

LANDSCAPE



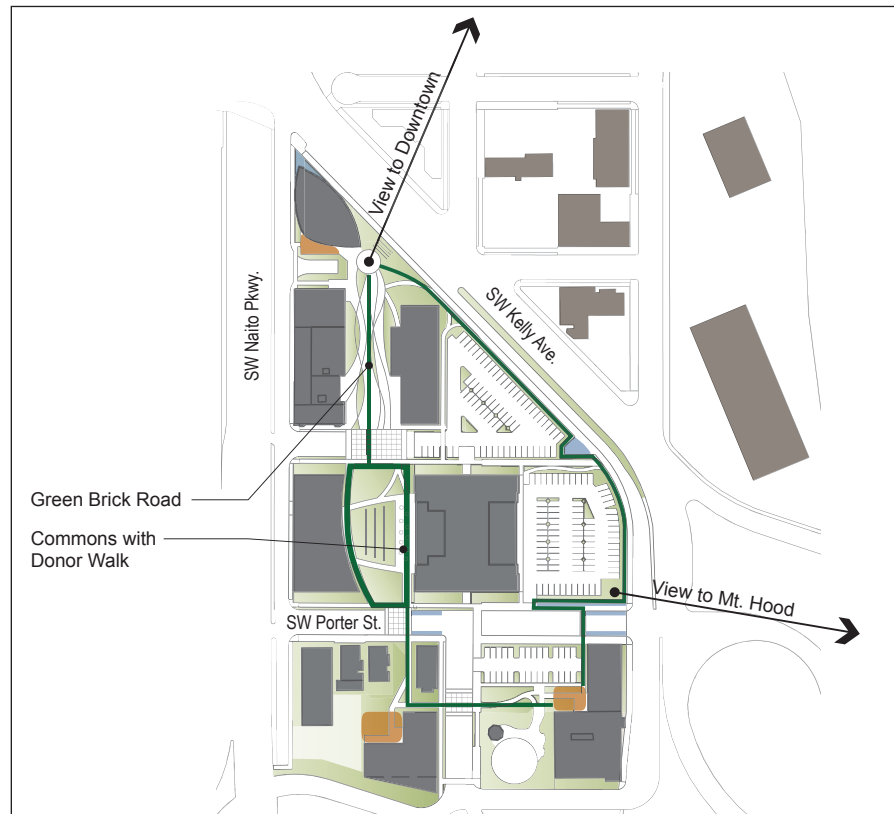
Each space on campus should have a distinct character and respond to its setting.

DISTINCTIVE CAMPUS SPACES AND THE GREEN BRICK ROAD

Over time, the NCNM campus will become a beautiful, unified sequence of spaces that vary in scale and purpose. Each distinct place on campus will meet a different need for students, faculty and visitors. These spaces can communicate the educational, health and well-being mission of the school through exceptional design gestures, iconic art, quality building materials and thoughtful planting design. Each space should have a distinct character and design that respond to the setting. For example, opening up selective inspiring views of Mt. Hood and the Cascade Mountains as well as the surrounding urban environment will make the campus seem more engaged with its context. Spaces envisioned include a commons area for events and gatherings, gardens, and smaller sitting areas (see Figure 10).

The Green Brick Road will be a distinctive element that ties the significant campus spaces together. It will extend as a loop that connects major buildings, viewpoints and campus entries (see Figure 10). A donor walk as part of the Green Brick Road in the commons area provides an area of focus for honoring people who have made contributions to the school. Engraved stones, bricks, benches, a water feature or works of art may be appropriate for honoring contributors and benefactors.

Figure 10. Campus Spaces and Green Brick Road



FURNISHINGS, LIGHTING, PERIMETER AND CAMPUS IDENTITY

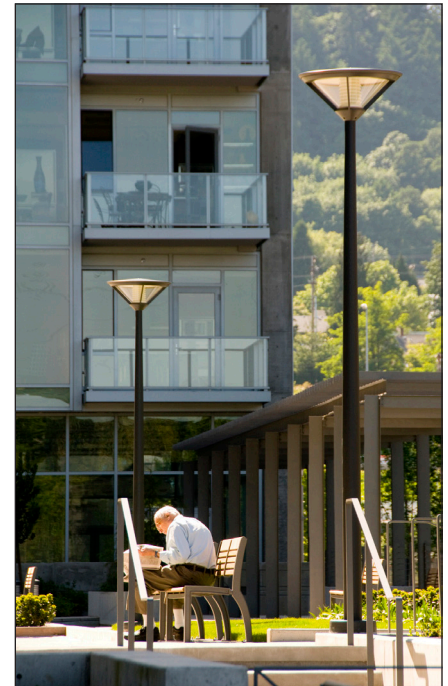
The NCNM campus is made up of a wide variety of buildings from an historic school to wood frame houses to a modern clinic. A cohesive design vocabulary on the NCNM campus is paramount to creating a stronger identity. Elements include site furnishings, lighting, and unified campus signage. New campus standards for benches, bike racks and bollards will promote a level of care and consistency to the design of the campus, helping to link the spaces on campus together.

The quality of lighting on campus is a significant determinant of the campus character. Careful consideration should be given to a campus standard pedestrian light pole and fixtures that are energy efficient, prevent glare and provide adequate lighting levels. Since the urban campus is situated on public streets, lighting in the rights-of-way should be coordinated with the City of Portland Bureau of Transportation.



The campus perimeter is an important opportunity for NCNM to communicate externally to those traveling on the busy streets that border the campus. Improving the aesthetic of the walls, fences, and entries is a simple way to send a positive message to the community and have a great impact on people's perception of the school. Creating living walls by planting vines above and below the large retaining walls would soften the stark facades and also serve to reduce the invitation for graffiti. The size of the existing evergreen hedges at the parking lots can be reduced to a more pedestrian scale of four to six feet depending on the location and view.

Wayfinding to and within the campus itself is challenging. Carefully placed wayfinding markers and signage should be implemented to aid visitors and prospective students. A consistency of signage type, scale and color on the buildings can work with the pedestrian and vehicular signage to provide a cohesive wayfinding and campus identity system.



Quality lighting and carefully placed wayfinding markers and signage give the campus character and enhance the visitor's experience.

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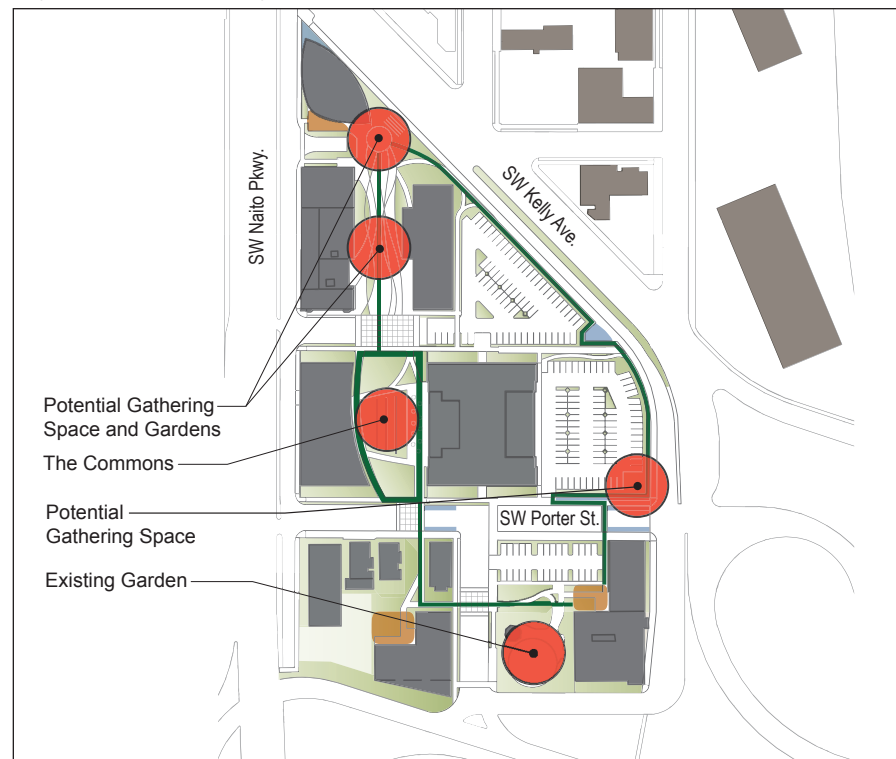
Unified green spaces of various sizes will provide space for different activities.

THE COMMONS, GATHERING SPACES AND GARDENS

The NCM campus should include a central open space or commons that can accommodate a number of gatherings of various sizes and functions (see Figure 11). Outdoor meetings, graduation, food, book sales, gardening demonstrations, classes, games, performance art and other special programmed events can become a much stronger part of the culture of the school. A generous commons space between Academic Buildings One and Two will be the best space to become the commons. A portion of the space should be paved so that it functions for events and activities to occur at all times of the year. The space should be flexible so that tents, moveable seating and a performance stage can be accommodated for certain events. The slope of the site may enable it to be terraced with low seat walls.

Smaller gathering spaces can be located throughout the campus, taking advantage of opportunities to enjoy views, converse one on one, and hold informal gatherings. Gardens throughout the campus will add to the diversity of experiences one can have at NCM. The existing Healing Garden at the south end of the campus provides one such experience. Other opportunities exist for gardens that showcase medicinal plants, horticultural collections, stormwater, and seasonal color. Comfortable benches and low retaining walls for informal seating will ensure places for people to sit and spend time in the outdoors.

Figure 11. Gathering Spaces



LANDSCAPE, WATER AND GREENROOFS

Portland has an hospitable growing environment for plant materials and a meaningful tradition of urban landscapes and parks being part of our daily lives. The urban landscape at NCNM has many opportunities to contribute to the city's collection of beautiful green spaces and be an inspiration to students and faculty on campus. It also has an opportunity to dissolve some of the



neighborhood barriers and become a welcoming place for neighbors to access and use. The campus, currently with an excess of paving, can literally turn "grey into green."

Even narrow areas next to buildings can feature medicinal plants and herbs that provide educational opportunities and add diversity to the plant palette, distinguishing the NCNM campus from other urban landscapes

The campus landscape can be a showcase of plants that relate to the educational mission of the school. Even narrow areas next to buildings can feature medicinal plants and herbs that provide educational opportunities and add diversity to the plant palette, distinguishing the NCNM campus from other urban landscapes. A flexible campus lawn area will provide an open space for gatherings and accommodate campus activities. A Tree Master Plan will ensure that the campus has a lasting and diverse tree canopy that responds to the mission of the school and creates a green framework for its buildings, pedestrian corridors and parking areas. Native plants will attract urban wildlife to the campus.

Green infrastructure on the campus will demonstrate a particular concern for healing the urban environment through the use of plants that improve water quality. A stormwater master plan would include how bioswales, rain gardens and greenroofs can be integrated into the campus and buildings. For example, the high retaining wall at the east end of campus at SW Woods St./ SW Kelly Ave. provides a special opportunity for a playful, vertical display while treating stormwater. Bioswales in the parking lots and right-of-way at the east end of SW Hooker St. can be seen as landscape amenities that serve both a functional and aesthetic purpose. Greenroofs planned for new buildings will detain stormwater, improve building performance, and demonstrate NCNM's commitment to sustainability.



Bioswales, rain gardens and greenroofs integrated into campus and building design can serve both aesthetic and functional purposes.

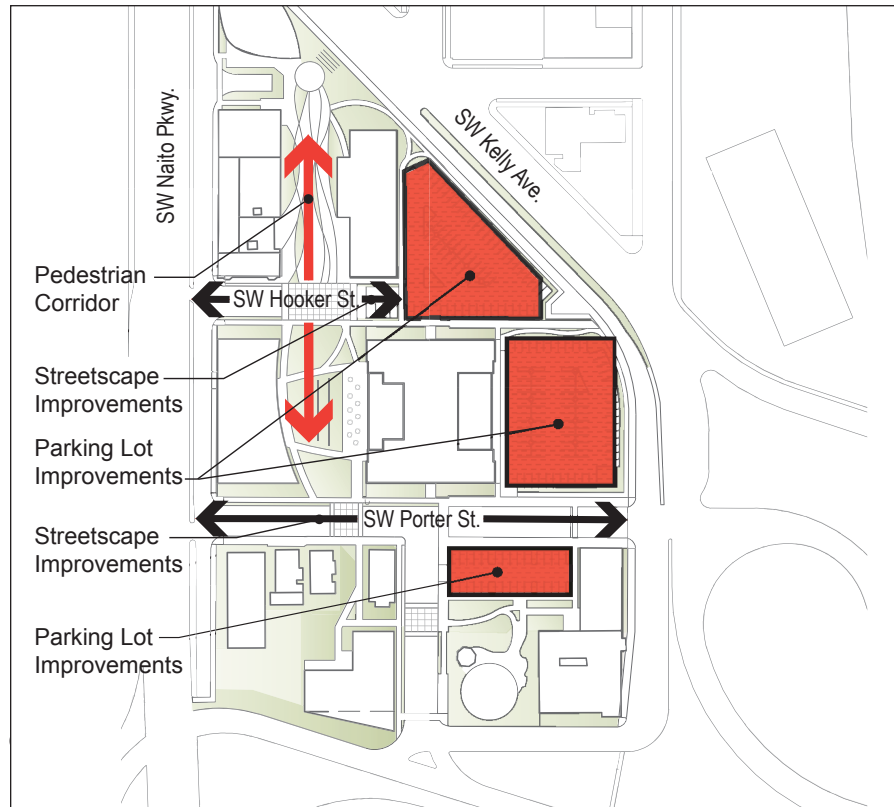
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STREETSCAPES, PEDESTRIAN CORRIDORS AND PARKING LOTS

Improving the pedestrian realm at NCM is an important step to enhance the quality of the campus and attract students. Upgrades to the streetscapes, pedestrian corridors, and parking lots will make the campus environment more walkable, healthy and beautiful.

SW Porter St. and SW Hooker St. are envisioned to have street trees, planting areas, pedestrian scale lighting, generous walkways, bike racks, attractive paving and benches. Stormwater planters in the rights-of-way and green vertical treatments such as vines will help to make the streetscapes more pedestrian-friendly. Pedestrian improvements will be complemented with lower vehicular speeds achieved by traffic calming features, narrow automobile lanes and on-street parking.

Figure 12. Streetscapes and Pedestrian Corridors



The campus master plan concept illustrates a strong main north-south pedestrian corridor and green spaces. A series of distinct, well-designed spaces offer visitors, students and faculty a variety of social environments, experiences and more contemplative respite spaces. The main pedestrian corridor has potential to create a signature identity for the school (see Figure 12). Wide campus walkways will facilitate movement between buildings. Smaller secondary pathways will connect other areas of campus.

Parking lot improvements will also enhance the pedestrian environment at NCM and bring them into conformance with city regulations. Adding trees to parking lots will create shade, reduce stormwater, and de-emphasize cars as a part of the visual environment. Lower hedges at the perimeter of the parking lots will screen views while reducing the visual barriers to off-site spaces. Bioswales can be used to beautify the parking lots and improve water quality.



Streetscape and parking lot improvements will enhance the campus for pedestrians.

NATURAL MEDICINE AND SUSTAINABILITY GO HAND IN HAND. Sustainability works to put our natural and built worlds into balance while natural medicine seeks to balance our own well-being and teach patients how to have life-long healthy bodies, minds and spirits. Natural medicine recognizes the interrelationship between our built environment and health, and promotes healthier neighborhoods and cities to help achieve a healthier body.

The Master Plan seeks to align NCNM's natural medicine practice with its physical campus by pursuing more aggressive sustainability strategies and creating a campus that creates spaces to nurture students, patients, faculty and staff. The following strategies will help improve the future sustainability of the campus.

DISTRIBUTED INFRASTRUCTURE

Distributed infrastructure refers to de-centralized utility systems that serve multiple buildings across a campus or district and due to their size, allow for economies of scale both during construction and in operation. Types of distributed infrastructure systems include solar PV, solar hot water, co-generation systems (combustion generators, microturbines, fuel cells), rainwater harvesting systems and wastewater treatment systems. The availability of various financial incentives at the federal, state and utility levels has helped spur the proliferation of third-party owned systems. To property owners who lack access to capital but who have the right kind of real estate, this solution has been very attractive. Both self-financed and third-party owned district systems may make sense for NCNM during the execution of the 20-year Master Plan.

BUILDING RENOVATIONS

With respect to building renovations, the opportunity exists to reinforce existing energy management practices and focus on the fine-tuning of the various building systems in order to ensure optimal performance (and least operating cost). Tracking and reporting on building performance are key parts of an energy management strategy. Energy audits should be conducted for the existing buildings that will be retained. A Level I Audit will identify an appropriate performance benchmark for the building and how well the building is currently



Solar PV is one type of distributed infrastructure system.

performing relative to this benchmark. A Level II Audit will go a step further and analyze the various energy end uses in the building to determine how impactful various energy efficiency measures may be on overall building performance, and make recommendations as to which types of energy efficiency improvements should be made.

PERFORMANCE CONTRACTING

Another alternative financing option to consider with respect to energy efficiency retrofits is to work with an energy service company ("ESCO"). ESCOs conduct energy audits, make recommendations and help finance the project by using the future energy savings to pay for the up-front cost of the improvements. As a client, NCNM would continue to pay the same amount in utility expenses over the life of the project; however, NCNM would pay a lower amount than previously to the utility due to the effect of the energy savings. The difference between the previous utility cost and the new, lower cost is paid to the ESCO to finance the improvements.

SUSTAINABILITY

INTEGRATED DESIGN

One very impactful yet easily implementable item is to use the integrated design process and sustainability goal setting early on for all projects, with involvement by faculty, students and staff. The benefits of this would go beyond the tangible outcomes and extend to building a sense of purpose around sustainability amongst the different communities at NCNM.

CAMPUS DEVELOPMENT STANDARDS

Campus development standards for specific building and finish material standards – both for new construction and for operations – will help streamline sustainable decisions. An example is creating a standard palette of sustainable materials that are pre-approved as ones that meet NCNM's visual and performance criteria. Another example is the type of cleaning products used across the campus.

SUSTAINABILITY COORDINATOR

Moving towards sustainability requires constant attention and dedication over the long term. Identifying a sustainability champion, to be strongly supported by the President and Board to implement the campus sustainability program will help ensure success. Ideally, a part-time or full-time sustainability coordinator position would be created, but until such time as funding can support this position, a volunteer could be designated. The sustainability coordinator could help expand the existing



Greenroofs detain stormwater, improve building performance, and demonstrate a commitment to sustainability.

composting and recycling programs on campus, improve building operations, and work to expand alternative transportation awareness and support.

THINKING BIG

Sustainability requires both big and little actions over the long term. One big idea that surfaced during the master planning process is maximizing open/green space and becoming a net zero water campus. A net zero water campus would mean that no more water is used on site than falls from the sky. What it will take to accomplish this has not yet been vetted, but rallying the NCNM community behind such a specific, big idea could be a very catalytic and transformative force for the campus should it come to pass!



The Master Plan seeks to transform the campus into a place where students can connect with a thriving, healthy urban landscape and increase the amount of useable green space.