# GROWING GREENWAYS: A MULTIMODAL TRAIL SYSTEM FOR MOORHEAD, MINNESOTA PROJECT LOCATION AND EXTENTS: FLOOD EVENTS:

### **THESIS STATEMENT:**

I propose a design for a Multimodal Greenway in the Red River Corridor of the Fargo-Moorhead Metropolitan area. I intend to demonstrate methods to increase local commuter options reduce automobile traffic and promote a healthier community.

## **PROJECT GOALS:**

### **Designing for Alternative Transportation.**

- Connect people to destinations by providing more sustainable alternative routes to motor vehicle transport
- Create strong connections to the existing public transit.
- Create safe, comfortable trails connecting larger green spaces along the Red River.
- Improve existing transportation system with introduction of a multimodal greenway.

### Designing for the Community.

- Strengthen social bonds by creating destinations for community gathering and collaboration of all ages.
- Improve the quality of life and overall health of local users with sustainable choices
- Change local commuter habits to more sustainable ones.

### **Designing for the Environment.**

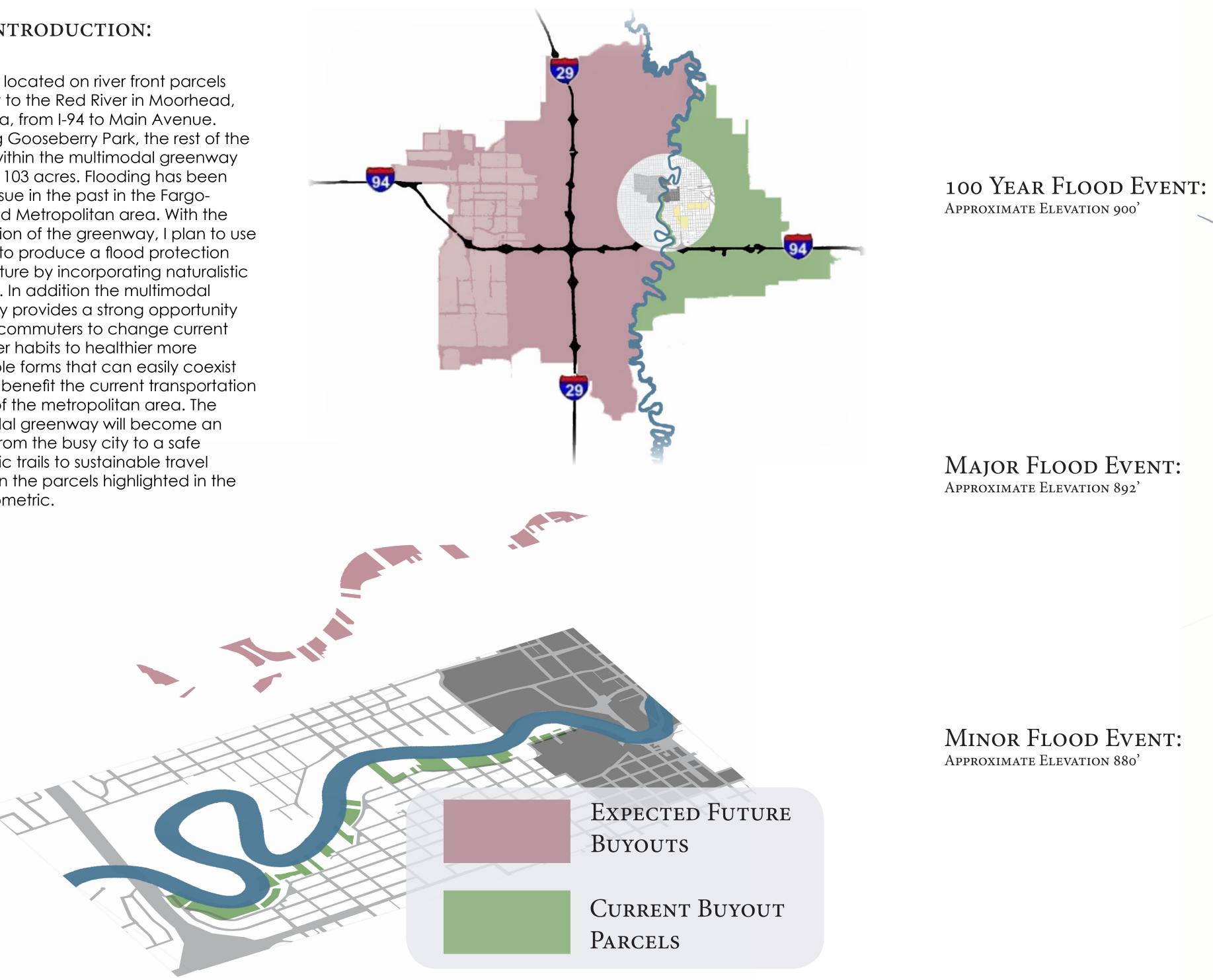
- Design a multimodal greenway to encourage users to engage and interact with the environment.
- Create more naturalist habitat.
- Design for flooding.

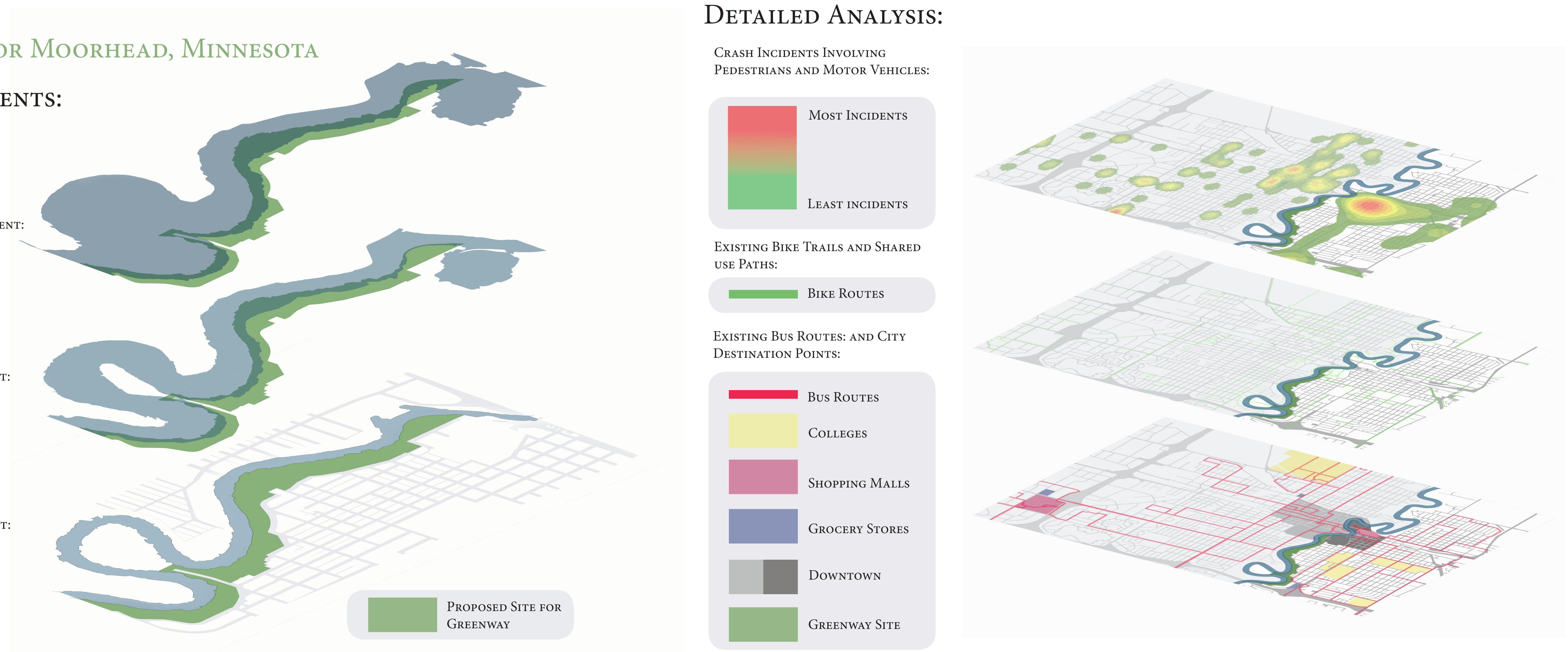
### **Research Hypothesis:**

By introducing a multimodal greenway with progressive flood control and an incentive program we can change transportation patterns. Improving the health of the community by lowering the number of vehicles on the road, lower traffic levels for safer streets and emergency response time as well as the city's bud-get for infrastructure such as street repair and additional parking. It can also dramatically effect individual health by increasing ones physical activity and relations in the community and lower the average vehicle miles traveled in the metropolitan area. Lowering the number of vehicle miles traveled in the metropolitan region means

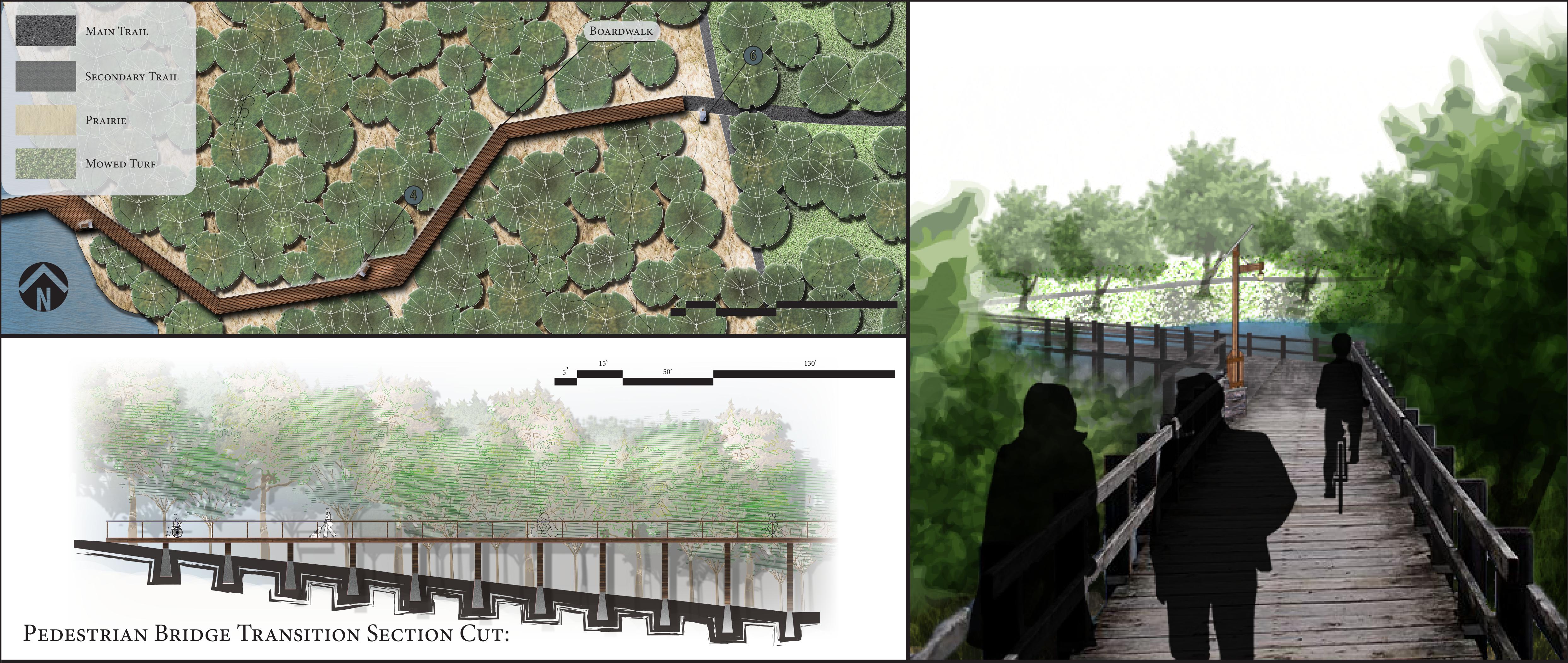
### SITE INTRODUCTION:

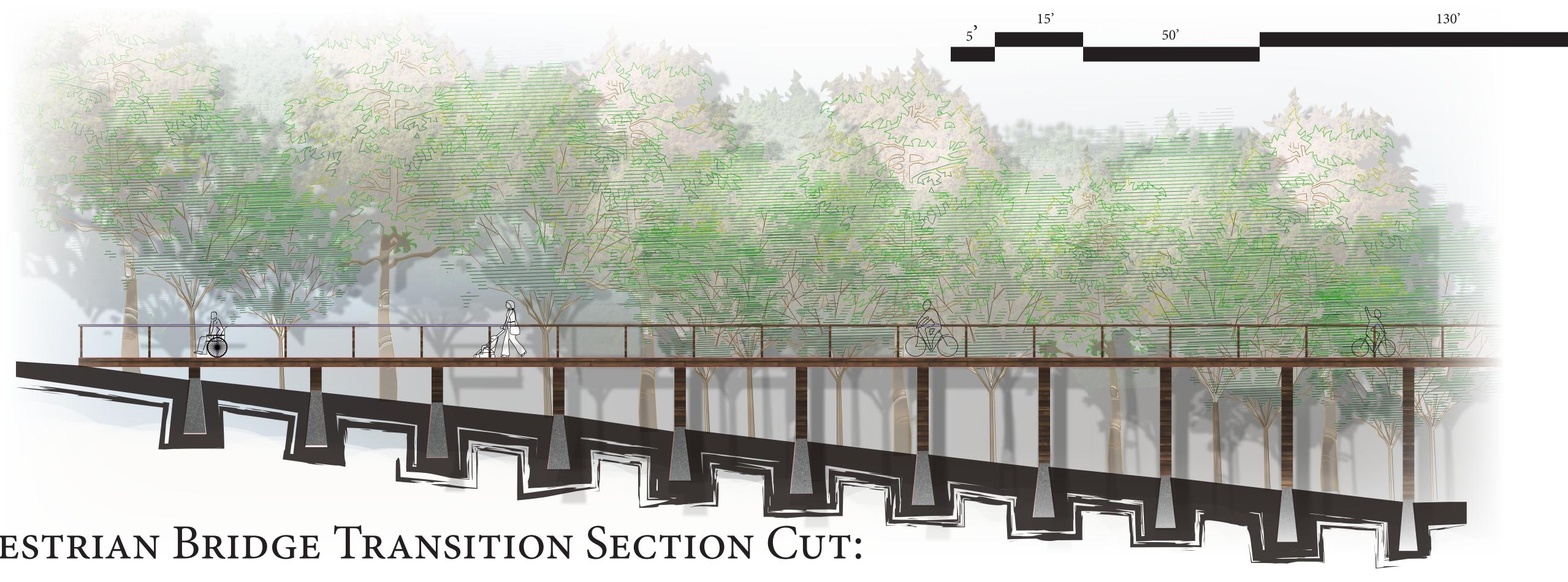
The site is located on river front parcels adiacent to the Red River in Moorhead Minnesota, from I-94 to Main Avenue. Excluding Gooseberry Park, the rest of the parcels within the multimodal greenway make up 103 acres. Flooding has been a large issue in the past in the Fargo-Moorhead Metropolitan area. With the introduction of the greenway, I plan to use the land to produce a flood protection infrastructure by incorporating naturalist wetlands. In addition the multimodal greenway provides a strong opportunity for local commuters to change current commuter habits to healthier more sustainable forms that can easily coexist with and benefit the current transportatio systems of the metropolitan area. The multimodal greenway will become an escape from the busy city to a safe naturalistic trails to sustainable travel located in the parcels highlighted in the below isometric.





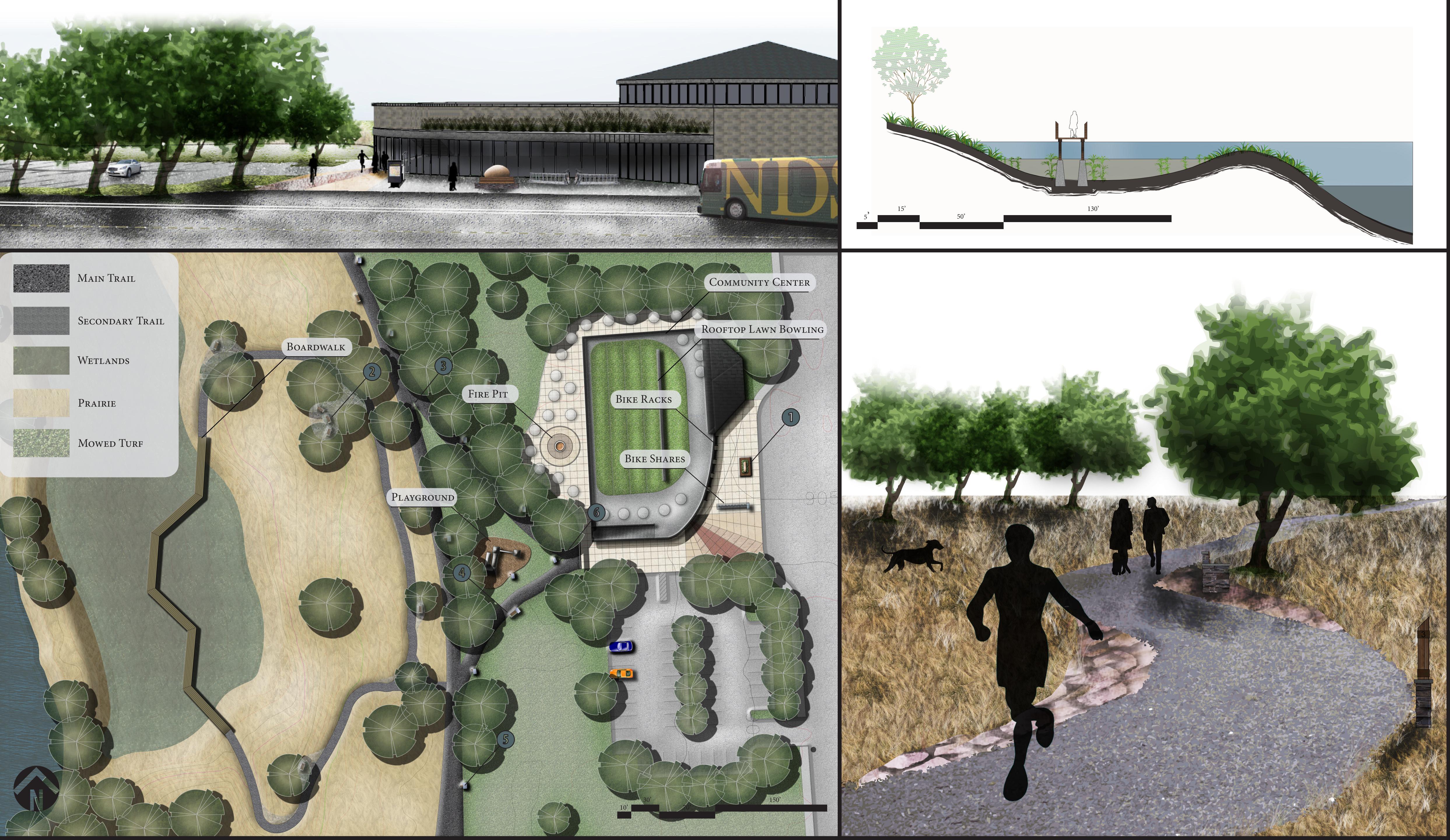
## Pedestrian Bridge Site Plan:





## Pedestrian Bridge Perspective:

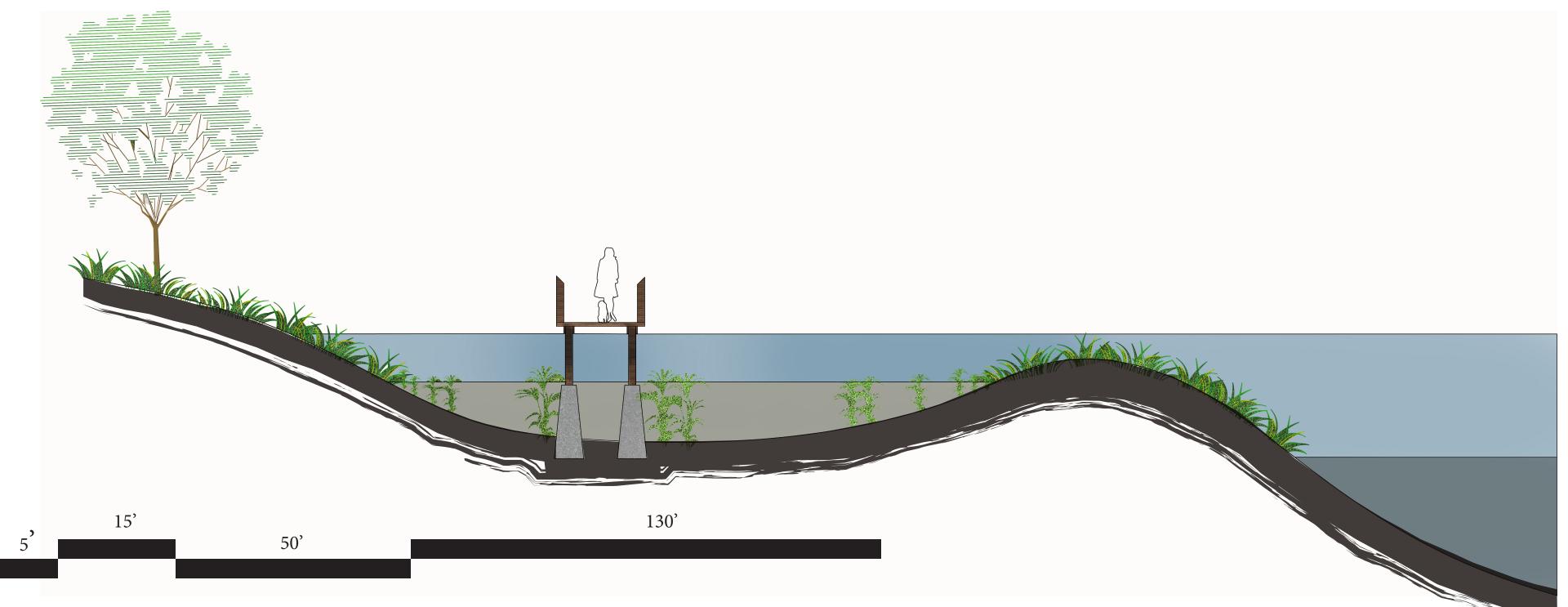
## Community Center Bus Stop Perspective





Community Center and Wetlands Site Plan

## Wetlands Boardwalk Section Cut

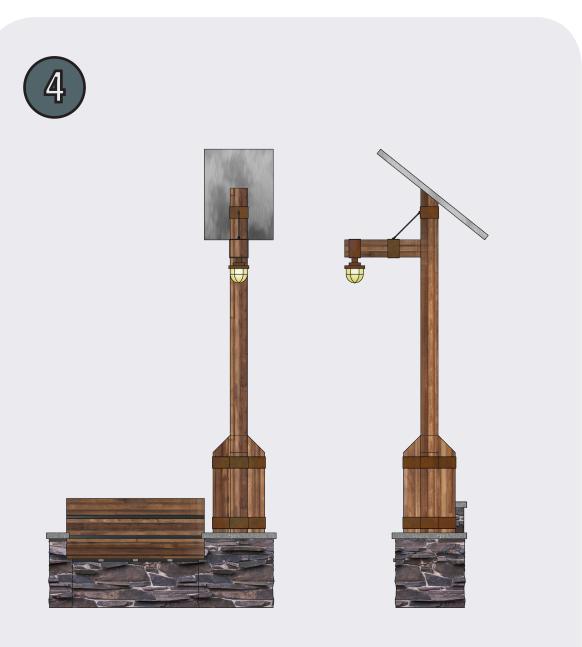


Crushed Stone Secondary trail with Flagstone EDGEING AROUND BENDS AND SEATING AREAS



## Master Plan

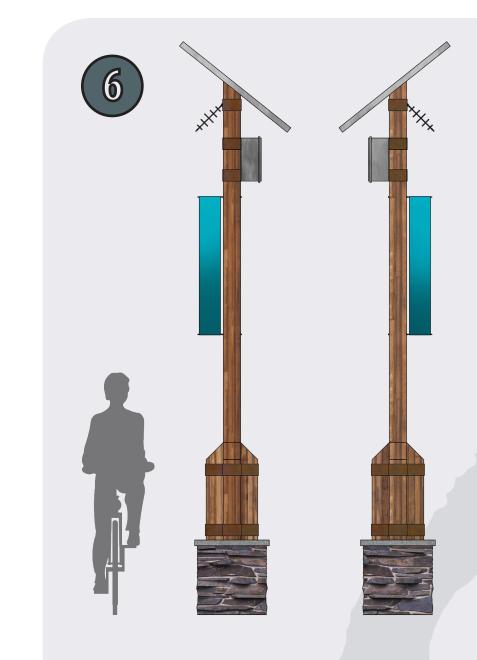




Park Benches with Solar Powered Light Poles



Solar Powered Light Poles



What is the Zap Program?

The Zap Program is an incentive program TO ENCOURAGES CITIZENS TO CHOOSE TO BIKE MORE OFTEN. A CITY ORGANIZATION OR NON-PROFIT ORGANIZATION WILL WORK WITH  $\mathsf{D}\mathsf{e}\mathsf{RO}$ , CITY GOVERNMENT AND LOCAL BUSINESSES. Users would simply sign up for free and ATTACH A PROVIDED TAG TO THE FRONT WHEEL OF THEIR BICYCLE WHICH WOULD BE RECORDED ANY TIME THEY RIDE BY ONE OF THE SOLAR SCANNERS, located throughout the city. The scanners KEEP TRACK OF HOW OFTEN YOU RIDE AND DEPENDING ON YOUR PERSONAL INVOLVEMENT YOU ARE PLACED IN DRAWINGS TO WIN PRIZES. Some businesses also offer discounts to USERS AND SOME EMPLOYERS EVEN OFFER LOWER HEALTH INSURANCE RATES ACCORDING TO YOUR INVOLVEMENT.

Solar Powered Zap Bicycle Scanners

## Site Furniture