March 11, 2013

To: Victoria Park Design Advisory Committee Members

From: Don Ganje, FASLA

Re: Sustainable Sites Initiative in regards to Victoria Park

At the request of Kent Petterson, a memo summarizing Sustainable Sites Initiative (SITES) and has been completed. Mr. Petterson suggested Victoria Park receive official SITES accreditation and this memo has been prepared to briefly explain to all Committee members the criteria Victoria Park would have to meet to be a SITES accredited project. Specific information on SITES can be accessed at the following website:

http://www.sustainablesites.org

Summary of SITES

SITES is an interdisciplinary partnership with American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden. The Initiative’s development of site-specific benchmarks is grounded in an understanding of healthy systems and natural processes.

Sustainable Sites Initiatives defines sustainability as “design, construction, operations, and maintenance practices that meet the needs of the present without compromising the ability of future generations to meet their own needs.” Sustainable performance benchmarks will enable built landscapes to support natural ecological functions by protecting existing ecosystems and regenerating ecological capacity where it has been lost. These guiding principles are:
During April of 2010, a number of pilot projects were completed to test and refine the Guidelines and Performance Benchmarks 2009 and its rating system over the course of two years. These pilot projects have recently been completed and SITES is expected to release the complete 2013 Rating System and Reference Guide mid-2013. At that time, open enrollment will begin for any project to pursue certification. Please note that the guidelines and benchmarks summarized below are based on 2009 standards and do not reflect the final version.

Guidelines and Performance Benchmarks

The Guidelines and Performance Benchmarks encompass a series of prerequisites and credits for measuring site sustainability. Benchmarks outlined as a “Prerequisite” are required and must be met to participate in the voluntary program. Benchmarks outlined under “Credits” are optional, but a certain number must be attained for a project to achieve recognition as a Sustainable Site.

A rating system has been developed that weights certain exercises based on a 250 – point system. Prerequisites are required and therefore are not assigned a point value. Credits are assigned a point and in many cases offer a range of points. SITES will recognize projects that have achieved all the prerequisites and at least 40 percent of total points. Beyond the basic certification level, projects may complete additional credits to achieve higher levels of certification.

<table>
<thead>
<tr>
<th>2009 Rating System</th>
<th>250 Points Total</th>
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<tbody>
<tr>
<td>One Star:</td>
<td>100 points (40% of total points)</td>
</tr>
<tr>
<td>Two Stars:</td>
<td>125 points (50% of total points)</td>
</tr>
<tr>
<td>Three Stars:</td>
<td>150 points (60% of total points)</td>
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<tr>
<td>Four Stars:</td>
<td>200 points (80% of total points)</td>
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Prerequisites and credits are organized into the following nine sections:

1. Site Selection
2. Pre-Design Assessment and Planning
3. Site Design – Water
4. Site Design – Soil and Vegetation
5. Site Design – Materials Selection
6. Site Design – Human Health and Well-Being
7. Construction
8. Operations and Maintenance
9. Monitoring and Innovation

A full listing of Guidelines and Performance Benchmarks 2009 are available on the project website, but an overall listing of Prerequisites and Credits are provided at the end of this document.

**City’s Position on SITES**

As indicated in the meeting notes from the Victoria Design Advisory Meeting #3 held December 4, 2012, the City stated that SITES has not been adopted by City of Saint Paul. The City has concerns about expending funds towards a policy that has not been adopted. However, the City is committed to referring to SITES guidelines as mock SITES accreditation for Victoria Park.
INDEX OF PREREQUISITES AND CREDITS

1. Site Selection 21 possible points
Select locations to preserve existing resources and repair damaged systems

Prerequisite 1.1: Limit development of soils designated as prime farmland, unique farmland, and farmland of statewide importance 15
Prerequisite 1.2: Protect floodplain functions 19
Prerequisite 1.3: Preserve wetlands 22
Prerequisite 1.4: Preserve threatened or endangered species and their habitats 24
Credit 1.5: Select brownfields or greyfields for redevelopment (5–10 points) 26
Credit 1.6: Select sites within existing communities (6 points) 28
Credit 1.7: Select sites that encourage non-motorized transportation and use of public transit (5 points) 30

2. Pre-Design Assessment and Planning 4 possible points
Plan for sustainability from the onset of the project

Prerequisite 2.1: Conduct a pre-design site assessment and explore opportunities for site sustainability 33
Prerequisite 2.2: Use an integrated site development process 44
Credit 2.3: Engage users and other stakeholders in site design (4 points) 46

3. Site Design—Water 44 possible points
Protect and restore processes and systems associated with a site’s hydrology

Prerequisite 3.1: Reduce potable water use for landscape irrigation by 50 percent from established baseline 49
Credit 3.2: Reduce potable water use for landscape irrigation by 75 percent or more from established baseline (2–5 points) 54
Credit 3.3: Protect and restore riparian, wetland, and shoreline buffers (3–8 points) 57
Credit 3.4: Rehabilitate lost streams, wetlands, and shorelines (2–5 points) 60
Credit 3.5: Manage stormwater on site (5–10 points) 63
Credit 3.6: Protect and enhance on-site water resources and receiving water quality (3–9 points) 78
Credit 3.7: Design rainwater/stormwater features to provide a landscape amenity (1–3 points) 82
Credit 3.8: Maintain water features to conserve water and other resources (1–4 points) 85

4. Site Design—Soil and Vegetation 51 possible points
Protect and restore processes and systems associated with a site’s soil and vegetation

Prerequisite 4.1: Control and manage known invasive plants found on site 88
Prerequisite 4.2: Use appropriate, non-invasive plants 90
Prerequisite 4.3: Create a soil management plan 92
### INDEX OF PREREQUISITES AND CREDITS

| Credit 4.4: Minimize soil disturbance in design and construction (6 points) | 95 |
| Credit 4.5: Preserve all vegetation designated as special status (5 points) | 99 |
| Credit 4.6: Preserve or restore appropriate plant biomass on site (3–8 points) | 101 |
| Credit 4.7: Use native plants (1–4 points) | 109 |
| Credit 4.8: Preserve plant communities native to the ecoregion (2–6 points) | 111 |
| Credit 4.9: Restore plant communities native to the ecoregion (1–5 points) | 114 |
| Credit 4.10: Use vegetation to minimize building heating requirements (2–4 points) | 116 |
| Credit 4.11: Use vegetation to minimize building cooling requirements (2–5 points) | 118 |
| Credit 4.12: Reduce urban heat island effects (3–5 points) | 120 |
| Credit 4.13: Reduce the risk of catastrophic wildfire (3 points) | 122 |

#### 5. Site Design—Materials Selection  
36 possible points

**Prerequisite 5.1:** Eliminate the use of wood from threatened tree species  
Credit 5.2: Maintain on-site structures, hardscape, and landscape amenities (1–4 points)  
Credit 5.3: Design for deconstruction and disassembly (1–3 points)  
Credit 5.4: Reuse salvaged materials and plants (2–4 points)  
Credit 5.5: Use recycled content materials (2–4 points)  
Credit 5.6: Use certified wood (1–4 points)  
Credit 5.7: Use regional materials (2–6 points)  
Credit 5.8: Use adhesives, sealants, paints, and coatings with reduced VOC emissions (2 points)  
Credit 5.9: Support sustainable practices in plant production (3 points)  
Credit 5.10: Support sustainable practices in materials manufacturing (3–6 points)

#### 6. Site Design—Human Health and Well-Being  
32 possible points

**Build strong communities and a sense of stewardship**

Credit 6.1: Promote equitable site development (1–3 points)  
Credit 6.2: Promote equitable site use (1–4 points)  
Credit 6.3: Promote sustainability awareness and education (2–4 points)  
Credit 6.4: Protect and maintain unique cultural and historical places (2–4 points)  
Credit 6.5: Provide for optimum site accessibility, safety, and wayfinding (3 points)  
Credit 6.6: Provide opportunities for outdoor physical activity (4–5 points)  
Credit 6.7: Provide views of vegetation and quiet outdoor spaces for mental restoration (3–4 points)  
Credit 6.8: Provide outdoor spaces for social interaction (3 points)  
Credit 6.9: Reduce light pollution (2 points)

#### 7. Construction  
21 possible points

**Minimize effects of construction-related activities**

**Prerequisite 7.1:** Control and retain construction pollutants  
**Prerequisite 7.2:** Restore soils disturbed during construction

Credit 7.3: Restore soils disturbed by previous development (2–8 points)  
Credit 7.4: Divert construction and demolition materials from disposal (3–5 points)  
Credit 7.5: Reuse or recycle vegetation, rocks, and soil generated during construction (3–5 points)  
Credit 7.6: Minimize generation of greenhouse gas emissions and exposure to localized air pollutants during construction (1–3 points)
8. Operations and Maintenance  **23 possible points**

**Maintain the site for long-term sustainability**

- **Prerequisite 8.1:** Plan for sustainable site maintenance  190
- **Prerequisite 8.2:** Provide for storage and collection of recyclables  198
- Credit 8.3: Recycle organic matter generated during site operations and maintenance (2–6 points)  199
- Credit 8.4: Reduce outdoor energy consumption for all landscape and exterior operations (1–4 points)  201
- Credit 8.5: Use renewable sources for landscape electricity needs (2–3 points)  203
- Credit 8.6: Minimize exposure to environmental tobacco smoke (1–2 points)  204
- Credit 8.7: Minimize generation of greenhouse gases and exposure to localized air pollutants during landscape maintenance activities (1–4 points)  206
- Credit 8.8: Reduce emissions and promote the use of fuel-efficient vehicles (4 points)  208

9. Monitoring and Innovation  **18 possible points**

**Reward exceptional performance and improve the body of knowledge on long-term sustainability**

- Credit 9.1: Monitor performance of sustainable design practices (10 points)  210
- Credit 9.2: Innovation in site design (8 points)  214