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Ford Site Open Space Guidelines

City of Saint Paul



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Executive Summary

The Ford site in Saint Paul's Highland Park neighborhood has been the focus of significant community energy since Ford Motor Company announced the facility's planned closure several years ago. In response to that announcement, Saint Paul facilitated a community urban design process to explore alternative futures for the site. Each of the five possible redevelopment alternatives includes new open spaces ranging from gathering places to active recreational fields to natural areas.

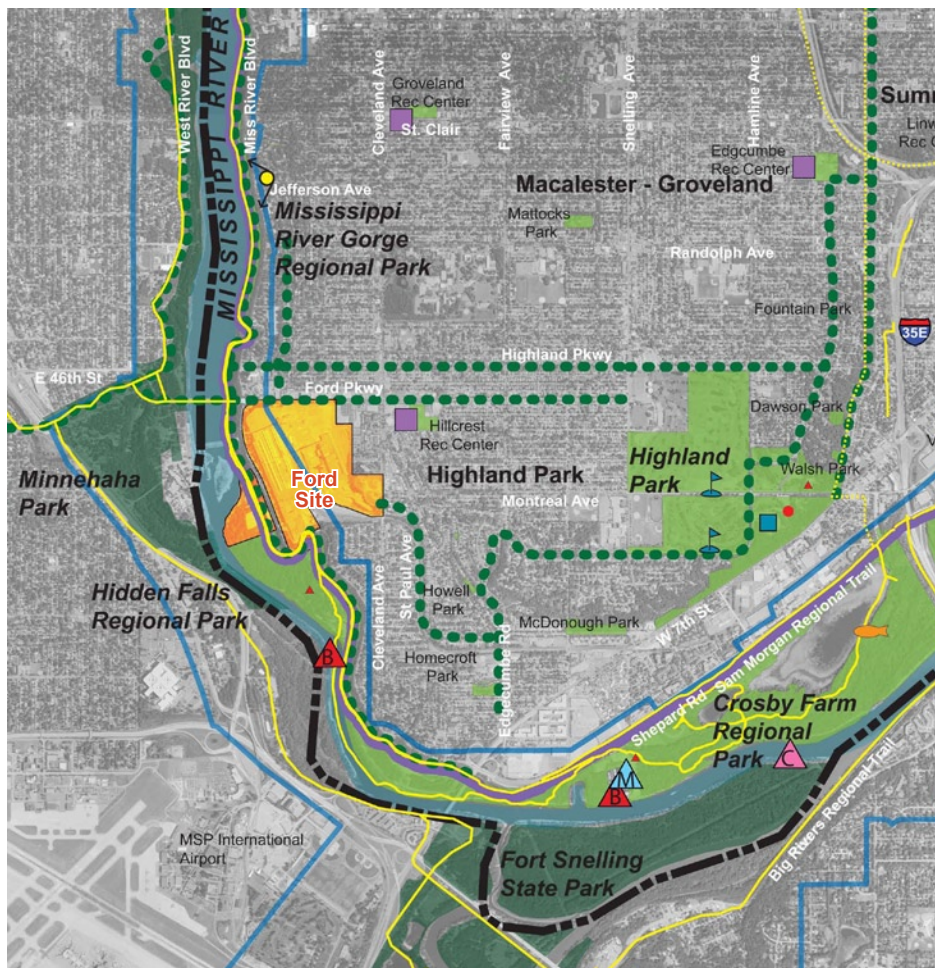
While the future of the Ford site remains tentative, Saint Paul has identified the need to establish open space guidelines and funding strategies for the site that can inform any and all redevelopment concepts regardless of pattern or use. **The intent of open space guidelines is not to physically design open spaces on the Ford site but rather to identify programmatic, design and performance criteria for future open spaces.** Similarly, potential funding strategies are needed to ensure that there are sufficient resources and operating systems to sustain high quality operations and programming of new open spaces.

The seven-month process to develop guidelines was coordinated jointly by Saint Paul Planning & Economic Development (PED) and Parks & Recreation. Creation of the guidelines has been overseen by a Ford Site Open Space Workgroup convened six times beginning in June 2010. The Open Space Workgroup is one of several topical workgroups organized to support the broader work of the Ford Site Planning Task Force. The Workgroup is composed of 12 members representing community interests and specialized knowledge in urban design, real estate development and finance, landscape/park design, stormwater management, recreation programming, and Mississippi River corridor planning and management.

These open space guidelines are coordinated with the work of two concurrent efforts - the Great River Park Master Plan and the Saint Paul Park and Recreation System Facilities Plan. An example of how the projects work together includes sharing the findings of a community-wide recreation demand analysis. Another example is an early concept in the Great River Park project suggesting a pedestrian and surface water connection from Hidden Falls into the Ford site. The Great River Park project will suggest how Hidden Falls can be programmed and designed while this project can identify guidelines and funding strategies for the open space connection once it enters the Ford site.

Guiding Principles

- » More open space is preferred to less.
- » League-play baseball fields should continue to be part of Ford site uses.
- » If higher acreages of open space can be attained, natural areas along the bluff should be expanded.
- » Open space features should strive to provide multiple functions.
- » Recreational uses at the Ford site should serve the site's new development as well as the surrounding community.
- » Open space should create an inter-connected greenway system.
- » Riverfront parcel should be publicly-accessible.
- » Options for the riverfront parcel should be explored in greater detail.
- » The economic value of open space should be recognized in comparing different land-use scenarios.
- » Balance open space ideals with the numerous other redevelopment considerations.



Context Map

Open Space Preferences



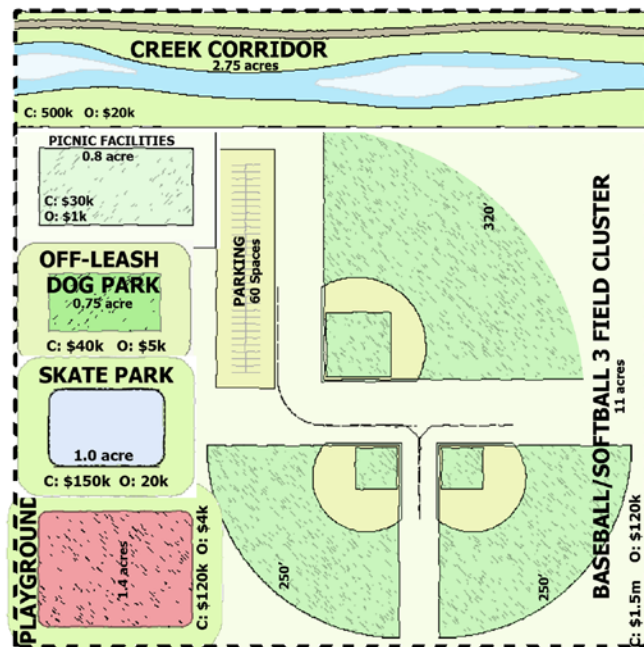
The Ford Site Open Space Workgroup devoted early meetings to understanding Saint Paul's park and recreation needs both system-wide and for the community around the Ford site. They also heard from several experts on the topics of athletics, habitat, stormwater and community recreation to understand key trends and considerations. The deeper level of understanding provided in these meetings in addition to an already strong community leadership basis each played a role in the group's open space preference selections.

On November 1 and November 15, 2010 the Ford Site Open Space Workgroup participated in a group exercise to identify priority open space features for a redeveloped Ford site. The group made feature selections from a wide array of scaled options with the objective of filling three boards that represented varying amounts of open space depicted in the five Ford Site redevelopment scenarios.

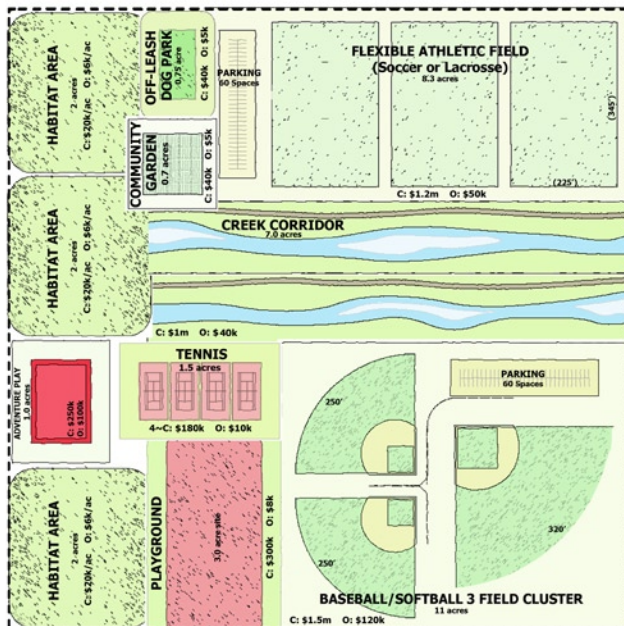
The three levels of open space used in the exercise were 10% of the site (roughly 15 acres), 25% of the site (39 acres), and 45% of the site (70 acres). The acreage calculations were based on a combined total of the bluff top parcel, river parcel and rail yards – all of which are anticipated to be part of the redevelopment package. The chosen land areas were used because they represent the range of open space exhibited through the five redevelopment scenarios selected by the community in the first phase of planning for the site.

10% of site area (15 acres): The group struggled with this level of open space because it was generally felt to be too small to provide adequate community recreation. The features chosen are generally neighborhood-scaled with the exception of the community ball fields. In this and every scenario the group used the component of a creek corridor as an expression of the possible reintroduction of Hidden Creek, which existed on the site before development. The selections include:

- » Roughly 3 acres of neighborhood-based and neighborhood-scale recreation such as playground, picnic area, small skate park and small dog park.
- » Roughly 10 acres of programmed community ball fields that were discussed as replacement for existing fields at the Ford site.
- » Roughly 2 acres of passive open space with habitat value that could be configured as a surface water (creek) amenity.



25% of site area (39 acres): With this level of open space, the group kept similar recreational components as in the smallest open space diagram, but expanded their scale and added significantly more natural open space and community athletics. The selections include:



- » Roughly 7 acres of neighborhood/community-scale recreation such as playground, picnic area, skate park, dog park and tennis courts.
- » Roughly 19 acres of programmable community fields including both ball fields and flexible fields that could accommodate sports like soccer and lacrosse.
- » Roughly 13 acres of passive open space with habitat value including a creek corridor.

45% of site area (70 acres): At this level of open space, the group selected more community park-scaled features, expanded athletic offerings and expanded natural areas. The group felt that this scale of open space would offer the opportunity for bigger and better dedicated recreational features such as a dog park and community garden as well as allow for meaningful natural areas at both the interior of the site and along the Mississippi River bluff top. The selections include:



- » Roughly 20 acres of diverse community recreation such as playground, picnicking, community gathering, tennis, ice-skating, open lawn, dog park and adventure play/skate park.
- » Roughly 26 acres of programmable community fields including both ball fields and flexible fields that could accommodate sports like soccer and lacrosse.
- » Roughly 24 acres of passive open space with habitat value including a creek corridor.

Strategic Guidance

Based on the feature selections made by the group, the following open space budgets are identified:

10% of site area (15 acres):

- » Capital budget total = roughly \$3.1 million or \$200,000/acre
 - » Comprised of:
 - » Features- \$2.2 million
 - » General park elements- \$150,000
 - » Surcharge- \$705,000
 - » Land acquisition not factored *
- » Annual operating budget = roughly \$170,000 or \$11,000/acre

25% of site area (39 acres):

- » Capital budget total = roughly \$6.5 million or \$170,000/acre
 - » Comprised of:
 - » Features- \$4.6 million
 - » General park elements- \$390,000
 - » Surcharge- \$1.5 million
 - » Land acquisition not factored *
- » Annual operating budget = roughly \$375,000 or \$10,000/acre

45% of site area (70 acres) =

- » Capital budget total: roughly \$8.9 million or \$130,000/acre
 - » Comprised of:
 - » Features- \$6.1 million
 - » General park elements- \$700,000
 - » Surcharge- \$2.1 million
 - » Land acquisition not factored *
- » Annual operating budget = roughly \$500,000 or \$7,000/acre

* **Possible land acquisition costs are not included** because, at this early stage, they could vary widely and it isn't known whether land acquisition will be part of the redevelopment equation. However, it is important to recognize that land acquisition costs could be significant and easily exceed recreational development costs per acre.

Assessing Private Developer Potential to Fund Open Space

A redeveloped Ford site will contribute to the City's tax/economic base and include parkland to serve the city's residents and enhance the value of surrounding development. It is important to establish a conversation with the City, with Ford, and with the developer of the site about the ability of the site's developer to pay for the construction and operations of open space.

Different characters of parkland have different potentials for securing these various funding sources, with parkland utilization being the primary revenue driver. However, utilization can be difficult to gauge and even once utilization is maximized, users may not have the capacity to secure funding sources in amounts sufficient to cover the additional costs of a highly-utilized park. Nonetheless, some of the open space elements desired by the community have potential for third-party (non-direct local government/developer) funding.

Potential Third-Party Funding Sources by Program Element

The following matrix provides a conceptual framework for thinking about the relative propensity of third-party funding sources (in addition to the City's general fund) for each open space element:

Program Element	Real Estate Levies or District Assessments	Dedicated Tax Revenues	Retail Concessions & Private Events	Philanthropy & Sponsorships
Nature Areas	●	●	■	▲
Trails	●	●	■	●
Gathering/Picnic Grounds	●	▲	●	▲
Dog Parks	●	■	▲	■
Community Gardens	●	▲	■	▲
Play Areas	●	■	■	▲
Ice Skating	▲	■	●	●
Adventure Sports	▲	■	●	●
Ballfields & Courts	▲	■	▲	●

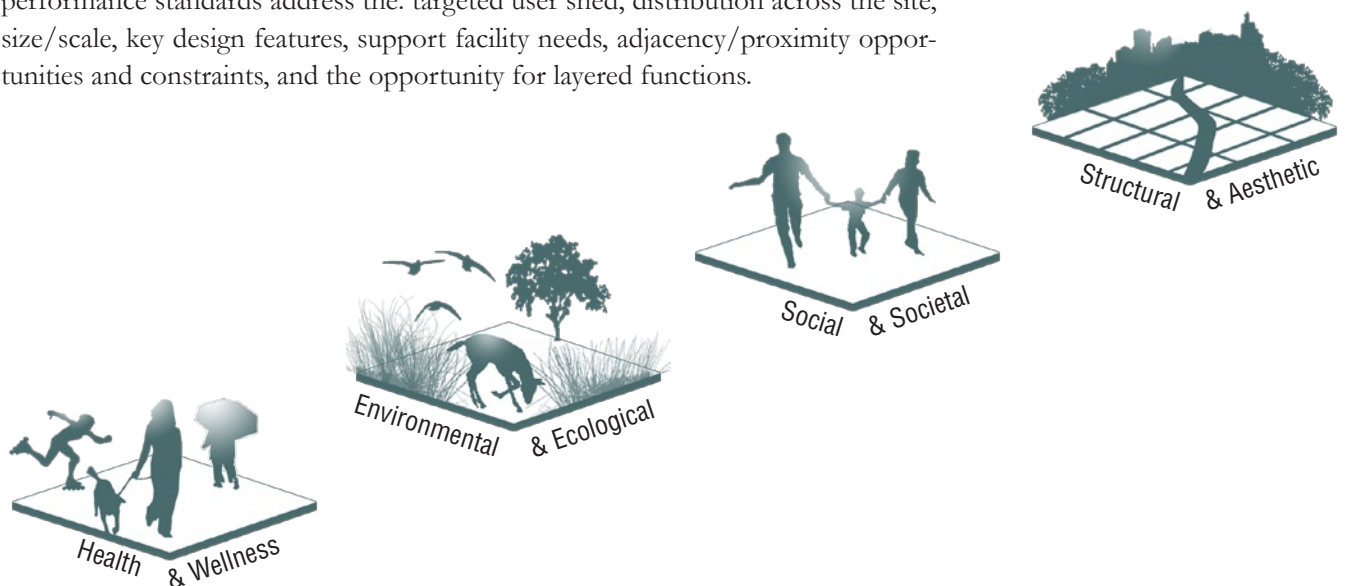
● = greater willingness/resources for funding source

▲ = moderate willingness/resources

■ = minimal willingness/resources

Open Space Performance Standards

The performance standards in the appendix are organized by open space feature, starting with more passive recreation and moving to more active recreation. The performance standards address the: targeted user shed, distribution across the site, size/scale, key design features, support facility needs, adjacency/proximity opportunities and constraints, and the opportunity for layered functions.



Chapter 1

Introduction

The Ford site in Saint Paul's Highland Park neighborhood has been the focus of significant community energy since Ford Motor Company announced the facility's planned closure several years ago. In response to that announcement, Saint Paul facilitated a community urban design process to explore alternative futures for the site. Each of the five possible redevelopment alternatives includes new open spaces ranging from gathering places to active recreational fields to natural areas.

While the future of the Ford site remains tentative, Saint Paul has identified the need to establish open space guidelines and funding strategies for the site that can inform any and all redevelopment concepts regardless of pattern or use. The intent of open space guidelines is not to physically design open spaces on the Ford site but rather to identify programmatic, design and performance criteria for future open spaces. Similarly, potential funding strategies are needed to ensure that there are sufficient resources and operating systems to sustain high quality operations and programming of new open spaces.



An underlying premise of these guidelines is that the Ford site will be predominantly devoted to urban uses along with some level of new open space as opposed to the notion that a majority of the site will be devoted to open space.

The seven-month process to develop guidelines was coordinated jointly by Saint Paul Planning & Economic Development (PED) and Parks & Recreation. Creation of the guidelines has been overseen by a Ford Site Open Space Workgroup convened six times beginning in June 2010. The Open Space Workgroup is one several topical workgroups organized to support the broader work of the Ford Site Planning Task Force. The Workgroup is composed of 12 members representing community interests and specialized knowledge in urban design, real estate development and finance, landscape/park design, stormwater management, recreation programming, and Mississippi River corridor planning and management. The Workgroup is charged with the following duties:

- » Review the open space plan in each of the five redevelopment scenarios created for the Ford bluff-top site.
- » Prioritize active and passive space programming for the bluff-top and river parcels of the Ford site.
- » Prepare capital and operational budget estimates for the prioritized open space features.
- » Develop potential funding sources and identify which open space features they would be suited for.

These open space guidelines are coordinated with the work of two concurrent efforts - the Great River Park Master Plan and the Saint Paul Park and Recreation System Facilities Plan. An example of how the projects work together includes sharing the findings of a community-wide recreation demand analysis. Another example is an early concept in the Great River Park project suggesting a pedestrian and surface water connection from Hidden Falls into the Ford site. The Great River Park project will suggest how Hidden Falls can be programmed and designed while this project can identify guidelines and funding strategies for the open space connection once it enters the Ford site.

A primary element of the Saint Paul Park and Recreation System Facilities Plan is the positioning of community centers across the city including Hillcrest Community Center, a short distance from the Ford site. The facilities plan indicates that decisions about park features at the Ford site will influence the approach to Hillcrest. The facilities plan outlines an option to move ball fields to the Ford site in exchange for more parking at Hillcrest. Over the next 20 years the City will continue to operate Hillcrest Community Center and Highland Library. The facilities plan also suggests that as the Hillcrest building ages (beyond 20 years), the City should consider opportunities to relocate the center to a new, nature focused location on the Grand Rounds (within Great River Park or on the Ford Site). If Hillcrest Community Center/Library is relocated, the existing park land could remain in the system and continue to provide neighborhood and community recreation opportunities.

Guideline Organization

This document has three general chapters and an important appendix. Each chapter expresses an important aspect of the guidelines but it is the document in total that represents the “open space guidelines” for the Ford site. The chapters of the Ford Open Space Guidelines include:

- 1** Introduction: Establishes a framework and guiding principles for the guidelines.
- 2** Open Space Preferences: Identifies the types of open space facilities and features that are preferred for the Ford site.
- 3** Strategic Guidance: Provides open space funding parameters and approaches.

Appendix

Performance Standards: Establishes standards for construction and operation of each category of open space.

Key Definitions

Open space: Natural lands, athletic fields (even if managed by non-city entity), recreational lands, community gathering spaces and recreational buildings which are publicly-owned and/or publicly-accessible. The term is not intended to refer to privately-owned lands, yards, urban plazas, stormwater treatment areas or public street rights-of-way unless, through agreement, the land is designated as public space with a recreational and/or habitat function.

Bluff top parcel: A roughly 135 acre land area that includes the portion of the Ford site that is above the Mississippi River bluff line as well as the rail yard adjacent to the Ford site. This is the land area for which redevelopment scenarios were created for the Ford Site Planning Task Force.

Riverfront parcel: A roughly 22 acre land area currently owned by Ford Motor Company adjacent to the Mississippi River. The land was not considered in the original redevelopment scenarios but is currently expected to be part of future redevelopment/open space strategies.

Performance Standards:

Open space guidelines are largely intended to communicate community expectation about park and open space facilities to potential developers of the Ford site. Performance standards describe general construction and operational expectations for the open space and park features anticipated at the Ford site.

Context Map



Legend

- Parks and Recreation

St. Paul Parks and Open Space

Ramsey County Parks and Open Space

Other Jurisdictional Parks and Open Space

Trails

Existing Major Trails

Proposed Major Trails

Roads

Parkways

Grand Rounds

Recreation Centers

Partnership Recreation Centers

Picnic Pavilions

Picnic Shelters

Overlooks

Proposed Overlooks

Swimming pools

Golf Courses

Other Information

City Boundary

Critical Area Boundary

Vistas

River Access

Marina

Boat launch

Non-motorized boat lanuch

Proposed non-motorized boat launch

Fishing
- 4

Ford Site Open Space Guidelines

Chapter 1: Introduction

Guiding Principles

A number of guiding principles for future open space at the Ford site have emerged through the planning process. The guiding principles establish a basis for open space guidelines but as importantly, they provide a framework for future community evaluation and policy directives for the site. The guiding principles are reviewed below.

Preamble: Redevelopment at the Ford site offers tremendous opportunities including the creation of more and better open space. The creation of new open space at the Ford site should recognize and take advantage of two important and overarching attributes. 1) the site's ecological importance as part of the continental Mississippi River flyway and its adjacency to the rare Mississippi River Gorge; and 2) the site's urban neighborhood setting and the role it can play in providing recreation and enhancing pedestrian/open space connectivity.

More open space is preferred to less. The five redevelopment scenarios done for the Ford site in 2007 depict a range of land area devoted to open space. All of the scenarios include more open space than what can be achieved through current City parkland dedication and code requirements. Nevertheless, achieving a higher level of open space is desired, recognizing that there may be tradeoffs in the form of public cost and development intensity in order to do so.

League-play baseball fields should continue to be part of Ford site uses. Three league-play community baseball fields exist today on the Ford site. At least that many league-play baseball fields of similar or higher quality should be part of future open space at the site.

If higher acreages of open space can be attained, natural areas along the bluff should be expanded. The open space preferences reviewed later in these guidelines suggest increasing the acreage of natural areas as the overall amount of open space increases. At lower amounts of open space, most of the land is required for recreational uses. At higher levels of open space there is a preference to increase the amount of natural landscape and strategically locate some of it along the edge of the bluff top to expand the current river corridor. This implies the possible realignment of Mississippi River Boulevard to be farther from the bluff edge.

Open space features should strive to provide multiple functions. Any particular piece of open space should perform multiple functions when possible and without diminishing its core function. For instance, the core function of a trail corridor is pedestrian and bike connectivity but it can also be designed to capture and treat stormwater and provide habitat. Sustainability should be a key factor in decision-making.

Recreational uses at the Ford site should serve the site's new development as well as the surrounding community. Recreational uses on the Ford site should be developed to a level of quality and intensity ranging between "neighborhood park" and "community park" as defined in the Saint Paul Park and Recreation Vision Plan. If lower levels of open space are attained (say 10-20% of the site), recreation would take on a neighborhood park flavor. If the amount of open space is higher, more community park type features would be incorporated.

Open space should create an inter-connected greenway system. In addition to habitat and recreation areas, a habitat and trail corridor should traverse the site and link to the surrounding neighborhood, the River, and Hidden Falls Regional Park. As explored in the Great River Park Master Plan, a creek element reminiscent of the once-present Hidden Creek should be incorporated in the site design to establish natural water flow and a greenway corridor from the interior of the Ford site to Hidden Falls.

Riverfront parcel should be publicly-accessible. The riverfront parcel should be made publically-accessible and include pedestrian linkage to Hidden Falls. Additionally, consideration should be given to its incorporation into Hidden Falls Regional Park through a boundary adjustment.

Options for the riverfront parcel should be explored in greater detail. The riverfront parcel should be further studied to determine viable approaches to the landfill ranging from landfill removal and site restoration to less dramatic alterations like a vegetative cap.

The economic value of open space should be recognized in comparing different land-use scenarios. Parks and open spaces bring value to communities and that value should be part of the equation when evaluating redevelopment proposals.

Balance open space ideals with the numerous other redevelopment considerations. It is recognized that redevelopment plans will need to consider many factors such as market factors, economic activity, traffic, site access, sustainability, and design quality in addition to open space ideals – all important community issues.

In 2007, the City of Saint Paul Planning Commission appointed the Ford Site Planning Task Force to assist in identifying a plan that creates a positive legacy for the City and Ford Motor Company. The charge to the Ford Site Planning Task Force was to prepare a redevelopment framework for a mixed-use site that will represent a fitting legacy for both the Ford Motor Company and the City of Saint Paul. Five redevelopment scenarios that explore differing solutions to mixed-use redevelopment and new open space were put forward by the Task Force as varied expressions of community desires for redevelopment.



Chapter 2

Open Space Preferences

The Ford Site Open Space Workgroup devoted early meetings to understanding Saint Paul's park and recreation needs both system-wide and for the community around the Ford site. They also heard from several experts on the topics of athletics, habitat, stormwater, and community recreation to understand key trends and considerations. The deeper level of understanding provided in these meetings in addition to an already strong community leadership basis each played a role in the group's open space preference selections.

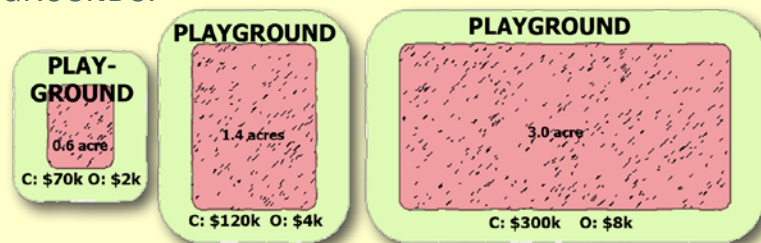
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The three levels of open space used in the exercise were 10% of the site (roughly 15 acres), 25% of the site (39 acres), and 45% of the site (70 acres). The acreage calculations were based on a combined total of the bluff top parcel, river parcel and rail yards – all of which are anticipated to be part of the redevelopment package. The chosen land areas were used because they represent the range of open space exhibited through the five redevelopment scenarios selected by the community in the first phase of planning for the site.



Open Space Feature Options:

PLAYGROUNDS:



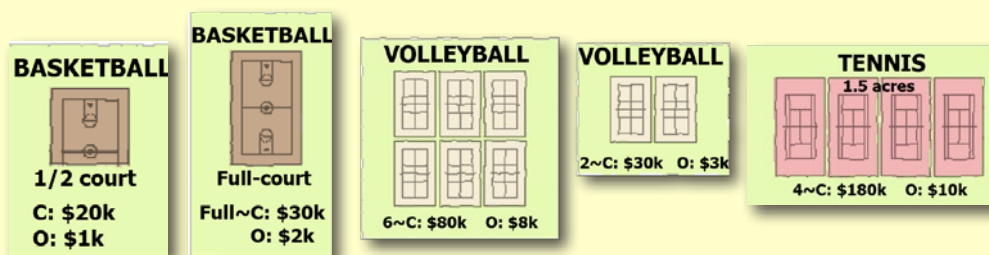
GATHERING (PICNIC AREAS, AMPHITHEATER, GENERAL):



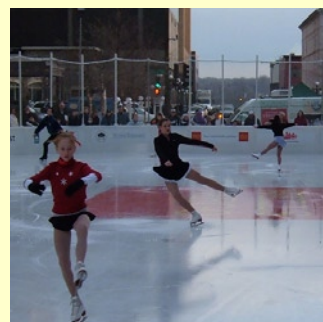
ARCHERY:



VOLLEYBALL:

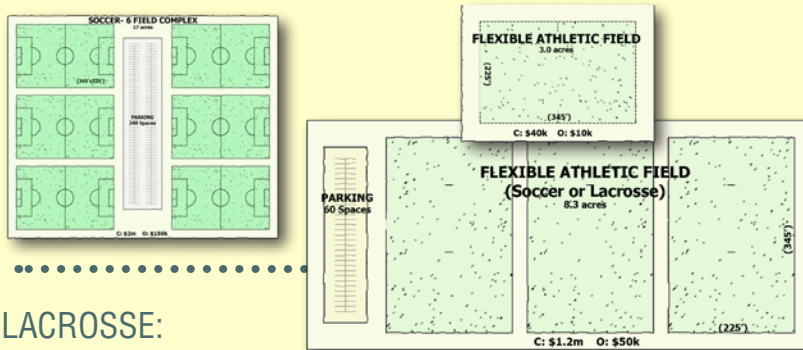


ICE SKATING:

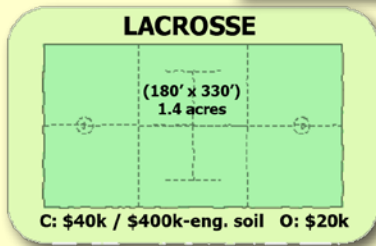


Open Space Feature Options (continued):

SOCCER:



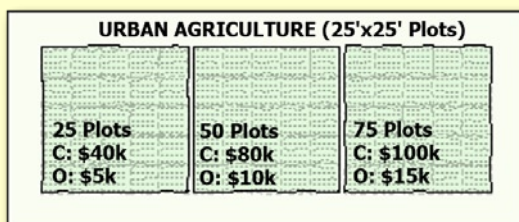
LACROSSE:



DOG PARKS:



COMMUNITY GARDENS:

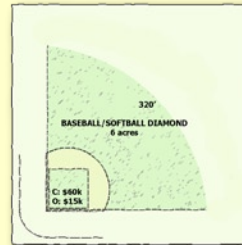
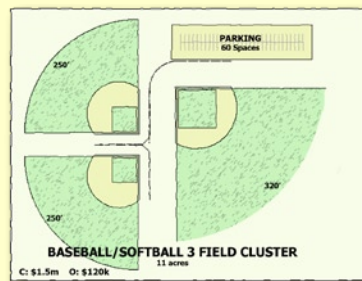
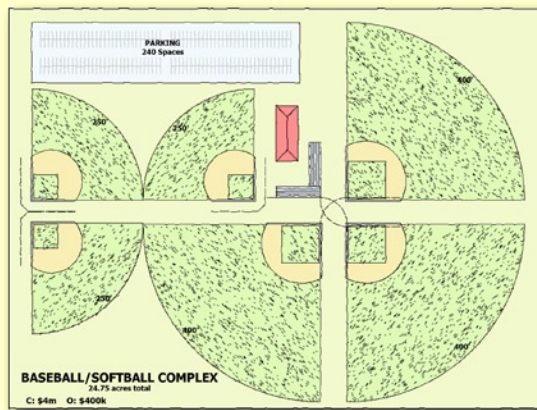


HABITAT/CREEK CORRIDORS:

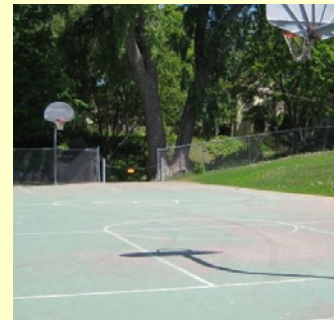
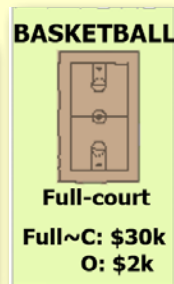


Open Space Feature Options (continued):

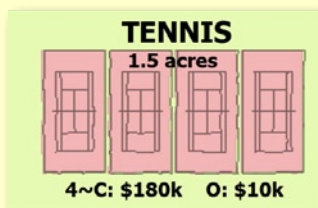
BASEBALL/SOFTBALL:



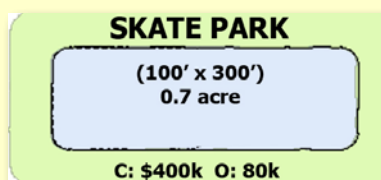
BASKETBALL:



TENNIS:



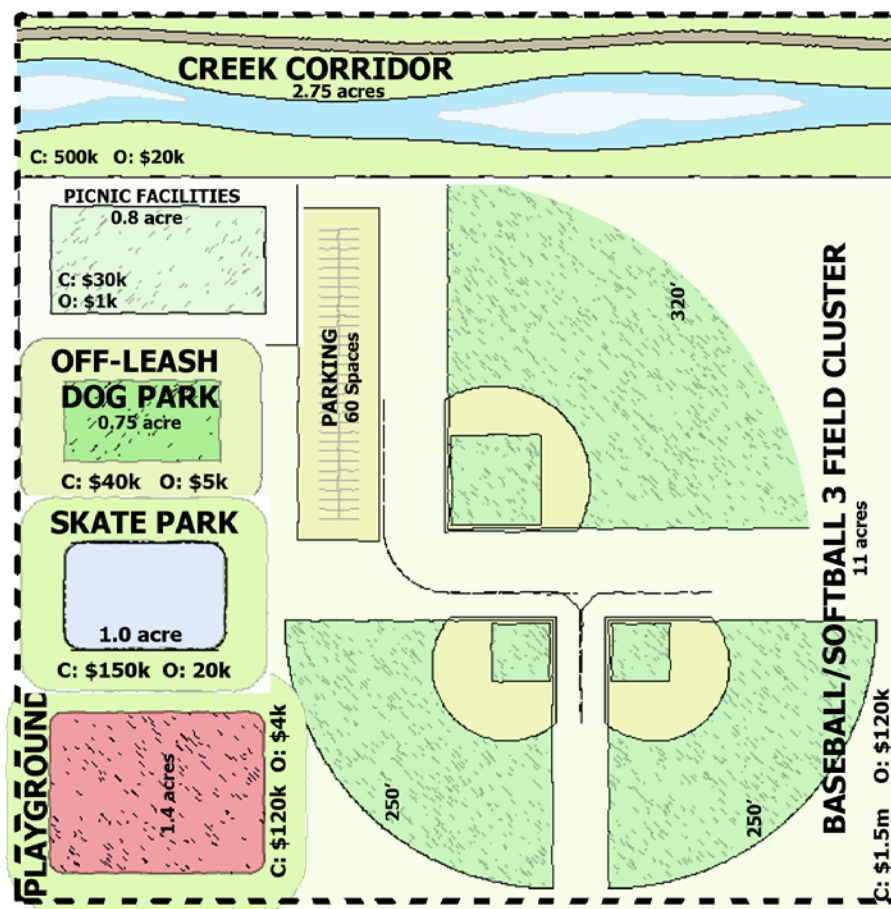
SKATE PARK:



Open Space Feature Selection

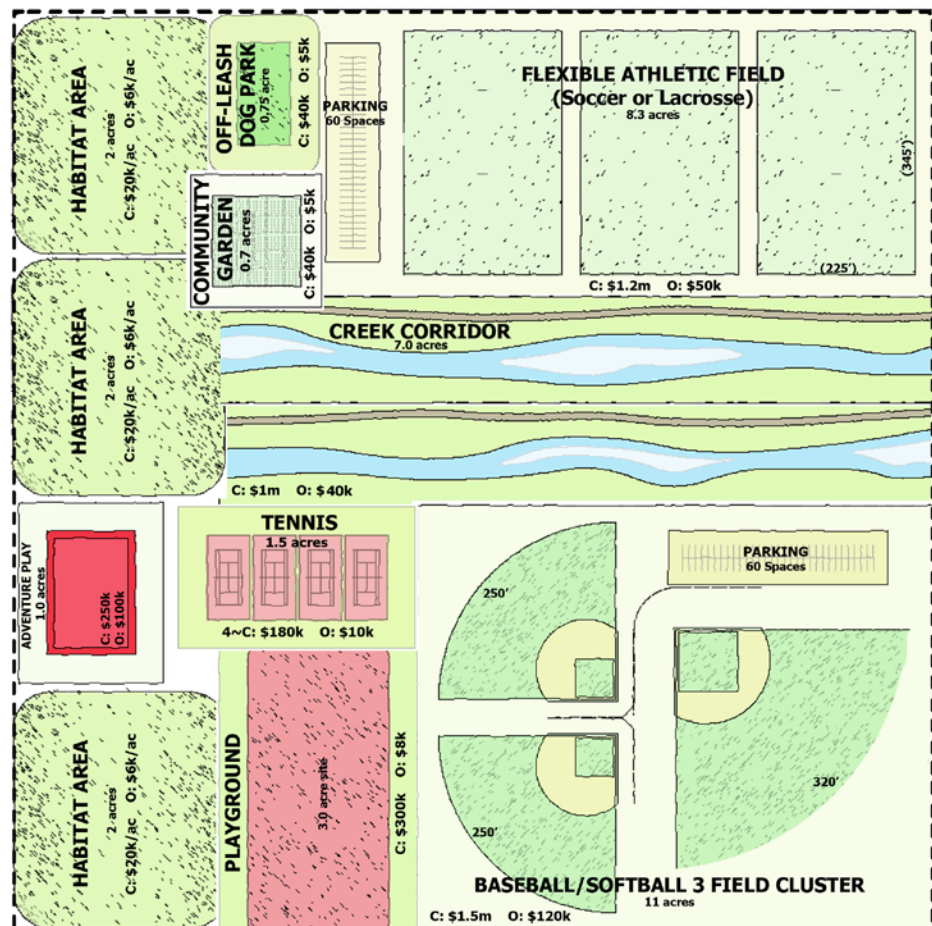
The exercise was valuable not because it defined exactly what features should be at the site but because it characterized the types of features that are valued by the community given varied land-area limitations. Because the Open Space Workgroup is reflective of diverse neighborhood and community interests, the results are considered representative of likely open space values held by the community. Following is an overview of the results.

10% of site area (15 acres): The group struggled with this level of open space because it was generally felt to be too small to provide adequate community recreation. The features chosen are generally neighborhood-scaled with the exception of the community ball fields. In this and every scenario the group used the component of a creek corridor as an expression of the possible reintroduction of Hidden Creek, which existed on the site before development. The selections include:



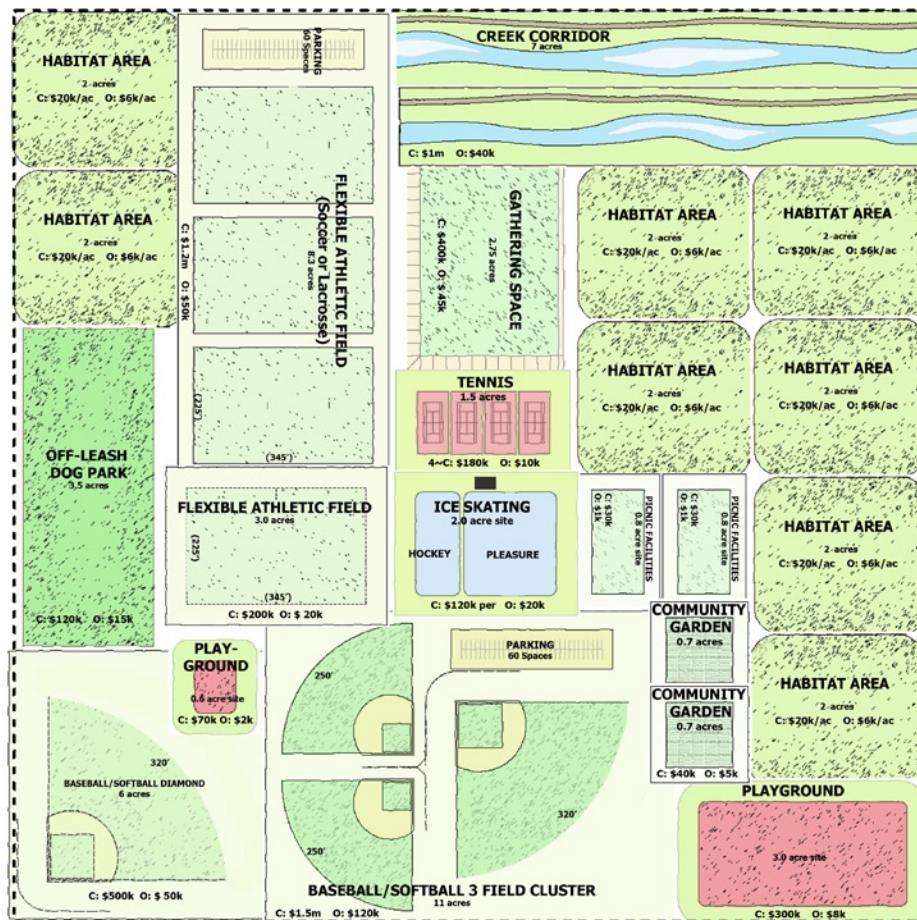
- » Roughly 3 acres of neighborhood-based and neighborhood-scale recreation such as playground, picnic area, small skate park and small dog park.
- » Roughly 10 acres of programmed community ball fields that were discussed as replacement for existing fields at the Ford site.
- » Roughly 2 acres of passive open space with habitat value that could be configured as a surface water (creek) amenity.

25% of site area (39 acres): With this level of open space, the group kept similar recreational components as in the smallest open space diagram, but expanded their scale and added significantly more natural open space and community athletics. The selections include:



- » Roughly 7 acres of neighborhood/community-scale recreation such as playground, picnic area, skate park, dog park and tennis courts.
- » Roughly 19 acres of programmable community fields including both ball fields and flexible fields that could accommodate sports like soccer and lacrosse.
- » Roughly 13 acres of passive open space with habitat value including a creek corridor.

45% of site area (70 acres): At this level of open space, the group selected more community park-scaled features, expanded athletic offerings and expanded natural areas. The group felt that this scale of open space would offer the opportunity for bigger and better dedicated recreational features such as a dog park and community garden as well as allow for meaningful natural areas at both the interior of the site and along the Mississippi River bluff top. The selections include:



- » Roughly 20 acres of diverse community recreation such as playground, picnicking, community gathering, tennis, ice-skating, open lawn, dog park and adventure play/skate park.
- » Roughly 26 acres of programmable community fields including both ball fields and flexible fields that could accommodate sports like soccer and lacrosse.
- » Roughly 24 acres of passive open space with habitat value including a creek corridor.

The group discussed numerous important considerations as it worked through the exercise. For instance, there was acknowledgement that future open space at the Ford site should support both site redevelopment and recreation for the surrounding community. The group also discussed the importance of integrating recreation and open space into the development pattern as opposed to clustering it at an edge of the site. And, if there is an opportunity for higher ratios of open space at the site, the group expressed interest in creating a broader habitat corridor at the edge of the bluff top.

There were several open space features that were specifically not selected by the group. A performance venue or amphitheater and major athletic complexes were felt to be too intensive, not in scale with the neighborhood, and a potential cause of traffic congestion.

The group generally felt that development density and predominant land use of redevelopment should inform open space selections. Higher densities warrant a more diverse set of open space features. Predominantly industrial reuse would warrant more focus on athletics and natural open space while predominantly residential reuse would demand a wider range of features similar to those selected by the group in the exercise.

Out of this exercise grew the ability to establish several general categories of open space preferred for the Ford Site. Chapter 4 establishes performance standards for each category of open space. The categories are:

- » Nature areas
- » Trails
- » Gathering/picnic grounds
- » Dog parks
- » Community gardens
- » Play areas
- » Ice skating
- » Court sports (tennis, basketball, volleyball)
- » Adventure sports
- » Baseball/softball fields
- » Soccer/lacrosse/football fields

Chapter 3

Strategic Guidance

Budgeting

Each open space feature considered by the Workgroup during the open space preference exercise identified capital and annual operating budgets. At such a preliminary stage, numerous assumptions were used to establish budgeting assumptions based on experiences in Saint Paul and other cities in the region. The identified budgets provide “order of magnitude” costs for construction and operations. Some of the more significant budgeting assumptions include:

- » Community athletic complexes would be lighted and use either engineered soil or artificial turf (significantly more expensive than native soils).
- » Annual operating budgets include labor and equipment needs as well as escrow for long-term facility replacement.
- » Above the stated facility budgets, an additional per-acre capital cost is included to account for general park elements such as landscaping, signage, sidewalks, etc. - \$10,000/acre is used.
- » A capital surcharge beyond the construction total is needed to account for design, engineering, construction administration and contingency – 30% is used.
- » **Possible land acquisition costs are not included** because, at this early stage, they could vary widely and it isn’t known whether land acquisition will be part of the redevelopment equation. However, it is important to recognize that land acquisition costs could be significant and easily exceed recreational development costs per acre.

Based on the feature selections made by the group, the following open space budgets are identified:

10% of site area (15 acres):

- » Capital budget total = roughly \$3.1 million or \$200,000/acre
 - » Comprised of:
 - » Features- \$2.2 million
 - » General park elements- \$150,000
 - » Surcharge- \$705,000
 - » Land acquisition not factored
- » Annual operating budget = roughly \$170,000 or \$11,000/acre

25% of site area (39 acres):

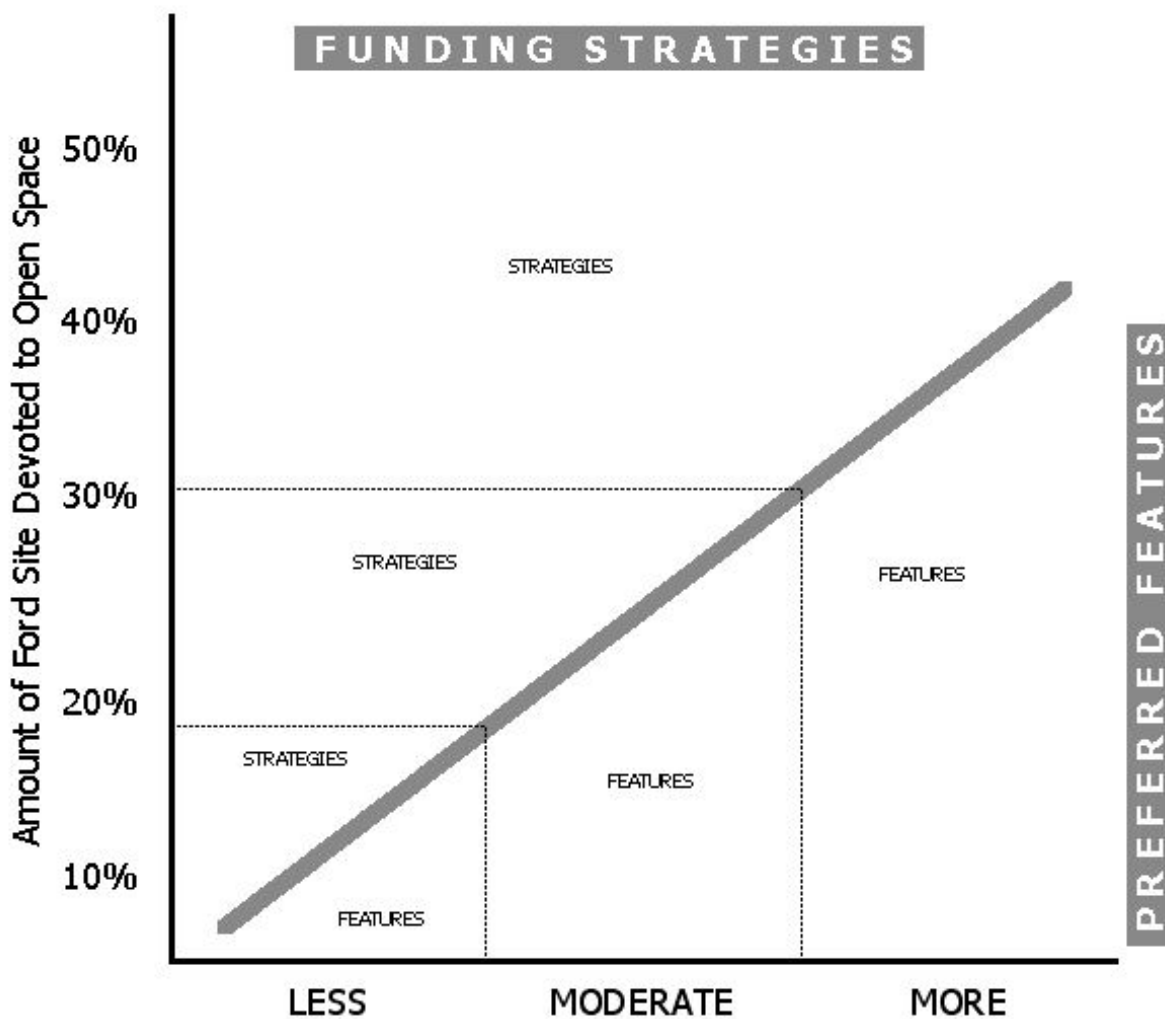
- » Capital budget total = roughly \$6.5 million or \$170,000/acre
 - » Comprised of:
 - » Features- \$4.6 million
 - » General park elements- \$390,000
 - » Surcharge- \$1.5 million
 - » Land acquisition not factored
- » Annual operating budget = roughly \$375,000 or \$10,000/acre

45% of site area (70 acres):

- » Capital budget total = roughly \$8.9 million or \$130,000/acre
 - » Comprised of:
 - » Features- \$6.1 million
 - » General park elements- \$700,000
 - » Surcharge- \$2.1 million
 - » Land acquisition not factored
- » Annual operating budget = roughly \$500,000 or \$7,000/acre

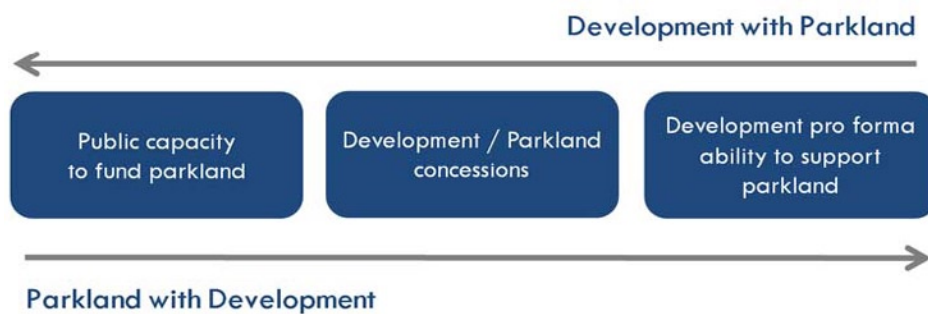
Relationship between Features and Funding

There is an inherent relationship between 1) the amount of open space at the Ford site, 2) the preferred features at various levels of open space, and 3) associated funding strategies. The diagram below is a simple illustration that depicts that inter-relationship and begins to establish a way to communicate the strategic approach to funding. In general, higher levels of open space and features will require more funding sources and strategies.



Positioning the Funding Discussion

Saint Paul has positioned the Ford site as a real estate redevelopment project within which there will be new parkland as opposed to a major new park around which there will be development. This is an important distinction because it has significant funding implications. For large-site development projects that are primarily considered real estate ventures, parkland is leveraged as both a community asset and value generator for new development. In this approach, the conversation begins with consideration of how much the developer can contribute to parkland development and operations after it has debt financed the land, soft costs and hard costs, and ensured an expected return. To the extent that the real estate pro forma cannot support the community's desires, the public sector may choose to offer concessions, e.g. offering height and bulk bonuses; waiving other requirements; making lower cost financing available; or actually contributing funds to the project.



Assessing Private Developer Potential to Fund Open Space

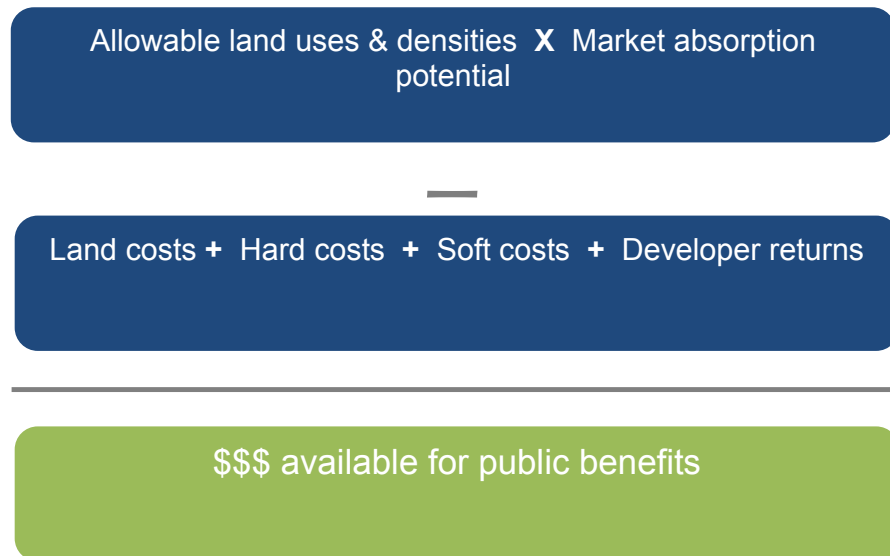
A redeveloped Ford site will contribute to the City's tax/economic base and include parkland to serve the city's residents and enhance the value of surrounding development. It is important to establish a conversation with the City, with Ford, and with the developer of the site about the ability of the site's developer to pay for the construction and operations of open space. This conversation generally has three steps:

» Step One - Open Space Characteristics

These guidelines outline which open space characteristics at the future Ford site most important to the community. This information provides a basis for understanding both capital cost and operating costs. For example, plazas, water features, and park pavilions are more expensive to build and maintain than naturalized areas or turf fields. In addition, it is important to consider what kind of utilization the site will have - heavily used ball fields or large events cost more to maintain in good condition than sparsely populated parklands or natural habitats.

» Step Two - Pro Forma Analysis

A pro forma analysis driven by private development with public benefit has the following structure:



Evaluation of the real estate development pro forma will inform the City about the elements that can be affected through public actions to enhance open space development and operations. As an example, the public sector could make allowable land uses and densities more flexible in order to affect the amount of money available to support parkland. While the public sector can leverage incentives or offer financing and/or tax relief to affect the developer's land costs and soft costs, it cannot change the cost of construction or the developer's return threshold.

The master developer will, of course, be required to provide certain open space elements as part of its redevelopment plan. For example, the developer will need to manage stormwater, provide streets and sidewalks, and will likely want to provide certain open space amenities within the site boundaries to enhance the value of development. Typically the developer will elect to build these necessities in the location and manner perceived most beneficial to the project's bottom line. The Ford Open Space Guidelines, however, suggest performance standards that leverage multiple benefits from open space for both the public and the developer.

» Step three - Identifying Supplemental Funds

If the developer's pro forma cannot support the parkland desired by the community even after public actions to affect the bottom line, then the community will need to be a financial partner with the developer to achieve open space goals. Financial tools may include:

- » City's General Fund for building and maintaining parkland
- » Real Estate Levies or Improvement District Assessments on surrounding property owners
- » Dedicated Tax Revenues devoted to parkland development and/or operations, such as Legacy Amendment funding from the State of Minnesota
- » Retail Concessions and Private Events within the park, including food service or private rental of spaces and facilities
- » Philanthropy and Sponsorships from willing and endowed stakeholders.

Different characters of parkland have different potentials for securing these various funding sources, with parkland utilization being the primary revenue driver. However, utilization can be difficult to gauge and even once utilization is maximized, users may not have the capacity to secure funding sources in amounts sufficient to cover the additional costs of a highly-utilized park. Nonetheless, some of the open space elements desired by the community have potential for third-party (non-direct local government/developer) funding. The following matrix provides a conceptual framework for thinking about the relative propensity of third-party funding sources (in addition to the City's general fund) for each open space element:

Potential Third-Party Funding Sources by Program Element

Program Element	Real Estate Levies or District Assessments	Dedicated Tax Revenues	Retail Concessions & Private Events	Philanthropy & Sponsorships
Nature Areas	●	●	■	▲
Trails	●	●	■	●
Gathering/Picnic Grounds	●	▲	●	▲
Dog Parks	●	■	▲	■
Community Gardens	●	▲	■	▲
Play Areas	●	■	■	▲
Ice Skating	▲	■	●	●
Adventure Sports	▲	■	●	●
Ballfields & Courts	▲	■	▲	●

● = greater willingness/resources for funding source

▲ = moderate willingness/resources

■ = minimal willingness/resources

There are a few specific funding mechanisms that warrant further description and consideration.

- » **Heritage and Legacy Funds:** A Minnesota constitutional amendment was passed in 2008 to dedicate a portion of the State's sales tax to significant open space in the categories of outdoor heritage, clean water, and parks and trails. This funding source would likely only be available to the Ford site if it was designated as a regional park or park reserve. The open space area considered for the Ford site cannot meet the criteria for a regional park or park reserve in and of itself because it is too small. If, however, the Hidden Falls Regional Park boundary was expanded into the Ford site, then funds for habitat-oriented acquisition, trail development and restoration could be requested through the Legacy program.
- » **Tax Increment Finance:** If the Ford site is designated as a Tax Increment Finance (TIF) District, TIF funds (under current MN Statute) could be used for specific capital improvements and infrastructure incorporated into public open space. Potentially fundable elements are generally limited to soil contamination remediation and stormwater infrastructure such as infiltration and treatment chambers including ponds, water flows and underground chambers. TIF would generally fund these elements only if they directly support surrounding development. The TIF district could be established around the boundaries of the Ford site, or could extend into the surrounding neighborhood.
- » **Payment in Lieu of Taxes (PILOT) district or Tax Increment Reinvestment Zone (TIRZ):** The Ford site could be designated as a district in which the tax increment produced by redevelopment could be dedicated to open space operations and maintenance instead of a capital project, as with a TIF. Sometimes these are called PILOT districts, and sometimes they are called Tax Increment Reinvestment Zones.
- » **Business Improvement District:** A business improvement district (BID) establishes a special property tax that a group of commercial properties elects to impose on themselves, with government approval. BID funds can be used to build or operate a broad range of public improvements (including parks and open spaces). Through negotiation, public entities sometimes compel developer participation in a future BID as part of a development agreement. The BID district could be the Ford site itself, or could extend into the surrounding neighborhood, although it is likely that approval for the latter would be more difficult. This funding source is another means of affecting the developer's pro forma – it does not create new value, but rather ensures that funds are directed where the BID wants them directed.
- » **Housing Improvement Area:** Similar to a BID, a housing improvement area (sometimes known as Public Improvement Districts or other names) establishes a special property tax that a group of residential properties elects to impose on themselves or a developer elects to impose on its buildings before the sale or rental of its housing stock – a cost that is passed through to home buyers and renters. The funds can be used to build or operate a broad range of public improvements (including parks & open spaces), but, as with a BID, is purely a means of ensuring

funds are dedicated to a specific purpose. Housing improvement areas are not common in Minnesota but the tool is available as a potential funding source.

Of these funds, only Legacy Amendment Funding and Tax Increment Financing would benefit the developer's pro forma and therefore create supplemental funding for open space, rather than merely ensure that funds are dedicated to open space within the developer's pro forma.

Controlling the Conversation

There are several keys to success that could be implemented to control the conversation about site redevelopment and open space planning:

1. **Insist on Transparency.**

Since the single biggest factor in the ability of a large-scale development project to support public parkland is the real estate development pro forma, the community should insist upon transparent process with the developer. The community must be able to understand the costs of development, as well as return potentials based on real estate market data. This means understanding each component of the pro forma equation listed above. It does not mean the developer does not deserve a return on its investment for taking the risk of developing in the first place, nor that the developer should not be able to maintain certain confidential data.

2. **Rely on Professional Support.**

If redevelopment of the Ford site becomes a private/public venture (if the City offers public redevelopment finance tools), the City of Saint Paul will enlist finance experts to evaluate the development pro forma. With that, comes the ability to analyze the pro forma from an open space point of view and suggest approaches to funding open space along with other public infrastructure and amenities.

3. **Fight for Development.**

Communities that are most successful with redevelopment do not reflexively oppose development; they proactively propose alternative solutions. The more the community can ground alternative solutions in market or other economic data, the more successful it will be.

4. **Articulate Unified Goals.**

These Open Space Guidelines articulate unified community goals for open space at the Ford site. They are a critical communication tool with the eventual developer. If the developer can be assured that these guidelines represent a credible voice from the community, they can reduce uncertainty about community interests and could lead to a smoother and less costly development review process and thus more money can be available to support public benefits.

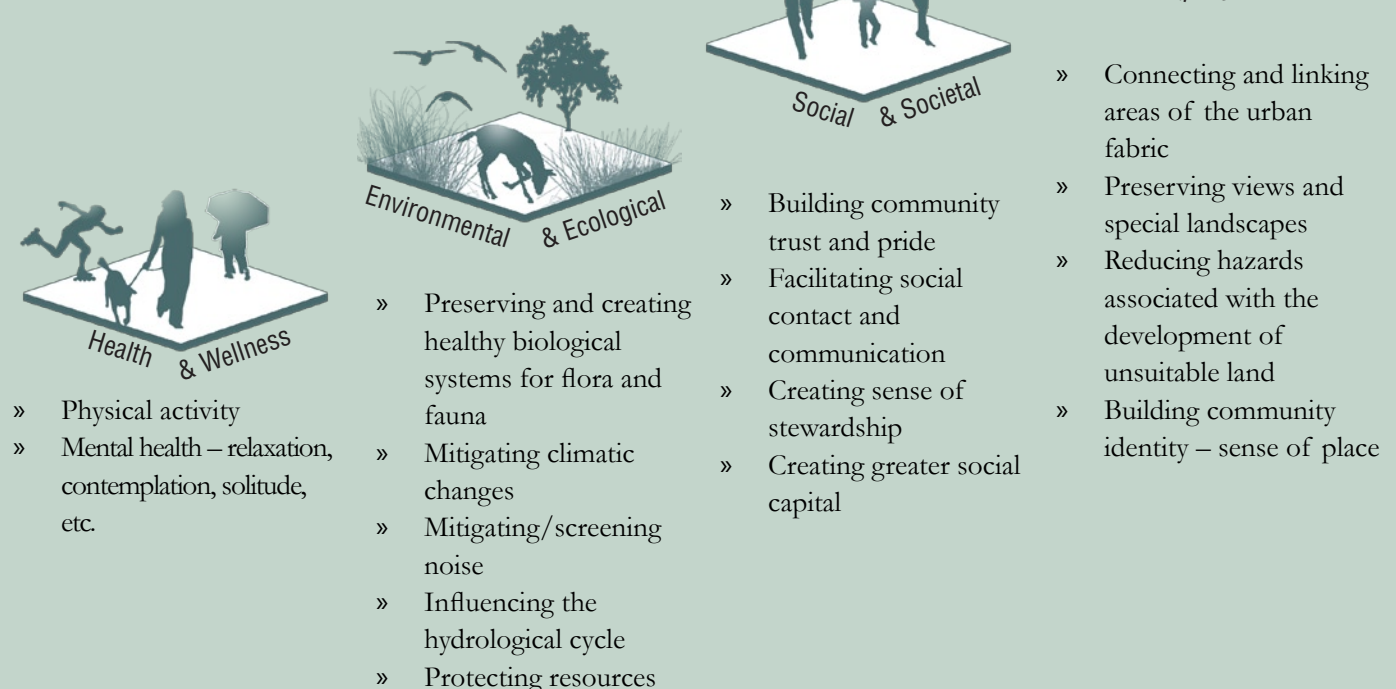
Appendix

Performance Standards

Performance standards are organized by open space feature, starting with more passive recreation and moving to more active recreation. The performance standards address the: targeted user shed, distribution across the site, size/scale, key design features, support facility needs, adjacency/proximity opportunities and constraints, and the opportunity for layered functions.

Layered Functions:

The following functional layers are assessed with each open space feature to ensure a holistic system that encompasses not only the full range of open space features, but also the necessary experiences that are integral to the City's identity.





Nature Areas

Targeted Users/ User-Shed:

- » Site use should be limited to the numbers and types of visitors the area can accommodate while still retaining its natural character and the intended level of solitude.
-

Distribution Across the Site:

- » Natural areas should be located near the River to enhance the existing natural open space and should occur linearly and in smaller patches across the rest of the site in order to link the urban fabric with the River.
-

Size/Scale:

- » Site size should be based on natural resource needs. Acreage should be sufficient to preserve or protect the resource.
-

Key Design Features:

- » Development and site improvements should be kept to a minimum, keeping the park's emphasis on the natural environment, interpretive features, and educational facilities.
- » Natural open space areas should be managed and maintained for a sense of solitude, separation, and environmental protection.
- » Where feasible, public access and use of these areas should be encouraged, but environmentally sensitive areas should be protected from overuse.
- » Off-street parking should be considered for larger natural areas where a trail is located within the site. The amount will depend upon the anticipated trail use. Otherwise, on-street parking should be provided.
- » Preserve native vegetation or encourage re-vegetation using native species.

Nature Areas

- » Interpretive signage
 - » Small picnic shelter
 - » Limited picnic areas
 - » Trail and pathway system
 - » Trailhead or entry kiosk
 - » Viewpoints or viewing blinds
 - » Interpretive or educational facilities
 - » Portable or permanent restrooms (depending on facilities and anticipated amount of site use)
 - » Parking
-

- » Nature areas should be located near existing natural resources in order to capitalize on existing habitat and enhance the positive impact on organisms and wildlife.
- » The construction of new natural areas should not conflict with active recreation uses.



Support Facility Needs:

Adjacency/Proximity:

Nature Areas

Layered Functions:



People have long recognized the desirability of naturally vegetated areas in neighborhoods, towns, and cities. This is related not only to the perceived role of natural vegetation in climate control, noise abatement, erosion control, and the like, but also to socio-cultural norms that place value on living plants and the habitats they create. The functions of natural open space are layered and numerous.

Research confirms what common sense would suggest: children and adolescents with easy access to recreational facilities and programs are more active than those without. Furthermore, in a society of rapidly increasing stress-related disorders, the rejuvenating and calming effects associated with natural settings is ever more imperative.

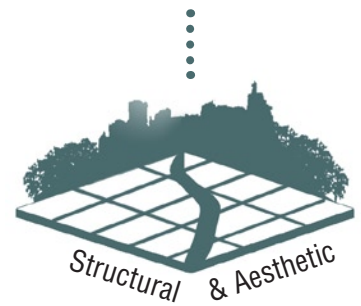
- » In order to provide the greatest health and wellness benefits of natural space:
 - » When possible, natural areas should be located so that they are visible by potential users
 - » When possible, natural areas should be located so that there is constant observation from neighborhood residents to promote safety, minimize vandalism, and encourage use
-
- » In order to increase habitat and biodiversity for various species, natural open space should:
 - » Be preserved or created in the physical form of both patches and corridors; and the linear corridors should aim to connect shoreline corridors with riparian corridors
 - » Focus on habitat systems and associated ecosystems rather than selected species
 - » Focus on critical locations that meet organism preferences
 - » In order to mitigate soil erosion and preserve the bluff top:
 - » Existing vegetation and landscaping should be retained
 - » Uninterrupted vegetated shoreline/bluff line should be provided where practical
 - » In order to minimize the implications of development on water quality:
 - » Direct overload runoff should be minimized
 - » Green infrastructure (such as infiltration beds, swales, and natural vegetation) should be utilized for source control of stormwater runoff
 - » Use of chemical fertilizers should be mitigated
 - » Use of salt on roads should be reduced

Nature Areas

- » To facilitate social contact between neighbors and between residents and the natural world, public viewing spaces/overlooks should be employed whenever applicable.
- » To encourage stewardship of natural open space, restoration should involve community members.



- » In order to build community identity and foster the sense of place that the River provides for the neighborhood, the “viewshed” of the river corridor should be protected so that persons enjoying the river or engaging in activities along the river will have a natural experience.
- » Natural landscaping should be utilized to give residents a sense of place and times past by connecting residents and visitors to the areas natural origin.
- » Nature areas should be used to connect and link the Mississippi River to areas of the urban fabric. A consistent native vegetation palette should be utilized to form a common design vocabulary that links the residents to the natural areas of the River.





Trails

Targeted Users/ User-Shed:

- » Trails should serve pedestrians, cyclists, in-line skaters, hikers, and cross-country skiers.
- » Local trail loops should serve residents and employees of the development and adjacent neighborhoods, as well as regional trail-users passing through the development between regional or community destinations (i.e. along the Mississippi River).

Distribution Across the Site:

- » Trails should be provided where they enhance public enjoyment of the environment and where they provide effective and economical access to and between the areas of recreational development and/or points of interest.
- » In order to provide access to places of solitude and refuge, pathways that meander through or alongside natural settings are desirable and should be considered.
- » To provide for trail users that may utilize the trail for a leisurely group stroll, a pathway that passes through varied and attractive active spaces should be considered.

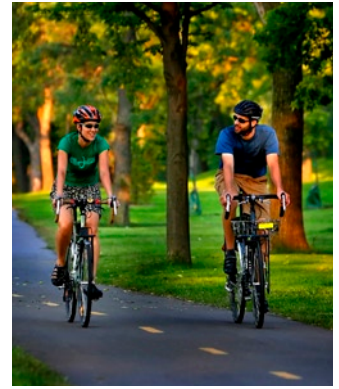
Size/Scale:

- » Pedestrian trails should have a clear width of 6 feet to allow room for passing, walking two abreast, or for devices such as strollers and wheelchairs. A minimum width of 5 feet should only be used when site specific conditions do not allow the preferred width.
- » Trails intended for bicycling or in-line skating should have a clear width of 12 feet.

Key Design Features:

- » Trails passing through vegetation need regular maintenance to provide sufficient clearance. At a minimum, a pedestrian trail should be cleared 2 feet beyond the width of the trail and to a height of 8 feet.
- » Landscaping can be designed to provide edge protection along steep slopes and other trail hazards. The landscaping should be sufficiently dense to act as a visual warning and to restrict trail user movement through the barrier.
- » Trail access points should be placed wherever trail access is expected, such as at adjacent schools, commercial areas, and parks.
- » An accessible pathway should be developed that connects parking and other accessible elements to the trailhead.

Trails



- » Fixed source lighting, important for improved visibility and safety at trailheads, access points and intersections and critical for lighting tunnels and underpasses, should be determined according to specific site needs.
- » Appropriate fencing should be incorporated into each trail design, as necessary, to deter trespassing onto adjoining properties, as well as provide a safety buffer at dangerous locations along a trail.
- » Secure bicycle parking should be placed near important trail access points.
- » Periodic rest areas, which are beneficial to all trail users and particularly crucial for people with mobility impairments, should be considered along all trail segments. Rest areas are most effective when placed at points of interest or scenic lookouts. Trail rest areas should at least include a seating area and a place to park the trail vehicle (bicycle, etc.). They may also include drinking fountains, restroom facilities, signage and emergency phone service when deemed necessary.
- » Interpretive facilities, which allow trail users to gain an understanding of the unique environment through which they travel, should be incorporated into the overall planning and design of each trail and are usually placed wherever there is a significant cultural, historic, or natural resource to be displayed.

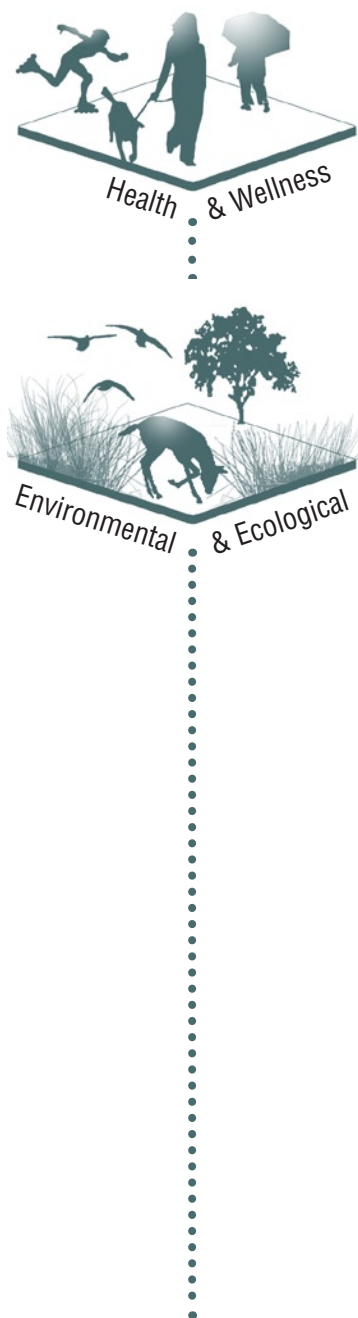
Wetland and floodplain areas, as well as historic and cultural sites, significantly enhance the trail user's experience by preserving the natural environment and adding variety and education to the experience. However, they are sensitive landscapes that need to be carefully addressed in order to avoid proximity conflicts.

- » For design purposes it is recommended that trails near floodplains and stream corridors be located outside and parallel to the stream buffer.

Support Facility Needs:

Adjacency/Proximity:

Layered Functions:



Trails

Trails provide opportunities for multiple-use recreation, promoting physical activity to improve fitness and mental health. They are also conduits for other recreational opportunities, such as hunting, fishing, or rock-climbing. Trails, more than any other recreational feature, connect people to the natural environment and therefore provide for an important part of our collective mental wellness.

- » The trail should be designed to meet needs of all ages and abilities so everyone benefits, including those with disabilities.

A trail's location, alignment, grade, drainage, and soil composition are the most critical factors affecting erosion and other environmentally degrading events. While trail users often receive the blame for erosion, the route a trail follows across the landscape is usually a much larger factor in the health of a trail. The proper location and construction of trails can drastically improve the environmental conditions in a natural area, and even help protect rare habitats and sensitive resources by concentrating use on designated, sustainable pathways, avoiding the creation of informal trails.

- » The location of the trails should persuade trail users to be walking/biking/hiking on the most appropriate route, by:
 - » Meeting destination desires of trail users
 - » Providing sufficient amounts of trail to meet the area's recreation demand
 - » Having stable and predictable surface
 - » Providing a sought-after experience
 - » Following the rolling contour and align generally perpendicular to the fall line
 - » Avoiding sensitive ecological areas
 - » Using natural infiltration and implementing best practices for stormwater management
- » A sustainable trail balances many elements. In addition to causing very little impact on the environment, a sustainable trail should provide enjoyable and appropriately challenging experiences for trail users.
 - » The trail should manage trail-user expectations and competency effectively
 - » The trail experience should account for length of visit, stamina, exercise, solitude, and a number of other factors
 - » The trail should minimize conflict between different user groups

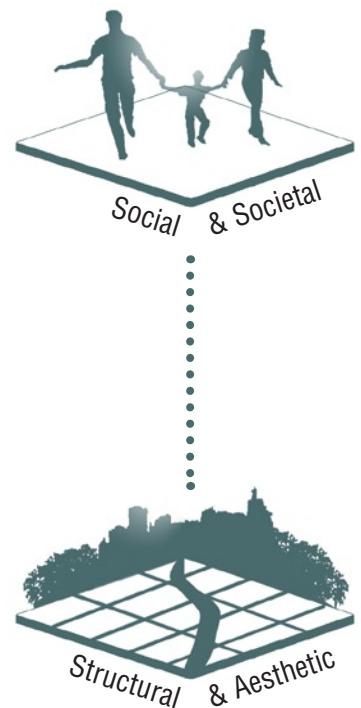
Trails

Trails connect place to place, person to person, and neighbor to neighbor. They present opportunities for observation, enjoyment, and exploration. By providing opportunities to improve and test skills, to be challenged, or to learn about our natural or cultural environment, they enhance our educational well-being and create greater social capital.

- » Trails should connect transit hubs to destinations and areas of social activity.
- » Trails should offer a powerful avenue for encouraging volunteerism and stewardship in our parks.
- » Some trails should be specifically designed to provide natural or cultural interpretation of an area. These types of trails should include signage, brochures or other kinds of written or verbal (i.e. podcast) information to provide this interpretation.
- » The trail should be designed for visibility and crime prevention in all settings.

Trails make our communities more livable, by improving the quality of life for residents, attracting tourism, stimulating civic improvement, and building support for land protection and stewardship. They also connect us to scenic landscapes, natural wonders, and cultural resources – providing a shared experience that fosters community identity and a greater shared sense of place.

- » Trails should complement their surroundings in order to construct a strong sense of place by:
 - » Changing to meet the opportunities and constraints of its surroundings
 - » Taking advantage of landscape features
- » Trails should successfully link the Mississippi River and the urban fabric of the community by utilizing site features and experiences.
- » Trail planning should identify main destinations within the neighborhood, main trail corridors within the community, and nearby communities, neighborhoods, or population centers to connect to.





Gathering/Picnic Grounds

Targeted Users/ User-Shed:

- » Picnic and gathering grounds would serve the immediate neighborhood at lower levels of open space and would have a community reach similar to the Hillcrest Recreation Center at higher levels of open space.
- » Smaller grounds would serve primarily a picnic function while larger ones could function as true gathering spaces.
- » When feasible, varied experiences should be planned – for both small intimate get-togethers and large-group gatherings.

Distribution Across the Site:

- » Picnic and gathering grounds should be primarily in one or two clustered locations on the site within easy walking distance to development and adjacent to support facilities identified below.
- » A few intimate, nature-oriented picnic sites could also be included.

Size/Scale:

- » At lower levels of open space, picnic grounds could be less than an acre and up to several acres at higher levels of open space.

Key Design Features:

- » Diversity of tree cover, from scattered trees to no tree canopy, should be provided in the picnic areas. Open areas with scattered trees and some privacy are preferred.
- » A diversity of ground cover, from lawn to gardens/landscaping to paved plaza space, is preferred and should be planned for.
- » Pedestrian-level lighting in primary gathering spaces should be employed.
- » Infiltration and/or reuse of site stormwater should be incorporated, either through rainwater gardens, cisterns, or other innovative methods.
- » The parking should be located to minimize visual intrusion.
- » All facilities should meet ADA accessibility standards.
- » Guest accommodations should include grills, drinking fountains, benches, trash receptacles, restrooms, cover from the elements.

Gathering/Picnic Grounds



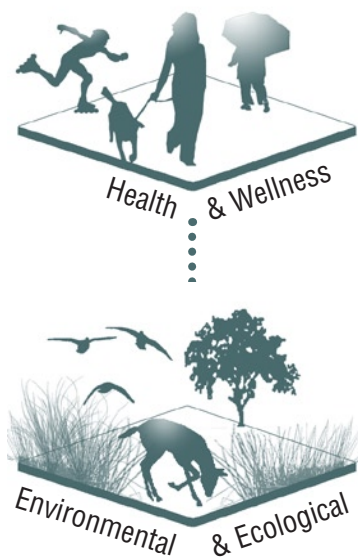
- » Picnickers, specifically large group gatherings, prefer parking nearby. Unless it distracts from the intent of the experience, parking should be located within 400 feet of the picnic area. Wherever possible, parking should be shared with other park facilities that have different usage times.
- » Restrooms and wash facilities should be provided.
- » Trash disposal should be provided in a location visible or known for all picnic users.
- » Picnic shelter(s) should be provided for group accommodation.
 - » When provided, these popular facilities should balance operating and maintenance costs with design character and function.
 - » Shelters should be designed to be compatible with park architecture and the surrounding environment.
 - » Vehicular access to the shelter should be provided for drop off of supplies and equipment and for service and maintenance.
 - » A fireplace with wood storage and work counters should be considered.
 - » Food reheating accommodations should be included
 - » Restrooms could be incorporated into shelter buildings

Support Facility Needs:

-
- » Picnic areas, specifically large group areas, should be located adjacent to open play lawn and/or other play areas.
 - » If the intent of the picnic area is for solitude, the site should be located in a natural area and accessible by trail.
 - » Picnickers prefer to be near water or overlooking water. When feasible, picnic areas should be sited near water.
 - » Connect picnic grounds to other open spaces and support facilities via trails.
 - » Locate picnic/gathering areas intended for group gatherings near children's play areas.

Adjacency/Proximity:

Layered Functions:



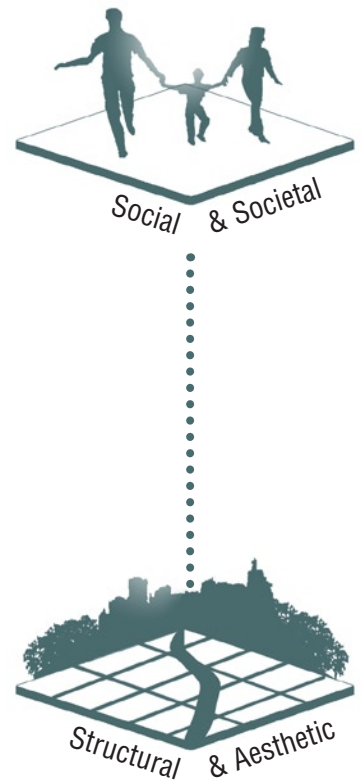
Gathering/Picnic Grounds

- » The location of gathering areas relative to other facilities is a strong factor in determining the extent of physical activity that is carried out. In order to encourage physical activity in conjunction with social gathering, the picnic areas, specifically large group areas, should be located near open play field space and/or courts, fields, and playgrounds.
- » Heavily used recreation facilities, like gathering or picnic areas, should be sited on soils that can sustain the intended use and still retain desired vegetation. If large or numerous ceremonies, community events, or other gatherings are intended for a proposed open space, structural soil or artificial turf should be considered.
- » Infiltration and/or reuse of site stormwater should be incorporated, either through rainwater gardens, cisterns, or other innovative methods, in the design and implementation of gathering and picnic areas.

Gathering/Picnic Grounds

- » Cultural entertainment, such as performing musicians and artists, also forms part of the social fabric that occur in places of open space that are designed for gathering and congregating. These gathering spaces should be designed to be flexible and inclusive in order to accommodate such cultural entertainment.
- » Another important social activity of open spaces, hard or natural surfaced, is lingering or resting. Public places, such as picnic grounds, should function as magnets which draw people to themselves or to the associated public facilities. With the correct mix of surrounding land uses these spaces could become attractions and visitors' destinations.

-
- » Hard surfaced gathering spaces provide access to public facilities and transport, not only via walkways and sidewalks, but also to places for waiting and intermodal transfer at stops or stations. These spaces can also be used multifunctionally for informal markets and meeting places. The structural function of these gathering spaces to connect and link areas of the urban fabric should be recognized and valued when determining the distribution and location of such areas.
 - » In terms of movement or access, hard surfaced gathering spaces should usually be located at points of relatively high accessibility.
 - » Gathering spaces, both hard and natural surfaced, can also serve political and symbolic functions that support the community's sense of place. Functions that are served by large gathering spaces, such as parades, ceremonies, or other public events, should be recognized and valued when determining the size, scale, and location of gathering spaces.





Dog Parks

Targeted Users/ User-Shed:

- » The dog park(s) should accommodate the dog-owners of the development and neighborhood and potentially the southwest area of the City (* See The Saint Paul Vision Plan's recommendation for providing 4-6 off-leash dog areas throughout the city, focused initially on creating one in each quadrant; and the Saint Paul System Plan's recommendation for the creation of a new off-leash dog area along the Mississippi River to serve the southwest portion of the City).

Distribution Across the Site:

- » Location of the dog park(s) is critical to the size, and therefore the draw, of the dog park and should be well-thought out in order to encourage a sustainable quantity of dog park users.
 - » If the dog park is not sufficient in size to support adjacent neighborhood use, the dog park should be located internally to the development in order to not encourage over-use from the greater community.
 - » If the dog park is sufficient in size to support use from the greater neighborhood and southwest area of the City, the facility should be conveniently located along a street that provides easy access and parking without disrupting other land uses and circulation.

Size/Scale:

Size and scale matter when it comes to dog parks and the health of the environment. Dog parks that are too small for the concentration of dogs during their heaviest periods of usage can quickly become de-vegetated and, alternately, muddy and dusty, and can cause water quality issues.

- » The size of the park should be as large as feasible. However, the municipality or organization managing the park needs to be able to adequately maintain the space.

Dog Parks



Because the quality of dog parks hinges on changing human behavior (by encouraging people to pick up after their pets), and spreading this new behavior to others, aesthetics is considered an important design feature.

- » Rules should be posted in several visible locations. The signs should be well-maintained.
- » Rules should profile user responsibility, especially regarding clean-up.

-
- » Support facilities should include:
 - » Double gate for security
 - » Shade structures
 - » Picnic tables throughout park
 - » Paved path
 - » Pet drinking stations
 - » Trash Receptacles - adding pooper scooper stations with free sanitary “pick-up” bags and proper receptacles can reduce fecal coliform loading in the greater watershed.

Minimizing the factors that create a conflict between dog parks and stream water quality, neighboring residents, and other adjacent users is critical in the siting and location of the dog facility.

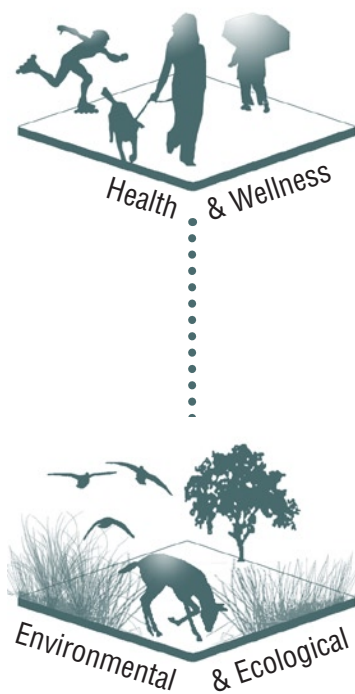
- » Dog parks should be sited out of swales, steep slopes, streams and beaches.
- » Locate the park so that it is not directly adjacent to residential property lines, to help decrease the chance of actual and perceived problems between park users and the neighbors. However, the park should be close enough to a residential area that dog owners will take their dogs to the park and not allow them off-leash elsewhere. If the dog park must be located immediately adjacent to residential property lines, create sound buffers with plants, fencing or earthen berms if needed.
- » Provide adequate parking for the dog park users, as most users (95%) drive to them. In addition, off-leash dog areas should be as close to the parking lot as possible to discourage owners letting their dogs’ off-leash between the dog park and parking.

Key Design Features:

Support Facility Needs:

Adjacency/Proximity:

Layered Functions:



Dog Parks

Dog parks provide the opportunity for dogs to run free and to exercise off-leash, but they also promote a safe environment for both dogs and dog owners.

- » The reduced potential conflicts between dogs and all park users should be recognized when considering the value of a dog park(s) to the neighborhood.

Research has shown that dog-owners who have a dog-supportive park within their neighborhood are more likely to walk their dogs. Furthermore, people who regularly walk their dogs are more likely to meet the minimum amount of recommended exercise per week.

- » The incentive that dog parks provide for encouraging daily physical activity for dog owners, as well as daily social interaction, should be recognized when evaluating the importance of open space.

In addition to providing the critical infrastructure to exercise dogs, dog parks are critical in promoting proper dog stewardship and are a venue for public outreach and education on issues of pet care and the enforcement of pet waste collection. Dog parks are playing an increasingly important role in removing pet waste from our stormwater runoff and reducing its contribution to lake eutrophication.

- » This environmental benefit should be recognized when evaluating the need, size, and location of a dog park.

Dog Parks

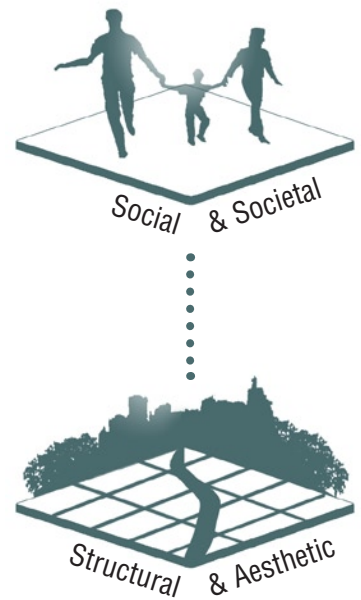
Dog parks are not just for dogs, they also need to accommodate human interaction and park use.

- » To accommodate the dog owner, dog parks should provide human amenities, such as benches, water fountains, and restrooms.

A public dog park is a community meeting space providing dog owners and guardians with an opportunity to socialize with each other and to share information.

- » To facilitate social contact and communication, as well as support the local economy, dog parks could be located near conveniences, such as coffee, newspapers, snacks, etc or be sited in a location that has the potential for such vendors to locate near the dog park.

Dog park users are regular members of the community who share an interest in having a safe neighborhood. Since people tend to use dog parks throughout the day, seven days a week, year-round—even in the rain and snow, dog park users add a high degree of activity to the park and neighborhood that ultimately leads to safer streets and public places, both functionally and psychologically.





Community Gardens

Urban agricultural gardens, or community gardens, are plots of land gardened by a group of people. Such gardens include small gardens where people grow vegetables, as well as tiny street beautification planters on urban street corners. Land for a community garden can be publicly or privately held. For all their diversity, however, most community gardens share at least four elements in common: land (or a place to grow something); plantings; gardeners; and some sort of organizing arrangements.

Targeted Users/ User-Shed:

- » Community gardens should serve all residents, from young children to older adults within the development and adjacent neighborhoods.

Distribution Across the Site:

- » The frequency and number of community gardens should typically increase in areas of large immigrant populations and areas of low mobility (elderly, low-income, and youth).
- » The ideal location for community gardens should have access to water, sunlight, and storage potential.

Size/Scale:

- » Community gardens vary in size but the projected need can be estimated by the number of gardeners, therefore the number of plots, the garden hopes to serve. Plots vary in size, ranging from about 100 to 1000 square feet, and average around 250 square feet.
- » When planning for total garden space needs, additional space should be planned for to accommodate path area, composting, storage, community gathering place, recycling area, etc.

Community Gardens



- » Farm equipment shall be enclosed or otherwise screened from sight.
- » Synthetic pesticides, herbicides, and chemicals may be applied and stored only in accordance with applicable state and federal regulations.
- » Compost areas should be set back at least 3 feet from all yards, open space, and operable windows.
- » The site should be designed and maintained so that runoff will not drain onto adjacent property.

-
- » Fencing, watering systems, soil and/or garden bed enhancements (such as raised beds), secure storage space for garden tools, solar access, and pedestrian access for these spaces should be provided (LEED ND).
 - » Permanent and viable growing space and/or related facilities (such as greenhouses) may be dedicated within the project (LEED ND).

-
- » Proximity to community gardens, like parks, adds a “certain curb appeal” to residential properties and there is growing proof of its impact on increased property values for adjacent residential lots. This impact on property values should be recognized when evaluating the importance of open space for community gardens.
 - » If a community garden is zoned by the City as a non-residential use (therefore often requiring buffering and landscaping to adjacent residential property), the City should consider making appropriate amendments to this ordinance.

Key Design Features:

Support Facility Needs:

Adjacency/Proximity:

Layered Functions:



Community Gardens

Although gardening is not often thought of as traditional physical recreation, gardening does get the muscles moving and heart rate elevated and is considered moderate physical activity. Gardening is in the same physical activity category as swimming, brisk walking, and dancing.

- » Community senior living centers, schools, and other organized groups should have access to the community gardens as a channel for regular physical activity.
- » Community gardens should be designed for use by residents of all ages and abilities.

Gardens are not just about food production. A garden that utilizes the techniques and concepts of permaculture (an approach to designing human settlements and agricultural systems that are modeled on the relationships found in natural ecological cycles) seeks to create wildlife habitat as much as a garden. That habitat is one where animals, insects, and micro-organisms work together in harmony.

- » All gardens should use and value diversity in order to reduce vulnerability to a variety of threats and support all living creatures.
- » Gardens should utilize edges to create value in the margins and foster habitats for edge species.
- » The output from one natural process should always be the resource for another natural process. Local resources should be recycled or reused on site as many times as possible within a polycultural system (i.e. food scraps to compost).
- » Every element should be placed in relationship to others so that they can benefit each other. The creation of these supportive environments helps to develop a self-sustaining system, replicating a natural ecosystem.

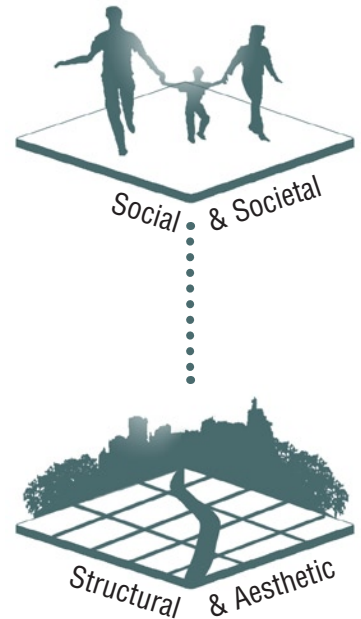
Community Gardens

The goal of gardens is not only about giving access to land for the production of food, but also about creating community.

- » Community gathering spaces should be planned for in order to build community, get the wider community involved as advocates, and for goodwill.
- » Ensure that the spaces are owned and managed by an entity that can include occupants of the project in its decision-making, such as community group, a homeowners association, or a public body (LEED ND).

Gardening can occur in linear spaces, such as along trail corridors or streets, and can create not only a productive landscape, but can also provide character and landscaping that unifies a linear path or corridor.

- » When addressing landscaping along a trail, greenway, or street corridor, consider the use of linear community garden beds and productive landscaping plants.





Play Areas

Targeted Users/ User-Shed:

- » Play areas should serve the youth of the new development and existing neighborhood. Larger, more unique ‘destination play areas’ will have a greater draw and should include youth in adjacent neighborhoods.

Distribution Across the Site:

The distribution and location(s) of play areas is paramount to the accessibility and concentration of the intended users. If few barriers exist within the targeted user-shed of the play area, then a more concentrated distribution of play areas is likely possible.

- » The location of the play area should be barrier free (it has not or few physical barriers to its use), psychologically accessible (attractive and secure), and understandable to the children who use it.
- » If barriers exist and cannot be mitigated, then a greater distribution of play areas across the site should be considered.

Size/Scale:

- » The size and scale of the play areas should be determined based on the user-shed and the desired complexity of the play area.
- » The size and scale of play spaces with each play area should be varied, juxtaposed, contrasted, and orchestrated in order to produce a range of spatial experiences suitable for different developmental and age requirements.

Key Design Features:

- » Entrances to the play area should be clearly identified, visible from nearby residential areas, and visible from the safest route or path. Furthermore, main pathways should be connected with main entrances, exits, and gathering areas to provide users with a clear mental image of the facility.
- » Play areas should be accessible from main pathways and routes to other use areas, such as ballfields and picnic facilities.
- » Hard surface paths and bike paths should be separated from play areas.

Support Facility Needs:

- » Gates: As a general principle these should take 4 – 8 seconds to close from a 90 degree open position. To prevent animal access they should open outwards unless opening directly onto a footpath where they could cause a collision.
- » Fences: These should pass the entrapment requirements: i.e. less than 89 mm between vertical paling’s; no horizontal access, and hoop tops should pass the head and neck probe.
- » Seats: These should be placed at least 300mm from the fence to prevent potential entrapment between the bench and the fence.

Play Areas



- » Litter bins: These should be placed at least 500mm from seats.
- » Signs: These should be placed adjacent to each of the playground entrances.
- » Cycle racks: These should be placed adjacent to the playground entrance
- » Pathways: Erosion resisting pathways should be provided into the site at least to the seating areas.
- » Restrooms and drinking fountains: Where feasible, restrooms and access to drinking water should be located adjacent to the play area.
- » Shelters: These should be located close to the play area as they can facilitate observation of children from covered seating areas.

Although playgrounds exist in many varying and different locations, there are a few matters that could form a hazard in the future and should be assessed with the siting of any playground.

- » The location of playgrounds near the following should be avoided:
 - » Overhead power lines/electricity sub-stations
 - » Major traffic routes
 - » Hidden/secluded areas
 - » Railway lines
 - » Waterways
- » Parking areas should be separated from play areas by barriers.

The layout of the play equipment, adjacency and proximity of structures, can also have a great influence on the overall safety of the play area. For example, collision accidents (between children and equipment and between children and other children) in play areas account for approximately 34% of play area accident reports (Association of Play Industries).

- » The layout of the play equipment should accommodate appropriately sized impact areas. A risk assessment should be conducted to indicate the proper size for free space and falling space requirements.
- » The play area should also consider the circulation patterns for those who are moving in or around the play equipment. Considerations should always be given to the anticipated number of users on the site and the circulation zones should increase if deemed necessary (these will increase if the play area is deemed a 'destination' playground, versus a small localized playground).

Adjacency/Proximity:

Play Areas

Layered Functions:

Play is learning in its most experiential sense, but it is only as rich as its supporting social and physical environment. As the additional functions of a play area are assessed and designed for, consider also how the enhanced ecological, social, and aesthetic environments contribute not only those additional functions, but also amplify the effectiveness of the learning experience for the child. A good play and learning experience must be designed as a range of settings, carefully layered on the landscape.

A successful play area challenges and supports both the physical and mental development of a child.

- » Play areas should provide highly challenging settings with many different events for the physical development of the upper body, balance, and coordination.
 - » Consider providing balance settings which stimulate the inner ear, such as tire swings, climbing surfaces, bridges, narrow rails, and walls.
 - » Consider providing judgment settings, such as horizontal ladders, stepping logs, climbers, tunnels, and banister slides.
 - » Consider providing settings that stimulate upper body strength, like rings, turning bars, climbing trees, swinging ropes, and things to lift.
- » Play settings should provide activities with a broad range of challenges with graduated levels of safe risk-taking for children of different ages and abilities.
- » Play areas should be designed to stimulate the development of all the senses: taste, touch, sight, smell, and hearing.
- » Play areas can be used to stimulate mental growth and creativity, therefore making play areas of entirely realistic play objects should be avoided.



By providing natural habitat for organisms and wildlife, children play areas can enhance regional ecological diversity; while also having a particularly powerful therapeutic effect on children and provide a source of wonder and fascination for all.

- » If natural habitats and features already exist on an undeveloped site, they should be conserved and integrated into the site plan.
- » A modest scale of wildlife that children find attractive (birds, beetles, salamanders, snails, worms, butterfly, etc.) should be supported. Shelter and food for this small-scale animal life must be provided. Specific ideas for making the site more attractive for wildlife that is compatible with play areas include:

Play Areas

- » Diversity of vegetation – volunteer wild plants, ground cover, wall covers, shrubs and trees
- » Dark undersides and cavities – rocks, logs, and other heavy objects placed on the ground with cavities underneath
- » Chip pile – chippings from trees will support a rich community of organisms
- » Compost heap – prunings and weeds will become a hive of activity for organisms
- » Wood pile – tie logs together to form a great habitat for insects and other organisms
- » Large logs – large, heavy, decomposing logs provide a self-contained ecosystem
- » Water places – wildlife can be encouraged in ponds by providing landings, islands, and marshes within the body of water

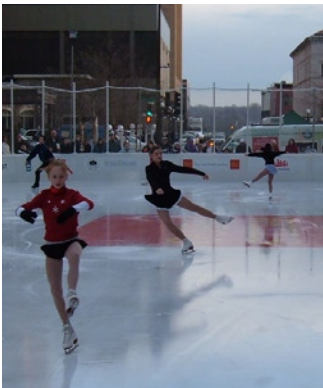
By providing a variety of spatial settings – private, semi-private, and public – the stage is set for a spectrum of social experiences.

- » Settings that stimulate social development and support social relationships for different sized groups should be provided.
- » Noisy areas should be separated from quiet spaces in order to provide children the time and space to be alone or in small groups.
- » To promote quiet exploration, private places that only children can get into but can be monitored by adults (such as low platforms and areas partially screened by vegetation) should be provided.

Children's play areas are important gathering areas for both youth and adults – they are frequented often and therefore become a defining element of the neighborhood fabric.

- » Settings that can build on the neighborhoods sense of place and community identity should be selected.
- » Structural equipment and materials that are unique to the neighborhood, and therefore strengthen its identity, should be preferred over generic materials.

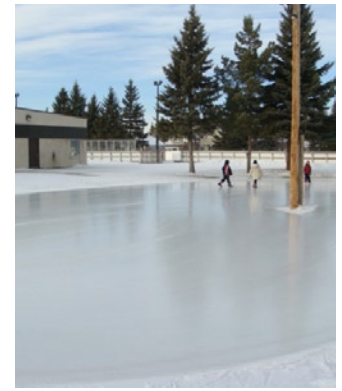




Ice Skating

Targeted Users/ User-Shed:	<ul style="list-style-type: none">» The skating area should serve the residents of the neighborhood and others that reside within 1-2 miles of the rink.
Distribution Across the Site:	<ul style="list-style-type: none">» Only one skating area is needed and it should be located near parking, restrooms, and other desired amenities.
Size/Scale:	<ul style="list-style-type: none">» The ice skating area should require a minimum of 20,000 square feet.
Key Design Features:	<ul style="list-style-type: none">» The skating area should be located near access to water for flooding.» The skating area should utilize dark-sky friendly lighting.» The skating area should utilize a stormwater capture and reuse system.
Support Facility Needs:	<ul style="list-style-type: none">» Support facilities should include:<ul style="list-style-type: none">» Warming house» Restrooms» Water» Concessions» Parking
Adjacency/Proximity:	<ul style="list-style-type: none">» The rink should not be located immediately adjacent to residential areas. If it is located near a residential area, a large buffer should be utilized to mitigate light and noise pollution.» The rink should be located near an indoor warming facility with restrooms. If a community center is an option, this should be pursued over a stand-alone warming house.

Ice Skating



Ice skating is a low-impact aerobic form of exercise that improves one's endurance, muscle tone, and balance. In addition, it is a de-stressor and a form of mental fitness as it typically gets people outside in the fresh air and sunshine, in the company of friends and family.

- » In order for ice-skaters to gain the greatest physical and mental benefits, the skating rink should be programmed to meet the needs for users of all ages and abilities.
- » The ice-skating rink should provide a mentally calming atmosphere, as well as a physically challenging environment.

An ice skating facility can consume a lot of electrical energy and a large amount of water during its normal operation.

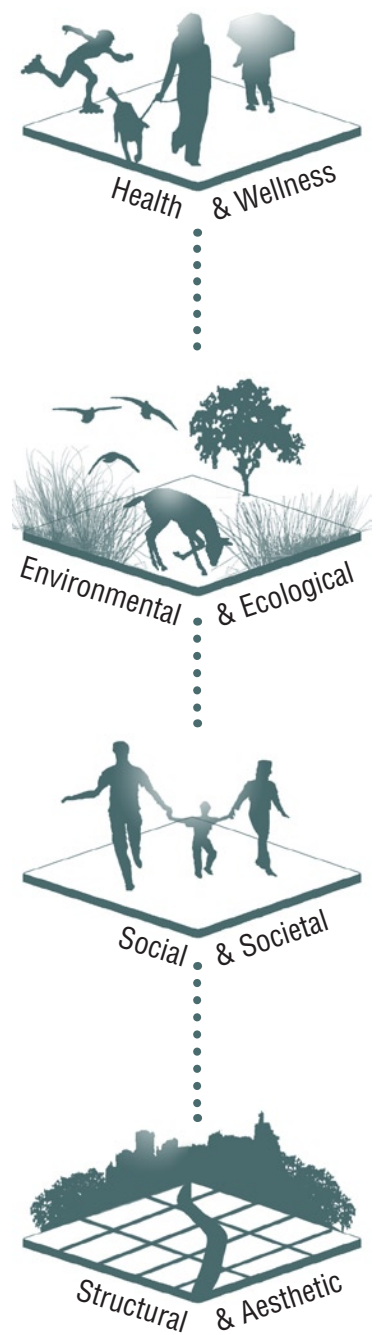
- » Therefore, the City should evaluate the needs of the community and consider the proper need for installation of in-ground refrigerated rinks.
- » There is a need to evaluate the potential re-use of stormwater for the flooding of ice rinks.
- » The City should continue to evaluate new techniques that incorporate proper integration and strategic management of components combined with operational procedures that will allow them to optimize the efficiency of the facility.

Ice sports come particularly close to the ideal of “Sports for All”, a concept envisioning the promotion of health, communication and quality of life through active living and sports. It provides for health and enjoyment while being socially and recreationally relevant to both sexes within a wide age bracket. Therefore, it is important to bring as many members of the community to the facility as possible.

- » With this in mind, it is important that rink management seek out the participation of as many diverse groups as possible, including school groups, companies, neighborhood organizations, church groups, etc.

Community identity and neighborhood sense of place is often tied-up in public open space. In a climate that has drastic seasonal differences, like Saint Paul's, it is especially important to program park and open space for winter use. Ice sports are critical winter sports that activate open spaces in cold climates.

- » Therefore the important role ice skating rinks play in year-round community identity should be considered when determining the need, size, and distribution of ice skating facilities within the community.





Court Sports

Targeted Users/ User-Shed:

- » Unless the courts are clustered to provide for tournament use, the courts should serve only the residents of the new development and the adjacent neighborhood.

Distribution Across the Site:

- » Court sports, such as tennis and basketball, should be located near areas of the site that will see active recreation use.
- » If there are to be multiple courts of the same purpose, they should be clustered together in order to facilitate tournament use.
- » If the courts will have tournament use, they should be located near a primary street and have access to adequate parking.

Size/Scale:

- » Basketball: Depending on if a full-court or half-court is preferred, 2,400-3,100 square feet should be allocated for court use.
- » Tennis: A single tennis court will require 7,200 square feet of space.
- » Volleyball: A single sand volleyball court will require a minimum of 2,000 square feet.

Key Design Features:

- » Active and noise producing facilities, such as basketball courts, should be located at least 100 feet from nearby homes or property zoned for residential use.
- » The long axis of both basketball and tennis courts should be sited north-south.

Support Facility Needs:

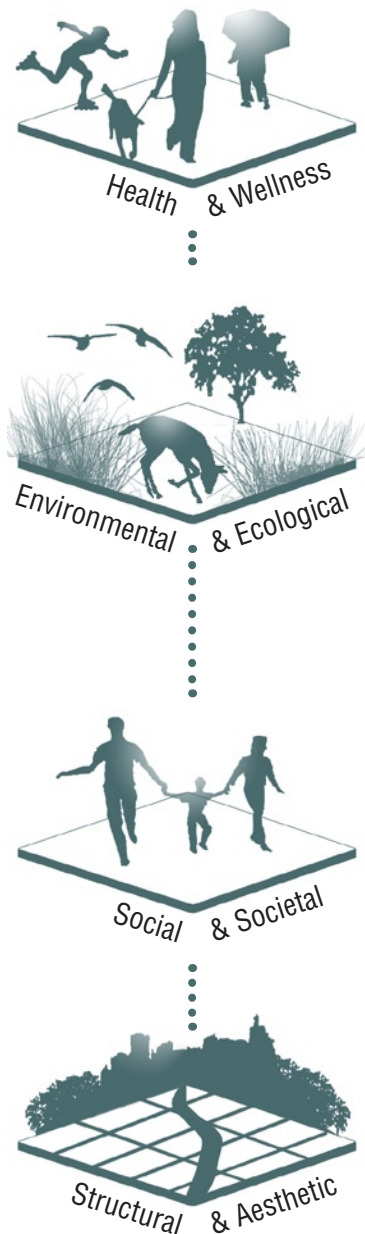
- » Where appropriate, storage facilities should be considered.
- » Where appropriate, court sports should be located near water-hookups for the potential addition of restrooms and drinking facilities.

Adjacency/Proximity:

- » Locate basketball courts, in particular, to provide visibility from adjoining streets, which will promote safety and minimize vandalism. However, do not locate them directly adjacent to parking lots or children's play areas.

Court Sports

- » Court sports, such as basketball and tennis, should be readily accessible to neighborhood residents as they provides a valuable opportunity for both youth and adult physical activity.
-
- » The construction and siting of sports courts should have the as small of impact on the environment as possible. Therefore:
 - » Courts should not be located immediately adjacent to pristine natural areas.
 - » Courts should not be located where they have adverse impacts on the water cycle.
 - » Court construction should consider a permeable surface in order to reduce the amount of impervious surface produced by the playing surface.
 - » If appropriate, the construction of the court should evaluate the opportunity to capture water runoff for reuse in the adjacent landscape.
-
- » Court areas are often areas for social gathering. Therefore, the design of the court areas should consider support amenities that facilitate social contact and communications.
-
- » In order to increase the value of development on unsuitable land, the siting of court sports could be considered on other lands that are unsuitable for development. In these cases, all environmental hazards should be reviewed and considered.





Adventure Sports

Targeted Users/ User-Shed:

- » The adventure sports facility should serve the residents of the neighborhood and potentially draw youth from other adjacent neighborhoods, depending on the size and diversity of the adventure sports facility.

Distribution Across the Site:

- » The adventure sports area should be centrally located and close to transportation (bikeways, sidewalks, and bus routes) as most of the users are not old enough to drive.
- » The adventure sports area should be located near conveniences (food and water) as it is a physically demanding form of recreation that requires youth to 'refuel'.
- » In order to reduce the risk of crime, adventure sports areas should be located in a highly visible place that has many eyes on it.

Size/Scale:

- » A skate park needs a minimum area of 7,500 square feet.

Key Design Features:

- » Many adventure sports, like skateboarding, are spectator sports. Bleachers should be considered.
- » In order to keep down dust and debris, an area of lawn should be planned for around the adventure sport area.
- » The skating area should be fenced in order to protect those passing by and spectators.
- » The adventure sports area should be located near a phone for emergencies.
- » To ensure successful and safe skate park design, the City should hire a professional skate park designer.
- » Adventure sport users should be segregated based on their level of experience.
- » Modular pieces that allow for easy replacement or occasional reconfiguration of the skate park layout should be considered to maintain user interest and challenge for multiple sports and skill levels.
- » Skate boarders, in-line skaters and bikers can use the same ramps, however, preference of ramps and the way they are used may be different and should be considered.

Adventure Sports



- » Adequate trash containers should be planned for.
- » Drinking fountains should be located nearby.
- » Restrooms should be located nearby.
- » A small shelter is desirable for checking in skaters, collecting fees and liability waiver forms, posting schedules, storing first aid equipment and maintenance tools. Some parks rent protective gear.
- » Other site amenities for consideration include:
 - » Parking
 - » Bike racks
 - » Lighting
 - » Fencing
 - » Bleachers
 - » Benches
 - » Pay phones
 - » Signage

Support Facility Needs:

-
- » The Adventure sports area should not be located adjacent to residential areas as the noise is not compatible with a residential development. A minimum of 150 yards from residential homes is recommended.

Adjacency/Proximity:

Adventure Sports

Layered Functions:



Adventure sports provide more than just traditional physical exercise. An adventure sport participant gains a sense of exhilaration, a sense of achievement, and a motivation to perform better that usually transcends into all aspects of life. And since most adventure sports occur outdoors, participants also receive the relaxing benefits that occur from breathing in fresh air and sunshine. Adventure sports participants are able to work both their mind and body.

- » Therefore, everyone should have the opportunity to be involved in adventure sports at one point in their life to feel the benefits of these sports.

Many adventure sports, specifically skateparks, provide kids with a place to practice their sport, while reducing physical and environmental damage to property and other items throughout the community that skateboarders use as obstacles when they ride. Other adventure sports can provide an organized venue for environmentally friendly activities that replace inappropriate use of natural landscape features, like mountain biking or rock climbing.

- » When evaluating the need and importance of adventure sports, the subsequent benefit to the environment, by the reduction of inappropriate use, should be considered.

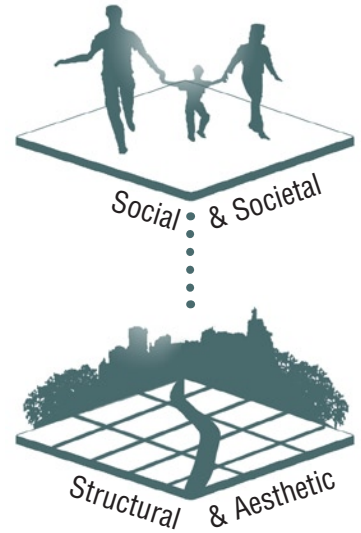
Adventure Sports

When adventure parks are built right — with local participant input and involvement throughout the process — the kids develop a sense of ownership and pride for the location.

- » Therefore, in order to create greater stewardship and social capital, the adventure park should be built with local participation, specifically youth.

Adventure sport opportunities, specifically an adventure sports park or facility, provide youth with a connection to their community that they identify with.

- » This facility becomes an important part of the urban fabric, especially for youth, and therefore should be recognized as an important neighborhood gem.





Baseball/Softball

Targeted Users/ User-Shed:

- » The baseball and softball fields should serve the surrounding community.
 - » The baseball and softball fields should specifically serve the needs of the neighborhood sports organizations, such as Highland Little League
-

Distribution Across the Site:

- » The fields should be clustered to take advantage of support facilities
 - » The cluster of fields should be located to minimize any negative impacts of activity and lights on residential properties
-

Size/Scale:

- » Softball: A single field should require 1.5 to 2.0 acres of space
 - » Baseball: A Little League field should require a minimum of 1.2 acres. An official adult field should require between 3.0 to 3.85 acres of space.
-

Key Design Features:

- » The fields should utilize engineered soils or artificial turf fields
- » The field complex/cluster should utilize dark-sky friendly lighting.
- » Spectator seating should accommodate approximately 150 – 300 per field.
- » The fields should utilize a stormwater capture and reuse system.
- » Adjacent field landscaping should utilize native plants for re-vegetation
- » Shade trees should be planted to reduce the fields' solar heat index
- » All site features should be constructed of durable and long lasting materials.
- » All site feature design and selection should maintain a common design vocabulary that ties the design features together as a unified project. These site features may include:
 - » Backstops
 - » Covered dugouts
 - » Score keeper's pavilions
 - » Electronic score boards
 - » Bleachers
 - » Drinking fountains
 - » Bike racks
 - » Flagpole/entry gateway
 - » Fencing

Baseball/Softball



- » Support facility needs should be evaluated relative to adjacent neighborhood facilities and be coordinated in order to provide the greatest impact for all open space users and neighborhood residents. Support facilities may include:
 - » Bathrooms
 - » Parking
 - » Concessions
 - » Storage Building
 - » Play Area
-

Support Facility Needs:

- » If the ballfields are located immediately adjacent to residential areas, a large buffer should be utilized to mitigate light and noise pollution.

Adjacency/Proximity:

Layered Functions:



Baseball/Softball

Softball and baseball, two traditional open space features, provide the opportunity for youth and adults to not only be physically active, but also to learn teamwork, responsibility, communication, and social skills. It is important that these opportunities be available to all.

- » In order to plan for the greatest positive impact on all residents and neighbors, the ballfield/ballpark complex should be designed for users of all abilities, including those with disabilities.

Traditionally ballparks have been perceived as environmental unsound and unnatural. However, with new technologies and advancements in sustainable construction materials, they no longer need to be disruptive to the natural ecological and watershed functions.

- » Utilizing sound environmental practices and new technologies, the ballfield facility should require little to no water for irrigation.
- » The Landscape Architect and the Civil Engineer should coordinate in order to integrate water quality and stormwater best management practices into the design. These may include:
 - » Vegetated swales in parking lot
 - » Curb cut inlets to swales
 - » Permeable paving
 - » Onsite stormwater retention
 - » Overflow drainage connected to storm drain

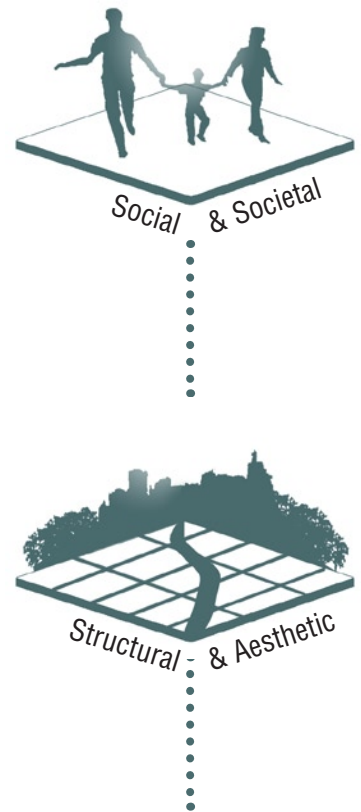
Baseball/Softball

The ballpark design - circulation system, seating patterns, and so on – will affect the opportunity for both overt and covert socializing. It is important to design for both planned social gatherings and casual people watching.

- » A space, within the ballfield or ballpark complex, for a meeting place that can easily be described to another person should be designed for.
- » Seating arrangements that support the type of social contact desired should be deliberately designed for. This may include more than bleacher seating arrangement and other locations for seating that supports conversation.
- » The design should provide picnic tables or other appropriate spaces for eating if concessions are available.

Traditionally, and perhaps still today, ballparks have served as iconic features that residents identify and connect with. Although current recreation trends show an increase in alternative sports and play, ballparks still serve as an important component of neighborhood recreation and may be central to neighborhood identity.

- » The ballfields should be sited in order to not disrupt a natural view or vista.
- » If feasible, the ballfields should be located in order to capitalize on important views and natural features by utilizing borrowed landscapes and site-line manipulation.
- » The fields should occupy a location that does not disrupt, but rather complements, the greenway connections between the Mississippi River and the neighborhood.





Soccer/Lacrosse/Football

Targeted Users/ User-Shed:

- » The soccer/lacrosse/football fields should serve the surrounding community.

Distribution Across the Site:

- » The fields should be clustered to take advantage of support facilities
- » The cluster of fields should be located to minimize any negative impacts of activity and lights on residential properties
- » The number of fields depends on the popularity.

Size/Scale:

- » A Lacrosse or football field should require a minimum of 1.5 acres of space
- » A soccer field may require 1.7 to 2.1 acres of space, depending on the field size and targeted age of users.

Key Design Features:

- » The fields should utilize engineered soils or artificial turf fields
- » The field complex/cluster should utilize dark-sky friendly lighting.
- » Spectator seating should accommodate approximately 150 – 300 per field.
- » The fields should utilize a stormwater capture and reuse system.
- » The long axis of field hockey/lacrosse/soccer fields should be sited north-south.
- » Adjacent field landscaping should utilize native plants for re-vegetation
- » Shade trees should be planted to reduce the fields' solar heat index
- » All site features should be constructed of durable and long lasting materials.
- » All site feature design and selection should maintain a common design vocabulary that ties the design features together as a unified project. These site features may include:
 - » Score keeper's pavilions
 - » Electronic score boards
 - » Bleachers
 - » Drinking fountains
 - » Bike racks
 - » Fencing

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- » Support facility needs should be evaluated relative to adjacent neighborhood facilities and be coordinated in order to provide the greatest impact for all open space users and neighborhood residents. Support facilities may include:
 - » Bathrooms
 - » Parking
 - » Concessions
 - » Storage Building
 - » Play Area
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- » If the fields are located immediately adjacent to residential areas, a large buffer should be utilized to mitigate light and noise pollution.

Support Facility Needs:

Adjacency/Proximity:

Layered Functions:



Soccer/Lacrosse/Football

Soccer, lacrosse, and football increases aerobic capacity and cardiovascular health, lowers body fat and improves muscle tone; builds strength, flexibility and endurance; increases muscle and bone strength; and improved health due to shifts between walking, running and sprinting.

- » Soccer should be made accessible to people of all ages and abilities. This includes providing enough space for programmed and un-programmed play.

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- » Utilizing sound environmental practices and new technologies, fields should require little to no water for irrigation.
 - » The Landscape Architect and the Civil Engineer should coordinate in order to integrate water quality and stormwater best management practices into the design. These may include:
 - » Vegetated swales in parking lot
 - » Curb cut inlets to swales
 - » Permeable paving
 - » Onsite stormwater retention
 - » Overflow drainage connected to storm drain

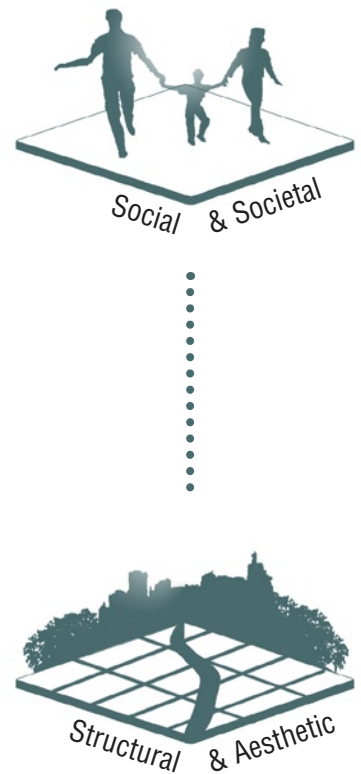
Soccer/Lacrosse/Football

Soccer, lacrosse, and football teach coordination, promote teamwork and sharing. They help to increase skills in concentration, persistence and self-discipline; and are a great way to meet people and exercise with friends.

- » With this in mind, it is important that the soccer, lacrosse, and football field be adequately sized and programmed to allow for team use and support the benefits that are gained from team sports.

There are few sports that are popular and practiced all over the world, but soccer is one of them. Soccer, lacrosse, and football provide an open play field space that is also an open venue for people of all ages, cultures, and ethnicities to share in a common interest and passion.

- » This play field space provides an opportunity for embracing diversity and should be central to neighborhood identity.
- » The field space should be sited in order to not disrupt a natural view or vista.
- » If feasible, the fields should be located in order to capitalize on important views and natural features by utilizing borrowed landscapes and site-line manipulation.
- » The fields should occupy a location that does not disrupt, but rather complements, the greenway connections between the Mississippi River and the neighborhood.





Hoisington Kogler Group, Inc.