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Saint Paul Sustainable Building Policy
Trout Brook Nature Sanctuary
Restroom Facility

STAFF REPORT

The Department of Parks and Recreation is seeking a partial waiver from the Saint Paul Sustainable Building Policy (“Policy”) for a new restroom facility at Trout Brook Nature Sanctuary and Regional Trail trailhead.

The Policy applies to all “municipal or HRA owned facilities financed by the City of Saint Paul or HRA and those buildings utilized by the City’s Executive Departments, the Saint Paul Public Library, or the Saint Paul Parks and Recreation Department. The Policy requires that such projects comply with a rating system (e.g., LEED) and the Saint Paul Overlay.

The proposed restroom trailhead is an 864 sq. ft. seasonal structure. Due to its small size and seasonal nature, the costs and effort to administer the building with one of the rating systems would be disproportionate to the costs of construction. Parks and Recreation staff recommends that the building comply with relevant items of the Overlay portion of the Policy. Compliance with the Overlay ensures that the building will conserve energy, reduce use of potable water, and divert construction waste from landfills. All of this will be achieved with relatively lower cost and administrative effort than if the Policy was applied in its entirety.

The Trout Brook Nature Sanctuary and Regional Trail project will redevelop a 42 acre brownfield site into a nature sanctuary with ponds, wetlands, a stream channel, nature trails, a paved regional trail, native plant restoration, and related park amenities. The restroom building is situated at the corner of Maryland Avenue and Jackson Street and will serve both regional trail and park users. The entire site will be rated through the Envision™ Sustainable Infrastructure Rating System, as this best aligns with the overall goals of the project. Envision™ provides a holistic framework for evaluating and rating the community, environmental, and economic benefits of all types and sized of infrastructure projects. It evaluates, grades, and gives recognition to infrastructure projects that use transformational, collaborative approaches to assess the sustainability indicators over the course of the project’s life cycle.

The Saint Paul Overlay to the Policy requires that projects achieve minimum levels of attainment in several environmental areas. The restroom trailhead building will meet the relevant requirements of the Overlay as follows:

1. Predicted energy use shall meet Minnesota Sustainable Building 2030 “Energy Standards” for new buildings.

- a. *Because the building is seasonal, and there is no energy used for heating or cooling, there is no benefit to modeling energy use and no opportunity to meet the SB 2030 Energy Standard.*
 - b. *Building lights are LED fixtures and are up to 90% more efficient than incandescent lighting .*
 - c. *The building has skylights to reduce the need for artificial light during the day.*
2. Predicted use of potable water in the building must be at least 30% below EPA Policy act of 1990.
 - a. *Plumbing fixtures are low consumption units with low water consumption valves. Water closets (4) use 1.28 gpf, urinals (2) use 0.5 gpf, and sinks (2) use 0.5 gpm of water.*
3. Predicted water use for landscaping must be at least 50% less than traditionally irrigated site using typical water consumption for underground irrigation systems standards.
 - a. *N/A. There is no irrigation for landscaping as part of this project.*
4. Actual solid waste of construction materials, excluding demolition waste, must be at least 75% recycled or otherwise diverted from landfills.
 - a. *At least 75% of construction waste will be diverted from landfills as documented in the Construction Waste Calculator*
5. Indoor Environmental Quality (IEQ) must be addressed through the following strategies:
 - a. *Ventilation based on ASHRAE 62.1-2004 or meet the minimum requirements of Sections 4 through 7 of ASHRAE standard 62.1-2007. Ventilation meets the requirements of ASHRAE 62.1-2007 and is controlled by occupancy sensors.*
 - b. *Construction IEQ management plan: This requirement will be met as documented in the IEQ Calculator*
 - c. *Low-emitting materials: This requirement will be met as documented in the Materials Log.*
 - d. *Thermal comfort: N/A due to seasonal structure.*
6. Storm Water Management Requirements:
 - a. *Site Eligibility: sites with ¼ acre or more of total land disturbance. This building is part of the Trout Brook Nature Sanctuary project which will develop 42 acres into a nature preserve. The project will create ponds, wetlands, and a stream channel that will harvest water from the site, the neighborhood to the west, and the Trout Brook storm sewer.*
 - b. *Rate Control: The storm water management meets the rate control as set forth by the Capitol Regional Watershed District.*
 - c. *Water Quality Management: This project is diverting 108,000 cu. ft. of stormwater from the western sub-watershed out of an existing storm sewer system via hydro-dynamic separators that can capture up to 80% of the Total Suspended Solids (TSS). Stormwater then flows into ponds enhanced with iron filtration benches, which can remove up to 80% of the Total Phosphorus and then flows into a wetland system and discharges into the stream channel. The stream channel flows into an existing stormwater pond where it then empties into the storm sewer system.*
 - d. *Volume Control/Infiltration: Due to brownfield contamination, we are unable to infiltrate the water on the site. This project will create 108,900 volume credits from the Capitol Region Watershed District for the City by diverting stormwater out of the existing stormwater system during 1 and 2 inch storm events. The existing storm sewer system will remain in place for overflow during lower probability storm events. This project is a partnership project between the Department of Parks and Recreation and the Department of Public Works, Sewer Utility Division.*
 - e. *Operation and Maintenance plan: A Memorandum of Understanding has been drafted between Parks and Recreation and Public Works Sewer Utility Division*

on operation and maintenance of the stormwater facilities. Parks and Recreation will assume responsibility for the rain garden that is associated with the building and parking lot at the trailhead. This includes annual sediment removal and plant maintenance.

7. Predicted greenhouse gas emissions must be reported to the Minnesota Sustainable Building 2030 database.
 - a. *The only energy used by the building will be for lighting and those lights are LED fixtures that consume up to 90% less electricity than typical. There is, therefore, very little value in tracking the greenhouse gas emissions of this building*
8. Annual submittals of energy usage data to the Minnesota Sustainable Building 2030 database.
 - a. *Because the building is seasonal, and there is no energy used for heating or cooling, there is very little benefit to tracking energy use*