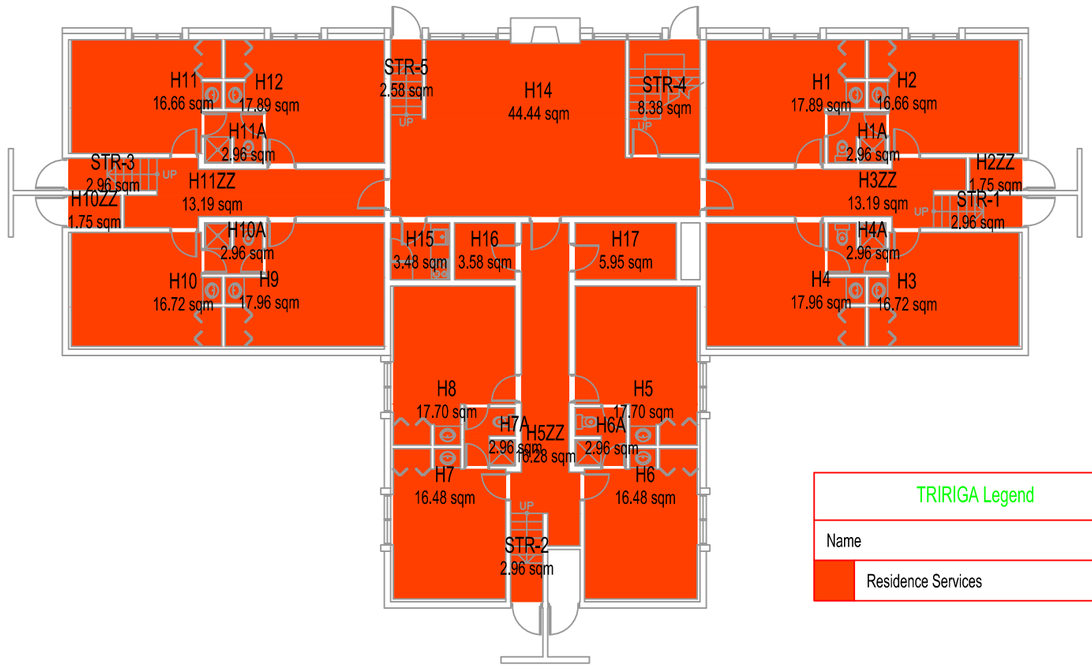


TRIRIGA Legend
Name
Residence Services

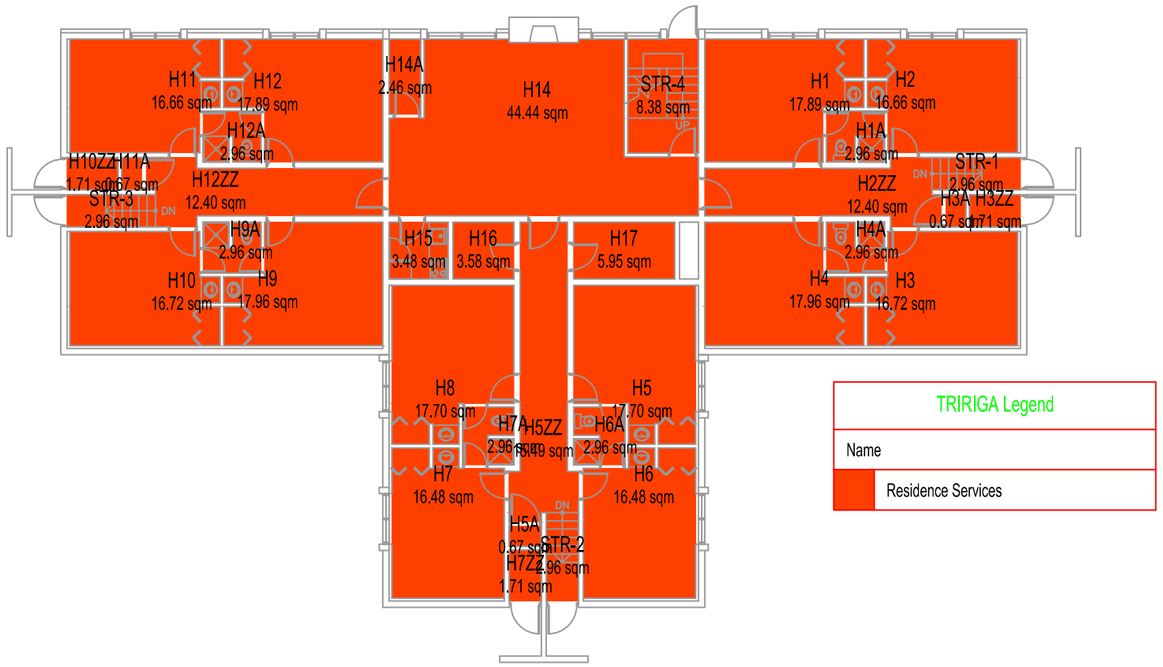
Planning & Infrastructure
Planning Services

First Floor Plan
Anderson Hall - 58215

November 17, 2005



TRIRIGA Legend	
Name	
	Residence Services

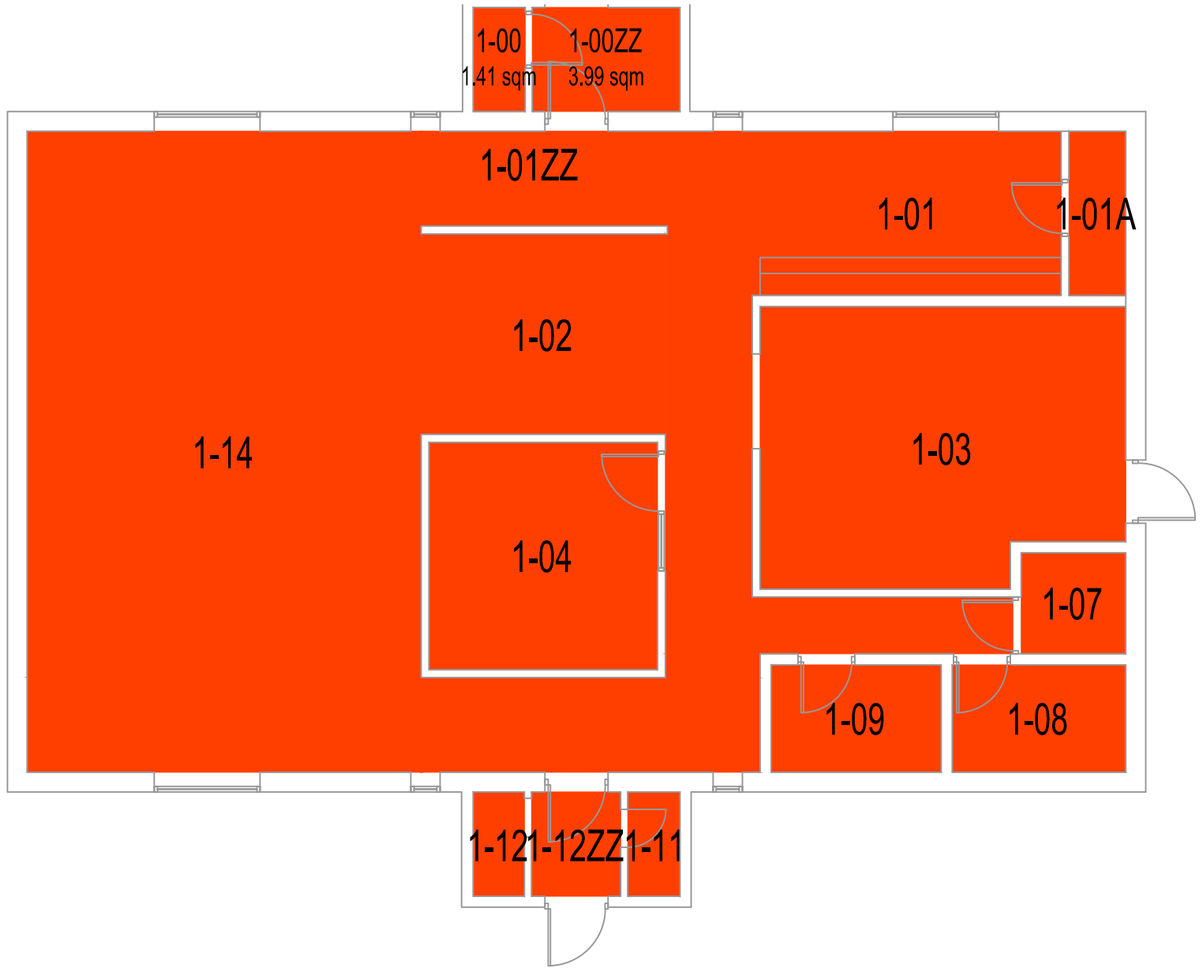


TRIRIGA Legend
Name
Residence Services

Planning & Infrastructure
Planning Services

Second Floor Plan
Bergh Hall - 58216

November 17, 2005

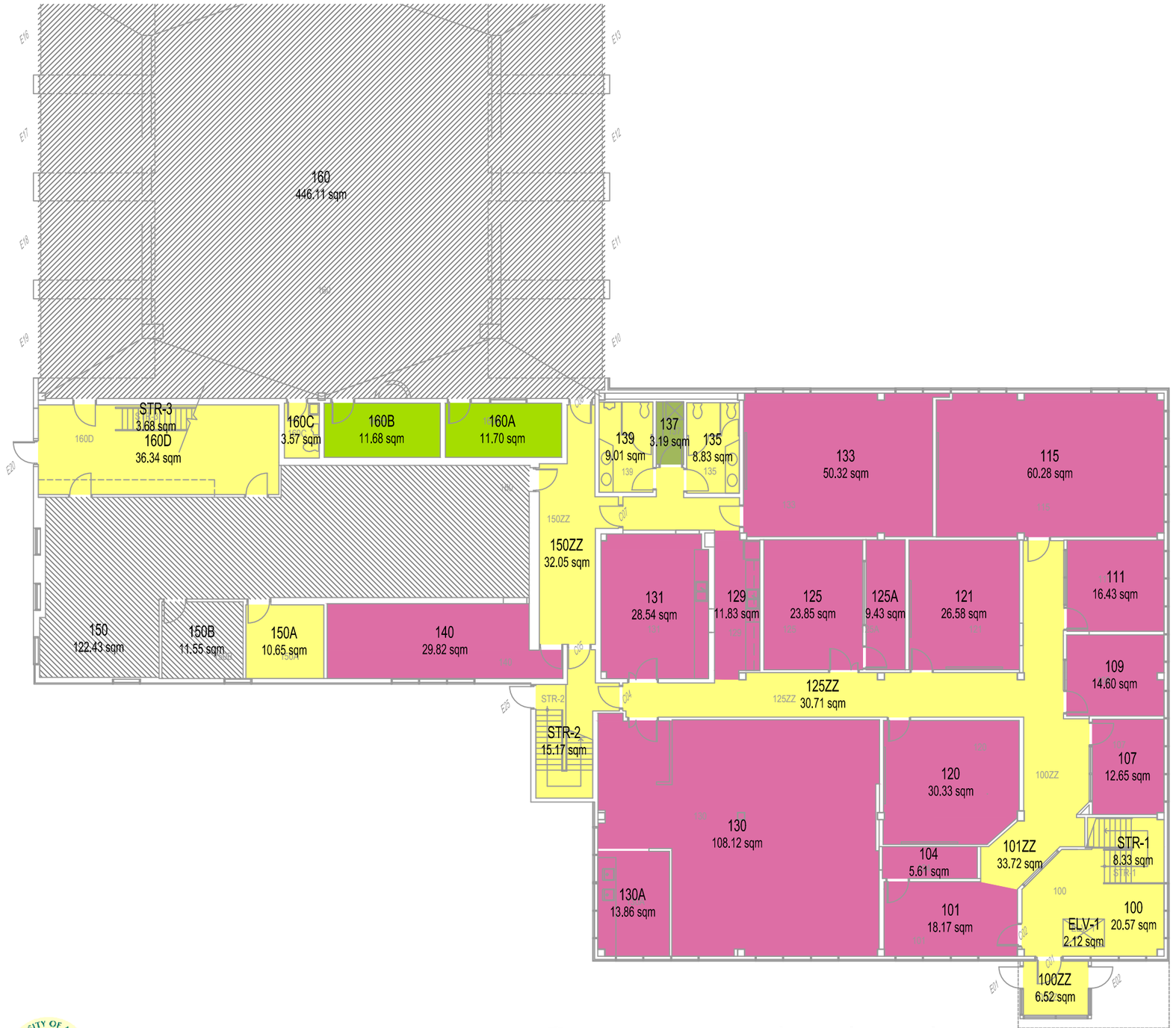


TRIRIGA Legend	
Name	
	Residence Services

Planning & Infrastructure
Planning Services

First Floor Plan
Commons Lounge - 58217

September 16, 2011

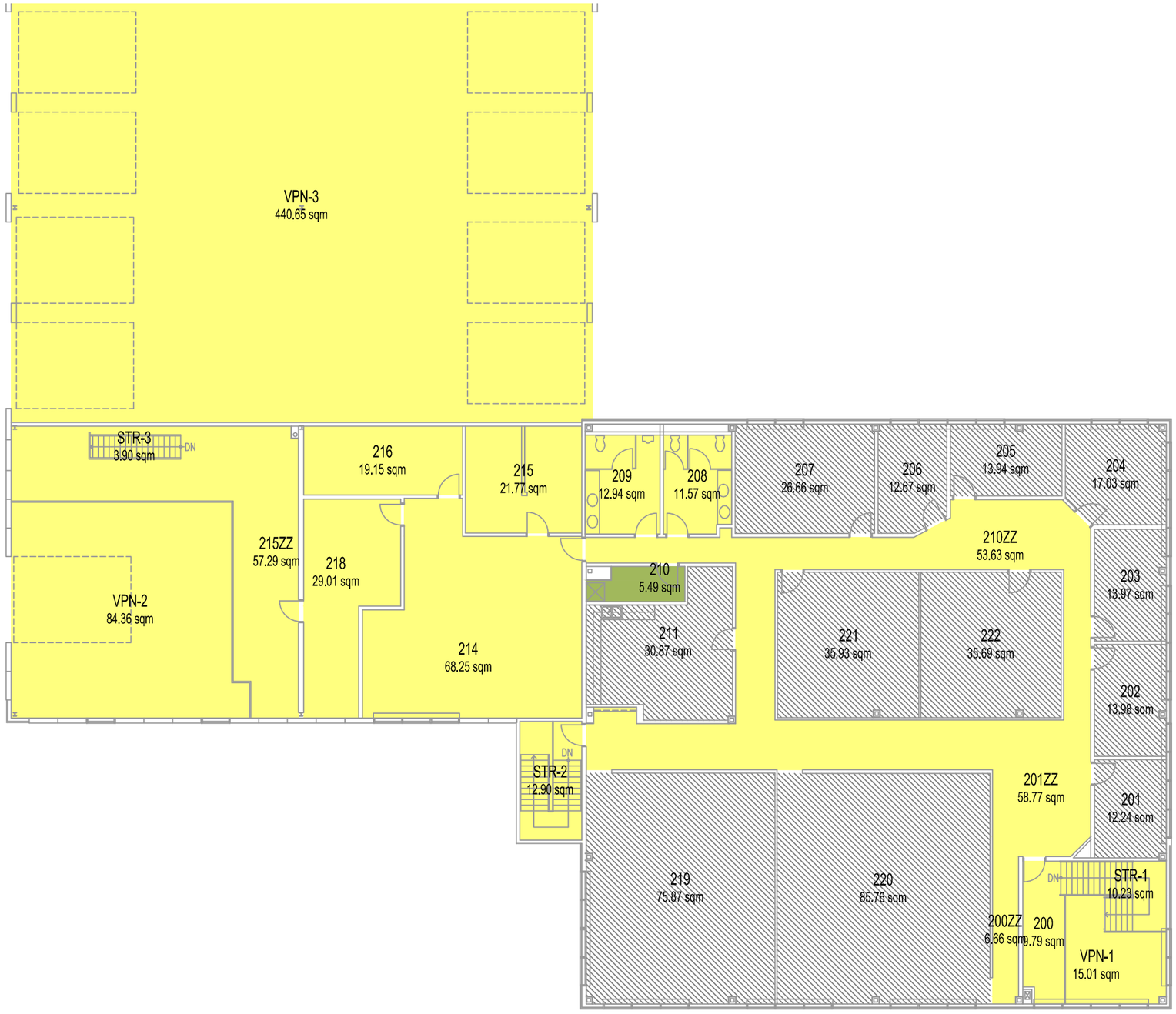


TRIRIGA Legend
Name
Augustana Faculty
Buildings and Grounds Services
Faculty of Nursing
General University Space
Operations & Maintenance
Unassigned
Multiple

Planning & Infrastructure
Planning Services

First Floor Plan
Richard Husfloen Centre - 58218

October 13, 2011

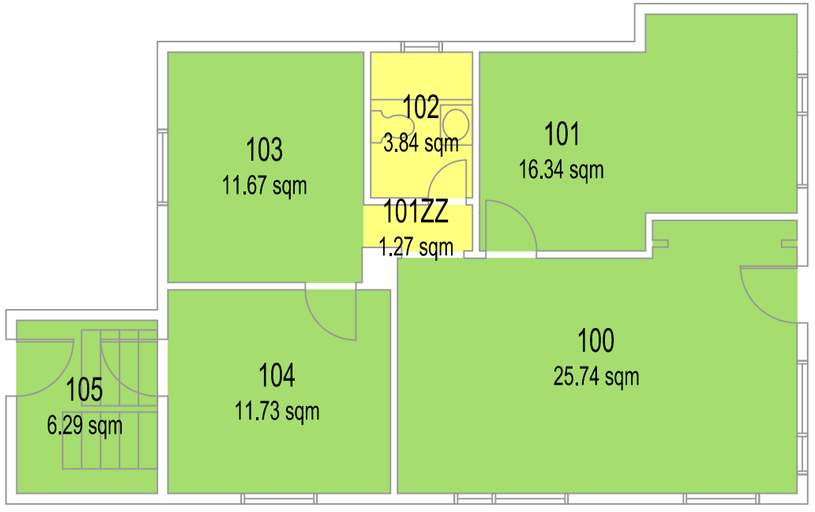


TRIRIGA Legend
Name
Buildings and Grounds Services
General University Space
Unassigned

Planning & Infrastructure
Planning Services

Second Floor Plan
Richard Husfloen Centre - 58218

September 20, 2011

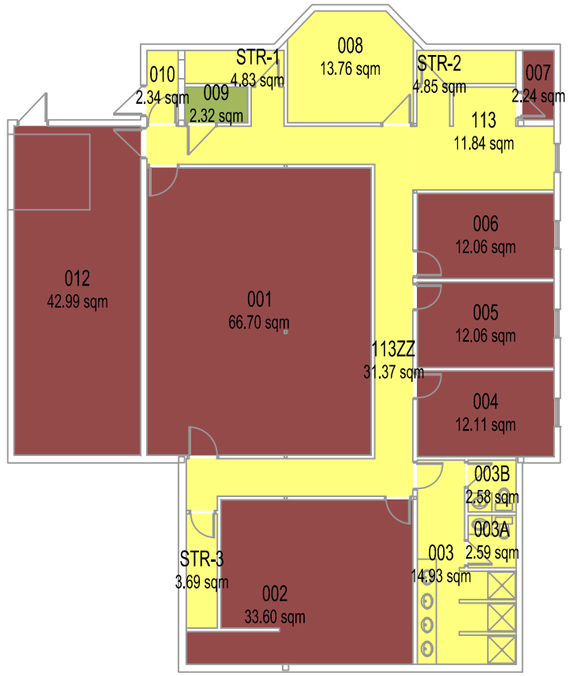


TRIRIGA Legend	
Name	
	Augustana Faculty
	General University Space

Planning & Infrastructure
Planning Services

First Floor Plan
Ronning House - 58221

October 17, 2011

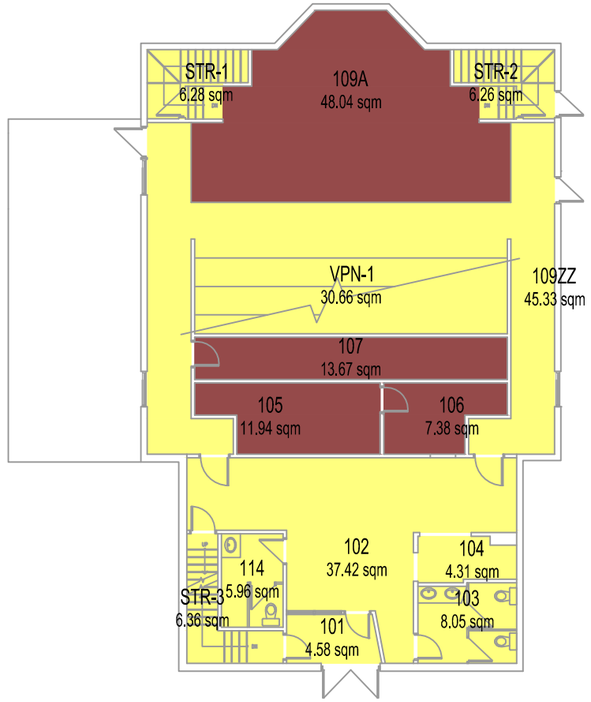


TRIRIGA Legend	
Name	
	Buildings and Grounds Services
	Drama
	General University Space

Planning & Infrastructure
Planning Services

Basement Floor Plan
Theatre Centre - 58225

September 20, 2011

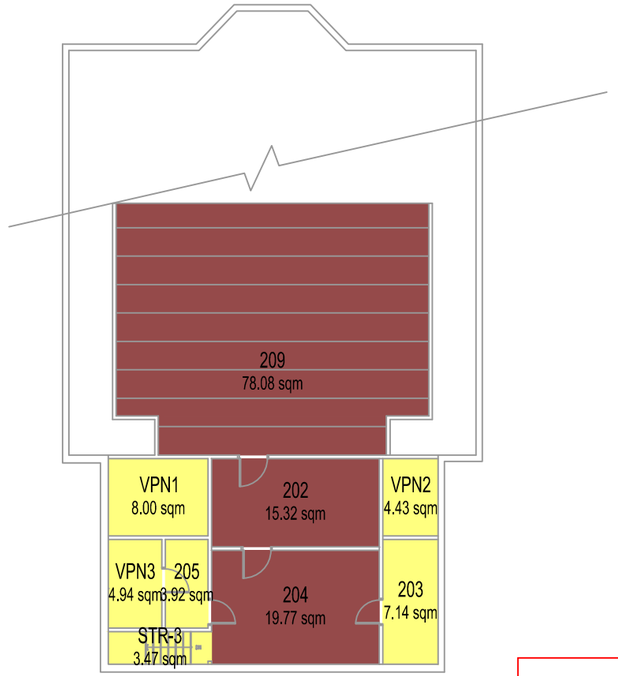


TRIRIGA Legend	
Name	
	Drama
	General University Space

Planning & Infrastructure
Planning Services

First Floor Plan
Theatre Centre - 58225

September 20, 2011

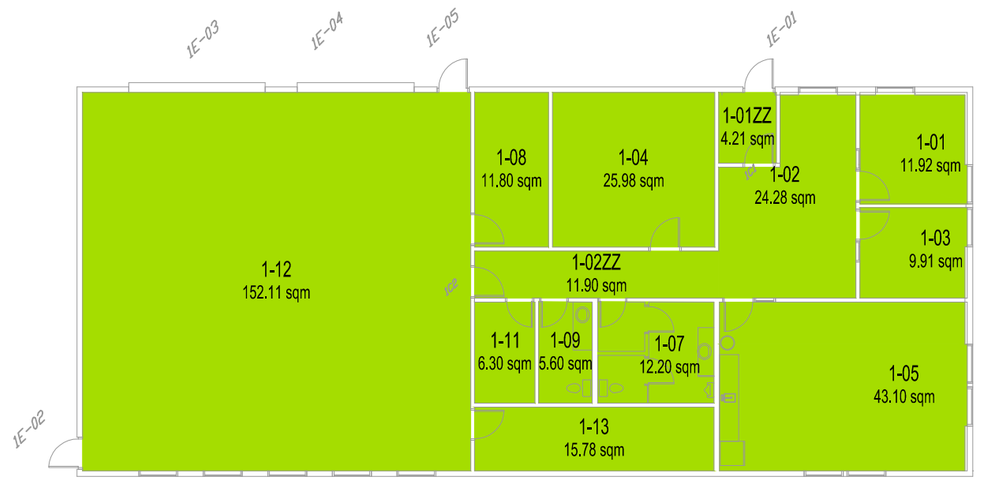


TRIRIGA Legend	
Name	
	Drama
	General University Space

Planning & Infrastructure
Planning Services

Second Floor Plan
Theatre Centre - 58225

September 20, 2011

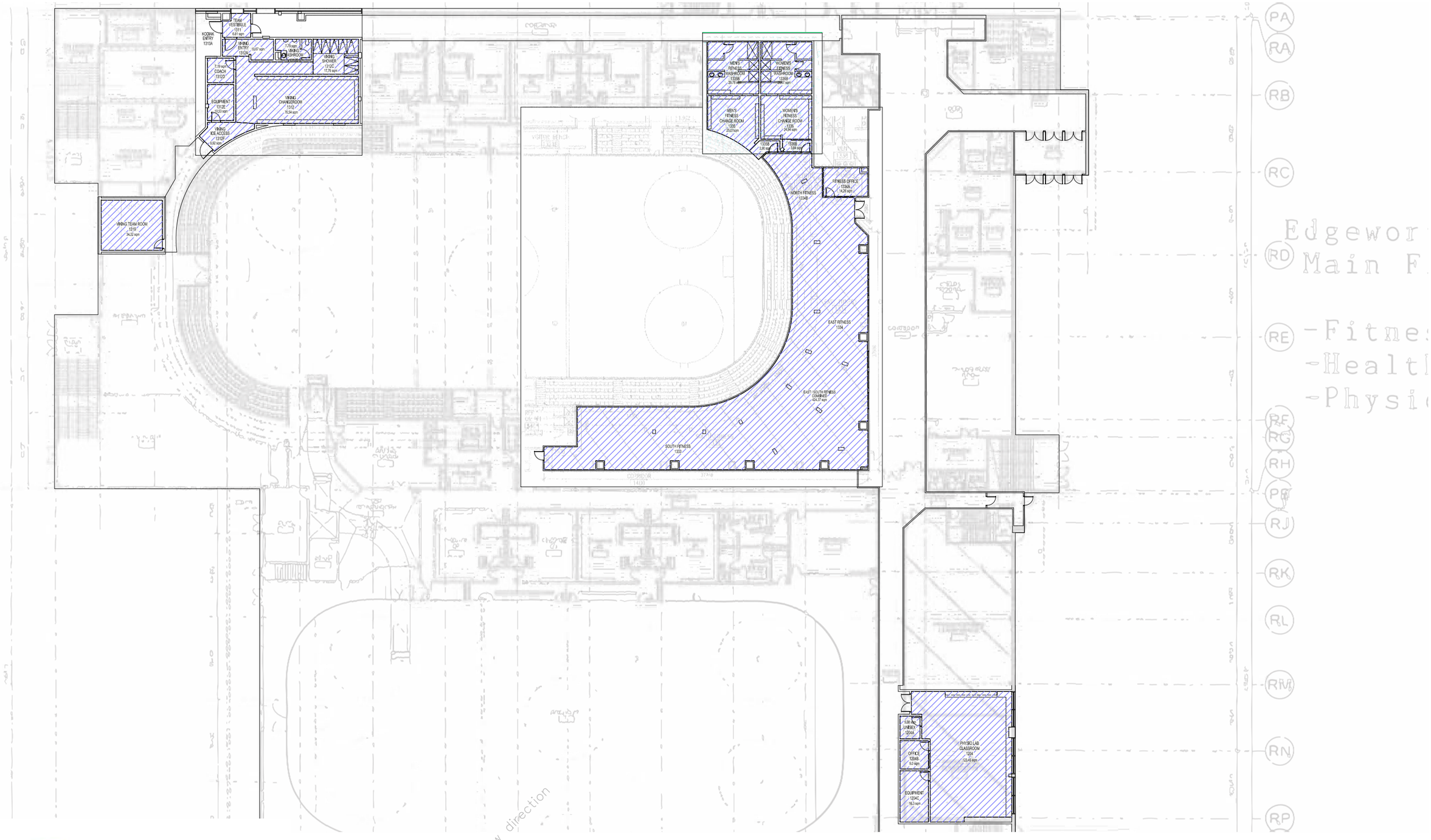


TRIRIGA Legend
Name
Operations & Maintenance

Planning & Infrastructure
Planning Services

First Floor Plan
Facilities Building - 58227

August 30, 2011



Planning & Infrastructure
Planning Services

Confirm North Arrow direction

Level 1 Floor Plan
Edgeworth Centre - Bldg

APRIL 24, 2012
Scale: 1/32" = 1'-0"

FINAL Item No. 6

OUTLINE OF ISSUE

Agenda Title: East Campus Village 89th Avenue Student Residence Project, Phase 1 – Design Development

Motion: THAT the GFC Facilities Development Committee approve, under delegated authority from General Faculties Council, and on the recommendation of Planning and Project Delivery, the proposed East Campus Village 89th Avenue Student Residence Project, Phase 1 – Design Development, being part of the design build (as set forth in Attachment 2) as the basis for further engineering and development of contract documents.

Item

Action Requested	☒Approval ☐Recommendation ☐Discussion/Advice ☐Information
Proposed by	Ben Louie, University Architect, Facilities and Operations
Presenter	Ben Louie, University Architect, Facilities and Operations Doug Dawson, Executive Director, Ancillary Services, Facilities and Operations
Subject	89th Avenue Student Residence, Project, Phase 1 – Design Development

Details

Responsibility	Vice-President (Facilities and Operations)
The Purpose of the Proposal is (please be specific)	This project will increase the amount of purpose built student residence on campus in alignment with the university's ultimate goal of accommodating 25% of students in residence housing.
The Impact of the Proposal is	The proposal is for a multi-phased student residence development in East Campus Village. For Phase 1 the new development consists of two new apartment style buildings providing a total of 244 new bed spaces. A total of 9 houses on the south side of 89th Avenue between 110th Street and 111th Street will be removed to make room for the new development. Four houses will be retained along the southside of 89th Avenue and is in accordance with the University's Preservation Plan.
Replaces/Revises (eg, policies, resolutions)	n/a
Timeline/Implementation Date	The project is ready for immediate mobilization and is targeted for completion on August of 2013.
Estimated Cost	n/a
Sources of Funding	n/a
Notes	n/a

Alignment/Compliance

Alignment with Guiding Documents	*Dare to Discover, Academic Plan (Dare to Deliver), Long Range Development Plan (LRDP), Comprehensive Institutional Plan (CIP)*
Compliance with Legislation, Policy and/or Procedure Relevant to the Proposal (please quote legislation and include identifying section numbers)	Complies with: 1. ***Post-Secondary Learning Act* (*PSLA*):** The *PSLA* gives GFC responsibility, subject to the authority of the Board of Governors, over academic affairs (Section 26(1)) and provides that GFC may make recommendations to the Board of Governors on a building program and related matters (Section 26(1) (o)). Section 18(1) of the PSLA give the Board of Governors the authority to make any bylaws "appropriate for the management, government and control of the university buildings and land." Section 19 of the *Act* requires that the Board "consider the

	recommendations of the general faculties council, if any, on matters of academic import prior to providing for (a) the support and maintenance of the university, (b) the betterment of existing buildings, (c) the construction of any new buildings the board considers necessary for the purposes of the university [and] (d) the furnishing and equipping of the existing and newly erected buildings [.] […]" Section 67(1) of the *Act* governs the terms under which university land may be leased. 2. **GFC Facilities Development Committee (FDC) Terms of Reference – Section 3. Mandate of the Committee**: "[…] ***2. Delegation of Authority*** Notwithstanding anything to the contrary in the terms of reference above, the Board of Governors and General Faculties Council have delegated to the Facilities Development Committee the following powers and authority: **A. Facilities** 1. To approve proposed General Space Programmes (Programs) for academic units. 2. (i) To approve proposals concerning the design and use of all new facilities and the repurposing of existing facilities and to routinely report these decisions for information to the Board of Governors. (ii) In considering such proposals, GFC FDC may provide advice, upon request, to the Provost and Vice-President (Academic), Vice-President (Facilities and Operations), and/or the University Architect (or their respective delegates) on the siting of such facilities. (GFC SEP 29 2003) **B. Other Matters** The Chair of FDC will bring forward to FDC items where the Office of the Provost and Vice-President (Academic) and/or the Office of the Vice-President (Facilities and Operations), in consultation with other units or officers of the University, is seeking the advice of the Committee. 3. **UAPPOL Space *Management Policy and Space Management Procedure*:** The respective roles of GFC FDC and the Vice-President (Facilities and Operations) with regard to institutional space management are set out in this Board-approved Policy and attendant Procedure. To access this policy suite on line, go to: www.uappol.ualberta.ca .

Routing (Include meeting dates)

Consultative Route (parties who have seen the proposal and in what capacity)	• March 2005 to September 2008 – 12 facilitated community dialogues with Garneau resulting the creation of the Design Guidelines for Infill Development • June 27 2011, November 21 2011 and January 10 2012 dialogues with Garneau • March 6, 2012 - Strategic Initiatives Group – Opportunity Paper (for information)

	• March 15, 2012 – University of Alberta International • March 19, 2012 – Open House Sectors 7 & 8 • March 22, 2012 – Dean of Students • March 30, 2012 – Graduate Students' Association • April 2, 2012 – Students' Union • April 3, 2012 – Concept Review with Garneau • April 26, 2012 - Facilities Development Committee – East Village Campus of 89th Avenue Student Housing, Phase 1 - Demolition, Concept and Siting plan • August 13, 2012 - Consultation meeting with representatives of Garneau Community League executive and residents within 60m from development re: design development • August 16, 2012 – Community Open House on design development • September 10, 2012 – Meeting with University of Alberta Community Consultation (UACC) reps from Garneau Community to review input commentary
Approval Route (Governance) (including meeting dates)	• Executive Planning Committee – Opportunity Paper - March 28, 2012 • Board Finance and Property Committee – CEAR – April 17th, 2012 • Board of Governors – CEAR - April 17th, 2012 • Facilities Development Committee – East Village Campus of 89th Avenue Student Housing, Phase 1- Demolition, Concept and Siting plan - April 26th, 2012
Final Approver	Facilities Development Committee approval of Design Development September 27th, 2012

Attachments:

1. Attachment 1 (Pages 1-2): Briefing Note - East Campus Village 89th Avenue Student Residence Project, Phase 1 – Design Development
2. Attachment 2 (Pages 1-56): East Campus Village 89th Avenue Student Residence Project, Phase 1 – Design Development Report
3. Attachment 3A and 3B (Pages 1-6): Community Consultation Summary

Prepared by: Ben Louie, University Architect, Planning and Project Delivery, Facilities and Operations
ben.louie@ualberta.ca

UNIVERSITY OF ALBERTA Facilities and Operations

Briefing Notes

East Campus Village 89th Ave Student Residences Phase 1 Design Development

Background

The 2012 Comprehensive Institutional Plan (CIP) identifies the expansion of the student residence portfolio as a strategic priority for the University of Alberta.

Ancillary Services under the portfolio of Facilities and Operations, is proposing to construct a multi-phased student residence development in East Campus Village. Under Phase 1, the University proposes to construct 244 new bed spaces in two apartment-style buildings on the south side of 89th Avenue between 110th and 111th Streets. In addition, a multipurpose room will be created connecting the western met apartment block with the existing International House residence to facilitate integrated use and program development opportunities.

In support of the CIP, the project will provide individual, self-contained apartments in multiple bedroom configurations designed to be attractive to international, rural and graduate students. The buildings will contain the appropriate amount of amenity and programmable space required to deliver support services for students and foster a sense of community.

As part of the community consultation process, the University has provided design options to the community for input in stakeholders meetings, a Community Open House held on August 16, 2012, and most recently a September 10 meeting with Garneau Community. The design development document being presented to FDC is in alignment with the Design Guidelines for infill Development - Garneau and consistent with the concept plans approved by FDC on April 26, 2012. The proposed infill development aims to respect the existing tree-lined street grid, front yard set-backs, pedestrian movements and street entrances off of 89th Avenue, as well as the character and style of architecture in the neighbourhood. Some of the neighbourhood architectural elements which have been incorporated into the concepts include:

- Articulation of the front façade to soften and break up the continuous front-face/massing along 89th Ave.
- Window styling to reflect residential character of the neighbourhood
- The combination of gabled roof and mansard roof is styled to reduce roof line and mirror adjacencies as buildings transition from the Garneau neighbourhood to University Sector 7
- Building materials and colour palette to reflect existing character and provide sustainable and durable end product an inviting welcome
- Canopied entrances to create a porch-style entrance and provide protection from the elements
- Landscape plans compliment the development as well as supporting social gathering and place making

East Campus Village 89th Ave Student Residences Phase 1
Design Development

Construction

- Execute the Design Build contract with the preferred proponent
- Site work commence September 2012
- Project completion August 2013
- Occupancy September 2013

Recommendation

That FDC approve the design development for the East Campus Village 89th Ave Student Residences Phase 1 as per motion presented in the Outline of Issues.

THE 89th AVENUE STUDENT HOUSING DEVELOPMENT - PHASE 1

ARCHITECTURAL DESIGN

A.1 Introduction

The purpose of this Document is to convey the fundamental design philosophy for The 89th Avenue Student Housing Development – Phase 1.

It is the design intent to provide buildings that are contextual to the neighbourhood, energy efficient, reliable, require minimal maintenance and meet the owners' requirements.

A-2 Architectural Concept

The 89th Ave Student Housing will be designed to respond to the overall design goals and objectives of enhancing a positive student experience, to support the achievement of academic goals and to build community.

The two Residence buildings are of varying sizes but similar in design. The basic planning concept consists of a basement and three or four storey double loaded corridor design. The basement level is 1.5 m below grade and the main floor level 1.5 m above grade. The suites on all floors are serviced by a common double loaded corridor which is accessed from a common main floor lobby via stair or elevator. An intercom system is provided in the main lobby for after-hours and visitor access. Security and residence safety are important design considerations.

All floors have a common Social Room to facilitate group conversation, reading, games and watching television. The elevator lobby is to have glazing and views to the exterior and be enlarged to promote casual meeting and conversation. The lower or main floor of each building will have a large common social space and laundry facility which will provide for a variety of activities including, group conversation, reading, exercise, games, laundry and watching television. The room will open onto an exterior patio area which will be equipped to facilitate barbeques and outdoor activities.

The individual suites will offer a variety of layouts in 4-bedroom and 2-bedroom configurations. The individual suites include private washrooms, showers and kitchen facilities. Generous sized windows are to be located in all inhabited areas providing an abundance of natural daylight. Individual temperature control is provided in each suite to ensure optimum comfort of the occupant.

Barrier free access is provided to the main lobby, social rooms, and all floor levels. A total of two (one per building) fully equipped barrier free units will be provided.

The buildings are contextual to the community and will be designed with reference to a craftsman residential vernacular incorporating sloped roof elements, dormers and building articulation. The proposed exterior finish materials are to be residential in nature and will provide a consistent aesthetic compatible with the existing houses in the community.
The overall project will be designed to a Green Globe, 3 Globe Standard and include many energy conserving design elements such as:

- Externally insulated structure and high quality air barrier membrane
- High efficient glazing systems and thermally broken frames
- Cooling is provided for corridors and common spaces only. Individual suites will be provided with ventilation and operable windows
- Energy efficient light fixtures
- High levels of day lighting in the suites

The 89th Avenue Student Housing buildings will be designed using the *Design Guidelines for Infill Development-Garneau* document. The goal of the document is the production and preservation of a mix of styles and types of housing appropriate to the community and to establish a planning and design framework for the development of architectural and landscape elements in the context of the neighbourhood, the site and for the proposed development.
The residence building design will respond to the guidelines as follows:

- Maintain the scale and general character of the existing neighbourhood-
- When a larger scale infill project is proposed, the front and rear façade should be articulated to reference the community's residential scale and rhythms.
- The use of materials, glazing, roof treatments, fascias, architectural details and components shall enhance the character of the streetscape and architecture of the overall area, and be appropriate to the neighbourhood. A residential scale is preferable.
- Develop site/building block plans for a variety of student housing accommodation options…this implies a variety of unit types sizes and possible combinations.

A-3 Architectural Standards

A.3.1 Minimum Acoustic Ratings

Floor to Floor – STC 64
Suite Party Wall - STC 57
Suite to Corridor- STC 52
Suite to Elevator- STC 56
Bedroom to Living Room- STC 36
Bathroom to Living/Sleeping Rooms- STC 36

A.3.2 Minimum Fire Resistance Ratings

Floor to Floor – as per Code
Suite Party Wall – 45 min
Suite to Corridor- 45 min
Suite to Elevator- as per code
Exterior Wall- as per code
Service and Storage Rooms- 1 hour
Service shafts – as per code

A.3.3 Building Construction

The Residences will be designed using high quality materials and construction standards suitable for a collegiate environment. Materials incorporating a high level of recyclable content will be specified, where appropriate, in keeping with good sustainable building practice.

The buildings are to be of combustible or non-combustible construction as permitted by the Alberta Building Code.

.1 Exterior Materials

<u>Residence Buildings</u>

Cementitious Exterior Cladding

- Contextual- mimics historical painted wood
- Maintenance friendly
- Fire resistant

Windows

- 1” sealed units in a PVC frame
- Maintenance friendly
- Energy efficient

Masonry

- Reclaimed Clinker brick (quantities to be confirmed)

Roofing

- Asphalt shingles on pitched roofs

- SBS membrane on flat roofs

Flashing and soffit

- Prefinished Metal/Aluminum
- Maintenance friendly

Link Building

Curtainwall glazing system and prefinished metal panel on canopies.

.2 Major Assemblies

Exterior Wall Construction – R 20 minimum
Exterior walls are to be designed using rain screen principals. The exterior building envelope will incorporate rigid insulation and an air barrier membrane applied to the exterior of the wall sheathing. The air barrier membrane will be of a peel and stick or torch on variety. Exterior cladding will consist of a combination of fibre cement board, masonry, or other low maintenance materials. Stucco or EIFIS systems are not permitted.

Roof Construction- R 30 minimum
The flat roof system will consist of a 2 Ply SBS Membrane on 25mm fibre board, rigid insulation and vapour barrier membrane applied to the roof sheathing. The roof assembly and details are to meet all standards of the ARCA and come complete with a 5 year ARCA warranty and 10 year membrane manufacturer's warranty. Sloped roofs are to utilize 25 year asphalt shingles complete with ice and water shield protection. Gutter and downspout are to be prefinished aluminum.

Floor Construction
38mm Gyp Crete Topping is to be provided for all floors framed of wood.

Windows
Windows are to be a minimum 25 mm sealed units, Low E coating, in thermally broken frames. Windows are operable to allow for natural ventilation. Frame material to be Vinyl, PVC or Metal clad wood.

Doors and Entrances
Main vestibule entry to be anodized aluminum or insulated metal in thermally broken frames.
Exterior doors are insulated steel doors in thermally broken steel frames.
Corridor to Suite Doors are Hollow Metal doors in Pressed Steel Frames.
Interior Service Room Doors are Hollow Metal doors in Pressed Steel Frames.
Suite Bedroom and Washroom to be Solid Core Wood Doors and Frames.

Millwork
All millwork is to be constructed to AWMAC Premium Grade.

Construction
Minimum core thicknesses and composition as follows:
.1 Drawer bottoms, 12 mm particleboard;
.2 Drawer sides and backs, 12 mm particleboard;
.3 Drawer fronts, particleboard 19 mm;
.4 Doors, particleboard 19 mm;
.5 Lower case backs against walls, Poplar Plywood 10 mm;
.6 Upper case backs against walls, Poplar Plywood 10 mm;
.7 Shelves, fixed and adjustable, Poplar Plywood 19 mm;
.8 Counter top cores, Poplar Plywood 19 mm with 38 mm edge, for wet areas ensure that all cut-outs are sealed prior to installation of sinks, primer is not considered to be an appropriate sealer;
.9 Backsplashes at all locations: Poplar Plywood 19 mm;
.10 All other work Poplar Plywood, 19 mm.

Finishes:
Suite millwork:
.1 Doors and drawer fronts: thermafoil.
.2 Gables and insides: white melamine.
.3 Counter tops: HGL plastic laminate on tops and front and BKL on underside.
.4 Backsplashes: VGP plastic laminate.
Commons millwork:
.1 Doors(fronts, edges, backs) and drawer fronts(fronts and edges): vertical grade plastic laminate.
.2 Gables and insides: white melamine.
.3 Counter tops: HGL plastic laminate on tops and front and BKL on underside.
.4 Backsplashes: VGP plastic laminate.

Interior Finishes
Walls and Ceilings- Painted Gypsum Board
Suite Floors- Sheet Vinyl- Plank solid vinyl: to ASTM F1700.
.1 Class III, Type B, 2.5 mm thick.
Social Space Floors- Sheet Vinyl- Plank solid vinyl: to ASTM F1700.
.1 Class III, Type B, 2.5 mm thick.
Corridor Flooring- Carpet tile
Entry Vestibule/ Lobby Flooring- Ceramic Porcelain Tile-
Porcelain tile: to CAN/CGSB-75.1, ANSI A118.4, Type V, Class MR (02 -3.0%):
Service Room Floors- Sheet Vinyl
Stair Treads and Landings- Vinyl
Doors and Frames – Painted

Window Covering- All Rooms
.1 Acceptable Product: Vertican BBV-700 Vertical Blind or equal.
.2 Options:
.1 Fabric free hang

.2 Mounting clips: ceiling clip or wall bracket as required.
.3 Valance: Standard

Elevator

The goal is to obtain high quality, environmentally friendly and energy efficient elevator equipment suitable for long term operation and use in the building. Elevator equipment shall have durable and easily maintained finishes, fixtures and components.

STRUCTURAL DESIGN

S.1 General

This section describes the recommended overall structural systems proposed for the 89th Avenue Student Housing Development- Phase 1 in Edmonton, Alberta and the applicable building code requirements that govern the design.

The structural systems are to be developed to be economical, and responsive to the architectural requirements for the building within the framework of environmental sustainability.

The design of all structural systems will meet or exceed all applicable CSA Standards, thus providing a safe environment for its occupants for years to come.

S.2 Design Requirements

The structural systems will be capable of sustaining the following loading requirements:

Typical Floor:	Dead Load =	4.2 kPa	
	Live Load =	1.9 kPa	(Suites)
	Live Load =	4.8 kPa	(Common Areas)
	Live Load =	4.8 kPa	(Mechanical / Service Areas)
Roof Structure:	Dead Load =	1.2 kPa	
	Snow Load =	1.46 kPa + Snow Drift	
	Important Factor (I_S) =	1.0	

Appropriate snow piling will also be incorporated into the roof design due to difference in roof heights.

The structural design will incorporate the actual anticipated loads in the various designated areas, which are unique to the building occupancy, and all equipment loads will be individually considered.

S.3 Lateral Load Resistant Systems

The main lateral load resisting elements of the building will be designed using the following parameters:

Wind

Reference Hourly Wind Pressure	1/50	0.45 kPa
Important Factor (I_W)	1.0	

Earthquake

Peak Ground Acceleration 0.06

5 % Damped Spectral Response Acceleration Values, Sa(T)

- Period = 0.2 s Sa(0.2) = 0.12
- Period = 0.5 s Sa(0.5) = 0.06
- Period = 1.0 s Sa(1.0) = 0.02
- Period = 2.0 s Sa(2.0) = 0.01

Site Class	As per geotechnical report
Acceleration Based Site Coefficient (Fa)	Site Class dependent
Velocity-based Site Coefficient (Fv)	Site Class dependent
Importance Factor (I_E)	1.0
Force Modification Factors	
Structural Steel Braced Frames	1.0

S.4 Design Criteria

The structural design will be in accordance with the following codes and standards:

- Alberta Building Code 2006
- National Building Code 2006
- Reinforced Concrete Design CAN/CSA-A23.1 / A23.2 / A23.3
- Cold Formed Steel Structural Members CAN/CSA-S136
- Engineering Steel Design CAN/CSA-S16

S.5 Construction Materials

The following materials will be utilized .

Concrete

	Minimum Compressive Strength at 28 days (MPa)
• Foundations	25
• Conventional Slab-On-Grade	25
• Walls	25
• Concrete Topping on Steel Deck	30

- Air entrainment will be used for concrete exposed to the atmosphere or cast against the ground.
- Type GU hydraulic cement will be used for all concretes. Coordinate with recommendations in the geotechnical report.
- Grade 400 reinforcing steel conforming to CAN/CSA-G30.18-M92 will be specified for reinforced concrete.

Cold Formed Steel Framing

- Cold Formed Steel framing will conform to the requirements of CAN/CSA-S136.

Steel Framing

- Steel framing will conform to the requirements of CAN/CSA-S16.

MECHANICAL DESIGN

M.1 Introduction

The purpose of this document is to convey the fundamental system design philosophy for The 89th Avenue Student Housing - Phase 1. Mechanical systems include but are not limited to the following major systems:

- Heating system
- Ventilation system
- Storm sewer system
- Sanitary sewer system
- Domestic hot/cold systems
- Natural gas system
- Exhaust air systems

It is the design intent to provide mechanical systems that are energy efficient, reliable, require minimal maintenance and meet the owners' requirements.

M.2 Design Conditions

Criteria and Guidelines

The mechanical systems for the building will be designed and installed to obtain the best possible building occupant comfort, with an acceptable capital expenditure. The design will strive for optimum energy consumption and economical operation. This shall be achieved using modern mechanical systems and equipment utilizing energy conservation techniques and energy management control systems.

The mechanical system will be designed to meet or exceed Green Globe, 3 Globe, standard.

Mechanical systems would be designed in accordance with all applicable codes and standards. The design will be based on the Owners' design requirements, the Alberta Building Code, National Plumbing and Drainage Regulations, The Model National Energy Code (MNEC) for buildings, and the latest edition of ASHRAE.

Design Conditions
The design will be based on the following outdoor conditions.

Summer
- Outdoor Air Temperature: 30°C Dry Bulb
  20°C Wet Bulb

Winter
- Outdoor Air Temperature: -38°C Dry Bulb

Indoor Air Ambient Temperature:
Room temperatures will be controlled within a winter/summer range of 22°C to 24°C.

Ventilation
Ventilation will be provided based on the Alberta Building Code and the latest edition of ASHRAE.

- Resident Suites — 1/2 Bedroom - 75 cfm
  4 Bedroom - 100 cfm
- Common Spaces — 15 cfm/person

Noise Criteria

Common Areas	NC 35 – NC 40
Resident Suites	NC 25 – NC 30
Service Spaces	NC 40 – NC 45

Air Filtration
All supply air ventilation systems will incorporate filters with a minimum efficiency of MERV 13.

Green Globe Standards

The Green Globe building rating system for new construction projects will be followed to work toward a minimum Three Globe certification.

Items which will be pursued to obtain the highest possible rating include:
-Domestic water use reduction by way of water conservation plumbing fixtures and no landscape irrigation.
-Optimization of energy performance by way of high efficiency equipment and heat recovery.
-Commissioning of all mechanical systems and equipment.
-Providing a quality indoor environment with systems that introduce a high volume of outdoor air, use of non CFC equipment, compliance with ASHRAE ventilation standards and systems which provide thermal comfort and space condition monitoring.
-Reduce the potable water heating requirements by introducing a potable water thermal reclaim system to offset the domestic hot water use.

M.3 Mechanical Systems

M.3.1 Site Services

Sanitary and Storm Service
Sanitary and storm sewers will connect to the services provided by the University. Catch basins on site shall collect storm water.

Water Service
A water supply will connect to the service provided by the University.
Fire hydrants will be provided on the site.

Gas Service
A natural gas service will be provided to the building by the University.

M.3.2 Plumbing System

Sanitary System
A sanitary line from the building service will run below slab at minimum 2% slope connecting to all fixtures throughout the building.

Fixtures will be commercial / institutional quality, barrier free type plumbing fixtures where required. Water closets will be low volume dual flush tank type. Lavatories will be china type c/w lever handle faucets.

Connections provided to all residential style laundry equipment.

Storm System
A storm line will extend from the building service, under slab and throughout the building, connecting to roof drains and the deck drains.

Domestic Water System
A domestic cold water line will be provided from the main service riser c/w backflow preventor and meter assembly for the building domestic system.

High efficiency condensing gas fired hot water tanks will be provided for the building.

In-line pumps will be provided for the domestic hot water recirculation system.

Cold, hot and hot water recirculation lines will be extended throughout the building. Included will be all plumbing fixture connections.
A separate cold water supply will be provided to the resident showers to provide tempered water from the thermal reclaim units.

Exterior Non-freeze wall hydrants will be provided around the building perimeter.

Natural Gas Piping System

Natural gas lines from the meter assembly will be provided to all gas fired equipment throughout the building.

M.3.3 Heating

Base heating system will include multiple gas fired high-efficiency near-condensing heating water boilers and a distribution system as required. Piping distribution will incorporate a primary / secondary system with in-line heating pumps to circulate boiler water through the building. System will include expansion tank, air separator, cartridge filter, chemical feeder, low water cut offs, flow switches, and make-up water assembly.

Resident rooms will be provided with perimeter heat throughout the building.

Commercial quality baseboard radiation c/w isolation and control valves, air vents and drains will be provided in service areas.

Force flow type cabinet heaters will be provided in vestibules.

Overhead hot water unit heaters in storage rooms, and service areas.

Each resident suite, specific purpose, and larger spaces will have individual thermostatic control.

M.3.4 Ventilation System

Resident suites - Outdoor roof mounted custom built unit will provide 100% outdoor air ventilation, coupled with exhaust system c/w air-to-air heat exchangers for energy recovery. Units to consist of supply fan, exhaust fan, filters, and energy recovery heat unit.

Ductwork will be routed through the attic space to service shafts connecting to supply outlets in all areas.

Air tempering – An integral air cooled condensing unit on the roof will be provided to serve the Dx coil for the indoor ventilation unit.

The ventilation system for the Resident Suites will be based on the provision of a system that supplies 100% outside air supply and direct exhaust from the washrooms and food preparation areas at all times to achieve a negative pressure relationship to the corridors.

Supply to each of the rooms will be at the ceiling level or high sidewall.

M.3.5 Exhaust System

Heat recovery exhaust fan systems will be provided to positively exhaust air from various areas of the building and direct the air to the exterior.

Duct connections from ceiling grilles will exhaust the resident washrooms and kitchens through combination exhaust / make-up air heat recovery units to allow preheat of the outdoor ventilation air. Kitchen hoods will consist of charcoal range hoods to eliminate odours and grease migration.

Exhaust ducts from the laundry clothes dryers will be extended to the exterior.

M.3.6 Insulation

Insulation for ducts and piping will be provided as specified below. Formed rigid mineral fibre insulation for piping, Duct insulation will be rigid or flexible blanket material and vapour barrier jacket on all insulation materials on cold pipes and ducts.

All insulating material, flexible connectors, combustible coverings, etc., will have flame spread ratings and smoke development classification not exceeding current code requirements.

All exposed insulation will have canvas recovery jackets.

Combustion air and fresh air – Foil faced vapour insulation throughout.

Local Exhaust ducts – Foil faced vapour proof insulation within 1800mm of roof or wall outlet.

Central Exhaust ductwork – Acoustic insulation.

Plumbing vents – Foil faced vapour proof insulation within 1800mm of roof outlet.

Acoustic lining – Acoustic lining on all fan intake and discharge ductwork.

Supply air ductwork – Thermal with foil faced vapour proof insulation.

Heating piping – Thermal insulation throughout except within radiation enclosures.

Domestic hot and cold and recirc piping – thermal insulation throughout.

Insulation thicknesses will be in accordance with the MNEC.

M.3.7 Fire Protection

A complete wet sprinkler system will be provided throughout the entire building, designed, installed and zoned in accordance with NFPA13 codes.

Hand held fire extinguishers will be provided in accordance with NFPA10 and to local authority's satisfaction. Multi-purpose type, mounted on wall brackets in service areas and in cabinets in public areas.

M.3.8 Control System

A qualified control contractor will provide all components, shop drawings, and installations.

Individual thermostats will be provided for each of the spaces and zones.

Central systems will be provided with complete control of the supply air temperature.

The boilers will be controlled by means of a reset control strategy to vary the heating water temperature in response to outdoor temperatures and space temperature demands.

Variable frequency motor drives will be provided for fans and pump motors, where applicable.

State of the art electric devises will be utilized for control of room temperatures.

Central monitoring shall be provided to monitor operation from the University's Central System.

M.4 Outline Specifications

M.4.1 General Requirements

<u>General</u>

The Mechanical Contractor will include all labour, materials, equipment, services and other items required for the supply and installation, testing and putting into operation of a complete mechanical system.

All materials will be new and free from defects.

Copies of shop drawings of all equipment proposed for installation will be issued for approval prior to ordering.

All Work will conform with all applicable codes and standards and to the satisfaction of the authorities having jurisdiction

All mechanical permits will be provided.

M.4.2 Piping

Piping systems to be designed to ASHRAE Standard and as approved by the governing authority.

The quality of piping and fittings shall be determined by the following specification			
Service Description	Size	Pipe Description	Fittings and Joints
Storm, Sanitary Drainage & Vent Piping (above grade)	all sizes	DWV Copper Cast Iron	Wrought or Cast with 50-50 Solder Joint Mechanical Joint
Storm, Sanitary Drainage & Vent Piping inside building (below grade)	all sizes	Plastic ABS-DWV or PVC-DWV	Plastic c/w Solvent Joint
Domestic Water Piping (above grade)	all sizes	Type 'L' Hard Copper Cross Linked Polyethylene	Wrought or Cast with Lead Free Solder Joints, Crimped O-ring Gasket Insert Crimp Ring Insert Fitting
Gas Piping (above grade	all sizes	Schedule 40, Black Steel	Malleable Screwed or Butt Welded Joints
Heating Piping	all sizes	Copper Type 'M' Schedule 40, Black Steel	Wrought Copper with 50-50 Solder Joints. Malleable Screwed up to 50mm Butt Welded or grooved Joints over 50mm

Pipe Supports

Hangers for piping will be adjustable ring or clevis type. Steel for Ferrous piping and copper for copper piping. Trapeze type hangers will be used where several pipes run at the same elevation.

C-Clamps will be used for fastening hangers to joist or install hanger rods in roof structure as approved by the Engineer.

Pipe hangers will be spaced at maximum intervals of 1.8 metres for 20mm pipes, 2.7 metres for 300mm pipes, and at 3 metres for 80mm and 100mm pipes.

All horizontal cast iron pipe above ground will be supported at least once in each length.

Pipe under the building in the fill will be supported continuously, by hanging from the underside of the structural slab.

Valves, Floor Drains & Sleeves

Bronze body full port ball valves will be provided for isolation and drains for all systems, sizes up to 50mm, butterfly valves for sizes 65mm and over.

Floor drains in janitor, laundry and mechanical rooms. Drains will be cast iron body with removable strainer.

Sleeves will be provided by the mechanical trade for all pipes passing through walls, beams, partitions, etc. Sleeves through walls will be standard weight steel pipe.

Piping Installation

Pipes will be installed in such a way as to conserve head room and interfere as little as possible with free use of the space through which they pass.

All pipes which are to be concealed will be installed neatly and closely to the building structure so that the necessary furring can be kept as small as possible.

A minimum of 2% slope for pipe inside the building on sanitary and storm drainage piping to be provided.

Hangers and supports will secure pipe in place, maintain grade by adjustment, provide for expansion and appear neat. All supports will be strength and rigidity to suit loading without unduly stressing the structure.

All piping installed will allow for expansion and contraction. Flexible pipe connections, expansion joints and compensators, pipe loops, swing joints and offsets will be provided.

Steel and copper pipe will be isolated with insulated couplings.

Every fixture shall have its own isolation valves, trap and vent in accordance with local plumbing regulations. All vents will extend to a minimum of 100mm above finished roof.

Vacuum breakers on all hose connections and backflow preventers on the main supply to the building and on all domestic water connections will be provided, where required by code.

Cleanouts will be provided for house drains in all straight runs of sewers, at the end of all branches, at the base of all riser lines, on all exposed or accessible traps (except water closets) further at the entry of the building at all points in the system where so indicated or called for, or where necessary to remove obstruction. Cleanout will have brass ring and cover to suit floor finish. Cleanouts will be in accessible locations.

Hot water heating systems will be cleaned and chemically treated.

Balancing of hydronic systems is to be provided.

M.4.3 Ducting

Duct Manufacturing
Ducts will be constructed of galvanized sheet metal sufficiently braced to prevent rattling or breathing. Duct systems shall be of sizes required to produce capacity of equipment installed, with galvanized hangers spaced not over 8' apart. Gauges and joints and bracing shall be as shown on Table 1 of the SMACNA Manual Latest Edition.

All laps will be smooth and in the direction of air flow. Sheet metal screws will be provided on low pressure ductwork only.

All rectangular ducts will be constructed by breaking the corners and grooving longitudinal seams using the Pittsburg-seam or other approved airtight seam. All elbow and transformation pieces will be constructed using Pittsburg corner seams or double seam corners.

All slips will not be less than one gauge heavier than the duct material and flange joint may be considered as girth reinforcing. Open corners will not be accepted. All ductwork joints will be caulked with approved type sealer or foil tape.

Duct Tees, Bends, Elbows, Hangers & Access Doors
All tees, bends and elbows will be constructed with a radius of not less than 12 times the width of the duct on centerline. Where this is not possible, and rectangular elbows are used, approved type air foil turning vanes will be provided. Changes in duct sizes will be gradual, not exceeding 15 degrees wherever possible.

All necessary anchors and guides to permit free expansion and contraction of ducts will be provided. Hangers and supports for covered ducts will not injure or pierce the insulation.

Hinged access doors will be provided for inspection and cleaning before and after all filters, fire and manual dampers and elsewhere as indicated on the drawings. Access doors will be rigid, close-fitting locking devices.

Balancing & Fire Dampers, Breeching & Chimneys

Balancing dampers will be provided complete with indicators at all points on supply and return and exhaust systems where branches are taken from larger ducts, also where required for proper air balance.

ULC labelled and approved fire dampers and fire smoke dampers will be located at all points where ductwork penetrates fire rated assemblies.

All breeching and chimneys will be provided for all gas fired equipment as required in accordance with CSA standards and local codes.

ELECTRICAL DESIGN

E.1 Introduction

The purpose of this document is to convey the fundamental system design philosophy to the Owner and Design Team.

It is the design intent to provide electrical systems that are energy efficient, reliable, require minimal maintenance and meet the owners' requirements.

E.2 Electrical Systems

E.2.1 Power Distribution

The power distribution will consist of 120/208V, 3 phase power supplied from a padmount transformer. A main distribution panel (MDP) will be provided in the electrical room on the main floor and will house the main circuit breaker, and distribution breakers. Separate metering will be provided for each residential suite, and one meter per building for 'house' loads. Meter centres will be provided in the electrical room and/or electrical closets strategically placed to minimize cost and voltage drop.

E.2.2 Interior Lighting

All fixtures will be specified with compact fluorescent lamps and electronic ballasts. All fluorescent lamps to be 'warm white' (3000k). Light fixtures will be surface ceiling mounted, wall mounted, and/or recessed as required. Fixtures will be controlled using standard 120V switches in the suites. To conserve energy, some corridor fixtures will be shut off by time clock during off peak hours. For safety, some corridor lights will remain energized 24 hours/ day.

E.2.3 Exterior Lighting

Exterior lighting will be provided using standard U of A poles. If possible, existing poles will be re-used or relocated. Additional matching poles may be required. Additional exterior lighting can be achieved by using sharp cut off wall fixtures where glare is not a concern. All other exterior lighting will be controlled via astronomical time clock with battery backup and automatic daylight savings adjustment.

E.2.4 Interface with Building Automation Centre

Mechanical controls connections to the building automation system will be provided by the mechanical controls contractor. The electrical contractor will not be responsible for connections to the building automation system.

E.2.5 Energy Consideration

The primary objective for energy conservation will be to ensure a sustainable design and contribute where practical to achieving LEED silver designation. Energy efficiency can be achieved by specifying compact fluorescent or LED lighting. Additional efficiency can be achieved through lighting control in the

corridors, common areas, storage and utility rooms. Occupancy sensors within the suites can be considered.

E.2.6 Security and Access Control

An apartment style door intercom system will be provided. The door intercom panel will operate through resident's telephones. The U of A 'One' card will be used to provide access to the building. A standard key will be used to provide access to individual suites. Security cameras will be provided and connected to campus security. CCTV cameras will be located in elevator lobbies and at exterior entrance doors to common areas (not individual suites). Fibre optic cable will be terminated within the tunnel system, for connection to Campus Security. Security system devices such as door contacts, occupancy sensors, glass break etc. will not be provided. Separate security systems will not be provided for individual suites.

Provide all necessary conduit, wire, cabinets and equipment as required for the door intercom system. Supply and install electric strike where shown on the drawings and wire to door intercom panel. Strike is to be compatible with the door hardware and of the voltage compatible with the intercom system. Door intercom panel to be complete with audio and visual signals to indicate door release, as per 3.7.1.2(3) of the latest edition of the Alberta Building Code. LED shall be powered from electric door lock. Main entrance panel to be equal to Mircom MUS-5120VK series telephone access system. System to be complete with all necessary accessories and materials to provide for a complete and operable system. Include heater kit Mircom TH-101 for panels located outside. Provide remote camera in front vestibule complete with all associated connections to cable TV system.

E.2.7 Telecommunications, CATV & Data Systems Infrastructure

The U of A wireless access will be provided throughout the building and available to all residents. A fibre optic line will be provided to each building for data services. Fibre optic cable will be terminated in the tunnel system. Equipment will be specified to U of A requirements. Telephone and cable TV service will be provided to each building and will terminate on the main television and cable TV backboard in the electrical room. Television and cable TV distribution cabinets will be distributed in electrical closets as required. From the distribution cabinets, services will be provided to each suite in a common cabinet. Telephone and cable TV cabling within the suite will be run from each jack to a multimedia cabinet in the suite. In addition, data jack locations and data cabling will be provided should the resident prefer a wired network or service from Telus or Shaw. Data/ telephone cables may be patched to be used as either a telephone extension or for network. Satellite dishes and service for each individual suite will be prohibited. A conduit will be installed to the roof for a future common central satellite service per building.

Supply and install all necessary components as required to provide television distribution system. Arrange for installation of all necessary material by the local TV company. Coordinate as required so that all wiring is installed while framing

is open and accessible. Pay all charges which may be levied by the cable TV company for a complete system installation, ready for connection once tenants occupy the premises. coordinate with telephone company to determine if cable TV service will be run along with the telephone service, and if necessary, increase the size of the entry conduit accordingly. if cable TV is run separately, install properly sized entry conduit as per cable TV company requirements.

Coaxial cable to be equal to RG6U Commscope 5730 complete with black jacket.

E.2.8 Fire Alarm System

The fire alarm system, will be specified to be Simplex 4100U c/w emergency communications. Fire alarm speaker/ strobe units will be provided in corridors, suites and common areas to ensure emergency paging from campus security is functional. Fire fighter's emergency handsets will not be provided throughout the building. A single handset will be provided at the fire alarm control panel only. Campus security will have access to the emergency paging functionality from their offices via fiber optic connection through the tunnel system. If required, the U of A to provide detailed location for terminating the fibre cable in the tunnel. Fibre optic cable to be Corning 024E81-TBD-24. Exterior weather proof fire alarm speaker horns will provided on the exterior of the building (1 or 2 per building) located near the fire alarm response point.

E.2.9 CO Detectors

Combination 120V CO/ Smoke detectors c/w battery back up will be provided in all suites located as directed in the Canadian Electrical Code.

E.2.10 Laundry Service

Laundry equipment will be operated by the 'ONE' card. A CAT 6 cable will be provided at the card reader and run to the main communications room. A 15A duplex receptacle will be provided at the card reader location. Two CAT 6 cables will be provided at each washer or dryer and run to the main communications room.

E.2.11 Vending Machines

Vending equipment will be operated by the 'ONE' card and interfaced with the University of Alberta ONE card system database.

E.2.12 'Blue" Emergency Phones

Emergency phones will be provided at two locations specified by the U of A. Emergency phones will be connected to Campus Security via the tunnel system.

E.2.13 Barrier Free Suites

Barrier free suite(s) will be provided as indicated on the architectural drawings. To accommodate this, electrical device locations will be adjusted in these suites to mounting heights that will improve access for occupants.

E.2.14 Elevator

Supply and install all necessary components to provide for a complete workable elevator system. Coordinate scope of work with elevator manufacturer. For each elevator, provide and wire complete a hp rated fused disconnect switch for power and a 2p-15a disconnect control and lighting switch on the latch side of the elevator machine room door. Supply and install a vapour-proof fixture and weatherproof duplex receptacle in each integral elevator shaft pit. Supply and install a telephone outlet complete with a 20mm conduit to the main telephone board, at a location as directed by the elevator manufacturer. It is this contractor's responsibility to coordinate the exact installation requirements and ratings with the elevator manufacturer.

E.3 Outline Specifications

E.3.1 General

The Electrical Contractor will include all labour, materials, equipment, services and other items required for the supply and installation, testing and putting into operation of a complete electrical system.

All materials will be new and free from defects.

Copies of shop drawings of all equipment proposed for installation will be issued for approval prior to ordering.

All Work will conform with all applicable codes and standards and to the satisfaction of the authorities having jurisdiction

All electrical permits will be provided.

E.3.2 Codes, Permits and Inspections

The installation shall comply with the requirements of the current edition of the Canadian Electrical Code, the Regulations of the Electrical Inspection Department having jurisdiction, and the University of Alberta standards and requirements.

Electrical trade shall obtain all electrical permits required and after completion of the work shall furnish to the architect a certificate of final inspection and approval from the inspection department. Electrical trade shall take out all permits at the beginning of the work.

The electrical contractor shall specifically note that he shall submit two (2) sets of drawings to the electrical inspection department and shall include all costs for prints, survey, etc., in this electrical tender.

E.3.3 Conduit and Duct

Conduit in earth to be rigid metallic conduit with protective coating, rigid PVC or DB2 encased in concrete where required.

Interior metal raceways to be of the EMT type except where within 1500mm of the finished floor and are subject to injury where same shall be rigid metallic conduit.

Electrical wiring and cables piercing fire separation walls shall be installed as per section 3.1.9.3 of the latest edition of the Alberta building code.

E.3.4 Branch Circuit Wiring

Branch circuit wiring to be copper 600 volt, minimum #12 AWG crosslink. No aluminum wiring will be permitted.

Interior wiring shall be metallic conduit throughout with flexible conduit being utilized for final fixture drops, wiring in stud walls and final connection of motors (seal-tight flexible conduit). NMD-90 will be permitted for branch circuit wiring in residential suite applications in a wood frame building.

Main feeders and panel feeders to be copper. Neutral size reduction is not permitted.

E.3.5 Wiring Devices

Lighting switches shall be white in finished areas; Hubbell #1201, 3-way, 4-way and 2-pole switches shall be of matching type.

Duplex receptacles shall be white in finished areas; Hubbell #5252. Isolated ground receptacles to be Hubbell #i.g.5262cn. Ground fault receptacles to be Hubbell #g.f.5262w.

Device plates shall be smooth white phenolic.

Dimmers to be equal to Lutron nt-1500, 1500w. do not exceed 80% of dimmer rating.

All electronic dimmers to have a separate neutral grounded to manufacturer's recommendations.

Range outlets to be Hubbell #9430 complete with #9432 angle cord cap.

Dryer outlets to be Hubbell #9430 complete with #9432 angle cord cap.

Weatherproof duplex receptacles to be complete with Leviton #4941 weatherproof covers (metal).

All device outlet boxes to be of copper free, aluminum construction. No PVC FSE boxes shall be used.

E.3.6 Mounting Heights

Verify heights of all devices such as receptacles, switches, bracket lights, etc., with the architect and/or engineer before rough-in. In general, mounting heights shall be as follows, unless specified to the contrary on the drawings:

- duplex receptacles 450mm (barrier free 600mm)
- switches 1200mm (barrier free 1050mm)
- thermostats 1550mm (barrier free 1050mm)
- telephone/television outlets 450mm (barrier free 600mm)
- fire alarm pull stations 1400mm
- fire alarm speaker/strobes 300mm below ceiling to a maximum of 2700mm
- end-of-line resistor - readily accessible area
- Suite speaker c/w signal silence 2100mm

E.3.7 Identification

Label all starters, panels, switches, end-of-line resistors and miscellaneous equipment indicating the voltage, usage and other pertinent information subject to the approval of the engineer. Labels shall be lamacoid plates, 13mm minimum height, "permanently" attached.

E.3.8 Motor Starters and Connections

Manual motor starters to be quick-make quick-break with thermal overload protection, CEMA 1 enclosures unless otherwise indicated on the drawings. General Electric #CR1061 for 250 volt maximum, .75kw or less, #CR1062 for 3-phase motors. All magnetic starters shall have control transformers, pilot lights, HOA switches and two auxiliary contacts or as specified in the wiring schematic. Combination magnetic starters are to be complete with circuit breaker type disconnect switches.

Furnish disconnects for all motors as required by the Canadian Electrical Code.

E.3.9 Wiring for Mechanical Trade

Supply and install all necessary disconnect switches, motor protection switches, manual starters, magnetic starters and all control stations required for the control of mechanical equipment except those starters or controllers which are part of packaged mechanical equipment shall be supplied by mechanical trade. Supply and install all line voltage power into the terminal housing of the mechanical equipment or motor.

Line and low voltage control wiring which forms part of an automatic control system for the control of mechanical equipment will be by mechanical trade. This wiring shall be in accordance with the electrical specifications.

Line and low voltage wiring for control devices such as thermostats, that do not form a part of an automatic system, shall be supplied and installed by electrical trade. This includes unit heaters, force flow heaters and manually controlled fans.

Thermostats and humidstats to be supplied by mechanical trade and installed and wired by electrical contractor as described earlier. Controls on mechanical piping to be done by mechanical trade as per electrical specifications.

E.3.10 Telephone System

Supply and install main service conduit and pull wire. provide interior conduit, wiring, outlet boxes, terminal cabinets, etc., required for complete interior conduit distribution as shown on the drawings. Termination point of service on property line shall be as directed by the telephone company.

Provide outlet boxes and termination jack at each outlet location shown on the drawings and to owner's requirements.

Terminal cabinets shall be provided as shown to owner's requirements.

Coordinate service entrance with utility company and install all necessary components.

Provide one 8c cat 6 cable to each telephone outlet from the telephone panel. Telephone sub-panels are to be wired with adequately sized multi-conductor cables.

Electrical contractor to confirm jacket rating "FT4" or "FT6" with local authorities.

E.3.12 Power Service and Distribution

Provide all conduit, wire, connections, etc., required for service as required.

Include in tender price all charges which may be levied by the servicing utility companies (power, telephone and cable) in servicing the project. If charges are not available, qualify the tender submission.

All requirements of the utility companies shall govern the service installations and such utilities shall be notified at the time work is commenced on the building with drawings and specifications submitted to same, if requested.

Coordinate the complete service installations with the servicing utility companies before rough-in.

Provide all grounding in accordance with the requirements of the Canadian Electrical Code.

Main service entrance distribution switchboard to be, solid neutral design, floor mounted, free standing, of uniform height, depth and width. Refer to single line/power riser detail for voltage, phase and bussing amperage. The switchboard shall be

constructed and certified in accordance with CSA 22.2.31 standards and shall be a Siemens series SMP, FC-RS or FC-1 or approved equal. Individual sections shall be front accessible, not less than 12.75" deep (324mm), with drip hoods, and the rear of all sections shall align. The bus shall be tin-finished aluminum of sufficient size to limit the temperature rise to 65 degrees celsius. The bus shall be braced for the interupting capacity in the following chart and supported and braced to withstand the mechanical forces exerted during a short circuit conditions when directly connected to a power source having the indicated available circuit current.

main distribution interupting capacity	
main breaker	120/208v
up to 200a	25,000a
201-800a	42,000a

Main breaker; shall be a molded case circuit breaker of the quick-make, quick-break design, standard or sensitrip electronic solid state design. it shall be sized according to the single line/power riser detail, with an interrupting capacity equal to the main distribution. for services equal to or greater than 2000a at 208v, or 1200a at 600v, ground fault and lsig electronic options are to be included.

Ground fault protection; 3 phase 4 wire, as required by the CEC. All new ground fault protection and indication equipment shall be factory installed, wired and tested by the switchboard manufacture. Furnish and install in the switchboard, a ground fault protection system and indication equipment as shown on the drawings and in accordance with CEC Section 14-102.

Feeder breakers, molded case circuit breakers shall be quick-make, quick-break, with frame, trip and voltage rating as indicated on the plans. All breakers to have an interrupting rating equal to the switchboard. Switchboard shall have space and provisions for future units as shown on the plans.

All equipment to be Cutler-Hammer, Schneider, or Siemens. All components of the assembly, except for those identified by the manufacturer in this specification shall be a regularly manufactured product of the assembler. All suppliers to submit catalogue cuts and material list prior to tender. Switchgear manufacturer to coordinate sizing and requirements of local utility company to ensure compliance with local codes.

Switchgear manufacturer to provide coordination study from utility primary fuse on padmount transformer through panelboard loads. Study to be done by factory engineers or independent professional service. Responsibility of the study's accuracy lies with the manufacturer.

E.3.13 Lighting Fixtures

The electrical contractor shall supply and install light fixtures complete with lamps, hangers and miscellaneous equipment necessary for a complete and operational installation.

Where recessed fixtures are utilized in insulated ceilings, electrical to confirm with general contractor that fixture will be boxed in with drywall as per code.

Fixtures shall be left clean at completion of the project and all lamps operational.

Self-contained emergency lighting units shall conform to CSA C22.2 no. 141 and provide minimum 30 minute power supply in the event that the regular power supply to the building is interrupted.

E.3.14 Branch Circuit Panels
Panelboards are to be equal to Siemens type p1, suitable for bolt in breakers, rated at 10 ka ic, with interiors that permit the installation of feed thru lugs or a bus fed sub feed breaker, up to 250 amps, without increasing the enclosure size, with concealed hinges, flush lock and a holder for circuit directory cards. Interiors are changeable from top to bottom feed and vice versa while maintaining readability of deadfront labeling. Interiors are convertible from main lug to main breaker with the addition of an appropriate field installable kit.

Where required provide isolated ground type panels and connect to building main ground.

Individual suite panels may be of the load center type.

E.3.15 Grounding
Provide all necessary grounding, whether shown on drawings or not, as per the latest Canadian Electrical Code requirements.

Where low tension conduits including, but not limited to, telephone, data, cable t.v., etc., terminate on backboard/cabinet with #6 insulated copper wire and bond conduit bushings.

E.3.16 Fire Alarm System
All equipment must be Simplex. The system is to be a microprocessor based, single stage, addressable fire alarm system simplex 4100u c/w emergency paging.

The system shall include:

Main control panel to carry out fire alarm and protection functions; including receiving alarm signals, initiating an evacuation alarm via the speaker/strobes, providing fire fighters telephone communications and zoned voice paging, supervising the system continuously, annunciating alarms and initiating trouble signals.

.1 addressable manual alarm stations.
.2 addressable and non-addressable automatic alarm initiating devices.
.3 addressable input and output modules.
.4 audible and visual signals.

.5 end of line resistors.
.6 alpha-numeric annunciator complete with zone led's and microphone

The system shall be a single stage system. Operation of any alarm initiating device shall:
.1 Display the event type, alarm time and location message at the fire alarm control panel (and remote alpha-numeric annunciator).
.2 Cause all audible speakers to sound a 1,000 hz tone at a temporal rate for evacuation in residence buildings.
.3 Stairwell audio speakers to be activated only upon operation of individual stairwell smoke detectors
.4 Cause all visual signals to flash in a synchronized manner.
.5 Cause all air conditioning and ventilating fans to shut down.
.6 Close all fire and smoke doors to close automatically if normally held open.
.7 Cause all doors with magnetic door locks to unlock (if applicable).
.8 Cause all elevators to home to ground floor, or to alternate floor if the alarm is initiated from the ground floor. Elevators to shut down if an alarm is initiated from the elevator shaft or elevator machine room.
.9 Transmit an alarm signal to a remote monitoring agency.

.10 Operation of any supervisory initiating device shall:

- Display a location message at the fire alarm control panel.
- Display a distinct message to indicate device operation, not to be combined with the indication of a wiring fault on that circuit.
- Cause an integral signal to sound at the control panel and remote annunciators.

Certification of compliance shall be as per ULC-S537-04. Electrical contractor shall employ the services of an electrical engineering consultant to perform the verification duties as described in the July 1995 quarterly bulletin of the Alberta Electrical Protection Branch.

ELECTRICAL DESIGN

E.1 Introduction

The purpose of this document is to convey the fundamental system design philosophy for The 89th Avenue Student Housing Development – Phase 1.

It is the design intent to provide electrical systems that are energy efficient, reliable, require minimal maintenance and meet the owners' requirements.

E.2 Electrical Systems

E.2.1 Power Distribution

The power distribution will consist of 120/208V, 3 phase power supplied from a pad mount transformer. A main distribution panel (MDP) will be provided in the electrical room on the main floor and will house the main circuit breaker, and distribution breakers. Separate metering will be provided for each residential suite, and one meter per building for 'house' loads. Meter centres will be provided in the electrical room and/or electrical closets strategically placed to minimize cost and voltage drop.

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All fixtures will be specified with compact fluorescent lamps and electronic ballasts. All fluorescent lamps to be 'warm white' (3000k). Light fixtures will be surface ceiling mounted, wall mounted, and/or recessed as required. Fixtures will be controlled using standard 120V switches in the suites. To conserve energy, some corridor fixtures will be shut off by time clock during off peak hours. For safety, some corridor lights will remain energized 24 hours/ day.

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E.2.4 Interface with Building Automation Centre

Mechanical controls connections to the building automation system will be provided by the mechanical controls contractor. The electrical contractor will not be responsible for connections to the building automation system.

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The primary objective for energy conservation will be to ensure a sustainable design and contribute where practical to achieving Green Globe designation.

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Coaxial cable to be equal to RG6U Commscope 5730 complete with black jacket.

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E.2.9 CO Detectors

Combination 120V CO/ Smoke detectors c/w battery back up will be provided in all suites located as directed in the Canadian Electrical Code.

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Laundry equipment will be operated by the 'ONE' card. A CAT 6 cable will be provided at the card reader and run to the main communications room. A 15A duplex receptacle will be provided at the card reader location. Two CAT 6 cables will be provided at each washer or dryer and run to the main communications room.

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All electrical permits will be provided.

E.3.2 Codes, Permits and Inspections

The installation shall comply with the requirements of the current edition of the Canadian Electrical Code, the Regulations of the Electrical Inspection Department having jurisdiction, and the University of Alberta standards and requirements.

Electrical trade shall obtain all electrical permits required and after completion of the work shall furnish to the architect a certificate of final inspection and approval from the inspection department. Electrical trade shall take out all permits at the beginning of the work.

The electrical contractor shall specifically note that he shall submit two (2) sets of drawings to the electrical inspection department and shall include all costs for prints, survey, etc., in this electrical tender.

E.3.3 Conduit and Duct

Conduit in earth to be rigid metallic conduit with protective coating, rigid PVC or DB2 encased in concrete where required.

Interior metal raceways to be of the EMT type except where within 1500mm of the finished floor and are subject to injury where same shall be rigid metallic conduit.

Electrical wiring and cables piercing fire separation walls shall be installed as per section 3.1.9.3 of the latest edition of the Alberta building code.

E.3.4 Branch Circuit Wiring

Branch circuit wiring to be copper 600 volt, minimum #12 AWG crosslink. No aluminum wiring will be permitted.

Interior wiring shall be metallic conduit throughout with flexible conduit being utilized for final fixture drops, wiring in stud walls and final connection of motors (seal-tight flexible conduit). NMD-90 will be permitted for branch circuit wiring in residential suite applications in a wood frame building.

Main feeders and panel feeders to be copper. Neutral size reduction is not permitted.

E.3.5 Wiring Devices

Lighting switches shall be white in finished areas; Hubbell #1201, 3-way, 4-way and 2-pole switches shall be of matching type.

Duplex receptacles shall be white in finished areas; Hubbell #5252. Isolated ground receptacles to be Hubbell #i.g.5262cn. Ground fault receptacles to be Hubbell #g.f.5262w.

Device plates shall be smooth white phenolic.

Dimmers to be equal to Lutron nt-1500, 1500w. do not exceed 80% of dimmer rating.

All electronic dimmers to have a separate neutral grounded to manufacturer's recommendations.

Range outlets to be Hubbell #9430 complete with #9432 angle cord cap.

Dryer outlets to be Hubbell #9430 complete with #9432 angle cord cap.

Weatherproof duplex receptacles to be complete with Leviton #4941 weatherproof covers (metal).

All device outlet boxes to be of copper free, aluminum construction. No PVC FSE boxes shall be used.

E.3.6 Mounting Heights
Verify heights of all devices such as receptacles, switches, bracket lights, etc., with the architect and/or engineer before rough-in. In general, mounting heights shall be as follows, unless specified to the contrary on the drawings:

- duplex receptacles 450mm (barrier free 600mm)
- switches 1200mm (barrier free 1050mm)
- thermostats 1550mm (barrier free 1050mm)
- telephone/television outlets 450mm (barrier free 600mm)
- fire alarm pull stations 1400mm
- fire alarm speaker/strobes 300mm below ceiling to a maximum of 2700mm
- end-of-line resistor - readily accessible area
- Suite speaker c/w signal silence 2100mm

E.3.7 Identification
Label all starters, panels, switches, end-of-line resistors and miscellaneous equipment indicating the voltage, usage and other pertinent information subject to the approval of the engineer. Labels shall be lamacoid plates, 13mm minimum height, "permanently" attached.

E.3.8 Motor Starters and Connections
Manual motor starters to be quick-make quick-break with thermal overload protection, CEMA 1 enclosures unless otherwise indicated on the drawings. General Electric #CR1061 for 250 volt maximum, .75kw or less, #CR1062 for 3-phase motors. All magnetic starters shall have control transformers, pilot lights, HOA switches and two auxiliary contacts or as specified in the wiring schematic. Combination magnetic starters are to be complete with circuit breaker type disconnect switches.

Furnish disconnects for all motors as required by the Canadian Electrical Code.

E.3.9 Wiring for Mechanical Trade
Supply and install all necessary disconnect switches, motor protection switches, manual starters, magnetic starters and all control stations required for the control of mechanical equipment except those starters or controllers which are part of packaged mechanical equipment shall be supplied by mechanical trade. Supply and install all line voltage power into the terminal housing of the mechanical equipment or motor.

Line and low voltage control wiring which forms part of an automatic control system for the control of mechanical equipment will be by mechanical trade. This wiring shall be in accordance with the electrical specifications.

Line and low voltage wiring for control devices such as thermostats, that do not form a part of an automatic system, shall be supplied and installed by electrical trade. This includes unit heaters, force flow heaters and manually controlled fans.

Thermostats and humidstats to be supplied by mechanical trade and installed and wired by electrical contractor as described earlier. Controls on mechanical piping to be done by mechanical trade as per electrical specifications.

E.3.10 Telephone System

Supply and install main service conduit and pull wire. provide interior conduit, wiring, outlet boxes, terminal cabinets, etc., required for complete interior conduit distribution as shown on the drawings. Termination point of service on property line shall be as directed by the telephone company.

Provide outlet boxes and termination jack at each outlet location shown on the drawings and to owner's requirements.

Terminal cabinets shall be provided as shown to owner's requirements.

Coordinate service entrance with utility company and install all necessary components.

Provide one 8c cat 6 cable to each telephone outlet from the telephone panel. Telephone sub-panels are to be wired with adequately sized multi-conductor cables.

Electrical contractor to confirm jacket rating "FT4" or "FT6" with local authorities.

E.3.12 Power Service and Distribution

Provide all conduit, wire, connections, etc., required for service as required.

Include in tender price all charges which may be levied by the servicing utility companies (power, telephone and cable) in servicing the project. If charges are not available, qualify the tender submission.

All requirements of the utility companies shall govern the service installations and such utilities shall be notified at the time work is commenced on the building with drawings and specifications submitted to same, if requested.

Coordinate the complete service installations with the servicing utility companies before rough-in.

Provide all grounding in accordance with the requirements of the Canadian Electrical Code.

Main service entrance distribution switchboard to be, solid neutral design, floor mounted, free standing, of uniform height, depth and width. Refer to single line/power riser detail for voltage, phase and bussing amperage. The switchboard shall be

constructed and certified in accordance with CSA 22.2.31 standards and shall be a Siemens series SMP, FC-RS or FC-1 or approved equal. Individual sections shall be front accessible, not less than 12.75" deep (324mm), with drip hoods, and the rear of all sections shall align. The bus shall be tin-finished aluminum of sufficient size to limit the temperature rise to 65 degrees celsius. The bus shall be braced for the interupting capacity in the following chart and supported and braced to withstand the mechanical forces exerted during a short circuit conditions when directly connected to a power source having the indicated available circuit current.

main distribution interupting capacity	
main breaker	120/208v
up to 200a	25,000a
201-800a	42,000a

Main breaker; shall be a molded case circuit breaker of the quick-make, quick-break design, standard or sensitrip electronic solid state design. it shall be sized according to the single line/power riser detail, with an interrupting capacity equal to the main distribution. for services equal to or greater than 2000a at 208v, or 1200a at 600v, ground fault and lsig electronic options are to be included.

Ground fault protection; 3 phase 4 wire, as required by the CEC. All new ground fault protection and indication equipment shall be factory installed, wired and tested by the switchboard manufacture. Furnish and install in the switchboard, a ground fault protection system and indication equipment as shown on the drawings and in accordance with CEC Section 14-102.

Feeder breakers, molded case circuit breakers shall be quick-make, quick-break, with frame, trip and voltage rating as indicated on the plans. All breakers to have an interrupting rating equal to the switchboard. Switchboard shall have space and provisions for future units as shown on the plans.

All equipment to be Cutler-Hammer, Schneider, or Siemens. All components of the assembly, except for those identified by the manufacturer in this specification shall be a regularly manufactured product of the assembler. All suppliers to submit catalogue cuts and material list prior to tender. Switchgear manufacturer to coordinate sizing and requirements of local utility company to ensure compliance with local codes.

Switchgear manufacturer to provide coordination study from utility primary fuse on padmount transformer through panelboard loads. Study to be done by factory engineers or independent professional service. Responsibility of the study's accuracy lies with the manufacturer.

E.3.13 Lighting Fixtures

The electrical contractor shall supply and install light fixtures complete with lamps, hangers and miscellaneous equipment necessary for a complete and operational installation.

Where recessed fixtures are utilized in insulated ceilings, electrical to confirm with general contractor that fixture will be boxed in with drywall as per code.

Fixtures shall be left clean at completion of the project and all lamps operational.

Self-contained emergency lighting units shall conform to CSA C22.2 no. 141 and provide minimum 30 minute power supply in the event that the regular power supply to the building is interrupted.

E.3.14 Branch Circuit Panels
Panelboards are to be equal to Siemens type p1, suitable for bolt in breakers, rated at 10 ka ic, with interiors that permit the installation of feed thru lugs or a bus fed sub feed breaker, up to 250 amps, without increasing the enclosure size, with concealed hinges, flush lock and a holder for circuit directory cards. Interiors are changeable from top to bottom feed and vice versa while maintaining readability of deadfront labeling. Interiors are convertible from main lug to main breaker with the addition of an appropriate field installable kit.

Where required provide isolated ground type panels and connect to building main ground.

Individual suite panels may be of the load center type.

E.3.15 Grounding
Provide all necessary grounding, whether shown on drawings or not, as per the latest Canadian Electrical Code requirements.

Where low tension conduits including, but not limited to, telephone, data, cable t.v., etc., terminate on backboard/cabinet with #6 insulated copper wire and bond conduit bushings.

E.3.16 Fire Alarm System
All equipment must be Simplex. The system is to be a microprocessor based, single stage, addressable fire alarm system simplex 4100u c/w emergency paging.

The system shall include:

Main control panel to carry out fire alarm and protection functions; including receiving alarm signals, initiating an evacuation alarm via the speaker/strobes, providing fire fighters telephone communications and zoned voice paging, supervising the system continuously, annunciating alarms and initiating trouble signals.
.1 addressable manual alarm stations.
.2 addressable and non-addressable automatic alarm initiating devices.
.3 addressable input and output modules.
.4 audible and visual signals.

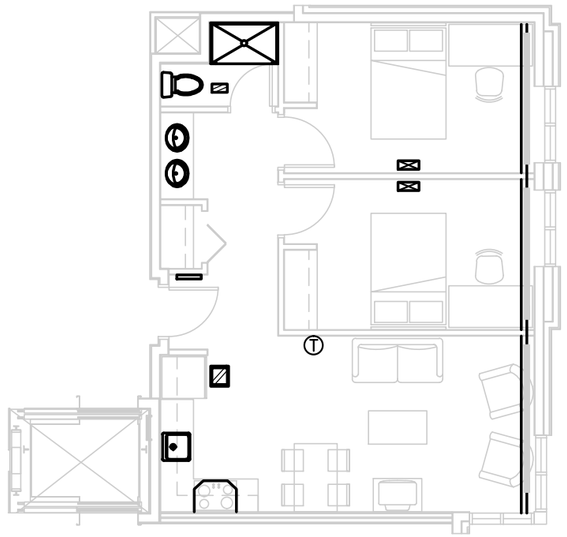
.5 end of line resistors.
.6 alpha-numeric annunciator complete with zone led's and microphone

The system shall be a single stage system. Operation of any alarm initiating device shall:
.1 Display the event type, alarm time and location message at the fire alarm control panel (and remote alpha-numeric annunciator).
.2 Cause all audible speakers to sound a 1,000 hz tone at a temporal rate for evacuation in residence buildings.
.3 Stairwell audio speakers to be activated only upon operation of individual stairwell smoke detectors
.4 Cause all visual signals to flash in a synchronized manner.
.5 Cause all air conditioning and ventilating fans to shut down.
.6 Close all fire and smoke doors to close automatically if normally held open.
.7 Cause all doors with magnetic door locks to unlock (if applicable).
.8 Cause all elevators to home to ground floor, or to alternate floor if the alarm is initiated from the ground floor. Elevators to shut down if an alarm is initiated from the elevator shaft or elevator machine room.
.9 Transmit an alarm signal to a remote monitoring agency.

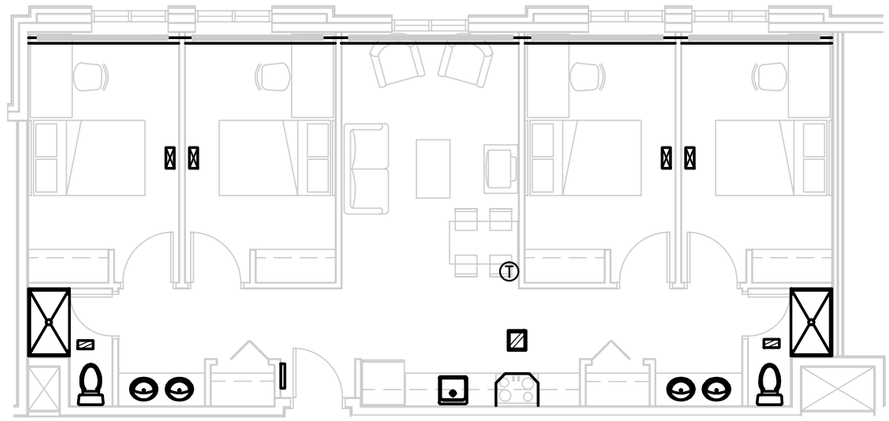
.10 Operation of any supervisory initiating device shall:

- Display a location message at the fire alarm control panel.
- Display a distinct message to indicate device operation, not to be combined with the indication of a wiring fault on that circuit.
- Cause an integral signal to sound at the control panel and remote annunciators.

Certification of compliance shall be as per ULC-S537-04. Electrical contractor shall employ the services of an electrical engineering consultant to perform the verification duties as described in the July 1995 quarterly bulletin of the Alberta Electrical Protection Branch.



SUITE A



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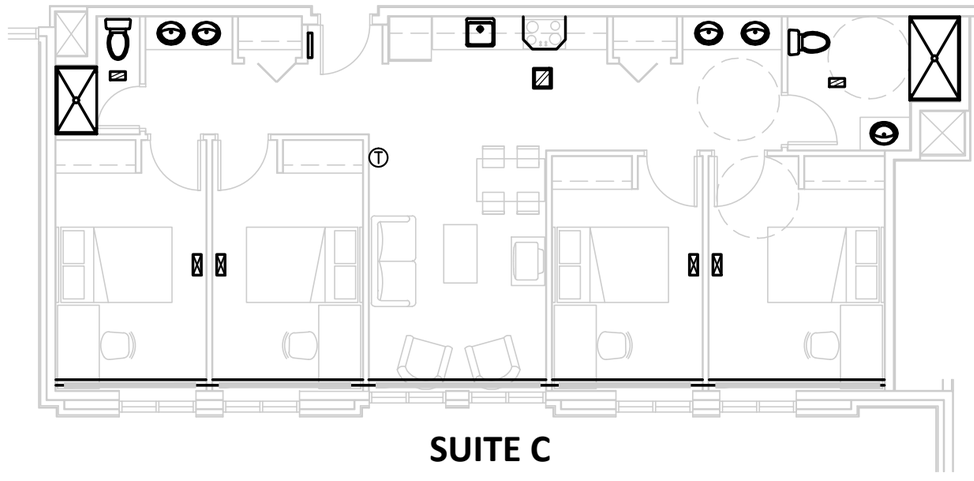


SUITE C

LINETYPES:

- SUPPLY AIR GRILLE – FRESH AIR – 25CFM
- KITCHEN EXHAUST AIR GRILLE – 50CFM
- BATHROOM EXHAUST AIR GRILLE – 25CFM
- RANGE HOOD – CHARCOL HOOD
- THERMOSTAT
- BASEBOARD RADIATION
- SUITE DOMESTIC WATER SHUT OFF ACCESS PANEL
- WATER CLOSET – LOW FLOW
- LAVATORY – LOW FLOW
- KITCHEN SINK
- SHOWER – LOW FLOW

REVISIONS:

F	ISSUED FOR REVIEW	2012.09.04
#	DESCRIPTION	YEAR.MN.DY

STAMP:

Arrow Engineering Inc.
Straight Forward Solutions
202, 13167 - 146 Street Edmonton, AB T5L 4S8
Tel: 780.801.6100 | Info@ArrowOnline.ca

PROJECT NAME:
89TH AVE STUDENT HOUSING DEV. PH 1
LOCATION: EDMONTON, AB

PROJECT#: 5902	DRAWN: PP
DESIGNED: GT	CHECKED: RP

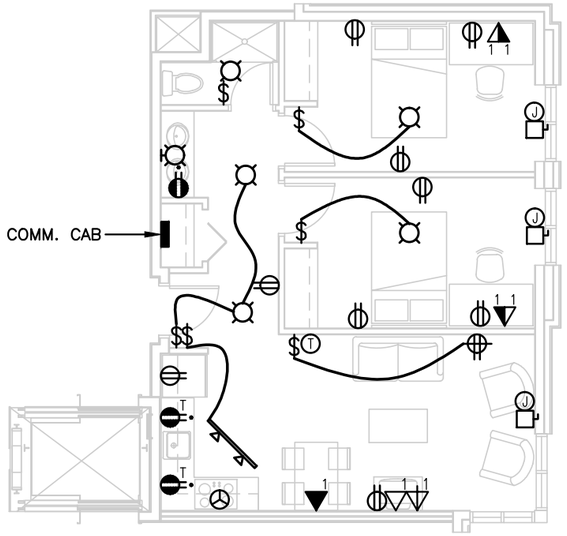
DRAWING NAME:
SUITE LAYOUTS

DRAWING NUMBER:
M1.0

FILENAME: 5902_BASEPLAN.DWg, PLOT DATE: September–04–12 4:43:48 PM

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	TRACK LIGHT
/	WALL/ CEILING LIGHT FIXTURE
	RECESSED POT LIGHT
	ON–OFF SWITCH
3	3 WAY SWITCH
	DUPLEX RECEPTACLE
T	15/20A T–SLOT RECEPTACLE
T	GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE
	SPLIT FED RECEPTACLE
	ELECTRICAL DEVICE INSTALLED ABOVE COUNTER
	DOUBLE DUPLEX RECEPTACLE
	SPECIAL RECEPTACLE
	TELEPHONE JACK LOCATION
1	DATA NETWORK JACK LOCATION
	COMBINATION TEL/DATA JACK LOCATION
1	TELEVISION OUTLET
	TELEPHONE/ CATV TERMINAL BACKBOARD (TTB/TVTB)
/	RECESSED/ SURFACE MOUNTED PANEL



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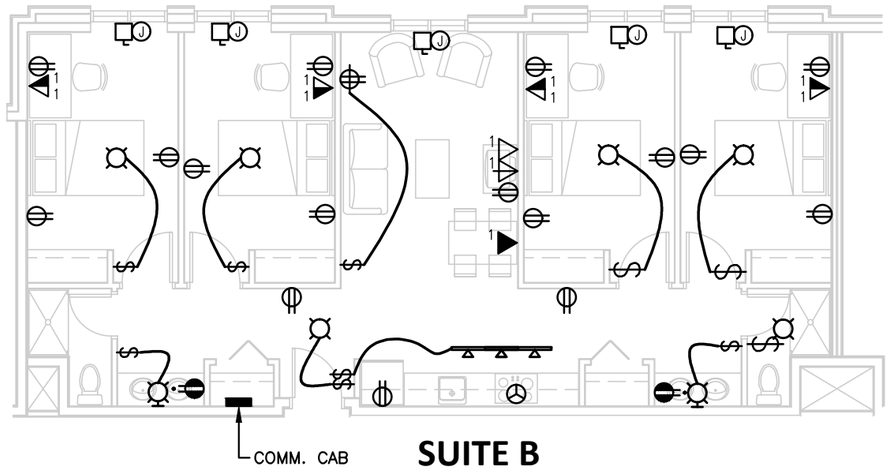

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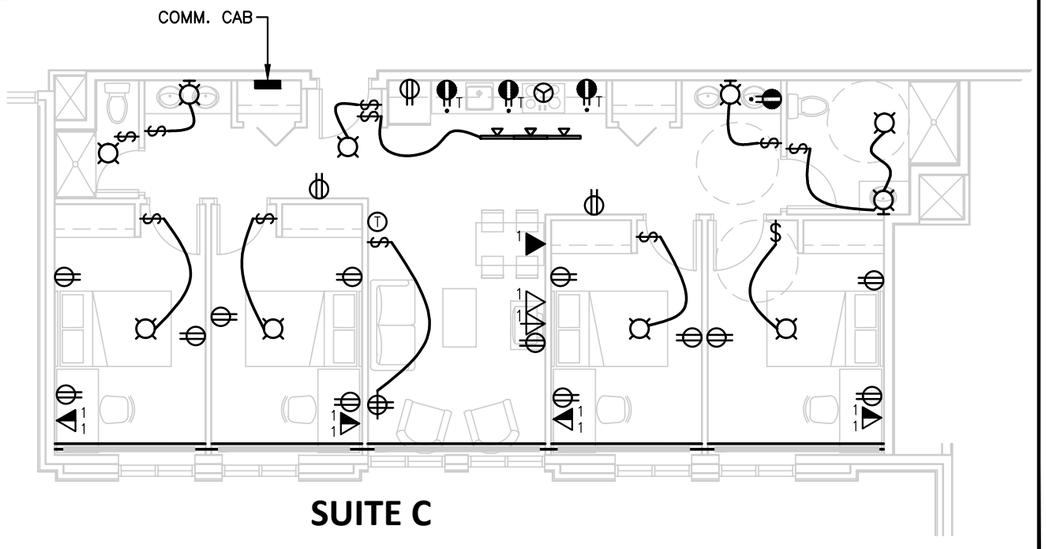

SUITE C

REVISIONS:

#	DESCRIPTION	YEAR.MN.DY

STAMP:

Arrow Engineering Inc.
Straight Forward Solutions
202, 13167 - 146 Street Edmonton, AB T5L 4S8
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PROJECT NAME:
89TH AVE STUDENT HOUSING DEV. PH 1
LOCATION: EDMONTON, AB

DRAWING NAME:
SUITE LAYOUTS

PROJECT#:	DRAWN:
5902	L.F.
DESIGNED:	CHECKED:
	A.S.

DRAWING NUMBER:
E1.0

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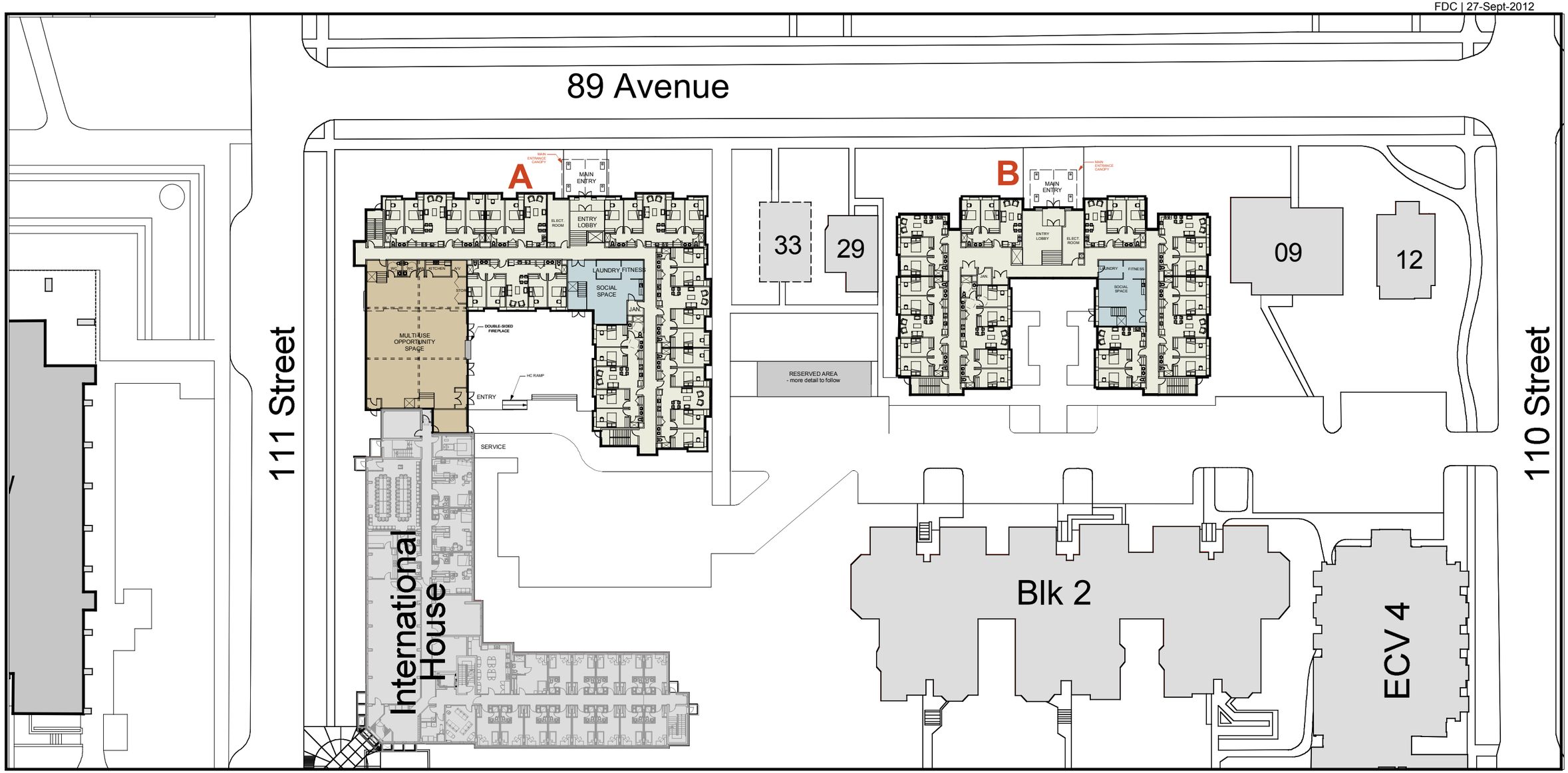


BUILDING A
4 STOREYS + BASEMENT

GFA= 5 675 M2
(EXCLUDING MULTI-USE)

BLDG. FOOTPRINT= 1105 M2
(EXCLUDING MULTI-USE)

TOTAL UNITS

4 BED UNITS	= 36 UNITS
2 BED UNITS	= 2 UNITS
TOTAL BEDS	**= 148 BEDS**

BUILDING B
3 STOREYS + BASEMENT

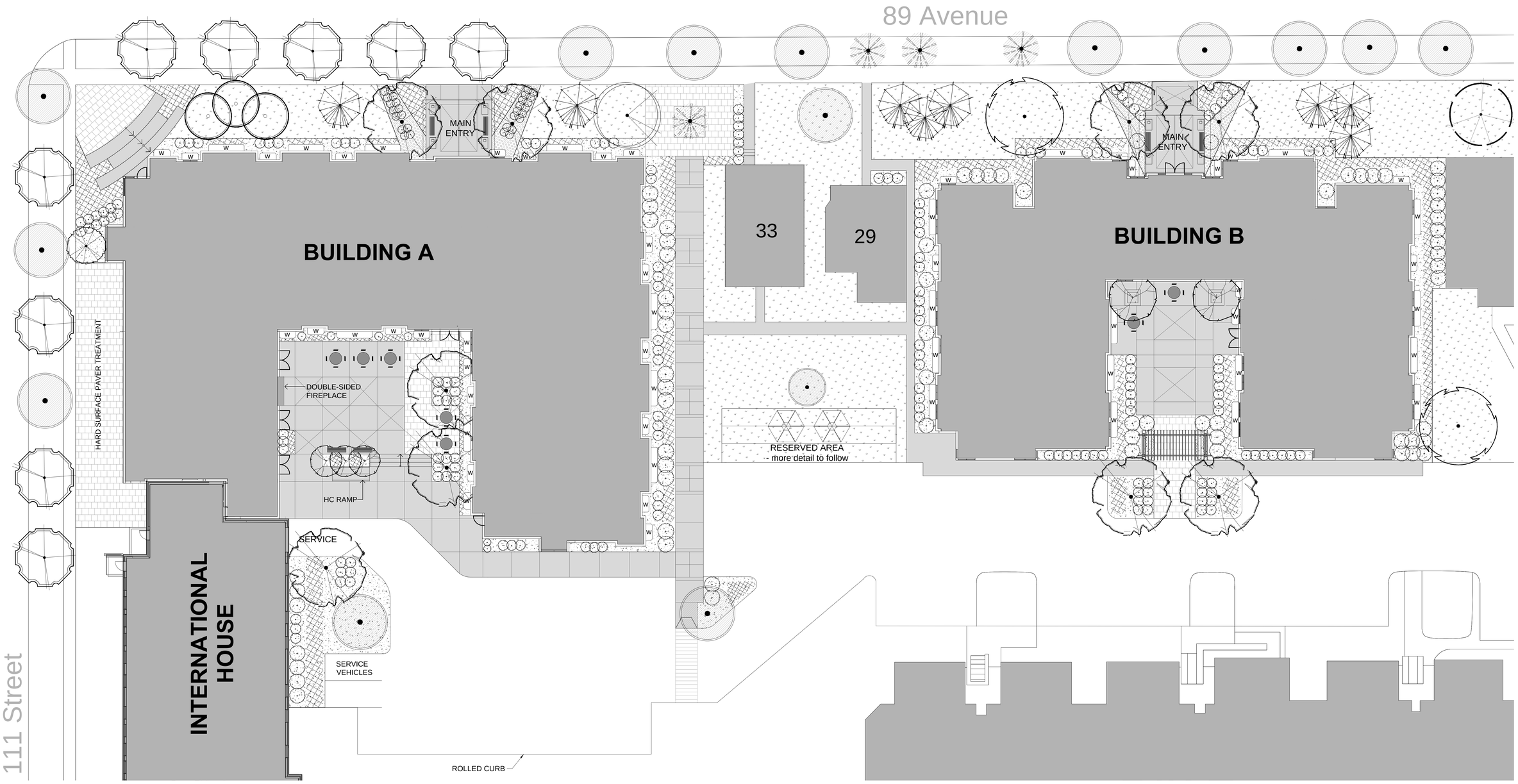
GFA= 4 047 M2

BLDG. FOOTPRINT= 1 046 M2

TOTAL UNITS

4 BED UNITS	= 14 UNITS
2 BED UNITS	= 20 UNITS
TOTAL BEDS	**= 96 BEDS**

MULTI-USE SPACE
1 STOREY — GFA= 350 M2



LEGEND

- SOD OVER 150mm TOPSOIL
- BARK MULCH
- DECORATIVE ROCK MULCH
- PAVERS - DESIGN AND MATERIAL TO BE CONSISTENT WITH 88 AVENUE PEDESTRIAN PATH RENOVATIONS
- CONCRETE WITH SCORE FINISH
- 1200mm LONG BENCH
- FIXED TABLE AND CHAIRS
- WINDOW WELLS
- TRELLIS
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- PROPOSED DECIDUOUS TREE (QTY. 31)
- PROPOSED CONIFEROUS TREE (QTY. 8)
- PROPOSED SHRUBS (QTY. 272)
- PROPOSED PERENNIAL DISPLAY BEDS

PROPOSED PLANT MATERIAL

TREES:

Aesculus glabra	Ohio Buckeye
Juglans cinerea	Butternut
Fraxinus pennsylvanica 'Patmore'	Patmore Green Ash
Larix siberica 'Durcarl'	Oasis Siberian Larch
Malus x 'Spring Snow'	Spring Snow Crabapple
Picea pungens 'Select Blue'	Select Blue Spruce
Pinus cembra	Swiss Stone Pine
Sorbus thuringiaca 'Fastigata'	Oakleaf Mountain Ash
Syringa reticulata 'Golden Eclipse'	Golden Eclipse Lilac
Tilia cordata 'Golden Cascade'	Golden Cascade Linden
Ulmus davisiana japonica 'Discovery'	Discovery Elm

SHRUBS:

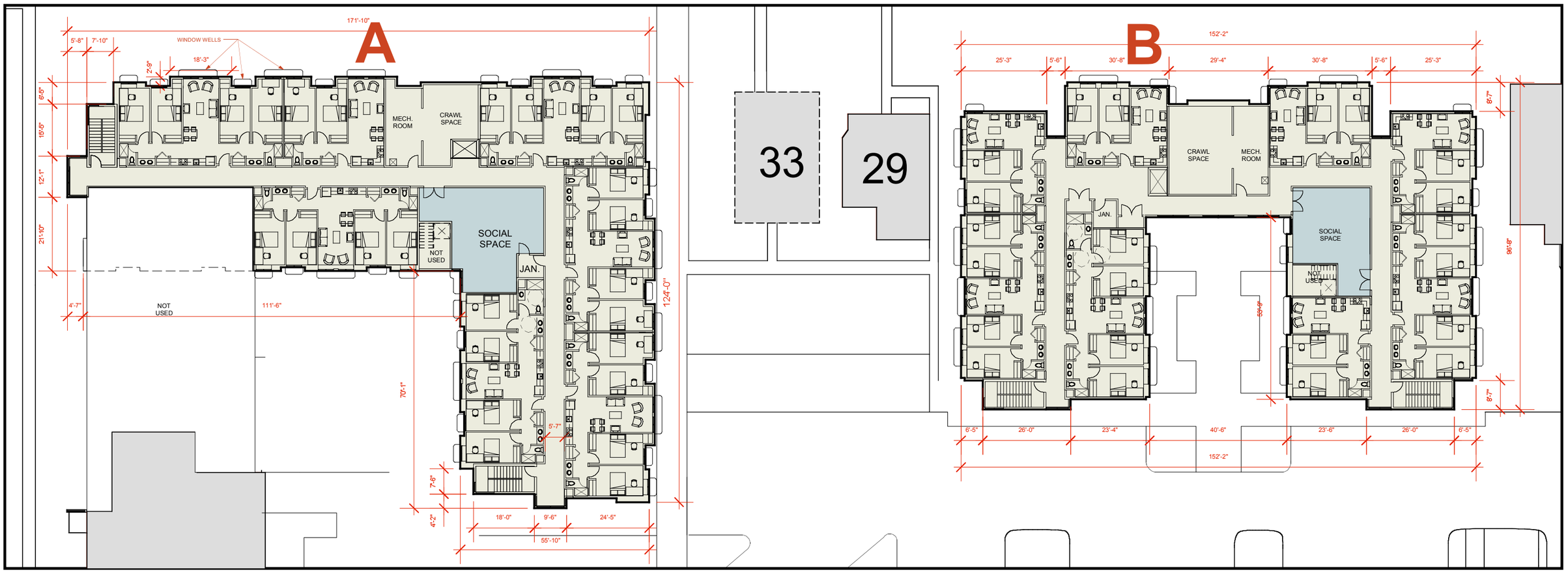
Acer ginnala 'Durglobe'	Atomic Amur Maple
Boxus 'Green Mountain'	Green Mountain Boxwood
Cornus alba 'Bailhalo'	Ivory Halo Dogwood
Diervilla sessilifolia 'LPDC Podaras'	Cool Splash Dwarf Honeysuckle
Euonymus alatus 'Compactus'	Dwarf Winged Burning Bush
Genista lydia	Dwarf Broom
Juniperus chinensis 'Aurea Gold Lace'	Gold Lace Juniper
Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper
Microbiota decussata	Russian Cypress
Philadelphus coronarius 'Aurea'	Golden Mockorange
Physocarpus opulifolius 'Monlo'	Diablo Ninebark
Picea pungens 'Montgomery'	Montgomery Spruce
Picea pungens 'Sester Dwarf'	Sester Dwarf Spruce
Syringa meyeri 'Palibin'	Dwarf Korean Lilac
Taxus cuspidata 'Morden'	Morden Yew
Viburnum dentatum 'Christom'	Blue Muffin Viburnum

PERENNIALS:

Ameria Maritima 'Dusseldorf Pride'	Dusseldorf Pride Sea Thrift
Aster novi-belgii x hybrid	Purple Beauty Aster
Bergenia cordifolia	Elephant-ears
Brunnera macrophylla 'Jack Frost'	Jack Frost Bugloss
Calamagrostis x acutiflora	Karl Forester Feather Reed Grass
Calamagrostis acutiflora 'Overdam'	Variegated Feather Reed Grass
Euphorbia polychroma	Spurge
Helictrotrichon sempervirens	Blue Oat Grass
Hemerocallis 'Stella D'or'	Stella D'or Daylily
Hosta 'Big Daddy'	Big Daddy Hosta
Hosta 'Francis Williams'	Francis Williams Hosta
Hosta 'Sum and Substance'	Sum and Substance Hosta
Lysimachia nummularia	Creeping Jenny
Miscanthus sinensis purpurascens 'Autumn Red'	Autumn Red Maiden Hair Grass
Molinia caerulea 'Variegata'	Variegated Moor Grass

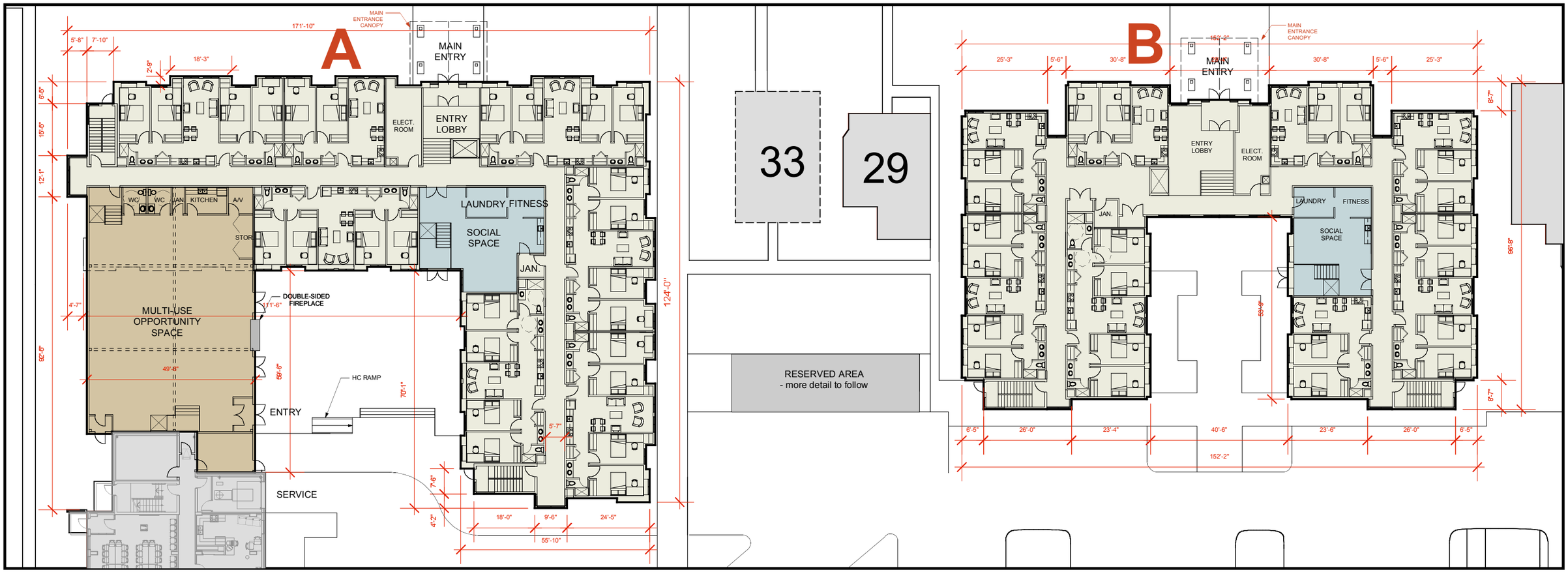
SCALE 1:150 NORTH

UNIVERSITY OF ALBERTA	The 89th Avenue Student Housing Development - Phase 1	HODGSON | SCHILF ARCHITECTS INC	L01 SEPT 27, 2012



LOWER FLOOR PLAN

SCALE 1:350



MAIN FLOOR PLAN

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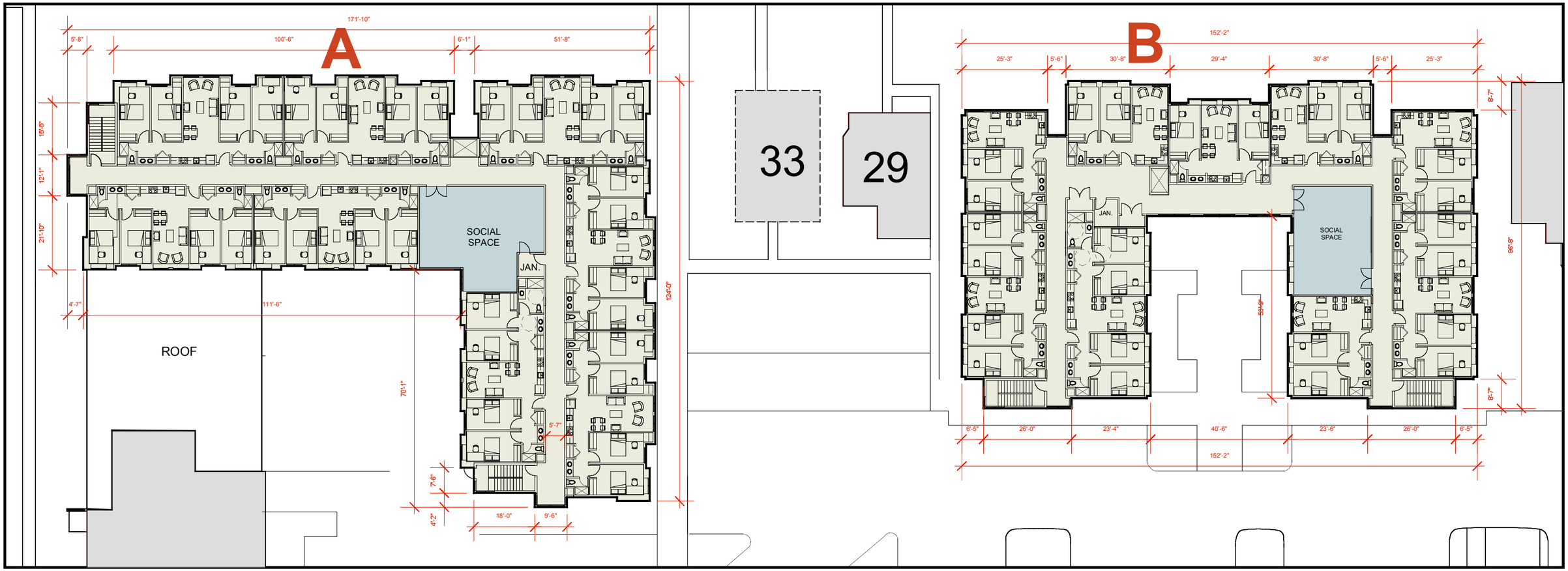

2ND & 3RD FLOOR PLAN

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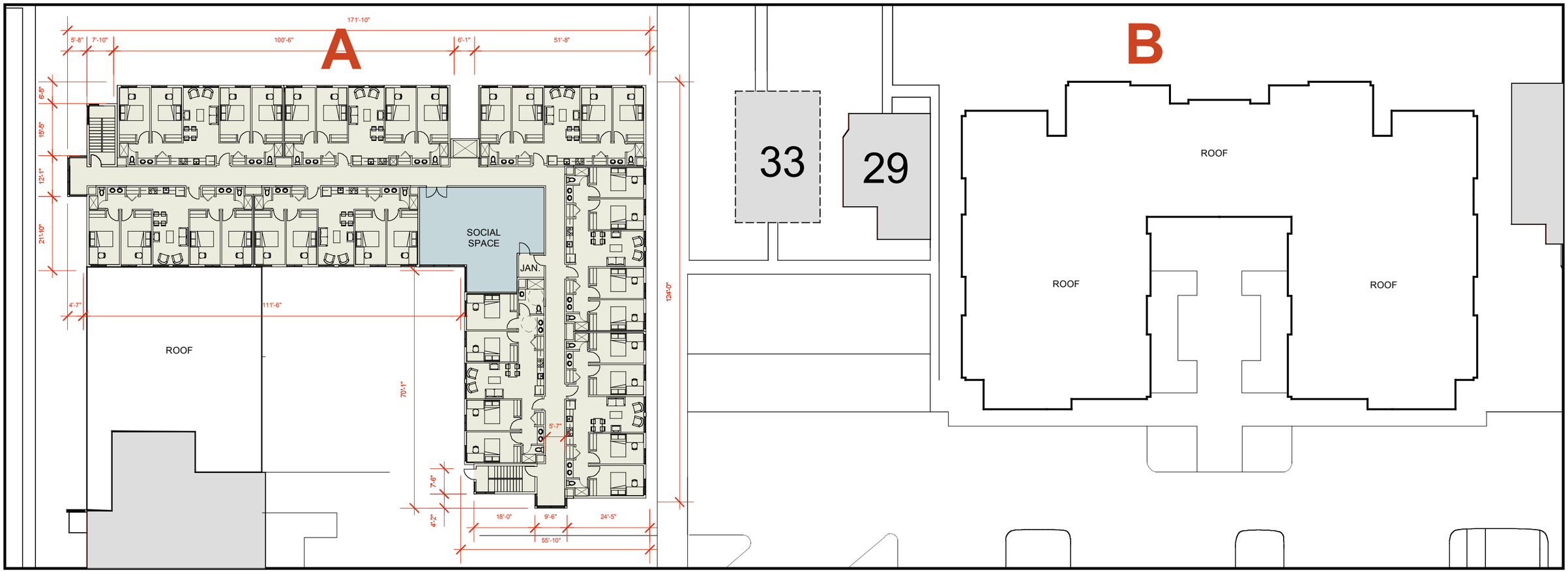
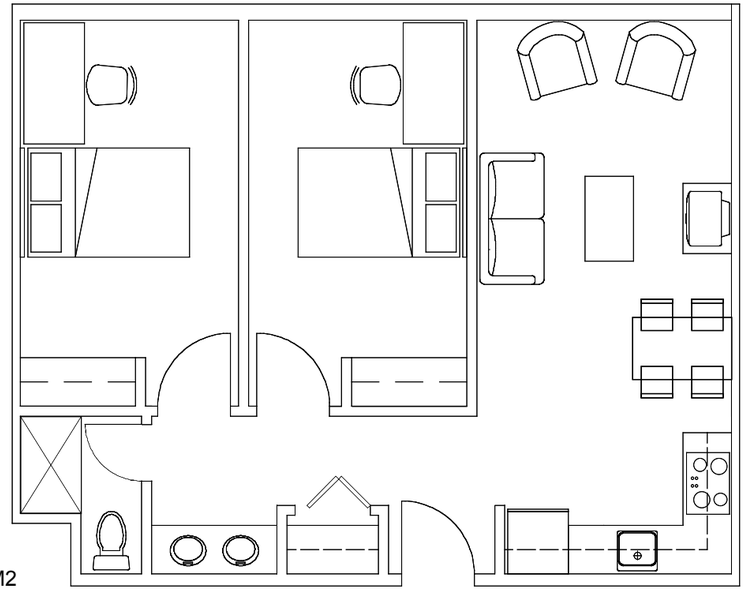


4TH FLOOR PLAN

SCALE 1:350

A

UNIT AREA = 61.6 M2



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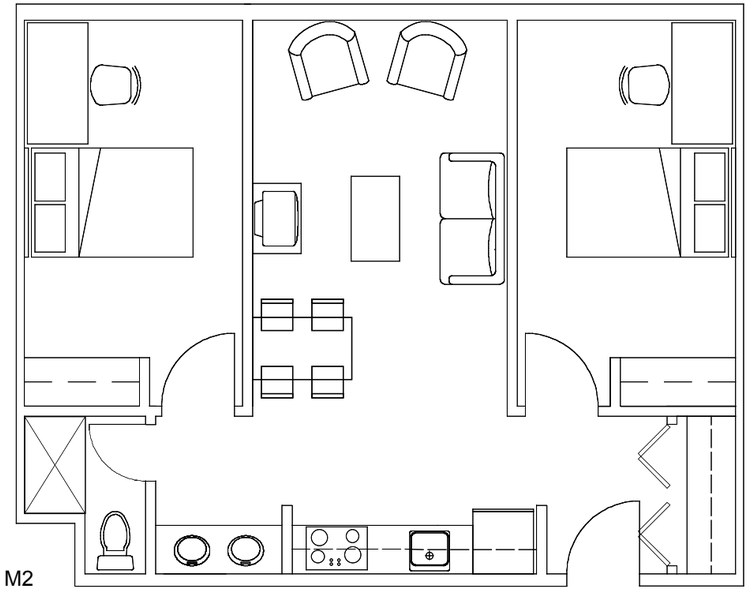

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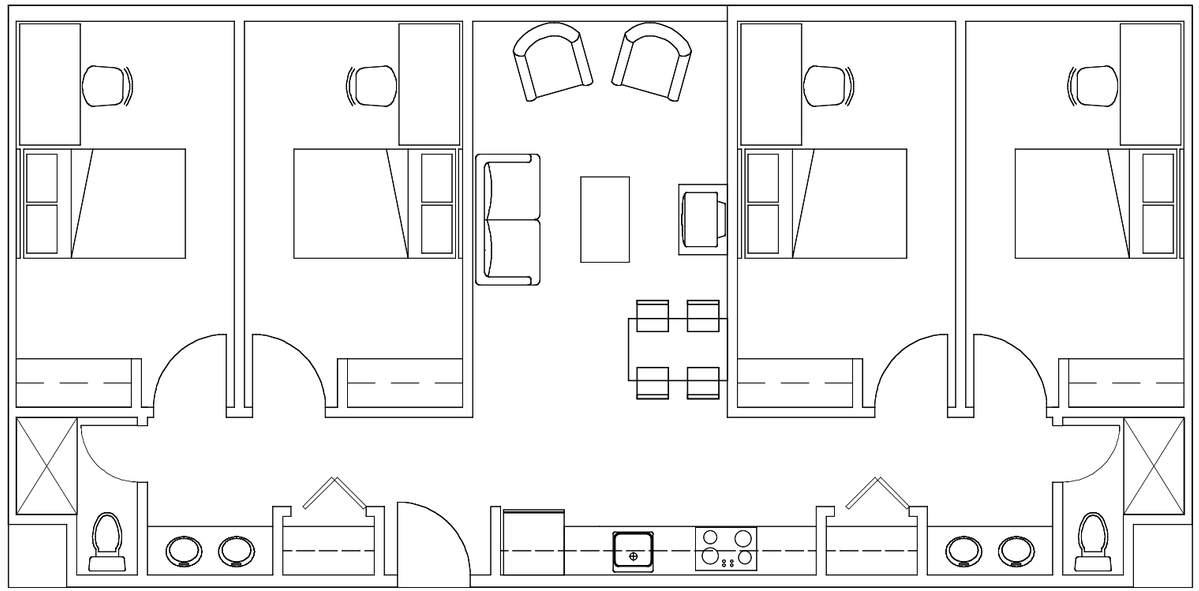

UNIT AREA = 101 M2

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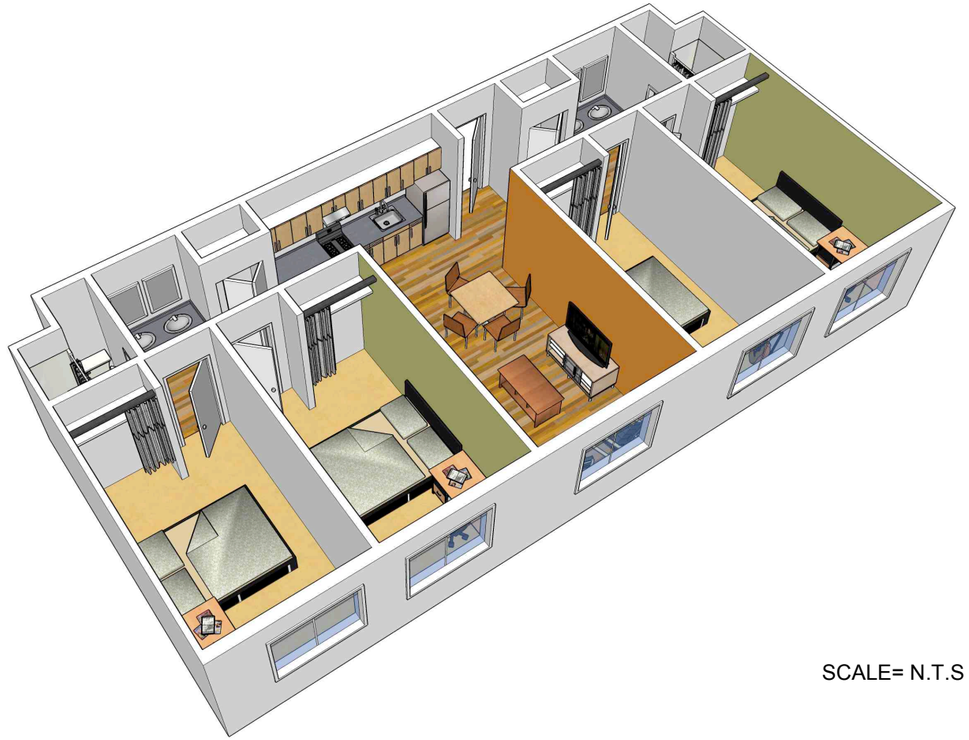

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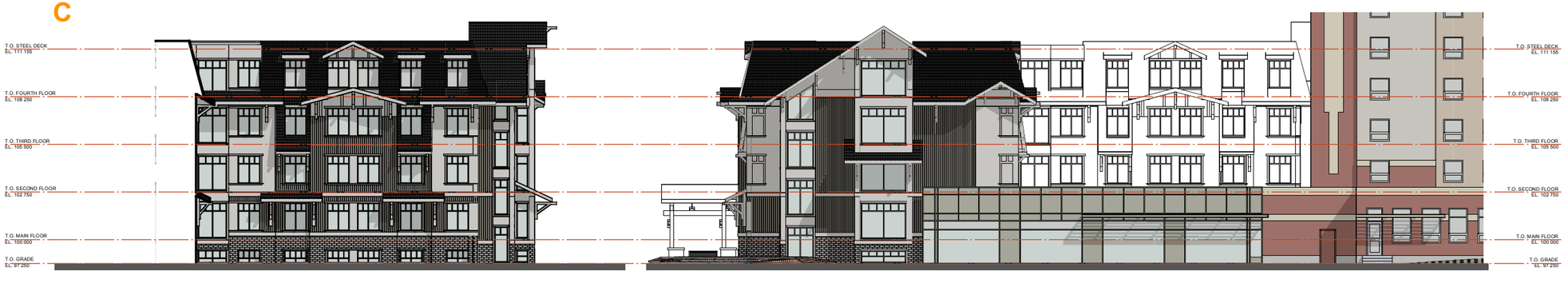
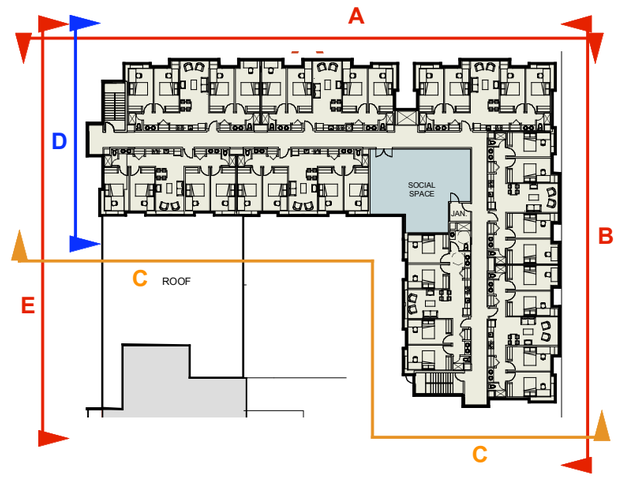




KEYPLAN

SCALE 1:300

ELEVATION MATERIALS

RESIDENCES

Cementitious Exterior Cladding
- Contextural -mimics historical painted wood
- Maintenance Friendly
- Fire Resistant

Windows
- 1" Sealed Unit in a PVC Frame
- Maintenance Friendly

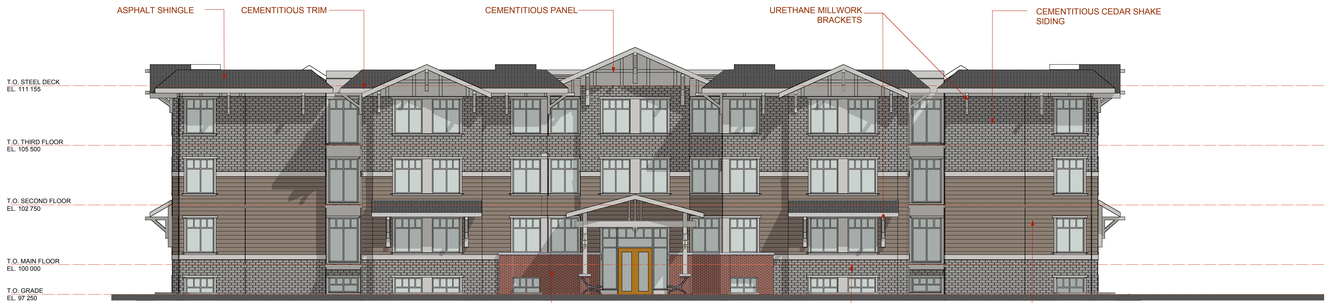
Masonry
- Reclaimed Clinker Brick (Quantities to be confirmed)

Roofing
- Asphalt Shingles on Pitched Roofs
- SBS Membrane on Flat Roofs

Flashing and Soffit
- Prefinished Metal/Aluminum
- Maintenance Friendly

LINK BUILDING

Curtain Wall Glazing System
Prefinished Metal Panel on Canopies



A

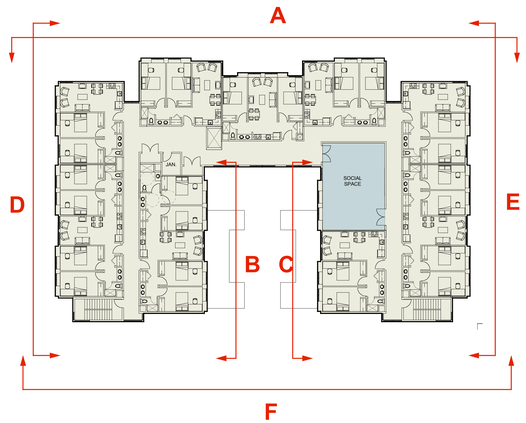
B

C

D

E

F



KEYPLAN

ELEVATION MATERIALS

RESIDENCES

Cementitious Exterior Cladding
- Contextural -mimics historical painted wood
- Maintenance Friendly
- Fire Resistant

Windows
- 1" Sealed Unit in a PVC Frame
- Maintenance Friendly

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Roofing
- Asphalt Shingles on Pitched Roofs
- SBS Membrane on Flat Roofs

Flashing and Soffit
- Prefinished Metal/Aluminum
- Maintenance Friendly

LINK BUILDING

Curtain Wall Glazing System
Prefinished Metal Panel on Canopies

SCALE 1:300

UNIVERSITY OF ALBERTA

89TH Avenue Student Housing Development- Phase 1

BUILDING ELEVATIONS - BUILDING B

SEPT. 27, 2012

10

CHANDOS

HODGSON | SCHILF ARCHITECTS INC

BUILDING A - LOOKING FROM 89TH AVE. & 111 ST. INTERSECTION- DAY

BUILDING A - LOOKING FROM 89TH & 111 STREET INTERSECTION- DUSK

BUILDING A - ACTIVITY NODE AT 89TH AVE. & 111 ST. INTERSECTION

BUILDING A - STREET FRONT ELEVATION ALONG 89TH AVE. LOOKING EAST

BUILDING A - NORTH ELEVATION ALONG 89TH AVE.- DAY

BUILDING A - NORTH ELEVATION ALONG 89TH AVE.- DUSK

BUILDING A - MAIN ENTRANCE

BUILDING A - OUTDOOR SOCIAL AREA

BUILDING A, INTERNATIONAL HOUSE & MULTI-USE LINK BUILDING

BUILDING B- NORTH ELEVATION ALONG 89TH AVE.- DAY

BUILDING B- NORTH ELEVATION ALONG 89TH AVE.- DUSK

BUILDING B- MAIN ENTRANCE

BUILDING B- NORTH ELEVATION FROM NORTH WEST CORNER

BUILDING B - NORTH ELEVATION STREETSCAPE ALONG 89TH AVE.- DAY

BUILDING B - NORTH ELEVATION STREETSCAPE ALONG 89TH AVE.- DAY

BUILDING B - SOUTH ELEVATION ALONG PARKING LOT W/ BLDG. A

BUILDING B - SOUTH FACING OUTDOOR SOCIAL AREA

BUILDING B - SOUTH FACING OUTDOOR SOCIAL AREA OFF PARKING LOT

BUILDING A & B - ELEVATIONS OFF PARKING LOT

BUILDING A , MULTI-USE LINK BUILDING & EXISTING INTERNATIONAL HOUSE- WEST ELEVATION

MULTI-USE LINK BUILDING SECONDARY ENTRANCE

Consultation for 89th Avenue Student Residence Project, Phase 1 in East Campus Village

Appendix XVIII – University of Alberta Consultation Protocol as per the Long Range Development Plan

Substantial Development

a) Information session held on April 3, 2012 to review and comment on site options and conceptual plans for a proposed new housing project for East Campus Village. Notification sent to owners of land within 60 metres of the proposed project and the host municipality. Notification contained detailed information on how to access session information on UA website and invitation to comment in writing within 10 days of the presentation.

   No one attending the April 3, 2012 meeting and no comments were received during the 10 day period outlined above.

   Due to the low turnout at the April 3, 2012 meeting, a second meeting was arranged. Notification sent to owners of land within 60 metres of the proposed project and the host municipality including detailed information on how to access session information on UA website and invitation to comment in writing within 10 days of the presentation. Owners of land within 60 metres and the host municipality did not attend the April 26, 2012 meeting. No comments were received during the 10 day period outlined above.

b) Notification for the April 3, 2012 and April 26, 2012 meeting were in the form of a directed letter.

c) As no written or verbal comments were received from owners of land within 60 metres of neither the proposed project nor the host municipality, the university did not prepare a summary document of any major concerns.

d) Information session held on June 13, 2012 to review and comment on the preliminary design of a proposed new residence project for East Campus Village. Notification sent to owners of land within 60 metres of the proposed project and the host municipality. Notification contained detailed information on how to access session information on UA website and invitation to comment in writing within 10 days of the presentation. Owners of land within 60 metres and the host municipality did not attend this meeting. No comments were received during the 10 day period outlined above.

   As no written or verbal comments were received from owners of land within 60 metres of the proposed project or from the host municipality, the university did not prepare a summary document of any major concerns.

e) To date we are not aware of any changes that impact owners of land within 60 metres of the proposed project or the host municipality.

f) As no written or verbal comments were received from owners of land within 60 metres of neither the proposed project nor the host municipality, the university did not prepare a summary document of any major concerns.

Design Guidelines for Infill Development (Garneau)

Amendments to Appendix D

Step 1 – Ongoing consultation

- UA has been updating representatives from the community of Garneau on the University of Alberta/Community Consultation committee (UACC) on all ongoing projects, including the proposed 89th Ave Student Residence Project, Phase 1 in East Campus Village. This proposed project was on the May 16, 2012 and June 20, 2012 meeting agenda.

Step 2 – Information for UACC

- Prior to issuance of the RFP, the UA informed the Garneau UACC representatives of its intention to develop the project to schematic design stage and issue such at the RFP phase on June 19, 2012. The preferred project delivery methodology was stated to be a Design Build solution.

Step 3 – Community feedback on proposal

- After the UA completed its internal review of the RFP responses, a meeting was arranged with the Garneau UACC Representatives and Garneau resident focus group to report on the progress of the project, provide information on how the project is applying the "Design Guidelines for Infill Development" and tentative project timeline. The meeting took place on August 13, 2012 and the information presented was available on the UA website for review from August 14 – 23, 2012.
- The UA will develop a project specific website once the project begins.
- Potential issues relating to the construction phase of the project have not been brought forward to the UA to date. The Garneau UACC reps will be asked again to provide any potential issues for consideration as the construction communications plan is developed.
- Direct email to the community representatives and direct letters to the 60m residents were sent notifying them of the August 13 meeting as well as the open house on August 16.

Step 4 – Community Open House

- The UA held a community wide open house on August 16, 2012 for all Garneau residents to review the project. Approximately 25 people attended. The open house was advertised using 3 road signs located through the Garneau community, newspaper ad in the Edmonton Journal on August 3, 2012, direct email to the community representatives, direct letters to the 60m residents, and information posted on the UA website. A summary of comments along with a response by the University is attached.

Step 5 – Community consultation through construction

- The UA arranged a meeting with the Garneau UACC representatives on September 10, 2012 to review the comments received at the open house and provide responses. The UA also intended on discussing in detail a draft communications plan for the construction phase of the project. Unfortunately neither representative attended. An additional meeting will be offered to the Garneau UACC Representatives.

Step 6 – Community access to tour facility

- An invitation to tour the facility once it is completed will be sent to the Garneau UACC Representatives and the Garneau resident focus group.

Public Information Open House
89 Avenue student housing project
Thursday, August 16, 2012
Rutherford Galleria
North Campus, University of Alberta
5:00 – 8:00 p.m.

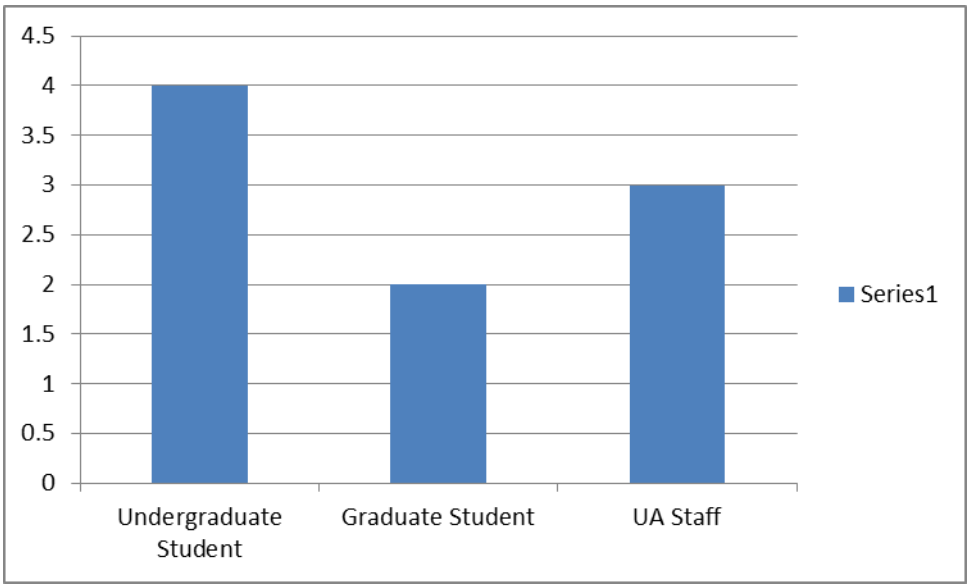
EVALUATION SUMMARY

There were approximately 25 attendees at the open house on August 16, 2012.
We received nine comment sheets at the open house and no additional responses after the open house.

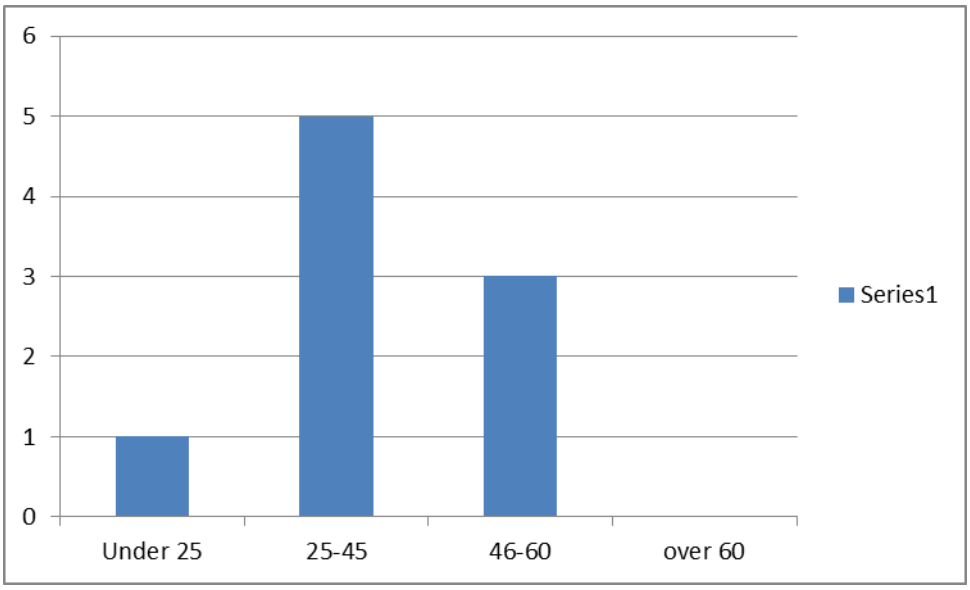
1. If you reside in one of the following neighbourhoods, please circle that neighbourhood:

Allendale
ECV
Garneau (2)
Holyrood
Luther House
University

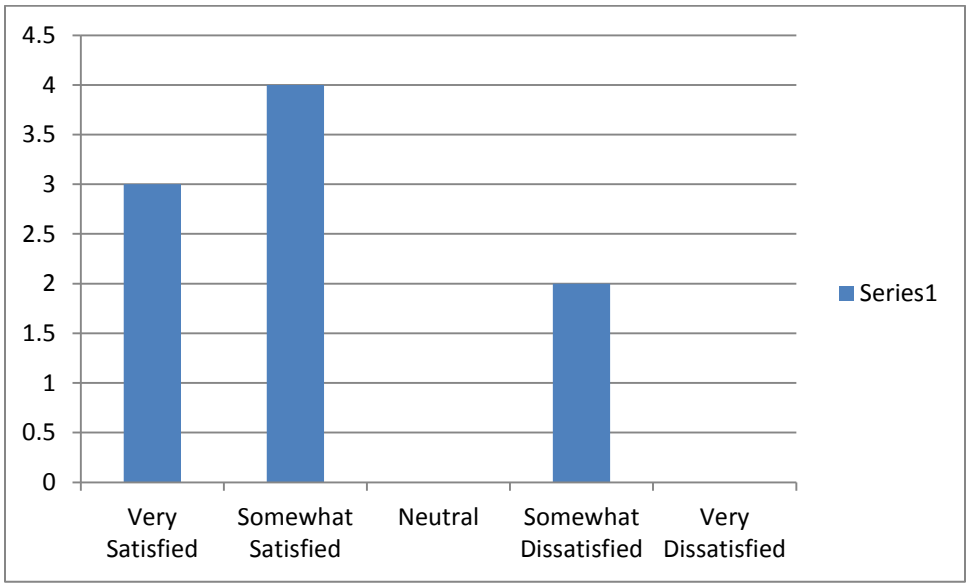
2. Please check all of the following descriptions that may apply to you:



3. Please check the age category that you are in:



4. Did the material that was presented help you understand the plan for the East Campus Village – 89th Avenue Student Residences project?



5. Please provide any suggestions/concerns about the East Campus Village – 89th Avenue Student Residences project that you may have.

The major themes from the written comments included:

- Bicycle traffic – including the safety and security of bicycles and the high use of current trails and bicycle traffic on adjacent streets.
- The preservation of heritage houses in this neighbourhood and integration of the new structure with the look and feel of the neighbourhood.
- Questions regarding the use of sustainable materials, the LEED rating for the building, easy access to the recycling and maintaining the Campus Community Garden.
- Concerns about not maintaining the East/West pathway for foot traffic rather placing the structure joining International House with the new residence.

Response from the Office of the University Architect:

- The current bicycle route through East Campus Village at 88th Avenue has been improved and enhanced with new paving, improved lighting as well as more generous activity and sitting area to better support pedestrian traffic, bicycle traffic and community-building activities.

- Careful site planning has resulted in balancing adaptive reuse of historic houses with infill development of student residences in accordance to Preservation Plan, Design Guideline and LRDP. Furthermore, the design for the 89th Ave Student Residence ensures a sensitive blend of old and new – i.e. contextual, careful articulation of front, rear and side facades to incorporate architectural details consistent with the prevalent Craftsman's style of the area such as gables, dormers, entry porches, roofs, windows and pallet of material and texture that respect the character of the Garneau neighbourhood.

- An integrated design methodology together with sustainable design principles afforded this design to target 4 stars in the Green Globe rating system, which is equivalent to LEED Silver.

- East/West pedestrian traffic will be accommodated along east-west avenues in East Campus Village including 87th, 88th, 89th and 90th Avenues. Furthermore a mid-block pedestrian route east of International House is introduced to bring residents from 90th Ave as well as 89th Ave to the 88th Avenue Commons, an outdoor social/gathering place for the students in East Campus Village.

One additional e-mail was received from a member of the Garneau resident focus group. A brief summary is below:

Built Form and Materials

There are a number of positive aspects to the proposed built forms and materials. These include:

1. Division of the infill into two separate buildings rather than a single building

2. Separation of these infill buildings with multiple existing houses, rather than single homes

3. Separation of infill structures from 110 St through retention of existing building stock at the corner

4. Alignment of the front building setbacks with nearby homes

5. Incorporation of a historically significant material (clinker brick) from soon to be demolished homes into the new buildings (this positive is caveated by my comments below on the houses being demolished. I believe they should have been retained, or moved within ECV, or offered for sale and transport; incorporation of their materials is superior only to discard)

6. Continued use of durable and appropriate materials which were recommended in the infill guidelines, and successfully pioneered on the 87 Avenue development, including cementaceous board as an alternative to wooden clapboards

7. The avoidance of materials which were negatively flagged in the infill guidelines, including stucco and vinyl.

In addition, the bridging structure proposed between International House and the new builds seems appropriate in scale and form, and as there is no direct linkage between the architectural styles of the new infill and International House, it seems appropriate that the design of the bridging building is a simple transparent structure.

These positives are offset by a number of negatives, many of which could be mitigated through further refinements to the site plan and building design as this moves from the current design to the final design. These issues relate to inadequate incorporation of patterns which are fundamental to the specifics and objectives of the design guidelines:

1. Relationship to the street: each proposed structure has a single entrance to 89 Avenue, and access to the units is oriented along interior corridors.

2. Articulation of building mass: proposed Building B has a modest level of articulation in its north elevation exterior form, and is fully articulated at the back into a U-shape; proposed Building A has no significant articulation on any elevation.

3. Residential scale glazing and features: another element the guidelines speak to is the desire to emulate a residential scale, rather than an institutional scale, particularly with regards to window sizes and other features.

4. Specific demolitions in this proposed site plan: As indicated above, I will repeat my comment from the 2011 meetings and indicate my disappointment that two clinker brick bungalows are included in the proposed demolitions.

Comments regarding Sector 7 & 8 were also part of the above response and will be incorporated into community responses gathered for Sector 7 & 8 consultation process.

Response from the Office of the University Architect:

1. Access to individual suites per article 3.3 Building Heights, Setbacks and Side Yards states, "Multiple entrances from the street are encouraged for multi-unit dwellings to reduce apparent scale and provide a more welcoming sense of arrival." However as the building program and operations require one main entrance on the 89th Ave side and one main entrance on the south side for each of the two residence blocks, the design team ensure that the objectives of reduced apparent scale and providing a more welcoming sense of arrival are achieved through other design device such as articulation of building elevation with rhythm of undulating planes of 2 feet recesses in regularity as well as introduction of porch-like canopies at those recesses to suggest a row house appearance along 89th Avenue. The main building entry porches are generous, well lit and welcoming as well as providing human scale and a comfortable covered outdoor area for greetings and farewells.

2. Consistent with the Design Guideline for Infill Development and in response to the building program, Block A is one storey higher than Block B. Furthermore its neighbouring International House and the Faculty of Law Building are of a different scale than a 2 storey former residential house. Nonetheless the design shows careful articulation of massing and scale per introduction of a mansard roof design with two types of dormer windows on the top floor as well as pulling apart the massing of the building to two separate but inter-linked buildings with a staircase attached along 111 Street in the style of the central staircases of the four graduate student residences along 87th Ave and 110 Street. Vertically, the cladding material is carefully designed to introduce stratification of a tripartite form (base, body and top) as opposed to a repetitive and extruded look of apartment buildings.

3. Fenestration design incorporates residential type windows, but grouped together in composition to emulate the look of a row house development as opposed to repetitive punch windows. The staircase on 111 Street has slightly larger windows, reflecting the neighbouring academic buildings along 111 Street.

4. The two brick bungalows slated for demolition do not successfully meet the evaluation criteria of sound building condition, historic value, building scale/contribution to streetscape, viability for adaptive reuse, and the effect on site development for house retention. However the clinker brick of house #53 is intended to be removed for reuse in the construction of the 89th Ave Student Residences pending on the bonding strength the mortar joints and brittleness of the brick itself. The brushed finished extruded brick of house #49 is also intended to be removed and reused.