

FAIRVIEW + ACADIA NEW BEHAVIORAL HEALTH HOSPITAL ST. PAUL, MN



Landscape and Stormwater Narrative

Project Summary

The Fairview + Acadia Team is proposing a new Behavioral Health Hospital on the site of the existing Bethesda Hospital in the Capitol Area of St Paul, MN. The project will include new landscape treatments and the implementation of stormwater measures to meet or exceed the stormwater management requirements of the applicable agencies having jurisdiction. Because of the relationship and interdependence of the proposed stormwater measures and the selection of plant materials for the site, the objectives for both will be addressed in this narrative.

The original facility was constructed in 1931, and the campus includes:

- The existing hospital
- The greenspace across Capitol Boulevard from the hospital, bordered by Como and Cedar Street
- An existing surface parking lot in the southeast quadrant of the Capitol Boulevard/Charles Avenue intersection
- The existing parking ramp south of the hospital

The campus benefits from the existing greenspace which includes a variety of tree species and an inviting pedestrian environment. There is a centrally located gazebo and walkways that circulate through the space. This greenspace will remain in its current condition.

The hospital building has some foundation planting along the front façade. The areas along Como and Park Street are utilitarian and dedicated to service and delivery access. The areas along Park Street are mostly paved driveways with service entrances in multiple locations, leaving little space for trees or other landscape treatments.

The campus was constructed prior to the enactment of various national and statewide programs, including the Capitol Region Watershed District regulations for stormwater quality and detention. There are currently no stormwater quality or detention facilities on the campus. The stormwater discharges into the existing system of subsurface drainage around the perimeter of the site.

A significant portion of the site is impervious around the existing hospital and surrounding pavement providing service and vehicular access. These areas will be demolished, and a new facility will be constructed, providing an opportunity to provide new landscape treatments and stormwater measures. This will be done not only to satisfy the requirements, but also to provide an enhanced visual environment for staff and visitors of the facility as well as the pedestrians traveling the routes around the perimeter of the campus.

Landscape Design

Landscape treatment will be included through out the project area, including the new roundabout drive, the foundation areas of the new facility and along Como and Park. Plant selections will be made based on appropriateness for the region, utilizing native and low water use plantings where possible. Some of the objectives for the plantings will be:

- Zone hardy and native, non-invasive plantings- include plantings of native material wherever practical, utilizing both native and non-invasive selections from the Department of Natural Resources Plant Guide.
- Urban Tree Canopy - plant trees that increase and diversify the existing tree canopy. The project will include the planting of shade and large canopy trees throughout the development to offset the effects of temperature and to enhance the plant diversity of the project site.
- Plants for Pollinators – where possible, include plants to aid in pollinator conservation. Effort will be made to include the planting of “Pollinator-friendly” flowering shrubs and perennials.
- Stormwater Management – planting of proposed bioswales and infiltration areas will be selected to provide function and aesthetic appeal, especially in the areas along Park Street.
- Park Street Landscape – this will be an area of focus, including a more intense canopy tree planting, reduction of service drives and pavement, screening of mechanical and service equipment and implementation of bioswale plantings to soften the areas between the walk, building and activity yards.

Stormwater Design

Coordination with Capitol Region Watershed District (CRWD) staff is underway to develop strategies for the design of the stormwater and water quality measures to be implemented for the site.

Understanding the nature of the existing system and the stormwater management plan that guides the district has been of benefit. Areas of discussion:

- The overall vision and design direction of the site
- Stormwater management elements including treatment areas and BMP siting and types
- potential ways that CRWD may be able to assist with stormwater elements that exceed regulatory requirements

The CRWD has provided information on recent stormwater management projects that have been successful in the area. Elements from these examples may be utilized to the benefit of this project.

The primary concepts that have been discussed for this project include the utilization of subsurface detention for the rainwater leaders from the building and the parking area runoff. The remaining areas will be treated with bioswales and infiltration if soil conditions warrant it. The future addition will be incorporated in the current design.

The CRWD encourages the implementation of measures that exceed the regulatory requirements and provides funding measures to offset additional costs. Areas of interest that may be explored are:

- Rainwater harvesting

- Analyzing areas of the campus that will not be disturbed as part of the project for potential stormwater treatment with oversized detention areas

Two areas of opportunity have been identified on campus for potential grant funding of additional stormwater treatment:

- Existing Surface Lot – there are currently no stormwater treatment or detention measures in place for the stormwater run-off for this lot. Implementation of stormwater treatment through raingardens or bioswales would be an opportunity for CRWD participation through grant funding of the construction of these measures.
- Parking Ramp Stormwater Discharge – the ramp has two discharge points that daylight on the south side of the structure and drain onto the lot south of the structure. There are currently no stormwater treatment or detention measures in place to treat this run-off. Implementation of stormwater treatment through raingardens or bioswales would be an opportunity for CRWD participation through grant funding of the construction of these measures.
- Water runnel system or pond to harvest and use rainwater to be utilized as an educational opportunity for the public

It is anticipated that these areas of interest will be considered as part of the overall design process involving members of the Fairview + Acadia team to determine the viability of each.

The stormwater design will evolve, and the initial concepts presented here will undoubtedly change based on actual conditions encountered during design. An ongoing dialog with the staff at CRWD will be beneficial to ensure that the final design is successful.