



TEN-YEAR CAMPUS MASTER PLAN 2015 UPDATE



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SECTION ONE – INTRODUCTION & GOALS

Intent

The mission of Lake Washington Institute of Technology (LWTech) is “to prepare students for today’s careers and tomorrow’s opportunities”. The physical attributes and conditions of instructional facilities are an integral aspect of this commitment. Learning environments have the dual responsibility of accommodating rapidly evolving education methods while emulating the workplaces in which the college seeks to place its students. Recovering from the recent economic downturn and subsequent reduced public funding opportunities, adapting and expanding campus facilities is especially challenging. To meet current and projected needs in a proactive manner, Lake Washington Institute of Technology has developed a Ten-Year Campus Master Plan. This document outlines proposed future building construction projects, campus character upgrades, and campus infrastructure needs. Also addressed is planning theory, common themes for capital projects, space needs, and supporting data. This planning document identifies a course for LWTech to follow over the next ten years, creating facilities and an integrated campus to support its community well into the next decade.

Purpose and Use

Development guidelines are defined within this document for use in planning the growth of Lake Washington Institute of Technology at both its Kirkland and Redmond campuses. The main objectives of this Master Plan are to:

- Identify current needs and predict trends with respect to population growth and workforce needs
- Structure the long-term growth of the institute and develop logical methods and guidelines for its implementation
- Provide background information for use by the institute as it seeks project funding through the State Board of Technical and Community Colleges (SBTCC)
- Maximize the effective utilization of existing spaces
- Aid in programmed space allocation
- Improve LWTech’s physical appearance within the community

Introduction

The communities served by LWTech have grown dramatically since the institute began operations at its Kirkland Campus. The institute’s campus, as well as its educational offerings, has grown in response. Once a vocational technical school within the Lake Washington School District, today’s Lake Washington Institute of Technology offers traditional workforce training pathways in addition to DTA/MRPs, baccalaureate degrees, and more. Growth and popular new programs have put increasing pressure on LWTech facilities to support student, faculty, and employer needs and expectations. This document defines the steps LWTech will make in facility improvements over the next ten years to assure its place as the region’s preeminent source for workforce education.

The development of a college facilities master plan is an evolving process. This Ten-Year Campus Master Plan is a living document; a tool to assist LWTech in maintaining a responsive and meaningful campus environment. It has been developed in conjunction with LWTech's current Strategic Plan and explicitly supports the institution's core themes and goals.

The Importance of Planning

With the wide array of choices in post secondary education, the future of any college depends as much on its facilities as on the educational opportunities it offers. Functionally outdated and inflexible buildings weaken the sense of community essential to the health of a college campus. The condition of the physical environment on campus is an obvious reflection of the standards of the institution itself. Campus growth requires an integrated plan to manage budgets, and maintain an environment of academic rigor and perceived quality. With a well-designed strategy for new campus development and the phased upgrade of facilities and services, Lake Washington Institute of Technology will operate more effectively and efficiently, expressing its commitment to excellence and unity among students, faculty, and members of the community.

Most of the funding of LWTech's capital projects is facilitated through the State Board of Community and Technical Colleges (SBCTC). Funding requests have traditionally been made bi-annually to the SBCTC. To be competitive for capital funding, LWTech must demonstrate need for development to support their mission, goals and strategic plan, and propose an approach for accommodating this development through a phased facilities master plan study. Following SBCTC master plan requirements, this document identifies structures on the Kirkland Campus that are worthy of renovation, and structures that require replacement due to poor condition or poor configuration for educational needs. This document also outlines opportunities for program growth, consolidation of interior uses, and plans for facility expansion.

Master Plan Goals

Respect its Stature: The Lake Washington Institute of Technology (LWTech) Master Plan should reflect the status of the College as a premier college of technology. The Master Plan is to establish a dynamic framework for future growth and decision making which reinforces the College as a learning-centered community with quality programs focused on student success.

Ensure Stewardship: The LWTech Master Plan should ensure good stewardship of the existing campuses, maintaining and protecting the value of the College's physical resources and open space. Changes should improve and enhance, rather than detract from, the existing campuses. The LWTech Master Plan encourages the maximum utilization of current and future space.

Provide Facilities: The LWTech Master Plan should provide for the facility and infrastructure needs of the next decade.

Maximize Flexibility: The LWTech Master Plan should provide the maximum amount of flexibility in order to best accommodate future growth and take advantage of unforeseen opportunities. The LWTech Master Plan should provide for industry and educational relationships in programmatic design and growth including the grouping of programs of similar nature.

Enhance the Campus: The LWTech Master Plan should create an aesthetic quality appropriate to the college as a whole and to specific areas, conserving and improving existing buildings, open spaces, and views on campus, and looking for opportunities to create additional open spaces. The LWTech Master Plan should create a unified image and/or singular identity for the College that links all three campuses as one institution.

Provide Accessibility: The LWTech Master Plan should ensure access to and within the campus, maximizing non-vehicular travel, emphasizing pedestrian routes for all pedestrians, and promoting the design of environments to be usable by all people, to the greatest extent possible, without the need for special arrangements or adaptations.

Promote Safety: The LWTech Master Plan should help create safe and healthy environments, with personal and workplace safety considerations integral to planning and design of circulation elements, buildings, and open spaces.

Respect the Environment: The LWTech Master Plan should value the environment and strive to promote the conservation of natural resources and goals of the Growth Management Act and Sustainable Practices Order.

Encourage Efficiency: The LWTech Master Plan should encourage efficiency and economy in College operations, with advantageous locations for facilities and advantageous adjacencies of uses.

Value the Community: The LWTech Master Plan should recognize the importance of the surrounding communities and strive to achieve compatible working relationships with these communities to improve the quality of life and public benefits for all in the vicinity.

Proposed Development Projects

The Planning Team acknowledges that development opportunities are often beyond the college's power to control. To be successful, a master plan must remain a living document, adaptable to circumstance yet resolved to promote high-quality, real-world, student-focused workforce training environments. Lake Washington Institute of Technology intends to remodel, renovate, replace, and expand its facilities in an organized manner disciplined by thoughtful long-term planning. In pursuance of traditional State-funded development opportunities, the institute also commits to submitting Project Request Reports for one or more projects in each biennium in which it is eligible.

When planning its facilities, the institute has three overriding concerns; preservation of existing assets, replacement of obsolete or deteriorated facilities, and judicious expansion to meet current and projected demand. To preserve assets, LWTech plans to renovate facilities on campus that no longer support modern workforce training. LWTech also recognizes that due to changes in education delivery methods and trends in the workplace, coupled with ever increasing student demand, that some facility challenges can be rectified only through new facility development.

This Master Plan proposes independent projects of varying type, cost, and scale, each capable of resolving significant needs of the institution. No project depends on another for sequential development. However, because every space on campus is regularly utilized, an overall balance of growth/replacement and renovation/remodel projects is essential to accommodate current and projected demand. Additionally, for building projects that increase FTEs, the cities of Kirkland and Redmond may require related development – such as parking lot expansion - as a prerequisite of permitting.

Because of the immediate benefits that will result from its development, LWTech has identified a new Center for Design as the college's highest priority for execution within the next ten years. See Sections 3 and 4, for details regarding the Center for Design, and other projects proposed by the college in its 10 year master plan.

Proposed Development

This Ten-Year Master Plan proposes to resolve identified space shortfall through four growth projects - three at Kirkland and one at Redmond. The following summary shows the proposed building projects with gross area broken down by type (replacement, renovation, and growth). Projects A - D are graphically depicted on campus site plans included at the end of this section.

<u>ID</u>	<u>Project</u>	<u>Replacement GSF</u>	<u>Renovation GSF</u>	<u>Growth GSF</u>
A	Center for Design (Highest Priority)	0	0	54,800
B	Accessibility Improvements	0	0	0
C	Early Learning Center	8,000	0	0
D	New Building/Tech Center Expansion	0	0	49,000
Potential other projects:				
	Redmond Campus Center Expansion	0	0	30,000
	Horticulture Portables Replacement	2,400	0	0
	East Building Academic Skills Center Renovation		33,300	0
	East Building Science Lab Renovation	0	2,600	0
	East Building Mall Renovation	0	26,400	0
	West Building Admin Consolidation	0	5,300	0
TOTAL gross square feet		10,400	67,600	133,800

Proposed Campus Character Development

To address functional inefficiencies at the Kirkland campus, site development projects are proposed in this Ten-Year Master Plan. These projects are intended to address vehicular and visitor circulation issues in addition to overall campus image. These projects include campus entrance improvements that will be completed with the new Center for Design, and Vehicular and Pedestrian improvements (Project B) which is planned in the short-term plan.

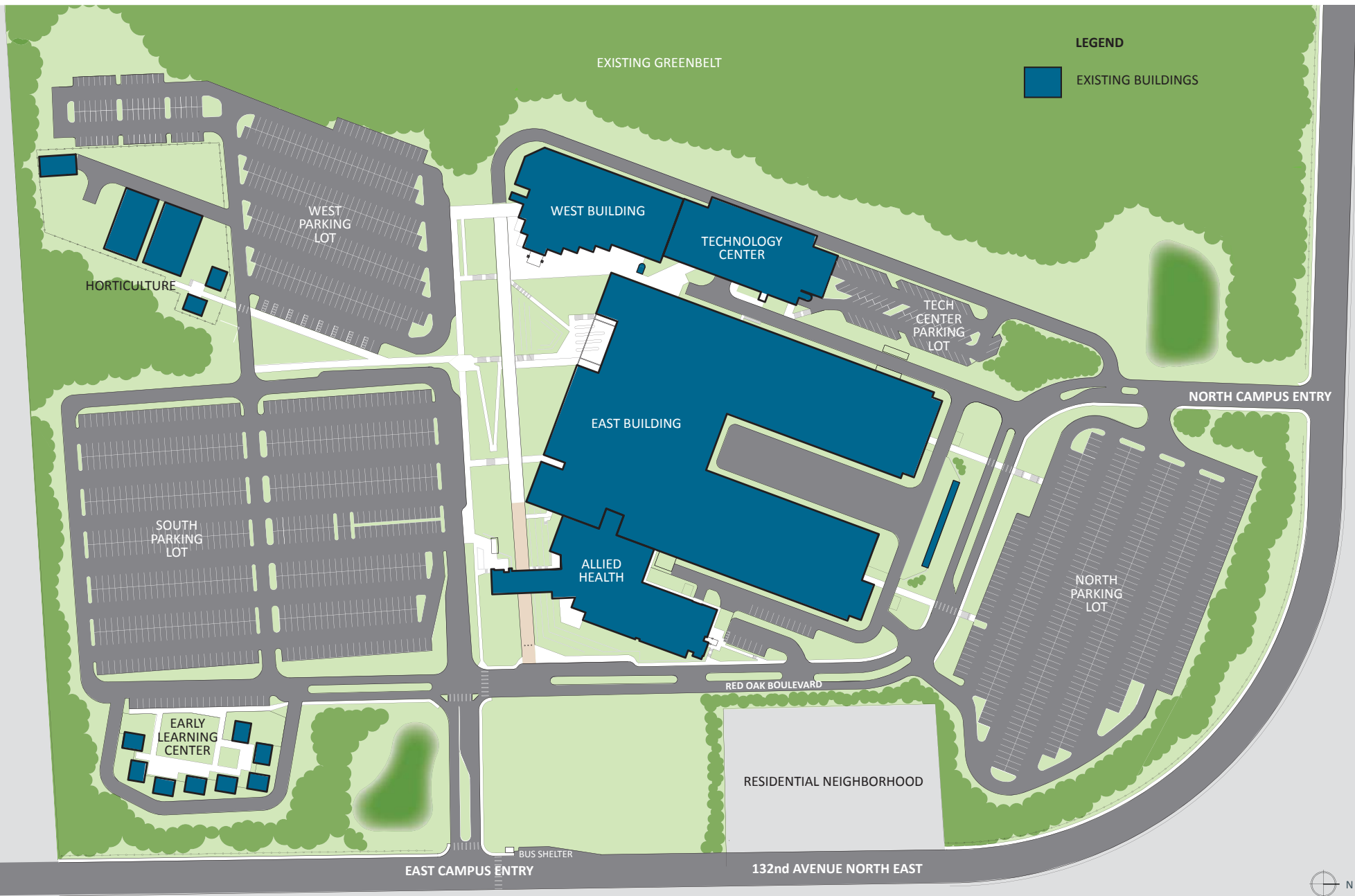
Proposed Infrastructure Development

Infrastructure improvements that are anticipated to coincide with the planned development include extensions of utilities, storm water management systems, landscaping improvements, and parking expansion. All infrastructure improvements will be determined by code and zoning requirements for each individual project. Since parking has the most direct impact on site development, this Ten-Year Master Plan identifies five parking projects necessary to support campus growth:

Parking Project	Approx. Capacity
Additional parking north of Allied Health Building	4
Accessible Parking-North of New Center for Design	8
Southeast Parking Lot	83
Technology Center Expansion Parking Lot	(10)
Redmond Campus Center Expansion Parking Lot	69
Total New Parking Capacity	154 stalls

Campus Plans

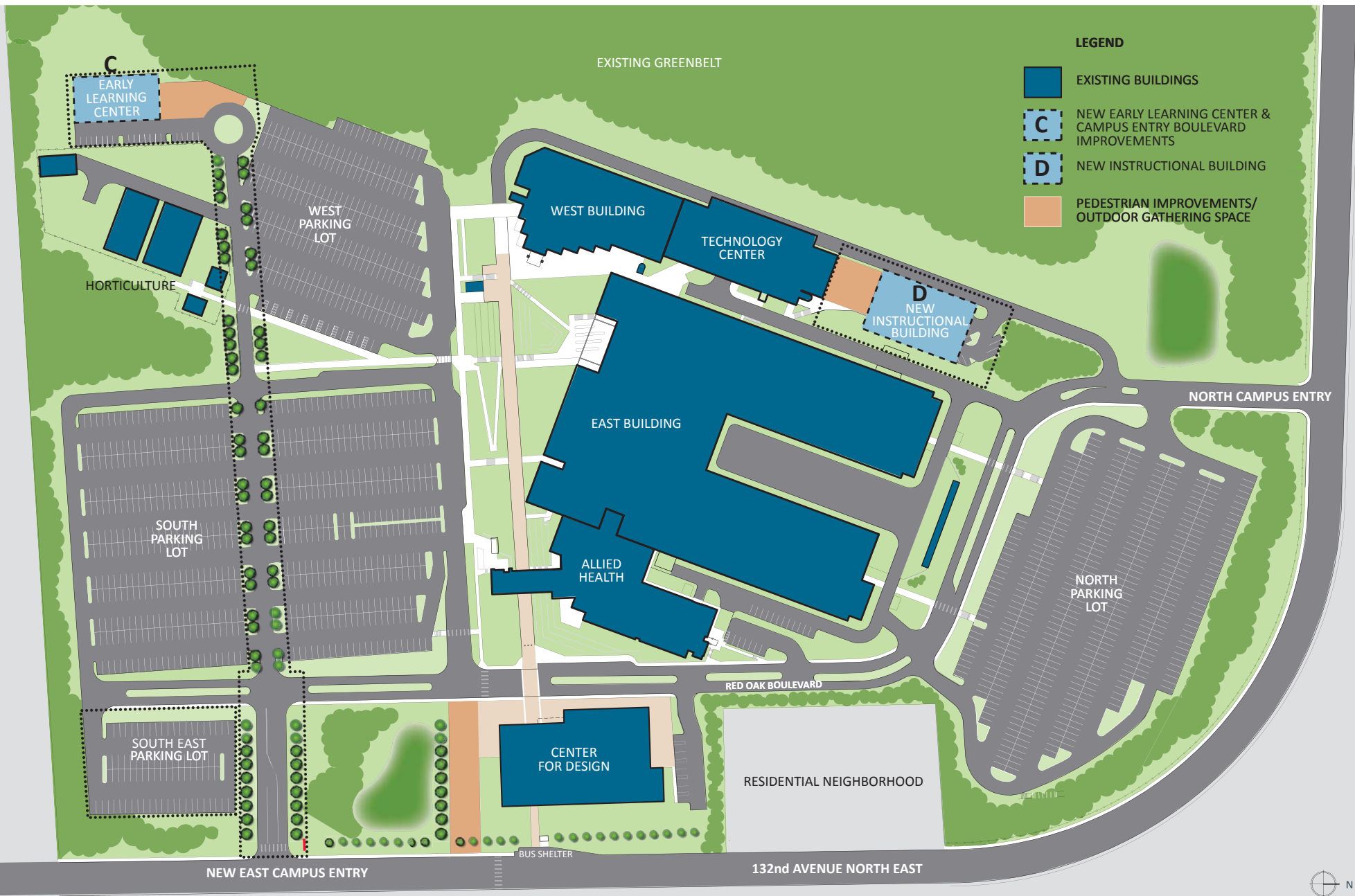
Plans on the following pages depict the Existing Kirkland Campus Plan in addition to Short-Term, Mid-Term and Long-Term Master plans.

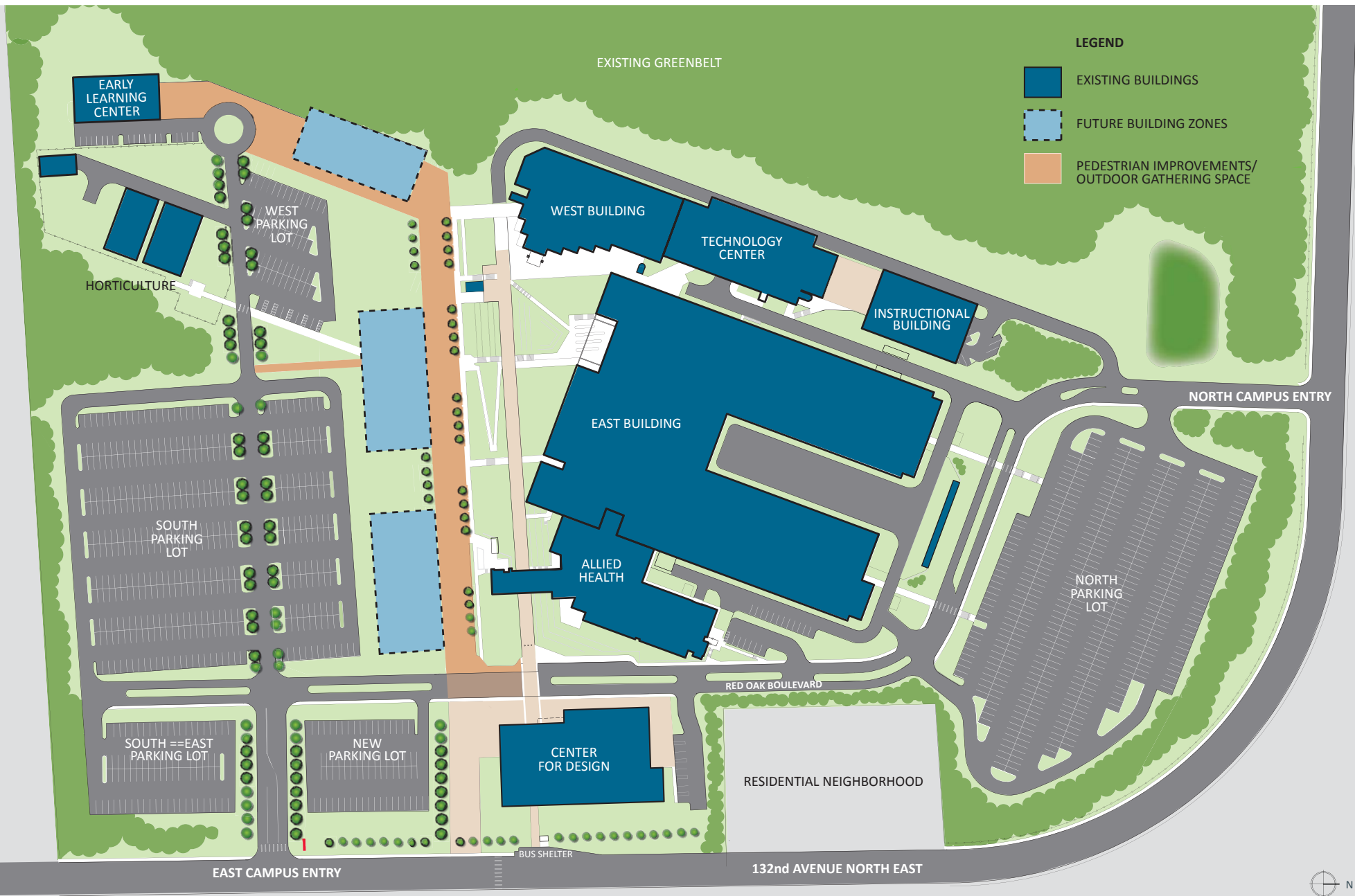


EXISTING PLAN

CAMPUS MASTER PLAN
LAKE WASHINGTON INSTITUTE OF TECHNOLOGY
23 SEPTEMBER 2015







LONG-TERM PLAN 2033+

CAMPUS MASTER PLAN
LAKE WASHINGTON INSTITUTE OF TECHNOLOGY
23 SEPTEMBER 2015

SECTION TWO – PROCESS

Master Planning Process

Master planning efforts were lead by a core Planning Committee consisting of key administrative personnel assisted by Schreiber Starling & Lane Architects. This Master Plan was updated in 2015 with the assistance of McGranahan Architects to more closely align with current capital planning efforts for the Capital Budget Request. On a monthly basis the Capital Planning Committee reported its progress to LWTech's Facilities Planning Committee, soliciting its input and receiving consensus in its recommendations.

Successful master planning projects begin with the Planning Team gaining an understanding of the functions and operations performed on campus. In November and December, 2012, the Planning Team facilitated a series of programming workshops with each department, college administration, and campus services personnel. The purpose of these meetings was to review organizational goals, analyze existing facilities and operations, gather pertinent growth and planning data and projections, review and incorporate institutional goals and objectives, and to make general observations to develop an understanding of the existing campus. Participants were asked to submit ideas and recommendations for minor and major projects, which were then analyzed for their ability to support the institute's mission, vision, and strategic objectives. Beyond these workshops, the team and undertook facility tours and inspections, collected pertinent data, observed daily campus life, and listened to many committed and informed administrators, staff, faculty, and students. These activities provided the Planning Team with valuable insight and direction that otherwise may not have been communicated through more traditional programming and design methods. Much of the information gathered during this process is documented herein with the intent of elucidating development of this Ten-Year Campus Master Plan.

Coupling the data gathered through the workshops and targeted meetings with department deans with previous master plans, the SBCTC Capital Analysis Model (CAM), the LWTech Strategic Plan, and the State Space Standards Manual, the planning committee identified current and projected space shortfalls.

To define the scope of work to be incorporated into the Master Plan the following strategies were implemented:

- **Total Need Determination:** Space shortfalls were identified during the departmental workshops as well as during follow-up meetings. Required growth was quantified using space needs standards. It was further authenticated through comparison with published population and employment trends data as well as the SBCTC's Capital Analysis Model (CAM) analysis.
- **Building Development Planning:** During the workshops, each department discussed the relationships of the spaces with their associated programs and services. Appropriate locations on campus for growth, and the area required at each location, were determined. A series of new capital construction/ replacement projects were located such that the projects organizationally supported the campus planning goals. Projects identified in prior LWTech master plans were analyzed for current relevance and were either retained, modified, or eliminated. A similar process was used to identify existing spaces suitable for renovation.

- **Campus Character:** Each workshop began with discussions regarding the physical presentation of the Kirkland campus to the community and to the students it serves. A series of goals were developed to enhance not only the visual image of the college but to strengthen the general campus organization and to ameliorate unsuccessful campus features.
- **Campus Infrastructure:** Along with new and replacement building developments, associated infrastructure improvements were identified and incorporated into the campus site plan.
- **Internal Space Consolidation:** The master planning process included examination of the existing uses of each space on the Kirkland and Redmond campuses. A similar process in 2001 led to massive space reorganization following completion of the Technology Center in 2004. Included in this Ten-Year Campus Master Plan are diagrams depicting current space use for use in future consolidation projects.

The Planning Team then developed a series of projects supportive of LWTech's planning goals. The resulting Ten-Year Campus Master Plan identifies the colleges immediate to long-term facility needs based on its vision of the future, external environment, and student requirements.

Strategic Plan Integration

In 2013 Lake Washington Institute of Technology completed its new Strategic Plan. First and foremost, this five year plan for the institute affirmed LWTech's existing Mission:

"Preparing students for today's careers and tomorrow's opportunities"

But expanded its Vision away from its former regional focus by declaring LWTech:

"To be the college of choice for workforce education."

During the planning process, faculty and staff created the following Vision Narrative to explain what this "college of choice" would look like:

"Lake Washington Institute of Technology is recognized by students, business, community, and peer organizations as the choice for innovative workforce education because we:

- *Value diversity and welcome students from all backgrounds and levels of educational attainment.*
- *Create educational opportunities and support for students to achieve success and prepare for life-long learning.*
- *Distinguish ourselves by offering creative, cutting-edge, hands-on education.*
- *Offer students choices to achieve their education goals through applied, pathway-based education from basic education and certificate programs to baccalaureate degrees.*
- *Teach using the latest industry standards and cross-discipline approaches to prepare students for immediate and future employment.*
- *Empower faculty and staff to reach their potential in a supportive environment that values collaboration, transparency, respect, and integrity.*

- *Work in partnership with business and industry as well as local and global organizations to foster economic vitality and create prosperous communities.*
- *Thrive in state-of-the-art facilities that use the latest learning and business technologies to enhance the delivery of education and our internal operations.*
- *Implement innovations that result in a financially-sustainable organization.”*

The Strategic Plan is organized by Core Themes, Goals, and Strategies, the implementation of which this Master Plan – from a facilities perspective – seeks to assist. Expressed in a condensed manner:

Core Theme 1: Pathways

PA Goal 1: Strengthen Pathways for students at every level from basic education to baccalaureates.

- Strategy 1:** *Develop and refine a continuous improvement system for program development curriculum.*
- Strategy 2:** *Develop systems that support students in navigating college certificate, degree, and transfer pathways and that provide them with alternatives to traditional course sequences, modes of instruction, and mechanisms for credit accrual.*
- Strategy 3:** *Develop meaningful prior learning assessment (PLA) processes to allow students to make the best use of their time and resources while also allowing programs to uphold educational standards.*

MP Response: While each strategy at face value appears to speak of systems and not physical environments, the physical accessibility of student support functions on a college campus has an enormous impact on student success. Since 2001, LWTech master planning efforts have sought to concentrate student service and academic support functions to improve student outcomes. This Ten-Year Campus Master Plan continues this effort by dedicating a large portion of the proposed East Building second floor renovation as a one-stop Academic Skills Center in support of the Strategic Plan’s student success initiative (below), consolidating functions now dispersed over several buildings and levels. Further, the West Building third floor renovation, in consolidating administrative support functions, allows for a return of the student assessment center to its original location in Student Services.

The proposed Center for Design will dedicate much-needed classroom, lab space and faculty offices to support instruction in the high-tech skills demanded in today’s workplace. Proposed campus accessibility improvements will guarantee that students are able to more easily navigate the challenging grade transitions on site.

Core Theme 2: Student Achievement

SA Goal 1: Increase the percentage rate of successful completion of student educational goals in degrees and certificates as well as in work-related outcomes.

- Strategy 1:** *Improve quality of and access to relevant institutional data*
- Strategy 2:** *Formalize and centralize leadership for student success initiatives (learning lab, writing center, math lab, tutoring)*

Strategy 3: *Identify struggling students and implement systems/strategies to support them to goal completion.*

MP Response: The Academic Skills Center included in the East Building second floor renovation is directly in support of the Strategic Plan's student success initiative, providing students an easily-accessed one-stop location for the institution's writing and math centers and tutoring labs. This project also expands the eLearning Center available to faculty, making them more effective communicators also with the goal of improving student success.

SA Goal 2: Increase cultural competency to prepare students for the global workforce.

Strategy 1: *Hire a consultant to assist in creating a framework that values cultural competency.*

Strategy 2: *Train faculty to teach cultural competency and the Global Outcome of Intercultural Appreciation and ensure that students demonstrate these skills.*

Strategy 3: *Examine/analyze assignments that are developed from courses that have been identified as teaching to the Global Outcome of Intercultural Appreciation.*

Strategy 4: *Foster interaction among students of diverse backgrounds.*

Strategy 5: *Create international experiences for employees and students to compete and succeed in the global economy.*

MP Response: Again, campus facilities have a major impact on what may otherwise be interpreted as purely process strategies. The Master Plan seeks to encourage development of non-programmed support spaces with an explicit goal of improving student communication and improving cultural empathy.

Core Theme 3: External Engagement

EE Goal 1: Develop an intentional coordinated plan for establishing industry and community partnerships.

Strategy 1: *Develop policies and processes to ensure contribution to the Customer Relationship Management (CRM) database.*

Strategy 2: *Develop an effective Alumni Association.*

Strategy 3: *Develop and execute a business plan to grow continuing and contract education.*

MP Response: Continuing and contract education will grow only when the facilities the institution offers mirror the workplace. This Master Plan seeks to maintain the pre-eminence of LWTech by thoughtfully re-investing in aging facilities and identifying new facility opportunities.

EE Goal 2: Identify new and increased funding sources.

Strategy 1: *Create/implement a Customer Relationship Management (CRM) database and populate with comprehensive data about alumni, local businesses and potential donors.*

Strategy 2: *Engage Instruction in the development of project proposals to support applications for grant funding.*

MP Response: To succeed in many funding initiatives LWTech must offer facilities relevant to the needs of the current and future workforce. Recognizing that this is extraordinarily difficult within the current funding environment, opportunities for securing capital funds must also be explored through grants or other means. As an example of capital improvements made through outside sources, LWTech recently renovated two spaces – E135 and E143 – through the Mercury IPZ initiative funded through a grant obtained by the City of Bothell.

EE Goal 3: Strengthen the comprehensive marketing plan for LWTech.

Strategy 1: *Build and strengthen a long-term LWTech brand.*

Strategy 2: *Enhance online tools, applications and mobile presence, e.g. SEO and social media.*

Strategy 3: *Develop an enhanced LWTech marketing plan.*

MP Response: One essential aspect of LWTech's facilities improvement strategy is accommodation for current and future instructional technologies. Today's students demand integration of technology like never before, and technology is evolving at a rate far faster than can be predicted in bricks and mortar. Accordingly, facilities must be designed to be as flexible as possible, capable of easily accommodating new tools without expensive retrofits.

Core Theme 4: College Community**CC Goal 1: Create and implement efficient business processes.**

Strategy 1: *Convert business processes to accommodate a smooth transition to ctclink.*

Strategy 2: *Digitize college processes, procedures, and forms and put them all in one searchable location.*

MP Response: Most of LWTech's facilities pre-date integrated digital technologies and as a result only haltingly accommodate current IT demands with no possibility for handling increased capacity. All projects proposed by this master plan will provide generous capacity for current need, structured in such a manner to assure future flexibility.

CC Goal 2: Expand and modernize facilities and infrastructure to meet program development needs, workforce training, and future growth.

Strategy 1: *Update the Master Plan to reflect the long-range program development plan and learning needs of future learners.*

Strategy 2: *Align the biennial Capital Budget Request Process with the Master Plan and the Strategy Program Development Plan.*

Strategy 3: *Provide equipment to meet the changing needs of students, faculty, and staff.*

MP Response: These Strategic Plan strategies speak directly to the efforts contained in this Ten-Year Campus Master Plan.

CC Goal 3: Create a culture of collaboration, respect, integrity, transparency, and recognition.

Strategy 1: *Foster vision-oriented leaders, committed to employees, who value collaboration, and model respect and transparency.*

MP Response: The physical environments LWTech contains directly support – and at times help create – atmospheres of collaboration, respect, and transparency. All projects envisioned by this master plan provide modern, highly flexible learning environments, as well as essential support spaces, all aimed at supporting collaborative learning.

CC Goal 4: Develop a campus culture that fully integrates and operationalizes equity and diversity work.

Strategy 1: *Create a system of collecting and analyzing data from a diversity and equity perspective on students who are stop-outs/non-persisters/non-completers.*

Strategy 2: *Conduct a Comprehensive Cultural Audit of the campus which provides strategic direction for a Diversity Plan.*

Strategy 3: *Hire a consultant to assist in assessing the “diversity and equity climate” on campus to determine what specific steps need to be initiated to reach the desired goal in five years or less.*

MP Response: The Academic Skills Center (see Project G) and the insistence that projects incorporate non-programmed spaces for casual interaction among students and facilitate and support a culture of openness and respect.

CC Goal 5: Create an employment environment that supports employee achievement and growth.

Strategy 1: *Increase professional development opportunities for faculty and staff to better serve students.*

Strategy 2: *Develop employee training, support, and recognition systems to attract and retain high quality diverse workforce.*

MP Response: For LWTech to be successful, its facilities must mirror the expectations of employers throughout the region. This Ten-Year Campus Master Plan identifies facilities improvements and additions, and sets the expectation for embedded flexibility in all capital funding projects, sufficient for LWTech to meet current and future expectations of relevance.

Acknowledgments

The Planning Team wishes to acknowledge the following people for their cooperation, interest and participation:

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Tim Wheeler	Director, Facilities & Operations

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References

“Space Allocations Standards,” State of Washington, Department of Enterprise Services, September 2011.

Lake Washington Institute of Technology Strategic Plan, 2013.

“Planned 2013 Capital Analysis Model (CAM),” provided by SBCTC, October 2012.

“10-Year Campus Master Plan,” Lake Washington Technical Institute, Schreiber & Lane Architects/Schreiber Starling & Lane Architects, December, 2001 and March, 2005.

“City of Kirkland Advisory Report – Findings, Conclusions, and Recommendations,” September 30, 2006.

SECTION THREE – CAMPUS GROWTH & DEVELOPMENT

Projections and the Need for Growth

Population and employment growth in the Lake Washington Institute of Technology service area (traditionally King County east of Lake Washington, extending from the Snohomish County border on the north, Bellevue and Mercer Island to the south, and Issaquah and the Snoqualmie Valley to the east) has consistently exceeded statewide and overall King County growth rates. The Puget Sound Regional Council showed that Kirkland had the greatest population growth in Puget Sound, with a growth of 70% from 2010 – 2014.

Optimism regarding growth is not limited to local sources. A recent Bloomberg News study, using data from the Bureau of Labor Statistics, found Washington State to have the fourth highest gain in STEM jobs in the United States between 2001 and 2012. Employment in occupations related to STEM is projected to increase by 1 million jobs by 2022.

Without physical expansion, Lake Washington Institute of Technology will be unable to accommodate projected growth. The existing physical plant is barely able to support current functions despite the realization of only a fraction of projects envisioned in the outgoing 10-Year Master Plan. It is clear that LWTech must expand its facilities LWTech to maintain its preeminence in workforce training within the communities it serves. This Ten-Year Campus Master Plan proposes growth projects at both LWTech's Kirkland and Redmond campuses, LWTech anticipating state appropriation over the next five biennia.

Programs and Services Growth

This Master Plan is intended to be an update of the 2007 & 2014 10-Year Master Plan currently in effect rather than an *ex novo* effort. As such, the analysis of space deficiencies began with a review of established baselines updated to reflect growth projects, such as the Allied Health Building, brought online since 2007. Space needs were subsequently re-evaluated during a series of twelve workshops conducted with all instructional and administrative departments. During these workshops, attention was given to projected growth or decline in program and services areas. Space needs were also identified for future programs and services currently in development such as DTA/MRP programs and baccalaureate programs for Transportation & Logistics Management, Public Health, Manufacturing Engineering, and Nursing. The following summarizes space needs determined during this process:

Type of Space	Net Area Shortage	Gross Area Shortage*
Instructional Services**	43,900	72,435
Instructional Support***	14,900	24,585
Administrative Services****	3,500	5,775
College Administration	0	0
Student Services	8,200	13,530
Collaborative Study Areas	11,100	18,315
Total Space Shortage	81,570	134,640

* Assumes 65% efficiency

** Includes general, basic skills, & technical training classrooms/labs; science labs; auditoria

*** Includes full-time & part-time faculty offices; library/media services

****Includes central stores/maintenance

The SBCTC's most recent CAM (Capital Analysis Model) report generated a similar overall space shortage. This alignment is important, as the CAM has historically not recognized vocational training space requirements and thus typically underestimates the instructional space requirements of technical colleges.

Proposed Projects

This Master Plan proposes five projects to satisfy established need, as follows:

Identifier	Project	Total Building GSF
A	Center for Design (Highest Priority)	54,800
B	Accessibility Improvements	0
C	New Early Learning Center	8,000
D	New Instructional Building/Tech Center Expansion	49,000
E	Redmond Campus Center Expansion	30,000

TOTAL gross square feet **141,800**

The following sheets describe each project through statements of need and response, project data and test-fit floor plans. As each project increases campus FTE the City of Kirkland will likely require infrastructure projects – such as parking lot expansions – be implemented as a prerequisite of permitting. Additionally, each project will require additional campus investments including utility and site improvements. Whenever possible, the campus character projects identified in Section 5 will be implemented within the scope of these growth projects.

Project A – Center For Design

Need: LWTech's applied design and technology programs are thriving and expanding in the heart of the technology corridor. Unfortunately, the current space does not allow for the learning environment to adequately prepare students for dynamic, collaborative, cross-discipline, hands-on experiences. Applied Design and Technology programs are presently scattered across four floors of three buildings, allowing little opportunity for collaboration or informal interactions across disciplines.

Further, LWTech plans to introduce new baccalaureate programs over the next several years to join its initial baccalaureate offerings. The new Baccalaureate programs in Applied Design and Technology include: Application Development/Software Engineering, Digital Gaming, and User Interface and User Experience (UI/UX). Additional instructional space is necessary to support the rapid and continuing growth of existing Applied Design and Technology programs and new educational pathways.

Other critical challenges include:

- The campus was not built to accommodate today's technology and in order to meet the needs of our business and industry partners, LWTech needs state-of-the-art, technology-rich facilities sufficient for attracting the most promising students yet flexible enough to adapt to ever changing technology;
- Inadequate or non-existent informal student-centered learning spaces for collaborative work;

- Programs are spread out throughout campus resulting in the lack of facilities to support program cohesion and interdisciplinary collaboration;

As a result, the College is at risk of not being able to provide the quality and type of education necessary to students to meet today's careers and tomorrow's opportunities.

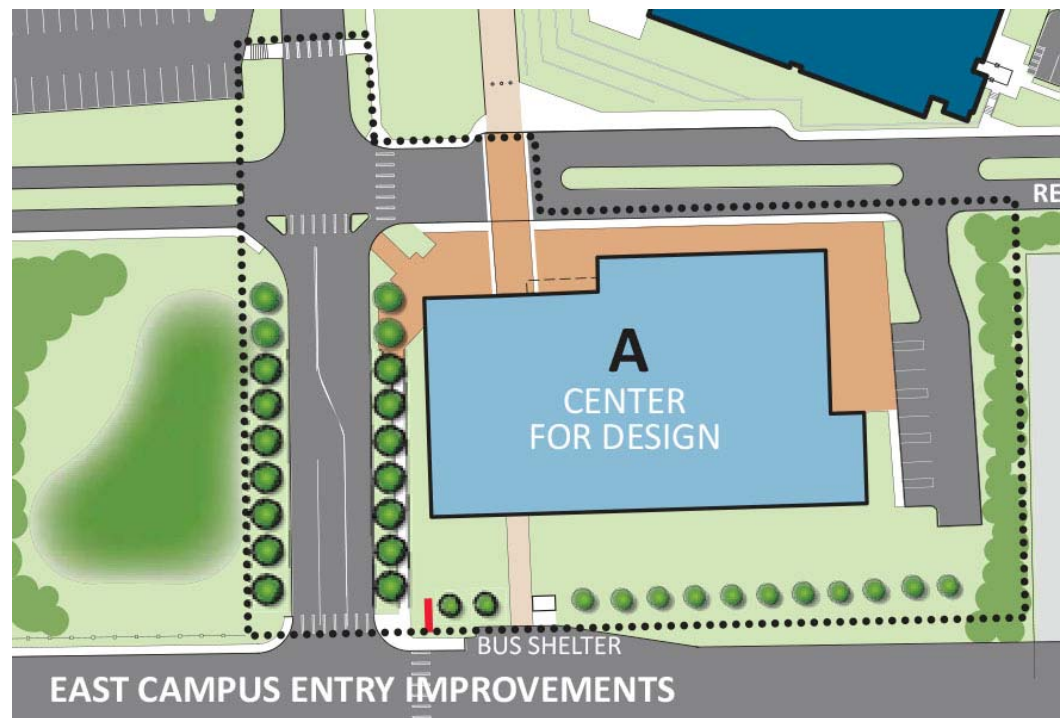
Response: A new building will provide these opportunities and needed program space for growing design, technology, and baccalaureate programs. This highest-priority project offers an opportunity to resolve a broad range of site and facility deficiencies in a new building located at the main entry to campus. This project will include:

- Flexible classrooms and labs to resolve existing shortfalls and meet projected growth, proportioned to accept varied furnishing/equipment layouts and containing flexible IT infrastructure to support current & emerging instructional technologies;
- Innovative space to house Multimedia and Digital Gaming programs with lab space for students/faculty to engage collaboratively in multidisciplinary projects/research;
- Classroom and collaborative lab space to address the growing Information Technology Application Development program to include a baccalaureate degree;
- Design studios and classrooms for the highly successful Bachelor of Technology in Applied Design program;
- Computer lab and design studios for the Engineering Graphics program;
- Shared collaborative space for work projects and learning experiences amongst programs;
- Flexible multi-use space to provide a campus event center and open learning space;
- Informal peer-led study spaces, in recognition that much learning occurs beyond the walls of classrooms and labs;
- Improved entry-way to the College which will address traffic and pedestrian safety, better access to public transportation, and the visibility of the College.
- Improve the capacity, condition and variety of informal student-focused collaborative areas
- Enable campus expansion without need for temporary facilities and without loss of existing instructional space
- Begin the framework for a new Long-Term campus configuration with buildings ultimately lining both sides of an enhanced east-west pedestrian corridor

The new facility will be constructed north of the main campus entry off 132nd Avenue NE, directly east of the Allied Health Building. It will comprise 54,800 gsf distributed over two stories, with targeted 67% efficiency to assure inclusion of vital non-programmed learning environments and to maximize future flexibility. The proposed project will serve an additional 512 FTEs in the new building. In addition to the FTEs accommodated by the new CD, space vacated by the Applied Design programs in existing buildings on campus will increase capacity to serve the projected 1,107 FTEs for a net increase of 110 FTE annually over the next 10 years

Because the Center for Design is anticipated to increase traffic at the constricted campus entry, this project justifies modification of the entry drive off 132nd Avenue NE from one lane in each direction with a center median, to 3 lanes with a dedicated left turn exit lane. Other related sitework includes adding landscape features such as street trees along the Entrance Boulevard, providing a new courtyard at the building entry along Red Oak Boulevard, and eventually completing a future Campus Plaza project to utilize outdoor area directly south of the new building.

An eight stall parking lot will be added north of the new building to accommodate accessible stalls. Additional parking spaces can be accomplished by restriping existing parking lots to increase capacity to the extent permitted by code, by use of off-site facilities, and by minimizing vehicular traffic by encouraging the use of public transit.



Project B – Accessibility Improvements

Need: Workshop participants unanimously cited poor campus-wide wayfinding, from the main vehicular entrance to the steep exterior stairs and ramps now required for access to most primary buildings. A recent US Department of Justice audit faulted LWTech for these pathways failing to satisfy basic provisions of the Americans with Disabilities Act (ADA) requiring accessible pathways to public buildings

The natural topography of the LWTech campus creates difficulties for students and visitors to campus to reach building entrances in a safe, direct fashion. The existing ramp connecting the South Parking Lot with the East Building is not ADA compliant due to steepness of grade and landing area deficiencies. Students with accessibility challenges are often required to take less efficient routes as they circumnavigate campus in order to find safer travel paths.

Due to both the programs it offers and the limits of its current facilities, LWTech offers night classes. LWTech students expect 24/7 access to campus facilities. For night access it is critical that safe passage – both physically and perceptually – exist between parking lots and building entries. With the exception of the Allied Health Building, no direct protected access exists between college facilities and the south and west parking lots. Pedestrians must utilize exterior stairs or ramps that are not visible from the parking lots to access building entrances. As a result, LWTech has recently reported numerous instances of car prowling in its parking lots. This situation may be considered a serious security concern for both student property and personal safety.

Response: Accessibility Improvements are planned along the main pedestrian walkway, indicated as Project B on the Short-Term Master Plan drawing. These improvements will benefit all visitors to campus by allowing easier, safer passage between the parking lots and the building entrances. Providing simplified accessibility between parking and buildings for all students has a direct positive relationship to student success.

Project C: Early Learning Center

Need: Also a legacy of its origins, the college has long depended on portable structures to house necessary functions. As recently as twelve years ago, nineteen individual units were in regular use. In the early 1990s, a group of portable structures once clustered southwest of the East Building were relocated to allow construction of the West Building. These units still exist, with eight serving as the Early Learning Center located at the southeast corner of campus. Rated 453 by the 2015 Facilities Condition Survey, these portables have long exceeded their useful lives, drain maintenance resources, and present a poor image of the institution.

Response: The eight existing ELC portable structures will be replaced by a new building to house the Early Learning Center. The project will include classrooms as well as state-mandated support spaces. The project will also include approximately 12,000 gsf of contained outdoor play area. The new building will be located along the western boundary of campus, south of the West Building. The proposed project will consist of 8,000 gross square feet.

(See Horticulture Portables Replacement Project under Section 4.)

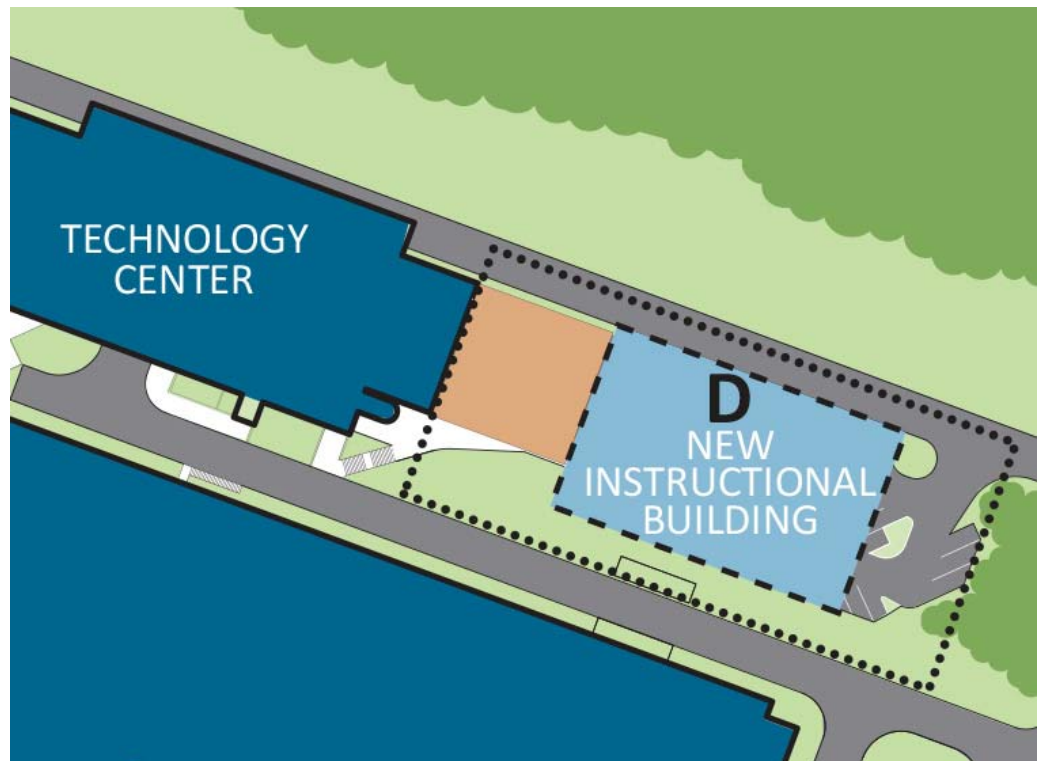
Relocating the early Learning Center into a single facility on the west side of campus will rectify several other facility shortcomings. The proposed site safely locates children in a quieter part of campus. Drop off areas and short-term parking stalls will be provided to make a parent's arrival experience as simple as possible. By eliminating the multiple access/egress points into the building, the children's safety and security will be vastly improved. Educators at the facility will be better able to plan activities utilizing multiple program space and supervision of the outdoor play spaces will be less challenging.



Project D: New Instructional Building/Tech Center Expansion

Need: In its 2001 Master Plan, LWTech envisioned extending the West Building to the north, to eventually align with the northern facade of the East Building. This campus expansion was designed to help alleviate program space shortfalls in STEM fields. As the concept developed over time, this expansion was proposed in three phases. The first phase of this expansion, completed in 2004, is now referred to as the Technology Center. This portion of the building contains LWTech's library and academic support services, general purposes classrooms and computer labs, science labs, the IT department, and faculty offices. Subsequent, needed West Building expansion for Technology programs has not yet been realized.

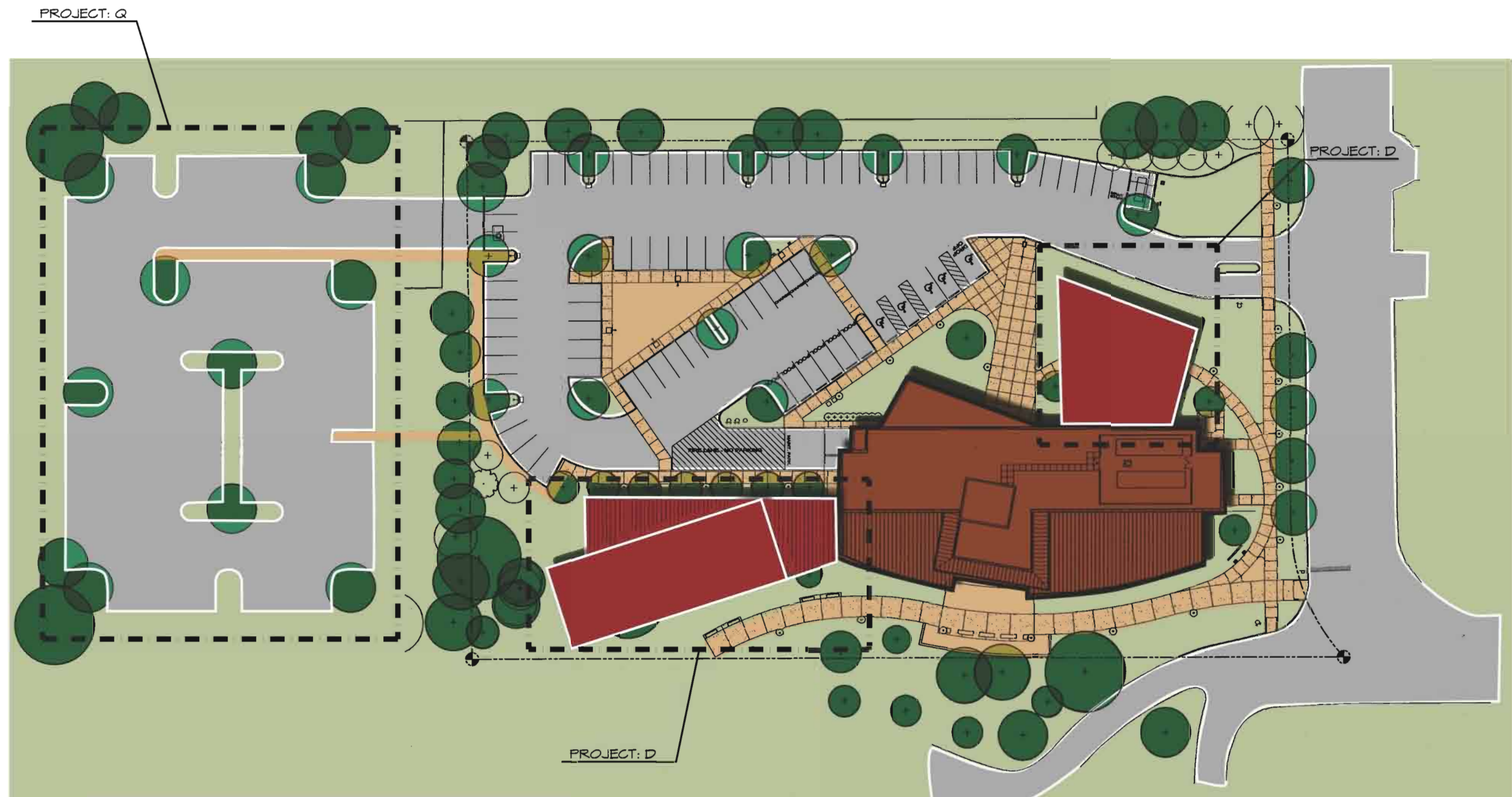
Response: A proposed new Instructional Building directly north of the West Building will fit well into the existing framework of the site and creates an opportunity to develop additional outdoor learning and socializing space for students, staff and faculty. Rather than abutting the existing facility, as was previously proposed, a detached facility provides better overall site access. In addition, it simplifies construction, provides the opportunity for higher efficiency mechanical systems and creates a more desirable building form for implementing sustainable strategies including providing building users with adequate daylighting and exterior views.



Project E: Redmond Campus Center Expansion

Need: The Redmond Campus is situated on a high-profile site adjacent to a popular regional park at the epicenter of population and employment growth for northeast King County. The success of this branch campus depends on its ability to support a critical mass of facilities and services. LWTech believes the potential for its Redmond Campus is inhibited by the limited scale of the existing facility.

Response: Lake Washington Institute of Technology is planning to further develop the offerings at the Redmond Campus to meet increasing training demands in the Redmond area. Currently, the Redmond Campus provides technical training programs, basic skills, and general academic courses. Future focus for the Redmond Campus will include business development and customized training to local businesses.



SECTION FOUR – EXISTING FACILITIES

Intent

For continued success of the institution, maintaining the functionality of LWTech's existing buildings is equally important as developing new facilities. Planning for asset preservation and minor improvements forms a key portion of this Ten-Year Campus Master Plan and includes the following:

- Portions of LWTech's older buildings, in particular the East Building, were purpose-built for specific programs, replete with built-in furnishings/equipment and specialized room dimensions. As needs change, these facilities are difficult to adapt to new purposes and become increasingly less capable of simulating contemporary work environments.
- As LWTech's buildings age, heavy use and aging components will require an ever larger commitment of maintenance resources.
- Similar to growth projects, renovation projects offer an opportunity to consolidate compatible functions into contiguous spaces, thereby improving educational synergies and operational efficiencies.
- The Puget Sound Regional Council projects that the Health, Physical/Life Sciences, Computer/Math and Business/Finance sectors will lead job growth during the next three decades, while the manufacturing sector will decline. This trend will influence the types of instructional and support spaces the institute requires and justifies the remodeling of obsolete spaces to serve new and future needs.

In addition, LWTech operates its Early Learning Center and Horticulture programs from ten portable structures on the Kirkland Campus. The temporary nature of these structures and the deficiencies they present are incompatible with an institution of higher learning. It is essential that these facilities be replaced as soon as feasible with more permanent structures to improve both the operations of the programs within the buildings and the institution's image within the community.

Facility Condition Survey

For capital planning purposes and for allocating capital repair funds among its member institutions, in 1989 the State Board of Community and Technical Colleges (SBCTC) instituted a biannual survey of all state-owned community college facilities called the Facility Condition Survey (FCS). This requirement was extended to technical colleges in 1991. The intent of the FCS is to objectively ascertain facility condition and identify capital repair projects for funding through the state's biennial budget cycle. In 2001, this survey was augmented to assign each facility a numerical rating based on the condition of 20 separate attributes. Possible scores vary from 146 to 730. The score for each attribute is weighted to give highest emphasis to health and safety deficiencies and those deficiencies, such as roofing, which could potentially deem a facility unusable. In contrast, the score weighting de-emphasizes deficiencies affecting operating costs and quality of use. In the past two biennia, LWTech buildings received the following scores:

TEN-YEAR CAMPUS MASTER PLAN – 2015 Update

19 November 2015

<i>Facility</i>	<i>Size (qsf)</i>	<i>Location</i>	2013 Score	2015 Score
Allied Health Building	83,700	Kirkland	146	146
Redmond Campus Center	20,000	Redmond	158	170
Greenhouse 1	6,000	Kirkland	174	174
Technology Center	60,728	Kirkland	174	186
West Building	89,967	Kirkland	186	186
East Building	214,827	Kirkland	246	246
Greenhouse 2	6,000	Kirkland	262	262
Horticulture Portable 1	1,130	Kirkland	320	369
Horticulture Portable 2	1,130	Kirkland	332	382
ELC Portable S01 (Toilets)	1,130	Kirkland	416	453
ELC Portables S02-S08	1,130 ea	Kirkland	446	453

FCS scores equate to the following recommended actions:

146 – 175	=	Superior
176 - 275	=	Adequate
276 - 350	=	Needs Improvement Through Additional Maintenance
351 - 475	=	Needs Improvement Through Renovation
>475	=	Replace or Renovate

Historically, the FCS score for each facility has been used to rank candidates for replacement or renovation during the SBCTC's capital project selection process. A building's score is therefore a strong indicator of success in obtaining state funding. Unfortunately, because a facility's score is often influenced by proper maintenance, the FCS process can have the undesirable effect of discouraging effective maintenance programs.

Internal Space Consolidation

Internal space organization in the East and West Buildings has become disjointed in part due to incremental growth and the college's admirable but piecemeal efforts to adapt its facilities to rapidly changing needs. During planning workshops, the fractured environment was determined to be inefficient and detrimental to the overall educational experience. The 2001 10-Year Campus Master Plan sought to re-organize the campus on the following planning concepts:

- Spaces designed for specific programs or services were to be clustered together to promote awareness of LWTech programs and encourage casual pedagogical interactions outside the classrooms and labs.
- Faculty offices were to be dispersed throughout campus and ideally located adjacent to the programs or services they support.
- Community services such as the dental clinic, bookstore, conference services, food services, and the fitness center would be located along the first floor East Building Mall with primary public access from the east.
- Student services would be clustered around the Campus Forum to foster student interaction by creating an area of concentrated activity.

Existing Conditions

Upon its adoption, the 2001 10-Year Campus Master Plan formed the framework for interior remodeling and consolidation within the existing buildings. Construction of the Redmond Campus Center, the Technology Center, and Allied Health Building all significantly increased the amount of floor space available for instruction and support functions. Following new building occupation, the resulting vacated spaces were remodeled in conformance with the 10-Year Campus Plan. Projects included:

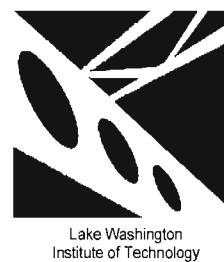
- Remodeling of the second floor of the West Building into a one-stop Student Services center, which consolidated all student services into a single location at the formal campus entrance.
- Encouraging public use of the first floor East Building Mall, which has been strengthened as a result of several projects executed in phases:
 1. Culinary Classroom E144 was remodeled into a Conference Services/Culinary Training Room.
 2. The Fitness Center was created from space previously occupied by various student services. This function had previously been located in the basement of the West Building, isolated from student activity areas.
 3. The Associated Student Government (ASG) was first moved to space on East Building second floor, then to the first floor in the space formally occupied by the floral program.
 4. TRiO was relocated to the East Building second floor suite previously occupied by the ASG.

Color-coded floor plans on the following sheets illustrate the 2013 internal space organization of the Kirkland campus. The color coding and program identification of spaces designate only the primary user. A clear testament to the power of master planning, the plans show a more coherent campus organization.



Department Room Use Key

Instructional Services:		Transportation/Manufacturing/Engineering/Tech. Prep
		Health and Wellness
		Hospitality
		Personal, Public, and Human Services
		General Education & Service Technology
		Business Engineering
		Business & Information Technology
		Library/Media Services
		Administrative Services
		Bookstore
Administrative Services:		Financial Services/Budget Services/Purchasing
		College Administration
		Student Services
College Administration:		Ottenson High School
		Campus Life
		General Classrooms
Student Services:		Faculty Offices and Support
		Conference Services
		Business Training Center - BTC
General Use Facilities:		Academic Skills Center
		Campus Services
		Storage
Other Components:		
Campus Services:		



Master Planning - 2001 Existing Use

1" = 40'-0"

First Floor Plan

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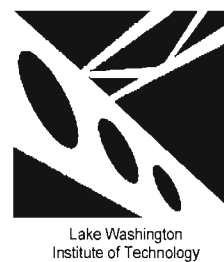


11/04/2013



Department Room Use Key

Instructional Services:	■	Transportation/Manufacturing/Engineering/Tech. Prep
	■	Health and Wellness
	■	Hospitality
	■	Personal, Public, and Human Services
	■	General Education & Service Technology
	■	Business Engineering
	■	Business & Information Technology
	■	Library/Media Services
	■	Administrative Services
	■	Bookstore
Administrative Services:	■	Financial Services/Budget Services/Purchasing
	■	College Administration
College Administration:	■	Student Services
	■	Otterson High School
	■	Campus Life
General Use Facilities:	■	General Classrooms
	■	Faculty Offices and Support
	■	Conference Services
Other Components:	■	Business Training Center - BTC
	■	Academic Skills Center
	■	Campus Services
Campus Services:	■	Storage
	■	Storage



Master Planning - 2001 Existing Use

1" = 40'-0"

Second Floor Plan

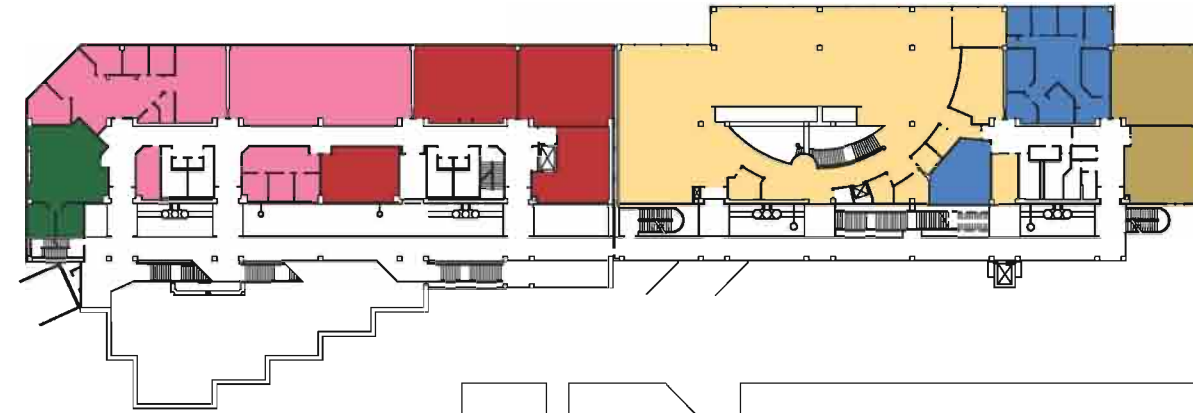
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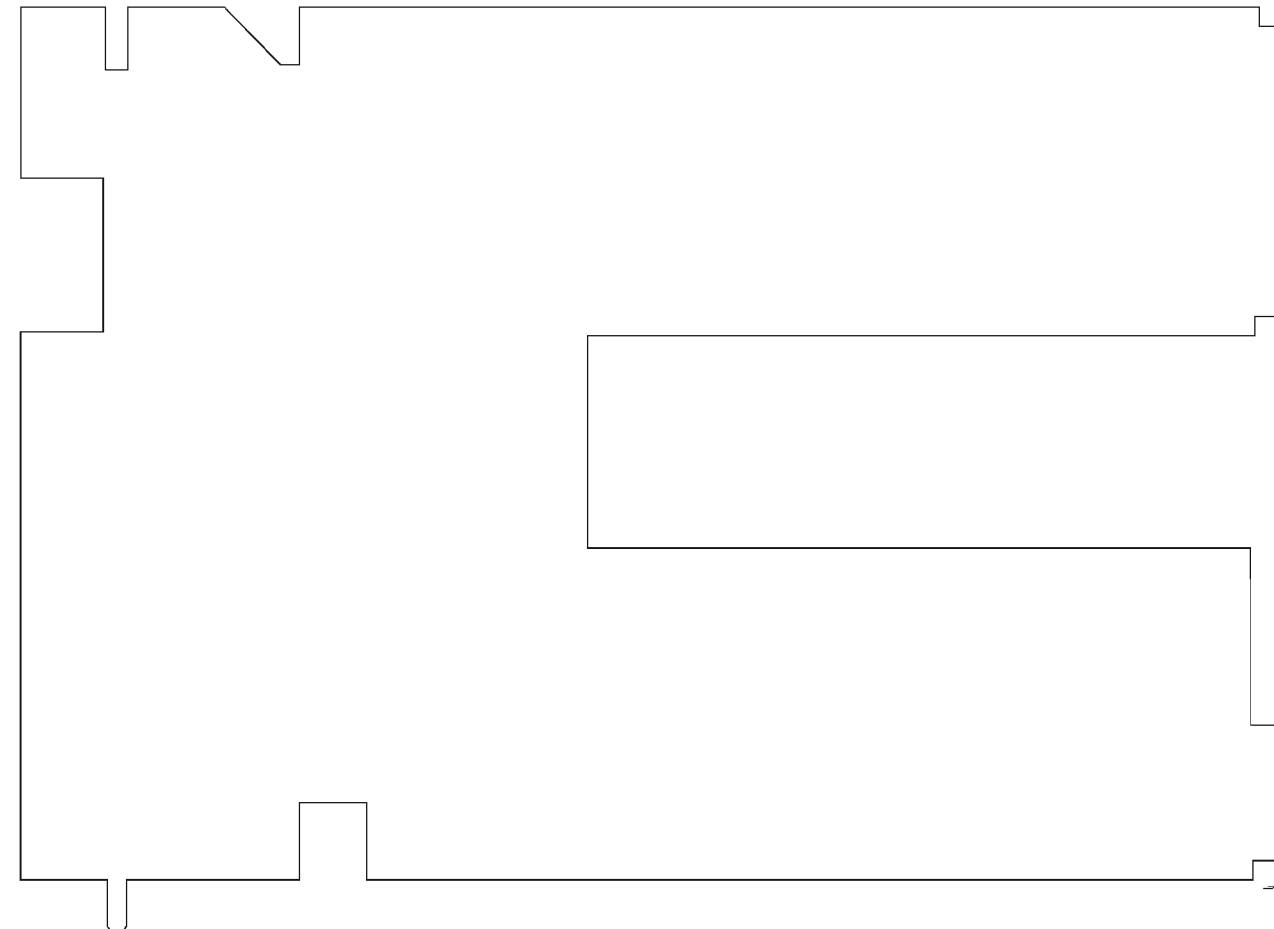


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Department Room Use Key

Instructional Services:		Transportation/Manufacturing/Engineering/Tech. Prep
		Health and Wellness
		Hospitality
		Personal, Public, and Human Services
		General Education & Service Technology
		Business Engineering
		Business & Information Technology
Administrative Services:		Library/Media Services
		Administrative Services
		Bookstore
		Financial Services/Budget Services/Purchasing
College Administration:		College Administration
Student Services:		Student Services
		Ottenson High School
		Campus Life
General Use Facilities:		General Classrooms
		Faculty Offices and Support
Other Components:		Conference Services
		Business Training Center - BTC
		Academic Skills Center
Campus Services:		Campus Services
		Storage



Master Planning - 2001 Existing Use

1" = 40'-0"

Third Floor Plan

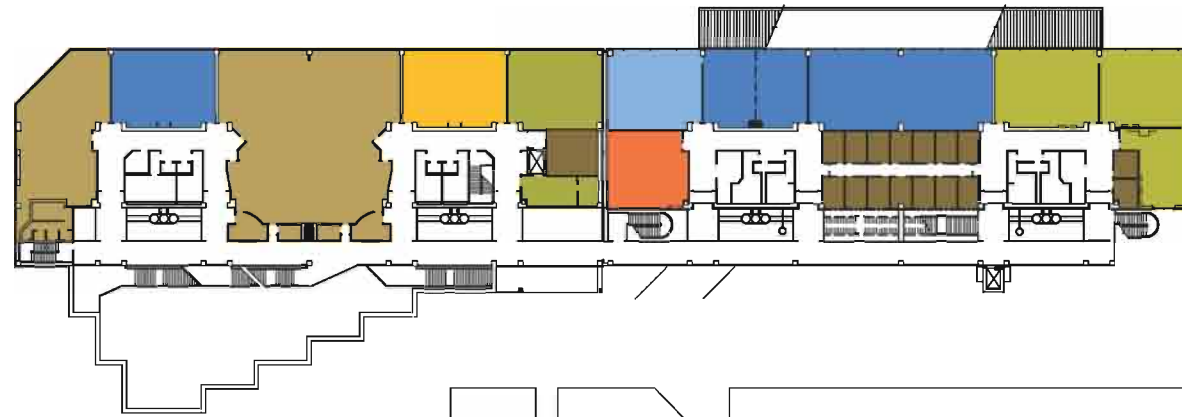
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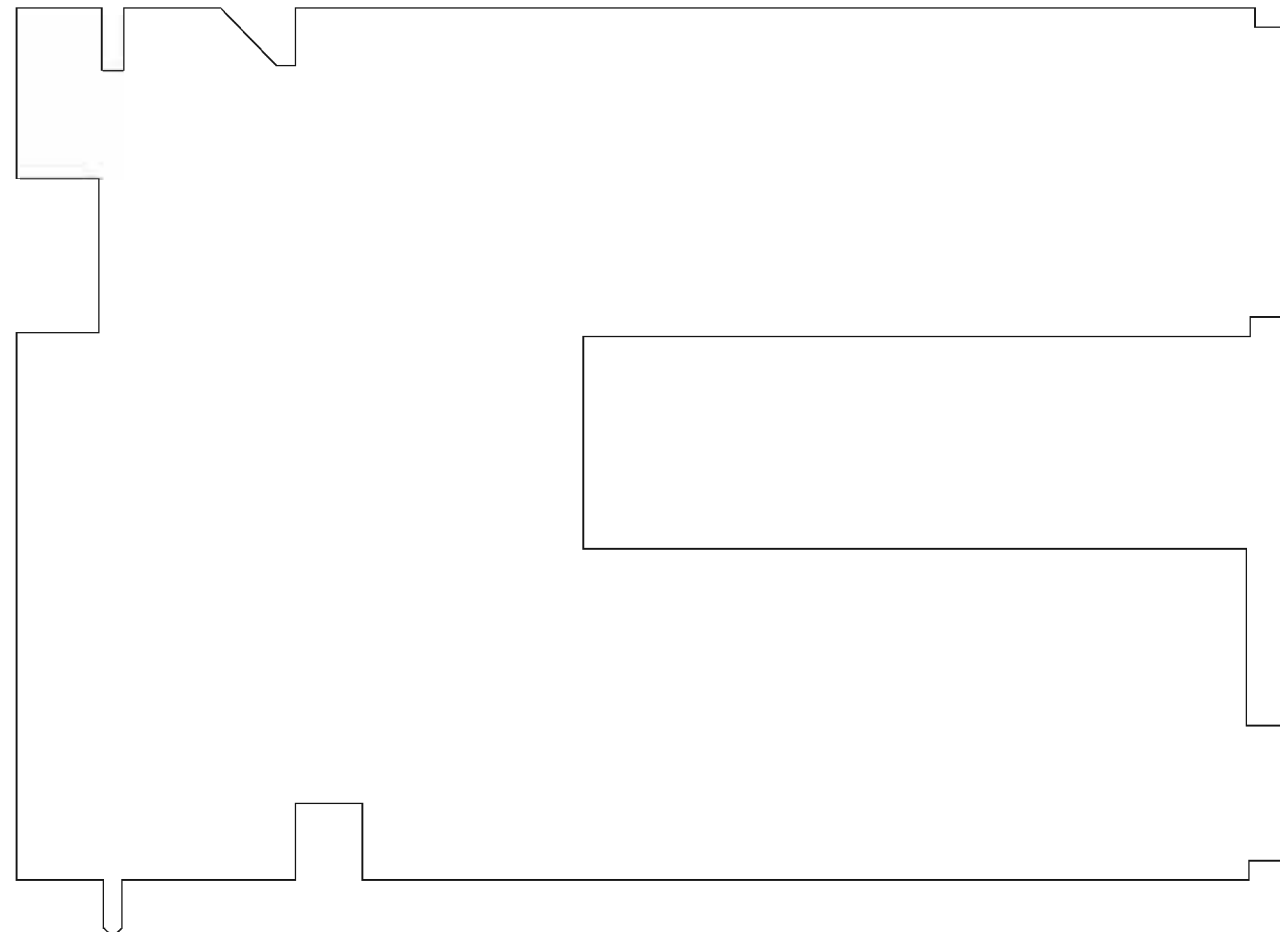


11/04/2013



Department Room Use Key

Instructional Services:		Transportation/Manufacturing/Engineering/Tech. Prep
		Health and Wellness
		Hospitality
		Personal, Public, and Human Services
		General Education & Service Technology
		Business Engineering
		Business & Information Technology
		Library/Media Services
		Administrative Services
		Bookstore
Administrative Services:		Financial Services/Budget Services/Purchasing
		College Administration
		Student Services
College Administration:		Ottenson High School
		Campus Life
Student Services:		General Classrooms
		Faculty Offices and Support
General Use Facilities:		Conference Services
		Business Training Center - BTC
		Academic Skills Center
Other Components:		Campus Services
		Storage
Campus Services:		



Master Planning - 2001 Existing Use

1" = 40'-0"

Fourth Floor Plan

Schreiber Starling & Lane



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11/04/2013



Master Planning - Current Use

1" = 40'-0"

First Floor Plan

Class Room Type Key

- Lecture Classroom
- Lab Classroom
- Computer Classroom
- Hybrid Computer/Lecture
- Conference Room

Department Room Use Key

- Instructional Services:
 - Academic Core, Hospitality Services, & ESL
 - Allied Health
 - Applied Design / IT Programs
 - Computer Classroom
 - General Classrooms & Auditorium
 - Industrial Technologies
- Instructional Support:
 - Faculty Offices & Support
 - Instructional Administration
 - Library/Media Services
- Administrative Services:
 - Auxiliary Enterprises
 - Events & General Use
 - Facilities and Operations
 - Financial Services / Budget Services / Purchasing
- College Administration:
 - College Administration & Support
 - Human Resources
 - Information Technology Services
 - International
- Student Services:
 - ASG & Student Programs
 - High School Program
 - Student Services
- External Partnership:
 - WaNic



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11/04/2013



Master Planning - Current Use

1" = 40'-0"

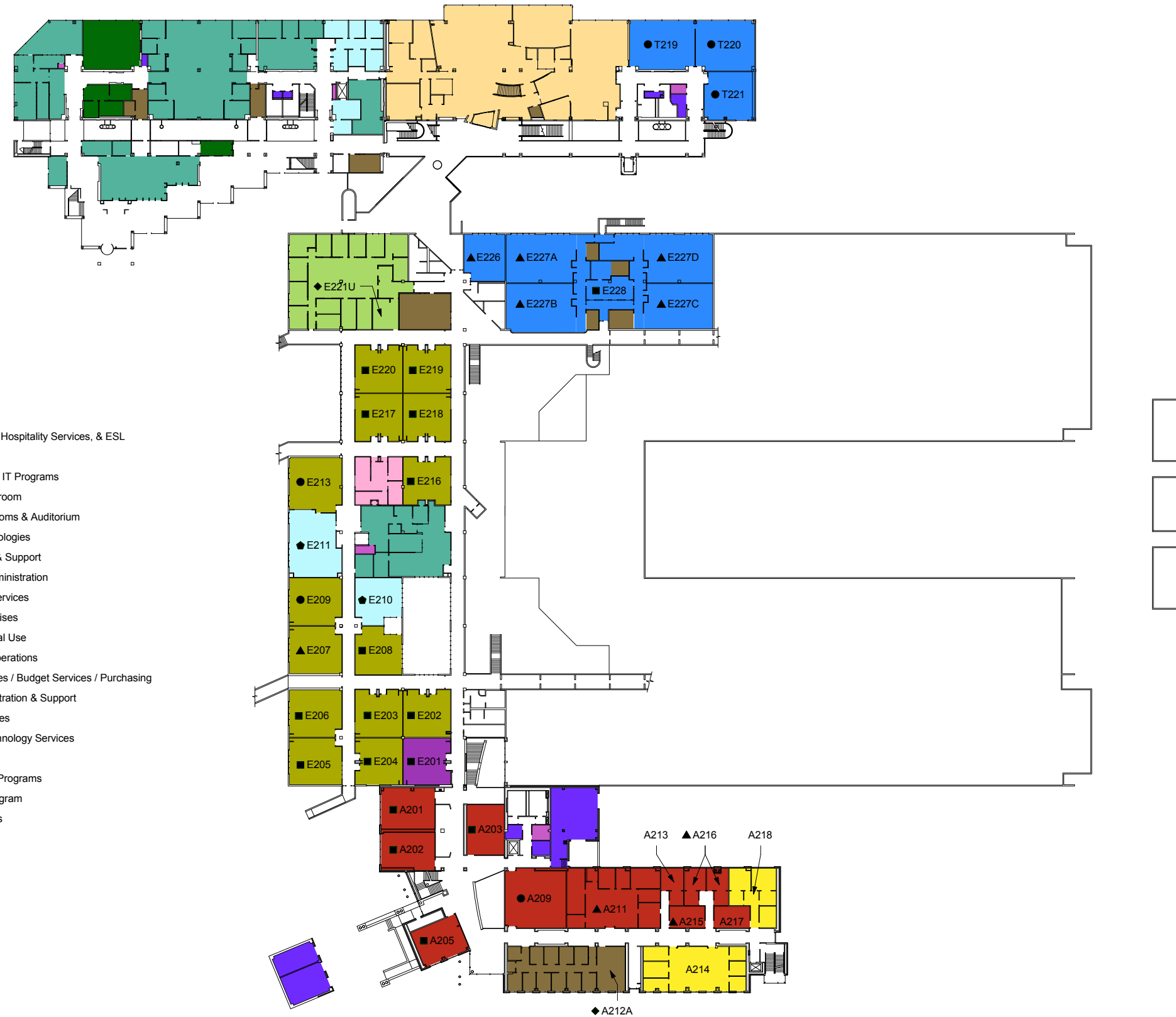
Second Floor Plan

Class Room Type Key

Lecture Classroom	■
Lab Classroom	▲
Computer Classroom	●
Hybrid Computer/Lecture	◆
Conference Room	◆

Department Room Use Key

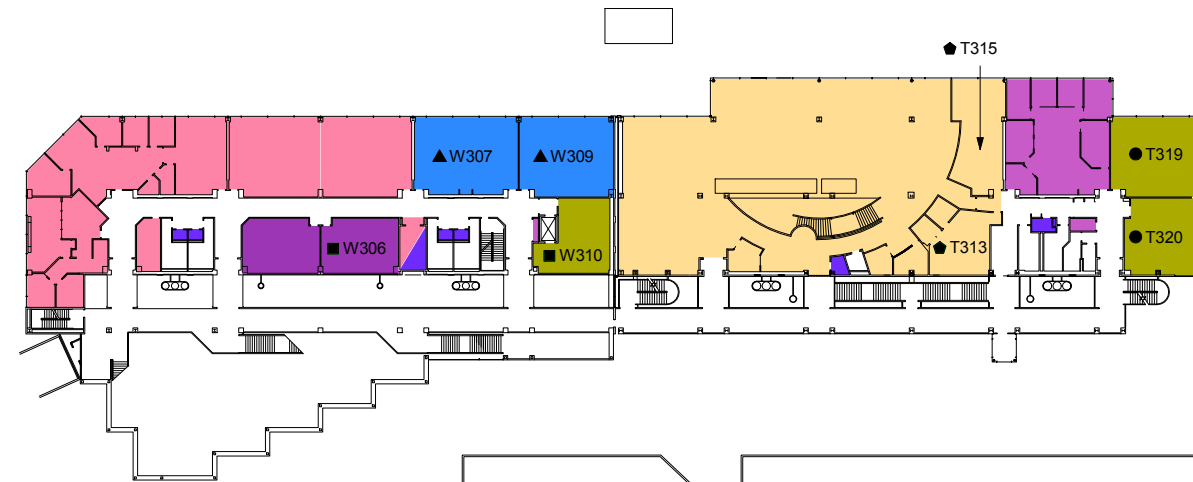
Instructional Services:	■ Academic Core, Hospitality Services, & ESL
	■ Allied Health
	■ Applied Design / IT Programs
	■ Computer Classroom
	■ General Classrooms & Auditorium
	■ Industrial Technologies
Instructional Support:	■ Faculty Offices & Support
	■ Instructional Administration
	■ Library/Media Services
Administrative Services:	■ Auxiliary Enterprises
	■ Events & General Use
	■ Facilities and Operations
	■ Financial Services / Budget Services / Purchasing
College Administration:	■ College Administration & Support
	■ Human Resources
	■ Information Technology Services
	■ International
Student Services:	■ ASG & Student Programs
	■ High School Program
	■ Student Services
External Partnership:	■ WaNic



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11/04/2013



Class Room Type Key

- Lecture Classroom ■
- Lab Classroom ▲
- Computer Classroom ●
- Hybrid Computer/Lecture ◆
- Conference Room ◆

Department Room Use Key

- Instructional Services:**
 - Academic Core, Hospitality Services, & ESL
 - Allied Health
 - Applied Design / IT Programs
 - Computer Classroom
 - General Classrooms & Auditorium
 - Industrial Technologies
- Instructional Support:**
 - Faculty Offices & Support
 - Instructional Administration
 - Library/Media Services
- Administrative Services:**
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 - College Administration & Support
 - Human Resources
 - Information Technology Services
 - International
- Student Services:**
 - ASG & Student Programs
 - High School Program
 - Student Services
- External Partnership:**
 - WaNic



Master Planning - Current Use

1" = 40'-0"

Third Floor Plan

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11/04/2013

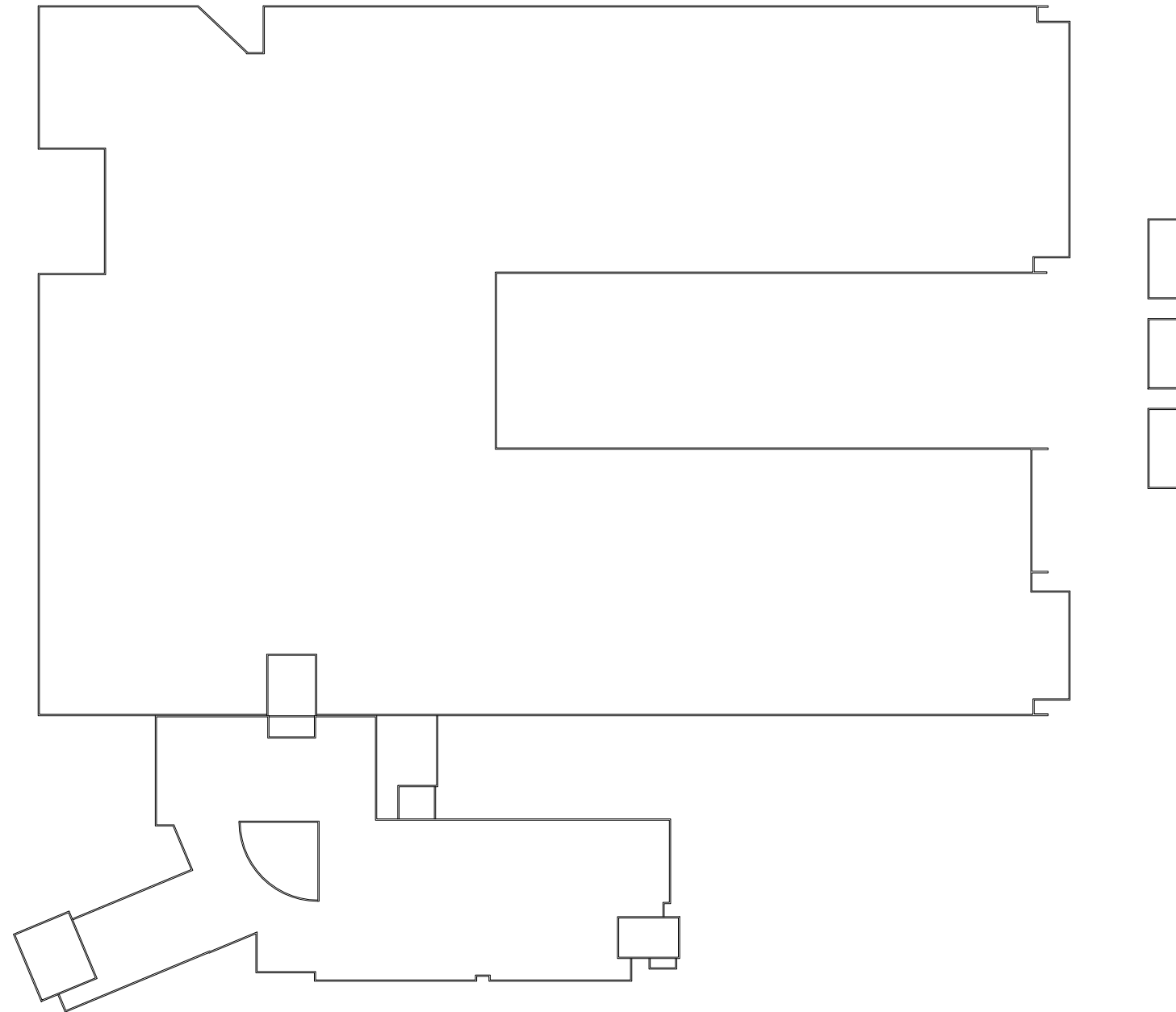


Class Room Type Key

- Lecture Classroom ■
- Lab Classroom ▲
- Computer Classroom ●
- Hybrid Computer/Lecture ◆
- Conference Room ◆

Department Room Use Key

- Instructional Services:**
 - Academic Core, Hospitality Services, & ESL
 - Allied Health
 - Applied Design / IT Programs
 - Computer Classroom
 - General Classrooms & Auditorium
 - Industrial Technologies
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 - Human Resources
 - Information Technology Services
 - International
- Student Services:**
 - ASG & Student Programs
 - High School Program
 - Student Services
- External Partnership:**
 - WaNic



Master Planning - Current Use

1" = 40'-0"

Fourth Floor Plan

Schreiber Starling & Lane



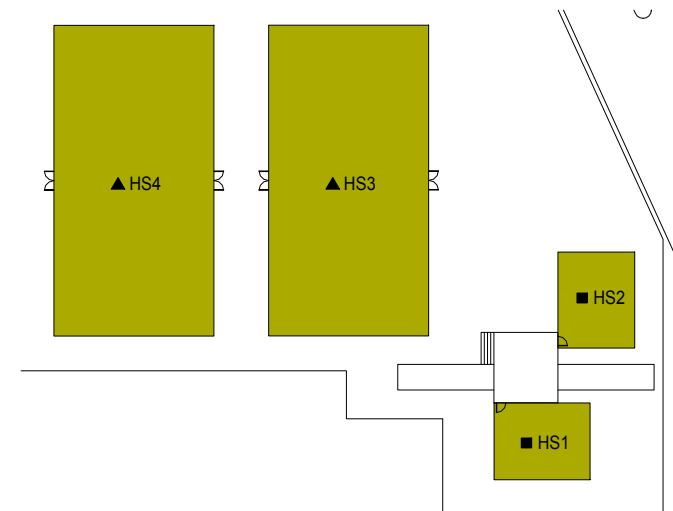
11/04/2013

Class Room Type Key

Lecture Classroom	■
Lab Classroom	▲
Computer Classroom	●
Hybrid Computer/Lecture	◆
Conference Room	◆

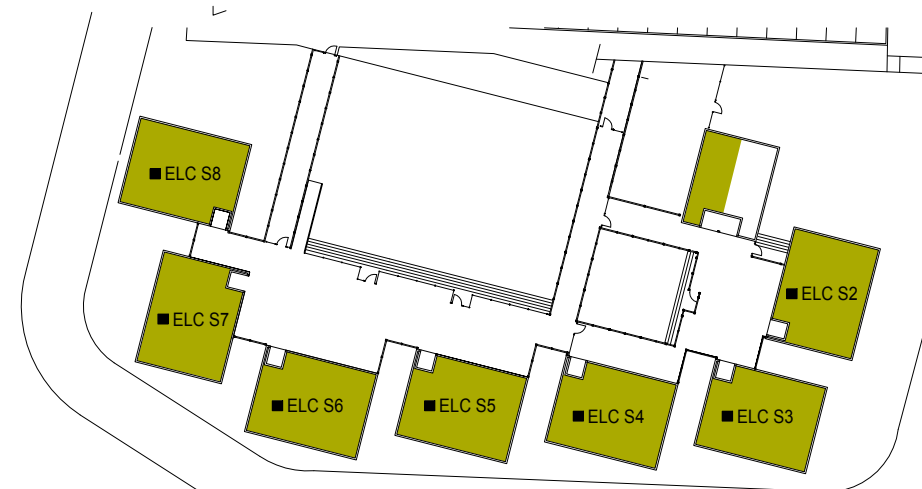
Department Room Use Key

Instructional Services:	■ Academic Core, Hospitality Services, & ESL
	■ Allied Health
	■ Applied Design / IT Programs
	■ Computer Classroom
	■ General Classrooms & Auditorium
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Student Services:	■ ASG & Student Programs
	■ High School Program
	■ Student Services
External Partnership:	■ WaNic



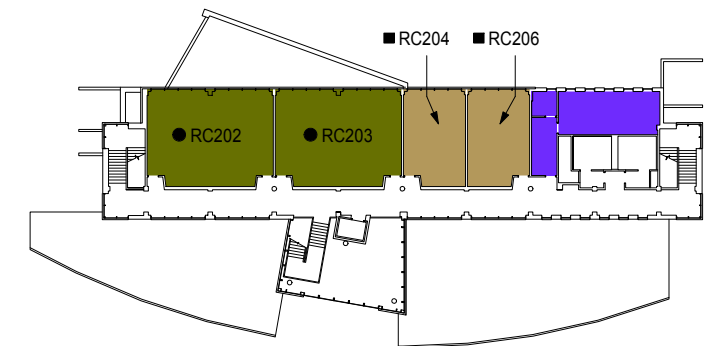
Horticulture First Floor Plan

Scale: 1" = 30'-0"



Early Learning Center First Floor Plan

Scale: 1" = 30'-0"



Redmond Campus Second Floor Plan

Scale: 1" = 30'-0"



Redmond Campus First Floor Plan

Scale: 1" = 30'-0"



Lake Washington
Institute of Technology

Master Planning - Current Use

As indicated

Early Learning Center, Horticulture, and Redmond Campus

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11/04/2013

Long-Term Consolidation

Having realized ten years of completed consolidation projects, Lake Washington Institute of Technology has experienced the tangible benefits anticipated by the 2001 Master Plan. Additional consolidation projects as indicated in Sections 3 and 4 will continue the progress toward operational efficiency and improved educational experience. The proposed Center for Design will make dramatic improvements to the Applied Design programs by grouping program spaces together for increased collaboration and the opportunity to provide learning-on-display. Spaces provided in the new Center for Design will replace those currently spread across four floors of three separate buildings in the following locations:

<i>Space & Current Use</i>	<i>ASF</i>
W108 (MMDP: Video/web classroom/studio)	1932 sf
W403 (ITAD: PC)	1376 sf
W405 (BTAD: Shared)	1358 sf
W406 (BTAD: Shared)	1274 sf
T120 (MMDP/BTAD: Computer lab)	879 sf
T122 (MMDP: Digital Design)	1369 sf
T123 (MMDP: Digital Design)	1275 sf
T124 (MMDP: Gaming)	996 sf
E226 (Eng. Graphics Computer Lab)	817 sf
E227A (Eng. Graphics: PC)	1443 sf
E227B (Eng. Graphics: Drafting + PC)	1457 sf
E227C (Eng. Graphics: PC)	1454 sf
E227D (Eng. Graphics: Drafting + PC)	1428 sf
E228 (Eng. Graphics: Lecture room)	1343 sf

Future Renovation & Replacement Projects

To preserve its built assets, LWTech intends to renovate existing facilities that are no longer able support its mission of providing contemporary workforce training. The institution recognizes that this is a period of rapid and dramatic changes in the types of jobs in high demand and the culture of those work environments. Coupled with increasing student demand creates LWTech faces infrastructure challenges that must be satisfied with new facilities. Lake Washington Institute of Technology intends to continue remodeling and renovating major and minor spaces consistent with its asset preservation mandate. It also intends to replace its remaining portable structures with permanent construction. This Ten-Year Campus Master Plan identifies one replacement project and multiple renovation projects justified by current need, as described on the following pages.

Replacement Project: Horticulture Portables Replacement

Need: Also a legacy of its origins, the college has long depended on portable structures to house necessary functions. As recently as twelve years ago, nineteen individual units were in regular use. In the early 1990s, a group of portable structures once clustered southwest of the East Building were relocated to allow construction of the West Building. The Horticulture program utilizes two of these portables. Rated 369 and 382 in the 2015 Facilities Condition Survey, these portables have long exceeded their useful lives, drain maintenance resources, and present a poor image of the institution.

Response: The two existing Horticulture portable structures will be replaced by a new building adjacent to the Horticulture greenhouses. The new building will include classrooms, labs, and offices for the Horticulture program. The proposed project will consist of 2,400 gross square feet.

Renovation Project:– East Building Second Floor Renovation & Academic Skills Center

Need: A majority of the East Building interior, south of the Mall, has been upgraded to meet the needs of a modern polytechnic institute. However, the second floor general use classrooms and the Engineering Graphics labs remain virtually unchanged from the original construction. Now, more than thirty years old and having endured heavy use, the spaces are worn, inflexible, and obsolete; more evocative of pre-digital pedagogy than reflecting contemporary workforce training. Additionally, while the second floor contains a modern TRiO facility, complementary academic support functions such as writing and math centers and tutoring, are dispersed across several buildings and floor levels. The eLearning department, which provides support for instructors and students using web-based tools for teaching and learning online, hybrid has no facility customized for its unique function. This project will:

- Replace obsolete learning environments with flexible, technology-rich classroom and labs
- Provide permanent facilities for expanded Allied Health programs
- Consolidate presently dispersed academic support functions (writing and math centers, and tutoring) alongside the existing TRiO suite in furtherance of LWTech's *Completer* initiative
- Address current space shortfalls, including instructor offices
- Provide a convenient eLearning Center that is fitted with a robust, highly adaptable technology infrastructure

Response: This renovation comprises 33,300 gsf of existing interior space on a single level. Since this project will result in a net decrease in available classrooms and labs; this project should take place following a growth project. To assure flexibility and adequate support spaces, this project will target 70% efficiency. The existing TRiO facility in E214, will remain in place and incur minor modifications, and the administrative suite in E221 will undergo no changes. This project maintains existing structural and primary mechanical systems, as well as toilet facilities planned to be updated with RMI funds. If necessary, this project will be executed in phases to limit interruption of institution functions.

Development of the Academic Skills Center within the East Building will result in a net loss of classroom area and accommodation for FTEs. However, this loss will be offset by improved graduation rates resulting from the institution's *Completer* initiative and the new resources provided by development of the Academic Skills Center.



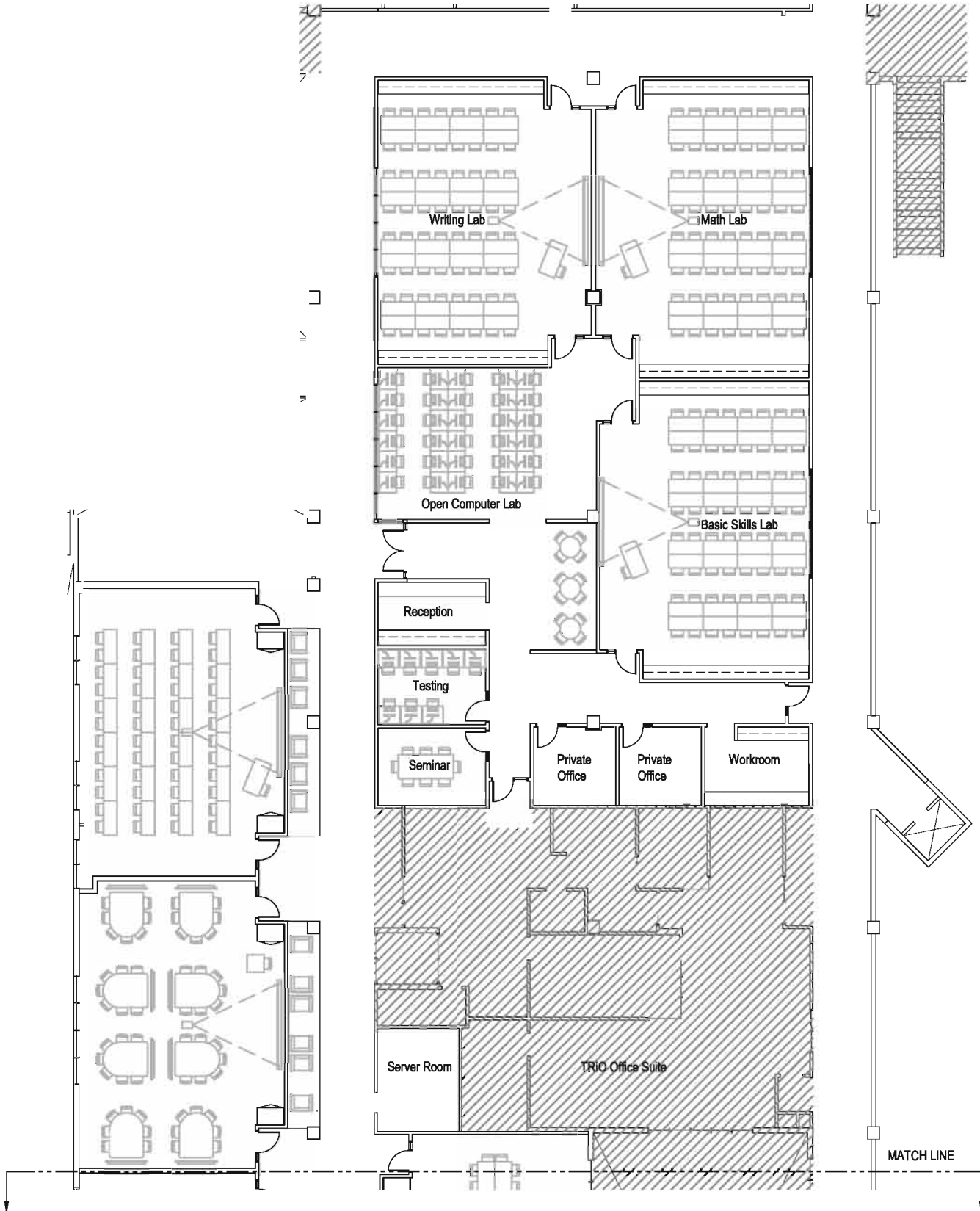
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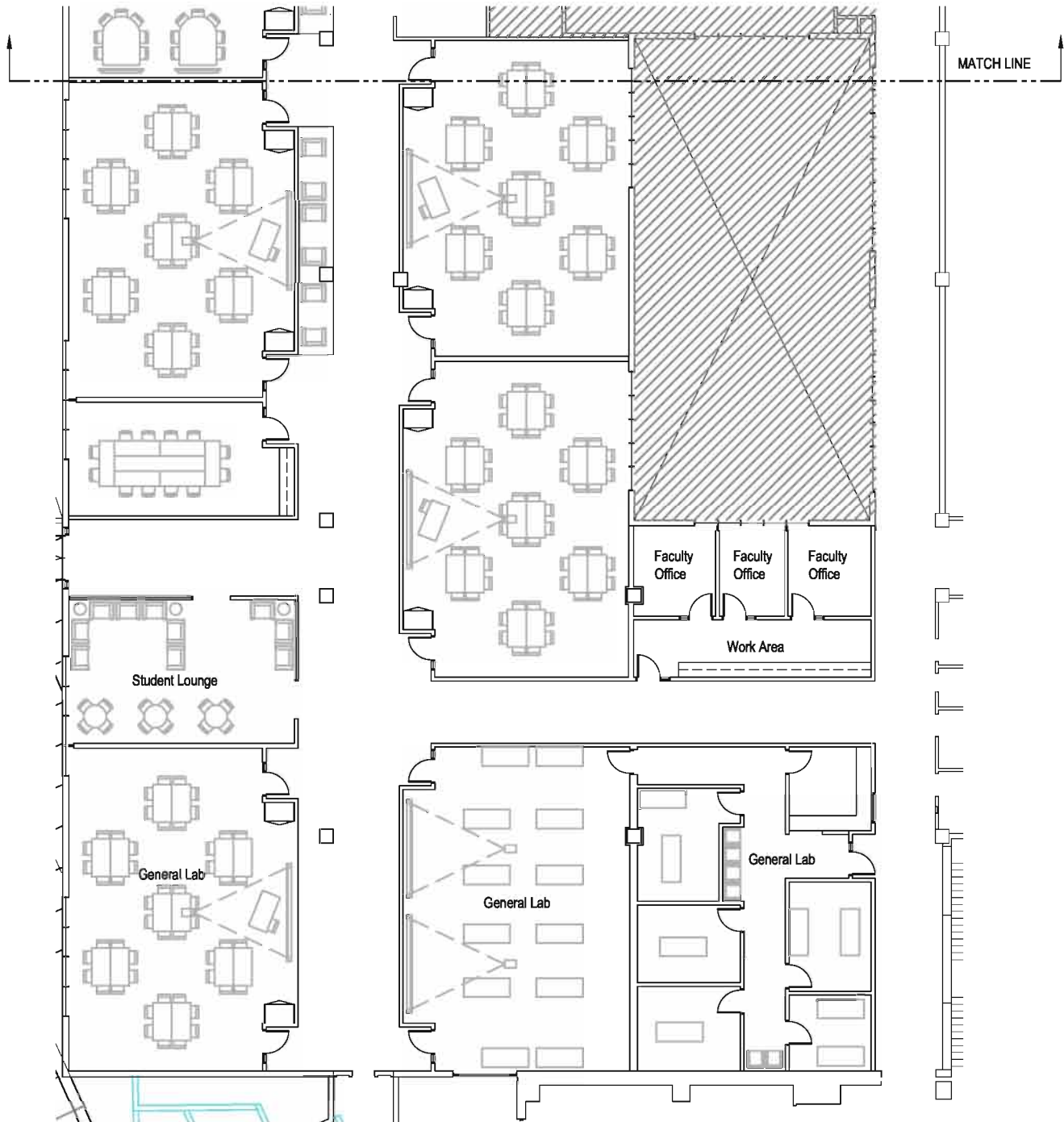
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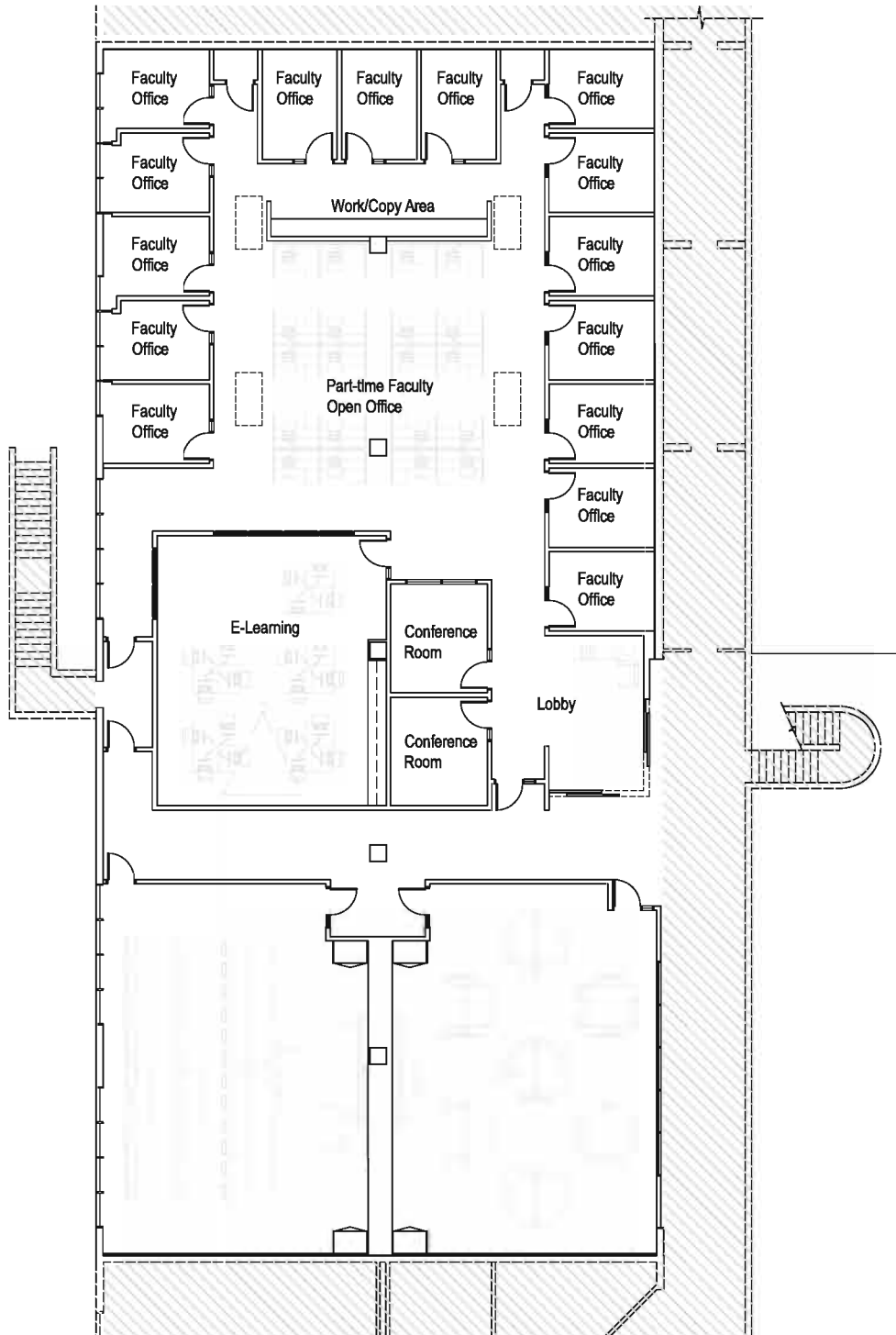
East Building Floor 2 - Diagram

Scale 1/20" = 1'-0"

Renovation & Academic Skills Center







East Building Second Floor Renovation & Academic Skills Center

Scope of work: **Renovation:** Removal of all dividing partitions, doors, interior relites, ceilings, and floor finishes. New storefront required at south façade entry adjacent to E206. Improvements to HVAC system associated with server room. Renovation program needs are as follows:

Academic Skills Center:

math lab with 64 stations	1,280 SF
writing lab with 64 stations	1,280 SF
basic skills Lab with 64 stations	1,270 SF
open skills center with 30 stations	560 SF
testing room with 8 stations	170 SF
reception counter	150 SF
2 private offices at 140 SF each	280 SF
workroom	170 SF
<u>open seating area</u>	<u>180 SF</u>
sub total	5,340 SF

General Classrooms, Faculty offices and Lounge:

5 general classroom at 1,210 SF	6,050 SF
1 general lab	1,230 SF
1 general lab	1,250 SF
1 general lab	1,310 SF
lounge	570 SF
conference room	430 SF
faculty office 1	130 SF
faculty office 2	100 SF
faculty office 3	130 SF
<u>soft space seating area</u>	<u>410 SF</u>
sub total	11,610 SF

Faculty Support Space and General Classrooms:

general classroom	1,230 SF
general classroom	1,210 SF
15 faculty offices at 110 SF each	1,650 SF
part-time faculty office area with 20 stations	700 SF
work area	100 SF
2 conference rooms at 130 SF each	260 SF
e-learning computer lab	790 SF
<u>lobby</u>	<u>190 SF</u>
sub total	6,130 SF

net total program area	23,080 SF
<u>X 44% net to gross</u>	<u>10,240 SF</u>
total gross program:	33,300 SF

Area: 33,300 SF

Est. Const. Cost: TBD

Assumptions:	Electrical and Mechanical systems are capable of reconfiguration to serve the new functions. No significant upgrades expected.
Demolition:	Remove approximately 80 SF of storefront and 670 SF of exterior wall. Remove all interior partitions, doors, and flooring within the limits of the area of work.
Finishes:	Flooring: carpet, and resilient flooring at lab spaces Walls: painted GWB, 80 SF of entrance storefront with a pair of entry doors Ceiling: suspended ACT ceiling throughout
HVAC:	Reconfigure all distribution and supply. Improvements to server room.
Plumbing:	Sinks required at lab spaces, quantity TBD.
Special Space Conditioning:	None
Electrical:	New electrical duplex outlet locations will be required throughout.
Lighting:	New light fixtures will be required throughout.
V/D/P Systems:	New data outlets and WiFi hubs required throughout
Special Systems:	None
Equipment:	242 computers, 11 video projectors, 11 projection screens, 27 marker boards, 14 tack boards; at Faculty Support Space and General classrooms 27 computers, 3 video projectors, 3 projection screens, 12 marker boards, 5 tack boards
Casework:	2 reception desks, 270 LF base cabinet, 220 LF wall cabinets; at Faculty Support Space and General Classrooms 60 LF base cabinet, 16 LF wall cabinets
Furnishings:	TBD
Remarks/Comments:	None

Renovation Project – East Building First Floor Science Lab Renovation

Need: LWTech is in urgent need of additional science lab space. Existing labs (T416 & T417, E132 & E134A/B) are booked solid, and evening sessions have been added to satisfy student demand. Between 2008 and 2013, science programs offered by LWTech experienced FTE growth of 15 percent. Further growth is limited by available space.

Response: Completion of the Allied Health Building in 2011 allowed for the renovation of former allied health facilities E130 & E131, into a new general science lab. Benefits of this new lab location include readily accessible utilities and compatible space adjacencies. An existing prep lab next to E130 has sufficient capacity to serve the new lab. The proposed project will renovate 2,600 gsf and serve an additional 40 FTE.



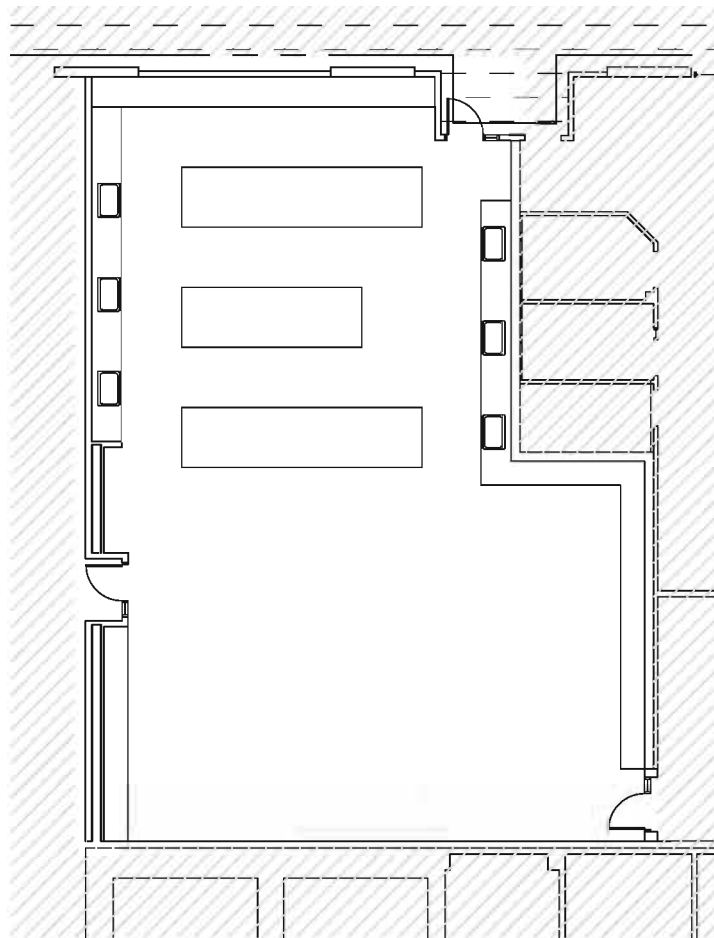
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East Building Floor 1 - Diagram

Scale 1/16" = 1'-0"

Science Lab Renovation



East Building First Floor Science Lab Renovation

Scope of work:	Renovation: Remove dividing partition, doors, interior relites, ceilings, and floor finishes. Renovation program needs are as follows:	
	lab space	1,150 SF
	lecture classroom	1,320 SF
	net total program area	2,470 SF
	X 04% net to gross	110 SF
	total gross program:	2,600 SF
Area:	2,600 SF	
Est. Const. Cost:	TBD	
Assumptions:	Electrical and Mechanical systems are capable of reconfiguration to serve the new functions. No significant upgrades expected.	
Demolition:	Remove partition, flooring, ceiling, doors and interior relites within work area.	
Finishes:	Flooring: resilient flooring Walls: painted GWB Ceiling: suspended ACT ceiling	
HVAC:	Reconfigure all distribution and supply. Provide exhaust hoods at all sinks.	
Plumbing:	6 lab sinks.	
Special Space Conditioning:	None	
Electrical:	New electrical duplex outlet locations will be required.	
Lighting:	New light fixtures will be required.	
V/D/P Systems:	New data outlets and will be required.	
Special Systems:	None	
Equipment:	1 computer, 1 video projector, 1 projection screen, 2 marker boards, 1 tack board	
Casework:	3 lab tables, 105 LF base cabinet, 30 LF full height cabinets	
Furnishings:	TBD	
Remarks/Comments:	None	

Renovation Project – East Building Mall Renovation

Need: Despite consistent growth of the Kirkland campus, the East Building Mall remains the heart of campus. This Mall provides a natural pedestrian spine and contains a number of student services. It is the only interior space on campus capable of housing Foundation benefits, job fairs, and ASG-sponsored events. While many spaces opening onto the Mall have been upgraded, the Mall proper and its food service component remain essentially unchanged from the original. The Mall is outdated with worn finishes, poor staging capacity, ineffective acoustic control, inoperable daylight control systems, and inefficient lighting. The food service area, which includes a cafeteria and an upscale restaurant, is also home to the Culinary Arts program. This area suffers from aged equipment and severely inadequate space.

Response: This project entails the complete renovation of interior finishes and systems, new lighting, and careful study of spaces within the Mall to optimize its functionality and flexibility. The food service area will be gutted and reconfigured for more effective operations and to provide up-to-date Culinary Arts instructional facilities. The project area encompasses 26,400 gsf and will result in a net increase of 40 FTE.

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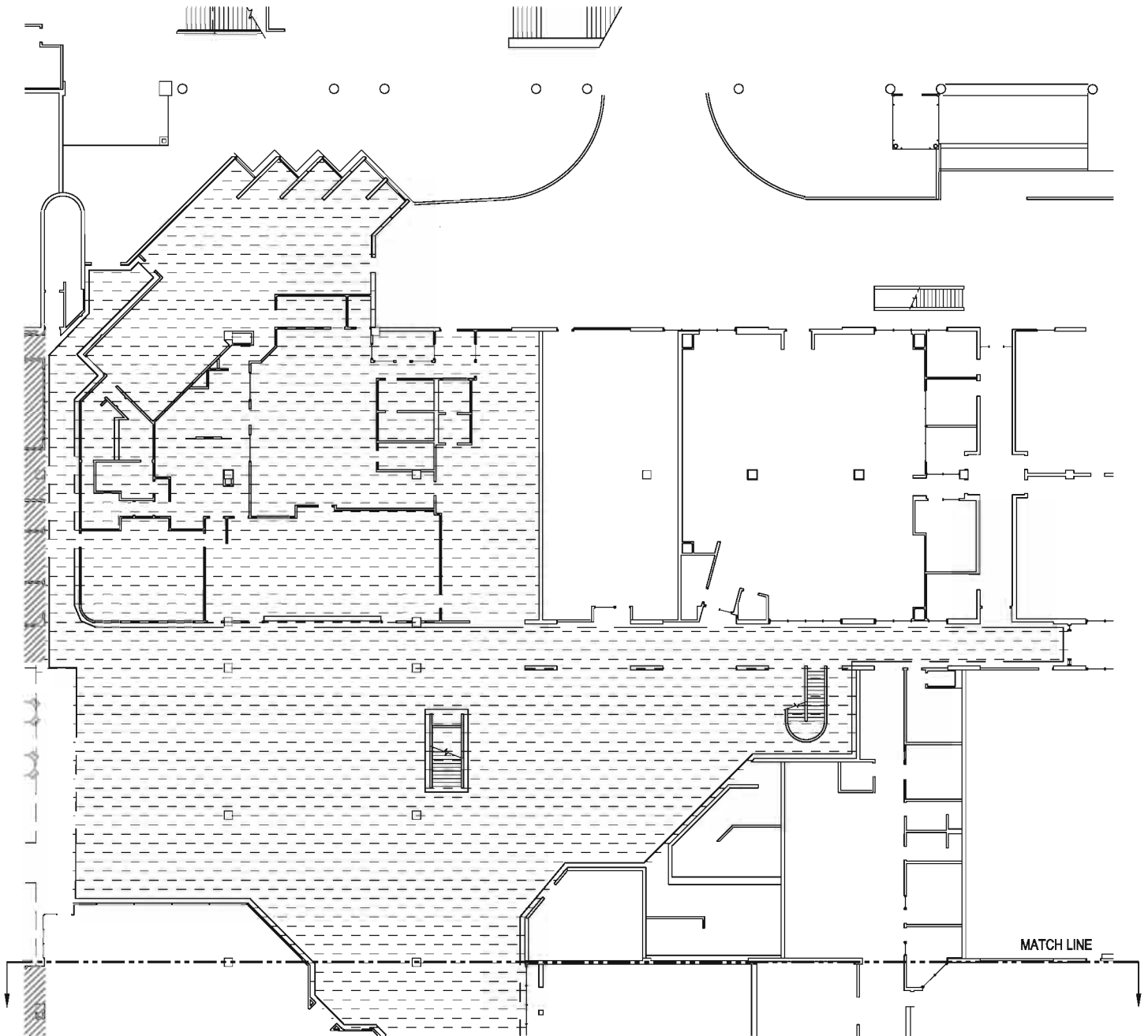
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East Building Floor 1 - Diagram

East Building Mall Renovation

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Scale 1/32" = 1'-0"





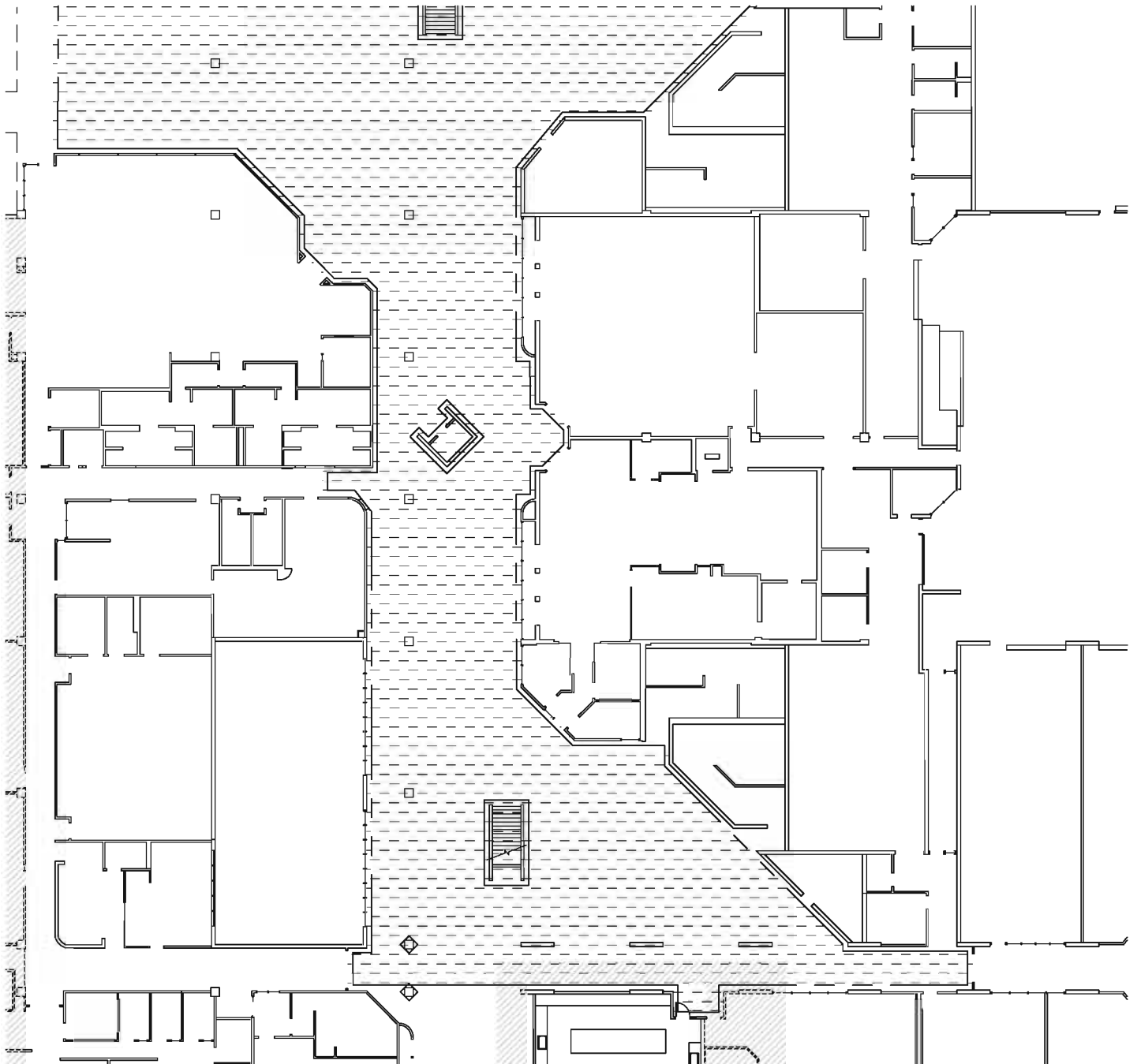
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East Building Floor 1 - Diagram

East Building Mall Renovation

10-YEAR CAMPUS MASTER PLAN- 2015

Scale 1/32" = 1'-0"



East Building Mall Renovation

Scope of work:	<p>Renovation: Remove dividing partition, doors, interior relites, ceilings, and floor finishes. Provide new finishes and lighting throughout mall; upgrades to mechanical, plumbing and electrical systems at food preparation and service areas. Renovation program needs are as follows:</p> <table> <tr> <td>first floor mall</td><td>19,780 SF</td></tr> <tr> <td>kitchen spaces</td><td>2,300 SF</td></tr> <tr> <td>restaurant</td><td>1,830 SF</td></tr> <tr> <td>cafeteria</td><td>1,200 SF</td></tr> <tr> <td>offices</td><td>545 SF</td></tr> <tr> <td>net total program area</td><td>25,655 SF</td></tr> <tr> <td>X 03% net to gross</td><td>745 SF</td></tr> <tr> <td>total gross program:</td><td>26,400 SF</td></tr> </table>	first floor mall	19,780 SF	kitchen spaces	2,300 SF	restaurant	1,830 SF	cafeteria	1,200 SF	offices	545 SF	net total program area	25,655 SF	X 03% net to gross	745 SF	total gross program:	26,400 SF
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Demolition:	Remove partition, flooring, ceiling, doors and interior relites within work area.																
Finishes:	Flooring: resilient flooring Walls: painted GWB Ceiling: suspended ACT ceiling																
HVAC:	Reconfigure all distribution and supply.																
Plumbing:	TBD																
Special Space Conditioning:	None																
Electrical:	New electrical duplex outlet locations will be required.																
Lighting:	New light fixtures will be required.																
V/D/P Systems:	New data outlets and will be required.																
Special Systems:	None																
Equipment:	TBD																
Casework:	TBD																
Furnishings:	TBD																
Remarks/Comments:	None																

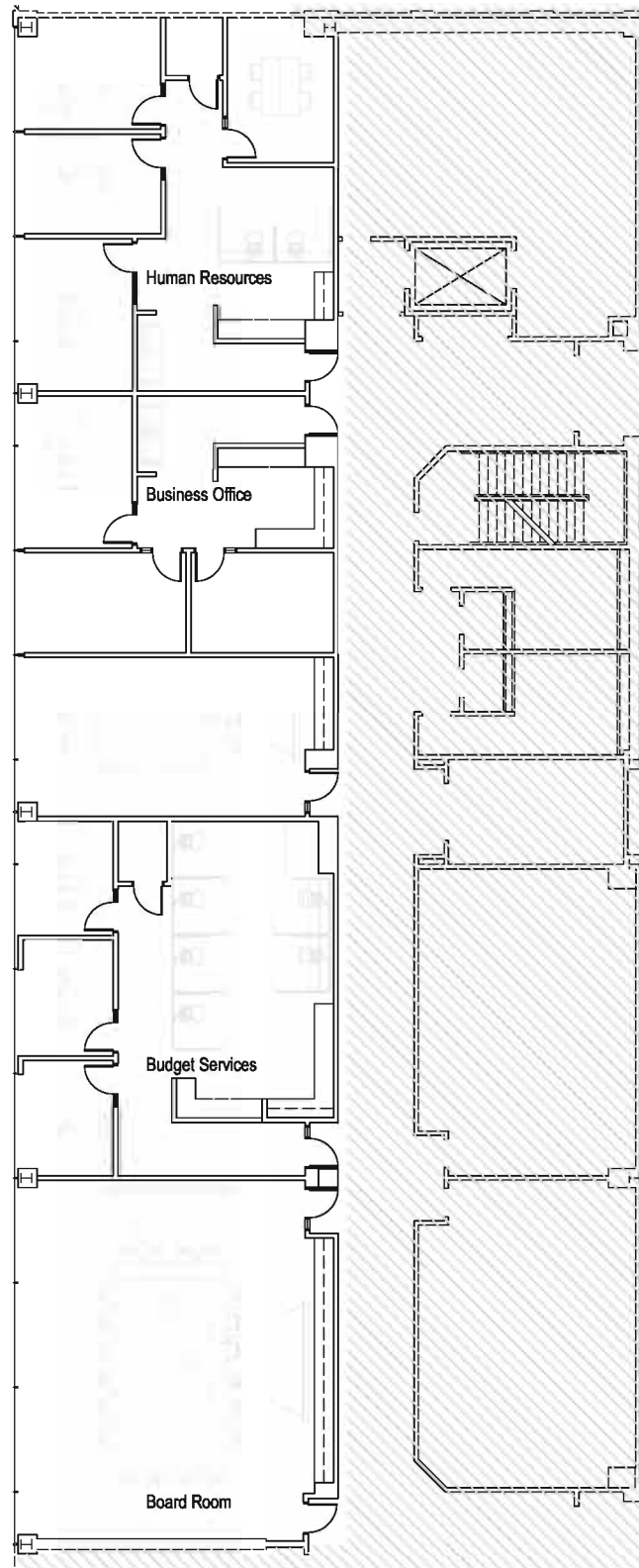
Renovation Project – West Building Administration Consolidation

Need: As a legacy of its origins within the Lake Washington School District, LWTech since joining the State community and technical college network has suffered a chronic shortfall of dedicated administrative space. Critical administrative departments are by necessity housed in spaces intended for other (generally instructional) college functions at a loss of at least two full-sized classrooms.

Response: This project will renovate two former allied health-related labs and a Board of Trustees meeting room surge space, to house the Budget Services, Business Office, and Human Resources & Payroll Service departments. In this location on the third floor of the West Building, they will be directly adjacent to other college administration departments, thus supporting a college goal of consolidating like functions and promoting more efficient operation. Total project size encompasses 5,300 sf and requires new partitions, doorways, finishes, lighting, and modifications to mechanical systems.

As a prerequisite for this project, the college will develop permanent facilities for its popular Arts programs, currently housed in the former allied health-related labs on the West Building third floor.

(Test-fit floor plans and data sheet follow)



West Building Administration Consolidation

Description: **West Building Administration Consolidation:** W305, W307 and W309 are completely renovated to use as an updated Boardroom, Budget Services offices, small conference room, the Business offices, and Human resources offices.

Scope of work: **Renovation:** Removal of all dividing partitions, doors, interior relites, built in casework, ceilings, and floor finishes. Renovation program needs are as follows:

board room	1,210 SF
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Budget Services Offices:

3 private offices at 115 SF each	345 SF
6 work stations at 36 SF each	216 SF
work area	90 SF
copy area	30 SF
reception	40 SF
<u>storage closet</u>	<u>30 SF</u>
sub total	751 SF

conference Room	520 SF
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Business Offices:

2 private offices at 180 SF each	360SF
private office	160 SF
reception	110 SF
<u>seating area</u>	<u>40 SF</u>
sub total	670 SF

Human Resources Offices:

private office	180 SF
private office	170 SF
private office	150 SF
conference room	160 SF
2 work stations at 36 SF each	72 SF
reception	50 SF
seating area	40 SF
<u>storage closet</u>	<u>40 SF</u>
sub total	862 SF

net total program area	4,013 SF
<u>X 32% net to gross</u>	<u>1,287 SF</u>
total gross program:	5,300 SF

Area: 5,300 SF

Est. Const. Cost: TBD

Assumptions:	Electrical and Mechanical systems are capable of reconfiguration to serve the new functions. No significant upgrades expected.
Demolition:	Remove all interior partitions, doors, ceilings and flooring within the limits of the area of work.
Finishes:	Flooring: carpet Walls: painted GWB Ceiling: suspended ACT ceiling throughout, GWB at skylight openings
HVAC:	Reconfigure all distribution and supply.
Plumbing:	None
Special Space Conditioning:	None
Electrical:	New electrical duplex outlet locations will be required throughout.
Lighting:	New light fixtures will be required throughout.
V/D/P Systems:	New data outlets and WiFi hubs will be required throughout
Special Systems:	None
Equipment:	3 computers, 3 video projectors, 3 projection screens, 5 marker boards, 3 tack boards
Casework:	3 reception desks, 70 LF base cabinet, 60 LF wall cabinets
Furnishings:	TBD
Remarks/Comments:	None

SECTION FIVE – KIRKLAND CAMPUS CHARACTER

Campus Character Projects

This Ten-Year Campus Master Plan identifies three Campus Character projects aimed at enhancing the visual and physical environment of LWTech. These projects are consistent with the institute's objective to be a "good neighbor" by maintaining, to the maximum extent possible, noise and visual buffers between campus and adjoining residential properties. However some "good neighbor" policies of the past have restricted public expression of the institution's identity. Accordingly, LWTech wishes to develop a clearly defined campus front door through a series of projects that will create a sequence of events, vistas, and spaces connecting the campus entry from 132nd Avenue onto the heart of campus.

Isolated site improvements are traditionally difficult for colleges to fund. The Campus Character projects identified below will be developed in conjunction with a specific building project, either as part of adjacent site development or jurisdictional requirement. Therefore, LWTech intends to seek state appropriation for these Campus Character projects within the budgets established for the capital projects. As an example, Growth Project A, the new Center for Design, will likely trigger a requirement for additional parking as well as a need for on-grade pedestrian access improvements which would be cost-effectively satisfied through implementation of the Entry Boulevard project described below.

Campus Character Project: Campus Gateway

Need: Two vehicular entrances exist at the LWTech Kirkland campus. The primary campus entrance is on 132nd Avenue NE with one lane serving each direction of travel and a central median. Outgoing traffic frequently backs up at peak hours due to drivers attempting to make a left hand turn into traffic. Besides being functionally under-scaled, ironically, this entry is visually less prominent than the campus service entrance off NE 120th Street. The 132nd Avenue entrance has poor sightlines which are exacerbated by topography an ill-placed transformer just south of the drive and a Metro bus shelter to the north. The ground-mounted entrance sign, positioned in the landscaped median between traffic lanes, is not only smaller than the NE 120th Street service entrance sign but is also partially obscured by plantings. The condition of pavements and curbs at the 132nd Avenue entrance is also poor.

Response: LWTech proposes enhancing the main vehicular entrance from 132nd Avenue by converting the landscape median into a left turn exit lane and adding pedestrian walkways that link together the Center for Design with the east/west pedestrian corridor.

NOTE: The possible need to add traffic lights as part of the Campus Gateway project will be determined by any requirements imposed by the City of Kirkland during the master plan review process. This project description will be updated as these requirements become defined.

Campus Character Project: Entry Boulevard

Need: Visitor parking is currently located at the northwest corner of the West parking lot, closest to the West Building entrances. No roadway directly connects the campus entry drive off 132nd Avenue NE to this visitor parking. Campus visitors and prospective students are required to wind through the South and West parking lots using several access drives to reach designated visitor parking.

Response: LWTech proposes connecting the northern edges of the South and West parking to create a single vehicular entry boulevard extending from 132nd to the western most edge of campus. The design will include new drop-off zones and pedestrian walkways. This is noted as Project B in the short term plan in conjunction with accessibility site improvements.

Campus Character Project: Outdoor Gathering Spaces

Need: College campus design traditionally incorporates large scale outdoor gathering spaces for informal gatherings as well as large planned events. As LWTech evolves into a multifaceted polytechnic institution the demand for such spaces is evident. Enjoyable, useful, and appropriately-scaled outdoor gathering spaces are in short supply at LWTech's Kirkland campus. Currently, engaging outdoor space is limited to the plaza east of the West Building Atrium. Several circumstances contribute to this shortage of outdoor gathering spaces:

- **Site Slope:** Most outdoor spaces adjacent to primary buildings are steeply sloped and difficult to access. Existing landscape design does not encourage the casual use of these areas. Maintenance of these sloped sites is also difficult.
- **Solar Access:** The success of an outdoor space in the Pacific Northwest is often related to its ability to capture sunlight. Landscaped areas at LWTech tend to slope downhill toward the north, placing them in near-perpetual shade.
- **Technology Center Plaza:** The plaza adjacent to the first floor of the Technology Center was specifically designed for informal gathering, but it has proven to be a poorly-used space. The space is not hospitable due to an abundance of hard surfaces, lack of solar access, and natural breezes due to its orientation.

Response: The goal of each growth and renovation project is to develop adjacent outdoor areas for student social gathering and informal learning. Plaza, courtyards and other open spaces will be oriented to take advantage of available sunlight and natural site protection from wind and rain. These outdoor spaces will be furnished with pedestrian-friendly features such as seating, activity kiosks, artwork, bike racks, landscape plantings and signage. An entry plaza will be created in conjunction with the Center for Design, directly west of the new building. A larger plaza to the south of the Center for Design will be incorporated at a later date, following the relocation of the main campus entry boulevard. (See the Campus Master Plans in Section 1)

SECTION SIX – CAMPUS INFRASTRUCTURE

Intent

NOTE: Actual extent of these projects will be determined by requirements imposed by the City of Kirkland during the master plan review process. This section will be updated as these requirements become defined.

In addition to building development and campus character (including pedestrian support) improvements, LWTech anticipates the need to upgrade or provide new/expanded campus infrastructure projects. Most important from a planning and budgeting standpoint, these include stormwater quality and quantity controls associated with any increase in impermeable surfaces on campus, and additional vehicular parking facilities associated with any expansion projects (physical and FTE). Landscape and utility improvements will also be required in any expansion project.

Campus Infrastructure Projects

Development of additional parking capacity constitutes the most conspicuous site development constraint at both the Kirkland and Redmond campuses. This Ten-Year Campus Master Plan identifies four infrastructure projects associated with parking, three of which are on the Kirkland campus:

Campus Infrastructure Project: Southeast Parking Lot

Upon completion of Project C that replaces the Early Learning Center portables with permanent construction on the west side of campus, the existing site will be converted into a surface lot containing approximately 83 new parking stalls.

Campus Infrastructure Project: Technology Center Expansion Parking Lot

It is anticipated that new development north of the Technology Center will result in a loss of parking stalls. Existing surface parking stalls could potentially be retained beneath the building. Due to building structure, stairwell, and services requirements, a net loss of approximately ten stalls must be reasonably anticipated.

Campus Infrastructure Project: Redmond Campus Center Expansion Parking Lot

LWTech owns an asphalt-paved lot due west of its existing Redmond Campus Center site, with intent to develop it as an overflow parking lot. This action will require a Change in Use process be completed with the City of Redmond, as well as SEPA review and a traffic study. Space is adequate for approximately 69 new stalls. This development will proceed as an independent decision of the institute, or will be mandated by expansion of the existing facility. Further detail is available from a study conducted by Schreiber Starling and Lane with AHBL in 2012.

Kirkland Campus Infrastructure

Each new proposed building will carry utility requirements and site improvements within its scope of work. Utilities needs are based on building size, utility capacities, and project use type. Utility upgrades will be examined in greater detail when individual development permits are sought. The following is a summary of utility upgrade/expansion and landscape concepts particular to the Kirkland Campus:

- Water:** Water main improvements are required to serve the proposed total campus development. Dead end water mains will be looped to increase fire flow. The 20" ductile iron water main is anticipated to be relocated south to accommodate development of the new Center for Design. Cross connection control will be provided for all new development and backflow prevention assemblies will be provided inside each building for both domestic and fire sprinkler services.
- Sanitary Sewer:** Sewer laterals, building services, and certain pretreatment systems will be required for the proposed development. New building sewers will be served with gravity connection to the existing and relocated sewer laterals such that the need for force mains will not be required.
- Storm Water:** Storm water conveyance system is adequate to convey storm water run-off from a 25-year storm event. Some of the existing conveyance lines will need to be relocated as part of any new construction project. Additional storm water detention and water quality treatment will be required for proposed development. On-site, below grade detention systems and water quality systems will be provided for all growth and replacement projects.
- Natural Gas:** The gas service currently available at the campus is limited. Additional gas service may require offsite gas line improvements. A new line is anticipated along NE 120th Street from the north campus entrance to a high-pressure line on Slater Avenue. Extension to the main gas line at 132nd Avenue NE is anticipated with the Center for Design. Offsite gas line improvements can be provided by PSE. LWTech will be responsible for the cost of construction.
- Electrical:** The existing power distribution system is a primary radial distribution system. In this type of distribution there is only a single path from the source to any given load. This form of distribution is subject to single point failure in which a fault at any point from the source to the load would interrupt service without a means of restoring service quickly. In order to rectify this significant problem, each building project includes service revisions via underground duct bank with new primary switches which will provide a loop system for each newly constructed project. Additionally these individual upgrades will join together to provide the campus with a fully revised loop system upon the completion of all new projects.
- Landscape:** The campus landscape should reflect a sustainable approach to each planting design, while at the same time, differentiating distinct "use-areas" or zones of the campus. The majority of plants should be chosen that are native and/or adapted to the region, species that can live without irrigation, and plants that require minimal maintenance. Thus, each zone will provide a recognizable, distinct, and sustainable landscape.

SECTION SEVEN – COMMON DEVELOPMENT THEMES

Intent

Planned projects at Lake Washington Institute of Technology will address the following common themes:

Sustainability Guidelines

Lake Washington Institute of Technology is committed to creating high performance educational facilities that ensure the optimal health and productivity of students and faculty. LWTech supports and fully complies with the State of Washington's LEED (Leadership in Energy & Environmental Design) mandate.

Whether it's termed "Sustainable", "High Performance", "Green", or "Environmentally-friendly", people have varied notions about what sustainable building means. Some think it means saving energy. Others think it means protecting the environment. While these are important aspects of sustainability, they are not sufficient to describe it, because sustainability has a human dimension as well.

Sustainable building can provide improvements in lifestyle, comfort, satisfaction, and health along with protecting ecosystems and saving energy and resources. It integrates the project designing, planning, and engineering, in order to work with, not against nature. Sustainable building practices incorporate nature's "free" services (wind, sun, thermal properties, greenhouse principles, light, etc.) to create a high quality indoor environment while circumventing as much damage to the ambient environment as possible.

Buildings are a primary source of pollution that leads to urban air quality problems, climate change, habitat destruction, and overfilled landfills. The challenge is to design and construct buildings prudently, so that they use a minimum of nonrenewable energy, produce minimum pollution, and use as little extracted material resources as possible, while at the same time increasing the comfort, health, and safety of the people who live and work in them.

Traditional building practices often overlook the interrelationships between a building, its components, its surroundings, and its occupants. "Typical" buildings consume more of our resources than necessary, negatively impact the environment, and generate a large amount of waste.

Conversely, sustainable building practices offer an opportunity to create environmentally sound and resource-efficient buildings by using an integrated approach to design. Sustainable buildings promote resource conservation, including energy efficiency, renewable energy, and water conservation features; consider environmental impacts and waste minimization; create a healthy and comfortable environment; reduce operation and maintenance costs; and address issues such as historical preservation, access to public transportation and other community infrastructure systems. The entire lifecycle of the building and its components is considered, as well as the economic and environmental impact and performance.

“High Performance Educational Facilities” refers to the physical facility. Good teachers and motivated students can overcome inadequate facilities and perform at a high level almost anywhere, but a well-designed facility can truly enhance performance and make education a more enjoyable and rewarding experience. A high performance educational facility is healthy; thermally, visually, and acoustically comfortable; energy, material, and water efficient; safe and secure; easy to maintain and operate; commissioned; has an environmentally responsive site; is a building that teaches; a community resource; is stimulating architecture; and is adaptable to changing needs.

Building Siting

Siting is one of the most important issues to grapple with when planning for new construction. The siting of any facility will impact every aspect of the campus, from the direct environmental impact, to energy consumption, to indoor environmental quality. Siting involves both the decision of where to put the building and how to orient it on the site. Several issues need to be addressed when siting any new construction. These include, but are not limited to, vehicle and pedestrian access, landscaping impacts, storm water management and orientation of the building for passive heating, natural ventilation, and daylighting

Indoor Environmental Quality (IEQ)

Indoor environmental quality is an integral aspect of high performance educational facility. Good IEQ can reduce student and faculty absences, increase student performance, reduce illnesses related to indoor toxins, and improve teacher retention rates. IEQ includes indoor air quality (IAQ), acoustics, daylighting and lighting quality, and thermal comfort. These factors will help reduce distractions, improve comfort levels, and keep students, faculty and staff healthy.

All aspects of IEQ react and interact with each other as well as with other aspects of high performance educational facilities. Siting issues will affect day lighting potentials and acoustics. Building envelope design will affect thermal comfort, day lighting, and indoor air quality. Materials choices will affect all aspects of IEQ. The construction process and the operations and maintenance will also affect IAQ. To optimize good IEQ, it is important to consider it throughout the design and construction process.

Energy Resources

“Sustainable” facilities should be models of energy efficiency. They can support sustainable energy efforts by using an integrated design process that takes into consideration everything from building siting and orientation, to the buildings shape and the landscaping around it, to the lighting, heating, cooling and ventilation sources.

Integrated design strategies can result in long and short-term savings. For example, reduced heat from an energy efficient lighting system and good natural ventilation designs can reduce the cooling demand, and thus the size and cost of the air conditioning units. All members of the design team should meet early on in the planning process and continue to coordinate integrated design concepts throughout the project in order to reduce energy costs. The end result of integrated design is reduced overall energy consumption, thus saving construction costs through the downsizing of the systems and on-going costs of operation through reduced utility bills.

Water Resources

The most economical, efficient, and environmentally appropriate approach to deal with water demand is to reduce water consumption and to use water resources more wisely. High performance educational facilities can contribute to this effort by using water-efficient landscape techniques, and by using water-efficient fixtures and controls in indoor and outdoor plumbing systems.

Materials

It is important to consider material efficiency in the design, construction, and renovation of buildings. Material efficiency refers to durable, reused, salvaged, refurbished, recycled content, and recyclable materials manufactured using environmentally friendly practices. The end result is buildings that are environmentally responsible models to both their students and their community. Material efficiency can often save money by reducing the need to buy new materials and by reducing the amount of waste taken to the landfill. Buildings can reduce the amount of materials needed by reusing onsite materials, eliminating waste created in the construction and demolition process, and choosing materials that are safe, healthy, aesthetically pleasing, environmentally preferable, and contain low embodied energy.

Community Matters

Sustainable design encompasses more than the physical building. It is imperative for LWTech to consider the impact of new construction on the surrounding community.

The location where a building is constructed impacts the surrounding community in a number of ways: how it affects pedestrian and automobile traffic, the visual and physical effects of parking lots, the quantity and quality of open space as an amenity to a neighborhood, and the community services the building may offer.

Aspects such as the exterior design of the school, the amenities provided and environmental design features can be a source of pride to the community. The LWTech college campus is a center for teaching and learning, and also adds a functional value within the community by providing access to facilities as well as services such as childcare, dental and health clinics and continuing education.

Commissioning

Without properly commissioning a building, many sustainable design elements can be compromised. The commissioning process is a quality-oriented process for achieving, verifying, and documenting that the performance of facilities, systems, and assemblies meet defined objectives and criteria. Commissioning begins at project inception (during the pre-design phase) and continues for the life of the facility through the occupancy and operational phase. By implementing a commissioning plan, LWTech can be sure that all of the systems function at optimum levels.

High Performance

Washington State Community and Technical Colleges are facing quite a list of challenges, including tight budgets, an ever increasing student enrollment, a growing need for renovation, and building, and most importantly a higher expectation of faculty and student performance among these compelling circumstances. While facilities built to be sustainable cannot solve every particular issue facing a campus, they can certainly have a favorable impact on LWTech's budget, help protect the environment, and encourage better performance of faculty and students as a result of a better learning environment. High performance educational facilities integrate today's best technologies with architectural design strategies to achieve a better learning environment. Such well-designed buildings include properties such as appropriate lighting (integration of day lighting and artificial lighting technologies), reduced noise levels (acoustic materials and low noise mechanical systems), and healthy air quality, temperature, humidity levels (indoor air quality (IAQ), thermal comfort, HVAC systems, and low-emission materials). This reduces distractions and creates environments where students and faculty can see and communicate with one another clearly and comfortably

Universal Design

Universal Design, as defined by The Center for Universal Design at North Carolina State University, is "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." Universal design principals are typically more stringent than code mandated accessibility requirements. Lake Washington Institute of Technology promotes the use of these Universal Design principles in all new building development or renovation or remodel.

Universal design asks from the outset how to make the design work beautifully and seamlessly for as many people as possible. It seeks to consider the breadth of Human diversity across the life span to create design solution that work for all users. The following seven principles will describe the basic philosophy of Universal Design.

Equitable Use:

The design is useful to people with diverse abilities, incorporating the following guidelines:

- Provide the same means of use for all users: identical whenever possible; equivalent when not.
- Avoid segregating or stigmatizing any users.
- Provisions for privacy, security, and safety should be equally available to all users.
- Make the design appealing to all users.

- Flexibility in Use:** The design accommodates a wide range of individual preferences and abilities.
- Provide choice in methods of use.
 - Accommodate right- or left-handed access and use.
 - Facilitate the user's accuracy and precision.
 - Provide adaptability to the user's pace.
- Simple & Intuitive:** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
- Eliminate unnecessary complexity.
 - Be consistent with user expectations and intuition.
 - Accommodate a wide range of literacy and language skills.
 - Arrange information consistent with its importance.
- Perceptible Information:** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
 - Provide adequate contrast between essential information and its surroundings.
 - Maximize "legibility" of essential information.
 - Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
 - Provide compatibility with a variety of techniques or devices used by people with sensory limitations.
- Tolerance for Error:** The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
 - Provide warnings of hazards and errors.
 - Provide fail safe features.
- Low Physical Effort:** The design can be used efficiently and comfortably and with a minimum of fatigue.
- Allow user to maintain a neutral body position.
 - Use reasonable operating forces.
 - Minimize repetitive actions.
 - Minimize sustained physical effort

**Size & Space for
Approach & Use:**

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

- Provide a clear line of sight to important elements for any seated or standing user.
- Make reach to all components comfortable for any seated or standing user. Accommodate variations in hand and grip size
- Provide adequate space for the use of assistive devices or personal assistance.

Universal Design Recommendations

In 2005, LWTech conducted an accessibility review of all facilities. The following enhancement opportunities were identified for inclusion in all future development:

Circulation issues:

- Clearly define and highlight accessible routes throughout campus.
- Utilize color and textured walking surfaces to ease use by the visually impaired.
- Connect accessible routes to accessible building entries.
- To the greatest extent possible, do not separate accessible routes from those used by others.

Site issues:

- Provide personal and van parking stalls in excess of code minimum requirements. Locate these stalls adjacent to building entrances.
- Provide a bus stop which is located on level ground adjacent to a major campus entryway.
- Site benches should be provided with arms to assist in transfer from wheelchairs.
- Provide an accessible route to and through the arboretum. This is to include curb cuts and pathways.
- Modify locking devices on gates at the Early Learning Center to allow operation with a closed fist.
- Change the play surface material at the Early Learning Center to a material that is easier for the mobility challenged to navigate.

Building use issues:

- To the greatest extent possible, do not design elements that are exclusive to any portion of the population.
- Fully integrate accessible features into all public gathering spaces.
- Provide clear sightlines to important elements for both seated and standing users, particularly within classroom spaces.
- Accommodate reach distances for both seated and standing users. Accommodate variations in hand and grip size
- Provide adequate space for the use of assistive devices or personal assistance.
- Provide accessible bathroom stalls that are larger than code minimum. Include space for baby changing tables in restrooms for both genders.

- Replace all vending and self-help equipment with ADA compliant models that accommodate reach and operational limitations.
- Ensure that all classroom, kitchen, and break room sinks are accessible.
- In auditorium spaces, provide lighting at instructional head walls for sign language interpreters.
- Update the locations of toilet accessories, HVAC controls, light switches, elevator buttons, etc. to comply with recent code revisions.
- Choose shades, curtains, windows, and mechanical doors that are operable by a closed fist.
- Acoustical performance should meet minimum WAC (Washington Administrative Code) requirements.
- Adjust doors to operate with minimum required force. Provide automatic doors where possible.
- Provide piping protection below all sinks.
- Provide an accessible route to and through the Early Learning Center play area.
- Provide instructor console which are fully usable by those with disabilities and that do not block the view of those seated in wheelchairs.
- Provide elevators to roof areas of all new buildings.

Security

Campuses carry high expectations regarding the safety of its diverse user population. A failure to provide the expected degree of safety (risk level) and comfort (fear level) will jeopardize the institution's image as a safe haven for learning. Consequently, enhancing security should be both a goal and byproduct of any campus development.

Safety is a concern of any planning exercise for public use. The layout and clarity of the campus play a physical role in enhancing the well being of diverse groups of people. This includes people with disabilities, the elderly, foreign students and students where English is a new language. The college is a center for diversity. It is a collection of many people from many places. The layout of the campus should reflect that fact. The following design strategies are to be implemented as part of any project development:

Clear Pedestrian Drop-off:

- Develop vehicular drop-offs with clear connections to major paths and building entrances.
- Provide drop-offs that are well light with clear signage to find major destinations.

Paths:

- Include clear paths of travel from all parking areas to building entrances.
- Provide clear routes to major activities.
- Locate facilities hosting evening activities along major pathways.
- Connect campus pathways to city trails, sidewalks, and transportation routes.

Signage:

- Mark parking entrances from main roadways.
- Unify campus with a campus-wide, consistent, approach to signage.
- Signage should reinforce path hierarchy.
- Develop signs for a diverse population. Make signs more visual/universal than language based.

Lighting, Day and Night Use:

- Develop lighting for paths with connections to overall path hierarchy.
- Unify campus with consistent lighting types and locations.
- Light campus with poles and bollards rather than by lights on buildings.
- Provide brighter lighting at building entries.
- Emphasize vehicular drop-off with higher light levels
- Provide lighted paths from parking to building entrances for nighttime use.

SECTION EIGHT – JURISDICTIONAL REQUIREMENTS

Master Plan History

Cummings Associates Architects developed the original Campus Master Plan in 1979, when Lake Washington Vocational Technical Institute was part of the Lake Washington School District and located in unincorporated King County. With the North Rose Hill Annexation to the City of Kirkland in 1989, jurisdictional control of the campus transferred to the City of Kirkland. In December of 1989, the City approved a revised Campus Master Plan, also prepared by Cummings Associates Architects, allowing Phase II additions to proceed. Construction of Phase II was completed in August 1992. In 1994, a plan modification allowing Phase III development was approved by the city. Lake Washington Technical College requested and received funding for construction of Phase IIIA in 1998. Currently Phases IIIB and IIIC, which were approved as part of the 1994 plan modification, have yet to be constructed.

In 2001, recognizing the profound impact completion of the Technology Center would have on space use within the East and West Buildings, the college in association with Schreiber & Lane Architects developed an all-new 10-Year Campus Master Plan focused on renovations and reassignments of interior spaces. A large number of the proposed projects were successfully funded and executed over the next several years. The scope of the 2001 master plan was expanded over time to include growth projects and a number of site and infrastructure improvements. This expansion process also addressed LWTech's new Redmond Campus. While the previously-approved Phase IIIB and IIIC Kirkland campus expansion projects were again included, preference was given to a new Phase IV addition to the East Building and replacements for the Early Learning Center and Horticulture portable structures. The expanded 10-Year Campus Master Plan was formally approved by the City of Kirkland in March 2007. Phase IV (a.k.a. the Allied Health Building) was successfully funded with construction completed in 2011.

Given the global economic upheaval experienced since 2008, the resulting massive disruption in State capital project funding, and shifting institutional priorities, Lake Washington Institute of Technology in 2012 embarked on an update of its approved 10-Year Campus Master Plan with the goal of producing an effective but more flexible framework for further improvements to its physical plant. This document is the result of that update process.

City of Kirkland Master Plan Approval Process

Schreiber Starling & Lane Architects has conducted a preliminary review of the Kirkland Zoning Code and met with the Department of Planning and Community Development to discuss Kirkland's approval requirements for master plan updates. For any substantive master plan update, the city requires its Process IIB be followed. This requires a pre-submittal conference with City of Kirkland departments of Public Works, Permitting, Community Development, etc. At this conference, the City will determine the extent of required documentation, e.g. traffic studies, parking studies, SEPA review, campus-wide storm water system analysis, etc. Process IIB also provides for community review and approval, planning commission hearings, city council review, etc. This approval process typically takes six months to one year to complete.

NOTE: Upon receipt of clarifications by the City of Kirkland and any further decisions made by LWTech, this section will be updated and included in the final Master Plan document.

City of Kirkland Zoning Review

Based on preliminary review of the Kirkland Zoning Code and the 10-Year Master Plan approved in 2007, any new development will be required to comply with the following:

Existing Zone:	Planned Area (PLA) 14
Use:	Public College or University
Required Yards:	50 feet from all property lines and 10 feet from the edge of the greenbelt easement on the west side of the property. All parking areas must meet setback requirements.
Maximum Lot Coverage:	Maximum of 70 percent. LWTech further agrees to set aside the Entrance Boulevard alignment for possible future connection to NE 116 th Street, but the city does not require the college to dedicate the Entrance Boulevard Alignment as public right-of-way at this time.

Maximum Structure Height:

Based on location within campus. Generally, 30 feet above average building elevation (ABE) calculated by either by averaging the elevation of the midpoints of the sides of the smallest rectangle that encloses the entire building footprint, or the elevation point at the center of all exterior walls.

- Portables Replacements: 30 feet above ABE
- Phase IIIB & C: Maximum height equal to the height of the existing West Building and Technology Center

Setback

Requirements:	Front: 50 feet Back: 50 feet Side: 50 feet All parking is required to meet minimum setback requirements.
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Façade Length

Restrictions:	When any portion of a structure is located less than 100 feet from an abutting lower density use, the horizontal length of any façade parallel to that border cannot exceed 50 feet.
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Landscape Buffers:

Lake Washington Institute of Technology property is categorized as Landscape Type D. Based on adjacent zoning, minimum landscape requirements per KZC 95.10 require compliance with KZC 95.15: Significant Trees and KZC 95.20 Supplemental Plantings. Development should be in compliance with approved Master Plan. This includes robust development and maintenance of landscape buffers along the north, east, and south property lines.

Street trees shall be of a species approved by the City. All trees must be 2 inches in diameter at the time of planting, with a canopy of not less than 6 feet above ground and not obstructing any adjoining sidewalks or driveways.

Residential:	A 25' landscape buffer shall be provided and planted along the abutting residential properties. Planting will include 1 row of evergreen trees along the entire length of the buffer, spaced a maximum of 15 feet on center. Under story plantings of shrubs and groundcovers should be provided as a visual screen to the minimum height of six (6) feet at maturity. Significant natural vegetation may be used to meet all or part of the standard and does not need to meet spacing requirements as long as visual screening of adjoining property is provided.
Street Frontage:	A 15 foot wide landscaped buffer measured from the back of the sidewalk shall be provided and planted with trees along the entire length of the buffer. Trees shall be spaced 20 feet on-center and planted a minimum of 4 feet from the back of the sidewalk. All trees shall be in compliance with overhead utility lines. Landscape back of sidewalk shall include a solid mass planting of low shrubs and groundcovers not exceeding a height of 36 inches at maturity. The landscape strip between the sidewalk and street curb shall be a minimum of four feet wide and may be maintained lawn (without irrigation). Significant natural vegetation may be used to meet all or part of this standard.
Walkway/ Bicycle Standards:	<p>Building shall provide pedestrian walkways designed to minimize walking distances from the building entrance to the right-of-way and adjacent transit facilities. Overhead weather protection must be provided along any portion of the building which is adjacent to a pedestrian walkway per KZC Chapter 105.18. The protection may be composed of awnings, marquees, canopies or building overhangs and must cover at least 3 feet of width of the adjacent walkway. The overhead protection must be mounted at least 8 feet above the ground immediately below it.</p> <p>Pedestrian walkways must be at least 5 feet wide, must be distinguishable from traffic lanes by pavement texture or elevation, and must have adequate lighting for security and safety. Lights must be non-glare and mounted no more than 20 feet above the ground. KZC 105.18.2</p> <p>Solid fencing along pedestrian walkways is limited to 42 inches high. All new structure shall set back from any pedestrian access right-of-way, tract or easement that is not directly adjacent to a public or private street right-of-way.</p>
Category:	Compliance with the approved Master Plan. This includes robust development and maintenance of landscape buffers along the north, east, and south property lines.
Sign Category:	Compliance with the approved Master Sign Plan (D-93-48).
Required Parking Spaces:	<p>As determined by Planning Official. A condition of the city's master plan approval in 2007 required development of a total 225 parking stalls as growth projects are developed, broken down as follows:</p> <ul style="list-style-type: none"> • Portables Replacements: 58 (46 for ELC and 12 for Horticulture)

- Phase IIIB & C: 167 995 for Phase IIIB and 72 for Phase IIIC)

Note: 170 spaces were developed as part of construction of the Allied Health Building (90 new stalls and 80 stalls achieved through re-striping of the South Parking lot). Instructively, the 2007 approved 10-Year Campus Master Plan included no requirement for development of what was intended to be a 64,000 gsf Allied Health Building. Actual new building size totaled 83,554 gsf as a result of the unanticipated incorporation of the Washington Network for Innovative Careers skills center.

City of Redmond Zoning Review

No master plan is required. Any new development will be required to comply with the following:

Existing Zone: Manufacturing Park (MP)

Use: Education: Vocational and Trade Schools with the capacity of more than 150 FTE students, with 1 FTE equaling 15 credits in any given quarter.

Development on the LWTech Redmond Campus is an allowed conditional use requiring Conditional Permit approval per *RCD 20F.40.40 Administration and Procedures – Conditional Use*. The Type IV permit approval process requires recommendation by the Hearing Examiner and final approval by the City Council.

Development is also subject to site/development standards (*20C.60*) and City-wide design guidelines (*20D.40*). The City is currently in the process of developing street network concepts and streetscape themes for the Marymoor Subarea Infrastructure Planning.

New regulations go in effect in 2017 that require use of low impact development strategies to meet water quality goals.

SEPA: Redmond has its own SEPA ordinance. LWTech would act as SEPA Lead Agency and an expanded SEPA checklist would be prepared for each project. As Lead Agency, LWTech would hold a public hearing and issue a threshold determination (DNS) for each project. Key environmental issues include traffic and transportation.