


Master Plan


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HOPE COLLEGE CAMPUS MASTER PLAN



FALL 2017
 **Hope** COLLEGE

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3.1 CAMPUS LAND AND BUILDING USE FRAMEWORK




Figure 3.1-1: Campus sculpture.

The Campus Land and Building Use Framework (Figure 3.1-2) supports the Master Plan goals, objectives, and planning principles by designating the highest and best use of College property. The Framework is a flexible tool for expressing the College's values, achieving excellence, and accommodating future change in appropriate ways. Through the lens of the Framework, the College community can consider decisions for specific parcels of land as well as identify areas where future programming or fundraising is required. The land use categories support and encompass the current character and utilization of each College facility while articulating compatible new building uses and broad environmental categories for sustainable stewardship of campus land. Precedents from comparable campuses for the following land and building use typologies have been included in the Appendix 4.8.

The core mission of the College takes place in the **ACADEMIC AND ADMINISTRATIVE** land use zone. Concentrated in the west and middle of campus, this zone supports the opportunity for academic programs and administrative office locations to evolve and anchor various corners of the campus. For example, Jack H. Miller Center for Musical Arts and De Pree Art Center and Gallery are bookends for an important social sciences, fine and performing arts corridor along Columbia Avenue. This is the highest and best use of this land. Furthermore, there is an opportunity to expand this academic energy east of the railroad tracks towards Lincoln Avenue. In this connected approach, it is possible to link the strong academic component of physical education in DeVos Fieldhouse with the campus core. It is key to capitalize on the possible natural instructional and research synergies between health, wellness and athletics within a 10-minute walk of the majority of other academic departments.

In addition to strengthening east-campus academic connections, there are opportunities to improve, support, and "showcase" the academic and administrative activities that surround the Pine Grove in the heart of the campus. Similar to the energy surrounding historic Dinning Chapel and Graves Hall, academic programming can be enhanced around Labbers Hall. The potential renovation and repurposing of Durfee and Van Vleet Residence Halls - after replacing their units

elsewhere on campus - provide ideal locations, floor plans and overall square footage to accommodate a wide range of new programs for expanding departments. A home base for Economics and Business, an entrepreneurship program, a hi-tech digital immersion lab, "huddle" or "showdown" spaces for interdisciplinary teamwork and support, and a central location for Hope's executive leadership would benefit from these highly visible locations at a campus crossroads.

When considering central campus improvements, it is essential to enhance connections with the west side of campus. As the home base for science and study functions, the land and buildings west of College Avenue provide a key, multidisciplinary academic zone. Identifying opportunities to support these uses and leverage the value of adjacent land - most notably north of 10th Street in the Pillar Block - are critical to meet the needs of the College. Structured parking, combined with flexible academic and administrative swing space can serve the needs of Engineering, Natural and Applied Sciences, Education, Sociology and Social Work, and the Academic Learning Commons. This potential land use along 10th Street is also an opportunity to strengthen the campus experience and provide an "academic front door" to pedestrians and the public.

The Hawthorn Inn and Conference Center and Belknap Admissions Office provide a natural front door for College visitors - highlighted by an asterisk on Figure 3.1-2 - whether alumni, high school students and their families, or attendees of special events. Enhancing existing land use and programmatic activities is a key strategy for this corner of the campus. Its highest and best use is as a zone for welcoming activities and that could include a multi-function welcome center.

The **SPORTS AND RECREATION** land use zone defines the current variety athletic, intramural and club sports facilities on the east side of campus as well as needed room for growth. It includes both indoor and outdoor facilities, encompasses support structures associated with these facilities, and includes parking needed for a welcoming visitor experience. The land use zone also reflects a need for space that supports off-season winter training and recreation for the varsity and non-varsity students. As a broad anchor for afternoon, evening and

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Figure 3.1-3: Corridor amenities along Lonsdale Street in Dandenong (suburb of Melbourne, Australia) create an active spine that was designed to alleviate congestion and improve pedestrian comfort.

weekend student and visitor activity, it is a priority to better connect the east side of campus to the core, better utilize the connecting city block fabric, define safer railroad crossings, and accommodate the flood plain patterns. Parcels that are situated along the east side of the railroad tracks present ideal locations for replacing aging sports facilities, expanding facilities to meet current enrollment and programs, and improving the student, visitor and returning alumni experience. The blocks between 10th and 12th Streets can link the east and west areas of the campus more effectively than their existing use as surface parking lots. The Campus Land Use Framework also highlights significant areas in the Flood plain that have experienced flooding during past weather events. Stretching into the eastern athletic lands, these areas are not recommended for future development due to environmental sensitivity.

The four **PARKING STRUCTURE** zones identified in the Framework are located at recognized arts, academic, and sports-centric crossroads for visitors, staff and students. These sites efficiently accommodate high parking demand at the campus perimeter where there is an opportunity to include financing from partners while serving the College community and its visitors.

The **HOUSING** land use zone shows land devoted to both current student housing as well as land for future housing sites. New housing may be required to bring students back on campus from leased off-campus property, remove aging cottages that do not warrant future investment, replace beds lost to upgrading current residence halls to provide 21st Century amenities and achieve universal design. New housing capacity could also replace beds in Durfee and Van Vleet Halls - allowing their renovation for pressing academic needs - and create a better balance in housing options and communities. Compared with its peers, Hope has a large percentage of traditional halls and lacks semi-site and suite options. Recognizing the key role that cottages play in retaining juniors and seniors on campus, the housing zone also suggests parcels for acquisition on the south side of campus. These individual lots fill out voids in the student

communities along key residential streets and support the broader policy goal of retaining the high-quality residential character of this City and campus neighborhood. The housing land use zone also supports the integration of high quality green spaces that create a sense of place and connection around residences, including pocket parks and landscaped footpaths.

The **MULTI-PURPOSE** zone identifies an evolving land resource for accommodating a full range of student life and administrative spaces - including special event, gallery, dining, study, and housing. Academic support space and programs that include public outreach are also appropriate. In particular, the highest and best use for college property between 8th and 9th Streets is a flexible mix of uses such as retail, display, and event space that complement the energy and activities of the Knickerbocker Theatre. There is also an opportunity to consider student apartments, an innovation/partnership hub, lifelong learning, and structured parking that serves the demand for amenities in (and in proximity to) Holland's vibrant downtown 8th Street corridor.

Framing the circulation through these land use activities is the key north-south corridor of Columbia Avenue, which is identified as the campus spine. This corridor is an important organizing element of day-to-day circulation on campus, providing access to key administrative and student life facilities including Phelps Dining Hall, DeWitt Student and Cultural Center, the Bulman Student Center, and the Doer Center. Branching off the Columbia Avenue corridor are shared streetscapes along 10th, 13th, and 11th Streets, which are highlighted in greater detail in Section 3.3 (Open Space Improvement & Community Connections).

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3.3 OPEN SPACE IMPROVEMENTS & COMMUNITY CONNECTIONS


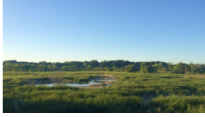



Figure 3.3-4 (Top): Engaging outdoor spaces on campus for formal and informal gathering. Figure 3.3-2 (Bottom): Autumn evening on the Windsor on the Waterfront boardwalk trail, along the Macatawa River marsh.

The Campus Master Plan Goals, Objectives, and Planning Principles emphasize the importance of a welcoming, walkable campus landscape that is all-season, easy to maintain, expresses beauty and botanical diversity, features clear points of entry, and contains branded signage and ease of wayfinding. Although surrounded by the City of Holland – and affected by its street patterns and materials – there is an opportunity for the College to utilize thoughtful open space planning and design to establish a distinct learning landscape. Distinguishing the campus grounds from the adjacent neighborhoods can educate the students and city residents when they have entered the College. Figures 3.3-6 to 3.3-12 are precedents from comparable campuses for the following open space typologies (further detail on typologies is included in Appendix 4.8 - Design Precedent).

Columbia Avenue is an important thoroughfare for motorists and pedestrians. It is the recognized **CAMPUS SPINE**, connecting the College to the downtown core of Holland to the north and the neighborhoods to the south and uniting the east and west sides of campus. It also links a series of prominent outreach, performance, and student life hubs: Jack H. Miller Center for Musical Arts, Martha Miller Center for Global Communication, Phelps Dining, Mass Center, DeWitt Student and Cultural Center, Krukowski Art Museum, De Pree Art Center and Gallery and Dow Center. Students, staff, faculty and visitors moving east and west between buildings dominate this vibrant area between 10th and 13th Streets.

GATEWAY BRANDED INTERSECTIONS indicate key street intersections at the campus perimeter where visitors approach and enter the campus by car. Landscape features distinct to Hope, such as signature planting, paving and wall materials, outdoor lighting, signage, and public art, can define the primary “campus gateways”, place campus heritage on display, and enhance the visitor experience. These features reinforce the College’s image and identity and indicate to visitors they are on the right path.

CAMPUS BRANDED INTERSECTIONS perform a similar role as the gateway branded intersection, except they are oriented toward and interior campus intersections. Their features should be coordinated

to express a secondary role – albeit a critical one. By differentiating street corners from neighborhood streets – based on traffic-calming design – they create safer pedestrian crossings and reinforce to drivers that they are within a collegiate environment.

WELCOMING LANDMARKS identify highly visible, signature locations to position artwork. Primarily sited along Columbia Avenue (the campus spine), their role is to reinforce view corridors and places where pedestrians and motorists pause next to signature facilities and intersections. Depending on their setting and potential scale, they can be sculpture, student installations, or information kiosks.

City standards for streets and sidewalks – including layout, dimensions, planting, outdoor lighting, signage and materials – shape the campus pedestrian environment. Although the campus public realm is well-maintained by the City and benefits from a highly valued snowmelt system, it does not meet the needs of class change times, special events, and the student desire to meet, walk in groups, and carry on conversations that began indoors. **STREETSCAPE ENHANCEMENTS** – developed in partnership with the City – provide sidewalk treatment that is safe and pleasant. Strategies to explore include campus-branded pedestrian lighting, seating, areas to pause, and connections to easily accessible building entrances. Coming and going from facilities should be visible and convenient. In particular, streetscape and public realm enhancements to the 10th Street and 12th Street corridors have been identified as highly beneficial for daily student and staff travel. Streetscape enhancements that communicate where travelers are within the city and campus street network and that cue drivers to slow down are also important. The goal of these features is to create an experience – east to west and north to south – that enhances the campus fabric and makes pedestrian travel to destinations feel shorter and more pleasant. All of this is in service of a healthier landscape that is safe and secure at all hours of the day.

Moving off the streets and into campus open space, east-west and north-south **ENHANCED PEDESTRIAN ROUTES** provide pathways to internal destinations where closed city streets have become quads, malls and pedestrian corridors. There are also “midblock”

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Figure 3.3-4: Holland Farmers Market at the 8th Street Marketplace (Photo source: Holland Farmers Market).

opportunities to strengthen accessible pathways and connectivity across the broader campus environment. Each of these routes contributes to students successfully changing classes in a timely manner, safely crossing the campus in the day and evening, and highlighting academic and student life programs. Careful coordination between improving these routes and the campus “outdoor rooms” provides an environmental expression of Hope’s heritage, its liberal arts mission and its lively residential communities.

Sidewalks that provide **OFF-CAMPUS CONNECTIONS** are important to all members of the campus community – as well as visitors and returning alumni. They provide recreational and academic linkages to city and regional open space amenities that help recruit and retain students and faculty. Figure 3.3-5 embodies the Campus Open Space Framework, into the broader landscape of Holland and its surroundings. It is important to encourage a connected and actively used system of civic space and capitalize on the unique amenities that Lake Michigan, the Macatawa Riverfront, city park system and downtown Holland offer.

Inside the campus, students, faculty and staff appreciate Hope’s park-like character. The sidewalks are used for informal recreation by both college and city community members. A **RUNNING / JOGGING TRAIL** promotes overall campus health and well-being, connects the east and west sides of the campus, encourages extracurricular activities such as 1k and 2k events.

The college landscape framed by academic and student life facilities differentiates the campus – by scale and character – from the surrounding city retail and residential development. **ENHANCED GREEN SPACE** is essential to provide an inspiring, healthy and supportive sense of place and sense of belonging for the student academic and residential undergraduate experience. Developed as a continuous experience, improved open space provides a “string of pearls” to display learning, image and identity. Comfortable, safe and easy student movement across campus can be combined with green space for botanical display, environmental research, informal recreation, ad hoc gathering and special outdoor events.

OPEN SPACE OPPORTUNITIES include outdoor learning spaces and gathering areas that are highly visible, universally accessible, underutilized by students, have a supportive microclimate, and are natural locations for outdoor installations and landscape enhancements. Research supports the positive relationship between views of nature, interaction with natural spaces, and enriched learning that improves student wellness and academic outcomes. Hope’s verdant campus can leverage these experiences throughout the academic year as well as during fine fall and spring weather.

There are opportunities to position **OUTDOOR CLASSROOMS** next to key academic buildings for seminar discussions, further connecting the inside and outside experience of student and faculty. Some of these locations already informally exist. All of them can benefit from enhanced lighting, access to power and WiFi, and dry, comfortable, informal seating. Properly designed, they can function into the evening and support social uses outside of class hours.

10th, 13th, and 14th Streets are ideal candidates for considering conversion to a **WOONERF OR SHARED STREET**. The woonerf concept views the street as a multifunctional social space, rather than simply a channel for vehicular activity, and is becoming increasingly popular in the United States. This street typology improves pedestrian safety, manages stormwater, introduces shade and vertical planting, reflects campus aesthetics, and accommodates through-traffic and accessible parking. The concept of the woonerf – developed in the City of Delft, the Netherlands in the late 1960s – features the flexible arrangement of bicycle, pedestrian, and vehicular infrastructure, as well as paving materials, planting and sidewalk bump-outs that cue slower traffic speeds.

There are two prominent sites on Columbia Avenue where parking and service areas dominate views. Converting the surface lots at Mass Center and De Pree Center to a multi-purpose **PARKING PLAZA** can accommodate required vehicular functions while introducing new flexible uses. Potentially incorporating the snowmelt system, a parking plaza can support special events while serving access along the Campus Spine. Additional locations along 9th, 10th and Lincoln can be identified as future redevelopment is planned.

Two branches of the Maplewood Drain divide the east campus. These waterways have a natural, undeveloped character that form a **STREAM AND STORMWATER PRESERVE**.

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3.6 STORMWATER IMPROVEMENTS



Figure 3.6-1: LEED Platinum Kroon Hall at Yale University. Within this rainwater harvesting system, aquatic plants like iris, cattails, arrowweeds, and lotuses cleanse runoff in a stormwater basin through phytoremediation (Photo credit: Landscape Architecture Foundation).

Minor Renovations

Flood Control: Review whether buildings have experienced any recent drainage issues and provide flood control as needed to protect buildings.

Stormwater Quality: Provide water quality treatment for any added impervious. Infiltration into drainage swales or leaching basins may be used where groundwater is not an issue. Where groundwater presents a challenge utilize green roofs, permeable pavement or stormwater pretreatment pipe to discharge to adjacent storm system.

Open Space Preservation: Limit loss of open space and removal of existing trees. Examples of preservation could include adjusting layout of expansion to preserve natural features or confining construction limits to avoid disturbance of natural areas.

New Development, Building Additions & Parking Lots

Flood Control: Provide flood storage for 1% chance (100-year) event. Where possible, attempt zero stormwater discharge from site. Treatment could include open ponds, swales, raingardens, underground storage, green roofs, drainage layers below pavement and rainwater harvest storage.

Stormwater Quality: Provide water quality treatment for first 1 inch of runoff. Goal is to remove 80% of Total Suspended Solids from runoff using either natural or mechanical means. Treatment can be incorporated into flood control elements or utilize pretreatment system such as hydrodynamic separator.

Groundwater Recharge: Where practical and without potential harm to other buildings encourage infiltration of stormwater into the surrounding soil as a means of groundwater recharge. This can be accomplished by use of raingardens, bioswales or ponds.

Education / Interaction: Where possible, utilize treatment methods that create opportunities for education and interaction. For instance, pedestrian walking paths could intersect with raingardens or create

viewing opportunities to see green roofs or ponds. Routing of access to interaction areas should incorporate safety measures to ensure risk to users is minimal.

Heat Island Effect Reduction: Select surfaces with high albedo to limit heat island effect. Attempt to preserve existing trees and plant new trees. Trees within parking lot areas should be situated in larger islands that could incorporate a stormwater treatment solution such as swales or sunken parking lot islands. Roof areas could be designed with high albedo surfaces or with green roof.

Rainwater Harvest: Incorporate rainwater harvest and drought-tolerant plantings to limit the need for irrigation water. Additionally, rainwater can be harvested for greywater use within the building or at remote restroom facilities. Rainwater harvest should be incorporated into the educational opportunities on the campus.

Open Space Preservation: Follow current campus policies to evaluate overall cost of removal of trees and open space. If preservation is not practical and prevents development that best serves the community, include cost in project to improve open space in other areas of the campus as shown in the masterplan.

Wetland Restoration: Improve the wetlands within the Maplewood Drainage Corridor by preserving wooded wetlands and enhancing areas that may be impacted by development with the installation of constructed wetlands, streambank restoration, native planting buffers, and flood shelves. The enhancements may be planned to serve as future mitigation areas where new development may require existing wetland areas to be impacted.