

# **Living Streets Within Downtown Fargo**

A Living Street that focuses on the pedestrian, environmental, and social design elements in downtown



# Living Streets Within Downtown Fargo

A Living Street that focuses on the  
pedestrian, environmental, and  
social design elements in downtown  
cores

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

By

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In Partial Fulfillment of the requirements  
for the Degree of Masters of Landscape  
Architecture

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Primary Thesis Advisor

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### **Thesis Archival Note**

The following thesis project, entitled (LIVING STREETS WITHIN DOWNTOWN FARGO) was composed over the course of the 2020-2021 academic school year. The Thesis program, as contained here, was initiated, and completed in the fall semester as a part of the LA 763: Programming and Thesis Preparation course. Supplemental material, including the thesis boards and the thesis presentation documents, were generated in the spring semester as a part of the LA 722: Design Thesis studio. Any inconsistencies between the different documents, in terms of research and design, should be excused per the evolution of the project across the two semesters.

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Part One-

# Thesis Proposal

Abstract

Narrative

Project Typology

Typological Research

Case Studies

Major Project elements

User Description

Site

Project Emphasis

Project Goals

Plan For Proceeding

Schedule

# Abstract

With downtown Fargo continuing to change with new multi-use buildings and parking garages, the focus should now be on the streets. Over the past couple years there has been multiple parking garages built within a mile of downtown Broadway. The question then came to me, was the street parking necessary and what could the street scape look like if the parking were removed. This thesis is to create a potential model for a living street scape in dense downtown city bodies. The design focuses on pedestrian, social, environment aspects of the street. These design aspects will provide opportunities for the community to be part of as well as the businesses located along the street to shape the landscape in front of them. This done through including multiple sidewalk zones, permeable elements, and modular components to create a dynamic landscape. The experience of downtown Fargo will be alive and growing alongside the thriving architecture.

# Narrative

Most city cores focus on the vehicular traffic and parking, which should be second to pedestrians. When looking at downtown Broadway in Fargo you mainly see parking a little pedestrian programming. In a dense pedestrian area, the focus should be on the pedestrian elements and how to create a proper space for them. Living streets are a great example of how to put pedestrians first. Living streets accommodate a range of transportation: focusing on walking, bicycling, and public transit. They are public spaces that satisfy the community needs no matter the age, income, or disability. Because they are public spaces and public investments, living streets add value to adjacent properties, maximize public investments and benefit, and provide places like shops, parks, and plazas for people to congregate. For the most part living streets feature well designed sidewalks, crosswalks, bike lanes, and on street parking if needed. Devoting less space to vehicle helps moderate vehicle speeds along with medians, bulb-outs, and curved streets. In Fargo's yearly climate, closing the street for a pedestrian mall or even a transit mall is not feasible. With living streets, the vehicular traffic can continue but the focus will be on the pedestrian circulation.

Figuring out criteria for a successful living street can be found from case studies in different settings. Within the case studies specific areas to focus on would be the pedestrian element affecting the street, social elements that create dynamic spaces, and environmental elements that create a more environmentally friendly street. These case study components can then be compared to the chosen Fargo site and adjusted to properly fit the space. The design will be influenced by these case studies and further research to create a proper living street.

# Project Typology

- Street scape planning
- Urban design
- Environmental design

# Typological Research

1. Location-consider the density of the surrounding area of the site and the daily pedestrian traffic
2. Design impact- analyzed the impact that the program elements had on the site and how those elements may be used across a variety of sites
3. Environmental impact- examined practices used to increase permeability and slow storm water runoff
4. Social impact- the opportunity to bring businesses and communities together through the spaces provided on the street

# Nicollet Mall, Minneapolis, MN

## Project Narrative

Originally designed by Lawrence Halprin and recently renovated by James Corner Field Operations the Nicollet mall has been Minneapolis's main shopping street for over 100 years. To compete with suburban shopping malls in the 60's eight blocks of the street were closed to traffic and only allowed taxi and bus transit creating the first transit mall. The renovation in 2017 created a greener, more pedestrian-friendly street.



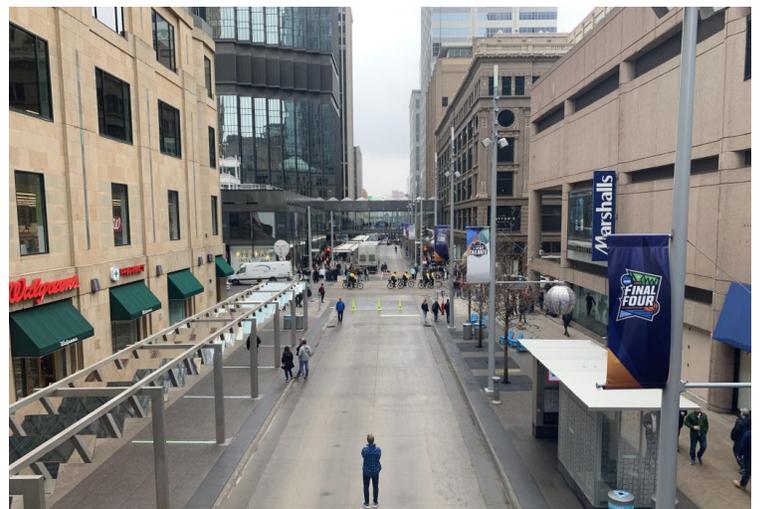
## Project Emphasis

The renovation focused on the environment and the pedestrians. The design included more than 240 streets planted as well as wider sidewalks and Three new civic gathering places. The pedestrian focused street scape included more project elements like unique lighting, curb free intersections, and of course kept the serpentine curve which slows down traffic.



## Important Takeaways

This past transit mall, now living street, has come along ways from what it was. This street scape focuses on the pedestrian experience which also includes added trees to create a greener environment.



# Downtown Mall, Charlottesville, VA

## Project Narrative

This pedestrian mall is considered one of the longest pedestrian malls in the United States spanning eight blocks. Original designer, Lawrence Halprin, had the challenge of creating a mall that would encapsulate the community's rich history.

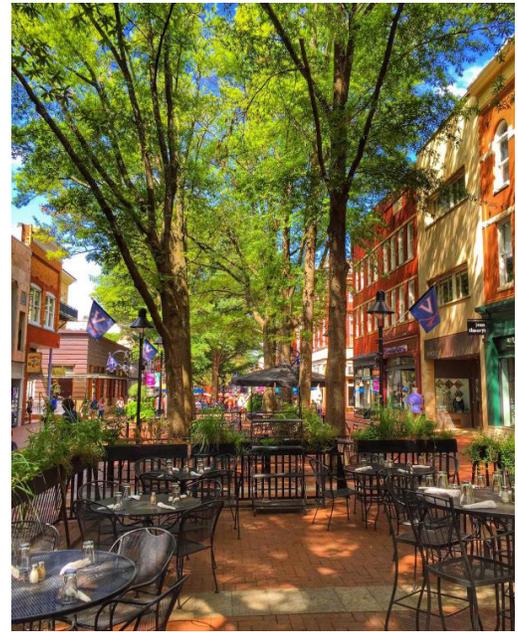
## Project Emphasis

This project focused on spaces for the businesses and the pedestrians spanning the

whole length of the mall. Designated zones for storefronts to use the outdoor space were important in getting business support as well as the community's. Being one of the longest pedestrian malls, the surrounding area includes parking garages and transit routes to accommodate visitors traveling to the mall.

## Important Takeaways

This pedestrian mall showcases the successful storefront interaction within the mall as well as the proper circulation surrounding the mall. Both are important for business and community support of the continuation of the pedestrian mall.



# South West Montgomery Green Street, Portland, OR

## Project Narrative

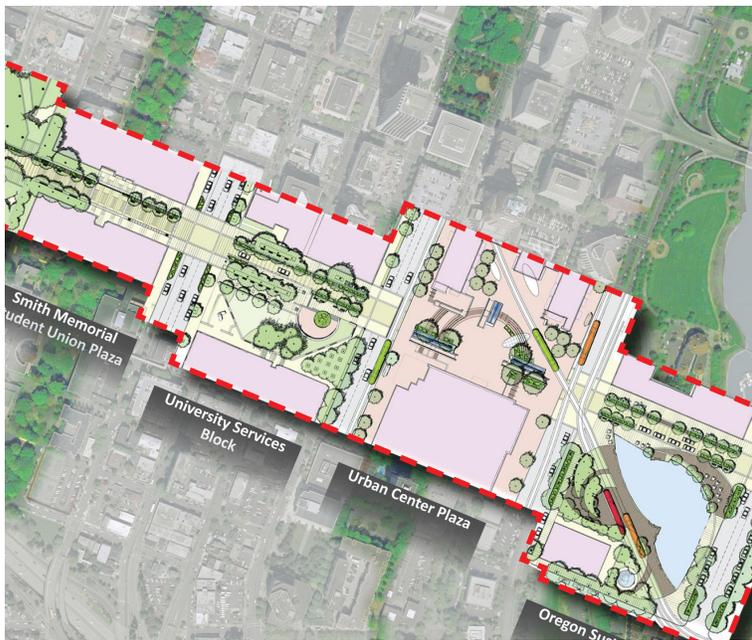
A highly pedestrian-oriented, nine block section of this street incorporates a variety of storm water strategies that has been successfully implemented over the last eight years. This street incorporates storm water planters, green walls, green roofs, surface storm water conveyance, creative downspout disconnection, and permeable paving. With these elements it will also create and activate the neighborhood, enhance the pedestrian experience, and guide a long-term relationship between academic, residential, and business communities.

## Project Emphasis

This project's main emphasis was on storm water management which also influenced the pedestrian experience as well. Curb-less streets were implemented to accommodate bicycles and pedestrians. This plan also promoted limited vehicular access to create a safer pedestrian street scape but at the same time not interrupting the flow of traffic through the street.

## Important Takeaways

This street scape takes in most all the components of a living street. The focus is on storm water management, but it also focuses on the pedestrian experience. These two elements combine create a street that will influence future streets capes within Portland and other cities.



# Major Project Elements

- Pedestrian
  - Proper sidewalk space
  - Safe street interactions
  - Connections to landmarks
- Social
  - Three sidewalk zones
  - Dynamic spaces for businesses
  - Clear site lines to businesses and landmarks
- Environmental
  - Increase plant life
  - Diverse plant pallet
  - Increased permeable materials
  - Better storm water runoff

# User description

The intended audience that I am hoping will use this space are residents, downtown visitors, business owners, cyclists, and transit users. This thesis proposal is open and intended to be used by everyone in the public realm.

# The Site

For this thesis proposal, the site will be Broadway street, Fargo, North Dakota between 1st avenue north and 4th avenue north spanning three blocks long. This is the main street of Downtown Fargo that is most popularly used by pedestrians, cyclists, and vehicles. Only one MAT bus route uses a portion of this site. Being a central location within Downtown Fargo it is a Fargo staple for tourists to visit this street.

# Project Emphasis

The implementation of a living street within Downtown Fargo, North Dakota is to focus on the pedestrian, social, and environmental aspects of downtown streets. By applying the principles of living streets, this design strives to emphasize the pedestrian while taking away the emphasis on vehicular transportation in downtown Fargo. Taking away parking on the street goes against a majority of street scape design and urban design principles.

# Goals of the Thesis Project

As a final thesis project to my graduate career at North Dakota State University, this thesis project seeks to accomplish professional and project goals.

With this thesis project, I hope to complete a design that can be well represented amongst already existing living streets and to influence the future look of Downtown Fargo. This design will hopefully create a new and unique perspective of what downtown could potentially look like. Along with those professional goals I also strive to enhance my research and analysis abilities throughout this thesis project. Focusing on case study results and applying them to my designs. In addition to research and analysis I hope to achieve professional level final renderings and graphics to be displayed.

# Plan for Proceeding

## Definitions of Research Direction

With both quantitative and qualitative research methods, it will influence the typology, site analysis, context, and program elements. Looking at case studies not only on living streets but as well as pedestrian malls and transit malls will provide influence in choosing design elements and other factors, such as the size of the site. Along with case studies, peer-reviewed journals, and landscape architecture standards will create a proper base to select design concepts.

## Design Methodology Plan

The methodology will include an approach using quantitative and qualitative analysis as well as digital analysis. I will be looking into how living streets began and how they have evolved to what they have become today to inform my design. As well as the information from the research will help direct the direction of the design outcome.

## Plan for Documenting the Design Process

Through the 2020 fall semester I will be documenting the thesis proposal process as well as beginning the research. This includes case study research, literature research and more. Soon after that I will start programming and expanding my research into living streets further. Beginning the spring 2021 semester this process continues. Next, site analysis and research begin and furthers the programming

within. After that, sketching and a final list of program elements and site goals will provide a stable base to begin designing. With advisors, professors and peers critiquing my design along the way it will make it into final rendering stages where it will then be compiled into a final presentation.

# Project Schedule

*Aug Sept Oct Nov Dec Jan Feb Mar Apr May*

Proposal Due ●

Program Due ●

Design Reviews ●

Booklet Due ●



**Part Two-**

# **Thesis Research**

Literature Review

Project Justification

Site

Performance Criteria

# Literature Review

## Understanding the legacy of Pedestrian Malls

### Abstract

In this article the author Dave Amos writes about all the aspects of the United States' pedestrian malls. In Dave Amos' words a pedestrian mall is a "street where private motorized traffic has been permanently eliminated and pedestrians have priority" (Amos, 2020, P.12). He covers the history of when and why they started and what they transformed into. As well as covering why so many failed throughout the years. In his research he compiled a catalog of 140 pedestrian malls built between 1959 and 1985. He has results showing what environments the pedestrian malls are likely to survive in. I chose this article to study because pedestrian malls are like living streets and stem from the same historical background. With help from pedestrian malls research this could have an influence on choosing locations for living streets.

### History

The first pedestrian mall was built in 1959 in Kalamazoo Michigan. This included a four-block pedestrian mall on Burdick street (Amos, 2020). Back in 1959 this idea would have been unthinkable unless there was a big reason for it, which there was. This was around the same time as suburban growth around cities, so people were moving to the outskirts and abandoning the city cores. Along with the people went the retail shops to the outskirts, creating a problem for the downtown cores. The first proposed plan for a pedestrian mall was in 1943 following European designed pedestrian malls,

they were not designing to help save city centers (Amos, 2020). When the Kalamazoo pedestrian mall first opened it was a huge success with businesses rushing back towards the city center. For other cities wanting to adopt the new idea it was easy. Most cities just changed the public right of way, which in the end caused some pedestrian malls to fail.

### Survey

The survey included in the article covers multiple sources from when the pedestrian mall phenomenon was taking place all the way to when pedestrian malls were being taken out. Between the span of 1959 and 1985, 26 years, an estimated 140 pedestrian malls were built across the United states in varying conditions. These conditions cover city populations, climates, size of pedestrian mall, and reason for being built. With additional elements in play these factors came together to determine the results of this study.

### Hypotheses

With so many conditions to these varying pedestrian malls Dave Amos could not just test one. From varying sources, he narrowed down one main reason why some pedestrian malls succeeded and this was because of pedestrians. This ranged from the pedestrian mall being located near a college campus to having a pedestrian "anchor" or attraction (Amos, 2020). Additionally, climate came into play. Did warmer climates have a better chance of success due to potential year-round warm weather. With this he could classify each of the 140 pedestrian malls into different climate zones to study. Along with climate the size or length of the pedestrian mall had an influence on the outcome. This focuses on how it affected the surrounding traffic of the mall. The pedestrian mall can create a large detour for commuters within the city. Plus,

a long walk from end to end could have a negative impact on the mall. Lastly, the overall maintenance and policing of the pedestrian mall was investigated. Creating an attractive environment for pedestrians can prove to be costly. With all these factors each pedestrian mall, existing or nonexistent, could be studied.

## **Existing Pedestrian Malls**

There are 46 pedestrian malls remaining today. Most all of them have a few characteristics in common. Noted first was the understanding of the policing, maintenance, management, and programming play. This is the overall care to the mall, it is looked after by the community and continually utilized for events. Along with maintenance, refurbishments could be another key factor. Out of the 46 malls, 17 have been updated since 2020 (Amos, 2020). If the malls are being updated, it shows that they are successful and influences the longevity of the pedestrian mall. Another characteristic in that could influence the success of the mall is the surrounding business support. In his study, most successful malls had supported the idea since the installation of them. A quote from Dave Amos that represents this topic well, "Business support led the installation of pedestrian malls, and business owner opposition led to the removal of many of them" (Amos, 2020, P.22). All together the community and the business should support the pedestrian mall to help it be successful.

## **Conclusion**

With the hypothesized reasons why most pedestrian malls failed and why some malls succeeded a rough guideline can be created to follow. The city should include some important traits that would possibly help with success. These include warm weather, large and dense population, stable or growing

population and possibly near a college campus (Amos, 2020). These traits fared better in the success of pedestrian malls. The businesses and the city are held responsible for maintaining and supporting the mall. Creating a clean and safe space is key to keep the area attracting pedestrians. Along with events and characteristics of the area to keep the area lively and engaging. Overall, these guidelines will not guarantee success but will potentially help a pedestrian mall thrive.

# 'The Great Street' Hopes for a Comeback

## Abstract

State Street Mall was one of the few transit malls to be created after the success of Nicolette Mall in Minneapolis, Minnesota. This article covers two perspectives of why the transit mall failed in the 1970s. Along with the reasoning behind its redesign. The city of Chicago took advantage of federal funding to create the transit mall, mainly to compete against the suburban shopping centers and the tony shops of north Michigan avenue (Gallagher and Enquist, 1997). These two factors were pulling pedestrians away from the street causing decline in the surrounding businesses.

## Patricia Gallagher's Perspective

In 1979, as State street was going downhill, the traditional downtown retail corridor was transformed into a modern transit mall. Changing everything from sidewalks, subway shelters, lighting fixtures, and the overall feel to the street. An important thing to note is how the transformation was completely opposite of the existing historical buildings and surroundings, creating a disconnect from the architecture. After the transformation, many large businesses pulled out of the area. Even though the downtown area of Chicago was growing with businesses and housing, State street did not experience any of it. The point of the transit mall transformation was to grow the area and attract new life to it. With transit malls being a new concept at the time the designers did not have much to design from. After just eight years the transit mall needed to be replaced. The physical condition of the mall had declined, along with the wide sidewalks looked unsafe and

uninviting (Gallagher, 1997). The absence of automobile traffic was said create a feeling of isolation from the rest of downtown Chicago. Over the next couple of years from that point, the street was rebuilt to incorporate vehicles again. Changes were made to the street, sidewalks, subway shelters, and lights to create the aesthetic connecting it to the surrounding historical architecture. With Patricia Gallagher's perspective of State street, it was on an obvious downhill and the transit mall was not successful in turning it around.

## Phillip Enquist's Perspective

After the removal of the transit mall on State street in Chicago there was gradual progression of life back into the area. The reconstruction consisted of a four-lane street, narrowed sidewalks, trees planted, new lighting and signage, along with other elements. All these changes went along with what the public did not like. The open process of the redesign pointed the design team on the right track. The biggest concern of the public was having the cars back on the street. Widening the street caused the sidewalks to go back to their original width of 22 to 26 feet (Enquist, 1997). As a result, this forced pedestrians closer to the store front windows creating a connection to the businesses. This connection was neglected with the transit mall design. As well as the design of the modern transit mall. The goal of the redesign was to "complement state street's remaining early 20th century buildings" (Enquist, 1997). This connection makes the street and the building become cohesive. With the new redesign, State streets future looked promising with more pedestrian activity and businesses moving in.

## Conclusion

With the transformation into a transit mall and reconstruction back to a vehicular road, studying state street can create guidelines for future downtown cores. In this article seven principles are pulled from these two perspectives. They include characteristics concerning engaging the business and public in projects, defining the issue and setting achievable goals, the street should be not viewed for cars but for the people as well, create a street that can stay alive for at least 18 hours a day, the landscaping should not fall short in the design, maintain the public space, and build on the street's strengths (Gallagher and Enquist, 1997). All seven of these characteristics can be seen failing when the transit mall was designed and installed. The redesign addressed all the characteristics and put the street back on track.

## Summary of literature Review

I think understanding pedestrian and transit malls, is a key first step to understanding living streets. They are all similar typologies focused on the pedestrians. The living street is adding a few more elements to the pedestrian mall and the transit mall which I think could be beneficial. Another step to living streets is figuring out what makes them successful and if there are any downfalls of them. Together, the two articles reviewed can influence living streets to be successful.

These streets capes have a lot in common, including trying to create quality pedestrian, social and environmental spaces. In the first article, majority of pedestrian malls were focused on bringing business back to an area of the city. With the conclusion of this article, it was shown that this should not be the main reason to create a pedestrian mall. Focusing on this one characteristic did not create a successful social environment. There are multiple elements that need to be address in choosing the location. The population density of the city seemed to be a major factor in the success of certain pedestrian malls around the country. Some lower density cities did not fare well but, was this because of lack of support for the pedestrian mall? There are multiple high-density cities that had pedestrian malls fail as well. It suggests that maybe the density and placement of the pedestrian mall is not the biggest factor involved. I believe by reading through this article the key components to a successful pedestrian mall are business and community support, the length and how they affected surround traffic, and overall maintenance and updating involved. The business and community support would have to apply to transit malls as well to become successful. Having a private-public ownership of the mall would promote proper upkeep, community

events, and appropriate marketing. This would keep the mall feeling safe and clean. Lastly, to create a proper social and pedestrian environment the mall must be focused on just that. The mall may be proposed to help the businesses but, the design should be focused on pedestrian use. This mall should include pedestrian spaces and events. To sum things up, the study of pedestrian malls can benefit the creation of the closely related Living Street.

The failure of State street mall in Chicago can prove beneficial when planning future transit malls or any high traffic pedestrian street scape. The key takeaways on why State street was not successful should be compared with other transit malls within the united states. The first notable reason failure was like some failures in pedestrian malls. They built the mall specifically to bring business back to the area. With this in focus they failed to create something for pedestrians. The sidewalks were too wide creating a disconnect from the street and the businesses. From the case studies looked at so far, wide sidewalks seem to be successful. Did State street create too wide of sidewalks? The second notable mistake was the overall design of the street. State street includes historic Chicago buildings and a rich history. A street and the surrounding buildings show be cohesive in creating an attractive environment. This seems like something that should have been covered in a site analysis which would benefit any transit mall. Lastly, like pedestrian malls, the businesses and community did not support the transit mall and it eventually failed. Within the first few month's big box stores moved off the street. Transit malls should incorporate the business and connect them to the street.

In conclusion, these two articles have created a list of guidelines to study benefiting my research. The key takeaway from each is they should be built to better the social and pedestrian environments connecting the street to the surround buildings.

# Project Justification

## Overview

As cities continue to grow, the denser the urban core can become causing mass amounts of congestion. Main streets are clogged with public transportation fighting against vehicular traffic along with bicyclist and pedestrians fighting for safe travel environments.

Proposing a living street to focus on the pedestrians will change the experience of the street scape all together.

## Personal Relevance

As a landscape architect student, looking into different urban typologies and specifically streets capes, have always been interesting to me. As well as trying to solve something that could become a problem in multiple different cities in the future. I have been to multiple different pedestrian malls and transit malls across the united states which guided me into looking at living streets as an addition street scape I had never heard of.

The knowledge that I can gain through the research within this project will be valuable for years to come. This project will help enhance my knowledge of public transit, pedestrian use, and bicycle travel. Along with that I will be able to go into detail with creating micro climates on streets to help create a multi-season environment. Throughout the design process I will be able to improve my street design skills, planting plan layouts, and final design renderings.

## Professional Relevance

Landscape architecture is a profession that is always growing and advancing in a green direction. This is done through creating and solving problems with sustainable designs. Retrofitting a living into an urban core can test the limits of the industry to promote environmentally friendly ideas in public spaces as well as incorporating new technology.

## **Social Relevance**

Retrofitting a living street can impact a lot of different groups. Commercial businesses will be the focus of this process due to the reaction of the public can go either way. This could increase the pedestrian traffic of the street and increase the economic value within the area. Potentially bringing new life into an area that was barely getting by due to the overall congestion. This project focuses on multiple factors but an important one is the social environment.

## **Project Financing**

The project funding would lie in the hands of the city and state. Completely changing a public street would affect the property taxes of the surrounding area affecting the nearby businesses. When considering the potential outcome of the project and the overall gains, it would have a positive impact on the businesses.

## **Project Impact**

This project will impact many groups including pedestrians, cyclists, public transit, businesses, residences of the area, and more. The overall use of the street will be different from what it was, vehicles will be limited with their parking, and pedestrians will be parking further away from the store they plan on visiting. Forcing them to either walk, cycle, or take the public transportation. Ecologically, the design of this project impacts storm water events, and the green space within the city. The design of this project will slow down the storm water run-off, capturing most of it with different techniques. As well as increasing green space. With less need for vehicle parking more green space can be implemented.

# Thesis Site:

## Location:

Broadway Street Spanning From 1st Ave north to 4th Ave North Fargo, North Dakota

## Land Size

2.2 Acres

This stretch of Broadway spans three blocks and has 2 intersecting streets and is the most densely populated section. Around thirty-eight buildings line this stretch with a couple parking lots and the new Broadway square. Within the southern most section a sky walk spans between two buildings creating an overhead connection. Most buildings located in these three blocks showcase the historic art deco architecture except for the newly built RDO building



# Performance Criteria

## 1. Space Allocation Categories

1. Bus lanes
  - preBus stops
2. Bicycle lanes
3. Pedestrian sidewalks
4. Green space
  - a. Lawns
  - b. Tree wells
  - c. Rain gardens
5. Plaza space
  - a. Small event space
  - b. Outdoor dining
  - c. Pedestrian interaction space
6. permeable /impermeable surfaces

## 2. Energy Consumption

- a. Consume the same amount of energy as existing street
  - i. Streetlamps
  - ii. Pedestrian and cyclist signage

## 3. Environmental Performance

- a. Micro climates from harsh weather elements
  - i. Wind
  - ii. Snow
  - iii. Rain

## 4. Behavioral Performance

- a. Pedestrians can successfully commute to destinations safely.
- b. Cyclists have a safe designated lane each direction
- c. Public transit can freely drive the route aside from pedestrian interactions

## 5. Psychological Impact

- a. Design should promote green spaces
- b. Connection from store fronts and the public is not broken

## 6. Environmental impact

- a. Decrease in storm water runoff
- b. Increase in green space and overhead tree canopy

## 7. Code compliance

- a. SITES 2.0 design criteria
- b. City and state road codes



## Part Three-

# Design Solution

Site Analysis

Performance Criteria

Design Concept

Design Development

Street Comparison

Detail Drawings

Thesis Conclusion



# Site Analysis

## FARGO ANALYSIS

NORTH DAKOTA STATE UNIVERSITY

PARKING GARAGES

PROPOSED SITE

CITY HALL, LIBRARY, & CIVIC CENTER

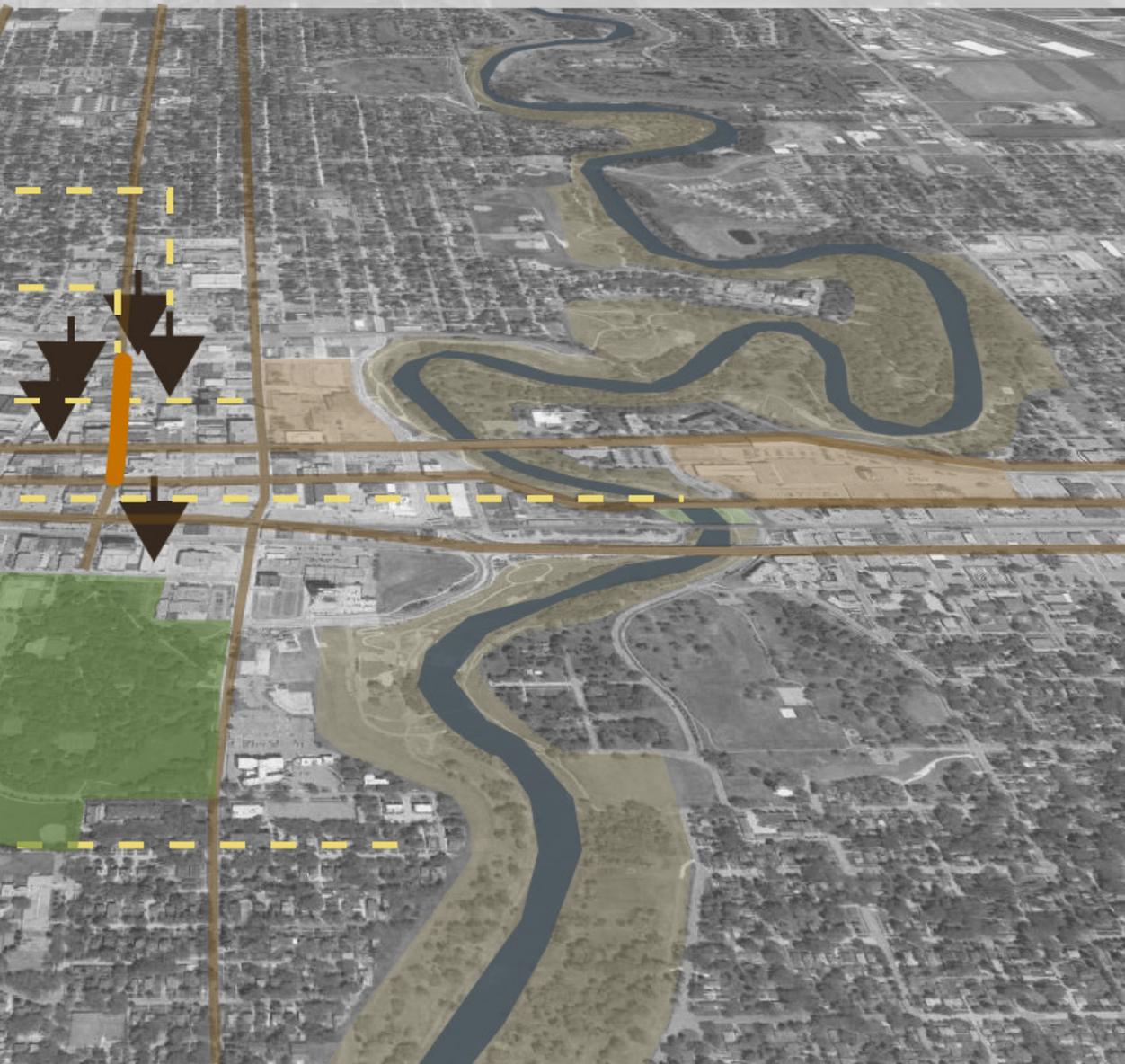
MOORHEAD CENTER MALL

VEHICULAR ROUTES TO DOWNTOWN

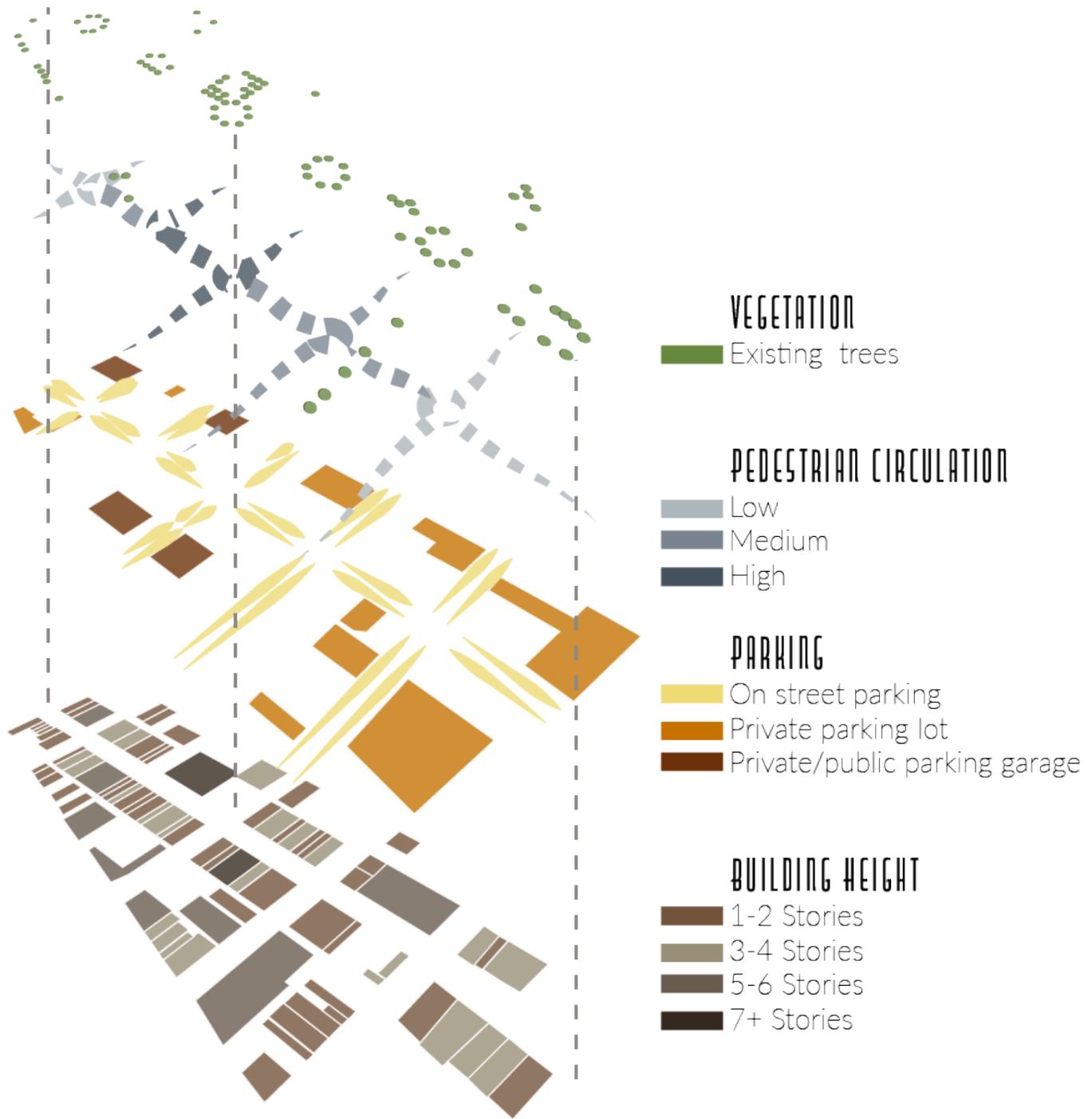
ISLAND PARK

PUBLIC RIVER TRAILS





# Downtown Study



# Performance and Program Criteria

## Pedestrian

- Proper sidewalk space without obstacles
- Safe street interactions
- Connect Landmarks and access points for proper flow
- Increased sidewalk lighting

## Social

- Include three sidewalk zones
- Dynamic Spaces for businesses and the community to shape together
- Site lines to businesses and landmarks are clear

## Environmental

- Increased plant life
- Create a diverse native plant pallet
- Decrease storm water run off through bio-retention plant beds

## Design Concept

A Designed Street scape that compliments the historical architecture art deco style of downtown Fargo while implementing pedestrian, environmental, and social design elements to create a successful downtown core.



# LIVING BROADWAY PLAN

Scale: 1" = 50'-0"



## SITE FEATURES

Raised intersection  
ADA accessible  
Rolled curbs  
Multiple sidewalk zones



# URES

Dynamic spaces  
Permeable Rubber surface  
Permeable Astroturf  
Bio Retention Planters





## Plants

- River Birch
- Honey locust
- Day lilies
- Purple coneflower
- Arborvitae
- Karl Forester grass



4

8

5

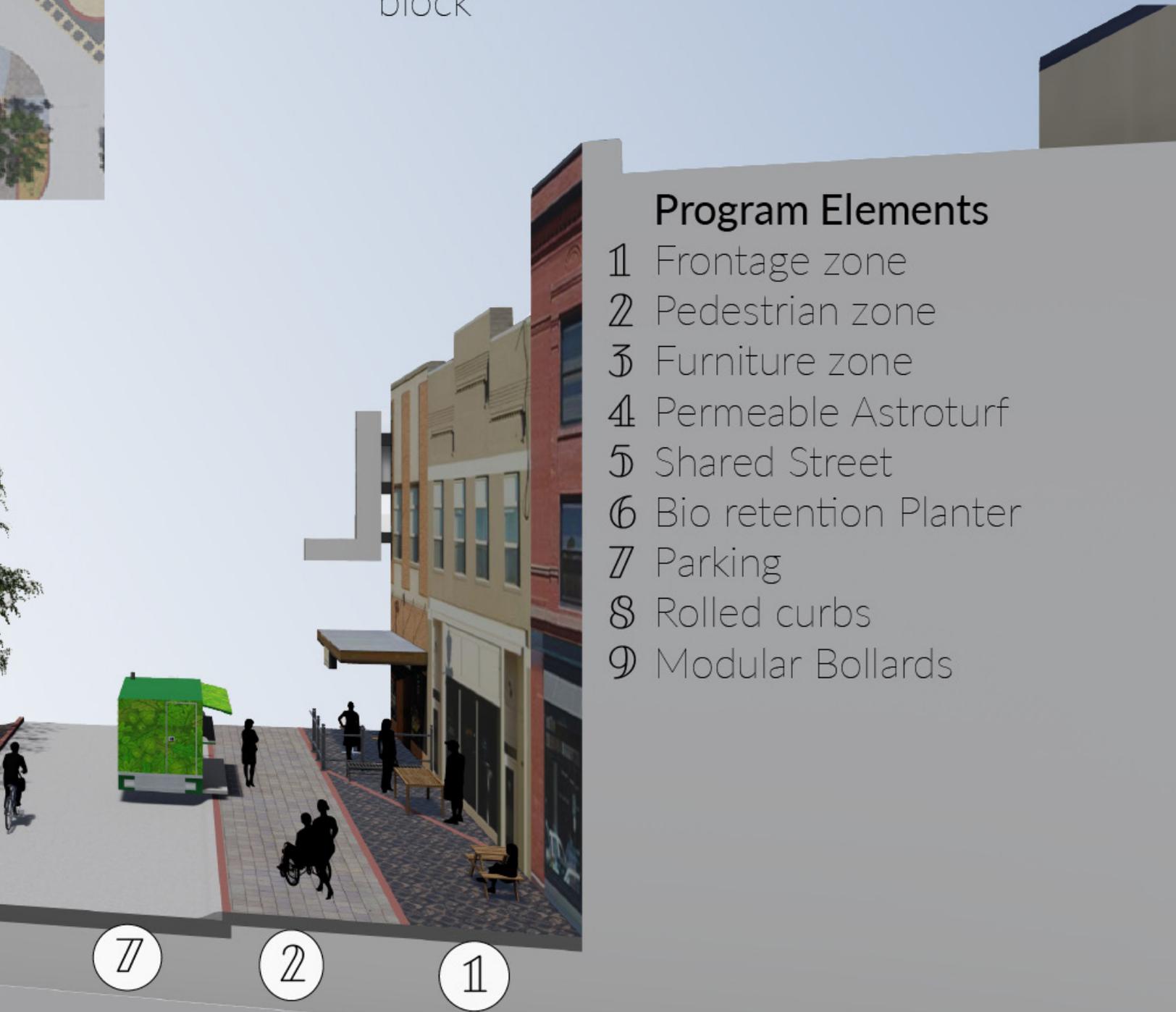
6

# BLOCK ONE

The design pattern was inspired by the Art deco patterns found within the Black Building located on this block

## Program Elements

- 1 Frontage zone
- 2 Pedestrian zone
- 3 Furniture zone
- 4 Permeable Astroturf
- 5 Shared Street
- 6 Bio retention Planter
- 7 Parking
- 8 Rolled curbs
- 9 Modular Bollards



## Plants

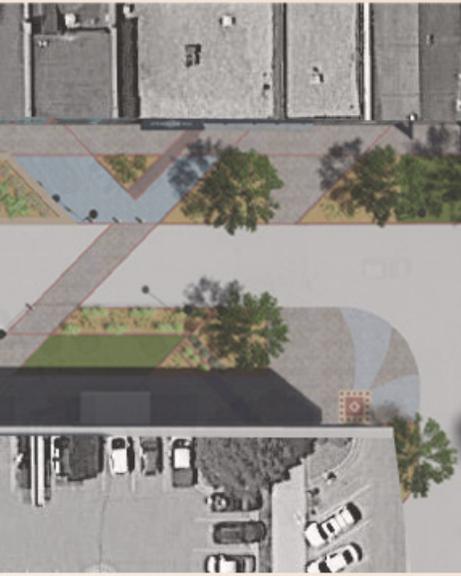
Honey locust  
River Birch  
Day lilies  
Purple coneflower  
Arborvitae  
Karl Forester grass



## Program Elements

- 1 Frontage zone
- 2 Pedestrian zone
- 3 Furniture zone
- 4 Permeable Astroturf
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- 6 Bio retention Planter
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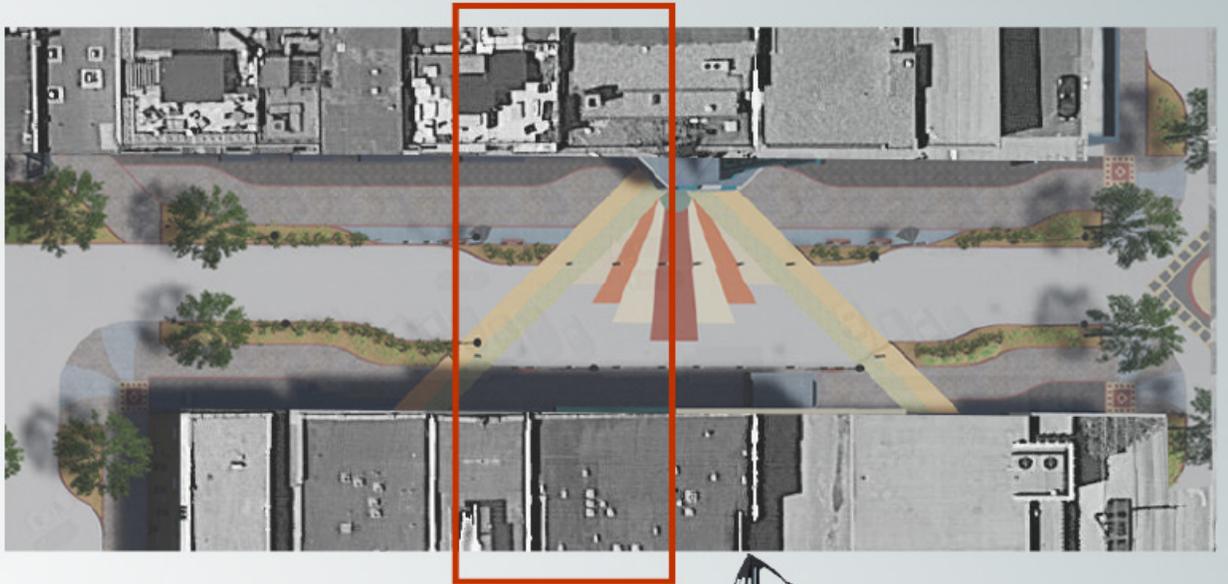




## BLOCK TWO

This block pattern is focused on sidewalk to street interaction as well as circulation to the new Broadway Square.





## Plants

Honey locust

Day lilies

Purple coneflower

Arborvitae

Karl Forester grass



# BLOCK THREE

This design pattern was inspired by the symbols located within the Historic Downtown Fargo theater

## Program Elements

- 1 Frontage zone
- 2 Pedestrian zone
- 3 Furniture zone
- 4 Permeable Astroturf
- 5 Shared Street
- 6 Bio retention Planter
- 7 Parking
- 8 Rolled curbs



# Street Comparison

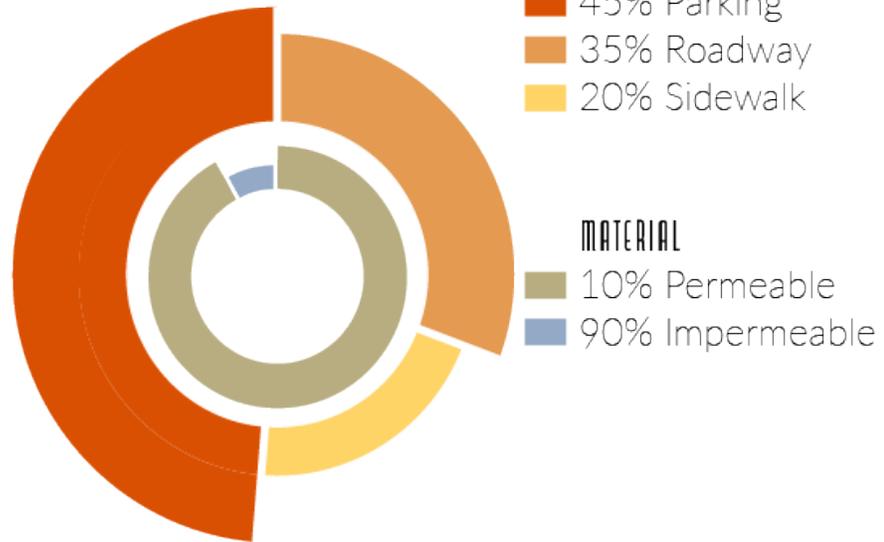


8'	20'	24'	20'	16'
37'		24'	10'	17'

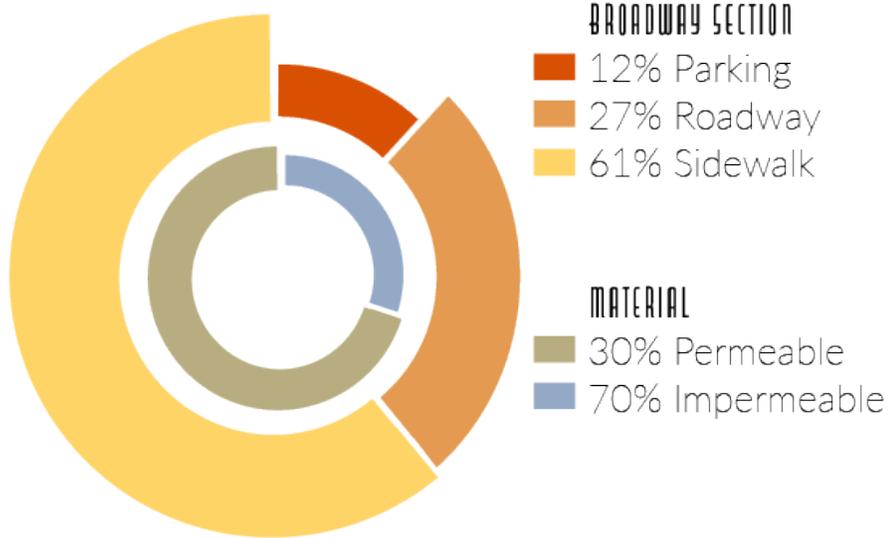


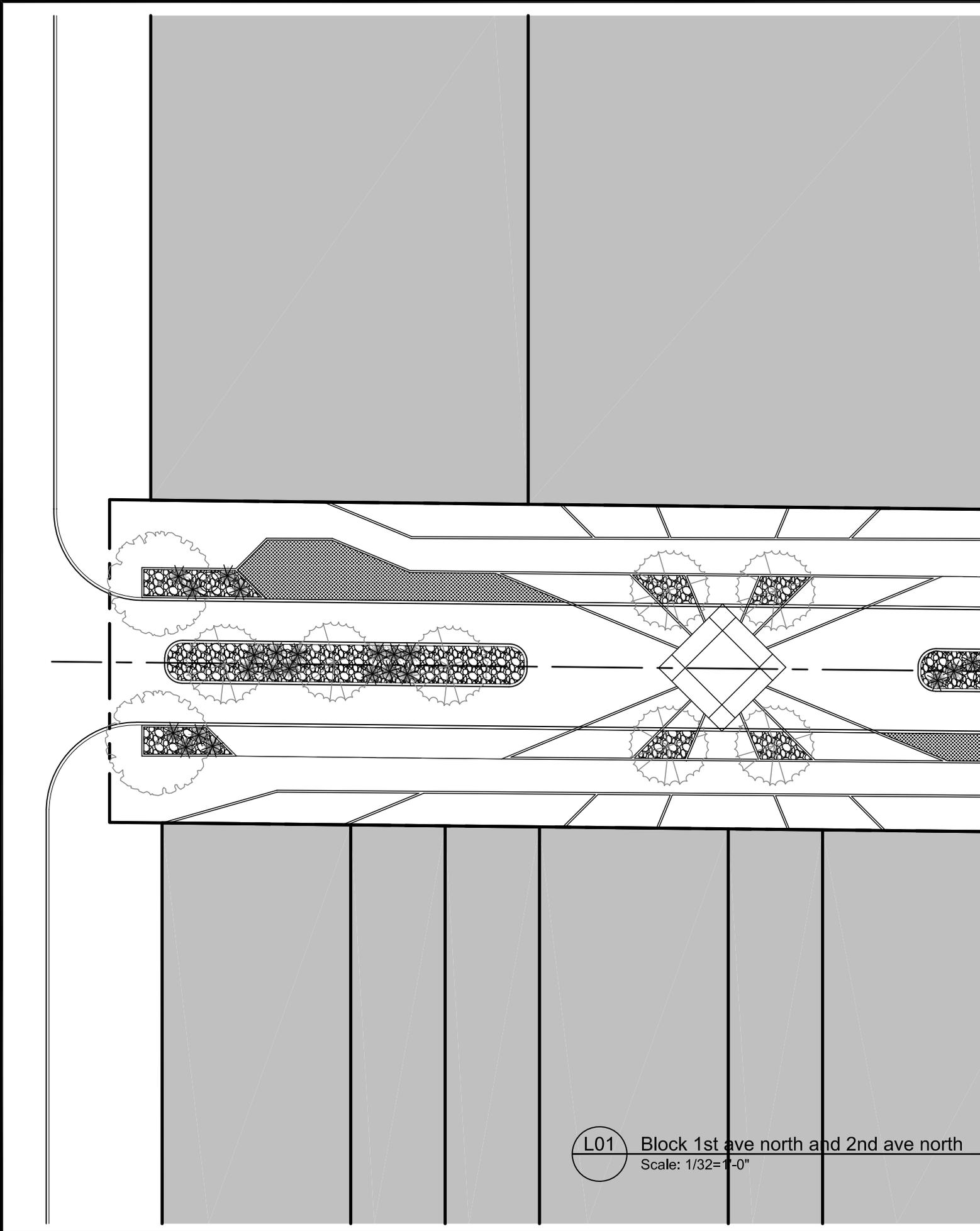


Existing Street section



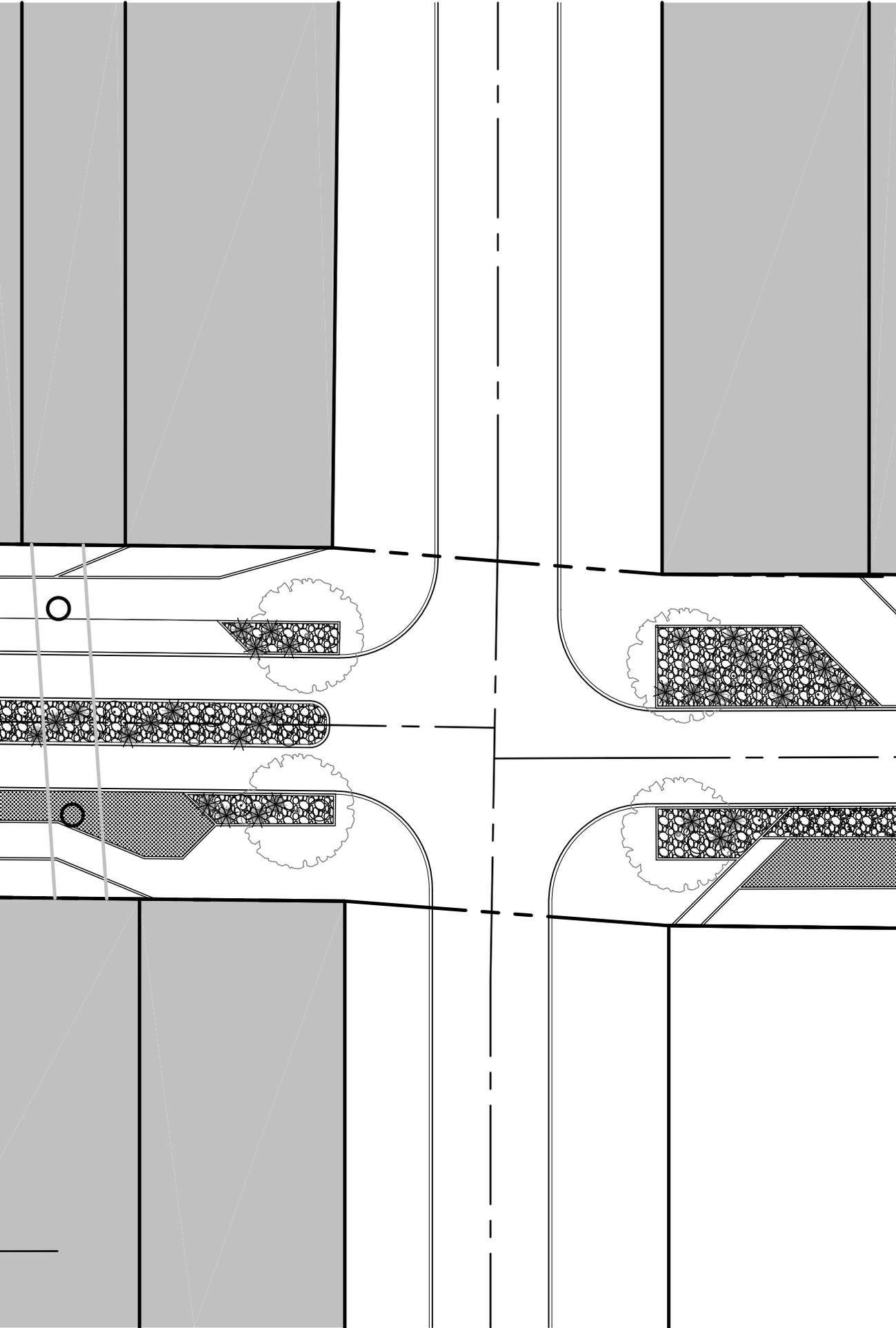
Proposed Street section





L01

Block 1st ave north and 2nd ave north  
Scale: 1/32"=1'-0"



PROJECT: Thesis Project  
 CAD FILE: Keller-Site Plans  
 DRAWN: Matthew Keller  
 ISSUED: 05.12.2021

# Living Streets Within Downtown Fargo Landscape Plan

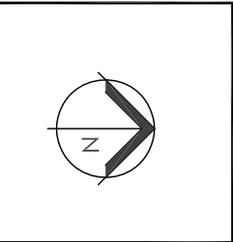
City of Fargo  
 Broadway North, 1st ave North to 4th ave North  
 Fargo, North Dakota

City of Fargo  
 Fargo, North Dakota  
 225 4th Street North  
 Fargo, ND 58103-1310  
 www.fargoND.gov

LA 722 | Spring 2021  
 Matthew Keller  
 Matthew.Keller@ndsu.edu  
 Matthew.Kirwood | Advisor

Registration Seal

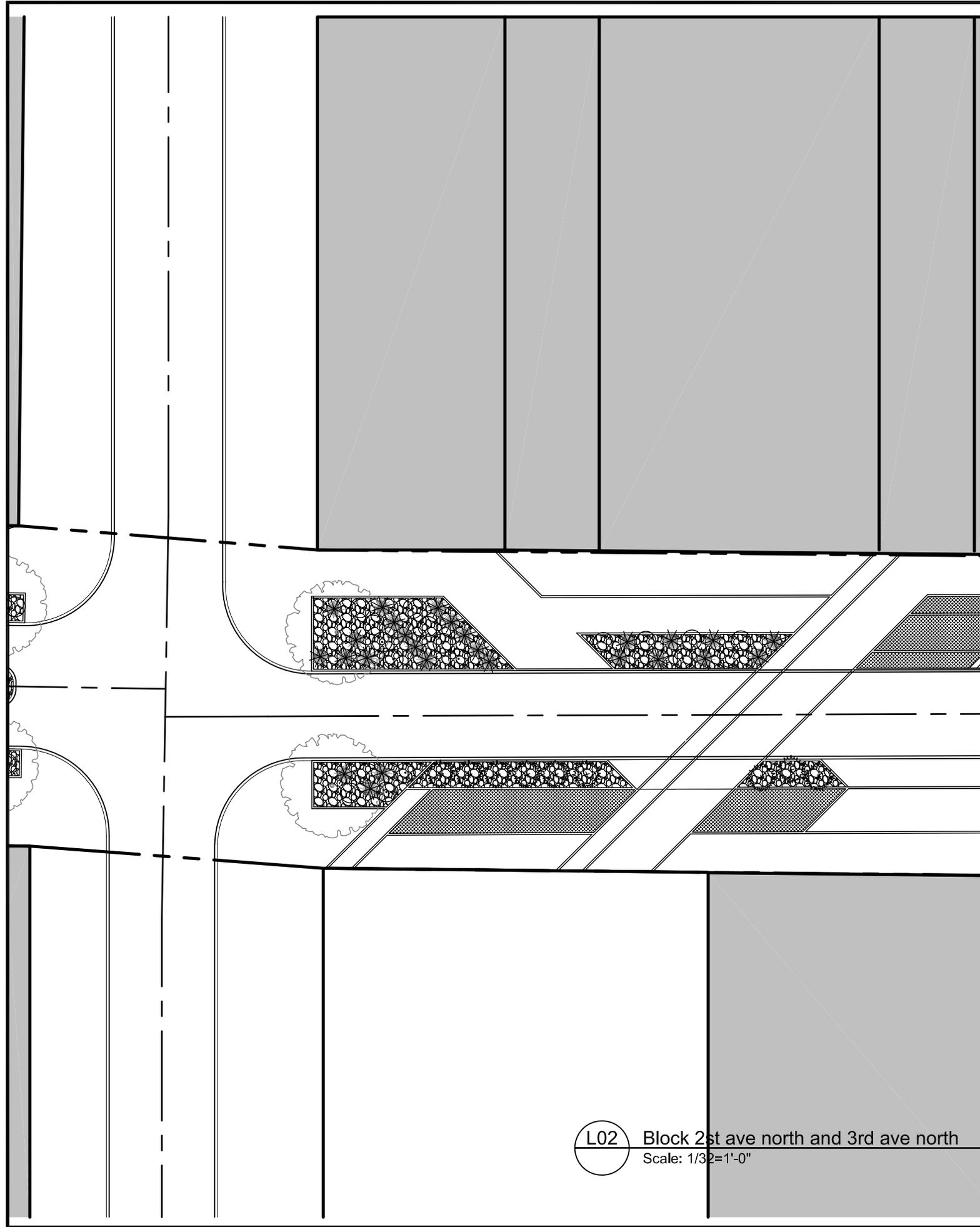
Consultant Logo



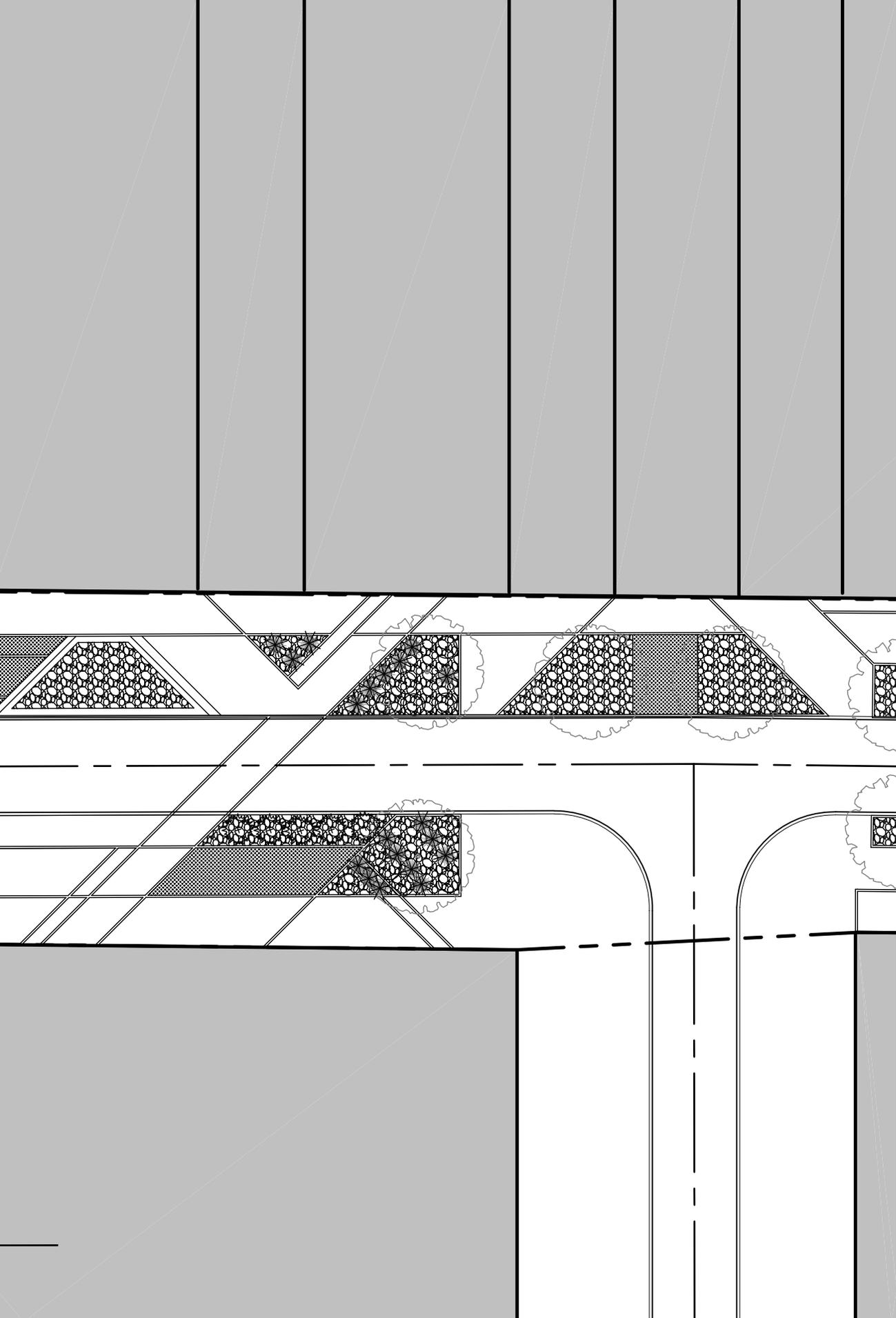
SCALE: 1/32" = 1'-0"

SHEET TITLE:  
 Landscape Plan  
 SHEET NUMBER:  
 L01

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L02 Block 2<sup>st</sup> ave north and 3<sup>rd</sup> ave north  
 Scale: 1/32"=1'-0"



PROJECT: Thesis Project  
 CAD FILE: Keller-Site Plans  
 DRAWN: Matthew Keller  
 ISSUED: 05.12.2021

# Living Streets Within Downtown Fargo Landscape Plan

City of Fargo  
 Broadway North, 1st ave North to 4th ave North  
 Fargo, North Dakota

City of Fargo  
 Fargo, North Dakota  
 225 4th Street North  
 Fargo, ND 58102-1310  
 Phone: 701.231.4310  
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Registration Seal

Consultant Logo



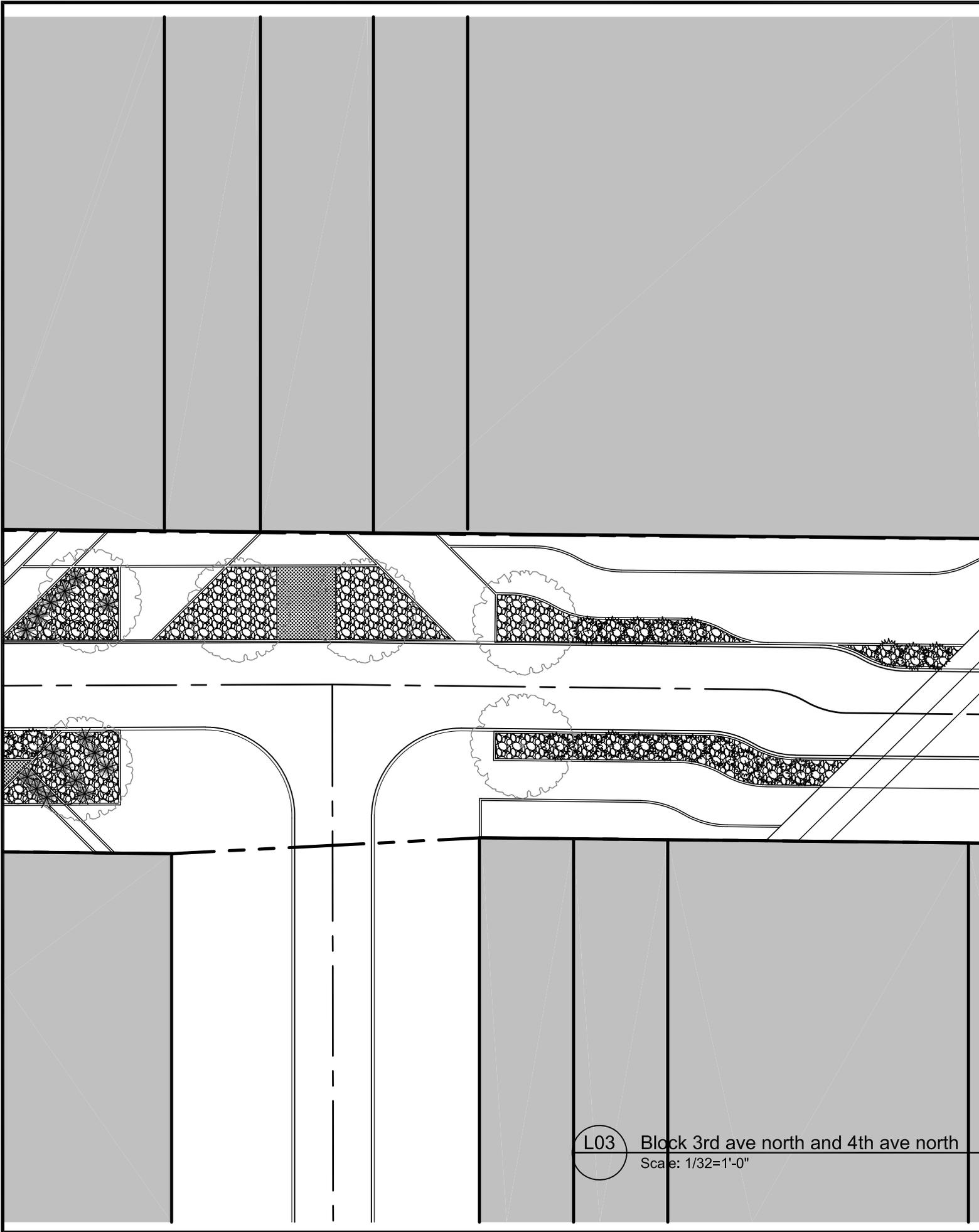
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SHEET TITLE:  
 Landscape Plan

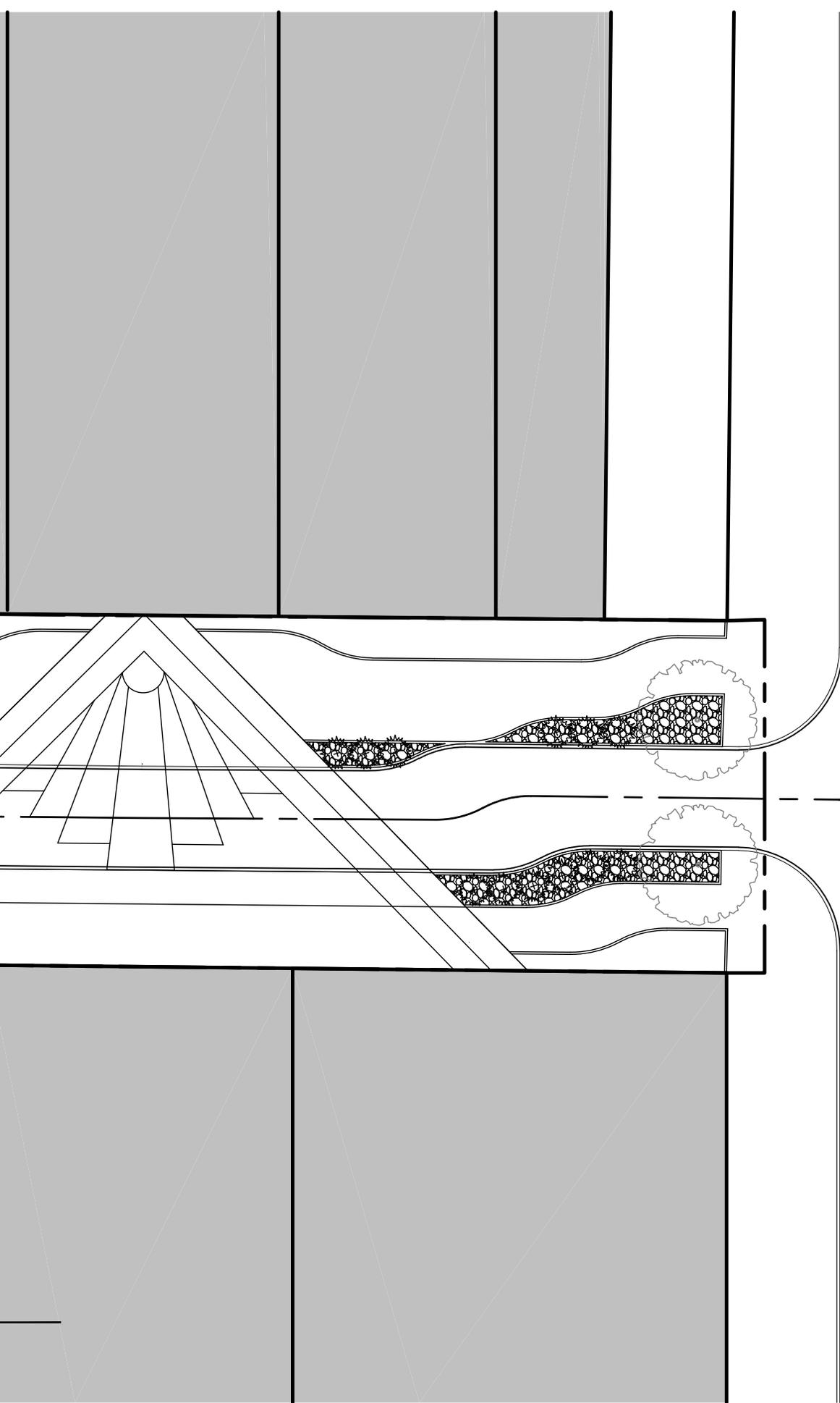
SHEET NUMBER:  
 L02

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L03 Block 3rd ave north and 4th ave north  
 Scale: 1/32=1'-0"



PROJECT: Thesis Project  
 CAD FILE: Keller-Site Plans  
 DRAWN: Matthew Keller  
 ISSUED: 05.12.2021

# Living Streets Within Downtown Fargo

## Landscape Plan

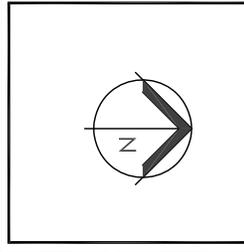
City of Fargo  
 Broadway North, 1st ave North to 4th ave North  
 Fargo, North Dakota

City of Fargo  
 Fargo, North Dakota  
 225 4th Street North  
 Fargo, ND 58102-1310  
[www.fargoND.gov](http://www.fargoND.gov)

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 Matthew Kfirwood | Advisor

Registration Seal

Consultant Logo



SCALE: 1/32" = 1'-0"

SHEET TITLE:  
 Landscape Plan

SHEET NUMBER:  
**L03**

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## Conclusion

Even though covid-19 was not the focus of my thesis the added outdoor space is a huge benefit to businesses because as we have seen over the past year with covid, businesses across the world are searching for ways to keep customers safe. In conclusion, I wanted to focus on the pedestrian, social, and environmental aspects of what a living street could be. Starting with increasing permeable materials, creating a diverse plant pallet, and enhancing the storm water management. Then creating a street that the community and the businesses could come together and shape. Lastly, putting pedestrians first, with the safety of raised intersections, rolled curbs, proper sidewalk space, unobstructed connection points and unique sidewalk lighting. I believe this living street would enhance the experience of downtown Fargo and create a model for the rest of downtown to follow.



Part Four-

# Appendix

Reference List

Previous Design Studio Experience

Personal Identification

# Reference List

## Important Resources

Richard L. Kronick & Lisa Middag, "Nicollet Mall," Minneapolis Historical, accessed May 11, 2021, <https://www.minneapolisishistorical.org/items/show/171>.

Dave Amos (2020) Understanding the Legacy of Pedestrian Malls, *Journal of the American Planning Association*, 86:1, 11-24, DOI:1080/01944363.2019.1656103

Gallagher, P., & Enquist, P. (1997). 'The Great Street' Hopes for a Comeback. *Planning*, 63(1), 12.

Belzer, D., Charlier, J., Letunic, N., Meter, T. V., & Williams, R. (2009). *Implementing Living Streets: Ideas and Opportunities for the City and County of Denver*, 1-71.

## Design Tools Utilized

- Research and Development: Microsoft and ArcGIS
- Digital Modeling Software: AutoCad and Sketchup
- Rendering Program: Lumion
- Graphic Programs: Photoshop, Illustrator, InDesign, and Acrobat

# Studio Experience

## Second Year

Fall 2017

Intro to LA Studio

Spring 2018

Parks & Open Spaces Studio

## Third Year

Fall 2018

Site Planning & Design Studio

Spring 2019

Community Planning & Design Studio

## Fourth Year

Fall 2019

Urban Design Studio

Spring 2020

Remediation & Planting Studio

## Fifth Year

Fall 2020

Performance Based Design Studio

Spring 2021

Landscape Architecture Graduate Thesis

# The Author

Matthew Keller

