

Bellevue College | MASTERPLAN

(Formerly Bellevue Community College)

2008 - 2018

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1.0 EXECUTIVE SUMMARY

1.1 Background and Study Purpose

Bellevue College (BC) was established in 1965 to serve students in Washington Community College District VIII, a 1,400 square mile area stretching from Lake Washington in the west to the crest of the Cascade Mountains to the east. One of 34 community and technical colleges in the State of Washington, BC's service district now includes all or parts of the cities of Bellevue, Fall City, Issaquah, Medina, Mercer Island, North Bend, Preston, Redmond, Renton Highlands, Clyde Hill, Yarrow Point, Hunts Point, Skykomish, Newcastle, Sammamish and Snoqualmie. Bellevue College is the third largest institution of higher education in the state. It is accredited by the Northwest Association of Schools and Colleges.

As originally envisioned, the College would grow to serve 3,000 - 3,500 full-time equivalent (FTE) students. During the academic year 2005-2006, the College enrolled 8,009 full-time equivalent (FTE) students. This represents a 34% increase over the last decade of enrollment.

The original campus complex was built on a 99-acre site in three phases over a six-year period from 1967 to 1975; new facilities have since been developed, bringing the total built area of the campus to approximately 612,683 gross square feet. Adjustment of classroom hours has further intensified the use of existing on-campus physical resources. In addition, BC leases 63,500 gross square feet of off-campus space to house a variety of administrative and continuing education activities for which there is not adequate space on the main campus. Even after completion of its funded growth projects, BC will continue to have an intense capital facility student utilization ratio of 99 gross square feet per FTE. As the college with both the highest state FTE allocation and the highest continuous excess enrollment in the state system over the last five years, additional space is critical.

Accommodation of the anticipated future increase in student population at BC through 2018 will require a significant expansion of BC's physical facilities. Thus, the intent of the master plan is to describe a comprehensive plan for growth in a manner that best supports the fundamental instructional mission of the College.

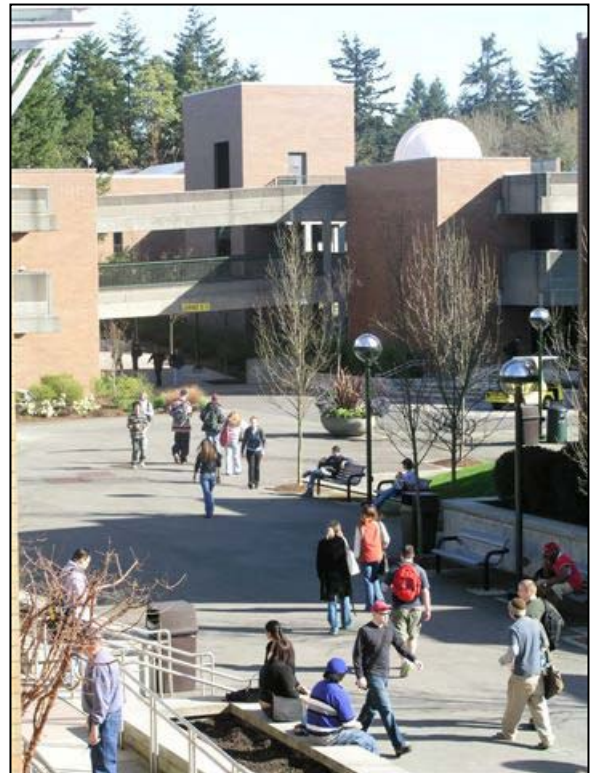


Figure 1.1 Campus core at Bellevue College



Figure 1.2 Student learning is at the heart of all BC activities



Figure 1.3 BC serves a diverse community



Figure 1.4 BC responds to the communities' changing educational demands

1.2 Planning Process and Schedule

The six-month master plan update process was conducted in several phases: physical analysis, exploration of planning alternatives, concept plan development, and document preparation. The design team worked closely with college representatives throughout the process.

In addition to participation from the College community, BC and the design team have met with the City of Bellevue and Metro/King County staff to coordinate with ongoing traffic and transit studies within the Eastgate/I-90 Corridor.

1.3 Vision

The Master Plan is a tool for implementation of the BC Vision. As such, all decisions should relate back to the vision for the College:

"Bellevue College is the region's college of choice, based on its excellence, innovation, and national recognition for exemplary programs."

1.4 Goals and Objectives

The physical campus environment of Bellevue College must support and enhance the fundamental instructional goals of the institution. The mission of the College emphasizes:

- Placement of student learning at the heart of all BC activities.
- Respect for diversity on campus and in the community.
- Equal opportunities for all who seek self-improvement through education.
- Excellence in academic and professional achievement.
- Esteem for shared decision-making.
- Creativity and innovation among BC faculty and staff.
- Responsiveness to the communities' changing educational demands.
- High quality services to students, visitors and the community.

1.5 Master Plan Goals

The primary goal of the master plan is to support the mission of Bellevue College through the physical development of its campus. More specific goals state that the master plan should:

- Respect and enhance the campus environment.
- Respect the environment as a whole.
- Maximize flexibility.
- Provide a safe, healthy, accessible place for learning.
- Encourage a strong working relationship with the community.

1.6 Planning Objectives

The master plan establishes a number of physical objectives to be achieved during the planning cycle. These fall into the following broad categories: buildings and infrastructure improvements, open space improvements, and circulation and parking improvements.

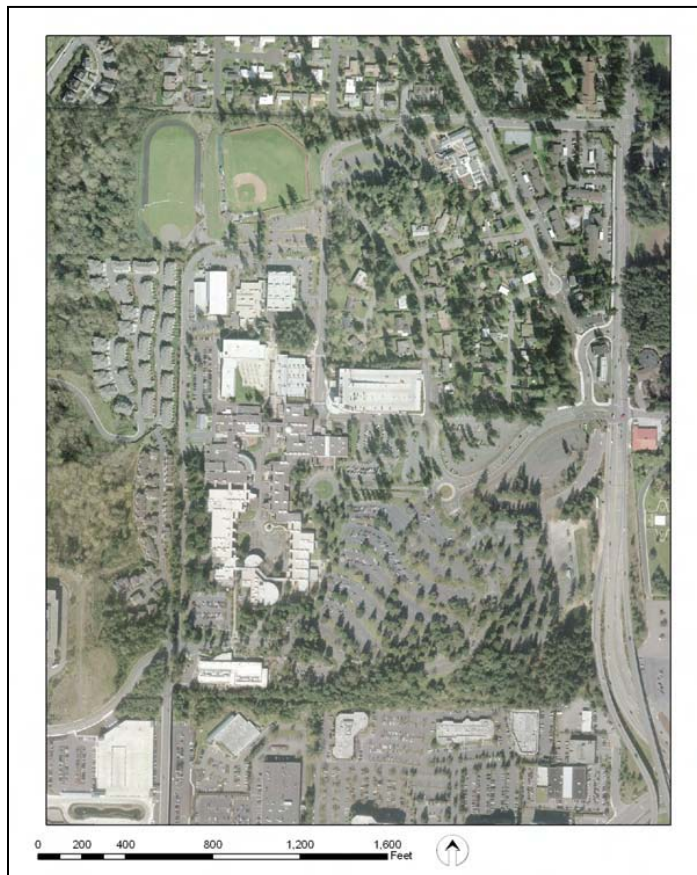


Figure 1.5 Aerial view of Bellevue College (June 2001)

1.7 Concept Plan

The Concept Plan Update has been developed as a tool to understand the impact of BC's projected growth in enrollment, and the interrelationship of the various planning objectives established for the study.

It proposes a pattern of new buildings based upon the original Master Plan concept of a series of linked internal courtyards surrounded by a more informal, natural landscape. The courtyards formed by the new buildings extend the network of landscaped outdoor spaces. The Concept Plan Update continues to place expansions of existing buildings so that they enhance and reinforce the north-south axis as well as improving the delineation of courtyards along this corridor. New buildings are being placed to further develop an east-west axis aligned with Landerholm Circle. This will provide a new set of courtyards along a new axis, as well as creating a more formal and defined entrance to the inner campus.

Additional parking structures will be added as enrollment increases. These structures will be strategically placed outside of the main walkable campus to maintain the pedestrian character and to minimize the aesthetic impacts of parking structures on the inner campus development.



Figure 1.6 Preferred Concept Plan

2.0 GOALS AND OBJECTIVES

2.1 College Mission

Student learning lies at the heart of all activities at Bellevue College, providing equal opportunities for all who seek self-improvement through education. In its ongoing pursuit of this fundamental mission, BC has established a number of strategic institutional planning goals, as well as a number of physical master planning goals through which the institutional goals will be made manifest.

“Bellevue College is a student-centered, comprehensive and innovative college, committed to teaching excellence, that advances the life-long educational development of its students while strengthening the economic, social and cultural life of its diverse community. The college promotes student success by providing high-quality, flexible, accessible educational programs and services; advancing pluralism, inclusion and global awareness; and acting as a catalyst and collaborator for a vibrant region.”

2.2 Institutional Planning Goals

Successful pursuit of BC's fundamental mission requires a strong sense of community. This community must include and involve students as well as faculty and staff, emphasizing diversity and inclusivity. BC aims to increase the effectiveness of, and participation in, College governance. The College seeks to provide a work environment that enhances opportunities for faculty and staff interaction and that supports the needs of all employees, by offering telework and flexible schedules as well as growth opportunities in all disciplines.



Figure 2.1 Student learning is the focus at Bellevue College

Instructional Programs

Management of instructional programs to achieve teaching and learning excellence is one of BC's most basic planning goals. To this end, BC will actively continue to develop overall principles for new programs, growth of established programs and program retention; this is a critical component of managing the projected growth of the College. The relationships among traditional transfer programs, professional and technical programs, and Continuing Education certification programs will continue to evolve. The College will continue to develop and improve its Distance Learning offerings and other innovative techniques to allow the flexibility that the modern student needs. In addition, as a baccalaureate candidate college, BC now offers a new four-year baccalaureate degree in Radiation Imaging with the first class of students to graduate in 2009. BC will continue to explore other programs of study that may evolve into full four year degree programs, including Interior Design and Nursing. In anticipation of successful accreditation by the Northwest Commission on College and Universities, Bellevue College anticipates a name change to Bellevue College to reflect this new stature.

As important as the baccalaureate accreditation will be to the College, it is important to focus on the needs of students to complete their studies in a timely and efficient manner. To this end, BC will investigate the feasibility of a 15-week semester system in lieu of the present 10-week academic quarter. As shorter term goals, a variety of schedule modes for students and faculty may be possible,

including two- or three-day, vs. five-day weeks, or two-week, five-week or even 20-week programs vs. the traditional 10-week quarter. Varying faculty teaching loads and calendars, such as fulfillment of annual load in two quarters, may provide greater flexibility in program planning and individual work schedules.

Development of mixed modes of delivery, such as science on-line, with Saturday lab or open lab, will further improve flexibility for students as well as faculty and staff.



Figure 2.2 Improved campus life

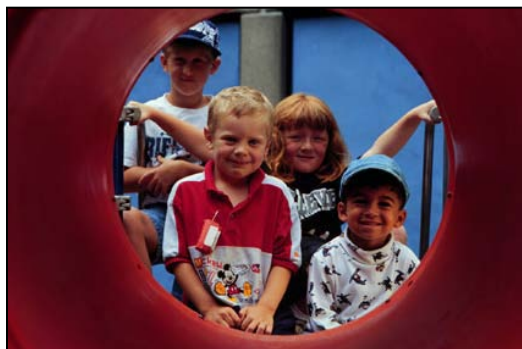


Figure 2.3 Community Childcare

As the College explores options for program delivery, student advising will become ever more crucial, to ensure that students are able to take full advantage of the opportunities available. The College will seek to provide greater access to faculty, and to improve students' understanding of the advising system. Individual contact with faculty as well as with advising and counseling staff should be increased for all students.

Strategic Goals

To provide a decision-making framework 9 strategic goals and a number of specific objectives were adopted by BC to directly implement the vision for the college.

Access

BC will provide access to educational programs and services that strengthen the economic, social and cultural life of its diverse community.

Student Success

BC will support students' lifelong educational development by offering programs and services consistent with their needs, interests and abilities.

Teaching and Learning Excellence

BC will offer educational programs and services that are responsive, flexible, and of the highest integrity.

Institutional Accountability

BC will maintain a viable and supportive system of organizational review that verifies and improves college effectiveness and ensures the integrity of programs.

Professional and Organizational Excellence

Financial Sustainability

BC will remain preeminent by strengthening its financial position.

Technology Leadership

BC will be a leader in administrative and education technology, including online learning.

Pluralism

BC will advance diversity programs that promote pluralism, inclusion, and global awareness.

Community Leadership and Partnership

BC will be a leader and partner in building a strong and vibrant region.

Community Relationships

Bellevue College values its positive and continuing relationship with the surrounding community, and is dedicated to strengthening this relationship as both the College and the community evolve over time. The College is committed to developing and expanding credit and continuing educational programs that address community needs and interests, such as the current science camp program, “Kids@BC”, a teacher training module “E2E” (educator to educator), and other programs. Community outreach will be extended with public school programs such as “Science to go” and new middle school events.

2.3 Master Plan Goals

In order to support and enhance the fundamental instructional goals of the College, the campus master plan should:

- Respect and enhance the campus environment; maintaining and protecting the character, architecture and open spaces of the College
- Changes to the campus should seek to enhance and improve the value and quality of College facilities
- Respect the environment as a whole, promoting the thoughtful conservation of natural resources through College programs as well as construction of sustainable buildings
- Maximize flexibility, in order to accommodate future growth and take advantage of unforeseen opportunities
- Provide a safe, healthy campus environment that is accessible to all
- Encourage a strong working relationship with the adjacent neighborhoods and the City of Bellevue to improve the quality of life for everyone in the community

2.4 Physical Planning Objectives

Specific objectives have been established to help Bellevue College realize its master planning goals. Broadly stated, these objectives fall into three main categories: buildings and infrastructure, open space, and circulation and parking.

Buildings and Infrastructure

A number of specific facilities and infrastructure projects are proposed for implementation on the BC campus; these are described in more detail in Section 5.0.

Development of individual buildings should support overall master plan goals. Each building should incorporate architecture and open space of the highest quality, and each should be in harmony with its particular context. Each building should be fully accessible, flexible and economically feasible. The College is committed to sustainable design, and development of new facilities should be consistent with the principles of energy conservation, resource efficiency and interior environmental quality. Development of utility infrastructure, including individual building systems, should be compatible with existing systems and maintainable with existing skills.

Open Space

Open spaces on the BC campus should be developed to create safe, comfortable spaces on campus for informal learning and casual social interaction. Links between open spaces should be designed



Figure 2.4 Inviting campus environment

to improve campus wayfinding and achieve a coherent, accessible open space network. Open spaces should integrate landscape elements to reinforce the structure of the campus and enhance its aesthetic character. Open spaces should offer a range of sun and shade, passive and active spaces with pedestrian circulation as a first priority.

Circulation and Parking

Movement to, from and around the BC campus should be safe, accessible, and pleasant. Circulation should be as efficient as possible by all modes of transportation. Access by pedestrians and bicycles should be improved, and conflicts with vehicular circulation routes should be minimized. Access to public transportation should be improved, with the intent of minimizing use of private automobiles and related parking demands. Parking needs of campus users, including the disabled, should be met in a manner which promotes safety and security, and which does not detract from the overall quality of the campus environment. Bicycle parking should be convenient to buildings and located near entrances. Major and minor campus entries should be identified and developed to improve wayfinding on the campus.

Strategies to minimize the impact of automobile parking areas will be carefully considered and implemented as growth is accommodated. Parking levels will be considered for all new buildings in an

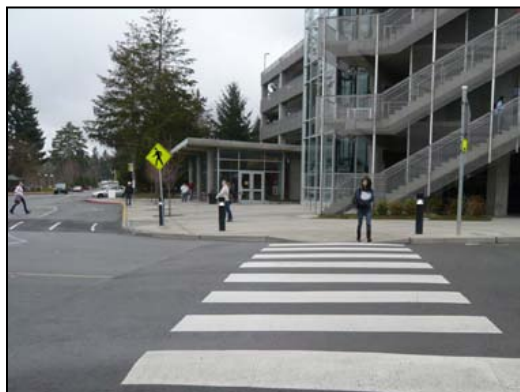


Figure 2.5 Parking and Access

2.5 Satellite Campus

In assessing population growth within the Bellevue College district, as well as growth in demand for programs, BC has identified the need to deliver services at a location further east than its main campus; to do this effectively requires development of a satellite campus. Planning for the implementation of this significant goal is proposed for the planning period 2008-2018.

During this period, many critical tasks must be accomplished, including assessment of program, administrative and student services needs and their impact on the main campus. A realistic time line for site identification, acquisition and development must be established as support for the satellite campus builds among students, faculty, staff, community and political groups. Policy issues of accreditation and faculty work load must be considered. Finally, the College will need to outline a detailed transition plan for individual programs so that the effective delivery of the programs is not interrupted.

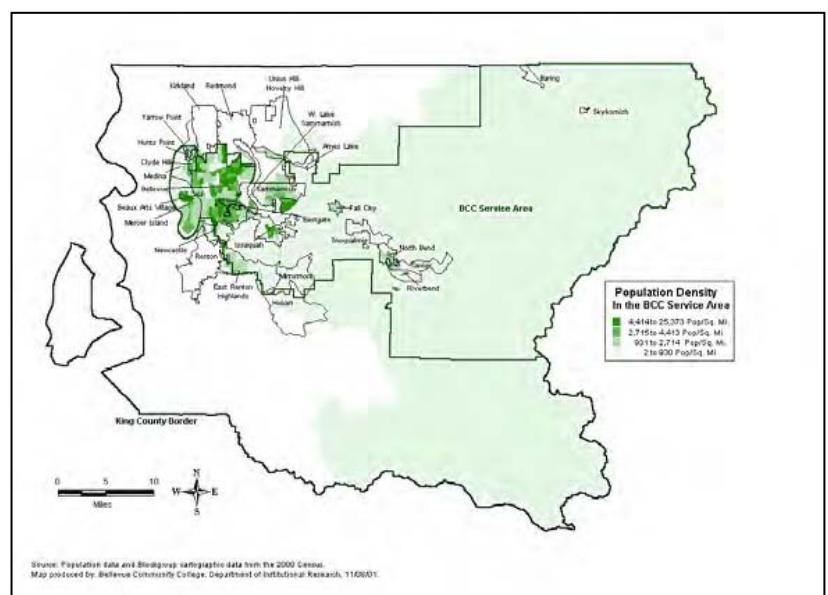


Figure 2.6 BC's Service Area

3.0 EXISTING CONDITIONS

Bellevue College has instructional and administrative space in several locations in and around the City of Bellevue. The approximately 99-acre main campus is located at the intersection of 148th Avenue SE and SE 28th St, adjacent to Interstate 90; this primary campus location is the focus of the Master Plan. Spaces located off the main campus are typically leased spaces that are utilized primarily for administrative and continuing education programs that support the main campus curriculum.

3.1 College History

In 1961, the Washington State legislature authorized the establishment of two-year junior colleges in counties already having four-year institutions. This authorization was granted to meet the need for additional educational facilities in and around the state's major metropolitan areas.

The Bellevue School District acted shortly after the 1961 legislation to begin preliminary studies in support of a new college. These studies confirmed the demand for a two-year college in Bellevue. In 1962, the citizens of Bellevue approved a special levy to purchase a site for a community college, and in 1964, Bellevue and Lake Washington School Districts issued a 'Joint Application for a Community College East of Lake Washington.' In support of the application, Bellevue College was authorized by the State Board of Education on June 2, 1965.

The college opened in September, 1965 with an enrollment of 523 students (309 full time equivalents). Newport High School was used as a temporary facility until the permanent campus was ready for use in 1969.



Figure 3.1 Dedication of the Bellevue College Campus, c.1969

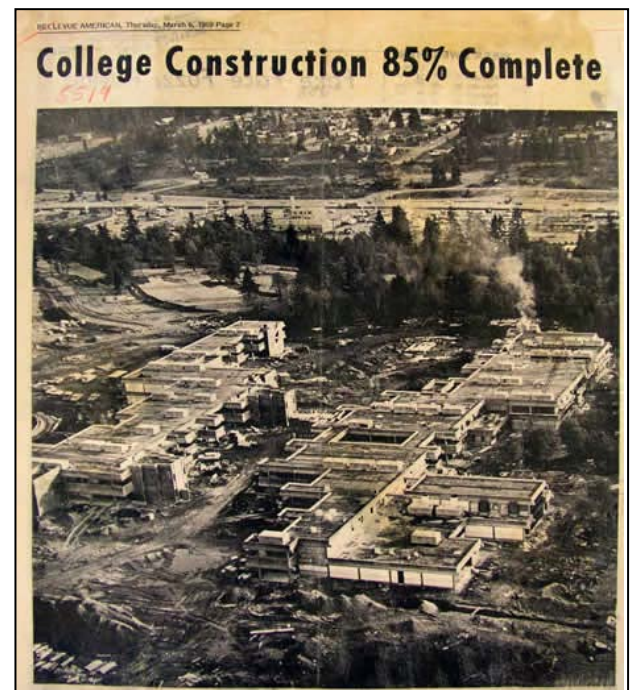


Figure 3.2 Campus Construction, c. 1969

By the time the permanent campus opened in 1969, the student population had grown to 2,200 Full-time Equivalent students (FTE's); it continued to grow as Building Phases II and III were completed over the next decade. By 1992, the campus complex featured classroom and lecture halls serving more than 14,000 students per quarter.

Bellevue College was the first College developed to serve the small and mostly rural Eastside community. During the 1980's, the 1,400 square mile district

experienced unprecedented population growth. The College, like many other public institutions, struggled to meet the increasing demands of a diverse and dynamic community.

To accommodate the intense increase in demand, the College, in 1984, leased the 46,000 assignable square feet (asf) Robinswood Elementary School from the Bellevue School District. In addition to this leased space, the College adjusted its regular on-campus hours of operation to an early hour start time of 6:30 AM through 4:30PM; evening classes were offered from 4:30PM through 10:30PM. Although the adjustment of classroom hours provided an effective way to maximize utilization of existing physical resources, the leasing of off-campus space was intended as only a temporary solution for an institution attempting to serve the needs of a growing community.



Figure 3.3 Landerholm Circle, c. 1968



Figure 3.4 BC has offered child daycare since 1971, photo c. 1973



Figure 3.5 BC's radio station, KBCS goes live in 1973

As originally designed, the facilities of Bellevue College were intended to accommodate between 3,000-3,500 full-time equivalent (FTE) students. During the academic year of 2007-08, the College had a student body of approximately 7,415 state-supported FTEs. Since many of BC's students take single continuing education classes or carry less than a full credit load each quarter, in Fall 2006 the total student head count of 18,291 was substantially greater than the FTE count. Enrollment has continued to climb and has resulted in a total student head count of 18,654 for Fall 2007. Although the College has experienced a dramatic increase in enrollment, the campus infrastructure has grown at a significantly slower rate, adding only 150,000 gross square feet (gsf) over the last decade, with nearly half of that growth occurring in 1999-2000.

3.2 Campus Boundaries

Bellevue College is bounded by 148th Avenue SE to the East, SE 24th Street to the north, and Snoqualmie River Road to the west. The southern boundary of the College is characterized by a steeply graded, forested slope, creating a natural buffer between the College and the adjacent light industrial and commercial land-use patterns.

The boundaries of the campus are clear and comprehensible, with two notable exceptions: a steep and densely forested 7.5 acre parcel at the northwest corner

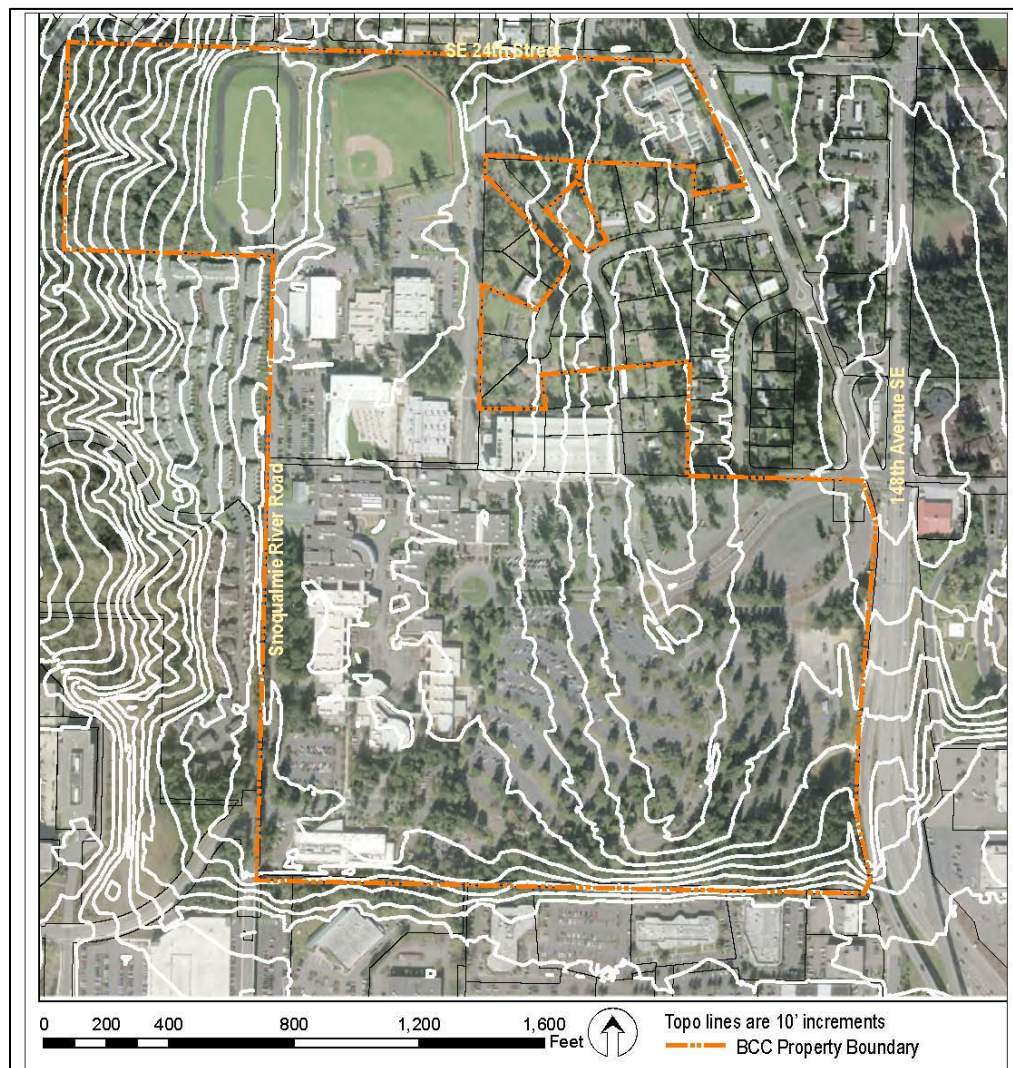


Figure 3.6 Existing Campus topography

of the campus, and the presence on the eastern side of Sunset Ranch, a residential development of 42 single-family homes.

The relationship between the College and the surrounding community is important to both the College and the City of Bellevue. Boundaries that are clear and well-defined create visible campus edges and enhance the identity of the College within the community.

3.3 Topography and Natural Features

The BC site is generally characterized by minimal to moderate slopes ranging from 1 to 5%, with notable exceptions to the west and south, where slopes of between 20 to 25% occur at the extreme edges of the campus. These steeply sloping areas have minimal impact on potential development activities, as these areas are limited to the campus edges or are isolated by the configuration of the campus boundary.

Development of existing campus structures has been limited to areas of the campus with little or no slope. Well-buffered surface parking occupies both the remaining flat areas, as well as the gently

graded portions with slopes of up to 10%. The most steeply sloping areas on the campus perimeter have remained undeveloped and serve as forested buffers between the College and the surrounding community.

The natural features of the campus include moderate stands of second growth douglas fir and western red cedar with native understory of salal and oregon grape. These stands can be found throughout the surface parking areas and more significantly along the steep edges of the campus. These stands lend significant natural character to the campus and serve several ecological functions including reducing surface temperatures, controlling stormwater runoff, and helping trap airborne particulate pollutants. The wooded areas also provide habitat for birds and other wildlife.

Soil types on campus consist of primarily Alderwood which is a gravelly sandy loam. This soil is moderately well drained but is underlain by consolidated glacial till at a depth of 24 to 40 inches. This soil type may have an increased erosion hazard on slopes greater than 6% according to the King County Conservation District.

The Campus is in the East Creek Basin watershed. East Creek daylights west of 139th Ave SE, flows into Richards Creek which then empties into Lake Washington.



Figure 3.7 Richards Creek

3.4 Land Use

The site occupied by the College is zoned R-5 (Residential, 5 units per acre) by the City of Bellevue. Despite this single-family residential land use designation, a letter of understanding between the City of Bellevue and the College allows the prevailing institutional development of the site to continue, by exempting the College from City land use restrictions.

The zoning of parcels surrounding the College varies from single-family residential to light industrial. More than three-quarters of the parcels adjoining the campus are zoned for the more intensive uses, ranging from

multifamily to light industrial. These uses are compatible with institutional development. City of Bellevue considers R-10 zoning to be multi-family.

The College currently owns seven single family homes in the Sunset Ranch development for use as future expansion.

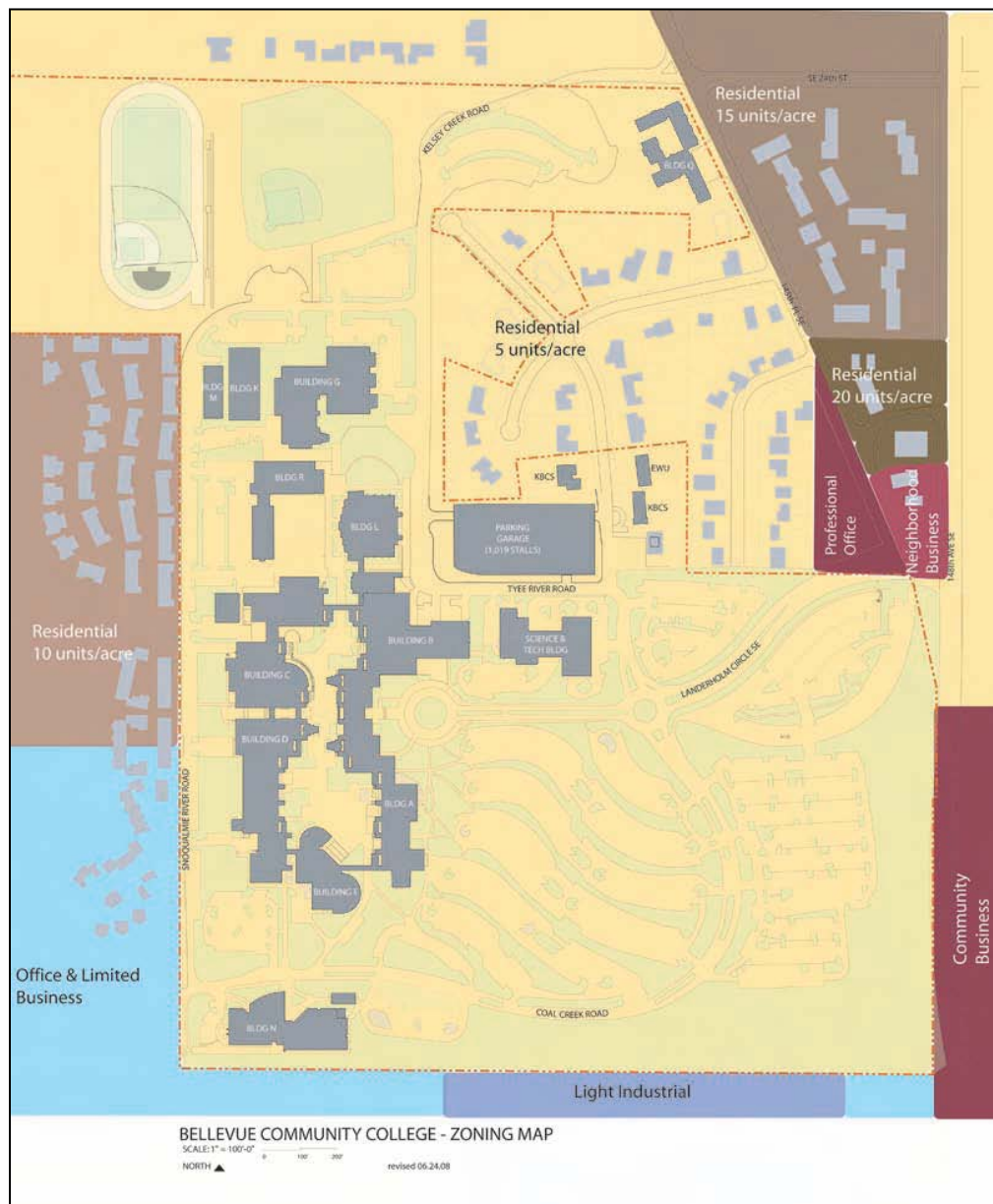


Figure 3.8 Campus and Adjacent Zoning

3.5 Buildings and Landscape

The campus maintains approximately 613,000 gross square feet (gsf) of facilities, most built during the initial construction phases between 1968 and 1975. Included in this total are the more recently completed 'K', 'L', 'R', and 'N' Buildings - all of which were completed during the period 1998-2001. Recent renovations and additions include 'A', 'B', 'C', 'D', and 'N' Buildings. In addition, a pre-engineered greenhouse was recently added. The 64,000 gsf Science and Technology Building is currently under construction.

Primary building materials on the campus are brick, exposed concrete, and cement plaster; operations and maintenance facilities are pre-engineered metal buildings. More recent buildings have used metal and glass to enhance building transparency and provide opportunities for capturing and controlling daylight.



Figure 3.9 Renovation of Building 'A', 2003

Conditions of Development

Renovation or expansion of existing buildings or construction of new facilities is limited by, among other things, the type of construction of existing facilities. The type of construction establishes the total quantity of space that may be built, as well as the number of levels and the required space between buildings based on actual or assumed property lines. The original buildings on campus were constructed at a time when the type of construction was not required to be classified in terms that are directly applicable to the classifications required today. Recent projects on campus have established precedents for some of the existing facilities.

Landscape

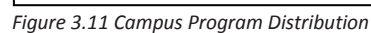
As the original landscape design within the campus core has been modified and supplemented to accommodate campus additions and remodels, new landscape strategies have emerged. The new approach respects many of the original landscape goals, but seeks to enhance gathering spaces through the use of a more varied plant palette within the campus core. These goals are embodied in recent projects such as the 'R', 'L', and 'N' Buildings, the Student Union Building Expansion, the Peace Garden, and the Millennium Garden.

Landscaped areas outside the campus core have also been modified over the life of the College; modifications are designed to support and enhance existing plantings and natural vegetation, such as the recent improvements to Landerholm Circle SE, parking lots 1, 3, 5, and 7 and the College East Entry at 148th Ave. SE.



Figure 3.10 Building 'R', interior/exterior relationship

The current distribution of programs across the campus has been determined largely by space availability. Notable exceptions are laboratories and athletic facilities, which are less flexible due to special building requirements and adjacencies. Facility flexibility remains an important goal in order to maintain high space utilization rates and to provide adaptability for continued program development.



3.7 Utilities

Storm Water

Detention of storm water currently meets City requirements and will be upgraded as new projects come online. The College is consistently looking for cost-efficient ways to reduce impervious surface with the construction of new buildings by incorporating pervious materials, creating rain gardens and in some cases actually reducing impervious surface by replacing asphalt parking with structures and additional open space. The College has incorporated bioswales in several parking areas to slow run-off and improve water quality.

Water

Water service to the campus is sufficient to support projected college growth. Current water pressure for fire protection systems is considered marginally adequate for three-story buildings, and the installation of booster pumps may be necessary for some new facilities. The College is working closely with architects and designers to reduce water use in new buildings by installing low-flow fixtures and exploring the potential re-use of rain water for irrigation and other needs. The College is also pursuing landscape solutions that require little to no irrigation after plants are established. By using natives and drought tolerant ornamentals, the College can develop a campus landscape that has higher survivability, provides an ecological function, and requires lower maintenance.

Sewer

The campus sanitary sewer system is gravity fed and does not require supplemental pumping to function effectively. Due to the favorable campus topography and the size of the mainline sewer serving the campus, the existing system appears to be sufficient to accommodate projected growth.

The houses owned by the College in Sunset Ranch are on individual septic systems. Development of these properties for new college facilities will require connection to the City of Bellevue sewer system or the college's system.



Figure 3.12 Mainline sanitary sewer, storm drainage, and water utilities

Data

Two server farms are currently in operation on the BC campus: one in the 'N' Building and a second in the 'A' Building. The 'N' Building server farm supports administration needs, while all service to students is provided through servers located in the 'A' Building. All service is currently provided via hard wire fiber optic connections. Capacity onto and from the campus is operating at about 36% of total capacity (10 lines of a total potential of 28). Fiber enters the campus along an east/west right-of-way adjacent to the main campus entrance at the intersection of Landerholm Circle and 148th Avenue SE. Service to the campus and distribution within the campus is underground.

Wireless systems are currently being used in some buildings and future expansion throughout the Campus is envisioned.

Power

Campus power utilization is currently at about 33% of the total capacity entering the College. Power enters the campus through a single transformer feeding two main connections located at opposite ends of the campus (north and south). During normal operation, the southern feed is closed and the northern feed is open. This arrangement can be reversed if required. Typically each building is fed by a 1500kV line; this has proven to be adequate supply

Primary voltage power is distributed through the center of campus via 3 #500 Kcmil conductors. This system has a capacity of 465 amps at 1500kV. The current power use is approximately 288 amps (with the additional load from Building S). Each of the buildings has a pad mounted switch and transformer to building voltage. The switches allow each building in the main campus core to be shut down individually. The exceptional configurations to this are the parking garage, the transmitter building, and the new Building 'S'. These are tapped off of the main core campus primary feeders in manhole #10. A primary switch in the garage serves the garage, transmitter building, and Building 'S'. The primary switch at Building 'S' has switch and conduit provisions for the future Health Sciences building planned for south of Landerholm Circle.

Telecommunications

Telephone service is provided via new underground conduit vaults with a copper wire system installed in 2004 feeding across the campus from a main switch room located in 'A' Building. The outside connection to this main switch room enters the campus along an east/west right-of-way adjacent to the main campus entrance at the intersection of Landerholm Circle and 148th Avenue SE. Recent upgrades to the system have included the introduction of fiber optic cables and the removal of above ground segments. Current demand is being marginally met.

Clock System

The College clock system is being updated as new buildings are built or renovations are completed. The new system is a fully automated GPS synchronized system. When it is fully installed this new system will reduce maintenance and increase efficiency.

to maintain usage at current rates.

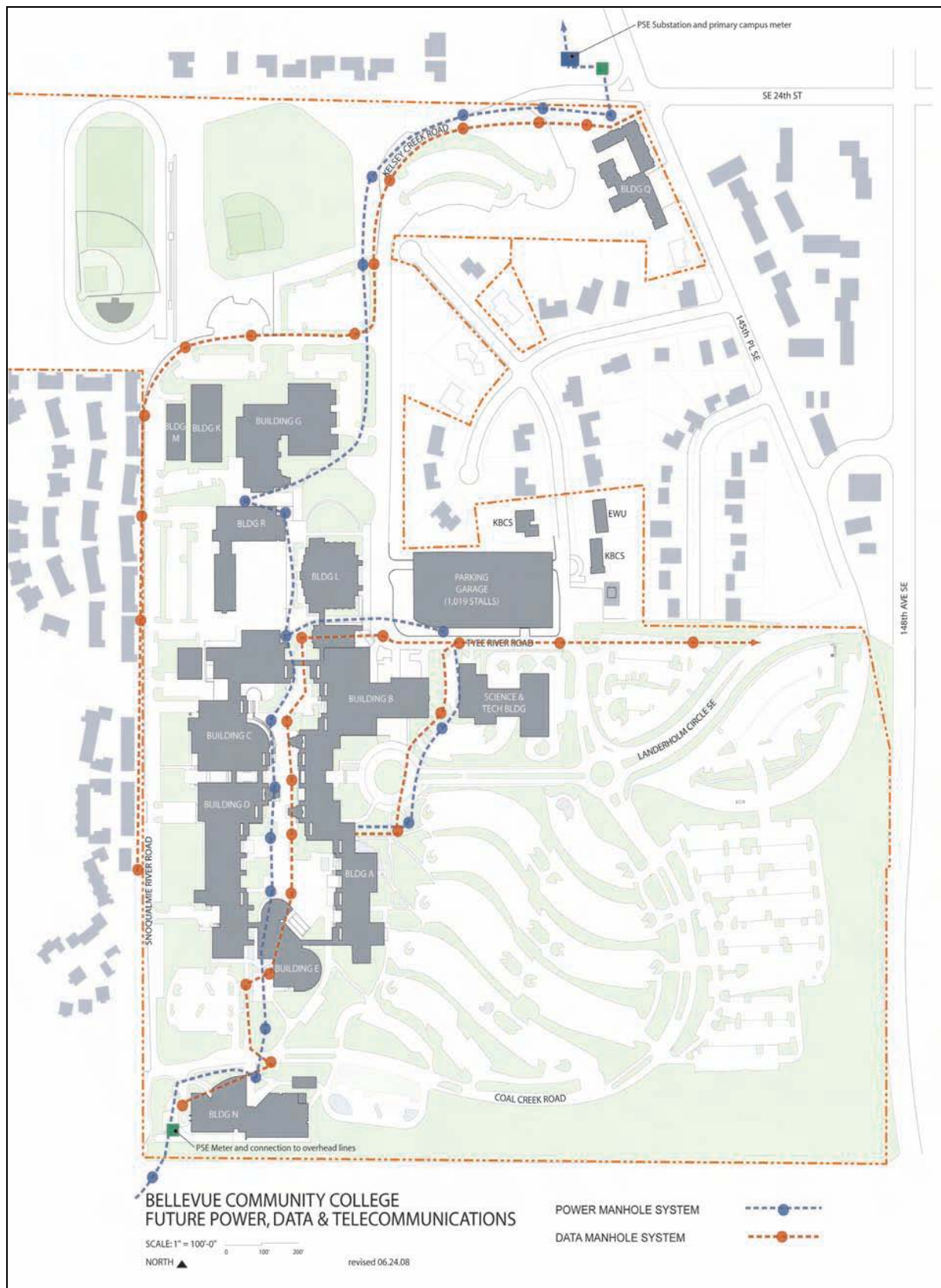


Figure 3.13 Existing Power and Telecommunications utilities

3.8 Transportation and Parking

Vehicular Circulation

Vehicular circulation consists of several campus controlled roadways. Some recent roadway changes include newly aligned access to SE 28th Street that includes direct access to westbound interstate 90 via 148th Ave SE. A new roundabout also was designed and installed at the intersection of Landerholm Circle and the main parking access road, this has greatly decreased congestion at this intersection. Additional modifications to improve circulation and increased capacity will be required as the campus develops.

Coal Creek Road

Coal Creek Road provides primary access to the College from the South Entry and feeds the bulk of the parking on the southeast portion of the campus. The roadway consists of one lane of traffic in each direction with grass median and open drainage ditches. It is paralleled by an informal 6' asphalt walk meandering through native vegetation.



Figure 3.14 Coal Creek Road

Coal Creek Road terminates at the southeast corner at the intersection of 142nd Place SE and SE 32nd Street, just west of Snoqualmie River Road. 142nd Place provides direct access to the HOV lanes on I-90 as well as to the south side of I-90. The Eastgate Park & Ride structure is accessed off of SE 32nd Street. The intersection's proximity to Snoqualmie River Road, high traffic volumes (particularly transit buses traveling through the intersection) and lack of stop control for vehicles on the south leg is somewhat problematic. The City is currently considering converting this to an all-way stop intersection, which will improve circulation for vehicles leaving the campus via Coal Creek Road.

Landerholm Circle

The East Entry at Landerholm Circle is the official main entrance to the College. Coming off of 148th Avenue SE and SE 28th Street, this campus access route receives the heaviest use and feeds all areas of the campus. The roadway features a planted median with trees, shrubs, and seasonal color; open drainage ditches; and an informal 6' asphalt walk meandering through native vegetation. Recently re-aligned with a full signal at 148th Ave SE, Landerholm Circle SE intersects Coal Creek Road and Tyee River Road in a roundabout feature that moves traffic more efficiently than a traditional intersection. This has significantly reduced congestion.

Tyee River Road

This short stretch between Landerholm Circle and Kelsey Creek Road fulfills many transportation functions. Along with directly serving the parking garage, the road also serves the single transit stop on campus directly west of the parking garage. Garage patrons must cross the road to reach campus and the road takes a right-angle turn that minimizes sight distance and creates multiple pedestrian-vehicular conflicts. Though a speed table and signage have been installed to slow vehicles and alert drivers to pedestrians, this location remains problematic.



Figure 3.15 Tyee River Road

Snoqualmie River Road

Snoqualmie River Road provides access to faculty parking and campus operations facilities and is intended to receive only limited use by the general public. This roadway is a service road on the west side of the campus with adjoining perpendicular and parallel parking. There is little opportunity for planting, although the native tree buffer between road and buildings could be enhanced. Campus planting areas do not exist between parallel parking and adjacent residences for the full length of the road, as the asphalt pavement extends to the property line.

Kelsey Creek Road

Kelsey Creek Road provides access to the campus from the north via the intersection of 145th Place SE and SE 24th. This is the primary access point for the Early Learning, Family & Childcare Center.

Pedestrian Circulation

The College has utilized several traffic calming devices including speed bumps and roundabouts to make vehicular circulation slower and more compatible with a pedestrian and non-motorized campus. The inter-building areas are pedestrian only and function well with covered walkways and open courtyards. The surface parking areas are reached through separated pedestrian paths and trails with signed and marked crosswalks across roadways. There is a study currently underway to improve signage and wayfinding that will improve pedestrian accessibility and readability of the campus.

Bicycle Circulation

All roads on Campus are available to cyclists. The campus also accommodates the Mountains to Sound trail.

Parking

The majority of campus parking is on the eastern side of campus in surface lots with some faculty and staff parking located along Snoqualmie River Road to the west. The campus significantly increased its parking with the addition of a 1,019 car garage in 2005. The College currently has an agreement with the City of Bellevue

delineating the number of stalls needed based on assignable square feet. As the campus grows, additional surface lots are neither practical or preferred, new parking is best accommodated in structured facilities. The need for additional parking will be evaluated with each new facility in conjunction with transportation demand management tools and strategies for reducing single occupancy vehicle use.

Public Transit

The campus is currently served by four King County Metro Routes and two Sound Transit routes serving Redmond, Kirkland, University District, Crossroads, Bellevue, and Downtown Seattle. There is a single transit stop, spanning Kelsey Creek Road just west of the parking garage. Though this site is centrally located there are many hazards from passing vehicles and vehicles exiting the garage.



Figure 3.16 Bicycle Parking



Figure 3.17 Bicycle Routes



Figure 3.18 Existing Transit Routes

There are additional transit stops; one located just west of the 'N' Building near the Eastgate Park and Ride, and one 0.3 miles away on 148th Ave SE.

Access and DART services are also provided with transit stops adjacent to the 'N' Building on Coal Creek Road and on Landerholm Circle SE.

3.9 Wayfinding

The existing signage and wayfinding information on campus is scattered and inconsistent. A wayfinding study has been initiated and the first phase of the proposal is underway. In the initial assessment pedestrian wayfinding was found to have several problems including:

- Directories are close to key entrance points, but are often not visible at first glance
- No information/messaging at key decision making points throughout campus
- Building identification is inconsistent in style and a lack of identification at building entrances.

- Lack of consistent typeface and layout in signage leads to confusion throughout the system

In addition, there are vehicular signage issues as well:

- Lack of key directionals at specific campus entrances and intersections
- Needs more overall consistency of sign types
- Enhance campus identification at main entry

The initial assessment document is included as Appendix A.



Figure 3.19 New Wayfinding system

4.0 COLLEGE GROWTH

BC continues to develop as the premier community college serving the eastside and the largest community college in Washington State. As such, BC needs to maintain its level of excellence and dedication to learning through new facilities and programs that reflect and respond to student needs.

4.1 Enrollment Projections

BC Serves between 35,000 and 40,000 students annually. While Capital Analysis Model (CAM) enrollment projections for day on-campus enrollment in 2015-16 show a growth rate of just under 8% (or 58 FTEs per year), the College continues to actually grow faster than the state funded enrollment. BC continues to enroll in excess of its state funded allocation. This over enrollment has resulted in a noticeable increase in the proportion of day, on-campus enrollment relative to state-funded FTES. For 2007-08 the college's state allocation is already at the level previously projected for 2013-2014.

A major contributing factor to the college's continuing high growth rate beyond that suggested by the CAM projections is the surrounding community's demand for more access to BC's high quality transfer programs. The proportion of state FTES generated by courses with an academic/transfer intent has grown from 58.3% in 2000-01 to 66.1% in 2006-07 indicating a strong transfer program presence at BC. This is the second highest

percentage in the state, and also the largest number of academic transfer oriented students. Based on this data, BC's own enrollment projections indicate an increase of 727 state FTES between AY 2007-08 and AY 2015-16, 565 of which will be generated by academic/transfer intent enrollments.

The projected growth of the student population over the coming decade places enormous pressure on the College to provide new space for the expansion of academic programs and support services, as well as to maintain and renovate existing facilities.

In addition, growth in numbers of students for BC are supported by local government projections of general population growth. The eastern area of King County grew 20% in the last decade. This information was derived from the '2007 King County

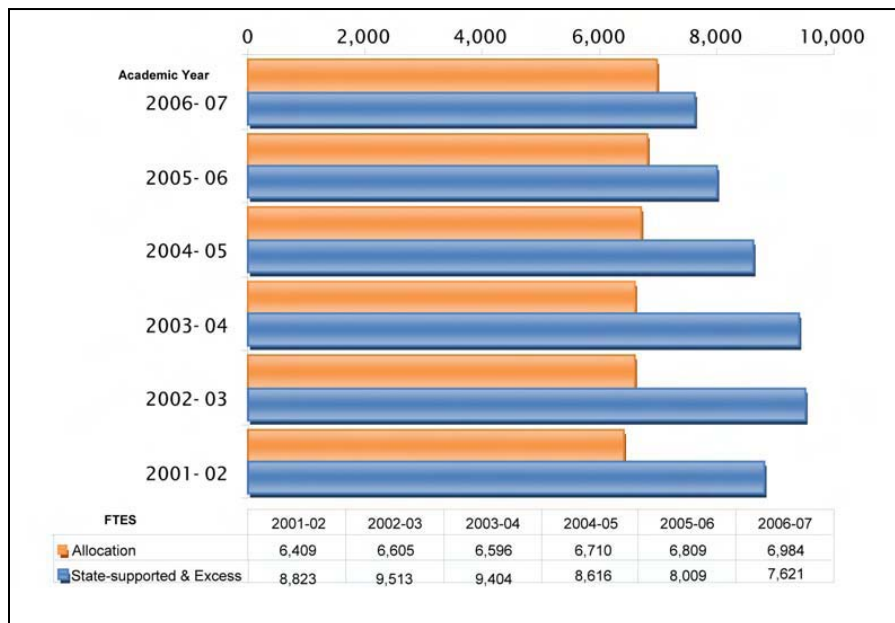


Figure 4.1 State-supported & Excess FTES Compared to FTES Allocation 2001 – 02 to 2006-07.

Annual Growth Report' published by the King County Office of Regional Policy and Planning. Also contributing to the growth of the College is increased demand by local and regional employers such as Microsoft and Boeing for technically skilled workers. It is also important to note that growth at the College does not appear to be dependent on a rapidly expanding local economy; indeed, in periods of economic downturn, BC has historically seen an increase in enrollment figures as workers return to school seeking new job skills.

4.2 Transfer Role

As originally envisioned in 1965, BC facilities would serve 3,000 to 3,500 full time equivalent (FTE) students. Ongoing high demand for its programs has forced BC to traditionally over-enroll state-supported FTEs. Figure 4.3 illustrates the

steady increase in basic state supported enrollment showing the growth from actual AY 2001-02 to 2006-07, estimated 2007-08, and projected 2009-10 through 2015-16.

This vigorous growth has allowed the campus to serve the needs of one of the most rapidly growing areas of the state (as shown in Figure 4.4, a map of the zip codes of BC students). BC's history of quality transfer and professional/technical education, plus an excellent program mix, lead new students from outside our service area to enroll year after year at BC.

Historically, BC has graduated more students with transfer degrees than any other Washington community or technical college. In addition, BC transfers more students to Washington public four-year institutions than any other Washington CTC—nearly 10% of all transfers were from BC in AY 2006-07—an increase of over 15 percentage points from the number of transfers in AY 2001-02.

Because of this extraordinary demand, new growth projects have long been recognized as major priorities for BC. The college has attempted to expand access through the provision of offsite facilities, offering classes from 6:30 am to 10:30 pm, opening a weekend college,

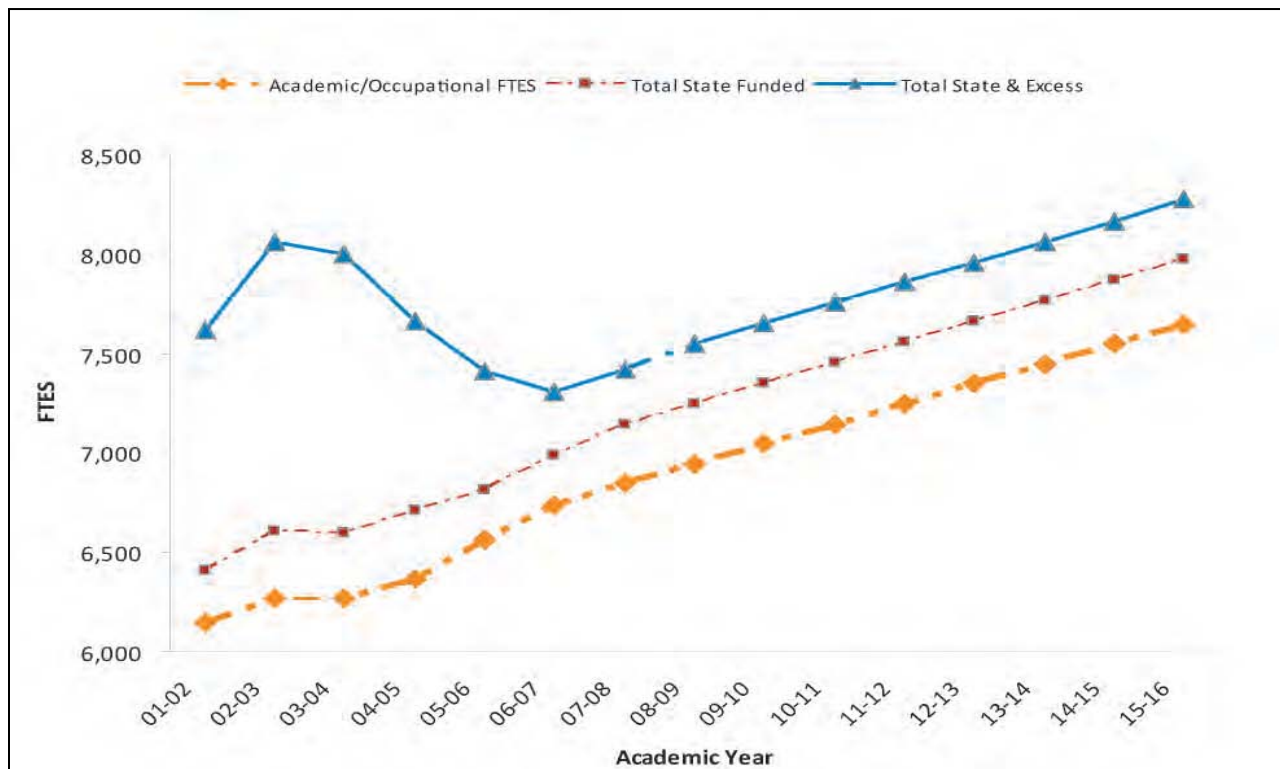


Figure 4.2 Historical and Projected BC FTEs, 2001-2002 to 2011-2012

weekend college, expanding on-line education programs and providing 24x7 labs whenever feasible. However, increased numbers of general classrooms are needed on the Bellevue campus to meet the needs of current and future students. In the case of the two most recent growth projects, campus space demands would have justified buildings twice as large as those that could be built under existing State Board policy.

Accreditation needs - BC is currently in candidacy status at the baccalaureate level. Additional BA programs are under intense discussion, and along with these programs there will be needs for additional and specialized space. BC's partnership with Eastern Washington University also permits the easy transfer of students to EWU from BC, thus further increasing the pipeline of baccalaureate degree winners for the state.

Factors that impact an expansion of this size include the physical limits of the existing main campus, parking, and the increase in student population coming from communities further to the east. To this end, BC is studying both the development of up to 280,000 square feet on the main campus and the potential for a satellite campus that may accommodate some of the anticipated growth. Future studies of a satellite campus will explore size, location, and programs.

4.3 Projection of Facilities Needs

BC's current facilities (including the Science and Technology Building occupancy 4/1/2009) comprises 676,921 gsf. This yields a utilization rate of 84.5 gsf per student FTE, significantly below the state system average of 113 gsf/student FTE. If the college were to meet the state system average, the College would need to build 228,096 additional square feet. In addition, the projected enrollment growth would bring a need of over 300,000 additional square feet by AY 2015-16.

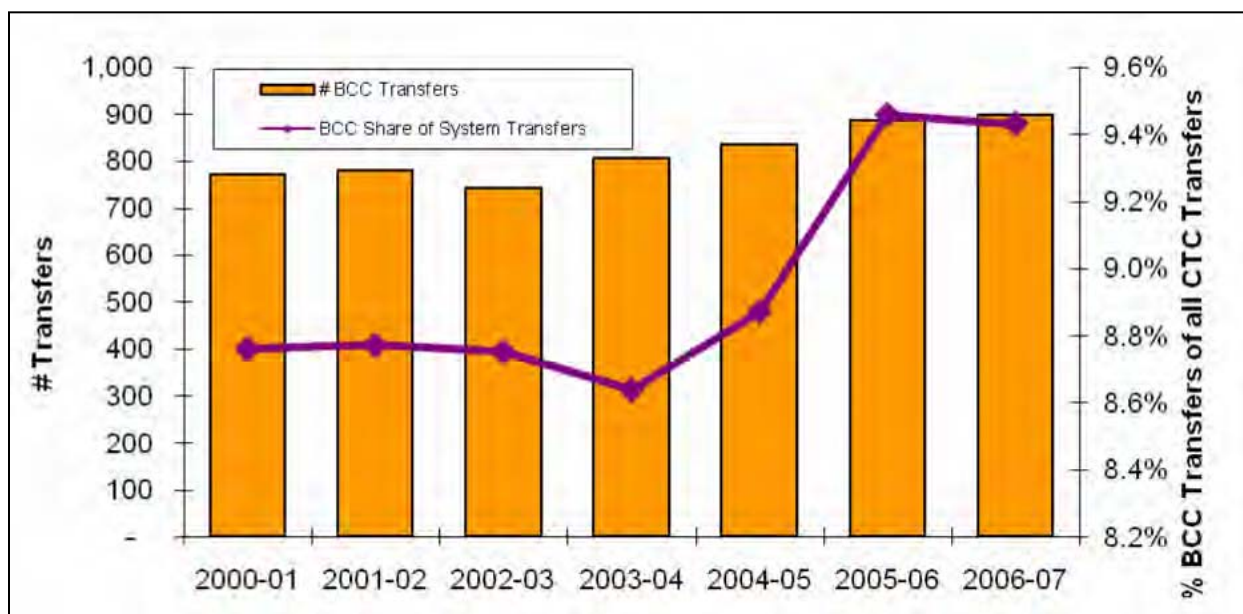


Figure 4.3 BC Transfers

4.4 Recent Development

Renovations and Additions

Since the 2005 Master Plan Update three renovations/additions have been completed. These include:

Building 'B'

This was a remodel of interior spaces with no new square footage added. Significant efficiencies were made by remodeling spaces for Work First Program, registration offices, and the Disability Resource Center.

Building 'D'

In addition to seismic upgrades, glazing and wiring improvements, the renovation to Building 'D' provided space for the Teaching and Learning Center, the Telecommunications Division, and the Library Media Center. This improved efficiency and ultimately the quality of education at BC by providing a 'one-stop'

center for faculty support systems and library orientation.

Building 'N'

A 2,800 sf addition was constructed at the NE corner of the existing building. This added much needed space for the Information Resource offices.

In total, these renovations added 33,194 gsf to the main campus and has significantly improved efficient use of space.

New Construction

New construction since 2005 includes the Science and Technology Building currently under construction (due to be open for occupancy by 4/1/2009). This building will add 64,238 gsf of much needed classrooms, laboratories, and office space and begin the expansion to the east along Landerholm Circle.

The College also assembled a pre-fabricated 2000 sf greenhouse. This structure enhances the development of the Botany course offerings including plant biology, identification and classification, and mycology.

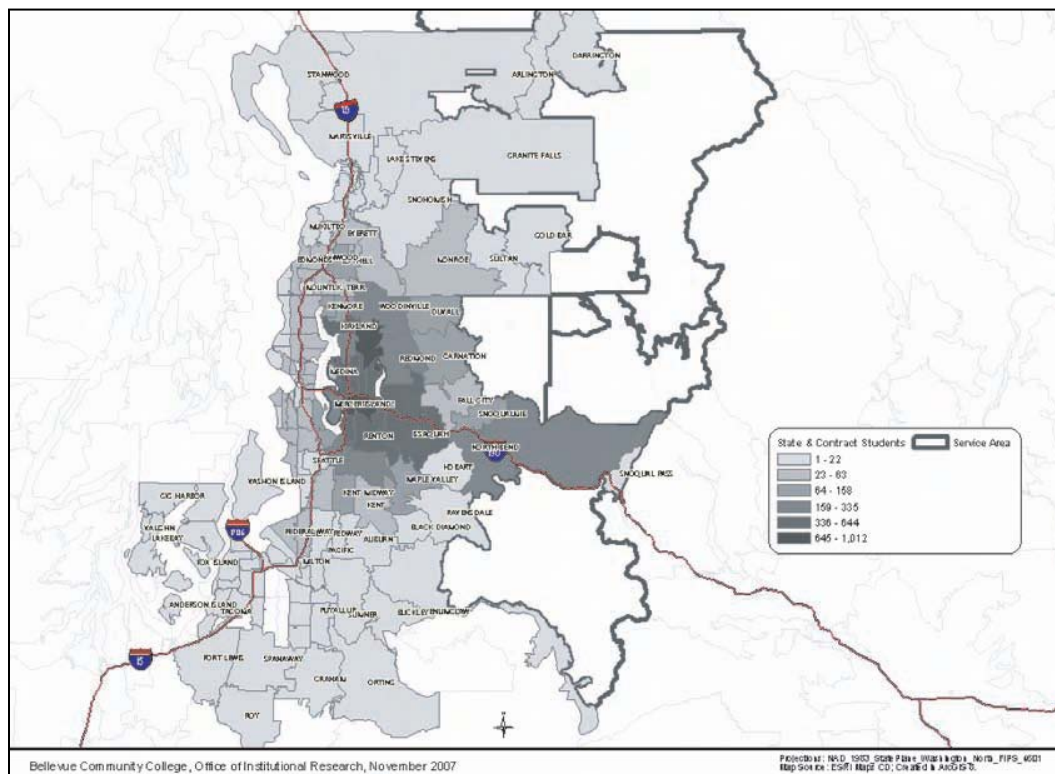


Figure 4.4 Fall 2006 State and Contract Student Enrollment for King, Pierce, and Snohomish Counties

5.0 RECOMMENDATIONS

Introduction

The Master Plan is a way to look at how growth may be accommodated in new facilities and how those new facilities may impact infrastructure, parking, access, and the character of the campus. This Master Plan update proposes new buildings and renovations to both provide for new enrollment and better serve current enrollment. The Plan also makes recommendations for changes to access and parking to more efficiently utilize land and create a safer and more secure campus.

Building on the 2005 Master Plan Update, this Update recommends a layout of new buildings based on the original concept of a series of linked internal courtyards surrounded by a more informal, naturalistic landscape. By creating a new east-west corridor along Landerholm Circle, the campus can still maintain its compact arrangement without minimizing its natural setting.

The campus is currently reaching its limits in terms of land utilization. Most of the land is covered by structures, surface parking or second growth forest. It is crucial to retain the quality of open space and the character of the campus to attract and retain students and faculty and to support the atmosphere of student-centered learning. Necessary to that end, is solving ongoing parking issues through the development of additional structures, scheduling changes, improvements to transit access and frequency, and utilizing transportation demand management to reduce single occupancy vehicles.

Due to these physical limits to the main campus and the changing demographic of new students, the Plan recommends a comprehensive study of satellite campus options.

5.1 Buildings and Infrastructure

New Construction

A preferred concept was developed through the master planning process. This concept shows a layout supportive of both a strong east-west axis through Landerholm Circle SE and a secondary north-south axis also intersecting Landerholm Circle and punctuated to the north with the Library and on the south with the new Growth Building III.

Health Sciences

The Health Sciences Building will be located in close proximity to the main campus core. The three story and 70,000 SF building will be the new home for the imaging and nursing departments at the college. The nursing cluster will be comprised of skills labs, simulation environments and computer labs whilst the imaging cluster will include x-ray labs, an ultrasound lab, and lecture spaces. The building also provides lab facilities for the genomics program and ALDAC program as well as additional general instruction space, a student center and lounge, and offices for administration, faculty and staff.

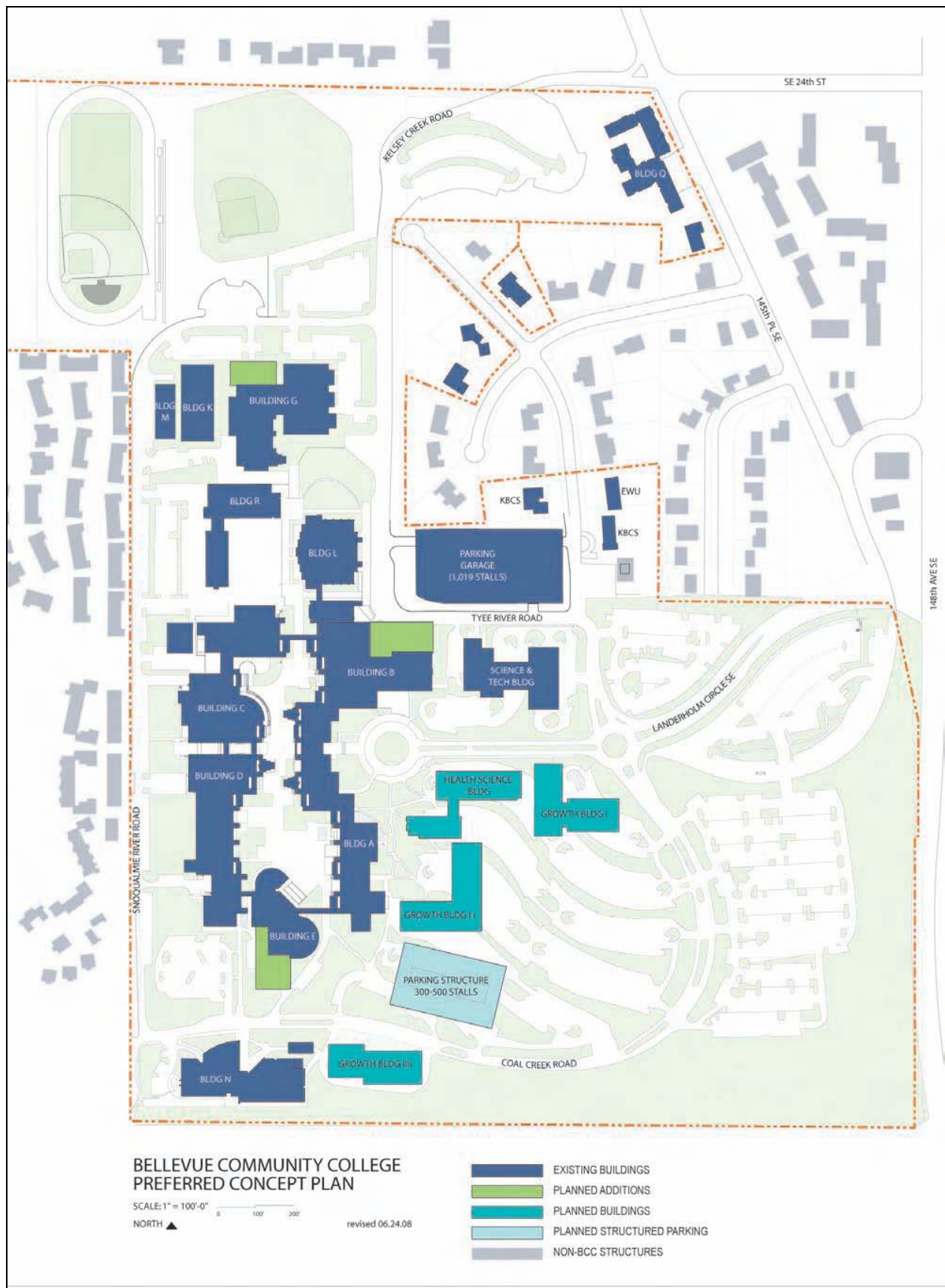


Figure 5.1 Preferred Concept Plan

This structure will be designed to take advantage of the new pedestrian-focused Landerholm Circle SE west of the roundabout. Along with the new Science and Technology Building this will start the development of the east-west perpendicular corridor on Landerholm Circle SE.

This building will complete the east-west corridor and utilize the Landerholm Circle as open space. This building in conjunction with the Science and Technology Building will form a gateway to campus from the east.

Growth I

The Growth Building I will be 70,000 gsf, potentially including labs, classrooms, lecture space, faculty offices for geosciences, a science teaching and learning center, and the Disability Resource Center.

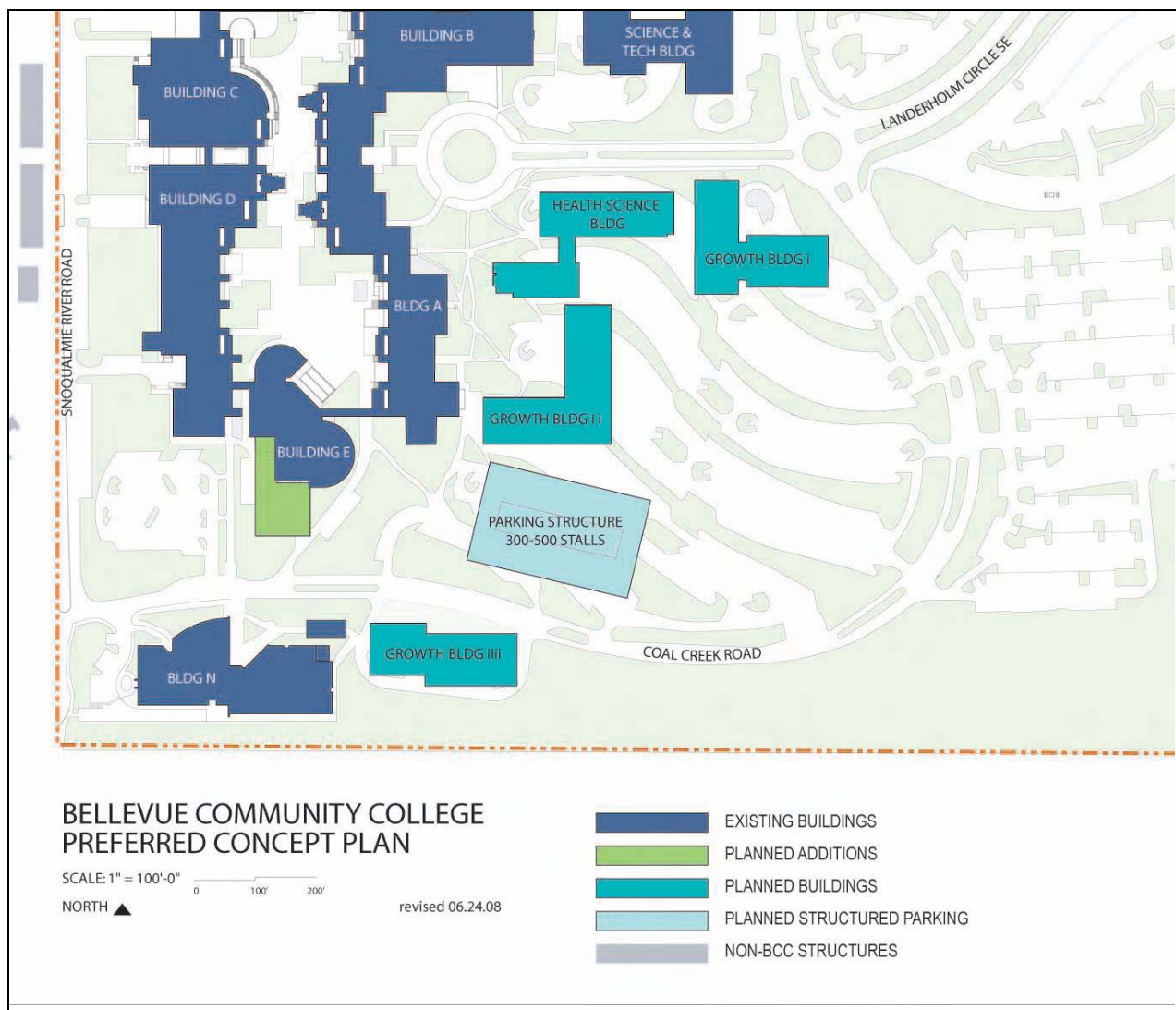


Figure 5.2 Preferred Concept Plan Detail

Growth II

This building will be 70,000 gsf on 3 levels and allow for expansion of a variety of programs.

Growth III

This building will be 70,000 gsf on 3 levels and could be programmed to include a 500-750 seat auditorium near the south end of campus.

Additions and Renovations

There are several additions planned to expand existing uses including the gym, the library, and the performing arts center.

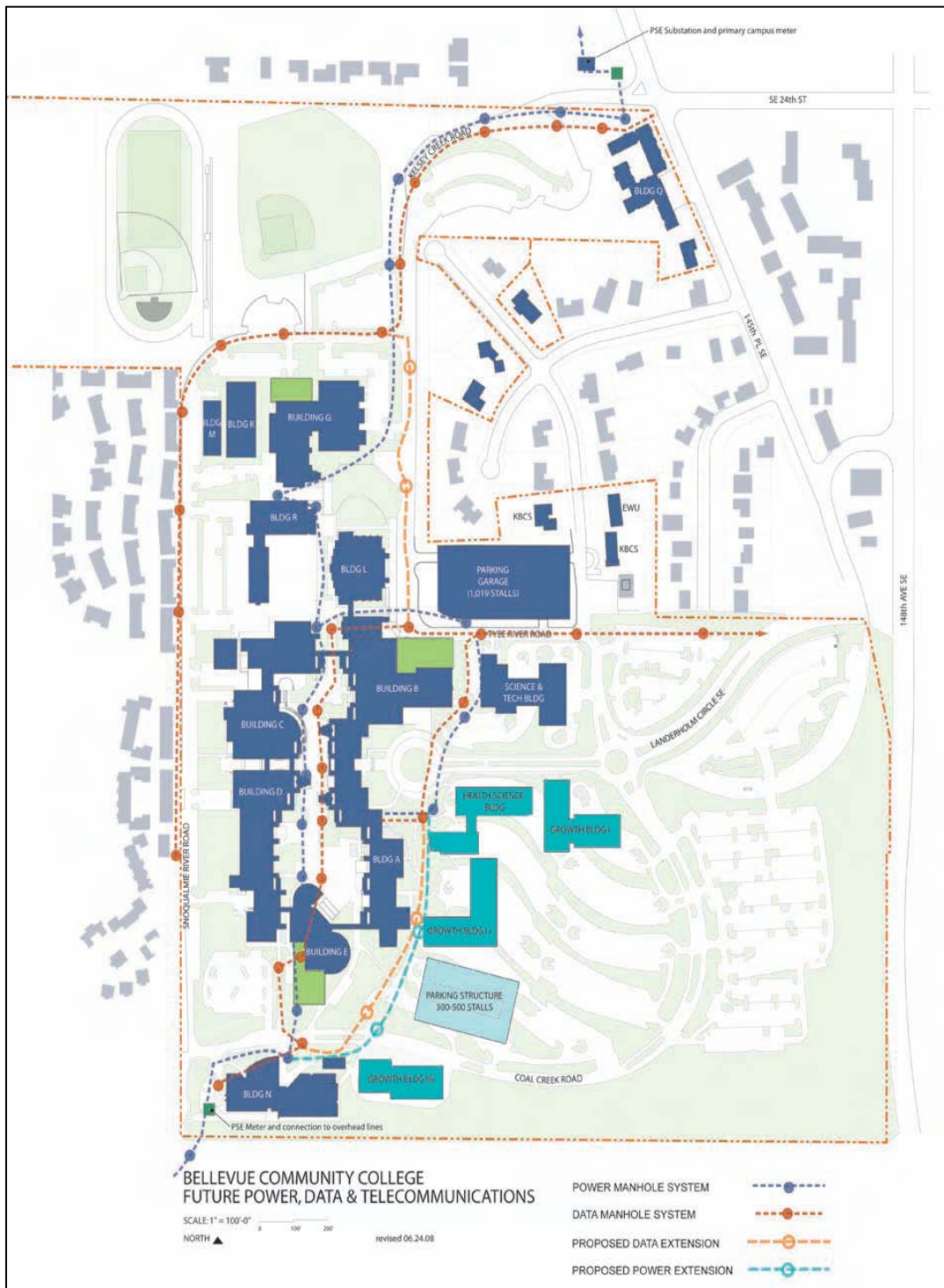


Figure 5.3 Future Power, Data and Telecommunications Utilities

Power and Communications

Sufficient power and communications are necessary to campus growth. The planned extension of both power and telecom/data along the east side of the existing layout will create a new utility corridor that can serve additional buildings south of Landerholm Circle SE and east of the existing core campus. There is a future extension planned for power along an existing telecom/data service line next to Kelsey Creek Road between the existing parking structure and Building L.

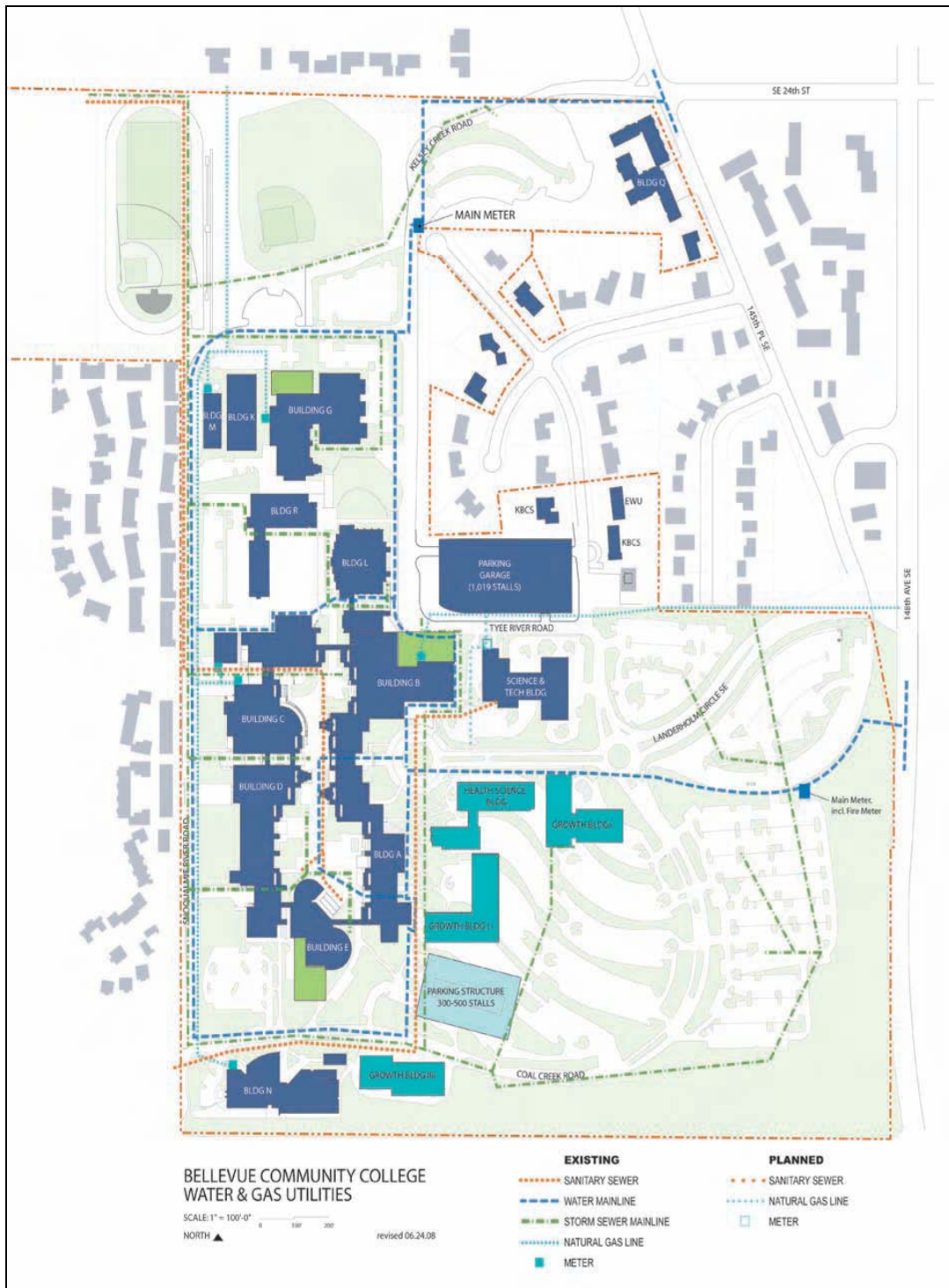


Figure 5.4 Future Water and Gas Utilities

Water and Sewer Services

Along with the power and communications, water and sewer systems will run along the eastern edge of the core campus buildings, servicing the new Science and Technology Building and the future Health Sciences Building; and the Science and Environmental Education Building.

The Campus will continue to actively pursue the use of natural drainage features like bioswales, rain gardens and permeable paving to reduce stormwater runoff and improve water quality.

Natural gas service will be extended to serve new buildings including Science and Technology and Allied Health.

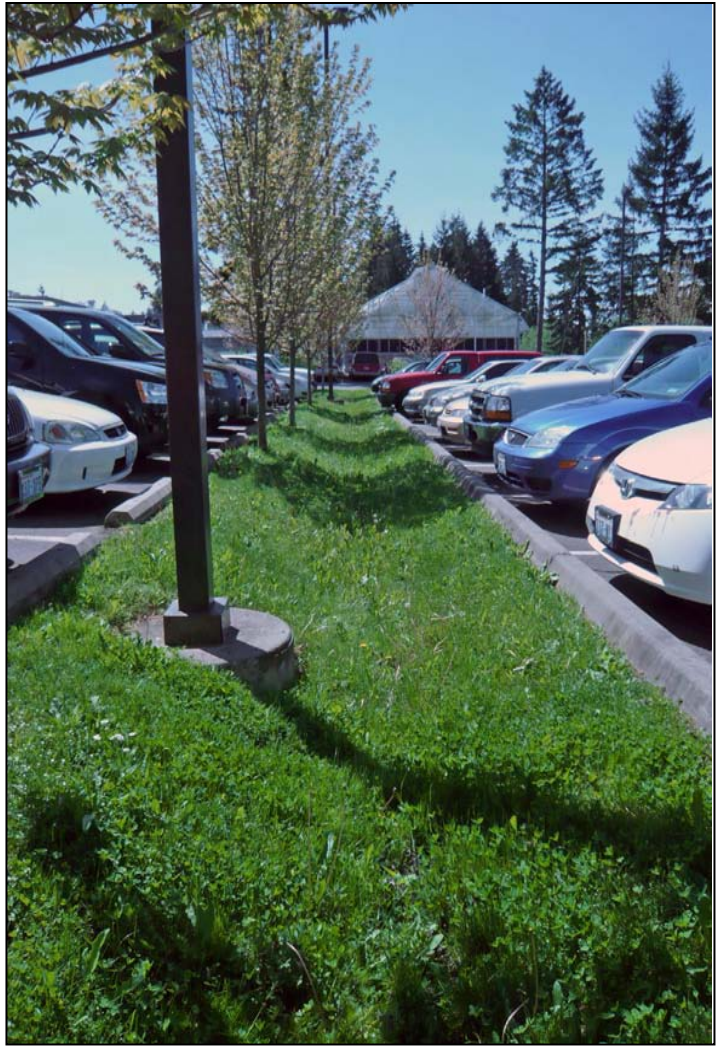


Figure 5.5 Existing Bioswale

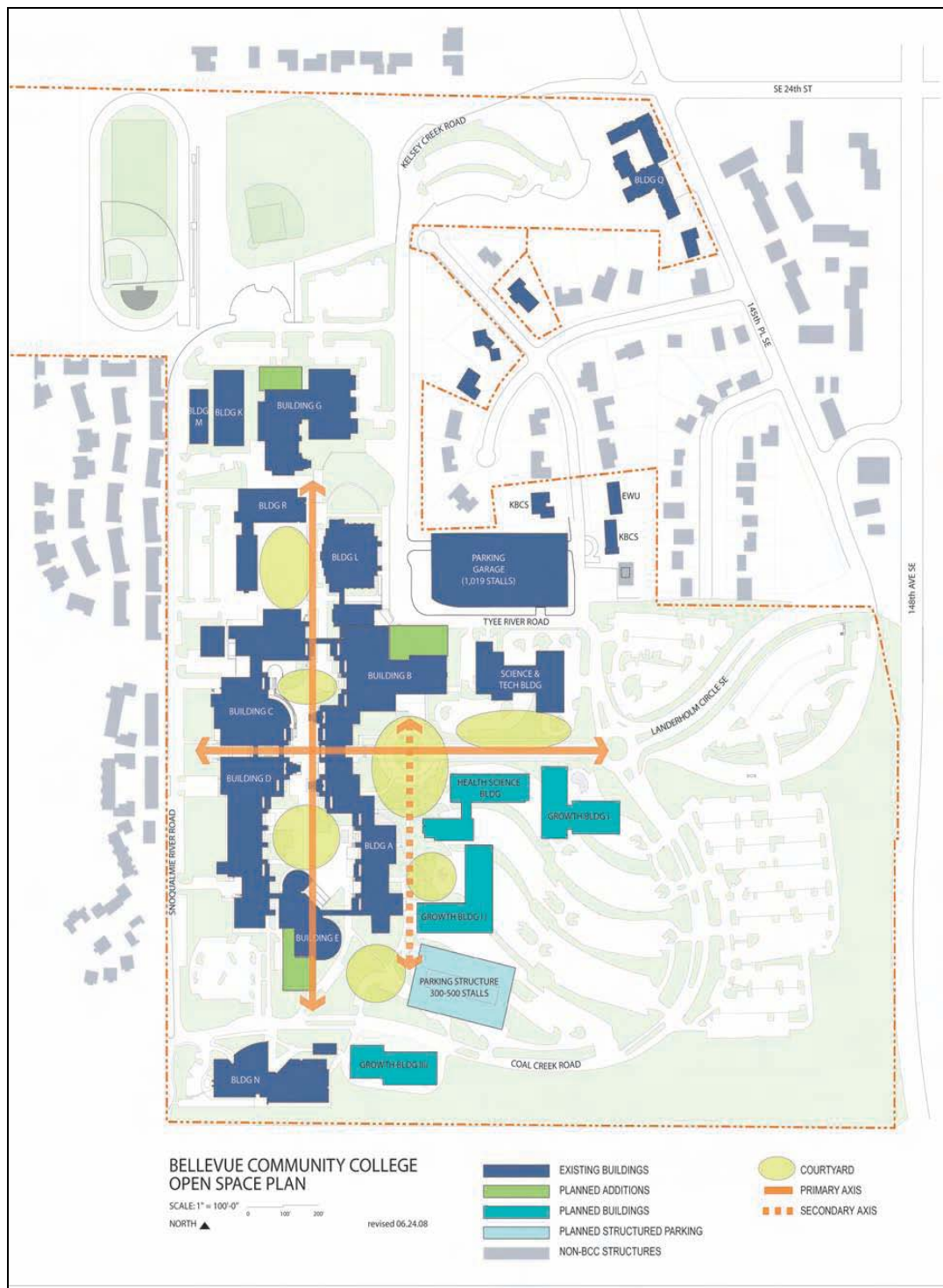


Figure 5.6 Open Space Plan

5.2 Open Space

Courtyards

With such a high ratio of students to facilities, functional and aesthetic outdoor spaces are critical to the campus. The construction of new buildings will add several new courtyards to the campus; these will build upon the clearly established pattern of linked buildings around a network of distinctive open spaces. It is recommended that each newly created courtyard have its own unique character, developed through use of landscape elements and plant materials. New structures that form the east-west axis along Landerholm Circle SE will have the opportunity to utilize the newly-pedestrian segment of Landerholm Circle SE as a major new courtyard for the campus. It is recommended that outdoor spaces are: clearly linked together, provide places of respite, offer overflow meeting and study space, and provide the spatial grammar needed for wayfinding.

It is recommended that courtyard designs incorporate drought-resistant plantings and pervious surfaces that allow stormwater to infiltrate. It's also recommended that plant selection include a high-degree of native or naturalized plants to improve survivability and provide additional habitat.

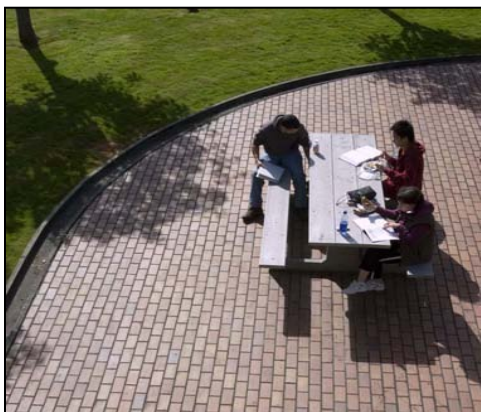


Figure 5.7 Outdoor meeting space

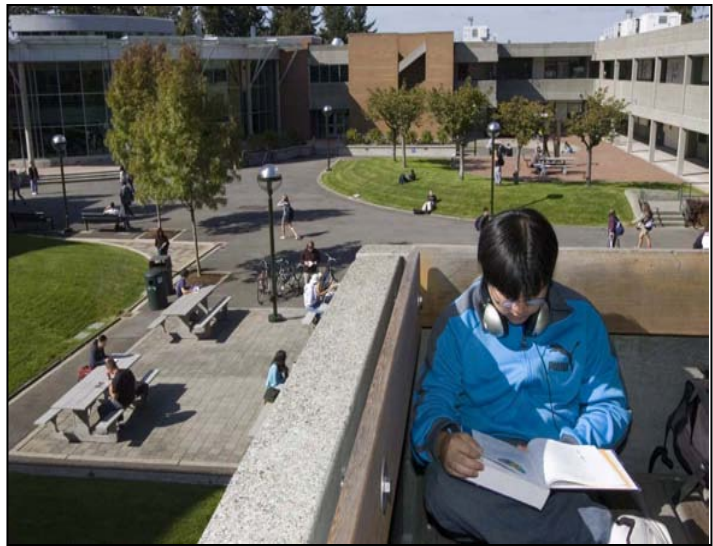


Figure 5.8 Outdoor study space



Figure 5.9 Distinct courtyards



Figure 5.10 Outdoor seating

Forested Areas

Retention of the last remaining forested areas on the campus is also strongly recommended: two parcels which include dense tree stands are at the north end of the campus between 'L' Building and the Gymnasium (recently chosen as the site for an Outdoor Learning Lab), and a similar stand at the south end of the campus adjacent to 'E' Building. These provide an important organic counterpoint to the more open, formal hardscapes of the interior courtyards; they also provide an important historical connection to the site and the origins of the College.

The forested slopes that skirt the edges of campus are critical to maintaining the natural setting that characterizes BC. These stands serve to buffer campus from adjacent uses and provide a distinct separation giving the campus a high level of integrity.

Outdoor Learning Laboratory

It has been recognized that the college does not utilize the courtyards and natural areas to their full extent for educational purposes. To this end it has been recommended that an Outdoor Learning Laboratory be developed that would support several disciplines including math, environmental sciences, culture, and communication. It is envisioned as a place that could serve multiple functions and learning abilities.



Figure 5.12 Native understory



Figure 5.11 Landerholm Circle Drive



Figure 5.13 Preservation of forested areas

5.4 Circulation and Parking

There are several issues of circulation and parking that are addressed in the Plan. As the campus grows, these issues may be exacerbated, therefore it is important to monitor congestion and overflow parking and be prepared to make changes when needed.

Roadways and Access

The City of Bellevue has implemented a relatively new signal and roadway alignment at 148th Ave SE and SE 28th Street (Landerholm Circle SE). This has significantly improved access to the Main Entrance onto the campus and greatly reduced backups onto 148th.

It is recommended that the western leg of Landerholm Circle SE (west of the roundabout at Coal Creek Road) be closed to vehicular traffic to serve as a major component of the pedestrian circulation system. It is recommended that the turnaround at the western terminus of Landerholm Circle be recast as a major courtyard serving the new Science and Technology Building and the new Allied Health Building. There is the possibility of bus service returning to Landerholm Circle SE and relocating the main bus stop to Landerholm Circle, but this needs further study.

A dangerous condition exists at the South Entrance to the campus. At this confusing pair of intersections, Snoqualmie River Road meets Coal Creek Road within the limits of the campus. Just outside the campus a few feet further west, Coal Creek Road intersects with 142nd Place SE, which is linked to HOV access to Interstate 90 to the south; to the north of the intersection, 142nd Place terminates in a multi-family residential complex. The City of Bellevue is currently studying alternatives at this intersection and the College will work closely with them to find an appropriate and functional solution. Within the Campus property the intersection of Snoqualmie River Road and Coal Creek Road should be studied to analyze alternatives that may include a realignment of Snoqualmie River Road further to the east to reduce congestion at this entrance.

Public Transit

Bellevue College strongly encourages the use of public transit by students, faculty and staff. This important policy is intended to reduce the use of private automobiles and the concomitant demand for on-campus parking. The College provides subsidized transit passes and fully supports efforts by the City of Bellevue and King County Metro to improve public transit service to the campus and the community. The College is presently served by four Metro bus routes and two Sound Transit routes. In addition, the Eastgate Park and Ride just southeast of campus is served by more than 15 bus routes from across the region.

The existing route for public transit vehicles through the campus links the North Entry off of SE 24th Street with the East Entry at 148th Ave SE, via Kelsey Creek Road, the roundabout and SE 28th St. The South Entry is in close proximity to an expanded Eastgate 'Park and Ride' station off of SE 32nd Street; bus lines serving this station use HOV access ramps to I-90 and improve transit connections to Seattle and other parts of King County.

The existing bus stop is located near 'L' Building on Kelsey Creek Road. In conjunction with the parking facility, this transit stop provides pull-out space for two to three buses, as well as covered passenger waiting areas. Due to the transit stop, vehicles entering and exiting the parking garage, and pedestrians crossing from the parking garage to main campus; this transit stop is congested and dangerous. It is recommended that a study be undertaken to evaluate alternative transit routing through campus and additional transit stops.

It's also recommended that BC study the implementation of direct parking fees, both to encourage transit ridership and carpooling and to help offset future costs for structured parking. Currently parking fees are included in a student assessed fee and parking is in effect free. Many colleges in more urban areas of the state institute a sliding scale parking fee system based on the number of credits. It is recommended that BC undertake a study of other systems implemented by other institutions and adopt a fee system. It is of upmost importance to the College to avoid park and hide behavior in the neighborhoods or at the Eastgate Park and Ride.



Figure 5.14 Existing Transit stop southbound



Figure 5.16 Existing Transit stop northbound

Pedestrians and Bicycles

The College is strongly committed to creating and maintaining a safe, attractive environment for pedestrians and bicycles. To achieve this goal, an improved wayfinding system for pedestrian pathways and bicycle routes is recommended.

There is currently bicycle parking near most buildings. To further improve bicycle access to the campus, expanded bicycle parking facilities are needed. These should be distributed throughout the campus, and should include dry, secure storage corrals and/or lockers, as well as outdoor racks.

The existing path system reaches all corners of the campus. The path system could be improved outside of the core campus buildings. Restricting vehicles on Landerholm Circle will encourage a more pedestrian-friendly campus but more can be done. Specifically, the pedestrian path on Kelsey Creek Road is narrow and only separated from the roadway by a concrete curb. It is recommended that this pathway be upgraded to a full concrete sidewalk.

The entire path system will be greatly enhanced by the on-going wayfinding study and implementation.



Figure 5.18 Pedestrian-friendly campus



Figure 5.19 Core campus path system



Figure 5.20 Kelsey Creek Road



Figure 5.17 Campus path system



Figure 5.21 Safe, secure bicycle parking

Parking

Bellevue College provides parking at a rate of one stall per 158 assignable square feet (asf) of classroom and office space; the Zoning Code of the City of Bellevue does not specifically address parking requirements for an institution such as BC, but the City has agreed that this rate is acceptable. In addition, BC would like to maintain a level of available stalls so that parking in neighborhoods or off campus is discouraged.

With the growth in enrollment and the building of new structures in areas currently utilized for surface parking, the campus will need to consider building a 300-500 stall garage in conjunction with the Growth I Building. There are also opportunities to re-stripe the existing parking lots to gain more efficiency, though if that were to happen it is critical to retain the tree canopy and replant naturalistic landscape within the surface parking areas to maintain the character of the campus.

It is also recommended that BC evaluate the current parking fees and transit pass options and look for ways to discourage single occupancy vehicles and promote alternative transportation.



Figure 5.23 Surface parking area



Figure 5.24 Parking Garage (2003), another level was added in 2005



Figure 5.22 Parking garage wayfinding



Figure 5.25 Street parking on Snoqualmie River Rd.

5.5 Wayfinding

The ongoing wayfinding study has developed a preferred concept. Through continued discussions with BC staff and representatives this concept will be refined and a full exterior wayfinding system will be implemented.

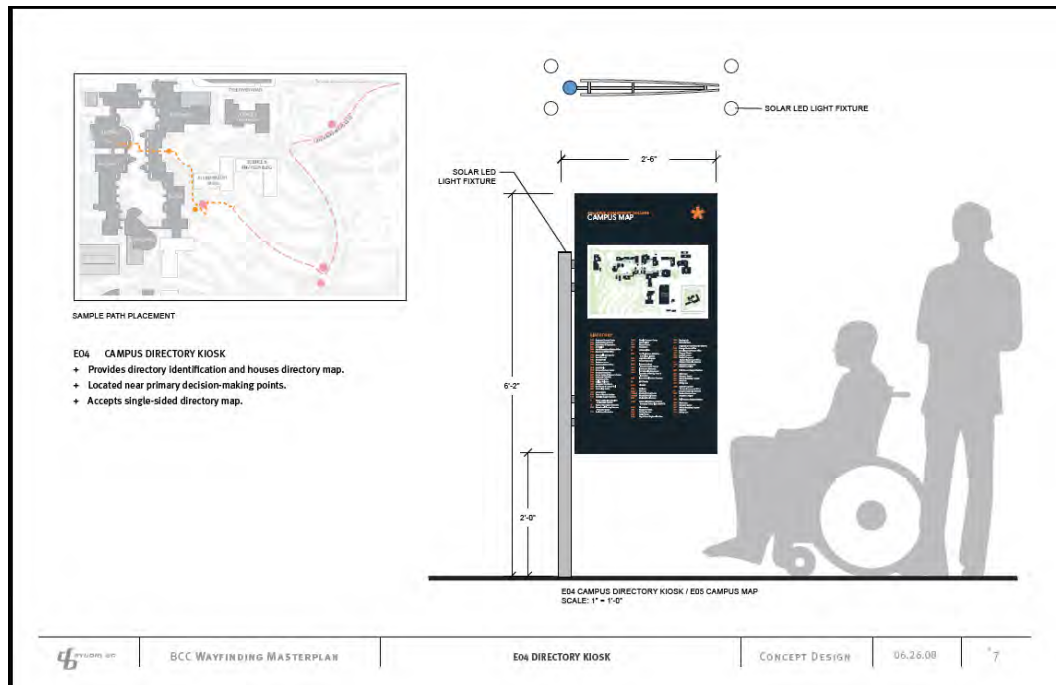


Figure 5.26 Wayfinding Study - Directory kiosk

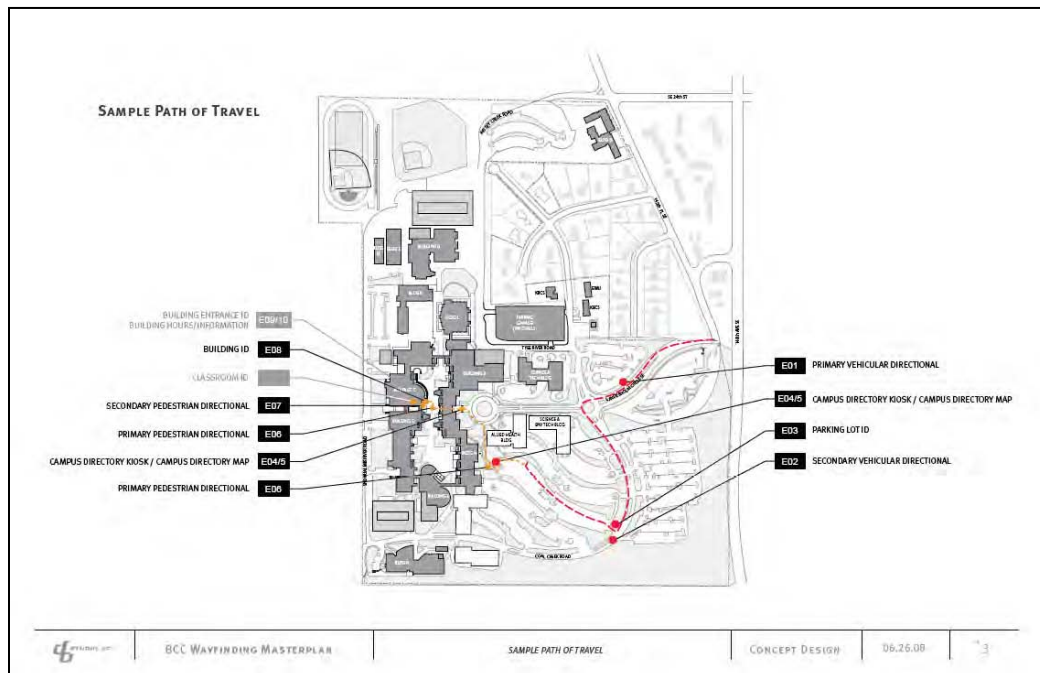


Figure 5.27 Wayfinding Study - Sample path of travel

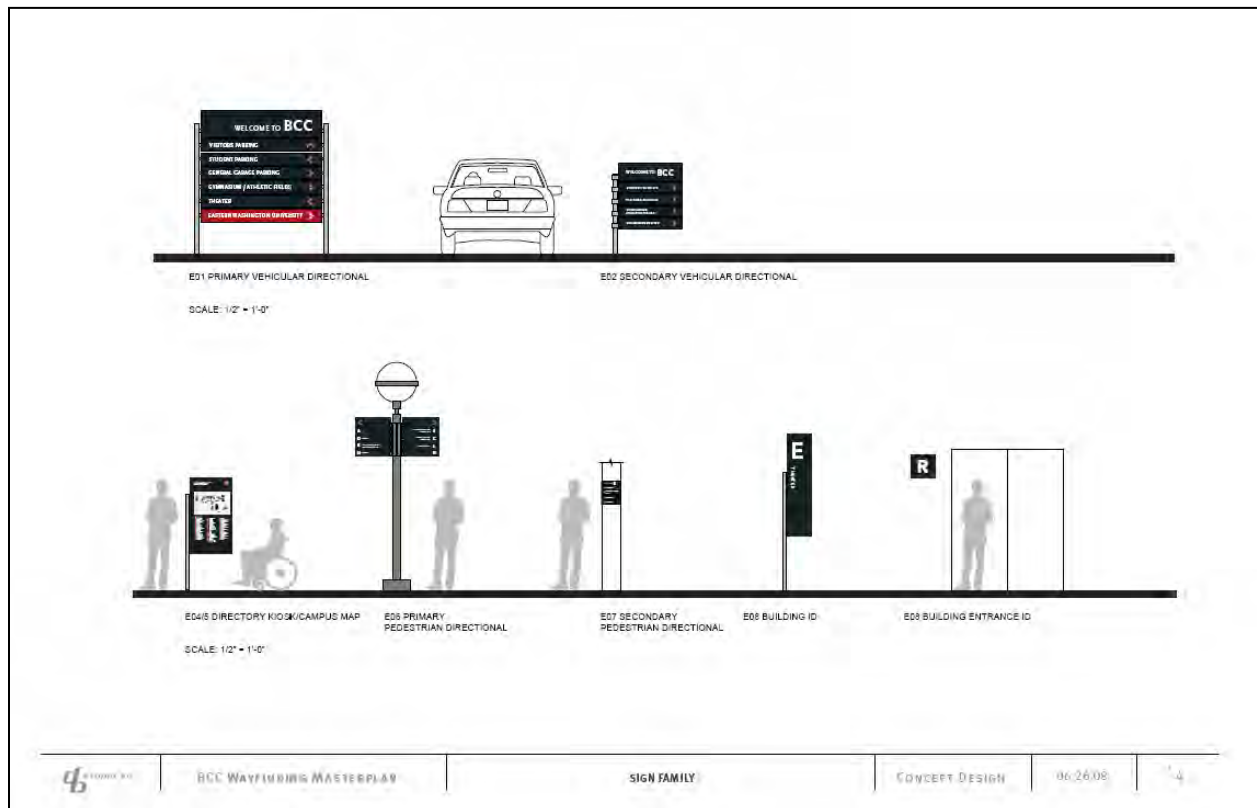


Figure 5.27 Wayfinding Study - Family of signs

6.0 DESIGN GUIDELINES

The distinctive character of the Bellevue College Campus is the result of a careful integration of the built environment with its natural setting. This mandate to have 'respect for the natural qualities of the site' was set forth in the original 1966 master plan. This desire to retain the natural landscape 'in close proximity to the college buildings to heighten the excitement of the pedestrian core' has resulted in the most memorable qualities of the campus being the open spaces created by the buildings as much as the buildings themselves.

The emphasis on creating unique and pleasing courtyards to connect and provide transition spaces between buildings continues to be the principal organizing feature of the campus. The courtyards and connections through the 'student or pedestrian mall' should continue to be developed and enhanced creating identifiable spaces and gateways that promote wayfinding and easy access to the campus and its facilities.

The following guidelines are offered to clarify and enhance the existing campus systems and in order to facilitate the further development of the prevailing aesthetic character of the built environment of the campus.

6.1 Architectural Design Guidelines

These architectural guidelines are intended as a reference tool for implementing individual building projects in a manner that will reinforce the identity of Bellevue College. The guidelines acknowledge the virtues of existing buildings and aim to strengthen the identity of the College through the complementary addition of new structures. It is important to note that these guidelines prescribe a general approach and philosophy while encouraging flexibility and creativity in the design of specific projects. The continued success of the campus environment depends upon careful attention being paid to the way in which building additions and new buildings are woven into the existing campus fabric.



Figure 6.1 Trees and landscaping in close proximity to campus buildings

Site Selection

Though site selection should be based on the Concept Plan's direction, adjustments should be made to accommodate stands of large trees and to minimize impacts to surface parking. Building siting should respond to solar exposure, wind, weather, and other environmental factors.

Building Design Goals

Each BC building project should strive to:

- Embody barrier-free, universal design that provides easy access for all users
- Express building function through form, organization, scale, massing, and detail
- Extend and enhance the continuity of the campus context and the overall master plan

- Promote environmentally conscious building designs and technologies
- Provide flexibility in buildings to achieve optimum adaptability

Building-Open Space Relationships

The relationship of buildings to the open spaces they define is critical. Each building project at BC should strive to:

- Engage/enhance adjacent open-spaces
- Clearly express building entrances, places of gathering, transition from outside to inside, and protection from weather
- Provide visual connections between interior spaces and the landscape and or views beyond
- Provide covered connections between buildings for pedestrians, including upper level connections whenever possible
- Provide adequate space for informal gatherings for students



Figure 6.3 Buildings woven into the campus context through careful consideration of scale and existing conditions



Figure 6.2 Newer buildings incorporate inside-outside relationships

Buildings and open-spaces should reinforce each other in a continuation of existing campus patterns. All building projects should include development of related open space components. New projects or building additions should contribute to, create, or complete open-spaces designated in the overall campus master plan.

Scale and Massing

Scale and massing are important considerations for both additions and new construction. The scale of new buildings or additions should respect its surroundings unless the building is intended to be a landmark and thus deserving of special consideration. In addition to overall building scale, individual elements (window size, mullion spacing, structural bays and material selections) must also be considered important contributors to the overall impact of the scale and massing of a building.

Building massing should reinforce the intimate, pedestrian oriented character of the campus and acknowledge the importance of the spaces between the buildings.

Although two-story structures dominate the campus, carefully massed three-story buildings are appropriate to achieve a more varied building profile, increase density and provide a more efficient building footprint

All new buildings should evaluate their potential for incorporating structured parking. This strategy limits parking lost as surface parking areas are developed as building sites. This strategy also creates convenient access for building users and utilizes the gently sloping topography of campus.



Figure 6.4 Relationships between inside and outside

Materials and Detailing

Building materials should:

- Express the rhythm of the building structure
- Maintain the material palette of campus
- Express a sense of permanence
- Require minimal maintenance
- Incorporate sustainable design and construction practices

Durable materials should be selected. These materials should be easy to install with a high degree of craftsmanship.

Materials should be used in a manner that expresses the natural state of the material and is consistent with the patterns on campus. Exposed concrete frames are expressed and infilled with cement plaster partitions. Oversized brick (as used throughout the campus) should be used to express building circulation and to create contrasting features and provide visual continuity with existing campus buildings.

Detailing should embrace the contemporary use of technology, with an emphasis on the integrity of the materials.

Sustainable Design

New buildings should incorporate environmentally conscious design strategies, material solutions, and acknowledge and utilize the natural setting of the campus.

The College recognizes its role in the community and the state as a leader and innovator in many fields, including stewardship of the natural and built environments. BC strongly supports the State's building sustainability goals.

Historic Preservation

Although the College and its physical infrastructure are almost 40 years old, it is important to acknowledge and respect the value of the underlying planning that has established the unique and desirable characteristics of the campus. Bellevue College's largely intact original campus is a strong, significant example of mid-twentieth century American community college and as such, it is worthy of careful stewardship and recognition.

The original design concept placed a strong emphasis on the importance of the natural landscape as a major contributor to the campus environment. This underlines the importance of landscape preservation on the Bellevue College Campus.

No buildings on campus are currently registered historic structures.

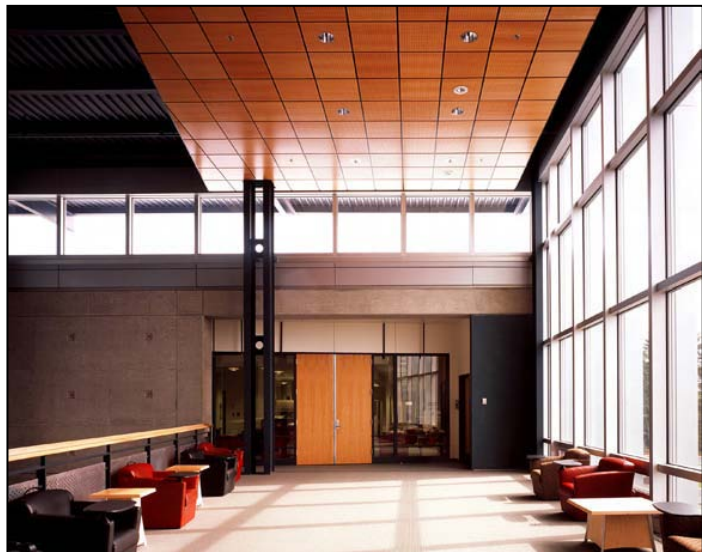


Figure 6.5 Materials express a sense of permanence

Art Program

BC enthusiastically supports the state program designating 1/2% of construction costs for art. In an effort to integrate public art on the campus in a meaningful way, BC must develop programs to engage various members of the College community, including academic departments, student groups, staff members and so on. This approach is intended to be responsive to campus planning, and to commission work which relates to the both its physical and educational contexts. Artists may be teamed with architects, landscape architects and planners to collaborate on landscape or building designs, and to integrate artwork into these designs. Functional elements on campus may also be designed by artists as part of this program. Administration of the program may be through the creation of a standing college committee; this committee would maintain an active, hands-on approach to curating the arts program to promote careful integration into projects, the campus and the goals of the College as a whole. Preservation and maintenance of BC's existing art collection would also be subject to oversight by this committee.



Figure 6.7 Maintenance is critical to keeping public art functioning

6.2 Landscape Design Guidelines

The existing campus landscape design enhances the distinctive natural character of the campus. All landscape designs for the campus should strive to continue and enhance the existing campus character. Landscape elements should be in scale with and be extensions of adjacent buildings.

Natural landscape buffers should be maintained and enhanced. Buffers lost to adjacent project development should be replaced to limit visual impacts on both the College and its neighbors. Landscape designs should include interpretive signage to enhance learning opportunities. All landscape designs will be accessible and in compliance with all governing codes and building requirements.



Figure 6.6 Continued acquisition keeps art timely

Courtyard Design Guidelines

Courtyard areas in the campus core should be memorable spaces to enhance wayfinding. Plaza spaces should be carefully designed to provide opportunities for student activities ranging from eating lunch to studying and socializing. Important elements to consider include:

- Solar access
- Weather protection
- Fire truck access
- Security lighting
- Paving patterns
- Tree grates
- Benches, tables, trash receptacles
- Seat wall/planters
- View corridors
- Locations for art
- Deciduous shade trees
- Accent plantings with variety in scale, texture, and seasonal color
- Plant containers with seasonal flowers



Figure 6.8 Native trees and ground cover preserved at parking areas and buffers

Courtyard landscapes should utilize native plants to relate courtyards to the rest of campus and to increase survivability and decrease irrigation and fertilizer needs. Courtyards should feature consistent elements and be recognizable as part of the Bellevue College Campus. Each courtyard area should also strive to be distinct and provide unique spatial experiences.

BC should strive to standardize outdoor elements for efficiency, maintenance, and safety.

Parking Lot Landscapes

Existing parking lots have been carefully integrated with the natural site features. New or modified parking areas should:

- Strive to preserve existing trees and native salal understory
- Prune trees for appearance, health, and security lighting distribution
- Provide drainage linked to campus storm water detention system.
- Utilize sheet flow from paved areas to bio-swale system
- Provide deciduous shade trees to reduce heat islands
- Accent parking lot entrances with ornamental trees and shrubs
- Utilize native and drought-tolerant shrubs and ground covers
- Enhance native buffers with native salal, oregon grape, snowberry, red flowering currant, vine maple, and other suitable plants

6.3 Engineering Criteria

Campus infrastructure must be updated, expanded, and maintained as new facilities are added over time. The design of all infrastructure systems must take into account potential campus growth by planning for flexibility, development of new technologies and provision of additional future capacity.

All building systems must comply with the requirements of applicable codes, building regulations and governing authorities. Elevator, fire sprinklers and seismic upgrades will be necessary to meet City of Bellevue requirements as the College expands or renovates existing facilities.

Water

As part of an overall sustainable strategies, water usage should be evaluated to target ways to reduce potable water consumption:

- Evaluate potential for grey water irrigation systems.
- Utilize low-flow and waterless toilet fixtures.
- Encourage conservation.
- Encourage native and low water use landscape designs.

Current water pressure may not be adequate to serve fire suppression systems in new buildings of three or more stories.

Sewer

As part of an overall sustainable design strategy, sewer system design should be evaluated to target ways to reduce the outflow from Campus.

Storm Water

The impact of storm water detention on the overall civil and environmental engineering effort is increasingly significant. In order to minimize the impacts to projects,

- Study campus-wide storm water detention issues to accommodate projected growth
- Evaluate alternative technologies and methods for accommodating storm water detention
- Strive to minimize and reduce the quantity of detainment in all future projects through creative and innovative strategies

Data

To support the data needs of the campus, systems should:

- Extend existing duct bank system to create a loop system of fiber optic feeds.
- Create redundant path to minimize service disruptions.
- Maintain two-hub server farm.

Telecommunications

To support the telecommunication needs of the campus, systems should:

- Relocate main switch room to an above-grade location.
- Plan for IP telecommunication system implementation.

Power

To support the power needs of the campus, systems should:

- Upgrade all building connections to 1500kV.
- Extend existing duct bank to create a loop system to serve projected growth.
- Create redundant path to minimize service disruptions.

6.4 Parking Design Guidelines

Parking at Bellevue College is a significant issue. With the exception of the athletic fields, virtually all areas outside the campus core are devoted to either vehicular circulation or parking. Given the tremendous impact of parking on the configuration of the campus and

the continuing pressure to accommodate more vehicles as the campus grows, parking design guidelines are critical to maintaining an appealing campus environment.

Parking lot and garage design should:

- Maintain and enhance parking area buffers.
- Improve pedestrian circulation to and from parking areas.
- Include compatible program elements in structured parking.



Figure 6.9 Landscape buffers that double as bio filtration

Addendum – July 2010 Revision

Bellevue College

TEN YEAR CAPITAL PLAN

Contact:

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BIENNIUM	PROJECT	CATEGORY								STRATEGIC PLAN / END STATE	NOTES
		Grow	Ren	Rep	Min	Mat	Repr	State Funds	Local Funds	GOALS	Actions
2007-2009											
	Health Sciences Building Pre Design	x						\$144,000		70,000 gsf nursing, imaging & general classrooms	
	Science & Tech Bldg - Construction	x						\$31,332,000	\$3,207,270	64,238 gsf chemistry, biology, oceanography labs & gen'l classrooms	
	Science & Tech Bldg - Escalation Funds							\$292,730	\$292,730		
	N-Bldg HVAC Replacement						x	\$119,216			
	Site Repairs						x	\$421,924			
	Storm Sewer Extension				x			\$759,700		Storm sewer to support Sci Bldg	
2009-2011											
	Health Sciences Building - Design	x						\$4,350,000			
	Buildings "A" & "B" Roof Replacement						x	\$1,232,000			

	Building "B" Minor Improvement Project				x			\$496,000		Renovate 1970's era science labs and convert to general classrooms	
	B Building - Student Services Welcome Center & Book Store		x						\$1,500,000	Welcome Center for Students/Locally funded addition to Building B	
	Off Campus Bookstore Warehouse								\$2,000,000	Move textbook receiving and distribution to an off campus location	
	Class and computer lab addition								\$11,500,000	Replace North Campus classrooms and class labs for continuing education - locally funded (43,000 gsf).	
	Satellite Campus Property Acquisition	x							\$7,000,000	Probable East King County location to be determined	
2011-2013											
	Health Sciences BLdg - Construction	x						\$36,650,000	\$5,288,000		
	General Building Repairs						x	\$1,000,000			
	Building "A" Minor Improvement Project				x			\$750,000		Renovate 1970's era general classrooms	
	Satellite Campus Design	x						\$6,000,000			
2013-2015											
	Growth Bldg #1 Predesign	x						\$300,000		Science & Environmental Education Building 70,000 gsf	

	General Building Repairs					x	\$1,250,000			
	Building "E" Minor Improvement Project				x		\$750,000		Renovate 1970's era general classrooms	
	Satellite Campus Construction	x					\$80,000,000			
	C Building Renovation - Predesign		x				\$250,000		Art Building renovation/seismic retrofit. 83,000 gsf renovation with 23,800 gsf new construction C-D Infill	
	Parking Garage - 500 Car							\$15,400,000	Additional staff and student parking required before Health Science Building is occupied.	
	Sewer Line to Dormitory							\$2,000,000	Dormitory replaces private residences that were all on septic tanks. Tie into City of Bellevue sewer line.	
2015-2017										
	Growth Building #1 Design	x					\$5,007,977		Science & Environmental Education Building 70,000 gsf	
	Growth Building #2 PredesignDesign	x					\$350,000		Baccalaureate 4-Year Programs expanded classroom capacity	
	General Building Repairs					x	\$1,250,000			

	Building "G" Minor Improvement Project				x			\$750,000		Renovate 1970's era general classrooms	
	KBCS Radio Station								\$3,360,000	New 6,000 gsf radio station building.	
	Satellite Campus Predesign	x						\$500,000			
	C Building Renovation Design		x					\$2,500,000		Art Building renovation/seismic retrofit. 83,000 gsf renovation with 23,800 gsf new construction C-D Infill	
	Dormitory								\$21,420,000	51,000 gsf Student Housing adjacent to campus (100 rooms w/200 beds)	
	Student Center Building								\$15,750,000		
2017-2019											
	Growth Building #1 Construction	x						\$49,733,226		Science & Environmental Education Building 70,000 gsf	
	Growth Building #2 Design	x						\$5,364,692		Baccalaureate 4-Year Programs expanded classroom capacity	
	Growth Building #3 (4-Year College) Predesign	x						\$350,000		Growth for expanded upper division capacity including LABS	
	General Building Repairs						x	\$1,250,000			

	Building "B" Minor Improvement Project				x			\$1,000,000		Renovate 1970's era general classrooms	
	C Building Renovation - Construction		x					\$27,600,000		Art Building renovation/seismic retrofit. 83,000 gsf renovation with 23,800 gsf new construction C-D Infill	
2019-2021											
	Growth Building #2 Construction	x						\$53,275,475		Baccalaureate 4-Year Programs expanded classroom capacity	
	Growth Building #3 (4-Year College) Design	x						\$5,746,471		Growth for expanded upper division capacity including LABS	
	General Building Repairs						x	\$1,500,000			
	Building "A" Minor Improvement Project				x			\$1,250,000		Renovate 1970's era general classrooms	
								State Funds \$323,525,411	Local Funds \$88,718,000		
<div>(PD) = Pre-Design</div> <div>(D) = Design</div> <div>(C) = Construction</div> <div>FCS = Facilities Condition Report</div> <div>Grow = Growth Project</div> <div>Ren = Renovation Project</div> <div>Rep = Replacement Project</div> <div>Min = Minor Improvement Project</div> <div>Mat = Matching Fund</div> <div>Repr = Repair Project</div> <div>M-I = Minor Improvement</div> <div>LF = Local Fund</div>											