Overview

The following design guidelines are intended to provide master plan level conceptual intent for future planning, design and implementation. These guidelines are not prescriptive requirements, rather planning and design principles that support the College’s mission and strategic initiatives all intended to bring about campus unity and beautification. The guidelines are a reference tool and should be used in support of the overall College mission. Creativity and flexibility is encouraged for each individual project. The success of the campus development depends heavily on implementing new projects that will appropriately meet the specific facility goals while weaving into the new vision of the campus. Each new project must strive for the following goals:

- Enhance the campus setting by optimizing programmatic adjacencies and relationships
- Incorporate campus pattern vocabulary
- Buildings must bring campus clarity and identity through the expression of program and place by use of structure, form and detailing
- Develop in a sustainable way, responsible stewardship of natural and financial resources
- Parking availability and vehicular traffic accessibility will be improved
- Maximize barrier free access by minimizing pedestrian crossover with vehicles and using building vertical circulation and topography to advantage accessibility.
- Open space will be used strategically to provide campus unity, spatial diversity and address multiple activity needs
- Campus edge and gateway locations will capitalize on TCC identity and wayfinding clarity
- Campus landscape shall help beautify the campus and provide framing and screening for buildings, onsite vistas and offsite views
- Wayfinding will be improved through the implementation of a coordinated environmental graphics plan and implementing planning goals for landscaping, open space, pathways and buildings
- Public art will be incorporated into each significant project to enhance the campus experience

Capital projects, whether building or infrastructure related, should provide high quality long lasting architectural solutions, materials and systems. Planning should balance economic feasibility for the short and long term.

TCC is within an urban setting that provides an active collegiate center for optimizing learning opportunities, supporting the College program goals and user needs. The guidelines use the current campus topography, established landscape, parking infrastructure and recent buildings as the catalyst for the creation of a revitalized Tacoma Community College.

These guidelines address 12 areas that affect campus development:

- Campus Zones and Relationships
- Campus Pattern Vocabulary
- Buildings
- Sustainability
- Transportation, Vehicular Circulation and Parking
- Pedestrian Circulation
- Open Space
- Edges and Gateways
- Landscaping
- Wayfinding and Signage
- Public Art
- Infrastructure
Campus Zones and Relationships

In order to optimize the campus environment and the learning opportunities, interaction and proximity are critical functional and planning components. The campus has been planned around two primary spines. The spines provide a method for linking campus edges to the center and provide attractive pathways that link students and staff to core services. Programs are also grouped together to give functional identity to programs through their arrangement on campus. Beneficial adjacencies are proposed that will foster collaboration and relevance between and among related programs.

- Organize buildings to optimize curriculum adjacencies and proximity
- Use Student Services and Learning support to make up N-S and E-W spines respectively.
- Consider long term planning goals when arranging and implementing smaller projects
- Create outdoor spaces that provide a variety of learning opportunities, connections and social interaction
- Provide campus zone identities through program emphasis and unique zone elements

Reference Documents and Exhibits: Building Program Zone Diagram
Campus Pattern Vocabulary

TCC has adopted a select array of qualitative facility objectives that are derived from Christopher Alexander’s book ‘A Pattern Language’. Each of these six objectives should be considered for each building project. The intent is to enhance aesthetic unity and campus identity through the consistent implementation of these objectives.

- Sheltering roofs
  Use roof overhangs to provide covered outdoor space and protect the building and users from the elements.
- Connected Building
  Consider how exterior spaces, walkway connections and plazas can connect related facilities.
- Positive Outdoor space
  Use outdoor space to bring campus order and to encourage social and academic interaction.
- Gateways:
  Introduce campus entries and zones, frame views and improve campus orientation through the use of gateway elements, spaces between buildings and landscaping.
- Family of entrances
  Implement a hierarchy of entrances through the use of entry height and orientation, finishes and materials.
- Roof Gardens
  Consider use of accessible roof spaces and green (planted) roofs

Reference Documents and Exhibits: The book – ‘A Pattern Language’

Buildings

The three most recent buildings (CAB, IT and Science/Engineering) have introduced new standards for campus development. They include elements that reflect the campus vocabulary noted above, but also have begun to define a campus material palette. Two of these projects, the new Information Technology building and the Science and Engineering building will provide a façade gateway that will be visible from 19th Street and introduce visitors as well as passers-by to a new invigorated campus that includes improved buildings and a more collegiate setting. This new palette is intended to complement the original buildings while anticipating a new campus density and appearance. Buildings will be improved, renovated or replaced based on need, the State’s Building Condition Survey and available funds provided by the State and other funding sources.
Buildings (continued)

- Buildings must bring campus clarity and identity through expression of program by use of structure, form and detailing
- Work within campus material palette to simultaneously provide campus unity and individual building identity through program, structure and site expression.
  
  **Material palette:** Warm color light to medium tone masonry, metal panels to add color and texture, aluminum windows with non reflective coatings, minimize expression of concrete on building façade, metal or membrane roofs)
- Optimize building footprint and create open space by constructing 2-3 story structures
- Use teaching tools within buildings (building elements, systems, artwork, interactive space) to expand learning opportunities
- Create spaces for impromptu interaction and learning
- Incorporate opportunities to connect indoor and outdoor spaces
- Incorporate family of entrances from main pedestrian circulation spine. Entrances that face or are in proximity of major plazas or campus greens should engage the building and outdoor space by providing visual and physical connections.
- Buildings should express a sense of permanence through orientation, material selection and form
- Materials shall be selected to minimize maintenance, long term performance and meet the campus aesthetic intent
- Screen all mechanical equipment from view (consider views from higher topography as well)

Reference Documents and Exhibits: *Short, Mid and Long Term Master Plan exhibits, Building Conditions Rating Summary in the existing conditions section of the Master Plan*

**Sustainability**

The College will plan and build in an environmentally responsible and sustainable manner. As an educational institution TCC recognizes its position in the community and will contribute to environmental awareness as well as sustainable innovations and practices. The College will follow a standard that will include stewardship of natural resources and environment, encouragement of alternative transportation approaches and responsible site development strategies, high quality indoor environmental quality, and innovation. All new buildings will meet the State environmental design criteria of LEED Silver. Considerations will include appropriate site development methods, scrutiny in site selection and building orientation, maximization of alternative transportation opportunities, responsible use of resources and energy, high indoor environmental quality achievements, while seeking out innovation opportunities whenever feasible.
Transportation, Vehicular Circulation and Parking

Significant changes are proposed for vehicular circulation and parking. Currently the east side pedestrian pathways are interrupted by roadways. The new master plan moves all vehicular circulation to the perimeter of the academic campus through phased project development. A new widened pedestrian loop will provide a clear pedestrian arterial as well as facilities for intermittent emergency and service vehicle access. Equally important are provisions for parking that are sufficient and placed conveniently. As the College grows, so will the need for parking. Current plans include new surface and structured parking. The City of Tacoma requires approximately .75 stalls per student and the State Board of Community and Technical Colleges suggest a .7 stall to student ratio for day on campus FTE. Currently TCC meets a ratio of approximately .5 per student on the main campus. Planning and funding requests are in process to work towards fulfilling those goals to improve parking convenience. Parking structures should also be considered in order to most effectively use the limited build-able area and keep parking in proximity to campus destinations.

- All non service/emergency vehicular circulation will be primarily located at the perimeter of campus to provide safe and minimally interrupted interior pedestrian uses
- Internal primary pedestrian loop also serves as emergency and occasional delivery vehicle access.
- A Transportation Management Plan will be implemented and maintained to encourage alternative transportation modes
- Improved facilities and programs will be used to increase alternative transportation use (bicycles, bus, carpooling, light rail…)
- Parking planning will include an increased proportion of landscape in order to soften the visual affect of parking and paving reduce paved heat island conditions. (420 sf per parking space is the recommended planning rule of thumb for stall, access and planting area allocation.)
- The 12th street entry will be improved in the near term.
Transportation, Vehicular Circulation and Parking (continued)

- Consideration for Surface parking lots and structured parking must be considered with each new project. (Maximize potential at daylight basement conditions where topography benefits this configuration.)
- Establish parking ratio goal and methodology.
- Optimize drop-off conditions for uses such as the child development center, Auditorium, etc.

Reference Documents and Exhibits: *Vehicular Circulation exhibit, Parking Study Exhibit*

**Pedestrian Circulation**

Pedestrian circulation is being improved at many levels. A new pedestrian arterial campus loop is in the works and will be complete in 2006. Each new project will provide a connection to this loop to assist in identifying the building and providing a welcoming entry. Barrier –free access shall be a consideration for each new building and site improvement project. Areas between new buildings will be developed to improve accessibility between upper and lower areas of the campus. Because the majority of campus buildings reside on the elevated campus area, buildings will be sited in order to provide internal connections between lower parking areas and upper campus zones.

- Once inside the perimeter parking and vehicular loop the primary mode of travel on campus is pedestrian circulation. Service and emergency vehicle drive widths are provided at the primary walkway loop for intermittent use as necessary.
- Primary walkway loop: TCC utilizes a pedestrian network with a primary circulation N-S loop intersected by building entry nodes and access pathways from parking and other site amenities. A new E-W circulation axis is proposed to improve access and visibility to the campus from the Mildred entrance to the eastern edge of the developed campus. Ultimately the axis will continue to the east parking areas to complete a bisection of the campus and provide a clear campus thoroughfare.
- Secondary walkway network: courtyards, plazas and walks will be used to connect buildings to the primary spine, connect like adjacent buildings, connect parking to the formal campus setting and provide active and passive open space provisions.
- Vertical circulation: Site topography plays a major role in the layout and approach to pedestrian circulation at TCC. Site accessibility will continue to be improved through the use of ramp/walk systems and the incorporation of vertical circulation lobbies at key locations around campus. The vertical circulation lobbies will provide covered access within buildings between the upper and lower site levels and will further encourage interaction as well as provide exposure to buildings that students and faculty might not otherwise frequent.
- The nature walk through wetland reserve land will be maintained and improved.

Reference Documents and Exhibits: *Pedestrian Circulation Exhibit*
Open Space

Existing conditions provide primarily a combination of lawn and intermittent small open areas along the pedestrian walkways. Open space in this master plan is planned for more strategic uses. Open space will provide places for gathering, vistas, introspective space, and active outdoor learning areas. Open space shall not be thought of as the leftover space between buildings, but should be used as a compositional, formal, functional and wayfinding element with equal importance as the buildings on campus. Specific proposed locations and open space intentions are described on the ‘Gateway, Edges and Open space’ exhibit.

Each building project or significant infrastructure project shall take the following goals into consideration:

- Open space will be used as a plan organizer, joiner and integrator.
- Two primary campus open space overlays provide a N-S and E-W passage through the campus.
- A campus quad located near the south central area of campus will designate a campus center.
- Capitalize on the opportunities provided by the topography, views and areas between buildings.
- Existing mature trees and plants will be supplemented to increase the number of trees on campus.
- Establish a hierarchy of open space, pathways, and buildings that connect and bring order to the campus setting.
- Open space will be created through expansion and renovation of existing spaces as well as new open space locations as building are replaced through the State funding process.
- Provide and articulate campus orientation and way-finding through the ordering and characterization of open space.
- Use open space to connect buildings.
- Provide clear entryways from parking to campus destinations.
- Combination of open space types:
  - Active spaces for meeting, informal assembly, hanging out, socializing; these may be planted or hardscape, mixture of fixed seating and open plaza area for gathering
  - Introspective spaces for quiet study and socializing; primarily planted with some hardscape and bench seating
  - View/vista oriented green space: primary planted, shrubs and ground cover specimen plants provide foreground and perimeter trees create framing
  - Areas for art display
  - ‘In between’ spaces that serve to connect buildings, provide circulation through - ways
  - Outdoor learning areas: amphitheater spaces, wetland learning platform, etc
- In the future, consideration may be given to naming open spaces to establish themes, use, or provide funding opportunities.

Reference Documents and Exhibits: *Gateways, Edges and Open Space exhibit*
Edges and Gateways

TCC is not easily noticeable from the three main entry points. Campus topography provides both opportunities and challenges for visibility. Because the campus sits above both the 19th and Mildred entry points edge treatment, gateways and landscaping will be used to frame views on to campus to improve the identity and visibility of the campus. Improvements for the 19th street entry will begin design in 2006. Improvements of the 12 Street and Mildred entries will follow. Entry improvements will include vehicular and pedestrian circulation, wayfinding, landscaping and other formal elements to unify and define the campus perimeter and improve accessibility and visibility between lower entry zones and the primary campus plateau.

- Establish an attractive campus perimeter with edges and gateways that identify TCC within the overall neighborhood, and provide stronger identity with a more favorable impression of a quality setting.
- Use edge treatments, building positioning and landscaping to provide portals into the campus setting from parking areas and neighborhood edges.
- Strengthen the 3 existing perimeter entries.
- 19th street as primary entry, Mildred and 12th as secondary.
- Use buildings to frame gateway vistas and identify edges.
- Use signage and edge treatment such as walls, fencing and landscaping to establish a collegiate campus appearance and enhance campus security.
- The 19th and Mildred edges are dominated by a one story uphill gradient. Campus identity and accessibility will be influenced by the treatment of this embankment. Buildings, pathways and open space shall be used to improve the appearance and access from the lower entry edges up onto the plateau of the primary campus area.
- Create a gateway to the wetland reserve area.

Reference Documents and Exhibits: Gateways, Edges and Open Space exhibit
Landscaping

TCC is blessed with many mature trees and shrubs. Existing trees and mature shrubs will be used as a foundation to build on. The overall landscape concept uses native plant materials in a combination of formal and informal depictions to define campus zones. Each new project should strive to enhance the campus setting. Scale, setting, master plan objectives, framing, screening, seasonal characteristics, color, maintenance and irrigation must all be considerations for landscape planning and implementation.

- Landscape will be used to create unique settings on campus.
- The overall campus quantity of trees and plant material will be increased.
- Landscape will identify circulation hierarchy, frame views, delineate open space, and screen utilitarian areas.
- Planting shall be used to reinforce building entry statements.
- Open spaces have specific theme/activity designations. Landscape shall support each of these intentions.
- Planting and paving at designated courtyard and open spaces shall be designed to provide unique memorable space in order to bring individual identity within the unifying planting scheme.
- Landscaping at parking areas shall be optimized to reduce the impact of paving and heat islands, minimize views of cars balanced with safety considerations.
- Plant materials shall be used to provide solar shading when ever possible.
- Landscape and irrigation will be implemented in a sustainable way. Native and drought tolerant species will be the primary foundation plants. Irrigation will be considered primarily for initial plant establishment and minimized or eliminated once plant structure is established. Stormwater and greywater irrigation opportunities will be pursued whenever possible.
- Hardscape will be used to promote linkages, plazas, outdoor learning.
- Landscape will be used to identify outdoor spaces.
- Use pervious surfaces wherever possible.
- Establish a vocabulary for site amenities – benches, light fixtures, trash receptacles, etc.

Existing landscape and walkway

Reference Documents and Exhibits: Landscape exhibit
Wayfinding and Signage
Wayfinding will become even more important as the size and number of the facilities grow. Signage should provide a coherent hierarchy of information that facilitates the location of a campus destination on foot or car. Campus wayfinding will be improved through the consolidation of larger 2 and 3 story buildings and the improved open spaces between these buildings.

- A new campus signage system will be pursued. It will include way-finding, directional and information elements.
- A new Environmental Graphics program should include:
  - Traffic signage, vehicular wayfinding and directional signs, pedestrian wayfinding and directional signs, informational signs, building identification, and directories. Educational and interpretive signage should also be considered.
- The current building numbering system will be re-visited. The size of the building numbers and the introduction of building names will be considered.

Public Art
Public art will be incorporated into every significant capital project. Key locations for site art have been denoted on the Gateway, Edges and Open Space exhibit.

- Art will be considered as an integral part of all significant projects.
- Use Art as a way to express diversity.
- Consider art as a teaching tool.
- Provide art for examination and introspection.
- Building elements are also candidates for art projects. Guardrails, outdoor shelters, canopies, hardware and other elements have been successfully created as artist made building parts

Reference Documents and Exhibits: Gateways, Edges and Open Space exhibit

Infrastructure
Much of the existing infrastructure has been in place since the inception of the campus in the 1960’s. The condition of these existing utility lines are being investigated but many will need replacement soon given the relative age. Many of these upgrades or replacements will take place in conjunction with other building projects. Both centralized and project specific utility services exist on campus and will continue into the future. The City of Tacoma has discontinued the use of ‘in lieu’ stormwater utility fees as a method of regulation requirements. Newer State storm water regulations are now a requirement for any new project on campus. Detention ponds and vaults will be the most likely solution. Efforts are underway to explore the opportunities of introducing campus stormwater onto the east portion of the campus with other wetland mitigation solutions.
Infrastructure (continued)

- All building systems must comply with the current applicable codes.
- Sustainable strategies should be considered for each utility and system provision.
- A campus wide stormwater system must be designed. Integration with east campus wetland mitigation or coordination with the City for a joint use regional facility should be considered.
- Look to reduce detention and containment through maximization of stormwater infiltration.
- Investigate project specific appropriateness of a combination of central campus shared systems and independent building systems.
- Improvements will be done incrementally, sometimes as separate site improvement projects and other times as part of building capital projects.
- See ‘Implementation plan’ for further intent and discussion.

Reference Documents and Exhibits: Utility overlay exhibit, Utility Improvement Alternatives in the Implementation plan section of Master Plan, and Buildable areas exhibit