

District Guidelines

District Guidelines

Building details and block components must be carefully integrated into larger district patterns and systems. An individual neighborhood derives its capacity to function—both as a coherent structural environment as well as a viable socio-economic entity—from its membership in a larger urban district. Systems interactions of the larger urban district are discussed here in terms of four major objectives for creating more livable and sustainable environments:



Improving the Public Realm

Protecting Water Resources

Increasing Energy Efficiency

Diversifying Transit Options

District Guidelines

Performance of Larger Urban Systems

All neighborhoods are dependent on energy, water, transportation and communications systems. For the most part older urban neighborhoods such as Elliot Park use enormous amounts of imported energy and water that incur a high environmental cost for access and disposal. And most existing transportation environments in the neighborhood are inefficient, wasteful of land resources, and inhospitable to pedestrians. By seeking a more effective integration of built systems with natural systems an urban neighborhood ensures not only its livability but its sustainability. Streets must continue to perform their sewer, water and utility functions and meet certain traffic-moving capacities. Through more effective design and integration with the pedestrian environment of sidewalks and streetwalls, neighborhood streets also can help to create “outdoor rooms” that are attractive, safe, and appealing for social interaction. And by applying energy and water conservation practices to building construction and infrastructure improvements a neighborhood stabilizes its resources and is better able to sustain itself as part of the broader urban community.

Green Practices

Green design and building not only have a positive environmental impact but also contribute to a more appealing public realm. Green principles are applicable to both public infrastructure improvements and to private building development. Nothing better illustrates the interdependence between individual parts (buildings, blocks) and the whole (districts and systems) than the dynamics of green principles. There are a wide variety of well known green strategies and techniques that can be applied to the planning and design of our streets, buildings and public outdoor spaces. The discussion of district objectives in the following chapter incorporates some of the basic principles of green design and building.





Improving the Public Realm D i s t r i c t G u i d e l i n e s

Public spaces in Elliot Park Neighborhood should express a commitment to pedestrian oriented design and to stewardship of both the natural and built environments. The public realm constitutes a kind of “third place,” or an “outdoor room” that is distinguishable in purpose and use from private residential and commercial spaces. These are the spaces people share once they step out the doors of private places and venture into the city. Building exteriors, the appearances of streetscapes, and the presence of commons areas such as plazas, mews and parks are all components of a public realm that instills a sense of place in the neighborhood.

Improvements to the public realm involve practices that enhance the pedestrian and social environment through the attention to detail, scale and use within the outdoor room of streets.



private properties can open up onto public sidewalks



pedestrian and transit environments can safely and attractively intermingle

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Improving the Public Realm



inviting sidewalk environments and friendly outdoor spaces encourage people to gather and socialize

The Pedestrian Environment

The outdoor room should be focused on the experience of pedestrians rather than on dominance by automobiles. This requires:

- continuation of the three-to-four story streetwall
- clearly visible and convenient entry ways into buildings from sidewalks
- welcoming streetscape elements that provide scale, safety and texture, such as: awnings, plantings, wide sidewalks, street corner bump-outs, street crossing pavers, pedestrian level lighting, benches and other outdoor seating opportunities
- expansion of through-block connections as part of the network of pedestrian pathways in the neighborhood
- courtyards, plazas, linear or pocket parks for outdoor leisure and social interaction
- use of energy efficient “dark sky” compliant exterior building and street lighting fixtures that reduce light pollution and glare while creating a safer pedestrian environment



Protecting Water Resources

The conservation, treatment, and reuse of water resources are important components of sustainable development. The waste and pollution of water has been an unfortunate by-product of much previous urban development. In high density urban environments such as Elliot Park Neighborhood it is especially important that more efficient techniques for capturing, collecting, filtering, reusing and recharging water be practiced rather than allowing water to simply run off into the storm water system.

These practices, which must be applied in the construction of individual buildings and in public infrastructure improvements, should include:

- planting boulevard trees to absorb more rainfall, contribute to better air quality, and create more appealing pedestrian environments
- planting trees and shrubbery in tree box filters and planters along sidewalk boulevards to absorb more rainfall and for better collection of curb / gutter run-off



ponds for water recycling



boulevard plantings to reduce water run-off

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Protecting Water Resources



green roofs to capture rainfall



bio-swales to capture and filter rainwater

- installing vegetated bioswales along property boundaries and in surface parking lots to collect and filter water run-off
- replacing “hardscape” surfaces with permeable surface materials and plantings to capture and retain water run-off
- constructing vegetative roofs to capture rainfall, increase insulation, reduce the heat island effect and extend the roof life cycle
- recycling roof water run-off and storing rainwater in cisterns for irrigation of green areas and gardens
- converting existing alley ways into “green alleys” that feature more permeable surfaces (such as bricks or cobblestones), plantings, pocket gardens and green walls

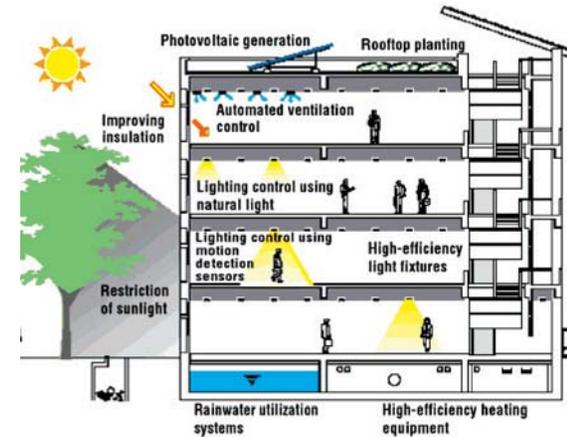


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Increasing Energy Efficiency

Conservation and efficient distribution of energy resources can be achieved at the smallest levels in building design and at the largest levels in district energy strategies. The application of LEED certification standards to building construction is a worthy goal; however, individual practices become much more effective when integrated into city-wide energy efficiency practices. Better energy strategies must be developed in concert by multiple jurisdictions, involving collaboration between the development and construction industries, architects and urban designers, government planning departments, and municipal and county public works and energy agencies. District strategies might include:

- on-site ground water recycling
- district heating and cooling
- district sewage collection and disposal
- local energy generation



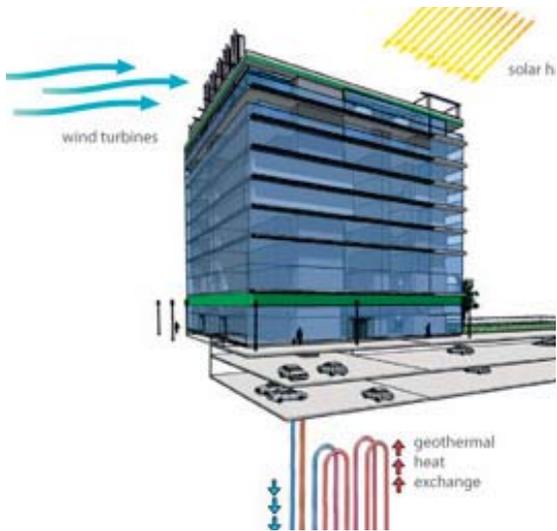
building interior - energy schematic



building envelope - green roof

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Increasing Energy Efficiency



building systems for circulation of heating and cooling



district energy - St. Paul District Heating Plant

Some goals for increasing energy efficiency in Elliot Park Neighborhood:

- solar access should be provided for every building on every block
- building envelopes should be designed to maximize retention of heating and cooling (for example, green roofs and green walls)
- orient buildings and design creative building facades that will exploit daily and seasonal heating / cooling effects in order to minimize dependence on mechanical systems
- utilize building designs that promote natural energy flow
- encourage energy sharing by incorporating mixed use occupancies
- develop block and district passive solar strategies that maximize daylighting to meet heating and cooling requirements
- flourish the urban tree canopy and other greening (grasses, plantings, gardens) to increase solar absorption and decrease heat island effects
- institute multiple-block and district-wide energy sharing practices to maximize and conserve energy delivery efficiencies
- utilize building construction that meets or exceeds LEED performance



Diversifying Transit Options

Just as a network of pedestrian pathways is critical for creating connections within a neighborhood, a broader network of connections is crucial for increasing interchange between separate districts of a city. As alternatives to the current over-dependence on automobiles, Elliot Park Neighborhood promotes an enhanced pedestrian realm as well as alternative modes of transit. Providing a variety of transportation options not only is important for making a community more livable, but also contributes to more effective patterns of movement that in turn produce better efficiencies in the use of energy resources.

Diversifying transit options requires cooperation at the level of larger public infrastructure and transportation initiatives. Still, individual developments must respect the pedestrian-scale of the neighborhood and can do much to offer better transit options. A few of Elliot Park Neighborhood's more important goals for improving transit connections include:

- broadening the network of pedestrian walkways and bicycle pathways for increased access to neighboring districts of the City, such as Downtown, the Riverfront and the University of Minnesota



a variety of ways for getting about



light rail mass transit

District Guidelines

Diversifying Transit Options



bicycle and pedestrian pathway



multi-modal transportation: bicycle and bus

- designing more appealing pedestrian environments with wider sidewalks, streetscape amenities (lighting, plantings, benches), street corner bump-outs, crosswalk pavers, signage and public art
- converting one-way pair streets to two-way streets to create hospitable pedestrian environments and slower, freer patterns of traffic circulation that provide more convenient access to local businesses
- “right-sizing” of individual streets to accommodate the variety of neighborhood and district functions they serve
- implementing parking strategies such as: off-street structured parking for most primary and accessory uses; short-term on-street parking for visitors and retail business customers; longer-term on-street critical parking for residents
- reducing on-site parking requirements to below zoning code maximum limitations
- developing a system of light rail and streetcar lines that connect Elliot Park Neighborhood with other district and regional destinations
- developing bus circulators and streetcar short lines that provide more frequent and reliable local connections