AGENDA ITEM 4E

Public Hearing for Corridor 84 Streetscape Plan— City of La Vista

Memorandum

To: Planning Commission

From: Christopher Solberg, City Planner

Date: 8/9/2018

Re: Civic Center Park Master Plan

In 2010, the City completed ***A Vision Plan for 84th Street*** (Vision 84), which included an extensive public process and the adoption of a master plan identifying the vision for 84th Street as the creation of a downtown for the community. *"The 84th Street corridor will be the central city core, with a memorable and distinct identity, a vibrant mix of land uses, a sense of community and a high quality of life for residents."*

Principle #3 of the plan – Attract people to the 84th street corridor – outlined a number of goals for the improvement of the 84th Street corridor including streetscape-related aspects centering on aesthetics and pedestrian safety.

On July 5, 2017, the City Council approved the selection of Design Workshop to conduct the development of the 84th Streetscape Schematic Plan.

After a successful public input process that included a steering committee, public input meetings, comment cards, a webpage, social media, and two online surveys, a draft plan was developed. Attached is the final draft of the plan for your review and recommendation to the City Council.

STAFF RECOMMENDATION:

Staff recommends approval of the proposed streetscape plan.

LA VISTA, NEBRASKA

84TH STREETSCAPE
SCHEMATIC DESIGN PACKAGE

PREPARED FOR THE CITY OF LA VISTA
AUGUST, 2018



DESIGNWORKSHOP



ACKNOWLEDGMENTS

PROJECT MANAGEMENT TEAM

CHRIS SOLBERG
RITA RAMIREZ
ANN BIRCH

WORKING GROUP

BRENDA GUNN
MITCH BEAUMONT
JOHN KOTTMANN
JOE SOUCIE
JEFF CALENTINE
SCOTT STOPAK
BOB LAUSTEN
CRYSTAL LARSON
TOMMY PROUHET

CONSULANT TEAM

DESIGNWORKSHOP

SCHEMMER
ARCHITECTS | ENGINEERS | PLANNERS

ISC

CLANTON & ASSOCIATES
LIGHTING DESIGN AND ENGINEERING

WaterCentric

CONTENTS

EXECUTIVE SUMMARY **IV**
- PURPOSE IV
- BACKGROUND AND POSITIONING IV
- DESIGN PROCESS AND TIME LINE IV
- PREFERRED PLAN IV
- NEXT STEPS IV

INTRODUCTION **3**
- LEGACY DESIGN 4
- PROJECT GOALS 5
- COMMUNITY PARTICIPATION 6

EXISTING FRAMEWORK **9**
- PROJECT AREA 10
- SITE FRAMEWORK 12
- REGIONAL CHARACTER ZONES 13

CONCEPT ALTERNATIVES **15**
- CONCEPT A: GRAND BOULEVARD 16
- CONCEPT B: SCULPTED WALK 17

PREFERRED PLAN **21**
- OPPORTUNITY ZONES 22
- BUILDING THE STREET 23
- OVERALL MASTER PLAN 24
- BLOCK BY BLOCK 26
- INTERSECTING STREETS 34
- PLANTING PALETTE 36
- MATERIALS, FURNITURE, AND SIGNAGE 38
- LIGHTING 40
- ON SITE WATER 42
- PERFORMANCE METRICS 43

IMPLEMENTATION **46**
- COST OPINION 46

IMAGE SOURCES **46**

EXECUTIVE SUMMARY

PURPOSE

The 84th Streetscape is one of many ongoing efforts comprising *Corridor 84*, an initiative borne out of *A Vision Plan for 84th Street* which imagines the street as La Vista's "central city core, with a memorable and distinct identity, a vibrant mix of land uses, a sense of community and a high quality of life for residents."

Design Workshop was retained by the City of La Vista to lead the design of the right-of-way improvements along the 84th Street corridor. The task was to enhance the visual quality and appearance of the street for both pedestrians and drivers as well as create a sense of identity and arrival entering the city. The consultant team was led by Design Workshop and included Schemmer Engineering, LSC Transportation Consultants, Clanton & Associates (lighting), and WaterCentric (irrigation).

BACKGROUND AND POSITIONING

La Vista's mile-long section of 84th Street was once a thriving commercial corridor but has suffered from neglect as a result of a changing business climate. Part of the state highway system, 84th Street is designed primarily for automobiles. The street lacks identity, pedestrian amenities, signage and wayfinding, well defined crosswalks and consistent planting.

With the building of the La Vista City Centre mixed-use development and Civic Center Park currently underway, 84th Street is positioned to be an integral component of Corridor 84 and a catalyst to realize the vision for 84th Street as the central city core.

The City is currently in conversations with the Nebraska Department of Transportation (NDOT) regarding the relinquishment of La Vista's portion of 84th Street from the state highway system that would allow for a much greater degree of flexibility in the proposed design.

DESIGN PROCESS AND TIME LINE

Over the course of a six month design and planning period, the City and consultant team received input from three public meetings, community advisory group and youth council meetings, and two online surveys.

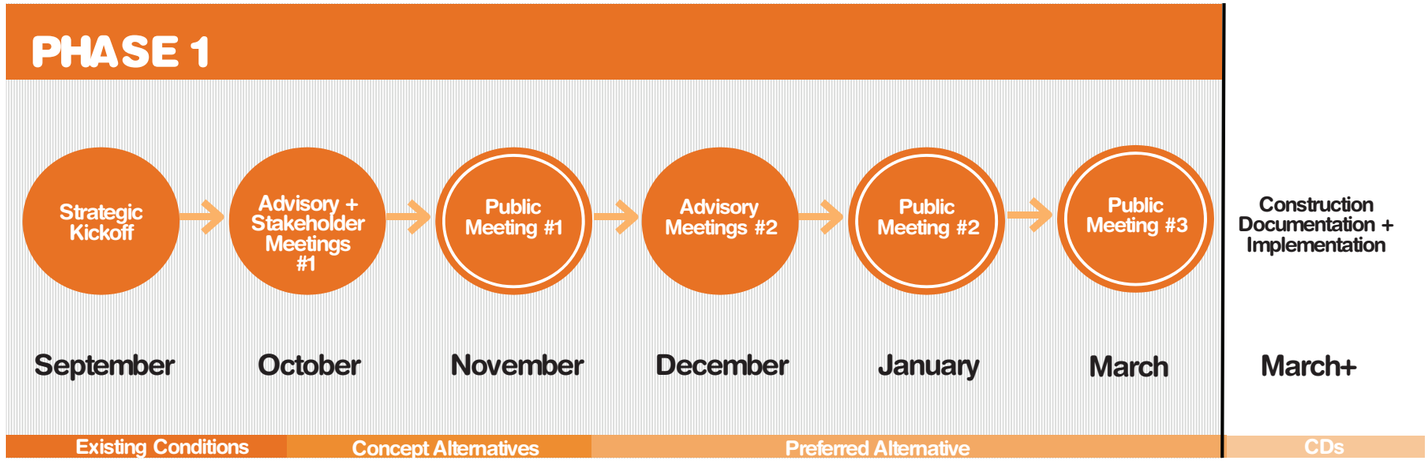
The conceptual design focused on improvements to the right-of-way for La Vista's 84th Street, including:

- Identity elements (bridge icon at Thompson Creek, signage and wayfinding, gateway identification)
- Pedestrian improvements (road noise attenuation, multi-use trails, plazas)
- Accessibility (pedestrian connections to adjacent neighborhoods, crosswalks, curb ramps)
- Lighting improvements (pedestrian and vehicular poles and fixtures)
- Landscape planting (street trees, shrub and ornamental grass and perennial planting)
- Street furniture (benches and trash receptacles)
- Transportation accommodations (dedicated bus pull-outs)
- Stormwater quality

The process was organized into three major tasks: (existing context, conceptual illustrative plan, and selection of preferred streetscape plan). An illustrative animation, plans, sections, and three-dimensional vignettes of the proposed concepts were developed to convey the design ideas. An opinion of probable construction costs was developed for the preferred plan.

The design effort included coordination with the following governing agencies:

- La Vista Planning Department
- La Vista Public Works Department
- La Vista Parks Department
- Nebraska Department of Transportation
- Local utilities
- Metro Area Transit
- Metropolitan Area Planning Agency (MAPA)



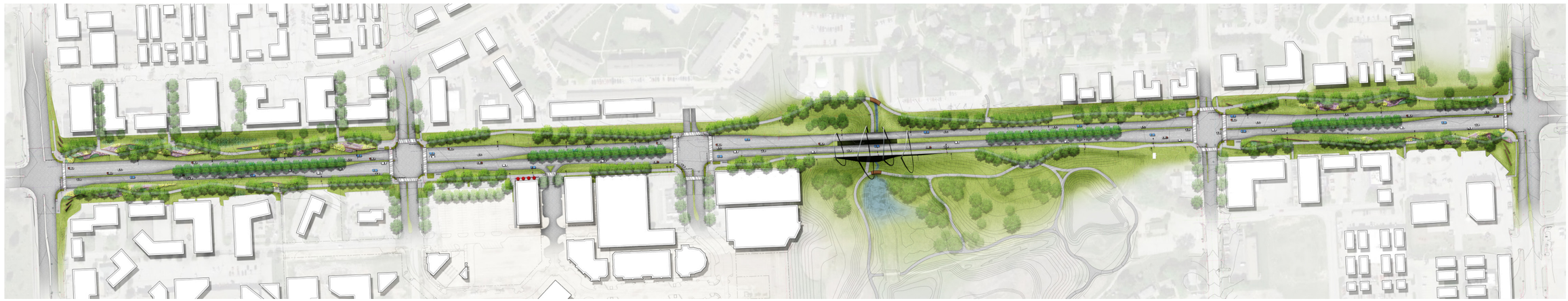
PREFERRED PLAN

Based on input from the public, Design Workshop synthesized and presented concepts for the preferred plan of the corridor. Because of the unique conditions created by the constant topographic change, there is no solution that can be applied to the entire corridor. The preferred plan recognizes and celebrates the nuance of grading, the demands of adjacent land use, and future opportunities that may come to the street frontage.

NEXT STEPS

The first phase of the design process outlined herein illustrates the design intent for the corridor improvements. The steps to follow will include:

1. Design development of corridor improvements
2. Estimates and phasing
3. Construction documentation of phase I improvements
4. Bidding and negotiations
5. Construction of phase I improvements



PREFERRED MASTER PLAN



INTRODUCTION

Once known as the “Golden Mile”, the extent of La Vista’s 84th Street contained a wealth of thriving commercial property and served as a magnet for surrounding communities. The last few decades, however, have seen an 84th Street subject to changing market conditions that no longer robustly support development patterns common to the middle part of the 20th Century. In 2010, La Vista completed a visioning document to undergo a restructuring that could foster a more resilient future for the corridor at a critical moment in La Vista’s history. The intent of this study is to rethink the right-of-way as a crucial component of that vision, now called Corridor 84.

INTRODUCTION

LEGACY DESIGN

The design team worked with the client group early on to define the critical challenges of the 84th Streetscape project using Design Workshop's DW Legacy Design® process. This process emphasizes a deliberate approach that seeks comprehensive, sustainable design solutions to project challenges. In the initial stages, strategic meetings helped discover the project vision, dilemma, thesis, and critical success factors. These identify the major challenges that have to be overcome in order for the project to be a success, outcomes of the project that will be tested and resolved through the design team's investigation, and features or results that must be accomplished in order for the project to be considered a success. These help lead to a foundational story that establishes achievable, measurable goals without limiting creativity and innovation. Each goal fits into one of Design Workshop's legacy categories of environment, community, art and economics.

PROJECT VISION

84th Street must complement the vision to establish a central city core, with a memorable and distinct identity, a vibrant mix of land uses, a sense of community, and a high quality of life for residents. The design of the street should appropriately respond to diverse and changing land use patterns. The street should also adapt to unique grading challenges, promote sustainable stormwater management, preserve existing specimen trees, accomodate varied traffic movements, promote pedestrian amenities and safety, connect to existing and proposed park space, preserve long views and provide community identification.

PROJECT DILEMMA

The project area includes a one mile section of one of southwest Omaha Metro Area's most important north/south connectors. While the street is partially maintained by the City of La Vista, it is part of Nebraska's state highway system. This means the right-of-way features are designed and built to accommodate large volumes of traffic at high speeds. With the promise of new development anticipated with the Corridor 84 initiative, the street will need to anticipate changing land use patterns, what is now a completely automobile-oriented corridor will need to accommodate an increased demand for safe, secure, and comfortable means for alternative modes of travel.

PROJECT THESIS

As a key component of the success of the vision for La Vista's emerging central city core, 84th Street will be distinguished by its memorable and welcoming design, comprehensive access and connection to existing and emerging developments, use of current technologies and practices, and by its provision for a harmonious coexistence of pedestrians, bicyclists, transit, and automobiles.

CRITICAL SUCCESS FACTORS (CSFs)

These critical success factors are the project results that must be accomplished in order for 84th Street to be considered a success. The CSFs were established early in the design process and refined during the public engagement and feedback period. A successful 84th Street will:

- Enhance the visual quality and appearance of the streetscape and contribute to the aesthetic feel of the street for both pedestrians and drivers
- Acknowledge the needs and interests of a wide range of community members and other stakeholders
- Be bold and imaginative
- Increase safety and security
- Increase the number of pedestrians using the right-of-way
- Improve stormwater quality in the open drainage features

PROJECT GOALS

Project goals for 84th Street were evaluated throughout the process and identify achievable, measurable goals in the four legacy categories of economics, environment, community, and art. This process identifies benefits, risks, method of measurement, and, most importantly, strategies to achieve the goals. Core goals and strategies are outlined here.

Economics

LEVERAGE PROPOSED DEVELOPMENT

STRATEGIES

- Encourage private improvement and investment along the corridor
- Activate City-owned land as part of a comprehensive programing strategy
- Catalyze adjacent development opportunities

IMPROVE LOCAL ECONOMICS

STRATEGIES

- Encourage local-serving uses
- Diversify commercial offerings
- Design public activation nodes

MINIMIZE OVERALL OPERATING COSTS

STRATEGIES

- Use LED fixtures to minimize life cycle and operating costs
- Use native and adapted plant material to minimize irrigation demand
- Work with the City to develop an efficient operations and maintenance plan for proposed design elements

DESIGN FOR AN EXPERIENCE THAT LASTS

STRATEGIES

- Maximize average product lifespan
- Select materials and systems with life cycle costs in mind
- Utilize proven regional construction detailing means and methods

Environment

INCREASE THE ENVIRONMENTAL QUALITY OF THE CORRIDOR

STRATEGIES

- Increase urban tree canopy and species diversity
- Naturalize the drainage systems to promote a diverse habitat offering
- Minimize use of harmful pesticides and herbicides

IMPROVE STORMWATER QUALITY

STRATEGIES

- Direct stormwater to rain gardens to slow flows and improve quality
- Utilize porous pavement at pedestrian plaza spaces
- Treat stormwater to help improve the quality of the lakes in Civic Center Park

Community

ENCOURAGE A COMMUNITY-LED PROCESS THAT IS A SOURCE OF PRIDE FOR THE RESIDENTS OF LA VISTA

STRATEGIES

- Fully engage all advisory and stakeholder groups in the formation of goals, issues, concerns throughout a transparent process
- Conduct engaging and participatory public meetings

PROMOTE ACTIVE USES

STRATEGIES

- Increase pedestrian use at all hours, especially daytime
- Provide robust seasonally-based programming

CREATE A COMFORTABLE PEDESTRIAN EXPERIENCE

STRATEGIES

- Reduce traffic speeds
- Increase sidewalk widths
- Provide improved lighting
- Provide shorter crosswalk distances
- Provide shaded walkways through the use of a continuous tree canopy
- Provide horizontal and vertical separation between pedestrian and vehicles
- Improve accessibility from development to the street
- Connect under 84th at Civic Center Park

INCREASE MOBILITY OPTIONS

STRATEGIES

- Provide multi-use paths for bicycle use
- Provide improved transit facilities
- Provide pedestrian lighting, signage, and wayfinding

Art

CREATE A MEMORABLE IDENTITY DISTINCTIVE TO LA VISTA

STRATEGIES

- Coordinate design of all street elements
- Ensure design is rooted in community values and priorities
- Celebrate the local culture and heritage
- Establish signature gateways at major intersections and pedestrian nodes

CREATE A STREET THAT CAN STAND THE TEST OF TIME

STRATEGIES

- Utilize a flexible framework of elements that can be modified as the community continues to grow

BALANCE THE ART AND FUNCTION OF NATURAL SYSTEMS

STRATEGIES

- Celebrate the ephemeral nature of water quality features
- Provide rich habitat which encourages species diversity
- Provide interpretation of features through interactive signage and wayfinding elements

IMPROVE THE OVERALL BEAUTY OF THE AREA

STRATEGIES

- Utilize materials and designs that reflect the local character
- Create a sense of consistency and clarity
- Establish a uniform and coordinated street and pedestrian lighting scheme
- Improve and expand landscape areas
- Coordinate planting design to provide seasonal interest

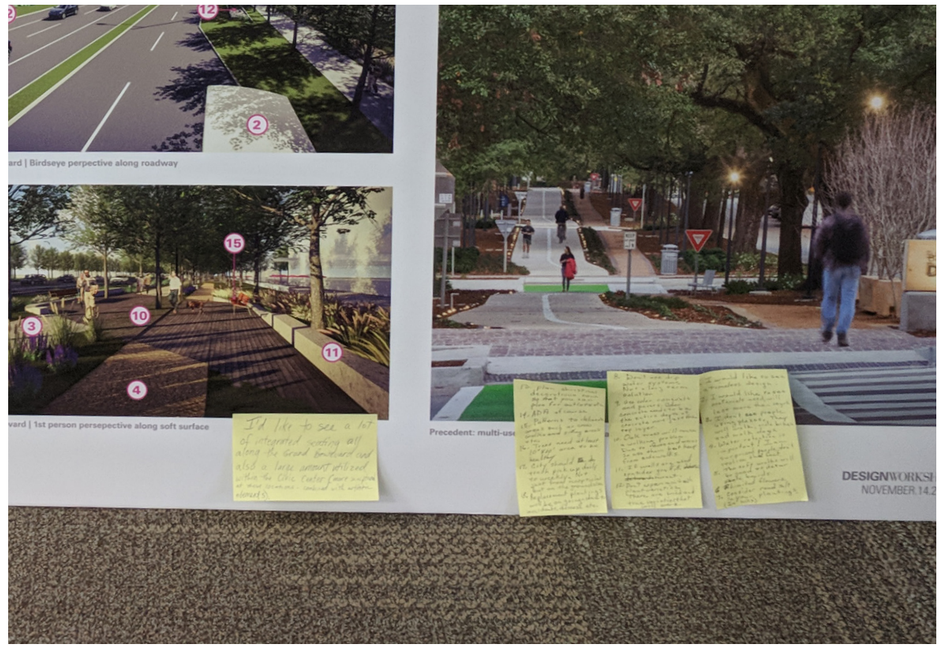
COMMUNITY PARTICIPATION

LA VISTA-LED DESIGN

Throughout the schematic design process, the design team used several methods to gather community feedback regarding the design of the streetscape plan. The principle efforts to gather feedback included public meetings, advisory and stakeholder meetings, engagement of the youth leadership council and online surveys. Information gathered through these efforts had a direct impact on the design of the preferred plan.



SITE WALK FOLLOWING STRATEGIC KICKOFF MEETING



COMMUNITY FEEDBACK POST-ITS



PUBLIC MEETING #1



LA VISTA-OPOLY EXERCISE WITH LA VISTA MAYOR'S YOUTH COUNCIL



PUBLIC MEETINGS

MEETINGS OPEN TO THE PUBLIC

A total of three public meetings were held during the schematic design process. The first meeting introduced the opportunities and constraints of the existing conditions and concept alternatives, the second meeting presented options for specific streetscape elements. The first two meetings provided a platform for live community feedback via keypad polling devices and the third meeting presented the preferred plan. All three meetings were recorded and made available on the project website.

FEEDBACK STRATEGIES

Keypad polling, question & answer, red dot/green dot exercise



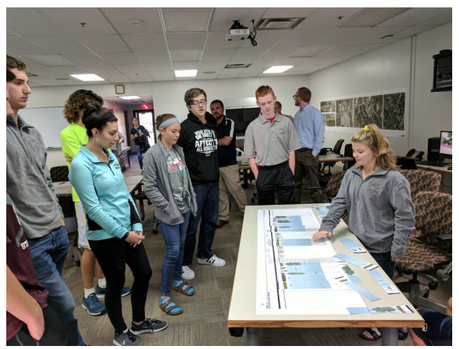
ADVISORY AND STAKEHOLDER MEETINGS

MEETINGS WITH COMMUNITY AND REGULATORY GROUPS

Stakeholders were heavily involved throughout the planning and design process. These meetings gathered targeted feedback from city departments, regulatory agencies, and assembled representation from various community groups to play an active roll in developing key aspects of the project. A total of 17 advisory and stakeholder group meetings were held throughout the process.

FEEDBACK STRATEGIES

Mind mapping exercise, comment cards, question and answer



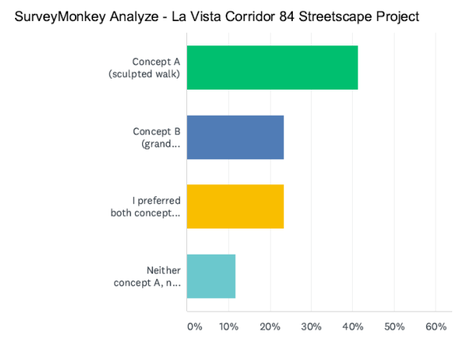
YOUTH LEADERSHIP COUNCIL MEETINGS

ENGAGING LA VISTA'S YOUTH

A special opportunity for the 84th Street design project was the willing and active involvement of the La Vista Mayor's Youth Leadership Council. The focus of the youth council is to engage youth in civic life through participation in local government and volunteerism. Over the course of the schematic design, the design team met with the youth council and facilitated feedback on the makeup of the street right-of-way and the prioritization of improvements from a budgetary perspective. Participants in the youth council presented their conclusions at the first two public meetings.

FEEDBACK STRATEGIES

'Dress the Street' exercise, 'La Vista-opoly' exercise



ONLINE SURVEYS

TARGETED ONLINE FEEDBACK

For members of the community that could not attend the public meetings, two online surveys were provided to gather additional public feedback. The questions listed mirrored those asked during the keypad polling that took place at the first two public meetings.

FEEDBACK STRATEGIES

Multiple choice, short answer question and answer

OUTREACH EFFORTS AT A GLANCE

48
COMMENT CARDS RECEIVED

5
WEB PAGES ON THE LA VISTA CITY WEBSITE DEDICATED TO THE PROJECT

23,550
POSTCARDS MAILED TO NOTIFY OF PUBLIC MEETINGS

8,100
VIEWS OF '5 THINGS YOU NEED TO KNOW ABOUT 84TH STREETSCAPE'

21,736
PEOPLE REACHED ON FACEBOOK

3
NEWSLETTER AND NEWSPAPER ARTICLES

17
ADVISORY AND STAKEHOLDER MEETINGS HELD

390
RESPONSES TO TWO ONLINE COMMUNITY SURVEYS


EXIT 448
84th Street
EXIT ONLY

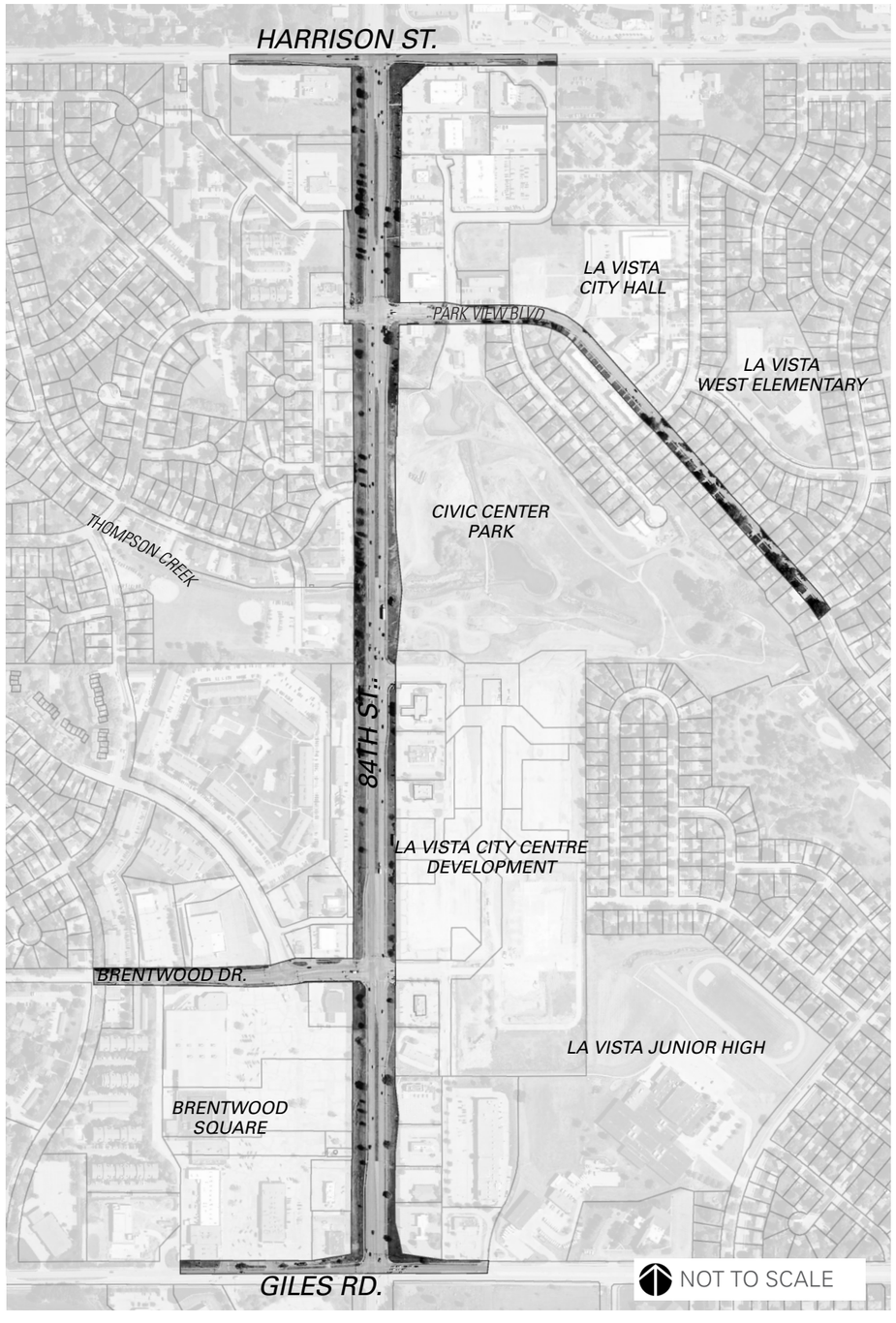
EXISTING FRAMEWORK

PROJECT AREA

SITE PHYSICAL FEATURES AND EXISTING CONDITIONS

La Vista's portion of 84th Street from Harrison Street to Giles Road is not unlike many of the arterial commuter streets in the region. The street was designed to rapidly convey automobiles, resulting in a neglected pedestrian experience. Narrow sidewalks, limited lighting, an inconsistent tree canopy, no street furnishings, and minimal accommodations for transit send a message that people shouldn't occupy the space. Commercial pole signage dominates views for the automobile experience and detracts from the incredible views towards the Thompson Creek basin and proposed Civic Center Park. There is currently little rhythm or cadence to signify a special experience.

The ample right-of-way, open drainage channels, minimal overhead utilities, and rolling grade changes are features that many roads do not have that can be better emphasized.



STUDY AREA BOUNDARY



EXISTING 4' DETACHED SIDEWALK IN POOR CONDITION



HIGHLY VISIBLE UTILITY VAULTS



MINIMAL BUS ACCOMMODATIONS



MINIMAL COMMUNITY SIGNAGE AND WAYFINDING



DOMINANCE OF LARGE COMMERCIAL POLE SIGNAGE



SATURATED AREAS WITHIN DRAINAGE CHANNELS



LARGE AUTOMOBILE-SCALED RIGHT-OF-WAY



CONSTRUCTION OF PARK UNDERWAY



DRAINAGE SLOPES: STEEP SLOPE



OPEN DRAINAGE CHANNEL WITH SEVERE EROSION



THOMPSON CREEK EXTENDS ACROSS 84TH STREET



CONSTRUCTION OF LA VISTA CITY CENTRE UNDERWAY



DRAINAGE SLOPES: LOW SLOPE



LARGE UNDEFINED AREAS OF RIGHT-OF-WAY



STEEP GRADING IN AREAS



OPEN CHANNELS CONVEY STORMWATER AND ARE CONSIDERABLY LOWER THAN THE ROADWAY

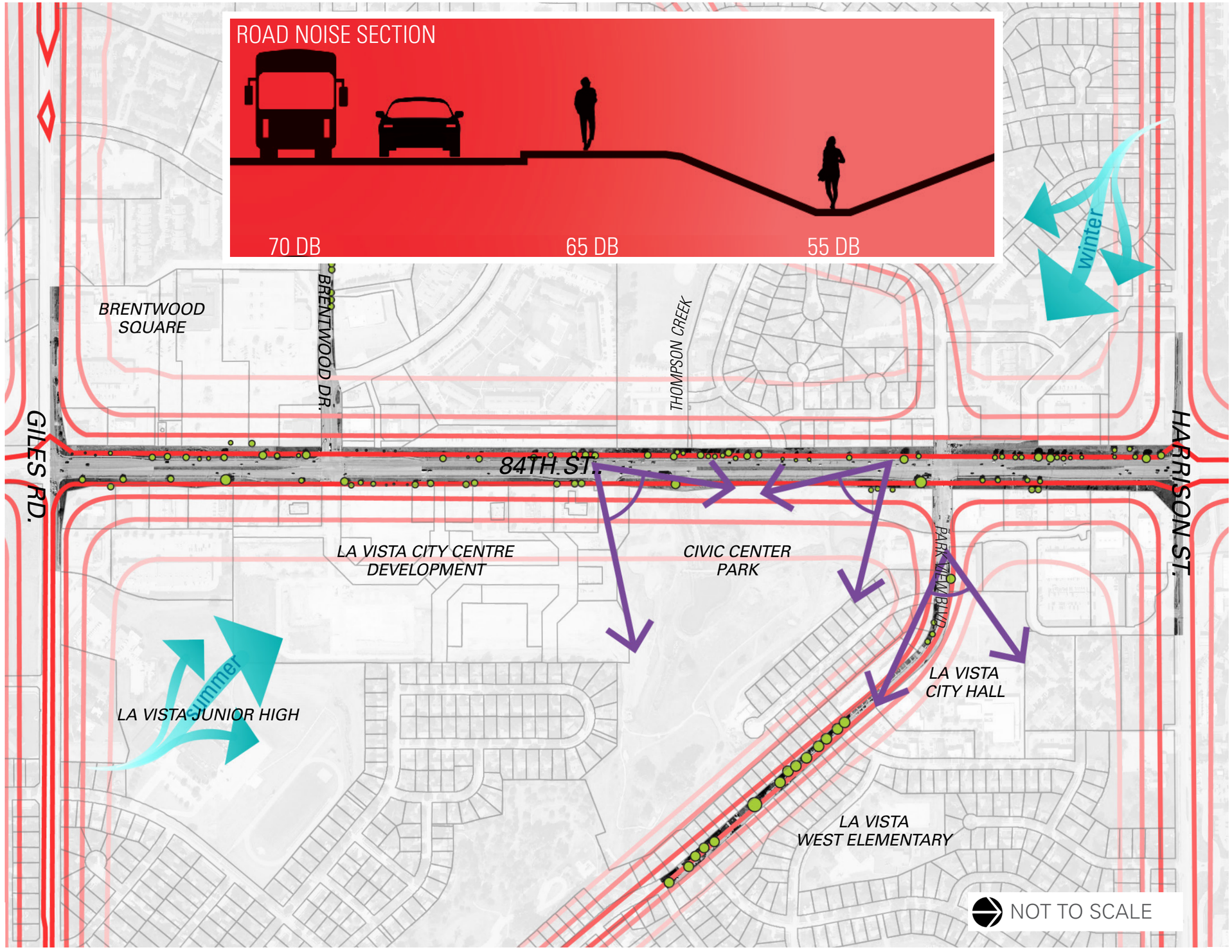


DRAINAGE SLOPES: MARGINAL

SITE FRAMEWORK

HUMAN COMFORT ALONG 84TH

Road noise levels along 84th Street reach nearly 70 decibels (dB), which is about the level of a vacuum cleaner--enough to make phone conversation difficult. On site, the design team observed a 10 dB difference between the sidewalk next to the street and the drainage ditch below. Trees are planted sporadically through the site and many do not have the best habit/form for a street tree application. Currently only about 7% of the walks are shaded.



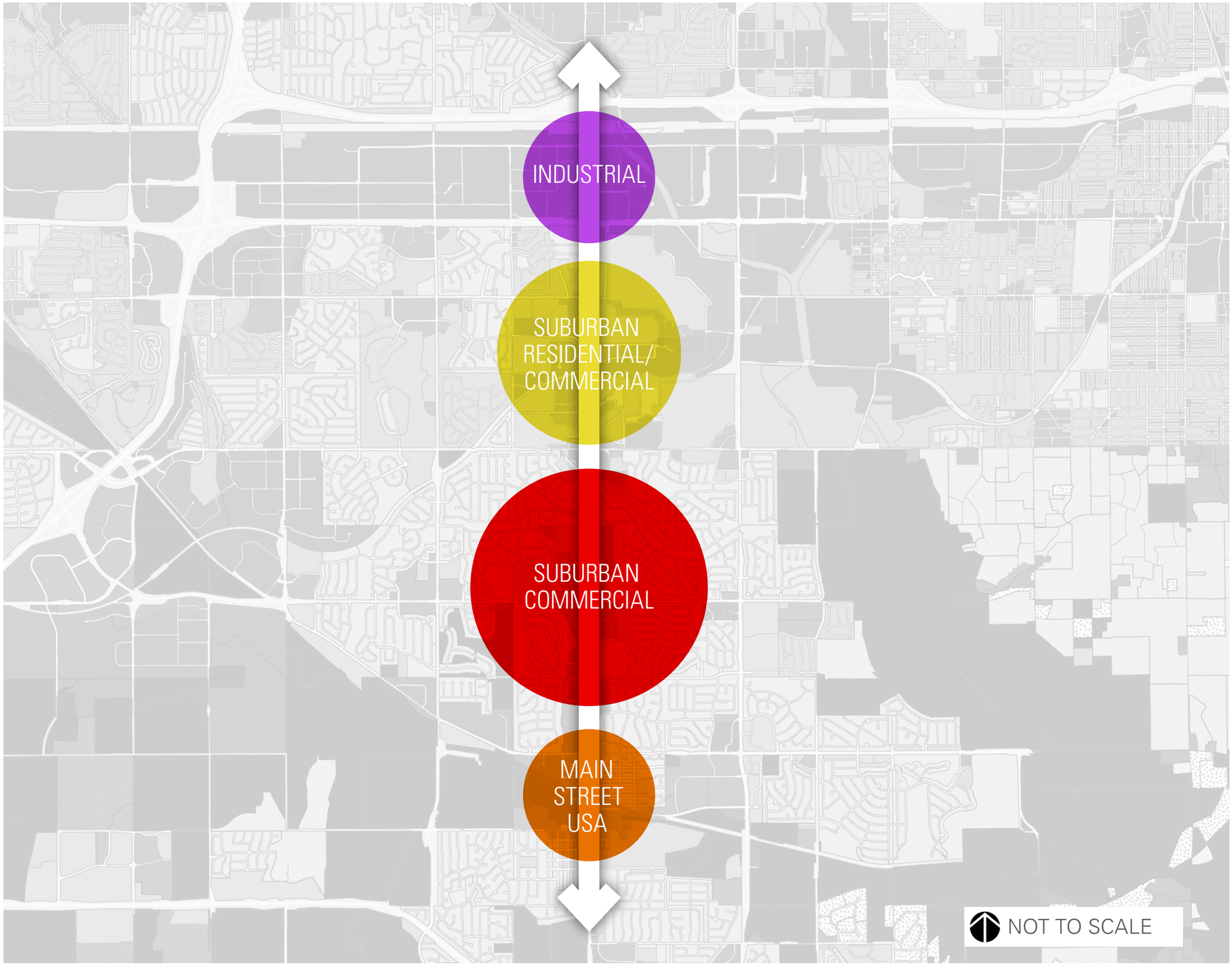
LEGEND

- 25-35 dB
- 35-45 dB
- 45-55 dB
- 55-70 dB
- Existing Tree
- Key Views
- Prevailing Winds

REGIONAL CHARACTER ZONES

84TH AS PART OF A LARGER SYSTEM

The zoning along 84th Street suggests a procession of changing character throughout the corridor. Directly south of the I-80 corridor is dominated by industrial uses. Crossing L Street (State Highway 92), however, the character changes with Bethel cemetery signifying a more calming atmosphere. While some businesses flank intersections in this area, low-density residential, either fronting the street or buffered from the street, is a dominant land use pattern. Entering La Vista, suburban commercial pad development with deep setbacks and large parking lots are most common. This character zone continues through the project area to north Papillion. The historic Main Street to the south, built along Papillion Creek begins a district reminiscent of many historic districts throughout the country complete with shopfronts, on-street parking and attached sidewalks.







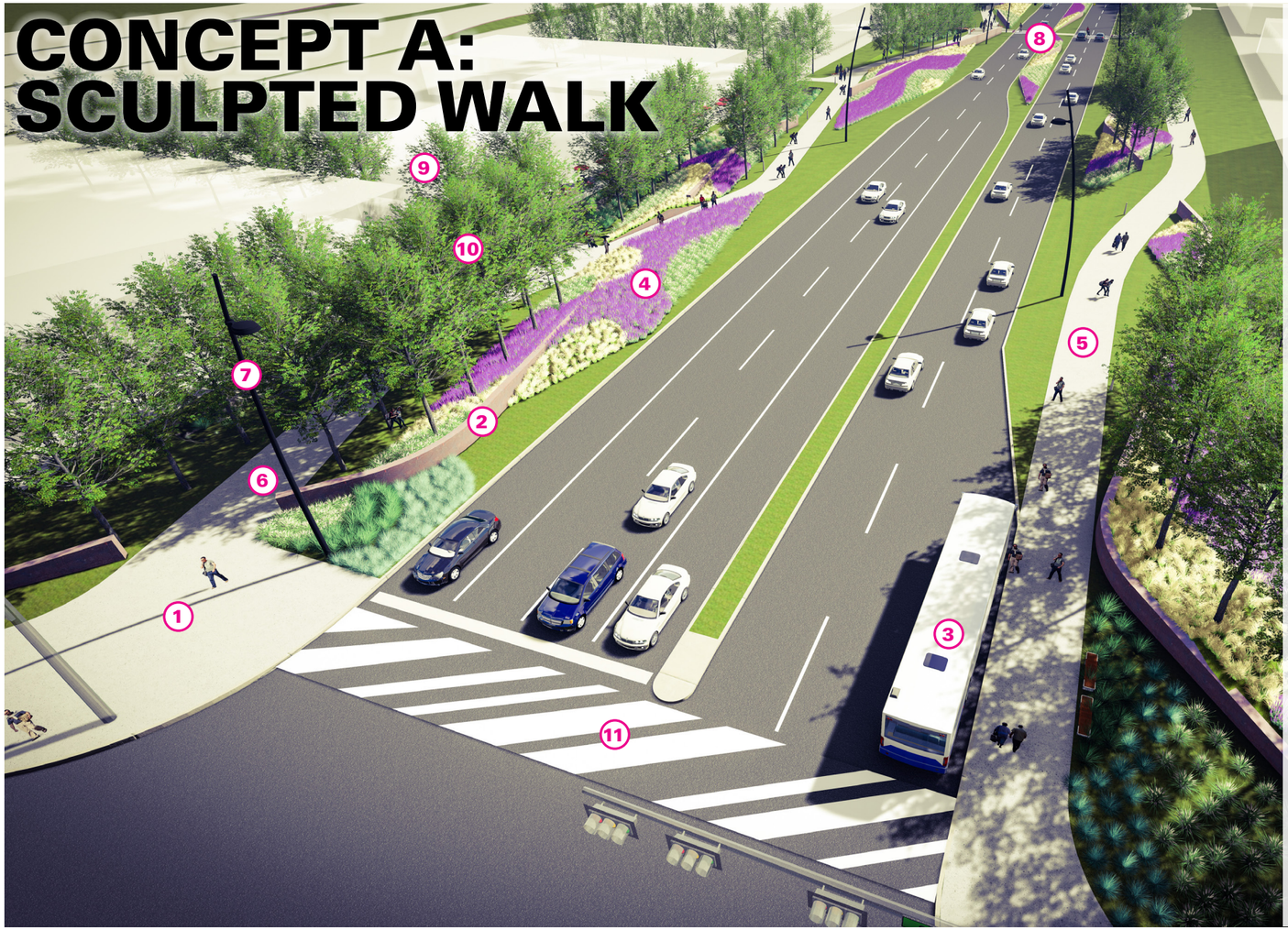
CONCEPT ALTERNATIVES

CONCEPT A
SCULPTED WALK

The design team initially developed three concept alternatives for the street. These alternatives were narrowed down to two that were presented at the first public meeting: Concept A (sculpted walk); and Concept B (grand boulevard). Both concepts held assumptions on the preservation of travel lanes and bus accommodations along the curb lane. Key differences occur within the landscape area along both sides of the roadway and within the median.

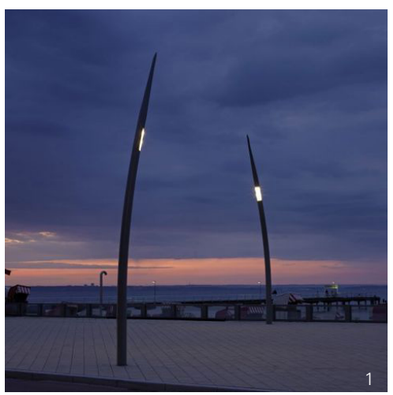
Concept A, Sculpted Walk relies on landform and signature walls to create a greater, purposeful separation of the pedestrian and vehicular experience. This is brought together by mass planting and trees in groups. The design language, as the name suggests, is sinuous and sculpted. These design ideas translate to all aspects of the concept from the geometry of the walls to the lighting and street furniture. This concept does not include trees in the median.

Many aspects of this concept, such as its flexibility, were preferred during the public feedback. In light of this, Concept A (Sculpted Walk) heavily informs the preferred alternative.

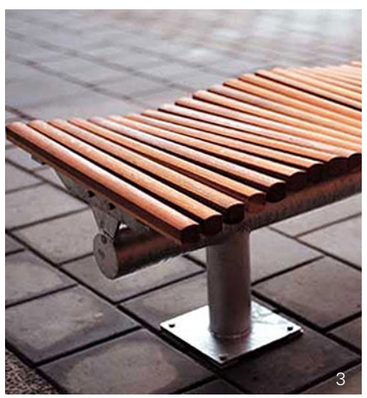


1. Reduced radius at intersections shortens crossing distances and provides enlarged receiving/ gathering areas
2. 4' high feature walls provide visual barriers and define space
3. Dedicated roadway for buses keeps traffic flowing at intersections
4. Mass planting 'drifts' are highly visible in a vehicle and appreciated at the pedestrian scale.
5. 12' multi-use path on east side
6. 8' multi-use path on west side
7. Sculptural character lighting
8. Planted median with feature wall
9. Pedestrian connections to potential adjacent development
10. Tree planting in groups/bosques
11. Crosswalk as graphic/art
12. Signal for mid-block crossing(s)
13. Boardwalk/bridge to adjacent development over stormwater retention ponds
14. Entry plaza
15. Retention ponds gather and filter water before discharging to Thompson Creek

Concept A, Sculpted Walk: Rendering Sculpted Walk | intersection bird's-eye view

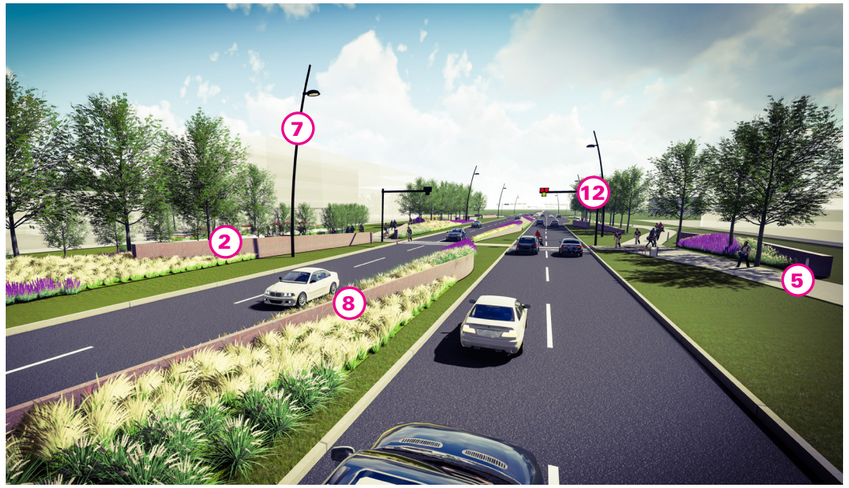








Precedents: lighting and furnishings



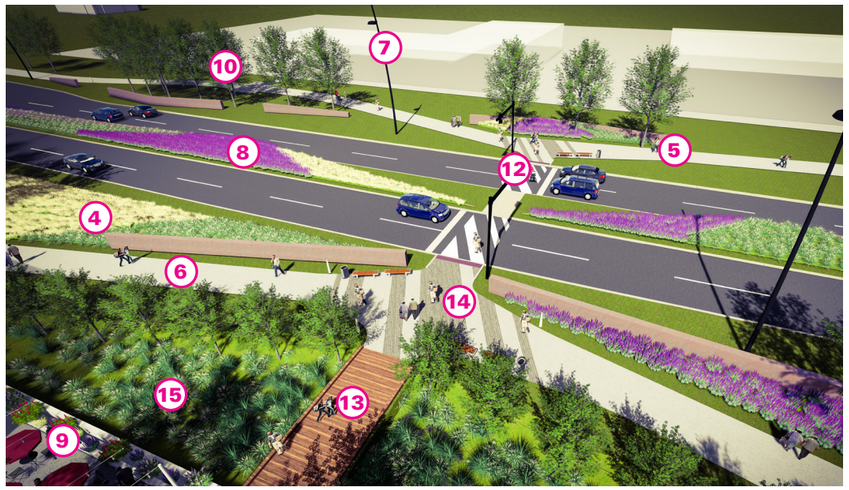
Concept A, Sculpted Walk: Rendering | 1st person perspective along 84th



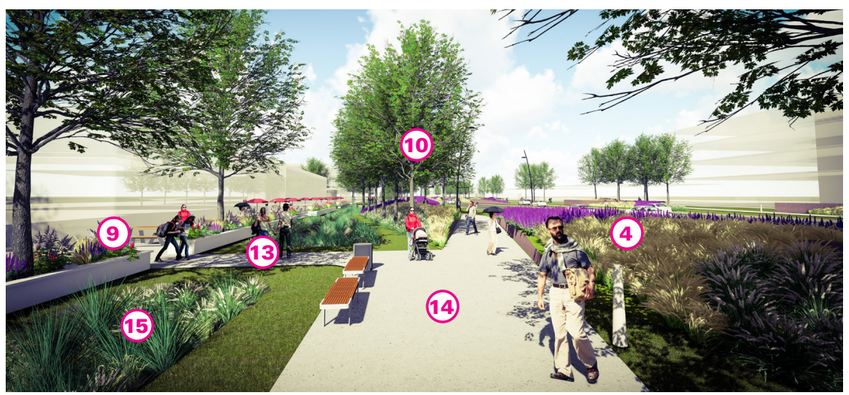
Precedent: landform



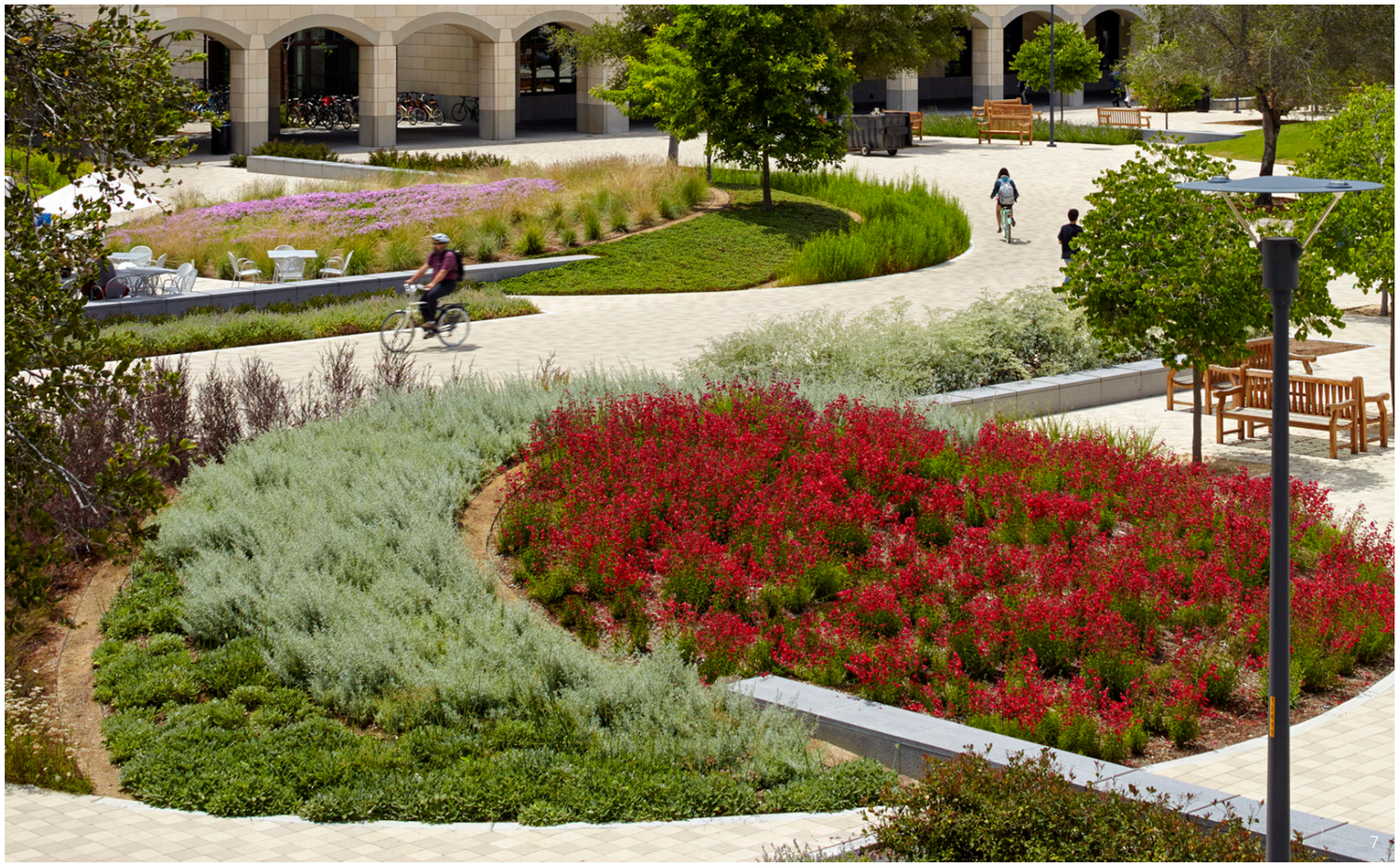
Precedent: landform + grade break



Concept A, Sculpted Walk: Rendering | bird's-eye at mid-block crossing



Concept A, Sculpted Walk: Rendering | first person perspective on multi-use path (west side)

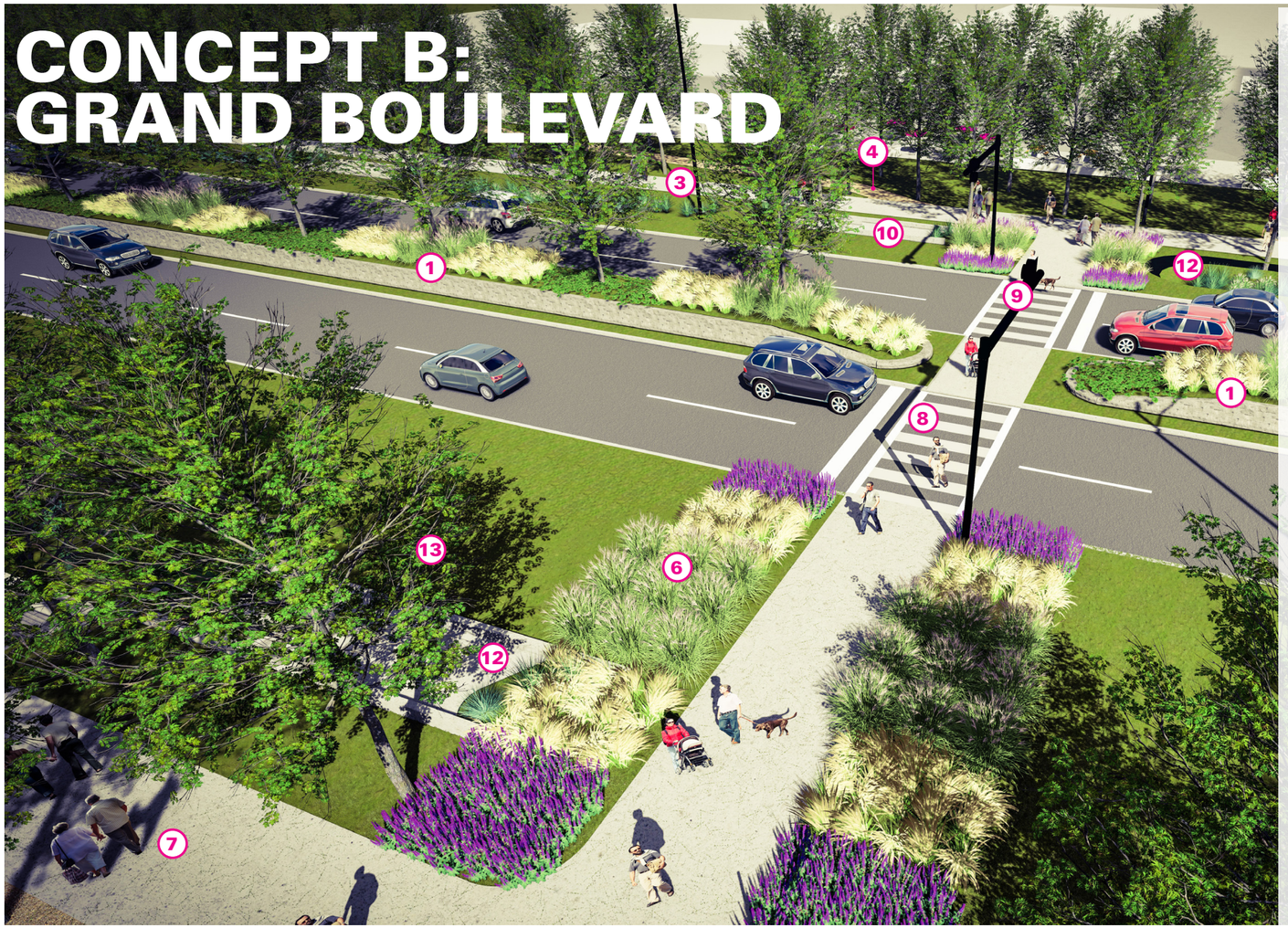


Precedent: landform, planting and walls

CONCEPT B
GRAND BOULEVARD

In contrast to concept A, the grand boulevard is very rigid and formal. In this concept, the components that make up the street are prescribed at regular intervals and help to create a very bold, distinctive statement. In this concept, trees form a colonnade on both sides of straight multi-use paths, soft surface jogging trails offer a more comfortable experience for the jogger. Water quality features and resting plazas make up the architecture of the pedestrian zones and ornamental planting is muted and restrained. In this option, trees are included in the median in raised planters that form a continuous canopy in the center of the roadway.

Although some aspects of this concept were favored by the public, ultimately the preference for a more responsive, less rigid concept appeared to better fit the needs of the community. The influence of furniture, lighting and the median tree planting in this concept, however, can be observed in the preferred plan.



1. Median tree planting with barrier wall creates linear rooms
2. Dedicated roadway for buses keeps traffic flowing at intersections
3. 10’ multi-use path on both sides of street
4. 6’ soft surface path interwoven with multi-use path
5. Architectural feature lighting
6. Regular, ordered shrub planting
7. Pedestrian connections to potential adjacent development
8. Standard ladder crosswalk
9. Signal for mid-block crossing(s)
10. Social spaces that connect hard and soft-surface trails
11. Integrated seating
12. Linear bioswales along roadway edge with concrete filter basins filter stormwater before discharging to Thompson Creek
13. Multiple rows of trees spaced at 30’ on center
14. Classic, refined site furnishings

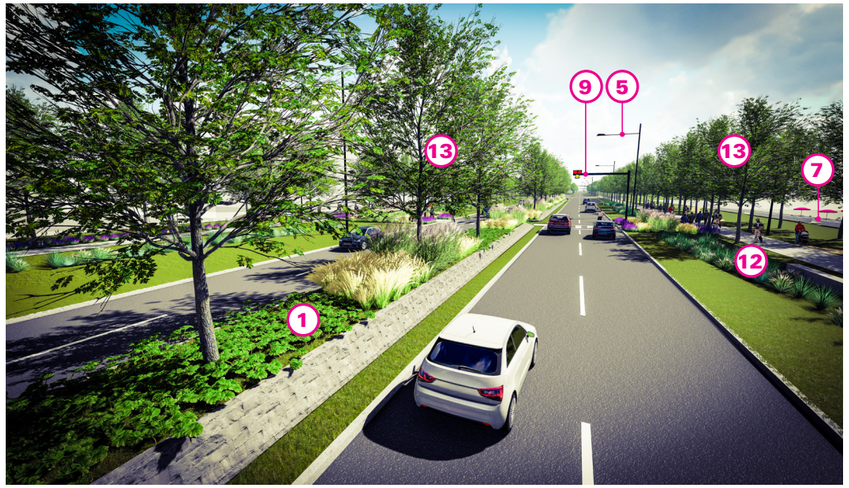
Concept B Rendering: Grand Boulevard | mid block bird’s-eye


8


9


10

Precedents: lighting and furnishings



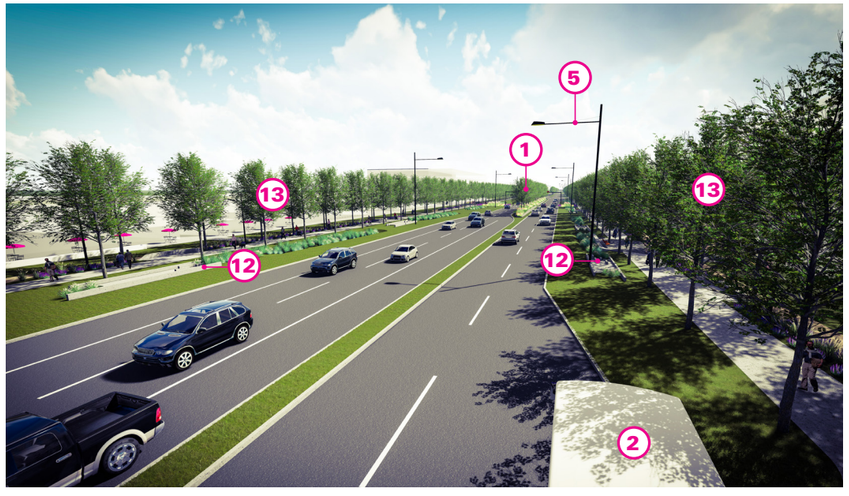
Concept B Rendering: Grand Boulevard | 1st person perspective along roadway



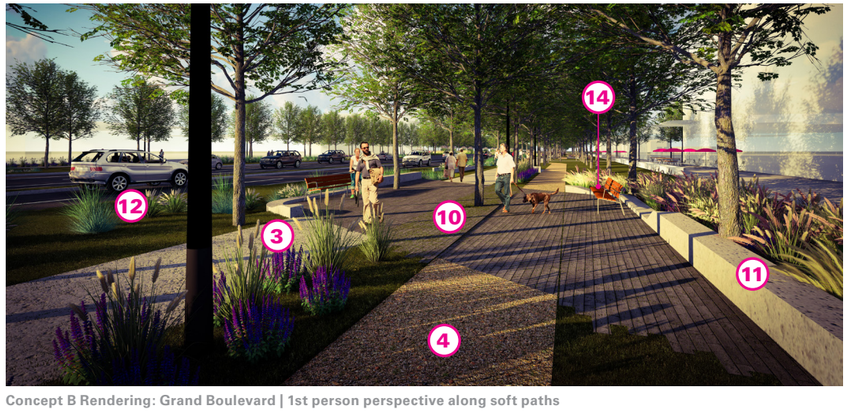
Precedent: bioswale stormwater



Precedent: boulevard with planted median



Concept B Rendering: Grand Boulevard | Bird's-eye perspective along road



Concept B Rendering: Grand Boulevard | 1st person perspective along soft paths



Precedent: multi-use paths and jogging paths


84TH
STREET
Bridge
0.5 miles
Crosswalk
0.3 miles
Civic Center Park
0.2 miles
City Centre
0.3 miles
Parking
0.5 miles
City Hall
0.7 miles

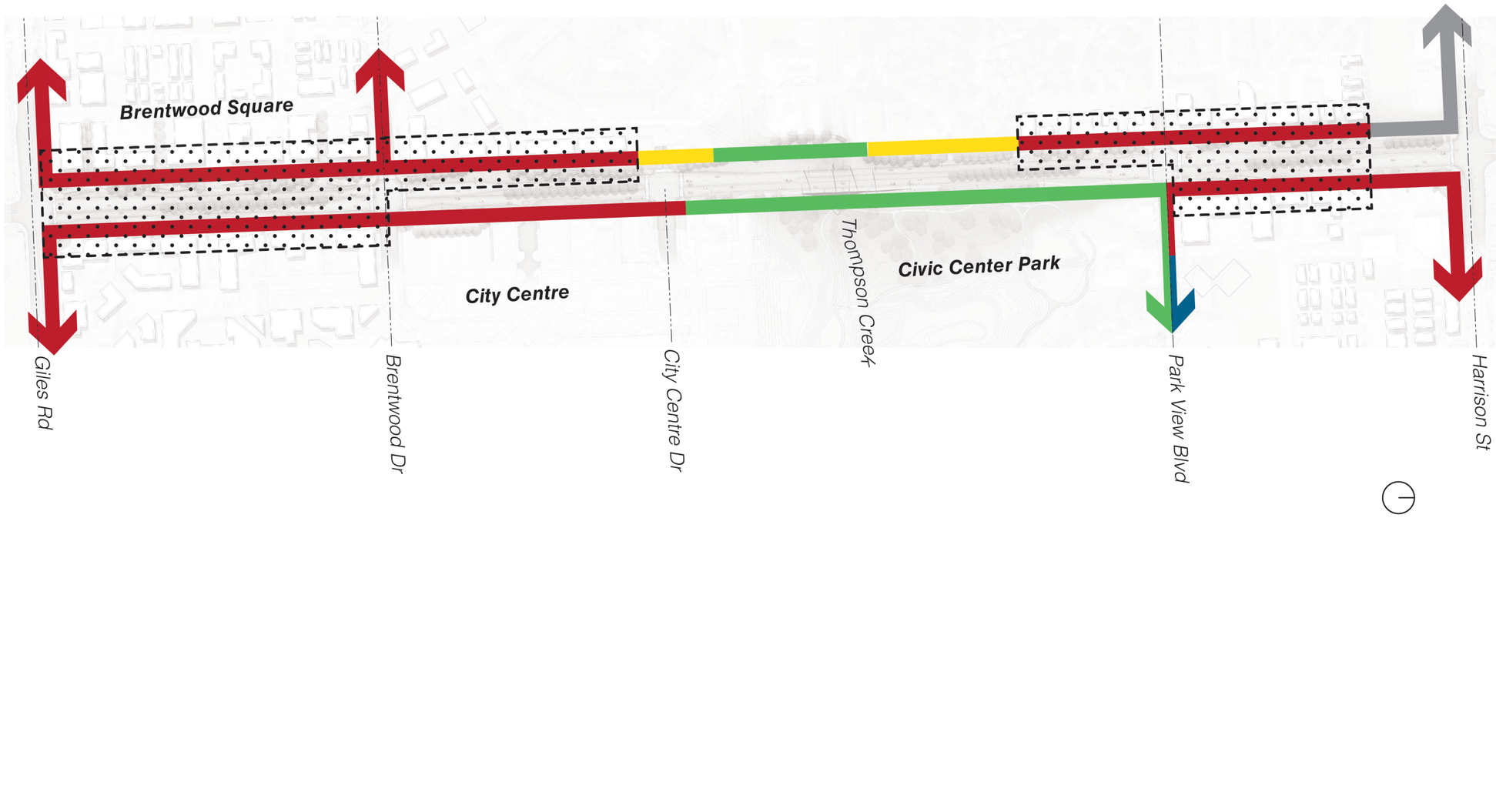
PREFERRED PLAN

OPPORTUNITY ZONES

The existing character along La Vista's 84th Street varies from one end to the other. With no one consistent condition that pervades. This variation is the result of changing topography as well as adjacent land use which has measurably informed the design along the 84th Street frontage.

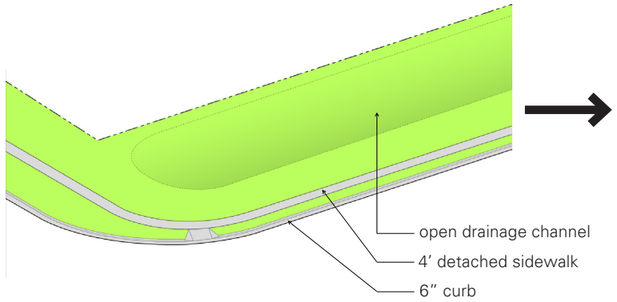
With the La Vista City Centre development and Civic Center Park underway, opportunity zones are identified here where development is anticipated along the 84th Street frontage. These opportunity zones will play a large role in the character of 84th Street in the future and can integrate the urban design to face and activate 84th Street.

Park
Residential
Commercial/ Mixed Use
Civic
Utility
Opportunity Zones

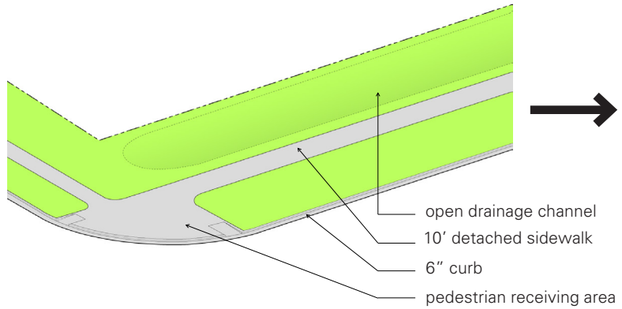


BUILDING THE STREET
ONE STEP AT A TIME

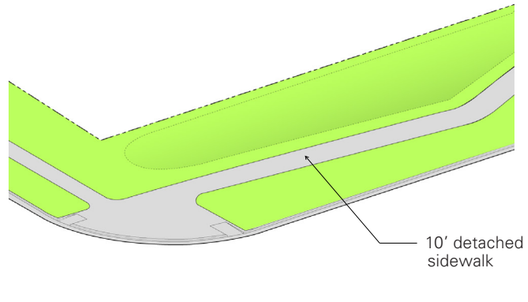
While there is no one street section, there are principles that apply to create a consistent design language that can extend through the corridor. The diagrams here show the building of a design language to create an ideal theme, and provides a starting point for the overall master plan of 84th Street.



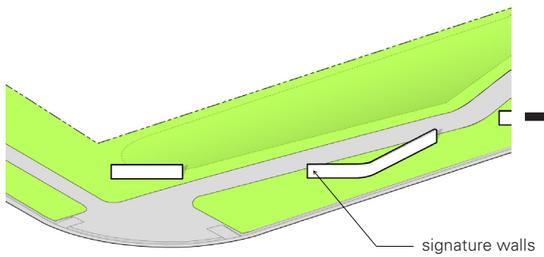
EXISTING
The existing landscape area along 84th Street is limited. It includes a 4’ sidewalk with minimal separation from the roadway and, in most areas, an open drainage channel along the right-of-way.



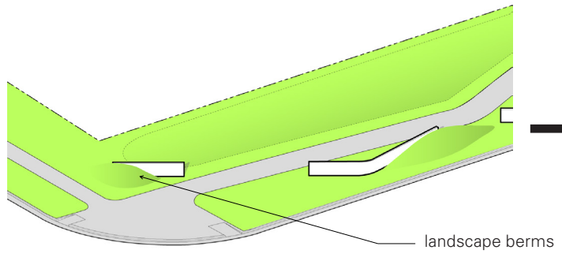
STEP 1 - MOVE AND WIDEN SIDEWALK
Moving the sidewalk away from the road edge encourages pedestrian and bicycle comfort and use. Additional paved space at corners and directional curb ramps provides a more accessible environment.



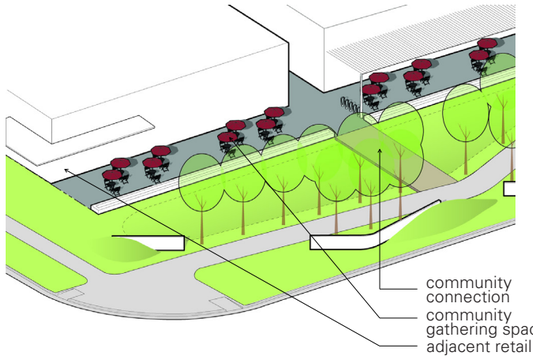
STEP 2 - MEANDER SIDEWALK
With the ample right of way, the multi-use path can comfortably meander without getting too close to the roadway. The meander provides opportunities to give more surface area to the water quality zones along the street frontage.



STEP 3 - SIGNATURE WALLS
Walls are added at key locations to provide a sense of architecture and enclosure along the corridor.

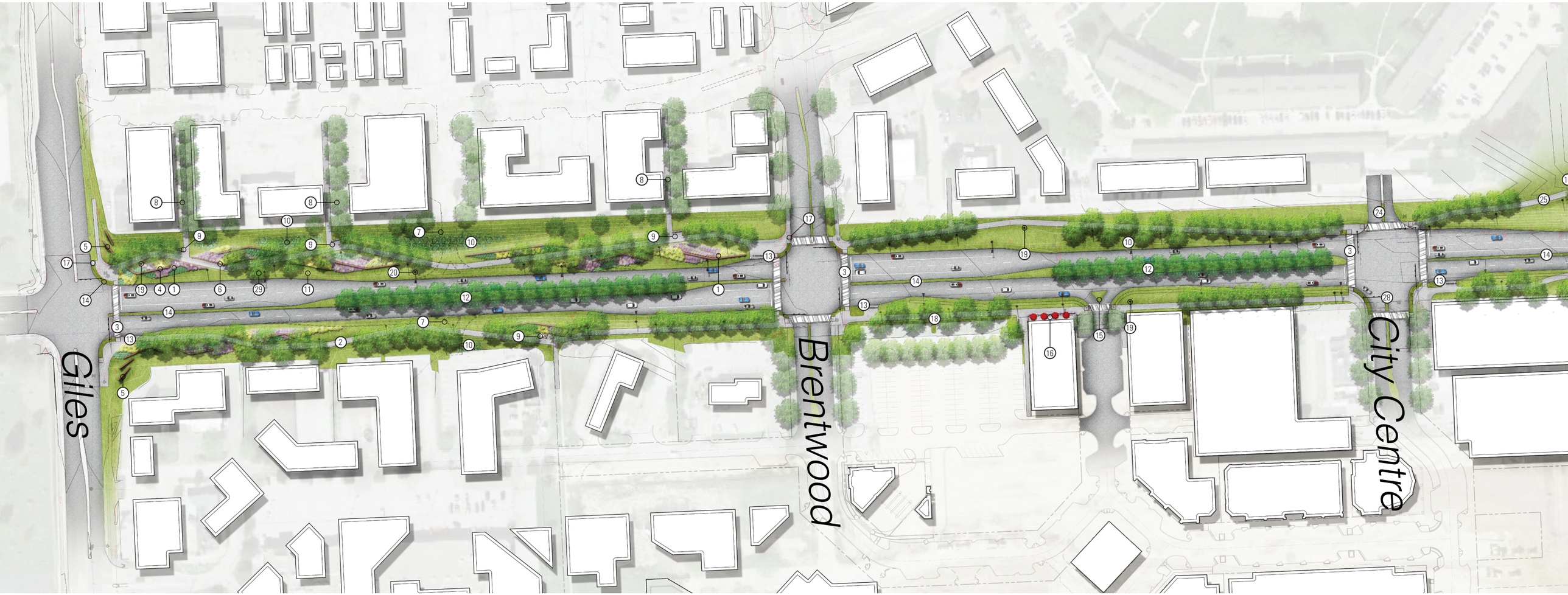


STEP 5 - COMPLEMENT WITH LANDFORM
Landform interplays with the signature walls to further separate pedestrians and vehicles, creating a more park-like environment by attenuating road noise and creating a visual separation.



STEP 6 - PLANTING AND DEVELOPMENT
The canopy of trees and strategic connections to adjacent development will be a crucial part of the vibrancy of 84th. Within the opportunity zones, these areas could face the street and provide an active edge for businesses and patrons.

OVERALL MASTER PLAN



1. Landscape planting on earthen berms
2. 10’ multi use path
3. Graphic crosswalk
4. 4’ Feature wall (partially retaining + static elevation)
5. 4’-8’ Gateway wall (sloped)
6. Retaining feature wall (sloped)
7. Future potential right-in-right-out intsersection
8. Future potential pedestrian connection to development
9. Connection plaza with special paving, seating + trash receptacle
10. Drainage swale/retention
11. Turf restoration
12. Raised median with trees and native + adapted grasses/ shrubs
13. Bus pull out and plaza with seating
14. Low groundcover planting
15. Proposed right-in-right-out at city centre
16. Future potential cafe seating / active frontage



17 ADA accessible ramp
18 Parking lot screen (shrubs and 4’ wall)
19 Pedestrian light pole and LED fixture
20 Existing automobile light pole with LED fixture
21 Roadway bridge at Thompson Creek
22 Overhead bridge icon
23 Footbridge at connection to Civic Center Park/ pool
24 Future potential full-movement intersection
25 Path provides access to park level from street
26 Viewing platform with seating at park interface
27 Lengthened turn pocket at Harrison
28 Proposed 3-way intersection at City Centre
29 Deciduous street tree

BLOCK-BY-BLOCK
GILES TO BRENTWOOD

The design of 84th Street must adapt to the ever-changing conditions of each block. The following section illustrates the schematic design of each block in the preferred plan with a concise narrative of the key elements that define each block.

ICONS AND MESSAGING

The block between Giles and Brentwood defines the southern entrance to La Vista's 84th Street with gateway walls, berms and mass ornamental plantings.

A comprehensive wayfinding and signage strategy makes the corridor more legible.

PEDESTRIAN EXPERIENCE

Multi-use paths, 10' in width, meander through the network of berms and signature walls. The paths are shaded more comprehensively with street tree groupings. These paths will be part of a larger effort to connect to near and adjacent trail networks at Civic Center Park, north to Ralston, and south to Papillion.

Future potential development and existing neighborhoods are accessed via connection plazas along the corridor. These plazas provide a moment of respite for pedestrians and bicyclists.

Graphic crosswalks and directional curb ramps create safer, shorter crossings at intersections.

INFRASTRUCTURE

What was once a large ditch becomes a series of connected rain gardens on the west side along the Brentwood Square property. These act to slow down stormwater runoff that comes from the roadway and adjacent properties.

Bus pull-outs are provided at the far end of the intersection as development infills and demand for transit increases.

Future potential right-in/right-out intersections are anticipated on both sides of the street in the middle of the block.



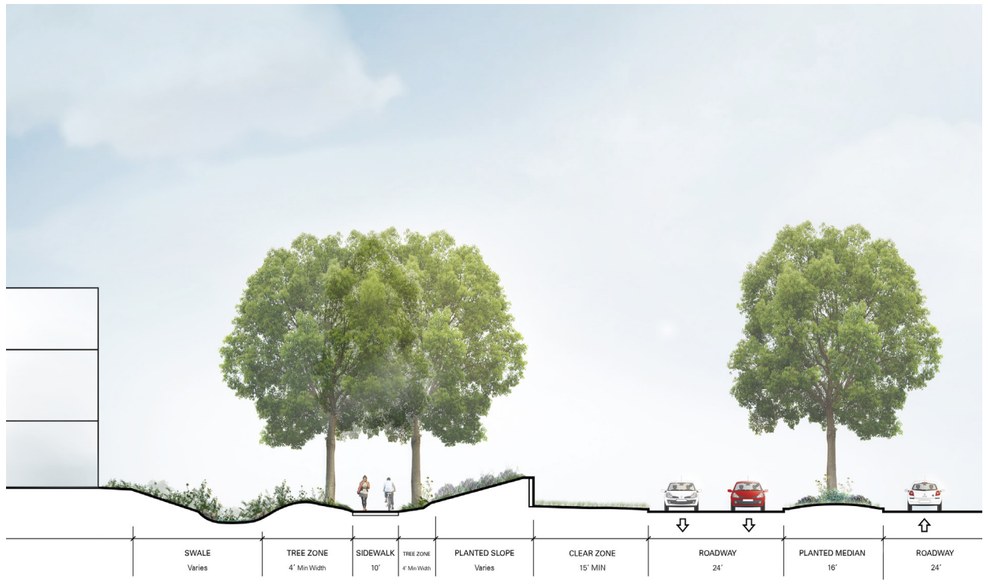
A *ILLUSTRATIVE BIRD'S-EYE RENDERING AT GILES*



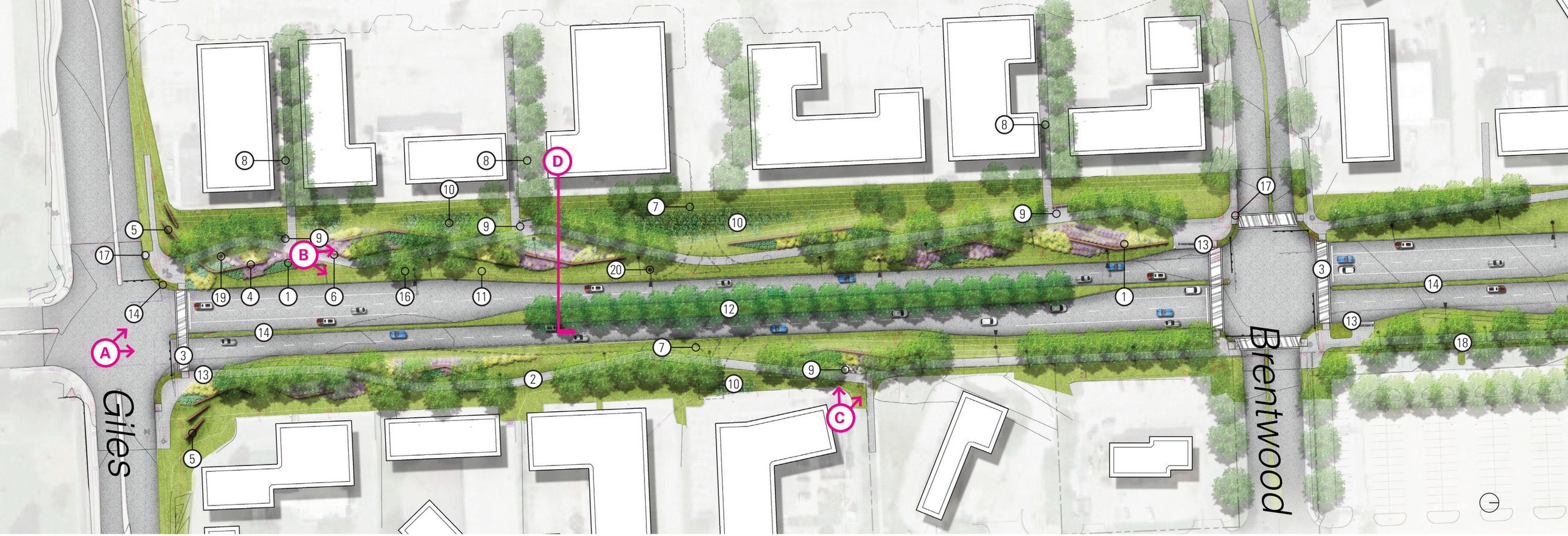
B *ILLUSTRATIVE RENDERING AT BRENTWOOD SQUARE CONNECTION PLAZA*



C *ILLUSTRATIVE RENDERING AT MIDDLE SCHOOL CONNECTION PLAZA*



D *ILLUSTRATIVE SECTION AT BRENTWOOD SQUARE*



1 Landscape planting on earthen berms
2 10’ multi use path
3 Graphic crosswalk
4 4’ Feature wall (partially retaining + static elevation)
5 4’-8’ Gateway wall (sloped)
6 Retaining feature wall (sloped)
7 Future potential right-in-right-out intsersection
8 Future potential pedestrian connection to development
9 Connection plaza with special paving, seating + trash receptacle
10 Drainage swale/retention
11 Turf restoration
12 Raised median with trees and native + adapted grasses/ shrubs
13 Bus pull out and plaza with seating
14 Low groundcover planting
15 Proposed right-in-right-out at city centre
16 Future potential cafe seating / active frontage
17 ADA accessible ramp
18 Parking lot screen (shrubs and 4’ wall)
19 Pedestrian light pole and LED fixture
20 Existing automobile light pole with LED fixture
21 Roadway bridge at Thompson Creek
22 Overhead bridge icon
23 Footbridge at connection to Civic Center Park/ pool
24 Future potential full-movement intersection
25 Path provides access to park level from street
26 Viewing platform with seating at park interface
27 Lengthened turn pocket at Harrison
28 Proposed 3-way intersection at City Centre
29 Deciduous street tree



KEY MAP (NOT TO SCALE)

ICONS AND MESSAGING

The feature walls in this area exhibit a more regular geometry and function to screen the parking lots that abut the La Vista City Centre development frontage. Tree spacing is intended to ensure visibility toward new development.

PEDESTRIAN EXPERIENCE

Multi-use paths connect to prominent intersections at La Vista City Centre. These larger paved spaces provide the key interface between potential ground floor uses within La Vista City Centre and 84th Street.

INFRASTRUCTURE

Stormwater in this block remains largely underground to accommodate the more urban condition without the impediment of a grade change.

A potential (future) full-movement intersection is shown at the new La Vista City Centre Drive. This would provide vehicular access and connection to the west side of 84th Street where the La Vista Municipal Pool and Kelly McMahon fields are currently located.



A *ILLUSTRATIVE RENDERING LOOKING AT BRIDGE FROM LA VISTA CITY CENTRE*



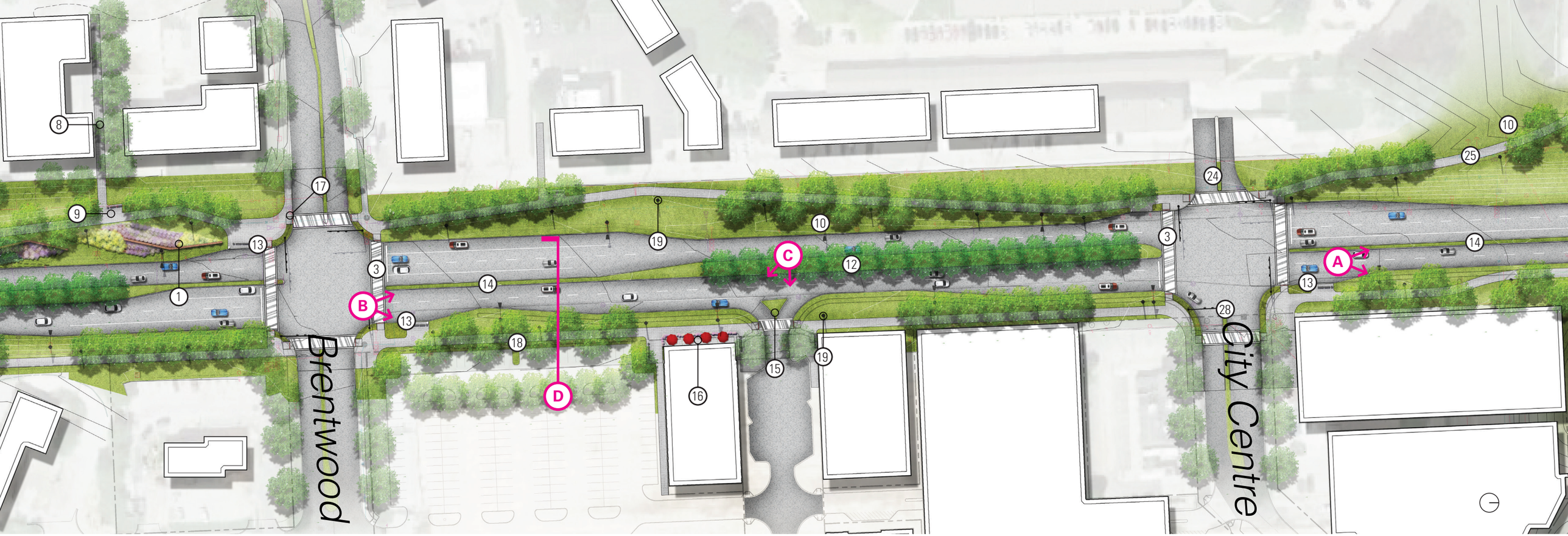
B *ILLUSTRATIVE RENDERING AT LA VISTA CITY CENTRE PARKING LOT*



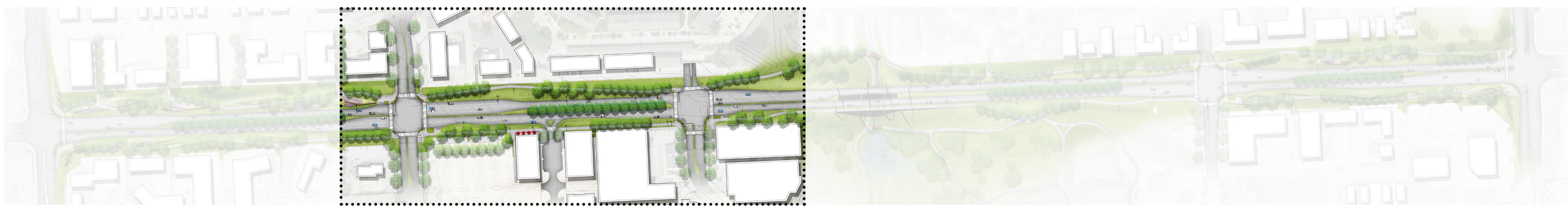
C *ILLUSTRATIVE RENDERING AT COTTONWOOD ENTRANCE TO LA VISTA CITY CENTRE*



D *ILLUSTRATIVE SECTION AT LA VISTA CITY CENTRE PARKING LOT*



1. Landscape planting on earthen berms
2. 10’ multi use path
3. Graphic crosswalk
4. 4’ Feature wall (partially retaining + static elevation)
5. 4’-8’ Gateway wall (sloped)
6. Retaining feature wall (sloped)
7. Future potential right-in-right-out intsersection
8. Future potential pedestrian connection to development
9. Connection plaza with special paving, seating + trash receptacle
10. Drainage swale/retention
11. Turf restoration
12. Raised median with trees and native + adapted grasses/ shrubs
13. Bus pull out and plaza with seating
14. Low groundcover planting
15. Proposed right-in-right-out at city centre
16. Future potential cafe seating / active frontage
17. ADA accessible ramp
18. Parking lot screen (shrubs and 4’ wall)
19. Pedestrian light pole and LED fixture
20. Existing automobile light pole with LED fixture
21. Roadway bridge at Thompson Creek
22. Overhead bridge icon
23. Footbridge at connection to Civic Center Park/ pool
24. Future potential full-movement intersection
25. Path provides access to park level from street
26. Viewing platform with seating at park interface
27. Lengthened turn pocket at Harrison
28. Proposed 3-way intersection at City Centre
29. Deciduous street tree



KEY MAP (NOT TO SCALE)

ICONS AND MESSAGING

As the entrance to La Vista from the north, the intersection at Harrison Street features a prominent bridge icon at Thompson Creek. This signifies a new pedestrian connection across 84th Street at the park level with an overhead structure that spans the roadway.

PEDESTRIAN EXPERIENCE

The multi-use path in this block meets with adjacent park uses. The path is removed from the roadway at its most dramatic degree and purposefully connects to the larger park trail network.

INFRASTRUCTURE

An open channel under 84th Street will carry the Thompson Creek flow along the path under the bridge. The bridge structure itself is shown here as a slab bridge with two separate bridge decks. The bridge type is still to be determined.

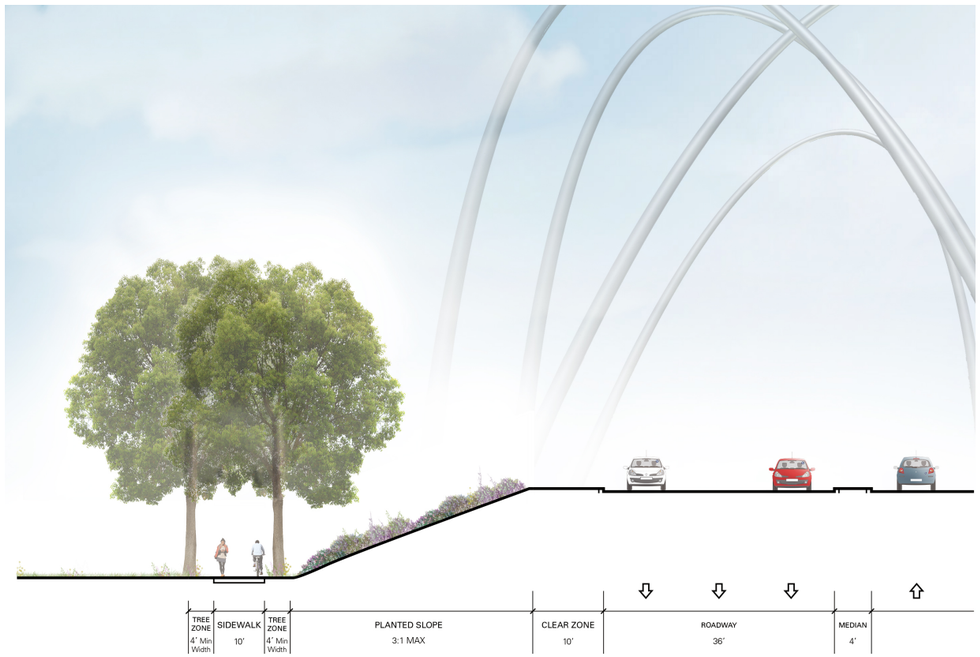
Where possible, stormwater is carried at the surface and weaves between the inside and outside of the multi-use path.



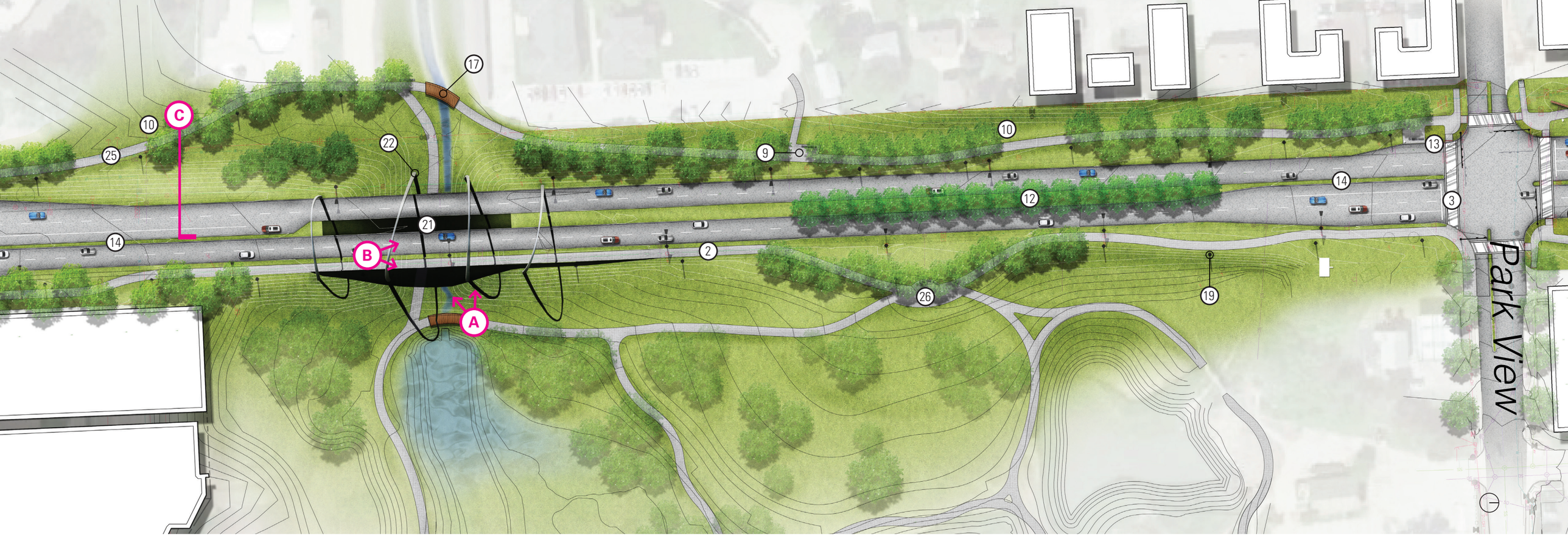
A *ILLUSTRATIVE RENDERING LOOKING TOWARD BRIDGE AT CIVIC CENTER PARK*



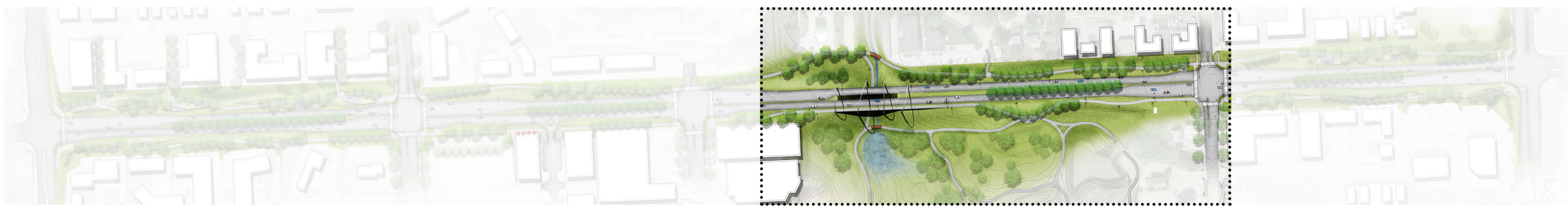
B *ILLUSTRATIVE RENDERING LOOKING TOWARD CIVIC CENTER PARK ON BRIDGE*



B *ILLUSTRATIVE SECTION*



1. Landscape planting on earthen berms
2. 10' multi use path
3. Graphic crosswalk
4. 4' Feature wall (partially retaining + static elevation)
5. 4'-8' Gateway wall (sloped)
6. Retaining feature wall (sloped)
7. Future potential right-in-right-out intsersection
8. Future potential pedestrian connection to development
9. Connection plaza with special paving, seating + trash receptacle
10. Drainage swale/retention
11. Turf restoration
12. Raised median with trees and native + adapted grasses/ shrubs
13. Bus pull out and plaza with seating
14. Low groundcover planting
15. Proposed right-in-right-out at city centre
16. Future potential cafe seating / active frontage
17. ADA accessible ramp
18. Parking lot screen (shrubs and 4' wall)
19. Pedestrian light pole and LED fixture
20. Existing automobile light pole with LED fixture
21. Roadway bridge at Thompson Creek
22. Overhead bridge icon
23. Footbridge at connection to Civic Center Park/ pool
24. Future potential full-movement intersection
25. Path provides access to park level from street
26. Viewing platform with seating at park interface
27. Lengthened turn pocket at Harrison
28. Proposed 3-way intersection at City Centre
29. Deciduous street tree



KEY MAP (NOT TO SCALE)

BLOCK-BY-BLOCK
PARK VIEW TO HARRISON

ICONS AND MESSAGING

As the entrance from the north, the intersection at Harrison features a prominent artistic gesture that builds on the design and arrangement of the signature walls that interplay with the landform on this block.

PEDESTRIAN EXPERIENCE

Like the block between Giles and Brentwood, multi-use paths meander through the network of berms and signature walls. A garden wall is suggested along existing surface parking lots as a strategy to partially shield pedestrians from the vehicular experience.

INFRASTRUCTURE

Due to the narrow right-of-way and grade constraints of the block, much of the stormwater is conveyed underground.

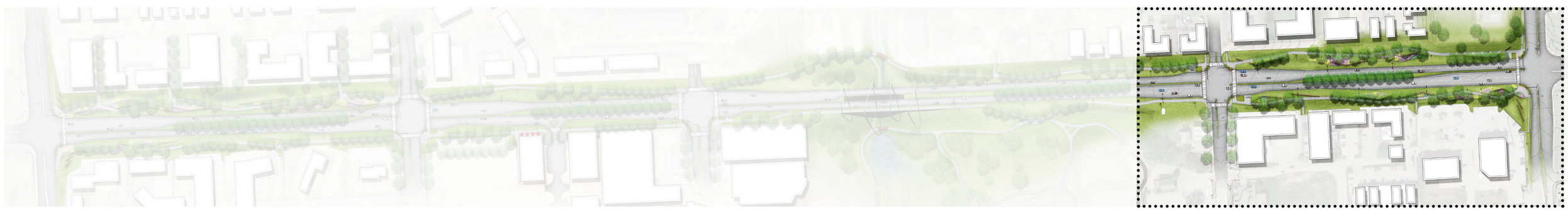


A *ILLUSTRATIVE RENDERING LOOKING AT BRIDGE FROM HARRISON*

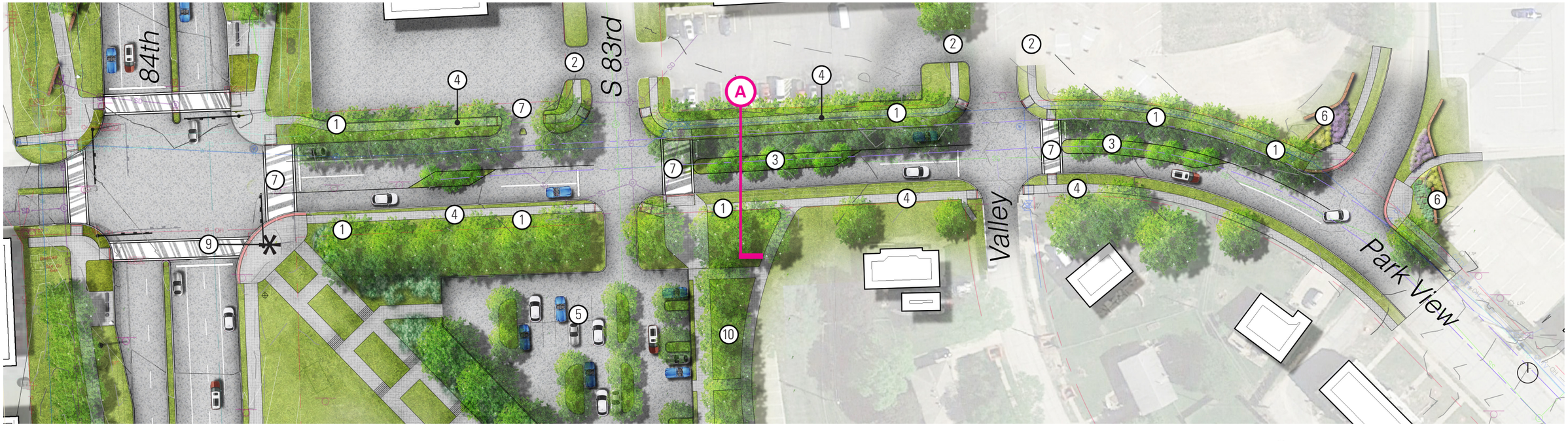


B *ILLUSTRATIVE SECTION AT SLOPED PLANTING FACING DRIVE LANES*

1 Landscape planting on earthen berms
2 10' multi use path
3 Graphic crosswalk
4 4' Feature wall (partially retaining + static elevation)
5 4'-8' Gateway wall (sloped)
6 Retaining feature wall (sloped)
7 Future potential right-in-right-out intsersection
8 Future potential pedestrian connection to development
9 Connection plaza with special paving, seating + trash receptacle
10 Drainage swale/retention
11 Turf restoration
12 Raised median with trees and native + adapted grasses/ shrubs
13 Bus pull out and plaza with seating
14 Low groundcover planting
15 Proposed right-in-right-out at city centre
16 Future potential cafe seating / active frontage
17 ADA accessible ramp
18 Parking lot screen (shrubs and 4' wall)
19 Pedestrian light pole and LED fixture
20 Existing automobile light pole with LED fixture
21 Roadway bridge at Thompson Creek
22 Overhead bridge icon
23 Footbridge at connection to Civic Center Park/ pool
24 Future potential full-movement intersection
25 Path provides access to park level from street
26 Viewing platform with seating at park interface
27 Lengthened turn pocket at Harrison
28 Proposed 3-way intersection at City Centre
29 Deciduous street tree



KEY MAP (NOT TO SCALE)



INTERSECTING STREETS

PARK VIEW BOULEVARD

Intersecting with 84th, Park View Boulevard and Brentwood Drive are opportunities to extend improvements to prominent corridors in La Vista's central city core.

ICONS AND MESSAGING

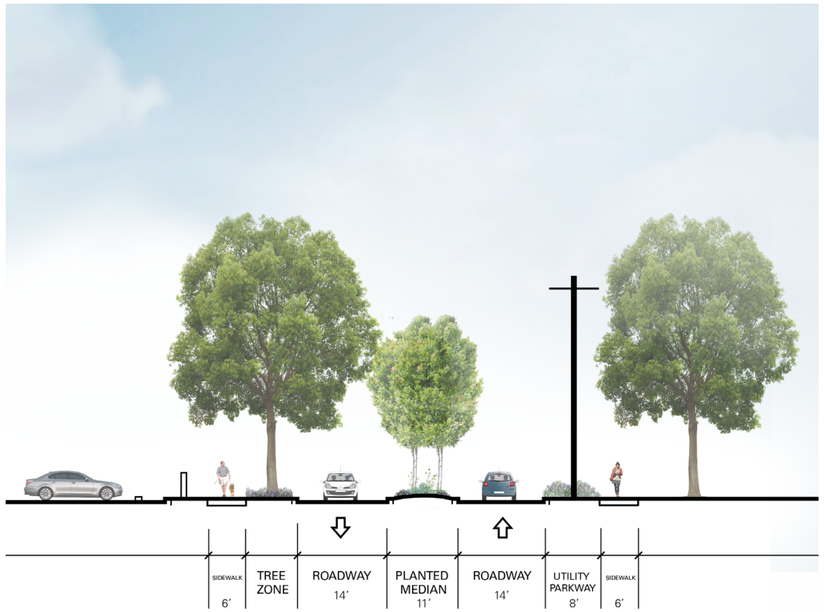
Entering from 84th Street, Park View Boulevard is the grand entrance to the civic and municipal hub of La Vista. Flanked by shade trees on both sides and a central median with ornamental planting, visitors are greeted with a new entry monument entering City Hall at Gertude.

PEDESTRIAN EXPERIENCE

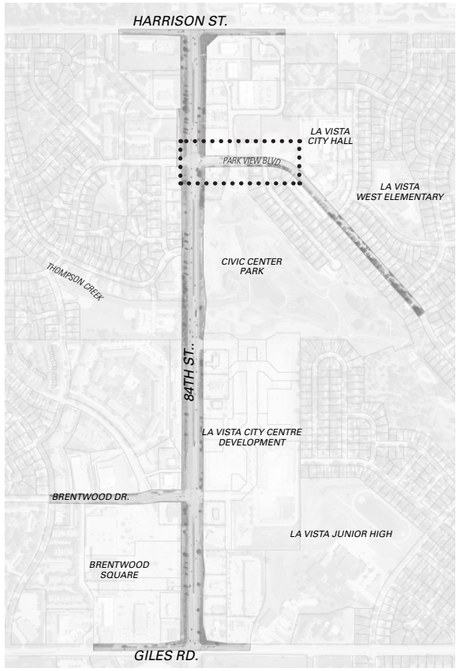
Sidewalks are widened to six feet. Where possible, trees are added between the detached sidewalk and the road. Along the Civic Center Park frontage, shade trees align at the back of sidewalk, avoiding utilities.

INFRASTRUCTURE

The section of Park View from 84th Street to City Hall is a complete reconstruction and includes major changes to the road alignment and control of driveway access.

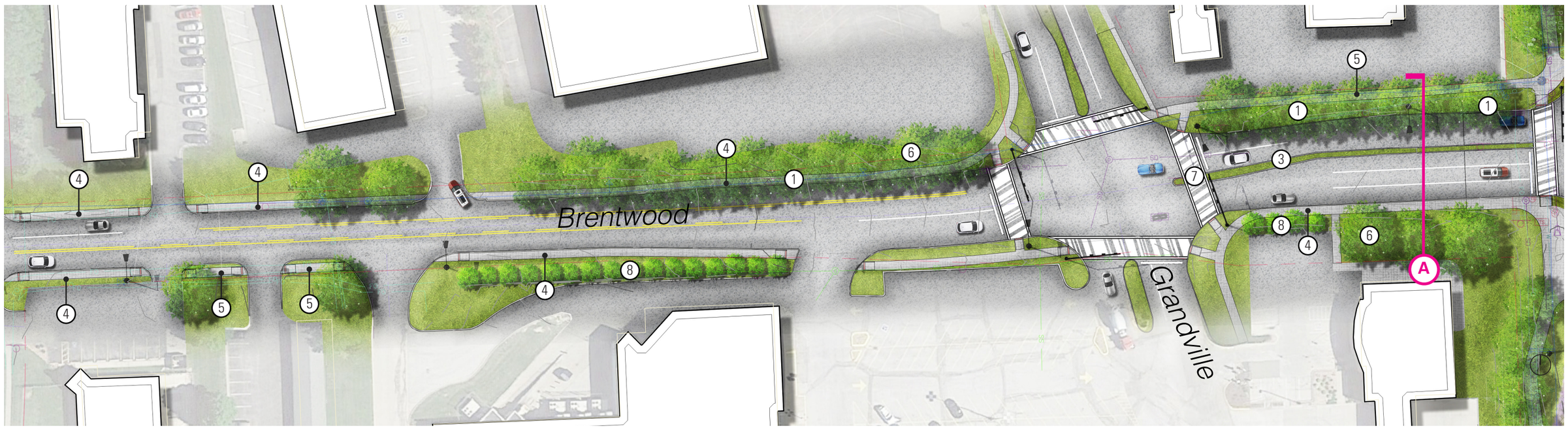


A ILLUSTRATIVE SECTION AT PARK VIEW BLVD



KEY MAP (NOT TO SCALE)

1. Vehicular access removed
2. Vehicular access provided
3. Landscape median with ornamental trees
4. 6' detached sidewalk
5. Future Civic Center Park parking lot
6. Entry monument/ feature walls
7. Graphic crosswalk
8. Right-in/right-out access
9. Icon monument at park
10. Garden connection to park



INTERSECTING STREETS

BRENTWOOD DRIVE

ICONS AND MESSAGING

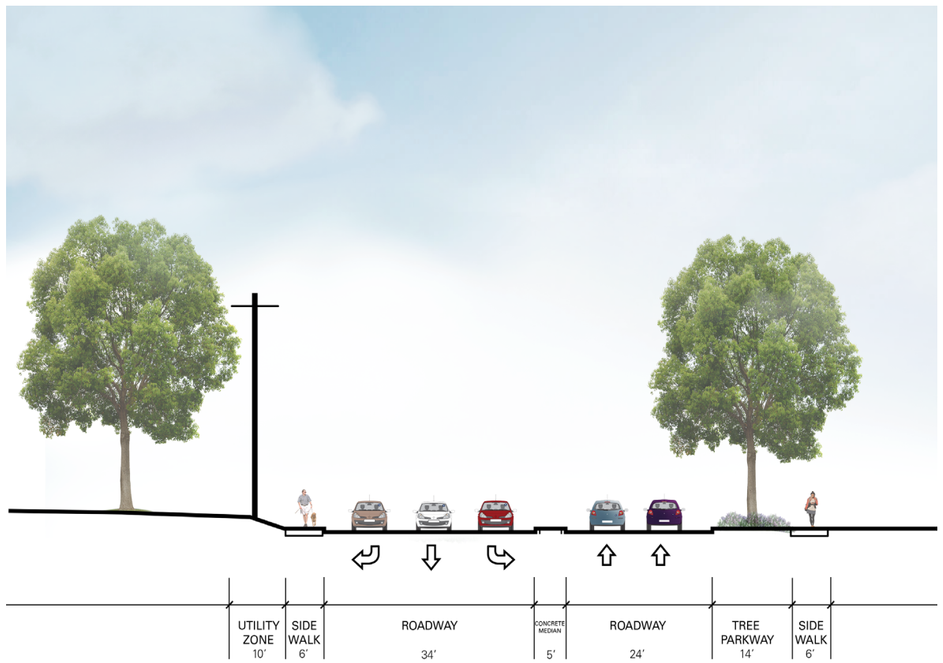
Brentwood Avenue is the future gateway to a potential new retail and mixed-use project at Brentwood Square.

PEDESTRIAN EXPERIENCE

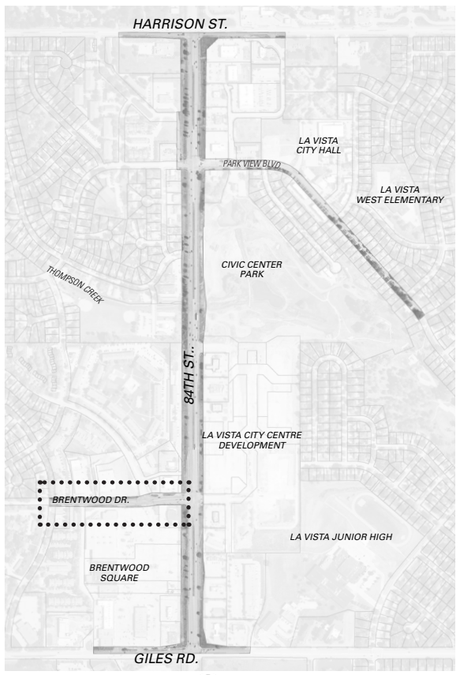
Because of the right-of-way available and location of existing overhead utilities, sidewalks are attached to the roadway and widened to six feet. Where possible, detached sidewalks with shade strees are provided. Ornamental trees are recommended on the adjacent properties.

INFRASTRUCTURE

The extent of improvements along Brentwood are largely limited to the back of curb. Driveway access to the street is managed in order to allow for a more consistent canopy of trees.



A ILLUSTRATIVE SECTION AT BRENTWOOD AVE



KEY MAP (NOT TO SCALE)

1. Vehicular access removed
2. Vehicular access provided
3. Grass median
4. 6' attached sidewalk
5. 6' detached sidewalk
6. Shade trees
7. Graphic Crosswalk
8. Ornamental screen trees

PLANTING PALETTE

NATIVE AND ADAPTED COMMUNITIES

During the feedback period, the community showed a preference for planting in mass monoculture blocks rather than more of a meadow look with a lot of variation.

The approach to the 84th Street corridor planting design is to introduce a planting scheme that is high performing in roadway environments, provides year-round interest, and celebrates the ecology of Eastern Nebraska. This is accomplished with the definition of three essential planting zones along the corridor: the parkway canopy, the salt-tolerant rain garden, and the bunchgrass pollinator.

PARKWAY CANOPY

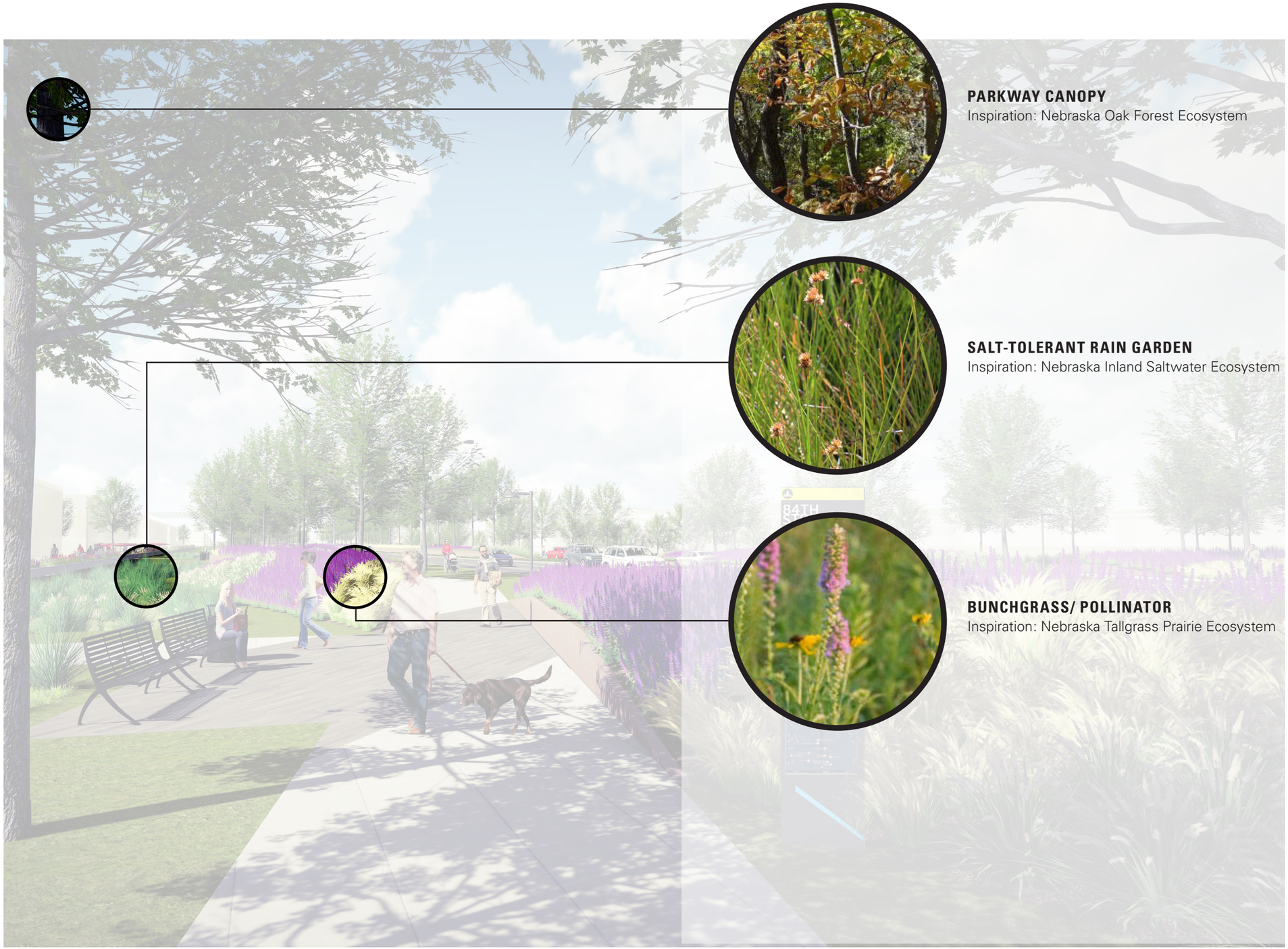
This zone forms the architecture of the street and gives meaning and form to the parkway. When we look up, we see native and adapted hard-working street trees. These communities of giants, reminiscent of Eastern Nebraska's forests, provide habitat for migrant birds, insect pollinators, cavity nesting birds, game birds, and small mammals.

SALT-TOLERANT RAIN GARDEN

This zone brings plant diversity to the reallocated open drainage channels along the parkway. Plants are chosen specifically to tolerate the soil toxicity of salts used to keep they roadway safe during the winter months. This scheme recalls plants of the rare, native inland salt wetlands of Nebraska as well as known salt-tolerant cultivated plants. Hydrophilic and mesic varieties echo the painterly approach of the bunchgrass/pollinator scheme.

BUNCHGRASS/POLLINATOR

This zone is characterized by discrete, colorful monoculture 'drifts'. Seasonal color bursts throughout the summer with a robust blooming program anchored by the pervasive architecture and year-round interest of ornamental grasses. This zone heavily borrows from the tallgrass prairie aesthetic that informs the composition and creates the ground plane of a reintroduced upland ecology.



PARKWAY CANOPY
Inspiration: Nebraska Oak Forest Ecosystem

SALT-TOLERANT RAIN GARDEN
Inspiration: Nebraska Inland Saltwater Ecosystem

BUNCHGRASS/ POLLINATOR
Inspiration: Nebraska Tallgrass Prairie Ecosystem



BUR OAK
quercus macrocarpa



HACKBERRY
celtis occidentalis



KENTUCKY COFFEE
celtis occidentalis



HONEY LOCUST
gleditsia triacanthos (cultivar)



FRONTIER ELM
ulmus ‘frontier’



FESCUE SEDGE
carex brevior



BIG BLUESTEM
celtis occidentalis



SHENANDOAH SWITCHGRASS
panicum virgatum ‘shenandoah’



DOGWOOD
cornus ‘arctic fire’



SIBERIAN IRIS
iris ‘caesar’s brother’



BLUE CARDINAL FLOWER
lobelia siphilitica



NODDING ONION
allium cernuum



HAMELIN FOUNTAIN GRASS
pennisetum alopecuroides



MAIDEN GRASS
miscanthus sinensis



FEATHER REED GRASS
calamogrostis brachyticha



NORTHWIND SWITCHGRASS
panicum virgatum ‘northwind’



YARROW
achellia millefolium



LITTLE JOE PIE
Eupatorium dubium ‘little joe’



RUSSIAN SAGE
perovskia atriplicifolia



LAVENDER
lavendula angustifolia



CATMINT
nepeta ‘walker’s low’









PRINCIPLE PLANTINGS

These hard-working plants anchor the planting scheme on the corridor. Each variety can be appreciated in multiple seasons throughout the year.

MATERIALS, FURNITURE, AND SIGNAGE

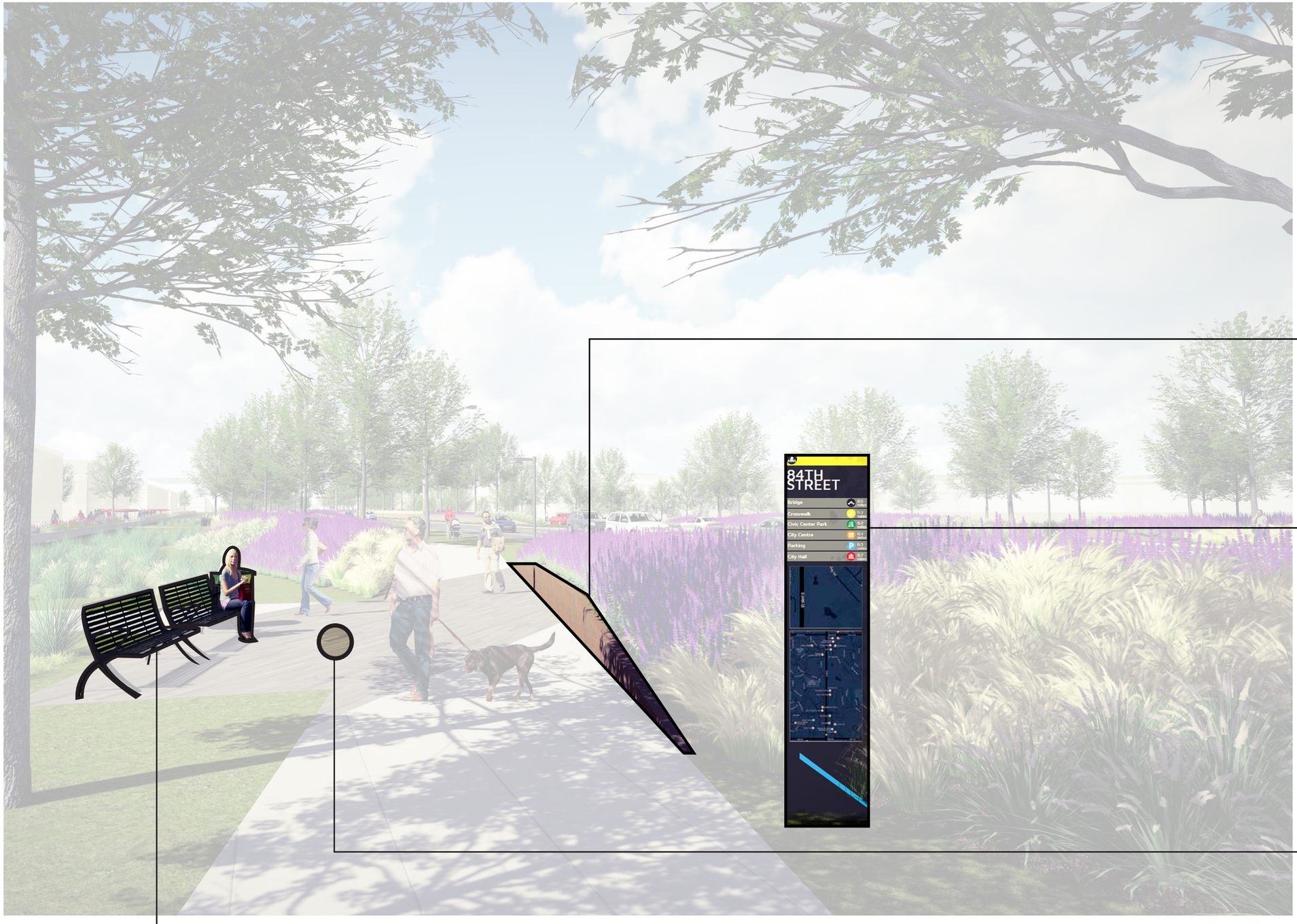
COMFORTABLE, NATURAL, TIMELESS

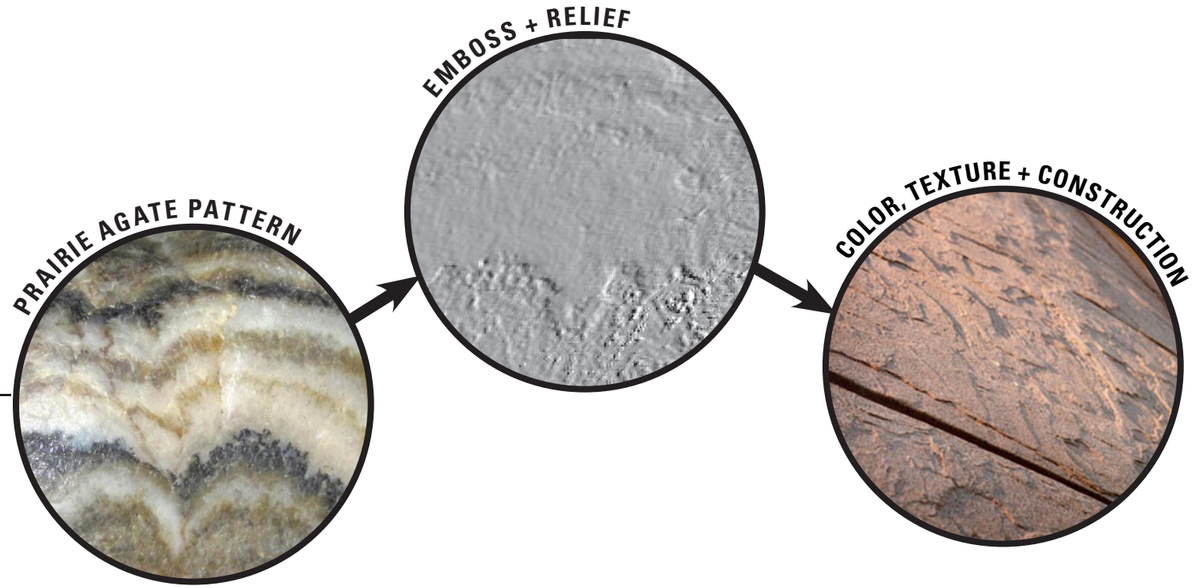
After receiving feedback from the second public meeting regarding material and stylistic choices for the finish of the corridor, it became evident the community preferred a timeless, comfortable aesthetic. This feedback informs the initial material, furnishing, and signage ideas presented here.

A new signage family that is compatible with all MUTCD-regulation signage and designed can complement the overall vision for 84th Street as the central city core. A new wayfinding family can serve as a key element to improve the user experience and city branding through 84th Street and to invite residents and visitors to engage with the mixed-use development along the street and throughout the city. This can be accomplished through design details such as color, material, finish, structure and forms. Illumination can be added to the system that will create an engaging atmosphere in the evening and at night. The following signage family contains the elements which are to be considered:

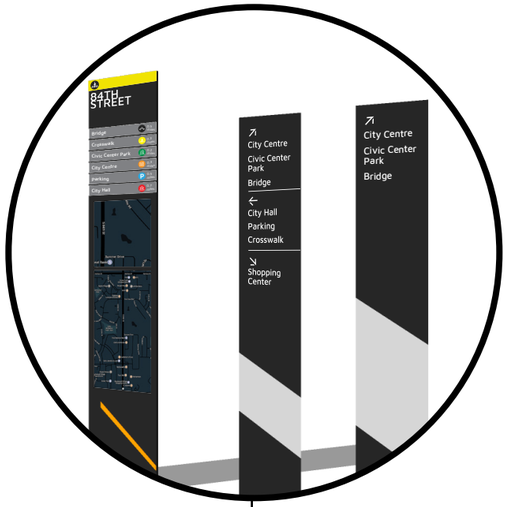
- City monument sign
- City landmark sign (city elements)
- Vehicular directional sign (retail and destinations)
- Pedestrian/cyclist directional sign
- Light pole banners (city event, culture, history, etc)
- Street information sign (speed limit, safety information, etc.)
- Bus/Metro station sign

Initial ideas are shown here, however, the actual wayfinding and signage will reflect the rebranding which is part of a larger City-wide effort outside the scope of the 84th Streetscape project.





WALL MATERIALS
Wall materials take inspiration from local geology while considering construct ability and durability. Form-lined concrete can have the appearance of natural stone at a fraction of the cost.

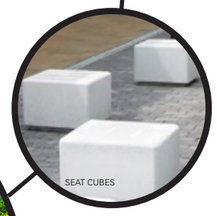


WAYFINDING + SIGNAGE
A unified concept for signage creates a much more legible environment for users.

DESIGN MOTIF
Thematic motifs established by a cohesive brand and message could tie street elements together.









FURNITURE
Timeless furniture and amenities bring a more comfortable pedestrian experience.



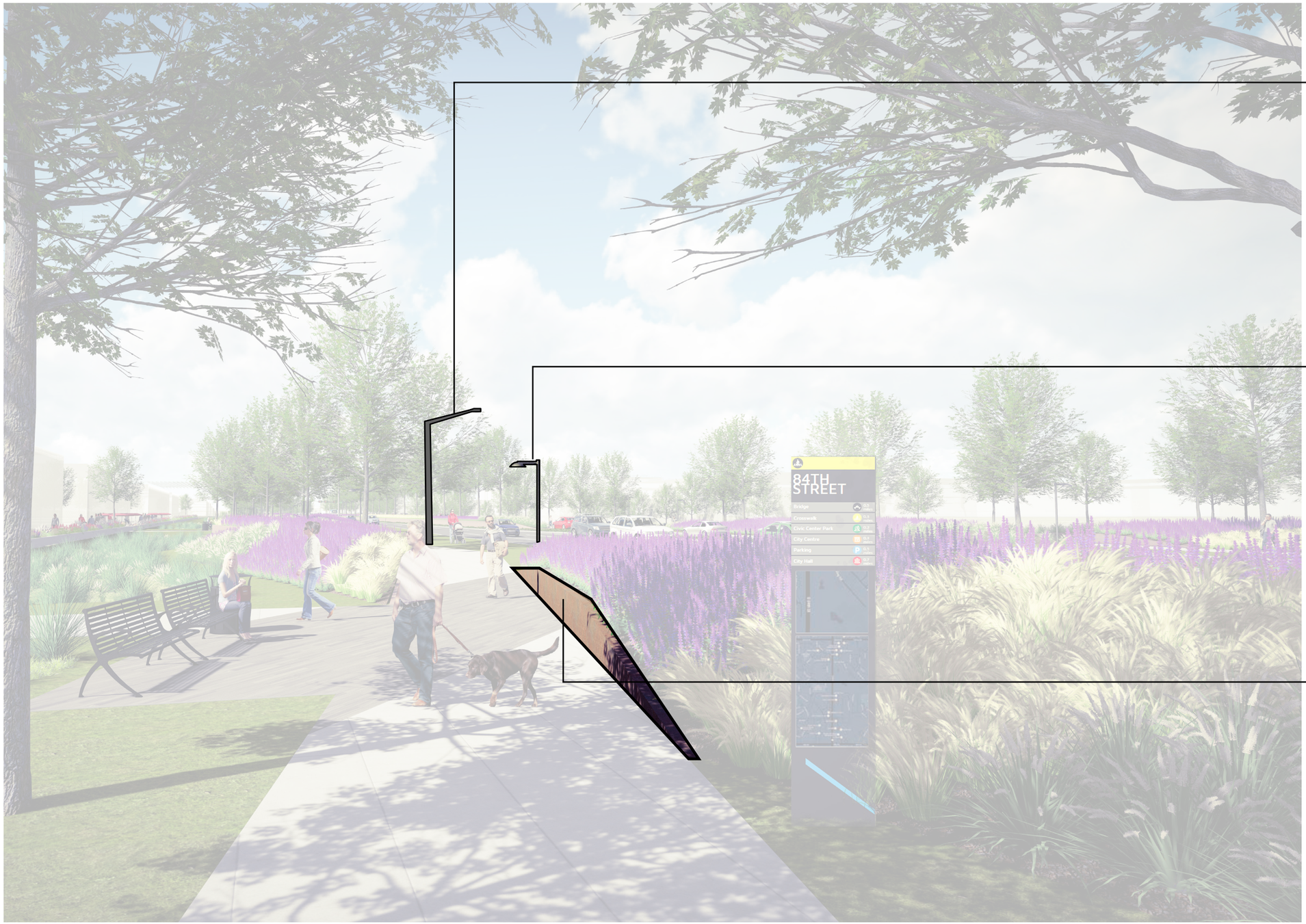
SPECIAL PAVING
Muted, refined paving subtly signifies plazas and gathering areas.

LIGHTING

SAFE, SECURE, COMFORTABLE

The lighting along 84th Street will be crucial to extending the use of the street into the evening. A cohesive lighting strategy will increase a sense of overall safety and security as well as complement the furnishing and materials to help add to a new civic identity.

Using the latest in high-efficiency LED technology in the streetscape reduces the amount of energy used and maintenance costs. Fixtures provide a warm, comfortable color temperature and minimize the amount of light spill and glare. Principles of good lighting design create an inviting atmosphere in the evening and include several strategies to provide multiple sources that acheive a more ambient lighting condition. Key strategies are oultined here.





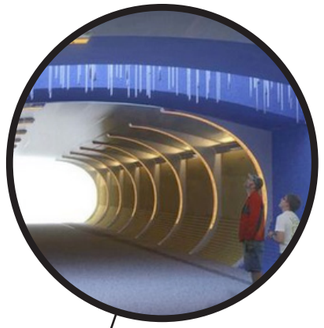
ROADWAY LIGHTING
Roadway lighting complements the pedestrian fixtures with a sleek architectural character. LED fixtures provide more even spread on the roadway with a particular focus on safety at intersections.



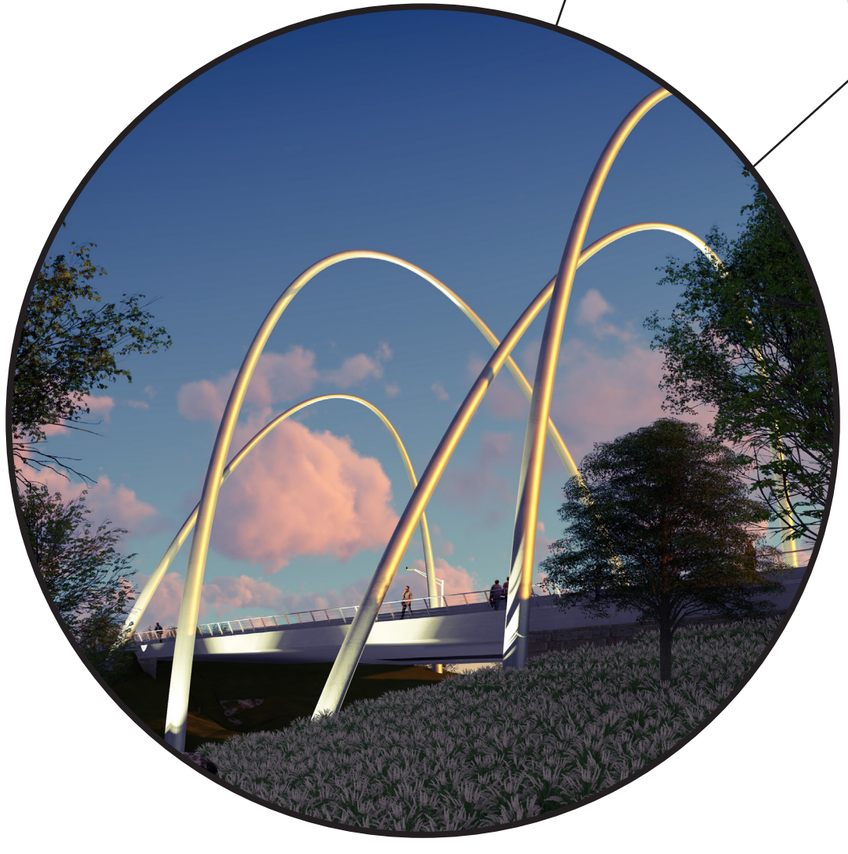
PEDESTRIAN LIGHTING
The pedestrian experience is enhanced along the parkway trail with strategically placed pedestrian poles and fixtures that provide a warm overhead glow.



WALL UPLIGHTING
The signature walls along the corridor are uplit by LED strip lighting. This highlights the architecture of the walls and provides a comforting, ambient glow from the sides of the path where the walls are present.







BRIDGE LIGHTING
Lighting of the deck and overhead icon capture the form and function of the bridge at Thompson Creek in the evening and at night. A comprehensive approach to the lighting underneath the bridge enhances the experience and ensures a safe and comfortable atmosphere for evening park users.

WATER QUALITY

The current drainage system along 84th Street is rudimentary. It carries water via open drainage channels along the corridor from the roadway and, in some cases, adjacent development. The stormwater contributes to the Big Papillion-Mosquito watershed.

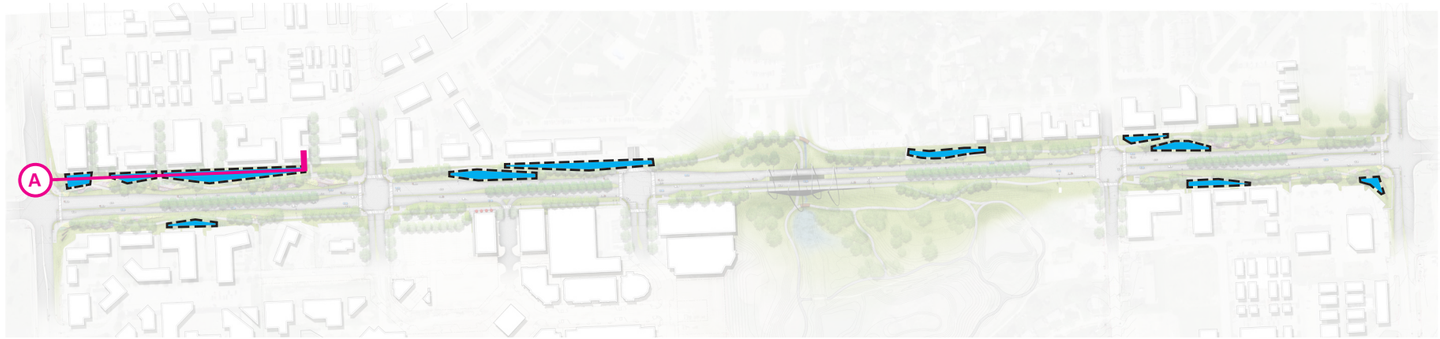
The vision of the proposed water quality design is to accommodate historic drainage patterns while providing infrastructure that encourages stormwater cleansing. To the extent possible, stormwater runoff is captured in a network of salt-tolerant rain gardens. The rain gardens are designed to temporarily hold and soak impervious stormwater runoff. As a best management practice, these rain gardens not only help clean stormwater runoff and add to the overall diversity of plant species within the corridor, they also help to reduce the effects of downstream washout and sedimentation.

In addition to the integration of rain gardens in the landscape design, the irrigation system also includes in-line fertilization systems that improve the soil conditions, specifically additives that help flush the salt from the soil. Plant nutrition and fertilizer is also introduced through the irrigation system to encourage plant growth and vitality.

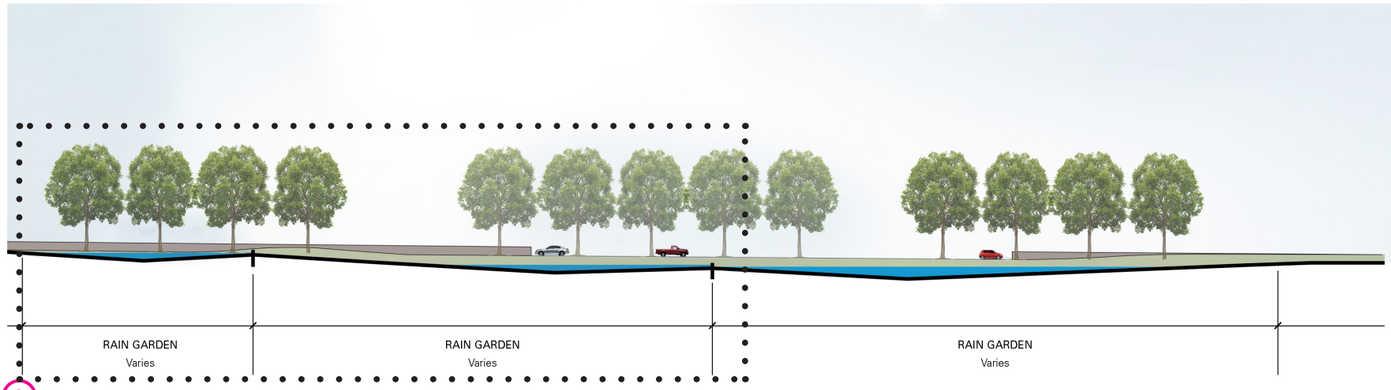
IRRIGATION SYSTEM

La Vista receives an average annual rainfall of 31” per year. This amount of rainfall is able to sustain a variety of plant life at maturity. Installation of efficient low water use drip irrigation systems within the project area help to protect the initial capital investment in plant materials as well as ease the burden of ongoing maintenance, both very important to the community.

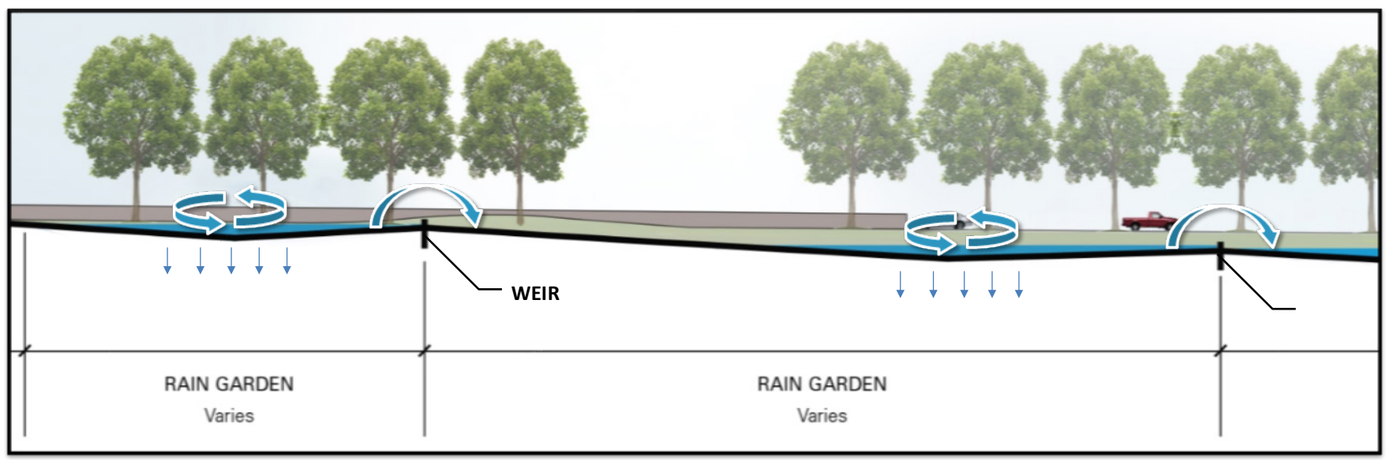
The proposed irrigation system design for the corridor is divided into four irrigation systems, separated by the major street crossings along 84th Street. Each system uses a potable tap sized to maintain an 8-hour per day watering window to minimize impact to the public use of the corridor amenities. Automatic, cloud connected irrigation controllers use local weather data to adjust the irrigation system run time in response to daily weather. Cloud connected capabilities allows maintenance staff to monitor the irrigation system performance from mobile and web based platforms. The controllers monitor the irrigation systems and alert staff of any mainline or lateral breaks, or other abnormal operating conditions to prevent water waste. Staff can also log repairs made and create irrigation based GIS maps for reference when locating equipment. Modeling and statistical features on each controller can build a history of water use to develop a baseline expected water use. Each system is protected by a master valve to prevent unrestricted flow in the case of a mainline break. Industry standard control valves, spray sprinklers, drip irrigation components and Class 200 PVC will be used in the construction of the system. In-line fertilization systems help to decrease salt bound in the soil as well as introduce nutrition for plant health. The irrigation system ensures that when natural precipitation is not adequate for the plant material it can provide additional water to protect the investment of the plant material.



RAIN GARDEN LOCATIONS



ILLUSTRATIVE LONGITUDINAL SECTION AT BRENTWOOD SQUARE



ILLUSTRATIVE LONGITUDINAL SECTION ENLARGEMENT AT BRENTWOOD SQUARE

PERFORMANCE METRICS

HOW DOES THE DESIGN OF 84TH STREET STACK UP?

Throughout the schematic design phase, the city and consultant team regularly referred to the initial goals of the project to ensure not only that they were being addressed, but that they produced tangible, quantifiable improvements to the corridor. Many of the recommended improvements have both environmental benefits while also benefiting the pedestrian experience. With a baseline (existing condition) that is currently focused almost exclusively on the conveyance of automobiles, the proposed design works harder to create a more comprehensive piece of infrastructure for the City of La Vista.

ANTICIPATED 84TH STREET PERFORMANCE METRICS

142
Opportunities to sit along the corridor

8
Additional neighborhood connections

11x
Shaded Sidewalk area at maturity

6x
Total tree canopy at maturity

15'
Average distance of path from street

250%
Increase in path width

1.2M
Gallons of stormwater intercepted each year

12hr
Average extended daily use

30%
Reduction of perception of road noise


Giles Rd

IMPLEMENTATION

COST OPINION

The table below illustrates and opinion of probable cost for the 84th Streetscape project, including portions of Brentwood Drive and Park View Boulevard as defined in the exhibits herein. The amounts below are subject to change.

Schematic Design - Opinion of Probable Cost	**% RANGE**	**% USED**	**COST**	
84th Street, Brentwood and Park View				
ROW Acquisition			$65,450	
Civil - roadway, grading and drainage improvements			$5,856,668	
Landscape, irrigation and lighting			$8,180,725	
SUBTOTAL			**$14,102,844**	(A)
Additional Costs	**% RANGE**	**% USED**	**COST**	
Contingencies	(15% - 30%) of (A)	15%	$2,115,427	(B)
Misc Removals	(1-10%) of (A+B)	1%	$21,154	(C)
SUBTOTAL (CONTINGENCIES)			**$2,136,581**	
Construction Cost Opinion (rounded):			**$16,200,000**	

Notes:
an appraisal and/or appraiser's opinion of ROW acquisition costs is recommended
cost opinion assumes improvements within the right-of-way only, with the exception of the ROW acquisition along Brentwood Square
List of exclusions:
survey, design, or construction phase services
utility removals, replacement or relocations
legal, finance or fees.
artistic arches or lighting at proposed bridges; recommend establishing a budget and soliciting proposals.
improvements to 84th Street roadway such as turn lanes, decel lanes, bus lanes, signals, or rehabilitation.
asphalt pavement resurfacing
curb and gutter replacement outside of the intersection corners

IMAGE SOURCES

Klapper, Nielhardl & Partner landscape architects. *Poa Lumina on the Niendorf beach promenade.* German Architects. <https://www.german-architects.com/de/pages/page_item/dlp-2013-studio-dl>

IP 44. *#2 Bollard Ivy Light.* On-light. <https://www.on-light.de/home/news/article/ausgezeichnet-elegante-lichtskulptur.html>

Nola Industrier. *Dyning Sectional Backless Steel Bench.* Archiproducts. <http://www.archiproducts.com/en/products/nola-industrier/steel-and-wood-bench-with-back-dyning-bench-with-back_98742>

Forms and Surfaces. *Bay City Bike Rack.* Forms and Surfaces. <https://www.forms-surfaces.com/bay-city-bike-rack>

Meyer Silberberg Landscape Architects. *Limelight.* Tetbury, Gloucestershire, UK. Landezine. <http://www.landezine.com/index.php/2011/01/limelight-by-meyer-silberberg-landscape-architects/limelight-meyer-silberberg-landscape-architecture-03/>

Andrea Cochoran. *Cranbrook Educational Community Campus median.* Detroit, MI. Thinking Outside the Boxwood. <http://thinkingoutsidetheboxwood.com/?tag=michigan>

Hargreaves Associates. *Stanford University Science and Engineering Quad.* Standford, CA. <http://www.hargreaves.com/work/stanford-university-science-and-engineering-quad/>

Structura. *Console-Bussy aluminum bracket and wood pole.* <https://structura.com/product/bussy/>

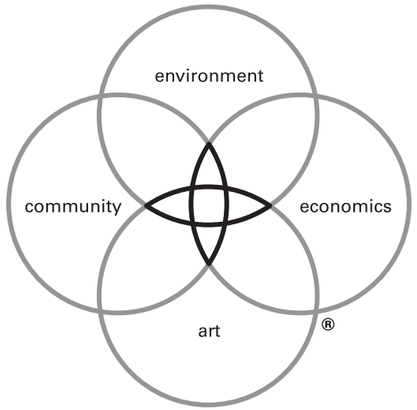
Rotech LED. *LUG-10 RGB Recessed light.* <https://rotechled.com/products/lug-10-rgb>

Hill Thalis Architecture + Urban Projects Jane Irwin Landscape Architecture. *Hassett Park.* Campbell, AU. Landezine. <http://www.landezine.com/index.php/2017/05/hassett-park-by-jane-irwin-landscape-architecture/>

Miela. *Miela Park Bench.* CityLife. <http://www.smekabcitylife.se/produkter/stadsmobler/parkmobler/miela/>

Jane Irwin Landscape Architecture. *Constitution Avenue.* Canberra, AU. Landezine. <http://www.landezine.com/index.php/2017/04/constitution-avenue-canberra-by-jane-irwin-landscape-architecture/>

Design Workshop. *Baton Rouge Greenway.* Baton Rouge, LA. Mark Bienvenu blog. <http://www.msbphoto.com/blog>



DW LEGACY DESIGN®

We believe that when environment, economics, art and community
are combined in harmony with the dictates of the land and needs
of society, magical places result — sustainable places of timeless beauty,
significant value and enduring quality, places that lift the spirit.
Design Workshop is dedicated to creating Legacy projects:
for our clients, for society and for the well-being of our planet.

DESIGNWORKSHOP
www.designworkshop.com

84th Street Streetscape - 84th Street Right-of-Way Improvements

Opinion of Probable cost

Schematic Design - Opinion of Probable Cost	**% RANGE**	**% USED**	**COST**	
84th Street, Brentwood and Park View				
ROW Acquisition			$65,450	
Civil - roadway, grading and drainage improvements			$5,856,668	
Landscape, irrigation and lighting			$8,066,955	
Artistic overhead bridge structure			$2,500,000	
SUBTOTAL			**$16,489,074**	(A)
Additional Costs	**% RANGE**	**% USED**	**COST**	
survey, design and construction phase services	(8% to 12%) of (A)	8%	$1,319,126	(B)
utility removal, replacements, or relocations	(15% - 30%) of (A)	15%	$2,473,361	(C)
Misc Removals	(1-10%) of (C)	1%	$24,734	(D)
General contingencies	(5%) of (A)	5%	$824,454	(E)
SUBTOTAL (CONTINGENCIES)			**$4,641,674**	
Construction Cost Opinion (rounded):			**$21,100,000**	

Notes:

- all costs are provided as a rough order of magnitude to reflect a schematic design level of detail
- an appraisal and/or appraiser's opinion of ROW acquisition costs is recommended
- The artistic overhead bridge structure opinion of cost is an average cost based on other projects of similar nature and size . It is not based on engineering design research, but strictly publicized project costs. Establishing a budget and soliciting proposals is
- cost opinion assumes improvements within the ROW and easements only
- improvements to the roadway such as turn lanes, decel lanes, bus lanes, signals, or rehabilitation are not included
- all existing guardrail is assumed to remain in place
- all existing curb and gutter is assumed to remain in place, except where necessary to remove with proposed improvements
- all existing roadway asphalt assumed to remain in place, except where necessary to remove with proposed improvements

84TH STREETSCAPE PLAN
EXISTING CONDITIONS REPORT

PREPARED FOR THE CITY OF LA VISTA
AUGUST 2018



PREPARED BY
DESIGNWORKSHOP


BRENTWOOD PLAZA
FRONT
FOR LEASE
Asian Health Massage
BACK
Underground
Gaming

CONTENTS

EXISTING CONDITIONS **5**

SITE ANALYSIS 6

REGIONAL ANALYSIS 14

WAYFINDING AND SIGNAGE 23

LIGHTING 25

DESIGN STANDARDS 27

TRANSPORTATION AND MOBILITY CONSIDERATIONS 30

RELATED STUDIES 36

On the Cover: 84th Streetscape sign from I-80 | La Vista, NE
Opposite: 84th Streetscape | La Vista, NE


SCHOOL
SPEED LIMIT
40
WHEN FLASHING

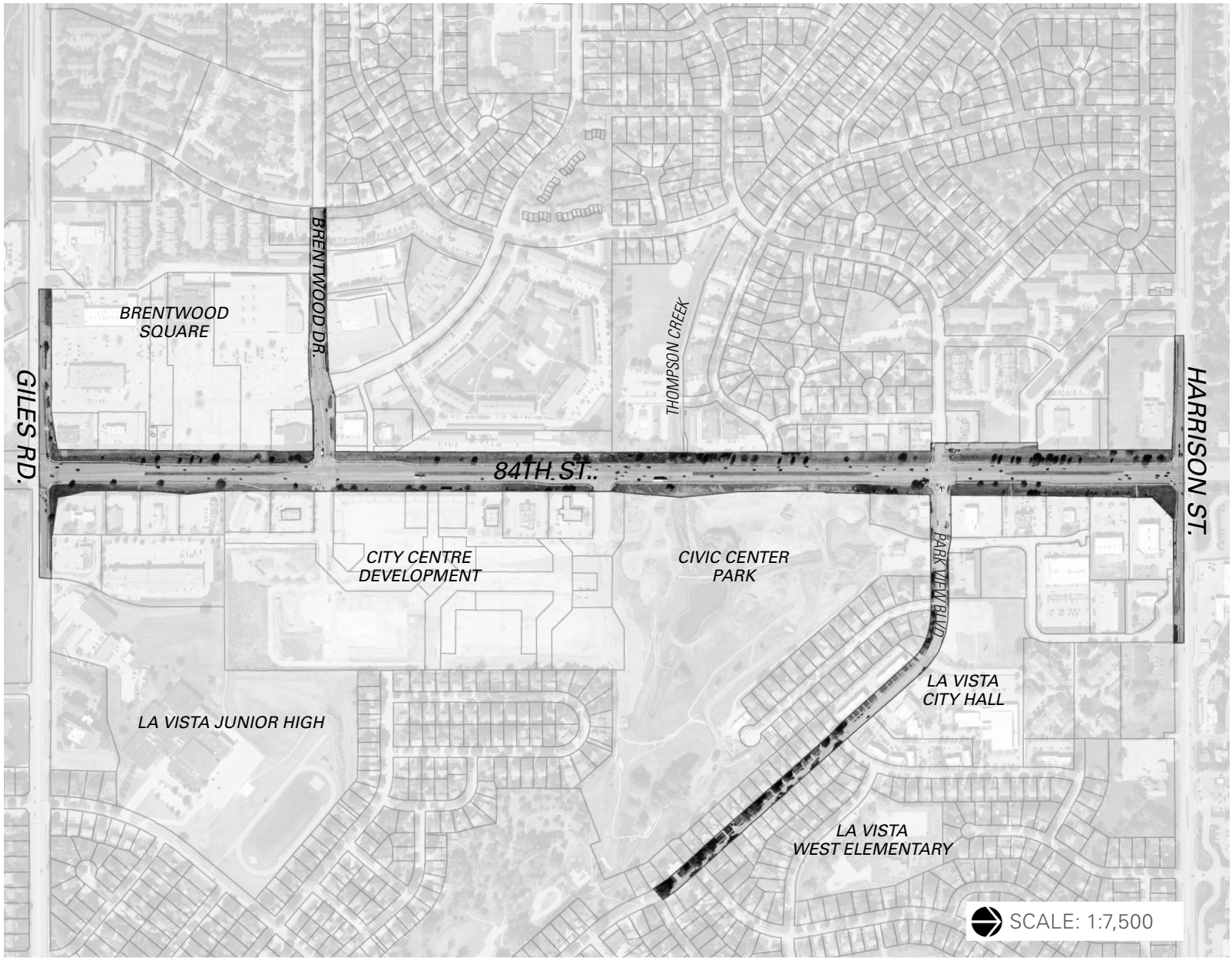
EXISTING CONDITIONS

To develop appropriate changes to the streetscape, an understanding of existing conditions is necessary. The following is a summary of information that examines factors observed at both a regional scale and at the scale of the site. This examination will provide the basis for design of the project.

SITE PHYSICAL FEATURES

La Vista's portion of 84th Street from Harrison to Giles is not unlike many of the arterial commuter streets in the region. Because the street was designed to rapidly convey automobiles, the amenity zone and median largely neglect the pedestrian experience. Narrow sidewalks, limited lighting, an inconsistent tree canopy, no street furnishings, and minimal accommodations for transit send a message that people shouldn't occupy the space. Commercial pole signage dominates views for the automobile experience and detracts from the incredible views toward the Thompson Creek basin and proposed Civic Center Park. There is little rhythm or cadence to signify a special experience.

The ample right-of-way, open drainage channels, minimal overhead utilities, and rolling grade changes are features that many roads do not have. They are unique conditions that can be better emphasized.





EXISTING 4' DETACHED SIDEWALK IN POOR CONDITION



SATURATED AREAS WITHIN DRAINAGE CHANNELS



LARGE AUTOMOBILE-SCALED RIGHT-OF-WAY



CONSTRUCTION OF PARK UNDERWAY



OPEN DRAINAGE CHANNEL WITH SEVERE EROSION



THOMPSON CREEK EXTENDS BENEATH 84TH STREET



CONSTRUCTION OF CITY CENTRE UNDERWAY



HIGHLY VISIBLE UTILITY VAULTS



MINIMAL BUS ACCOMMODATIONS



LARGE AREAS OF RIGHT-OF-WAY



OPEN CHANNELS PROVIDE OPPORTUNITY TO MOVE PEDESTRIANS AWAY FROM ROADWAY EDGE



MINIMAL COMMUNITY SIGNAGE AND WAYFINDING



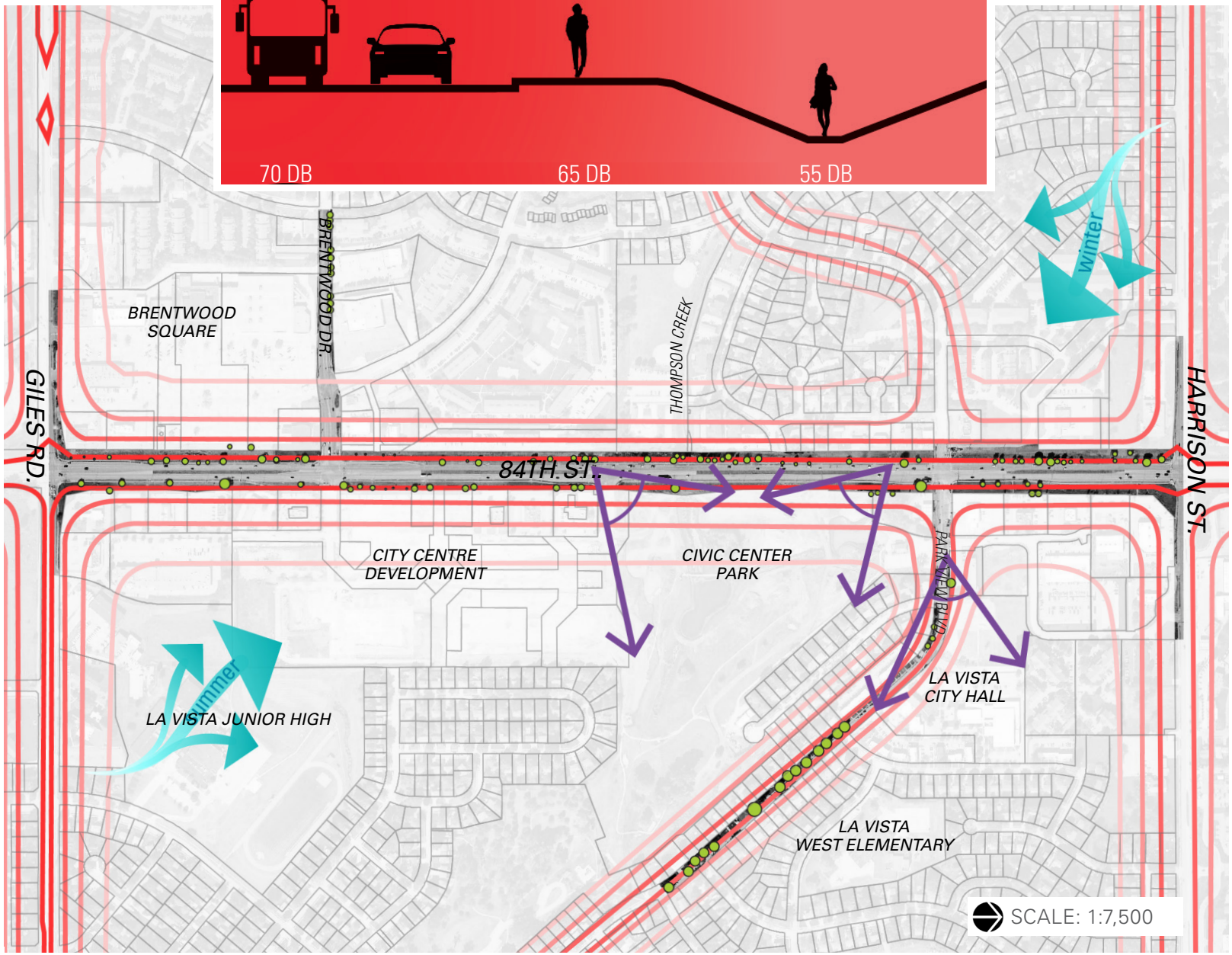
DOMINANCE OF LARGE COMMERCIAL POLE SIGNAGE



STEEP GRADING IN AREAS

SITE HUMAN COMFORT

Noise levels along 84th Street were observed to reach nearly 70dB, or about the level of a vacuum cleaner which is enough to make phone conversation difficult. On site, the design team observed a 10 decibel difference between the sidewalk next to the street and the drainage ditch below. The prevailing summer and winter winds and directional views suggest that a pedestrian would prefer to be on the east side of the street.

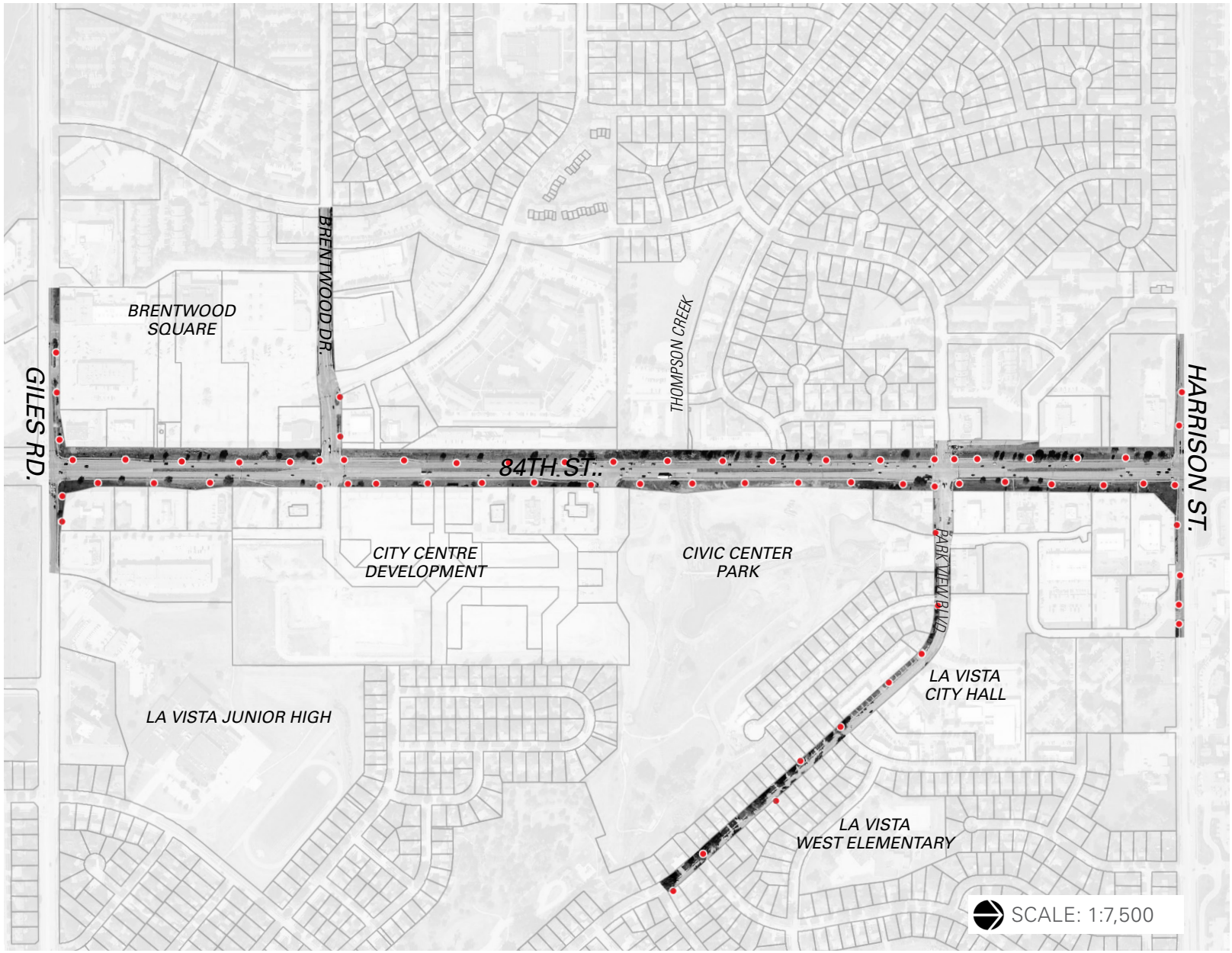


LEGEND

- 25-35 dB
- 35-45 dB
- 45-55 dB
- 55-70 dB
- Existing Tree
- Directional Views
- Prevailing Winds

SITE LIGHTING + UTILITIES

The current lighting in the project area includes cobra head fixtures at 250' on-center. These provide just enough lighting for the roadway and are scaled to accommodate vehicular movement. Overhead utilities align with the edge of the right-of-way which creates a tidy edge at the roadway.

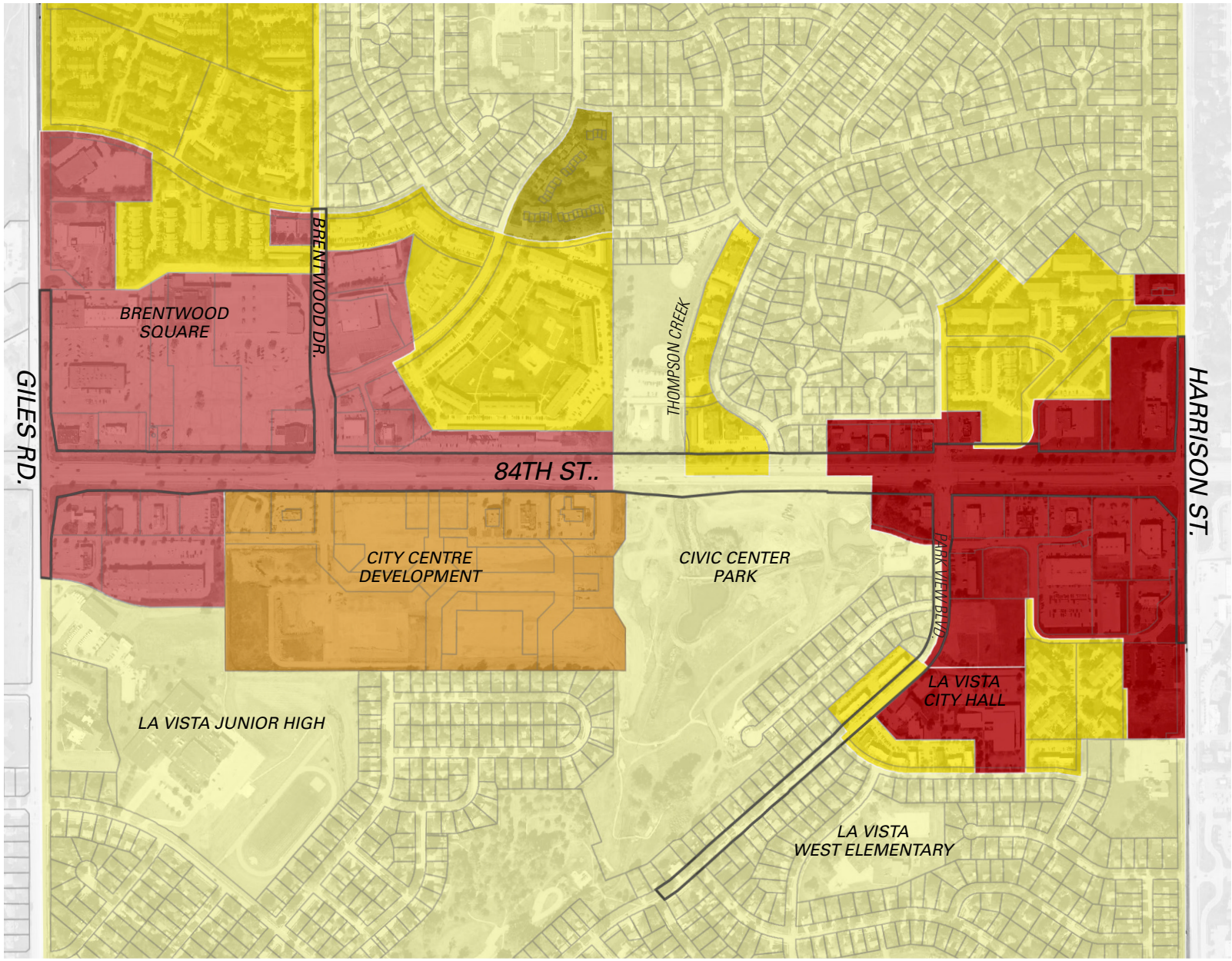


LEGEND

Street Light

SITE ZONING

Current zoning abutting the project area favors a neighborhood block pattern that concentrates commercial activities along 84th Street and at major intersections. With the implementation of Corridor 84, however; the zoning promotes mixed use buildings with shallow setbacks, pedestrian oriented design, and encourages health and well-being of residents.

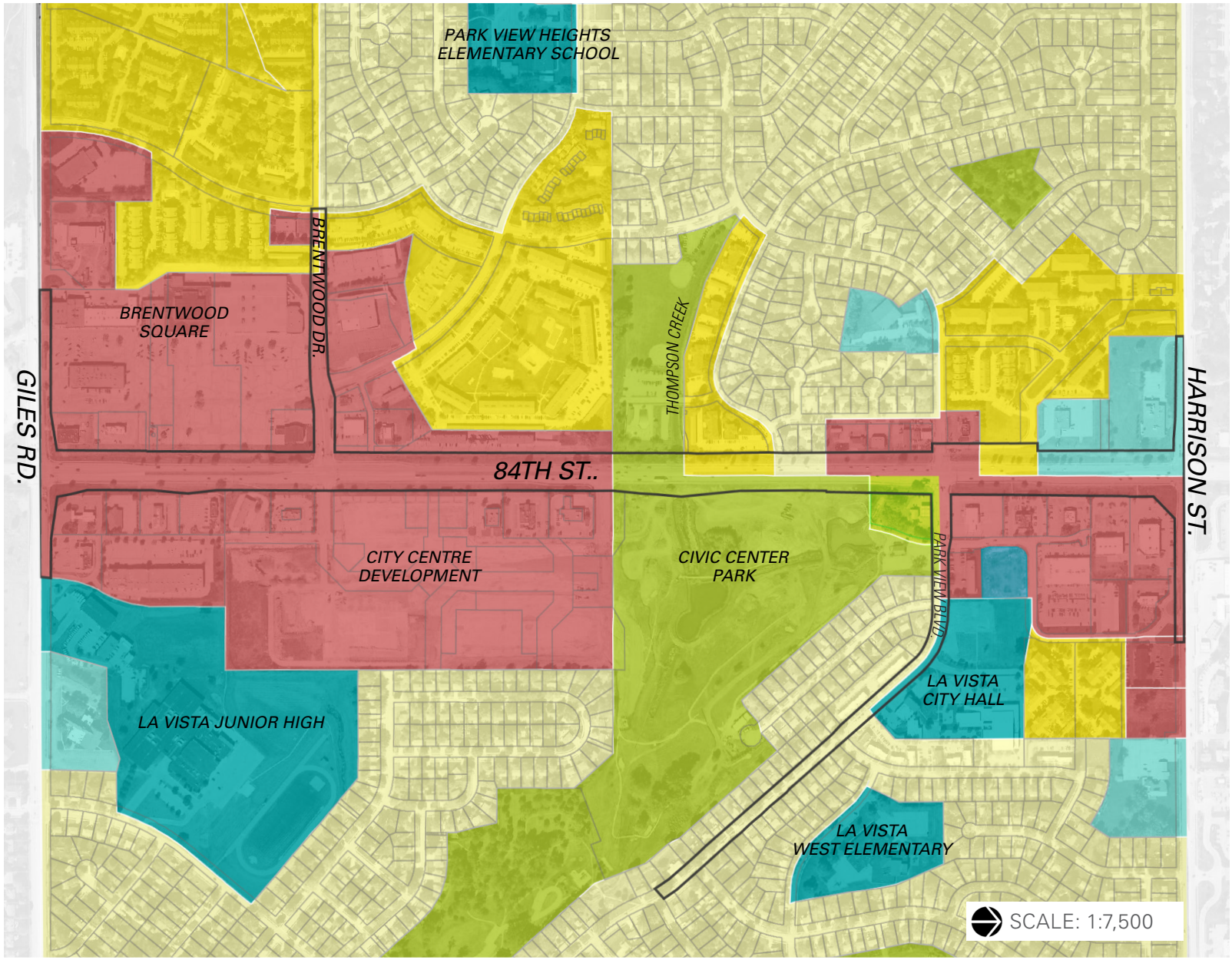


LEGEND

- Shopping Center District
- General Commercial
- Mixed use
- Singe-Family Residential
- High Density Residential
- Condo Residential

SITE FUTURE LAND USE

Future land uses for 84th Street begin to layer public use areas such as parks and civic and institutional campuses into the current commercial and residential nature of the street. This will provide a larger pedestrian user base than currently exists.

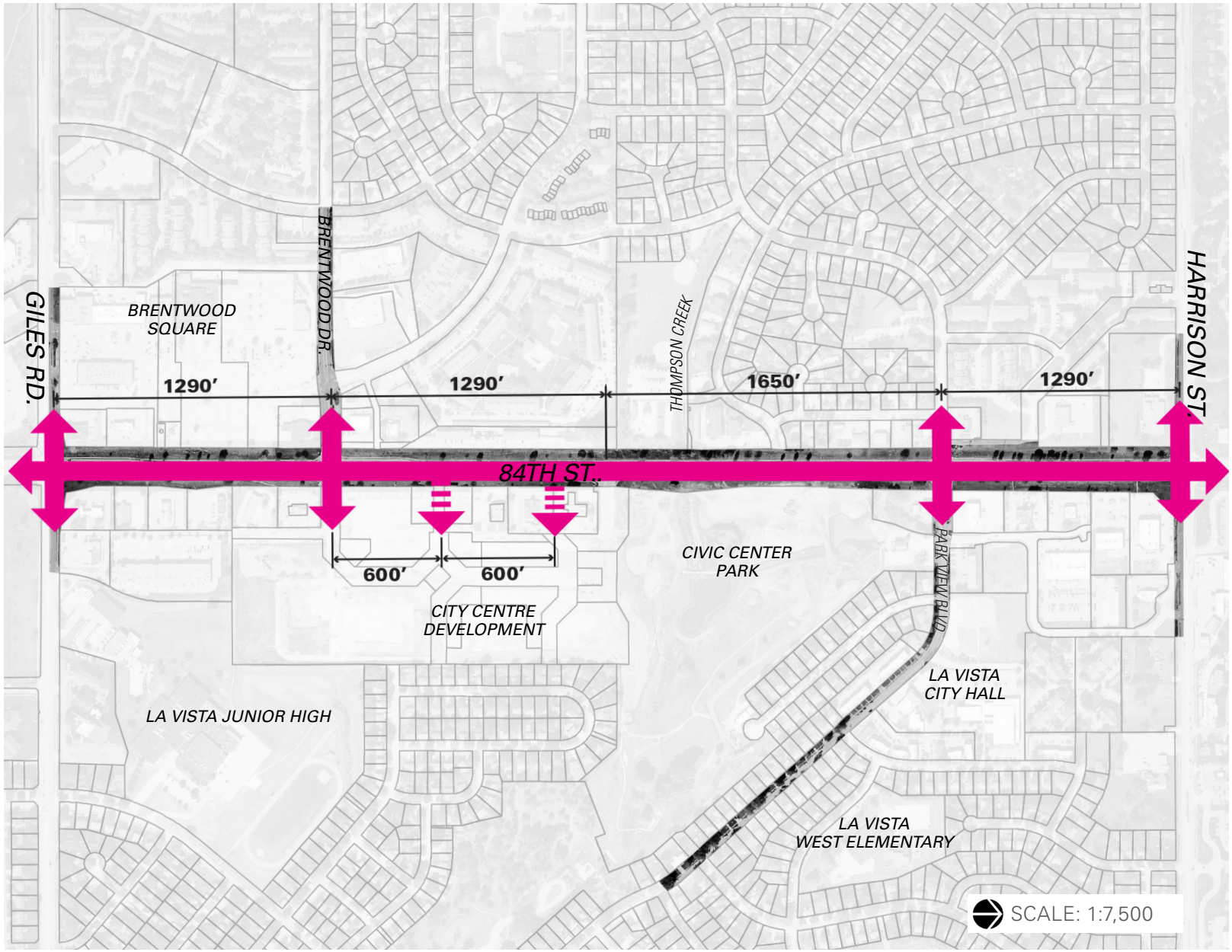


LEGEND

- Commercial
- Med Density Residential
- High Density Residential
- Park
- Civic/Institutional
- Quasi-Public

SITE CURB CUTS + INTERSECTIONS

Vehicular connections to intersecting streets is limited which creates a large block length. This large block length reduces potential conflicts with intersecting streets however, it encourages a higher speed along 84th Street. Proposed redevelopment includes an additional access point with a right-in, right-out access point that reduces the block length in the La Vista City Centre Development to 600'.



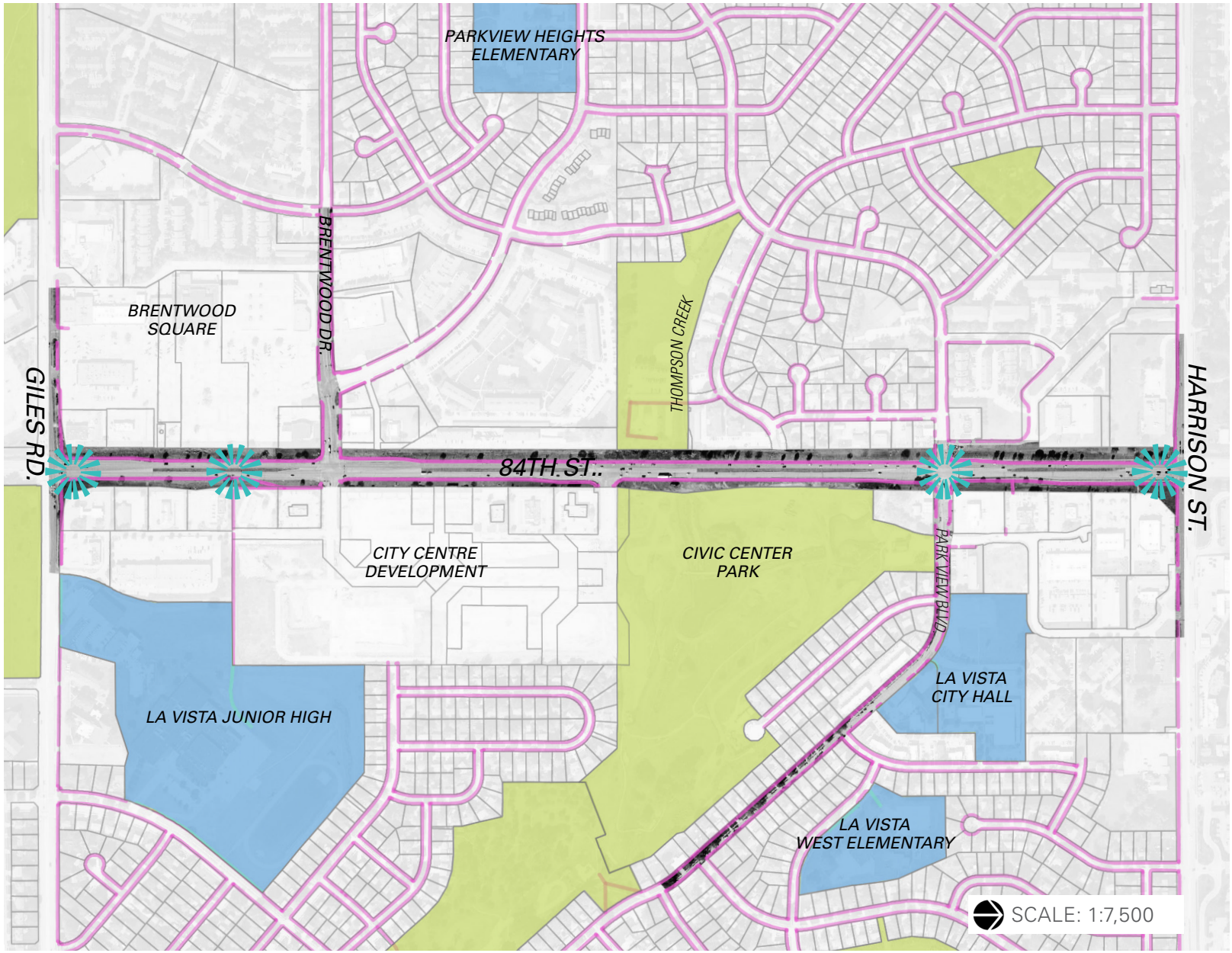
LEGEND

Existing Vehicular circ.

Proposed Vehicular circ.

SITE OPEN SPACE + PEDESTRIAN NETWORK

The current sidewalk system is continuous and runs the entire length of La Vista's 84th Street. A complete network of detached sidewalks throughout adjacent subdivisions provides opportunities to comprehensively connect the pedestrian network. The close proximity of the narrow sidewalk (4 ft) to the street, however, compromises human comfort and deters use.

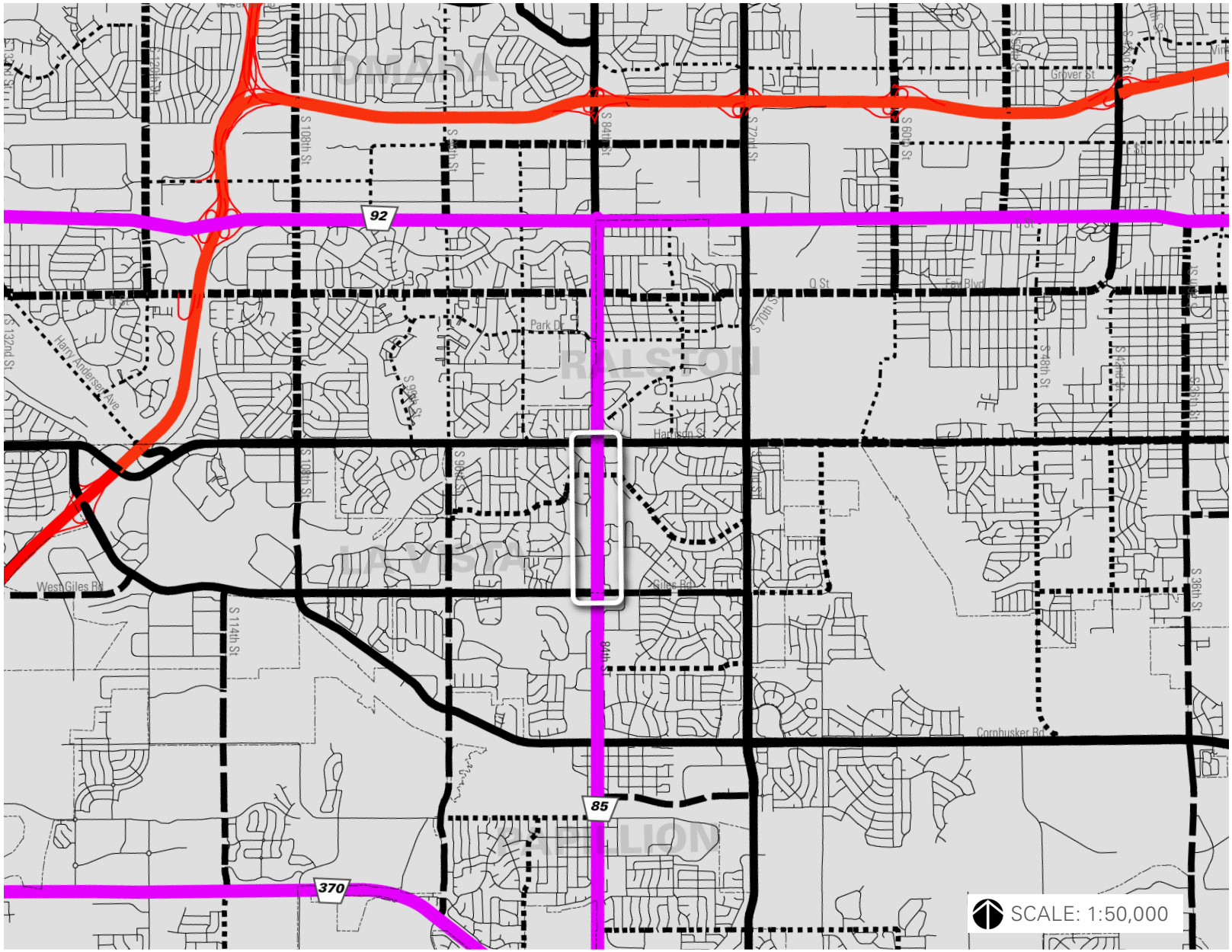


LEGEND

- Existing Sidewalk
- Open Space
- Public/ Educational
- Designated Crossing

REGIONAL ROADWAY CLASSIFICATION

Built on a grid of 1 mile increments, 84th Street serves as a major north/south connector for the southeast Omaha metro. From Highway 370 to Highway 92, 84th Street is classified as a highway and as such is governed by the Nebraska Department of Transportation (NDOT).

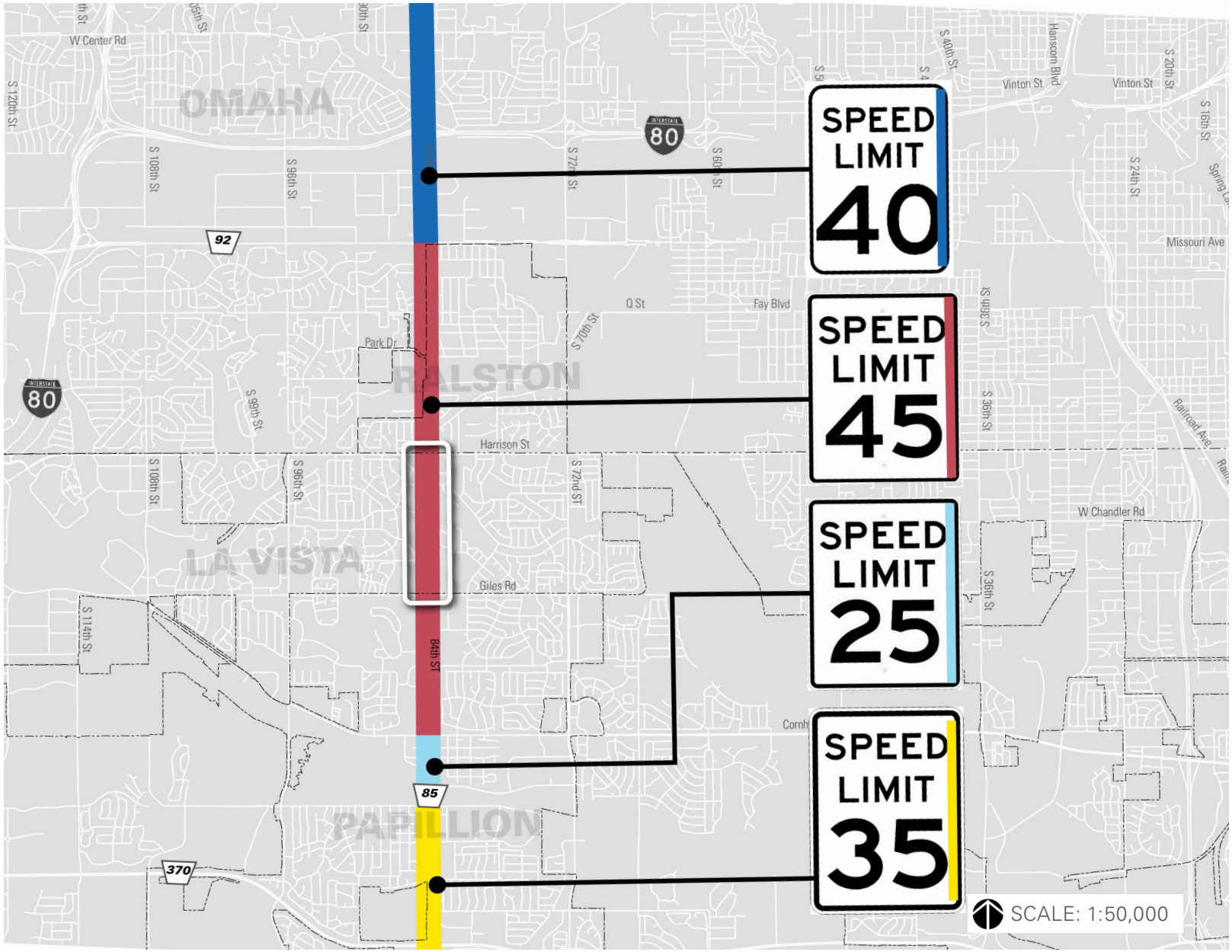


LEGEND

- Project Location
- Freeway
- Highway
- Major Arterial
- Minor Arterial
- Collector
- Local

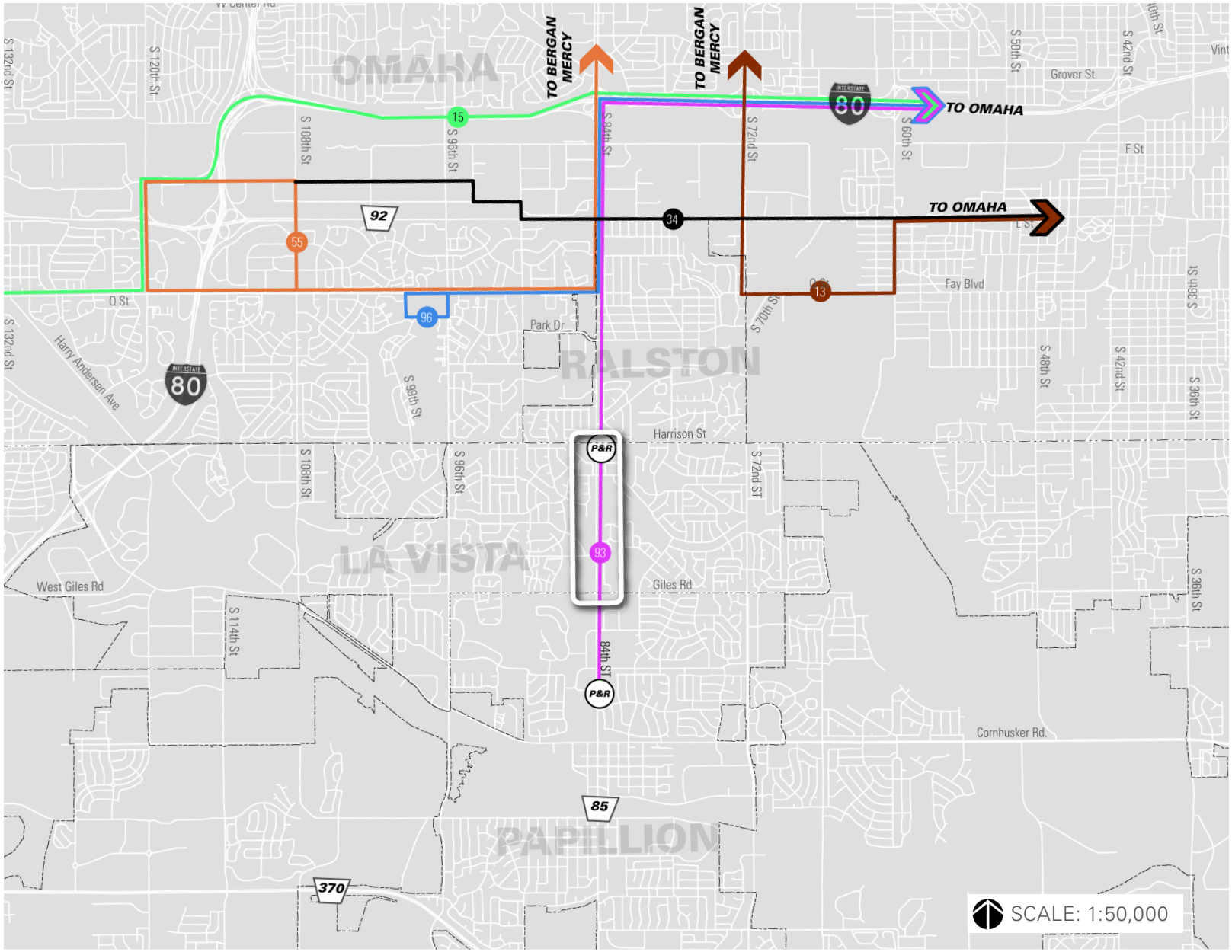
REGIONAL POSTED SPEED

The posted speed limit varies along 84th Street. In the south section, where storefronts and residential neighborhoods font the street, the posted speed limit is 25 MPH. For the majority of the street, including the study area, the speed limit increases to 45 MPH. At this speed, the average stopping distance for vehicles is 145 ft. This is important to consider as more pedestrians will be present in the corridor as it urbanizes.



REGIONAL TRANSIT CONNECTIONS

Omaha's Metro transit service provides an express bus to La Vista on Route 93, twice in the morning and twice in the evening from Papillion to downtown Omaha via I-80. A reverse commute option from Omaha to Papillion is also available twice daily. While the ridership is low and the service is infrequent, it is the only route that serves La Vista and Papillion.

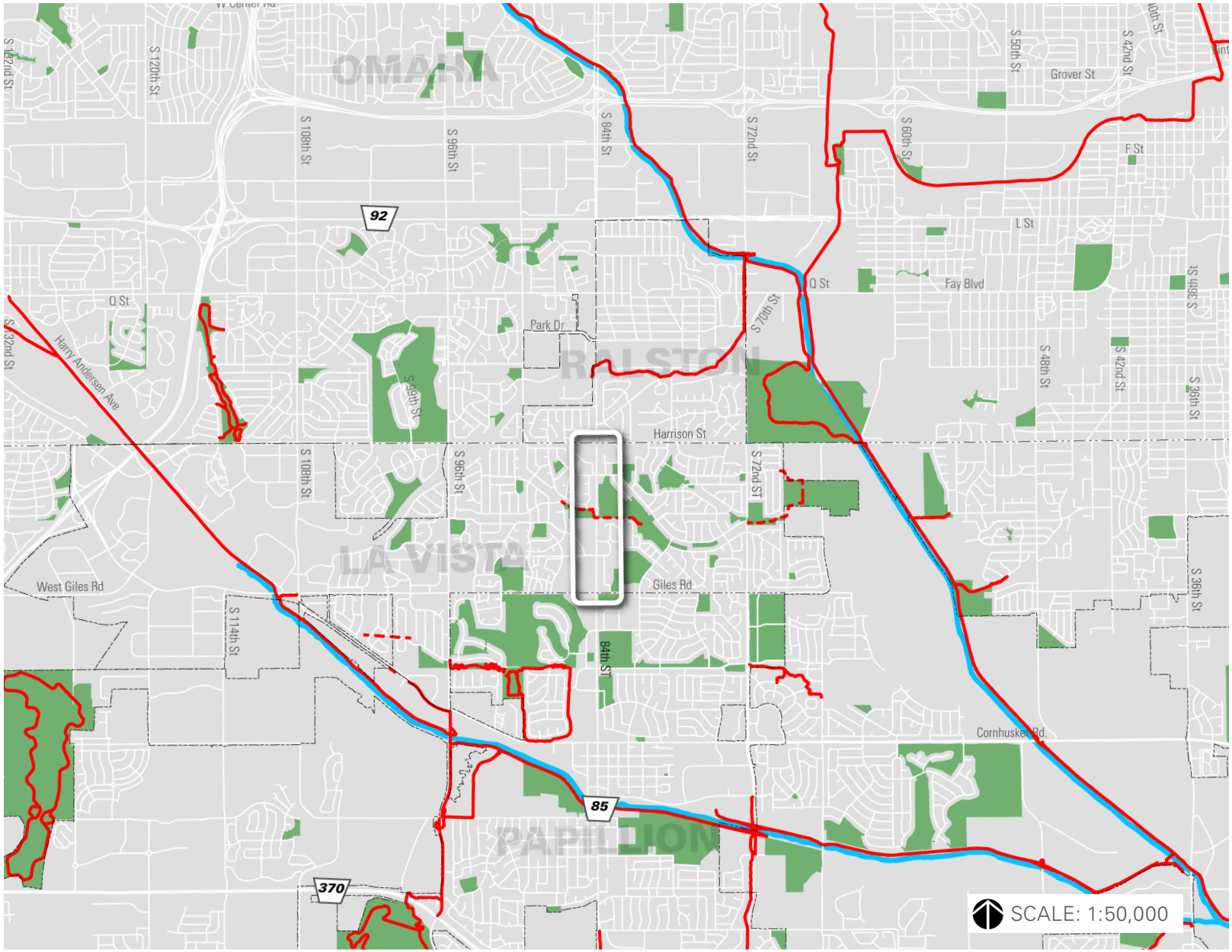


LEGEND

- 96 Bus Route 96
- 55 Bus Route 93
- 93 Bus Route 55
- 34 Bus Route 34
- 15 Bus Route 15
- 13 Bus Route 13

REGIONAL OPEN SPACE + TRAIL NETWORK

The residents of southwest Omaha metro area are fortunate to have access to many regional and neighborhood parks. Many of these include trails for pedestrians and bicyclists. With the development of Civic Center Park, a trail addition is planned underneath 84th Street that will connect both sides of the park. This is a great opportunity to consider 84th Street as a meaningful extension of and connector to the larger trail network.



LEGEND

- Trails
- Rivers
- Parks + Open Space

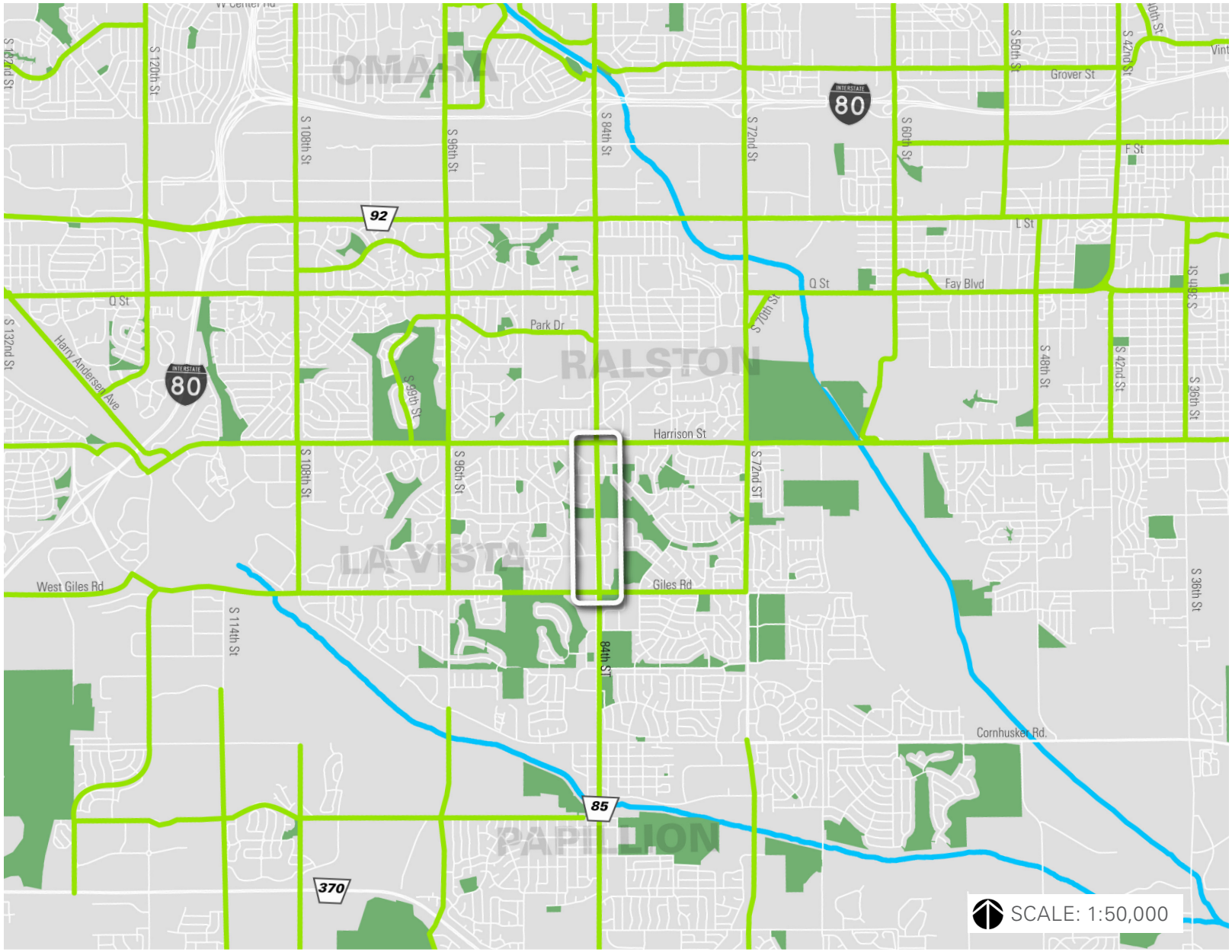
REGIONAL PROPOSED GREEN/ COMPLETE STREETS

Long range park and streets plans for La Vista, Omaha, and Papillion recommend a comprehensive program of complete and green streets. The most continuous green/ complete street planned in the southwest Omaha metro is 84th Street. According to the La Vista Park and Recreation Master Plan, green streets should include the following elements:

- One or more rows of trees along both sides of the roadway (along City right-of-way or on private property). Specific tree types are recommended in the plan.
- Space for wide sidewalks or off-street trails on one or both sides of the roadway.
- No overhead utility wires that interfere with the growth of overstory trees.

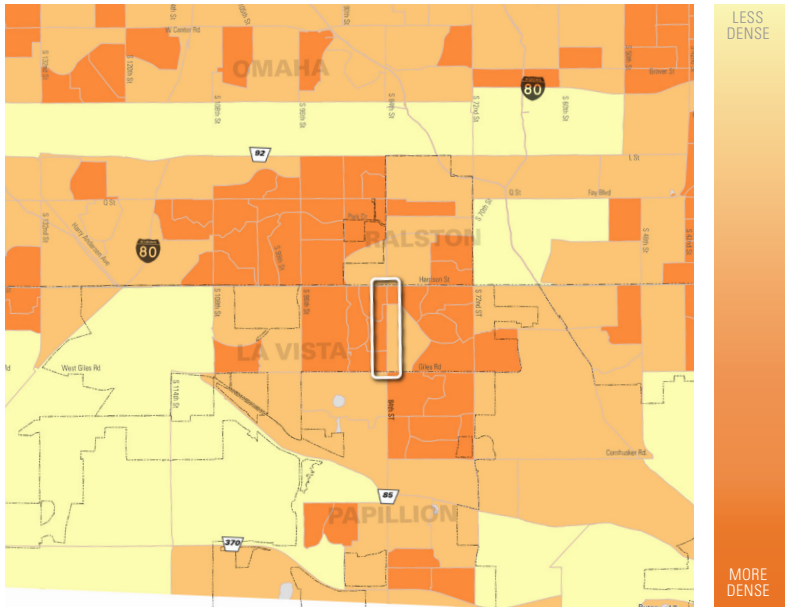
LEGEND

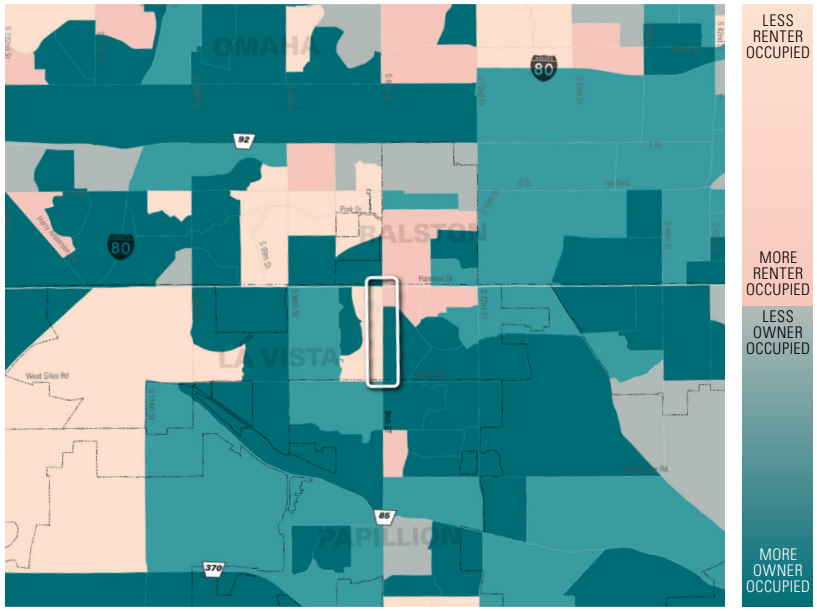
- Complete/ Green Streets
- Rivers
- Parks + Open Space

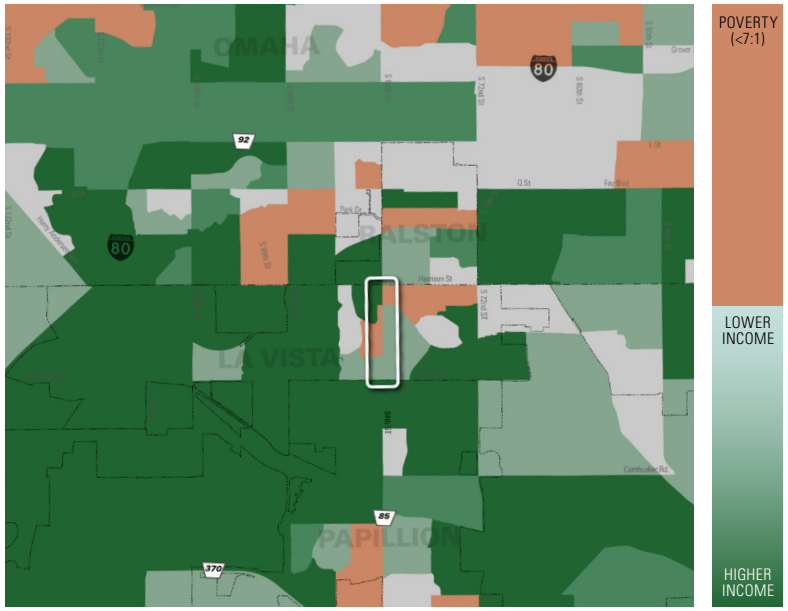


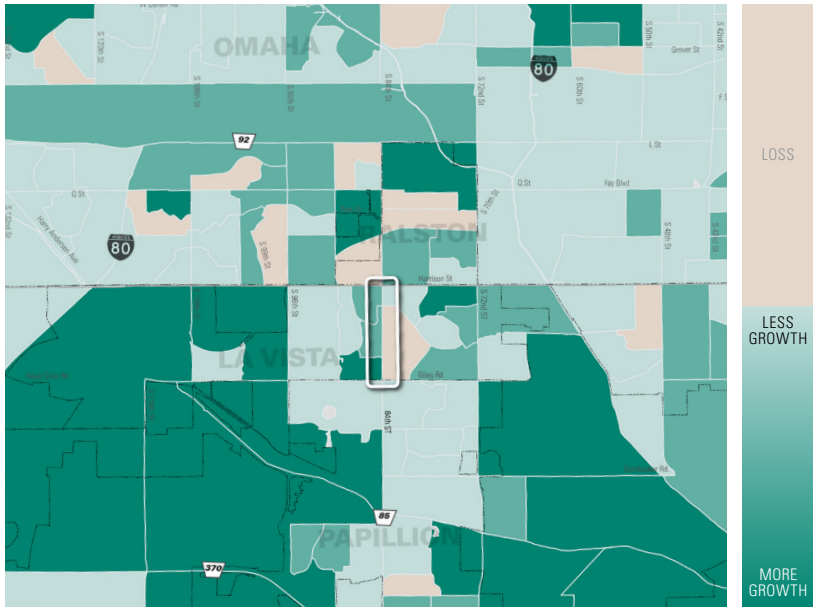
REGIONAL DEMOGRAPHICS

Population density, renter occupancy, poverty levels and anticipated growth are high on the west side of the 84th Street frontage. Although the Vision 84 plan suggests that a notable difference between east and west La Vista that takes place at 84th Street, a notable demographic shift appears to be concentrated at the street itself with the presence of higher poverty levels and a greater density. The immediate access suggests that 84th Street could be an amenity for underserved populations.



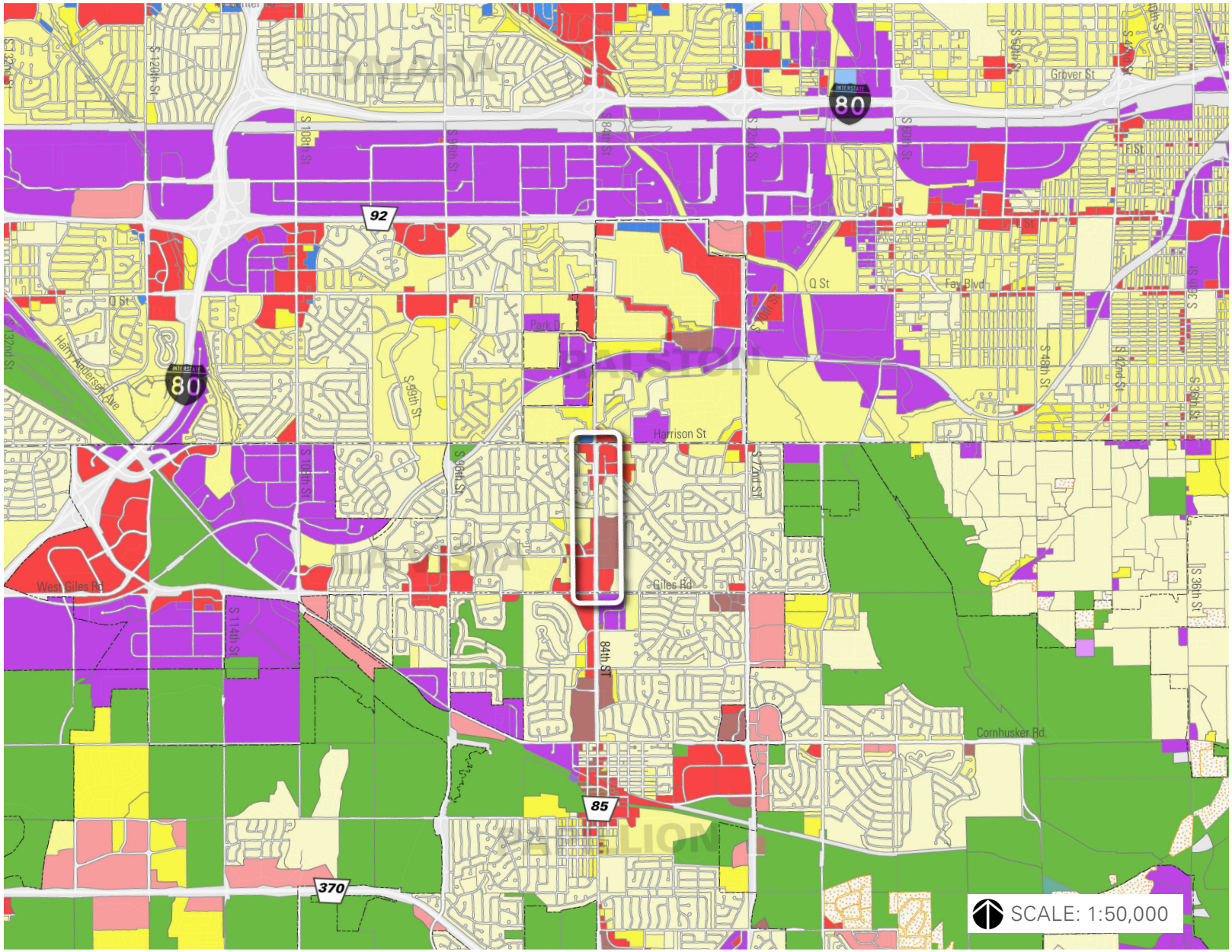






REGIONAL ZONING CONTEXT

The current zoning for La Vista, Ralston, Omaha, and Papillion encourages a development pattern that illustrates a neighborhood block where largely commercial land uses are concentrated along major arterial roads and intersections and the interior of the blocks are largely zoned for residential uses. Industrial zoning is scattered throughout the region and heavily concentrated south of the Interstate 80 corridor.

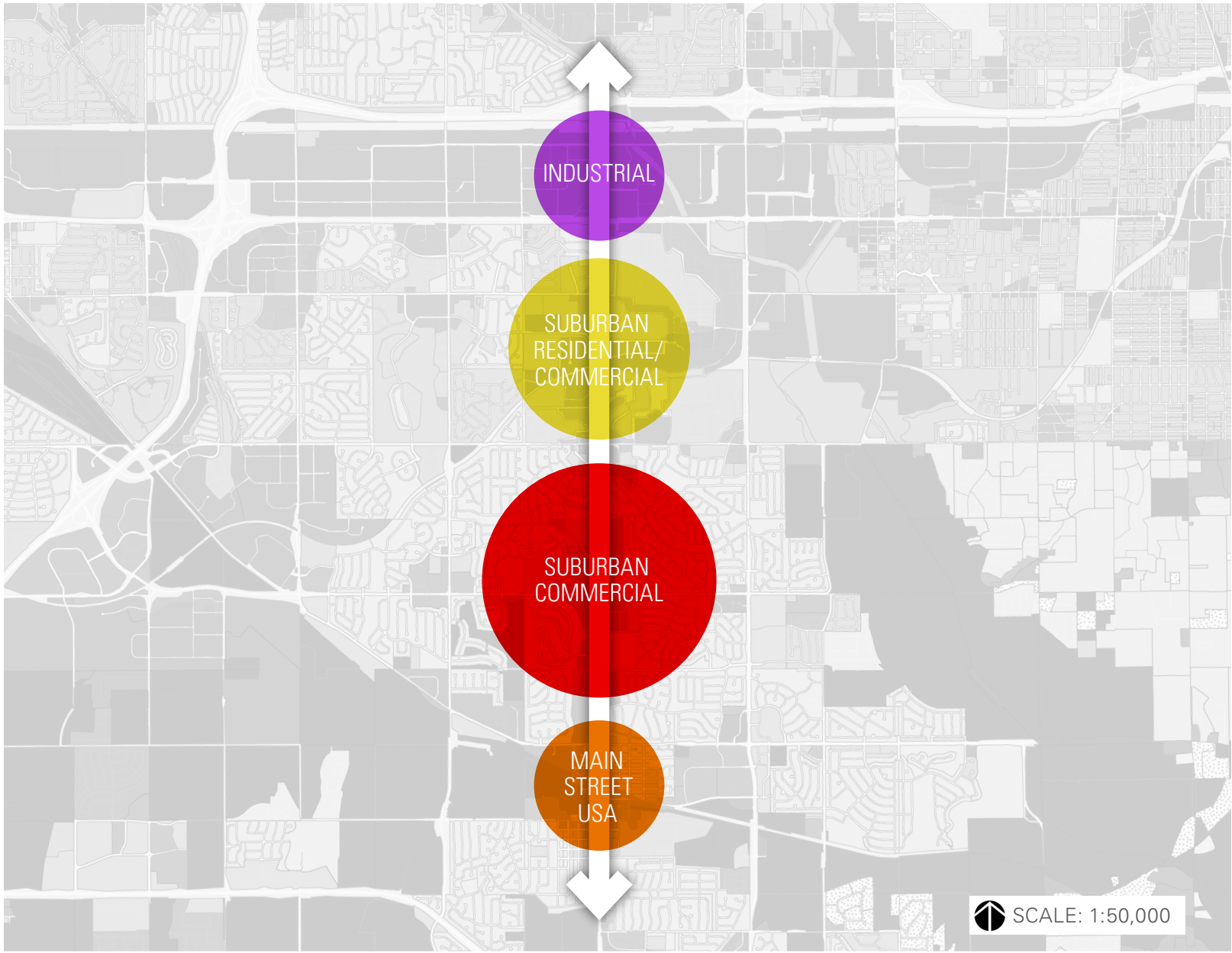


LEGEND

- Commercial
- Residential
- Industrial
- Agricultural
- Office

REGIONAL EXISTING CHARACTER ZONES ALONG 84TH STREET

The zoning along 84th Street suggests a procession of character areas throughout the corridor. Directly south of the I-80 corridor is dominated by industrial uses. Crossing L Street (state highway 92), however, changes character at Bethel cemetery, which signifies a more calming atmosphere. While some businesses flank intersections in this area, low-density residential, either fronting the street or buffered from the street, is a dominant land use pattern. Entering La Vista, suburban commercial pad development with deep setbacks and large parking lots are most common. This character zone continues through the project area to north Papillion. The historic Main Street to the south, built along Papillion Creek begins a district reminiscent of many historic districts throughout the country complete with storefronts, on-street parking and attached sidewalks.



WAYFINDING AND SIGNAGE

EXISTING SIGNAGE AND WAYFINDING

Signage and wayfinding from a vehicular perspective is limited to basic traffic control devices and signage as regulated by the Nebraska Department of Transportation (NDOT). Likewise, for city identity, there are only pole-mounted banners. There are no signs that correspond to the city culture and spirit. The appearance of the street could benefit greatly from placemaking through signage design. These are wayfinding and signage challenges that the team has identified based on the information gathered from the site visit and historical imagery.

Our full analysis of deficiencies includes:

- Lack of city identification/monuments
- incomplete family of signage types
- Outdated and inconsistent signage style/font/form/finishing/color
- Incompatible street pole sign (banner and information sign) with surrounding retail shops sign
- Faded or decrepit traffic control signs (such as pedestrian crossing ahead signage)
- Cluttered retail advertising signs along roadway
- Unclear/inconsistent speed limit sign (School zone speed)
- Faded or decrepit bus and metro station signs



LIGHTING

EXISTING LIGHTING

The City of La Vista does not have a specific street lighting ordinance but relies on the local utility provider, Omaha Public Power District (OPPD), for lighting standards and code requirements.

84th Street is currently illuminated with drop-lens cobra head style utility grade luminaires (light fixture) mounted on 12'-0" mast arms from 40'-0" tall galvanized poles. The light source is 200 watt High Pressure Sodium (HPS) lamps which have a very warm color (2200°K CCT) with fairly poor color rendering (22 CRI) and a moderate average life expectancy of 24,000 hours. The poles are spaced approximately 250' on center, on both sides of the roadway, staggered, and on intersection signal poles.

This luminaire, height, spacing arrangement should result in approximately 1.0 footcandle (FC) average illuminance level. This level is appropriate based on the Illuminating Engineering Society (IES) recommendations and tends to be supported by a few select illuminance level readings on-site.

Giles Road has the same luminaire except on 30'-0" poles.

Brentwood Drive has wood utility pole mounted 100 watt HPS and 175 watt mercury vapor cobra heads mounted on 25'-0" galvanized poles.

Park View Boulevard also has wood utility pole mounted 100 watt HPS and 175 watt Mercury Vapor cobra heads.

Standard illumination levels cannot be surmised for the three roads. 100 watt High Pressure Sodium (HPS) lamps have a very warm color (2000°K CCT) with fairly poor color rendering (22 CRI) and a moderate average life expectancy of 24,000 hours.

175 watt mercury vapor lamps have a cool color (5700°K CCT) with very poor color rendering (15 CRI) and a moderate average life expectancy of 24,000 hours (some phosphor coated lamps have better color characteristics but are typically not used in street applications). Per the Energy Policy Act, mercury vapor lamps are no longer allowed to be produced.

There is no dedicated pedestrian equipment or lighting, there is no specialty lighting such as for public art, and there is no accent lighting such as landscape or decorative luminaires.

DESIGN STANDARDS

NDOT STANDARDS

The Nebraska Department of Transportation Roadway Design Manual describes recommended design techniques for the detailed design of roadways. It covers roadway alignment, typical roadway cross-sections, intersections and driveways, interchanges and grade separations, pedestrian and bicycle facilities, and other elements of roadway design.

The introduction to the Manual explains that the NDOT design criteria presented in the manual generally conform to the guidelines of the American Association of State Highway and Transportation Officials (AASHTO) in publications such as AASHTO's "A Policy on Geometric Design of Highways and Streets." The manual states, "Where nationwide guidelines do not fit Nebraska conditions, NDOT design practice differs from AASHTO guidelines. For those situations NDOT guidelines take precedence over AASHTO's guidelines. However, if the NDOT design criteria cannot be attained the designer should follow AASHTO's guidelines."

Further, the introduction states "NDOT and the Board of Public Roads Classifications and Standards have developed the Nebraska Minimum Design Standards. These standards represent minimum design values. Higher values may be used if it is environmentally friendly and economically feasible. The designer should contact his/her supervisor if NDOT standards cannot be met because a design exception approval may be required (See Chapter One: Design Standards, Section 6)." As the 84th Street project moves from conceptual design to more detailed design plans, close interface with NDOT designers and supervisors may be necessary.

Table 1 identifies quantitative aspects of the design manual that may apply to proposed streetscape elements for 84th Street. 84th Street is classified as a Major Arterial using the

TABLE 1: NEBRASKA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS

CATEGORY	DESIGN STANDARD	MINIMUM DESIGN STANDARD	SOURCE
TRAVEL LANE WIDTH	12 FEET	11 FEET	*NEBRASKA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN MANUAL, CHAPTER 6, TYPICAL ROADWAY CROSS-SECTION*, PAGE 1, SECTION 1.A; AND *NEBRASKA ADMINISTRATIVE CODE, TITLE 428 - BOARD OF PUBLIC ROADS CLASSIFICATIONS AND STANDARDS, MINIMUM DESIGN STANDARDS*, SECTION 001.02M, STATE FUNCTIONAL CLASSIFICATION MAJOR ARTERIAL
SHOULDER WIDTH	SAME AS MINIMUM	CURBED: NOT APPLICABLE NON-CURBED: 8 FOOT PAVED	*NEBRASKA ADMINISTRATIVE CODE, TITLE 428 - BOARD OF PUBLIC ROADS CLASSIFICATIONS AND STANDARDS, MINIMUM DESIGN STANDARDS,*
HORIZONTAL CLEAR ZONE		15 FEET (MAY INCLUDE THE SHOULDER)	*NEBRASKA ADMINISTRATIVE CODE, TITLE 428 - BOARD OF PUBLIC ROADS CLASSIFICATIONS AND STANDARDS, MINIMUM DESIGN STANDARDS,*
HORIZONTAL ALIGNMENT			
MAXIMUM SUPERELEVATION		4%	*NEBRASKA ADMINISTRATIVE CODE, TITLE 428 - BOARD OF PUBLIC ROADS CLASSIFICATIONS AND STANDARDS, MINIMUM DESIGN STANDARDS,*
MINIMUM RADIUS OF CURVATURE DESIGN SPEED = 35 MILES PER HOUR		371 FEET	
MINIMUM RADIUS OF CURVATURE DESIGN SPEED = 40 MILES PER HOUR		533 FEET	
MINIMUM RADIUS OF CURVATURE DESIGN SPEED = 45 MILES PER HOUR		711 FEET	
VERTICAL CLEARANCE			
GRADE SEPARATION - ROADWAY UNDER PEDESTRIAN BRIDGE	17 FEET		*NEBRASKA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN MANUAL, CHAPTER 10, MISCELLANEOUS DESIGN ISSUES*, PAGE 7, SECTION 2.E.1
BICYCLE AND PEDESTRIAN			
SIDEWALK WIDTH	5 FEET	4 FEET, PROVIDING FIVE FEET BY FIVE FEET PASSING SPACES EVERY 200 FEET	*NEBRASKA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN MANUAL, CHAPTER 16, PEDESTRIAN AND BICYCLE FACILITIES*, PAGE 4, SECTION 3
SHARED USE PATH WIDTH	10 FEET		*NEBRASKA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN MANUAL, CHAPTER 16, PEDESTRIAN AND BICYCLE FACILITIES*, PAGE 4, SECTION 3
BUFFER AREA BETWEEN BACK OF CURB AND EDGE OF SIDEWALK	5 FEET	2 FEET, TO ALLOW ADEQUATE SPACE FOR HYDRANTS, PARKING METERS, AND OTHER ROADSIDE APPURTENANCES. IF NO BUFFER IS PROVIDED, A SIDEWALK WIDTH OF SIX FEET IS PROVIDED TO ACCOMMODATE BOTH THESE APPURTENANCES AND A MINIMUM CONTINUOUS FOUR FEET WIDTH FOR AN ACCESS PATH	*NEBRASKA DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN MANUAL, CHAPTER 16, PEDESTRIAN AND BICYCLE FACILITIES*, PAGE 5, SECTION 4.A

state functional classification system. Additional, qualitative design considerations are described after the table.

MID-BLOCK CROSSINGS

Warrant analysis for mid-block pedestrian street crossings is the responsibility of the Traffic Engineering Division and is developed during the plan-in-hand or public hearing processes.

The design guidance for a pedestrian crossing includes:

- Pedestrian street crossings shall continue through medians.
- On wide, divided roadways, Traffic Engineering may require a pedestrian refuge area in the median. A pedestrian refuge is an area a minimum of six feet wide in the direction of pedestrian travel that allows a pedestrian to stop and wait for traffic mid-crossing.
- Marked crosswalks shall be a minimum six feet wide.
- Accessible pedestrian signals are optional devices that provide non-visual guidance for those with visual disabilities. They are not routinely installed on signal projects but can be installed upon request for, and the completion of, an engineering study that determines if they are needed for the project. The designer will coordinate the provision of accessible pedestrian signals at crosswalks with Traffic Engineering.

CURB RAMPS

Curb Ramps compliant with NDOT standards are required at crosswalks (marked or unmarked); at an intersection having curb or other barriers to entry from a walkway; where accessible on-street parking is provided.

INTERSECTION DESIGN

- When a minor roadway intersects a mainline roadway which is on a horizontal curve, the minor roadway should be realigned to provide as close to a 90° intersection to the local tangent of the mainline curve as possible.
- Urban intersections should have a minimum radius of 30 feet for 90° intersections.
- For roadways intersecting at right angles, left turn radii that range between 60 feet and 75 feet will normally satisfy all of the controlling factors. For dual turning movements a minimum radius of 90 feet should be applied to retain a satisfactory capacity in the outer lane.
- Parking should not be placed within 20 feet of the intersection crosswalk of any unsignalized intersection.

TURN LANES

Traffic Engineering staff will determine when Two-Way-Left Turn Lanes (TWLTL) treatment is appropriate in lieu of raised medians. Median widths of 12 feet to 16 feet wide are most adaptable to TWLTL conversions.

RAISED ISLANDS

The use of a raised island for pedestrian refuge should be considered if a crosswalk passes through the channelization.

LANDSCAPING

During the development of major roadway projects, urban or rural, the Roadside Stabilization Unit in the Project Development Division will review and recommend an appropriate landscaping treatment for each project in accordance with the AASHTO manual A Guide for Landscape and Environmental Design (Reference 10.6). The Roadside Stabilization Unit involvement will begin at the engineering review or corridor study stage of project development to promote early identification of the potential for landscaping. Landscaping recommendations will be included in the engineering review report, corridor study report and in the design public hearing engineering statement. There are additional requirements for landscaping in Chapter 10.

URBAN LIGHTING

Lighting warrants must be met in order to install lighting on an urban roadway. If none of the warrants are met the local governing authority (city, town, village, or S.I.D.) can choose to install lighting if sufficient benefits are found in the form of convenience, safety, policing, community promotion, or public relations. The local governing authority will pay 50% of the installation cost and 100% of the operation and maintenance cost of the lighting system.

TRANSPORTATION AND MOBILITY CONSIDERATIONS

MOBILITY COUNTS

BICYCLE AND PEDESTRIAN COUNTS

The City of La Vista does not track bicycle and pedestrian volumes. However, city staff anecdotally indicates that these activity levels are low, noting that on a nice summer day, there may be a total of 12 bicyclists on the corridor, and perhaps 25 pedestrians.

The City of Omaha's ongoing intersection counts include pedestrian data and limited bicycle data. To supplement the bicycle data, Omaha conducts bicycle counts at multiple locations around the city. Since La Vista is not part of Omaha, these counts do not include any La Vista streets, and the Omaha data cannot be used as a proxy for existing or potential bicycle use on 84th Street, as the environment and density of population differ. However, it is useful to look at these counts for an understanding of the range of bicycle usage in the region. Volunteers counted 24 sites in mid-September, on Tuesdays, Thursdays, and Saturdays spread over two consecutive weeks, from 7:00 to 9:00 AM and 4:00 PM to 6:00 PM on weekdays, and between 12:00 PM and 2:00 PM on Saturdays. These peak hour counts were then factored up to a daily estimate. The sites were chosen based on proximity to popular destinations, the presence of existing bicycle facilities, and the potential for the installation of bicycle facilities at some point in the future. Where there were no bicycle facilities, estimated weekday counts ranged from 7 to 144, with a median count of 48. Where there were sharrows or bike lanes, daily counts ranged from 38 to 360, with a median count of 103. Volunteers counted 128 and 206 bicyclists on two separated trails. For the most part, weekend counts were lower than, or similar to weekday counts.

- The City of Omaha provided pedestrian counts collected on August 29, 2012, at the intersection of 84th Street and Harrison Street. Pedestrian movements at this intersection throughout the day consisted of:
  - Between 7:00 AM and 10:00 AM there were a total of 13 pedestrian movements -- 2 on northbound 84th Street, 2 on southbound 84th Street, 3 on eastbound Harrison Street, and 6 on westbound Harrison Street.
  - No pedestrians were observed between 10:00 and 11:00 AM.
  - Between 2:00 PM and 6:00 PM there were a total of five pedestrian movements – one on northbound 84th Street, two on southbound 84th Street, and one each on eastbound and westbound Harrison Street.

VEHICLE COUNTS

The Omaha-Council Bluffs Metropolitan Area Planning Agency (MAPA) maintains traffic counts along major roadways, posting them on its website. The most recent data available for the 84th Street Corridor is from 2012. Traffic counts are tracked on two locations along this corridor, and numbers indicate annual average weekday traffic in vehicles per day in both directions. In 2012, average daily traffic volumes at these locations were:

- 84th Street south of Park View Boulevard: 32,100
- 84th Street north of Giles Road: 25,400

SIGNAL TIMING

The Nebraska Department of Transportation, City of Omaha, City of La Vista and other nearby communities are developing an adaptive signal control project for 84th Street which will be implemented in 2019. The same signals will be used, but additional equipment will be added to them to allow for the adaptive signal timing. In 2011, an 84th Street Signal Coordination Plan was developed. The adaptive signal timings will be based on that plan. Based on that plan, the protected left-hand turning phases have been removed from 84th Street signals.

TRAFFIC FORECASTS

As part of its continuous planning process, MAPA generates traffic forecasts. Traffic forecasts for the 84th Street Corridor used 2010 as a base year, and generated forecasts for the year 2040. Table 2 shows the 2010 Base Year counts and the 2040 forecasts for three major intersections along 84th Street in La Vista, and one adjacent intersection in Ralston.

TABLE 2: Traffic Base Year and 2040 Forecast

Intersection	Leg	2010 Base Year	2040 Model Forecast	Percent Change
84th and Giles	North	25,500	33,200	30%
	East	17,300	23,100	34%
	South	26,500	35,300	33%
	West	20,000	25,000	25%
84th and Park View Blvd	North	27,500	34,300	25%
	East	7,200	8,000	11%
	South	26,500	33,400	26%
	West	No Count	No Forecast	
84th and Harrison	North	27,000	31,900	18%
	East	18,300	22,400	22%
	South	27,500	34,300	25%
	West	17,500	22,200	27%
84th and Ralston	North	26,500	30,500	15%
	East	5,000	5,600	12%
	South	27,000	31,900	18%
	West	No Count	No Forecast	

Source: MAPA, 2017

LEVEL OF SERVICE

ROADWAY AND INTERSECTION LEVEL OF SERVICE

The City Centre Project at 84th Street and Brentwood Drive conducted vehicle level-of-service (LOS) analysis as part of its project planning. LOS was analyzed for the five existing intersections along 84th Street between Harrison Street, to the north, and Giles Road, to the south, as well as for the proposed Right-In-Right-Out (RIRO) intersection to be added between Brentwood Drive and Summer Drive as part of the City Centre project.

Olsson Associates performed and submitted the existing roadway capacity analysis in April 2016 based on the existing lane configuration, traffic counts, and signal timing. The LOS is reported in an A-F grade format, including E-grades. Table 3 below summarizes the criteria used for specific letter grades for signalized and unsignalized intersections.

TABLE 3: Level of Service (LOS) Criteria

	Delay (seconds)	
Level of Service	Signalized	Unsignalized
A	≤ 10	≤ 10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

Note: Signalized intersections are based on the average delay for all movements while unsignalized intersections are based on the longest average delay by movement.

Source: Highway Capacity Manual, 2010

Analyses were performed to determine the LOS for the morning and the evening commutes. As shown in Tables 4 and 5, under existing conditions, the analysis found that all intersections are LOS A-C in the morning and the evening, except the 84th and Harrison Street intersection which is LOS D in the evening rush hour. Olsson Associates also generated background conditions for the opening day scenario (2020) and the year 2040, then estimated additional trip volumes from the planned City Centre project for both of these analysis years. For the opening day scenario, all intersections passed in the A-C range, with the exception of the intersections at 84th Street and Harrison Street and 84th Street and Giles Road, which received D grades in the evening commute hours. For the opening day scenario in the morning, all intersections were LOS A-C.

For the 2040 forecast including the addition of the City Centre, all intersections are forecast to have acceptable LOS in the A-C range in the morning hours, with the exception of 84th Street and Park View Blvd, which received a D grade. For the evening hours, the 2040 forecast showed that all intersections between Park View Blvd and Brentwood drive will be in the A-C range, while 84th and Harrison will have an E grade, and 84th and Giles will have a D grade.

The analysis also studied LOS excluding the new RIRO intersection, however, as the RIRO is currently part of the design, this documentation shows only the analysis that includes the RIRO.

Included in the analytics was a review of the 95th percentile queue lengths (i.e., the queue length (in vehicles) that has only a 5-percent probability of being exceeded during the analysis time period) in and approaching the turn lanes at all intersections.

Table 4: Project Intersection Level of Service - Morning

			Existing No Project		Opening + Project		2040 + Project	
Intersection		Control	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
84th	Harrison St.	Signal	C	34.3	C	22.9	C	31.9
84th	Park View Blvd.	Signal	C	25.9	B	17.5	D	36.9
84th	Summer Dr.	Signal	A	1.8	A	4.9	A	9
84th	RIRO	TWSC	N/A	N/A	C	16.6	C	20.4
84th	Brentwood Dr.	Signal	A	7.7	A	8.6	A	9.9
84th	Giles Rd.	Signal	C	24.9	C	30.3	C	29.3

Note: Reported delayis worst movement for TWSC and AWSC intersections, or total intersection for signalized.
Source: Town Center 84th Street and Brentwood Drive, Traffic Impact Study, April 2016

Table 5: Project Intersection Level of Service - Evening

			Existing No Project		Opening + Project		2040 + Project	
Intersection		Control	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
84th	Harrison St.	Signal	D	38.2	D	35.6	E	71.2
84th	Park View Blvd.	Signal	C	30.4	B	17.5	C	30
84th	Summer Dr.	Signal	A	3.3	A	6	A	3.9
84th	RIRO	TWSC	N/A	N/A	B	14.9	C	18.2
84th	Brentwood Dr.	Signal	A	8.4	B	11.3	C	21.6
84th	Giles Rd.	Signal	C	29.7	D	36.7	D	35.5

Note: Reported delay is worst movement for TWSC and AWSC intersections, or total intersection for signalized.
Source: Town Center 84th Street and Brentwood Drive, Traffic Impact Study, April 2016

Analysis of the current operation show that all turn lanes are within acceptable performance with the exception of the WBL and the SBL turn lanes on the intersection of 84th and Harrison. While most intersections are forecasted to operate at LOS C or better in 2040, several 95th percentile queue lengths will exceed the existing storage capacity. Tables 6 and 7 summarize storage lengths needed to accommodate the queues for the current operation and the 2040 forecast year with the City Centre project.

TRANSIT LEVEL OF SERVICE

Omaha's Metro Transit provides an express bus into La Vista on contract with La Vista, Ralston, and Papillion. The route, Route 93, is a commuter bus which runs from Papillion (La Vista's neighboring town to the south) into downtown Omaha via 84th Street and Interstate 80. There are two runs in the morning, leaving Papillion at 6:20 AM and 6:50 AM, and two runs in the afternoon, leaving downtown Omaha at 4:42 PM and 5:12 PM. In the morning, two reverse commute runs transport the bus from Omaha to Papillion, and back to Omaha in the afternoon. Annual ridership on this route in 2016 was 7,726 trips (or approximately 30 per weekday). Boarding and offboarding data for specific stops is not available.

The communities of La Vista and Ralston pool resources to develop a "Special Services Unit" program to provide transportation services to all senior citizens (ages 60 and older) and all handicapped residents of La Vista and Ralston. The bus provides services to a variety of destinations including senior centers, shopping, and appointments. The Special Services Unit operates Monday through Friday from 7:00 AM to 4:30 PM.

Table 6: Available Storage Lengths and Required Storage Lengths, Current Condition

Movement	Peak Period	Available Storage (ft)	Required Storage (ft)	Description
Harrison Street				
WBL	PM	180	235	Turn bay filled
SBL	PM	210	275	Turn bay filled

Source: Town Center 84th Street and Brentwood Drive, Traffic Impact Study, April 2016

Table 7: Available Storage Lengths and Required Storage Lengths, Forecast Year 2040

Movement	Peak Period	Available Storage (ft)	Forecasted Required Storage (ft)	Description
Harrison Street				
EBL	AM	210	290	Turn bay filled
WBR	AM	110	175	Turn bay filled
WBL	PM	180	310	Turn bay filled
SBL	PM	210	260*	Turn bay filled
Park View Blvd				
EBL	AM	200	240	Intersection with S 85th Street
WBL	AM	150	235	Gas Station entrance
Brentwood Dr				
EBL	AM	150	160	Turn bay filled
EBL	PM	150	205	Turn bay filled
WBL	PM	100	185	Turn bay filled
Giles Rd				
EBL	AM	250	265	Turn bay filled
WBR*	AM	100	155	Mall entrance
WBR*	PM	100	155	Mall entrance
SBL	PM	210	315	Turn bay filled

Source: Town Center 84th Street and Brentwood Drive, Traffic Impact Study, April 2016; LSC Transportation Consultants using March 17, 2010 Turning Movement Counts provided by Nevada Department of Roads

*Forecasted storage in the original document did not match simulation results. Table has been updated to match the simulation's forecasted requirement.

BICYCLE LEVEL OF SERVICE

MAPA and its partners completed an extensive Bicycle Level of Service (BLOS) analysis as part of the Heartland Connections Bicycle and Pedestrian Plan for the Omaha-Council Bluffs Metro Area, published in June 2015. The Heartland Connections Plan used the BLOS standards described in the Highway Capacity Manual. These standards account for bicyclist comfort as measured by roadway geometry and traffic conditions, and include levels A through F, with A being a location that is good for riders of all ages and abilities, and F being a level that is appropriate for no riders. Table 8 shows the definitions for BLOS levels A-F. The Heartland Connections Plan did not evaluate 84th Street in La Vista for BLOS, although nearby parallel streets, such as 72nd Street and 96th Street were evaluated and scored a level of service "D." Using the criteria in the Highway Capacity Manual, LSC Transportation Consultants evaluated the segments along 84th Street in La Vista, and all segments also scored a "D" rating.

PEDESTRIAN LEVEL OF SERVICE

No existing Pedestrian Level of Service (PLOS) evaluation was found for any roads in the Omaha Region. Using the Highway Capacity Manual methodology, LSC transportation consultants evaluated roadway segments and intersections for PLOS.

For roadway segments, the Highway Capacity Manual's PLOS methodology is very sensitive to the amount of space available for pedestrians. In the formula, this pedestrian space term includes the width of the bike lane, shoulder, buffer between the roadway and sidewalk, and the sidewalk itself. Because these widths are quite low along 84th Street, the 84th Street segments score poorly. All roadway segments between Giles Road and Harrison Street scored a PLOS "F."

The PLOS score for intersections is highly sensitive to the number of lanes a pedestrian must cross. Intersections on 84th Street scored better than roadway segments, generally scoring a "C" on all legs. The only exception was the intersection of 84th Street and Summer Drive. At this intersection, both the northbound and southbound legs scored a PLOS "B." Summer Drive is currently a "T" configuration, with no crossing required at all on the southbound leg, and only three lanes required to be crossed on the southbound leg. All other intersections have a minimum of five lanes that must be crossed in each direction.

Table 8: Bicycle Level of Service Standards

Level of Service	Score	Condition	General Description	Comments
Level A	0-1.5	Excellent	Good for all	Nearly impossible to achieve this level w/o bike lanes or parking[1]
Level B	1.5-2.5	Very Good	Good for all with possible exception of inexperienced child	25 mph, 750 ADT or less is 2.48, but with only 10% occupied on-street parking
Level C	2.51-3.5	Average	Acceptable to most average adult cyclists	30 mph, 3,000 ADT is 3.47 which is upper threshold of C
Level D	3.51-4.5	Poor	May be acceptable to experienced cyclists	35 mph, 4-lane, with more than 5,000 ADT is 3.5 or greater
Level E	4.51-5.5	Very Poor	Bearable by some experienced adult cyclists	35 mph, 4-lane, ADT 10,000 is 4.5
Level F	>5.5	Extremely Poor	Not suited to any cyclist	

Note 1: (From Heartlands Connection Plan) Parking space, even at 40 and 50% occupied has a large impact on BLOS. BLOS changes by a full point with a marked parking lane of 6' in width.

Source: Heartland Connections Bicycle and Pedestrian Plan, Omaha Council-Bluffs Metro Area, June 2015, p. 3-14.

RELATED STUDIES

LA VISTA COMPREHENSIVE PLAN, 2007

La Vista's Comprehensive Plan, uptate currently underway, calls for residential and commercial development areas that complement each other, and the realization of and maintenance of economic potential. The plan identifies the 84th Street commercial area as a center for commerce and professional services. The plan notes the need to upgrade and develop modern, accessible public facilities and infrastructure as the population grows, and to consider public facilities and infrastructure that have the capacity to address county- and region-wide needs.

Key goals, policies and actions that relate to development of the 84th Street Corridor include:

GENERAL COMMUNITY GOALS

Plan and produce community-based projects directed at improving the quality of life and creating a sense of community for all residents of La Vista.

Enhance the physical appearance and character of the community, with special emphasis on commercial corridors.

Transportation Action Strategies

- Develop and maintain a community-wide sidewalks program to provide a safe and efficient system for pedestrian movement including handicap accessibility within the community.
- Economic Development and Employment Action Strategies
- Encourage street-scape improvements in La Vista's 84th Street commercial core i.e.; landscaping, signage and public seating areas.

LA VISTA PARK AND REC MASTER PLAN, 2002

The purpose of the La Vista Park and Recreation Master Plan is to assist the City of La Vista in its efforts to ensure that current and future residents have the opportunity to participate in a range of park and recreation activities in a safe, convenient, and aesthetically pleasing environment.

The La Vista Park and Recreation Master Plan proposes a system of greenways and trails and "green streets." Greenways and trails will link parks together in a unified system. Green streets serve to create an interconnected network of parks, recreation areas, schools, and other civic facilities.

GREENWAYS

In La Vista greenways will serve as natural connections along a creek, drainage way, and/or vegetated corridor. More active greenways may include unpaved or paved trails.

The La Vista Park and Recreation Master Plan proposes a recreational trail along the Thompson Creek Greenway, which passes under 84th Street, and through existing La Vista parks and recreation facilities adjacent to 84th Street, including the La Vista Municipal Pool and the La Vista Falls Municipal Golf Course (construction underway to become Civic Center Park).

GREEN STREETS

The Park and Recreation Master Plan also identifies a system of green streets that are designed to extend a park-like appearance through the City. Green streets should be designed or redesigned over time to have one or more of the following elements:

- One or more rows of trees along both sides of the roadway (along City right-of-way or on private property). Specific tree types are recommended in the plan.

- Space for wide sidewalks or off-street trails on one or both sides of the roadway.
- No overhead utility wires that interfere with the growth of overstory trees.

Green streets may also include signage, maps, rest areas, benches, and landscaping. The plan illustrates typical cross-sections which designers should utilize when planning construction or redesign of green streets. The plan also proposes alternative designs where typical cross-sections are not feasible.

Several streets in the 84th Street corridor between Giles and Harrison are proposed as green streets in the plan. They include:

- 84th Street (Primary Green Street)
- Giles Road (Primary Green Street)
- Park View Boulevard (Neighborhood Green Street)
- Brentwood Drive (Neighborhood Green Street)

SARPY COUNTY COMPREHENSIVE PLAN AND SARPY COUNTY MASTER TRAIL PLAN

The Sarpy County Comprehensive Plan summarized several region-wide transportation documents and their implications for Sarpy County. As part of the development of the Comprehensive Plan, Sarpy County held a well-attended public workshop meeting with approximately 250 attendees. Public input from this workshop is highlighted throughout the plan. Key components of the summarized plans or of the public workshop input that relate to the 84th Street corridor include:

PUBLIC TRANSIT

Public workshop participants thought that public transit services should be incorporated into the comprehensive plan, however, a majority said there was currently limited need for transit services in Sarpy County. The primary transit services identified as a need were paratransit services, which primarily provide on-call rides for elderly and disabled, and to serve employment needs.

The Comprehensive Plan also summarized the results from an August 2015 Transportation Survey and the Heartland Connections Regional Transit Vision, 2013. La Vista's 84th Street was identified as a possible corridor for Bus Rapid Transit with 10-15 minute service, however the later, Sarpy County Transit Feasibility Study does not mention this option.

BICYCLE AND PEDESTRIAN CONNECTIVITY

The Sarpy County Comprehensive Plan includes a Sarpy County Master Trails Plan as an appendix. The Master Trails document lays out a plan for a unified system of trails in Sarpy County. Part of the process of identifying areas for new trails included a summary of existing trail plans, including the Heartland Connections Regional Bicycle and Pedestrian Plan, 2015, the previous Sarpy County Comprehensive Plan, 2005, the La Vista Comprehensive Plan, and the La Vista Park and Recreation Plan. None of these documents identified any planned bicycle or pedestrian facilities along the 84th Street corridor itself, although the La Vista Park and Recreation Plan did identify a facility along Thompson Creek, as noted above. Other nearby planned bicycle and pedestrian facilities noted in the Sarpy County Master Trails Plan are along 72nd Street and 96th Street, and Cornhusker Road (which is to the south of La Vista).

The actual recommendations of the Sarpy County Master Trails Plan include construction of those multi-use corridors along 72nd, 96th, and Cornhusker, which would improve connections to local trails identified in local plans. The Heartland Connections Regional Bicycle and Pedestrian Plan also identifies existing multi-use corridors just to the north of Sarpy County. One-half mile north from Harrison Street along 84th Street riders from La Vista can connect to the system of paths and trails just south of Park Drive. Any bicycle and pedestrian improvements in the 84th Street corridor should tie into these major multi-use corridors.

MAPA SARPY COUNTY TRANSIT FEASIBILITY STUDY, JANUARY 2017

The Sarpy County Transit Feasibility Study identified existing transit services, transit needs, gaps, and potential future demand in Sarpy County. MAPA used this information to develop three alternative transit packages. With public input, MAPA scored each of these alternative transit packages against a set of eleven evaluation criteria and selected a preferred alternative. The three packages included:

- Package A: Minimum Impact
- Package B: Low Density Network
- Package C: Higher Density Network

Package C, Higher Density Network scored the highest and was selected as the preferred alternative. There is a phased time frame for implementing this package, encompassing near-term projects (1-10 years), medium-term projects (11-20 years) and long-term projects (20-30 years). The list below describes the projects that relate to the 84th Street corridor.

NEAR-TERM PROJECTS (1-10 YEARS)

- Route 93 Expansion - Expand Route 93 along 84th Street to/from highway 370 in Year Two (2019). This service will operate Monday through Friday, peak morning, two mid-day trips, and peak afternoon.
- Implement Primary Corridor Fixed Route Service - Add Monday through Saturday service, from 6:00 AM to 7:00 PM along multiple corridors, including 84th Street through La Vista and Papillion. Frequency is not specified. The fixed route service will be coordinated with existing Metro services, and will have complementary paratransit service. The fixed route service is planned to start in Year Eight (2025).
- Expand county-wide demand-response service - The county-wide demand response service requires five additional new vehicles to cover areas of Sarpy County currently without transit service. This service should begin in Year Two, with coordination among the existing transit providers in Bellevue, La Vista/Ralston, and Papillion. While Omaha Metro provides complementary paratransit services that mirrors the fixed route transit network, the express routes are exempt.
- Private provider partnership with Uber, Lyft, Taxi – Regular transit service will operate Monday through Saturday, with service until 7:00 PM. This partnership would provide service after regular service hours and on Sunday. Registered users will be eligible for a 50 percent subsidy of the total trip costs made within the service area. This coordination of services should begin in Year Two (2019).
- Coordination with Statewide Rideshare Program – The statewide program will begin in 2017. Sarpy County will be a partner beginning in Year One with the Statewide Rideshare Program with major employers and activity centers located in the county.
- Park and Ride Lots – Five initial park and ride locations are needed in the near-term. A detailed regional Park and Ride study is needed to assess the demand for parking spaces in the future. The study should take

place in Year One. The development and maintenance of Park and Ride lots should take place in Year Two.

- Sarpy County ITS Infrastructure Transit Plan/Deployment - $100,000 per corridor. Three corridors are identified for the near-term. This plan should be coordinated with the High Capacity Corridor Studies (see next bullet). Planned for Year 1.

- High Capacity Corridor Study - Initial plan and steps for required environmental studies for three corridors - Fort Crook/13th; Hwy 370; 84th/72nd.

- Employment-based Transit Strategies - The focus of this strategy is direct outreach to major employers in the metro area. The goal of the study is to listen to their needs, inform them of future transit options, and develop buy-in for potential future funding partnerships.

MEDIUM-TERM PROJECTS (11-20 YEARS)

All medium-term projects that relate to 84th Street are continuations of near-term projects.

LONG-TERM PROJECTS (20-30 YEARS)

Implement High Capacity Corridor Routes – The new high capacity transit routes will provide service Monday through Saturday, 6:00 AM to 7:00 PM. The three primary corridors equate to approximately 30 miles of high capacity service – 13th/Fort Crook, 72nd/84th, and Hwy 370. Three transit routes will be discontinued due to duplication of service when the high capacity corridor service begins, including Route 93 Express, Route 95 Express (from Omaha to Bellevue), and the Gretna/Bellevue Express Route.

- Redevelopment Proposal for the City Centre at 84th Street and Brentwood Drive

- The City Centre at 84th Street & Brentwood Drive, Traffic Impact Study, April 2016 notes three potential changes to access points to 84th Street. These include:

- A west leg at the intersection of 84th Street & Summer Drive (also called South 83rd Street) will potentially be constructed as part of the redevelopment of the city golf course into Civic Center Park.

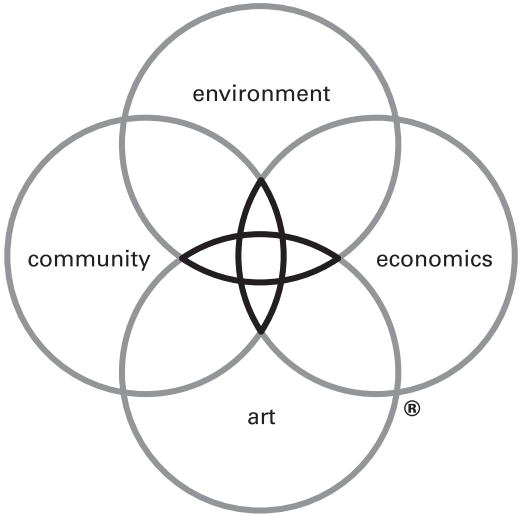
- Summer Drive is proposed to be relocated approximately 300 feet south from its existing location and re-named to "City Centre Drive." The intersection will be moved to allow for better pedestrian connectivity for the planned site to the proposed city park (see below) on the north side of the site.

- A "Right-In/Right-Out" drive is proposed to be located 500 feet north of Brentwood Drive. This would require a break of NDOT controlled access. The new drive would be called "Cottonwood Avenue."

LA VISTA CIVIC CENTER PARK MASTER PLAN

La Vista's A Vision Plan for 84th Street set out a concept for a revitalized 84th Street corridor. Part of that vision is the redevelopment of the La Vista Falls Golf Course into a community park called Civic Center Park. The Civic Center Plan devised four alternative layout concepts for the park, including an urban layout, a natural layout, an active layout and an open layout. The preferred alternative is a combination of all four of these concepts.

A primary transportation feature common to all four layouts is the underpass under 84th Street, connecting the park with the swimming pool, ball fields, and neighborhoods to the west. This underpass includes a smaller sidewalk and a larger trail, with Thompson Creek in the middle. The two trails would increase access to the creek and ensure that the underpass is wide and safe. This underpass is also noted as the Thompson Creek Greenway in La Vista's Park and Recreation Master Plan, described above. There are no additional changes to access to 84th Street described in the Civic Center Park Master Plan, besides the relocation of Summer Drive described above.



DW LEGACY DESIGN®

We believe that when environment, economics, art and community
are combined in harmony with the dictates of the land and needs
of society, magical places result — sustainable places of timeless beauty,
significant value and enduring quality, places that lift the spirit.
Design Workshop is dedicated to creating Legacy projects:
for our clients, for society and for the well-being of our planet.