

Johns Hopkins University Homewood Campus

JOHNS HOPKINS
UNIVERSITY

Association of University Architects - 2010 Conference
Thursday - June 24th





University of Calgary Taylor Family Digital Library

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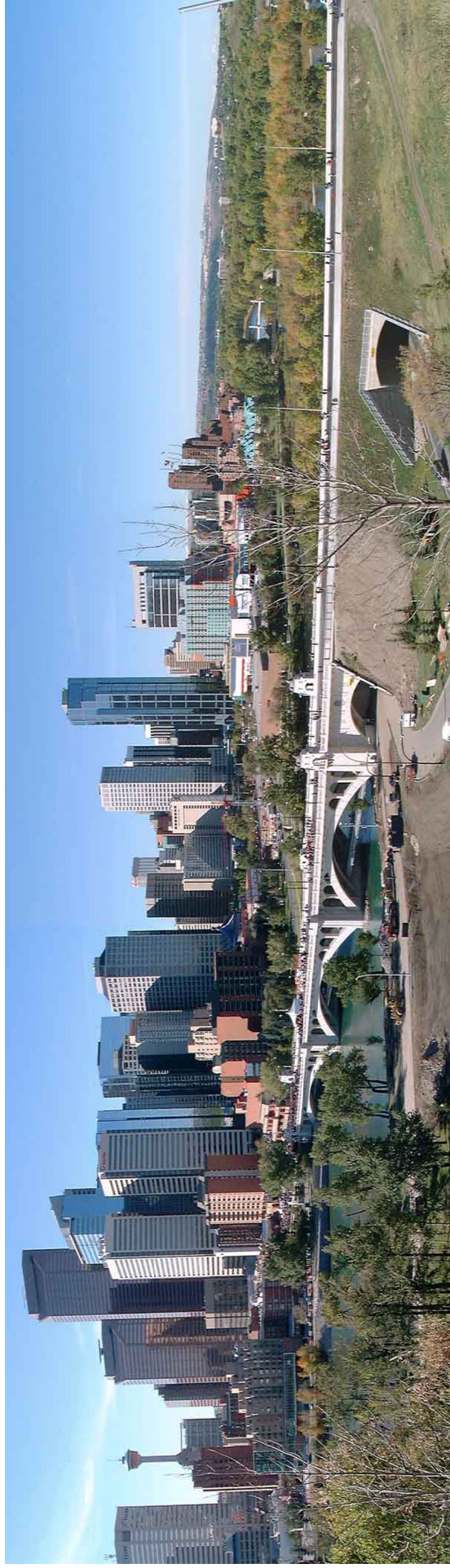


INVESTING IN DESIGN



University of Calgary

- 24,000 undergraduate and 5,500 graduate students attend the University of Calgary.
- Founded in 1945 as a branch of the University of Alberta, the University of Calgary became established as an autonomous institution in 1966.
- The U of C is one of Calgary's fourth largest employers with 2,600 teaching staff and 2,800 management, professional and support staff.
- The U of C is composed of 13 faculties, 55 departments, 36 research institutes, with over 150 programs awarding bachelors, masters and doctorate degrees. The U of C also includes a teachers' college, medical school, law school and veterinary school.



Campus Plan

Main Campus Plan





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Master Plan: The heart of campus



TFDL begins to define the new heart of campus

Mackimmie Library Tower

Existing Facilities:

Mackimmie Library Block, 1963
Mackimmie Library Tower, 1974

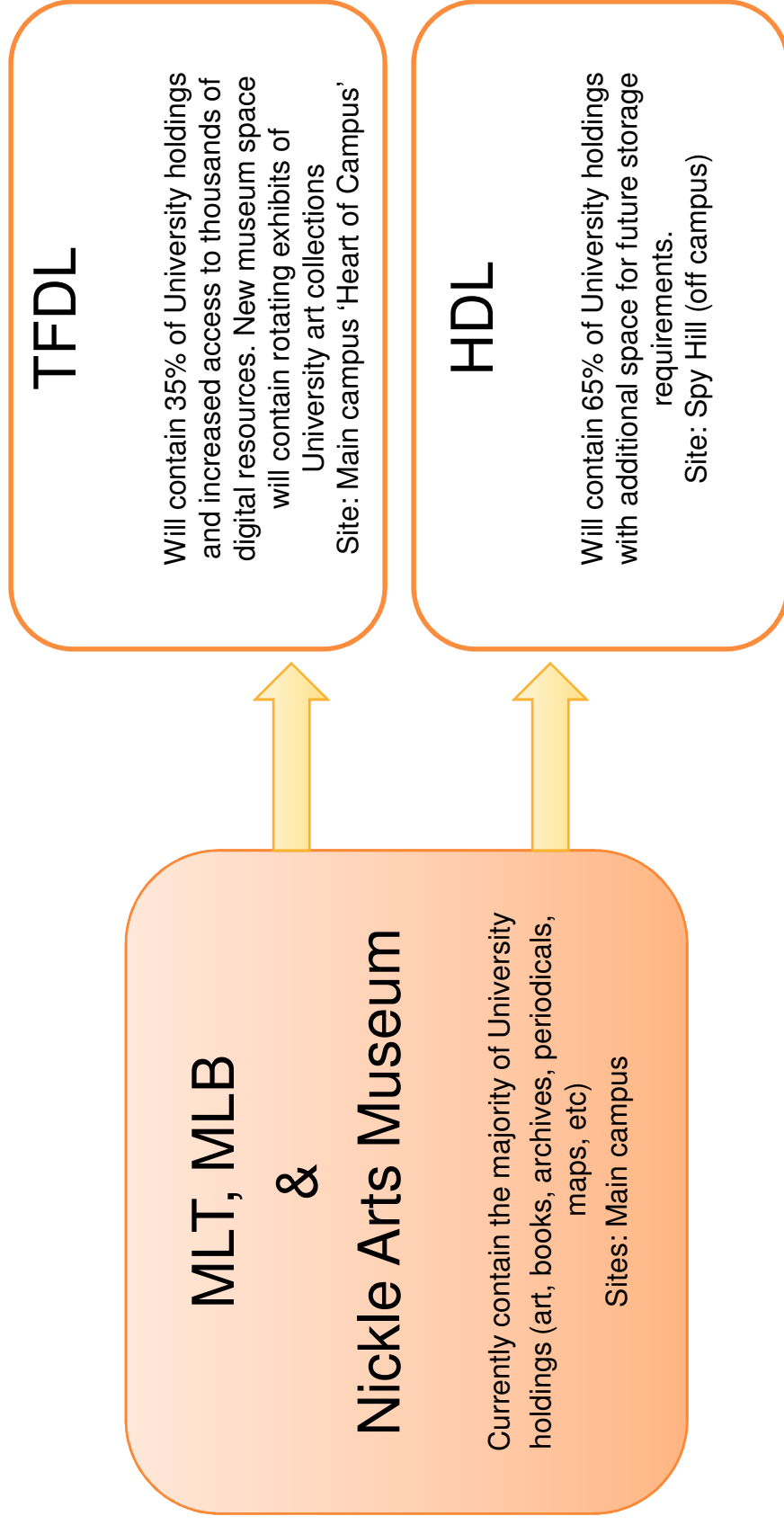
With the completion of the TFDL, 200,000sqft of current library space will become available in MLT & MLB for repurposing and renovation in the heart of campus.



Existing library buildings are over stacked, unorganized and outdated. Substantial structural, mechanical, electrical, building envelope and life safety alterations are required.



Concept





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High Density Library (HDL)

Services?

- *User-initiated retrieval*: Students, staff and faculty able to request items online and indicate when/where they want the material delivered. - *Customized retrieval*: Staff in the HDL can pull large sets (journal runs, call number ranges, and archival docs) and provide space for reviewing material in secure and bookable reading rooms. - *Desktop delivery*: Where copyright permits, articles from U of C's print journal collections will be scanned and sent to the researcher's desktop as requested.

What is a High Density Library?

- Environmentally controlled storage facility used for storage and preservation of books, journals, archival files, architectural drawings, and art.



Advantages?

- *Environmental controls*: Preserve and increase the life span of valuable materials and resources.
- *Space Recovery*: In the past, as collections grew, student, faculty and service spaces were pushed out to accommodate growing collections. The HDL allows U of C to store less frequently used materials off campus, while providing high-use materials in the main library and backfilling previous book storage space on campus with much needed teaching and learning space.

32,000sqft with 1.6mil archival volume capacity. Will store 65% of current LCR holdings.

TFDL: Library of the future...

"The Taylor Family Digital Library is an excellent example of how infrastructure links directly to a student's experience on campus. When this building is completed next year, it will house state-of-the-art teaching, learning and research tools. We picture this building as a hub for our students, staff and faculty – a place where they can meet to discuss ideas in person or by video conference, access information from around the world online, and tackle tough questions by using the latest research tools such as 3D visualization, interactive Smart boards and high-powered computer technology."

- Former University of Calgary President Harvey

Weinga



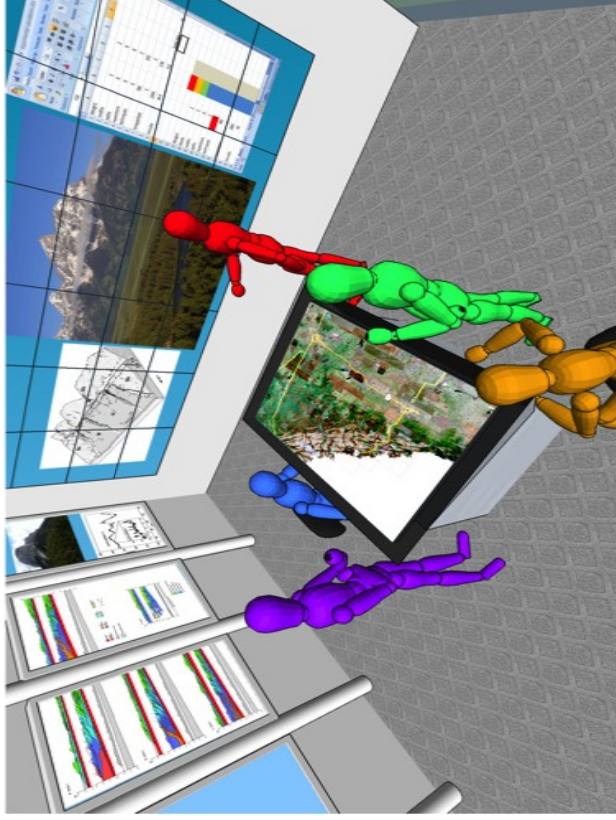


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TFDL: Library of the future...

More than just a building with books, the TFDL is a place for the 21st-century scholar to learn, to study, to collaborate, to research, to explore, to create. For the TFDL to be a “library of the future” it will have:

- Multimedia labs for students and faculty
- Multimedia editing suites
- Triple the number of public computers and of student workrooms (as compared to the existing library on campus)
- Presentation practice rooms with recording and projection capability
- 3D Visualization Lab
- Video Conferencing
- Expanded ‘Learning Commons’
- Collaborative workrooms
- Wireless Cafe
- Presentation practice rooms
- Audio-visual viewing rooms
- Editing and recording suites
- Multimedia labs and computer-equipped classrooms
- Quiet reading rooms
- A prominent, public media wall displaying changing information about the building itself (such as energy being consumed, internal atmospheric data, etc), campus announcements, student work, etc.



Rendering of 3D visualization room



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Program

Primary Programmatic Groups

Libraries and Cultural Resources (LCR): Develops, preserves and provides access to large collections of print, archives, digital and 3D objects (~232,000sqft)

Nickle Arts Museum: 3 stunning galleries will be located on the first two floors of TFDL (~12,500sqft)

Canadian Architectural Archives (CAA): The world's largest collection of Canadian architectural records, drawings, models and photos (~1500sqft)

Special Collections: Features rare and unique literature, art, music, archives, etc. (~4000sqft)

University Archives: Manages the U of C Archives Program and Information Management Program (~3250sqft)

University of Calgary Press: Publishes scholarly works (~2500sqft)

Student Success Centre: Provides learning support for students (~8250sqft)

Alumni Association: Develops and supports various alumni and student activities. (~1000sqft)



Main entry lobby



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Program

TFDL will...

- Make electronic and print collections available to post-secondary students, researchers, staff and the larger community;
- Equip scholars, instructors, and students with information to meet evolving teaching, learning, and research needs;
- Share resources, expert assistance, training programs and information technology support for collaborative teaching and learning with nine post-secondary institutions;
- Integrate technology, learning spaces, and rich resources to better support inquiry-based learning and knowledge creation.



TFDL Vital Statistics

Project area: 6 floors with total 265,000sqft

Completion Date: January 2011

Consultant Team

Project Architect: Kasian Architecture,
Interior Design and Planning Inc.

Construction Manager: CANA
Construction

Technology Consultant: The Sextant
Group

Structural Consultant: Read Jones
Christoffersen

Electrical Consultant: Stantec
Electrical Engineering

Mechanical Consultant: Stantec
Mechanical Engineering

Landscape Design: 02 Planning &
Design Inc.



Project budget: CAN\$203.5 million total budget.

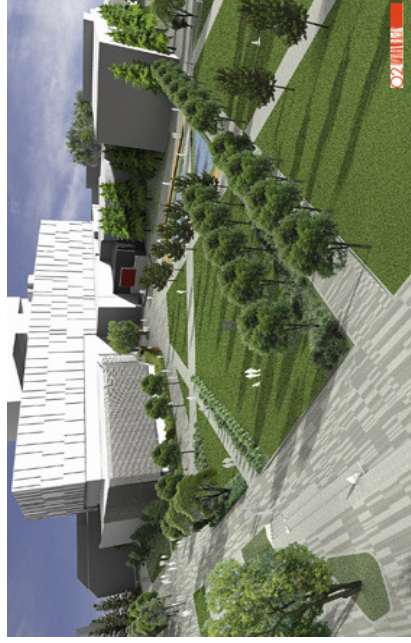
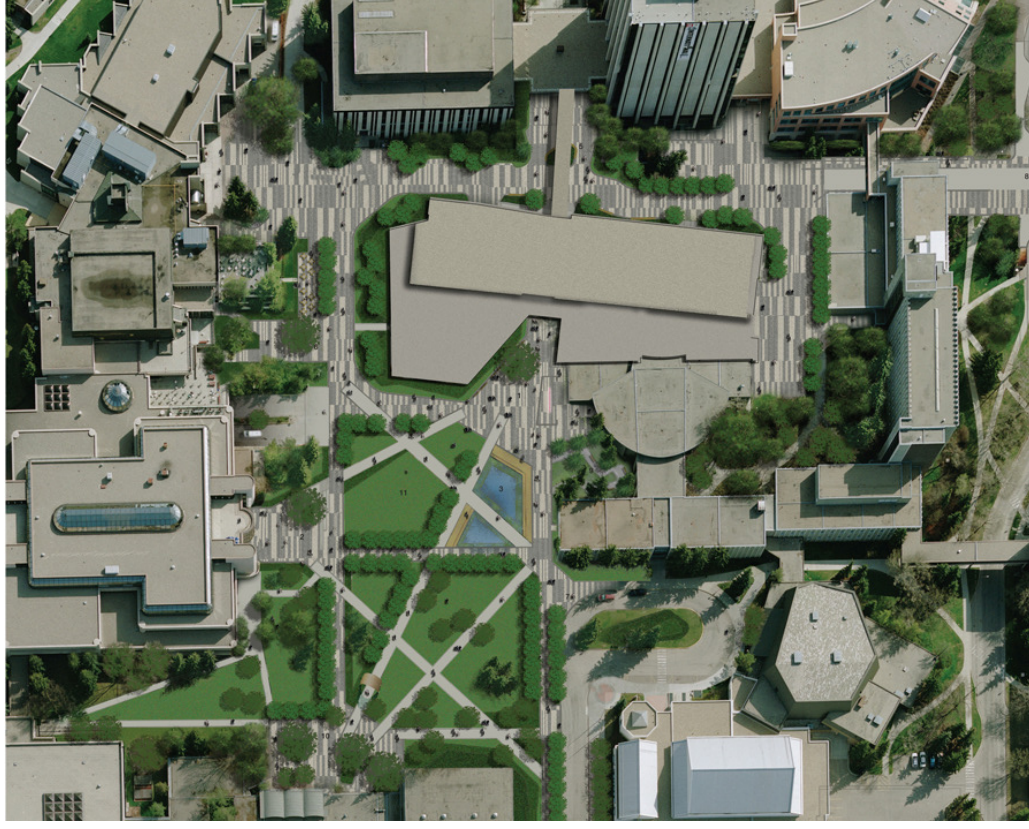
Funding Sources: \$25million donation from the Taylor Family; \$27million from the Federal Government Knowledge Infrastructure Program (KIP); \$151.5million from the Provincial Government Major Capital Funding; \$3mil from City of Calgary.



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Site Plan & Quad Design

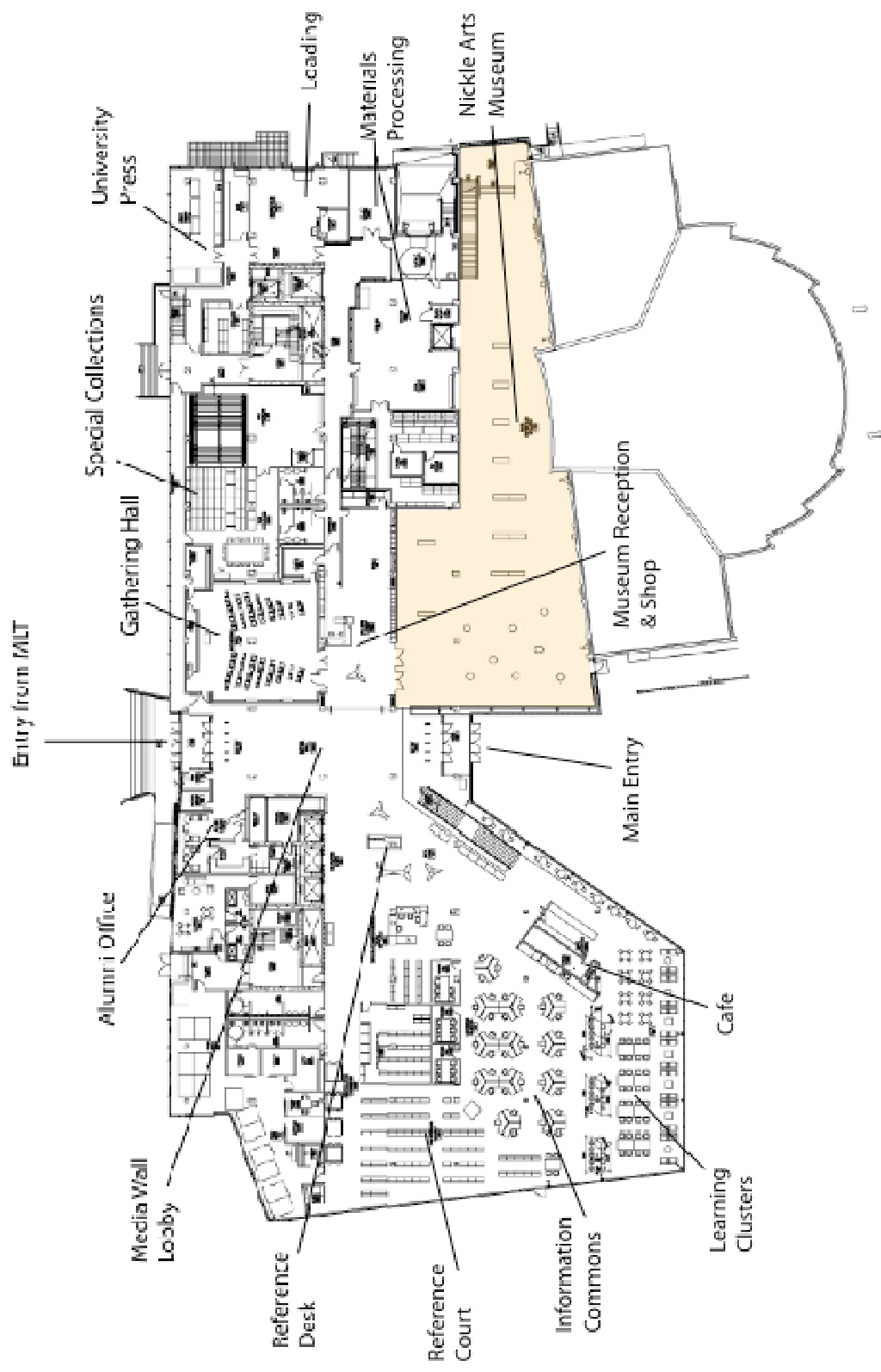
- Quad: 285,000sqft
- \$7mil construction budget
- Defines the new Heart of Campus
- Mix of soft and hard landscaping
- Native grasses and plant species
- Feature retention pond
- Improved lighting and signage
- Ample bike storage and public seating
- Revised loading and delivery zones
- Improved pedestrian pathways





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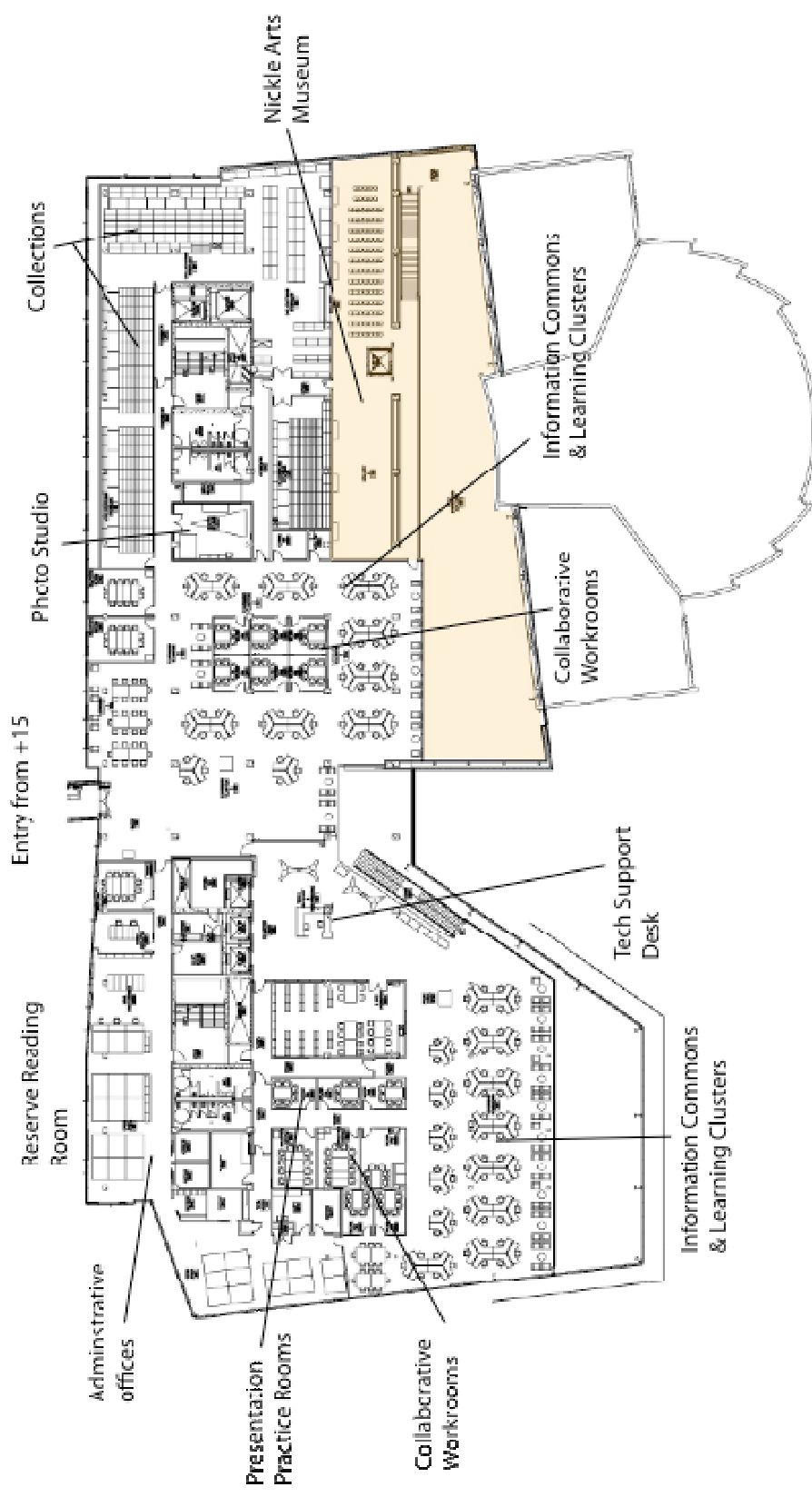
Main Floor Plan





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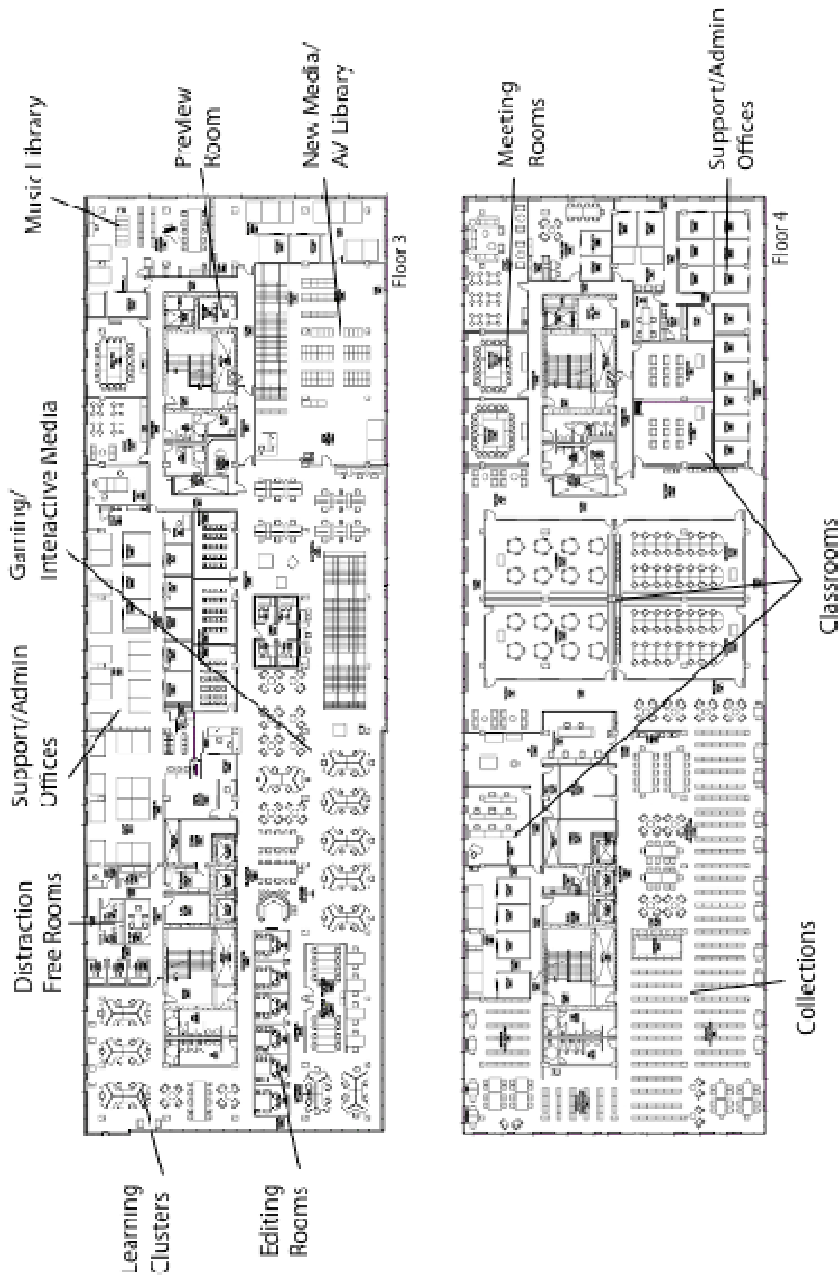
Floor 2 Plan





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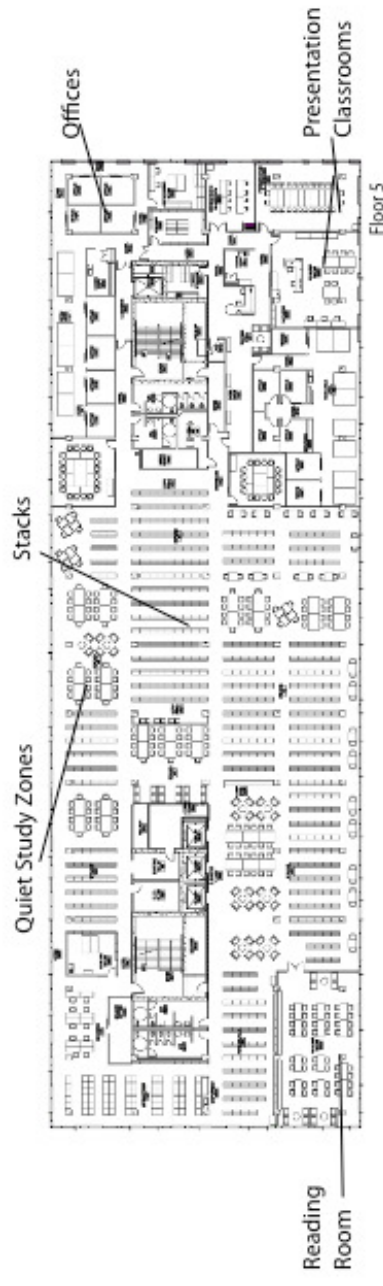
Floors 3&4 Plan





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Floors 5&6 Plan





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Media Distribution



Media walls with 65" interactive flat touch screens with various information feeds and streaming video/campus announcements/etc

Powered Touch Tables and multisurface computing

Spherical computer interface globes with touch technology

Whiteboards and Smartboards in all collaborative workrooms

Bookable Room Schedule Displays

Technology-integrated furniture



Nickle Arts Museum



Main floor gallery space



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“The Task of Libraries Will Be to Provide Tangible Interfaces to the Intangible”

Colleen Sharpe, University of Calgary



Media Wall Lobby

TFDL by night...

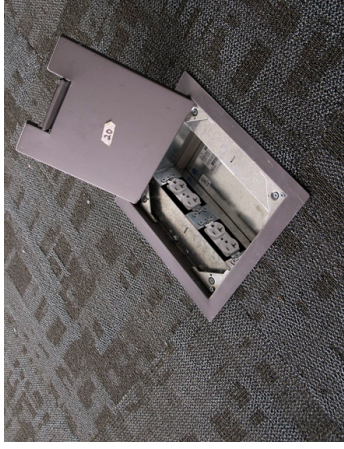


Illuminated from within, the TFDL will become a beacon in the heart of campus

Raised Access Flooring

Technology Infrastructure:

- 600mm raised flooring
- 260 km of Cat 6A Cable
- Over 5000 Receptacles
- 13 Telecom Rooms
- 222 Consolidation Points
- 3996 Network Ports





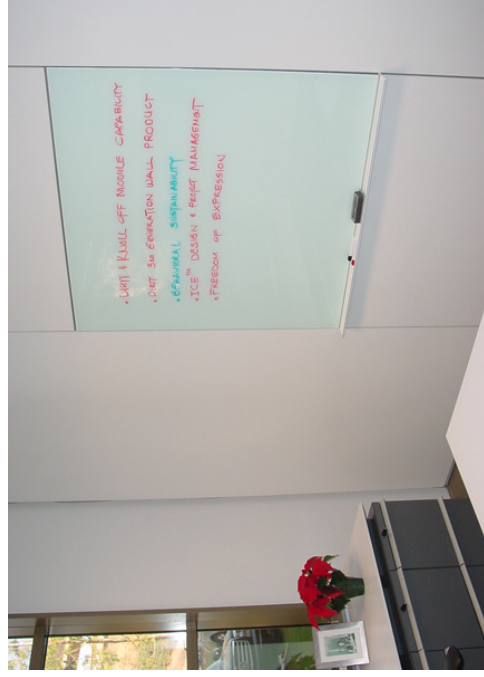
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DIRTT walls



DIRTT: “Do It Right This Time”

Reconfigurable
Flexible
Sustainable
Cost Effective
“Plug and Play”
Technology Integrated

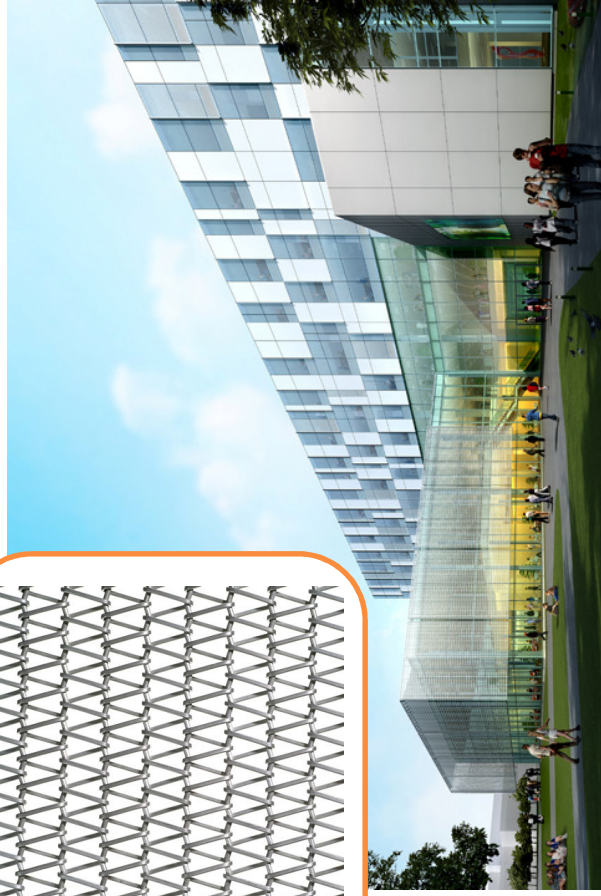
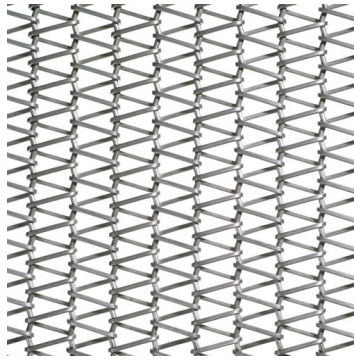




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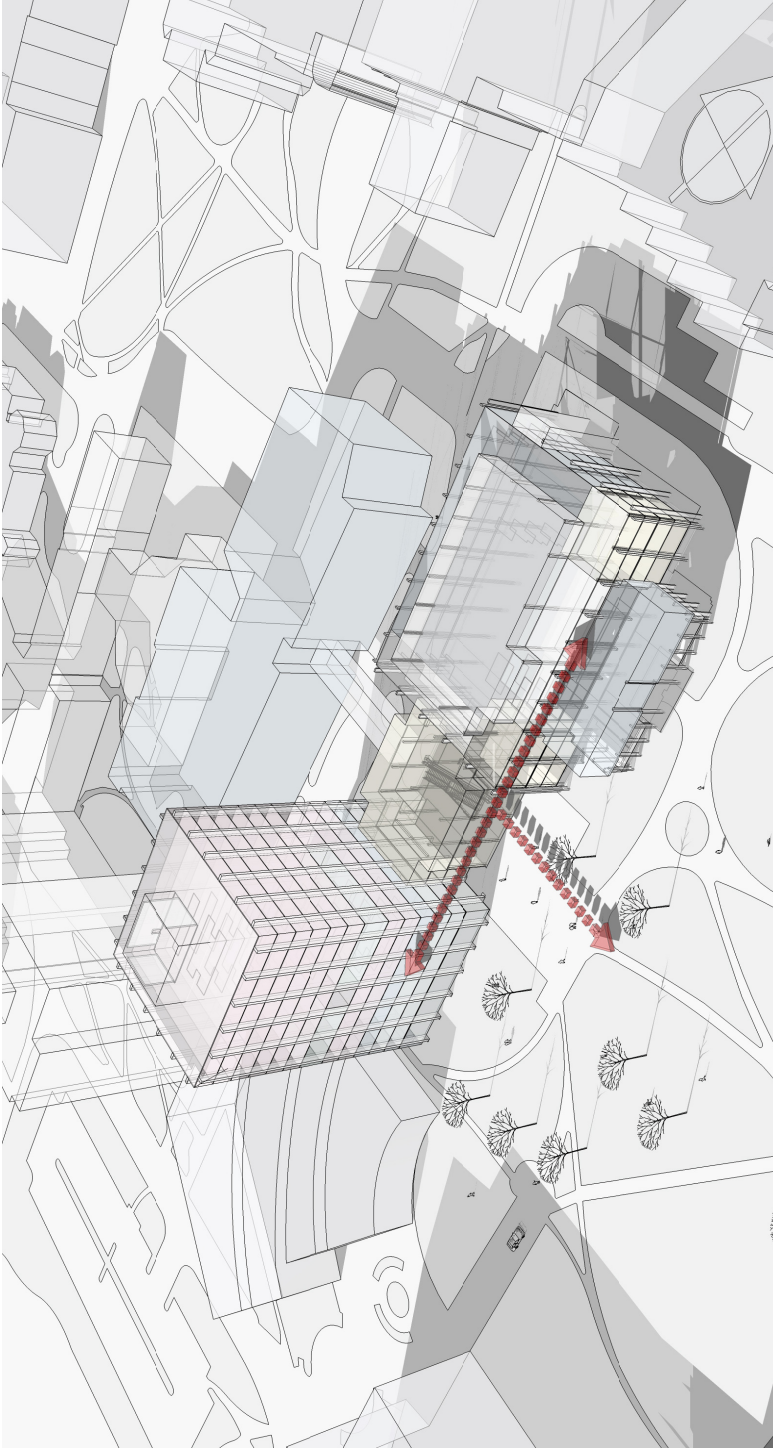
Details: Metal Mesh

Fully glazed 'podium' (main and second levels) will be clad with **Cambridge metal mesh panels**. These mesh panels act as large sun shades, saving energy by reducing heat load and reducing glare on work surfaces and digital screens. The appearance of the mesh varies in different lighting conditions, creating a dynamic surface effect on the building's façade during the day.



The mesh provides a unique alternative to traditional shading systems and creates a canvas for nighttime digital projections on the building's exterior.

MLT/MLB Repurposing

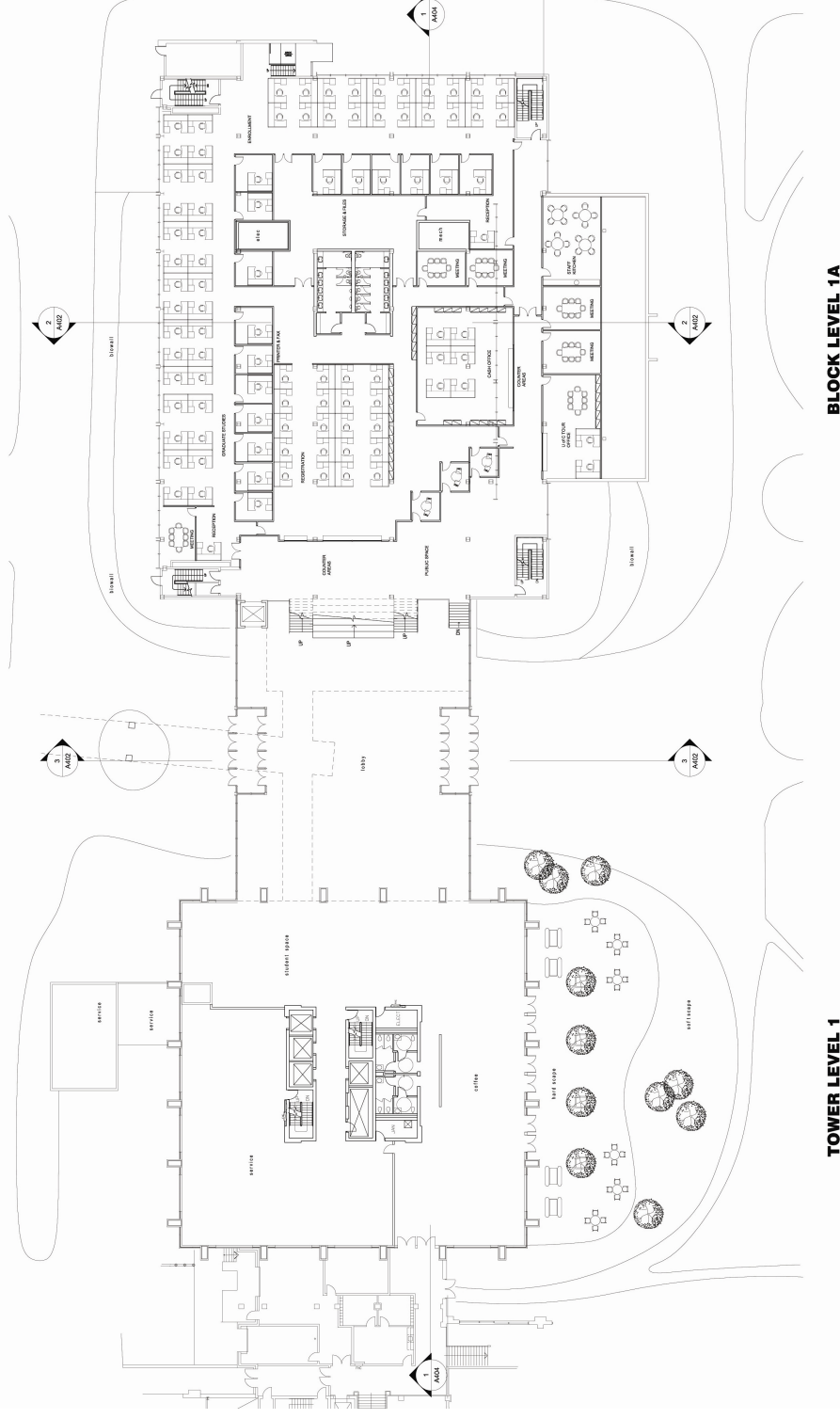


Extensive building condition assessments revealed the need for substantial upgrades to building envelope, mechanical, electrical, and life safety systems. Campus-side program studies and 'test fits' were completed to determine effective programmatic distributions/adjacencies/etc.



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MLT/MLB Repurposing



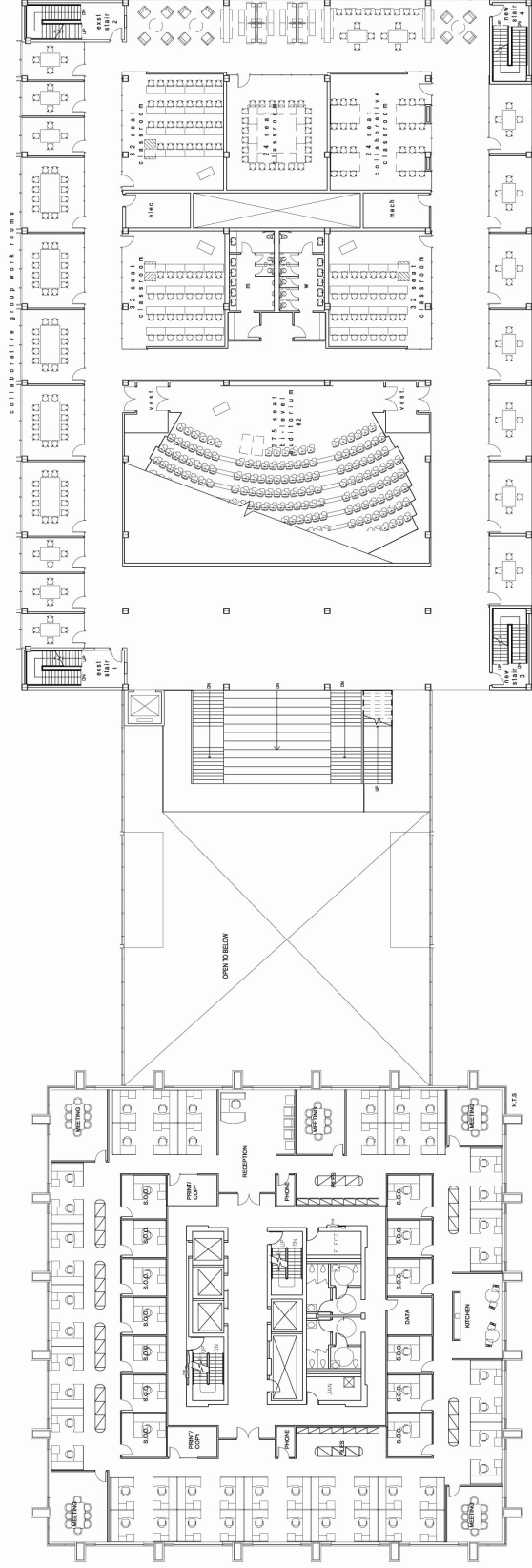
MLT –
Consolidate major campus admin/office spaces; main floor cafeteria; event space on floor 6A

MLB –
Consolidate student support services (registrar, advising, etc); create mixture of improved academic spaces (large lecture halls, small classrooms, etc)



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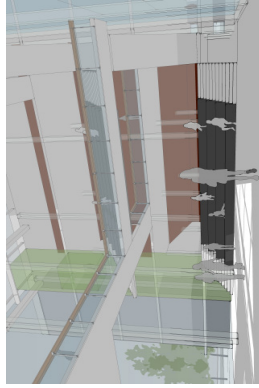
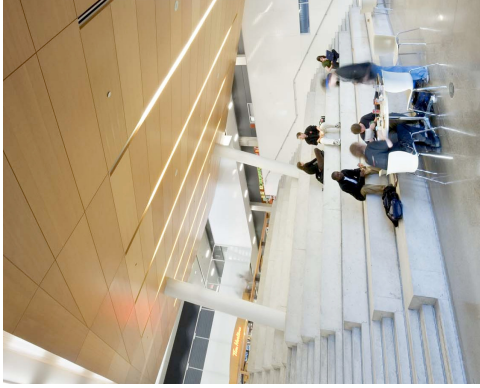
MLT/MLB sample floor plan



TOWER LEVEL 3

BLOCK LEVEL 3

MLT/MLB Repurposing



ML Link- “Town Hall” gathering area for students/staff/faculty; new gateway to TFDL

Q & A

