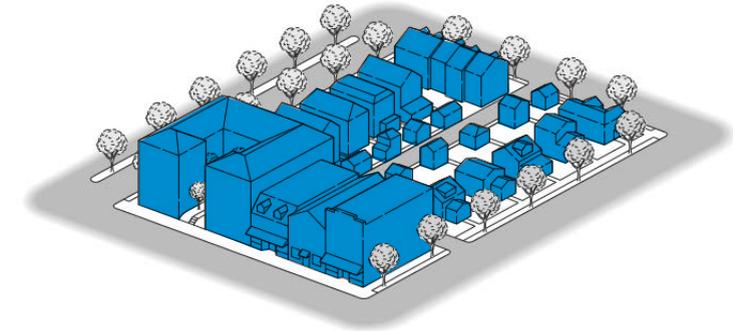
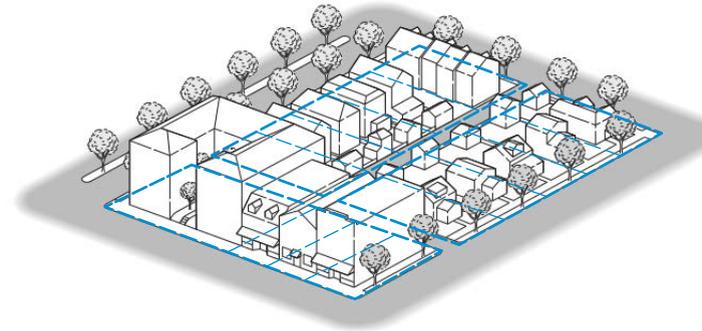
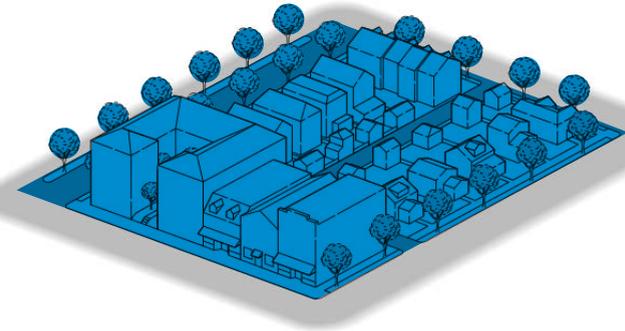
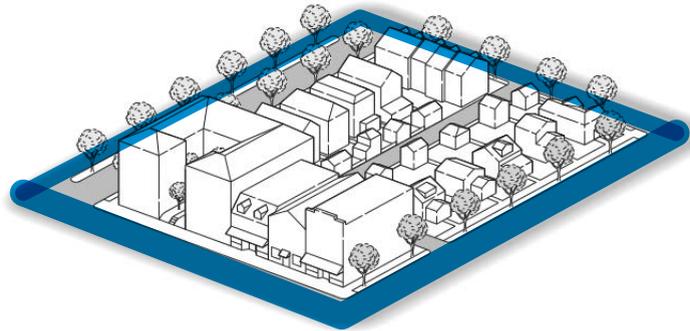


HILLCREST URBAN DESIGN WORK GROUP

Meeting 3 – Regulatory and Design Basics for Streets
and Blocks



DESIGN SCALE FRAMEWORK



Streets

- + St. Paul 2040 Comprehensive Plan
- + Watershed requirements (RWMWD)
- + Hillcrest Master Plan
- + St. Paul Street Design Manual
- + District stormwater, utility, and traffic needs

Blocks

- + Hillcrest Master Plan
- + City of St. Paul Zoning Code
- + City Council Ordinance 19-39: City Council Bonding Approval for Acquisition
- + LEED for Communities Platinum Pre-Certification

Lots

- + City of St. Paul Zoning Code
- + Watershed requirements (RWMWD)
- + Operations & Maintenance
- + Crime Prevention through Environmental Design (CPTED)
- + Market feasibility

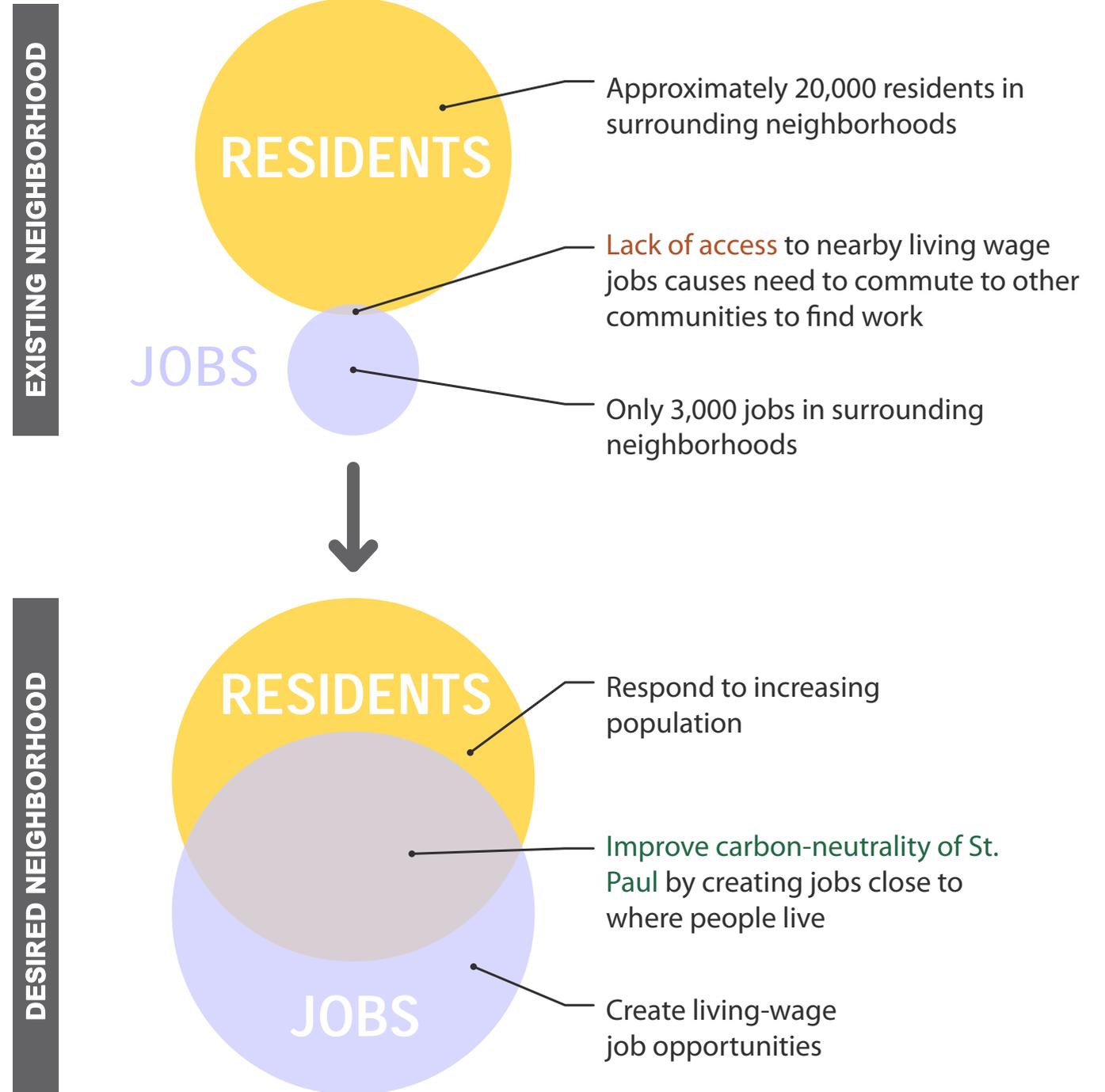
Buildings

- + City of St. Paul Building Code
- + LEED certification
- + Arts/Employment District concept
- + Sustainability requirements



PORT AUTHORITY GOALS

- + Create quality, living wage job opportunities
- + Expand the St. Paul tax base
- + Advance sustainable development





TYPICAL LIGHT INDUSTRIAL DEVELOPMENT

1

Based upon *market pressure* and the *project's goals* (i.e. create good jobs), it is clear that the least important factor for the success of the proposed light industrial development is the *architecture*.

2

Light industrial developers do not need impressive or beautiful buildings to run their businesses well, but the community benefits when these structures add nuance and character to the neighborhood.

3

All development projects should incorporate the goals of **Livability, Environmental Stewardship, and Financial Viability**.



WE WANT TO DO BETTER

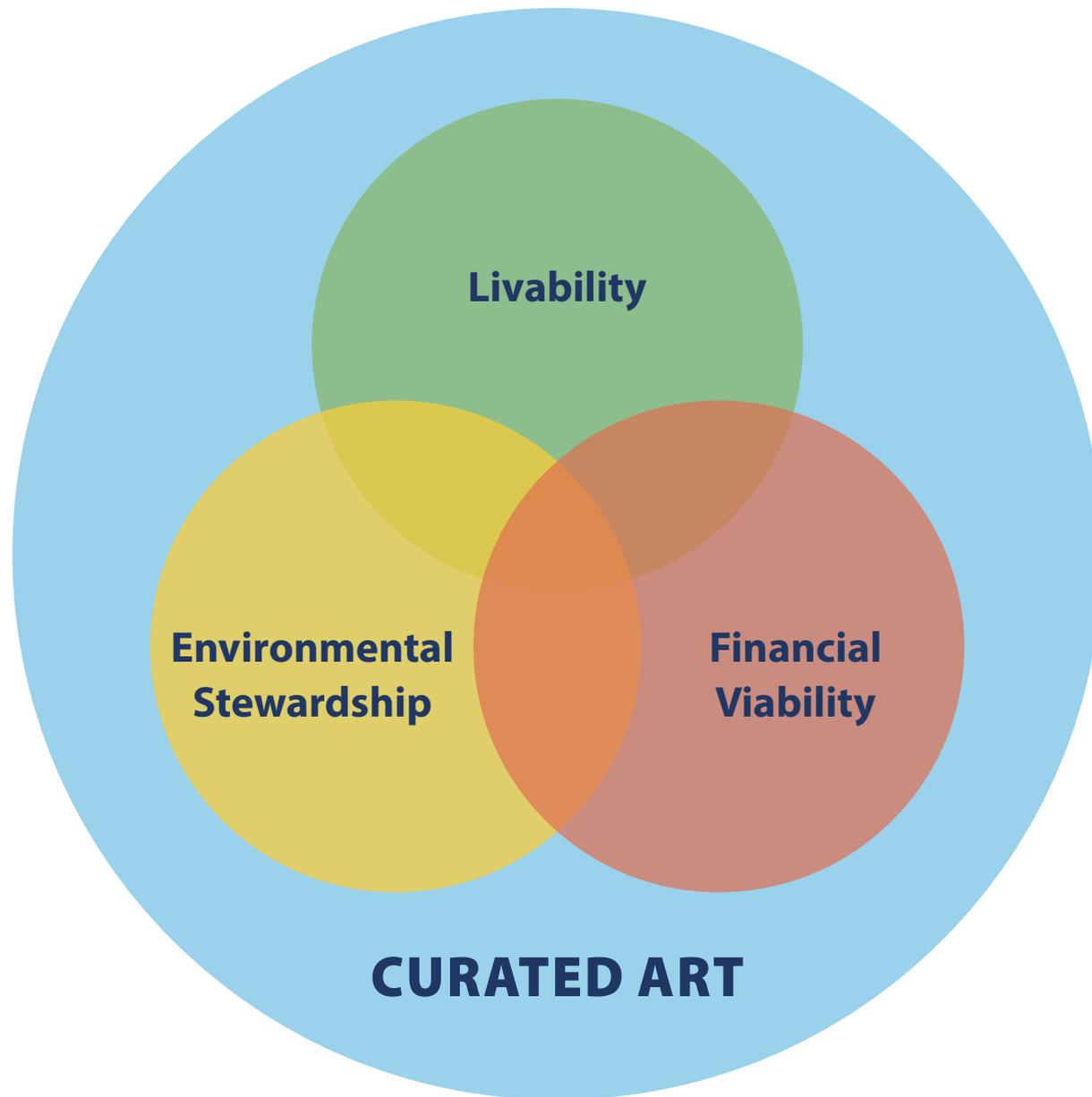
The Port Authority has been seeking alternative compliance for building code requirements that accept mural-based public art as a form of architectural articulation.

"Murals and other art upon industrial buildings can satisfy the requirements of City Code Sec. 66.542(a)(2) in lieu of facade articulation if the Department of Safety and Inspections determines that the art has a similar visual impact from the street and can be adequately maintained."

From Hillcrest Master Plan, draft dated January 13, 2022, page 41

+ Any requirements that must be fulfilled by potential developers/business owners must support the financial viability of their project.

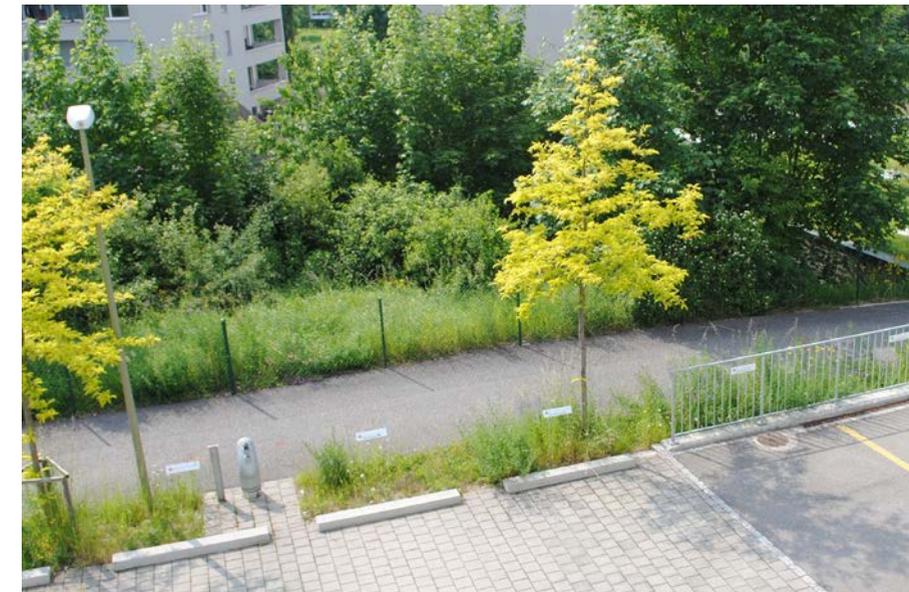
Additional requirements that increase the level of a site's environmental stewardship are also being explored.





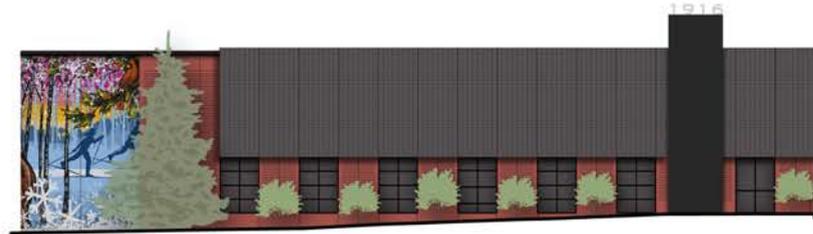
LIVABILITY

+ Layered, textured, human-scaled streetscape

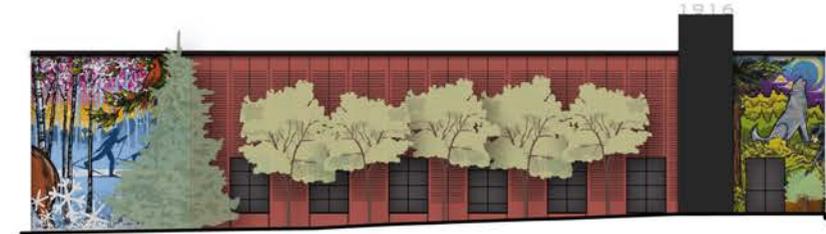


FINANCIAL VIABILITY

- + Pre-selected, cost- and energy-efficient components
- + Create simple, attractive "background buildings" that are useful to job providers
- + Redirect investment from architecture to community-oriented site amenities



South-Facing Facade
 15% Murals
 850 Square Feet
 \$8,500-\$34,000



South-Facing Facade - No Solar
 30% Murals *if Public-Facing*
 1,700 Square Feet
 \$17,000-\$68,000

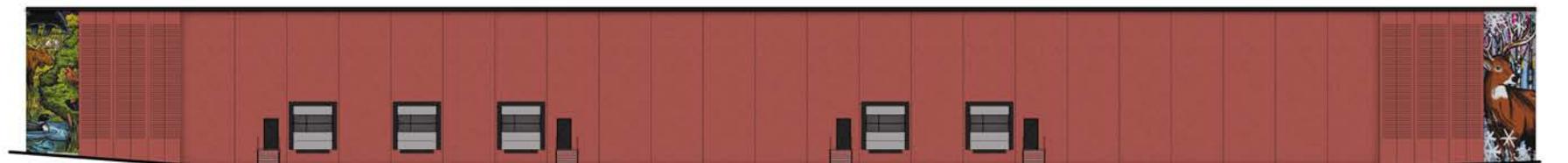


Street Facade
 20% Murals
 2,400 Square Feet
 \$24,000-\$96,000



Trail Facade
 15% Murals
 800 Square Feet
 \$8,000-\$32,000

Loading Facade
 6% Murals
 850 Square Feet
 \$8,000-\$32,000



ENVIRONMENTAL STEWARDSHIP

- + Stormwater infiltration and biofiltration
- + Energy – reserve roofs and surfaces for solar panels





A DIFFERENT APPROACH

to Light Industrial Building and Site Design



A DIFFERENT APPROACH

to Light Industrial Building and Site Design



A DIFFERENT APPROACH

to Light Industrial Building and Site Design



A DIFFERENT APPROACH

to Light Industrial Building and Site Design



A DIFFERENT APPROACH

to Light Industrial Building and Site Design

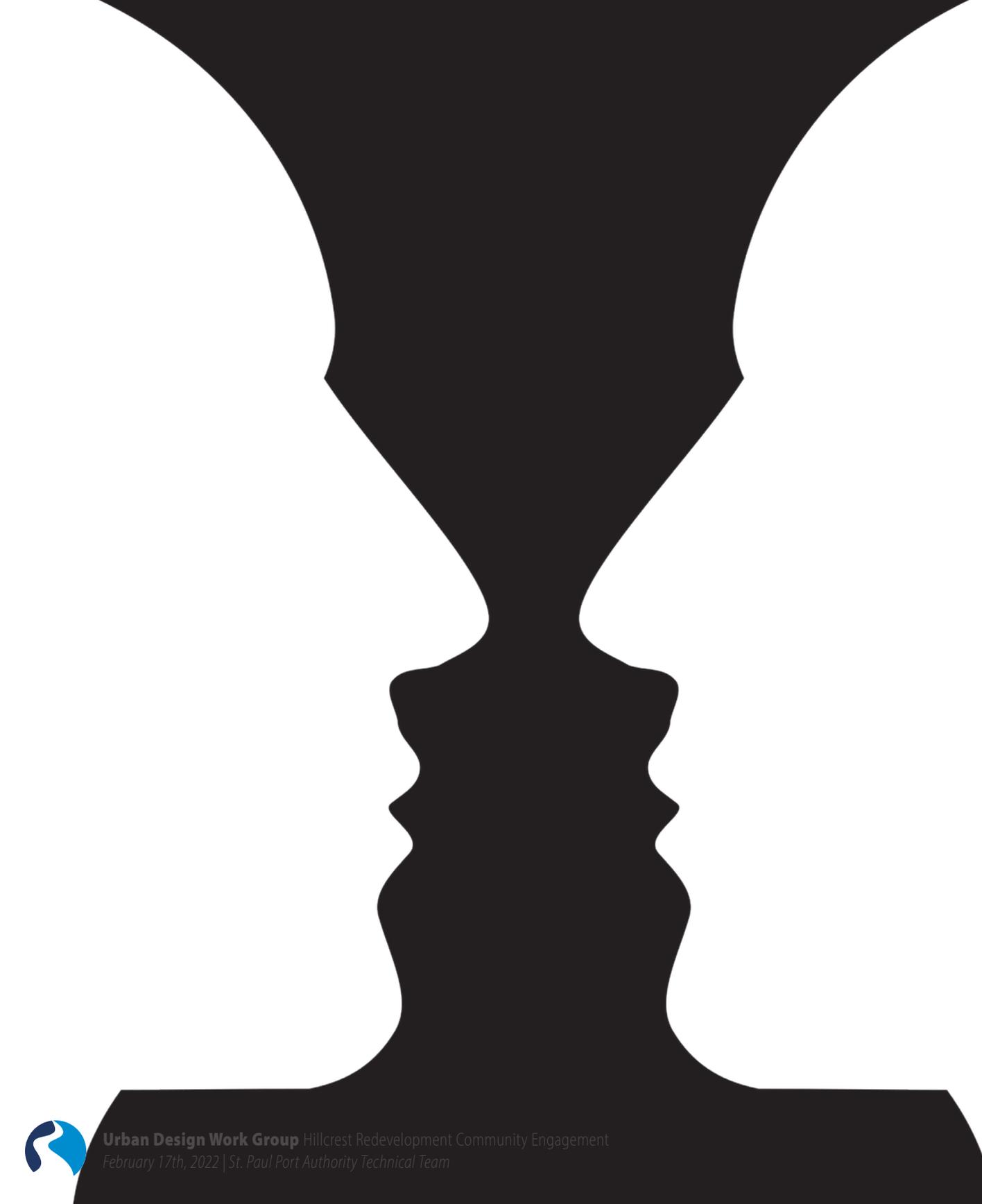


A DIFFERENT APPROACH

to Light Industrial Building and Site Design







STREETS AND BLOCKS

They define each other's extents and character as they are each other's negative space.



PLANNING DOCUMENTS & REQUIREMENTS



- + City-adopted document outlining community-driven policies that address city-wide physical development over the next 20 years
- + Establishes priorities for design of rights-of-way, with needs of pedestrians & bicyclists placed at the top



- + City-adopted document outlining community-driven policies that address city-wide physical development over the next 20 years
- + Guides transportation planning while fitting strategically into regional visions laid out by the Metropolitan Council



CITY OF ST. PAUL 2040 COMP PLAN

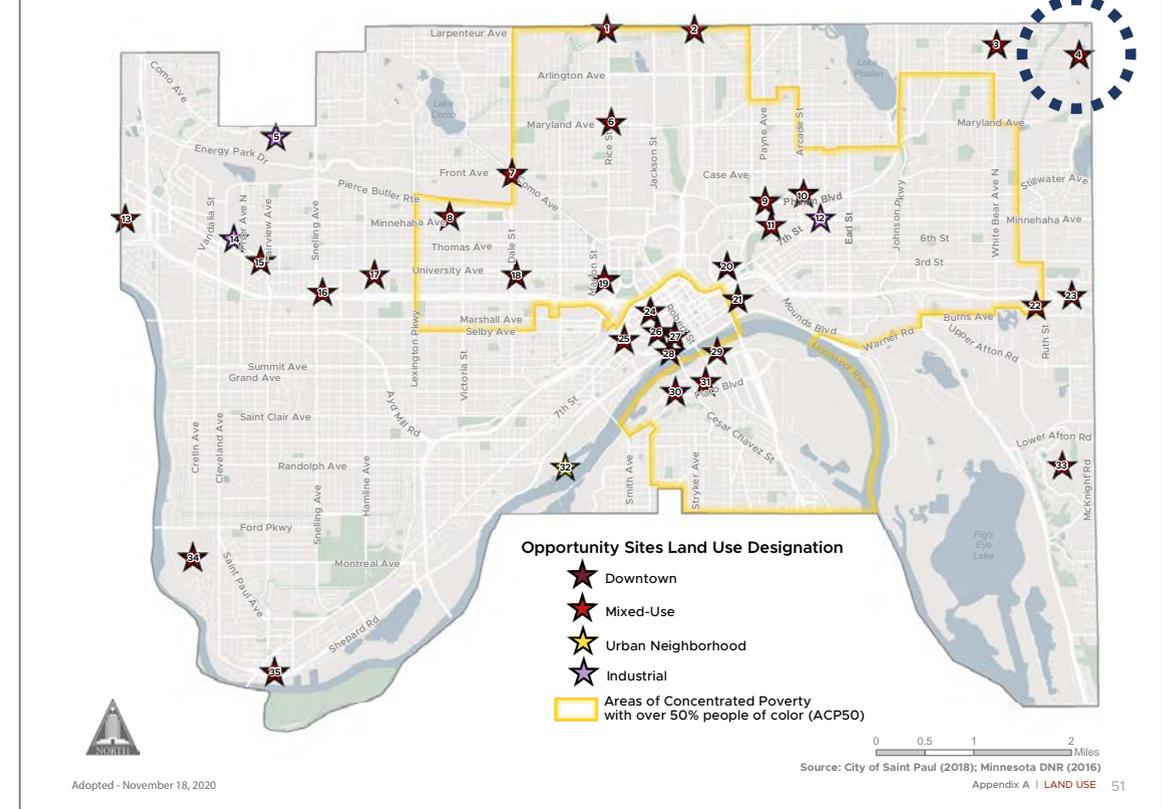
Overall city Land Use goals and Neighborhood Node locations are based on the urban design concept of the “20-minute city.”

+ All residences within St. Paul shall be a 20-minute walk (or less) from a Neighborhood Node that offers a variety of amenities, such as neighborhood businesses, grocery stores, parks, and/or open space.

Hillcrest Golf Course is specifically mentioned on page 42 as a future Neighborhood Node location. Locations were identified via:

- + Adopted small area, neighborhood, and master plans
- + Community feedback
- + Market potential
- + Review of current zoning designations
- + Analysis of current and future land use

Map LU-3: Opportunity Sites



Introduction

The Land Use Chapter guides the overall physical layout and organization of Saint Paul. Policies set forth in this chapter promote development patterns that strengthen neighborhoods; improve walkability; increase access to housing, jobs, schools, parks and services; promote equitable access to neighborhood nodes; help to reduce carbon emissions; and accommodate growth by leveraging transit investments.

As Saint Paul has developed, land uses have changed in conjunction with transportation trends, and evolving zoning regulations and market forces. The land uses that have developed over time have a close relationship to natural forms and systems in Saint Paul, including the Mississippi River. The overall composition of these natural and built characteristics influences how people live, move and do business in Saint Paul (Figure LU-1).

This chapter provides guidance by land use type and is illustrated by the Future Land Use Map (Figure LU-2), which determines where the uses are to be located over the next 20 years. The land use types are described throughout the chapter, followed by policies per land use. Household and employment growth over the next two decades is focused in Downtown, Mixed-Use areas and Neighborhood Nodes, creating compact urban development in areas with a high level of services and amenities. Ongoing investment in housing choice in Urban Neighborhoods is also supported. Additional supporting materials for Land Use Chapter policies can be found in the appendices beginning of page 46.

The following goals guide the Land Use Chapter:

1. Economic and population growth focused around transit.
2. Neighborhood Nodes that support daily needs within walking distance.
3. Equitably-distributed community amenities, access to employment and housing choice.
4. Strong connections to the Mississippi River, parks and trails.
5. Infrastructure for all ages and abilities.
6. Efficient, adaptable and sustainable land use and development patterns and processes.
7. Quality full-time jobs and livable wages.
8. People-centered urban design.

also an increasingly rich amount of quantifying the positive benefits of development pattern. Benefits

ved health; ased walking; ed vehicle miles traveled; and ve equity outcomes. at Research Quantifying Smart nefits, Todd Litman)

nefits show the close relationship land use and transportation, and how we can grow in a way that the improvements people want to see mmunities. Neighborhood Nodes are the streets that host them. Jan Gehl t in his book Cities for People:

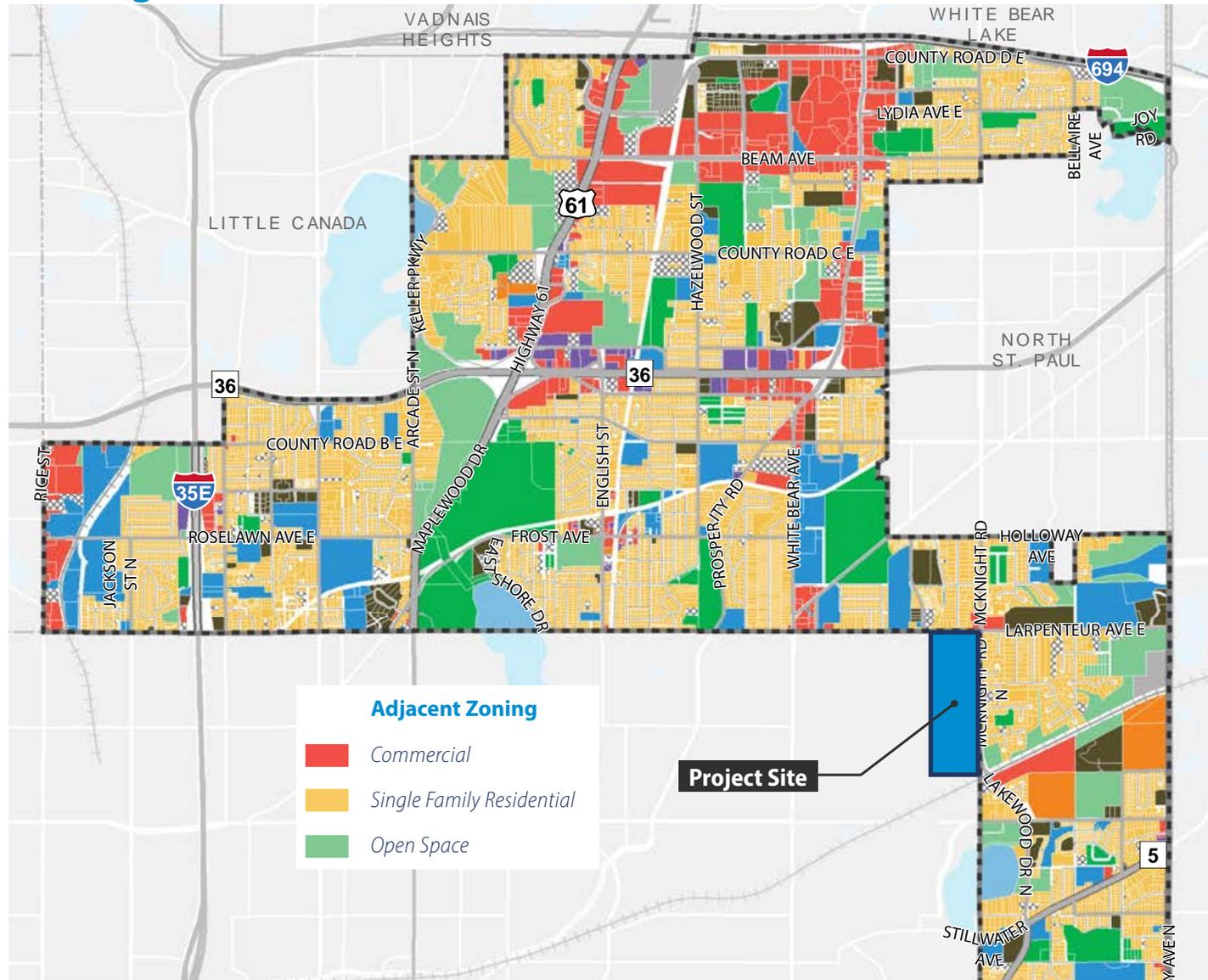
more life in urban neighborhoods ople move slowly. The goal of cities where more people are invited and bike will bring more life to the nd a greater wealth of experience (ast traffic will be converted into affic" (p.71).

a land use mix and high-quality urban at invites pedestrians to linger at hood Nodes will make the city more

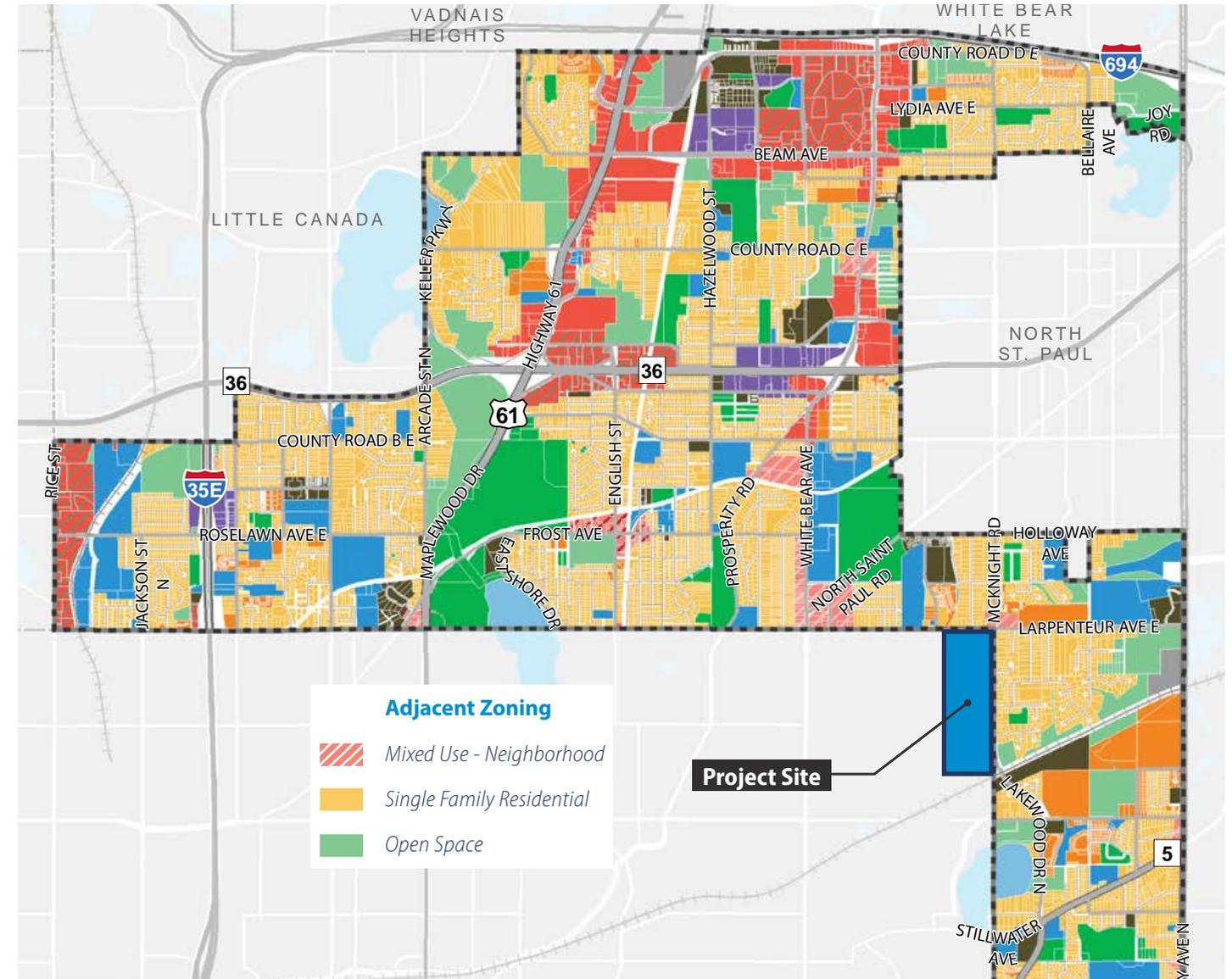
Phalen
Tedesco
Village
Arcade
Cayuga
Cook
Olive
Sh-Snelling
Sh-W. 7th/Schmidt
nd Station Area
rk Urban Village
ation Area
ale
Hilton
metling
Western
d-Davern/Sibley Manor
Station Area
ony Park Village
-Cleveland
-Snelling
-W. 7th
er-Iroquois
-George
an-White Bear
y Station Area
Park
Station Area
a Commons Urban Village
de Flats
n Station Area
re Station Area
ck-Arcade
ck-Rice-Larpenteur
ear Station Area
ear-Maryland

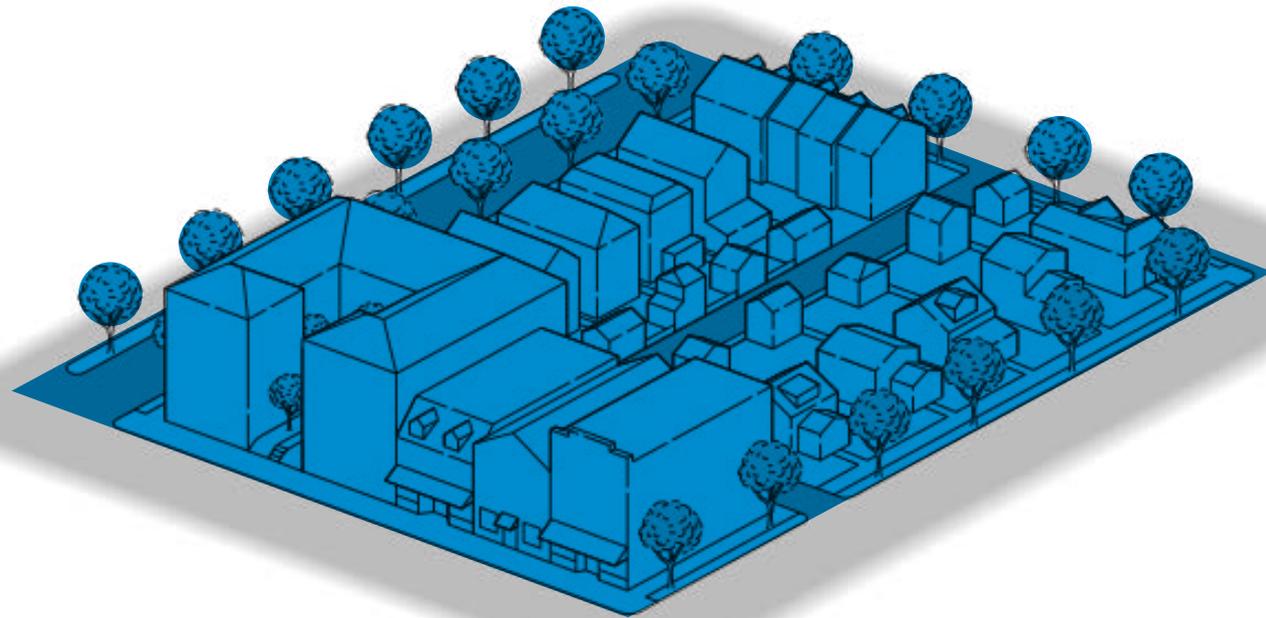
CITY OF MAPLEWOOD 2040 COMP PLAN

Existing Land Use



Future Land Use





BLOCKS

1

Block configuration is strongly influenced by prioritizing alignment with the existing intersections around the site perimeter.

2

Blocks are further influenced by minimum and maximum dimensions for residential and mixed use development.

3

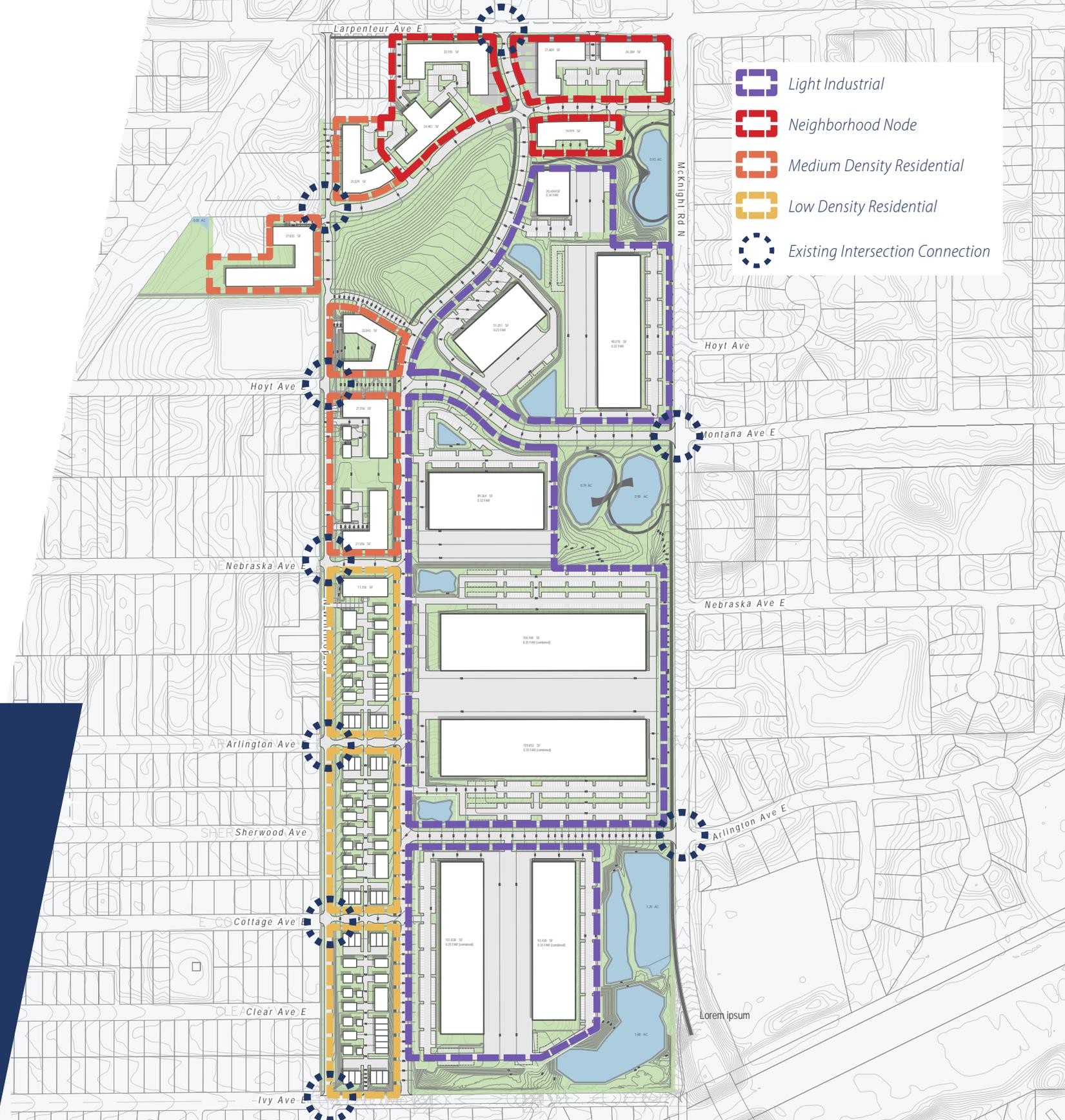
Light Industrial blocks are configured to maximize existing wetland preservation and long-term development flexibility.



MASTER PLAN

Block and Street Layout

- + City and County Traffic Engineers strongly endorsed a road network that aligns with existing intersections
 - Most truck traffic will be coming off of McKnight, entering the site at Arlington or Montana
 - Neighborhood Node main access at Larpenteur & Howard
- + Strong community desire to prevent cut-through traffic into the surrounding neighborhood
 - Every other street connects to the street grid west of the site
 - There are no continuous roads across the site east/west
 - Traffic calming/street diet measures will be used to discourage truck traffic from going west of Howard
- + Block depth at Neighborhood Node & western residential buffer zone reflect minimum developable dimensions



- Light Industrial
- Neighborhood Node
- Medium Density Residential
- Low Density Residential
- Existing Intersection Connection

Lorem ipsum

WETLAND MANAGEMENT

According to the Wetland Conservation Act (WCA), Ramsey-Washington Metro Watershed District (RWMWD), and the City of St. Paul:

Wetland Classification	Manage A	Manage B	Manage C	Not Yet Assessed
Average Buffer Width	75 feet	50 feet	25 feet	Wetlands will need to be assessed by project applicant to understand appropriate management level
Minimum Buffer Width	37.5 feet	25 feet	12.5 feet	

Wetland Terminology

- + Preservation: leave healthy wetlands alone
- + Restoration: clean-up contaminated wetlands in the current location
- + On-site Mitigation: off-set of unavoidable wetland impacts through creation of new wetlands, i.e. build healthy wetlands at a new location within the site.
 - Only replacement option available to fulfill watershed rules at this time, since watershed credits are not available
- + Off-site Mitigation: off-set unavoidable wetland impacts through creation of new wetlands, i.e. buy off-site credits or create new wetlands off-site



WETLAND TYPE

- A** Manage A
- B** Manage B
- C** Manage C
- D** Manage D

WETLAND MANAGEMENT

Necessary removal of contaminated soils within wetlands shall require dredging and restoration of wetlands within their existing footprint.

Watershed rules (RWMWD) are more restrictive than Wetland Conservation Act (WCA) requirements:

- + WCA requires 2:1 ratio for mitigated wetlands, but can be offset through state-purchased credits
- + Watershed requires 1:1 ratio for mitigated wetlands, but must be on-site





Change parcel along Larpenteur to high-density mixed-use

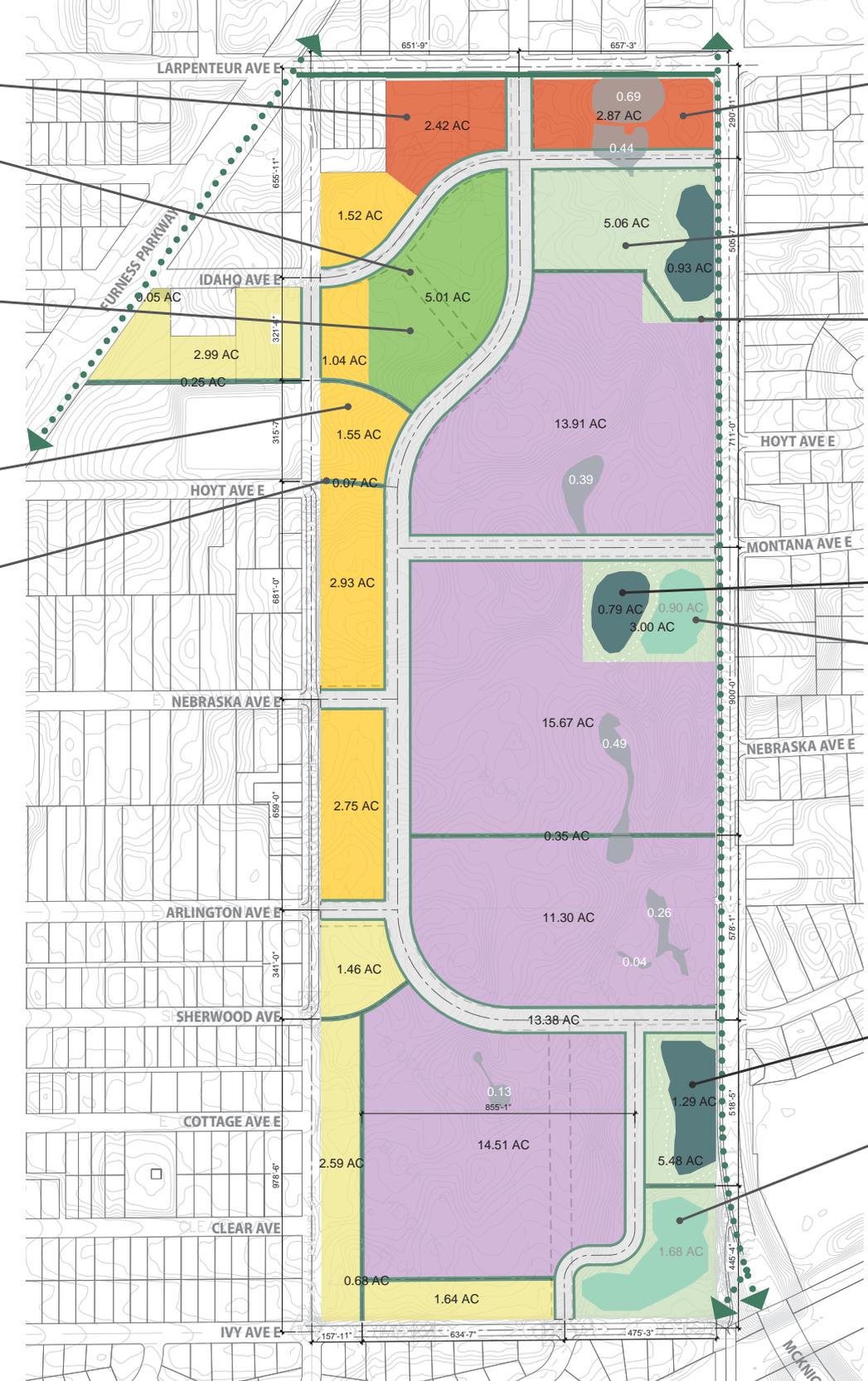
Eliminate ROW segment; block does not exceed 600' maximum; Covenants will address public pedestrian connection through high- and mid-density residential parcels

Shift Active Park to west side of spine road

Change parcels to mid-density residential

Shift trail northward to align with established street grid

LAND USE	
Original	Revised
16.20 AC	8.68 AC
11.4	9.79
1.5	5.29
54.75	55.22
8.63	15.00
4.77	5.01
0.98 (17%)	3.06 (55%)
4.62 (83%)	2.54 (45%)
14.4	13.38
DU 903	925



Change corner parcel to high-density mixed-use

Expand passive open space to reach 15 acre goal; good location for district stormwater management

Shift trail and parcel boundary northward

Save Wetland D and 25' buffer (only non-contaminated wetland on site)

Locate mitigated wetlands (i.e. relocated wetlands) here within appropriate silty sand/clay sand soils

Save Wetland H and 25' buffer

Locate mitigated wetlands (i.e. relocated wetlands) here at the site's low ground and within hydric soils (clay sand)

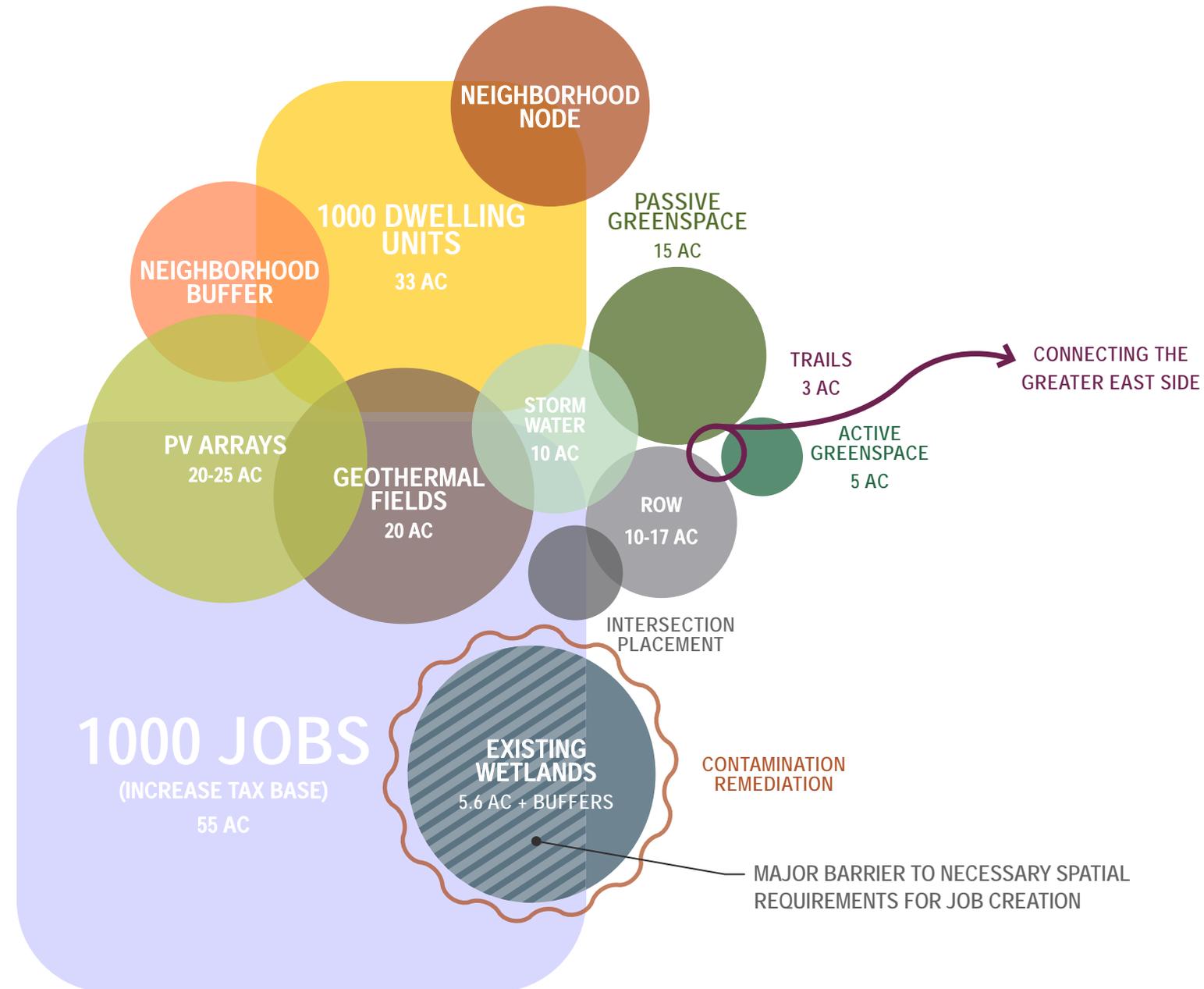
*Based on CAD drawings from Cuningham; 3/18/2021 transmission



SPATIAL RELATIONSHIP BETWEEN USES

112 acre site

150+ acres of required programming



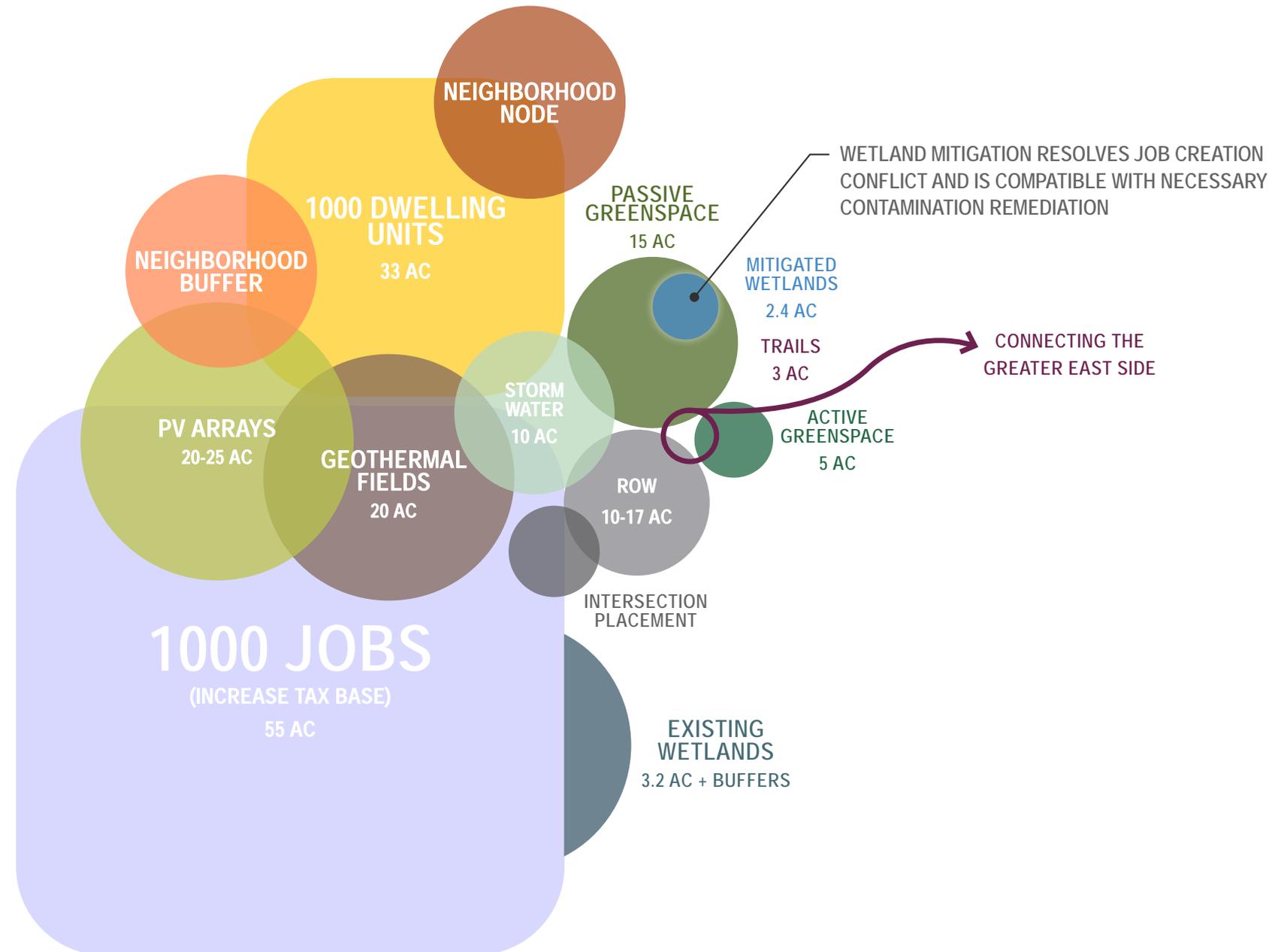
NOT TO SCALE



SPATIAL RELATIONSHIP BETWEEN USES

112 acre site

150+ acres of required programming



NOT TO SCALE



MASTER PLAN

Block Types and the Zoning Code

- + The Master Plan for Hillcrest designates four zoning types throughout the site:
 - T1 – Traditional Neighborhood
 - T2 – Traditional Neighborhood
 - T3 – Traditional Neighborhood
 - IT – Transitional Industrial
- + Each zoning type has specific requirements for principal uses and accessory uses, and provide direction on the density, scale, and appearance of development.
- + The size and scale of these blocks have a direct impact on the look and feel of the public realm.

Refer to: library.municode.com/mn/st._paul/codes/code_of



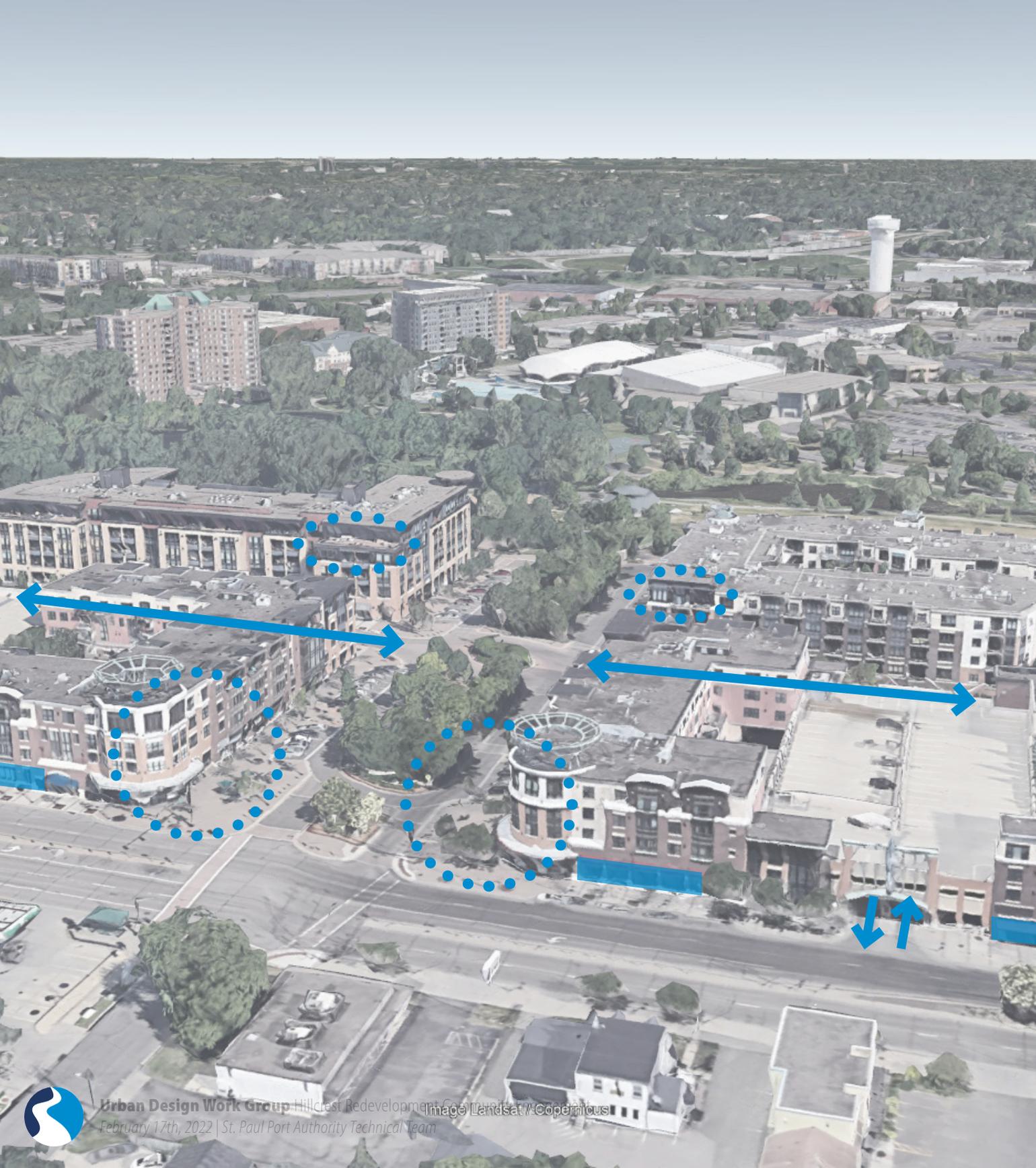
TRADITIONAL NEIGHBORHOOD DISTRICT DESIGN STANDARDS

(Sec. 66.343)

- + **Block length** (does not apply to T1) – in mixed use areas must not exceed 400' & in residential should generally match existing block patterns while not exceeding 660'
- + **Screening of equipment & service areas** (does not apply to T1) – fences, walls, or plantings at least 6' in height must screen storage, service, or loading equipment from public streets/walkways
- + Interconnected street & alley network (does not apply to T1) – extending & restoring the existing street network to the greatest degree possible (no cul-de-sac! Cul-de-sac bad!)
- + On-street parking (does not apply to T1) – generally prefer on-street parking lining both sides of the street to buffer pedestrians, calm traffic, and supplement off-street parking
- + **Off-street parking** – preferred to be within, below, or behind principal buildings, & if structured, must be buffered from public ROW with active uses and/or architectural screening
- + **Parking lot lighting** (does not apply to T1) – requires pedestrian-scaled lighting in off-street parking areas
- + Street trees – required within a minimum 5' wide strip (or approved structure) between the curb and sidewalk of all streets at regular intervals (~30' on center) to define edges, provide shade, & buffer pedestrians
- + Sidewalks – required on both sides of street except where abutting a park or other open space, & should be at least 6' wide in areas of high pedestrian activity, & at least 5' wide everywhere else
- + **Setbacks & front yard areas** – hard surfaced front yards should include amenities such as benches, tables, & planters







POTENTIAL AREAS OF INFLUENCE

How the lots work together to make a block

- + Corners & entry points
- + Private, semi-private, & public spaces
- + Open spaces within blocks – trail connections, pocket parks, POPS (privately-owned public space), community garden, temporary greenspace/agriculture

Scale & Density

- + Building heights, widths, parcel widths
- + Dwelling unit density per acre
- + Accessory Dwelling Units (ADU's)

Internal Circulation

- + Alleys & shared driveways
- + Driveway frequency





Rendering of potential POPS at Howard & Larpenteur



Rendering of Hoyt Greenway east of Winthrop

HOW LOTS WORK TOGETHER TO MAKE A BLOCK

- + Corners & Entry Points
- + Private, semi-private, and public spaces
- + Open spaces within blocks – trail connections, pocket parks, POPS (privately-owned public space), community garden, temporary greenspace/agriculture

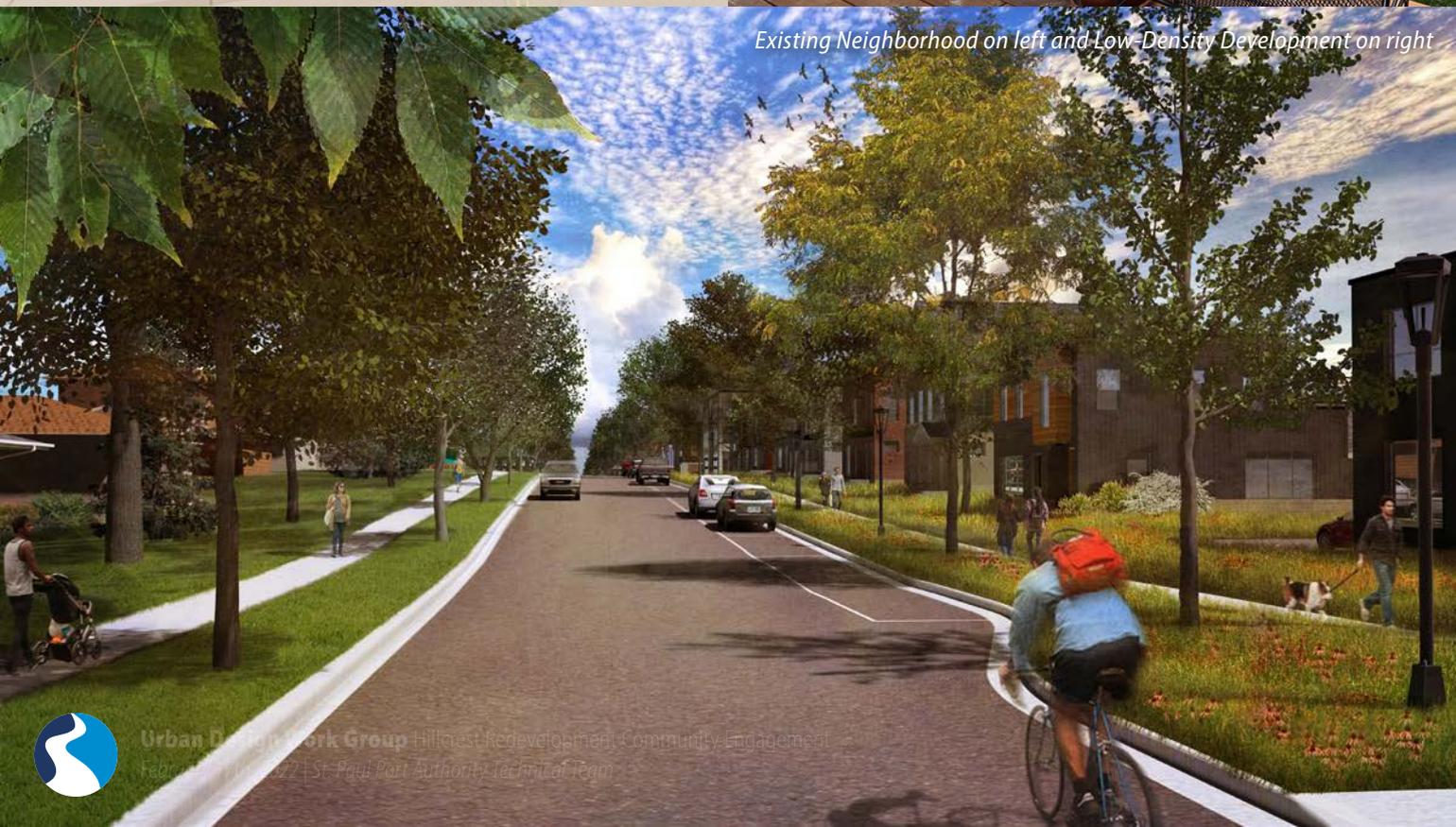




5-Story Apartment building with step back



Accessory Dwelling Unit over a detached garage



Existing Neighborhood on left and Low-Density Development on right

SCALE & DENSITY

- + Building heights, widths, parcel widths
- + Dwelling unit density per acre
 - Accessory Dwelling Units (ADU's)

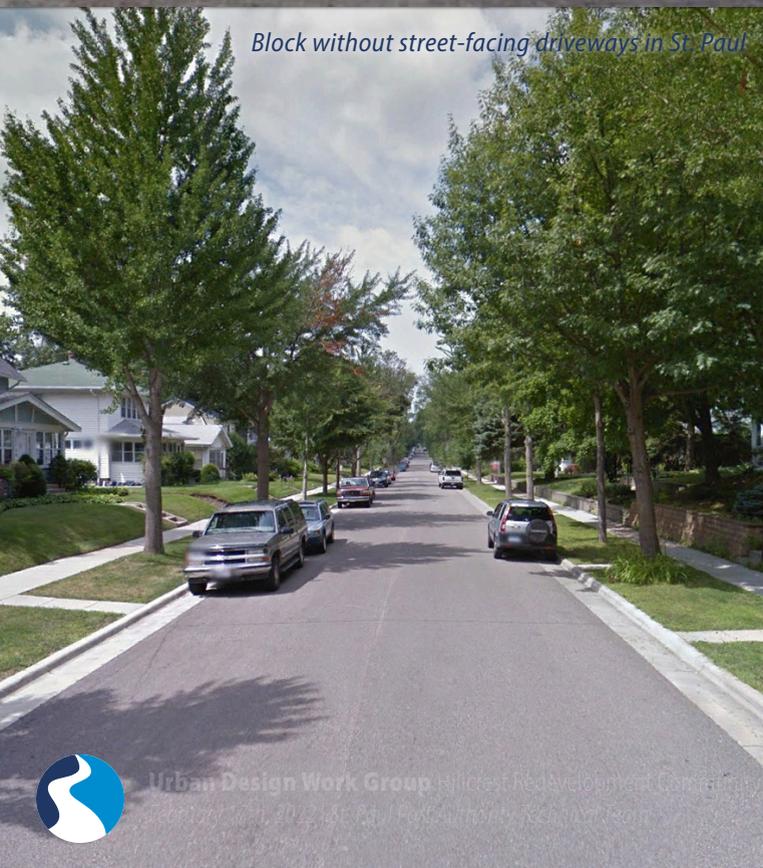




Residential alley



Shared Driveway in South St. Paul



Block without street-facing driveways in St. Paul



Block with street-facing driveways

INTERNAL CIRCULATION

- + Alleys & shared driveways
- + Driveway frequency



HOMework

Walkable, inviting spaces

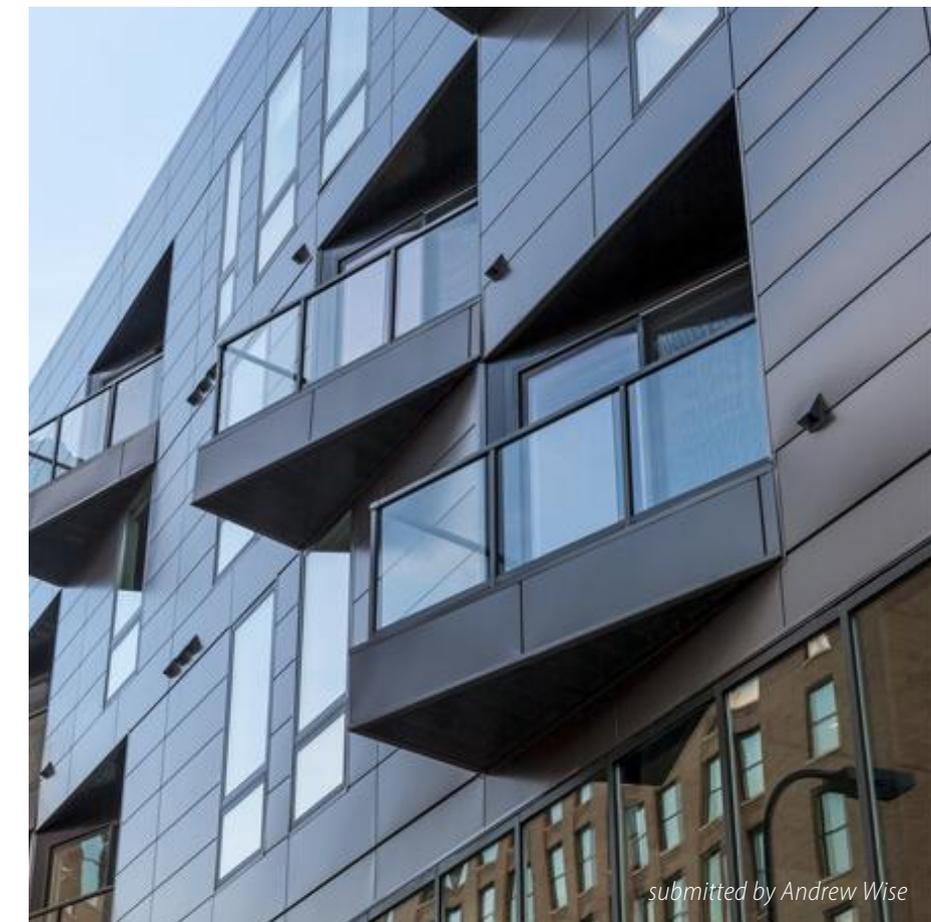
- + Ensure all programmatic areas are accessible to all, keeping trip hazards and rolling barriers to a minimum
- + Natural materials and plantings are inviting, encouraging people to utilize an area
 - Generates "eyes on the street"

Architectural Interest

- + Variation in facade material
- + Projections, shadow reveals, parapets
- + Balconies and views

Lighting

- + Creates ambiance and enhances safety
- + https://www.pinterest.com/landscape_/pathway-lighting/



HOMework

Mixed-use, High Density

- + Street-level transparency
- + Connections through building mass

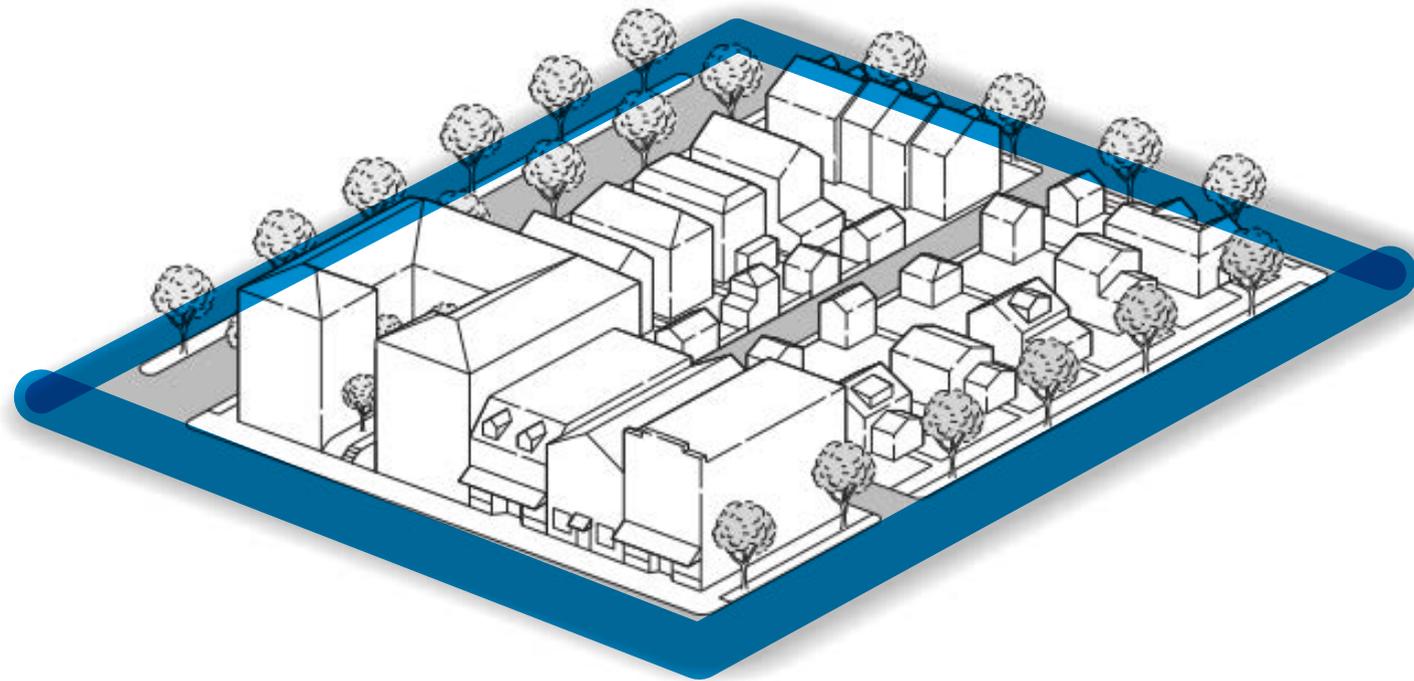
Neighborhood Node

- + Activation on all sides and edges
- + Permeable edges, so a person can approach from almost any direction
- + People love water!

Trails

- + Incorporate gathering spaces periodically along trail corridors





STREETS

1

There are several **planning documents & requirements** in place that outline the alignment & design of Saint Paul's Right of Way (ROW)

2

Different areas of Hillcrest require **different types of streets** to serve a variety of housing, commercial, light industrial, & recreational uses

3

Technical design considerations are essential to a functioning street network, but there are opportunities for **this group to inform** streetscape amenities, programming, & materiality.



HILLCREST MASTER PLAN STREET TYPES

Nighborhood Node Streets

- + Dedicates more space to pedestrian movement
- + Anticipates first-floor, mixed use programming
- + Best location for adjacent Privately-Owned Public Space (POPS)

Light Industrial Streets

- + Accommodates pedestrian circulation, stormwater management, vegetative buffering, & public art
- + Must support truck movements to/from McKnight

Nighborhood Streets

- + Traffic calming is a priority
- + Focuses on pedestrian safety & comfort



STREET TYPES: NEIGHBORHOOD NODE

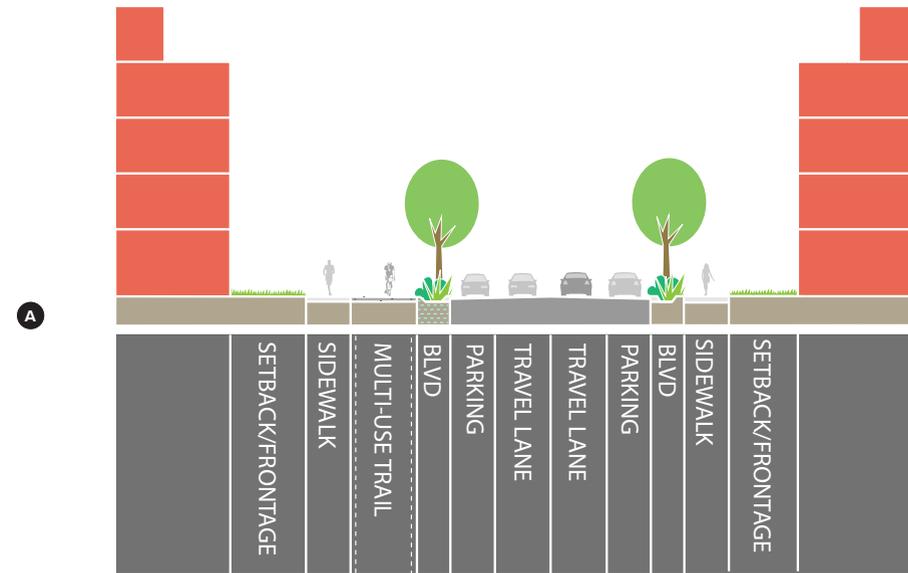


NOTE:
For new developments and where opportunities are available to create additional setback, site designs should accommodate wider sidewalks with generous Boulevard / Furnishing Zones. Source: Saint Paul Street Design Manual (p.23)

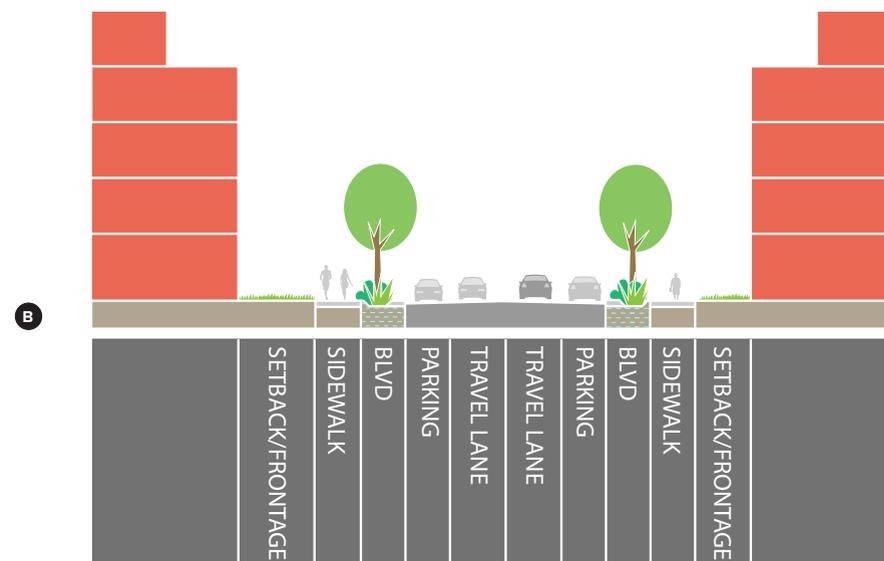
NODE - HOWARD		
DIMENSIONAL CRITERIA		
Minimum	Typical	
	82 ft	Right of Way Width
36 ft	38 ft	Pavement Width (includes gutter)
6 ft	8 ft	Sidewalk Width
6 ft	8 ft	Boulevard / Furnishing Width
2 ft		Frontage Zone
10 ft	12 ft	Two way bike trail
DESIGN FEATURES		
<ul style="list-style-type: none"> » On-street parallel parking » Intersection Bump-outs where feasible » Street and Pedestrian-Scale Lighting » Streetscape Furnishings (seating, planters, trash receptacles, bicycle racks) » Tree-trench BMP's » Street trees spaced 30'-40' 		

NODE - IDAHO		
DIMENSIONAL CRITERIA		
Minimum	Typical	
	70 ft	Right of Way Width
36 ft	38 ft	Pavement Width (includes gutter)
6 ft	8 ft	Sidewalk Width
6 ft	8 ft	Boulevard Width
2 ft		Frontage Zone
DIMENSIONAL CRITERIA		
<ul style="list-style-type: none"> » On-street parallel parking » Intersection Bump-outs where feasible » Street and Pedestrian-Scale Lighting » Streetscape Furnishings (seating, planters, trash receptacles, bicycle racks) » Tree-trench BMP's » Street trees spaced 30'-40' 		

NODE - HOWARD STREET



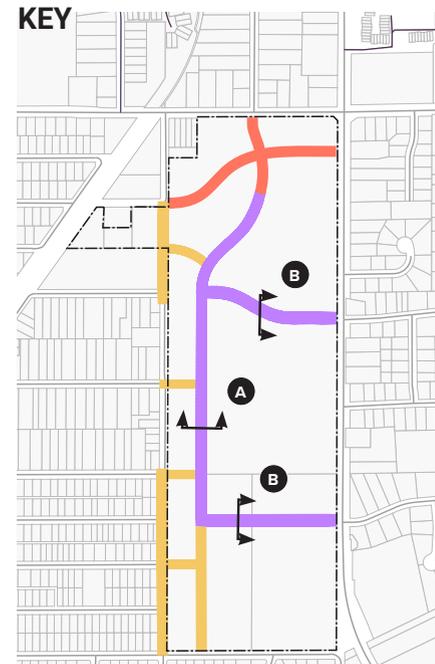
NODE - IDAHO AVE



NOTE:
City Park on south side of Idaho west of Howard Street

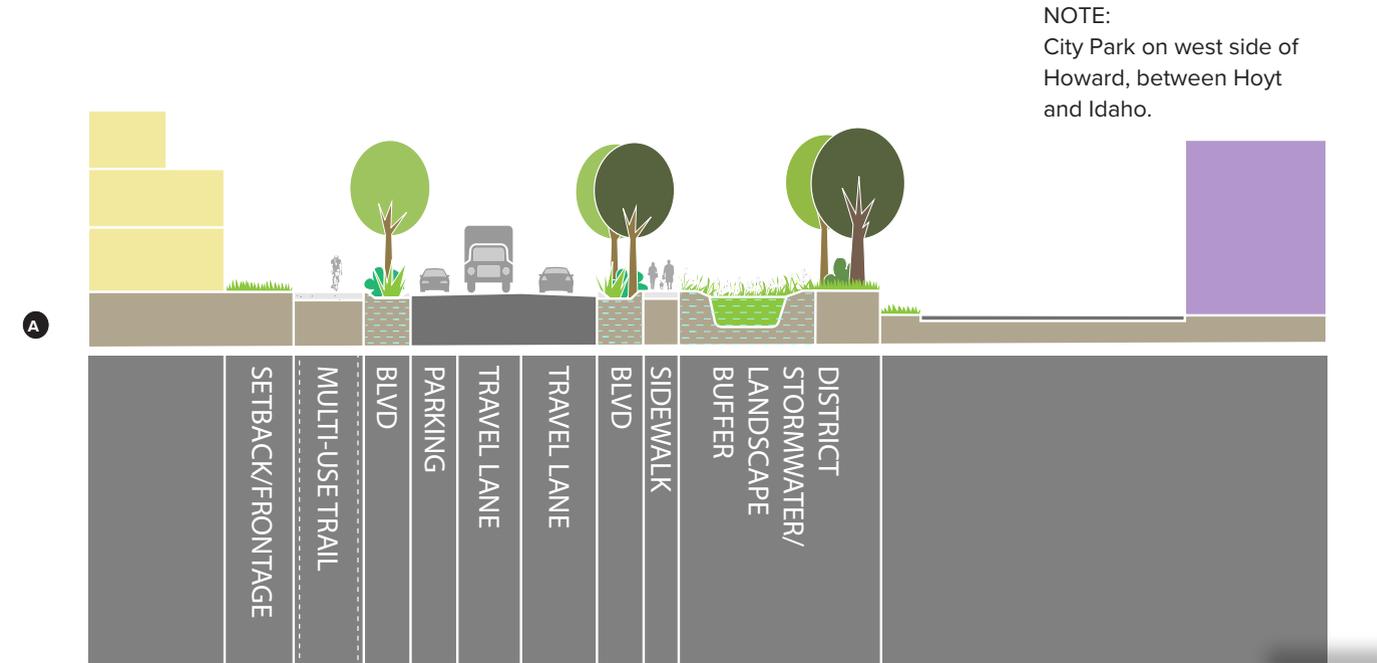


STREET TYPES: LIGHT INDUSTRIAL



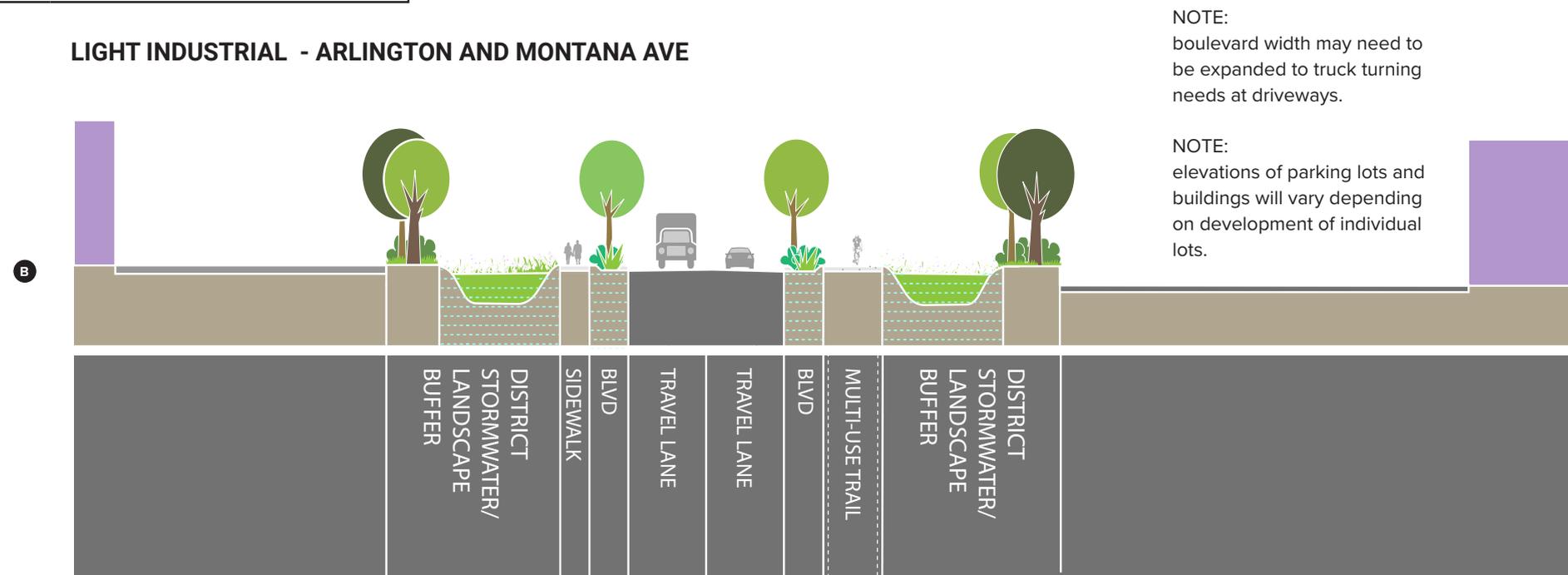
LIGHT INDUSTRIAL - HOWARD		
DIMENSIONAL CRITERIA		
Minimum	Typical	
	80 ft	Right of Way Width (does not include District Stormwater/Landscape Buffer)
36 ft	40 ft	Pavement Width (includes gutter)
6 ft	6 ft	Sidewalk Width
6 ft	8 ft	Boulevard / Furnishing Width (see note)
2 ft		Frontage Zone (west side only)
10 ft	12 ft	Multi-use Trail
25 ft	25 ft	District Stormwater / Landscape Buffer
DESIGN FEATURES		
<ul style="list-style-type: none"> » District Stormwater / Landscape buffer feature along east side of street » On-street parallel parking on west side of street » Intersection bumpouts where feasible » Street and Pedestrian-Scale Lighting » Tree-trench BMP's 		

LIGHT INDUSTRIAL - HOWARD STREET

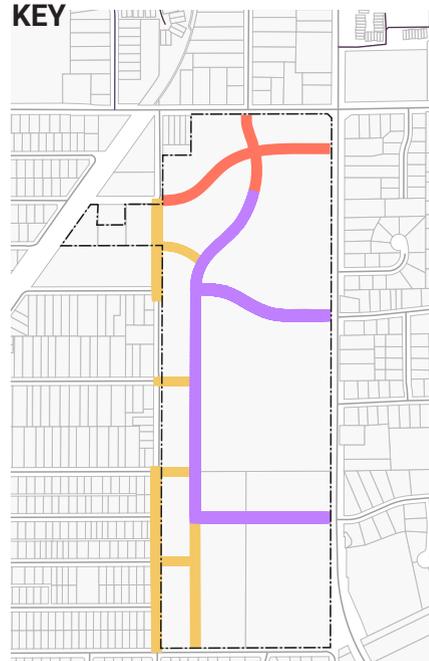


LIGHT INDUSTRIAL - ARLINGTON AND MONTANA AVE

LIGHT INDUSTRIAL - ARLINGTON AND MONTANA		
DIMENSIONAL CRITERIA		
Minimum	Typical	
	80 ft	Right of Way Width (does not include District Stormwater/Landscape Buffer)
32 ft	40 ft	Pavement Width (includes gutter)
6 ft	6 ft	Sidewalk Width
6 ft	8 ft	Boulevard / Furnishing Width (see note)
10 ft	12 ft	Multi-use Trail
25 ft	25 ft	District Stormwater / Landscape Buffer
DESIGN FEATURES		
<ul style="list-style-type: none"> » District Stormwater / Landscape buffer » Intersection bumpouts where feasible » Street and Pedestrian-Scale Lighting » Tree-trench BMP's 		



STREET TYPES: NEIGHBORHOOD STREETS

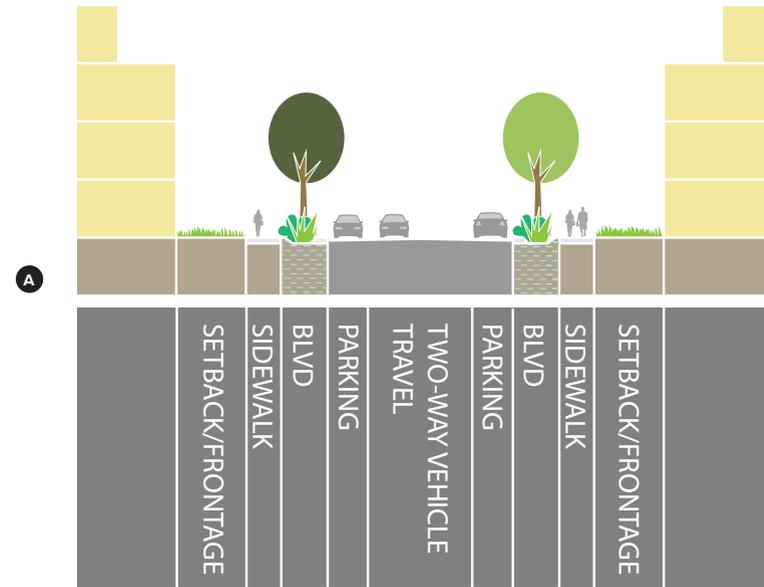


NEIGHBORHOOD - TYPICAL		
DIMENSIONAL CRITERIA		
Minimum	Typical	
	60 ft	Right of Way Width
29 ft	32 ft	Pavement Width (includes gutter)
6 ft	6 ft	Sidewalk Width
5 ft	8 ft	Boulevard / Furnishing Width
0 ft	2 ft	Frontage Zone
DESIGN FEATURES		
<ul style="list-style-type: none"> » On-street parallel parking in front of new residential » Intersection bumpouts where feasible » Street and Pedestrian-Scale Lighting » Streetscape Furnishings (seating, planters, trash receptacles, bicycle racks) adjacent to residential » Tree-trench BMP's 		



NEIGHBORHOOD - IOWA AND HOWARD		
DIMENSIONAL CRITERIA		
Minimum	Typical	
	66 ft	Right of Way Width
32 ft	32 ft	Pavement Width (includes gutter)
6 ft	6 ft	Sidewalk Width
6 ft	8 ft	Boulevard / Furnishing Width
10 ft	12 ft	Multi-use Trail
0 ft	2 ft	Frontage Zone
DESIGN FEATURES		
<ul style="list-style-type: none"> » On-street parallel parking in front of new residential » Intersection bumpouts where feasible » Street and Pedestrian-Scale Lighting » Streetscape Furnishings (seating, planters, trash receptacles, bicycle racks) adjacent to residential » Tree-trench BMP's 		

NEIGHBORHOOD - TYPICAL



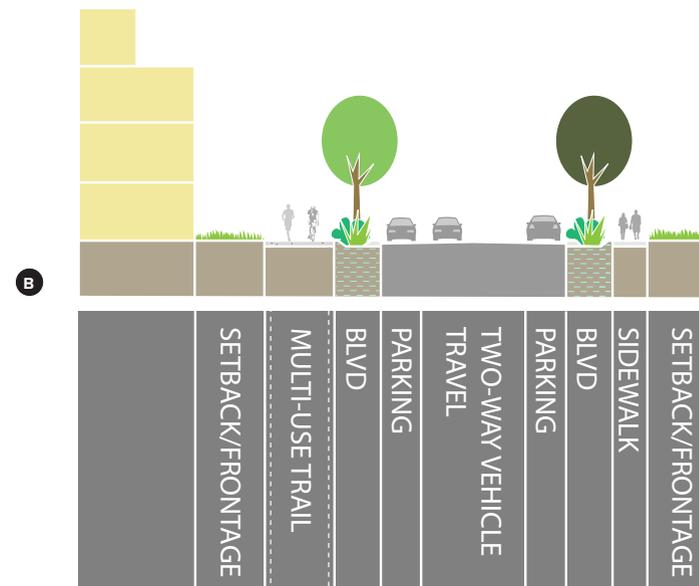
NOTE
Refer to land use plan for housing density.

NOTE:
Off site green space on west side of Winthrop, between Hoyt and south west corner of City Park.

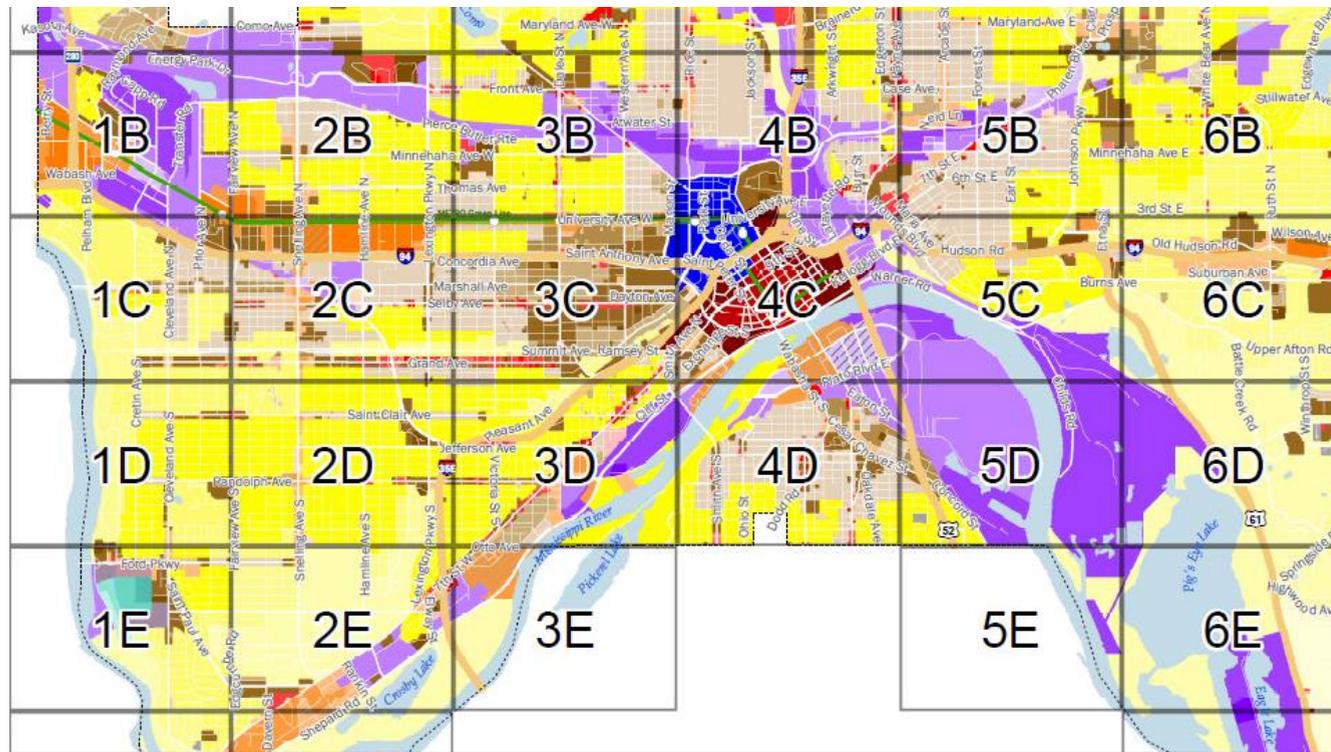
NOTE:
City Park on east side of Winthrop south of Idaho.

NOTE:
Winthrop Street south of Sherwood may swing east within the right-of-way as feasible, if its centerline aligns with Orange's centerline at Ivy. This is the only portion of Neighborhood Streets expected to potentially be at the minimum dimensions for pavement, sidewalk, and boulevard widths.

NEIGHBORHOOD - IOWA AND HOWARD



PLANNING DOCUMENTS & REQUIREMENTS



Saint Paul Zoning Code

+ Traditional Neighborhood District Regulations ([Code of Ordinances Part II, Title VIII, Chapter 66, Article III](#))



Complete Streets

- + Defined by the U.S. Department of Transportation as streets designed & operated to enabled safe use & support mobility for all users (regardless of age, ability, or mode of transportation)
- + Policies are set at state, regional, & local levels to guide balanced systems

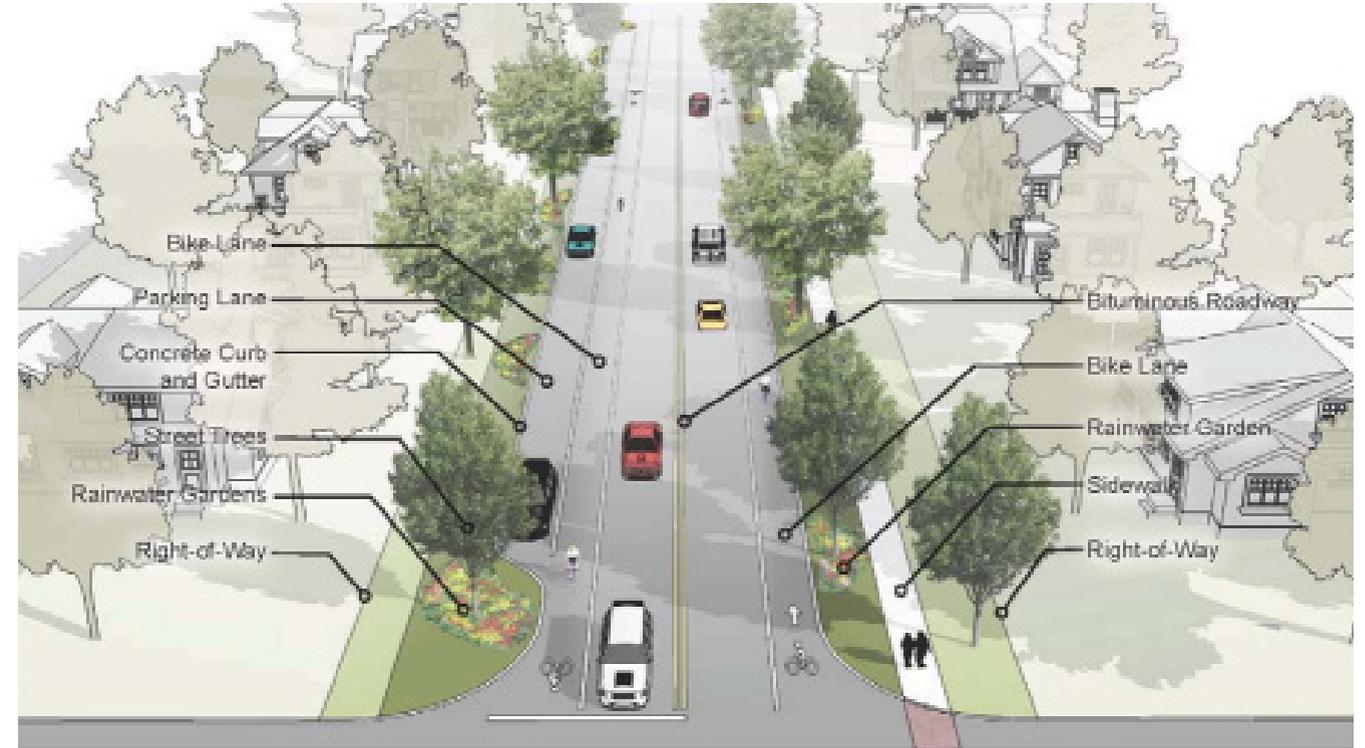


PLANNING DOCUMENTS & REQUIREMENTS



Saint Paul Street Design Manual

- + Result of a national grant, this manual illustrates street design best practices & implements adopted complete streets policies
- + Intended to streamline the City's internal street design processes



Maplewood Living Streets Policy

- + Combines "Complete Streets" & "Green Streets" methodologies to provide multiple modes of transport while reducing environmental impacts
- + City's principal guide for evaluating & implementing all multi-modal transportation improvement projects, including reconstruction & new construction



PLANNING DOCUMENTS & REQUIREMENTS



Sustainability Requirements

- + District stormwater, district geothermal, & district energy are all being discussed & designed by other consultant groups & have elements that intersect the right of way (i.e. space needs to be saved for them)

Other Standards & Guidelines

- + Metropolitan Council Thrive 2040
- + Metropolitan Council Transportation Plan
- + City of Saint Paul 2040 Comprehensive Plan
- + City of Maplewood 2040 Comprehensive Plan
- + Saint Paul Standard Plates
- + Street and Park Tree Master Plan
- + Parks and Recreation System Plan
- + Saint Paul Bicycle Plan
- + Saint Paul Street Lighting Policy
- + Blooming Saint Paul
- + Brick Street Policy
- + Public Art Ordinance Guidelines



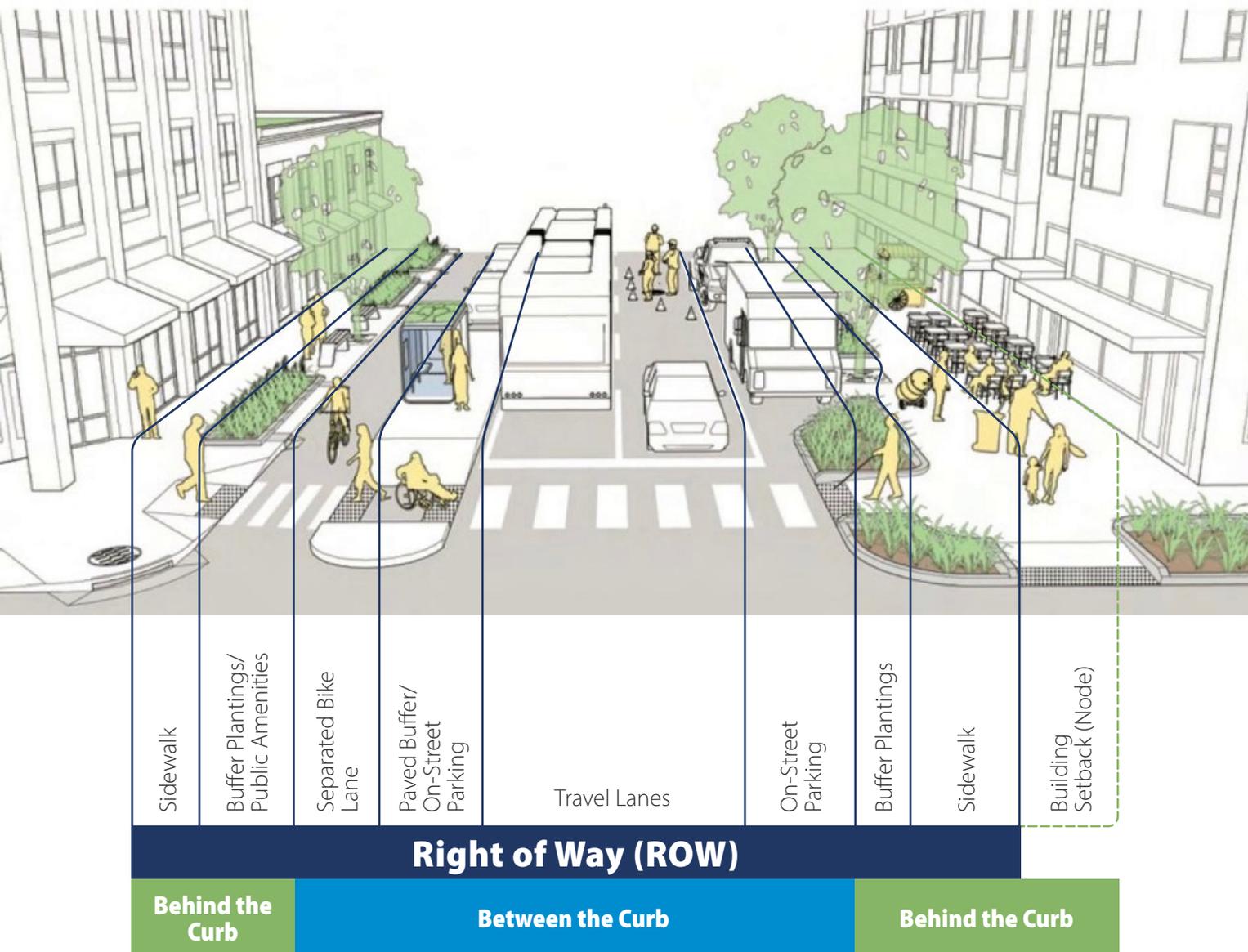
TRADITIONAL NEIGHBORHOOD DISTRICT DESIGN STANDARDS

(Sec. 66.343)

- + **Block length** (does not apply to T1) – in mixed use areas must not exceed 400' & in residential should generally match existing block patterns while not exceeding 660'
- + **Screening of equipment & service areas** (does not apply to T1) – fences, walls, or plantings at least 6' in height must screen storage, service, or loading equipment from public streets/walkways
- + **Interconnected street & alley network** (does not apply to T1) – extending & restoring the existing street network to the greatest degree possible (no cul-de-sac! Cul-de-sac bad!)
- + **On-street parking** (does not apply to T1) – generally prefer on-street parking lining both sides of the street to buffer pedestrians, calm traffic, and supplement off-street parking
- + **Off-street parking** – preferred to be within, below, or behind principal buildings, & if structured, must be buffered from public ROW with active uses and/or architectural screening
- + **Parking lot lighting** (does not apply to T1) – requires pedestrian-scaled lighting in off-street parking areas
- + **Street trees** – required within a minimum 5' wide strip (or approved structure) between the curb and sidewalk of all streets at regular intervals (~30' on center) to define edges, provide shade, & buffer pedestrians
- + **Sidewalks** – required on both sides of street except where abutting a park or other open space, & should be at least 6' wide in areas of high pedestrian activity, & at least 5' wide everywhere else
- + **Setbacks & front yard areas** – hard surfaced front yards should include amenities such as benches, tables, & planters



POTENTIAL AREAS OF INFLUENCE



Public Amenities

- + Frequency & character of site elements (benches, planters, etc.)
- + Lighting character

Planting Strategies

- + Turf grass vs. native plantings

Nodes/Intersections

- + Adjacent programming, facade variation (including bays, awnings), wayfinding, etc.

Paving Strategies

- + Use delineation, materiality (asphalt vs. brick), traffic calming

Traffic Calming Measures

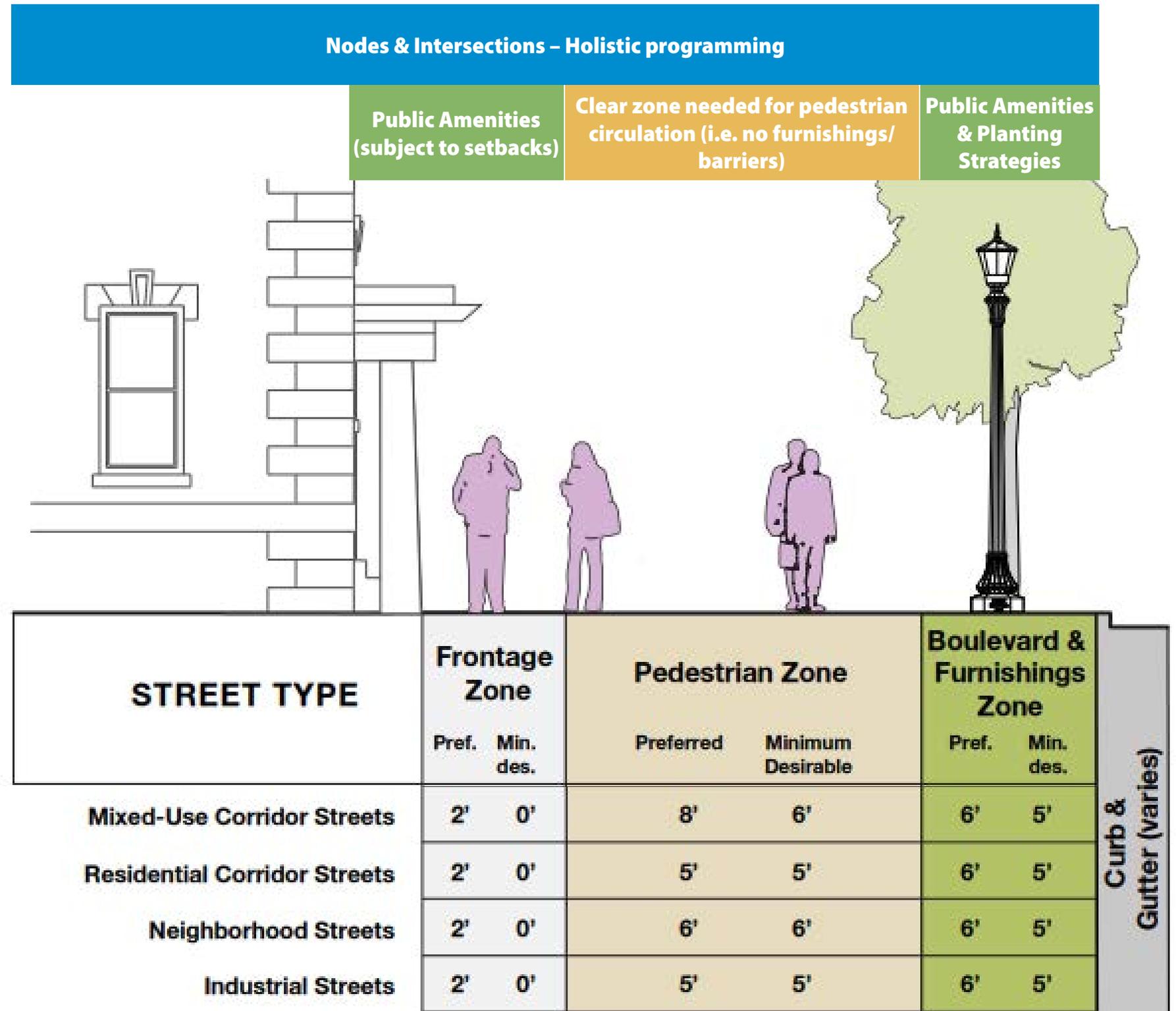
- + Bump-outs, speed bumps, tabled intersections, shared spaces, buffer requirements



BEHIND THE CURB

Potential Areas of Influence

- + **Frontage Zone** – area that buffers building entrances/provides space for sidewalk cafes, window shopping, or landscaping
- + **Pedestrian Zone** – area specifically reserved for pedestrian circulation that must be clear of barriers like furnishings or plantings
- + **Boulevard & Furnishings Zone** – area for vegetation, utilities, bike parking, street furniture that buffers pedestrians from roadway
- + **Curb Zone** – separation zone between travel lanes/other zones that can be raised or at grade





Street with trees, benches, trash & recycling receptacles, & lighting



Street with planters, benches, & bike racks



Artistic stop sign post

PUBLIC AMENITIES

- + Frequency of site elements, like benches, trash/recycling receptacles, bike racks, etc., can greatly influence how it feels to use a street as a pedestrian
- + Character of site elements (i.e. modern, traditional, etc.)
- + Incorporation of placemaking or public art elements





Street with native plantings & canopy trees



Street with turf grass & ornamental trees

PLANTING STRATEGIES

- + Trees must have an 8' minimum vertical clearance from the sidewalk to the lowest branch
- + Boulevard plantings must not exceed 3' in height (12" is the maximum planting height at, & within 30' of, intersections)
- + Salt & drought tolerance are essential in plant selection
- + "Door zone" of parked cars (~2') should be clear of plantings
- + Maintenance & operations considerations
- + Green stormwater infrastructure – range of stormwater management features like bioswales, rain gardens, etc. that capture, infiltrate, & clean stormwater runoff – part of district stormwater system



*Privately-Owned Public Space
(Andrew's Submission)*



Street with sidewalk cafes & vegetative buffer

NODES & INTERSECTIONS

- + Adjacent programming expressed in the streetscape (i.e. sidewalk cafes & parklets)
- + Facade variation (including bays & awnings)
- + Wayfinding elements like kiosks & unique elements
- + Activity centers – where modes & uses converge
- + Crosswalks
- + Privately-Owned Public Space (POPS)





Street where the temporary event space area is paved with bricks, making it stand out from the rest of the street network (Rachel's Homework)



Street with permeable paver parking strip

PAVING STRATEGIES

- + Paving selections can differentiate between modes of transportation or street types
- + Different materials have different cost, maintenance, & operational considerations (i.e. asphalt vs. pavers)
- + Permeable pavement can be incorporated in low traffic areas (i.e. parking lots/spaces) to reduce impervious surface area





Bumpout with stormwater infrastructure PHILADELPHIA



Intersection prioritizing pedestrian traffic on a street with paving variation/bumpouts/plantings to separate traffic modes

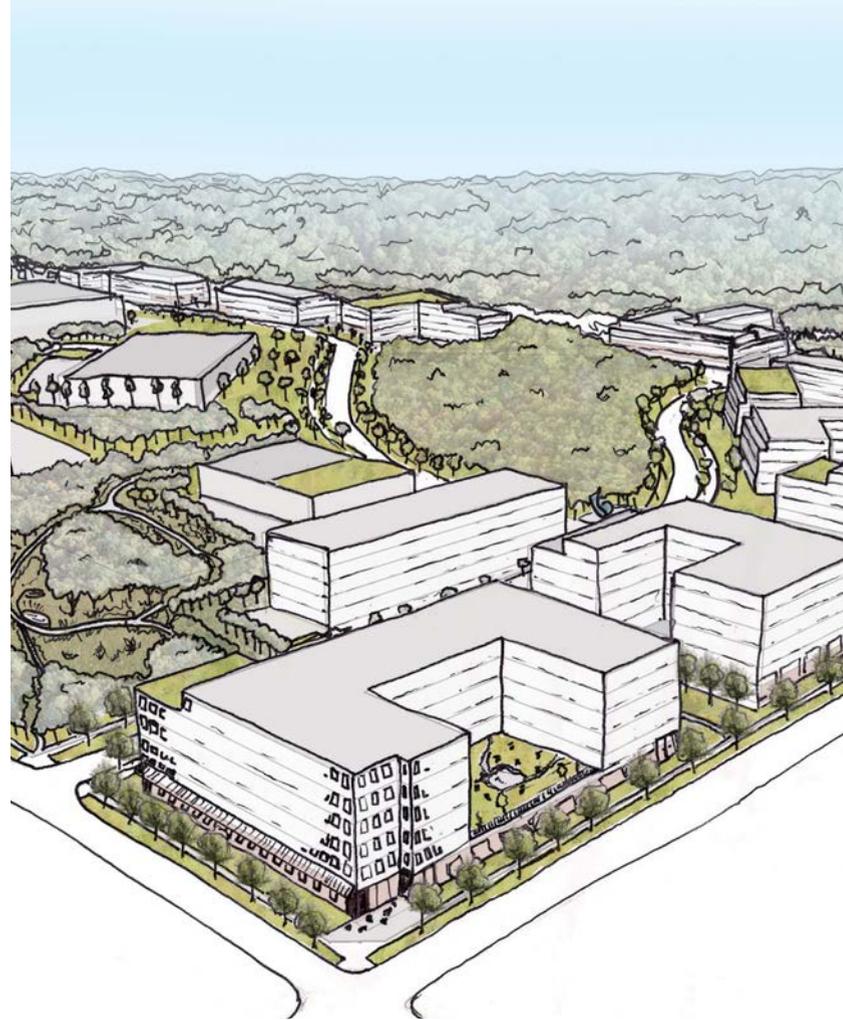
TRAFFIC CALMING MEASURES

- + On street parking
- + Speed bumps/humps
- + Bump outs at intersections and/or crosswalks
- + Tabled intersections
- + Shared spaces (i.e. woonerfs)
- + Paving strategies to identify/distinguish transportation modes
- + Buffer requirements like bollards, medians, planting strips, elevation differences



WORK GROUP AREAS OF INTEREST

- + Pedestrian experience
- + Transit
- + Building massing and materiality
- + Cohesively blending with the existing neighborhoods
- + Common areas and green spaces
- + Housing design
- + Local work opportunities
- + Green space
- + Street design
- + Neighborhood node (no fast food please)
- + High density housing and crime prevention design





Preview for next meeting's design charette!



THANK YOU!

Hillcrest Redevelopment Community Engagement
St. Paul Port Authority Technical Team