West Side Flats Master Plan & Development Guidelines
West Side Flats Master Plan & Development Guidelines

Prepared for the
SAINT PAUL ON THE MISSISSIPPI DESIGN CENTER
In conjunction with the
SAINT PAUL DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT
And
SAINT PAUL RIVERFRONT CORPORATION
And the
NEIGHBORHOOD DEVELOPMENT ALLIANCE
WEST SIDE CITIZENS ORGANIZATION
RIVERVIEW ECONOMIC DEVELOPMENT ASSOCIATION
OPUS ARCHITECTS AND ENGINEERS, INC.
KKE ARCHITECTS, INC.
Prepared by
HAMMEL, GREEN AND ABRAHAMSON, INC.

August 2001
## Contents

**Executive Summary** (Inside Pocket)

**Preface** .................................................. 1

**Part One Master Plan** ................................. 5  
1A Development Context .............................. 7  
1B Market Place ......................................... 11  
1C Master Plan .......................................... 15

**Part Two Development Guidelines** .............. 25  
2A Thoroughfare Standards ......................... 27  
2B Block Standards ..................................... 37  
2C Urban Standards .................................... 59  
2D Architectural Standards ......................... 67  
2E Landscape Standards ............................... 75

**Part Three Appendix** ................................. 87  
A1 Great River Greening Mitigation Language .... 88  
A2 US Bank at West Side Flats ..................... 89  
A3 Acknowledgements .................................. 90  
A4 Bibliography .......................................... 91
Preface

The West Side Flats (a 45-acre area bordered by Wabasha Street, Plato Boulevard, Robert Street and the Mississippi River) provide a unique opportunity. While the area has suffered from disinvestment over the last several decades and is currently the location of several acres of vacant land, the Flats hold great promise to be transformed in a way that will complement the greater West Side area and reconnect it to the Mississippi River. A mix of residential, commercial, entertainment and recreational uses will fill this “hole in the urban fabric” and revitalize this long-neglected section of the Mississippi Riverfront.

The West Side Flats Master Plan and Development Guidelines are rooted in strong, deeply-held visions shared by the larger West Side community and the City as a whole, including the Saint Paul on the Mississippi Development Framework, West Side Flats Development Strategy and West Side Flats Conceptual Master Plan. Each of these documents further refines the overarching vision of a city of neighborhoods connected to the Mississippi River, and sets the stage for the specific guidelines and standards of the West Side Flats Master Plan.

In the early 1900’s, architect Benjamin Thompson created a new vision for downtown. Looking westward from the sacred Native American mounds of Dayton’s Bluff, Thompson created a picture that showed the promise of a city outdoor room: a valley two miles wide and ten miles long planted with trees, punctuated by arching bridges, and once again a point of gathering for neighborhoods. This concept of a Great River Park sets the stage for the West Side Flats Master Plan.
The *Saint Paul on the Mississippi Development Framework*, completed in 1997 after two years of extensive community input, most clearly established the vision of Saint Paul as a city on both sides of the Mississippi River, where the river joins, rather than separates, neighborhoods. In the *Framework*, the West Side is envisioned as a series of linked urban villages where people live, work and play. Each village, of which the West Side Flats is one, has a clearly-identified focus, high-quality architecture and well-designed public spaces. A diversity of housing types welcomes residents of all ages, incomes and family types. A vibrant local economy is reflected in businesses catering to neighborhood needs as well as community/regional markets. In this vision, the Mississippi River is an integral part of the neighborhood, and there are opportunities to experience it from a number of perspectives and vantage points. The *Framework* envisions a “green armature” that comprises the banks of the Mississippi River, the greened bluffs, a converted railroad corridor and a series of green corridors along the north-south streets extending from the river to the bluffs. Within this armature, a variety of public spaces, ranging from regional park to neighborhood green, create a finer-grained green network extending throughout the West Side. The *Saint Paul on the Mississippi Development Framework* laid out ten city-building principles, as well as goals and objectives in the areas of environmental context, urban structure, movement networks and public realm.

During preparation of the *Framework*, the West Side Citizens Organization (WSCO) consulted community members and developed four principles for riverfront development to guide the revitalization of the West Side Flats. The principles are based in the history of the West Side as a gathering place that welcomes diversity. Fulfillment of the West Side riverfront development principles will result in the resurgence of the great gathering place that is the Mississippi River:

**Accessibility**
Riverfront development shall be consistent with a community vision of pedestrian corridors buffered from traffic that invite residents to enjoy affordable activities on the riverfront in all seasons. *Key concepts*: pedestrian-centered, year-round use, affordable.

**Connectedness**
Riverfront development shall incorporate the character and culture of the West Side. Projects must provide a clear and definite connection with the aesthetics and spirit of the existing neighborhood. In addition, development should enhance transportation and relational linkages between the West Side and other riverfront communities. *Key concepts*: aesthetically consistent with neighborhood character, develops transportation linkages, respects West Side culture.

**Opportunity**
Riverfront development shall provide job and business opportunities for West Side residents and community development opportunities for the neighborhood as a whole through such projects as business incubators, youth development and educational activities, and the establishment of a community trust fund. *Key concepts*: supports local business development, offers viable employment, provides reinvestment resources.

**Quality**
Riverfront development shall respect that the West Side is first and foremost a place where people live, thereby protecting the residents’ ability to peacefully enjoy their homes and neighborhood. *Key concepts*: counters nuisance potential, maintains community security, includes appropriate infrastructure development, enhances resources.
In 1999, as a follow-up to the Development Framework, a consortium of public and private partners (including the Saint Paul Riverfront Corporation, West Side Citizens Organization, City of Saint Paul, Capital City Partnership, Saint Paul on the Mississippi Design Center, Riverview Economic Development Association, Neighborhood Development Alliance, Saint Paul Port Authority and Ellerbe Becket, Inc.) prepared the West Side Flats Development Strategy to study the West Side Flats in more detail and apply the Framework’s principles to the area. Over the course of a year, a public visioning workshop, charrette and several community meetings were held with residents, business owners and affected agencies to receive input on the community’s vision for the Flats. The West Side Flats Development Strategy establishes a flexible framework for future development that allows for a variety of uses to occur within the context of a compact urban village. Key components of the Development Strategy include:

- New open spaces and pedestrian connections to create linkages to adjacent uses/neighborhood and add value to development parcels.
- Visual and physical access to the river.
- Re-establishment of the historic neighborhood street grid to provide appropriately-scaled development parcels, a streetscape open space network, and multiple street access points for convenient vehicular circulation.
- Improved streetscapes, building facades and adjoining public uses.
- A mix of uses, with commercial activities on blocks with Robert and Wabasha street frontages, entertainment uses along the river and residential uses on interior blocks oriented to a linear open space.

In January 2000, the West Side Flats Development Strategy was endorsed by the Saint Paul City Council as the overall vision for the future development of the area between Robert, Wabasha, Plato and the Mississippi River.

The next step in refinement of the vision for the West Side Flats came in response to a specific development opportunity - the desire of U.S. Bank to site a new client services center on Saint Paul’s riverfront. A conceptual master plan and perspective sketches were prepared in February 2000 by HGA, Inc. and Town Planning Collaborative under the direction of the Saint Paul on the Mississippi Design Center to illustrate how a 500,000-square-foot office development could fit into a new mixed-use urban village on the Flats. Using the vision of the Development Strategy as a starting point, the Conceptual Master Plan laid out a new neighborhood with several key features:

- Integration of a large corporate office development with residential, commercial, community and recreational uses.
- A mix of housing types, prices and sizes, totaling almost 900 units.
- A public edge along the river and engagement of the riverfront esplanade.
- A land use pattern and form based on an urban block structure.
- Re-establishment of the historic street grid.
- On-street parking.
- Connections between the river’s edge and West Side Flats site, as well as between the river and the greater West Side neighborhood through the Flats.
- A central green.
- Enhancement of the urban ecology through plantings and natural stormwater management.
- Recognition and protection of important views and view corridors.
The Conceptual Master Plan was instrumental in U.S. Bank’s selection of the West Side Flats for its new office buildings, and in gaining developer interest for the housing component of the new community.

With the reality of serious interest in redevelopment of the West Side Flats, and a sound basis of City and community support to implement a commonly-held vision, the need for a master plan and development guidelines for the entire 45 acres became apparent. The West Side Flats Master Plan was prepared through a collaboration of the West Side Citizens Organization, the Neighborhood Development Alliance, the Riverview Economic Development Association, the Saint Paul Riverfront Corporation, the Saint Paul on the Mississippi Design Center, the City of Saint Paul and representatives of JLT Group, the designated master developer for the Flats. It illustrates how the vision shared by these entities - and laid out in the Saint Paul on the Mississippi Development Framework, West Side Flats Development Strategy and West Side Flats Conceptual Master Plan - should be implemented at the neighborhood, block, parcel and building scale.

This document is intended for use by developers, community-based organizations, City departments and agencies, architects, landscape architects, residents and business owners to guide the design of both private development and public improvements on the West Side Flats. In some cases, there may be a formal City role in the use of the Master Plan (e.g. site plan review, development agreements, public financing), where compliance with the guidelines and standards may be required. In other cases, the review may be more informal, such as when prospective developers confer with the West Side Citizens Organization or the Saint Paul on the Mississippi Design Center to receive feedback or assistance on a particular proposal. In any event, the West Side Flats Master Plan and Development Guidelines should be used to inform and guide new development so that it is consistent with the community’s vision of how best to “complete” the West Side.
The West Side Flats Master Plan is a more detailed response to the plans, policies, and strategies previously referenced. Specifically, the plan is a direct refinement of the *Conceptual Master Plan* prepared in March of 2000. The *Conceptual Master Plan* set the basic characteristics of the neighborhood: a grid street pattern, a prominent public realm of green streets, neighborhood park and riverfront green spaces; a mix of uses and mixed use buildings; and a variety of residential types.

In Part I, the Master Plan is discussed relative to the larger context of region, city and neighborhood. The Market Study is summarized as it applies to the site and identifies a variety of building types. The Master Plan is also discussed in terms of existing conditions, buildable areas, proposed building types, public realm, stormwater management and parking.
REGION

Natural Environment
The West Side Flats are located in what was once a large river sand bar; near the confluence of the Minnesota and the Mississippi Rivers. In an earlier time, these rivers formed a transportation network for getting up and down river; these were the highways that brought new settlers and goods into the Upper Midwest plains and forests.

The West Side Flats are also part of a river valley that has undergone many changes from the early 1800’s, when the first settlers arrived at “Pig’s Eye,” to the current redevelopment of vacant and under-utilized land along the river. The large sand bars between the valley’s bluffs became home for the first trade and market places, as well as home sites for the growing new city of Saint Paul. As time went on, frequent flooding of the river forced residential neighborhoods up on the bluffs, and left the river flats to become industrial and shipping locations. In recent years, almost all freight and passenger travel has moved to highways and municipal thoroughfares. As a result, the West Side Flats have become less valuable as a regional hub for industrial activity, and more valuable as an integral part of a dynamic American city center.

The Great River Greening project is just one of the current efforts to restore the ecological heritage of the river valley as it passes through Saint Paul. Several other local and regional projects are being undertaken by local and metropolitan citizens to reestablish the Mississippi River as a valuable regional amenity. The West Side Flats will integrate these efforts to make the city’s riverfront a natural habitat for plant and animal communities, as well as a great place to live, work and play.

Competitive Livability
The Saint Paul on the Mississippi Development Framework states quite clearly it is a city’s ability to effectively balance its economy, environment and society that provides a competitive advantage among other metropolitan communities throughout the world, country, and particularly the Upper Midwest. As more commercial enterprises search for new locations to grow their business activity, a high quality of life for families and employees becomes an important consideration in their choice.

The West Side Flats will offer a great urban neighborhood to prospective residents and businesses to establish strong roots in Saint Paul’s economy, environment and society. Much like mature Saint Paul urban neighborhoods, the West Side Flats have many types of buildings, a network of streets and a comfortable, pedestrian-scaled public realm. It is an urban environment like very few others in the region because it is in such close proximity to local resources such as the retail and commercial activity downtown, the river and valley habitat, an established neighborhood, and a local urban lifestyle.
Smart Growth

One of the most pressing issues of our time is the pattern by which our communities grow and prosper. “Urban sprawl” is often thought of as a problem at the metropolitan edge alone. However, it is not. By leaving vacant and under-utilized parcels within the center of our cities, where there is existing infrastructure and where communities are rooted in an interesting and vibrant heritage, we are actually promoting repetitive duplication of suburban environments at the metropolitan edge.

The West Side Flats directs urban development into area where significant public infrastructure already exists by redeveloping open land into an attractive urban neighborhood. The new community takes advantage of neglected land and offers locations to live, work, shop, and play within close proximity of one another. It offers residents direct access to transit such that they may reach any place within the metropolitan area, or even the region, without using a car. In this way, future residents and workers of this new urban community will be actively contributing to the construction of great urban places and preservation of our region’s countryside environment.

City Building

Redevelopment of the West Side Flats is part of a larger strategy towards building a great Upper Midwest city. Saint Paul has a specific place and identity within the region, and in the minds of Minnesota citizens. Saint Paul is Minnesota’s capital. The city is also home for a variety of cultural activities, such as hockey, museums, galleries and performance arts. But a vibrant city is known not just for its institutions and monuments. It is also known for its culture, activity and community life. Saint Paul is unlike any other place throughout the region. It is not the countryside. It is not a collection of subdivisions. It is not a theme park. It is a city.

West Side Flats is a complementary component of that city. It is directly across the river from downtown Saint Paul. It is also right on the river, part of an established neighborhood with a long history of ethnic diversity. Such a unique location in the heart of the city offers all the amenities of an urban lifestyle, convenient connections to destinations throughout the region, and the opportunity to be part of an urban renaissance.
DISTRICT
Great cities have distinct, yet connected districts. The Framework calls for new “urban villages” throughout the city and particularly near the city’s center. Along the river, the West Side Flats is one of those new urban villages where the scale of development is appropriate to future residents and the lifestyle of urban living. Neighborhood-scaled parks, greens, open spaces, as well as tree-lined streets that connect the bluff neighborhoods to the Mississippi River and the view of downtown Saint Paul, will offer many memorable places.

NEIGHBORHOOD
There are some fundamental characteristics that identify the greater West Side as an urban neighborhood. It is has a center and an edge, a network of interconnected streets, a hierarchy of public open spaces, and a connection to the local landscape and its heritage. As a part of that larger neighborhood, the West Side Flats will be designed and built with these same characteristics in mind.

The West Side Flats are bounded by Robert and Wabasha Streets, Plato Boulevard and the Mississippi River, all fairly formidable barriers, at least at a pedestrian scale. With Robert and Wabasha Streets and Plato Boulevard, there is a hierarchy of streets that provides a variety of circulation routes and speeds, as well as parking choices. Within this network of tree-lined, pedestrian-scaled streets, there will be a variety of public open spaces, including a riverfront esplanade, a central green, sidewalk cafes and delis, and courtyards between buildings. Perhaps the greatest achievement of the West Side Flats will be its capacity to both resurrect and reinvent for today the urban village lifestyle that was over a hundred years ago such a lively part of Saint Paul’s riverfront landscape.
Saint Paul Comprehensive Plan

The Housing Plan, as part of the Saint Paul Comprehensive Plan of 1999, notes three key strategies for housing in the city. They include:

- Take care of what we have.
- Meet new market demand.
- Ensure availability of affordable housing.

The Plan envisions that, by the year 2020, Saint Paul will have added over 20,000 people to its population and 12,000 jobs to its employment base. The West Side Flats can significantly support this anticipated new housing demand by providing a range of housing for new workers.

The Comprehensive Plan notes the following key trends for housing in the region:

- Empty nest households will flood the market.
- Rising numbers of young households and immigrant families will create a demand for modest cost housing.
- There will be rising property values.
- There will be low vacancy rates for apartments.

The Comprehensive Plan calls for encouraging the production of 300 - 400 new housing units city-wide per year by working with potential developers to create compact and mixed-use development with ready access to transit. The Plan also encourages innovative development through such regulatory reforms as streamlining the zoning approval process, and amending the zoning code to allow for more efficient use of existing larger single-family homes and the mixing of uses within a district.
MARKET POSITION ANALYSIS
Completed in March, 2000, the Market Position Analysis conducted by Zimmerman/Volk Associates, Inc. provides an overview of four key development sites: West Side Flats, Koch-Mobil, Shepard-Davern, and Stroh’s Brewery. The report uses a unique target market methodology that examines potential demand for future urban in-migration rather than simply extrapolating past trends of population change.

The potential for future growth is estimated based on the options of new housing that could be provided and the households in an estimated draw area for future urban residents. This technique is useful in locations where no development comparables exist, because it considers not only basic demographic characteristics, “such as income qualification and age, but also less frequently analyzed attributes such as mobility rates, life style patterns and compatibility issues.”

With regard to the West Side Flats, the Zimmerman/Volk study encourages a mixture of high-density type housing units. The report concludes that a target residential mix of approximately 1,000 housing units could be broken down to roughly multi-family rental (58% of total units), multi-family for sale (24% of total units), and single-family attached for-sale (17% of total units).

The analysis envisions target households for the West Side Flats as a mix of urban and suburban older and younger families with an affinity for urban life. A majority of these households might be professionals, small business owners, software and computer specialists and office workers.

Apartment Unit Design
The study recommends a unit mix of 587 rental apartments and courtyard buildings, with 20% studios, 40% one-bedroom apartments, 30% two-bedroom apartments and 10% three-bedroom apartments. Although the report notes that unit sizes and individual buildings can be adjusted according to location, with smaller and less expensive units located in areas without river views, a net density of 45 units per acre should be achievable in this housing type. The study also calls for 72 loft (live/work) apartments in new loft buildings of approximately 1,000 to 1,400 square feet of living space per apartment.

The size and mix of over 172 story houses on approximately 24 x 90 foot lots vary according to location and views. The study calls for townhouses of two bedrooms to be 40% of the mix and three-bedroom townhouses to be 60% of the mix.
Phasing to Create a Critical Mass

The study urges that a range of housing types be introduced as quickly as possible to have the highest impact at market introduction for the new neighborhood. An appropriate first phase would be to start with riverfront sites and include more expensive units in buildings with key river views. The next step would be to immediately proceed to successive blocks south of the riverfront. “This phasing strategy immediately establishes the highest market values for the site; it also provides less expensive units as well.”

Building types for West Side Flats include a mix of for-sale and rental units that have been implemented in other market locations. They include:

- Mixed Use Buildings (retail/commercial use on the ground floor with rental/for-sale units above)
- Courtyard Apartments
- “Mansion” Type Apartment (4-8 unit rental buildings)
- “Tuck-Under” Townhouses
- Courtyard Townhouses
- Live/Work Units
- Accessory Units
The West Side Flats Master Plan seeks to create a balanced, sustainable place that incorporates the environment, the economy and the community into a riverfront neighborhood. Each of the ten principles of the Development Framework have been carefully followed to emphasize the environmental context, urban structure, movement of people and cars, and a prominent public realm. The physical plan for the area recognizes the historic grid of streets such as Water, Fillmore and Starkey Streets and uses this traditional pattern to provide the basis for developing a new traditional neighborhood.

The envisioned West Side Flats will contain a number of special characteristics, including well-designed public spaces, a diversity of housing types, corporate and community uses, and a strong relationship to the Mississippi River and the greater West Side neighborhood. Specifically, the new neighborhood will contain over 1,300 new housing units, a central neighborhood park fronted by townhomes and apartments, and the future potential of a linear green space that connects the Flats and upper bluff to the riverfront. The plan includes land currently under HRA ownership that would be developed for corporate offices, high-end riverfront condominiums and restaurant/entertainment uses. In addition, the plan for this approximately 45 acres of land may also include a neighborhood-scale grocery, a multi-purpose community building, and about 170,000 square feet of retail shops and offices.

The Master Plan is further defined by block and urban standards, a specific set of street sections, architecture and landscape standards. The Master Plan is also discussed in terms of existing conditions, buildable area, suggested building types, parking and stormwater management. There are a few differences between the Master Plan and the earlier Conceptual Master Plan.

- A larger area within the neighborhood and along the river is dedicated to stormwater management. The Conceptual Master Plan only hinted at this feature; whereas, the Master Plan was studied in some detail to understand the complex set of circumstances that affect this site. Two stormwater ponds are proposed in the Master Plan: one along the river (a low point on the site) and another more central to a run-off collection point internal to the site.
- The block width between Robert and Livingston was expanded by 30 feet to accommodate the proposed US Bank program; likewise, the block dimension from Fillmore to Fairfield was lengthened by 80 feet to accommodate the parking ramp. These adjustments to the historical street grid essentially compressed the block dimension between Fairfield and Indiana.
- The Conceptual Master Plan also illustrated three crossings of the existing railroad line; this was reduced to two in the Master Plan.

The Master Plan exhibits the notion of ‘urban village’ in several ways:

- It is a true mixed-use neighborhood, patterned after many viable Saint Paul models.
- It is decidedly part of a larger whole: the greater West Side neighborhood and the great river corridor.
- It places at the forefront of its physical design a prominent public realm of the river esplanade, green streets and neighborhood-scale parks and open spaces.
- It is based on the historic pattern of streets and infrastructure that in an earlier time supported people who lived and worked in this area, and that integrates new development with existing neighborhood fabric.

There are four major physical features that are key to the plan:

1. The prominent public realm of river esplanade, green streets (that are multi-use and connected), and public parks and open spaces.
2. The greater river environment that requires sensitive management of stormwater runoff and encourages the use of indigenous plants and materials.
3. A wide variety and mix of uses not only in the neighborhood but within the vertical envelope of the buildings.
4. A sensitive relationship to the greater river ecology and bluff lands.

The illustrated plates on the following pages define a vision and an expectation of this new urban neighborhood.
EXISTING CONDITIONS

Existing conditions include mostly vacant and undeveloped land totaling approximately 45 acres. A variety of businesses exist on the site including office, warehouse and restaurant uses. An active rail line runs through the site and is owned by the Union Pacific Railroad. The riverfront esplanade and Wabasha bridgehead are two very visible improvements to the site.

The site is bounded by Wabasha and Robert streets, which connect to downtown and the greater West Side area, and Plato Boulevard. Fillmore Street is the only paved street crossing the site (this route is currently obstructed by a barrier in place at the rail line). Levee Street provides access from Wabasha Street and loops under the bridge to Raspberry Island and Harriet Island.

Infrastructure includes a variety of buried and overhead utilities and site topography that generally slopes from the northeast to the southwest with low spots of EL 702 and 700. A major stormwater pipe (84” and 90”) parallels the rail line, and a sanitary sewer and force main is located in the northwest portion of the site connected to the Riverview lift station.

Evidence of past uses may include soil contamination as well as other environmental impacts.
THOROUGHFARE PLAN

The Thoroughfare Plan includes 6 different street sections that often replicate the location of the historic street grid. All streets include sidewalks on both sides, planting strips for street trees, and on-street parking. Alleys are proposed in the interior blocks of the neighborhood mainly to serve the townhouse types fronting the park.

Refer to Development Guidelines: Thoroughfare Standards for detailed sections of each street type.
REGULATING PLAN

The Regulating Plan graphically describes the street and block pattern proposed for the neighborhood. The historic street network provides the basis for this new street and block pattern, and retains the original street names such as Water, Fillmore, Livingston and Custer. The blocks were originally laid out as 250’ squares with 50’ lots and service alleys running in the north-south direction (except for Starkey and Water streets along the river front.) Street rights-of-way were originally laid out at 60’ widths and are generally retained at 60’.

An initial revision to the 250’ wide blocks widened them by 30’ to 280’ between Robert and Livingston to better accommodate the US Bank development program. Likewise, 80’ was added to the south portion of the block (Block 4) between Fillmore and Fairfield, making this block 330’ deep. This accounts for short blocks running between Indiana and Fairfield.

In addition to existing streets (Wabasha and Robert), Livingston, Custer and the extension of Levee connect the new neighborhood to the river. Other plan characteristics include:

- Shallow, alley-loaded townhouse blocks fronting the Neighborhood Park (Block 8).
- A linear “open space” (that currently includes the rail road) to connect the West Side area to the riverfront in the future.
- A stormwater treatment pond (Block 13) that will have a well-planted public edge.

<table>
<thead>
<tr>
<th>BLOCK NUMBERS</th>
<th>TOTAL AREA</th>
<th>BLOCK NUMBERS</th>
<th>TOTAL AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>58,800</td>
<td>11</td>
<td>50,200</td>
</tr>
<tr>
<td>2</td>
<td>70,000</td>
<td>12A</td>
<td>52,000</td>
</tr>
<tr>
<td>3</td>
<td>44,800</td>
<td>12B</td>
<td>23,000</td>
</tr>
<tr>
<td>4</td>
<td>92,300</td>
<td>13</td>
<td>36,800</td>
</tr>
<tr>
<td>5</td>
<td>184,400</td>
<td>14A</td>
<td>20,700</td>
</tr>
<tr>
<td>6</td>
<td>32,200</td>
<td>14B</td>
<td>49,400</td>
</tr>
<tr>
<td>7A</td>
<td>27,700</td>
<td>15</td>
<td>35,500</td>
</tr>
<tr>
<td>7B</td>
<td>22,000</td>
<td>16</td>
<td>52,500</td>
</tr>
<tr>
<td>8</td>
<td>35,200</td>
<td>17</td>
<td>67,700</td>
</tr>
<tr>
<td>9A</td>
<td>19,800</td>
<td>18</td>
<td>63,800</td>
</tr>
<tr>
<td>9B</td>
<td>47,300</td>
<td>19</td>
<td>92,400</td>
</tr>
<tr>
<td>10</td>
<td>50,600</td>
<td>20</td>
<td>90,400</td>
</tr>
</tbody>
</table>
BUILDABLE AREA

Plate Four illustrates the area of each block that is allowable for development according to the Urban Standards for building types. A common residential setback is 12’, with encroachments up to 8’. Main Street building types are shown as 0’ or 6’ setbacks to accommodate a variety of outdoor seating and vendor uses on the sidewalks. The block standards define minimum open space area per block.

Refer to Development Guidelines: Block Standards for detailed information on block development.
BUILDING TYPE

A major feature of the neighborhood is a variety and mix of building types. In particular, the Master Plan aims to incorporate a number of residential types, unit sizes, locations and price points, from attached townhouses to live/work units, courtyard apartments, apartments over commercial/office, and apartment/condominiums with river and downtown views. Variety is planned through the use of different building heights, multiple building types and their collective response to the Regulation Plan.

Refer to Development Guidelines: Urban Standards for detailed information concerning building types.

Plate 5

<table>
<thead>
<tr>
<th>BUILDING TYPE</th>
<th>UNITS</th>
<th>COMMERCIAL/OFFICE SPACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
<td>733</td>
<td>170,000</td>
</tr>
<tr>
<td>Type II</td>
<td>513</td>
<td></td>
</tr>
<tr>
<td>Type III</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Type IV</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Type V/VI</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Accessory</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>US Bank</td>
<td>A</td>
<td>350,000</td>
</tr>
<tr>
<td>Parking Structure</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,330</td>
<td>520,000</td>
</tr>
</tbody>
</table>

C Existing Llewlyn Building
PARKING PLAN

Plate Six illustrates how parking is accommodated in a variety of ways in the neighborhood. Public parking will be, for the most part, on-street. On-street parking will include about 480 spaces located throughout the neighborhood. Resident parking will, for the most part, occur in garages behind units or under buildings. Some areas along Robert and Fillmore that include commercial/retail uses will also have some surface spaces behind the building. A “parking building” (structured ramp) will park 1,440 cars for the US Bank employees.

Parking Counts

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER OF SPACES</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Street</td>
<td>480</td>
</tr>
<tr>
<td>Off-Street</td>
<td>1,339</td>
</tr>
<tr>
<td>US Bank</td>
<td>1,440</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,259</strong></td>
</tr>
</tbody>
</table>
STORMWATER MANAGEMENT PLAN
The existing stormwater management in this area was designed around two constraints:

1) The 90 inch storm sewer running into the Custer Street Pump Station was sized to handle a 5-year storm event in the drainage area it serves.

2) The capacity of the pumps in the Custer Street Pump Station is sized to handle a 9-month storm event. Beyond a 9-month event, stormwater will likely back up in the storm sewer system and inundate the low areas.

In general, the area south of Fillmore Street drains south to Plato Boulevard. The area north of Fillmore Street and west of the railroad tracks drains to a low point at 702.0'. The area north of Fillmore Street and east of the tracks drains east to below the Robert Street Bridge.

The levee/dike running along the river on the north end of the site is at elevation 715' +/-.

The river’s “normal” elevation varies daily. On October 7, 2000, it was 687.0'.

The river’s 10-year flood elevation is 701.0'.

The river’s 100-year flood elevation is 709.0'.

The river’s 500-year flood elevation is 713.8'.

For an area of 45+/- acres, assuming 75% impervious area:

- Sediment Storage Volume: 0.2 acre-feet
- Dead Storage Volume: 4.5 acre-feet
- 0.5" First Flush Volume: 1.5 acre-feet
- 100-year Flood Storage Volume (Live Storage): 4.4 acre-feet
- Total: 10.6 acre-feet

Plate Seven illustrates the stormwater runoff concept and subsequent water quality treatment, through the use of two principal ponds. These ponds are sited relative to the existing topography, and at strategic locations to intercept stormwater runoff. A majority of surface runoff would be collected at the pond between Indiana and Chicago, just west of the neighborhood park. From there water would be conveyed to a second pond near the riverfront before being discharged to the river via a gravity outlet near the Custer Street pumping station. While these ponds will be designed to function properly, they will also be designed as a neighborhood amenity.
Plate Eight illustrates the most significant community amenity of the West Side Flats. The public realm consists of all outdoor and neighborhood places held in common. It is deliberately designed to be the principal amenity for daily activity within the West Side Flats urban village. A well-proportioned and appointed set of streets, parks, greens, as well as the river’s edge, defines the community’s character and offers safe, usable outdoor spaces. Attractive public spaces also provide distinguished addresses for new residences and businesses.

When the public realm is designed and built to be the principal outdoor amenity of the new village, local citizens and business customers will certainly take advantage of it. There are civic and community building implications beyond its physical and utilitarian character.

The public realm features include the riverfront esplanade, which is connected to the street network via Livingston, Custer and Levee streets. A riverfront open space includes a stormwater run-off pond situated in a park-like setting and a small community building. The railroad corridor is proposed as a linear greenway that will also connect the neighborhood and the greater West Side area to the river. A second stormwater run-off pond is located interior and west of the neighborhood park. The Great River Greening vegetation that has been planted is also a significant component of the public realm, and should be maintained and enhanced.
ILLUSTRATED PLAN

Plate Nine illustrates the Master Plan and brings all of the “layers” of the previous plates together.
The Development Guidelines are composed of a variety of standards that describe the desired built form of the neighborhood. They include: Thoroughfare Standards, Block Standards, Urban Standards, Architectural Standards and Landscape Standards. Thoroughfare Standards guide the right-of-way of neighborhood streets and provide dimensions for moving lanes, parking, planting and pedestrian systems. Block Standards include specifications about each block such as area, use and building type. Urban Standards determine the placement of buildings on individual lots and blocks. Architectural Standards provide general information about the desired character of individual buildings. Landscape Standards suggest plant material, tree species and guidance for signage, lighting and paving materials. All of these standards are proposed in concert with a set of Sustainable Design Principles, directing the use and application of materials, techniques and tools for sustaining the built and natural environments.

Sustainable design offers a way of mitigating our impact, and creating safe objects of long-term value. It is the conception and realization of ecologically, economically and ethically responsible development.

Sustainable design offers means of increasing profit to developers and savings to owners through added and inherent value as well as lower life-cycle, maintenance and operating costs. It can also reduce overall project costs, enhance asset values, and reduce liability and insurance costs.

Throughout this document are design guidelines that respond to the following categories: site, water efficiency, materials and resources, and waste reduction.

Each section contains strategies specific to each topic. Not all strategies will be able to be utilized to the full extent. Some may be inappropriate for individual projects.

Historically, Saint Paul’s streets have been lined with houses, stores, or multi-unit buildings with uniform setbacks and consistent scale. Urban streets are outdoor rooms, shaped by the facades of buildings to either side and the street surface. In this way architecture creates a coherence of scale and distinctly-framed public space. Streets are also enriched by building entries, the semi-public space between building and sidewalk, lighting, and tree planting.

On the following pages, street standards are described in a format to assist with concept design. Upon approval, these standards may become the basis for engineering and construction documents. The criteria illustrated by these standards are:

- Pavement width.
- Location of travel and parking lanes.
- Location of tree plantings.
- Sidewalk widths.
Development Guidelines  Thoroughfare Standards

**TYPE PL-24**  
PAVED LANE

24 feet  Right-of-Way Width
16 feet  Pavement Width (1-Way)
None  Sidewalk Width

NOTES
Street Trees: none
**TYPE RS–30**

**RESIDENTIAL STREET**

**NOTES**

Starkey Street and Levee Street fronting railroad/greenway corridor.

Street Trees: 20’ - 30’ o.c.

**Development Guidelines**  
**Thoroughfare Standards**
**TYPE RS–60**

**RESIDENTIAL STREET**

---

**NOTES**

- Water Street
- Fairfield Avenue
- Indiana Avenue
- Chicago Avenue
- Custer Street
- Levee Street

---

60 feet   Right-of-Way Width
36 feet   Pavement Width (2-Way)
20’ - 30’ o/c   Street Trees
5’   Sidewalk Width (both sides)
**TYPE CS–60**

**COMMERCIAL STREET**

**NOTES**

- **Livingston Street**
- **Fairfield Avenue from Livingston to Robert**
- **Street Trees:** 20’ - 30’ o/c
- **5’ Sidewalk Width (both sides)**

<table>
<thead>
<tr>
<th>Right-of-Way Width</th>
<th>60 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement Width (2-Way)</td>
<td>38 feet</td>
</tr>
<tr>
<td>Street Trees</td>
<td>20’ - 30’ o/c</td>
</tr>
<tr>
<td>Sidewalk Width (both sides)</td>
<td>5’</td>
</tr>
</tbody>
</table>

**Location**
**TYPE CS–70A**

**COMMERCIAL STREET**

<table>
<thead>
<tr>
<th>70 feet</th>
<th>Right-of-Way Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>38 feet</td>
<td>Pavement Width (2-Way)</td>
</tr>
<tr>
<td>20' - 30' o/c</td>
<td>Street Trees</td>
</tr>
<tr>
<td>16'</td>
<td>Sidewalk Width (both sides)</td>
</tr>
</tbody>
</table>

**NOTES**

Fillmore Street between Livingston Avenue and approximately 200 feet east of Wabasha Street.
TYPE CS–70B
COMMERCIAL STREET

70 feet   Right-of-Way Width
48 feet   Pavement Width (2-Way)
20’ - 30’ o/c  Street Trees
11’   Sidewalk Width (both sides)

NOTES
Fillmore Street from Livingston Avenue to Robert and 200 feet east of Wabasha.
TYPE CS-80
COMMERCIAL STREET
ROBERT STREET

Location

80 feet Right-of-Way Width
56 feet Pavement Width (2-Way)
20’ - 30’ o/c Street Trees
12’ Sidewalk Width (both sides)
TYPE CS–80
COMMERCIAL STREET
WABASHA STREET

Location

80 feet Right-of-Way Width
56 feet Pavement Width (2-Way)
20’ - 30’ o/c Street Trees
12’ Sidewalk Width (both sides)
TYPE BV–110

COMMERCIAL STREET

PLATO STREET

110 feet  Right-of-Way Width
54 feet  Pavement Width (2-Way)
20’ - 30’ o/c  Street Trees
5’  Sidewalk Width (both sides)
BLOCK STANDARDS

Blocks are the scale where the city’s grid intersects with individual buildings. Traditional city blocks include a range of uses, activities and materials within a single block. The Block Standards seek to achieve coherence and diversity of design and include guidelines for each of the 20 blocks relative to use, area, height, open space and general building massing.

SUSTAINABLE DESIGN

Sustainable design goals and strategies for blocks:

- Limit coverage of buildable area of lot to no more than 75%.
- Conserve and reuse stormwater.
- Reduce off-site treatment of wastewater.
- Consider the use of Gray Water Systems for irrigation and other non-potable water uses.
- Consider the use of Biological Waste Treatment Systems.
- Reduce total energy consumption of buildings.
- Optimize building placement and configuration for maximum energy performance.
- Extend the life cycle of existing building stock, reduce waste and environmental impacts of new buildings in manufacturing, embodied energy and occupation.
- Reuse existing buildings on-site if possible. If not, salvage materials from existing buildings so that they can be sold or reused and significantly reduce the amount of demolition debris directed to landfills.
- Design buildings for adaptability.
- Consider designing buildings for re-use and disassembly.
Block 1

BLOCK AREA:
58,800 sf

DESCRIPTION & USES:
Gateway building from the south
Mixed-use residential and commercial
Courtyard apartment

BUILDING TYPES:
Main St. (I), Apartment (II)

MINIMUM OPEN SPACE:
30%

MAXIMUM BUILDING HEIGHT:
3 stories facing Indiana Avenue
5 stories facing Robert Street
4 stories facing Plato Boulevard

Notes
- Gateway building mass should build-to and define the corner at Robert and Plato.
- Main Street building type should face Robert Street with surface parking allowed behind.
- Residential courtyard building should front Livingston and Plato Boulevard.
- Surface parking lots should contain one over-story tree for each 10 parking stalls and exposed parking bays should be screened with a low wall or fence and landscape materials.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building or interior to the block.
**Block 2**

**BLOCK AREA:**
70,000 sf

**DESCRIPTION & USES:**
Mixed-use, commercial & residential

**BUILDING TYPES:**
Main St. (I), Apartment (II)

**MINIMUM OPEN SPACE:**
30%

**MAXIMUM BUILDING HEIGHT:**
3 stories
5 stories facing Robert Street

**Notes**
- Main Street building type should face Robert Street with surface parking allowed behind.
- Residential courtyard building should front Livingston.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building or interior to the block.
Block 3

BLOCK AREA:
44,800 sf

DESCRIPTION & USES:
Mixed-use, commercial & residential

BUILDING TYPES:
Main St. (I), Rowhouse (IV)
Live-Work (VI)

MINIMUM OPEN SPACE:
30%

MAXIMUM BUILDING HEIGHT:
3 stories facing Livingston Street
4 stories facing Indiana Avenue
5 stories facing Robert Street

Notes
- Main Street building type should face Robert Street and define the corner at Indiana, oriented away from the parking ramp on Block 4.
- The Livingston frontage of the block should contain townhouse/rowhouse types fronting onto the neighborhood park.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building or interior to the block.
**Block 4**

**BLOCK AREA:**
92,300 sf

**DESCRIPTION & USES:**
Parking, possible retail at street level, gateway from east

**BUILDING TYPES:**
Parking Building (VII)

**MINIMUM OPEN SPACE:**
0%

**MAXIMUM BUILDING HEIGHT:**
1 story below grade
4 stories above grade

**Notes**
- Parking building for US Bank use; all faces should be articulated to relate to and complement residential-scale buildings.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
**Block 5**

**BLOCK AREA:**
184,400 sf

**DESCRIPTION & USES:**
Office Buildings, possible retail at street level, gateway from east

**BUILDING TYPES:**
Office

**MINIMUM OPEN SPACE:**
10%

**MAXIMUM BUILDING HEIGHT:**
3 stories (Phase I)
5 stories (Phase II)

**Notes**
- US Bank office building; Phase I building should front the river esplanade; Phase II building should provide a gateway mass at the Robert Street/Fillmore intersection and front Fillmore in a Main Street condition.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the buildings.
- Key public views of the river and river valley should be maintained.
Block 6

BLOCK AREA:
32,200 sf

DESCRIPTION & USES:
Residential

BUILDING TYPES:
Apartment (II) Parking Building (VII)

MINIMUM OPEN SPACE:
30%

MAXIMUM BUILDING HEIGHT:
4 stories

Notes
- Courtyard apartment type should face Plato at the build-to line with the courtyard space oriented to Plato Boulevard.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building.
**Block 7**

**BLOCK AREA:**
- **7A:** 27,700 sf  
- **7B:** 22,000 sf

**DESCRIPTION & USES:**
- **7A:** Small-building residential apartment  
- **7B:** Single-lot townhouses

**BUILDING TYPE:**
- **7A:** Mansion Apartment (III)  
- **7B:** Townhouse (V), Live-Work (VI)

**MINIMUM OPEN SPACE:**
- **7A:** 40%  
- **7B:** 30%

**MAXIMUM BUILDING HEIGHT:**
- **7A:** 3 stories  
- **7B:** 3 stories

**Notes**

**Block 7A**
- Mansion-type apartments should face Livingston and Custer Streets.  
- Residential parking should be provided in garages.

**Block 7B**
- Townhouse/rowhouse types should face Indiana Avenue and front onto the neighborhood park.  
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.  
- Residential parking should be provided in garages, which may have accessory units above them.
### Block 8

**BLOCK AREA:**
35,200 sf

**DESCRIPTION & USES:**
Public Park

**BUILDING TYPE:**
Open-air civic structures (potential)

**MINIMUM OPEN SPACE:**
100%

**MAXIMUM BUILDING HEIGHT:**
1 story (if any)

**Notes**
- Block 8 should be reserved for park and open space use only and dedicated to public use.
- Majority of block should be as a turf lawn with street trees planted along all street frontages.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
**Block 9**

**BLOCK AREA:**

- **9A:** 19,800 sf  
- **9B:** 47,300 sf

**DESCRIPTION & USES:**

- **9A:** Single-lot rowhouses  
- **9B:** Small-building residential apartment, parking, mixed-use commercial and residential; optional civic/institutional building

**BUILDING TYPE:**

- **9A:** Rowhouse (IV), Live-Work (VI)  
- **9B:** Main Street (I), Mansion Apartment (III), Parking Building (VII)

**MINIMUM OPEN SPACE:**

- **9A:** 20%  
- **9B:** 15%

**MAXIMUM BUILDING HEIGHT:**

- **9A:** 3 stories  
- **9B:** 6 stories

**Notes**

**Block 9A**

- Townhouse/rowhouse types should face Fairfield Avenue and front onto the neighborhood park.

**Block 9B**

- Mid-portion of the block should contain mansion apartment types facing Livingston and Custer.
- Main Street building type should front Fillmore with surface parking and/or parking building (low-rise) allowed behind.
- Another possible use would include a civic or institutional building.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building or interior to the block.
Block 10

BLOCK AREA:
50,600 sf

DESCRIPTION & USES:
Mixed-use commercial & residential

BUILDING TYPE:
Main St. (I), Apartment (II), Parking Building (VII)

MINIMUM OPEN SPACE:
30%

MAXIMUM BUILDING HEIGHT:
6 stories facing Fillmore Street
5 stories facing Water Street

Notes:
- This block should contain the core commercial/entertainment/office uses on the ground floor; mixed-use Main Street type should front to the build-to line on all streets.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building.
- Key public views of the river and river valley should be retained.
**Block 11**

**BLOCK AREA:**
50,200 sf

**DESCRIPTION & USES:**
Mixed-use commercial & residential

**BUILDING TYPE:**
Main St. (I), Apartment (II), Parking Building (VII)

**MINIMUM OPEN SPACE:**
30%

**MAXIMUM BUILDING HEIGHT:**
4 stories facing esplanade
5 stories facing Water Street

**Notes**
- Prominent river front block should consistently front Livingston and Water Streets
- Maintain strong river views for residential units, and key public views of the river and river valley.
- It is important that this block fully connect and maintain the public realm on all fronts and especially engage the river esplanade.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building.
- Building design should engage the proposed linear greenway (rail corridor).
Block 12

**BLOCK AREA:**
12A: 52,000 sf  12B: 23,000 sf

**DESCRIPTION & USES:**
12A: Residential
12B: Single-Lot Townhouses

**BUILDING TYPE:**
12A: Apartment (II)
12B: Townhouse (V), Live-Work (VI)

**MINIMUM OPEN SPACE:**
12A: 30%  12B: 30%

**MAXIMUM BUILDING HEIGHT:**
12A: 4 stories  12B: 3 stories

Notes

**Block 12A**
- Courtyard apartment type should face Plato at the build-to line with the courtyard space oriented to Plato Boulevard.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building.
- Building design should engage the proposed linear greenway (rail corridor).

**Block 12B**
- Townhouse/rowhouse types should face Indiana Avenue and front onto the neighborhood park/stormwater pond.
- Residential parking should occur in garages, which may have accessory units above them.
- Building design should engage the proposed linear greenway (rail corridor).
Block 13

BLOCK AREA:
36,800 sf

DESCRIPTION & USES:
Open space; stormwater retention area

BUILDING TYPES:
N/A

MINIMUM OPEN SPACE:
100%

MAXIMUM BUILDING HEIGHT:
N/A

Notes

- This block is as open space dedicated to stormwater runoff treatment and storage.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- The design of the pond should take into account both function and aesthetics. While the site must be operational as a stormwater detention pond, it also needs to be designed as an open space amenity.
- Building design should engage the proposed linear greenway (rail corridor).
Block 14

BLOCK AREA:
14A: 20,700 sf
14B: 49,400 sf

DESCRIPTION & USES:
14A: Single-lot townhouses
14B: Small building residential apartment, parking, mixed-use commercial and residential

BUILDING TYPES:
14A: Rowhouse (IV), Live-Work (VI)
14B: Mansion Apt. (III), Parking Building (VII), Main Street (I)

MINIMUM OPEN SPACE:
14A: 30%  14B: 15%

MAXIMUM BUILDING HEIGHT:
3 stories facing Fairfield Avenue
4 stories facing Starkey Street
6 stories on Fillmore Street

Notes

Block 14A
- Townhouse/rowhouse types should front Fairfield Avenue, and the neighborhood park/stormwater pond.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Building design should engage the proposed linear greenway (rail corridor).

Block 14B
- Mid-portion of the block should contain mansion apartment types facing Custer.
- Main Street building type should front Fillmore with surface parking and/or parking building (low-rise) allowed behind.
- Parking should occur under the building or interior to the block.
- Building design should engage the proposed linear greenway (rail corridor).
Block 15

BLOCK AREA:
35,500 SF

DESCRIPTION & USES:
Mixed-use commercial & residential

BUILDING TYPES:
Main St. (I), Apartment (II), Parking Building (VII)

MINIMUM OPEN SPACE:
30%

MAXIMUM BUILDING HEIGHT:
6 stories facing Fillmore;
5 stories otherwise

Notes
- Main Street building type with shopfronts and entries fronting Fillmore and Custer Streets; building design should maximize residential views to the river corridor and maintain key public views of the river and river valley.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building.
- Building design should engage the proposed linear greenway (rail corridor).
Block 16

**BLOCK AREA:**
52,500 sf

**DESCRIPTION & USES:**
Residential

**BUILDING TYPE:**
Apartment (II), Parking Building (VII)

**MINIMUM OPEN SPACE:**
30%

**MAXIMUM BUILDING HEIGHT:**
4 stories

**Notes**

- Courtyard apartment type should face Plato, the greenway corridor and provide a gateway mass at the intersection of Plato and Wabasha.
- Courtyard space should be oriented to Plato.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building.
- Building design should engage the proposed linear greenway (rail corridor).
Block 17

Block Standards

**Notes**

- Courtyard apartment type should face Wabasha and building mass should define the corners at Indiana and Fairfield.
- Courtyard space should be oriented to Indiana.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building.
- Building design should engage the proposed linear greenway (rail corridor).
Block 18

BLOCK AREA:
63,800 sf

DESCRIPTION & USES:
Residential

BUILDING TYPE:
Main St. (I), Apartment (II), Parking Building (VII)

MINIMUM OPEN SPACE:
30%

MAXIMUM BUILDING HEIGHT:
6 stories on Fillmore
4 stories otherwise

Notes
- Main Street building type should front Fillmore Avenue with surface parking allowed in rear.
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
- Parking should occur under the building to the greatest extent possible.
- Building design should engage the proposed linear greenway (rail corridor).
**Block 19**

**BLOCK AREA:**
92,400 sf

**DESCRIPTION & USES:**
Gateway building from the north
Residential

**BUILDING TYPE:**
Apartment (II), Parking Building (VII)

**MINIMUM OPEN SPACE:**
30%

**MAXIMUM BUILDING HEIGHT:**
4 stories
6 stories on Fillmore

**Notes**

- The existing, former bottling plant, a two story building at the corner of Fillmore and Wabasha, should be maintained and integrated into the building program and design for this block.

- Main Street building type should front Fillmore Avenue with surface parking allowed in rear and under the building.

- A condo apartment building should front the public way, provide strong views of the river corridor for the residential units and maintain key public views of the river and river valley.

- It is important here to keep the area around the Wabasha bridgehead plaza in view and connected to the greater public realm. The building mass should reinforce this space without intersecting the movement of pedestrians between the neighborhood and the esplanade.

- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.

- Parking should occur under the building or interior to the block.
Block 20

**Block Area:**
90,400 sf

**Description & Uses:**
Open spaces; stormwater detention area; community activities

**Building Type:**
Small community building (potential)

**Minimum Open Space:**
95%

**Maximum Building Height:**
2 stories (if any)

**Notes**
- This block is designated as a stormwater ‘park’, a strategic location for managing stormwater run-off for much of the West Side Flats. This area should be treated and developed as a park that contains other functional uses (i.e., stormwater run-off).
- New construction and redevelopment activities should maintain, preserve and protect existing Great River Greening plantings, to the extent possible.
Urban Standards will guide the use, placement, height, bulk, and massing for private development of blocks and parcels. The standards will also physically determine build-to and/or setback criteria, encroachments, location of parking and any specific site features related to building types (e.g., outdoor courtyards, plazas, etc.).

The standards are prepared for a range of building types including Main Street (mixed-use) buildings, small/large apartments/condominiums, attached townhouses, live-work units, accessory units, commercial buildings and other types as needed. The architectural massing and proportion of each building type are illustrated.
Building Use and Height

1. Uses of buildings should be as shown here. The only permitted use above the first story is residential.

2. Maximum building height should be as designated by the Block Standards.

3. Each building’s first story should not exceed 14 feet in height, the second story should not exceed 12 feet in height, and all additional floors should not exceed 10 feet in height, measured from floor to ceiling.

4. All off-street parking should be located under the building’s first story and adjacent spaces.

Building Placement

1. Buildings should be set within the property lines as shown here.

2. Building street facades should extend along the property lines as designated here. A setback of 6 feet may occur along any portion of the building’s façade to provide for bike racks, outdoor seating, transit shelter, public art storefront displays or similar uses.

3. In the absence of building walls, masonry garden walls or wrought iron fences should be built along the property lines to define the street’s edge.

Permitted Encroachments

1. Balconies and screen porches are permitted above the first story within the shaded areas as shown here.

2. Maximum depth of any encroachment should be no more than 8 feet from the building wall.

3. Covered walkways, such as arcades, are permitted at grade level.
Building Placement
1. Buildings should be set within the property lines as shown here.
2. Building street facades should extend along the property lines as designated here.
3. In the absence of building walls, masonry garden walls or wrought iron fences should be built along the property lines to define the street’s edge.

Permitted Encroachments
1. Balconies, bay windows, open and screen porches are permitted within the shaded areas as shown here.
2. An entrance portico may encroach to the property line.
3. Maximum depth of any encroachment should be no more than 8 feet from the building wall.
4. Covered walkways, such as arcades, are permitted at grade level.
Type III

Mansion Apartment

Building Use and Height
1. Uses of building should be as shown here.
2. A maximum of 6 dwelling units per lot are permitted, including an accessory unit.
3. Maximum building height should be as designated by the Block Standards.
4. Each building’s first story should not exceed 12 feet in height, and all additional floors should not exceed 10 feet in height, measured from floor to ceiling.
5. Garages may be attached to or detached from the principal building.
6. A residential or office use of not more than 500 square feet should be permitted as an accessory use above a detached garage.

Building Placement
1. Buildings should be set within lots relative to the property lines shown here.
2. Building street facades should extend along the lot width as designated here.
3. Masonry garden walls, wrought iron fences should be built, or hedges should be planted along the property lines to define the street’s edge.

Permitted Encroachments
1. Balconies, stoops, open porches, bay windows, covered walkways and raised door yards are permitted within the shaded areas shown here.
2. Covered walkways between the principal building and garages are permitted.

Parking
1. Parking should be provided within the shaded areas shown here.
2. Private parking spaces should be no less than 10’ by 17’ with access to a paved lane.
3. Enclosed garage parking spaces may accommodated at grade level under the accessory living unit.
4. Trash areas should be enclosed with fencing and located within the parking area or the rear setback.
Permitted Encroachments
1. Balconies, stoops, open porches, bay windows, covered walkways and raised door yards are permitted within the shaded areas as shown here.
2. Maximum depth of any encroachment should be no more than 8 feet from the building wall.
3. Covered walkways between the principal building and garages are permitted.

Building Placement
1. Buildings should be set within lots relative to the property lines as shown here.
2. Building street facades should extend along the lot width as designated here.
3. Masonry garden walls, wrought iron fences should be built, or hedges should be planted along the property lines to define the street’s edge.

Type IV
Rowhouse

Building Use and Height
1. Uses of building should be as shown here.
2. Maximum building height should be three stories.
3. Each building’s first story should not exceed 12 feet in height and all additional floors should not exceed 10 feet in height, measured from floor to ceiling.
4. The building should have a first floor elevation between 18” and 36” above grade level.

Parking
1. Outdoor on-site parking should be provided within the shaded areas as shown here.
2. Private parking spaces should be no less than 10’ by 17’ with access to a paved lane.
3. Enclosed garage parking spaces shall be accommodated under the living unit and have access to a paved lane.
4. Trash areas should be enclosed with wood fencing and located within the parking area or the rear setback.
Type V

Townhouse

Building Use and Height
1. Uses of building should be as shown here.
2. Maximum building height should be three stories.
3. Each building's first story should not exceed 12 feet in height and all additional floors should not exceed 10 feet in height, measured from floor to ceiling.
4. The building should have a first floor elevation between 18" and 36" above grade level.
5. Occupancy of accessory use should not require off-street parking.

Building Placement
1. Buildings should be set within lots relative to the property lines as shown here.
2. Building street facades should extend along the lot width as designated here.
3. Masonry garden walls, wrought iron fences should be built, or hedges should be planted along the property lines to define the street's edge.

Permitted Encroachments
1. Balconies, stoops, open porches, bay windows, covered walkways and raised door yards are permitted within the shaded areas as shown here.
2. Maximum depth of any encroachment should be no more than 12' feet from the building wall.
3. Covered walkways between the principal building and garages are permitted.

Parking
1. Parking should be provided within the shaded areas as shown here.
2. Parking may be provided in attached or detached garages, or on paved concrete parking pads.
3. Private parking spaces should be no less than 10' by 17' with access to a paved lane.
4. Trash areas should be enclosed with fencing and located within the parking area or within the rear setback.
Permitted Encroachments

1. Balconies, stoops, open porches, bay windows, covered walkways, and raised door yards are permitted within the shaded areas shown here.

2. Maximum depth of any encroachment should be no more than 12 feet from the building wall.

3. Covered walkways between the principal building and garages are permitted.

Parking

1. Parking should be provided within the shaded areas as shown here.

2. Parking may be provided in attached or detached garages, or on paved concrete parking pads.

3. Private parking spaces should be no less than 10' by 17' with access to an paved lane.

4. Trash areas should be enclosed with fencing and located within the parking area or the rear yard setback.

Building Placement

1. Buildings should be set within lots relative to the property lines shown here.

2. Building street facades should extend along the lot width as designated here. A maximum of 30 percent of the front elevation at grade level may be recessed from the property line for building entries.

3. Masonry garden walls, wrought iron fences, should be built, or hedges should be planted along the property lines to define the street’s edge.

Building Use and Height

1. Uses of buildings should be as shown here.

2. Building height should be measured by the number of structural floors from the street elevation. Maximum building height should be three stories.

3. Each building’s first story should not exceed 12 feet in height and all additional floors should not exceed 10 feet in height, measured from floor to ceiling.

4. Garages may be attached or detached to the principal building.

5. A residential use of not more than 500 square feet is permitted as an accessory use above a detached garage. Occupancy of accessory use should not require off-street parking.

Permitted Encroachments

1. Balconies, stoops, open porches, bay windows, covered walkways, and raised door yards are permitted within the shaded areas shown here.

2. Maximum depth of any encroachment should be no more than 12 feet from the building wall.

3. Covered walkways between the principal building and garages are permitted.

Development Guidelines

Urban Standards

Type VI

Live-Work Unit

Building Use and Height

1. Uses of buildings should be as shown here.

2. Building height should be measured by the number of structural floors from the street elevation. Maximum building height should be three stories.

3. Each building’s first story should not exceed 12 feet in height and all additional floors should not exceed 10 feet in height, measured from floor to ceiling.

4. Garages may be attached or detached to the principal building.

5. A residential use of not more than 500 square feet is permitted as an accessory use above a detached garage. Occupancy of accessory use should not require off-street parking.
Type VII

Parking Building

Building Use and Height
1. Uses of buildings should be as shown here. The only permitted use above the first story is parking.
2. Maximum building height should be designated by the Block Standards.
3. Each building's first story should not exceed 12 feet in height, and all additional floors should not exceed 10 feet in height, measured from floor to ceiling.
4. Parking for commercial uses should be accommodated within the building.

Building Placement
1. Buildings should be set within the property lines as shown here.
2. Building street facades should extend along the property lines as designated here. A setback of 6 feet may occur along any portion of the building’s façade to provide for bike racks, outdoor seating, transit shelter, public art storefront displays or similar uses.
3. Entrance and cafe canopies are permitted encroachments within the 6 foot setback.
4. In the absence of storefront windows, ventilation screening patterns should complement the door and window openings of neighboring building facades.

Permitted Commercial Space
1. A maximum of 60 feet from the building’s facade may be dedicated to current or future commercial uses.
2. Permitted uses should be chosen from those permitted in the OS-2 zoning classification.
3. Commercial floorspace may be aggregated along the building facade.
4. A minimum of 50% of a storefront facade should be a window surface.
Architectural Standards are a written description of suggested building materials, configurations and techniques for construction of new buildings. These guidelines seek to provide direction for the highest quality design possible. All buildings, whether residential, commercial or mixed use, shall add to the urban fabric in a positive manner and benefit the public. These guidelines seek to promote quality, not style. While some areas and specific projects may be more appropriately developed and designed via vernacular architectural vocabulary, we hope to allow for a variety of quality architectural responses, traditional to modern.

The Architectural Standards are intended to provide architectural design guidance for a broad range of housing types and flexible spaces for living, working, hospitality and merchandising. When all new buildings are constructed from a consistent pallet of building standards, the resulting visual expression is harmonious, even though there is a broad diversity of activity and building use. In addition, these standards emphasize building design elements critical to an attractive public realm, an entrancement of Saint Paul’s urban heritage, and the of construction durability.

The following four sections catalog some considerations for each building type described in the Urban Standards. Criteria such as building elements, roofs and chimneys, windows and openings, doors and entryways, and material finishes are described for each urban building type.

SUSTAINABLE DESIGN

- Maintain a high level of water quality on the site and in the building(s).
- Reduce potable water consumption and conserve building water consumption.
- Conserve or eliminate cooling tower water consumption.
- Reduce total energy consumption of buildings using the following strategies:

  Reduce Loads
  a. Optimize building placement and configuration for energy performance
  b. Optimize building envelope thermal performance
  c. Provide daylighting integrated with electric lighting controls

  Design Efficient Systems
  a. Provide efficient electric lighting systems and controls
  b. Maximize mechanical systems performance
  c. Use efficient equipment and appliances

  Use Energy Sources with Low Environmental Impact
  a. Use renewable or other alternative energy sources
Exterior walls should demonstrate a proportion of base, middle and top of the building. For example, the building’s top may be expressed by a cornice or overhanging eaves. Its base may be expressed through a first level rendered in stone or rusticated block. The middle could be a combination of brick, stone and rusticated masonry expressed in vertical proportions.

Buildings should demonstrate an articulation of each block face. Breaking up a continuous façade can be designed through use of material changes, opening sizes, as well as window and door placements. Passages may be excellent opportunities to accent building entrances as well as courtyard entrances.

Balcony openings on the building façades should be vertical or square in proportion and unenclosed.

Cylindrical columns should be no less than 6 inches in diameter.

The undercroft of wooden porches and decks should be enclosed by wood lattice.

Roof heights and types should vary. The typical “project” condition of complete uniformity from building to building and block to block should be avoided.

Building roofs may be flat with a parapet, or pitched with boxed eaves. Flat roofs should have a minimum 4.2” parapet along each façade. Hipped or gable end roofs should have a pitch not less than 4:12 and no more than 8:12, and clad in asphalt shingle or tile.

Overhanging rafters should be trimmed with a fascia board. The eaves of a box cornice should be trimmed with boards and molding.

Exterior chimneys should be finished in brick or stone. Whether for wood fireplaces or utility purposes, chimneys should be expressed using traditional architectural references.

Projecting dormers should be framed with a shed or symmetrical gable roof construction.

Gutters should be constructed of galvanized and painted aluminum.
<table>
<thead>
<tr>
<th>Windows and Openings</th>
<th>Doors and Entryways</th>
<th>Material Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>· All windows should be square or vertical in proportion. The building heritage of Saint Paul demonstrates the verticality of post and beam, wall construction. The building’s design should express the local building vernacular of square or vertically proportioned window bays. Large expanses of window surface should have vertically proportioned glass and a structural hierarchy of mullions to express the vertical weight load of bearing wall and punched window heritage.</td>
<td>· Doors, building addresses and entry-ways should be visible from the street.</td>
<td>· Exterior building walls should be finished in brick, stone, or materials similar in appearance and demonstrated durability.</td>
</tr>
<tr>
<td>· Dormer windows should be double-hung, hinged casement or hopper type.</td>
<td>· Door swings should not encroach on public rights-of-way.</td>
<td>· Brick should be laid in a true bonding pattern. Bonding patterns should demonstrate the natural integrity of the brick as a compressive material. Bonding patterns that express the integrity of interconnected building components are consistent with the building heritage of Saint Paul.</td>
</tr>
<tr>
<td>· Canvas awnings should be rectangular in shape and match the window or transom opening it shades.</td>
<td>· Address numbers should be clearly visible from the street.</td>
<td>· Columns, posts, balconies, porches and bay windows should be constructed of wood or brick.</td>
</tr>
<tr>
<td>· Windows and glazed openings should be clear, not mirrored or tinted.</td>
<td></td>
<td>· Stoops should be constructed of wood elements or cast concrete and finished in brick or stone.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>· Railings should be constructed of wrought iron sections.</td>
</tr>
</tbody>
</table>
## TYPE III - MANSION APARTMENT

- Exterior walls should set on a base foundation of rock or rusticated concrete block, between 18 inches and two feet from grade level. Elevation of the first story slightly above the grade of the sidewalk enhances the privacy of front unit living rooms.
- Balcony openings on the building facades should be vertical or square in proportion and unenclosed.
- Cylindrical columns should be no less than 6 inches in diameter.
- Wood posts should be no less than 4 inches by 4 inches in section.
- The undercroft of wooden porches and decks should be enclosed by wood lattice.

## TYPE IV – ROWHOUSE

- Exterior walls should set on a base foundation of rock or rusticated concrete block, between 18 inches and two feet from grade level. Elevation of the first story slightly above the grade of the sidewalk enhances the privacy of front living rooms of the house.
- Porch openings on the building facades should be rectangular in proportion and unenclosed.
- Cylindrical columns should be no less than 6 inches in diameter.
- Wood posts should be no less than 4 inches by 4 inches in section.
- The undercroft of wooden porches and decks should be enclosed by wood lattice.

## TYPE V – TOWNHOUSE

- Building roofs should be pitched with boxed eaves. Hipped or gable end roofs should have a pitch not less than 4:12 and no more than 8:12, and be clad with standing metal seam, wood shingles or asphalt shingles.
- Exterior chimneys should be finished in brick or stone.
- Projecting dormers should be framed with a shed or symmetrical gable roof construction.
- Gutters should be constructed of galvanized and painted aluminum.

## TYPE VI – LIVE-WORK UNIT

- Roof heights and types should vary at the street edge. The typical “project” condition of complete uniformity from building to building and block to block should be avoided.
- Building roofs should be pitched with boxed eaves. Hipped or gable end roofs should have a pitch not less than 4:12 and no more than 8:12, and be clad with standing metal seam, wood shingles or asphalt shingles.
- Exterior chimneys should be finished in brick or stone.
- Projecting dormers should be framed with a shed or symmetrical gable roof construction.
- Gutters should be constructed of galvanized and painted aluminum.
### Windows and Openings
- All windows should be square or vertical in proportion.
- Dormer windows should be double-hung, hinged casement or hopper type.
- Windows and glazed openings should be clear, not mirrored or tinted.

### Doors and Entryways
- Front doors and building entryways should be visible from the street.
- Building addresses should be clearly visible from the street.
- Address numbers should be clearly visible from the street.
- Front doors and building entryways should be visible from the street.
- Building addresses should be clearly visible from the street.
- Address numbers should be clearly visible from the street.

### Material Finishes
- Exterior building walls should be finished in brick, stone, clapboard siding or materials similar in appearance and demonstrated durability. Clapboard siding should be greater than 2 inches and less than 6 inches to the weather.
- Brick should be laid in a true bonding pattern.
- Columns, posts, balconies, porches and bay windows should be constructed of wood or brick.
- Stoops should be constructed of cast concrete and finished in brick or stone.
- Railings should be constructed of wood elements or wrought iron sections.
- Exterior building walls should be finished in brick, stone, clapboard siding or materials similar in appearance and demonstrated durability.
- Brick should be laid in a true bonding pattern.
- Columns, posts, balconies, porches and bay windows should be constructed of wood or brick.
- Stoops should be constructed of cast concrete and finished in brick or stone.
- Railings should be constructed of wood elements or wrought iron sections.
Facade walls should demonstrate a proportion of base, middle and top of the building. Even though these buildings store automobiles, they should appear to be one in a collection of neighborhood buildings. Therefore, the façade should appear similar to a Main Street building. For example, the building’s top may be expressed by a cornice or by overhanging eaves. Its base may be expressed through a first level rendered in stone or rusticated block. The middle could be a combination of brick, stone and rusticated masonry expressed in vertical proportions.

Buildings should demonstrate an articulation of each block face. Breaking up a continuous façade can be designed through use of material changes, opening sizes, as well as window and door placements. Stairs or other vertical circulation may be excellent opportunities to accent functional features with architectural gestures.

Where possible, first-floor commercial (retail/service) space should be dedicated and articulated.

Roof heights and types should vary at the street edge. The typical “project” condition of complete uniformity from building to building and block to block should be avoided.
<table>
<thead>
<tr>
<th>Windows and Openings</th>
<th>Doors and Entryways</th>
<th>Material Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>· All windows and ventilation openings should be square or vertical in proportion. The façade of the building should fit well among other neighborhood buildings. Therefore it should demonstrate the verticality of post and beam wall construction similar to the standards of Main Street and Courtyard Apartment buildings. Large openings should have vertically proportioned screening and a structural hierarchy of mullions to express the vertical weight load of bearing wall and punched window heritage. Canvas awnings should be rectangular in shape and match the opening it shades.</td>
<td>· Doors and entryways should be visible from the street.  Entrance should have pedestrian lighting oriented downward, and bulb fixtures should be less than 16 feet from the ground. Because buildings adjacent to Parking Buildings have predominantly residential units above the first story, lighting should not shine into bedrooms and personal living spaces. Lighting should be considerate of local residents but still add to pedestrian comfort and safety in and around the parking facility. Door swings should not encroach on public rights-of-way.</td>
<td>· Exterior building walls should be finished in brick, stone, or materials similar in appearance and demonstrated durability. It is anticipated that the interior of parking buildings will be constructed of reinforced concrete. However, where the building is adjacent to a block face, it should appear to be constructed of the same materials as neighboring buildings. Railings should be constructed of wrought iron sections.</td>
</tr>
</tbody>
</table>
SUSTAINABLE DESIGN

Simulate Total Building Energy Use
a. Integrate all systems and reduce total energy use
   · Minimize production and transmission of air pollution.
   · Control moisture to prevent microbial contamination.
   · Provide Ample Ventilation for Pollutant Control and Thermal Comfort.
   · Provide needed operational control of systems to occupants.
   · Provide appropriate building acoustical and vibration conditions.
   · Provide views, viewspace, and connection to natural environment.
   · Produce environments that enhance human comfort, well-being, performance and productivity.
   · Minimize consumption and depletion of material resources.
   · Minimize the life-cycle impact of materials on the environment.

Use Materials with Low Environmental Impact During Their Life Cycle
Production
a. Use salvaged and remanufactured materials.
b. Use recycled content products and material.
c. Use materials from renewable sources.
d. Use locally manufactured materials.
e. Use low-VOC-emitting materials.
f. Use durable materials eventual reuse or recycling.
g. Use materials that are reusable, recyclable or biodegradable
   · Minimize use of resources.
   · Design for less material use.
   · Design building for adaptability.
   · Design building for disassembly.
   · Minimize waste generated from construction, renovation and demolition of buildings.
   · Salvage and Recycle Demolition Waste.
   · Recycle construction waste.
   · Reduce and recycle packaging waste.
   · Reduce and recycle waste from building users.
   · Reduce and properly dispose of hazardous waste.
   · Minimize waste generated during building occupancy.
Landscape Standards address the form and construction of places between buildings. All aspects of the natural and built environment should be deliberately designed to offer neighborhood residents, local business owners and visitors a great place to be, inside and out. Greening of the river valley should take into account the treatment of landscape preservation as well as urban living.

This section is divided into two parts. The first describes landscape improvement standards for the neighborhood’s public realm (or the property under the City of Saint Paul’s jurisdiction). The second section describes standards for landscape improvements in private development. Both sections emphasize a sheltering canopy of trees, green lawns, and colorful gardens as a principal amenity of the West Side Flats.

PUBLIC REALM

The public realm includes all those aspects of the urban environment held in common. It includes an assortment of open spaces, including street rights-of-way. Places that integrate the routine aspects of daily living. Termination of axes, places for gathering, monuments, fountains and quiet benches are all means to amplify the quality of daily life experiences. The intentions of the Landscape Standards are to assure the community’s public realm becomes a valuable amenity of this new neighborhood.

Standards for the public realm are cataloged below according to their location and function. It should be remembered that the public realm is the fabric by which the urban buildings are held in place. It should therefore always be thought of as a connected system of green and open spaces.

PRIVATE DEVELOPMENT

Private development lots have similar standards to those of the public realm, but in more detail for front yards. Building frontages and front yards embrace the function, look and feel of the neighborhood and enclose the street. As such, everything from the placement of benches and lighting to the design and type of paving is to be considered in the physical design of the site.

Standards for private development lots are identified below according to their location and function. It should be remembered that a consistently attractive public realm will coordinate private lots and buildings and enhance their value. These buildings should therefore always be thought of as needing to connect to the system of green and open spaces to achieve their full value.

SUSTAINABLE DESIGN

Landscape Design

The following sustainable design goals and strategies are recommended to maintain neighborhood public open spaces as attractive amenities of the neighborhood:

- Maintain and/or restore the bio-diversity of natural systems and ecology of the site.
- Respond to microclimate and natural energy flows through the use of environmentally responsive site design.
- Restore, maintain, and/or enhance the natural character of the site.
- Select native trees, shrubs, and plants for public and private landscape treatments.
- Reduce light and noise pollution.
- Preserve site watersheds and groundwater aquifers.
- Conserve and reuse stormwater.
- Maintain a high level of water quality on the site and in the building(s).
- Reduce potable water consumption.
- Reduce off-site treatment of wastewater.
- Review street tree plans for their consistency with City of Saint Paul’s Division of Parks and Recreation policies.
- Integrate signage, lighting, place markers and monuments to improve way-finding through the neighborhood.
- Establish a commitment to using indigenous, long lasting, disease resistant, low maintenance species while maintaining a diversity and species that do not impede public safety.
- Coordinate with Great River Greening Planting Plans, where appropriate.
PUBLIC REALM

RIVERFRONT ESPLANADE

Although the riverside esplanade is already constructed, there are a few items that should be considered as new housing and commercial activity increases within close proximity.

- Plants should be arranged in a variety of ways. Where there is a lawn abutting the promenade, it should be planted a thick green grass cover, a place where one could sit comfortably in fair weather. Shrubs and other vegetation could be aligned to define the edges of lawns and walkways. Flowering plants in hanging baskets and pots, fixed or moveables also add opportunities to define pedestrian ways and accent the beauty of resting-places.

PUBLIC REALM

RIVERFRONT PARK

The triangular park adjacent to the esplanade serves as a public open space as well as a stormwater retention basin. In keeping with the objectives of Great River Greening, it is suggested that this park take on as much of the site’s original ecological heritage as possible while still supporting its use as a public space and setting for new urban development. The final design should be determined by a master planning process involving including neighborhood residents.

- Plants around the stormwater pond should be indigenous to the river’s natural ecosystem. Plantings in and around the water feature should be chosen to accommodate the water level “bounce” and change of seasons with minimal maintenance.
- Plantings at the park’s edge should be a more ordered arrangement than at the pond’s edge. The spaces in between the center and edge of the park should be designed to express a transition from a more natural river environment to a more urban neighborhood character.
- Fences hedges and masonry walls of less than 36” in height may be used to define pedestrian pathways and building entrances. However, fences should be constructed of wood or metal, walls should be constructed from stone or brick, and hedges should be specified that are fully green even when regularly trimmed.
- Pedestrian pathways throughout the park should be greater than 6 feet in width. Two people should be able to walk comfortably side-by-side, or pass each other.
- Pedestrian connections to the urban street network should be clearly indicated.
- The park should be connected to Harriet Island Park for pedestrians and bicycles with eventual connection to the linear greenway (rail corridor).
<table>
<thead>
<tr>
<th>Lighting</th>
<th>Signage</th>
<th>Furnishings</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Pedestrian lighting should be oriented downward, and bulb fixtures should be less than 16 feet from the ground.</td>
<td>· All signage should be of a consistent theme. All advertising and informational signage should blend into the background of the esplanade experience. Signs should be placed in appropriate and convenient locations, and be graphically consistent.</td>
<td>· There are various considerations for placing trash receptacles along the esplanade, and throughout the urban village. Trash and recycling containers should be noticeable without being visually obtrusive, and located for convenient access.</td>
</tr>
<tr>
<td>· All signage should be of a consistent theme. All advertising and informational signage should blend into the background of the esplanade experience. Signs should be placed in appropriate and convenient locations, and be graphically consistent.</td>
<td>· Trash and recycling containers should be noticeable without being visually obtrusive, and located for convenient access.</td>
<td></td>
</tr>
</tbody>
</table>
### PUBLIC REALM

#### NEIGHBORHOOD PARK

The neighborhood green at the center of the village serves as a principal open space amenity. This neighborhood park is intended to be distinct in character and range of activities than at the river, and should support leisure/open space needs of the neighborhood. This may include the location of a tot lot. The final design of the park should be determined by a master planning process involving neighborhood residents.

<table>
<thead>
<tr>
<th>Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>· If planting are used, they should define the park’s edge. Separate from the street trees in the roadway right-of-way, shrubs and flowering plants may be used to shape the park in a more formal neighborhood character. Flowering plants in hanging baskets and pots (fixed or movable) may also add opportunities to define pedestrian ways and accent the beauty of resting-places around the park’s perimeter.</td>
</tr>
<tr>
<td>· Planting should restore native habitats to the greatest extent possible.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pedestrians</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Fences, hedges and masonry walls of less than 36” in height may be used to define pedestrian pathways and building entrances.</td>
</tr>
<tr>
<td>· Pedestrian connections to the urban street network should be clearly indicated.</td>
</tr>
</tbody>
</table>

#### STORMWATER POND

The pond to the west of the Neighborhood Park has a simple, utilitarian purpose – to filter storm water from the surrounding streets and paved surfaces before it enters the river. But it also has an aesthetic purpose to be an open space amenity and should be designed to appear as an integrated, seamless part of the adjacent neighborhood park.

<table>
<thead>
<tr>
<th>Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>· The stormwater pond should have a relatively consistent water surface level, and be surrounded by native river and pond grasses. Landscape design should take into account the aesthetic appearance of the pond grasses as well as the most efficient filtering of stormwater runoff. If aeration is required, a fountain should be designed to be an aesthetic amenity.</td>
</tr>
<tr>
<td>· If plantings are used, they should define the neighborhood block. Separate from the street trees in the street, shrubs and flowering plants may be used to shape the block’s edges in a more informal manner.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pedestrians</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Fences, hedges and masonry walls of less than 42” in height may be used to define the urban block. Fences should be constructed of wood or metal; walls should be constructed from stone or brick, and hedges should be specified that are fully green even when regularly trimmed.</td>
</tr>
<tr>
<td>Lighting</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>· Pedestrian lighting should be oriented downward, and bulb fixtures should be less than 16 feet from the ground. Because buildings adjacent to the Neighborhood Park are predominantly residential units, lighting should not shine into second story bedrooms and personal living spaces, yet lighting provided should add to pedestrian comfort and safety at grade level.</td>
</tr>
</tbody>
</table>
**PUBLIC REALM**

**PUBLIC STREETS**

Streets are the threads that hold the public realm and private development together. The street network defines blocks, and it is the block faces that become addresses for urban buildings.

The West Side Flats street network is also the principal movement system. As the pathways for all kinds of vehicles, bicycles and pedestrians, they are frequently the first impression of the neighborhood’s character. The streets of this Urban Village should take on a much more ordered, urban arrangement of trees and plantings to define these pathways.

- Planting strips should be placed wherever possible between the sidewalk and the street curb. Thick grass planting strips requiring a minimal amount of maintenance accent the urban street character and provide visual relief from pavement surfaces.
- Street trees should define the street corridor. Street trees should be planted within planting strips at regular intervals appropriate to root structure and canopy of the tree species chosen. Flowering plants in hanging baskets and pots (fixed or movable) may also add to the pedestrian character.
- Where trees are planted in paved areas, structural soil should be used.

**LINEAR GREENWAY**

The linear open space running north/south through the West Side Flats is currently an active railroad. In the event the railroad right-of-way is abandoned, this open space corridor would become a pedestrian oriented greenway, connecting Plato Boulevard with the River through the new Urban Village. Completion of this Linear Greenway would implement better connections to the Mississippi River edge, as is clearly stated in the objectives of Great River Greening and redevelopment plans of bluff neighborhoods.

- If plantings are used, they should define each linear block. Separate from the street trees in adjacent roadway right-of-way, shrubs and flowering plants may be used to identify entry to the greenway’s pedestrian pathway.
- Landscaping may include flower gardens, provided they are designed and maintained to be neighborhood amenities.
- Pedestrian connections to the urban street network should be clearly indicated. Where local streets join each other, pedestrian sidewalks should be connected and street signs posted to identify each connecting street. Crosswalks should be clearly marked and consideration given to pedestrian safety and comfort for crossing the street.
- The pathway’s pavement should be at least 10 feet in width to accommodate four pedestrians to pass one another comfortably. Bicycles should be directed to use the streets for travel through the neighborhood.
• Pedestrian lighting should be oriented downward, and bulb fixtures should be less than 12 feet from the ground. Because buildings adjacent to the street are predominantly residential units, lighting should not shine into second story bedrooms and personal living spaces. Streets are the primary pedestrian circulation networks, and therefore lighting for nighttime use should add to pedestrian comfort and safety at grade level.

• Trash and recycling containers should be noticeable without being visually obtrusive, and located for convenient access.

• Signage should be of a consistent theme and information oriented. All signage should be oriented towards identifying locations and blend into the background of the Riverfront Park experience. Signs should be located in visible, convenient locations and graphically consistent.
• Directory maps in shelters or kiosks should be located conveniently, and describe places of interest, pathway routes and access to public transit.

• Benches, lampposts and other furniture should be of a similar style such that they blend with those placed in the Riverfront Park and the Neighborhood Park.
• Trash and recycling containers should be noticeable without being visually obtrusive, and located for convenient access.
PRIVATE DEVELOPMENT

YARDS

The setbacks specified by the urban standards define yards. For example, a mixed-use building may have only a rear yard, whereas a mansion apartment has front, side and rear yards. The purpose of standards for private yards is to preserve the integrity of the public realm as the community’s principal amenity. The front yard is also an opportunity to develop a stronger, richer landscape by planting native materials.

SURFACE PARKING LOTS

One of the distinguishing features of the West Side Flats is that it orients all the parking requirements to the interior of the block, leaving streets to be public places. Where surface parking occurs, even on an interim basis, there are some design standards that will reduce the negative impacts of automobile storage on this pedestrian-oriented community, while at the same time enhance the quality of the open space that a parking lot really is. Parking lots could be thought of as “parking courts.”

Plants

- The yard itself should be a simple grass lawn. A thick grass lawn should be planted that will accommodate the change of seasons with minimal maintenance.
- If plantings are used, they should define the yard’s edge. Shrubs and flowering plants may be used to shape the yard in a more formal manner. Flowering plants in hanging baskets and pots (fixed or movable) may also add opportunities to define pedestrian ways.
- Tree root zone must be a minimum of 5’ deep between street grade and underground.

Pedestrians

- Fences, hedges, and masonry walls of less than 36” in height may be used to define lot perimeters, pedestrian pathways and building entrances. Any combination of materials listed below may be used to offer diversity in landscape treatments. However, fences should be constructed of wood or solid metal; walls should be constructed from stone or brick; and hedges should be specified that are fully green even when regularly trimmed.
- Pedestrian connections to the urban street network should be clearly indicated. Passageways should identify adjacent street streets from within the court.

- The parking lot itself should have several simple grass lawn islands. A thick grass lawn should be planted within the curb backing of parking lot islands.
- Trees with broad canopies should be specified and planted within these grass islands.
- Fences, hedges, and masonry walls of less than 36” in height may be used to define parking lot boundaries. Fences should be constructed of wood or metal; walls should be constructed from stone or brick in a true bonding pattern; and hedges should be specified that are fully green even when regularly trimmed.
- Tree root zone must be a minimum of 5’ deep between street grade and underground.
- Where trees are planted in paved areas, structural soil should be used.
<table>
<thead>
<tr>
<th>Lighting</th>
<th>Signage</th>
<th>Furnishings</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Pedestrian lighting should be oriented downward, and bulb fixtures should be less than 12 feet from the ground. Because adjacent buildings are predominantly residential units, lighting should not shine into second story bedrooms and personal living spaces, yet add to pedestrian comfort and safety at grade level.</td>
<td>· All signage should be of a consistent theme. Signs should be placed in appropriate and convenient locations and be graphically consistent.</td>
<td>· Trash and recycling containers should be noticeable without being visually obtrusive, and located for convenient access.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Many buildings being suggested are a courtyard type. A courtyard building has units that face the street on one side and the interior of the block, or the court, on the other side. These courts are opportunities to improve the open space amenity of each block, and should provide adequate private open space for uses such as outdoor cooking, gardening, play activities, etc.

Trees and other green plantings also can soften the visual appearance of building facades that enclose the court. Trees can offer a canopy for cool, shaded, intimate places below them, as well as offer a habitat for a variety of birds. A network of pathways allows residents and visitors to walk through gardens and lawns of the court. Deliberate design efforts should result in small seating areas throughout the courtyard. If well-appointed and well-maintained, these courts will remain valuable homeowner and real estate amenities.

- Unpaved areas should be a simple grass lawn or maintained flowerbeds. A thick grass lawn should be planted that will accommodate active public use throughout the change of seasons, and require minimal maintenance. Gardens are encouraged, as long as there is a maintenance program to support them throughout all seasons.
- If plantings are used, they should define the courtyard’s edge. Separate from the street trees in the roadway right-of-way, shrubs and flowering plants may be used to shape the courtyard in a more informal neighborhood character.
- Trees root zone must be a minimum of 5’ deep between street grade and underground.

- Pedestrian connections to the urban street network should be clearly indicated. Passageways should identify adjacent street streets from within the court.
<table>
<thead>
<tr>
<th>Lighting</th>
<th>Signage</th>
<th>Furnishings</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Pedestrian lighting should be oriented downward, and bulb fixtures should be less than 12 feet from the ground.</td>
<td>· All signage should be of a consistent theme. Signs should be placed in appropriate and convenient locations and be graphically consistent.</td>
<td>· Trash and recycling containers should be noticeable without being visually obtrusive, and located for convenient access.</td>
</tr>
</tbody>
</table>
PLANTING STANDARDS

Selection of plant materials is based upon the site location and desired effect on the landscape; They should be nursery grown, sound healthy, vigorous plants and free of insects, disease, and injuries.

In consideration of diversity among landscape treatments, implications of aesthetics, maintenance, types of treatments, and safety issues should be addressed in these areas:

- **Planting**: Due to disease issues, the City of St. Paul has established a policy to plant a variety of species so a disease (i.e. Dutch Elm disease) cannot destroy whole areas in the landscape. The master plan will follow the guidelines established by the City of St. Paul for tree planting and types of trees to plant on streets designated.
- **Soils**: The soil type must be compatible with the species, and if not either the species is not planted in the site, or if feasible, the soil type is changed to enhance the likelihood of success of the plantings.
- **Fertilizer**: When used, commercial fertilizer is a complete plant food; soil tests will indicate composition required.

TREES

Broad sidewalks and trees in continuous planting strips flank the streets of West Side Flats. A healthy tree canopy should be maintained above 9 feet and tree root zone of 9 feet depth, along residential streets. Single rows of trees with canopies above 10-12 feet each side of the street for commercial streets should be provided with a 5-foot deep root zone between grade and any underground structure.

The five genera listed are long lived, hardy species of the region. Other trees, less suited to a formal design but still characteristic of a natural environment and are capable of defining open space and delivering a sustainable design solution are recommended.

- Ulmus – Elm
- Acer – Maple
- Fraxinus – Ash
- Quercus – Oak
- Tilia – Basswood/Linden

---

The urban habitat for trees should have the following characteristics:

- a uniform growth habitat, particularly for street trees;
- an attractive breeding habitat and winter character;
- tree crowns that will grow to arch above sidewalks;
- Resistance to insect pests and diseases;
- easy to transplant, ensuring good success of installation and immediate impact;
- adaptable to an artificial growing medium and watering regimes; and
- able to survive city conditions such as road salt and traffic pressures for about 50 years;
Appendix

A1  Great River Greening Mitigation Language
A2  US Bank Site and Landscape Plans
A3  Acknowledgements
A4  Bibliography
“Agreement Between the State of Minnesota, Department of Natural Resources, the City of Saint Paul, and the Saint Paul Foundation: Regarding the Greening the Great River Park Project”, 1996

Greening the Great River Park, now known as Great River Greening, began in 1995 as a community-based effort of the Saint Paul Foundation to plant native vegetation in the downtown Saint Paul Mississippi riverfront. In 1996, an agreement was made between the State of Minnesota, Department of Natural Resources, the City of Saint Paul, and The Saint Paul Foundation to provide Reinvest in Minnesota (RIM) funds for this project.

The agreement stated that “the plant materials shall become public property and must be placed by plantings of equal value if it becomes necessary for them to be removed, altered or destroyed.” To fulfill the State of Minnesota’s requirements for protection of the native vegetation in the Mississippi River valley, the Saint Paul Foundation has agreed to work with current and new landowners to help maintain or reconfigure plantings.

Alteration of the RIM-funded plantings will be consistent with the State (DNR) planting criteria, which state that:

- Plantings must occur in the Greening the Great River Park Project area,
- Species must be from the list of species native to the river valley or other native species mutually agreed to,
- Plantings will reinforce the vegetative state that provides habitat and opportunity for wildlife movement through the Mississippi River migration corridor,
- Plantings must include a diverse mix of vegetative types and heights, including native trees, shrubs, grasses and forbs,
- Planted areas must be of sufficient size to provide suitable and usable habitat for wildlife species, and
- Plantings should be connected to each other and to existing wildlife habitat in the area as much as possible.
ACKNOWLEDGMENTS

City of Saint Paul
Department Planning and Economic Development
Brian Sweeney, Director
Al Carlson, Project Manager
Lucy Thompson, Senior Planner
Bob Schreier, Director of Development

Department of Public Works
Mike Klassen, Transportation Planner
Pat Byrne, Civil Engineer

Division of Parks & Recreation
Tim Agness, ASLA, Landscape Architect and former Director of the Design Center

Saint Paul Riverfront Corporation
Patrick Seeb, Executive Director
Gregory Page, Program Associate

Saint Paul on the Mississippi Design Center
Tim Griffin, Director

West Side Citizens Organization Riverfront Team
David Boyce, WSCO Board
Bruce Vandal, WSCO Board
Julie Eigenfeld, Riverview Economic Development Association
Karen Reid, Neighborhood Development Alliance
Errol Edwards, WSCO Board
Steve Faust, WSCO Staff

Hammel, Green and Abrahamson, Inc.
Anita Barnett, Principal
Denny Wallace, Project Manager
Michael Lamb, Urban Designer
Rich McLaughlin, Urban Designer
Kevin Flynn, Architect
Rich Firkins, 3dModeling
Frank Martin, Landscape Architect/Editor
Gretta Greenberg, Graphic Designer
Terry Minarik, Landscape Architect
Jim Husnik, Civil Engineer
Pat Sutherland, Civil Engineer
Akshay Kini, Intern Architect
Jeremy McAdams, Intern Architect
Liz Henshaw, Intern Architect
Mark Nolan, Intern Architect

KKE Architects
Greg Hollenkamp, AIA, President

Opus Architects & Engineers, Inc.
Dave Bangasser, Project Manager
David Menke, Project Manager
LIST OF REFERENCES


West Side Flats Development Strategy prepared by Ellerbe Becket, Inc. October 29, 1999


