# 6 indoor air quality

Indoor air quality is important for the health and productivity of the OCE&E's occupants. Low-emitting materials, including carpet, paints, adhesives, sealants and composite wood products will reduce the quantity of indoor air contamination. Natural ventilation via operable windows will decrease the need for mechanical ventilation during some parts of the year while improving user comfort and saving energy. Additionally, 75% of regularly occupied areas of the building have some daylighting and 90% have access to views to the outside, which will enhance the comfort and well-being of building users.

# 7 green roof

Water plays a key role in the natural ecology and cultural history of the Northgate neighborhood. Managing site rainwater using tools such a green roof (pictured below) will improve water quality downstream. Water that lands on the green roof is absorbed, slowed, and dispersed more slowly into nature than it would be if a conventional gutter system were used. The roof of the second floor is a white color, which reduces summer cooling loads by reflecting heat from the sun and will reduce the heat island effect, minimizing impacts on microclimates for human and wildlife habitats.



# nsc sustainability office

North Seattle College has been committed to sustainable and environmentally responsible practices for nearly two decades. In 2009, NSC students hired a Sustainability Coordinator to promote sustainable initiatives and work closely with students on campus.

The NSC Sustainability Program focuses on cocurricular education for students. This education includes opportunities for interships, work study, class assignments and volunteer project that support both student personal interests and making the College more sustainable. Many members of our campus and surrounding community are involved in developing a sustainable curriculum, promoting environmentally responsible practices and improving the environmental footprint of our campus.

Contact the Sustainability Office at timothy.albertson@seattlecolleges.edu or (206) 934-6127 for more information about how you can be involved with sustainability at NSC.

# Opportunity Center for Employment and Education



**Green Building Design Walking Tour** 



9600 College Way North

Seattle, Washington 98103

produced by the nsc sustainability office & schacht aslani architects

# walking tour stops

The new Opportunity Center for Employment & Education (OCE&E) is a reflection of NSC's dedication to promoting and creating a sustainable campus and community. The OCE&E aims to earn a LEED Gold certification with its green building design strategies. Construction of the 42,500 square foot building took just under two years.

#### 1 collocation

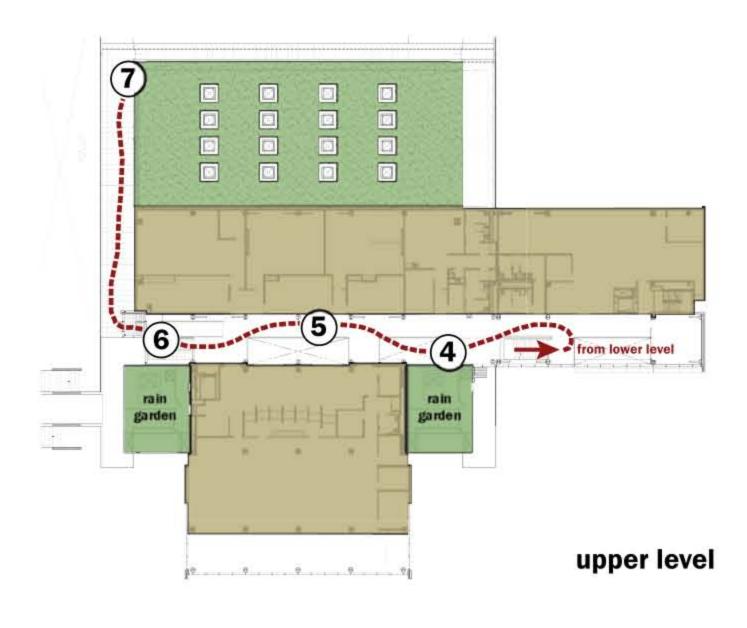
The OCE&E integrates employment and social services with basic skills education, workforce education and academic programs so that resources such as classrooms and computer labs can be shared between agencies and NSC. The location of this previously developed site offers excellent connectivity to campus. It will provide ease of access for students and clients who use many types of transportation, including bike, transit, walking and carpooling.

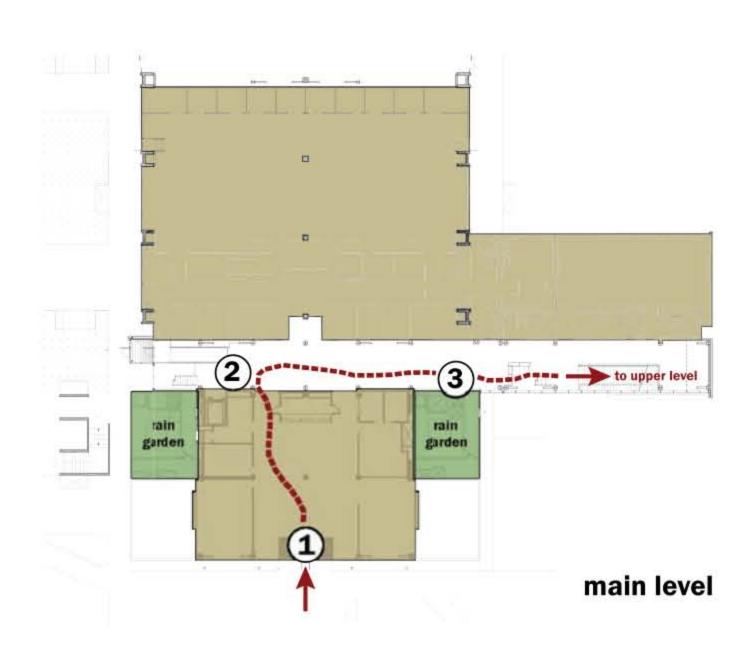
#### 2 waste

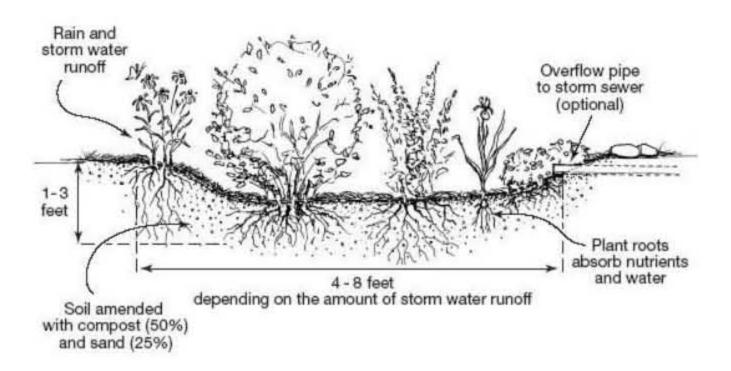
Waste from the construction and operation of the building presents a significant cost to the environment and to the budget of the College. In this project, 98% of the construction waste was diverted from landfills. Every interior waste station has clear signage for garbage, recycling and compost (where appropriate) and is serviced daily. Consistent container coloring and signage makes each waste station easy to use, creates less contamination and subsequently decreases overall facility costs. Also, at least 20% of the materials used in this project are made with recycled content. This reduces the need for extracting virgin materials for building material manufacturing.

## 3 rain garden

Two rain gardens infiltrate a significant percentage of the building's stormwater runoff. Conservation and effective stormwater management are important for maintaining and protecting finite groundwater supplies. Onsite stormwater infiltration reduces the impacts of discharging stormwater into local surface water supplies, helping to improve the health of local water ecosystems. By decreasing stormwater runoff and treating stormwater on site, the College can help replenish natural aquifers, reduce erosion impacts and minimize local water contamination.







#### 4 water

Water-saving fixtures and equipment will save thousands of gallons of water each year. Low-flow and water-efficient fixtures help to reduce overall water use throughout the building. Water bottle filling stations located on each floor provide clean filtered water with which building users can refill their reuseable water bottles, reducing waste created by disposable plastic water bottles. Irrigation for landscaped plants will be used for plant establishment only, and this project will use at least 50% less potable water for irrigation then a conventional building. Eventually, no potable water irrigation will be used on the grounds surrounding the OCE&E.

## 5 energy

Many energy-saving features have been included in this building. High-performance south-facing windows with deep overhangs and sun shades reduce solar gain and maintain outdoor views while minimizing glare. Building lighting near windows is designed to dim and use less energy when the sun is providing light. Building energy modeling estimates 18% less energy consumption when compared with conventional construction. Also, an under-floor air distribution system helps to maximize energy performance by reducing the energy needed to distribute air throughout the building. Review and verification steps were made during the design and construction process to ensure that the building performs in the way in which it was designed and contracted.