



Trails Design Guidelines

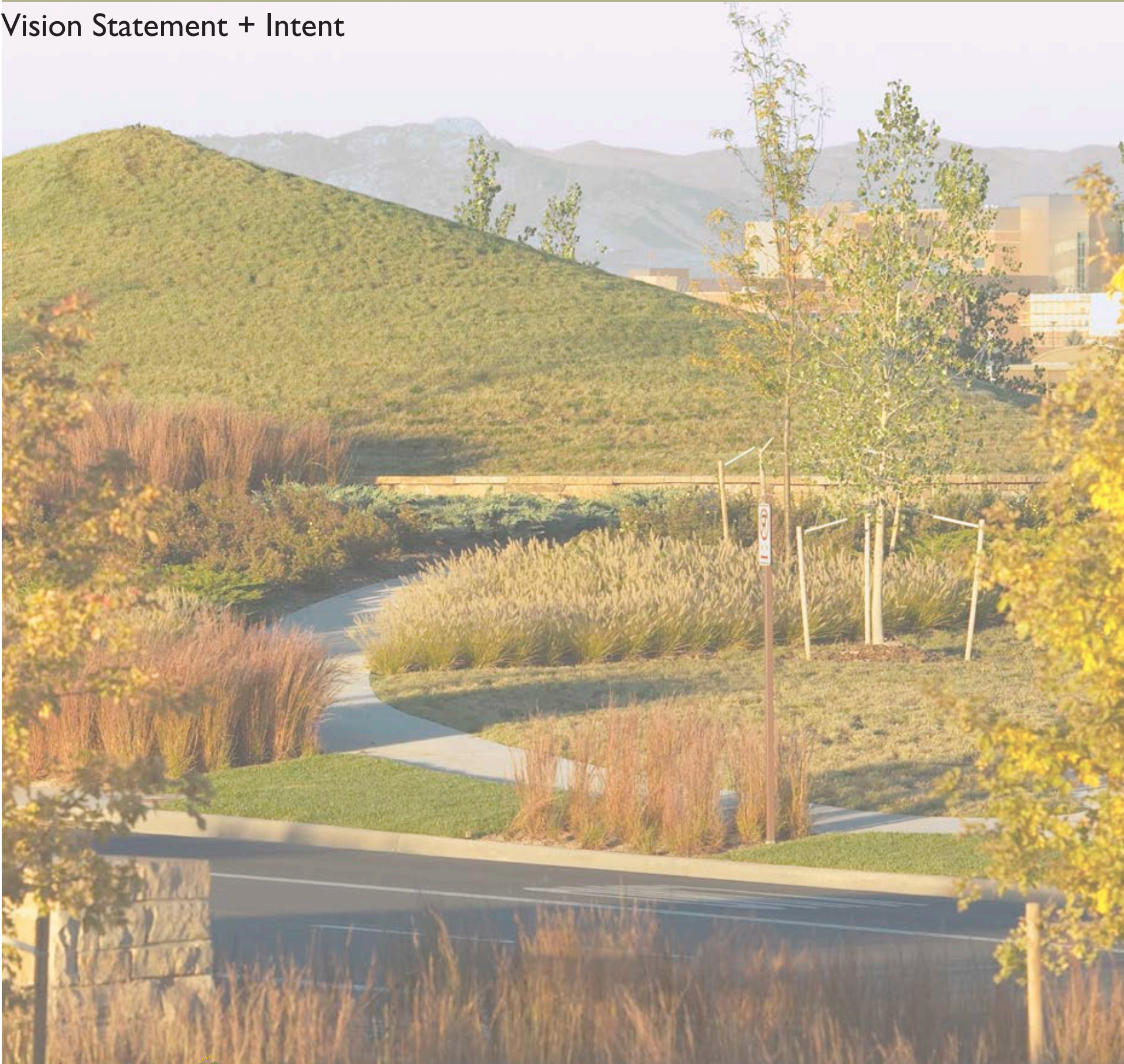
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Prepared by:



May 2020

Vision Statement + Intent



Vision Statement

To create a unified network of trails and their associated amenities across the entirety of the Centerra community while anticipating future regional connections. This trail network should be welcoming to users of all types and abilities, have a consistent aesthetic, invite users to explore by providing simple and user-friendly wayfinding, and ensure ease of use through proper selection and placement of furnishings and amenities.

Design Guideline Intent

- Provide a vision for the Centerra trail system
- Create a strong identity for Centerra trails and open space areas
- Promote a sense of community
- Promote a healthy lifestyle by providing alternate forms of transportation within Centerra
- Provide the user with an enjoyable trail experience and an appreciation of the natural ecosystem and wildlife
- Standardize materials, furnishing, and construction as much as possible for ease of installation and long-term maintenance
- Provide trail connectedness within and to adjacent trail systems, destinations and other forms of transportation (bus / train / etc.)
- Provide a digital database of all trails and all amenities within Centerra for use in facility management and incorporation into digital mapping and navigation applications.

How to Use These Guidelines

These guidelines are meant to serve as a toolbox for both individual developers and designers of Metropolitan District common open space to ensure new projects adhere to the larger vision of a cohesive pedestrian and bike network found within the Trail Map and other exhibits in the following pages. While some larger-scale connections are suggested in the exhibits individual design teams are encouraged to explore creative solutions as to the exact location and design of these connections that enhance the pedestrian experience and encourage non-motorized means of transportation. Design teams are also encouraged to provide additional tertiary connections interior to individual sites.

In addition to setting forth a road map for connectivity, the tools within these guidelines are intended to provide a cohesive design vocabulary and a set of wayfinding standards across the Centerra pedestrian network.





Introduction to Trail Types

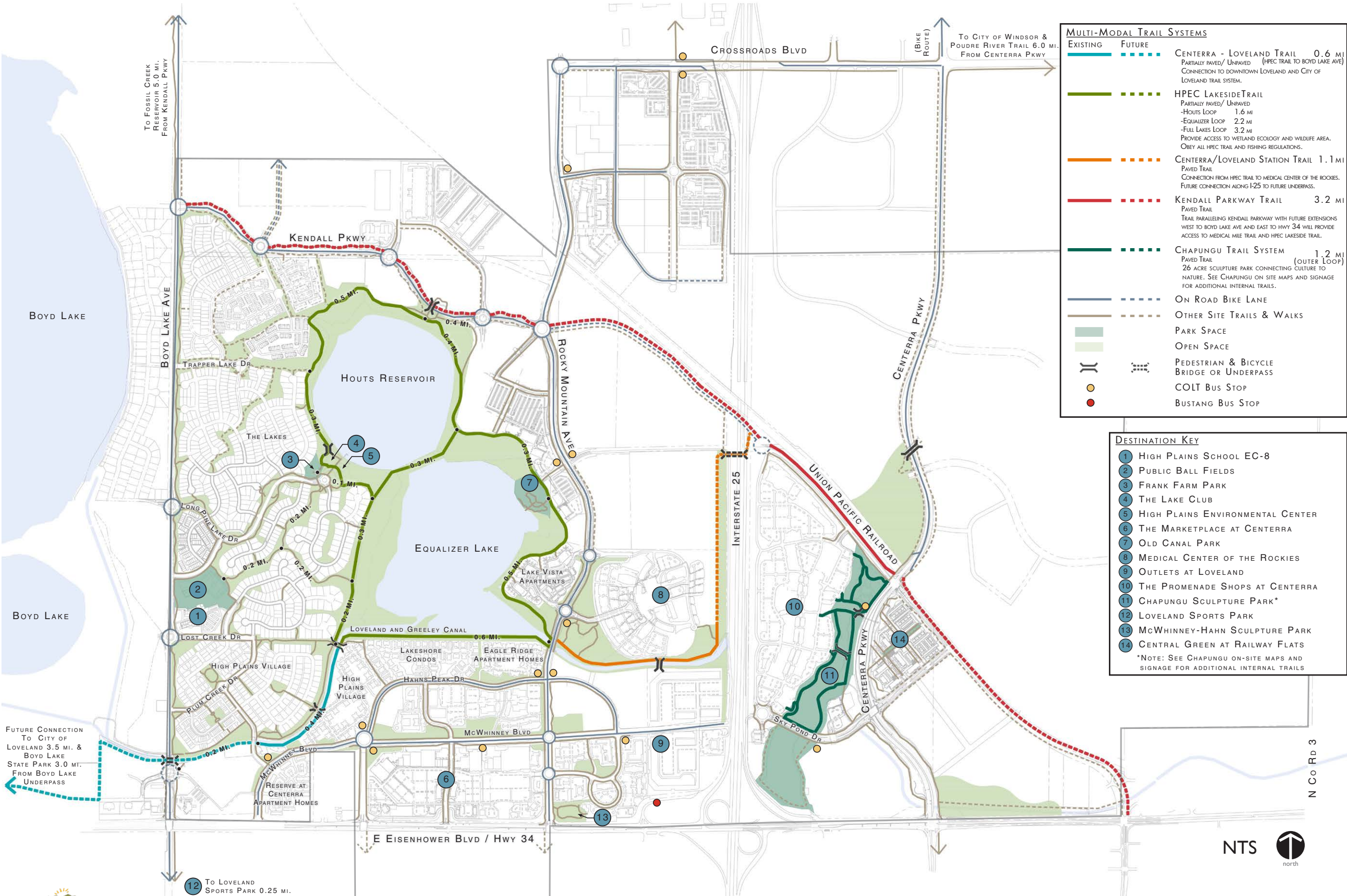
The intent of this section is to establish standard details and materials for each of the anticipated trail types used within Centerra for ease of construction, maintenance, and consistent appearance. Trails developed within the Centerra trails system must conform to the current City of Loveland Building Codes, Ordinances, Standards and Specifications for Construction of Public Improvements, as well as all other applicable governing documents in effect.

Trails generally fall into two categories: pedestrian and multi-use. Pedestrian refers to trails that are intended for walkers, runners, and small groups. Multi-use trails are adequately sized for bike traffic and large groups.

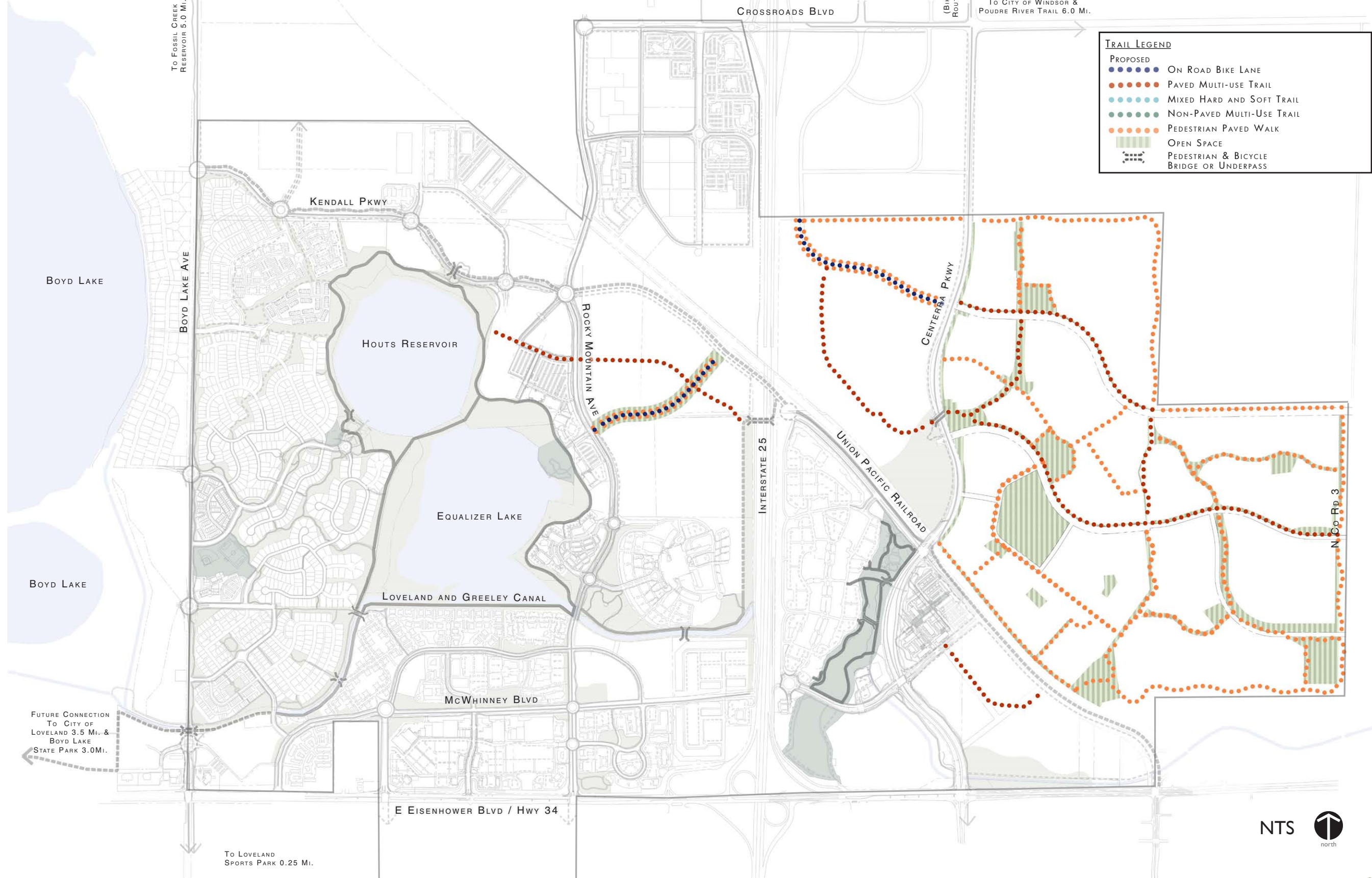
The existing trails found on the maps in the following pages are for information and connectivity purposes only. The future and proposed trails found on the maps in the following pages are intended to be built when the associated parcel is developed. While final location and design is up to the individual developer and designers the intent illustrated in these guidelines shall be met, including but not limited to connectivity and level of use.

The details within this document do not apply to sidewalks within neighborhoods. This document does not address details for sidewalks or bike paths that fall within street rights of way.

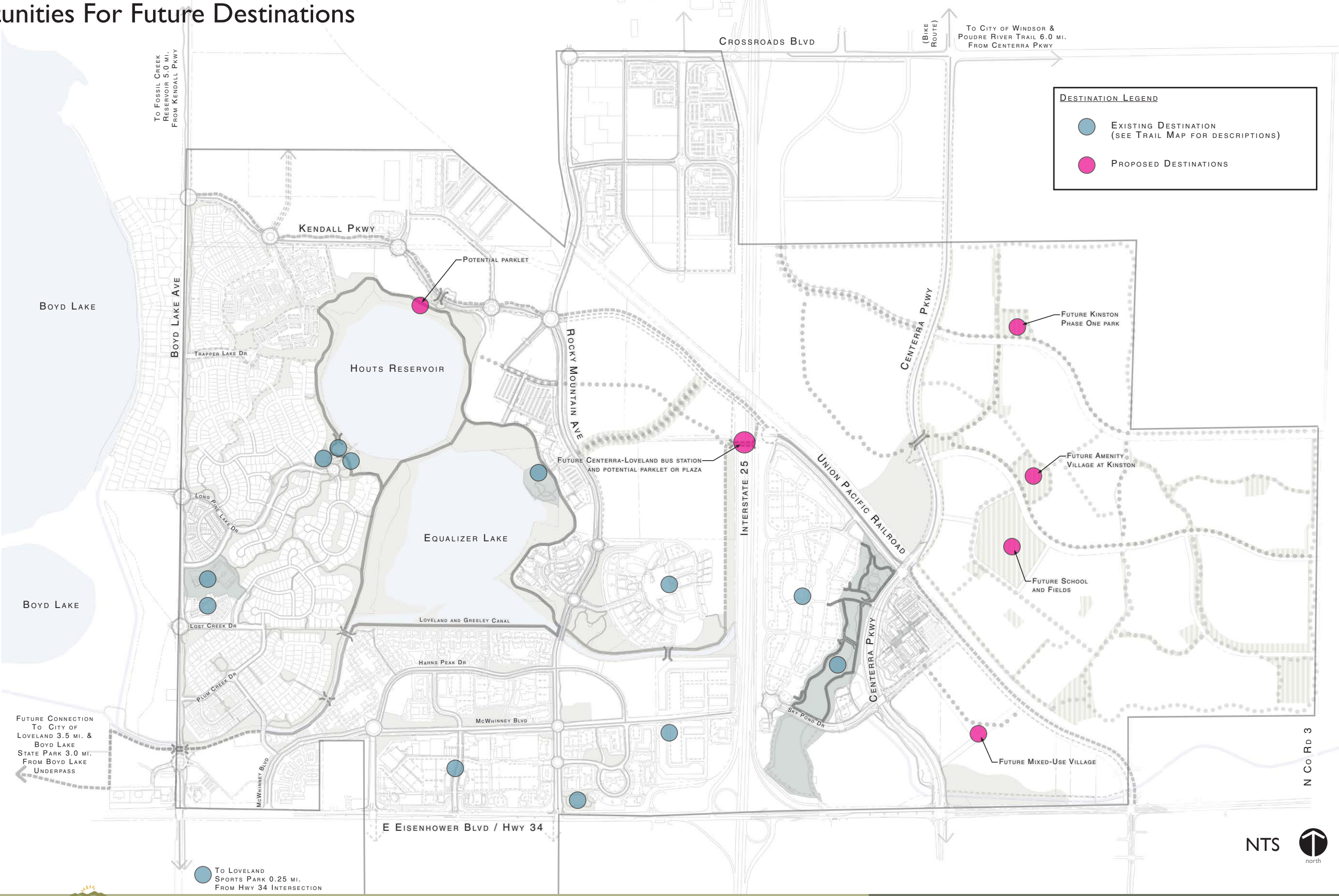
Trail Map



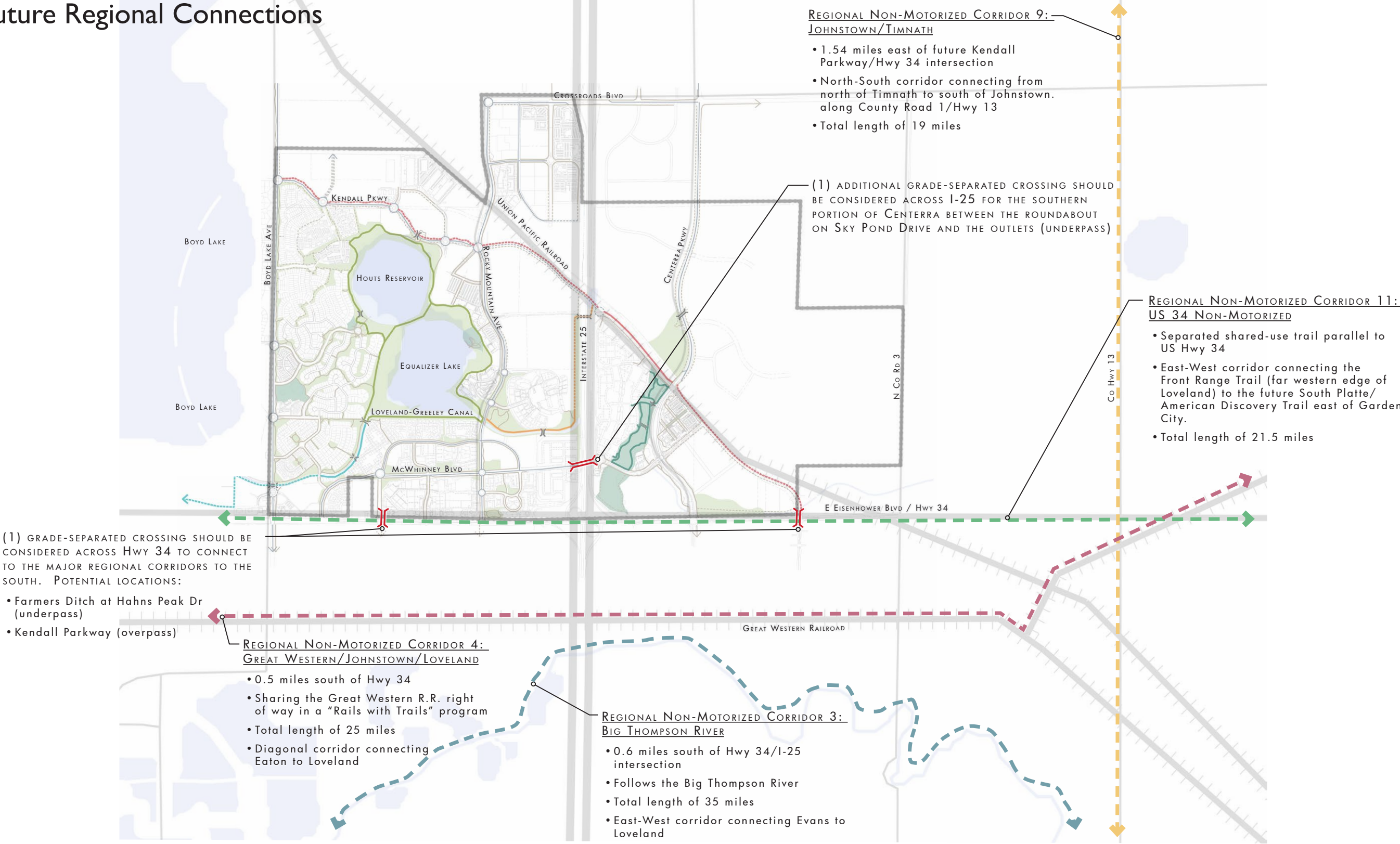
Proposed Future Trails Map



Opportunities For Future Destinations



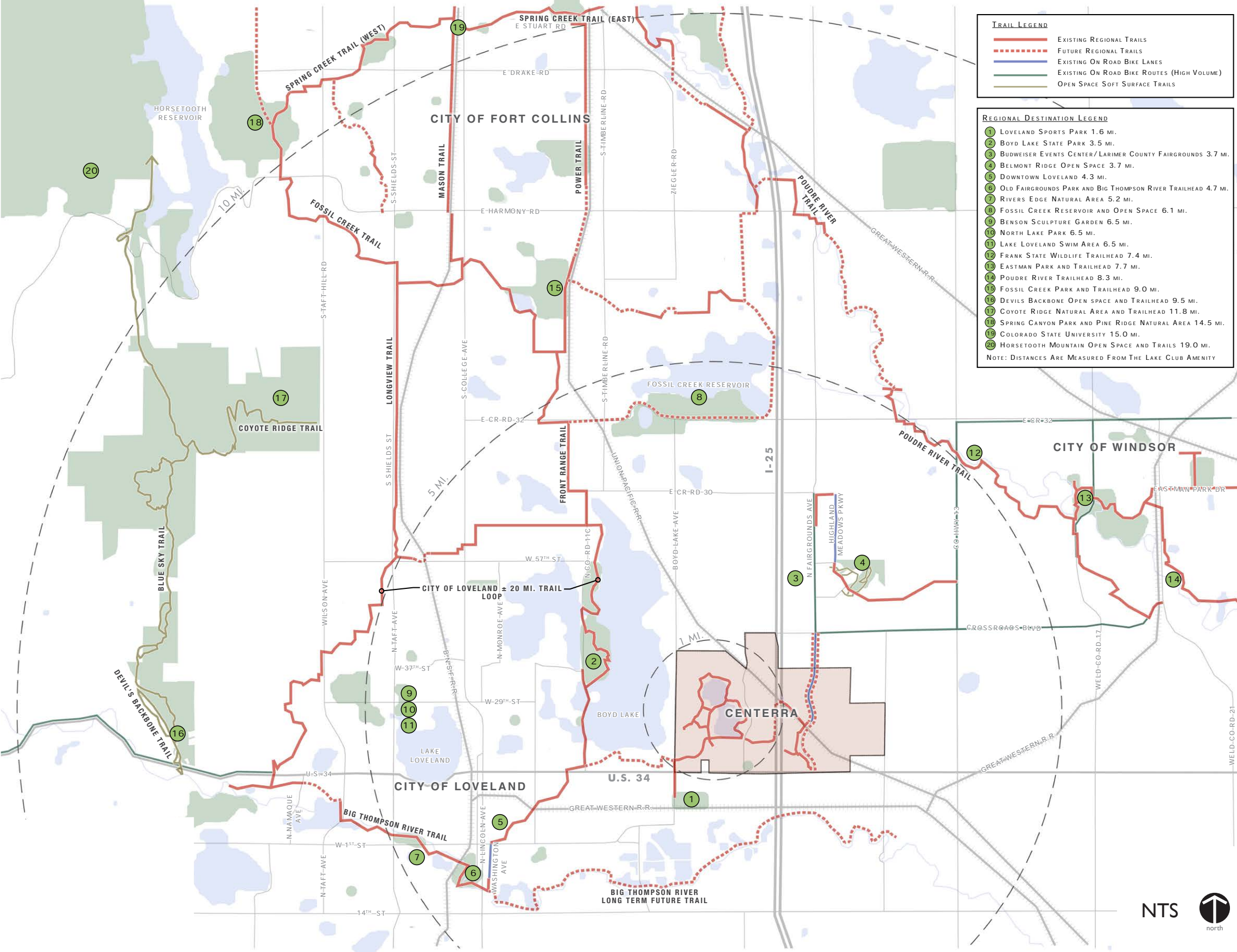
Potential Future Regional Connections



REGIONAL NON-MOTORIZED CORRIDORS BASED ON THE "2016 NON-MOTORIZED PLAN" FROM THE NORTH FRONT RANGE METROPOLITAN PLANNING ORGANIZATION

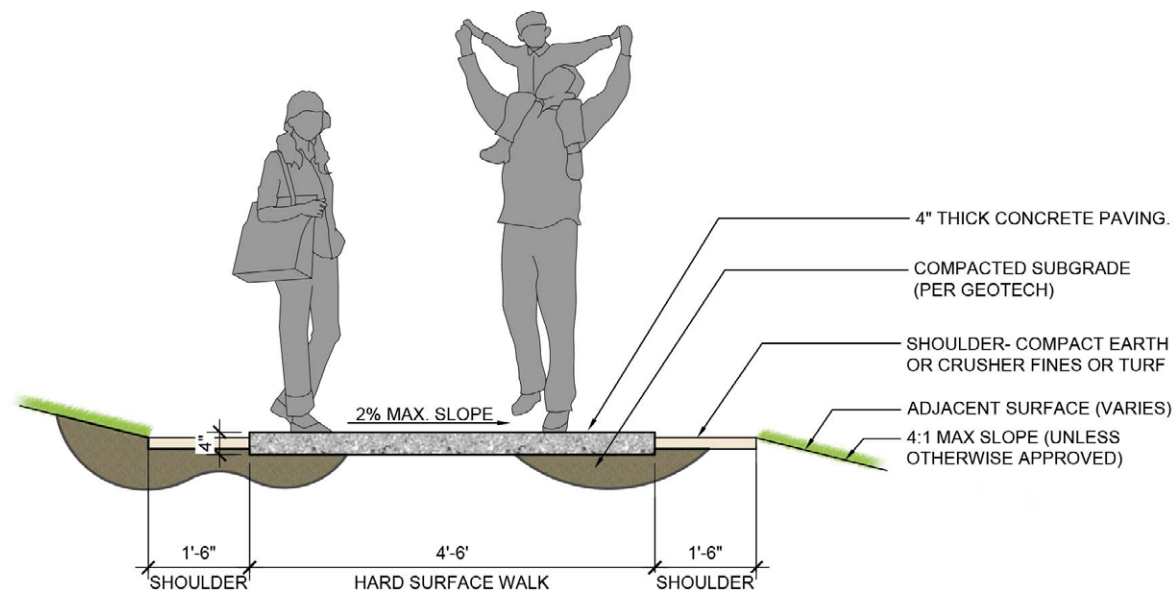


Regional Trails Map

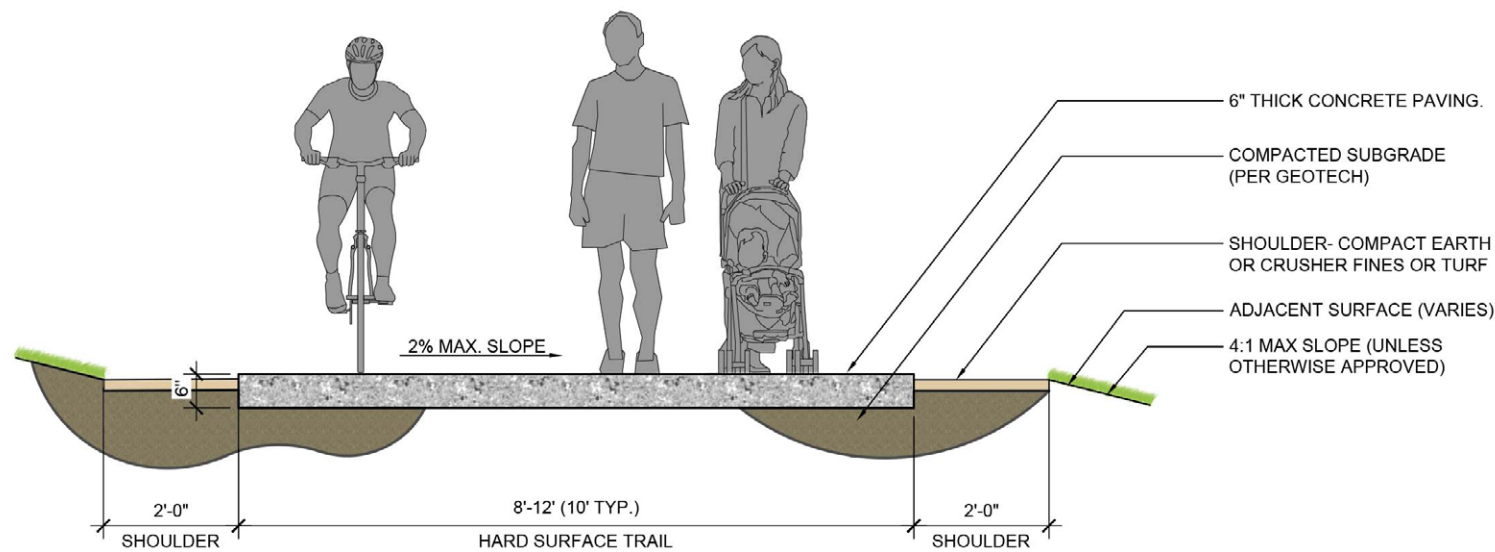


Trail Sections: Paved Pedestrian Walk + Paved Multi-Use Trail

(Two Conditions)



1 PAVED PEDESTRIAN WALK (4'-6')
NTS

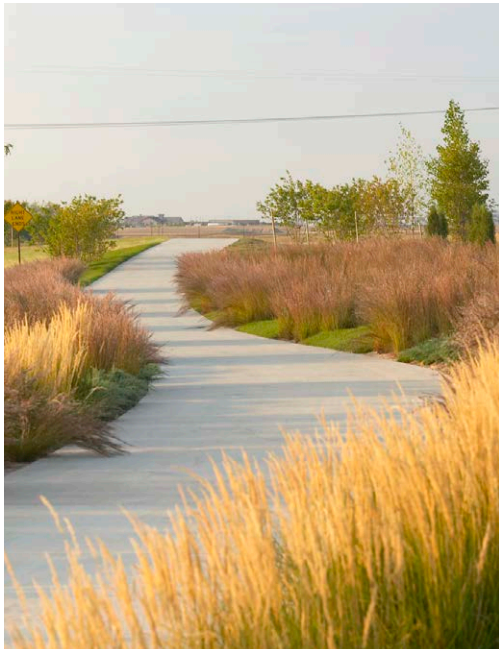


2 PAVED MULTI-USE TRAIL (8'-12')
NTS

Character Images:

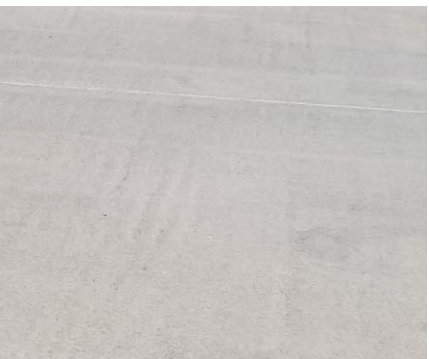


Paved Pedestrian Walk (4'-6')



Paved Multi-Use Trail (8'-12')

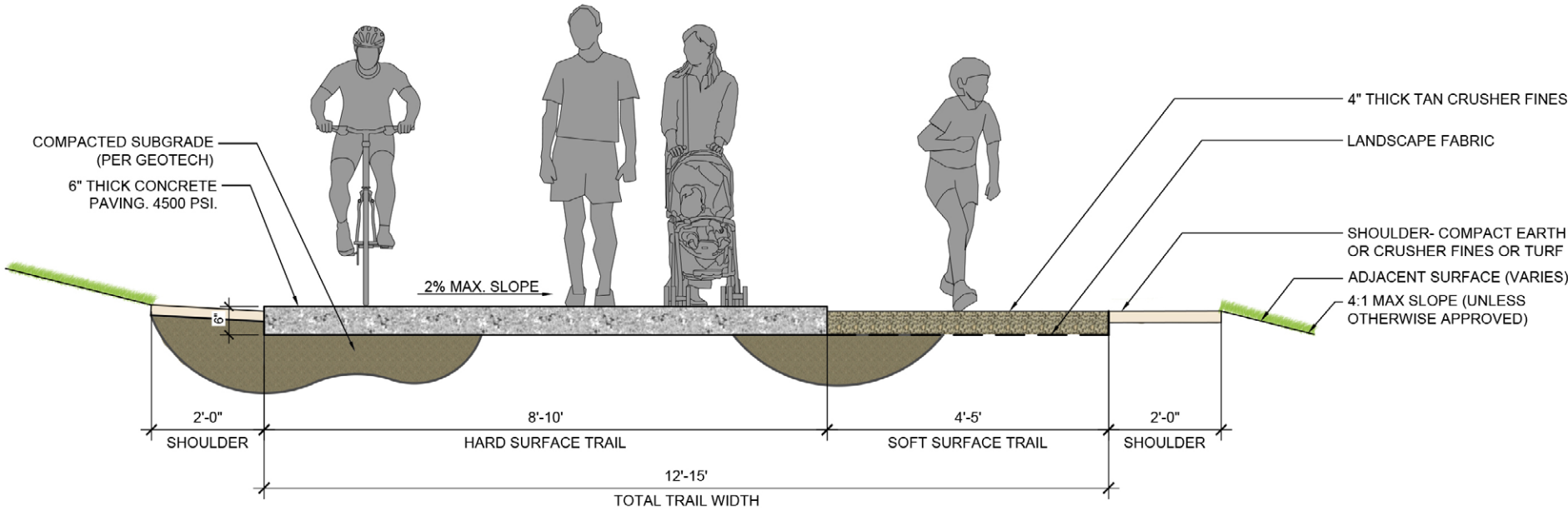
Materials



Concrete- Shall be natural grey color, unless otherwise noted, with heavy broom finish perpendicular to flow of traffic. PSI and reinforcing shall be specified by the geotech or as otherwise stated.

See "Trail Sections- Notes" for additional information regarding trail construction and design.

Trail Sections: Combination Paved/Non-Paved Multi-Use Trail
(One Condition)



3 COMBINATION PAVED/ NON-PAVED MULTI-USE TRAIL (12'- 15')
NTS

Character Image:



Combination Paved / Non-Paved Multi-Use Trail (12'-15')

Materials



Concrete- Shall be natural grey color, unless otherwise noted, with heavy broom finish perpendicular to flow of traffic. PSI and reinforcing shall be specified by the geotech or as otherwise stated.

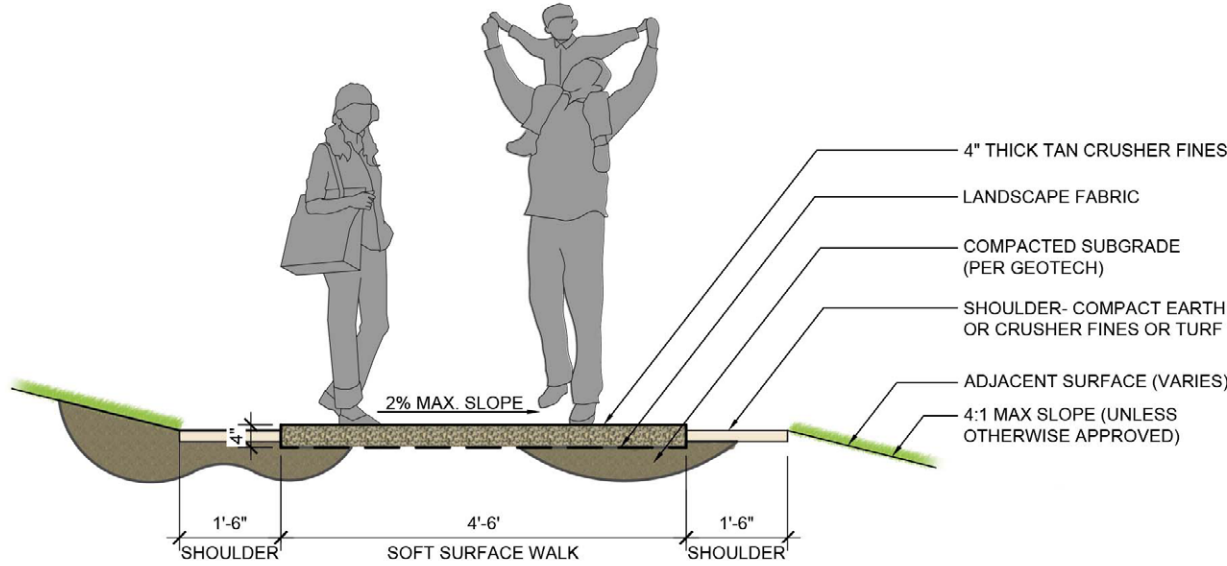


Crusher Fines - Tan Color, sample to be provided to DRC prior to construction.

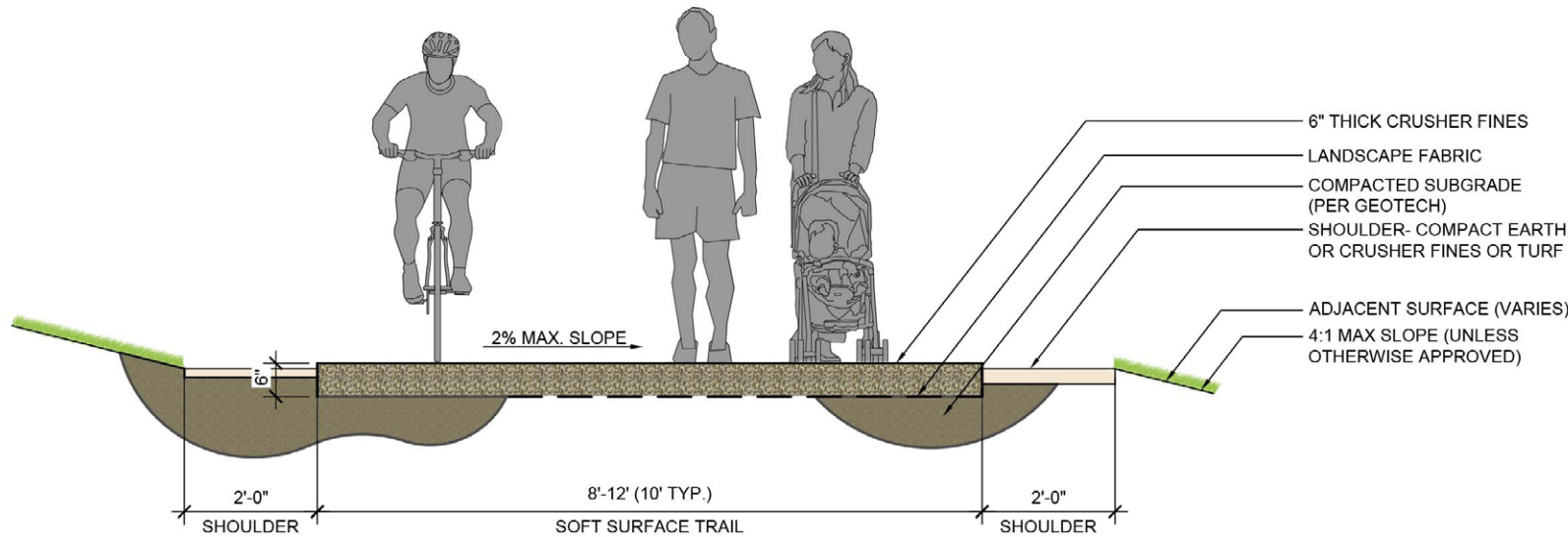
See "Trail Sections- Notes" for additional information regarding trail construction and design.



Trail Sections: Non-Paved Pedestrian Trail + Non-Paved Multi-Use Trail
(Two Conditions)



4 NON-PAVED PEDESTRIAN TRAIL (4'-6')
NTS



5 NON-PAVED MULTI-USE TRAIL (8'-12')
NTS
Note: section typically denotes shared use utility access / maintenance trail. Trail depth and width may need to be increased per utility provider requirement.

Character Images:



Non-Paved Pedestrian Trail (4'-6')



Non-Paved Multi-Use Trail (8'-12')

Materials



Crusher Fines - Tan
Color, sample to be provided to DRC prior to construction.

See "Trail Sections- Notes" for additional information regarding trail construction and design.

Trail Sections: Notes

GENERAL NOTES

- 1. All trails shall meet Millennium GDP Trail Standards.
- 2. All new and or proposed trail improvements shall be submitted to the DRC for review and approval prior to construction.

CONSTRUCTION NOTES

- 1. All trails will be field staked for review and approval by the Owner or Owner's Representative prior to installation.
- 2. All crusher fines shall be 3/8" (maximum) crushed gravel, tan color, 4" thick (min) laid in 2" lifts. Samples shall be submitted for review and approval prior to construction.
- 3. All concrete will be natural color with broom finish perpendicular to flow of traffic. All form work shall be reviewed / approved by owner's representative prior to pour construction.
- 4. Provide positive drainage off walks / paving and away from all structures in all locations / conditions. Adjust adjacent grades as required to properly drain. Grading plans shall be submitted with all trail improvements.
- 5. Concrete PSI and reinforcing shall be specified by the geotech or as otherwise stated.





Introduction to Site Furniture

Per the Millennium GDP Section 6.26 - Site Furnishings: Proposed site furniture should enhance and respect the scale of urban space. Lines should be simple, clean, and harmonious with the adjacent architecture and landscape.

The intent of this section is to establish standard details and materials for each of the anticipated trail furnishings used within Centerra for ease of construction, maintenance, and to establish a strong identity and appearance.

Notes:

- All placement and site design for site furnishings shall be provided to the DRC for review and approval prior to any construction. Submittals may include product materials, color or mock-ups.
- All furniture placement shall be done in a manner that does not interfere with the use of existing facilities or create a hazard in any way.
- All local, state or federal standards and code shall be met when incorporating site furnishings.

Site Furniture



BENCH

Manufacturer: DuMor
Product: Bench 472
Finish: Wood (Ipe)

Mounting: Free Standing or Surface Mount



Steel: Textured Grey



Wood: Ipe



BENCH - BACKLESS

Manufacturer: DuMor
Product: Bench 472
Finish: Wood (Ipe)

Mounting: Free Standing or Surface Mount



Steel: Textured Grey



Wood: Ipe



PICNIC TABLE

Manufacturer: DuMor
Product: Table Set 475
Finish: Wood (Ipe)

Mounting: Free Standing or Surface Mount



Steel: Textured Grey



Wood: Ipe



TRASH RECEPTACLE

Manufacturer: DuMor
Product: Receptacle 474
Finish: Wood (Ipe)

Mounting: Free Standing or Surface Mount



Steel: Textured Grey



Wood: Ipe



BIKE RACK

Manufacturer: Landscape Forms
Product: Ride Bike Rack
Finish: Aluminum

Mounting: Surface Mount or Embedded



Silver



Site Furniture



BIKE REPAIR STATION

Manufacturer: Bike Fixation
Product: Deluxe Public Work Stand
Finish: Paint 'Pale Brown (RAL 8025)'
Mounting: Surface Mount
Accessories: Outdoor Bike Pump, Wheel Chock, Vinyl
Details, Include Centerra Logo / Branding


Painted Metal Color:
'Pale Brown
(RAL 8025)'



BRIDGE

Manufacturer: Big R Bridge
Product: Pedestrian Bridge
Finish: Wood Deck with Painted Metal Rail


Wood

Painted Metal Color:
'Pale Brown
(RAL 8025)'



DOG STATION

Manufacturer: Dog Waste Depot
Product: Dog Waste Station with Roll Bag System
Finish: Paint 'Pale Brown (RAL 8025)'
Mounting: Custom Post to be Provided - Square Post


Painted Metal Color:
'Pale Brown
(RAL 8025)'

DRINKING FOUNTAIN

Manufacturer: Most Dependable Fountains
Product: Model 440 SMFA
Finish: Stainless Steel
Mounting: Surface Mount


Stainless Steel

SHADE STRUCTURE

Manufacturer: Poligon
Product: Cantilevered Trail Shelter
Finish: Metal Painted 'Pale Brown (RAL 8025)' and Wood


Painted Metal Color:
'Pale Brown
(RAL 8025)'

Final design and placement of shade structure may include the incorporation of site walls and seating

Site Furniture Spacing + Associations

Site Furniture	Spacing	Intent	Associations
Bench	1500' - 2500'	Provide resting, reflecting / view opportunities or meeting places within the Centerra Trails System. Benches should be placed off trails to provide adequate room for all users, easy accessibility, and consideration should be given to the incorporation of shade (existing or proposed trees).	Trail Map Kiosk, Trail Nodes, Trail Junctions, Viewsheds and Trash Receptacles
Trash Receptacle	1500' - 2500'	Encourage the trail users to practice a “Take Nothing, Leave Nothing” policy. Trash receptacle should be placed off trails and provide adequate room for all users and easy accessibility to encourage use and ease of maintenance. In addition, trash receptacles should be placed an adequate distance from other trail amenities to minimize odor.	Trail Map Kiosk, Trail Junctions, Trail Nodes, Dog Station, Picnic Table
Dog Station	1500' - 2500'	Encourage the trail users to pick up after their dog. Dog Station should be placed off trails to provide adequate room for all users and be easily accessible to encourage use and ease of maintenance. Placement should also be done in a manner that encourages the usage of trash receptacles and minimize the impact of odor.	Trail Map Kiosk, Trail Starts, Trail Junctions, Dog Stations, Trash Receptacles
Picnic Table	2500' - 3500'	Provide eating, resting, and socializing places within the Centerra trails system.	Trash Receptacle, Shade Structures
Bike Rack	TBD	Bike racks should be placed off trails as to provide adequate room for all users. And easy accessibility to encourage use and ease of maintenance. They should be generally associated with destinations and trail heads within the trail system.	Bike Repair Station, Drinking Station
Bike Repair Station	TBD	Repair station should be located with bike racks in a manor that provides adequate room for all users and is easily accessible to encourage use and ease of maintenance.	Bike Rack, Trail Junctions, Trail Map Kiosks
Drinking Station	3500' - 4500'	Provide water for trail users and their pets in areas with significant traffic, usually at a destination within the trails system.	Picnic Table, Bench, Bike Rack
Shade Structure	As needed	Shade structures may be incorporated into the Centerra Trails system to provide respite from the sun and rain as well as create a destination. Shade structures will typically be “off-the-shelf” products. When considering incorporating a shade structure into the trail system, placement, scale, materials, and intended use should be considered in the design. Final placement of shade structures may include seating, picnic tables, paving and site walls.	Picnic Table, Bench, Wall/ Seatwall
Bridge	As needed	<p>In addition to providing users with a safe crossing of natural or proposed features, proposed bridges shall meet the following design standards:</p> <ul style="list-style-type: none">• Bridges shall be similar in character to the existing bridges within Centerra.• Bridges shall incorporate metal railing (horizontal or arched; the arched railing is preferred) and be painted Pale Brown (RAL 8025) to match the existing metal finishes.• Bridges shall incorporate durable wood decking.• Bridge shall respond to the use / type of trail (multi-use vs pedestrian) that it is associated with. At a minimum, bridges shall 8’ in width.• Bridge abutments may incorporate pilasters / monuments that are in character with existing bridge structures or are in character to the adjacent land use / design.• Design and construction of all proposed bridges shall meet all federal, state and local standards and guidelines for bridge construction.	





Introduction to Signage

This section addresses the use and organization of wayfinding, informational, and regulatory signs within the community. Existing site signage varies in style, size, level of design, and wear. Inconsistent regulatory signage can become cluttered and have a negative affect on a site.

The intent of this section is to create consistent architectural signage elements throughout Centerra that provide trail overviews and information at major hubs and trailheads with directional signs and mileage markers on trail. Creating a consistent and identifiable look is essential for achieving a clean site experience and successful wayfinding communication.

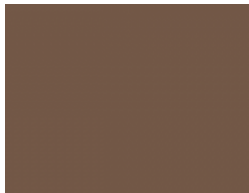
Trail Signage: General Notes + Materials

SIGNAGE MATERIALS

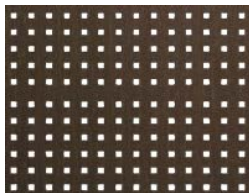
PRIMARY



Wood- rough sawn cedar treated with a waterproof sealer.



Metal millwork painted to match existing 'Pale Brown (RAL 8025)'



Perforated Metal, 1/4" thick (heavy gage) with round staggered hole pattern (60% open min.) 'Pale Brown (RAL 8025)'

SECONDARY



Natural Stone - to be "Masonville Buff" set in a broken ledge stone pattern to match existing masonry work within Centerra



Heavy Gage Brushed Aluminum Panel for letters and logos



Signage Color Pantone: 7710C



Signage Color Pantone: 370C



Signage Color Pantone: 716C



Signage Color Pantone: 1797C



Signage Color Pantone: 3298C

Signage fabrication notes:

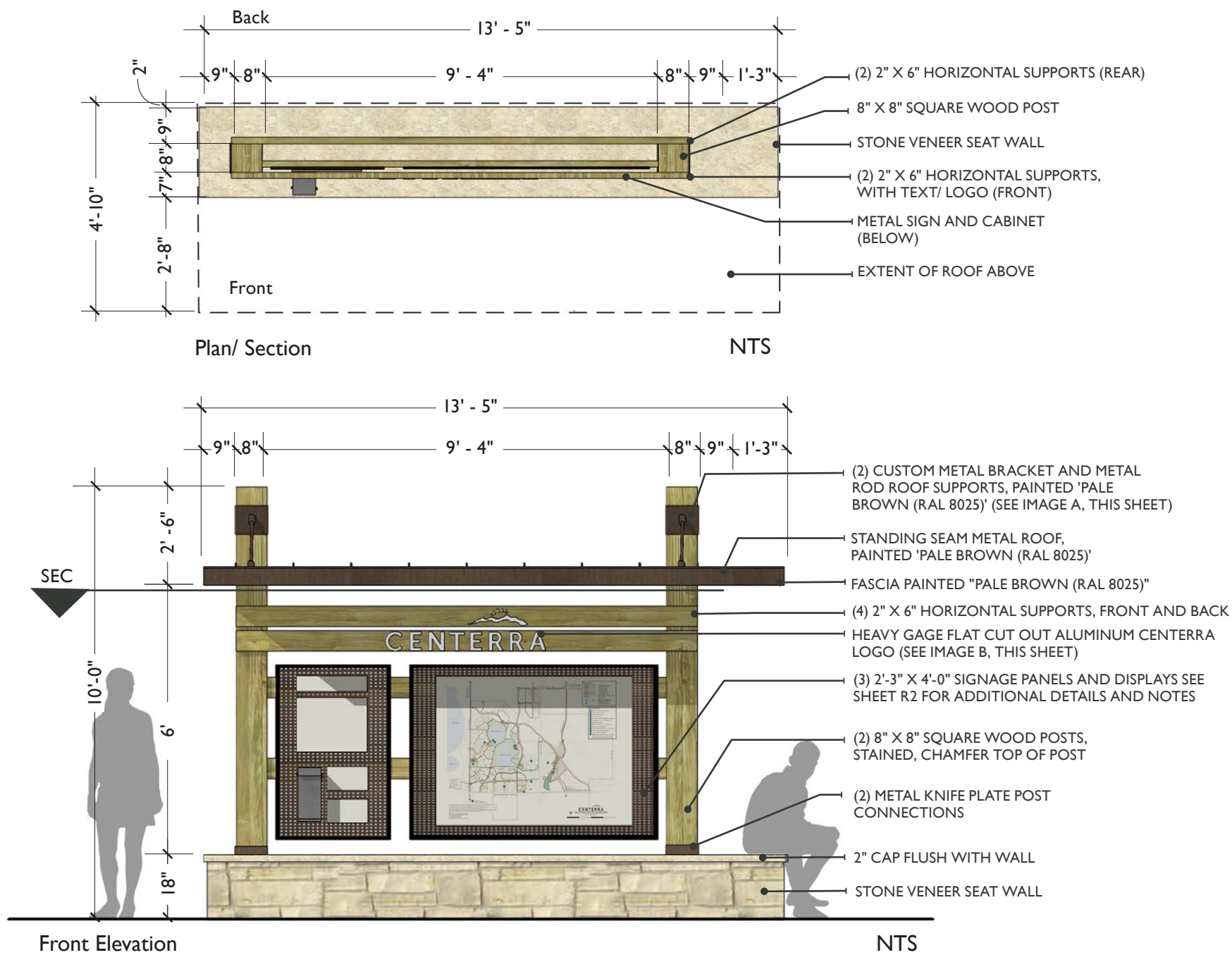
- 1. The sign fabricator shall provide a complete set of shop drawings to the DRC & owner / owner's representative for review and approval prior to any fabrication. Shop drawings shall include adjacent masonry wall (if any). Details shown within this document shall be followed for exterior appearance. Sign fabricator may change interior construction details to conform with his / her shop practices.
- 2. Owner or owner's representative is to provide text lettering and artwork to sign fabricator.
- 3. Sign fabricator to provide samples of each color and finish, as specified, for all materials being proposed, including letters, metal for sign cabinets, and hardware connections to DRC & owner / owner's representative for review and approval prior to fabrication.
- 4. Sign fabricator to provide temporary wood / heavy cardboard (or other approved material/method) mock-up in field for owner / owner's representative review and approval of sign placement, orientation, and height prior to sign fabrication or construction.
- 5. All hardware connections to be hidden.
- 6. The sign fabricator shall provide all structural engineering and design of signage, unless otherwise indicated. Additionally, sign fabricator shall provide required permits within bid package, unless otherwise directed.

Stone veneer / wall notes:

- 1. All stone shall match existing stonework within Centerra (materials and pattern). Material samples and mock-up must be provided to the DRC and owner / owner's representative for review and approval.
- 2. Structural design for the walls, wall footing / core, sign cabinet and hardware connection, if required / requested, shall be provided by the signage fabricator.



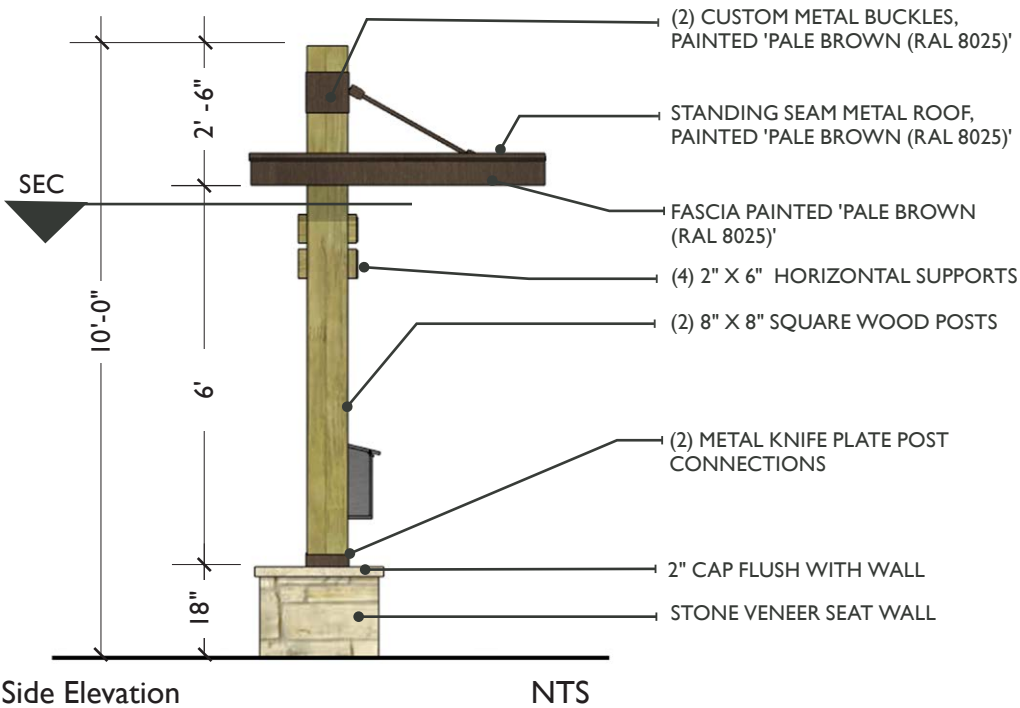
Trail Signage: Major Trail Map Kiosk (with Seat Wall)



A. Bracket/ Rod
Character Image Only



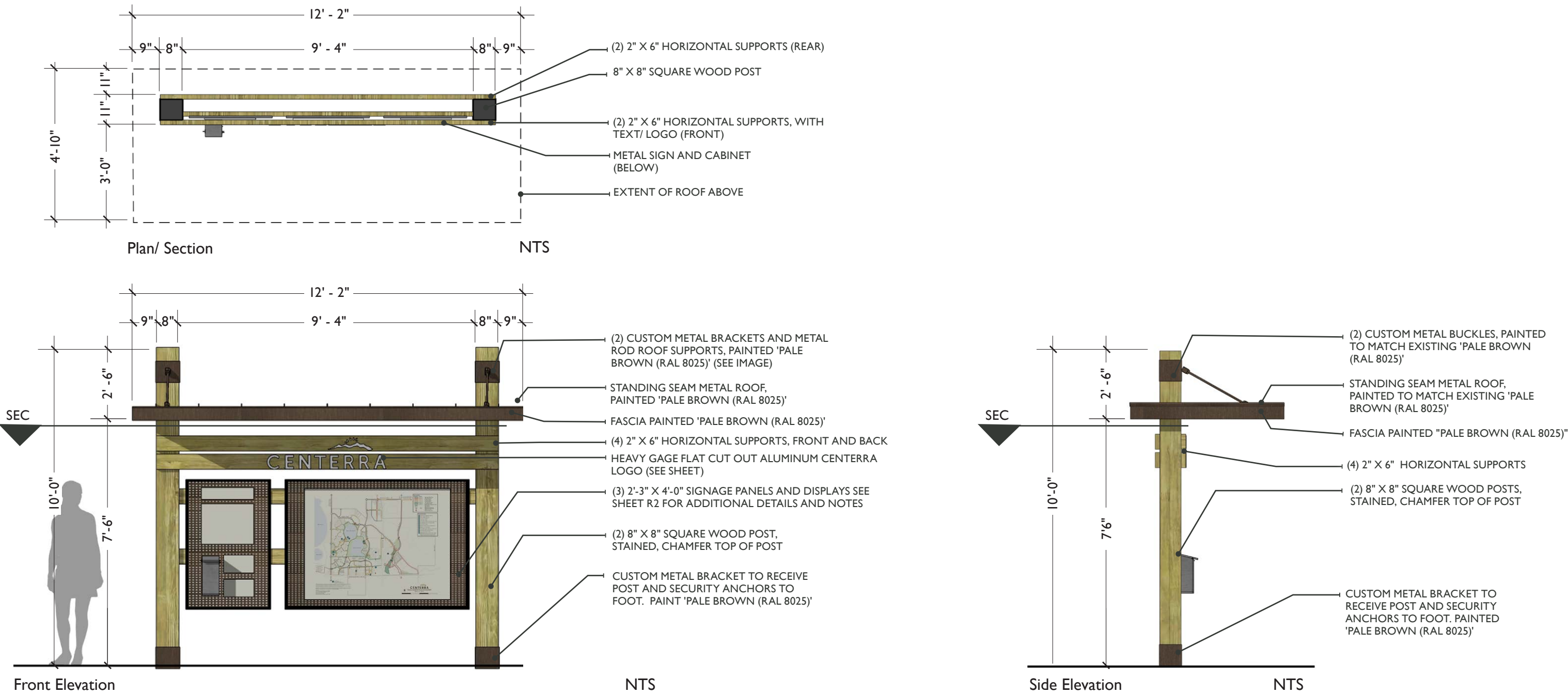
B. Aluminum Logo Letters
Character Image Only



Major Trail Map Kiosk (with Seat Wall)

The intent of the Trail Map Kiosk is to orient the user as to where they are within the Centerra Trail System and provide potential destinations / goals. In addition, the kiosk would post trail “Rules and Regulations”, notices and brochures.

Trail Signage: Major Trail Map Kiosk



Major Trail Map Kiosk

The intent of the Trail Map Kiosk is to orient the user as to where they are within the Centerra Trail System and provide potential destinations / goals. In addition, the kiosk would post trail “Rules and Regulations”, notices and brochures.



Trail Signage: Panel Use + Layout

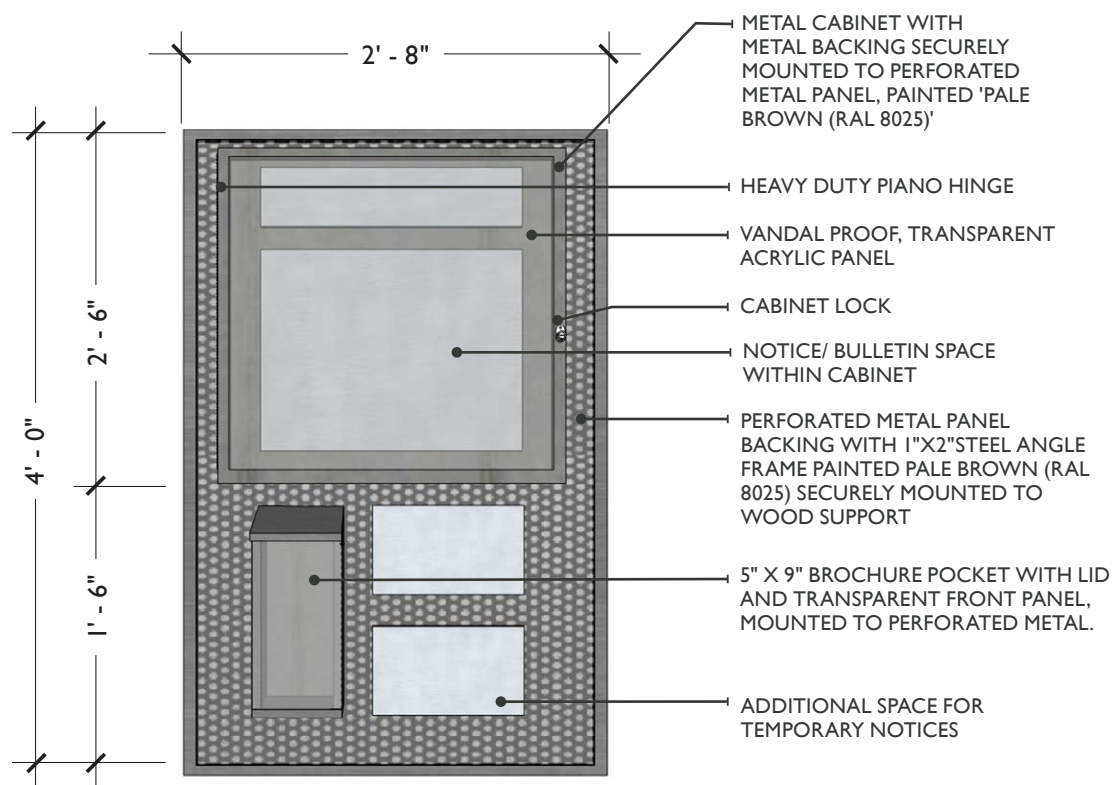


See Panel Enlargements, Page TRA-22

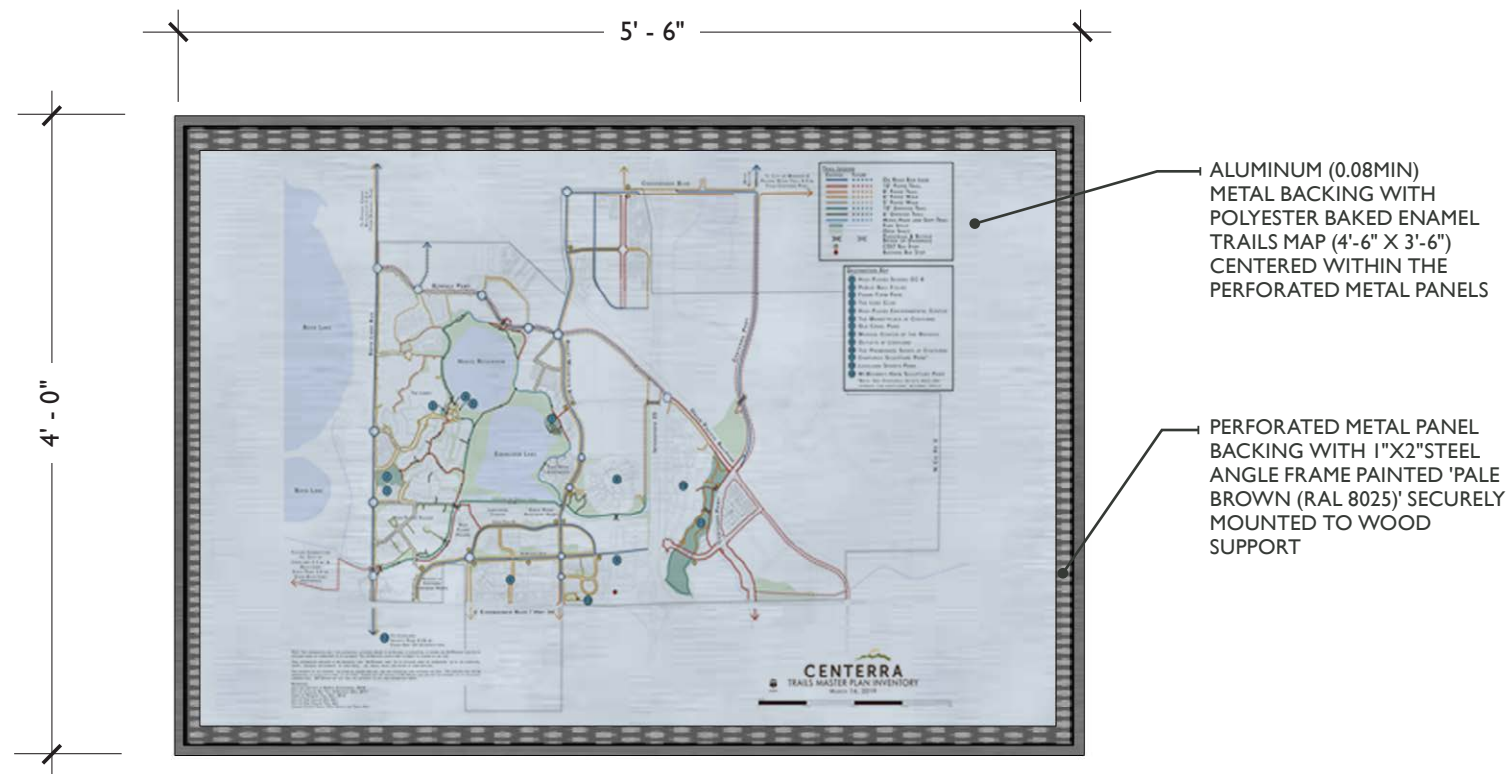
Panel Legend

- Left Cabinet / Panel
- Placement of Brochures, Announcements, News, Events, Rules, Regulations and Restrictions. (See "Trail Regulations", Page TRA-25)
- Middle/ Right Cabinet / Panel
- Placement of Trail Maps

Trail Signage: Panel Enlargements



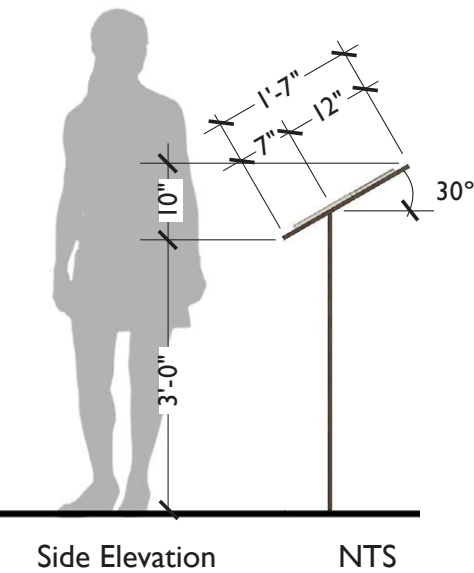
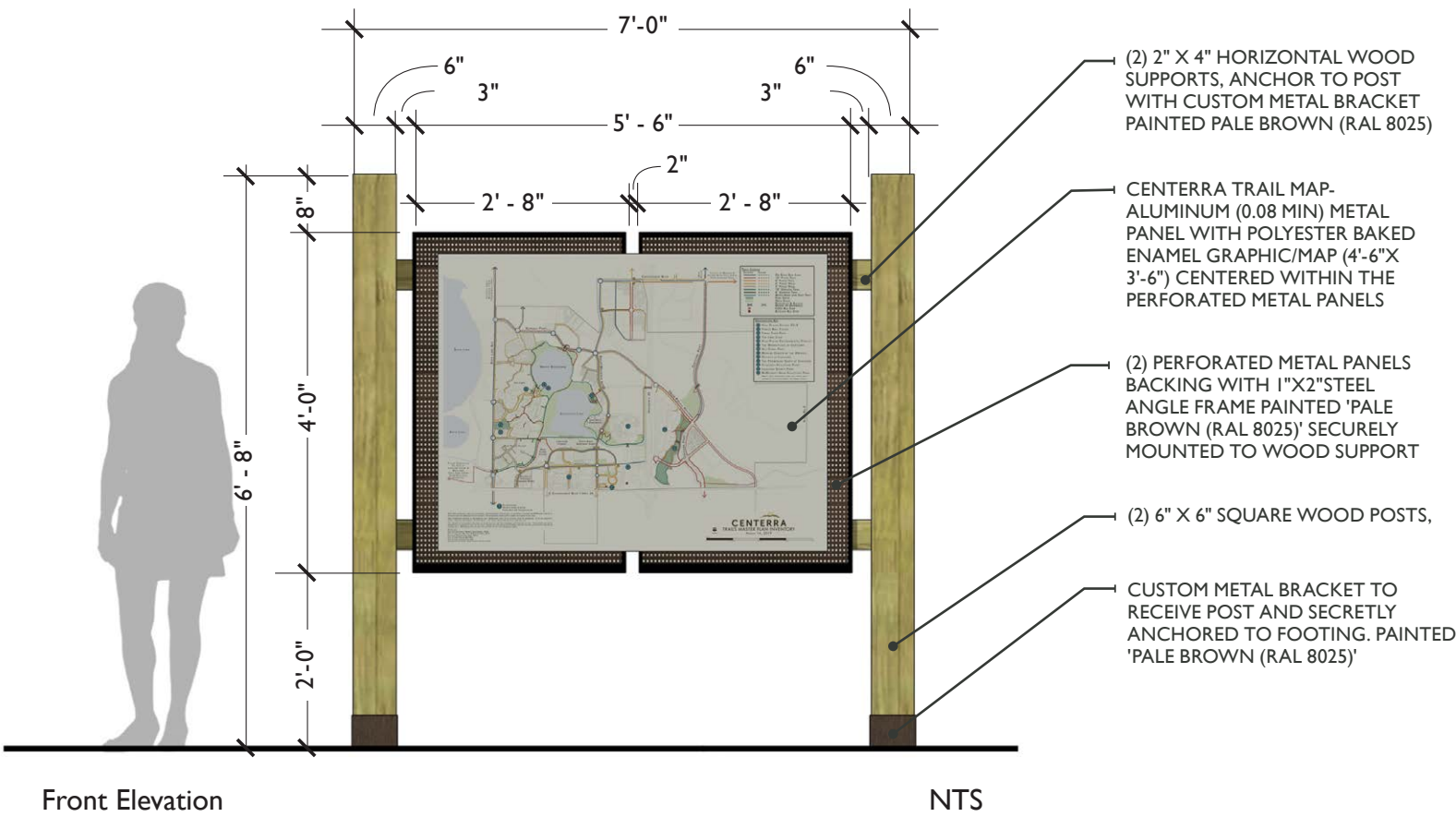
Left Panel / Cabinet



Right Panel



Trail Signage: Minor Trail Map Kiosk + Trail Map/Information Sign



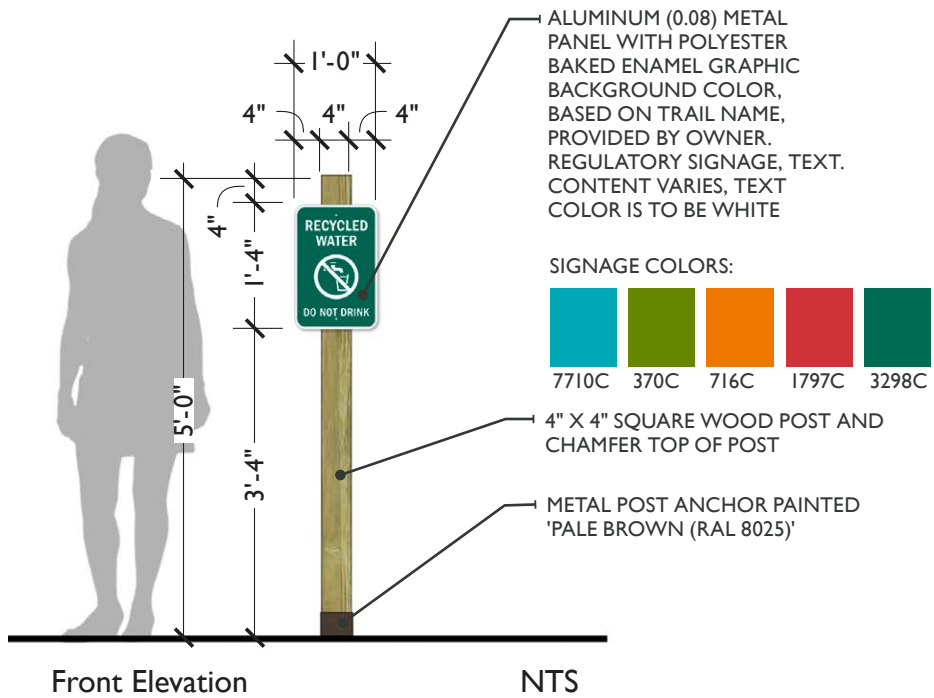
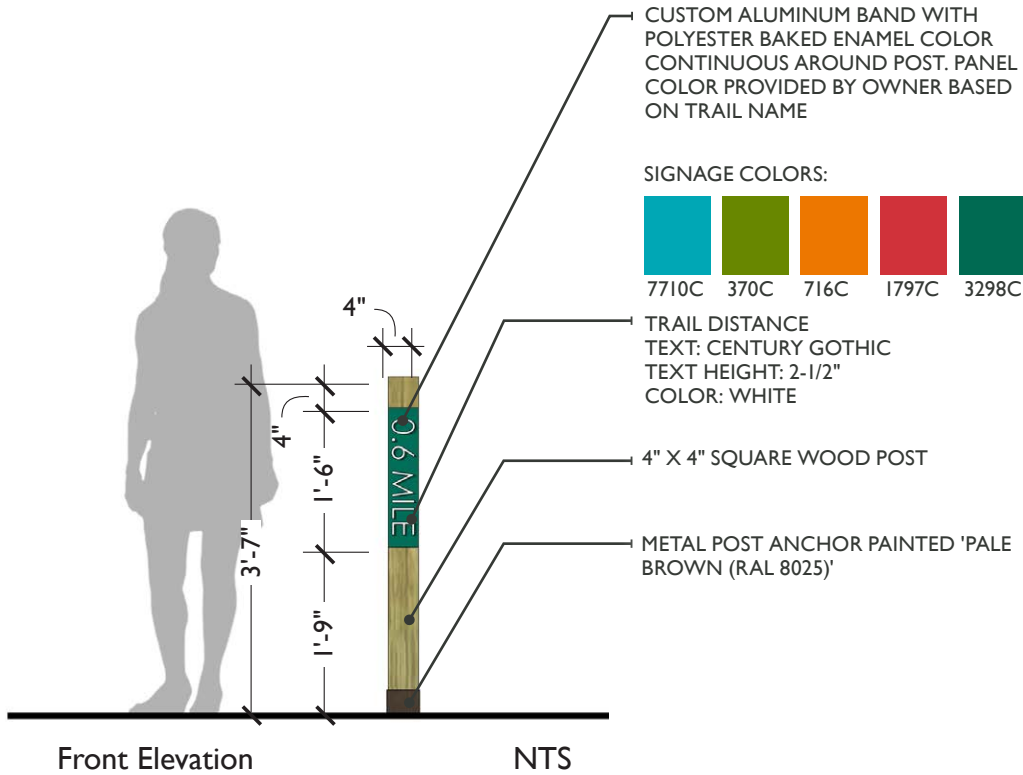
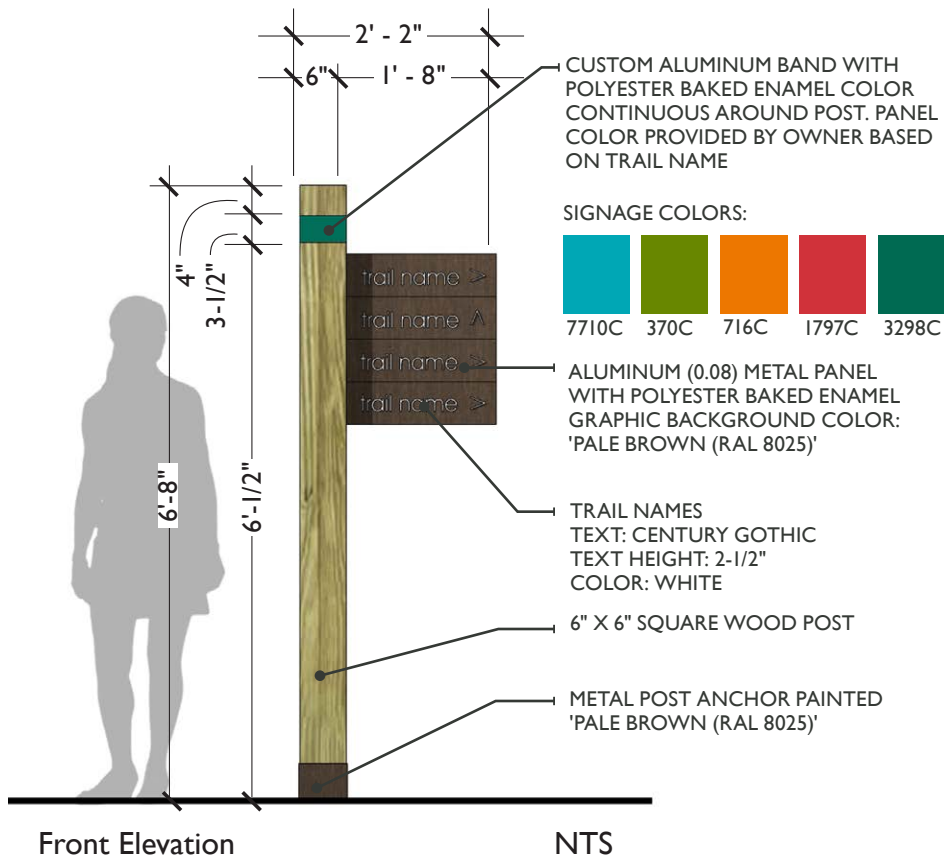
Minor Trail Map Kiosk

Similar to Major Trail Map Kiosk, without the overhead structure

Trail Map / Information Sign

The purpose is to provide a trail map as well as trail rules and regulations.

Trail Signage: Junction, Mileage, + Regulatory



Junction Markers

The purpose is to provide direction at trail junctions. Additional information provided may include distance. Other associated sign would include Trail Information Signage.

Mileage / Trail Name Markers

The purpose is to denote trail distance and trail name (as applicable).

Regulatory Signage

Provide specific user information regarding adjoining properties, like "Private Property, Do Not Trespass" or information specific to a zone, like wildlife habitat. Signage may also reiterate trail "Rules and Regulations".



Trail Regulations

The trail rules and regulations listed below shall be posted on major trail map kiosks and regulatory signage within the Lakeside Trail system and any other applicable areas.

High Plains Environmental Center (HPEC)

Trail Regulations

- All pedestrians and bicyclists must stay on established trails
- Dogs must be on a leash at all times
- Pet waste must be disposed of properly in waste stations along trail
- No litter – LEAVE NO TRACE
- No alcohol allowed
- Trails open dawn to dusk
- Harassment of wildlife is STRICTLY PROHIBITED
- No unauthorized vehicle access
- No swimming
- No boats or flotation devices

Fishing Regulations

- All Colorado state fishing regulations apply
- No ice fishing
- No boats or flotation devices
- Dogs must be on leash at all times
- Pick up all pet waste
- No bow fishing
- No swimming
- No littering – LEAVE NO TRACE
- No alcohol allowed
- Fish only in designated areas (see trail map)
- Fishing is allowed from certain shore locations around Houts Reservoir and Equalizer Lake including:
 - Equalizer
 - From the fishing pier located west of Old Canal Park
 - From the riprap/shoreline stabilization along the southeastern edge
 - From the dam riprap along the southern edge
 - Houts
 - From the shoreline along the southwestern edge, from the pump houses to where the land bridge begins

Proposed Trail Signage Locations



Sources

These inventory and guidelines were developed by McWhinney and DTJ Design, Inc. Based on the Framework Plan prepared by Civitas, the base information compiled by Merrick & Company, ground inventory verification, and input from the following agencies and organizations:

- High Plains Environmental Center
- City of Loveland Parks & Recreation Department
- Greeley-Loveland Irrigation Company (GLIC)
- City of Loveland Transit (COLT)
- City of Fort Collins Park Planning & Development
- Medical Center of the Rockies, Community Health Group
- Medical Center of the Rockies, Operations and Design Group
- Colorado Parks and Wildlife
- Western Area Power Administration (WAPA)
- North Front Range Metropolitan Planning Organization (NFRMPO)
- Anadarko Oil and Gas
- Great Outdoors Colorado (GOCO)
- Thompson School District High Plains School