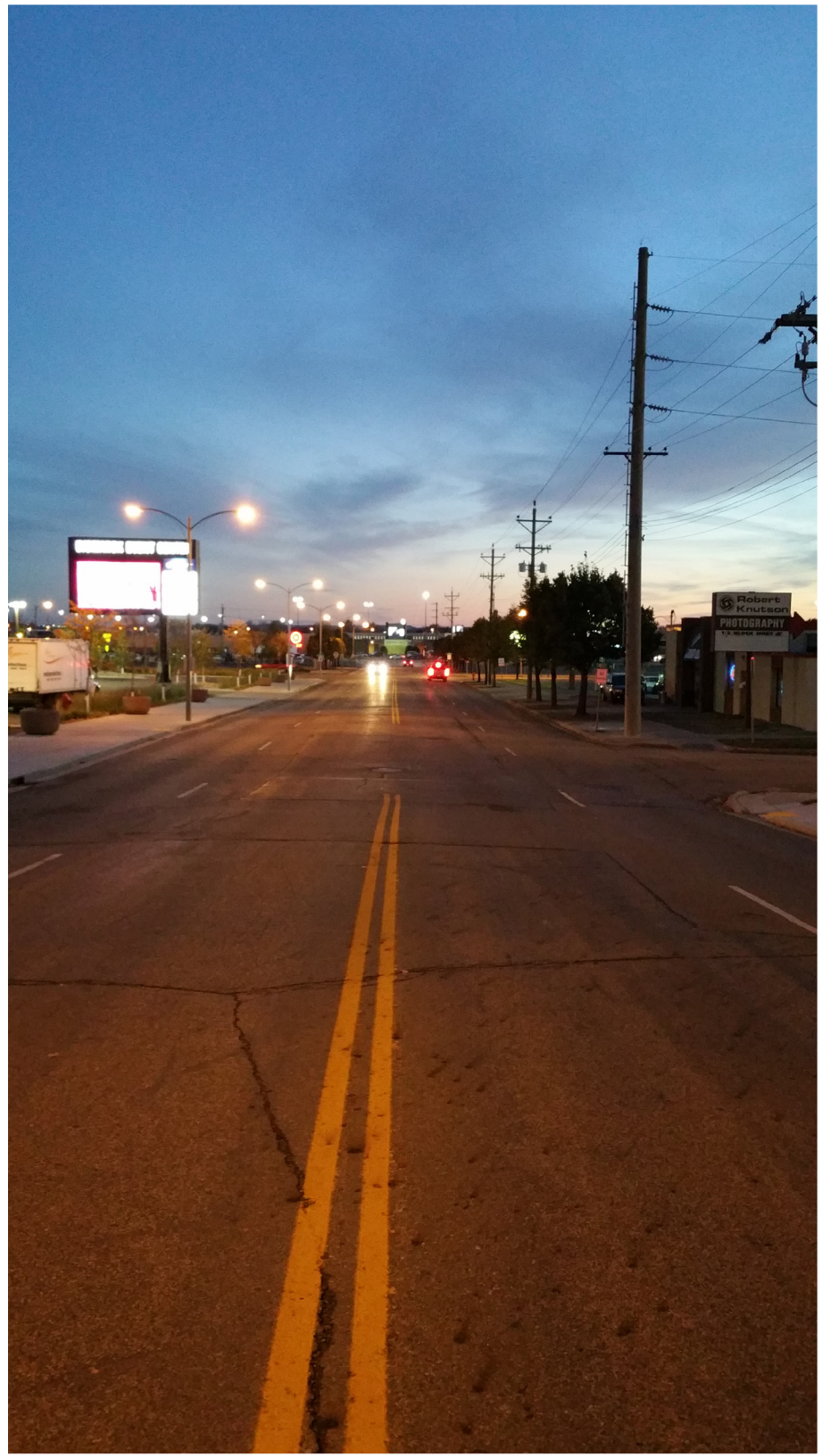


th
F STREET
Festival

A Multi-modal Streetscape and Cultural Center in downtown Bismarck, ND.



Festival On 5th Street

**A Multi-modal Streetscape and Cultural Center
in downtown Bismarck, ND.**

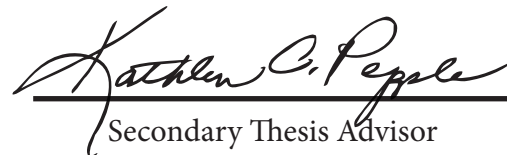
A Design Thesis Submitted to the
Department of Architecture and Landscape Architecture
of North Dakota State University

By
Dylan Anderson

In Partial Fulfillment of the Requirements
for the Degree of
Bachelor of Landscape Architecture



Primary Thesis Advisor



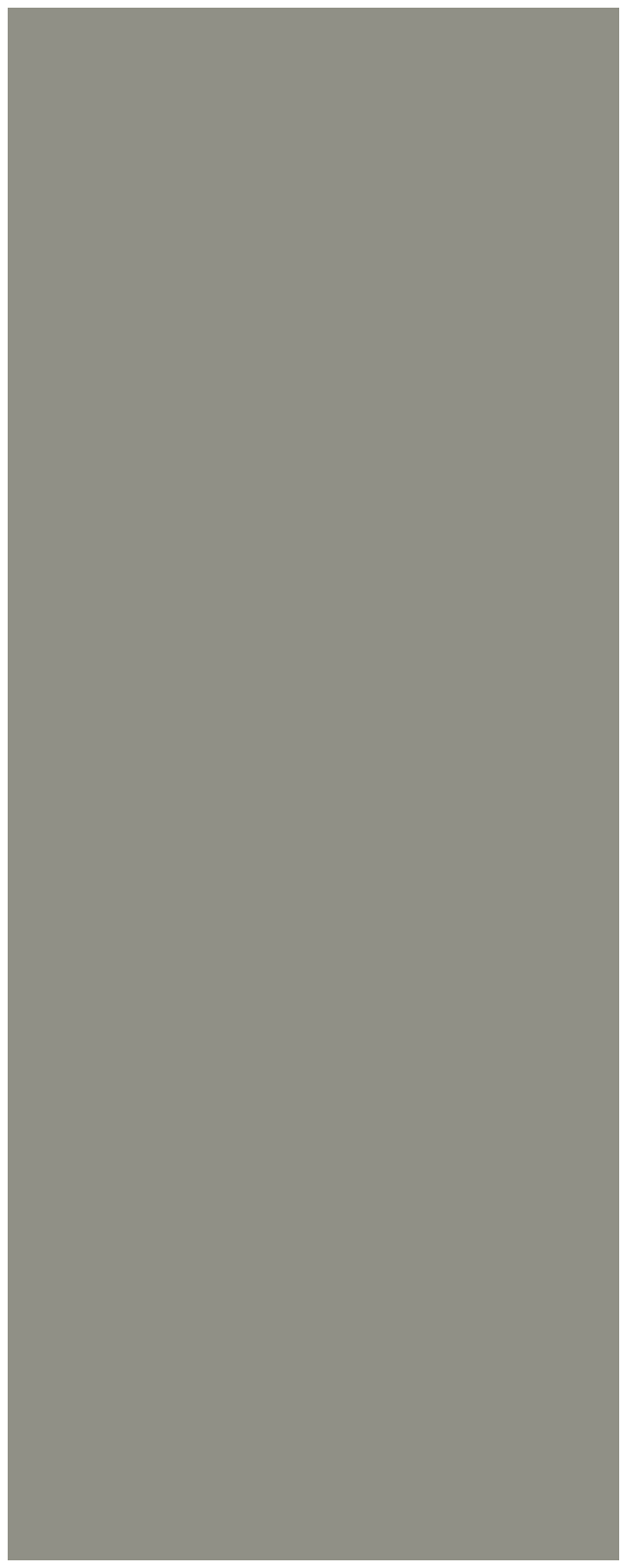
Secondary Thesis Advisor

May 2016
Fargo, North Dakota



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This thesis is a study conducted to explore the effects of revitalizing a downtown street emphasizing the pedestrian. Through research, the streetscape will be redeveloped for the safety of pedestrians as well as various modes of traffic. Discovering what activities the pedestrian wants on a street will bring a steady flow of people to utilize a downtown space more often and make the street more comfortable to be shared with pedestrians as well as modes of transportation.

The study considers adding the elements of a complete street (drive, bike, parking, transit, and walk lanes, also, planting and furniture zones) street trees/shrubs and new paving patterns to the urban core and community space for both private and civic use. As defined from the research and along with case studies the final design of a better streetscape for pedestrians will be accomplished.

ABSTRACT 02

As cities expand and their populations rise, cities face the need to revitalize the original core to promote healthy, efficient, and sustainable living standards for its citizens. In order to create an experience for pedestrians to want to use, the city government and private investors have to give people a reason to live, work, and play on the street and in downtown.

Through this study I want to

- 1) discover what activities draw people to the street,
- 2) form safe healthy connections between pedestrians, motorists, and vehicles
- 3) explore sidewalk widths and complete street elements, and
- 4) create a pedestrian mall destination.

The end design will be a complete street emphasizing bringing pedestrians together to utilize the street.

03 STATEMENT OF INTENT

TYOLOGY 04

Create a new urban streetscape within a commercial and industrial area where emphasis will be for Pedestrian's activities and experiences.

Urban Design, Pedestrian Mall, New Urbanism

RESEARCH QUESTIONS

1. What programs within the street redevelopment will promote an active flow of pedestrian traffic back to the older parts of downtown?
2. Where would be the best location for a social gathering space?
3. What activities will be most efficient in pedestrian interaction and promote multi-seasonal use?
 4. What elements of a complete street will be used?
 5. How will the train track be utilized in the design?
 6. Who will be drawn to the street redevelopment?

RESEARCH HYPOTHESIS

I expect that redeveloping a downtown core street will encourage people to safely walk the street. I expect the programs to provide the needed interest to pedestrians for continued use and an all year round experience. New public spaces will give relief to the street hardscape and give various sized groups space to visit the site. The redevelopment will create revenue, jobs, and vibrancy for the core of the city.

Girling, C., & Kellett, R. (2005). *Skinny streets and green neighborhoods design for environment and community*. Washington, DC: Island Press.

Cynthia Girling and Ronald Kellett are both teachers and researchers in Architecture and Landscape Architecture disciplines. Together they wrote *Skinny Streets and Green Neighborhoods* (2005). They suggest that good urban design and good environmental design might collaborate. The book reveals that city physical forms and patterns must relate to nature and look at several case studies, as well as defines several characteristics to consider in design.

The purpose of the study was to look at nature and how design works with it in order to create a unique experience. The authors are writing to professionals in related fields of Landscape Architecture in a formal way.

Vries, S., Dillen, S., Groenewegen, P., & Spreeuwenberg, P. (2013). Streetscape greenery and health: Stress, social cohesion and physical activity as mediators. *Social Science & Medicine*, 94, 26-33.

These authors claim that greenery might exert health benefits to users through stress reduction, stimulating physical activity, and facilitating social cohesion. The authors look at previous studies for much of their data but they also conduct a mail survey in four Dutch cities looking at quantity and quality of streetscape greenery. They want to discover a correlation between greenery and health. The audience of this journal are individuals in science and health related fields.

Harvey, C., Aultman-Hall, L., Hurley, S., & Troy, A. (2015). Effects of skeletal streetscape design on perceived safety. *Landscape and Urban Planning*, 142, 18-28.

The authors of this study are all professionals in design related fields. They argue that physical characteristics of a streetscape contribute to perceived safety and comfort of the street. The study looks into the "streetscape skeleton" design principles: tree canopy, the number of buildings along a block, and the cross-section proportion. The purpose is to understand how streetscapes and human interaction relate in order to design a street that feels safe and comfortable to pedestrians so that they use it. The study was written for review by other designers to create successful streetscapes in a professional manner.

Schellinger, D., & Priest, S. (2006). Getting streetscape design right. *Planning*, 72(6), 44-49.

The authors are members of AICP and are trained in streetscape design. They assert that all parts of a street design are important for a successful streetscape. The article further explores that memorable streets and sidewalks are oriented toward pedestrian experiences. The purpose was to inform designers of proper streetscaping characteristics in order to design streets for pedestrians as well as vehicles. The tone was polite and informative.

http://www.bikewalk.org/pdfs/sopgeorgia_ped_streetscape_guide.pdf

The Pedestrian and Streetscape Guide was written for the Georgia Department of transportation. The authors assert that streets and pedestrian activity are related. The focus is to guide individuals on design of pedestrian and streetscape facilities in order to create a successful pedestrian facility. The guide was written for designers, planners, engineers, and cities to assist in streetscape design.

Tan, C. (2011, October 1). Going on A Road Diet. Retrieved October 1, 2015.

<https://www.fhwa.dot.gov/publications/publicroads/11septoct/05.cfm>

The author of this article works for the Federal Highway Administration. The article defines a relatively new term the road diet. This new design implication looks at restriping existing streets to increase safety in pedestrian use. The article uses case studies to define its meaning and to show real world examples. This article was intended for designers to create a low cost redevelopment of the street.

CRITICAL EVALUATION OF CITED WORKS

Festival Fifth street in downtown Bismark, ND will be a pedestrian destination. Research of academic papers and case studies will analyze the activities needed to attract visitors to the downtown year round, form safe healthy connections between pedestrians, bicyclists, motorists, and transit users. The design of elements will be determined by observations of case studies and the reviewed literature.

Urban communities can relate to the natural environment. In *Skinny Streets and Green Neighborhoods*, professors Girling and Kellet researched the connection urban communities have to the natural environment who says an urban setting can not have a feel for preservation of the area back to the original without human impact. In reality a forest, wildflower prairie, or wetland would not sustain itself mixed into the city core. They also would not fit into the high density mixed use code set by the downtown core regulations. Instead designing small pockets and reminiscences of natural preservation areas will imitate the past and make users feel like they are not in the center of the city.

Studies show that trees and other vegetation are preferred by most people. Plants are three dimensional art pieces that can come in many colors, textures, and sizes. An integrated web of plant placements can create a beautiful scene. A study conducted by Bries, Dillen, Groeneweyen, and Sprauwenberg, *Streetscape Greenery and Health: Stress, Social Cohesion, and Social Activity as Meteors*, looked at connections plants have to pedestrians on the street. The study researched stress reduction, stimulated physical activity, and social cohesion. Although the data was no inclusive in the study, they did however, open up discussion topics on these subjects. When asked, people enjoy street trees and planters, people feel more comfortable with the presence and refuge of trees from the street. People gather in the shade under the trees on hot summer days. They purify the air and clean the pollutants emitted from human interaction.

Fifth street design will have trees lining the street. The trees will provide seasonal interaction for the street and will aid in the overall appearance.

The relationships that physical street elements have create pedestrian perceived safety. The study of *Affects of Skeletal Streetscape Design on Perceived Safety*, looked at diagrammatic of street size, building height, and placement of street elements (trees, awnings, street furniture). The hopes of the information was to create ideal standards for streetscapes designs that are safe and comfortable to pedestrians as they visit the street.

A complete street is designed for all modes of transportation, but pedestrians experience the site with the highest social interaction. Schellinger and Priest wrote in *Getting Streetscape Design Right* that pedestrians remember the street more than any other using the street. Pedestrians use the street for a longer time and are not focused on anything in particular. They observe their surroundings and remember their experience. Vehicles pass through the site quickly and are distracted by other traffic, street signals, and the safety of the pedestrians. In the design, creating a street atmosphere with many pedestrian activities will create a memorable experience.

Around the country, a new design phenomena is a road diet. The Federal Highway Administration wrote an article, *Going on a Road Diet*. They describe road diet as re-striping existing streets to increase safety for pedestrian use. The idea is similar to street redesign. In general, it is the act of removing drive lanes to slow traffic and increase motorists attention to their surroundings. Fifth street redevelopment will remove drive lanes and parking lanes to create larger sidewalks and promote pedestrian use.

11 SITE PROPOSAL

Downtown Bismarck, North Dakota

The city of Bismarck and the Bismarck-Mandan Metropolitan Planning Committee commissioned a year long study to determine a major revitalization project of downtown Bismarck. The Subarea study considered both public and private investing within a new urban design and complete street elements. This project is underway and a dramatic change will be seen in the following years in downtown.

The plan has changed the look and feel of Bismarck's downtown with many of the major changes being along the Fifth Street From Kirkwood Mall to Broadway.

The study addresses:

- Parking, traffic, quiet rail, transit, walking and biking
- Opportunities for new public gathering spaces, 'greening'* downtown streets, and a transit hub
- Opportunities to live downtown
- The integration of transportation, land use and urban design into a coordinated vision
- A realistic implementation strategy that identifies the necessary public investments to inspire investor confidence and stimulate significant private investments within the first five years of Subarea Plan adoption

*'greening'-- Adding street trees, planters and Vegetated open spaces

Bismarck and the Bismarck-Mandan MPC wanted this project to have community involvement and support so public meetings and workshops were a must.

Criteria for the revitalization was driven by the dream to transform the downtown area into a vibrant place where people want to live, work and be entertained. The public issues for the area were documented and categorized:

Urban Design

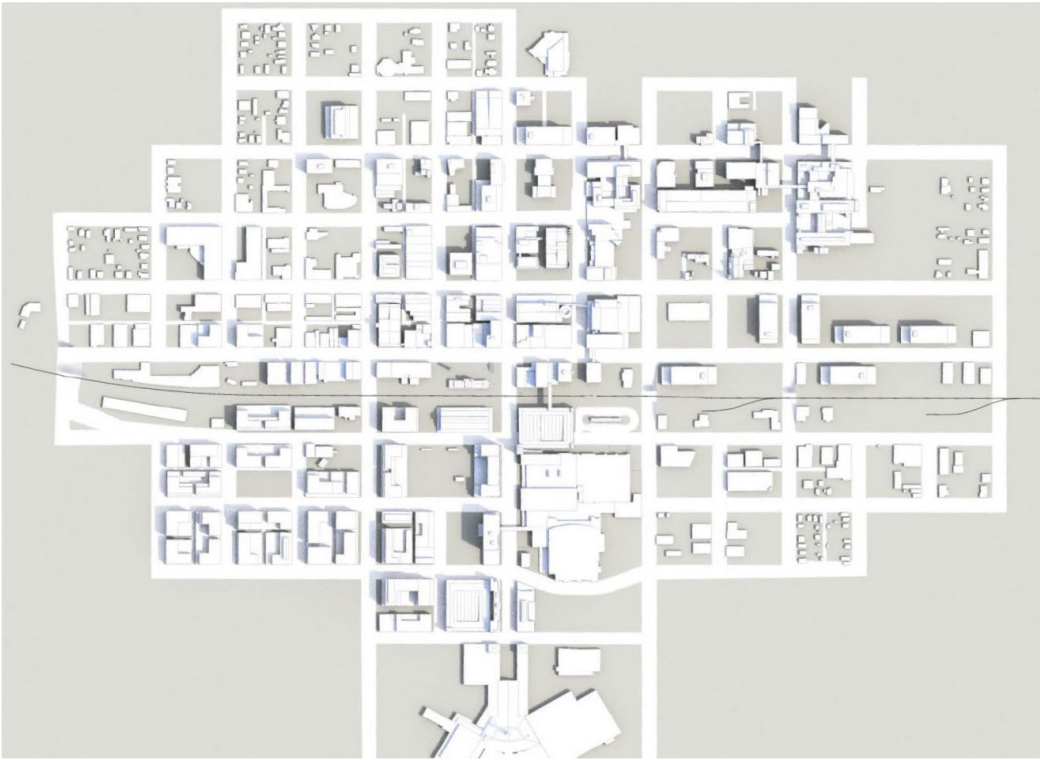
- Public Gathering Spaces
- Parking Strategy for Ramps
- Shopping & Entertainment Opportunities
- Housing Opportunities
- Preserve/Enhance Historic Buildings
- Multi-Modal Transit Hub
- Downtown Core, Civic Center, Kirkwood Mall
- Linkage

Complete Streets

- Pedestrian-friendly, Walkable Environment
- Greener Downtown Streets
- Biking Opportunities
- Traffic Access To & Within Downtown
- Chancellor Square Traffic Circulation
- Public Art
- Trolley

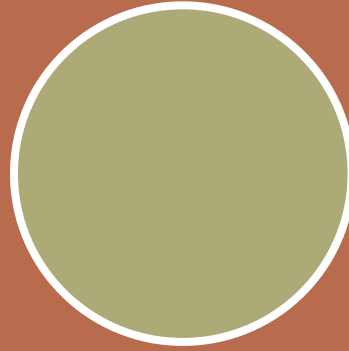
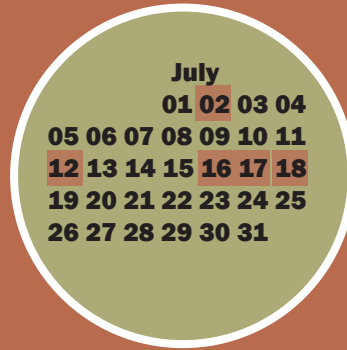
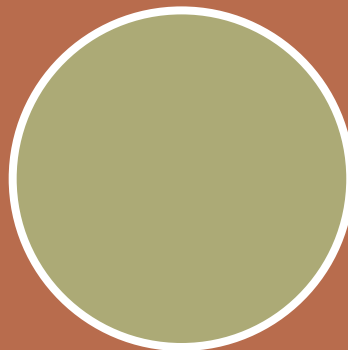
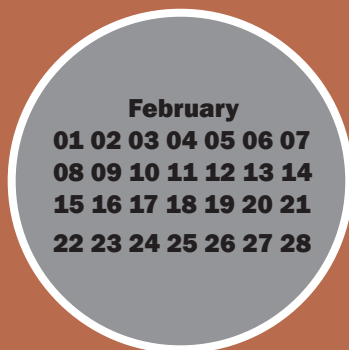
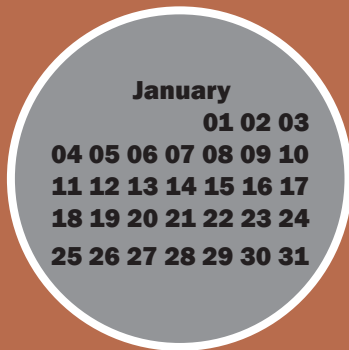


Fifth Street



Fifth street redevelopment will remove much of the surrounding parking lots but a parking ramp will be constructed. Additions to the Civic center and Kirkwood Mall will give refuge to large groups of people. A hotel and retail destinations will provide employment and revenue. Upscale condos will provide living situations.

LIVE
WORK
PLAY



BROADWAY FARGO, ND

Streets Alive

06/14: Streets Alive
 07/12: Streets Alive
 08/30: Streets Alive

Parades

03/14: St. Patrick's Day
 10/09: NDSU Homecoming
 11/24: Holiday Lights

Pub Crawls

03/14: St. Patrick's Day Pub Crawl
 05/02: Zombie Pub Crawl
 11/26: Octoberfest Pub Crawl

Cruzin' Broadway

06/04: Cruzin' Broadway
 07/02: Cruzin' Broadway
 08/06: Cruzin' Broadway
 09/03: Cruzin' Broadway

Street Fair

07/16-18: Street Fair

CASE STUDY 14

Broadway in Fargo North Dakota is a great example of a street that has many programs that promote pedestrian use. The city supports several events that strengthen the health and social interaction of pedestrians. As well as, boosts revenue for downtown and enlightens people to live, work and play downtown.

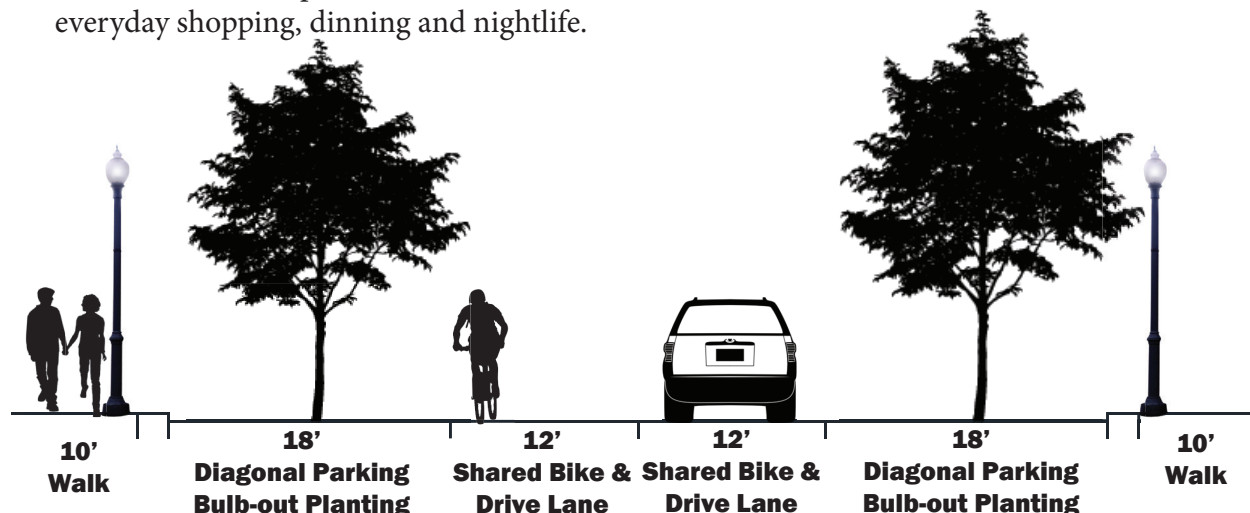
These events vary in size and involvement but each attracts people of different backgrounds and interests. Some events close the street off to traffic and transit all together while others limit the traffic and its speed.

The calender to the left shows Broadway's events blocked off for the previous year of 2015. Shown in the graphic, the street still lacks a winter seasonal interest for pedestrians other than everyday shopping, dining and nightlife.

Broadway is also a street with a well known identity within the city. The street is consistent with finishings and materials. Broadway has corner bulb-outs, street plantings, decorative paving patterns and public space.

It follows principles of a complete street with parking, shared drive, transit, and bike lanes, planting and pedestrian space.

It is slightly congested with many vehicles and pedestrians using the site. Side walks are decently sized but do not provide sidewalk dining options.



15 CASE STUDY



Location: Salt lake City, Utah

Address: 50 South Main Street, Salt Lake City, UT 84144

Scope: Landscape Architecture, Urban Design

Size: 25 Acres

Landscape Architecture Firm: SWA

Client: Church of Jesus Christ of Latter-day Saints

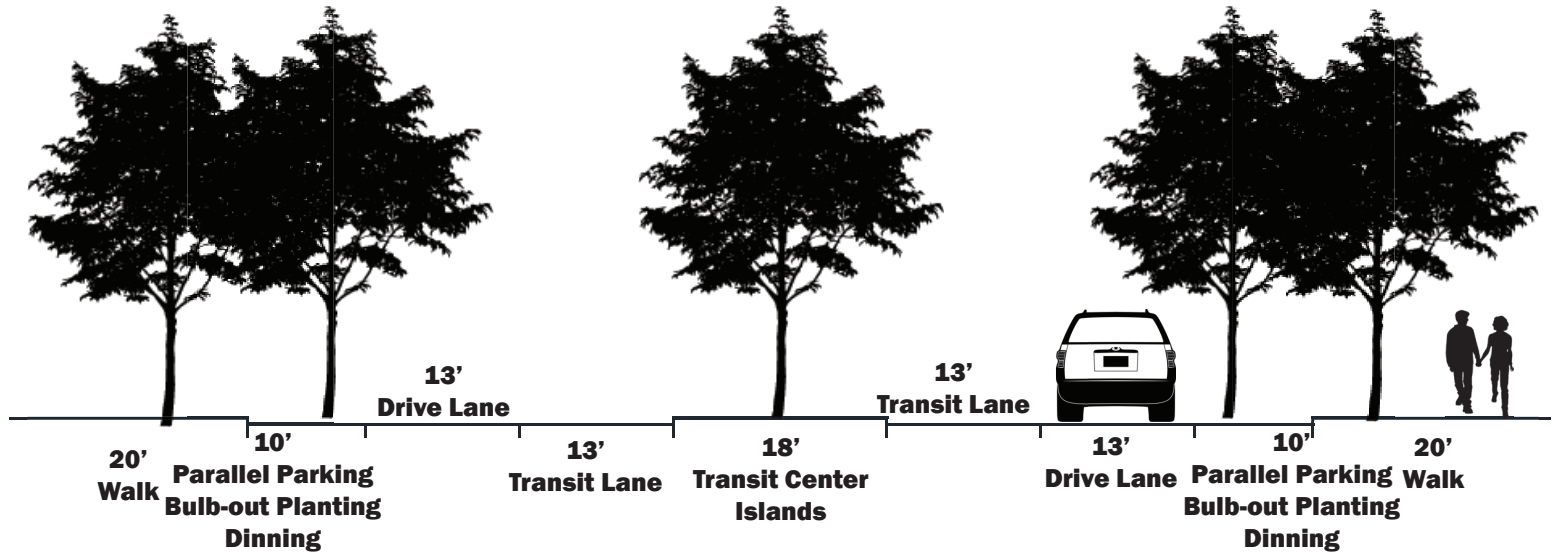
Estimated cost: 1.5 Billion

Completed: 2013

Program:

- This unique shopping environment features a retractable glass roof
- a creek that runs through the property
- a pedestrian skybridge
- Public transit
- Sidewalk Dinning
- Urban landscaping
- Shopping, entertainment, work, and living.

The project is the largest mixed-use urban project to be built in the US in recent years. SWA's design takes its inspiration from City Creek which once traversed the site. The iconic stream-like waterway provides a pedestrian-oriented green space throughout the property—the largest flowing watercourse built on-structure in the US. Other elements of the landscape design support the overall concept of urban living, with pocket parks, roof gardens, and landscape connections throughout the project. The project has received LEED Silver certification.



CITY CREEK CENTER

17 CASE STUDY

Location: Denver, Colorado

Address: 16th St, Denver, CO 80265

Scope: Urban Design, Pedestrian Corridor

Size: 80-foot-wide, mile-long mall

Designer: I.M. Pei and Partners and Hanna/Olin

Client: Downtown Denver Inc. and Regional
Transportation District

Estimated cost: \$57 Million

Completed: October 4, 1982

Program:

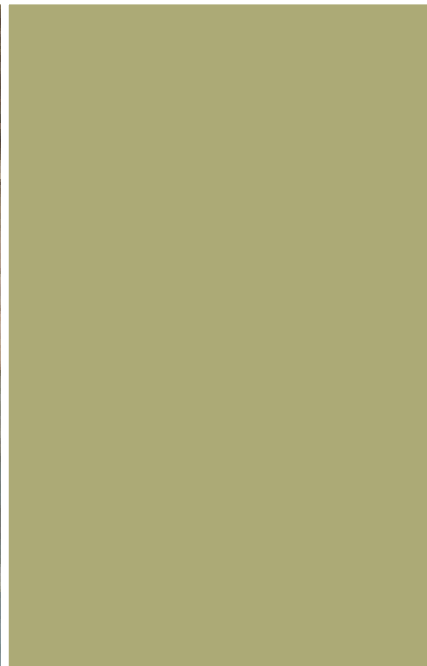
- 22-foot-wide central promenade (Pedestrian zone) with trees that provide shade,
- Two 10-foot-wide bus paths, slightly depressed,
- 19-foot-wide sidewalks bordering the buildings,
- Granite pavers resembling the pattern of a diamondback rattlesnake
- Specially designed light standards and street furniture
- Unique shopping, dining, living, and entertainment environment



16th Street Mall is one of Denver's most sought out destinations. Over the years its original character has been degraded and as surrounding urban designs have been re-envisioned, this street holds the cities eyes to stay unchanged but updated as needed. An expansion to the street was commissioned in 2001 and 2002 connecting to Union Station.

The central promenade has been designated as a lounging zone for pedestrians to relax, enjoy, people watch, and meander the site. The street zones are limited to a free bus shuttle that moves up and down the street, which is a very popular amenity to tourists and Denver residents alike. The sidewalks give room to sidewalk cafe seating and retail merchandise stands.

The street is used for the annual New Year's Eve fireworks shows and events, as well as hosting other special small business events throughout the year that showcase local artisans. Neighboring Skyline park offers winter season enjoyment with an ice rink and activities for all ages.



16TH ST MALL





Location: Boulder, Colorado
Address: 1942 Broadway Suite 301 Boulder, CO 80302
Scope: Urban Design, Pedestrian Corridor
Size: Four block stretch
Designer: OZ Architecture
Client: City of Boulder
Completed: August 6, 1977

Program:

- Pedestrian only street
- Community space with amenities for all ages
- Way-finding and historical signage
- Site finishings and site lighting
- Pop-jet fountain and children play areas
- Shade structure for outdoor performances
- Flower planters with trees
- Shopping, dining, living, and entertainment environment

19 CASE STUDY

PEARL STREET MALL

Pearl street mall in Boulder is a nationally recognized example of great downtown revitalization. The street attracts hundreds of thousands of visitors a year. It provides an escape for residents and tourists to enjoy together.

There are many restaurants, bookstores, boutiques and sidewalk cafes for visitors to choose from. Also popular are the seasonal art shows, craft fairs, musical presentations (Summer Concert Series), Boulder Asian Festival, and street performers who entertain enthusiastic crowds with their antics. The “Switch on the Holiday” a Christmas light show is a popular winter attraction. The Pearl Street Stampede takes place every Friday night before the University of Colorado’s home football games. For 10 years, hundreds of fans have lined the Pearl Street Mall to enjoy the marching band and cheer on members of their favorite football team, the Colorado Buffaloes. People watching is the major pass time when in the mall.



21 CASE STUDY

Location: Minneapolis, MN

Address: Nicollet Avenue Minneapolis, MN

Scope: Urban Design, Pedestrian Corridor

Size: Twelve block stretch

Designer: James Corner Field Operations

Client: City of Minneapolis, Minneapolis Downtown Council

Estimated cost: \$50 million Redesign

Estimated completion: 2017 (first 1968)

Program:

- Pedestrian and transit only street
- Better connections between downtown destinations
- More green space
- Attract and grow employers
- Create a better place to call home



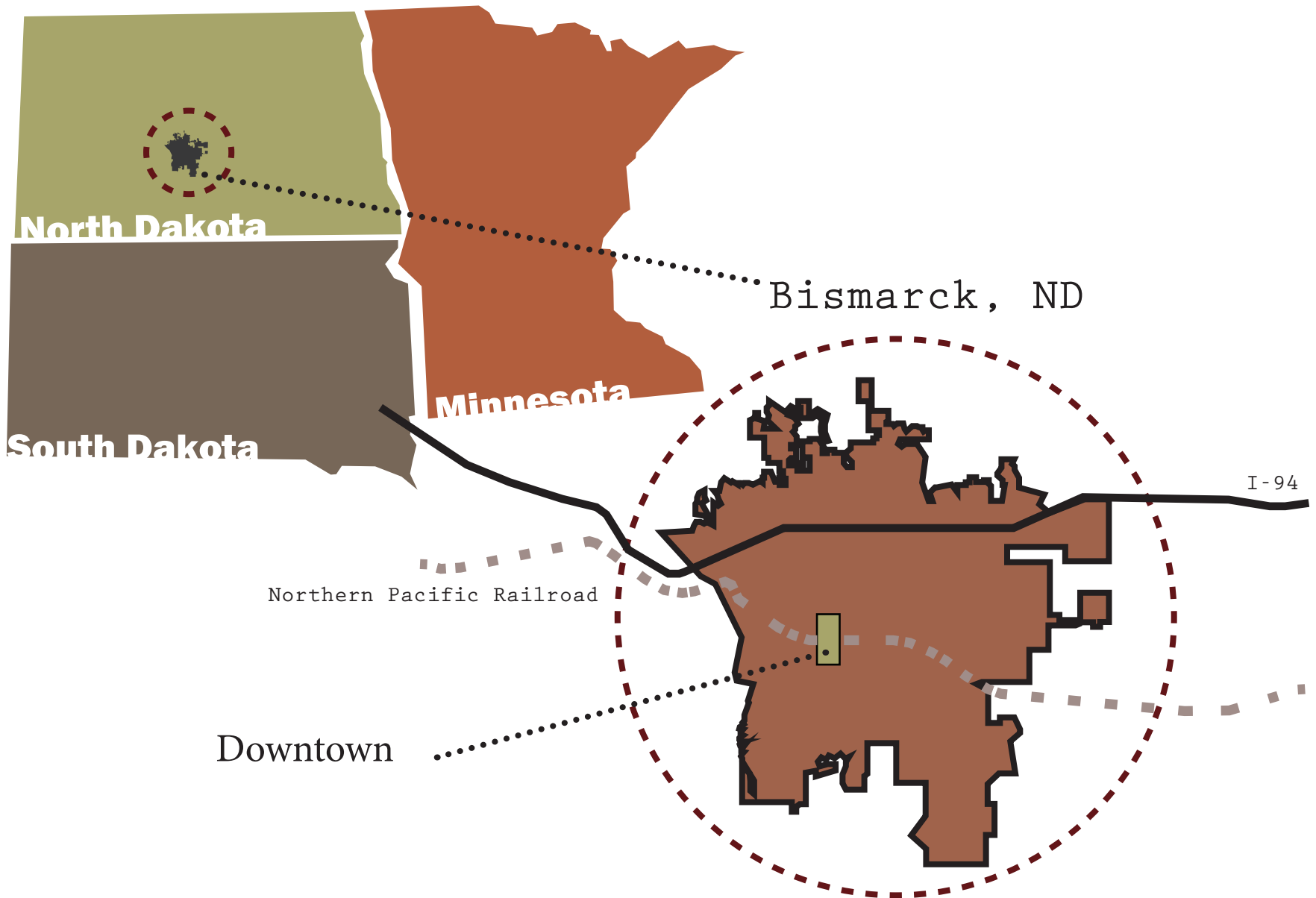
NICOLLET MALL

The New Design was commissioned by the City of Minneapolis and the Minneapolis Downtown Council. Discussions have led to the understanding that a higher functioning mall will create a better environment for companies to grow and for employees to be. The vision for the redesign is to maximize resident's and tourist's experiences to live, work, play and visit the mall.

The new mall will be a destination in-itself and also a connector to other main attractions downtown. It will have three distinct areas within the design the **Woods** on either end and the **Groves** flanking the **Center**. The Woods will be heavily vegetated to resemble a Minnesota forest and a parklike setting. The Groves will be designed for seasonality and provide community gathering spots. The Center is located in the middle of the business district and be the most urban feeling of the site.



23 SITE INTRODUCTION



SITE INTRODUCTION 24



25 RESEARCH APPROACH

In order to design a streetscape for pedestrians, I will first look at previous work from professionals and diagram the elements of the street that work well and what doesn't quite work. I will then look at potential activities powered by both private and public realms that could be implemented on the street development and feasibility of space requirements on site. Finally, I will ask the public how they feel about different designs and activities.

The results will determine what elements are added to the complete street for downtown Bismark's redevelopment.



Good design is the foundation for people to frequent the site. Analyzing and comparing case studies on their design and features will set a program for year round use and enjoyment of the street.



Activities

Public activities will draw pedestrians to the street. The scope of the event should vary to attract a people of all interests.



Public

A survey will ask individuals general questions about both Bismarck's downtown and downtowns in general. The results will help guide the design of 5th Street for the people.

27 CLIENT & USER DESCRIPTION

All Citizens
Any Age
All Professions
Any Ethnicity

CITY OF BISMARCK BUSINESS

Strengthen Existing
Promote New
Retail
Dinning
Living

RESIDENTS TOURISTS

Downtown Professionals
Young Adults

People from around the State
People from around the Country

Design From Case Study Exploration

COMPLETE STREET ELEMENTS

	Parking	Drive Lanes	Transit	Bike Lanes	Street trees	Planters	Extended Sidewalks over 5'
Broadway	X	X			X	X	X
City Creek Center	X	X	X		X	X	X
16th St Mall			X		X	X	X
Pearl St Mall					X	X	X
Nicollet Mall			X		X	X	X
	40%	40%	60%	0%	100%	100%	100%

GENERAL DESIGN

	Sidewalk Cafes	Paving Patterns	Water	Public Art	Signage Wayfinding	Furniture	Pedestrian Only
Broadway		X		X	X	X	
City Creek Center	X	X	X	X	X		X
16th St Mall	X	X	X	X	X	X	
Pearl St Mall	X	X	X	X	X	X	X
Nicollet Mall	X	X	X	X	X	X	
	80%	100%	80%	100%	100%	80%	40%

29 RESEARCH FINDINGS

	Street Fairs	Parades	Concerts/Street Performers	Farmer's Market	Dining	Bars/Pub Crawls	Shopping	Art	Holiday Display
Broadway	X	X	X	X	X	X	X	X	X
City Creek Center			X		X	X	X	X	X
16th St Mall					X	X	X	X	X
Pearl St Mall			X		X	X	X	X	X
Nicollet Mall			X		X	X	X	X	X
	20%	20%	80%	20%	100%	100%	100%	100%	100%

A vibrant downtown has several scheduled events throughout the year. Planning the events scattered throughout the year promotes multi-seasonal enjoyment. Also, planning events in adjacent to other events around the city gives visitors reasons to stay in town longer.

Activities From Case Study Exploration

RESEARCH FINDINGS 30

Selected results from 35 respondents from the survey asking general downtown design questions and questions directly related to the North Dakota State Capital's Downtown

87% Of respondents do not utilize public transit

87% Of respondents said they would pay to ride a transit line that operates up and down 5th St from Kirkwood Mall to the State Capital Grounds

68% Of respondents say parking can be sacrificed to allow for more pedestrian amenities

Public Opinion From Survey

RESEARCH FINDINGS 31

Bike Lanes

80% Of respondents want designated bike lanes

51% Of respondents do not think protected bike lanes are essential

Downtown Visits

93% Of respondents would visit downtown more with more regularly scheduled events

93% Of respondents would visit downtown more in the winter with winter attractions like an ice rink or light-shows

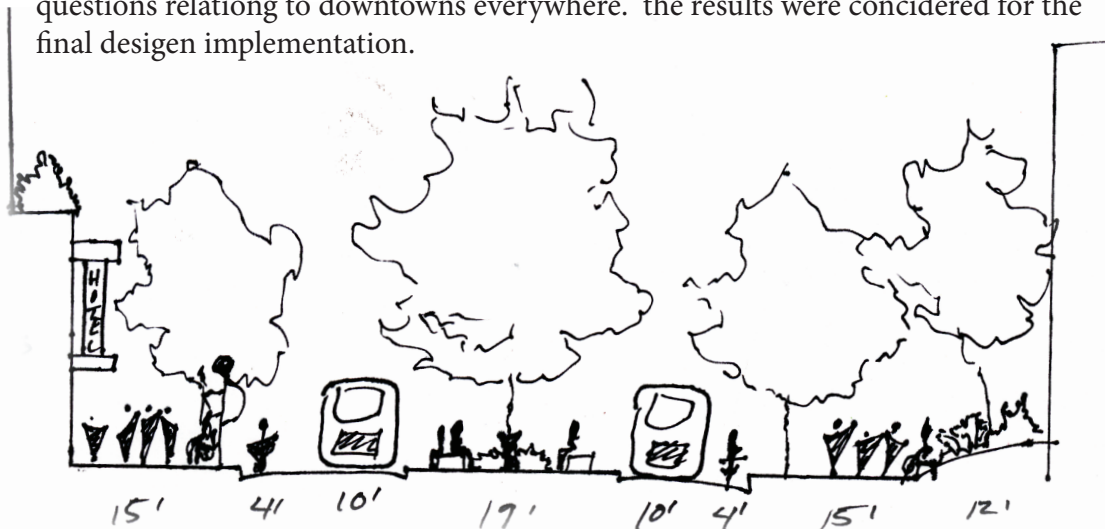
Public Opinion From Survey

32 RESEARCH CONCLUSIONS

Complete Street designs promote use from all modes of transportation. Large sidewalks allow for ample space to give pedestrians safety and variability. The case studies all lack designated bike lanes. The new design of 5th St must have bike lanes.

City regulated events promote citizenship , supports local business, and provides needed support. Having a variety of events and programs draws in people of different disciplines all of which can enjoy the space. Scheduled events all year round creates multi-seasonal use. More events will bring mor people to the street.

The survey was sent out to 50 individuals and the 35 participants answered variouse questions relationg to downtowns everywhere. the results were considered for the final design implementation.



Design

Events

Public

The location is a great site for design development. It has had very little recent work or development and has become underutilised as part of downtown Bismarck, ND. here are what we can expect from the new redevelopment.

Urban Renewal Project

Traffic Calmed Street

Retail Destination

City Core

State Capital and History

Cultural Heritage

Bismarck tree memorials and dedication

The Civic Center and Kirkwood Mall Already draw people to the site in large groups

33 APPLICABLE SITE VALUES

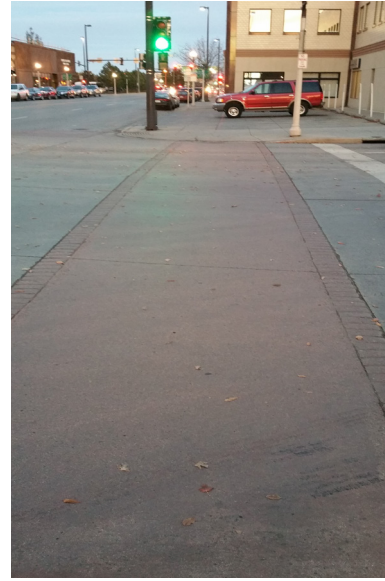
DESIGN GOALS

- Create a complete street design for the 5th St redevelopment.
- Add street trees and other landscaping to establish a greener downtown.
- Use native plants in the design.
- Introduce sidewalk dining and public space.
- Link existing city elements together through a unified design.
- Reduce traffic speeds and street parking.
- Create year round experiences with programmed events.

ACADEMIC GOALS

- Create the best complete capstone project in my educational career.
- Strengthen Photoshop skills.
- Strengthen design presentations.
- Use better time management skills.

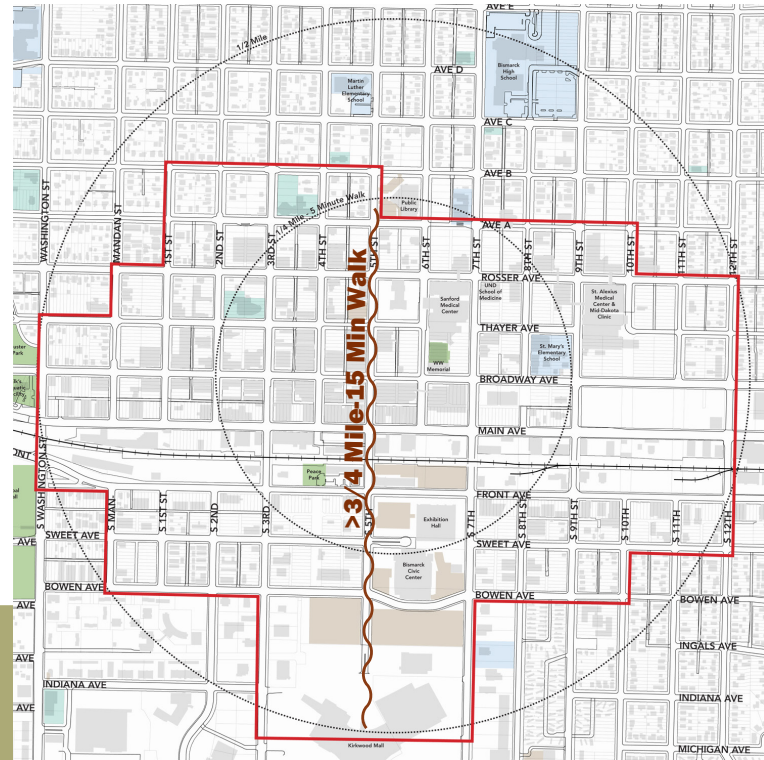
35 EXISTING SITE PHOTOS



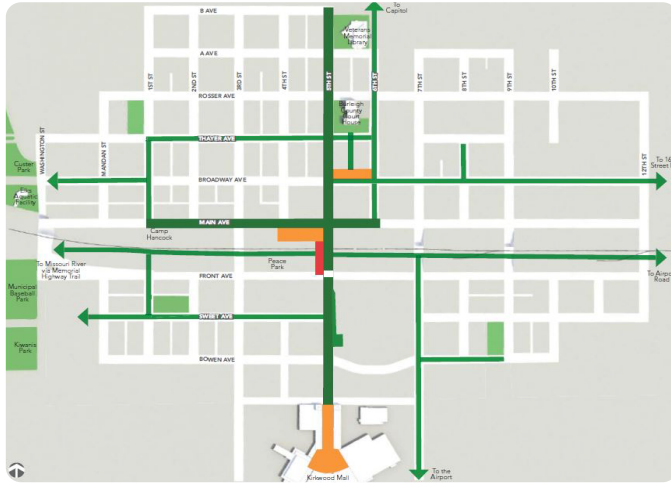
INVENTORY WALK-ABILITY 36

Centered at the intersection of
5th st and Broadway Ave

Less than a 1.5 miles from
the Dakota Zoo, Super Slide
Amusement Park, Capital
Grounds, Riverwood Golf
Course, and Bismarck Airport

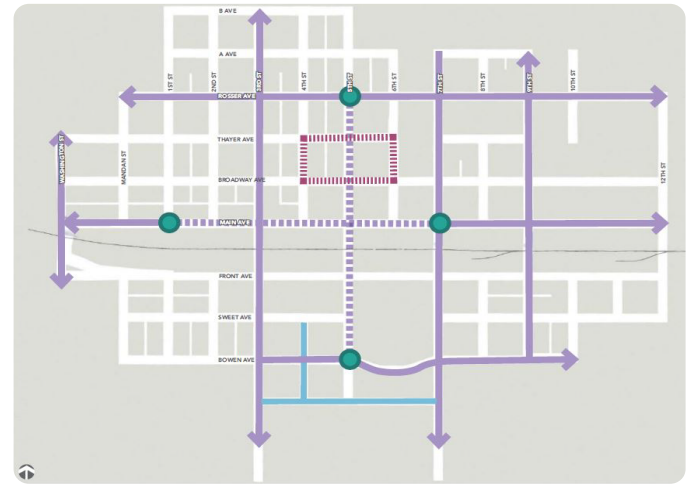


37 EXISTING SITE



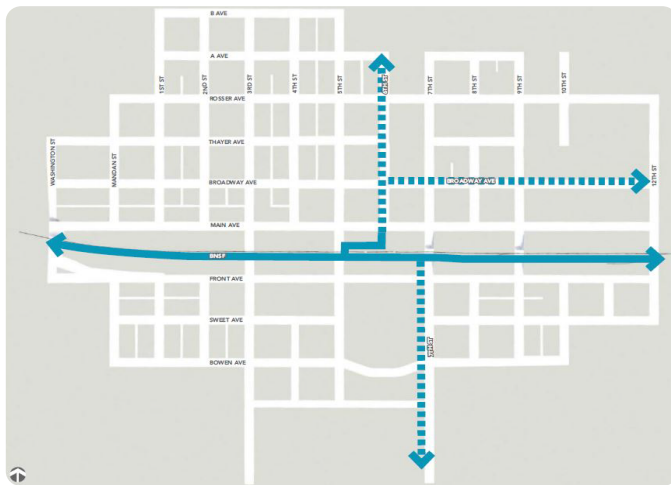
Pedestrian Paths

- █ Signature Street
- █ Pedestrian Underpass
- █ Neighborhood Connector
- █ Public Gathering Area
- █ Parks



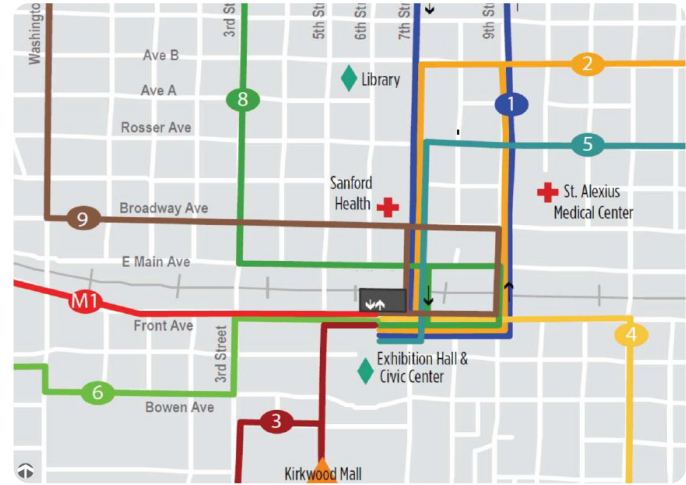
Traffic

- ⋯ Traffic Calmed Street
- - - Two Way Conversion
- █ Main Streets
- █ New Streets
- Gateways



Bike Route

- ⋯ Protected Bikeway
- █ Multi-use Trail



Transit

New Transit Hub
Front Avenue

Civic/ Cultural



Retail

- Retail
- Retail/
Entertainment
- Retail Parking
- Ramp
- Shopper Friendly
Streets



New Employment



Open Space

- Gathering Space
- Neighborhood
Park
- Existing Park
- A) Depot Plaza
- B) Mehus
Commons
- C) Mall
- D) Neighborhood
Parks



Housing



Parking

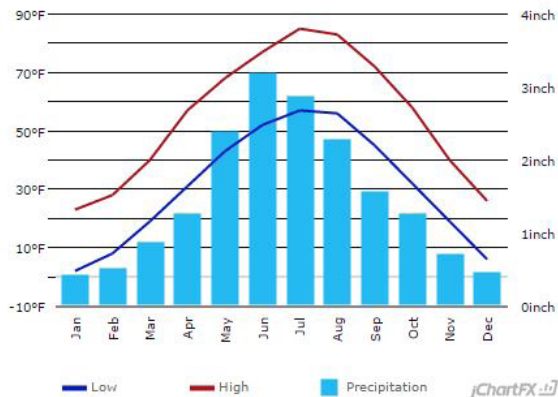
- Retail Ramp
- Employee Ramp
- Existing Ramp



39 EXISTING SITE

Average
17.8" Rain

Average
42.8F Temp.

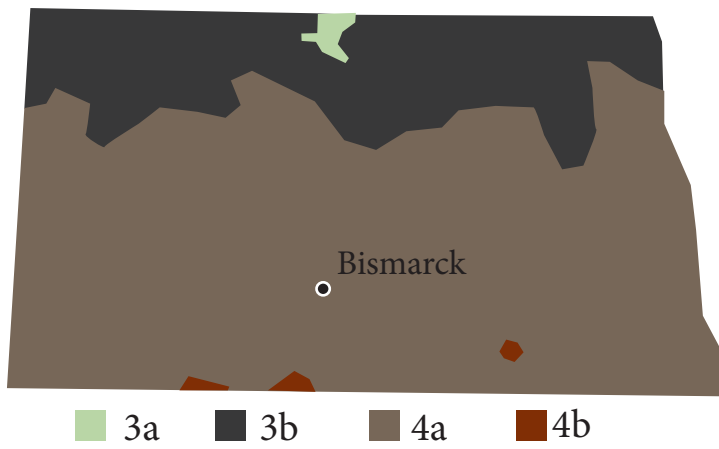
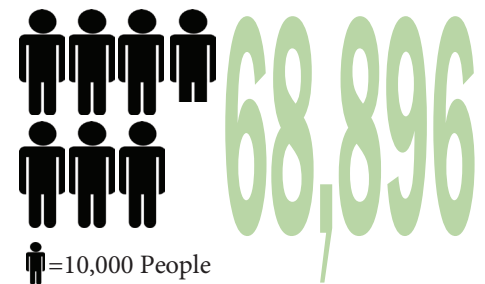


SOIL TYPE

Downtown Bismarck consists largely of silt loams. Also present are areas of silty clay loams, sandy loams, and loams. In general the water table is deeper than 80 inches and well drained. Flooding on flats is unlikely.



POPULATION



PLANT HARDINESS

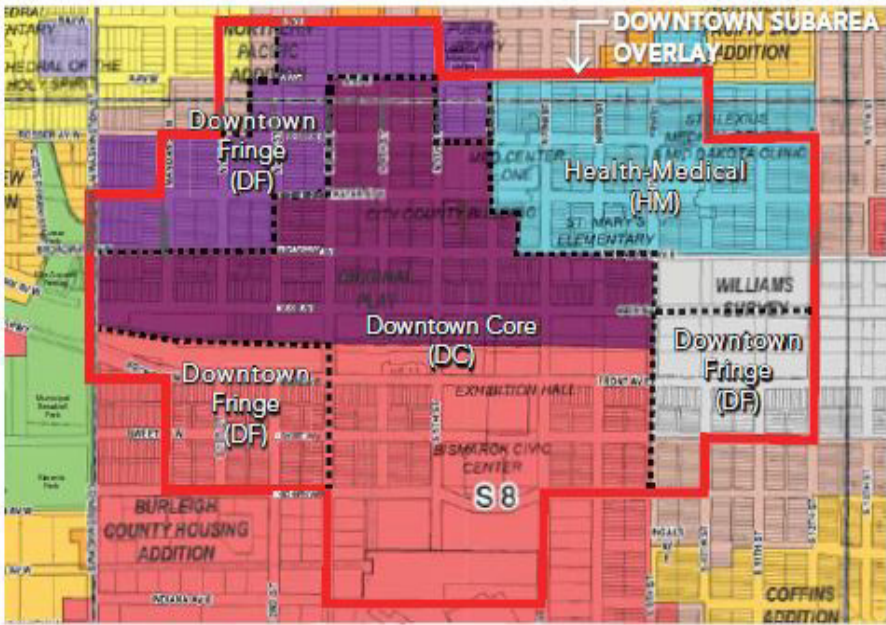
Classified as zone 4a, Bismarck is rated to withstand temperatures of -30F to -25F.

41 RENAISSANCE ZONE



The Renaissance Zone program, which was established by the North Dakota Legislature in 1999, provides tax exemptions and credits to both residents and businesses for revitalization and redevelopment activities within the Zone. Bismarck's Renaissance Zone was established in March 2001 and now encompasses a 39-block area in downtown Bismarck. The purpose of the Zone is to encourage reinvestment in downtown properties, which in turn strengthens the core of our community. The Renaissance Zone provides both property tax and income tax incentives to property and business owners who invest in qualified projects. There are five different types of Renaissance Zone projects: rehabilitation, purchase with major improvements, purchase only, lease, and historical preservation and renovation. (Renaissance Zone Program, City of Bismarck Website)

NEW CITY ZONING 42

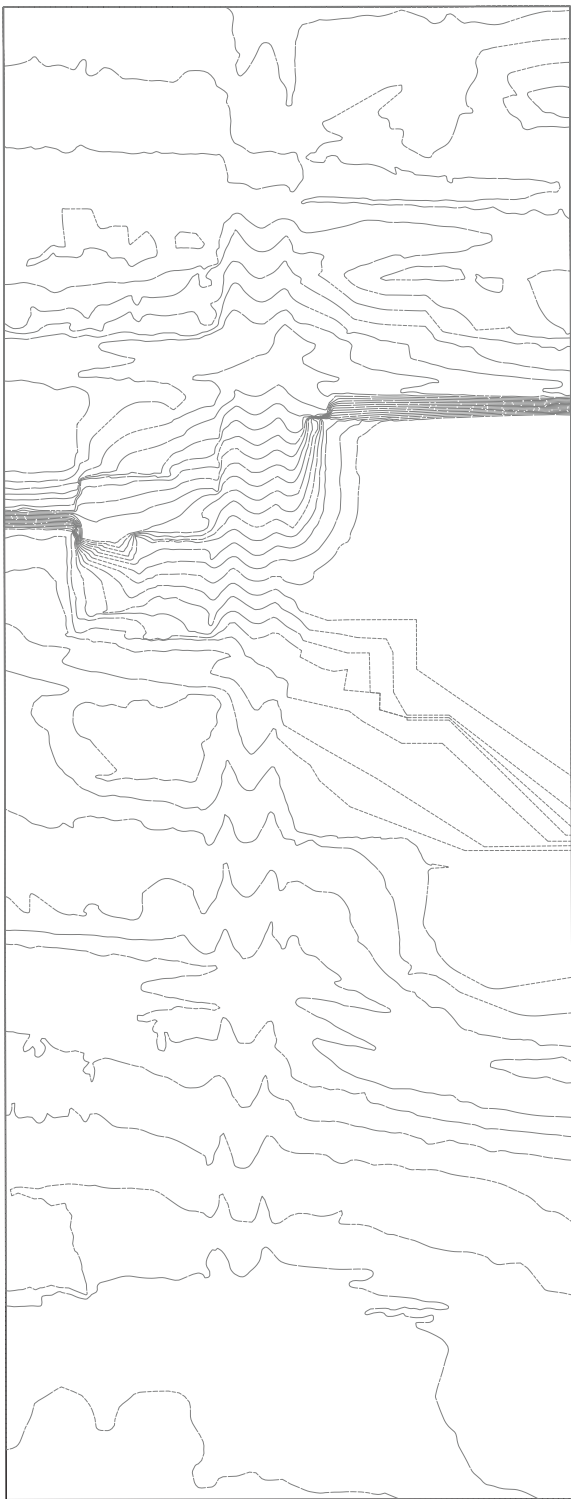


DC Mixed use
Business
Retail
Public
Pedestrian

DF Neighborhood
Housing
Semi-Public

HM Medical
Business
Public

TOPOGRAPHY 43





- Urban Greenspace
- Urban Plaza
- Pedestrian Street
- Streetcar Proposal route

BASIC CONCEPT 44

Existing Buildings



Infill Buildings



Proposed Open Space



ANALYSIS 47

Semimall

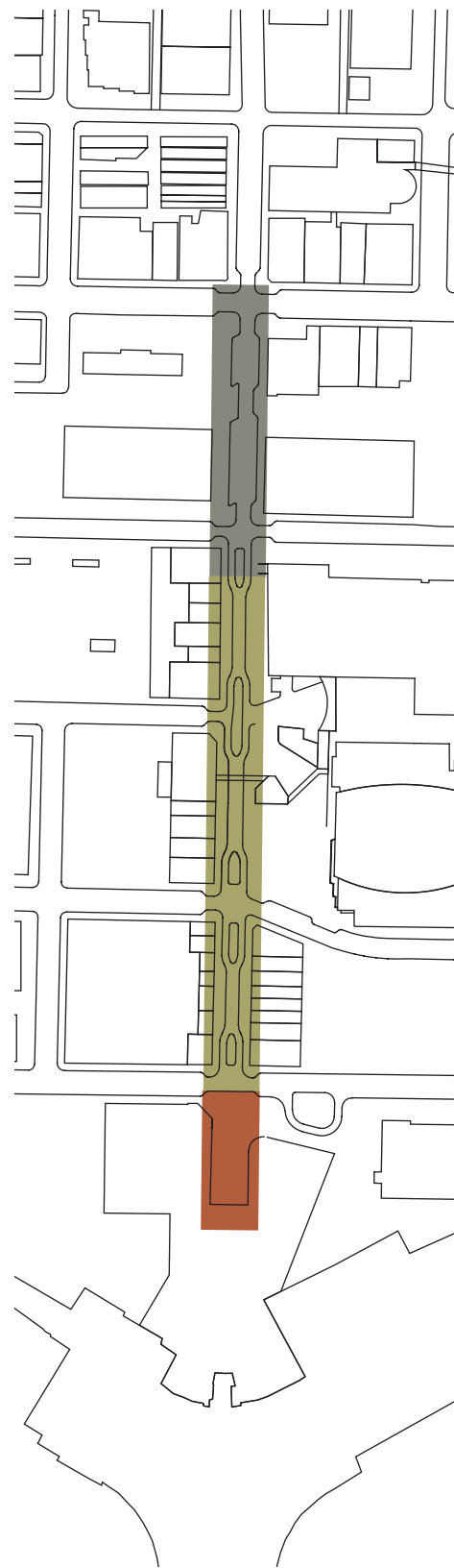
Reducing parking and traffic on street, while traffic is permitted.

Transit Mall

Closing off street to through traffic and personal vehicles.

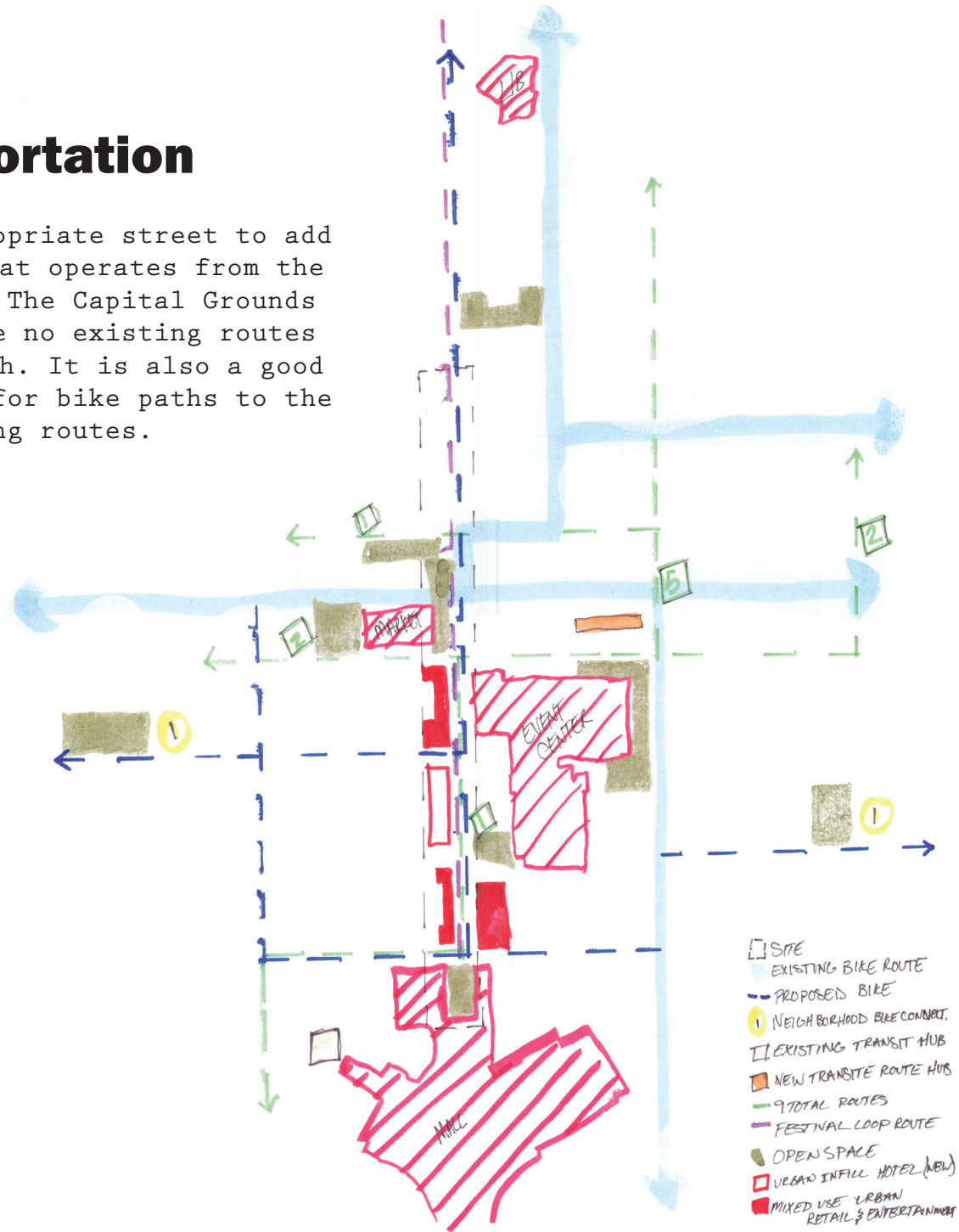
Full Mall

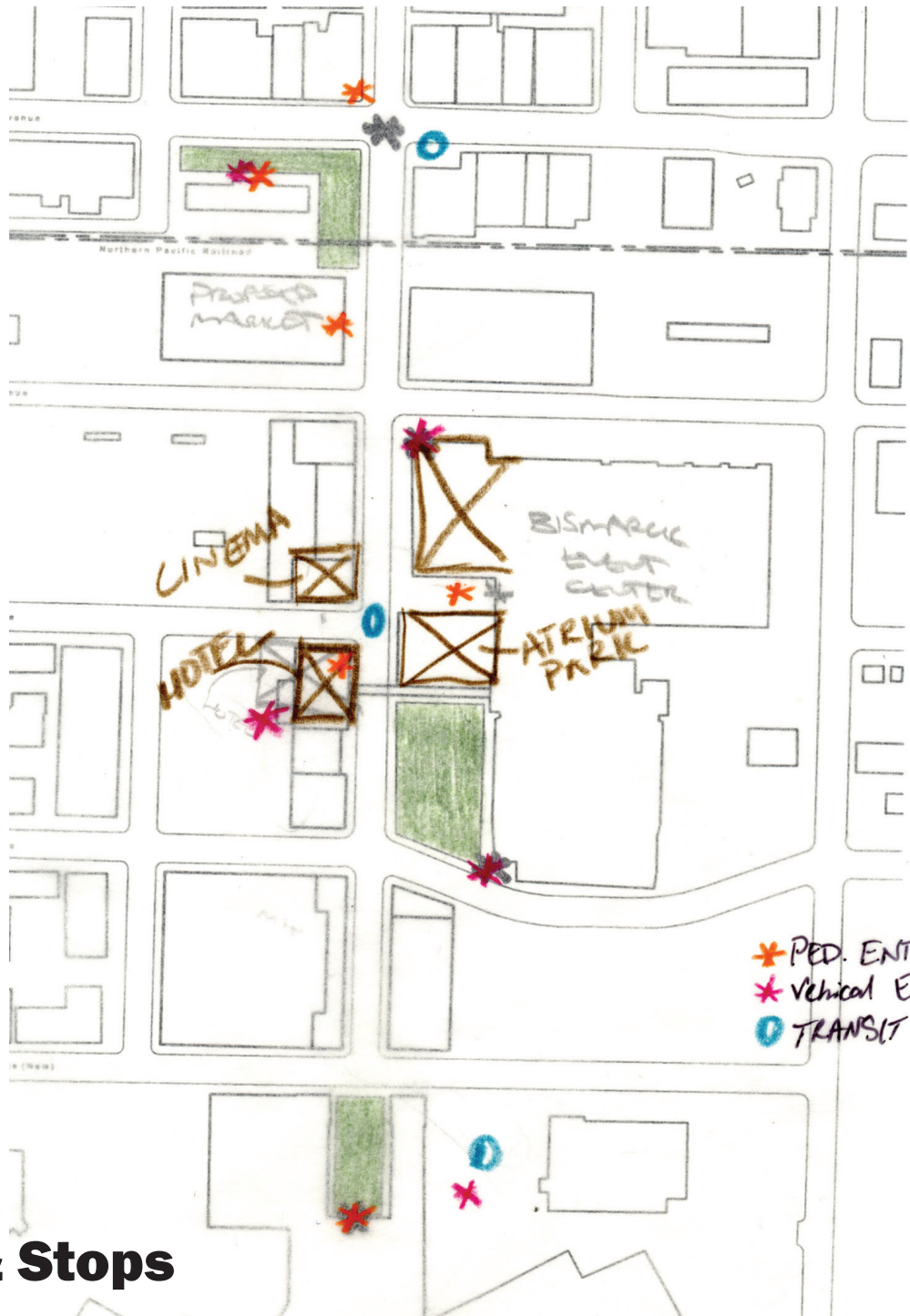
Closing off entire street to all types of motorists.



Transportation

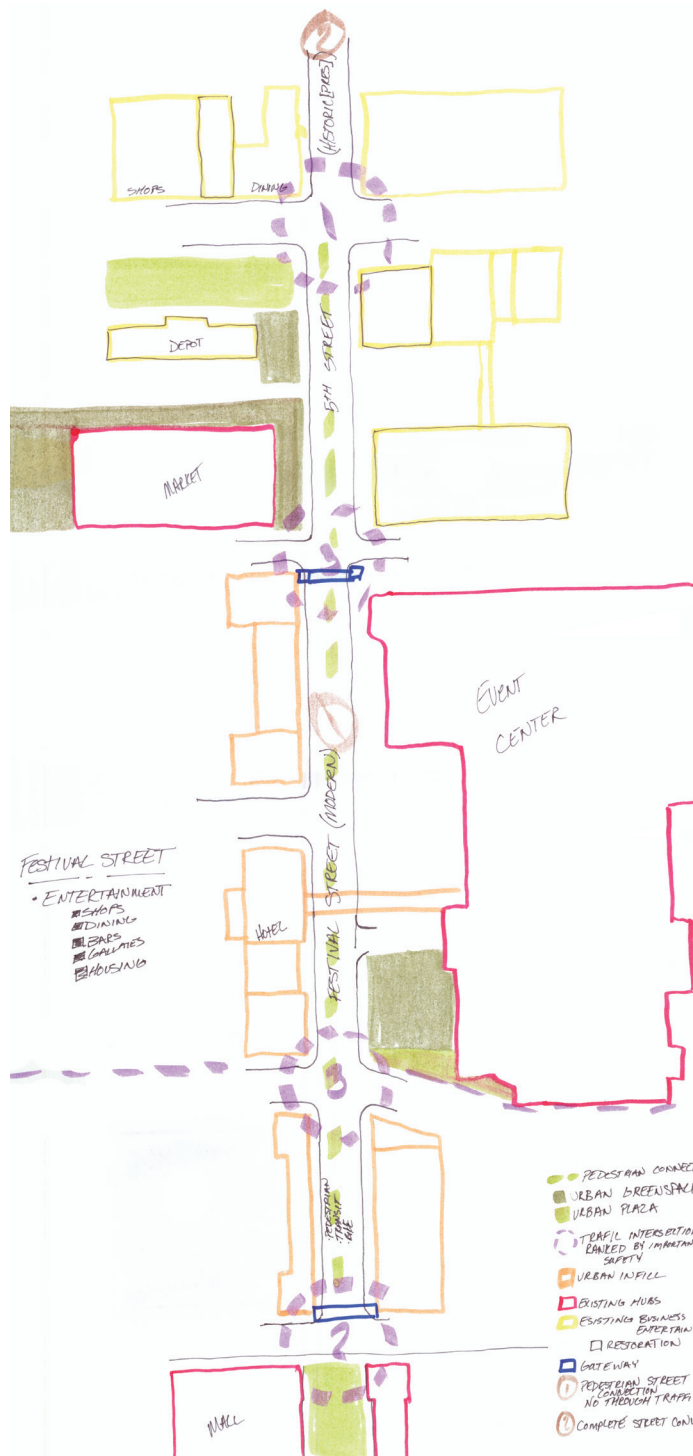
5th St is an appropriate street to add a Transit loop that operates from the Kirkwood Mall to The Capital Grounds because there are no existing routes that use this path. It is also a good connector street for bike paths to the existing routes.





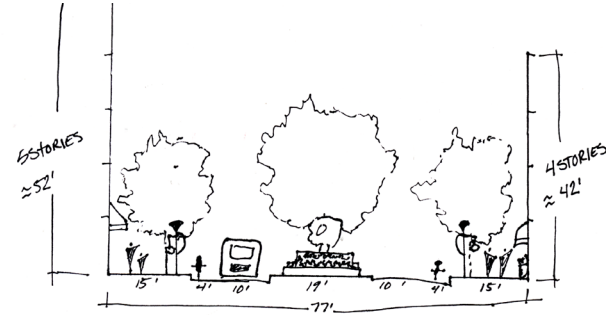
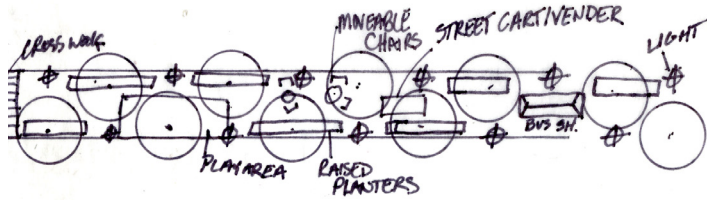
- ★ PED. ENTRANCE
- ★ VEHICULAR ENTRANCE
- TRANSIT STOP

Connections & Stops



ANALYSIS 50

51 DEVELOPMENT

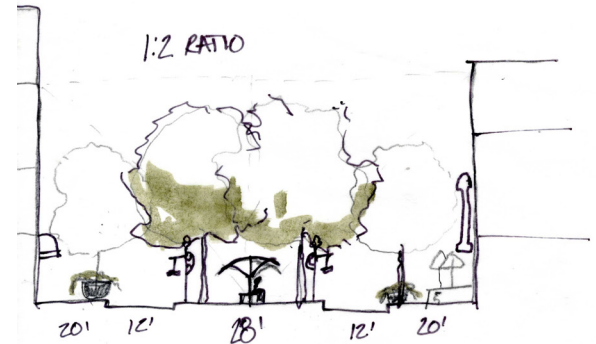


GENERAL STREET DESIGN

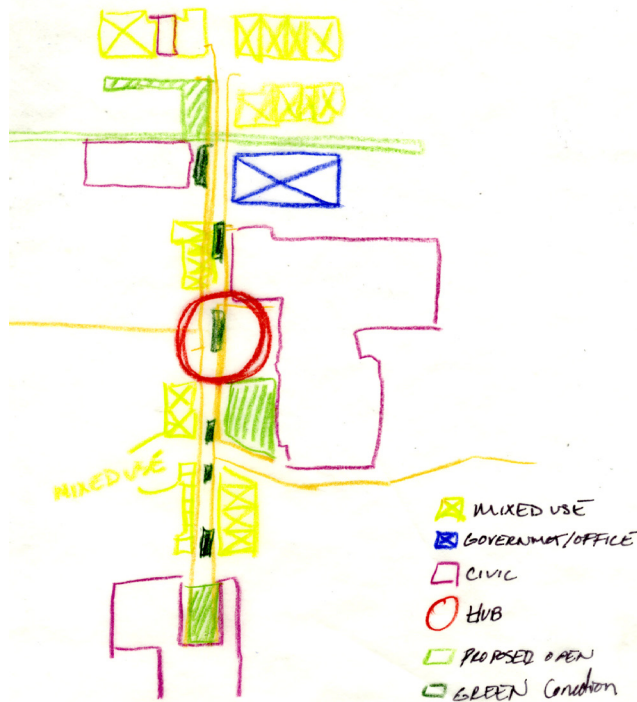


CENTRAL PROMENADE

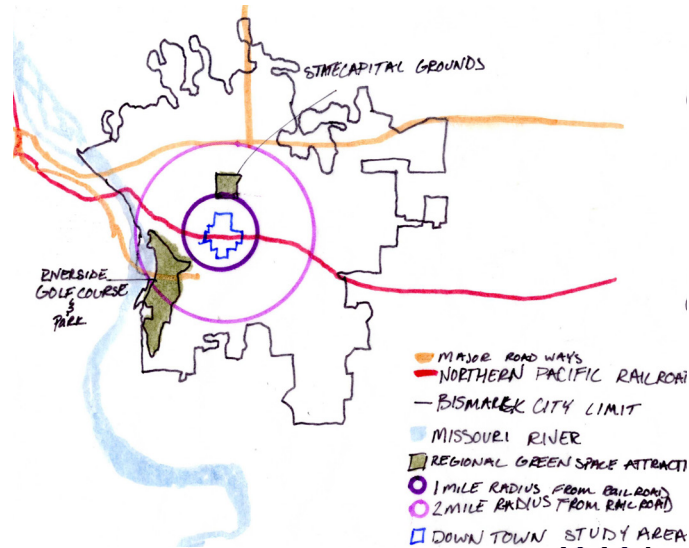
- CHESS
- PEOPLE WATCHING
- REMOVABLE SEATING
- PERMANENT SEATING
- KIDS ZONE
- ART DISPLAYS
LIKE SCULPTURES
- WAYFINDING
- TROLLEY REPLICAS
ON MODERN WHEELS



DEVELOPMENT 52



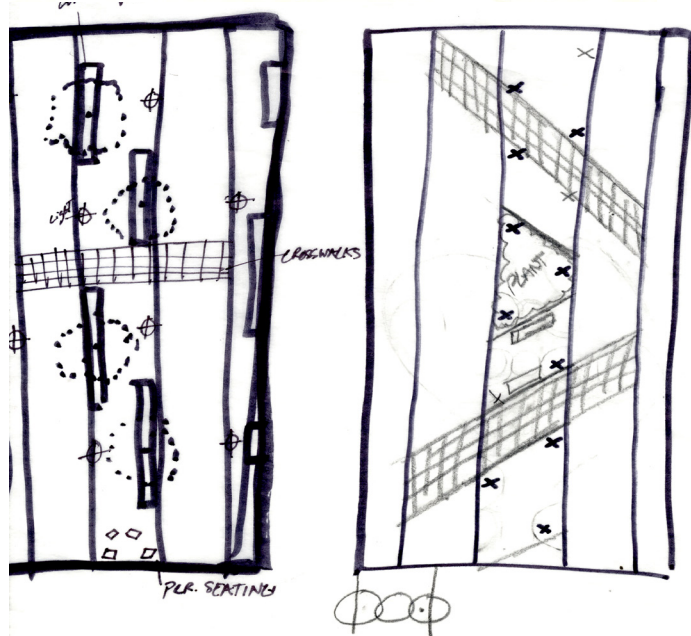
- ★ MIXED USE
- GOVERNMENT/OFFICE
- CIVIC
- HUB
- PROPOSED OPEN
- GREEN Corridor



- MAJOR ROADWAYS
- NORTHERN PACIFIC RAILROAD
- BISMARCK CITY LIMIT
- MISSOURI RIVER
- REGIONAL GREEN SPACE ATTRACT
- 1 MILE RADIUS FROM RAILROAD
- 2 MILE RADIUS FROM HIC ROAD
- DOWN TOWN STUDY AREA

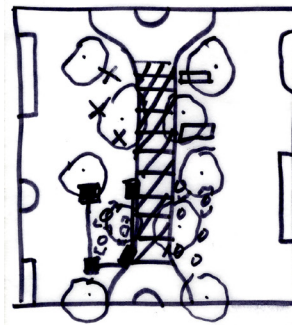
CENTRAL ISLANDS

- PUBLIC SPACE
- COFFEE SHOPS/VENDORS
- TRANSIT STOPS
- PLAY AREA

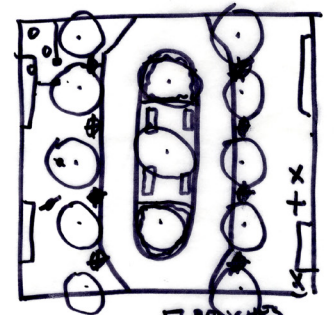


WIDENED SIDEWALKS

- DINING/RETAIL BUSINESS
- CANOPY VEG.
- MOVABLE FURNITURE
- PEDESTRIAN CROSSING



1 TIME CROSSING TRAFFIC
Change in material



□ BENCHES
○ TABLES/CHAIRS
+ CLOTHES RACKS

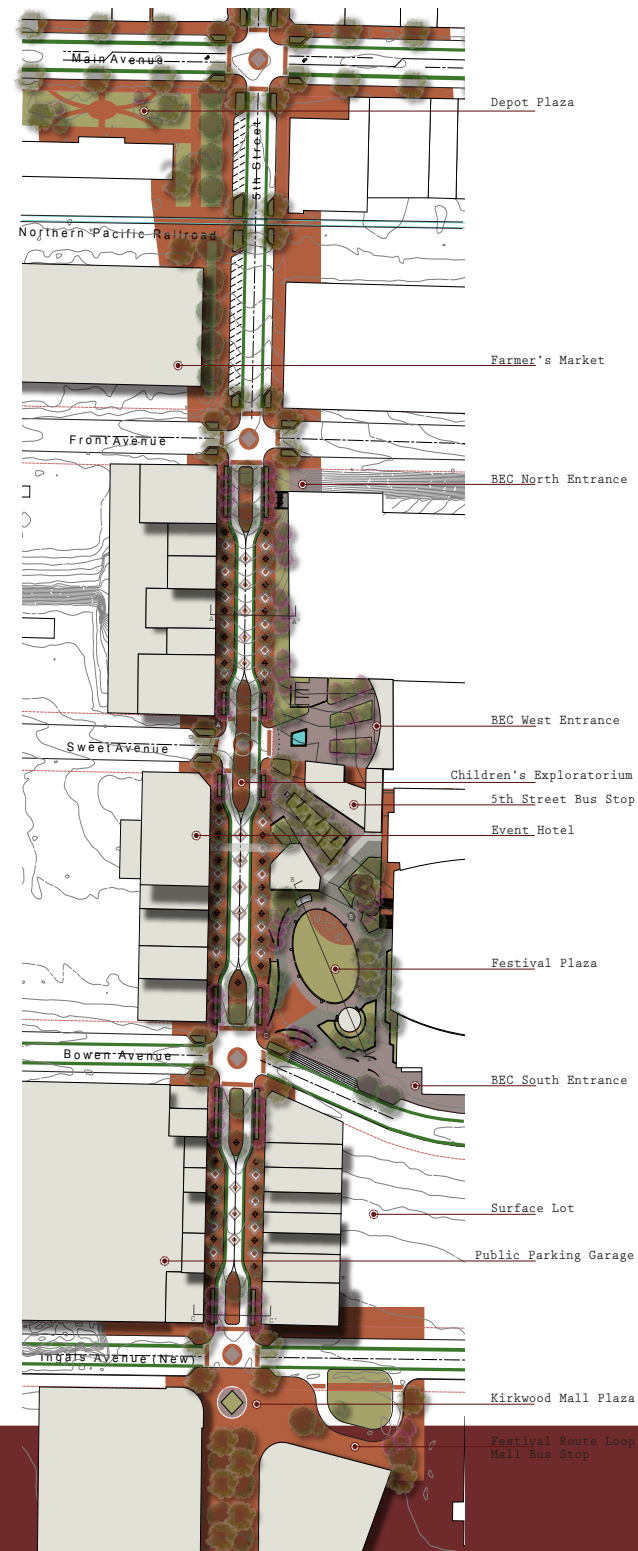
SEASONAL STREET EXHIBITS

- 10'x10' OR 12'x12'
- CLOSE STREET TO ALL TRAFFIC

Festival on 5th Street creates a streetscape that has identity and unity. The street should be enjoyed by all ages, disciplines, and abilities as well as feel comfortable.

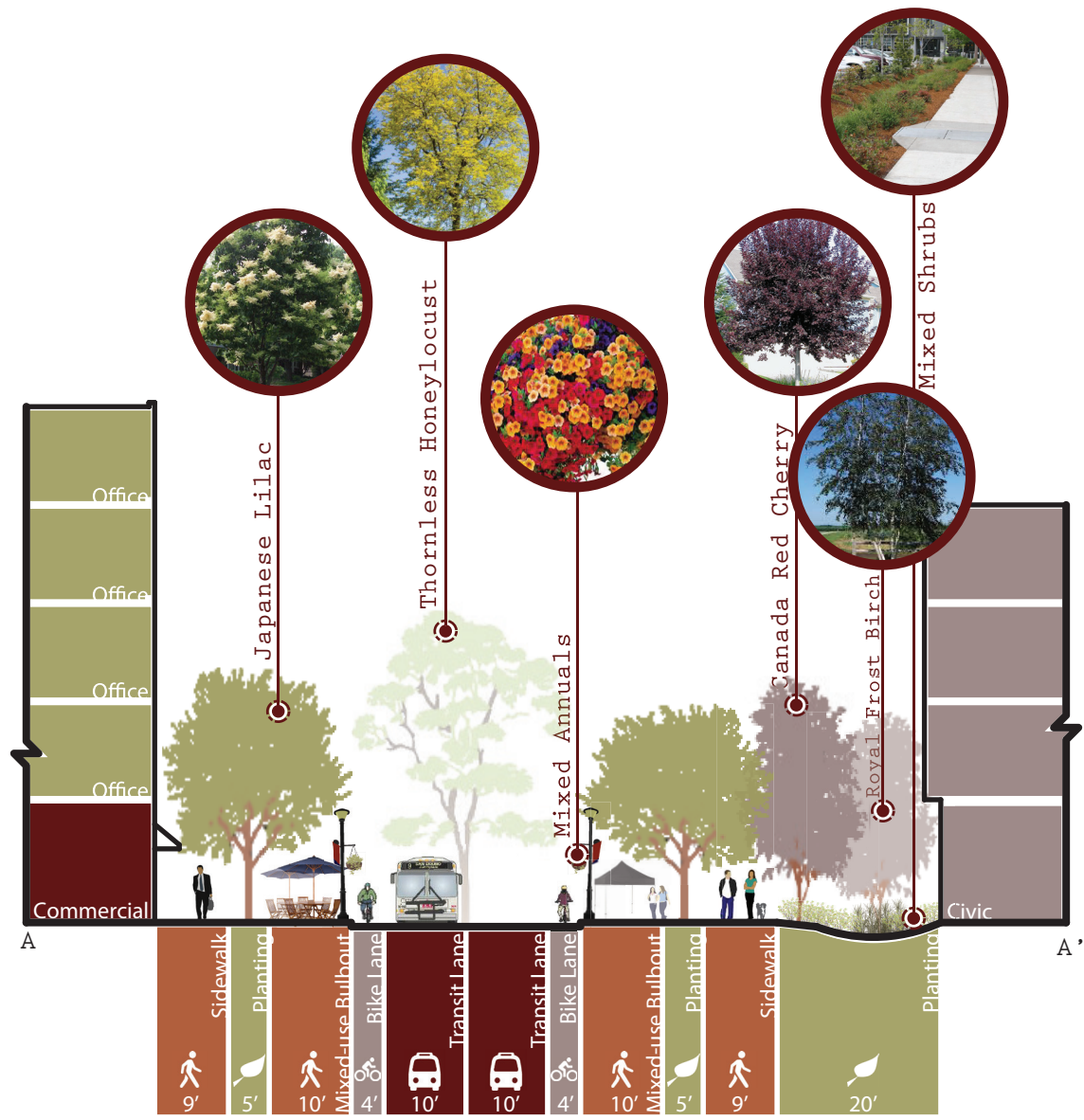
The tree canopy along the buildings provides refuge and brings buildings down to a pedestrian scale. Annual planters add pops of color to the natural color pallet.

The walk expansions promote business use and street performers. It also allows for festival exhibits and events. Pedestrian islands will allow visitors to relax passively on the street and enjoy an American favorite pass time- people watching. They also create vehicle awareness so that drivers focus on the street. A transit loop will run up and down the street connecting the State Capital to Kirkwood Mall.

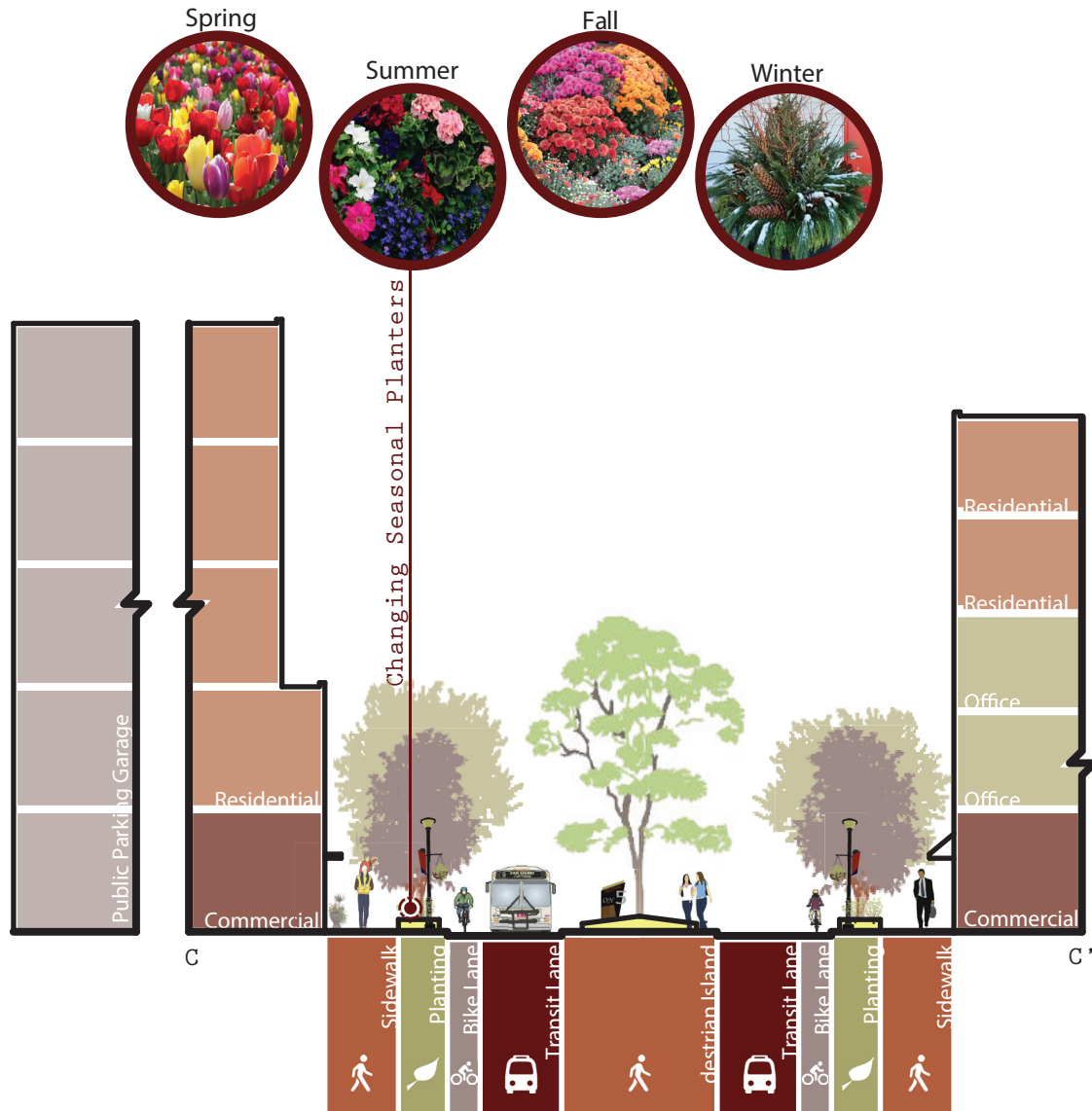


53 FINAL DESIGN

Typical Section with Extended Walks



Typical Section with Pedestrian Islands

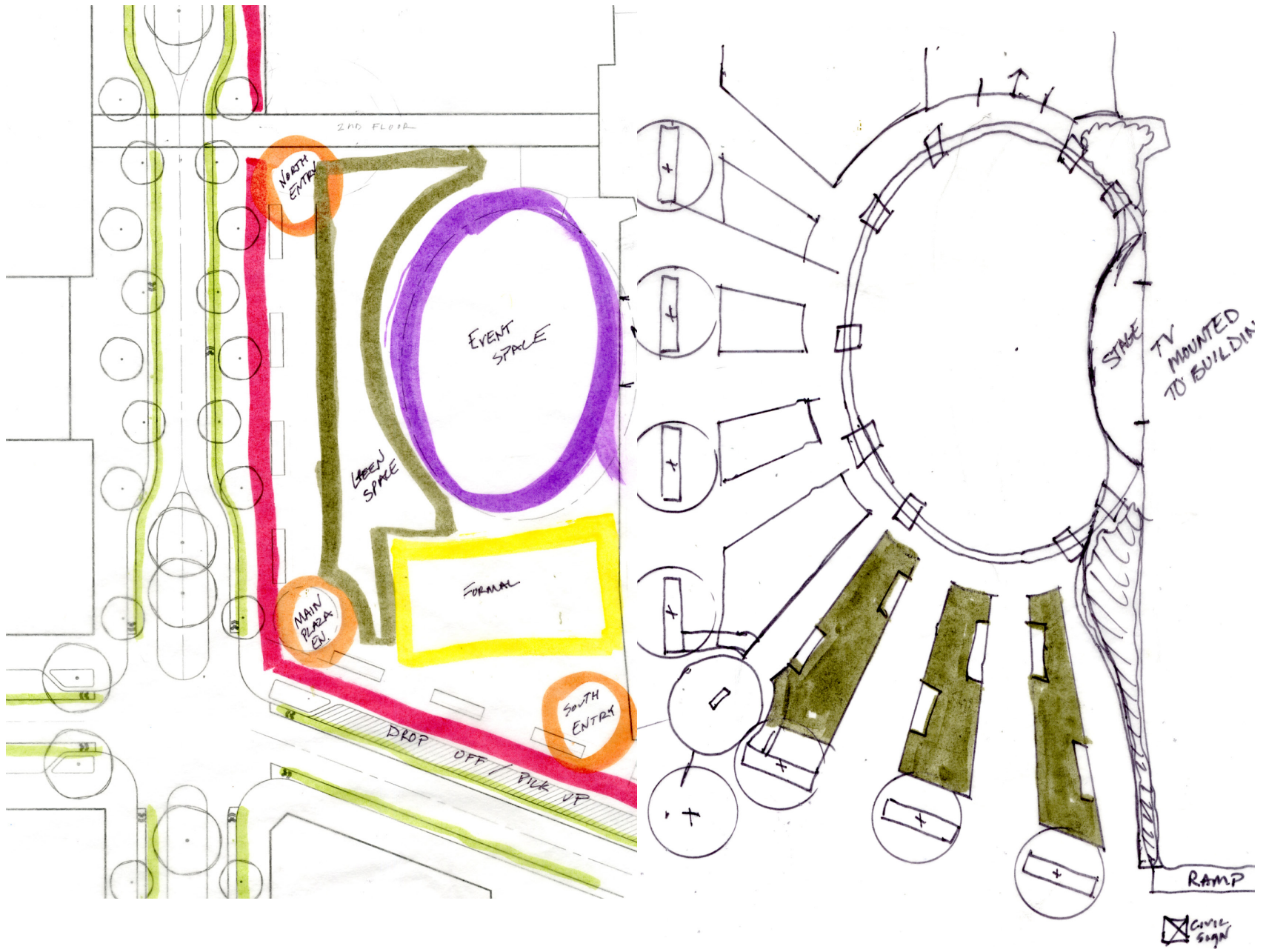


55 FINAL DESIGN

Street Section



FINAL DESIGN 56



57 SITE PLAN DEVELOPMENT

Festival Site Plan

Exploratorium Grove

Play Ground

Exhibit Space
Splash Pad

Lower Civic Path

Open Green Lawn

Exhibit Space

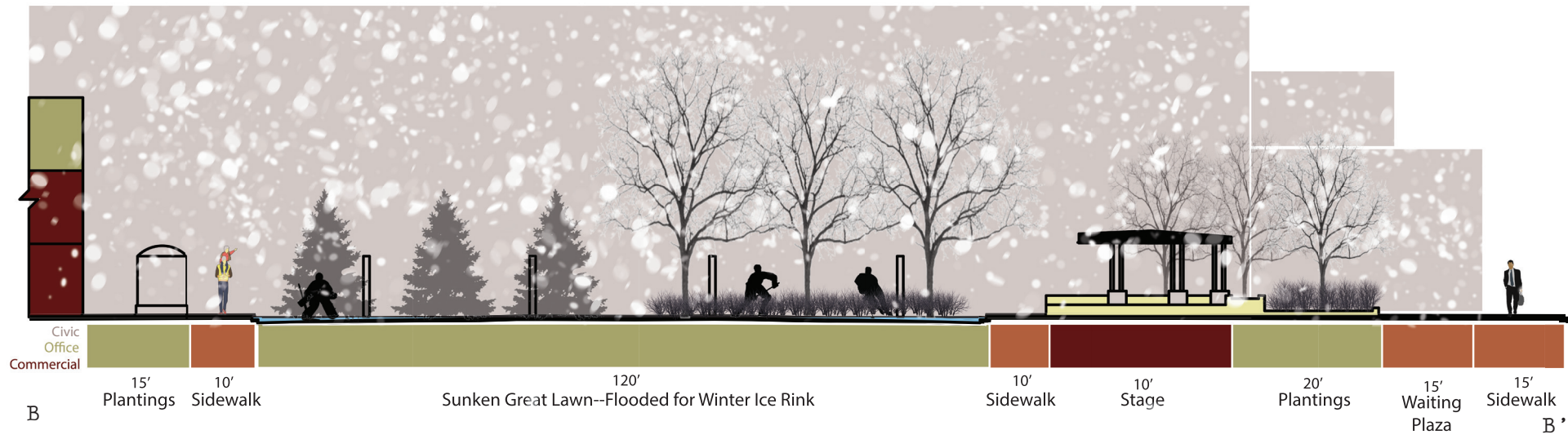
Performance Stage



FINAL DESIGN 58

Section Sunken Lawn and Ice Rink

A Seasonal interest in Festival Plaza... The sunken green space will be flooded to create a winter ice rink, holiday ice festival, and light shows.



59 FINAL DESIGN

B

Festival Open Lawn



FINAL DESIGN 60

A

Festival Bus Stop



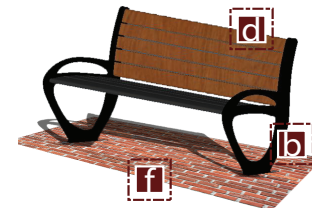
61 FINAL DESIGN



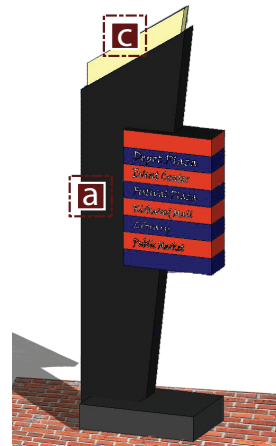
Materials

- a** Powder Coated
- b** Cast Aluminum
- c** Black Steel
- d** LED Light
- e** Wood Panels
- f** Concrete
- f** Brick Pavers

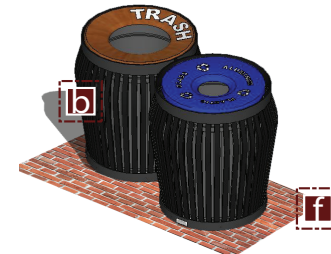
Street Bench



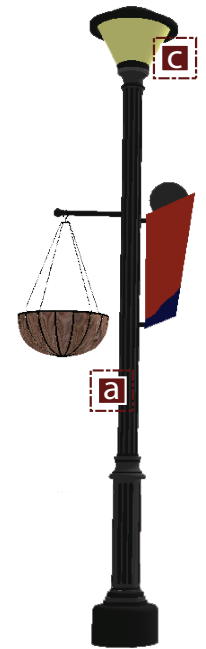
Way-finding



Entrance Sign



Receptacles



Street Light

FINAL DESIGN 62



63 REFERENCE LIST

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Model



Visit the online survey at...

https://docs.google.com/forms/d/1x_CU753TTgU7VU-VqWMHBKRfkyQYfwBH46HnApD1lRXg/viewform?usp=send_form

Visit the online PDF ...

Bismarck Sub Area Study

<http://www.bismarcknd.gov/DocumentCenter/View/20796>



APPENDIX 66