



**CITY OF BOULDER  
CITY COUNCIL AGENDA ITEM**

**MEETING DATE:** June 4, 2019

**AGENDA TITLE**

Provide direction to staff on whether the draft Alpine-Balsam Area Plan Options and Analysis for land use, urban design, access and mobility, and flood mitigation are ready to move to the next phase of the process.

**PRESENTER/S**

Jane S. Brautigam, City Manager  
Chris Meschuk, Asst. City Manager, Interim Director of Planning  
Kurt Firnhaber, Director of Housing and Human Services  
Jim Robertson, Comprehensive Planning Manager  
Edward Stafford, Development Review Manager, Public Works  
Michele Crane, Facilities Design and Construction Manager  
Douglas Sullivan, Principal Engineer - Utilities  
Katie Knapp, Engineering Project Manager-Flood/Greenways  
Chris Hagelin, Senior Transportation Planner, Transportation/GO Boulder  
Michelle Allen, Inclusionary Housing Program Manager  
Jeff Haley, Planning, Design & Community Engagement Manager, Parks and Recreation  
Doug Godfrey, Parks & Recreation Planner  
Sarah Huntley, Engagement Manager, CMO  
Kalani Pahoa, Urban Designer, Planning Department  
Jean Gatza, Senior Planner, Planning Department

## **EXECUTIVE SUMMARY**

Over the last three years, the City Council and the community have identified a vision for the future of the Alpine-Balsam area. The 2015 purchase of the Alpine-Balsam property (“the site”) was a strategic investment for the community, in part motivated by the desire to shape the redevelopment of an area that has been focused around a major healthcare facility for decades, and in part to address the city’s decentralized service challenges in a way that reflects Boulder’s vision and values by creating a Customer Service Hub. The 2017 Vision Plan articulated the following vision for the area: “Alpine-Balsam will be a vibrant multi-generational hub for community life and local government services – a welcoming and inclusive new model for equitable, affordable and sustainable living.” Adoption of the Alpine-Balsam Area Plan will be an important step forward in implementing that vision. The feedback and direction provided by council at this time will move us closer to that adoption.

The purpose of this agenda item is for City Council to review the major components of the draft Alpine-Balsam Area Plan -- Goals and Objectives, Land Use and Urban Design Options, Connections Plan, Access and Mobility Strategy, Flood Mitigation Options, and Community Engagement Plan -- and provide direction to staff about whether these components are ready to move to the next phase of the process. The draft Alpine-Balsam Area Plan Options and Analysis include options for changes in the surrounding area in order to comprehensively plan for the site, neighborhood center, and surrounding area.

If council decides that these draft Area Plan components are ready for the final round of public engagement, staff will gather feedback from community members and advisory boards in June and July. The schedule includes a public hearing, review and direction on a draft Area Plan by the Planning Board and City Council in August with a joint public hearing and adoption of the final plan in late September.

## **STAFF RECOMMENDATION**

Staff requests feedback on the engagement draft components of the Alpine-Balsam Area Plan and direction to proceed with community engagement.

Questions for City Council

1. Does City Council agree with the revised Area Plan Goals and Objectives?
2. Are the draft Area Plan components and options ready for public review and input?
  - a. Should any options be eliminated?
  - b. Should any new options be added?
3. Does City Council have questions about the following draft Area Plan components?
  - a. Land Use, Character District, and Urban Design Options;
  - b. Connections Plan and Access and Mobility Strategy
  - c. Community Engagement Plan
4. Does City Council agree with the approach for further assessment of flood mitigation?

## **COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS**

- Economic – The Alpine-Balsam Area Plan Options promote equity, affordability and sustainability through thoughtful redevelopment; the proposed uses are aligned with market and community needs.
- Environmental – The Alpine-Balsam Area Plan Options include considerations for achieving environmental goals.
- Social – The Alpine-Balsam Area Plan Options strive to achieve goals of the Vision Plan that the area should be a vibrant place for community gathering that promotes affordable housing and a multi-generational hub.

## **OTHER IMPACTS**

- Fiscal – Development of the area plan options and components are included in the established city budget including consulting services.
- Staff time – The Alpine-Balsam Area Plan is identified as a priority for staff.

## **BOARD AND COMMISSION FEEDBACK**

Staff has provided updates to boards over the course of the project and encouraged participation from board members in community events. Since the area plan kickoff, staff hosted two workshops with liaisons from several advisory boards to facilitate board awareness of the project and to provide the opportunity for project liaisons to provide feedback. These liaisons serve to keep other members of their boards informed about the area planning process.

The following boards will review the engagement draft and provide recommendations to the Planning Board and Council in June and July on elements of the plan within their purview. Their recommendations will be provided to the Planning Board and City Council in August and will inform the draft plan.

- Transportation Advisory Board
- Parks and Recreation Advisory Board
- Housing Advisory Board

## **PUBLIC FEEDBACK**

Community engagement processes for Alpine-Balsam vision planning began in September 2016 with workshops, open houses, pop-up events, an online questionnaire, and charrettes involving local and out-of-town experts and resulted in acceptance of the 2017 Vision Plan.

Public engagement efforts for the Area Plan started in May 2018 and have included:

- 1) Area plan kickoff event
- 2) Meetings with private property owners in the area
- 3) Pop-up events and attending city-wide events:
- 4) Collecting feedback on Be Heard Boulder
- 5) Hosting a focus group of community members from traditionally under-represented communities to discuss opportunities at Alpine-Balsam and learn how we might best communicate about and structure engagement events to be welcoming and compelling
- 6) Hosting workshops to share draft Scenarios, opportunities and trade-offs for redevelopment of the city site

Most recently, staff held a series of small-group workshops to ask questions and gather feedback about the future vision for the wider area and facilitate conversations among community members. The goal was to learn about the community's preferences related to land use goals, character, access, and mobility to inform choices for the area plan. Staff sought to implement lessons learned from earlier engagement, including hosting events closer to the area and hosting a total of 10 engagement opportunities at different times and days to accommodate a variety of participants.

The small-group workshop format (facilitated small group discussions) allowed participants to have an open dialogue with each other and staff to listen to and document the range of feedback. Approximately 120 people participated in the workshops. The full Workshops Summary is included in **Attachment A**. Key themes include:

- **Neighborhood Quality of Life is High.** This results from a mix of people; mix of housing; character and safety of residential areas; walkability and access to activity in park and centers, downtown and mountains.
- **Neighborhood Center functions well and is beloved.** Take care in considering changes. People appreciate the current look and feel of the center as well as easy access to a range of retail, commercial and medical uses in the area.
- **Mixed Views on New Housing and Density** Because of the area's close proximity to downtown, jobs, services, and transit, some see the area as an ideal location to add density in order to address critical housing needs in an innovative and attractive way. Conversely, some neighborhood residents have concerns about adding too much housing on the city's site that is "too big" and could negatively impact traffic, parking, services, and visual character.
- **Recreation, Open and Green Spaces** – People love North Boulder Park but as the area changes, other green and open spaces will be important for connections and places to gather. Changes for flood mitigation should be carefully considered.
- **Access and Mobility Hub** - People appreciate the current ability to walk, bike, take transit and drive. There are concerns for more traffic and parking. People suggest improvements for safety, ease of moving through the area with or without a car, and to promote all-mode mobility.
- **Redevelopment on the city site needs to be innovative and thoughtful** - People want redevelopment to fit in, support the neighborhood center, add value and have great public spaces and amenities. They want housing that helps meet affordability goals and provides



housing that is most needed. They also want open spaces, great connections, innovative design, welcoming places to gather and a little retail along with the city service hub.

## **BACKGROUND**

### Vision Plan

The 2015 purchase of the Alpine-Balsam property (formerly the home of Boulder Community Hospital) was a strategic investment for the community, in part motivated by the desire to shape the redevelopment of an area that has been focused around a major healthcare facility for decades, and in part to address the city's decentralized service challenges in a way that reflects Boulder's vision and values by creating a Customer Service Hub.

The [Alpine-Balsam Vision Plan](#), developed with significant community involvement and accepted by City Council on June 6, 2017, guides redevelopment of this area and states:

*“Alpine-Balsam will be a vibrant multi-generational hub for community life and local government services – a welcoming and inclusive new model for equitable, affordable and sustainable living.”*

*A prime location in a thriving neighborhood, the Alpine-Balsam site presents a valuable opportunity to develop a model for equitable, affordable and sustainable living. The city is committed to ensuring that future redevelopment of the site fits the community's vision and goals, and complements the character of the neighborhood. (City of Boulder Alpine-Balsam Vision Plan, p. 3).*

*...the Alpine-Balsam vision offers an approach to strengthen the neighborhood fabric with buildings and spaces that focus on the community. This vision imagines individual buildings organized around a network of streets and open space, with welcoming sidewalks, plazas and pocket parks (City of Boulder Alpine-Balsam Vision Plan, p. 4).*

### Site Scenario Analysis – Fall 2018 and February 2019

The Area Plan will address both the city-owned land previously occupied by the hospital and the broader area nearby the site. With respect to the city-owned land, initial analysis and exploration of site scenarios were shared with the community in the fall of 2018. Planning Board and City Council provided initial feedback in November 2018 indicating preferences for:

- Emphasize housing as the primary use on the site to achieve 140 to 330 housing units with a combination of rental and ownership, the potential to serve a range of future residents including workforce and/or seniors, and offering a range of affordability, including an examination of the financial trade-offs for more or less affordability.
- Building heights between 35-55 feet, with a variety of heights and high-quality design to reduce the feel of tall and boxy building density.

- Explore the potential to preserve flexibility for possible future uses such as co-location of Boulder County facilities at Alpine-Balsam, additional city facilities or additional housing.
- Include an approach to access and parking that supports meeting the Transportation Master Plan (TMP) and Climate Commitment mode share objectives (including analysis of existing on-street parking supply and potential impacts to neighborhoods) and that can be implemented without constructing new structured parking.
- Continue to assess feasibility of upper Goose Creek flood mitigation approaches including in North Boulder Park.

The materials from this meeting are included in the [November 13, 2018 Study Session](#) and a summary of the discussion and next steps are available in the [December 4, 2018 Study Session Summary](#).

Staff shared revised scenarios based on feedback from the Planning Board and City Council at a study session on [February 12, 2019](#). Decision-makers confirmed the approach moving forward to include conceptual scenarios for the city-owned site to emphasize housing as the primary use achieving 140-330 housing units with minimum to moderate space for civic facilities; varying building heights between 35-55 feet; flood mitigation that would be achieved both at North Boulder Park and on the Alpine-Balsam site; and a transportation and access approach that supports the mode share objectives of the Transportation Master Plan (TMP).

## ANALYSIS

### Area Plan Purpose

The Boulder Valley Comprehensive Plan outlines the role of Area Plans as “bridging the gap between the broad policies of the comprehensive plan and site-specific project review (development applications or city capital projects).” The planning horizon for Area Plans is up to 15 years. Such plans are prepared through a process that requires residents, neighbors, businesses and landowners and city (and sometimes county) departments to work together toward defining the vision, goals and actions for an area. Area Plans are intended to:

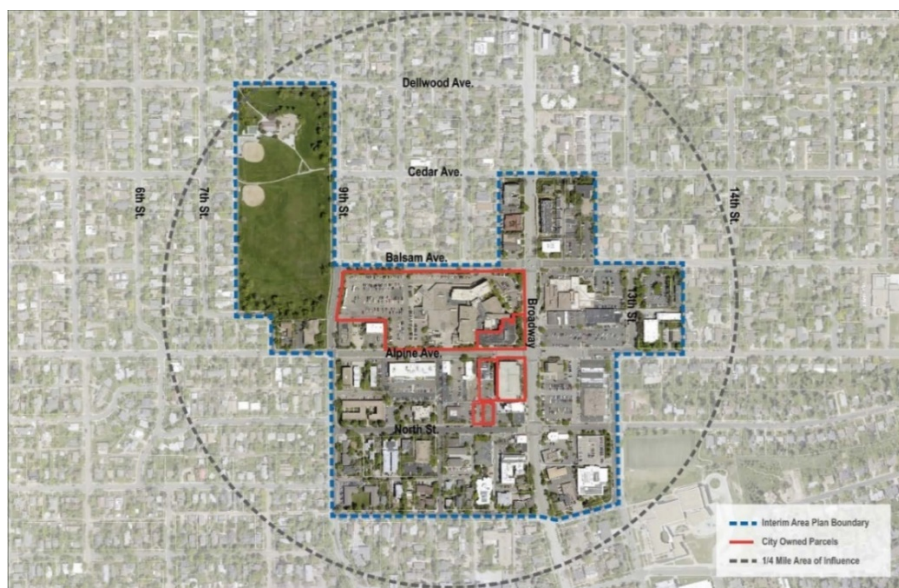
- Establish the official future vision of an area
- Create a common understanding among the parties involved regarding the expected changes in the area
- Determine the appropriate density, character, scale and mix of uses in an area and identify the regulatory changes needed to ensure or encourage appropriate development compatible with its surrounding area
- Define desired characteristics of an area or neighborhood that should be preserved or enhanced

- Define the acceptable amount of infill and redevelopment and determine standards and performance measures for design quality to avoid or adequately mitigate the negative impacts of infill and redevelopment and enhance the benefits
- Identify the need and locations for new or enhanced pedestrian, bicycle and vehicular connections
- Identify the need and locations for new public or private facilities, such as shopping, child care, schools, parks and recreation, transit facilities and mobile and virtual library services and facilities so that daily needs are close to where people live and work and contribute to the livability, enjoyment and sense of physical and social identity of a subcommunity or area
- Identify and prioritize community benefits from developments that are a priority for the area, and
- Develop implementation methods for achieving the goals of the plan.

In addition, the area planning for Alpine-Balsam will be a bit different from “conventional” area planning because the city is, in part, operating as a landowner for key parcels within the planning area. In some ways, this affords greater opportunities to achieve community goals for the site - to bridge the gap between the broad policies of the Boulder Valley Comprehensive Plan, the goals articulated in the Alpine-Balsam Vision Plan, and site-specific project development. However, with the city as a significant landowner, it also creates the need for vigilance throughout the planning process to ensure that the final plans are fiscally responsible and achievable, and funding needs for the city-owned sites are balanced within the context of funding needs for all city priorities.

Much of the focus on planning to date has been to assess future uses for redevelopment of the hospital site in order to clarify the ramifications of such a significant change and then assess the opportunities and impacts of that change to the wider area.

Map 1: Alpine-Balsam Area Plan Boundary



## Engagement Draft: Area Plan Components, Options, and Assessment

The following sections describe the components and options included in the “Engagement Draft” of Area Plan components. The Engagement Draft provides the foundation for the draft area plan, outlining options and analysis that will serve as the materials for community feedback. A draft outline of the Area Plan is included in **Attachment B**, illustrating the alignment of the Engagement Draft components with the corresponding sections of the final plan.

The Engagement Draft Area Plan Components and Options are outlined in more detail below and include:

1. Proposed Area Plan Goals and Objectives
2. Land Use and Urban Design: Land Use and Urban Design Map Options, Character Districts, and Land Use Prototypes Master Legend
3. Connections Plan and Improvements
4. Access and Mobility Strategy and Assessment
5. Flood Mitigation Assessment and Options
6. Facilities and Services Assessment

### **1. Area Plan Vision, Goals and Objectives**

The vision and goals for the Alpine-Balsam Area Plan is drawn from multiple sources including:

- the Boulder Valley Comprehensive Plan (BVCP),
- the Alpine-Balsam Vision Plan,
- feedback and direction from community members and decision-makers.

Relevant goals from the BVCP include increasing housing affordability and diversity, addressing the jobs-housing imbalance by increasing housing in commercial areas, ensuring design quality and placemaking, and supporting and retaining small local businesses.

Overall Vision for redevelopment of the Alpine-Balsam property from the Vision Plan:

- Create a local government service hub
- Preserve and create diverse and affordable housing
- Preserve and foster design and character that respects and enhances the neighborhood
- Encourage mixed-use and higher density development that incorporates a substantial amount of affordable housing in proximity to the Broadway multimodal corridor
- Provide engaging and welcoming public spaces

#### *Proposed Goals and Objectives for the Area Plan*

Staff shared initial Alpine-Balsam Area Plan goals with the Planning Board, City Council and community in all prior engagement opportunities and updates. The following proposed goals for the area plan build upon the initial goals, adding clarifying objectives based on further analysis, option development and community feedback.

## *LAND USE & URBAN DESIGN*

1. Enhance the neighborhood center at Alpine-Balsam to support a vibrant mix of uses for community life
  - Provide a mix of uses necessary for the neighborhood center as a destination
  - Include a mix of uses for day and evening activity
  - Create ground floor spaces are engaging and support a variety of active uses
2. Incorporate design and character that respects and enhances the neighborhood
  - Include a diverse and varied built form to respond to the neighborhood context
  - Provide permeability to the surrounding neighborhood and North Boulder Park
  - Concentrate the tallest buildings towards Broadway
  - Protect historic qualities and encourage adaptive reuse of historic properties

## *PUBLIC REALM & PUBLIC SPACES*

3. Provide engaging and welcoming public spaces
  - Provide various scales and types of public spaces
  - Include high-quality, pedestrian-oriented public realm, including green streets, walkways and indoor and outdoor gathering spaces for public use
  - Develop multi-functional green space for ecological and community benefit

## *LOCAL GOVERNMENT SERVICES*

4. Create a centralized local government customer service hub
  - Renovations and/or new construction improves energy performance and advances climate commitment goals for city facilities
  - Include space for public art and activities to create a welcoming and inclusive community hub

## *HOUSING*

5. Create diverse and affordable housing
  - Allow for a variety of housing sizes and types and prices including both rental and ownership opportunities
  - Provide a diverse mixture of housing types that balances market-rate and permanently affordable units
  - Housing serves various community needs and a range of household types

## *ACCESS & MOBILITY*

6. Improve walkability, safety and connections with well-connected and pedestrian-oriented streets and walkways
  - Improve neighborhood connections between the park, retail, services, public spaces, bus stops and other destinations with improved bicycle and pedestrian pathways

- Develop safe streets and crossings, especially along Broadway, for all people regardless of ability, and all modes of travel
  - Integrate vehicular access carefully to minimize conflicts with pedestrians and bicycles
7. Implement a comprehensive multi-modal access and parking strategy that supports the full range of mobility choices
- Initiate an Access District (general improvement district) to provide a sustainable source of funding for parking management, Transportation Demand Management (TDM) programs through property taxes, for residents and employees
  - Plan for mobility “hub” for bikeshare, carshare and access to mobility on-demand services
  - Develop sufficient parking for all uses, applying AMPS tools and strategies
  - Include curbside management for ride-sharing and freight pick up and drop off
  - Plan for inviting transit / multi-modal experiences with active uses near transit, sidewalk connections and inviting transit shelters

#### *ENVIRONMENTAL SUSTAINABILITY & FLOOD MITIGATION*

8. Integrate environmentally sustainable strategies into the layout and function of the public realm and built environment
- Include integrated stormwater and flood management strategies, with a focus on the benefits of green infrastructure
  - Increase the urban tree canopy and variation of tree species
  - Flood mitigation improvements balance naturalized systems with cost-effectiveness of mitigation and desired land uses

## **2. Land Use and Urban Design**

### *Existing Conditions*

The Alpine-Balsam area is a lively and well-loved neighborhood located north of downtown Boulder with a thriving commercial center and diversity of housing. Within the planning area there are:

- Approximately 400 housing units
- Approximately 2000 jobs (down from a high of 2,700 in the early 2000s)
- A range of housing types and tenure including apartments, condos, single-family homes, townhomes, cooperative housing and mixed use
- Existing and potential historic landmarks

Projections for future growth in the area are minimal for either housing or employment, excluding redevelopment of the city-owned land. Some redevelopment is possible, however many parcels were developed prior to the current regulations, are currently non-conforming and

have more existing development (i.e. more housing units) than would be allowed under current zoning regulations. The [Existing Conditions Report](#) provides more detailed information about the area.

### *Land Use and Urban Design Options and Components*

The Land Use and Urban Design Options and Components are presented in **Attachment C**. These materials are organized by (A) **Land Use Options** that present different visions for land uses in the planning area, (B) **Urban Design Element Maps** illustrating the options for urban design improvements and building heights, (C) **Character Districts** within the planning area that describe the potential future vision for each area outlined in the land use options, and (D) **Land Use Prototype Master Legend** that aligns with the proposed land uses shown in the options. The Master Legend provides descriptions of the range of allowed uses, building density and form, who might live or work there, and includes photos illustrating a range of potential building examples.

#### **A. Land Use Options**

To facilitate consideration of future opportunities and different future visions to meet a range of goals in the area, staff has proposed five alternative Land Use Options that emphasize different goals, presented in **Attachment C**. The options outline a vision for each district that is intended to promote plan goals related to land use, urban design, and livability. All options include preserving existing retail uses in the neighborhood center, preserving existing housing diversity in several areas not proposed for encouraging more housing, and encouraging protection of historic character.

1. Current Trends / Preserve Existing Housing / Minimize Growth: This option generally maintains existing land uses in the area and proposes minimal growth, consistent with the area's current trends. It includes select proposals to change land use to reflect existing higher housing density in order to preserve existing units should properties renovate.
2. Emphasize Housing: This option would encourage future redevelopment in select areas to add housing. Buildings would generally be 2-3 stories with a range of housing intensities and types.
3. Strongly Emphasize Housing: This option would steer future redevelopment towards housing uses and would allow higher densities of housing development. Buildings would range from 2-4 stories with more areas above 35'.
4. Emphasize Mixed-Use: This option would allow some intensification of use and allow redevelopment of either business or residential uses. This option allows for preservation of many of the medical or professional offices in the area while allowing housing to develop above.
5. Emphasize Mixed-Use with Strong Civic Presence: This option is similar to Number 4 but would be used if the desire was to develop a significant civic presence (i.e. Boulder County Health and Human Services Relocation from the Iris Complex) on the city-owned parcels previously occupied by Boulder Community Hospital.



## B. Urban Design Element Maps

### Existing Conditions

The planning area currently operates as a “15-minute neighborhood” with a neighborhood center that has both community-serving retail establishments and other professional and public services ringed by housing of various types and densities.

Currently, the scale of the built environment includes a mix of building heights and densities from 68’ of the existing hospital to single-family homes from 1 to 2 stories and mixed densities from as much as 50 dwelling units per acre to properties with less than 5 dwelling units per acre. The architectural styles represented in the area vary from historic bungalows to mid-century modern retail establishments and modern office buildings to contemporary and neo-traditional multi-family residential buildings.

Public gathering spaces in the area are limited, despite the expansive open space at North Boulder Park. Though located on private property, the Ideal Market and Community Plaza Shopping Centers are some of the most loved community gathering areas and have fulfilled some of the need for a variety of public gathering spaces. In addition, the planning area experiences an urban heat island effect from the large amounts of asphalt parking lots and poor non-vehicular green connections or porosity through the larger blocks. Many of the streetscapes have substandard sidewalks and landscape areas.

For more information, please see [The Existing Conditions Report](#), which provides additional baseline information about the urban design elements and built environment in the planning area.

### Options Summary

Changes to the area outlined in the land use and urban design options complement and/or expand the existing commercial ecology, and provide the additional community benefits of increasing housing, increasing public services, emphasizing sustainability, and adding an amenity-rich public realm. The site and planning area provide the opportunity to achieve a variety of these benefits in the various options (**Attachment C**).

The housing opportunities in the Options range from maintaining the existing and adding a moderate amount of additional medium density housing types to mixed density, mixed-use housing to high density housing. Commercial opportunities range from adding a moderate amount of civic facilities and discrete areas of small-scale retail to a mixed-use main street along Broadway with active ground floor uses and opportunities for office or residential above to developing a civic campus for public facilities that partner with Boulder County.

All options with the exception of Option 1 explore allowing areas within the planning area to pursue a height modification. Rather than explore heights isolated to 35 and 55 feet, they were explored on scale of building stories and the ability to achieve desired uses and architectural design elements and proportions. The proposed options for areas eligible for height modifications are separated out by the following:



- 3-story buildings with a pitched roof form,
- 4-story buildings with a pitched roof form,
- up to 4-story mixed-use or commercial buildings to establish a well-proportioned base for active ground floor uses which typically require taller first floors and taller floor to floor heights for commercial uses above the ground floor, and
- a 55' maximum height specific to the existing parking structure at the southwest corner of Alpine Avenue and Broadway to allow for an additional floor to be added if a parking district is established and demonstrates a demand for additional parking spaces.

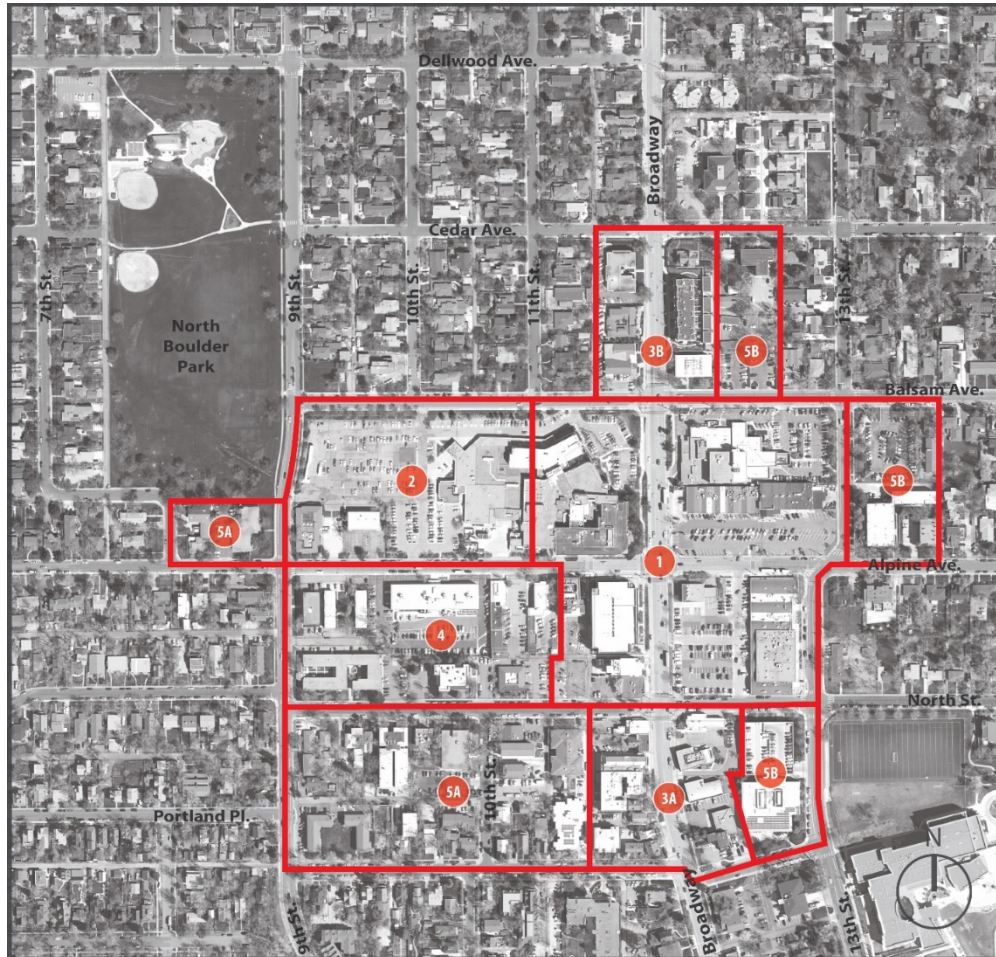
All options include improving the streetscape and adding amenity-rich public realm spaces in a variety scales and types including greenways, linear parks and intimate semi-private open space. In addition, all options include reducing the urban heat island effect by introducing green infrastructure, increasing the trees species and urban tree canopy, increasing the connections and porosity through the larger “super blocks” with green connectors to improve environmental sustainability and the quality the public realm of this area.

### **C. Character Districts**

The area has been divided into five Character Districts, primarily based on current and potential future land use. Current land use and physical character of each district is described in more detail in the attachment. Also included is a summary of community feedback about concerns, opportunities, observations on the role that the district and its features and uses play within the larger community.

The Character Districts for describing the future state of the Planning Area are:

- |    |  |
|----|--|
| 1  | Neighborhood Center                                      |
| 2  | Redeveloped Hospital Site (Central and Western Portions) |
| 3A | Neighborhood Gateway South                               |
| 3B | Neighborhood Gateway North                               |
| 4  | Transitional Mixed Use                                   |
| 5A | Mixed Residential Southwest                              |
| 5B | Mixed Residential East / Boulder County Clinic Facility  |



## Future Land Use Options Assessment Summary

### Land Use Options Table Summary

	<b>1.Current Trends, Preserve Existing Housing, Limited Growth</b>	<b>2.Emphasize Housing</b>	<b>3.Strongly Emphasize Housing</b>	<b>4.Emphasize Mixed Use</b>	<b>5.Emphasize Mixed Use with Strong Civic Presence</b>
<b>Primary Changes to City Site</b>	<ul style="list-style-type: none"> <li>Limited to Moderate Civic Services</li> <li>Low intensity residential uses</li> </ul>	<ul style="list-style-type: none"> <li>Limited to Moderate Civic Services</li> <li>Mixed intensity residential uses</li> </ul>	<ul style="list-style-type: none"> <li>Limited to Moderate Civic Services</li> <li>High intensity residential uses</li> </ul>	<ul style="list-style-type: none"> <li>Limited to Moderate Civic Services</li> <li>Mixed intensity residential uses</li> </ul>	<ul style="list-style-type: none"> <li>High Intensity Civic Campus</li> <li>Minimal residential uses</li> </ul>
<b>Primary Changes in the Wider Area (primarily Character Districts 3A and 4)</b>	No changes from current land use, anticipate some redevelopment but minimal growth	<ul style="list-style-type: none"> <li>Allows addition of housing in commercial areas</li> <li>Encourages conversion of current non-residential uses to housing over time</li> <li>Encourages mixed use with focus on housing along Broadway</li> </ul>	<ul style="list-style-type: none"> <li>Allows addition of housing in commercial areas</li> <li>Encourages and incentivizes conversion of current non-residential uses to housing over time</li> <li>Encourages mixed use with focus on housing along Broadway</li> </ul>	<ul style="list-style-type: none"> <li>Allows addition of housing in commercial areas</li> <li>Encourages conversion of non-res uses to mixed use, allowing 1<sup>st</sup> floor commercial and office uses</li> </ul>	<ul style="list-style-type: none"> <li>Allows addition of housing in commercial areas</li> <li>Encourages and incentivizes conversion of non-res uses to mixed use, allowing 1<sup>st</sup> floor commercial and office uses</li> </ul>
<b>Potential Housing Yield Range<sup>1</sup></b>	site: 65-105 area: ~50 total: up to 150	site: 170-250 area: ~400 total: up to 650	site: 230-300 area: ~530 total: up to 830	site:170-250 area: ~400 total: up to 650	site: 30-90 area: ~400 total: up to 500
<b>Primary Housing Types</b>	Primarily single-family detached and	Mix of compact, attached single-family	Primarily multifamily apartment buildings	Mix of multifamily apartment buildings and	Mix of housing types from compact single-

<sup>1</sup> Housing projections are broad estimates, made using dwelling unit/acre assumptions for general areas of potential land use change. These estimates are provided to show order of magnitude and potential differences between options but do not represent detailed assessment of buildable potential. The word “site” is used to refer to the city-owned parcels, and the word “area” is used to refer to the broader planning area.

	<b>1.Current Trends, Preserve Existing Housing, Limited Growth</b>	<b>2.Emphasize Housing</b>	<b>3.Strongly Emphasize Housing</b>	<b>4.Emphasize Mixed Use</b>	<b>5.Emphasize Mixed Use with Strong Civic Presence</b>
	attached housing, e.g. duplexes, small lot clustered housing	attached units like rowhouses/townhomes, compact apartments, and larger multifamily apartment buildings		mixed-use residential buildings	family attached townhomes to multifamily apartments
<b>General Building Heights</b>	Generally, 2-3 stories	Generally, 2-3 Stories	3 – 4 stories in central area 2-3 rest of area	Generally, 2-3 stories	3-4 stories in central area 2-3 rest of area
<b>Proposed Height Modification Areas</b>	None	Varies See Urban Design Elements Maps in <b>Attachment C</b>			
<b>Open Space on Site</b>	<ul style="list-style-type: none"> <li>Public Plaza with City Service Hub</li> <li>More private residential open spaces</li> </ul>	<ul style="list-style-type: none"> <li>Public Plaza with City Service Hub</li> <li>Greater ability to provide communal open spaces</li> </ul>			
<b>Engaging ground floor spaces / Mix of uses for Day and Evening Activity</b>	Adds <u>minimal</u> amount of active ground floor uses throughout the area	Adds <u>moderate</u> amount of active ground floor uses throughout the area	Adds <u>moderate</u> amount of active ground floor uses throughout the area	<u>Maximizes</u> active ground floor uses throughout the area	Provides <u>minimal</u> active ground floors uses on the site; moderate amount of active ground floor uses in other areas
<b>Site Relationship to Neighborhood Context</b>	Similar density and housing type to low-density housing to the north	Similar density and housing types to both north and south	Similar higher density and housing types to residential areas to the east and south	Similar density and housing types to both north and south	<ul style="list-style-type: none"> <li>Generally civic use campus</li> <li>Would require 4 stories in center block</li> </ul>
<b>Access and Parking Approach for Site / Ability to apply AMPS tools and strategies</b>	<ul style="list-style-type: none"> <li>City service center utilize shared parking in structure</li> </ul>	<ul style="list-style-type: none"> <li>City service center utilize shared parking in structure</li> <li>Mix of housing units that self-park and utilize shared</li> </ul>	<ul style="list-style-type: none"> <li>City service center utilize shared parking in structure</li> <li>Housing utilizes shared parking, would utilize</li> </ul>	<ul style="list-style-type: none"> <li>City service center utilize shared parking in structure</li> <li>Mix of housing units that self-park and utilize shared</li> </ul>	<ul style="list-style-type: none"> <li>City service center utilize shared parking in structure</li> <li>County would need to construct parking in multi- level structure</li> </ul>

	<b>1.Current Trends, Preserve Existing Housing, Limited Growth</b>	<b>2.Emphasize Housing</b>	<b>3.Strongly Emphasize Housing</b>	<b>4.Emphasize Mixed Use</b>	<b>5.Emphasize Mixed Use with Strong Civic Presence</b>
	<ul style="list-style-type: none"> <li>Housing units self-park<sup>2</sup>; not useful to create district</li> </ul>	parking and TDM strategies	district shared parking and TDM strategies	parking and TDM strategies	<ul style="list-style-type: none"> <li>Housing would self-park</li> </ul>
<b>Traffic Impacts</b>	<ul style="list-style-type: none"> <li>In all options, land uses on site will generate trips at a level that is less than half of the traffic estimated to have been generated by active hospital.</li> <li>Traffic generated by new development in the wider area can be easily accommodated by existing roadway network.</li> <li>All nine intersections in the study area operate well overall in the LOS A – C range during AM and PM peak hours and are projected to continue to operate well.</li> </ul>				
<b>Facilities &amp; Services Impacts</b>	<ul style="list-style-type: none"> <li>No appreciable differences between options regarding impacts to facilities and services.</li> <li>Growth from new residential development can generally be accommodated within level of service established by master plans.</li> <li>Several potential existing deficiencies (water system, sewer system, park amenities) will need further assessment to appropriately address in the CIP.</li> <li>Neighborhood schools have capacity for all projected student yields.</li> </ul>				

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<sup>2</sup> Self-park means dedicated parking spaces would be provided near units and would not be part of a shared parking and access district.

At the May 16, 2019, City Council requested more information about ways to achieve affordable housing on the city site.

### *Housing Affordability*

The primary affordable housing outcome for the area plan will be through the city's inclusionary housing program (IH) which requires that new residential development with five or more units contribute 25% of the total units as permanently affordable housing. The program provides four options to meet the requirement:

1. provide the affordable units on-site;
2. provide the affordable units off-site at a different location;
3. contribute cash-in-lieu of affordable units; or,
4. dedicate land that is equivalent to the value of the requirement.

With the exception of the hospital site, most properties in the area are privately owned and any redevelopment would be done by private owners. Each such development will contribute to affordable housing through the inclusionary program. While council can be assured all new development will meet IH, variables such as the tenure (rental or ownership), the type of housing, and which IH option they utilize will be decided by the developer and each will affect the IH affordable housing outcomes. If current trends continue it is expected that most new housing will be rental and will meet the inclusionary requirement with cash-in-lieu. The funds would then be used to produce a greater number of affordable units (30%-32%) at other locations throughout the city.

The notable exception to this outcome is the hospital site. The city has more influence over the affordable housing outcomes as a land-owner. Ideally, under any of the scenarios, the city will retain ownership long enough to control both the timing and the way in which the land is sold to ensure the best possible affordable outcome is achieved. At this time, all parking is expected to be met in the existing parking structure. If additional parking is needed on-site it will affect the levels of affordable housing possible primarily due to the cost. Both the required egress for underground parking or any surface parking can take up developable land reducing the number of units achievable.

In addition to IH cash-in-lieu generated by the market units on the site, if additional funds are available the city can increase the overall amount of affordable housing.

Factors to consider in assessing affordable housing outcomes include the following:

1. Rental housing – Allowable density directly affects the ability for the site to support a development of sufficient size (50-70 units) for 100% affordable rental development leveraging state and federal funds (LIHTC's). It also affects the amount of cash-in-lieu the development will generate as outlined below. Allowing the flexibility of height modifications supports additional affordable housing outcomes.
2. IH cash-in-lieu – In order to ensure funds are available when needed to support the affordable project, the site could contain a second similarly sized development (50-70 units) that would be sold to a market-rate developer who would meet IH with cash-in-lieu. This CIL would be available to support the affordable development on this site. This

would result in the lowest level of additional city funding needed for the affordable development.

3. Desire for transitional housing – The site could have zoning flexible enough to accommodate 12-24 units earmarked for this use.
4. Desire for for-sale market and affordable housing – The site could have zoning flexible enough to support both for-sale and rental housing outcomes. City control of the site would be needed ensure this outcome.

Each land use option is summarized in the table below for affordable housing outcomes on the **hospital site only**.

<b>HOSPITAL SITE</b>	<b>Rental Housing</b>	<b>IH Cash-in-lieu</b>	<b>Transitional Housing</b>	<b>For-sale Housing</b>	<b>Notes</b>
1.Current Trends / Minimal Growth	poor	poor	poor	good	Doesn't accommodate density to support affordable housing
2.Emphasize Housing	good	good	better	good	Flexibility allows for different housing types; density adequate
3.Strongly Emphasize Housing	better	better	good	better	Results in the highest affordable housing levels
4.Emphasize Mixed Use	good	good	better	good	Flexibility allows for different housing types; adequate density
5.Mixed Use with a Civic Presence	poor	poor	poor	good	Reduces developable area for residential

### **3. Connections Plan and Improvements**

#### *Existing Conditions*

The planning area benefits from being within fifteen minutes walking distance from a variety of shops, restaurants, services, and other key destinations. Downtown Boulder is directly accessible by foot, bike, bus, or car. Several transit routes serve Broadway, including the 208, SKIP and Y, providing connections to areas north and south.

The area lacks east to west connections by both transit and by dedicated bike and pedestrian infrastructure. Overall pedestrian flow and experience could be improved in the area, specifically in and around the Community Plaza and Ideal Market shopping centers. As shown on the Connections Plan map, several areas present opportunities for alley way enhancements and realignment, multi-use paths and dedicated bike and pedestrian infrastructure, providing additional connections and improving pedestrian experiences.

Several potential corridor and intersection improvements are currently being analyzed by transportation staff as part of the city's Low-Stress Walk and Bike Network Plan. While the area offers strong mobility opportunities for all modes of travel, improving safe and convenient access remains a top priority.

For more information, please see [The Existing Conditions Report](#), which provides additional baseline of information about access and mobility in the area.

#### *Connections Plan and List of Improvements*

The Draft Connections Plan and list of improvements included in **Attachment D** were developed in conjunction with the proposed area land uses and were informed by community feedback and traffic analysis performed by consultants. Feedback from the small-group workshops included specific questions to inform improvements to connections in the area.

Upon adoption, the Connections Plan component of the area plan will be a right-of-way plan that will be administered according to Boulder Revised Code. The Plan will be incorporated into the TMP and replace portions of earlier network plans that cover the Alpine-Balsam site and surrounding areas within the planning area boundary. The transportation improvements included in the Connections Plan will be implemented by private development when and if properties redevelop and by the city as capital projects in public right-of-way.

The list of improvements is organized by recommendations for:

- Primary corridors in the area (Alpine Ave., 9<sup>th</sup> Street, 13<sup>th</sup> Street, Balsam Ave, and Portland Place)
- Alley Way Improvement / Realignment
- Multi-Use Paths
- Pedestrian Connections
- New Local Streets
- Residential On-Street Loading Areas
- Curbside Management Locations
- Mobility Plaza/Hub
- Transit Stop Improvements

#### **4. Access and Mobility Strategy**

The draft Access District and Transportation Demand Management (TDM) Strategy is described in more detail in **Attachment E**. Based on city policies, principles and strategies for access and mobility included in the Transportation Master Plan (TMP), Access Management and Parking Strategy (AMPS), the Climate Commitment, and the Alpine-Balsam Vision Plan, the approach includes creation of a general improvement district that would collect property taxes for on-going programs and services. For example, the Access District revenue would fund capital infrastructure improvements, on-going TDM programs and services, curbside management,



mobility hub services, and parking management and operations. This is the same approach used in the city's transit-oriented development at Boulder Junction where there are two overlapping general improvement districts, one focused on parking management and the other on TDM programs for all residents and employees (provision of annual Eco Passes, bike share, carshare memberships, etc).

Several alternatives exist for the geographic boundaries and focus for a district(s) within the Alpine-Balsam area. Initially, the district could be formed just within boundaries of the city-owned properties and include both a parking management component as well as a TDM component. This includes a shared parking strategy using the existing city-owned parking structure and guided by SUMP principles; shared, unbundled, managed and paid parking strategies. Depending on community and property-owner interest, other nearby areas could be included initially for one or both of the districts or could be expanded as nearby residents and property-owners seek TDM benefits or upon redevelopment, seek parking reductions or shared parking approaches.

## **5. Flood Mitigation Assessment and Options**

### *Flood Mitigation Studies*

The city has been studying flood mitigation for upper Goose Creek and Twomile Creek as a part of the city's comprehensive flood and stormwater management program. As the Alpine-Balsam vision and area planning has progressed, the city has evaluated ways to address flood mitigation in the area, including on the site and in North Boulder Park. The studies aimed to inform alternatives for removing developable area on the site from the 100-year floodplain, allowing for development to occur without individual buildings being burdened with floodplain development regulations (e.g., elevating buildings above the floodplain) and potentially providing some benefit to downstream areas by reducing flows. Assumptions for mitigation in North Boulder Park aimed to achieve detention of at least 50% of the 100-year flows, which would require storage of approximately 17 acre feet.

Testing for ground water levels in North Boulder Park was initiated in February 2019 and results have informed assessment of various options for mitigation in the park. Results indicate a very high water table with water +/- 6-inches of the existing surface.

### *Options*

Staff and consultants explored several options for flood mitigation – on the city-owned site and in North Boulder Park -- including:

1. Detention area in southern section of North Boulder Park with various preliminary designs that included different approaches to protection of trees, sensitivity to uses and existing contours, and amount of space necessary for detention.
2. Different locations and configurations of conveyance on the site (i.e. east-west center of site, on the northern edge along Balsam Ave., and various conveyance width/depth alternatives.)

3. No detention in park requiring very wide conveyance on site

See **Attachment F** for a more detailed description of options studied.

### *Assessment and Key Findings*

Analysis revealed what staff considers to be several “fatal flaws” to the options and as a result, has informed the recommended approach for option refinement and further analysis outlined below.

#### Detention in the Park

- New monitoring data showing very high water table impacts the ability to construct detention that maintain usability of the park, e.g. baseball diamonds and other recreation activities, requiring the bottom of any detention basin to be at or above the existing surface (no ability to lower the detention area).
- To achieve 17 acre/feet of detention (50% of 100-year flow) an approximately 9’ high berm along 9<sup>th</sup> Street and the potential to impact facilities in the northern section of the park would result. This level of impact was deemed unacceptable and not recommended for further consideration.

#### Conveyance through the Site

- The center greenway location requires detention in North Boulder Park to reduce flows and a wider and deeper channel in order to handle emergency overflow that could flow into the street if the greenway location is along Balsam. For this reason, a center greenway with the purposes of flood mitigation does not appear to be feasible.
- If there is no detention in North Boulder Park, the flood mitigation to address the 100-year flows require either a 100-foot greenway or 40 foot greenway with a large box culvert. These options would allow for development on the site to be outside the 100-year floodplain but would not provide flood mitigation benefits outside of the site. The 100 foot greenway is feasible but removes some of the developable area of the site. The large box would allow more developable area but is less feasible as it would either require improvements east of Broadway or the flood waters would have to be brought back to the surface on the site.

### *Context for Upper Goose Creek Mitigation Alternatives Downstream to Folsom*

This work is being done in conjunction with studies for the Upper Goose Creek drainage basin extending past the eastern edge of the Alpine-Balsam Planning Area at 13<sup>th</sup> Street to Folsom. Utilities staff is currently completing a floodplain mitigation study evaluating options for potential flood mitigation improvements between North Boulder Park and Folsom Avenue.

The flood mitigation study includes both Upper Goose Creek and Twomile Canyon Creek. Several alternatives are currently under analysis including:

1. Detention Facilities
2. Sediment Capture Facilities

3. Channel and Culvert Improvements
4. Piped Storm System Improvements, and
5. Roadway Conveyance

Although it is a standard practice to develop flood mitigation plans with the intent to adequately convey a 100-year storm event, it is recognized that 100-year improvements may not be feasible for these drainageways due to the existing development within the study area. Therefore, alternatives that reduce flooding risks and improve life safety but do not accommodate the full 100-year flood flows are also under consideration. Public feedback has helped with both the initial development and the refinement of the current alternatives under analysis and will continue to be an important element of the flood mitigation study. For more information about this flood mitigation study, please visit the [study webpage](#).

Major Goose Creek drainageway improvements were completed over the last 20 years for the sections downstream of Folsom Avenue – all the way to the confluence with Boulder Creek. These improvements were completed in four phases and provide drainageway capacity to convey the 100-year storm event. Major highlights included the drainageway improvements through the Mapleton Mobile Home Park which removed over 100 homes from the 100-year floodplain.

Following completion of the Goose Creek major drainageway projects, the decision was made not to continue 100-year conveyance major drainageway improvements west of Folsom Avenue. There was a significant community public process associated with the various alternatives at the time. The city's Stormwater & Flood Management Utility has limited funding and the acquisition of the 29 homes located on the south side of Edgewood Avenue between 19<sup>th</sup> Street and Folsom Avenue would have been cost prohibitive. It was recommended that staff pursue flood mitigation approaches along the Upper Goose Creek Drainageway that would address smaller storm events. For this reason, in the early 2000's, the Stormwater & Flood Management Utility directed funding towards several of the city's other major drainageways including Fourmile Canyon Creek, Wonderland Creek, and South Boulder Creek.

The Stormwater & Flood Management Utility includes funding in the 6-year Capital Improvements Program (CIP) for Upper Goose Creek Drainageway improvements in year 2023 at approximately \$24,000,000. To fund these improvements, Utilities would need to issue a revenue bond. Utilities typically issues revenue bonds to fund large capital projects that are in excess of the fund's cash reserves. The bonds have a 20-year loan with the annual debt service equal to approximately 10% of the bond's value.

This drainageway section between 19<sup>th</sup> Street and Folsom Avenue includes an unimproved channel that is very heavily wooded and has limited capacity to convey flow. Upper Goose Creek drainageway improvements would address two separate, but related components. The first component will include open channel improvements for the section located between 19<sup>th</sup> Street and Folsom Avenue. Drainageway improvements would likely be constructed to increase this section's capacity convey either the 5-yr or 10-yr storm events. The second component would involve a large network of storm sewer pipes between 6<sup>th</sup> Street and 19<sup>th</sup> Street. Some of the storm sewer infrastructure work would involve capacity improvements to replace undersized

existing storm sewer pipes. Other infrastructure improvements would provide new storm sewer infrastructure where none currently exists. The Upper Goose Creek storm sewer project was identified in the 2016 Stormwater Master Plan (SMP) as the highest rated Tier 1 Priority project.

The proposed Upper Goose Creek improvements project approach is consistent with the master plan guidelines to provide storm sewer conveyance that meets the 2-yr storm event flows in residential areas, and the 5-yr storm event flows in commercial areas. It is anticipated that other storm sewer improvements in the Alpine-Balsam vicinity would be designed and constructed to meet the 2-yr and 5-yr storm events flows as development occurs.

### *Refined Options for Further Consideration*

The findings from the options analysis and the limited ability to make improvements east of 13<sup>th</sup> Street, staff recommends moving forward with additional analysis for the following two options:

- Assessment of mitigation in North Boulder Park that achieves less than 50% flow detention but has fewer design impacts. Staff and consultants will assess potential benefits to the Alpine-Balsam site and downstream properties, costs, and how this investment might compare with other citywide flood priorities.
- Site-specific flood mitigation only (not address wider impacts of 100-year floodplain). This option would be studied to better understand the impacts of an approach that just regulates to city standards and does not attempt to address the impacts of the 100-year flood in the surrounding neighborhood. The option would likely entail some fill and grading to move the floodplain and may require elevating buildings.

Further analysis of these options should clarify benefits and impacts of each option regarding: ability to achieve flood mitigation goals, site development, North Boulder Park, and infrastructure costs. Results of further analysis will be presented with the draft plan and a recommended approach in August.

## **6. Facilities and Services Assessment**

An initial assessment of the area plan's potential impacts on both city capital and operating budgets for several public services has been conducted as part of the area planning process. As options are refined and a preferred option is identified, staff will refine the assessment of potential impacts and associated costs with estimates of potential revenue from impact fees or other sources. The assessment is included in **Attachment G** and key findings described below.

### **Parks and Recreation**

- The potential increased population associated with all options can be accommodated within Level of Service (LOS) for neighborhood parks established by the Parks and Recreation Master Plan.
- While North Boulder Park is classified as a neighborhood park, it serves a wider population because of the aesthetic value of the park and unique features. Given its

already high amount of use, staff recommend providing additional amenities within the park to serve an increase in population.

#### Wastewater Collection System

- In general, the potential increase in flows can be served by the existing sewer system. The exception to this is a section of sewer in 20<sup>th</sup> St from Alpine Ave. to Bluff St. that is currently exceeding the city standard that peak dry weather flows shall not cause the sewer to flow more than half full. Although new development would exacerbate an existing deficiency, the Utilities Division will reassess the capacity needs during the next utility plan updates and program the project in the Capital Improvements Program accordingly.

#### Water System

- This area is served with water pipeline infrastructure that is well looped and in close proximity to the city's larger transmission pipelines network. Static pressure in this area is very good and ranges from about 80 to 100 pounds per square inch (psi). However, as construction proceeds in the area, there may be the opportunity to accomplish water infrastructure improvements in conjunction with other construction in order to support additional future development and system flexibility.

#### Fire Rescue

- The area is primarily served by the units housed at Station 1 at 2441 13<sup>th</sup> Street, within the area plan boundary. In general, demand for fire rescue services is likely to increase over time due to the additional residents and the potential for an increase in calls. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community.

#### Police

- Demand for police services are likely to increase over time due to the additional residents. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community. Including a small office space in the new city service center (i.e. renovated Medical Pavilion) for officers to complete paperwork, use the telephone, etc. would meet an identified capital need for facilities in the northwest section of the city.

#### Library Services

- All potential additional population growth can be accommodated under the current Library Master Plan and not appreciably impact service levels.

## Arts and Culture

- Opportunities exist to integrate arts and cultural improvements in the area in conjunction with new civic facilities and other infrastructure.

## Schools

- Neighborhood schools have capacity for projected student yields from new residential development at the Alpine-Balsam site and in the wider area.

## NEXT STEPS

Based on council feedback at the June 4 meeting, staff will proceed with the following next steps:

- Community Engagement on the materials contained in this memo with council and Planning Board input
- Advisory Board feedback in June and July
- Development of the draft area plan & implementation plan based on community input
- City Council and Planning Board public hearings on August 15 and August 20.

## **Community Engagement Plan**

**Purpose of Engagement:** During this phase of engagement, the purposes include:

- facilitate community understanding about possible future changes and opportunities in the area;
- collect feedback on draft plan components including land use options, connections plan, and access and mobility strategy as well as identify common ground in divergent views in the community in order to inform development of a draft plan; and
- share decision-making process and schedule with community members.

Public Hearings will be held for community members to share views directly with decision-makers.

**Objectives:** Within the City of Boulder's adopted Strategic Engagement Framework, engagement is focused on *inform* and *consult*.

*Inform:* the objective is to provide clear and complete information on past engagement, direction from Planning Board and City Council that has shaped options, current and future engagement opportunities, and area plan goals. Supplemental supporting documentation and analysis on a variety of topics such as flood mitigation, traffic analysis, housing affordability analysis, and land use prototypes will be shared with the community.

*Consult:* the objective is to collect feedback from community members on preferences on land use and urban design; and access and mobility; which will be presented through Land Use Options, Land Use Prototypes, draft Connections Plan and Improvements, and Access and Mobility Strategy.

**Format:** In-person events will consist of a guided open house format, with an array of boards and handouts and a detailed feedback form. The online BeHeard platform will seek to emulate this format by utilizing visual and written materials alongside a feedback form.

Public Hearings will be held for Planning Board and City Council meetings to review and provide direction on the draft and final area plans.

The Alpine-Balsam Area Plan has citywide impact and interest, and as such, there will be a variety of events and efforts to reach a broad citywide audience, interested nearby neighbors, and those who have not yet participated in engagement efforts for this project.

A draft list of potential events and venues is described in more detail in the Engagement Plan included in **Attachment H**.

### **Implementation Planning**

To build on the information shared during the May 16 meeting with City Council on Alpine-Balsam, staff will bring forward a “Strategic Investment and Redevelopment Plan” in August that will be a living document throughout the redevelopment of Alpine-Balsam city owned property. This plan will provide direction and guidance on redevelopment activities and identify funding opportunities. The purpose of this plan will be to:

- Ensure redevelopment of the site is reasonable, feasible, and fiscally responsible
- Ensure a predictable and well-informed development process
- Identify investment touchpoints and critical development milestones

Implementation plan development generally occurs after an area plan adoption. Given that the city is the property owner at Alpine-Balsam and there are already redevelopment activities occurring (hospital deconstruction), this information is being provided as a part of the area plan adoption.

Implementation information will include phasing for capital improvements in area and a schedule for land use, zoning or other regulatory changes.

### **Boulder County**

Staff will continue to work with Boulder County to further assess the viability, impacts and benefits of relocating the county’s Health and Human Service Hub at Alpine-Balsam. Evaluation of this option will be provided with the draft plan in August.

### **Pavilion Renovation**

Analysis of options and costs for renovating the Medical Pavilion for a city service center, including follow up from the May 16 meeting will be included in the August discussion on the Facilities Master Plan.

## **ATTACHMENTS**

- A. Engagement Summary of Small-Group Workshops – Jan-Feb 2019
- B. Draft Area Plan Outline
- C. Draft Land Use and Urban Design Components and Options
- D. Draft Connections Plan and Improvements
- E. Draft Access and Mobility Strategy and Assessment
- F. Draft Flood Mitigation Options
- G. Draft Facilities and Services Assessment
- H. Draft Engagement Plan





## What We Heard

Phase 3: January 2019 to February 2019

### Seeking Feedback on Opportunities in the Wider Alpine-Balsam Area

This phase of community engagement focused on learning about preferences for future opportunities and planning in the area around the former hospital site. The goal was to learn about the community's preferences related to land use goals, character, access, and mobility to inform choices for the area plan. Staff sought to implement lessons learned from earlier engagement, including hosting events closer to the site and hosting a total of 10 engagement opportunities at different times and days to accommodate a variety of participant needs.

The mini-workshop format (facilitated small group discussions) allowed participants to have an open dialogue with each other and staff to listen to and document the range of feedback. Maps, dots, and trace paper, as well as note-taking at the workshops facilitated hands-on interaction. Approximately 120 people participated in the workshops.

For those who were unable to attend a small group workshop, a questionnaire on BeHeardBoulder.org was available that mirrored the workshop format.

### Key Takeaways – Themes from Feedback

- **Neighborhood Quality of Life is High.** This results from a mix of people; mix of housing; character and safety of residential areas; walkability and access to activity in park and centers, downtown and mountains.
- **Neighborhood Center functions well and is beloved.** Take care in considering changes. People appreciate the current look and feel of the center as well as easy access to a range of retail, commercial and medical uses in the area.
- **Mixed Views on New Housing and Density** Some neighborhood residents have concerns about adding too much housing on the city's site that is "too big" and could negatively impact traffic, parking, services, and visual character. Conversely, others see the area as an ideal location to add density in order to address critical housing needs in an innovative and attractive way.
- **Recreation, Open and Green Spaces** – People LOVE North Boulder Park but as the area changes, other green and open spaces will be important for connections and places to gather. Changes for flood mitigation should be carefully considered.
- **Access and Mobility Hub** - People appreciate the current ability to walk, bike, take transit and drive. There are concerns for more traffic and parking. People suggest

improvements for safety, ease of moving through the area with or without a car, and to promote all-mode mobility.

- **Redevelopment on the city site needs to be innovative and thoughtful.** People want redevelopment to fit in, support the neighborhood center, add value and have good public spaces. They want housing that helps meet affordability goals and provides housing that is most needed. They also want open spaces, welcoming places to gather and a little retail along with the city service hub.

## Summary of Events

Staff hosted a series of small group workshops from January to February in the Brenton Building. One session focused on property-owners in the area, seven sessions were open to all community members, and one session was for board and commission liaisons. These workshops were focused on small groups of no more than eight people per table to listen and learn about preferences for the future vision of the area around Alpine-Balsam.

A variety of dates and dates were available (including weekdays and one Saturday). Times ranged from early morning (7a.m.) to evening (6:30 p.m.). Demographics were not recorded at the workshops, however from the introductions, a strong majority of the participants conveyed that they were residents of nearby neighborhoods and intimately familiar with the area.

Staff provided a brief presentation about the purpose of the session and an update on recent



feedback from Planning Board and City Council. Questions to the groups included:

1. Group Discussion Land Use / Built Form / Neighborhood Character
  - a. What neighborhood features are most important to preserve?
  - b. What neighborhood center attributes are most important?
  - c. What are the locations that might be appropriate for new housing or increasing housing?
  - d. What other ideas or concerns would you like to share?
2. Group Discussion on Access, Mobility, Circulation

- a. What access & circulation improvements are needed to more fully connect the neighborhood?
- b. What are your thoughts about expanding the Access and Parking District/Transportation Demand Management (TDM) approach in the area?

Comments were recorded by staff facilitators and participants were encouraged to clarify notes as well as write directly on the maps and trace paper. [Photos of all the maps and notes were posted on the project website.](#)

### *Informing community about workshops and Be Heard Boulder questionnaire*

Invitations to participate in the workshops and the online questionnaire included:

- Direct mailing to property owners, residents and businesses within the area plan boundary
- Nextdoor, Facebook and Twitter
- Planning newsletter
- News from City Hall in the Daily Camera
- Project website
- Neighborhood associations/organizations sent emails
- Stakeholder outreach – individual emails to community and neighborhood groups
- Direct e-mail to workshop participants

### *Be Heard Boulder questionnaire format*

Recognizing that not everyone would be able to attend a workshop, the city utilized the online platform, Be Heard Boulder, to create a questionnaire that summarized key themes people shared during the workshops. While the summary could not fully capture the depth and richness of all the conversations, it provided an opportunity for others to read the summary of themes and provide additional input. People were asked to complete the questionnaire only if they were not able to participate in a workshop; the goal was not to count numbers or take a tally of views, but instead round out feedback to ensure all ideas were presented. There is no way to track how many workshop participants also provided comments online. The online comments closely resembled the feedback received during the workshops. The summary report from the Be Heard Boulder questionnaire can be found [here](#).

## **Community Feedback**

The following provides a summary of comments from both workshop participants and responses from Be Heard Boulder, organized around the key themes listed above:

### *Neighborhood Quality of Life & Character*

Workshop and Be Heard Boulder participants universally noted the positive and vibrant quality of life (“livability”) in the neighborhoods around Alpine-Balsam. For participants, this included: character, walkability (including to downtown and nature), variety of building ages and types, aesthetics, closeness to amenities, views, multigenerational living, mix of uses (residential/commercial), and level of service and capacity. The level of neighborhood activity

from dog-walking to playing with kids was highly valued. The neighborhood is a diverse social hub.

Specific comments about elements that are appreciated by the community included:

- The neighborhood look and feel, which for some included diversity of housing types (i.e., multi-family flats, condos, townhomes and single-family homes)
- Importance of the sense of place close to the mountains with its accompanying views
- Historic buildings and building facades
- Multigenerational aspect of the area, where design, housing, and area amenities could facilitate older adults aging in place
- The diversity of people (residents, employees, shoppers, park-goers);
- Desire to maintain the safety and security of the area both during the day and night
- Desire to capitalize on the opportunity to elevate this special place even further and to create more of a “village-like” atmosphere with retail at its center.

Specific characteristics that were appreciated include:

- Diversity of housing types
- Diversity, energy, and vibrant social hub of the neighborhood
- Multigenerational character
- Creative and diverse residents already in the area
- Good location to live for walking, biking, and public transit
- Character and visual style of single-family residences and low density

Be Heard Boulder participants were provided a list of key attributes of the area suggested by workshop attendees and asked which resonated most. The following chart shows their feedback.

Which of these current attributes resonates with you most? You may choose up to 5.

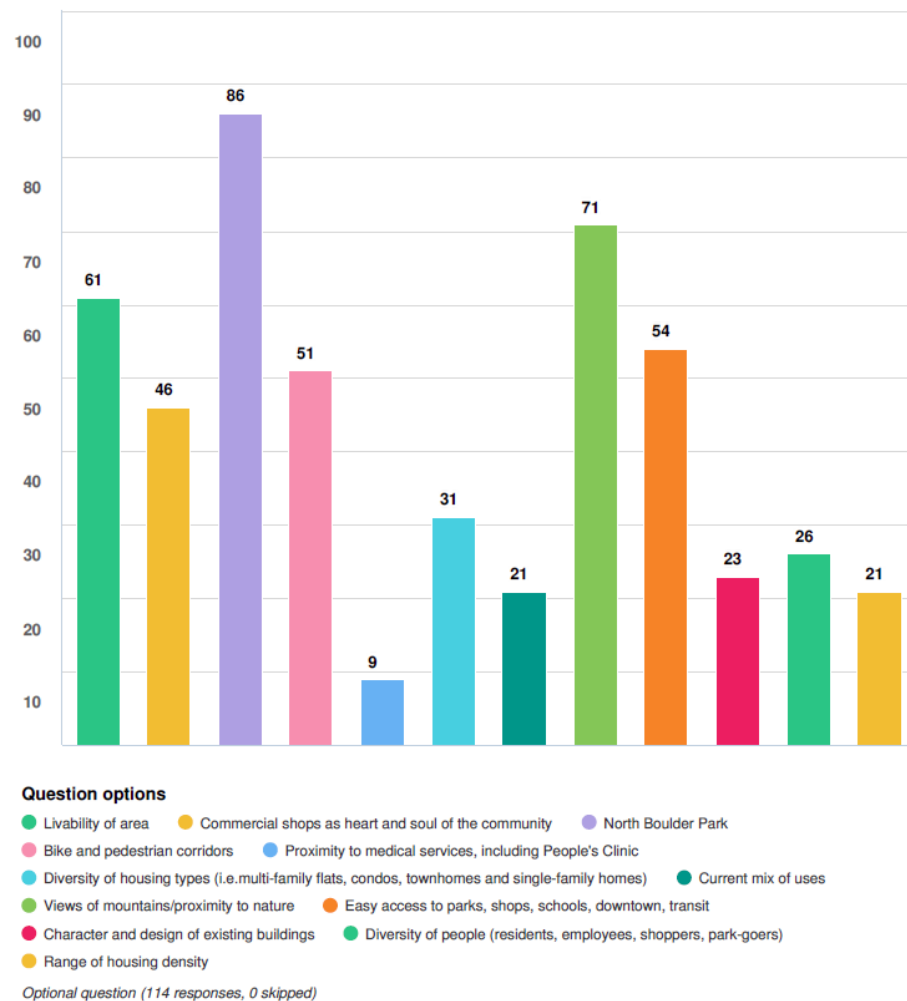


Figure 1: Results from online questionnaire on favored attributes of the area

### Neighborhood Center

As the next activity, staff provided the BVCP policy description of neighborhood centers and asked about Alpine-Balsam characteristics that define this neighborhood center.

People highlighted the mix of nearby retail, commercial, and medical uses that meet daily needs of the neighborhood. They expressed a lot of love for the retail and commercial center of the neighborhood at Ideal Market and Community Plaza, describing it as “the heart and soul of the community,” which resonated with Be Heard Boulder respondents as well. The shops are unique, local, and charming. People noted that the retail core feels community-based and serves as an important gathering space day and night.

Having access to medical services in the area as provided by Boulder Medical Center and other smaller medical and dental offices, especially with the closing of the hospital, was highly appreciated. Participants appreciated the convenient access to these services by foot, bike, or car, including availability of parking. Specific aspects that were appreciated by participants include:

- Mix of land uses (retail, commercial, and residential) contributed to connecting the community and making it self-sufficient
- An affinity for the stores and buildings themselves, noting the historic building facades and one-story buildings
- Close proximity to medical services
- Community Plaza as a hub in the area and a benefit in attracting other local services and businesses.

Specific concerns included:

- Fear that the existing retail center would change
- Losing the vibrancy of the plaza with changes to retail tenants
- Acknowledgement that the nature of retail is changing and could be precarious; noting the importance for regulations to maintain flexibility while providing opportunities for small local businesses
- Lack of vibrancy and stability at the north corner of Broadway and North Street for retail uses

Ideas that participants expressed included:

- Enhance plaza and mix of uses by adding a second floor (housing or retail) or developing the parking lot in the future (should be noted, this suggestion received mixed reactions, with some participants strongly opposed).
- More mixed use both at the city-owned site and the surrounding area. Several suggested a further study of what is missing in the area so the gap could be appropriately filled without competing with existing retail.
- More retail to serve new residents from additional housing.
- Affordable retail program to allow desired services/uses in the area to add diversity in retail and reduce tenant turnover.
- More entertainment, arts & culture, and performance space in the area. Space for nonprofits was also mentioned.
- Shared co-working spaces were suggested.





Figure 2: Example of Map from Table Exercise

### *Mixed Views on New Housing and Housing Density*

There are different perceptions about the current level of density in the area and it was clear how these perceptions strongly contribute to individuals' preferences for how the area should redevelop. Many participants consider the area to be a low-density neighborhood, focusing on the abundance of single-family homes in the neighborhoods surrounding the neighborhood center. Others describe it as a mixed density area, describing the high and medium density housing to the south and east of the neighborhood center, the presence of a busy community hospital, active neighborhood park, and active retail center functioning alongside single-family areas.

### *Housing at City-Owned Site*

Many workshop and Be Heard Boulder participants thought if there were to be additional housing in the area, the city-owned property was most appropriate location. Ideas that were expressed for future housing at the city-owned site include:

- New housing for people who work in Boulder but cannot afford to live here
- Build or improve existing housing character and diversity, supporting existing residents
- Welcome all ages and demographics by building housing for those 55 and older and allow for aging in place in a centrally located vibrant location.
- Build housing for families with children
- Emphasize new housing for hard-to-house populations, like seniors and people living with disabilities, as well as those transitioning from homelessness

- Build workforce housing, possibly with an emphasis on employees who provide a community or public service, such as teachers, firefighters, etc.
- Make affordable housing accessible and consider relaxing restrictions on the Permanently Affordable Housing Program at the city
- Mix of affordability, both low and middle income to support the middle class
- Include measures to improve transit and other mobility programs
- Include green space
- Make sure there is a variety of heights that cascade down into the neighborhood to create more visual appeal of the site. Taller buildings should be closer to Broadway
- Buildings should be varied in appearance and attractive
- Include “high-end” and quality design on the site that is consistent with the neighborhood (i.e., not a hodgepodge and not a self-contained box). Highland Garden Villages, Newton family housing, Prospect in Longmont, and the Holiday neighborhood were cited as good examples of mixed uses with no commercial space and good design (height, ages of residents, green space, and family-friendly) that might fit in the neighborhood.

The city also heard suggestions that areas outside the Alpine-Balsam area (such as Broadway and Violet, Diagonal Crossing, and/or East Boulder) were more suited to new housing.

### *Housing Density*

There was a wide range of viewpoints on housing and density on the city-owned site. Two primary viewpoints emerged: minimal or low housing density and maximum or high housing density. Many participants wanted to understand the impact to the neighborhood. Participants who expressed a desire for minimal or low housing density described preferring one to two stories of housing, row homes, 12 homes/block, 140 dwelling units or less, or no housing on the site. Participants expressing concerns with higher densities noted:

- There could be negative impacts to neighborhood property values.
- Parking in general would be a problem, as they were skeptical that tenants would be interested in having fewer cars. Parking for seniors, in particular, could be challenging if parking was far away from their homes.
- The impact of adding many new residents on North Boulder Park, congestion on nearby streets and crowding at the retail shops.
- Higher densities may not provide family-friendly units that would be bought and remain owner-occupied by families.
- Units would go to commuters that work outside the city instead of people who wanted to be part of the Boulder community.
- Reduced amount of green space on the site.

Participants who expressed a desire for higher density housing expressed the desire to see as many dwelling units on the site as possible, citing the site as a good opportunity to address affordable housing as a critical issue in Boulder, with some saying up to 300 units was appropriate with others expressing the view that 300 units was too low. They said lower density:

- Would not maximize the site for the benefit of the whole community
- Would not achieve enough units to affect in-commuting and carbon footprints



- Was not efficient from a land use, sustainability, environmental perspective
- Would not allow for enough open space on the site; higher density and concentration of units would free up more space

*Housing in the broader area (beyond the city-owned site)*

Participants discussed ideas for area-wide possibilities for adding housing. The map below reflects areas that were suggested.

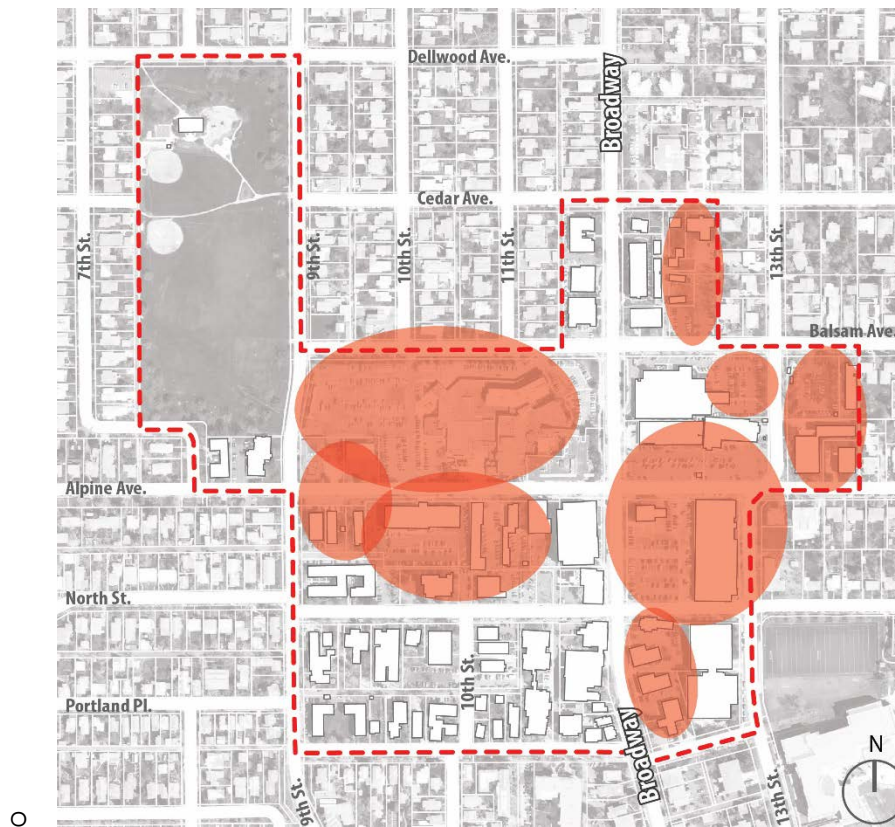


Figure 3: Areas participants suggested for adding housing

Comments about adding housing in the area include:

- Use the second floor on commercial/retail buildings for housing while maintaining sun access for solar purposes.
- Convert existing buildings, over time, to housing while preserving some medical services.
- Convert other medical facilities to housing.
- Explore regulatory changes to better support housing in the area through removing or increasing occupancy limits.
- Allow more OAU/ADUs as a better alternative to add housing stock with less land and without contributing to a feeling of dense development. OAU/ADUs would also be more integrated into the neighborhood instead of isolated apartment complexes.
- Support existing multi-family units and require property owners to maintain these; amend the code to allow multifamily units legally.

- Convert surface parking to affordable housing or add affordable housing above surface parking.
- Increase housing in places where there is existing housing but preserve historic character.
- Allow higher than three-story buildings.

Online participants were asked which comments about housing resonated most with them. This graph shows their perspectives:

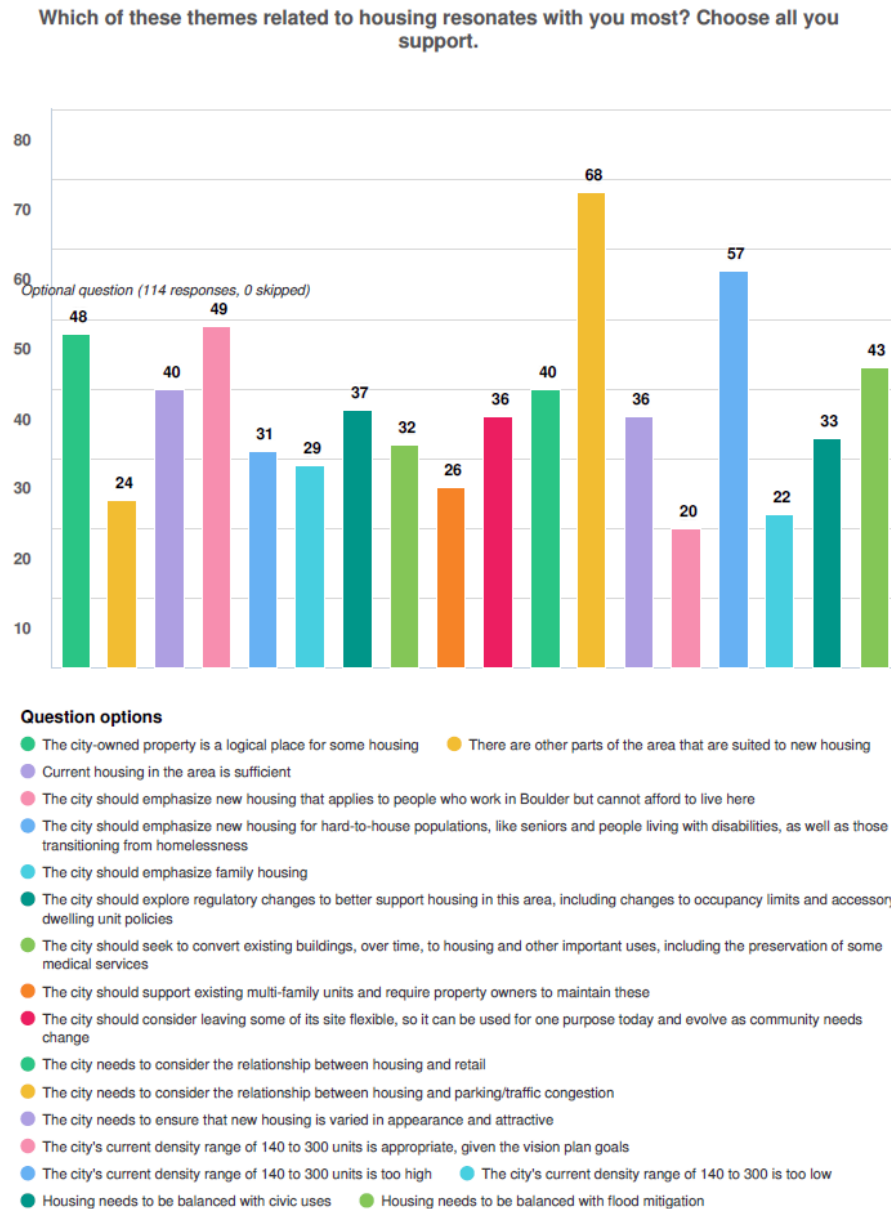


Figure 4: Online participants' reactions to housing comments

### *Recreation, Open and Green Spaces*

Participants were united in their love of North Boulder Park and its natural beauty. A majority of Be Heard Boulder respondents selected North Boulder Park as a resonating attribute of the area. Workshop participants wanted to maintain its features, views, and multitude recreational uses. North Boulder Park is valued as a gathering space and frequently used by families. Specific aspects that participants appreciated included:

- Mature trees in the area and see more greenery, trees, and outdoor seating
- Current quiet and peace in the park
- Opportunities as a community gathering hub

Specific feedback about concerns included:

- Overcrowding in the park if more housing was to be added nearby
- Mountain views becoming blocked with development
- Flood detention improvements at North Boulder Park would impact park uses and construction would cause too many disruptions

Ideas that participants expressed included:

- More green and open space in the area, especially in the city-owned parcels.
- More open space would benefit families and new residents, both improving quality of life and reducing demand for North Boulder Park.
- West to east green space to provide connectivity, flood mitigation, and open space.
- More outdoor arts & cultural spaces, such as events or activities in North Boulder Park.
- Additional family areas for kids in the area or park.

### *Flood Mitigation*

While questions about flood mitigation were not a focus of the workshops, people were interested in the topic. Generally, community members expressed support for some flood mitigation at North Boulder Park, as it is a great opportunity to improve safety and drainage in the area. However, many participants expressed concern about how housing might be balanced with flood mitigation and how flood detention at North Boulder Park might impact park activity. Their concerns are listed below.

- During the 2013 flood, there was a torrent of water from North Boulder Park down to 19th, with high impacts on the intersection of Alpine and 13th St.
- A rigorous study of the area and system downstream of North Boulder Park should be done first.

## Access & Mobility

Participants suggested many ideas about increased connectivity, especially the importance of an east-west connection from North Boulder Park to Goose Creek for pedestrians and cyclists (especially crossing Broadway) and an east-west transit connection that could also serve to connect the jobs in the area to housing on the west part of Boulder. All the suggestions and concerns highlight the perceived lack of safety in certain areas and the desire to improve safety for nearby residents to walk and bike.

Item 6A - Alpine Balsam Direction

the neighborhood ecopass program as a way of reducing vehicle traffic and improving connectivity and safety in the area, especially for the multi-family residents currently in the area.

Participants responded to various parking and Transportation Demand Management (TDM) strategies by expressing both support for this approach and concern. People were interested and supportive of mobility hub programs (car share, electric car charging, bike storage, shuttles). Others expressed concern about the viability of these programs to truly reduce the need for parking, the ability of some populations to reasonably travel without a car, and people's preferences for travel.

Specific comments and suggestions include:

*Corridors:*

- Appreciate 10<sup>th</sup> and 11<sup>th</sup> as one-way streets
- Support frequent transit service on Broadway
- Recognize 13<sup>th</sup> and 9<sup>th</sup> are critical bike corridors
- Concerns about:
  - speeding in the neighborhoods, specifically on 9<sup>th</sup> where there is impaired visibility going north down the hill
  - vehicular access to and from area from Broadway
  - Lack of parking and high congestion during peak times
  - Transit routes only serve north to south connections

*Alleys:*

- Recommend improved pedestrian connections and amenities where there are alleys
- Improve connections through the neighborhood, specifically east to west south of Alpine

*Bike and Pedestrian Connections:*

- Improve crossings along Broadway as well as sidewalks and lighting
- Better east to west connections and increased protection on bike lanes

*Intersections:*

- Safety issues were noted about crossings at 13<sup>th</sup> and Alpine, 9<sup>th</sup> and North, 9<sup>th</sup> and Alpine, and along Broadway

*Access and Parking:*



There was a wide range of viewpoints about how much parking should be provided on the city-owned site and in the area. There were two main viewpoints: maximize available parking for housing and use TDM strategies to minimize available parking. The former was the larger of the two groups of opinions.

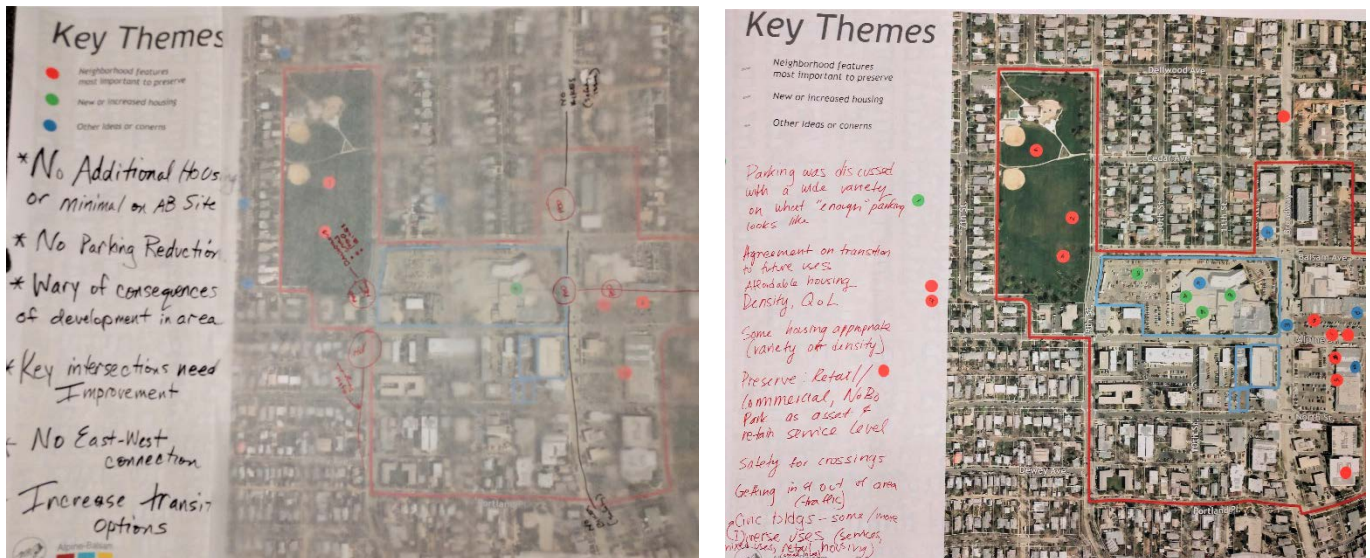


Figure 6: Examples from workshop discussions

Those who supported increased parking said:

- If units do not have enough parking, the impact to the surrounding area would spill over into neighborhood residential and commercial parking areas. Parking needs to be adequate for both residential, office, retail, and commercial uses. Businesses and offices need space for employees to park.
- Ability to park in front of home would be reduced, and parking in front of homes was important not only for convenience but ease for families and aging parents.
- .8 parking space/unit is unrealistic and an attempt to force behavioral change that will not succeed
- Parking in the Community Plaza was already crowded and full. Accommodating additional traffic and residents would be possible under current conditions.
- The carless future is not here yet and the city needs to appropriately account for a majority of car owners.

Many who supported reduced parking were concerned that more parking would lead to large and unattractive parking lots and less permeability/connectivity in the area. A variety of ideas were shared, specifically:

- Investment in pedestrian and cyclist infrastructure instead of vehicular; while a carless future was not here yet, there is a desire to start somewhere.

- Become a model for sustainability, design parking in a progressive way, and plan for autonomous vehicles and less required parking in the next 10 years. Increased parking or parking structures are not future-facing.
- Encourage alternative modes of transportation
- Built for and attract residents who would like or are car-free and incentivize them.
- Promote small electric vehicles to conserve space for parking, perhaps through the creation of a community-based hub

### *City Facilities*

There was a wide range of views about locating city facilities on the site. Some participants felt that housing needs should be balanced with civic uses. Many participants were relatively indifferent to the issue, and more focus was on the impact of locating a larger employer in the area due to increased traffic around peak commuting times. Some participants were curious about the impact to the site as city employees who commute to the downtown facilities are not net new employees. Many participants expressed a desire to hear more information about impacts and studies to make an informed decision.

Some participants did not support city facilities on the site, saying this is a neighborhood and additional offices were not desired uses. Others mentioned that keeping city facilities downtown would also be appropriate with the retail options on Pearl.

Some participants expressed excitement around the city facilities and civic uses as an opportunity to make the site an amenity, bringing added life and diversity to the area. It could provide benefits to the community, with space for meetings, classes, and workshops for nonprofits and community members. Some participants expressed a desire for the city to use their facilities to be a model for sustainability (LEED certification, net zero building with green roofs, parking in a progressive way to consider autonomous vehicles, etc.)

### *County*

Almost all the community workshops occurred before the Feb. 12 City Council Study Session on Alpine-Balsam. During the community workshops, the possibility of co-locating county facilities with civic facilities on the site was not a facilitated topic. However, some workshop participants discussed the possibility; after the study session, participants had questions about how county facilities might impact the project.

Some participants expressed a desire to have county facilities instead of housing on the site. Some supported the city and county facilities together from a synergy perspective. Other participants supported the county finding an alternative site outside of the city. Some participants supported co-locating the county at the Alpine-Balsam site in order to develop the county's Broadway-Iris site for housing as they believed it to be a more appropriate site for increased density.

### *Participant Demographics*

At the workshops, a majority of participants was from nearby neighborhoods. Most of the participants at the workshops were white residents, ranging from their mid-30s to over 65. At the

Saturday workshop, more families with young children were able to participate. In the introductions, many participants mentioned children or family in the area. Several participants mentioned the amount of time living in the neighborhood as over 20, 30, 40 years.

## **Joint Boards and Commissions Workshop**

### *Introduction*

In 2018, city staff invited several boards and commissions to designate liaisons to participate in engagement events for Alpine-Balsam. The liaisons' role was not to represent other members of their boards but to look at the issue from their area of specialty and from a citywide perspective. These liaisons were invited to a Joint Boards and Commissions Workshop on Feb. 18, 2019 that was structured similarly to the community workshops. Attendees included:

- Erica Joos, Kathleen McCormick – Arts Commission
- Lauren Folkerts, Rory Bilocerkowycz – Design Advisory Board
- Jerry Shapins – Downtown Management Commission (unable to attend but attended one of the small group workshops)
- Miriam Hacker – Environmental Advisory Board
- Masyn Moyer, Jacques Juilland – Housing Advisory Board
- Art Figel, Nikhil Mankekar – Human Relations Commission
- Pamela Yugar, Tom Klenow – Parks and Recreation Advisory Board
- Tila Duhaime, Jennifer Nicoll – Transportation Advisory Board
- Juana Gomez – Library Commission

### *Key Themes*

Many key themes were similar from the workshops, including:

- Preserve and enhance spaces for kids and families and neighborhood assets (Ideal, North Boulder Park, local businesses.
- Good walkability and bikeability with room for improvement.
- Improve intersections and safety. Mitigate speeds.
- Improve walkable feel along Broadway.

There were several concepts that the boards and commissions emphasized or were more united in than workshop participants:

- Preserve community before cars. Any new development should support a walkable hub.
- Support arts and community space on site
- Encourage diversity through activation, mixed use, mixed housing, and mixed income.
- Support housing in area – types not elsewhere. E.g. mix of micro units, co-housing, stacked paths.



**Alpine-Balsam Area Plan Outline DRAFT**  
**Draft: May 2019**

**I. Introduction and Background**

- A. Purpose of the plan and how it will be used
  - i. What is an Area Plan?
  - ii. Relationship to BVCP
  - iii. How does an Area Plan get used? Regulatory and non-regulatory implications of an Area Plan
  - iv. Explanation of Approach (organization of Plan) – “Plan Elements”: Land Use, Urban Design; Access and Mobility; Flood and Stormwater; Facilities and Services
- B. Background and Context
  - i. Brief history and existing conditions of area, especially as it relates to presence (and departure) of hospital
  - ii. Brief history of hospital, city’s purchase, and Vision Plan
  - iii. Summary of Public Engagement

**II. Vision, Goals and Objectives of the Area Plan**

- A. BVCP policies relevant to Area Planning and Neighborhood Centers
- B. Vision Plan Guiding Principles and applicability for site redevelopment
- C. Area Plan Goals and Objectives

**III. Planning for the Area**

- A. Land Use
  - i. Land Use Plan – Map with proposed land uses for area
  - ii. Land Use Types - descriptions and images
- B. Urban Design
  - i. General Guidelines (all areas)
  - ii. Character Districts Descriptions and Guidelines (each of 5 districts)
  - iii. Land Use and Urban Design Goals Assessment
- C. Access and Mobility: Connections Plan
  - i. Connections Plan
  - ii. Improvements
- D. Access District and Transportation Demand Management (TDM) Strategy
  - i. Strategy Elements
  - ii. Access and Mobility Goals Assessment
- E. Flood and Stormwater
  - i. Strategy
  - ii.
- F. Facilities and Services
  - i. Utilities
  - ii. Parks and Open Space
  - iii. Fire and Police
  - iv. Library
  - v. Schools
  - vi. Human Services

vii. Public Art

- IV. Planning for the City-Owned Land** *[Note: While the city-owned land will be addressed in the Land Use and Urban Design sections of the Area Plan (demonstrating the integration between planning for the broader area and planning for the site), this section will provide additional detail to guide next steps in securing a development partner, selling portions of the site and expectations for more detailed site planning.]*

**V. Implementation and Next Steps**

**Appendices**

1. Existing Conditions
2. Community Engagement Summary

## Land Use and Urban Design Options and Components

The Area Plan's Land Use and Urban Design components are presented below and organized by

- A. Land Use and Urban Design Options
- B. Character Districts
- C. Land Use and Urban Design Prototypes

### **A. Land Use and Urban Design Options**

To facilitate consideration of future opportunities and different future visions to meet a range of goals in the area, staff has proposed alternative **Land Use Options** that suggest new land use prototypes in the area. The proposed land use prototypes used in the options are described in more detail in the **Land Use Types Master Legend**, which provides a description of allowed uses, building density and form, who might live or work there, and photos illustrating a range of potential building examples.

The area plan's land use prototypes are more detailed than the standard Boulder Valley Comprehensive Plan (BVCP) land uses in order to provide more detail about desired urban form and character. These prototypes will inform changes to BVCP land use and zoning when implementing the plan.

#### **Land Use Options**

The following descriptions outline a vision for each district that is intended to promote plan goals related to land use, urban design, and livability.

1. Current Trends / Preserve Existing Housing / Minimize Growth: This Option generally maintains existing land uses in the area and proposes minimal growth, consistent with the area's current trends. It includes select proposals to change land use to reflect existing higher housing density in order to preserve existing units should properties renovate.
2. Emphasize Housing: This Option would encourage future redevelopment in select areas to add housing. Buildings would generally be 2-3 stories with a range of housing intensities and types.
3. Strongly Emphasize Housing: This Option would steer future redevelopment towards housing uses and would allow higher densities of housing development. Buildings would range from 2-4 stories with more areas above 35'.
4. Emphasize Mixed-Use: This Option would allow some intensification of use and allow redevelopment of either business or residential uses. This Option allows for preservation of many of the medical or professional offices in the area while allowing housing to develop above.
5. Emphasize Mixed-Use with Strong Civic Presence: This Option is similar to Number 4 but would be used if the desire was to develop a significant civic presence (i.e. Boulder County Health and Human Services Relocation from the Iris Complex) on the city-owned parcels previously occupied by Boulder Community Hospital.

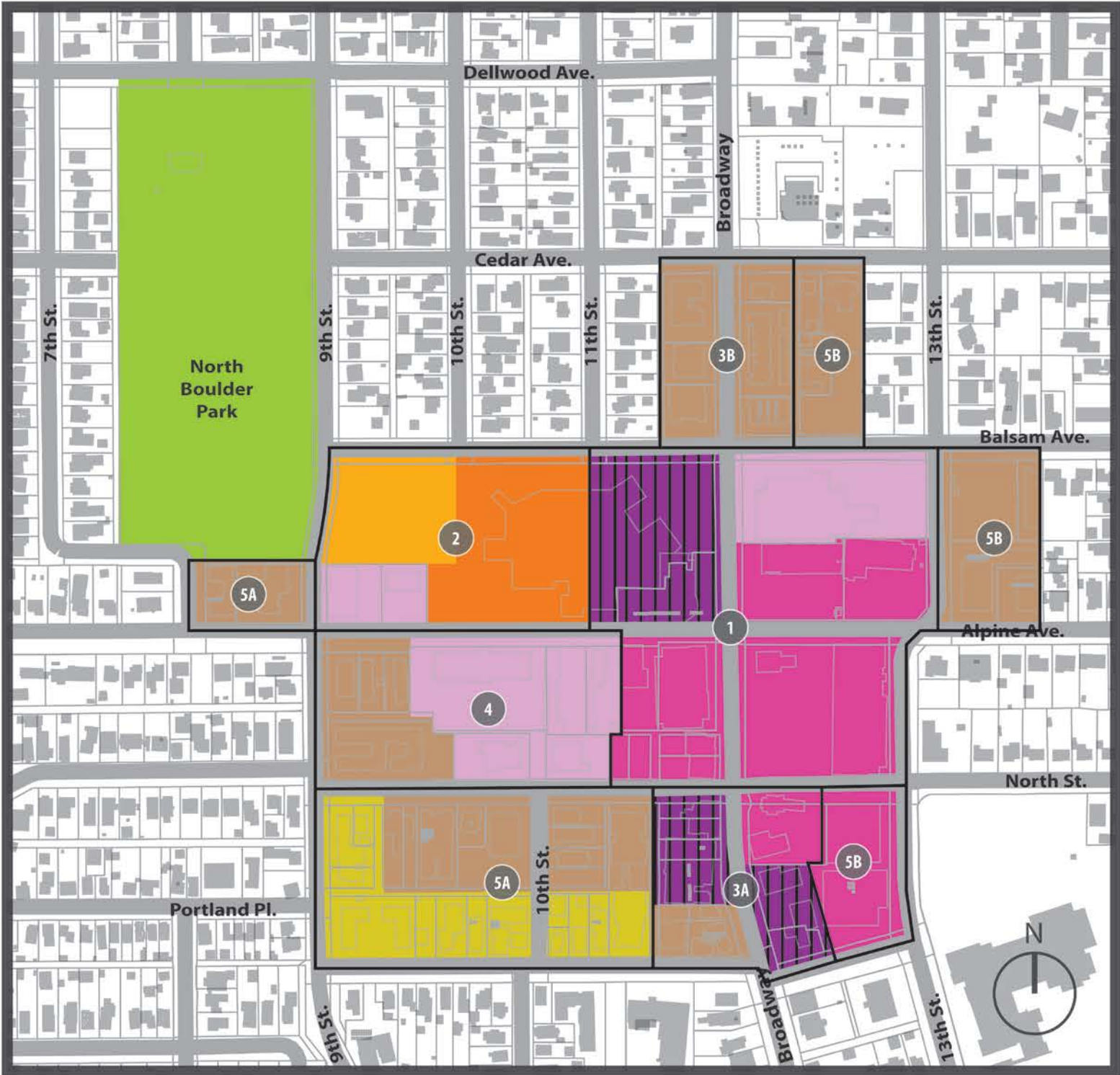
#### **Common to All Options**

- In all options, it is assumed that the Medical Pavilion will be redeveloped into a city service hub and the remaining space on the east block of the site, referenced as a "flex" space, could be used for additional future city facilities consolidation or could be additional housing, potentially

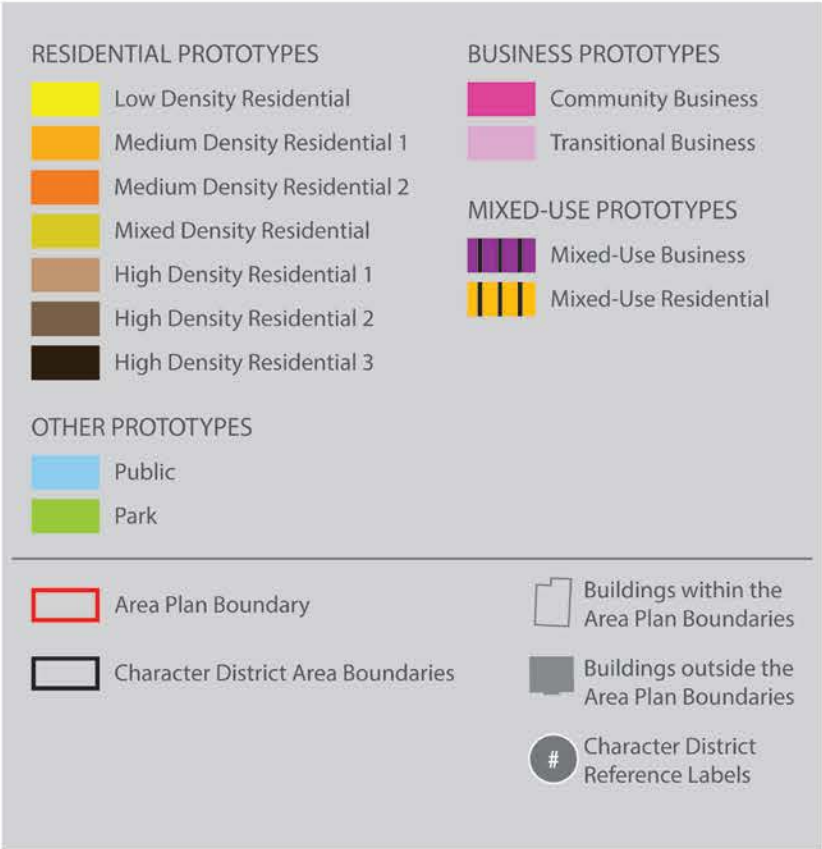
with ground floor commercial uses. The future uses for this block will be further discussed in the context of the Facilities Master Plan later this year.

- All options were developed with a guiding focus on preserving existing housing in the area resulting in significant areas where no new land use changes are proposed (primarily areas outlined in Character District 5).
- All options recognize the existing designated and potential historic resources in the area. For example, the Ideal Market and Community Plaza developments are well-loved, both for their uses and their physical form. All options recommend exploring the potential eligibility of structures in the area for landmark designation. Landmark designation does not strive to save every old building, but to provide a reasonable balance between private property rights and the public's interest. Landmark designation does not indicate a static environment, but strives to provide a criteria for historic buildings and neighborhoods to adapt and change with the times, while protecting their historic character and history.

Option 1 - Current Trends / Preserve Existing Housing / Minimize Growth

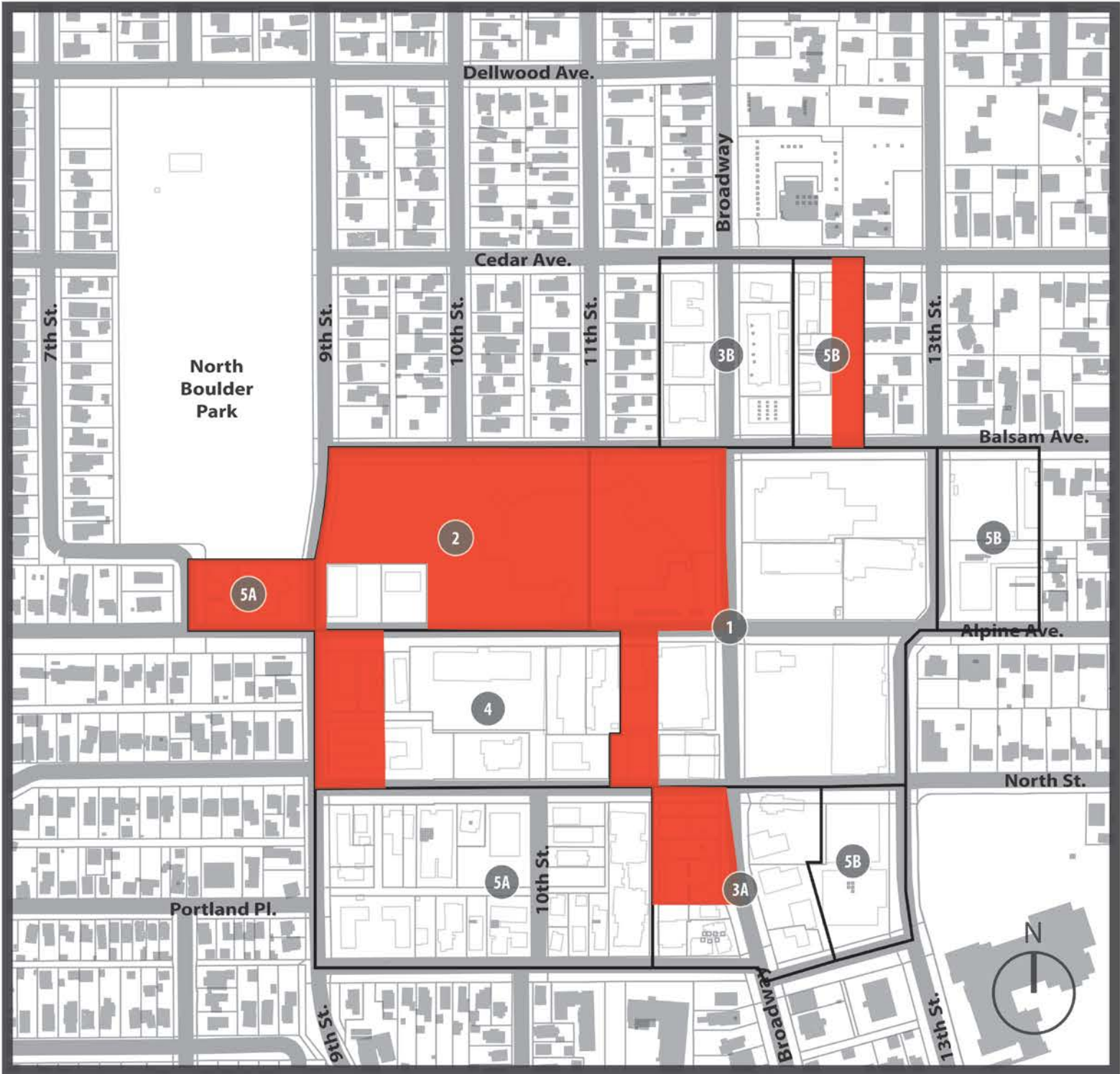


Option 1 - Current Trends / Preserve Existing Housing / Minimize Growth  
Land Use Prototypes

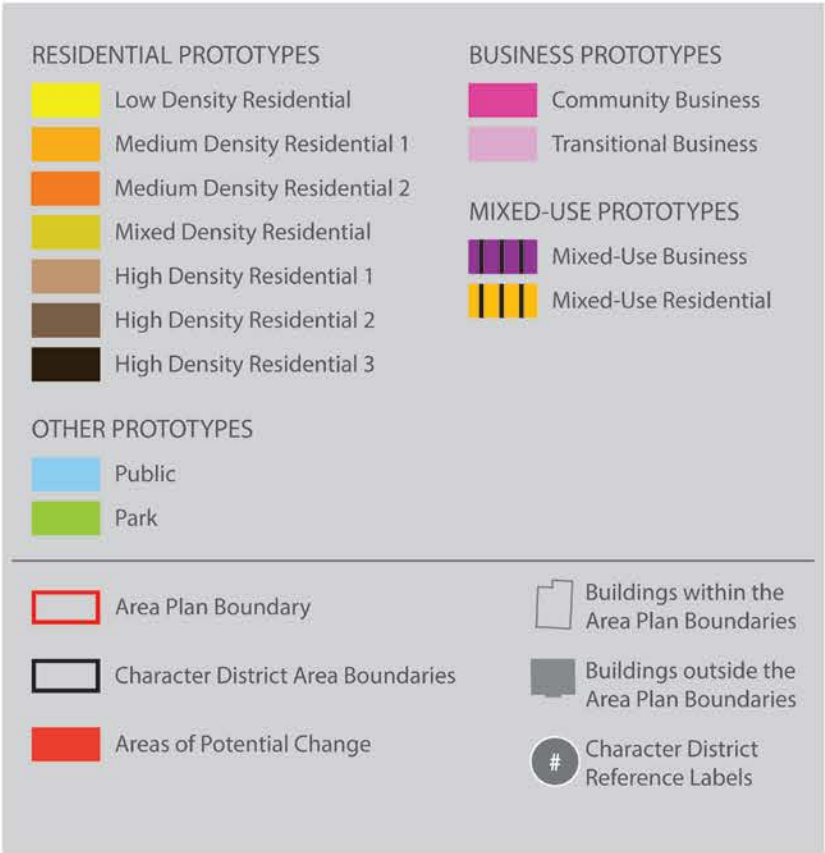




Option 1 - Current Trends / Preserve Existing Housing / Minimize Growth

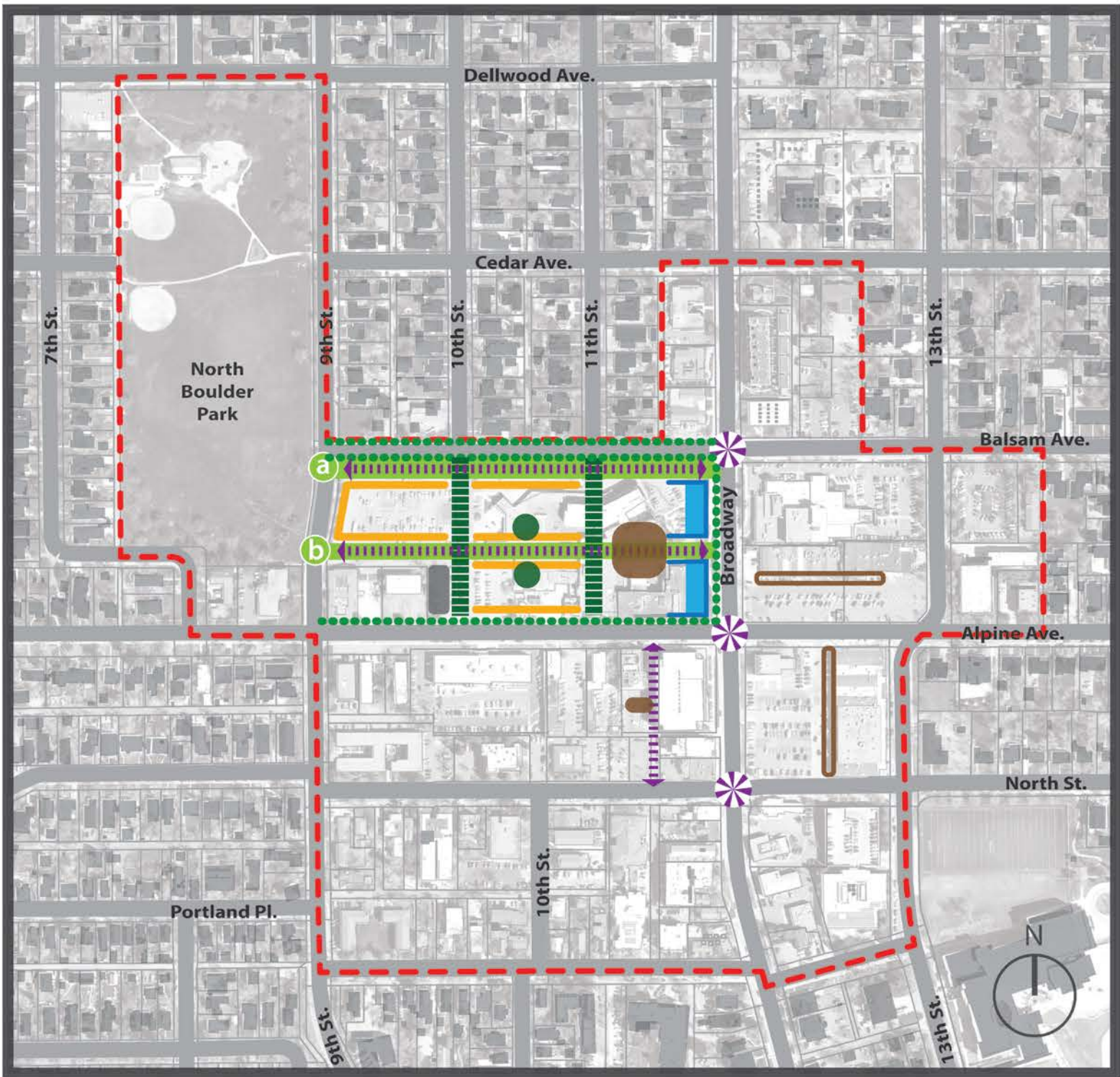


Option 1 - Current Trends / Preserve Existing Housing / Minimize Growth  
Areas of Potential Change





Option 1 - Current Trends / Preserve Existing Housing / Minimize Growth



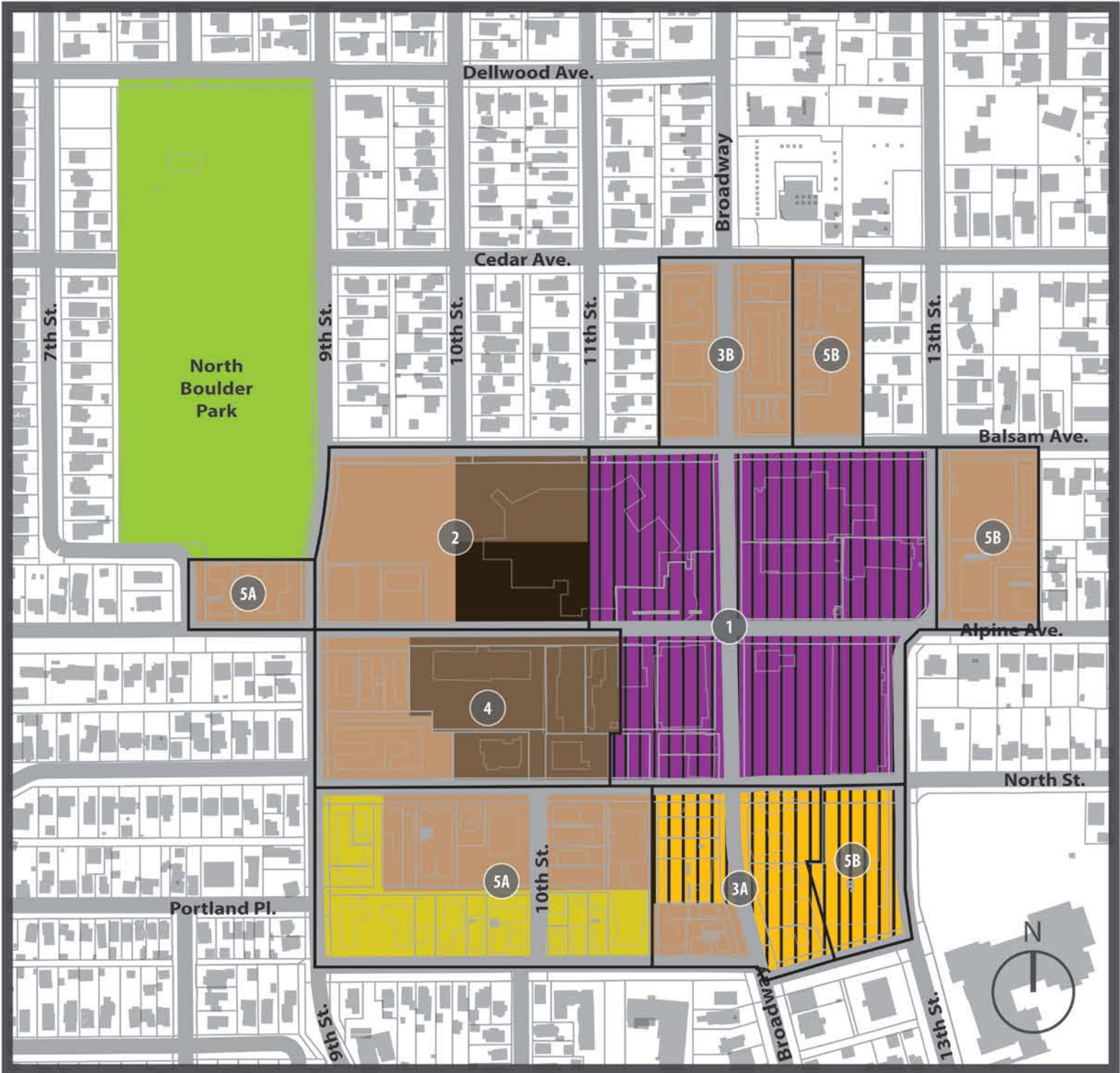
Option 1 - Current Trends / Preserve Existing Housing / Minimize Growth  
Urban Design Elements



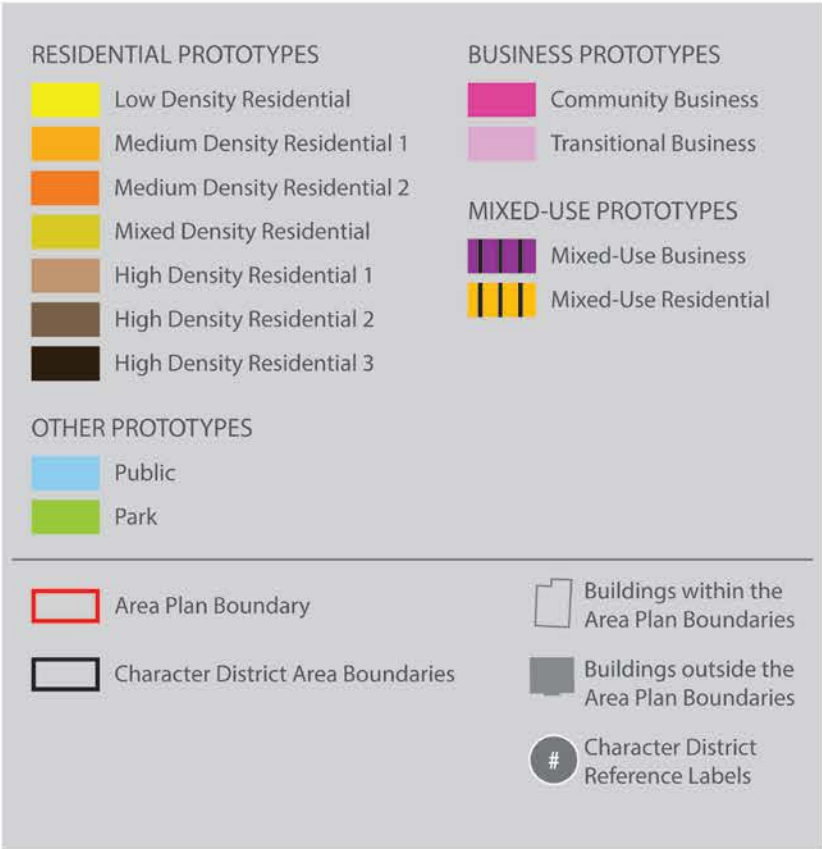




Option 2 - Emphasize Housing

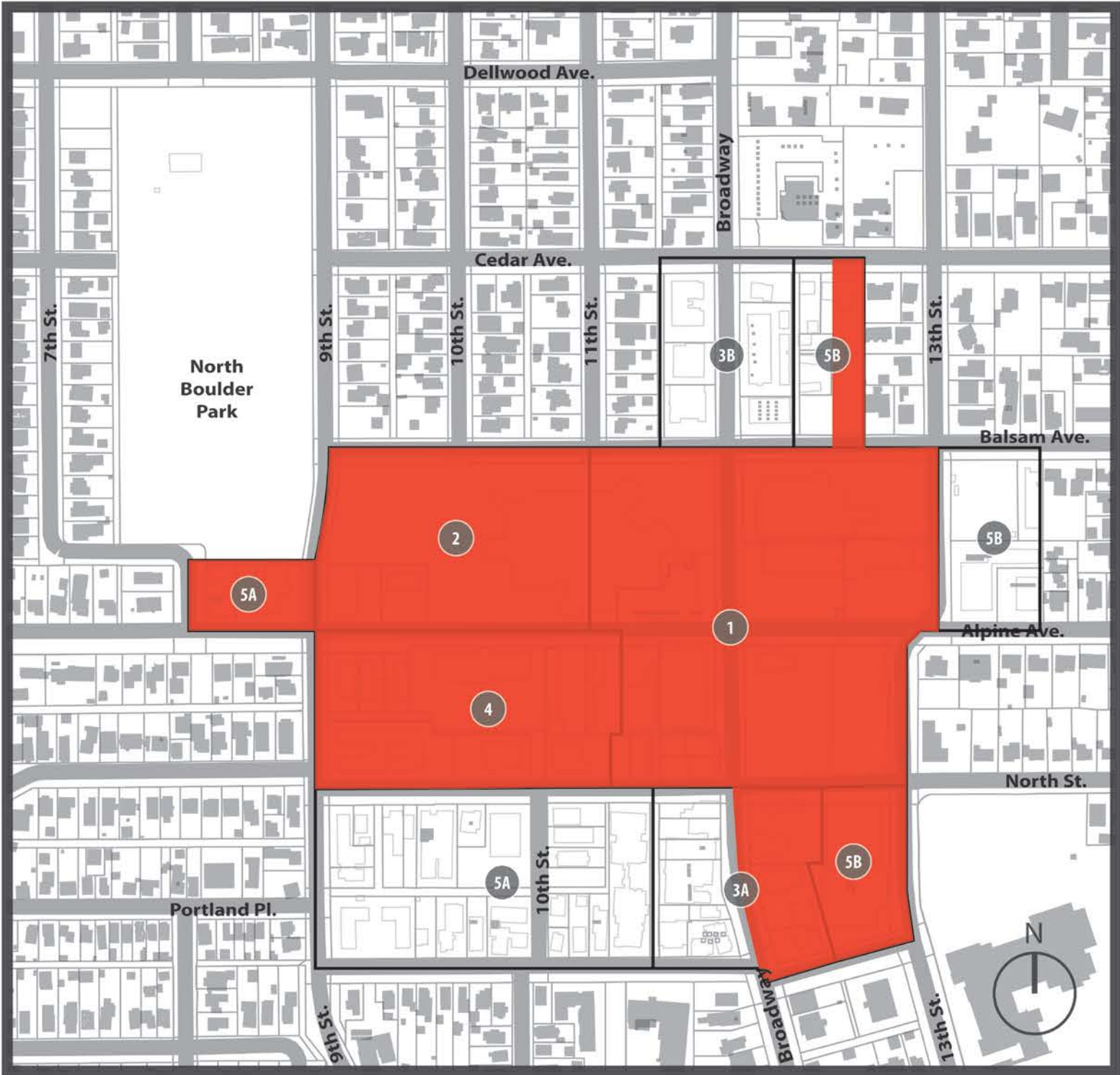


Option 2 - Emphasize Housing  
Land Use Prototypes

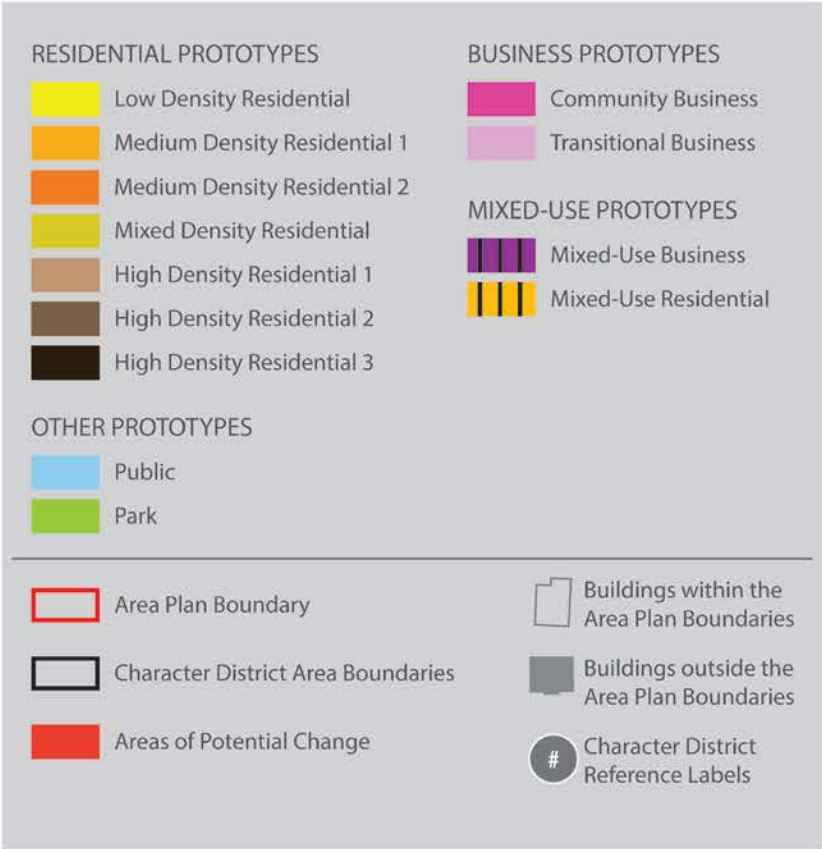




Option 2 - Emphasize Housing

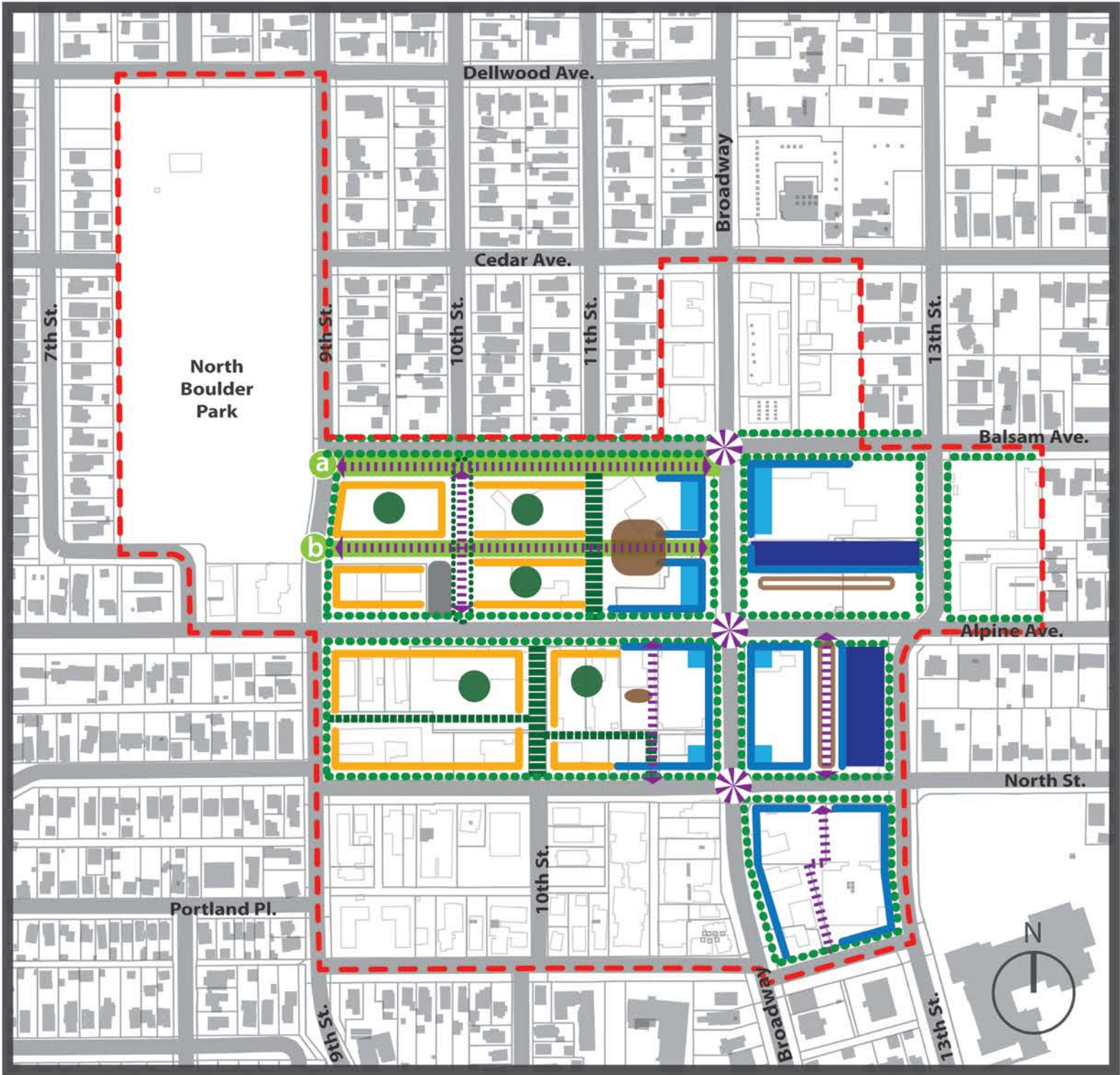


Option 2 - Emphasize Housing  
Areas of Potential Change





Option 2 - Emphasize Housing

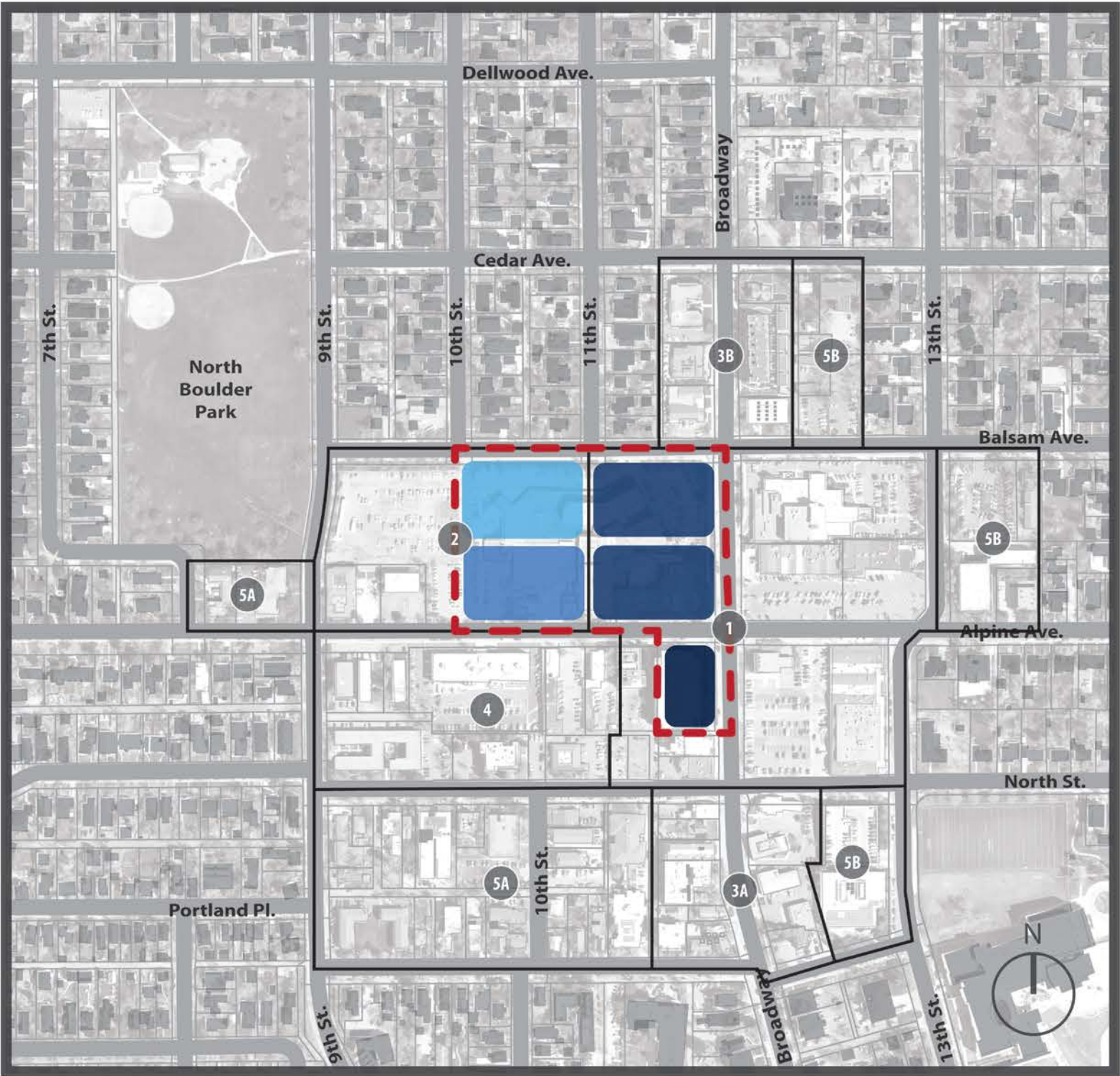


Option 2 - Emphasize Housing  
Urban Design Elements

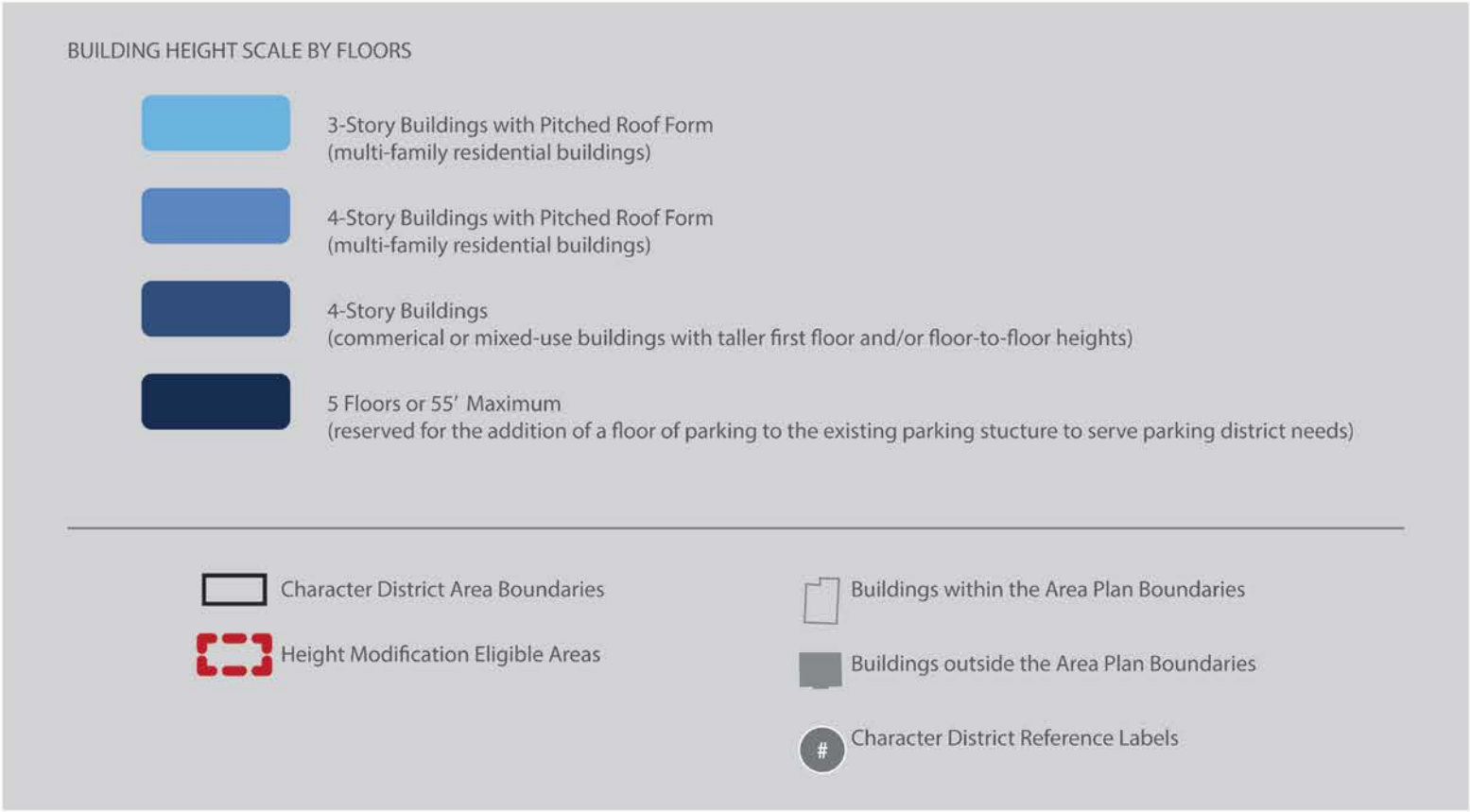




Option 2 - Emphasize Housing

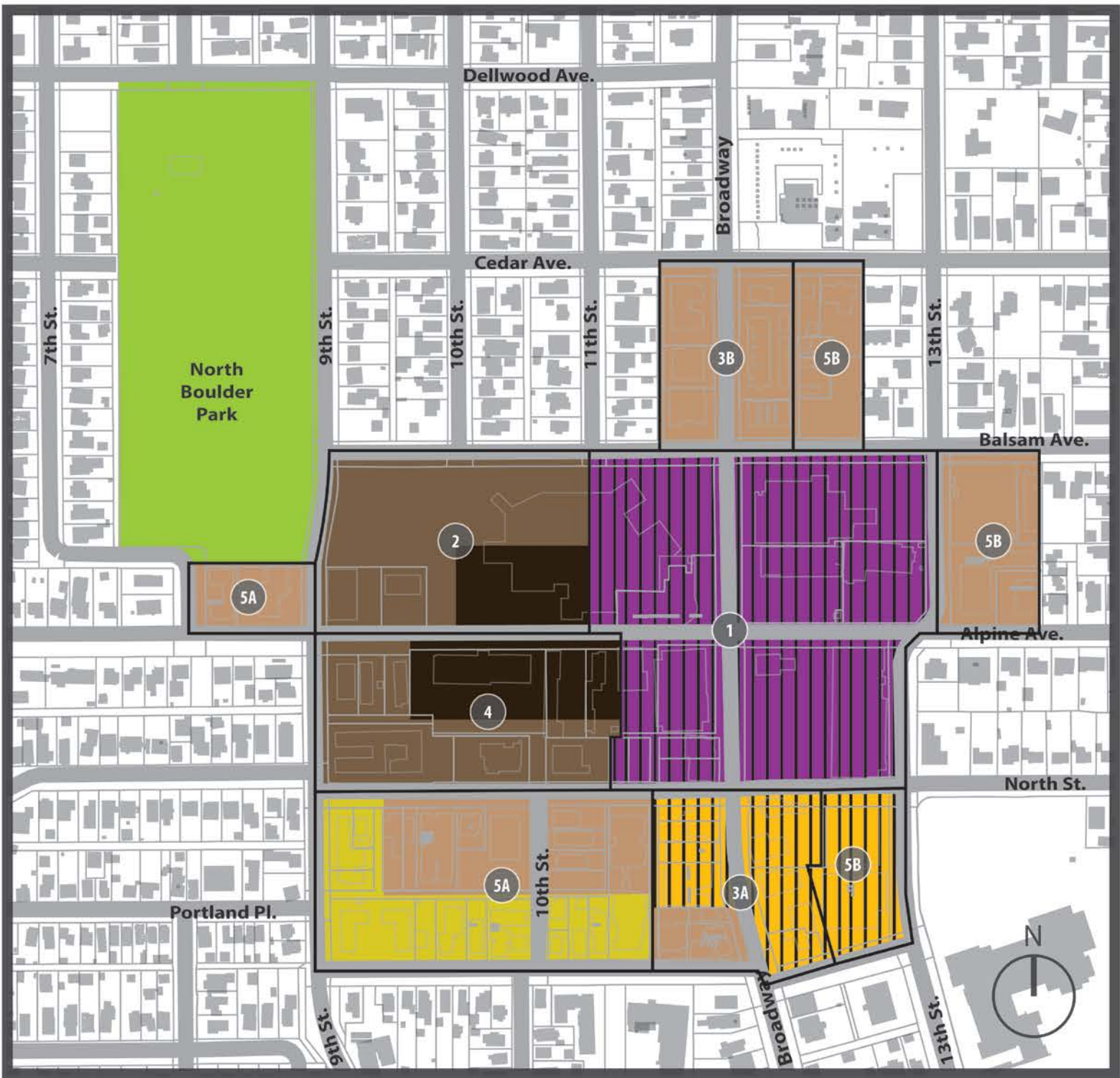


Option 2 - Emphasize Housing  
Areas of Potential Height Modification





Option 3 - Strongly Emphasize Housing



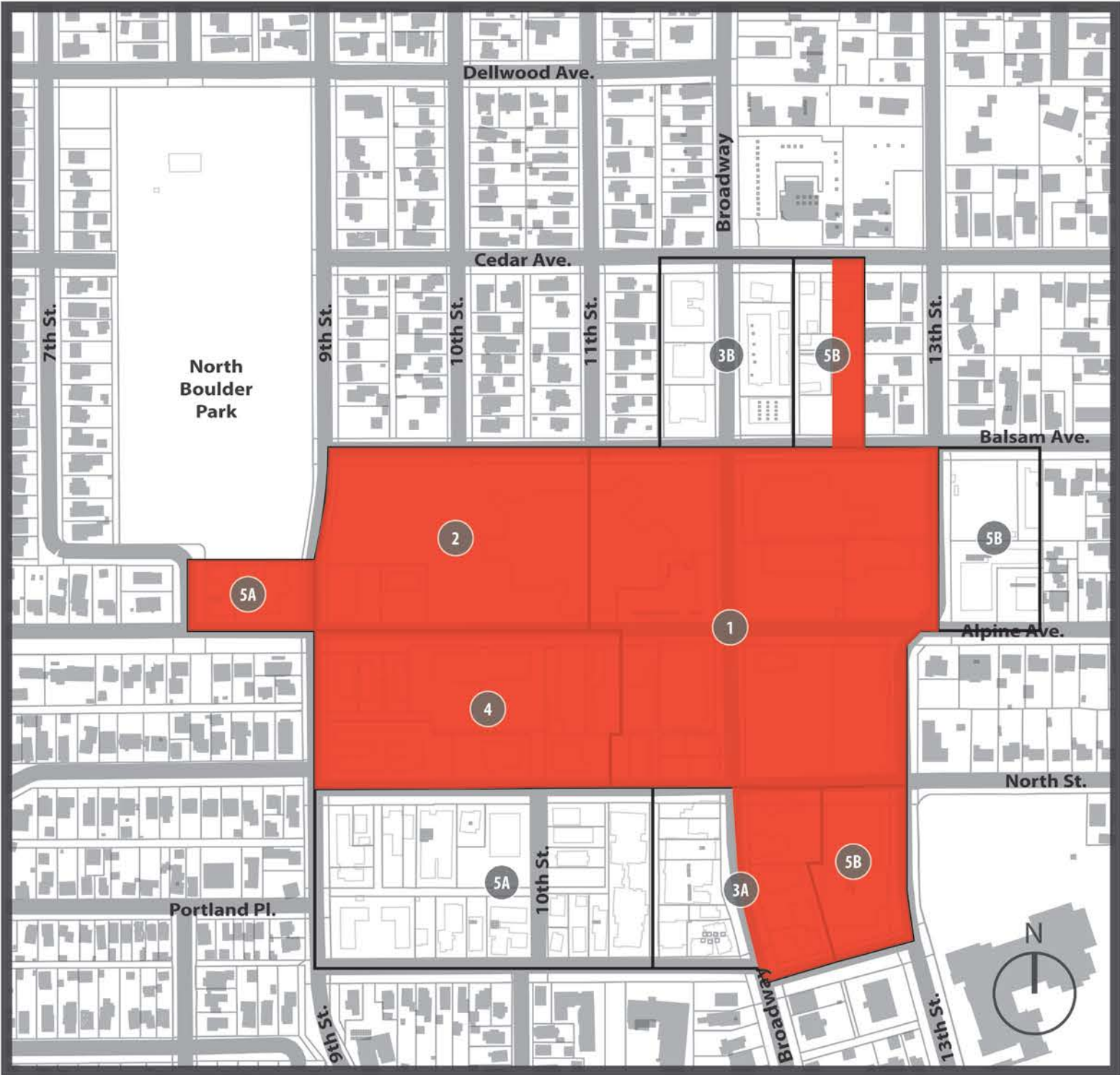
Option 3 - Strongly Emphasize Housing  
Land Use Prototypes



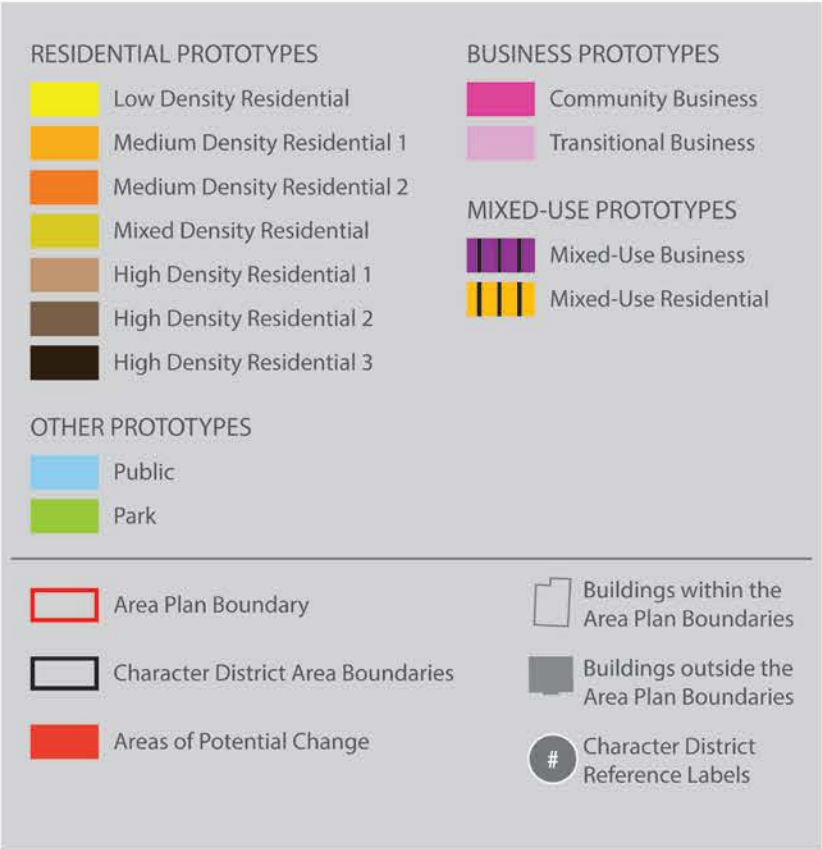
Existing Land Use Key Map



Option 3 - Strongly Emphasize Housing

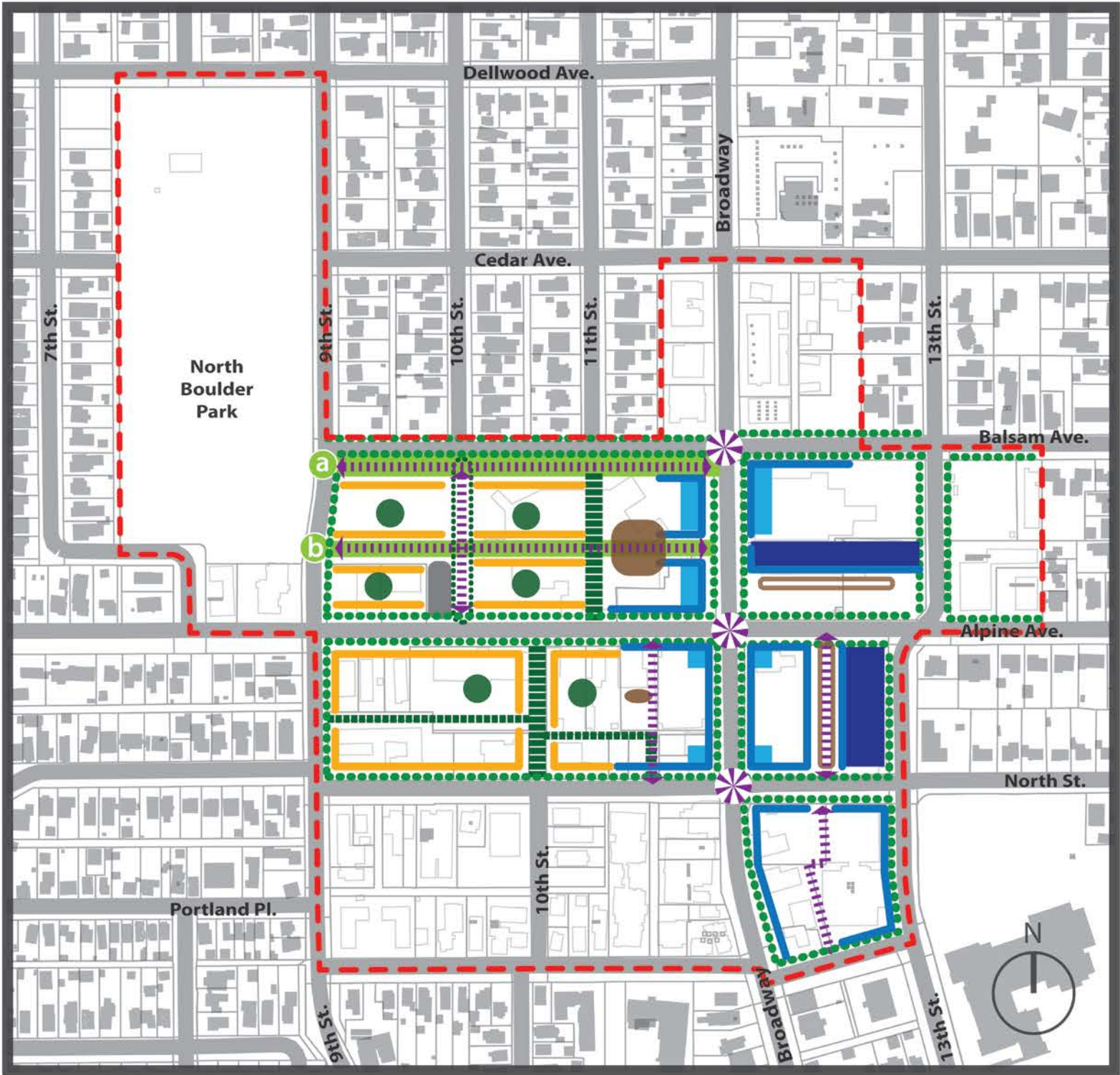


Option 3 - Strongly Emphasize Housing  
Areas of Potential Change





Option 3 - Strongly Emphasize Housing

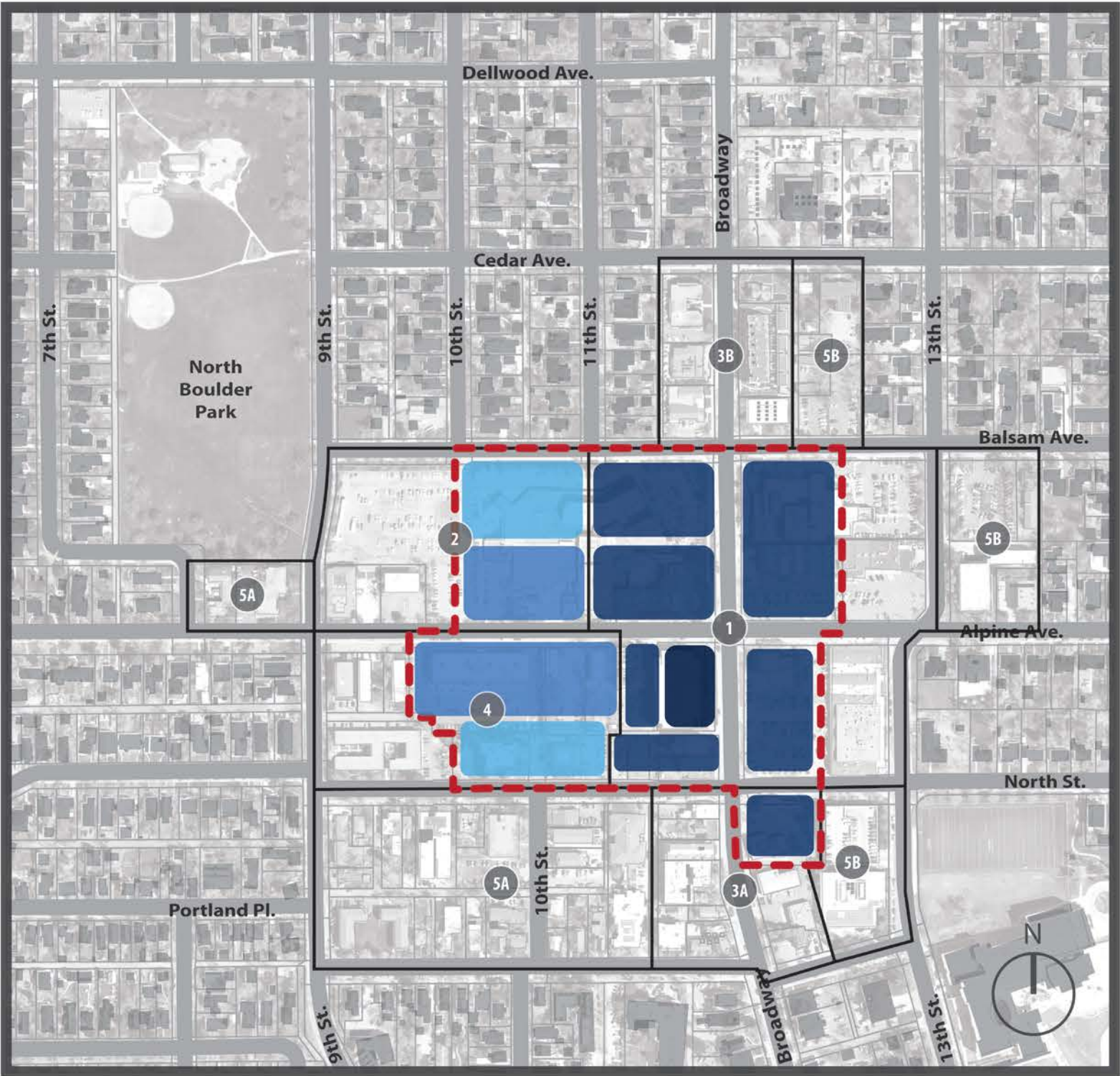


Option 3 - Strongly Emphasize Housing  
Urban Design Elements

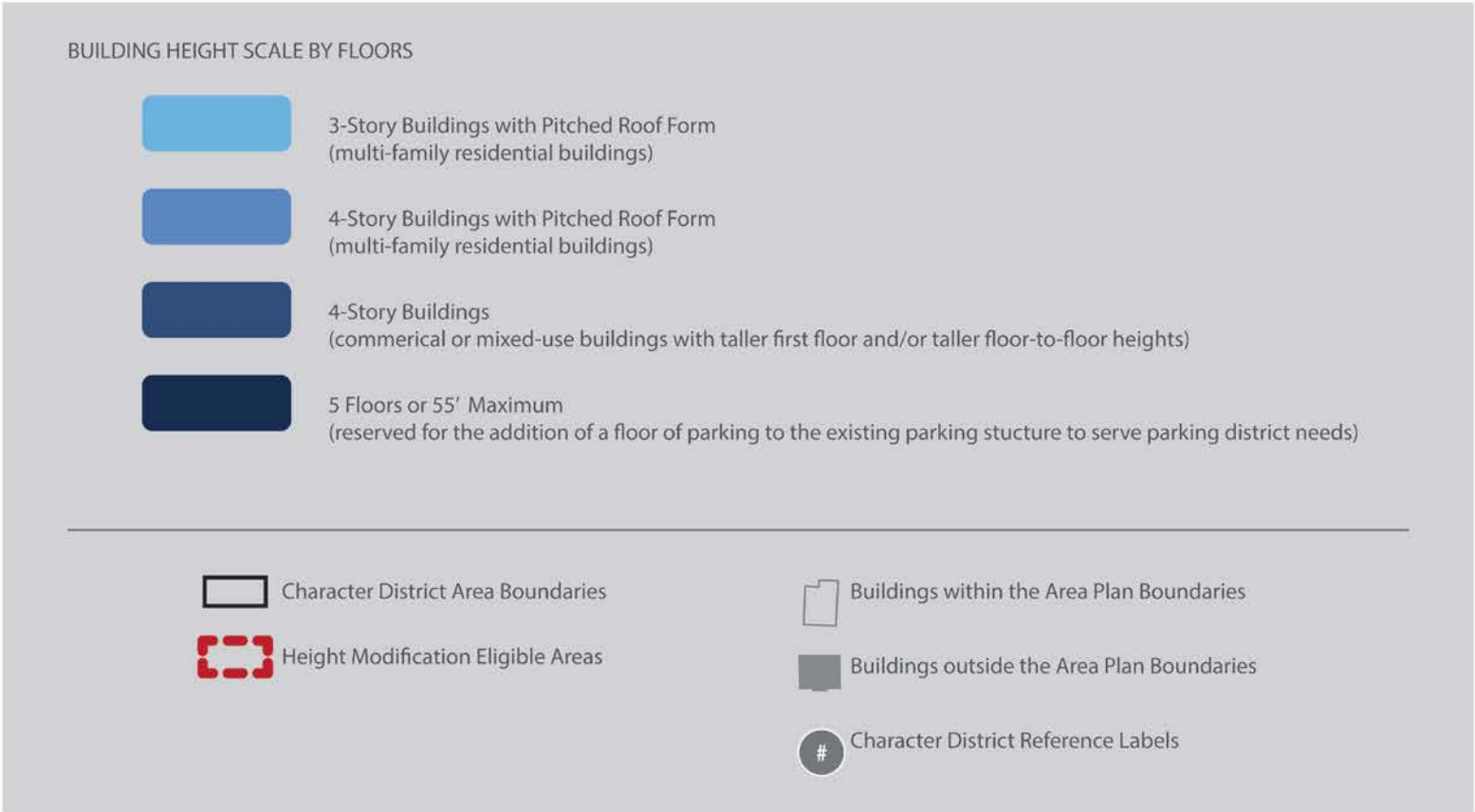




Option 3 - Strongly Emphasize Housing

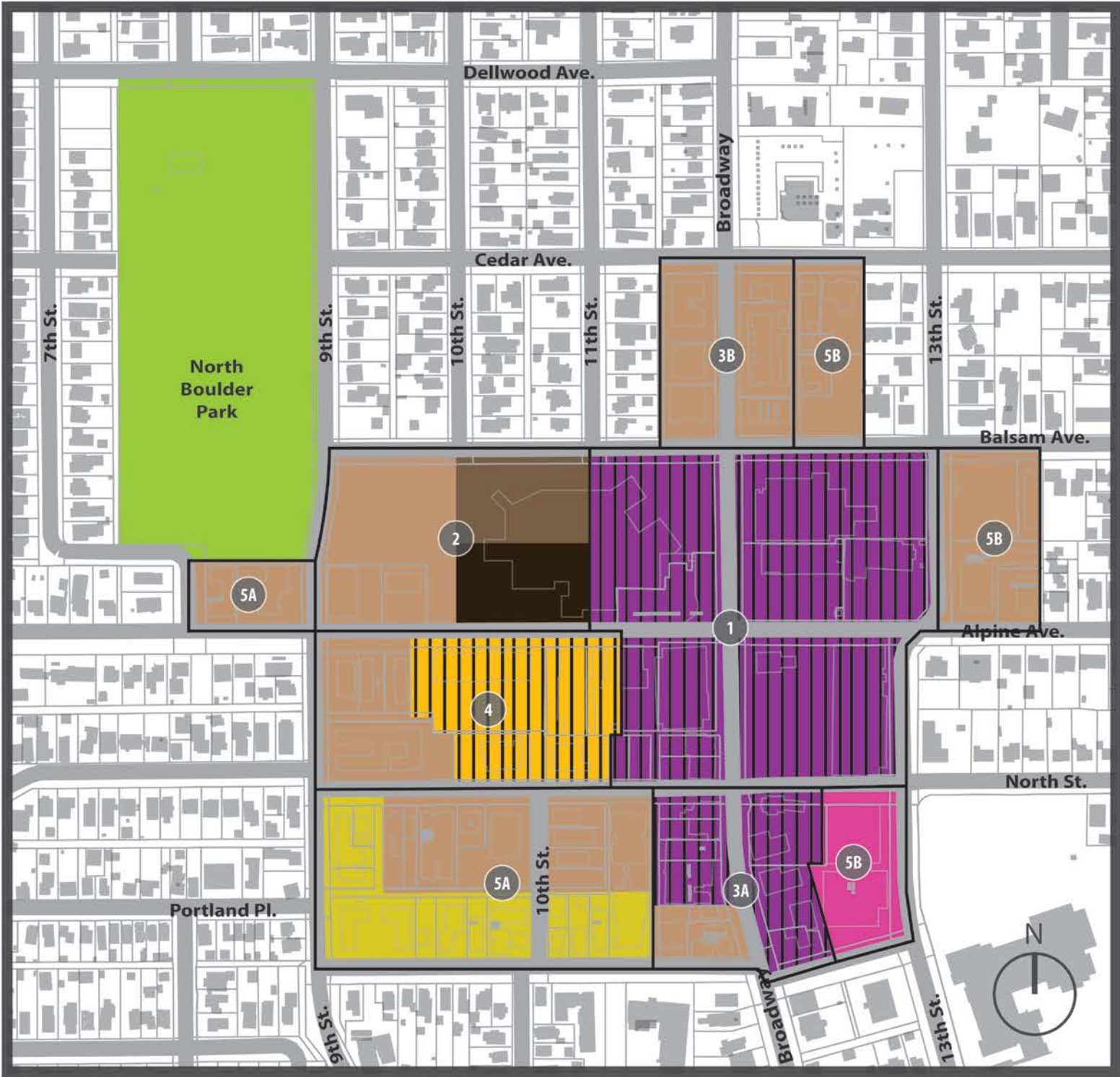


Option 3 - Strongly Emphasize Housing  
Areas of Potential Height Modification

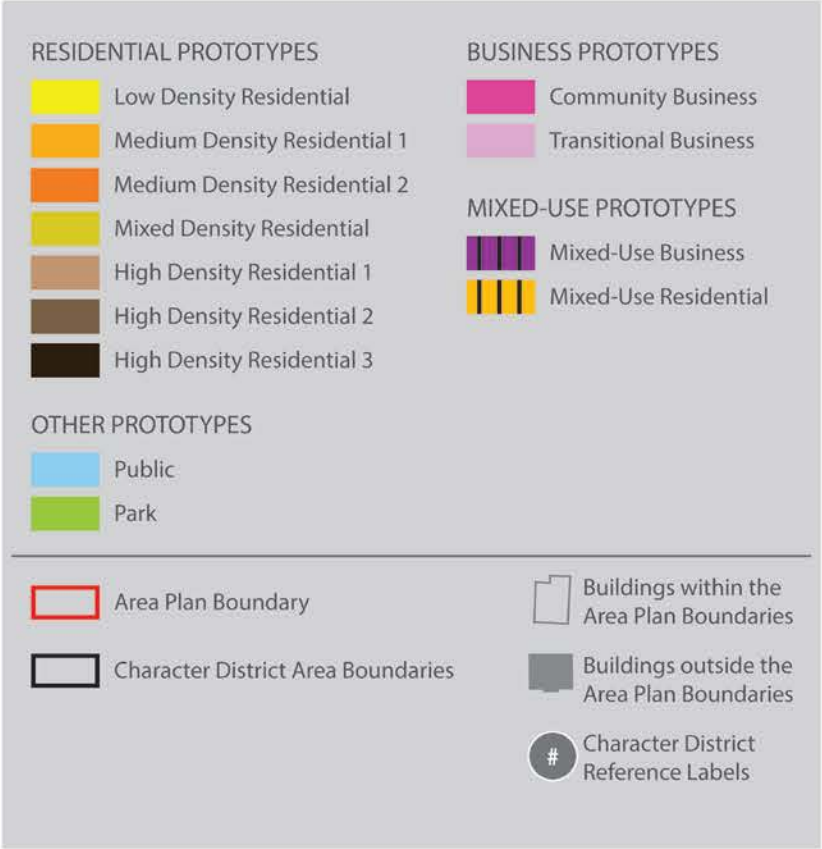




Option 4 - Emphasize Mixed-Use



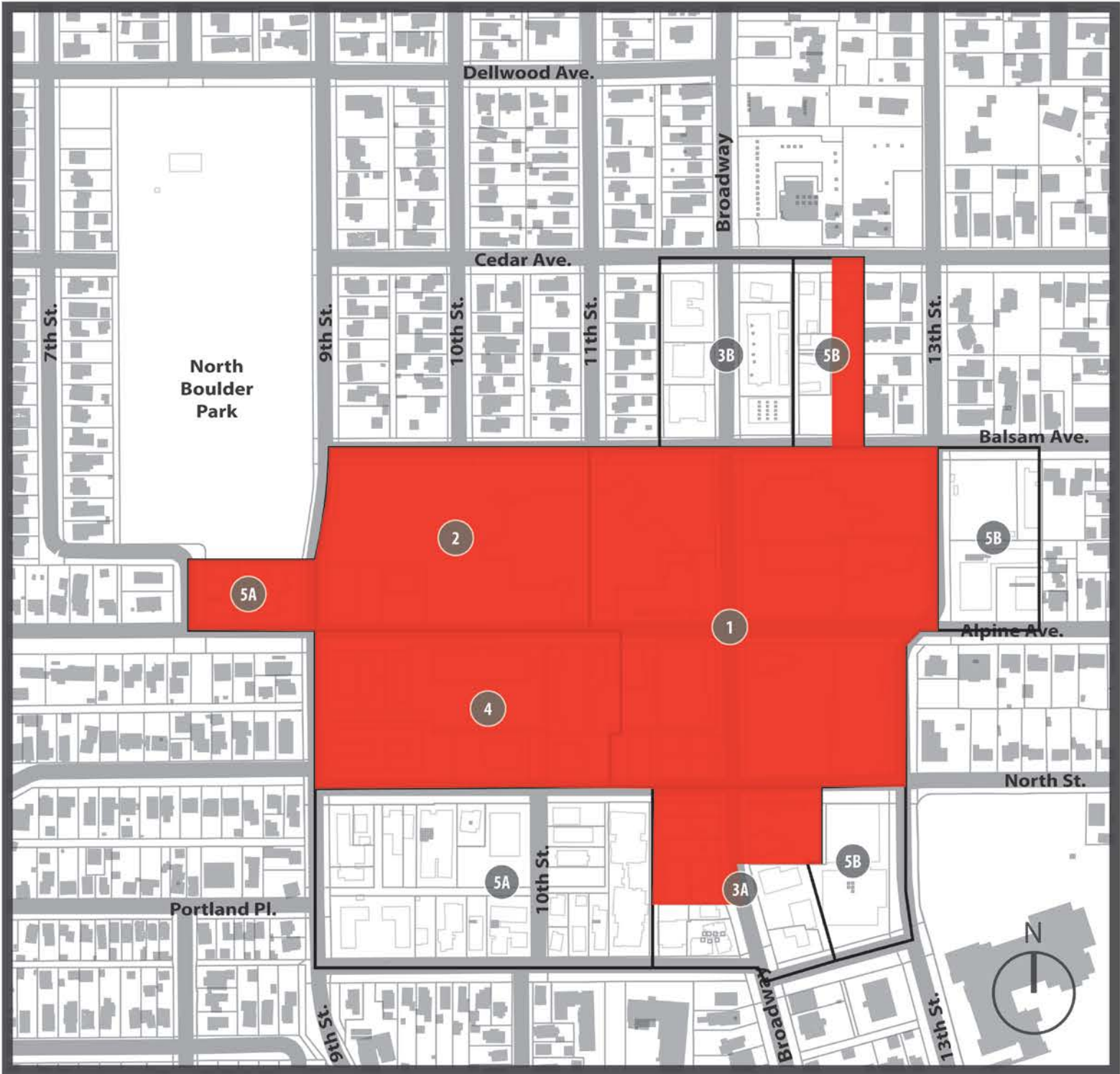
Option 4 - Emphasize Mixed-Use  
Land Use Prototypes



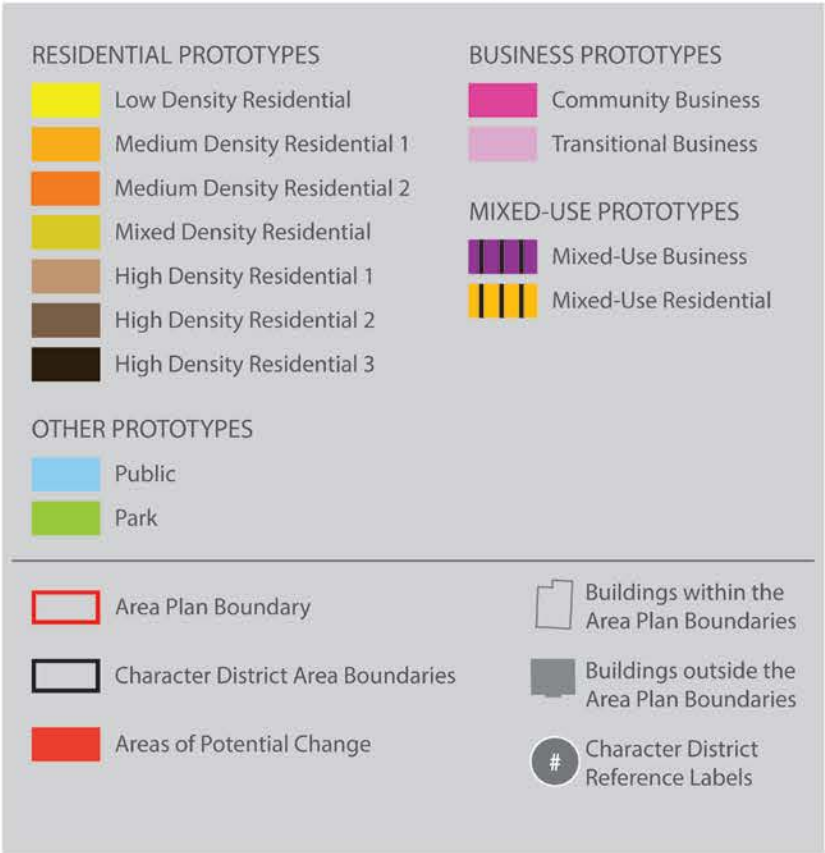
Existing Land Use Key Map



Option 4 - Emphasize Mixed-Use

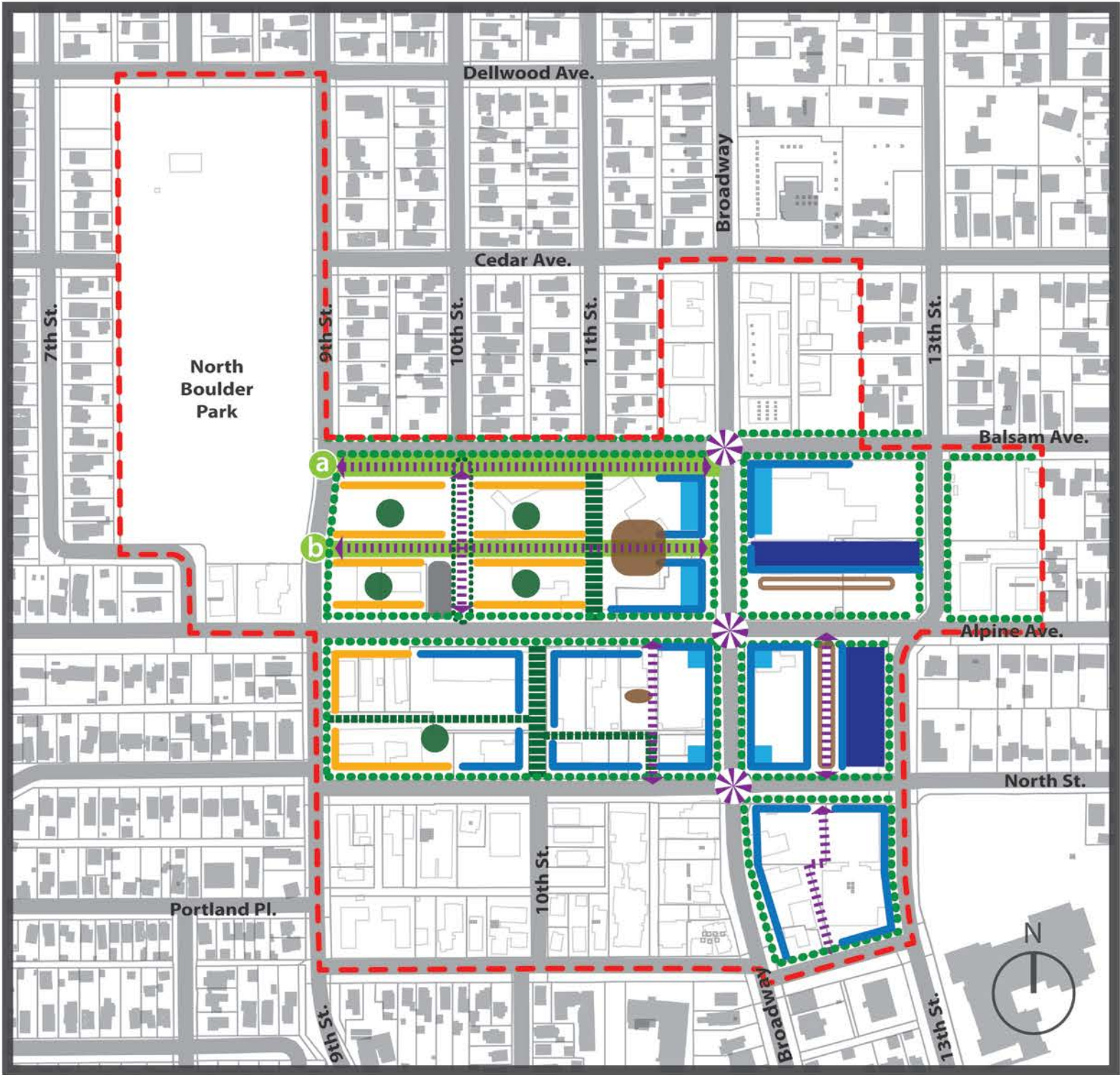


Option 4 - Emphasize Mixed-Use  
Areas of Potential Change





Option 4 - Emphasize Mixed-Use

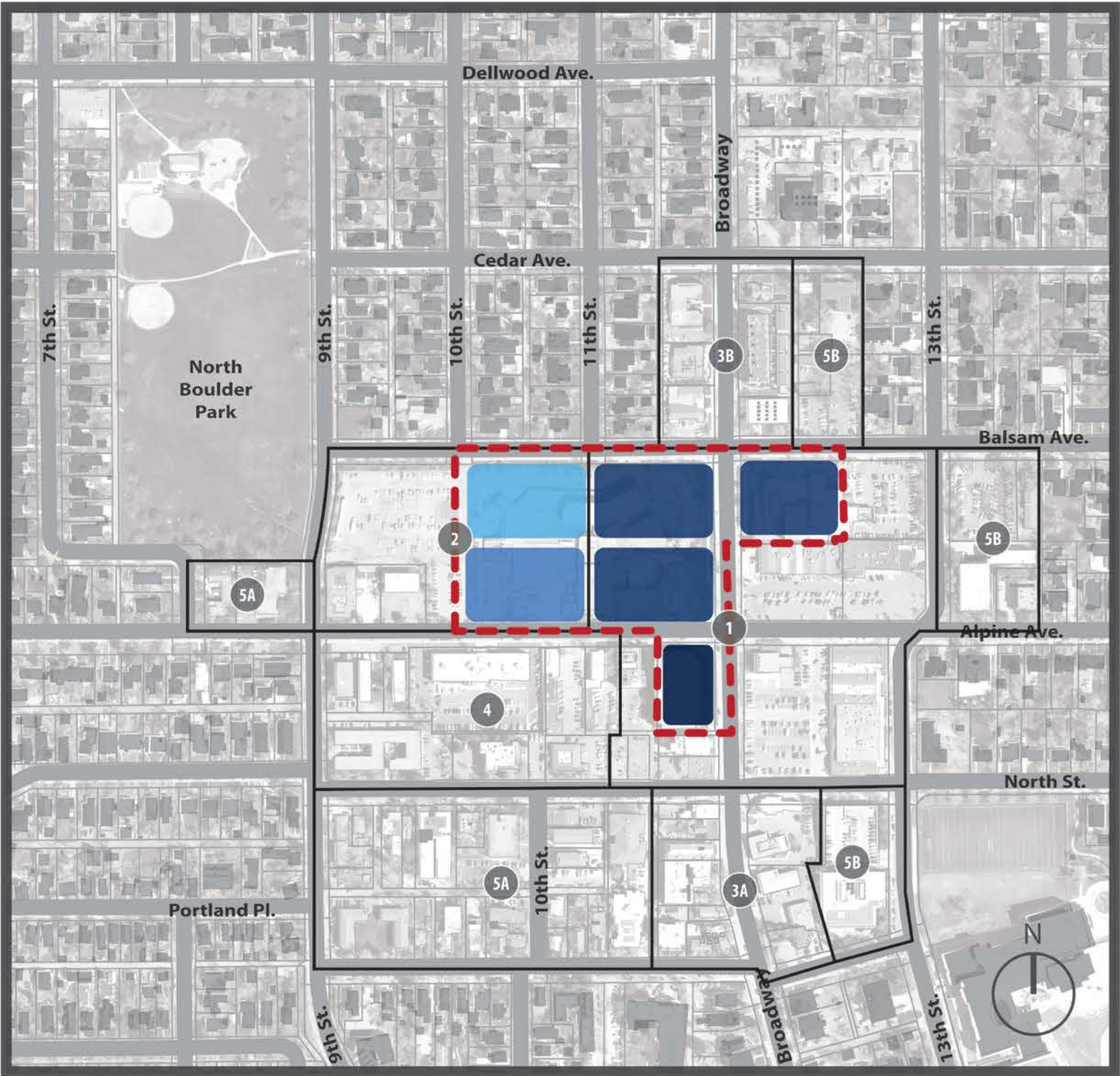


Option 4 - Emphasize Mixed-Use  
Urban Design Elements

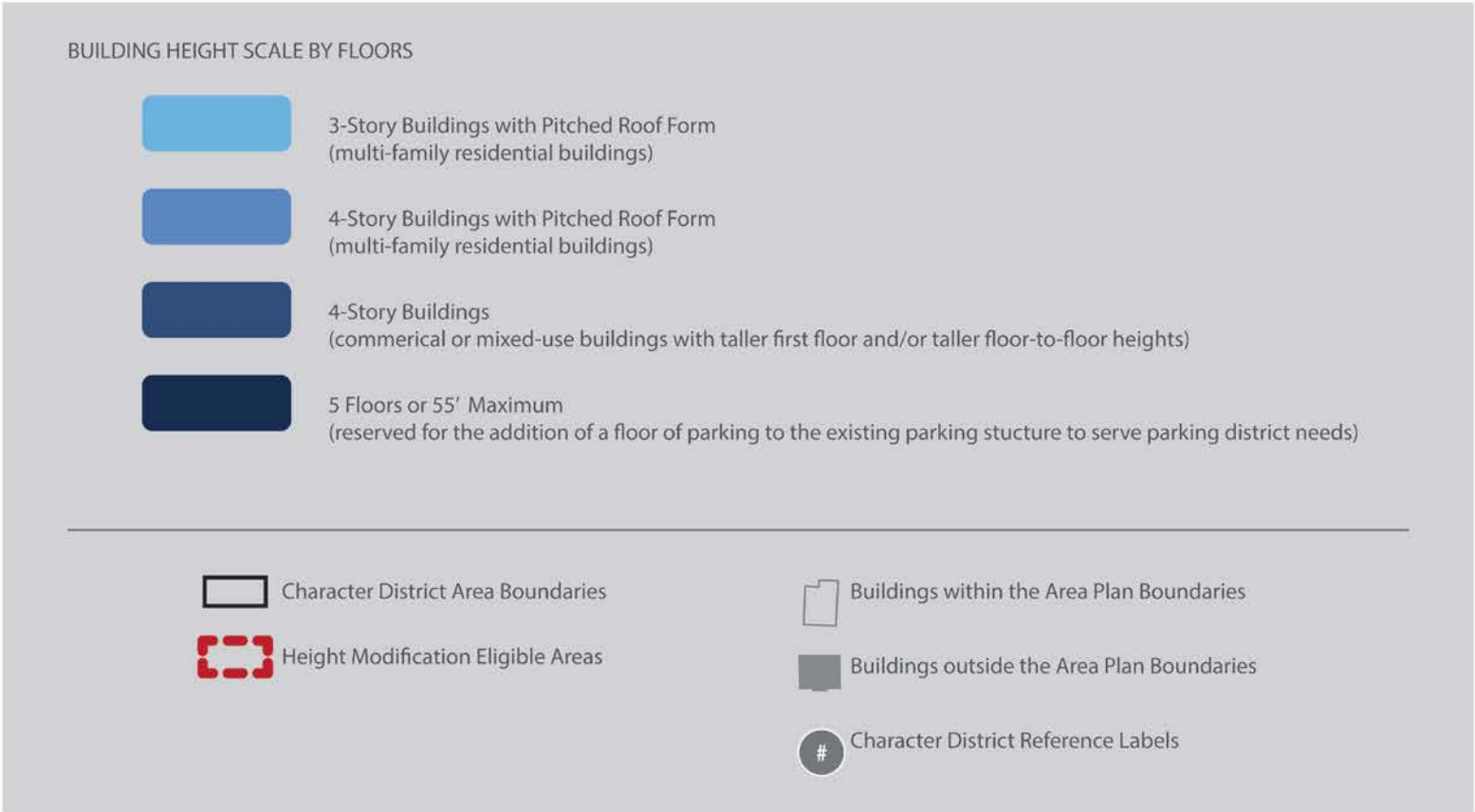




Option 4 - Emphasize Mixed-Use

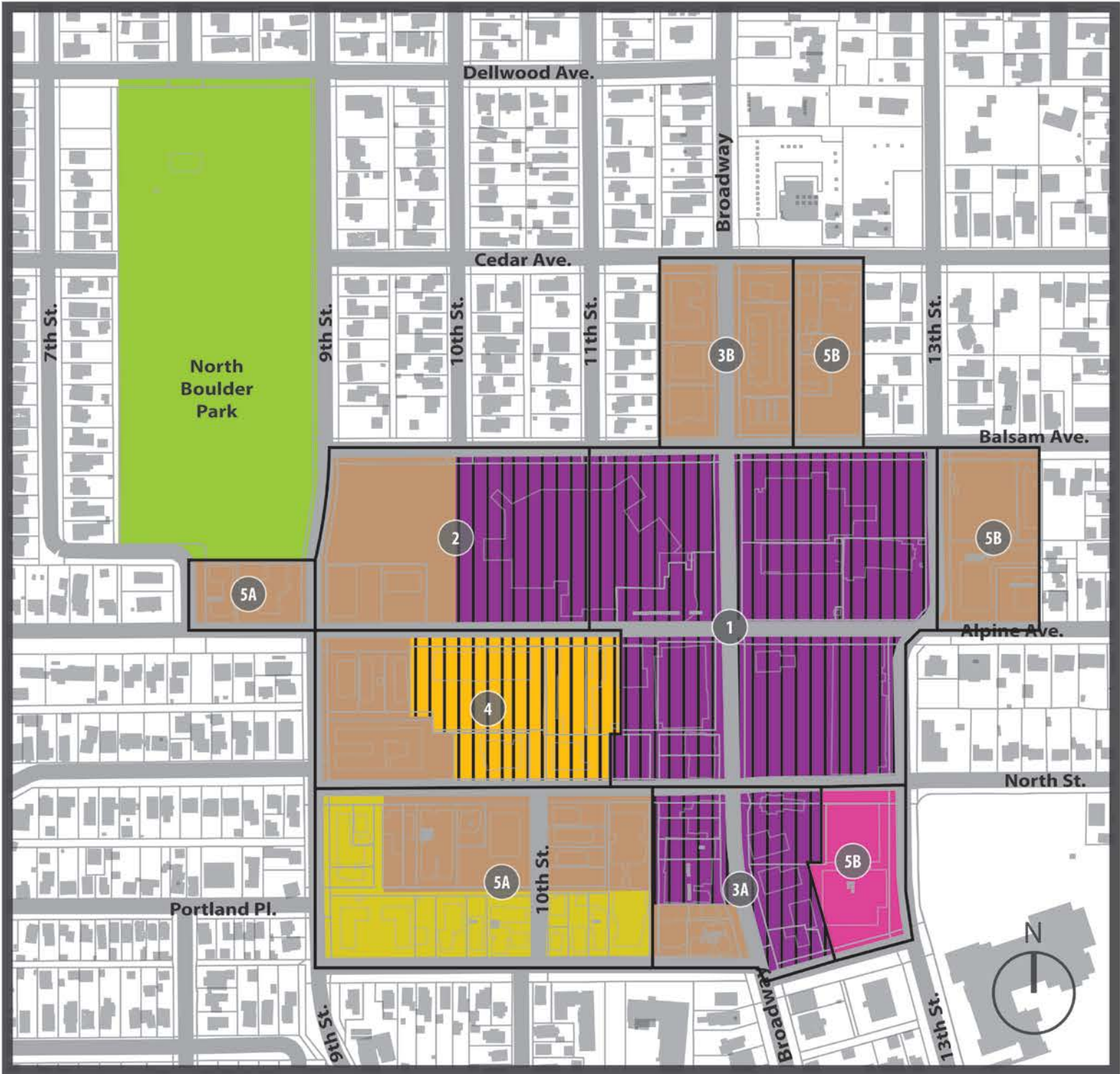


Option 4 - Emphasize Mixed-Use  
Areas of Potential Height Modification





Option 5 - Emphasize Mixed-Use with Strong Civic Presence

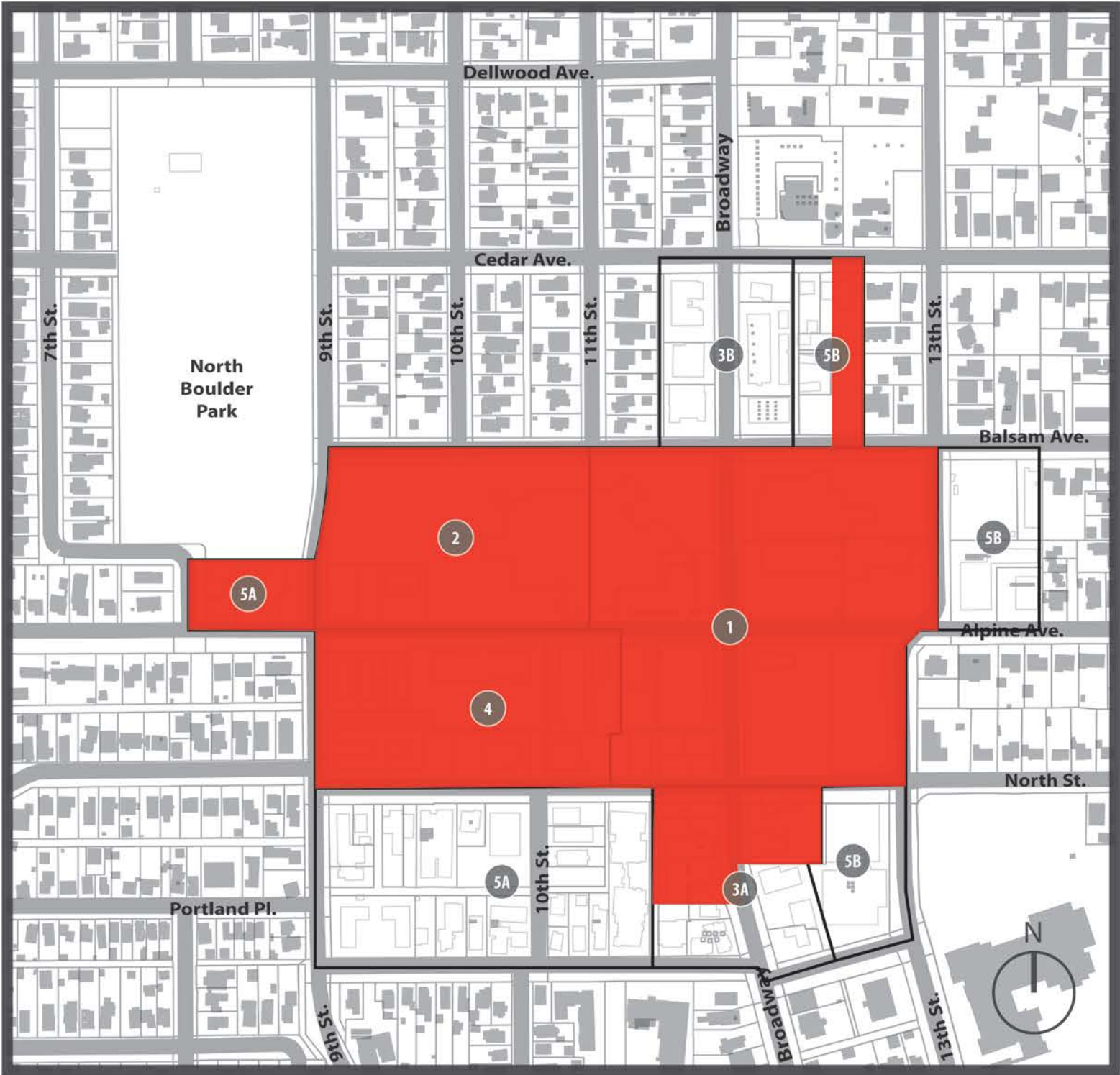


Option 5 - Emphasize Mixed-Use with Strong Civic Presence  
Land Use Prototypes





Option 5 - Emphasize Mixed-Use with Strong Civic Presence

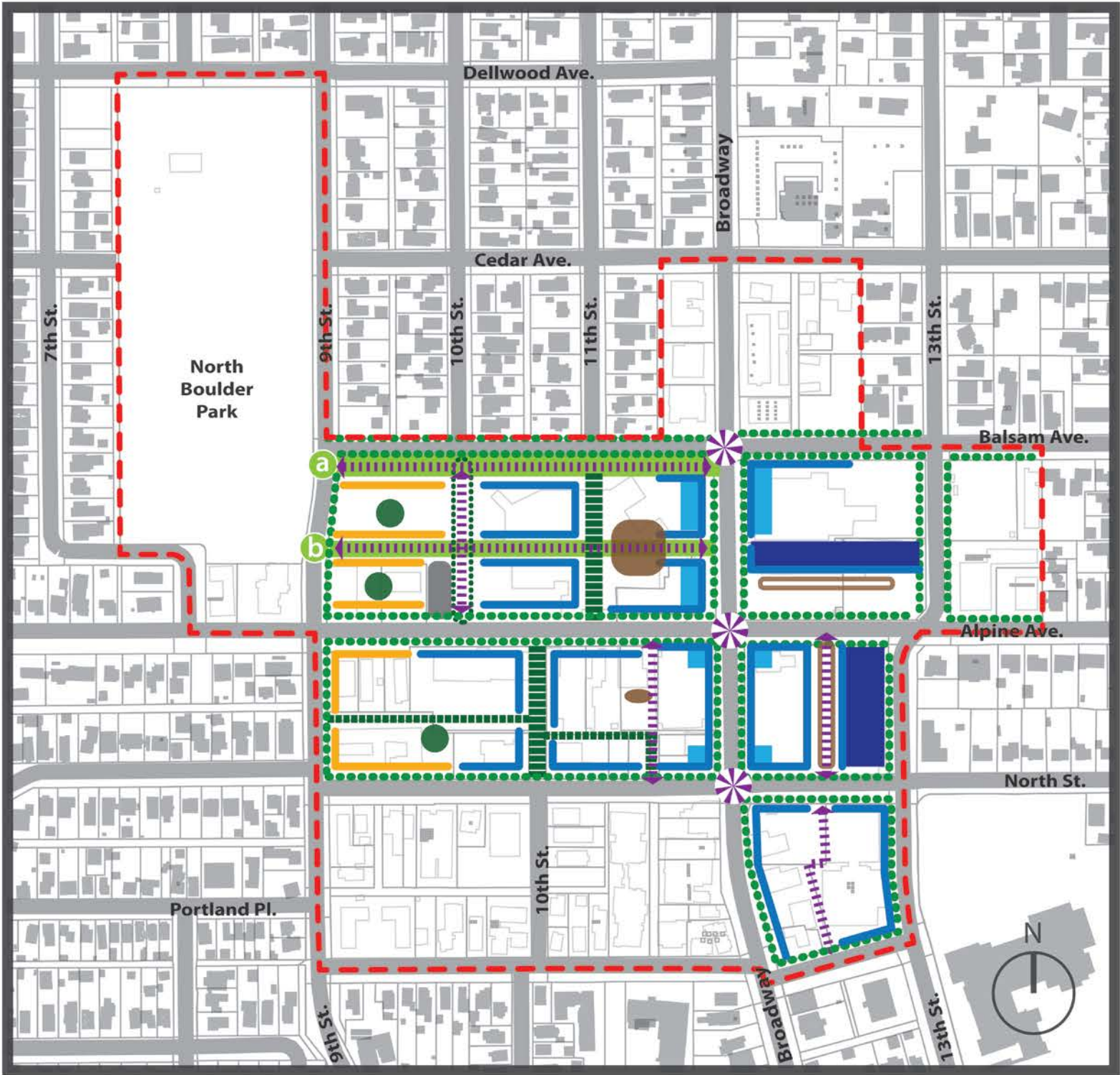


Option 5 - Emphasize Mixed-Use with Strong Civic Presence  
Areas of Potential Change





Option 5 - Emphasize Mixed-Use with Strong Civic Presence

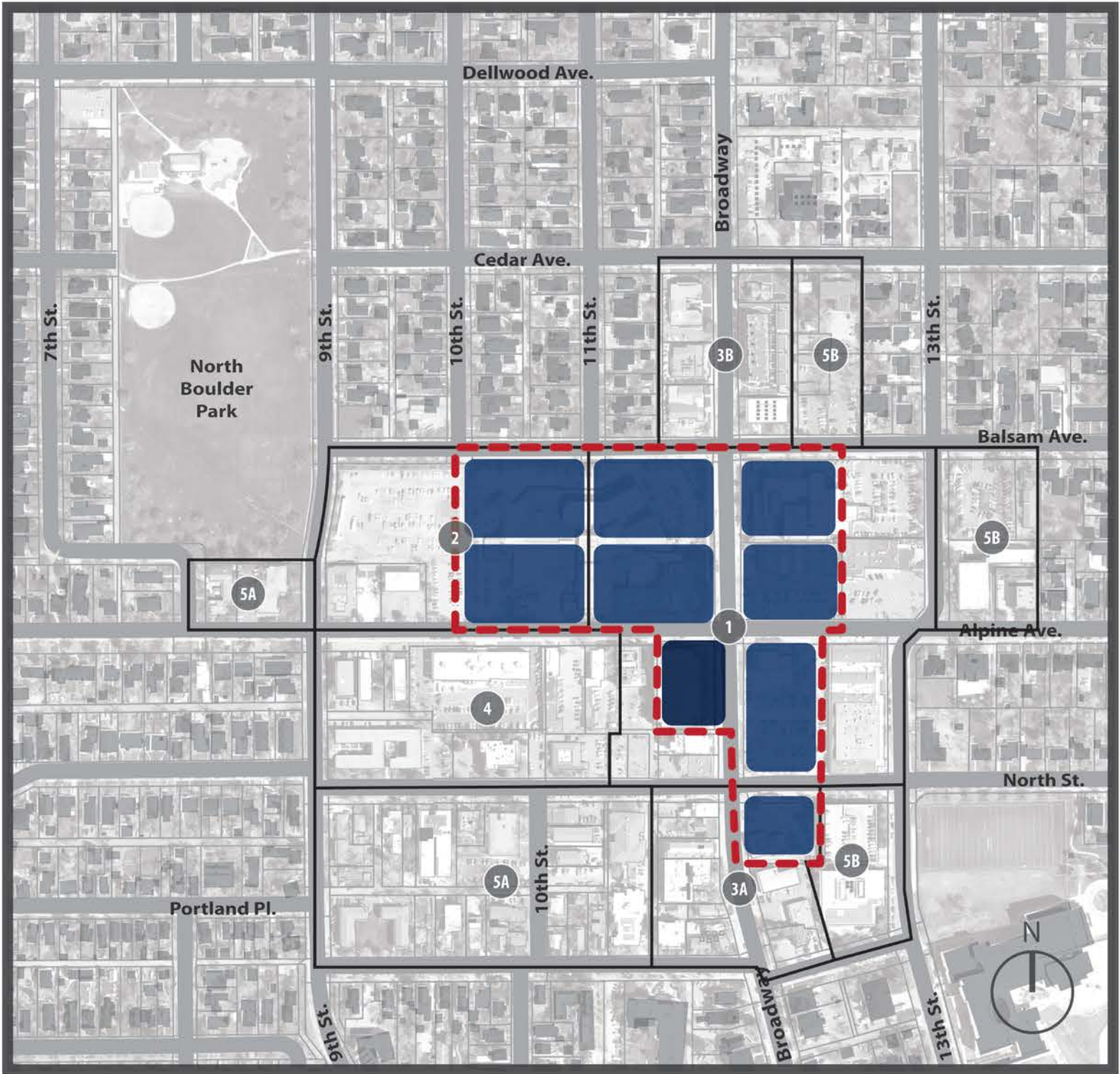


Option 5 - Emphasize Mixed-Use with Strong Civic Presence  
Urban Design Elements

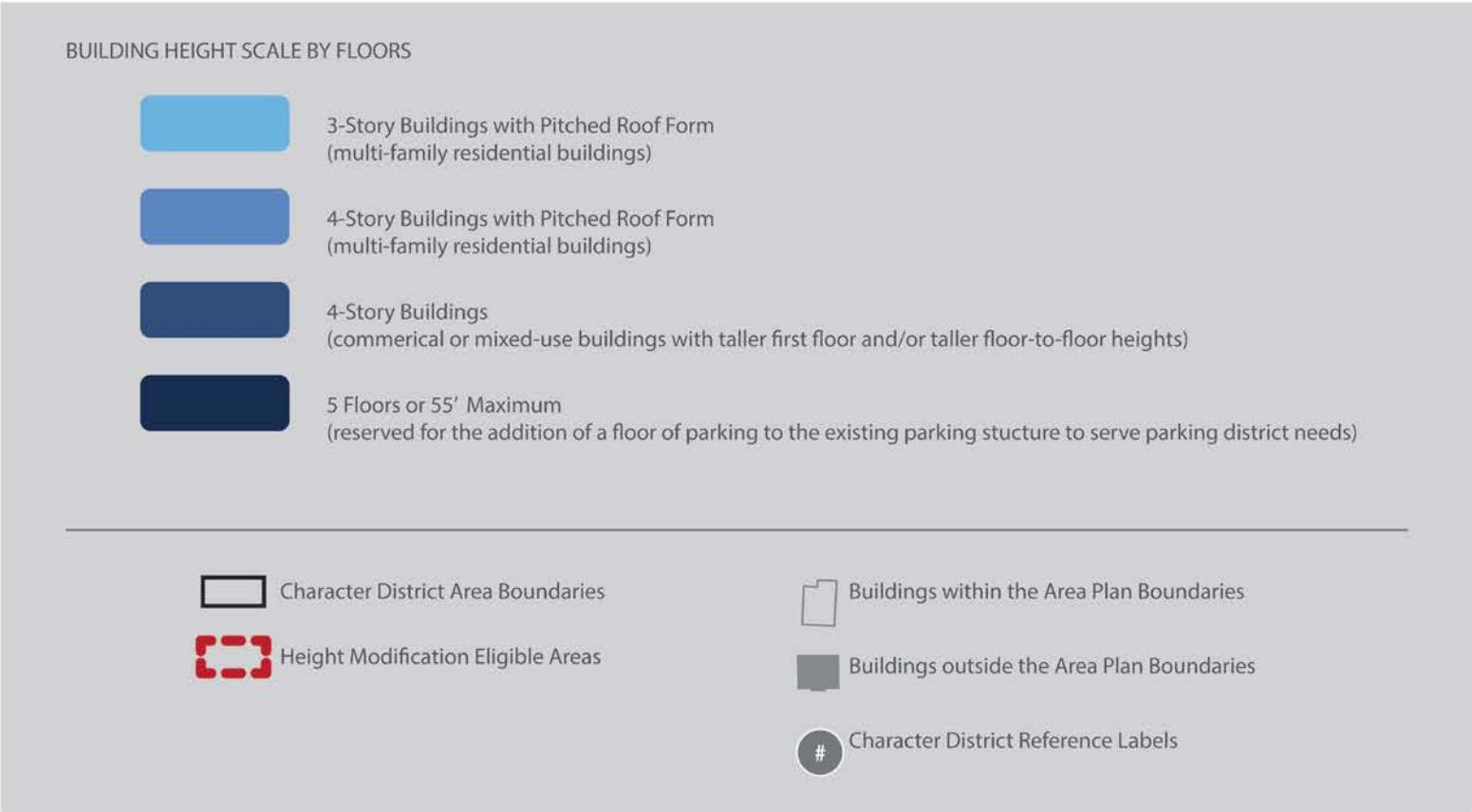




Option 5 - Emphasize Mixed-Use with Strong Civic Presence



Option 5 - Emphasize Mixed-Use with Strong Civic Presence  
Areas of Potential Height Modification



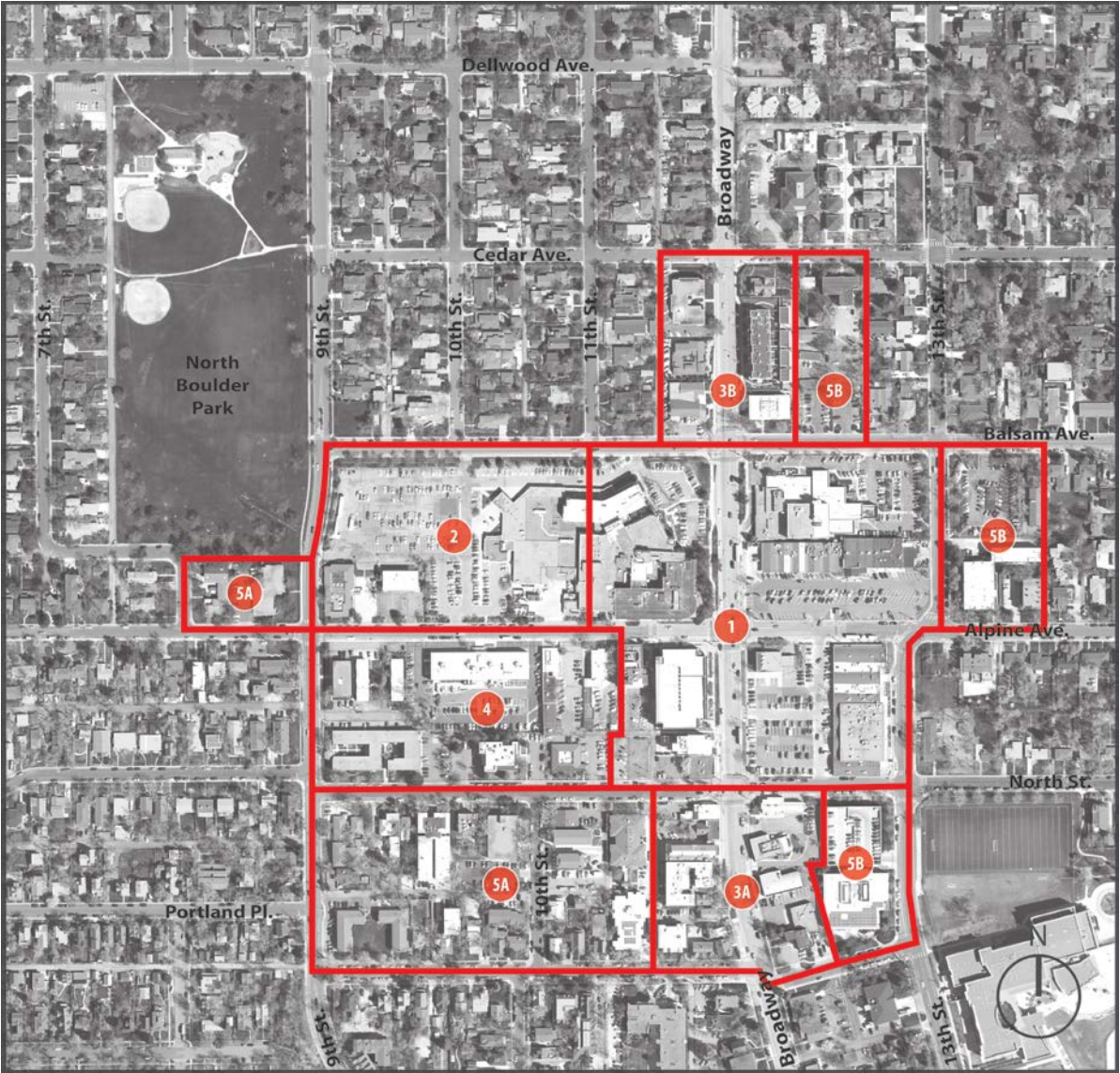


**B. Character Districts**

The planning area has been divided into five character districts, primarily based on current and potential future land use. Current land use and physical character of each district is described in more detail below. Also included is a summary of community feedback about concerns, opportunities, observations on the role that the district and its features and uses play within the larger community.

The Character Districts for describing the future state of the Planning Area are:

- 1 Neighborhood Center
- 2 Redeveloped Hospital Site (Central and Western Portions)
- 3A Neighborhood Gateway South
- 3B Neighborhood Gateway North
- 4 Transitional Mixed Use
- 5A Mixed Residential Southwest
- 5B Mixed Residential East & Boulder County Clinic Facility

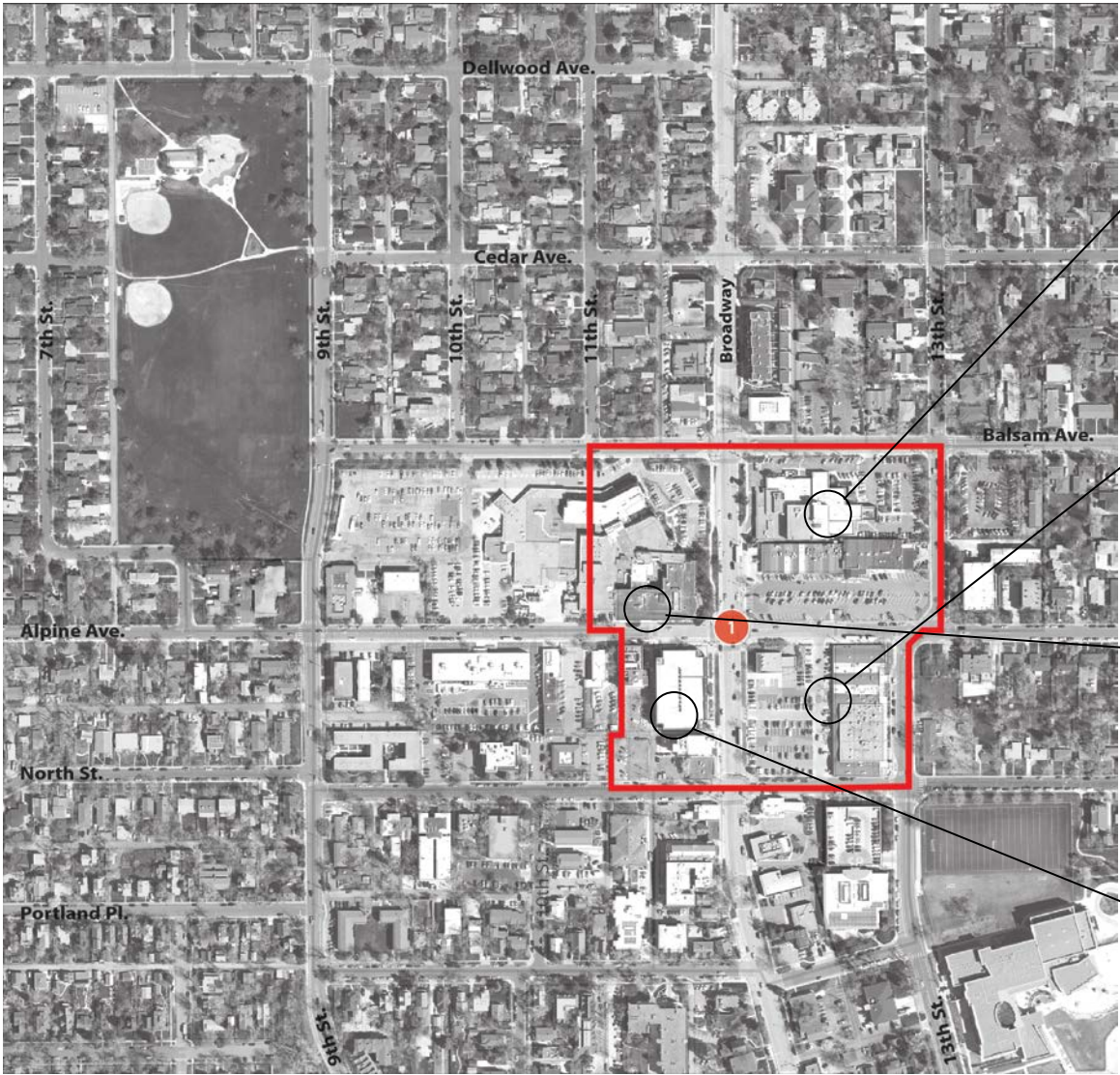




Character District 1: Neighborhood Center

The activities in Character District 1 serves as a Neighborhood Center that includes both locally serving retail and small offices as well as medical uses that have served a much wider community. The Community Plaza and Ideal Market Center and shops provide a range of retail uses and provide lively and popular gathering places. The Boulder Medical Center at Balsam and Broadway is a long-standing community medical provider with a range of services.

Deconstruction of the former Boulder Community Hospital and renovation of the Medical Pavilion into a future-serving City Service Center as well as the completed renovation of the Brenton Building and reuse of the parking structure will be a significant change for the center.



Land Use Options Character District 1 Neighborhood Center
<p><b>1. Current Trends / Preserve Existing Housing / Limited Growth:</b></p> <p>The current land uses for the commercial areas of the Neighborhood Center include Community Business (CB) and Transitional Business (TB). The land use for the former hospital properties is Public.</p>
<p><b>Land Use Options 2 – 5</b></p> <p>Mixed Use Business (MUB) land use type is proposed for the Neighborhood Center District in land use options 2 – 5 to achieve the following goals:</p> <ul style="list-style-type: none"><li>Maintain existing commercial and medical uses: These are highly valued and recommended to remain as anchors of the neighborhood center. The MUB land use type is quite flexible and would accommodate maintaining the current uses and allowing some redevelopment.</li><li>Develop city service hub: The current uses are dominated by retail and medical services. A local government service center would provide daytime activity and employment in the area that would to some degree replace the activity generated by the hospital’s hundreds of employees and visitors.</li><li>Possibly add housing: Currently there are no housing units in the Neighborhood Center district. While the district is largely surrounded by high, medium and low-density residential uses, the district could benefit from the addition of housing units, bringing greater daytime and nighttime vitality to the area. New housing could be located either above the existing (or new) structures or in areas currently occupied by surface parking.</li></ul> <p><b>Areas Proposed for Allowed Height Modification</b></p> <p>The options differ in proposed areas of building heights over 35 feet.</p> <p><b>Option 2: Emphasize Housing</b> - heights up to 55 feet only on the city site.</p> <p><b>Options 3 Strongly Emphasize Housing:</b> heights up to 55 feet more widely throughout the neighborhood center.</p> <p><b>Options 4 Emphasize Mixed Use:</b> heights up to 55 feet on the city site and Boulder Medical Center.</p> <p><b>Option 5 Emphasize Mixed-Use with Strong Civic Presence:</b> heights up to 55 feet more widely throughout the neighborhood center.</p>

Urban Design Goals:

- The neighborhood center serves as the most intense of all the districts with higher densities of land use and 3 and 4 story buildings allowed
- Tallest buildings are located close to Broadway with decreasing heights that transition to adjacent residential uses
- New buildings provide for ground-floor frontages on Broadway to enliven the public realm. For commercial buildings, the front of the ground floor should present an active and inviting presence on the street.
- Public spaces are welcoming and encourage formal and informal gathering
- Avoid large surface parking lots and look to district-wide parking management strategy
- Explore potential eligibility of structures in the district for landmark designation. Landmark designation does not indicate a static environment, but strives to provide a criteria for historic buildings and neighborhoods to adapt and change with the times, while protecting their historic character and history.

Character District 1: Neighborhood Center

**What is proposed for the East Block of the City Site**

The Broadway Corridor provides an excellent framework to link the Alpine-Balsam site to the Civic Area, creating a civic corridor between these two nodes to provide city services on the western edge of town.

- All options currently assume renovation of the Medical Pavilion for a future City Service Hub. The Alpine-Balsam site is a key location for the city to provide services now and well into the future. The service hub would include community gathering spaces, a public plaza, likely some small retail, and other amenities. Renovation may include adding a full or partial 4<sup>th</sup> floor to the building.
- The northern part of the east block is being considered a “Flex Space”, for which future uses can be left undetermined in the near-term as other decision-making around city facilities consolidation proceeds. The additional approximately 80,000 square feet that could be built in this space, if combined with the Pavilion and Brenton buildings, could meet the needs for further city facility consolidation, other civic/community and small-scale retail uses, or provide an opportunity for additional housing units.
- Other potential civic uses that have been suggested as part of the Pavilion renovation or in other new civic buildings in the area include: a multi-cultural and/or Senior Center, incubator retail space, community meeting spaces, or shared civic use spaces with Boulder County should the county’s health and human services function locate at Alpine-Balsam.

**Access and Mobility**

An Access District and Transportation Demand Management (TDM) Strategy is proposed for the city site and may be employed more widely through the neighborhood center and area. The approach includes creation of a general improvement district that would collect property taxes for on-going programs and services. For example, the Access District revenue would fund capital infrastructure improvements, on-going TDM programs and services, curbside management, mobility hub services, and parking management and operations.

Several alternatives exist for the geographic boundaries and focus for a district(s) within the Alpine-Balsam area. Initially, the district could be formed just within boundaries of the city-owned properties and include both a parking management component as well as a TDM component. This includes a shared parking strategy using the existing city-owned parking structure and guided by SUMP principles; shared, unbundled, managed and paid parking strategies. Depending on community and property-owner interest, other nearby areas could be included initially for one or both of the districts or could be expanded as nearby residents and property-owners seek TDM benefits or upon redevelopment, seek parking reductions or shared parking approaches.

**Community Feedback**

City Service Hub

- Support for a balance of civic uses and housing. People expressed excitement for developing a community hub, bringing added life and diversity to the area. People would like the center to provide benefits to the community, such as space for meetings, space for nonprofits or start-up businesses.
- Desire for the city to use their facilities to be a model for sustainability (LEED certification, net zero building with green roofs).
- Mixed views about advanced mobility strategy and parking reductions: some in support and others raising concerns about not providing enough parking for uses.
- Some questions around Alpine-Balsam as the best location for a city service center, offering downtown or eastern Boulder as better locations.
- Concern about traffic and congestion impacts of staff and customers coming to the area.

Commercial Uses in the Neighborhood Center

- Love for Community Plaza and Ideal Market and shops. Specifically, people value: the historic facades; the presence of gathering spaces; the small-scale and local nature of the shops; the ease of parking; the abundant sunlight; and the mountain views to the west. There was mixed feedback about adding additional uses to the shopping centers.
- Strong support for medical offices like Boulder Medical Center to remain in the area.

Housing Opportunities

- Areas where people had suggestions for where new housing could be added in the area include:
  - retail centers above the existing retail buildings (if that could be done without jeopardizing the appealing and historic facades) or in the areas currently occupied by surface parking lots (with a structure that combined parking and residential units);
  - Other surface parking lots especially if parking can be shared within a wider district.



Character District 2: Redeveloped Hospital Site (Center and West Blocks)

Character District 2 is the center and west blocks of the city site. The majority of the district is owned by the City of Boulder and occupied by the building formerly occupied by Boulder Community Hospital and surface parking that served the hospital. Deconstruction of the hospital will free up approximately three acres of land for redevelopment.

There are two privately owned parcels at the southwest corner of the district – single story buildings occupied by medical use.



Land Use Options – Character District 2 - Redeveloped Hospital Site
<p><b>1. Current Trends / Preserve Existing Housing / Limited Growth:</b> <b>Land Use Prototypes: Medium Density Residential 1, 2</b> The current land use is public and with the deconstruction of the hospital no current trends option exists. Option 1 proposes medium density housing as a ‘minimal growth’ option reflecting future land use on the lower end of what is seen for multi-family housing in the wider area. It would include residential uses in the form of attached homes and small multi-family buildings including townhomes, mews apartments and small footprint fourplex apartments.</p> <p>SW corner parcels are proposed for Transitional Business Land Use Prototype to reflect current uses.</p>
<p><b>2. Emphasize Housing:</b> <b>Land Use Prototypes: High Density Residential 1, 2, 3</b> The future vision for the area would include residential uses in the form of stacked flats from three to four floors in height in the center block and single-family attached townhomes or stacked flats from two to three floors on the west block.</p> <ul style="list-style-type: none"><li>Height modification is proposed for the center block to accommodate pitched roofs on 3 story buildings and potentially a 4 story building fronting Alpine.</li></ul>
<p><b>3. Strongly Emphasize Housing:</b> <b>Land Use Prototypes: High Density Residential 2, 3</b> The future vision for the area would include 3 and 4 story, larger footprint apartment buildings including courtyard or bar style buildings.</p> <ul style="list-style-type: none"><li>Height modification is proposed for the center block to accommodate pitched roofs on 3 story buildings and potentially a 4 story building fronting Alpine.</li></ul>
<p><b>4. Emphasize Mixed Use:</b> <i>For this option, the proposed land uses are the same as Option 2 Emphasize Housing</i></p>
<p><b>5. Emphasize Mixed Use with Strong Civic Presence:</b> <b>Land Use Prototypes: Mixed Use Business (MUB) &amp; High Density Residential 2</b> The future vision would include county services and structured parking in the center block that would be up to 55 feet and 2-3 story alley-loaded rowhouse or multiplex apartment units on the west block.</p> <ul style="list-style-type: none"><li>Height modification is proposed for the center block to accommodate the building square footage needs of the county’s service center and parking structure.</li></ul>

Urban Design Goals
<ul style="list-style-type: none"><li>Establish an east-west greenway or linear park connection for flood mitigation.</li><li>Increase pedestrian connections through the site.</li><li>For residential buildings, the entries should utilize clear way-finding by expressing well-defined entries and differentiation between the public and private realm. All residential buildings should provide quality communal open space opportunities for residents.</li><li>Minimize surface parking and develop access and mobility amenities, like a mobility hub, that help achieve Transportation Master Plan goals.</li><li>Land uses should support the ability to provide limited parking, taking advantage of the proximity to the transit-rich Broadway corridor and other advanced mobility strategies.</li></ul>

Flood Mitigation Options
<p>Analysis of flood mitigation options and ground water testing have informed recommended additional analysis on the following two options:</p> <ul style="list-style-type: none"><li><u>Mitigation in North Boulder Park that achieves less than 50% flow detention but has fewer design impacts.</u></li><li><u>Site-specific flood mitigation only.</u> This option would be studied to better understand the impacts of an approach that just regulates to city standards and does not attempt to address the impacts of the 100-year flood in the surrounding neighborhood. The option would likely entail some fill and grading to move the floodplain and may require elevating buildings.</li></ul>

Character District 2: Redeveloped Hospital Site (Center and West Blocks)

Housing Considerations

Affordable housing for low- and moderate-income households remains an ongoing need in Boulder. Housing needs that are more challenging to meet in Boulder include affordable senior housing, permanently supportive housing (PSH) for people transitioning out of homelessness, housing for people with disabilities and low/moderate and middle-income priced for-sale homes. Creating a community of seniors, urban downtown homeowners and folks getting on their feet with the help of support services could create the envisioned “vibrant multi-generational hub for community life” as outlined in the Alpine-Balsam Vision.

To meet these identified needs, the options explore a range of housing types in the form of mixed-use apartment blocks, courtyard apartments, condominiums and townhomes. Apartments and condominium/townhomes have a number of benefits including placing people in close walking distance to amenities, supporting pedestrian and bike friendly environments, and increasing density to support local businesses. Townhomes and other attached single-family, can provide livability similar to single-family homes at a lower cost and less private yard space. Low-rise apartments and townhomes can help to transition from single-family residential areas to busy corridors and other commercial uses.

Factors of consideration for housing affordability on the city site include:

- Allowable density directly affects the ability for the site to support a development of sufficient size for 100% affordable rental development leveraging state and federal funds. It also affects the amount of cash-in-lieu the development will generate.
- In order to ensure funds are available when needed to support the affordable project, the site could contain a second similarly sized market-rate development that would contribute cash-in-lieu.

Access and Mobility

The proposed approach for access and mobility for Character District 2 include a shared parking strategy using the existing city-owned parking structure and guided by SUMP principles; shared, unbundled, managed and paid parking strategies to reduce the need to build additional parking in the planning area. Not only is parking expensive to build and maintain, it is likely that parking demand will reduce in the future as advanced mobility technology and innovations increase their impact on travel behavior.

Residential parking requirement should be limited to one parking space per unit or less, and maximums set for commercial parking similar to Boulder Junction and the TMP access and mobility level. Wherever parking is managed, it is important to consider and mitigate the impact of spill over parking in surrounding commercial and residential areas. To mitigate the impacts, the Alpine-Balsam district will need to work with the surrounding property owners to determine what policies and strategies will need to be implemented to manage spillover into the neighborhoods.

Option 5 – County Facilities at Alpine-Balsam

Boulder County has expressed an interest in co-locating at Alpine-Balsam for relocation of their Health and Human Services functions into a new hub that would consolidate and replace functions at Iris and Broadway. Considerations about Option 5 include:

- The county’s minimum space requirement is 120,000 square feet for the service hub and structured parking which could only be accommodated in the center block.
- An exemption from city height restriction would be needed to enable construction of both the building and parking structure up to 55 feet.
- If the new hub could be located at Alpine-Balsam, Boulder County would sell property at the Iris Complex with the goal of creating affordable housing. Many other factors would need consideration and planning including the future of the existing ball fields, historic buildings, flood plain, density and types of units, and many other factors.

Community Feedback

**Mixed Views on New Housing and Density** Because of the area’s close proximity to downtown, jobs, services, and transit, some see the area as an ideal location to add density in order to address critical housing needs in an innovative and attractive way. Conversely, some neighborhood residents have concerns about adding too much housing on the city’s site that is “too big” and could negatively impact traffic, parking, services, and visual character.

Many participants in the small-group workshops and online questionnaire thought if there were to be additional housing in the area, the city-owned property was most appropriate location. Ideas that were expressed for future housing at the city-owned site include:

- Strong support for the housing to be affordable and meet many of the critical needs: workforce, families with children, seniors, hard-to-house populations, like seniors and people living with disabilities, as well as those transitioning from homelessness.
- Build or improve existing housing character and diversity, supporting existing residents
- Include measures to improve transit and other mobility programs
- Include green space
- Make sure there is a variety of heights that cascade down into the neighborhood to create more visual appeal of the site. Taller buildings should be closer to Broadway
- Buildings should be varied in appearance and attractive

Community Feedback has been mixed about the appropriateness of **locating Boulder County facilities at Alpine-Balsam** and moving from the Iris Complex.

- Curiosity about the benefits of co-locating city and county uses and support for affordable housing at Iris
- Concern about too many civic uses at Alpine-Balsam resulting in a lack of evening activity
- Concern about added traffic and parking
- Commenting on an early scenario that presented a civic campus, people were more in favor of the less impactful or moderate civic facilities scenarios than the civic campus concept.



Character District 3: Neighborhood Center Gateways

Two areas serve as North and South “Gateways” to the Alpine-Balsam Neighborhood Center along Broadway. The gateways signify entrance to a node of activity, and they also serve as transitions from the more mixed-use and energy-filled neighborhood center to the less intense residential areas to the north and south.

The North Gateway includes residential uses a half-block deep on both the east and west sides of Broadway between Balsam and Cedar Avenues. The half block on the east side of Broadway is occupied by a several decades-old three-story mid-sized multi-family building, a row of recently constructed three-story townhomes, and a single-family home. The half block on the west side of Broadway is occupied by a one-and-one-half story professional services building and a several decades-old three-story mid-sized multi-family building. *No changes to land use are proposed for this area.*

The South Gateway includes the half block areas that front on the east and west sides of Broadway between Portland Place and North Street.

- The east side of Broadway is occupied by one-and two-story commercial structures occupied by retail, service, office, and drive-through banking uses. Each structure is served by adjacent surface parking.
- The half-block on the west side of Broadway is occupied by several two-story single-family houses, several two- and three-story commercial (office) structures, and a one-story restaurant. Three buildings on the west side of Broadway at Portland Place are part of the Mapleton Hill Historic District.



Land Use Options - Character District 3 Neighborhood Center Gateways
<p><b>1. Current Trends / Preserve Existing Housing / Limited Growth:</b></p> <p>The current land use in the <u>north gateway</u> is High Density Residential and it is <u>not proposed</u> for a change in any of the Land Use Options. The current land uses in the <u>south gateway</u> are</p> <ul style="list-style-type: none"><li>• Mixed Use Residential and Community Business (west of Broadway)</li><li>• Mixed Use Business and Community Business (east of Broadway)</li></ul> <p><b>Land Use Prototypes: Mixed Use Residential (MUR) west of Broadway</b></p> <p>The change would better reflect current uses.</p>
<p><b>2. Emphasize Housing:</b></p> <p><b>Land Use Prototypes: Mixed Use Residential (MUR)</b></p> <p>The future vision for the area would change from commercial to mixed use with one level commercial uses and housing above – or would allow all residential uses.</p>
<p><b>3. Strongly Emphasize Housing:</b></p> <p><b>Land Use Prototypes: Mixed Use Residential (MUR)</b></p> <p>The future vision for the area would change from commercial to mixed use with one level commercial uses and housing above. Would allow all residential uses. Could allow more units if area included for height modification</p> <ul style="list-style-type: none"><li>• Height modification is proposed for the southeast corner of Broadway and North to allow more housing to be achieved in potential mixed-use redevelopment.</li></ul>
<p><b>4. Emphasize Mixed Use:</b></p> <p><b>Land Use Prototypes: Mixed Use Business (MUB)</b></p> <p>The future vision would allow some increase in density and encourage either residential or commercial mixed-use development. The change would encourage adding housing if properties redevelop but would encourage or at least accommodate some non-residential uses with housing above.</p>
<p><b>5. Emphasize Mixed Use with Strong Civic Presence:</b></p> <p><b>Land Use Prototypes: Mixed Use Business (MUB)</b></p> <p>The future vision would allow some increase in density and encourage either residential or commercial mixed-use development. The change would encourage adding housing if properties redevelop but would encourage or at least accommodate some non-residential uses with housing above.</p> <ul style="list-style-type: none"><li>• Height modification is proposed for the southeast corner of Broadway and North to allow more housing to be achieved in potential mixed-use redevelopment.</li></ul>

**Urban Design Goals**

Primary entrances should be oriented towards Broadway or another street (if it functions as a primary frontage).

- Buildings should provide a "semi-building forward" and a pedestrian friendly presence on Broadway. “Semi-building forward” means that buildings should be oriented towards the Broadway frontage, but with a modest front-yard setback, especially for residential buildings.

**Community Feedback**

North Gateway: This area received minimal community feedback.

South Gateway: Many people recognized that this is an area (especially the east side of Broadway) that could benefit from change in some areas. People appreciate the Hungry Toad as well as the historic buildings near Portland Place. Some indicated support for not being too prescriptive about future uses, allowing redevelopment to respond to future needs and market forces. Many people indicated a support for ground-floor commercial uses with housing above and offer favorable reactions to the mixed-use building on the east side of Broadway.



Character District 4: Transitional Mixed Use

The area bounded on the south by North Street, on the west by 9<sup>th</sup> Street, on the north by Alpine Avenue, and on the east by a north-south line drawn slightly to the west of the city-owned Brenton Building.

The district accommodates a wide range of uses including medical and professional offices and multi-family housing. Building scales are generally small to mid-sized and range from one to three stories in height. Most of the uses are supported by surface parking, which occupies a significant amount of the land area.



Land Use Options - Character District 4 Transitional Mixed Use
<p><b>1. Current Trends / Preserve Existing Housing / Limited Growth:</b></p> <p>The current land uses in the district are</p> <ul style="list-style-type: none"><li>Transitional Business</li><li>High Density Residential</li><li>Mixed Density Residential (MXR)</li></ul> <p><b>Land Use Prototypes:</b> <b>High Density Residential 1</b> in select MXR areas that are already developed at higher densities and are currently non-conforming Other land uses would remain. The non-residential uses have limited ability to expand or change due to the restrictiveness of the current land use and zoning.</p>
<p><b>2. Emphasize Housing:</b></p> <p><b>Land Use Prototypes:</b> <b>High Density Residential 1, 2</b></p> <p>The future vision for the area would change from the mix of commercial businesses to predominantly housing. Housing could be characterized by 2-3 story residential buildings.</p>
<p><b>3. Strongly Emphasize Housing:</b></p> <p><b>Land Use Prototypes:</b> <b>High Density Residential 2, 3</b></p> <p>The future vision for the area would change from the mix of commercial businesses to predominantly high-density housing. Rationale is that it is a good place to maximize housing opportunity and a good opportunity minimize access and parking impacts by expanding the parking district. Would require a height modification for some sections.</p> <ul style="list-style-type: none"><li>Height modification is proposed for areas suggested for conversion from non-residential uses to high density housing. Guidelines can be tailored to describe intent for height modification (e.g. allowing 3 stories with pitched roofs ~40’ or up to 4 stories in certain locations with community benefit of affordable housing)</li></ul>
<p><b>4. Emphasize Mixed Use:</b></p> <p><b>Land Use Prototypes:</b> <b>Mixed Use Residential (MUR) and High Density Residential 1</b></p> <p>The future vision would allow some increase in density and encourage either residential or commercial mixed-use development. The change would encourage adding housing if properties redevelop but would encourage or at least accommodate non-residential uses with housing above.</p>
<p><b>5. Emphasize Mixed Use with Strong Civic Presence:</b></p> <p><b>Land Use Prototypes:</b> <b>Mixed Use Residential (MUR)</b></p> <p>The future vision would allow some increase in density and encourage either residential or commercial mixed-use development. Mixed use acknowledges city and county presence across Alpine and encourages the county mental health partners use to remain. The change would encourage adding housing if properties redevelop but would encourage or at least accommodate non-residential uses with housing above.</p>

Land Use and Urban Design Goals:

Urban Design Goals for the District (regardless of Option):

- Continue to serve in a “transition” role:
  - between the busy, commercial uses along Broadway and the quieter, predominantly mixed-residential uses west of 9th Street;
  - between the redeveloped mixed-use redevelopment of the city-owned land (north of Alpine) and the medium- to high-density residential development south of North Street
- Minimize surface parking, taking advantage of the proximity to the transit-rich Broadway corridor.
- A mid-block ped/bike connection between Alpine and Balsam is desired and reflected on the Connections Plan.
- While some front setback seems appropriate (especially on the south side of the district for the parcels fronting on North Street), new buildings should be sited generally towards the front of their sites, principal entries should be on the front, and surface parking should not be located between the building and the street.
- For commercial or mixed-use buildings, the front of the ground floor should present an active and inviting presence on the street.
- Any regulatory changes should support the ability to provide limited parking.
- Any regulatory changes should strive to ensure that all existing uses and structures are conforming.

Community Feedback:

- People appreciate the existing mix of uses, including medical uses.
- Comments about the character of buildings in this district included recognition that several are aging and may not be well-suited for preservation.
- People identified the big blocks of surface parking in the area and suggested these have potential for redevelopment.
- If redevelopment occurs, people expressed preferences for encouraging ground-floor commercial with residential above.
- Many people expressed concern that redevelopment or renovation of the existing residential uses could impact affordability.



Character District 5: Mixed Residential

Character District 5 includes areas that are primarily residential, where the future vision is to largely maintain the existing character and land uses. Proposed changes to land use in these areas only aim to “clean-up” and clarify land use to inform zoning that aligns with the current densities and reduces the non-conforming status of residential development.

Character District 5 includes two Mixed Residential sub-districts that serve as a transition from the denser mixed-use and commercial orientation of the Broadway corridor to the quieter, less dense, and predominantly single-family residential nature of the adjacent neighborhoods. Each is, and will likely remain, predominantly (but not exclusively) residential.

Character District 5A: Most of this sub-district (Mixed Residential Southwest) is located between North Street and Portland Place, bounded on the east by an alley running behind the parcels that face eastward onto Broadway, and bounded on the west by 9<sup>th</sup> Street. A small portion of the District 5A is located between 9<sup>th</sup> and 8<sup>th</sup> Street, north of Alpine Avenue, and south of North Boulder Park. The District is dominated by small to modest sized multi-family complexes, duplexes, and single-family homes. It has more dwelling units (over 170) than any other single part of the planning area. Many of the buildings are 50+ years old and some may be eligible for landmark designation; a number of the structures along Portland, especially, represent early 20<sup>th</sup> century housing types.

Character District 5B: This sub-district (Mixed Residential East) is divided into three sections. The north section is bounded on the south by Balsam Street, on the north by Cedar Avenue, and on the west by a north-south running alley located one-half block east of Broadway. The eastern boundary is the parcel lines behind the houses that face eastward onto 13<sup>th</sup> Street. The center section is bounded on the north by Balsam Street and on the south by Alpine Avenue, on the west by 13<sup>th</sup> Street, and on the east by a line running north-south approximately midway between 13<sup>th</sup> and 14<sup>th</sup> Streets. The south section is bounded on the north by North Street, on the east by 13<sup>th</sup> Street, and on the south by Portland Place. It is occupied by a parking structure and offices occupied by Boulder County.

The north section has an eclectic mixture of single-family structures, three-story stacked flat multi-family residences, and surface parking. The largest single feature of the south section is a surface parking lot that serves as employee parking for the Boulder Medical Center. It also contains a two-story multi-family development.



Land Use Options – Character District 5 Mixed Residential
<p><b>All Land Use Options:</b></p> <p>The current land uses are predominantly Mixed Density Residential (MXR), High Density Residential (HR), and a small area with Medium Density Residential (MR)</p> <p><b>Land Use Prototypes: Mixed Density Residential (MXR) and Medium Density (MR) to High Density Residential 1 (HR1)</b></p> <p>The proposed clarifying changes include: 5A small area just south of North Boulder Park that is currently developed at a density of over 30 units per acre and 5B small area east of Broadway, between Balsam and Cedar that splits parcels and is partially developed at high density levels.</p>
<p><b>Land Use Options 2. Emphasize Housing and 3. Strongly Emphasize Housing:</b></p> <p>Small area of 5B at 13<sup>th</sup> and Portland Ave. occupied by Boulder County Facilities. The current land use is Community Business. In each of the housing emphasis options, Mixed Use Residential (MUR) Prototype is proposed here to signal a desired change to support conversion to mixed use and housing in the unlikely event this facility should not continue to be used as a civic service facility.</p> <p><b>Land Use Prototypes: Community Business Mixed Density Residential (MXR) to High Density Residential 1 (HR1)</b></p>

Urban Design Goals:

- In all of the options, the proposed land uses reflect keeping the basic mix and character of each sub-section of this District largely unchanged.
- If, due to age or otherwise, properties redevelop, the redevelopment should strive to achieve compatibility with existing structures in terms of scale, massing, and site design.
  - If the Boulder Medical Center was ever able to meet its employee parking needs without the need for the surface parking lot, this would make a suitable site for moderate-sized multi-family housing.
  - The Land Use and Zoning should allow and encourage new development to limit the amount of parking, especially in the form of surface parking.



## C. Land Use Prototypes Master Legend

### Medium Density Residential 1 (MDR 1)

#### Description

This prototype could be characterized by a moderate amount of residential density found in both detached and attached single-family homes on small parcels. To accommodate a more compact style of single-family residential housing than low-density residential, this prototype would allow for various, compact attached single-family housing types including cottage court housing, duplex and triplex units on smaller parcels. Regardless of the more compact nature of this prototype, each unit should include a portion of private yard space for each unit, though at a smaller size than traditional, single-family homes.

#### Who would live here?

This prototype offers a range of medium density housing likely to attract large or growing families along with couples, empty nesters or active seniors. Single-family units with visible yard space could be particularly attractive to families with young children. Pricing can range from affordable to high-end market rate



Intensity	Built Form	Similar Zoning
6-10 Dwellings Per Acre	2 Stories, under 35', Compact Footprint, Small Parcels	RM-1, RM-3, or create new zoning district

## Medium Density Residential 2 (MDR 2)

### Description

This prototype could be characterized by a moderate amount of residential density found in attached single-family homes and small multi-family buildings. Residential buildings in located in this area could include townhomes, mews apartments and small footprint fourplex apartments. Openspace could be a mix between communal openspace and small private yards.

### Who would live here?

This prototype offers a range of medium density housing likely to attract large or growing families along with couples, empty nesters or active seniors. Townhome or rowhouse units with visible yard space could be particularly attractive to families with young children. Apartments could provide opportunities for those looking to downsize or needing less space. Pricing can range from affordable to high-end market rate



Intensity	Built Form	Similar Zoning
10-20 Dwellings Per Acre	2-3 Stories, up to 35', Townhomes/Rowhouses, Compact Apartment Buildings, Mews and Carriage Houses	RM-1, RM-3, or create new zoning district



# Mixed Density Residential (MXR)

## Description

This prototype is currently represented by the existing area of Character District 5A. In addition, this land use accounts for a buffer area outside the southwest border of the area plan boundary. In this prototype there is mix of densities within the building types including single-family to multifamily residential buildings and commercial buildings. This prototype includes an existing density range from 5 to 50 dwelling units per acre and commercial properties with mixed FAR densities.



Intensity	Building Mass & Scale	Similar Zoning
5-60 Dwellings Per Acre	Varies, 1-4 stories, variety of residential and commercial types	Zoning established

# High Density Residential 1 (HDR 1)

## Description

This prototype would be the lowest of the high-density residential prototypes. It could be characterized by 2-3 story alley-loaded rowhouse units and multiplex apartments. In general, this prototype would have at-grade, communal openspace or greenspace. Most private openspace would be located on balconies or roof decks. Residential unit types could vary between compact, alley loaded rowhouses to small-scale, low-rise multiplex apartment buildings.

## Who would live here?

This prototype offers a range of housing likely to attract couples, people with disabilities, and families. Townhome or rowhouse units with visible yard space could be particularly attractive to families with young children. Apartments could provide opportunities for hard to house populations or permanently supportive housing. Pricing can range from affordable to high-end market rate

		
Intensity	Building Mass & Scale	Similar Zoning
Up to 30 Dwellings Per Acre	2-3 stories, no more than 35', mixed housing types from rowhouses to stacked flats	RM-3, RH-3, or create new zoning district



# High Density Residential 2 (HDR 2)

## Description

This prototype could be characterized by 3-story, larger footprint apartment buildings. Buildings could be in variety of orientations including courtyard or bar style buildings. Regardless of orientation or footprint, the building should provide beneficial at-grade openspace for residents with a sense of comfort and enclosure. This prototype would aim for a substantial amount of openspace at the ground (approximately 50%) to provide a relief to density and increase the types of the private & public openspace on the site.

This prototype would typically include 3-story buildings with a building height limit of 35'. It could be beneficial to encourage pitched roofs by allowing a height modification to accommodate a well-balanced roof form.

## Who would live here?

This prototype offers a range of higher density housing likely to attract singles, workforce, people with disabilities, young families, empty nesters and seniors. If designed with multiple bedrooms and amenities for children, larger units could attract growing families. Pricing can range from affordable to high-end market rate



Intensity	Building Mass & Scale	Similar Zoning
30-60 Dwellings Per Acre	3 stories, allow for heights above 35' for pitched roof forms.	RH-3, or create new zoning district

# High Density Residential 3 (HDR 3)

## Description

This prototype could be characterized by 4 story, larger footprint apartment buildings. Buildings could be in variety of orientations including courtyard or bar style buildings. Regardless of orientation or footprint, the building should provide beneficial at-grade openspace for residents with a sense of comfort and enclosure. This prototype would aim for a substantial amount of openspace at the ground (approximately 50%) to provide a relief to density and increase the types of the private & public openspace on the site.

This prototype would typically include 4-story buildings with a building height limit of 55'. It would be necessary to allow for a height modification to allow an additional floor and to encourage well-balanced pitched roof forms if desired.

## Who would live here?

This prototype offers a range of higher density housing likely to attract singles, workforce, people with disabilities, young families, empty nesters and seniors. If designed with multiple bedrooms and amenities for children, larger units could attract growing families. Pricing can range from affordable to high-end market rate



Intensity	Building Mass & Scale	Similar Zoning
60-90 DU/AC	4 stories, allow for heights above 35'.	RH-3, or create new zoning district



# Mixed Use Business (MUB)

## Description

This prototype could be characterized by single-use or mixed-use 4 story buildings. This prototype would be flexible to allow for a variety of commercial, public and high-density residential uses. This prototype would generally be oriented along a busy corridor similar to a main street and can provide a noticeable anchor feature at the corners of busy intersections.

As these buildings would be larger in scale, typical elements should include easily discernible entry features, welcoming forecourts to encourage public access and complimentary orientation to public and green spaces. Civic buildings should be clearly identifiable and inviting with amenity rich public spaces.

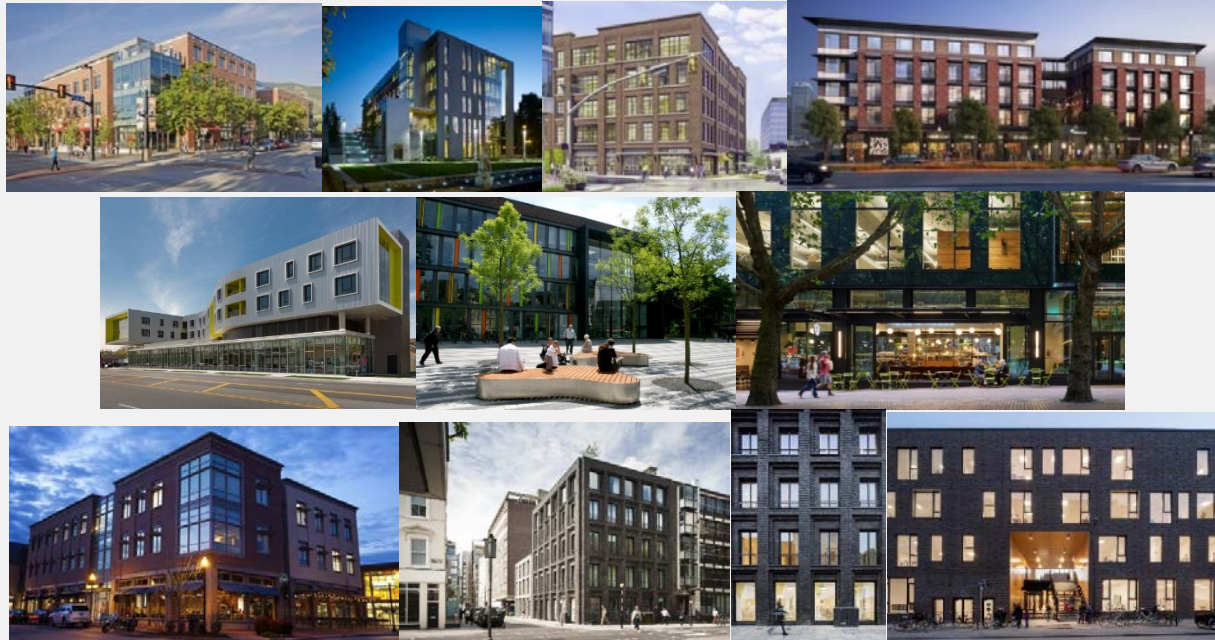
This prototype could incorporate pedestrian-oriented commercial opportunities with residential units. The buildings should be designed with a pedestrian in mind and programmed with an active ground floor level.

### Who would live here?

This prototype offers a range of higher density housing likely to attract singles, workforce, people with disabilities, young families, empty nesters and seniors. Pricing can range from affordable to high-end market rate

### Who would work here?

A combination of office workers involved in public service, professional and technical services, and workers involved in community serving retail, personal services and other small to medium retail establishments.



Intensity	Building Mass & Scale	Similar Zoning
FAR up to 2.5	4 stories, up to 55', Mid-rise block, Single use buildings or a mix of commercial, residential and/or public uses	BMS, or create new zoning district



# Mixed Use Residential (MUR)

## Description

This prototype could be characterized by single-use or mixed-use residential 3-4 story buildings. This prototype would focus on residential uses with or without a variety of community serving, active ground floor uses. This prototype would generally be oriented along a busy corridor similar to a main street and can provide a noticeable anchor feature at the corners of busy intersections.

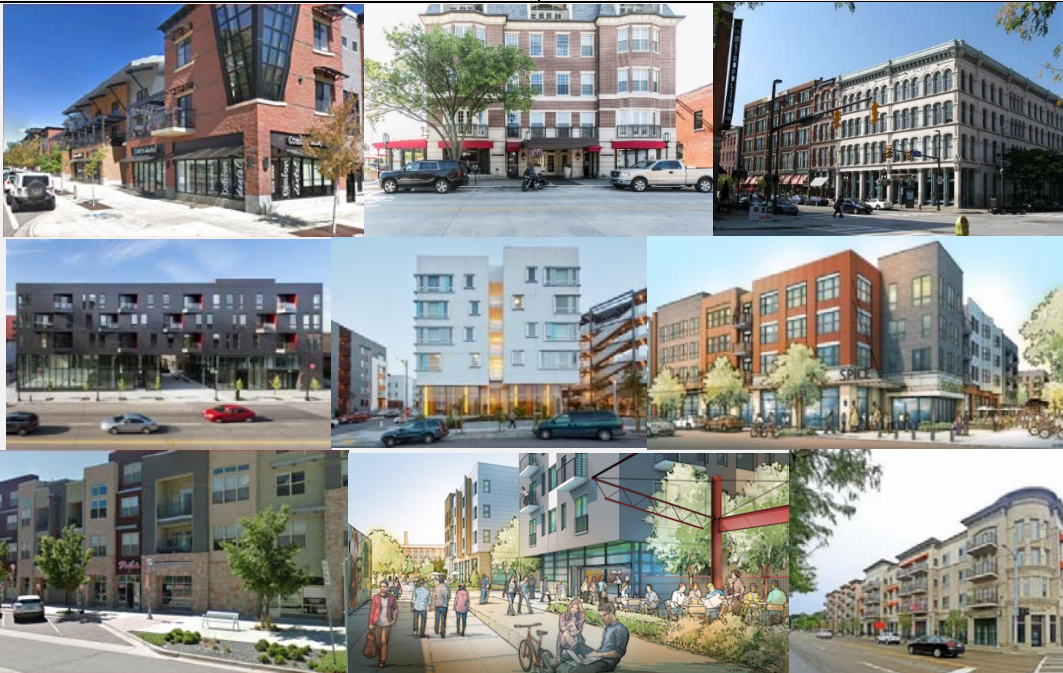
Similar to the MUB prototype, these buildings would be larger in scale. Typical elements should include easily discernible entry features, welcoming forecourts to encourage access and complimentary orientation to public and green spaces. In the case of an all residential building, an easily discernible and consolidated primary entry feature could be desired. In the case of a residential mixed-use building, ground floor civic and/or commercial uses should be clearly identifiable, inviting and situated adjacent to amenity rich public spaces.

### Who would live here?

This prototype offers a range of higher density housing likely to attract singles, workforce, people with disabilities, young families, empty nesters and seniors. Pricing can range from affordable to high-end market rate

### Who would work here?

Workers involved in community serving retail, personal services and other small to medium retail/commercial establishments.



### Intensity

Ground floor commercial .75 FAR, residential 40-60 DU/AC

### Building Mass & Scale

3-4 stories, up to 55', Mid-rise block, single use or mixed-use residential

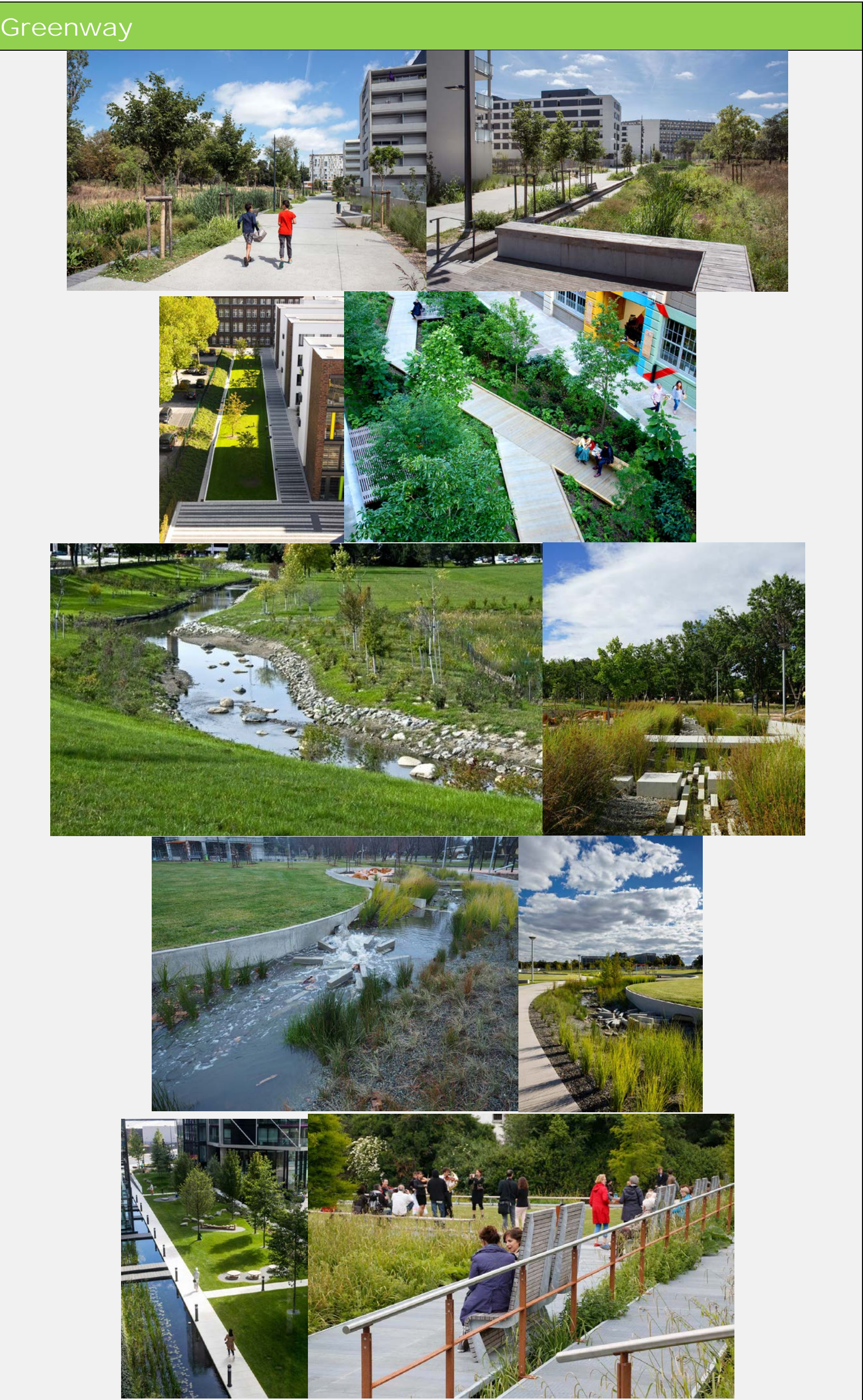
### Similar Zoning

MU-1, MU-2, or create new zoning district



URBAN DESIGN ELEMENTS & MASTER LEGEND

E. Urban Design Master Legend





URBAN DESIGN ELEMENTS & MASTER LEGEND

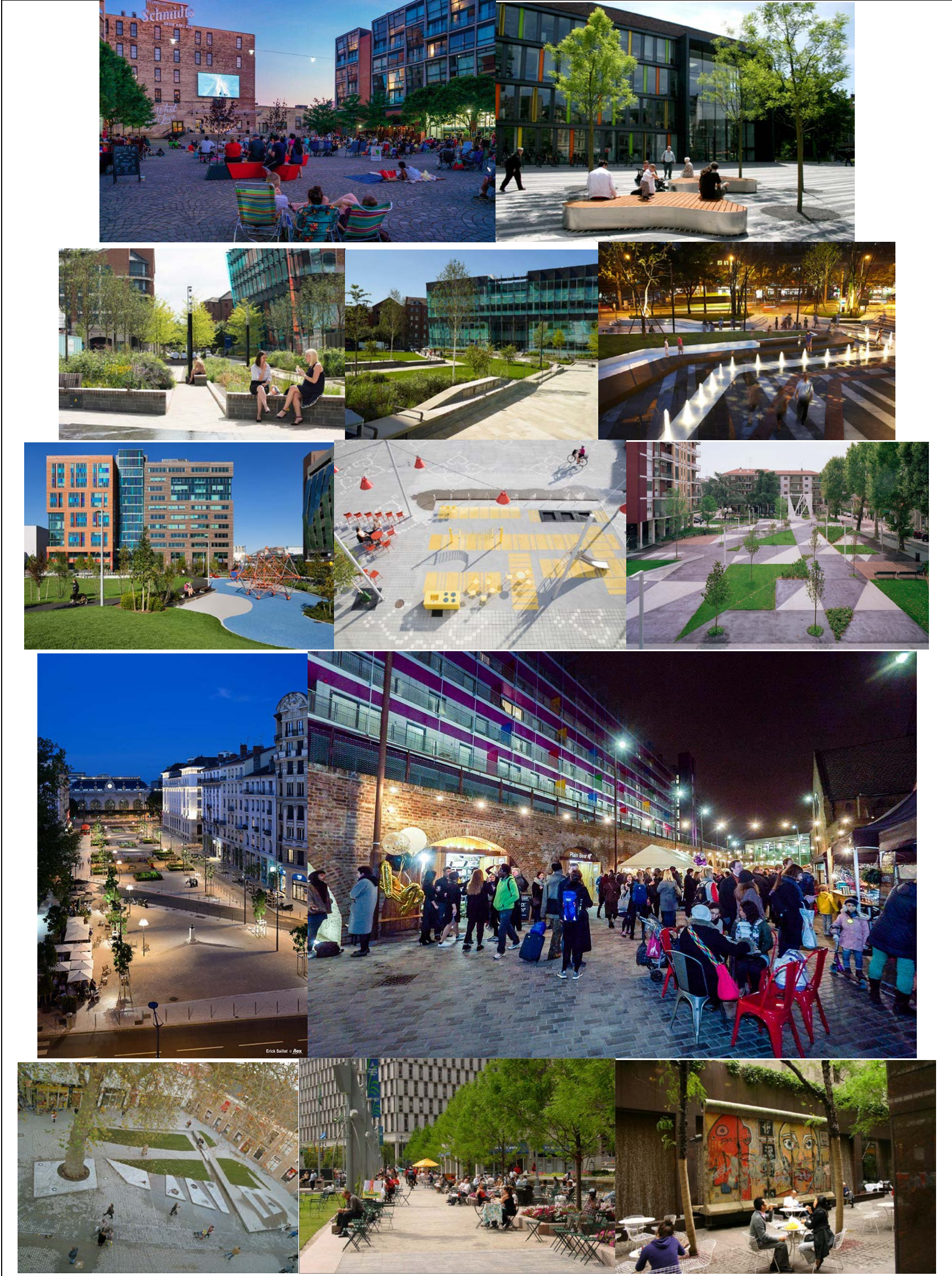
Linear Park





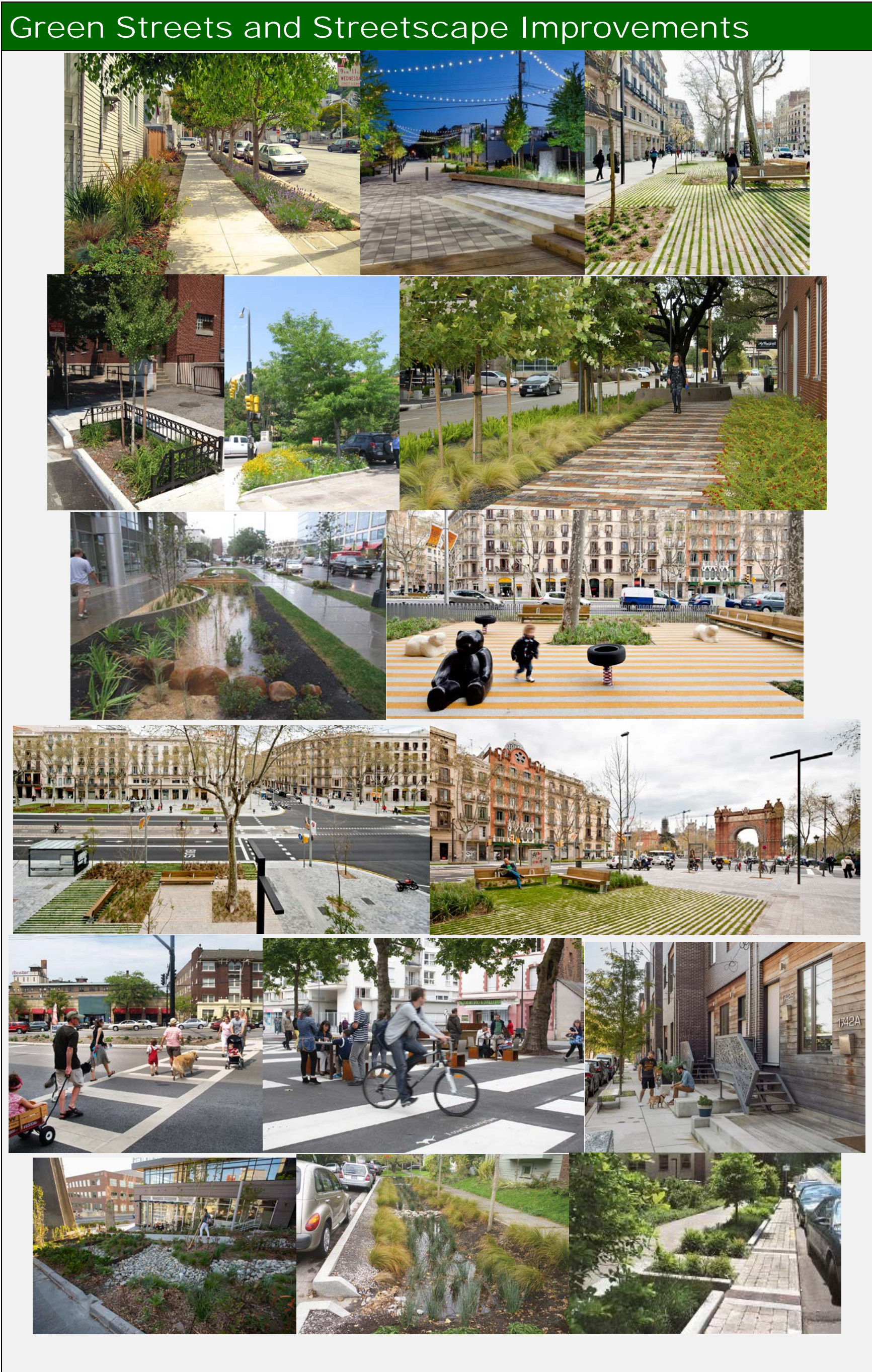
URBAN DESIGN ELEMENTS & MASTER LEGEND

Plazas & Public Gathering Spaces





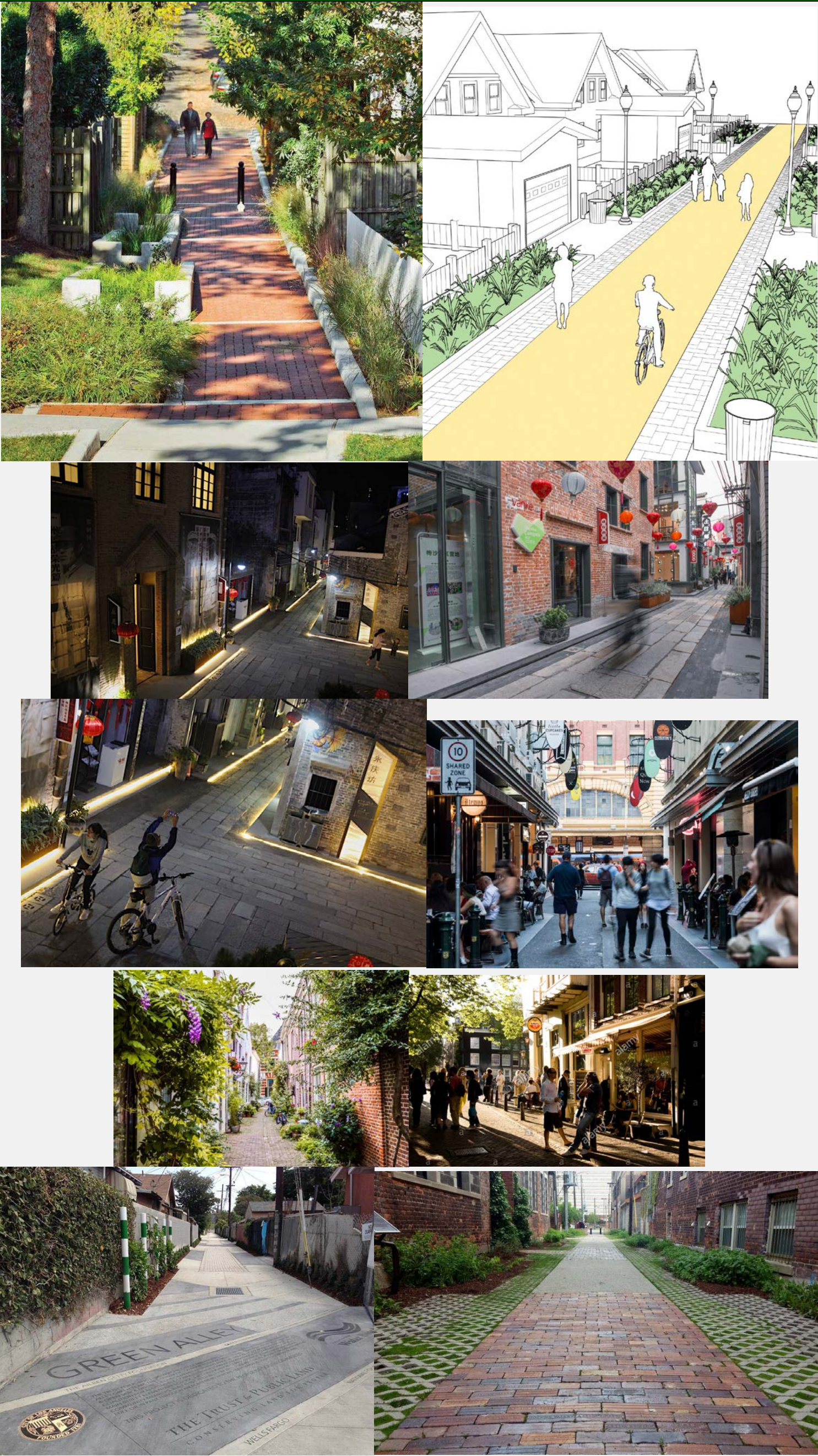
URBAN DESIGN ELEMENTS & MASTER LEGEND





URBAN DESIGN ELEMENTS & MASTER LEGEND

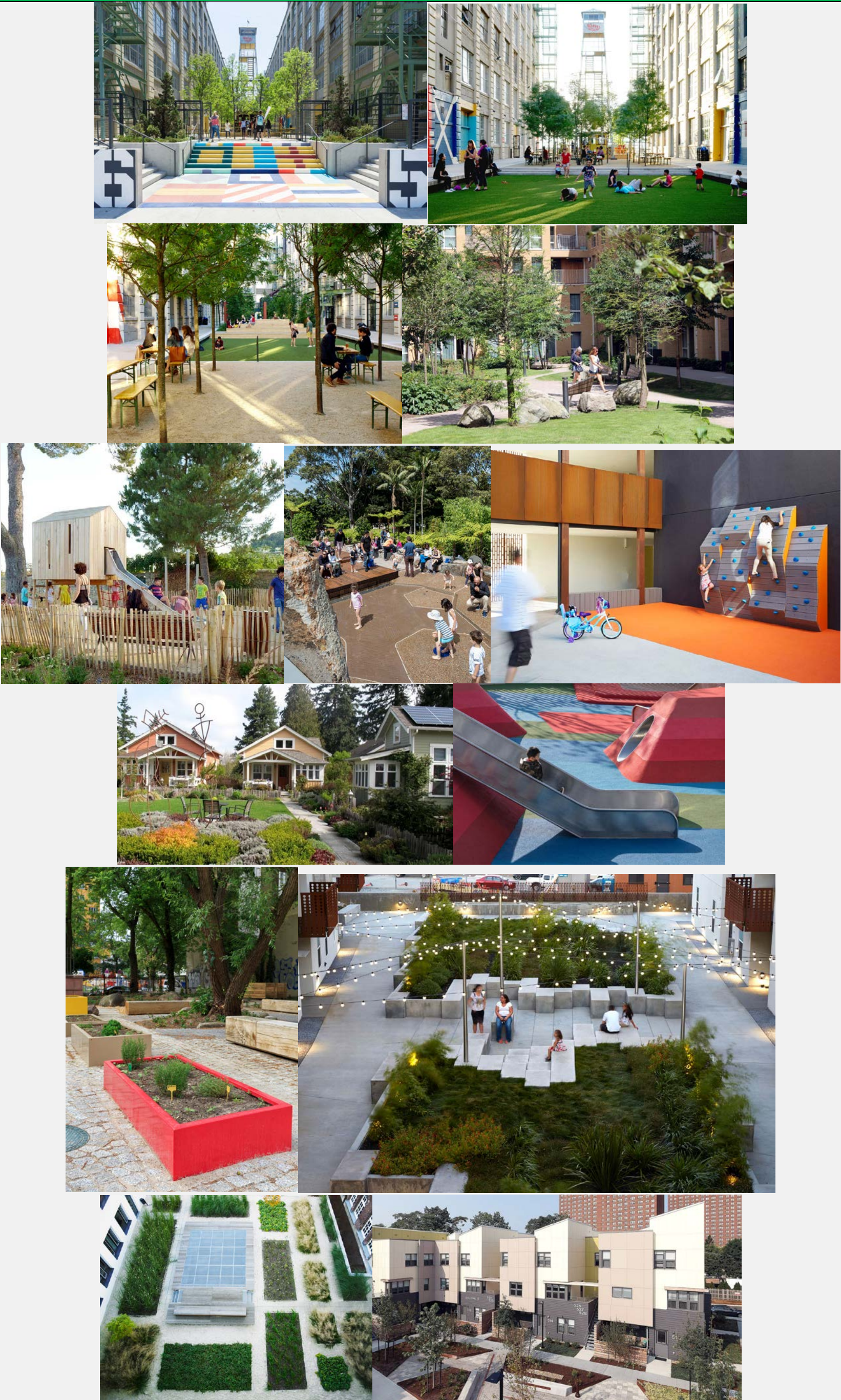
Green Alleys and Alley Improvements





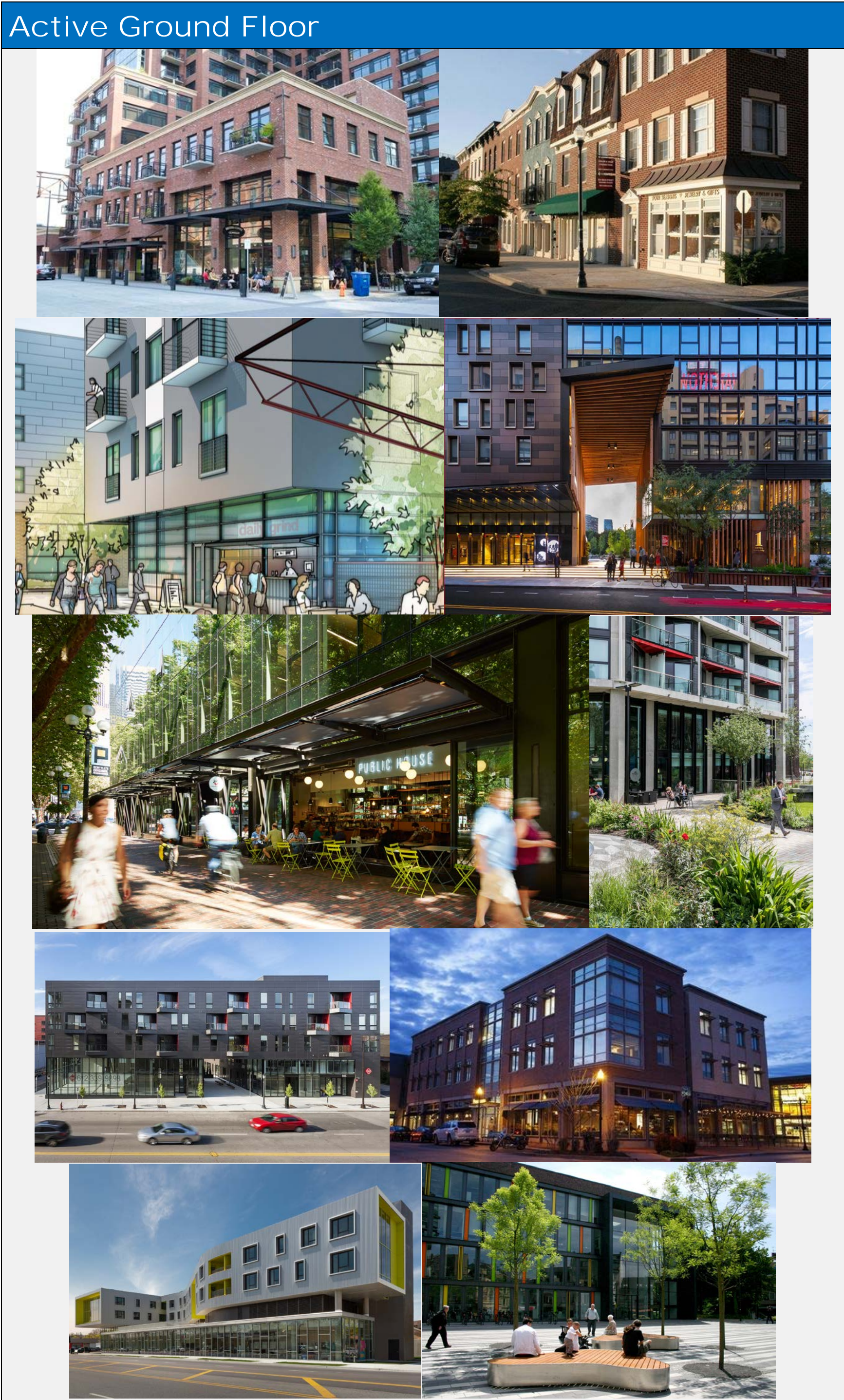
URBAN DESIGN ELEMENTS & MASTER LEGEND

Semi-Private Communal Openspace





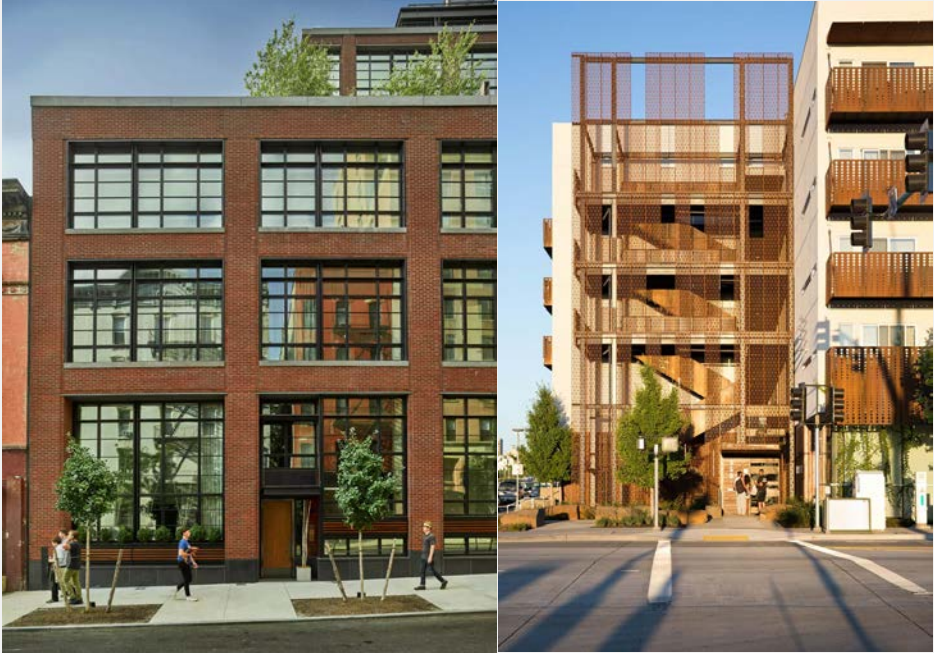
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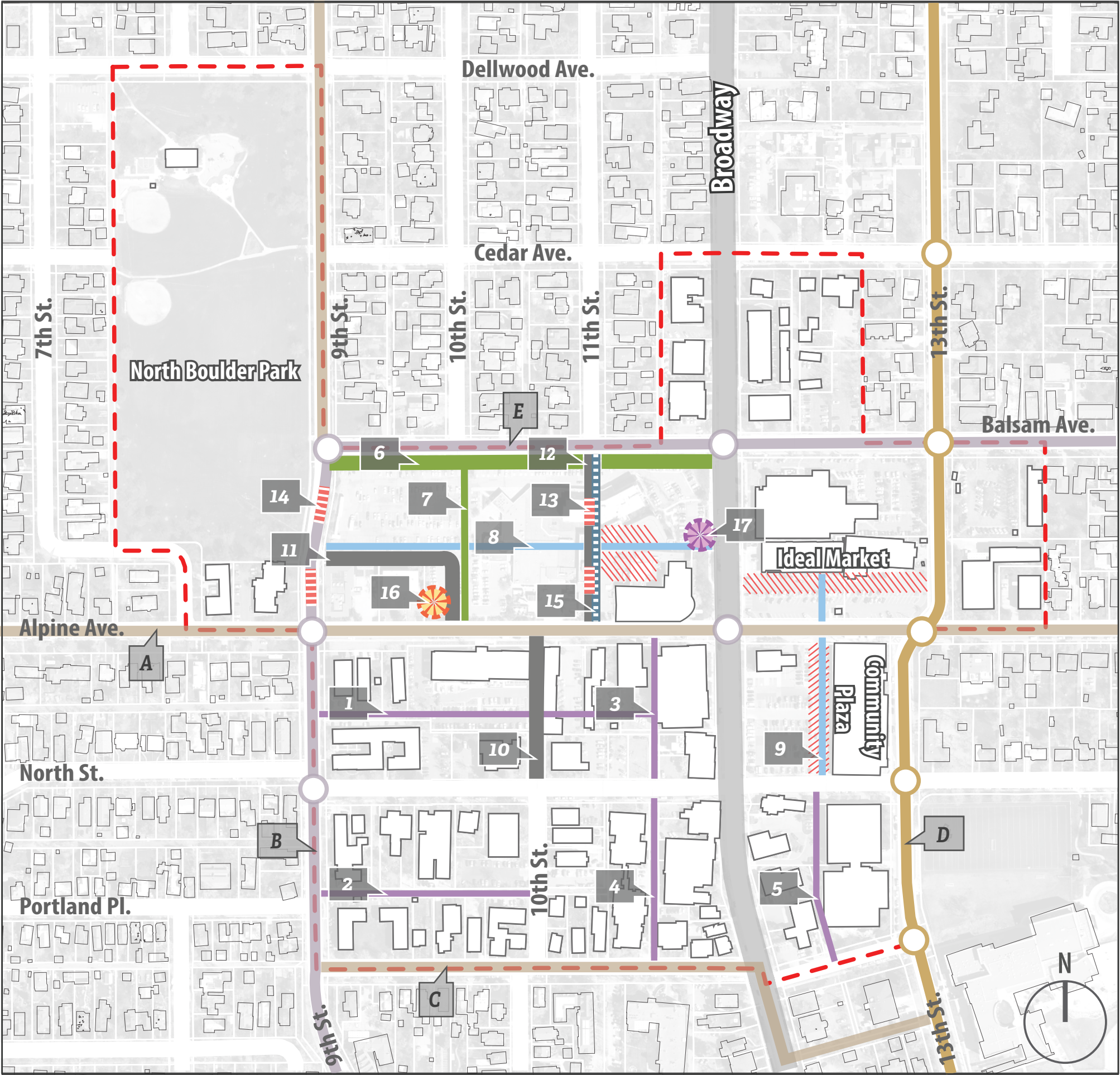
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Residential Frontage





# DRAFT Alpine-Balsam Connections Plan



## KEY

--- Area Plan Boundary

### DRAFT Area Plan Recommendations

- New Local Street
  - Pedestrian Connection
  - Multi-Use Path
  - Alley Way Enhancements/Realignment
  - Residential On-Street Loading
  - Curbside Management
  - Mobility Hub
  - Bus Super Stop
  - Pedestrian Activity Center
- (\*Please reference Urban Design section for more information)

### Under TMP Evaluation

- Potential Bike Lane (preferred buffered)
- Potential Neighborhood Greenway
- Potential Intersection Improvements

### TMP Recommendation

- Neighborhood Greenway (13th Street)
- Intersection Improvements (13th Street)

(\*Please reference TMP for up-to-date information)



## Corridor Improvements

Description
<p><i>These corridors provide key routes for cyclists and pedestrians to travel within and through the Alpine-Balsam area. They connect to schools, parks, downtown, a recreation center, shopping centers and adjacent neighborhoods.</i></p> <p><i>These collector and residential streets provide an opportunity to prioritize forms of active transportation, including walking, cycling and transit while also slowing vehicle speeds in order to improve the quality of life for residents and visitors. The <b>13<sup>th</sup> Street Neighborhood Greenway</b> will be Boulder's first Neighborhood Greenway implemented summer of 2019 through the city's <b>Low-Stress Walk and Bike Network Plan</b>.</i></p> <p><i>The <b>Low-Stress Walk and Bike Network Plan</b>, which emerged out of the <b>2014 Transportation Master Plan</b>, will create a network of comfortable streets enabling people of all ages and abilities to walk and bike to get where they need to be.</i></p> <p><i>*While the 13<sup>th</sup> street corridor is currently in a planning and design process, all other proposed corridor improvements will be further evaluated and confirmed as part of the Transportation Master Plan Update process.</i></p>

Corridor Improvements
<p><b>A) Alpine Avenue Corridor</b> <i>Neighborhood Greenway</i></p>
<p><b>B) 9<sup>th</sup> Street Corridor</b> <i>Buffered Bicycle Lane, Neighborhood Greenway</i></p>
<p><b>C) Portland Place Corridor</b> <i>Neighborhood Greenway</i></p>
<p><b>D) 13<sup>th</sup> Street Corridor</b> <i>Neighborhood Greenway</i></p>
<p><b>E) Balsam Avenue Corridor</b> <i>Buffered Bicycle Lane</i></p>



**Neighborhood Greenways** are streets with low vehicle volumes and speeds, designed to prioritize bicycling and enhance conditions for walking. These are streets where people of all ages and abilities feel safe walking and biking.

**Buffered Bicycle Lanes** are standard bike lanes with a designated buffer space of at least two feet separating the bike lane from the adjacent motor vehicle traffic lane

**Responsibility:** All improvements would be **implemented and maintained by the city as capital projects**

### Neighborhood Greenways



### Buffered Bicycle Lanes



## Alley Way Improvement/Realignment

**Alley Enhancement** concepts include design elements that promote safety, activation, walk and bike circulation, enhanced entries, resurfacing, artistic lighting, planting and art elements.

**Responsibility:** All improvements would be **implemented through private development**.

### Improvements

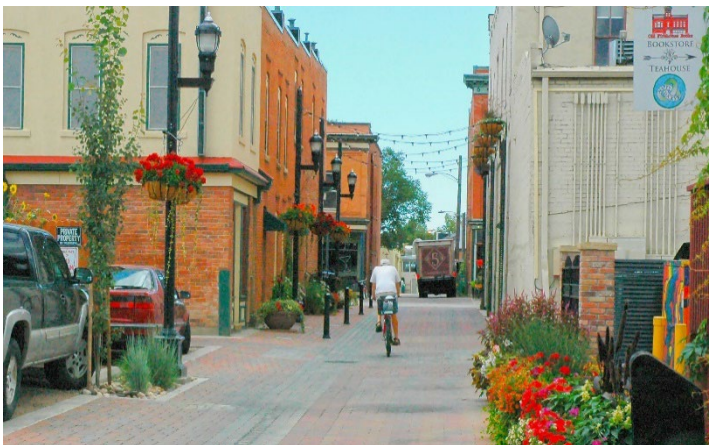
**1) 9<sup>th</sup> Street to 10<sup>th</sup> Street (mid-block)**  
(Connects to proposed 10<sup>th</sup> street extension)

**2) 9<sup>th</sup> Street to 10<sup>th</sup> Street (mid-block)**

**3) Alpine Avenue to North Street (mid-block)**

**4) Portland Place to North Street (mid-block)**

**5) Portland Place to North Street (mid-block)**





## Multi-Use Paths

**Multi-Use Paths** are physically separated from streets for non-motorized travel, and are shared by walkers, runners, cyclists and non-motorized skaters and scooters. Multi-use paths are paved surfaces.

**Responsibility:** Improvement #6 would be **implemented and maintained by the city as a capital project**. Improvement #7 would be **implemented through private development**.

### Improvements

#### 6) 9<sup>th</sup> Street to Broadway

(Linear Park Flood Mitigation/Multi-Use Path)

#### 7) Balsam Avenue to Alpine Avenue (mid-block)



# Pedestrian Connections

**Pedestrian Connections** are public paths or avenues designed for walking and are dedicated to the pedestrian.

**Responsibility:** Improvement #8 would be **implemented by the city as a capital project**. Improvement #9 would be **implemented through private development**.

## Improvements

**8) 9<sup>th</sup> Street to Broadway**  
*Alpine Balsam Site*

**9) North Street to Ideal Market**  
*Fronting Community Plaza*





## New Local Streets

**New Local Streets** should provide safe and inviting places to walk with direct access to local stores and schools. Local streets can combine stormwater management features, curb extensions, vertical speed control elements, and bicycle facilities that encourage safe speeds and meter through traffic.

**Responsibility:** All improvements would be **implemented and maintained by the city as a capital project**

### Improvements

**10) North Street to Alpine Avenue (mid-block)**  
(10<sup>th</sup> street extension)

**11) Alpine Avenue to 9<sup>th</sup> Street (mid-block)**

**12) Balsam Avenue to Alpine Avenue (mid-block)**  
(11<sup>th</sup> street extension)



## Residential On-Street Loading

**Residential On-Street Loading** is a strategy to provide convenience for and to ease the burden of accessibility, the loading and unloading of children, groceries and other daily needs of residents living in high-density residential areas located within a parking district and where the parking is located off-site or at a distance from the home. These zones would be located along the curb and within the right-of-way. They should be directly adjacent to the building and preferably near a building entrance. Residential on-street loading should generally be available for short periods of time and would be identified by curb and/or street markings and signage.

**Responsibility:** All improvements would be **implemented and maintained by the city as a capital project**

### Improvements

**13) 11<sup>th</sup> Street Extension**

**14) 9<sup>th</sup> Street**





# Curbside Management

**Curbside Management** is the proactive organization and regulation of right-of-way uses at the curb to enhance mobility, ensure access, promote safety, and support the overall goals of the Transportation Master Plan and the Climate Action Plan.

**Responsibility:** All improvements would be **implemented and maintained by the city as a capital project.**

## Improvement

### 15) 11<sup>th</sup> Street to Alpine Avenue



# Mobility Hub

**A Mobility Hub** is an area designed to facilitate safe multimodal access and connections at the intersection of frequent transit lines or at a locally or regionally significant activity center with high transit demand.

**Responsibility:** All improvements would be **implemented and maintained by the city as a capital project.**

## Improvement

### 16) 10<sup>th</sup> Street and Alpine Avenue





# Bus Super Stop

**Super Stops** are upgraded bus stops along high frequency routes that included enhanced amenities such as real-time arrival information, lighting and covered seating, bike racks, and additional space for boarding up to two buses at a time.

**Responsibility:** All improvements would be **implemented and maintained by the city as a capital project.**

## Improvement

### 17) Broadway (mid-block)

Between Alpine Avenue and Balsam Avenue, west side



## **Alpine-Balsam Access and Mobility Strategy**

### **Analysis and Supporting Documentation**

A range of approaches for access and mobility at Alpine-Balsam have been proposed and discussed in the area planning process. This report provides context and analysis for the proposed approach for an Access District and Transportation Demand Management (TDM) strategy for the Alpine-Balsam area. It also summarizes traffic impact analysis and recommendations provided by consultants. The report is organized by the following:

- A. Policy Context
- B. Community Feedback
- C. Anticipated Traffic Impacts
- D. Proposed Access District and TDM Strategy
  - a. Parking Supply and TDM Approach
  - b. Access District Approach
  - c. Boulder Junction Case Study
  - d. Multi-modal Access and Mobility
  - e. Mobility Hub and Curbside Management
  - f. Parking Regulation and Management

### **A. Policy Context**

The city's policies for Access and Mobility are based on four primary sources, the 2017 Alpine-Balsam Vision Plan, the Transportation Master Plan (TMP), the Access Management and Parking Strategy (AMPS) and the Climate Commitment. The 2017 Alpine-Balsam Vision Plan outlined increased multimodal access and mobility for the area that will be a vibrant multi-generational hub for community life and local government services—a welcoming and inclusive new model for equitable, affordable, and sustainable living. The TMP is the policy document outlining the policies and Action Plan guiding the city's investment in transportation infrastructure enhancements, operations, maintenance, planning and programs. Pertinent to the Alpine-Balsam redevelopment, the TMP's Action Plan prioritizes the city's Vision Zero goal of improving safety and eliminating serious and fatal injuries, the expanded use of Access Districts to manage parking and provide on-going funding for transportation demand management (TDM), and enhancing multimodal access while preparing for the impact of mobility on demand services in our future.

The city's Climate Commitment outline the strategies, programs and policies that are needed to reduce the greenhouse gas (GHG) emissions by 80 percent by 2050. With transportation-related emission being almost 30 percent of the city's GHG inventory, it is critical for the city to reduce emissions through travel behavior change and electrification of the fleet.

AMPS is a set of strategies and policies that represent a balanced approach to enhancing access to existing districts and the rest of the community. AMPS is achieved by increasing travel options for residents, employees and visitors to Boulder. The guiding principles of AMPS is to provide access through all transportation modes, develop and use customized programs by area, support the diversity of people at all stages, ages, and mobility needs, seek solutions with co-benefits for economic and



community well-being, to plan for the present and the future and cultivate local and regional public-private partnerships.

Most relevant to this project are the parking management principles and strategies that AMPS established: Shared, Unbundled, Managed and Paid (SUMP):

- Shared- Parking spaces between commercial, residential, and visitor uses at different times of the day to maximize overall use of the infrastructure throughout the day, while decreasing the overall need for newly constructed facilities. All users share parking spaces. Elimination of reserved stalls increase maximization of use of the infrastructure.
- Unbundled- Parking spaces are leased separately from the unit and priced at market rates.
- Managed- All parking is managed by time and/or cost and enforced regularly.
- Paid- No free parking is provided within the management district.

These principles and strategies along with curbside management and the access district approach have proven successful in other areas of the city and are recommended to be a part of the design and redevelopment of Alpine-Balsam.

## **B. Community Feedback**

### *Small-Group Workshops*

Community members were asked several questions in the Area Plan small group workshops about access and mobility in the Alpine-Balsam area. A more detailed summary of the community feedback is included in Attachment A of the June 4, 2019 City Council Agenda Memo.

Staff shared information about the formation of an access and parking district for the site, and potentially the wider area, describing potential amenities that could be included for the wider area. Generally, participants wanted to understand the impact to the neighborhood and felt that the city needs to consider the relationship between housing and parking/traffic congestion. Many participants expressed concerns about increased traffic congestion with the development of housing in the area. Key themes from the community feedback include:

### *Connections*

- Participants suggested many ideas about increased connectivity, especially the importance of an east-west connection from North Boulder Park to Goose Creek for pedestrians and cyclists (especially crossing Broadway) and an east-west transit connection that could also serve to connect the jobs in the area to housing on the west part of Boulder. Suggestions and concerns highlight the perceived lack of safety in certain areas and the desire to improve safety for nearby residents to walk and bike.

### *All-Mode Access*

- Residents suggested expansion of the neighborhood ecopass program as a way of reducing vehicle traffic and improving connectivity and safety in the area, especially for the multi-family residents currently in the area.
- Participants responded to various parking and Transportation Demand Management (TDM) strategies by expressing both support for this approach and concern. People were interested and supportive of mobility hub programs (car share, electric car charging, bike storage, shuttles). Others expressed concern about the viability of these programs to truly reduce the need for

parking, the ability of some populations to reasonably travel without a car, and people's preferences for travel.

#### *Access and Parking*

- There was a range of viewpoints about how much parking should be provided on the city-owned site and in the area. There were two main viewpoints: maximize available parking for housing and use TDM strategies to minimize available parking.
- Those who supported increased parking had concerns about spillover parking from the site into the neighborhood, reduced ability to park in front of one's home, unrealistic expectations of future residents not wanting parking spaces, and current inability to park at commercial center at peak times.
- Many who supported reduced parking were concerned that constructing more parking on the city site would lead to large and unattractive parking lots and less permeability/connectivity in the area. People supported investments in pedestrian and cyclist infrastructure instead of vehicular; using the site as a model for sustainability by designing parking in a progressive way and including amenities like a mobility hub.

### **C. Anticipated Traffic Impacts**

A Traffic impact study was commissioned to evaluate the potential development changes within the Alpine-Balsam area. The purpose of the study was to identify potential traffic impacts and multi-modal access improvement needs within the study area.

The analysis conducted by Fox, Tuttle Hernandez looked at both existing conditions and a projected future 2040 analysis to study the impact of redevelopment on the level of service (LOS) of the transportation system and its infrastructure. Level of Service (LOS) characterizes the operational conditions of an intersections traffic flow, ranging from LOS A (indicating very good, free flow operations) and LOS F (indicating congested and sometimes oversaturated conditions). Typically, an acceptable level-of-service is LOS D or better in the peak hours. Findings from this analysis is included as an Appendix below.

The traffic impact study evaluated several land use options including:

Alpine-Balsam Site only:

- 1A: Civic Service Center focus that would include both city and county service centers and minimal housing
- 1B: "Maximum" residential (up to 300 dwelling units) with the city service center

Alpine-Balsam Site and Land Use Changes in the Plan Area

- 2A: Civic Service Center focus on the site with additional housing in the wider area
- 2B: "Maximum" residential for the site with additional units in the wider area (up to 670 units total)

### **Trip Generation Analysis**

The analysis of trip generation and traffic impact concluded that:



- All the study intersection operate overall at LOS C or better and perform similarly to the existing conditions for all options.
- The trip generated after re-development of the site will not exceed the trips that were generated in the past when the site was a fully functioning hospital.
- On-going Transportation Demand Management (TDM) programs and services and parking management are essential for the site to function effectively after re-development.

According to the analysis, land uses within the Alpine Balsam site will generate approximately 2,900 automobile trips per day in the Maximum Office Options, and the Maximum Residential Options will generate approximately 2,600 trips per day. Both land use options will generate trips at a level that is less than half of the traffic that is estimated to have been generated by the site when it was a fully occupied and active hospital. In this context the traffic generated by the proposed new land uses should be easily accommodated by the existing roadway network in the area.

Currently, all nine intersections in the study area operate well overall in the LOS A – C range during AM and PM peak hours on weekdays. In the near term (existing plus site and area plan land uses) all nine intersections will continue to operate in the LOS A-C range. The only noticeable increase in delay is projected to occur on Alpine Avenue approaching 9<sup>th</sup> Street, and on Balsam Avenue approaching Broadway. Restriping to add separate left and right turn lanes on Alpine at 9<sup>th</sup> and extending the length of the eastbound left turn lane on Balsam approaching Broadway.

The addition of the Area Plan land uses to the Alpine Balsam site uses adds very little congestion or delay to area intersections. Year 2040 traffic projections have incorporated the assumption that all existing traffic movements at all intersections will increase by 10%. This 10% increase is based on the historic growth in traffic along the Broadway corridor through the area. This is conservative given that most land uses surrounding the area are built out and will not likely increase traffic on the side streets approaching Broadway. In this context, the Year 2040 traffic projections are likely to be conservatively high. In the Year 2040 horizon, with the addition of site and area plan land uses, eight of the nine intersections continue to operate in the LOS A-C range, and the Alpine/9<sup>th</sup> intersection drops into the LOS D range.

## **D. Proposed Access District and TDM Strategy**

### **Parking Supply and TDM Approach**

Land uses desired on the site can be supported by a range of options for access, mobility and parking. There are different levels of parking and Transportation Demand Management (TDM) investments that can be designed to support the desired mix of uses. The transportation analysis for the Alpine-Balsam site considered a broad spectrum of access and parking approaches based upon local and national examples:

- National Average level – On the high end of the parking supply spectrum, the analysis used national average ratios for residential and non-residential uses based on Institute of Transportation Engineers (ITE) trip generation and parking utilization rates. This level of analysis does not factor in any TDM programs to manage parking demand.
- Boulder Citywide Level – To consider a more modest parking supply ratio for both residential and non-residential uses and a minimal investment in TDM programs and services, the next level of analysis is based on a parking supply rate based on the average parking supply rate

throughout the Boulder community. This parking supply rate is lower than ITE estimates and is based on local examples and considers Boulder’s long history of investing in multimodal infrastructure and the Community Transit Network (CTN).

- Boulder “District” Level – To consider parking supply rates comparable to other Boulder mixed use districts such as downtown Boulder and Boulder Junction, the next level of analysis considered lower parking supply ratios and higher investment in TDM transportation options.
- Boulder TMP Goal Level – This level of analysis represents the parking supply rates, parking pricing and policies, and TDM program investment that would be needed for the Alpine Balsam site to meet the city’s TMP mode share objectives. For this level to be functional, increased investments in on-going TDM programs and transit service would be needed along with increased parking costs.

Transportation Demand Management (TDM) measures will be important to reduce the demand for parking by the new land uses on the Alpine Balsam site and help minimize automobile access. Parking projections have considered “Enhanced Mobility/TDM” levels of parking supply, consistent with the City of Boulder Transportation Master Plan and the on-going efforts in the Boulder Junction area.

## Mobility Scale

	National Average (ITE)	Boulder City-Wide Average		Boulder District Average (Downtown & Boulder Junction)		Boulder Transportation Master Plan Goal	
TDM/AMPS Level	LOW	MEDIUM		HIGH		VERY HIGH	
Residential - Single Family Attached (Townhomes)	1.4 parking spaces per unit	1.2 parking spaces per unit	14% Parking Reduction	1 parking space per unit	29% Parking Reduction	0.9 parking spaces per unit	46% Parking Reduction
Residential - Multi-Family (Flats)	1.4 parking spaces per unit	1.2 parking spaces per unit	14% Parking Reduction	1 parking space per unit	29% Parking Reduction	0.8 parking spaces per unit	43% Parking Reduction
Commercial Office	4.15 spaces per 1,000 sq. ft.	3.2 spaces per 1,000 sq. ft.	23% Parking Reduction	2 spaces per 1,000 sq. ft.	52% Parking Reduction	1.9 spaces per 1,000 sq. ft.	53% Parking Reduction
Retail Mixed-Use	4.7 spaces per 1,000 sq. ft.	3.9 spaces per 1,000 sq. ft.	17% Parking Reduction	2 spaces per 1,000 sq. ft.	57% Parking Reduction	1.9 spaces per 1,000 sq. ft.	60% Parking Reduction

It is assumed that the **TMP Goal Level** assumptions will be applied to the trip rates and parking rates for these residential focused scenarios on the Alpine-Balsam site. It is also assumed that these same



assumptions will be used for the residential infill in the larger area plan consistent with the district approach to providing on-going services.

### **Existing Parking Conditions**

The parking garage at Alpine and Broadway has a total of 407 parking spaces. A goal of the project is to have the site function adequately without having to build additional parking. There are just over 900 parking spaces on-street in the 22 surrounding neighborhood blocks, and approximately 50% of these on-street spaces are unoccupied mid-day on a weekday.

### **Access District Approach**

This approach includes the creation of a general improvement district to collect property taxes which can fund on-going transportation demand management (TDM) strategies and programs. Property taxes (or payments in lieu of taxes- PILOT fees) can be collected from both residential and commercial properties to provide funds for capital infrastructure and on-going funds for programs, services, parking management, and operations. This approach is used in the city's transit-oriented development, Boulder Junction; see case study below.

As the case study below indicates, Boulder Junction's approach is to have two separate, but overlapping and complimentary access districts. There is one for parking management and another for TDM programs and services. This approach allows property owners to annex into one or the other or both districts based on their need. For example, a property that supplies all its own parking on site may not want to join the parking district, but may want to pay into the TDM district to have access to programs like the RTD EcoPass. In the case of Alpine-Balsam, there is an option to follow the Boulder Junction model with two Access Districts or design a single access district that provides both parking management and on-going TDM programs. While there are some administrative inefficiencies with managing two districts in a single area, the dual district approach does provide additional flexibility for properties that want to annex in at a later time.

If an Access District is implemented, staff recommends that the tax revenue would be used to fund on-going TDM incentive programs and parking management and maintenance. This could include, RTD EcoPasses for all residents and employees of the Alpine-Balsam District, bike- and carshare memberships, credits to subsidize Transportation Network Company (TNCs) like Uber or Lyft, and funding for additional local transit services, micro-transit or micro mobility options.

An Access District can also be managed by a trip generation allowance ordinance that caps the number of vehicle trips the district can generate. This regulatory tool can be used to evaluate the performance of the district and dictate the course of action required to reduce vehicle trips if the district is in non-compliance. One course of action can be to increase the property tax mill rate to increase funding for additional TDM programs or multimodal services.

### **Boulder Junction Case Study**

*In the Boulder Junction Access District, there are two overlapping general improvement districts. The first district is focused on parking. The Parking Access District provided the ability to construct shared public parking in Boulder Junction and provides the on-going revenue to manage on- and off-street parking for residents, employees and visitors. The overlapping Transportation Demand Management*

*(TDM) Access District's property tax revenue provides all residents and employees with annual Eco Passes, bike share memberships and carshare memberships and credits.*

*Boulder Junction is also guided by a Trip Generation Allowance, an ordinance, which states that the District as a whole can only produce 45 percent of the trips that would be expected for that mix and sizes of land uses. While Boulder Junction is still developing and transit services is not at the desired level, the District is only producing 58 percent of expected trips after its first evaluation in 2017.*

*Boulder Junction also incorporated the use of parking maximums instead of minimums and serves as the first parking district managed by the SUMP principles of shared, unbundled, managed and paid. Residential developments are limited to 1 parking space per unit and commercial developments can build little or no parking and rely on district parking. Parking supply and demand analyses have demonstrated that Boulder Junction residential parking demand is 0.9 per unit and that commercial demand is being met by a combination of private and public parking.*

### **Multimodal Access and Mobility**

The site is accessible on foot, by bike, or on transit. Sidewalks exist on both sides of all roadways in the area, on-street bicycle lanes and/or neighborhood bikeways connect to the area along 9<sup>th</sup> Street, 13<sup>th</sup> Street, and Balsam Avenue, and the area is well served by frequent bus service in the Broadway corridor. The connections plan will address the:

- Low-Stress bicycle and pedestrian access
- ADA requirements
- Safe pedestrian crossings
- B-Cycle Access
- Access to restaurants, retail and downtown Boulder

### **Mobility Hub and Curbside Management**

A mobility hub is a place in which people can access a variety of transportation options in one location. For example, a mobility hub could include a bikeshare station, carshare vehicles, micro-mobility options, like electric scooters, pick-up and drop-off curbside for TNCs or micro-transit, electric vehicle or bicycle charging.

With the growth of TNCs and increased freight delivery, it will be important for the Alpine-Balsam District to manage access to curbs from public right-of-way. Over time, additional short-term loading zone could take the place of a portion of time-limited, on-street parking. In the future, it is possible to manage curbside demand through variable pricing based on demand or time.

### **Parking Regulation and Management**

It is recommended that the SUMP principles be implemented to the maximum extent to reduce the need to build additional parking in the planning area. Not only is parking expensive to build and maintain, it is likely that parking demand will reduce in the future as advanced mobility technology and innovations increase their impact on travel behavior.

Residential parking requirement should be limited to one parking space per unit, and maximums set for commercial parking similar to Boulder Junction and the TMP access and mobility level.



Wherever parking is managed, it is important to consider and mitigate the impact of spill over parking in surrounding commercial and residential areas. To mitigate the impacts, the Alpine-Balsam district will need to work with the surrounding property owners to determine what policies and strategies will need to be implemented to manage spillover into the neighborhoods. In the downtown and University Hill where parking is managed and priced, many neighborhoods worked with the city to implement Neighborhood Parking Permit (NPP) programs to manage parking and limit the number of commuter parking permits per block face and provide parking permits to residents.

See Below for Appendix A: Alpine-Balsam Area Plan Traffic Impact Study

# Alpine-Balsam Area Plan Traffic Impact Study **DRAFT**



**Date:** May 6, 2019

**Submitted To:**

City of Boulder  
Planning & Development Services  
1739 Broadway  
Boulder, CO 80306

**Submitted By:**

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**FOX TUTTLE HERNANDEZ**

TRANSPORTATION GROUP

Item 6A - Alpine Balsam Direction



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**APPENDIX**

Level of Service Definitions

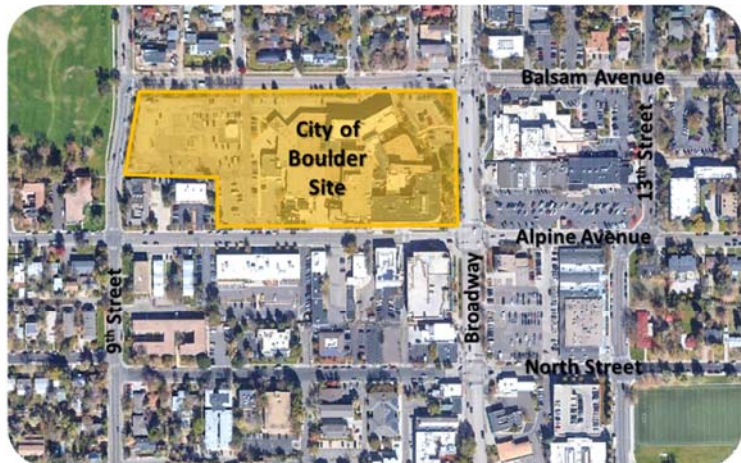
Existing Traffic Data

Intersection Capacity Worksheets

Existing Parking Summary Memorandum

**ALPINE-BALSAM AREA PLAN****TRAFFIC IMPACT STUDY****1.0 INTRODUCTION**

The Fox Tuttle Hernandez Transportation Group prepared this traffic impact study in support of the Area Plan to evaluate the potential development changes within the Alpine Balsam area in Boulder, CO. Recently, Boulder Community Health relocated the majority of its services to the new hospital at Arapahoe Road and 48<sup>th</sup> Street from the property bounded by Broadway to the east, 9<sup>th</sup> Street to the west, Alpine Avenue to the south, and Balsam Avenue to the north as shown to the right. The 8.8± acre property on Broadway was purchased by the City of Boulder for planned redevelopment to provide civic facilities and/or housing. In addition, to the hospital site, the City purchased additional properties along Alpine Avenue and North Street including the existing Brenton building and medical plaza parking garage.



The project proposes the demolition of the existing 260,000 square foot (sq. ft.) hospital building and construction of a mix of civic facilities for the civic services and residential units to compliment the land uses within the Alpine Balsam area.

The purpose of this study is to assist in identifying potential traffic impacts and multi-modal access improvement needs within the study area to support this project.



## 2.0 PROJECT DESCRIPTION

The traffic study addresses the potential traffic impacts caused by the redevelopment of the city- owned Alpine Balsam area and then tests the combined impact of the redevelopment of the city-owned site and increased residential density added in the area surrounding the city-owned site. These potential land use changes were evaluated for both the existing and long-term (Year 2040) planning horizons. The study has evaluated peak hour intersection conditions in the study area with and without the project generated traffic and surrounding area plan traffic increases. There are four land use scenarios or options that were evaluated for redevelopment of the Alpine-Balsam area:

- |           |   |
|-----------|---|
| Option 1A | Maximum Office on Alpine Balsam site only <ul style="list-style-type: none"> <li>- 191,000 sq. ft. of office (including City)</li> <li>- 120,000 sq. ft. of County office</li> <li>- 75 apartments</li> <li>- 1,700 sq. ft. of neighborhood serving retail</li> </ul> |
| Option 1B | Maximum Residential on Alpine Balsam site only <ul style="list-style-type: none"> <li>- 111,000 sq. ft. of office (including City)</li> <li>- 300 apartments</li> <li>- 8,000 sq. ft. of neighborhood serving retail and co-work space</li> </ul>                     |
| Option 2A | Maximum Office on Alpine Balsam site plus Area Plan area land uses <ul style="list-style-type: none"> <li>- Same as Option 1A plus 370 additional apartments spread through the larger area plan area</li> </ul>  |
| Option 2B | Maximum Residential on Alpine Balsam site plus Area Plan area land uses <ul style="list-style-type: none"> <li>- Same as Option 1B plus 370 additional apartments spread through the larger area plan area</li> </ul>   |

This study focuses on the weekday AM and PM peak hours which historically have been the periods of highest automobile traffic for the proposed type of land uses. The study area includes the nine existing intersections illustrated on **Figure 1**. The land uses in this analysis were grouped into the five zones illustrated on **Figure 2**. The scope of this analysis has been approved by City staff, and this traffic study has been prepared consistent with the City of Boulder's Design and Construction Standards (November 2000).

The benchmark used for comparing the impacts of the anticipated land uses on the city-owned site and the surrounding area plan area is the existing traffic conditions (Year 2018). It should be noted that traffic in the study area was significantly higher in the past, before the relocation of the hospital to east Boulder, than in 2018 when most of the city-owned site was vacant.

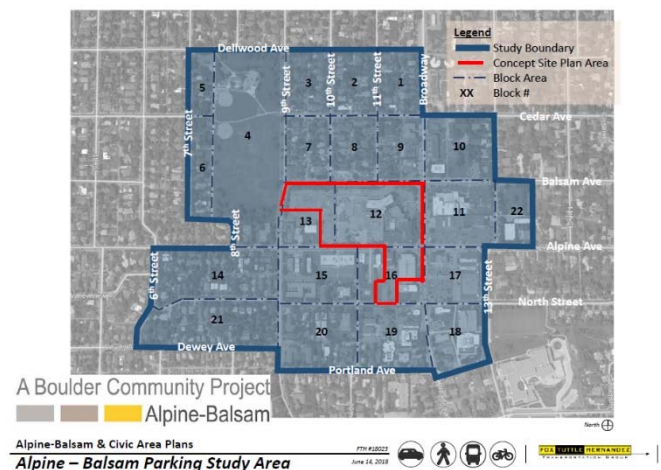
### 3.0 STUDY CONSIDERATIONS

The traffic analysis addresses the signalized and unsignalized intersection operations using the procedures and methodologies set forth by the *Highway Capacity Manual (HCM)*<sup>1</sup>. Study intersections were evaluated using Synchro (version 10) software for signalized, stop-controlled and roundabout intersections.

#### 3.1 Data Collection

For the study intersections on Broadway, the traffic counts were gathered from the City of Boulder traffic count database. Traffic counts for the unsignalized intersections within the study area were collected in September 2018 for the weekday AM and PM peak hours. The existing traffic volumes are illustrated on **Figure 1**. The existing intersection geometry and traffic control are also shown on this figure. Signal timing for the intersection on Broadway was provided by the City of Boulder within the Citywide Synchro model. Count data is provided in the **Appendix**.

*[Note that a detailed inventory of existing automobile parking in and adjacent to the Alpine Balsam site (see figure at right) was completed and summarized in a Fox Tuttle Hernandez memorandum dated June 15, 2018. This memo is attached in the Appendix for reference]*



<sup>1</sup> *Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis*, Transportation Research Board, National Research Council, 6<sup>th</sup> Edition (2016).



### 3.2 Level-of-Service Criteria

To measure and describe the operational status of the study intersections, transportation engineers and planners commonly use a grading system referred to as “Level-of-Service” (LOS) that is defined by the *HCM*. LOS characterizes the operational conditions of an intersections traffic flow, ranging from LOS A (indicating very good, free flow operations) and LOS F (indicating congested and sometimes oversaturated conditions). These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with traveling through the intersections. The intersection LOS is represented as a delay in seconds per vehicle for the intersection as a whole and for each turning movement. Criteria contained in the *HCM* was applied for these analyses in order to determine peak hour LOS. A more detailed discussion of LOS methodology is contained in the **Appendix** for reference. Typically, an acceptable level-of-service is LOS D or better in the peak hours.

## 4.0 EXISTING CONDITIONS

### 4.1 Roadways

The existing study area street network consists of arterials and local streets. The primary public roadways that serve the project site are discussed in the following text. The existing study area roadway network is illustrated on **Figure 1**.

**Broadway** is a principal arterial that provides a north-south connection through the study area. It begins at US 36 to the north and travels south through the entire length of Boulder. This roadway serves as access into the heart of downtown Boulder and connecting to many residential communities and retail centers along the way. Broadway currently serves approximately 25,500 vehicles per day (vpd) north of the Alpine-Balsam study area (Year 2018, City of Boulder). The posted speed limit on Broadway is 30 mph within the study area. In this vicinity Broadway is 50-foot wide with 10-foot travel lanes, two per direction and a 10-foot left turn lane at intersections.

**9<sup>th</sup> Street** is a north-south minor arterial south of Balsam Avenue and a collector north of Balsam Avenue that travels from Foothills Elementary School in north Boulder to Chautauqua Park in south Boulder. The roadway links residential neighborhoods to downtown, recreational areas,

---

and retail centers. The posted speed limit changes midway between Alpine Avenue and Balsam Avenue with 25 mph to the north and 20 mph to the south. Adjacent to the Boulder Community Hospital site, 9<sup>th</sup> Street is 35-feet wide with 11.5-foot travel lanes, one per direction, and 6-foot on-street bike lanes. North of Balsam Avenue, 9<sup>th</sup> Street continues to be 35-feet; however, the bike lanes are no longer designated with pavement markings, and a parking lane is introduced on the west side of the street adjacent to North Boulder Park.

**13<sup>th</sup> Street** is a north-south two-lane local street travels from north of the Alpine-Balsam area to Arapahoe Avenue. The roadway links residential neighborhoods to downtown, recreational areas, Christian Recht Field, Boulder County offices, Casey Middle School and retail centers. Within the study area 13<sup>th</sup> Street has a posted speed limit of 25 mph and the width ranges from 36 feet to 48 feet. North of Balsam Avenue, 13<sup>th</sup> Street is the narrowest with one travel lane per direction and parking lanes on both sides of the street. Between Balsam Avenue and Alpine Avenue, 13<sup>th</sup> Street widens to 40 feet to accommodate 11-foot travel lanes, one per direction; 5- to 6-foot bike lanes, and a 7-foot parking lane on the east side. South of Alpine Avenue, 13<sup>th</sup> Street widens to 48 feet to include a parking lane on the west side also.

**Balsam Avenue** is a two-lane minor arterial west of Broadway and a collector east of Broadway. The roadway extends between 9<sup>th</sup> Street to 19<sup>th</sup> Street where it changes names to Edgewood Drive and then changes to Valmont Road east of Folsom Street. Balsam Avenue provides connectivity through the Alpine-Balsam area and to nearby neighborhoods, retail centers, and office complexes. The posted speed limit within the study area is 25 mph. Adjacent to the Boulder Community Hospital site, Balsam Avenue is 32-feet wide with 10-foot travel lanes, one per direction, and 6-foot bike lanes.

**Alpine Avenue** is a local two-lane roadway that serves commercial and residential properties between the foothills and 20<sup>th</sup> Street. Within the study area, Alpine Avenue ranges in width from 34 feet to 38 feet, including one lane per direction and parking lanes on both sides of the street. The posted speed limit within the study area is 25 mph.

**North Street** is a local two-lane roadway that serves commercial and residential properties between 6<sup>th</sup> Street and Alpine Avenue. Within the study area, Alpine Avenue ranges in width from 32 feet to 40 feet, including one lane per direction and parking lanes on both sides of the street. The posted speed limit within the study area is 25 mph.



## 4.2 Intersections

The study area was developed from discussions with City staff and includes nine existing intersections as listed below with the current traffic control:

1. Broadway at Balsam Avenue (signalized)
2. Broadway at Alpine Avenue (signalized)
3. Broadway at North Street (signalized)
4. 9<sup>th</sup> Street at Balsam Avenue (all-way stop-controlled)
5. 9<sup>th</sup> Street at Alpine Avenue (side-street stop-controlled)
6. 9<sup>th</sup> Street at North Street (side-street stop-controlled)
7. 13<sup>th</sup> Street at Balsam Avenue (all-way stop-controlled)
8. 13<sup>th</sup> Street at Alpine Avenue (all-way stop-controlled)
9. 13<sup>th</sup> Street at North Street (side-street stop-controlled)

The lane configuration at each of the study intersections is illustrated on **Figure 1**.

## 4.3 Pedestrian and Bicycle Access

There are sidewalks on both sides of all the study roadways with crosswalks at all of the study intersections. The three signalized intersections on Broadway include pedestrian signal equipment to facilitate crossing the intersecting streets.

There are on-street bike lanes on 9<sup>th</sup> Street and 13<sup>th</sup> Street between Pine Street and Balsam Avenue. North of Balsam Avenue, both of these streets are designated bike routes without on-street bike lanes. Balsam Avenue also has on-street bike lanes that lead to the Goose Creek multi-use path. The bike lanes within the Alpine-Balsam area link to other on- and off-street bike facilities throughout the City of Boulder.

## 4.4 Transit Access

Broadway serves as major transit corridor with the Y, 208, 208F, and SKIP routes served directly adjacent to the site with bus stops in each direction. Each of the transit routes provide connections to shopping centers, the University of Colorado, civic facilities, school campuses, office complexes and business parks, recreational areas, and adjacent communities. The routes are described below:

- 
- **Route Y (Lyons/Boulder)** – This regional route connects Lyons to Boulder via US 36 and Broadway. This route provides access between the Lyons park-n-ride and the Downtown Boulder Station.
  - **Route 208 (Iris/Valmont)** – Travels between the Downtown Boulder Station and the Flatiron Business Park. This route utilizes Broadway, Iris Avenue, Valmont Road, and 55<sup>th</sup> Street to connect the west and east parts of Boulder.
  - **Route 208F (Iris/Valmont)** – This route is the same as Route 208 with the addition of circulating the Flatiron Business Park.
  - **Route SKIP (Broadway)** – Travels the length of Boulder along Broadway with high frequency service connecting to North Boulder, University of Colorado, Downtown Boulder Station, three park-n-rides, and various community destinations.

There are northbound and southbound bus stops located midway between Alpine Avenue and Balsam Avenue. The southbound stop in this block includes a bus pull out in front of the old hospital building. There is also a southbound stop just north of North Street, and a northbound stop just south of North Street. Each includes a bench, bike racks, and trash receptacle and three of the four stops have shelters.

#### 4.5 Existing Intersection Capacity Analysis

The results of the LOS calculations for the intersections are summarized in **Table 1**. Average and 95<sup>th</sup> percentile<sup>2</sup> queues are summarized in **Table 2**. The intersection level-of-service worksheets are attached in the **Appendix**. **All of the study intersections operate overall at acceptable level-of-service, LOS B or better.** All of the movements and approaches currently operate at LOS D or better, except at the intersection of 9<sup>th</sup> Street and Alpine Avenue.

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<sup>2</sup> It should be noted that the 95<sup>th</sup> percentile queue length is a theoretical queue that is 1.65 standard deviations above the average queue length. In theory, the 95<sup>th</sup> percentile queue would be exceeded 5% of the time based on the average queue length, but it is also possible that a queue this long may not occur.



The intersection of 9<sup>th</sup> Street at Alpine Avenue has LOS E on the westbound approach during the PM peak hour with a 95<sup>th</sup> percentile queue of 118 feet (about five vehicles). No mitigation measures are recommended. Side-street volumes are not approaching warrants for a multi-way stop.

## 5.0 FUTURE BACKGROUND TRAFFIC CONDITIONS

### 5.1 Annual Growth Factor and Future Volume Methodology

The daily volume of traffic in the Broadway corridor in this area has been relatively stable over the years with only a slight upward trend of  $\frac{1}{2}$  of 1 percent per year. A case could be made that Boulder's ongoing efforts to shift travel into modes other than the automobile are being successful and may result in no increase in background traffic over the next 20 years. However, to be conservative for this study, City staff has decided to project this slow growth in historic traffic into the future for the next 20 years. This results in a 20-year growth factor of 1.10, which has been utilized to estimate the future background traffic growth in the study area. This growth factor was applied to the existing study area traffic volumes to determine the long-term volumes. The Year 2040 background traffic is summarized on **Figure 3**.

### 5.2 Year 2040 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2040 background scenario and to identify any capacity constraints associated with background traffic without the redevelopment of the Alpine Balsam site. The level-of-service criteria discussed previously was applied to the study area intersections to determine the impacts with the long-term background volumes.

The results of the LOS calculations for the intersections are summarized in **Table 3**. Average and 95<sup>th</sup> percentile queues are summarized in **Table 4**. The intersection level-of-service worksheets are attached in the **Appendix**.

**All of the study intersections operate overall at LOS C or better and perform similarly to the existing conditions.** All of the movements and approaches operate at LOS D or better within the study area, except at the intersection of 9<sup>th</sup> Street and Alpine Avenue. It is estimated that the eastbound and westbound approaches will operate at LOS E and LOS F, respectively, in the PM peak hour. The 95<sup>th</sup> percentile queue is estimated to become 75 feet (about three vehicles) for the eastbound approach and 185 feet (about eight vehicles) for the westbound approach. The City may want to consider restriping the westbound

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approach to 9<sup>th</sup> Street on Alpine Avenue to have one left-turn lane and one through+right-turn lane. This will require removing on-street parking on Alpine Avenue for a portion of the block east of 9<sup>th</sup> Street. This would help mitigate the westbound delay and shorten the westbound queuing at this intersection.

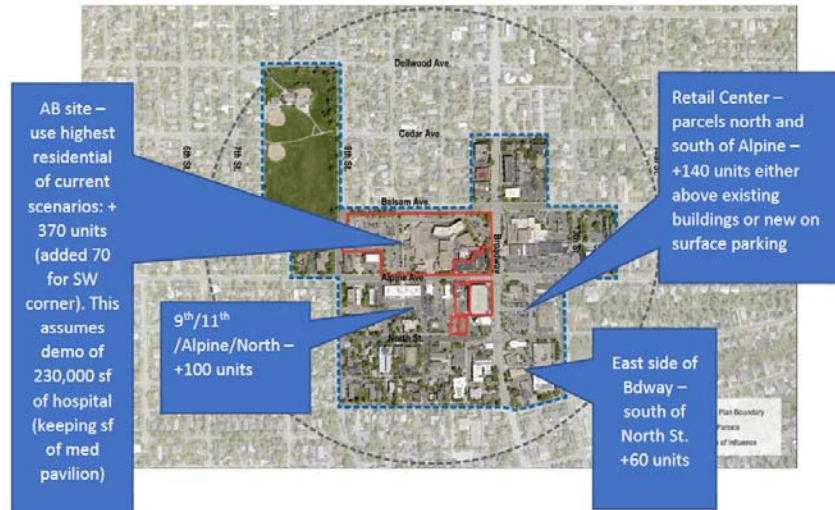
## 6.0 PROPOSED DEVELOPMENT TRAFFIC

The Alpine-Balsam Area Plan was evaluated for four development options in the existing and long-term (Year 2040) future scenarios as described above. The Boulder Community Hospital site that is owned by the City is proposed to be a mix of civic offices and multi-family residential homes. There is also potential for redevelopment of other properties within the Alpine-Balsam area to increase residential apartments in the area plan area to the south and east of the city-owned property. **Figure 2** illustrates the development zones of the Alpine-Balsam area.

- Zone 1 is city-owned Alpine Balsam site (land uses detailed above for the Maximum Office and Maximum Residential Options);
- Zone 2 is located in the northeast corner of 9<sup>th</sup> Street and Alpine Avenue. This zone was evaluated with 70 additional apartments in the “plus area plan” scenarios;
- Zone 3 is located between Alpine Avenue and North Street, between 9<sup>th</sup> Street and 11<sup>th</sup> Street alignment. This zone was evaluated with existing land uses plus 100 additional apartments in the “plus area plan” scenarios;
- Zone 4 is located east of Broadway between Portland Place and North Street. This zone was evaluated with existing land uses plus 60 additional apartments in the “plus area plan” scenarios;
- Zone 5 is bounded by Broadway to the west, 13<sup>th</sup> Street to the east, Balsam Avenue to the north, and North Street to the south. This zone was evaluated with existing land uses plus 140 additional apartments in the “plus area plan” scenarios.

The additional residential density added in the area plan area are illustrated below:





The following options were evaluated:

- Option 1A** Maximum Office on Alpine Balsam site only
- Option 1B** Maximum Residential on Alpine Balsam site only
- Option 2A** Maximum Office on Alpine Balsam site plus Area Plan area land uses  
Same as Option 1A plus 370 additional apartments spread through the larger area
- Option 2B** Maximum Residential on Alpine Balsam site plus Area Plan area land uses  
Same as Option 1B plus 370 additional apartments spread through the larger area

## 6.1 Trip Generation

To establish the volume of new trips that will be added to the roadway network from the proposed redevelopment in the Alpine Balsam area, trip generation rates were gathered from the *Institute of Transportation Engineers (ITE) Trip Generation Manual*<sup>3</sup>. A trip generation estimate was performed to determine the traffic increase for each option based on the anticipated land use types. The trip rates contained in the ITE Trip Generation Manual for land uses #221 “Multi-Family Housing (Mid-Rise)”, #710 “General Office”, and #820 “Shopping Center” were applied to the size of building or number of units to

<sup>3</sup> Trip Generation 10<sup>th</sup> Edition, Institute of Transportation Engineers, 2017.

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estimate the proposed traffic for each development option. **Table 5** provides the trip generation estimates for the four scenarios.

### Trip Types

The proposed development will create new trips, also known as ‘primary trips’, as well as non-auto and multi-purpose trips, which are discussed in detail below:

Primary Trips. These trips are made specifically to travel to/from the residential community and are considered “new” trips. Primary trips would not have been made if the proposed project did not exist. Therefore, this is the only trip type that increases the total number of trips made on a regional basis.

Multi-Purpose or Internal Trips. These internal trips occur from one land use or building to another within the site boundaries and surrounding, connected land uses. For example, a person that works in the new office building may visit the new or existing retail businesses or a patron may visit several stores during one visit. Multi-use or multi-purpose trips typically do not affect the exterior site access points, nor add any additional traffic volumes to the adjacent street network. Multi-use factors were only applied to the retail land use and are shown on **Table 5**.

Non-Auto Trips or Multi-Modal Trips. These trips are those that are completed by walking, bicycling, ride sharing or riding transit. The existing transit, pedestrian, and bicycle amenities in the area coupled with Boulder’s strong transportation demand management (TDM) efforts will encourage residents, employees and customers to make non-auto trips to/from the Alpine-Balsam area. The automobile trip generation estimates were reduced by the multi-modal factors illustrated in **Table 5** for each land use to account for the success Boulder has had in encouraging travel by non-auto modes and the continued emphasis on transportation demand management (TDM) in the Alpine Balsam area.



The resultant automobile trips accessing the new land uses in the study area are summarized below in **Table 6:**

*Table 6: Summary of Trip Generation*

Period	Option 1A (Max. Office)	Option 1B (Max. Residential)	Option 2A (Max. Office + Area Development)	Option 2B (Max. Residential + Area Development)
Weekday Daily	2,904	2,580	4,780	4,456
Weekday AM	324	252	455	383
Weekday PM	330	279	494	443

For comparison, it is estimated that the historic hospital site use generated significantly more traffic (approximately 8,500 vehicle trips per day) than any of the land uses anticipated on the Alpine Balsam site and in the surrounding area plan area (See Table 5). In this context, the transportation impacts associated with the potential new uses in the study area should function well on the existing transportation network since the prior hospital use generated more traffic.

## 6.2 Trip Distribution and Assignment

The trip distribution patterns developed for this study were based on the existing travel patterns illustrated in Figure 1, the location of each land use zone within the study area relative to the nine study area intersections, and an estimate of local and regional trip origin and destination patterns. Overall trip distributions to/from the study area are summarized as follows:

Zones west of Broadway:

- 20% to/from N. on Broadway
- 40% to/from S. on Broadway
- 20% to/from E. on Balsam
- 5% to/from S. on 13<sup>th</sup>
- 10% to/from S. on 9<sup>th</sup>

- 5% to/from N. on 9th

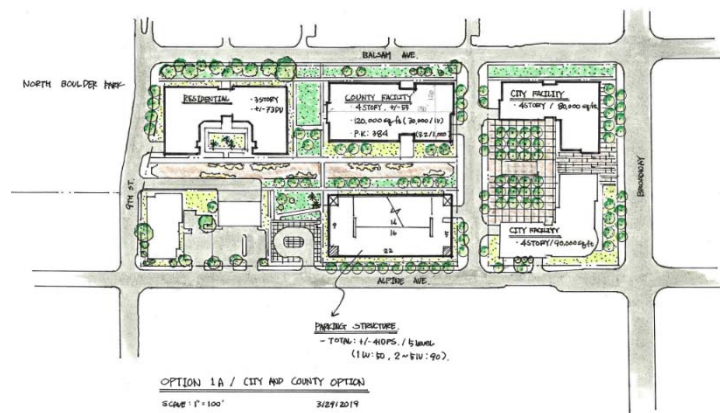
Zones east of Broadway:

- 20% to/from N. on Broadway
- 40% to/from S. on Broadway
- 20% to/from E. on Balsam
- 10% to/from S. on 13<sup>th</sup>
- 5% to/from S. on 9<sup>th</sup>
- 5% to/from N. on 9th

Using these distribution assumptions, the projected site traffic from each zone was assigned to the nine study area intersections for the weekday AM and PM peak hour periods. The site-generated volumes for Option 1A are shown on **Figure 4**, Option 1B are shown on **Figure 5**, Option 2A are shown on **Figure 6**, and Option 2B are shown on **Figure 7**.

### 6.3 Proposed Access

Traffic that accesses the city-owned Alpine Balsam site is anticipated to take access directly from either Alpine or Balsam. 11<sup>th</sup> Street will provide a connection between Alpine and Balsam, there will be a mobility hub accessing Alpine at approximately 10<sup>th</sup> Street, and the existing parking structure will continue to access Alpine Street just west of Broadway as it does today. The figure at the right illustrates a potential access plan for Option 1A.



## 7.0 TRAFFIC CONDITIONS WITH SITE DEVELOPMENT

This section discusses impacts associated with the development of the Alpine Balsam area in the near-term and long-term conditions with each of the four development options.



## 7.1 Existing + Option 1A Project Intersection Capacity Analysis

The site-generated traffic volumes for Option 1A (maximum office) were added to the Existing volumes to analyze potential site impacts in the near-term condition. The Existing + Option 1A site-generated traffic volumes are illustrated on **Figure 8**. The level-of-service criteria discussed in prior sections was applied to the study area intersections to determine impacts with the addition of the Option 1A site-build out traffic volumes in the near-term. The results of the LOS calculations for the intersections are summarized in **Table 1**. Average and 95<sup>th</sup> percentile queues are summarized in **Table 2**.

**The Option 1A project trips do not significantly impact the overall operations of the study intersections in the near-term.** The study intersections will operate overall with the same LOS letter grade when compared to the Existing scenario. The following intersections have a movement or an approach that are anticipated to begin to operate at LOS E or F:

- **9<sup>th</sup> Street at Alpine Avenue:** This side-street stop-controlled intersection will operate overall at LOS B in both peak hours; however, the westbound approach will begin to operate at LOS F during the weekday PM peak hour. The 95<sup>th</sup> percentile queue for this approach is estimated to be 158 feet (about seven vehicles, two more than existing).

**Recommendation:** The City may want to consider restriping the westbound approach to 9<sup>th</sup> Street on Alpine Avenue to have one left-turn lane and one through+right-turn lane. This will require removing on-street parking on Alpine Avenue for a portion of the block east of 9<sup>th</sup> Street. This improvement will reduce the queue by two vehicles and reduce the approach delay by 30 seconds.

- **Broadway at Balsam Avenue:** This signalized intersection will operate overall at LOS B in both studied peak hours; however, the eastbound left-turn will begin to operate at LOS E in the PM peak hour. The average queue for this movement is estimated to be 165 feet (about seven vehicles) and the 95<sup>th</sup> percentile queue is estimated to be 247 feet (ten vehicles) during the PM peak hour. Both queues extend beyond the existing storage length of 80 feet, similar to the existing conditions.

**Recommendation:** Consider adding one second of green time to the eastbound left-turn phase. This will change the eastbound left-turn level of service to LOS D in the PM peak hour. Changes in signal timing will need to be coordinated with progression on Broadway. The left-turn storage

length is limited by the width of Balsam Avenue to the west of the intersection. With the redevelopment of the hospital site, consider lengthening the eastbound left-turn lane.

## 7.2 Existing + Option 1B Project Intersection Capacity Analysis

The site-generated traffic volumes for Option 1B (maximum residential) were added to the Existing volumes to analyze potential site impacts in the near-term condition. The Existing + Option 1B site-generated traffic volumes are illustrated on **Figure 9**. The level-of-service criteria discussed in prior sections was applied to the study area intersections to determine impacts with the addition of the Option 1B site-build out traffic volumes in the near-term. The results of the LOS calculations for the intersections are summarized in **Table 1**. Average and 95<sup>th</sup> percentile queues are summarized in **Table 2**.

**The Option 1B project trips do not significantly impact the overall operations of the study intersections in the near-term.** The study intersections will operate overall with the same LOS letter grade when compared to the Existing scenario. Similar to Option 1A, the westbound approach at 9<sup>th</sup> Street and Alpine Avenue will begin to operate at LOS F without separate approach lanes. The 95<sup>th</sup> percentile queue is estimated to be 143 feet (about six vehicles, one less than Option 1A). Consider restriping the westbound approach to provide one left-turn lane and one through/right-turn lane.

## 7.3 Existing + Option 2A Project Intersection Capacity Analysis

The site-generated traffic volumes for Option 2A (maximum office + new area plan area development) were added to the Existing volumes to analyze potential site impacts in the near-term condition. The Existing + Option 2A site-generated traffic volumes are illustrated on **Figure 10**. The level-of-service criteria discussed in prior sections was applied to the study area intersections to determine impacts with the addition of the Option 2A site-build out traffic volumes in the near-term. The results of the LOS calculations for the intersections are summarized in **Table 1**. Average and 95<sup>th</sup> percentile queues are summarized in **Table 2**.

**The additional project trips associated with the potential development in the Alpine-Balsam area do not significantly impact the study intersections when compared to Option 1A.** The majority of intersection and movement delays are within two seconds of the Option 1A scenario. Similar to Option 2A, the eastbound left-turn at Broadway and Balsam Avenue will operate at LOS E in the PM peak hour. Consider adding one second of green time to the eastbound phase and lengthening the left-turn storage with the redevelopment.



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The additional traffic will increase the delay experienced on the westbound approach at 9<sup>th</sup> Street and Alpine Avenue and the 95<sup>th</sup> percentile queue will increase to 175 feet (about seven vehicles) with existing lane configuration. Consider restriping the westbound approach to provide one left-turn lane and one through/right-turn lane.

#### 7.4 Existing + Option 2B Project Intersection Capacity Analysis

The site-generated traffic volumes for Option 2B (maximum residential + new development) were added to the Existing volumes to analyze potential site impacts in the near-term condition. The Existing + Option 2B site-generated traffic volumes are illustrated on **Figure 11**. The level-of-service criteria discussed in prior sections was applied to the study area intersections to determine impacts with the addition of the Option 2B site-build out traffic volumes in the near-term. The results of the LOS calculations for the intersections are summarized in **Table 1**. Average and 95<sup>th</sup> percentile queues are summarized in **Table 2**.

**The additional project trips associated with the potential development in the Alpine-Balsam area do not significantly impact the study intersections when compared to Option 1B.** The majority of intersection and movement delays are within two seconds of the Option 1B scenario. The additional traffic will increase the delay experienced on the westbound approach at 9<sup>th</sup> Street and Alpine Avenue and the 95<sup>th</sup> percentile queue will increase to 160 feet (about seven vehicles, one more than Option 1B) with existing lane configuration. Consider restriping the westbound approach to have one left-turn lane and one through/right-turn lane.

#### 7.5 Year 2040 Background + Option 2A Project Intersection Capacity Analysis

*[Note when reviewing all Year 2040 traffic evaluations: The 2040 background traffic projections conservatively project that all existing traffic volumes increase by 10%, which is the projected growth along Broadway over the next 20 years. This is extra conservative considering that most side street areas are built-out and not likely to generate additional automobile traffic in the future. This analysis has also used the conservative assumptions that the peak hour traffic does not “spread” to effectively minimize the peak congestion by spreading the peak period traffic over a longer period (which typically does happen as traffic increases). The reader is reminded that these conservative assumptions are built into the analysis.]*

The site-generated traffic volumes for Option 2A (maximum office + new development) were added to the Year 2040 Background volumes to analyze potential site impacts in the long-term condition. The Year 2040 Background + Option 2A site-generated traffic volumes are illustrated on **Figure 12**. The level-of-

service criteria discussed in prior sections was applied to the study area intersections to determine impacts with the addition of the Option 2A site-build out traffic volumes in the near-term. The results of the LOS calculations for the intersections are summarized in **Table 3**. Average and 95<sup>th</sup> percentile queues are summarized in **Table 4**.

**The Option 2A project trips do not significantly impact the overall operations of the study intersections in the long-term, except at the intersections of 9<sup>th</sup> Street at Alpine Avenue.** The study intersections will operate overall with the same LOS letter grade or within three seconds of average delay when compared to the Year 2040 Background scenario. The following intersections have a movement or an approach that are anticipated to operate at LOS E or F:

- **9<sup>th</sup> Street at Alpine Avenue:** This side-street stop-controlled intersection will operate overall at LOS A in the AM peak hour and LOS D in the PM peak hour. The eastbound approach will continue to operate at LOS E and the westbound approach will continue to operate at LOS F during the PM peak hour. The 95<sup>th</sup> percentile queue for the eastbound approach is estimated to be 83 feet (about four vehicles, one more than background). The 95<sup>th</sup> percentile queue for the westbound approach is estimated to be 268 feet (about 11 vehicles, three more than background).

**Recommendation:** Consider restriping the eastbound and westbound approaches to provide one left-turn lane and one through/right-turn lane by removing on-street parking. This improvement will reduce the queue on the eastbound approach by one vehicle and reduce the average approach delay by three seconds. The westbound queue will be reduced by six vehicles and the average approach delay by 90 seconds.

- **Broadway at Balsam Avenue:** This signalized intersection will operate overall at LOS B in the AM peak hour and LOS C in the PM peak hour; however, the eastbound left-turn will begin to operate at LOS F during the PM peak hour. The average queue for this movement is estimated to be 208 feet (about eight vehicles, two more than background) and the 95<sup>th</sup> percentile queue is estimated to be 330 feet (about 13 vehicles, four more than background) during the PM peak hour. Both queues extend beyond the existing storage length of 80 feet, similar to the existing and background conditions.

**Recommendation:** Consider adding three seconds of green time to the eastbound left-turn phase. This will change the level of service for the eastbound left-turn movement to LOS D in the PM peak hour. Changes in signal timing will need to be coordinated with progression on Broadway.

The left-turn storage length is limited by the width of Balsam Avenue to the west of the intersection. With the redevelopment of the hospital site, consider lengthening the eastbound left-turn lane.

## 7.6 Year 2040 Background + Option 2B Project Intersection Capacity Analysis

The site-generated traffic volumes for Option 2B (maximum residential + new development) were added to the Year 2040 Background volumes to analyze potential site impacts in the long-term condition. The Year 2040 Background + Option 2B site-generated traffic volumes are illustrated on **Figure 13**. The level-of-service criteria discussed in prior sections was applied to the study area intersections to determine impacts with the addition of the Option 2B site-build out traffic volumes in the near-term. The results of the LOS calculations for the intersections are summarized in **Table 3**. Average and 95<sup>th</sup> percentile queues are summarized in **Table 4**.

**The study intersections will operate similarly to Option 2A in the long-term condition.** The majority of intersection and movements experience delays that are less than the Option 2A scenario. The side-street approaches of 9<sup>th</sup> Street and Alpine Avenue will continue to operate at LOS E and LOS F, respectively, in the PM peak hour. The 95<sup>th</sup> percentile queue is estimated to be 83 feet (about four vehicles) on the eastbound approach and 245 feet (about 10 vehicles) on the westbound approach. As discussed in Option 2A, consider restriping the eastbound and westbound approaches to provide one left-turn lane and one through/right-turn lane.

The eastbound left-turn at Broadway and Balsam Avenue will continue to operate at LOS F and the westbound through/right-turn will begin to operate at LOS E in the PM peak hour. Queues on the eastbound left-turn are anticipated to extend beyond the existing storage length as experienced in the existing and background conditions. To achieve LOS D on these movements, consider adding three seconds to the eastbound left-turn phase and one second not the westbound through phase. Changes in signal timing will need to be coordinated with progression on Broadway.

## 8.0 QUEUE ANALYSIS

A queuing analysis was performed to determine if the vehicular queues generated at each study area intersection would be accommodated by the existing storage length of turn lanes or through lane and if any of the queues impact an upstream intersection. **Tables 2 and 4** provide the existing storage lengths



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or distance to nearest intersection, and the 95<sup>th</sup> percentile<sup>4</sup> and average queues for the two peak hours within each evaluation scenario.

As shown in tables, the majority of the 95<sup>th</sup> percentile queues are shorter than the provided storage length or nearest upstream intersection, except those highlighted with **blue bold** font. The 95<sup>th</sup> percentile queues exceed the existing storage length or extend to the upstream intersection during one or more of the various scenarios at the following intersections and movements:

- **9<sup>th</sup> Street at Alpine Avenue**
  - Westbound Approach (PM peak; existing, background, and with all project scenarios)
- **Broadway at Balsam Avenue**
  - Eastbound Left-turn (AM and PM peaks; existing, background, and with all project scenarios)
  - Northbound Through/Right-Turn (PM peak; existing, background, and with all project scenarios)
- **Broadway at Alpine Avenue**
  - Eastbound Left-turn (PM peak; with all project scenarios)
  - Northbound Left-turn (AM peak; with Option 2A)

It should be noted that **the project trips slightly increase queues at the study intersections**. The largest increases related to the trips will be on the westbound approach at 9<sup>th</sup> Street and Alpine Avenue and the eastbound left-turn at Broadway and Balsam Avenue, as previously discussed.

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<sup>4</sup> It should be noted that the 95<sup>th</sup> percentile queue length is a theoretical queue that is 1.65 standard deviations above the average queue length. In theory, the 95<sup>th</sup> percentile queue would be exceeded 5% of the time based on the average queue length, but it is also possible that a queue this long may not occur.

## 9.0 PARKING AND TRANSPORTATION DEMAND MANAGEMENT (TDM)

Minimizing the need for automobile parking on the Alpine Balsam site has been a critical factor in developing the vision for the project. In this context City staff and the consulting team have developed a set of parking supply rates that reflect an “Advanced Mobility/TDM” scenario that is consistent with Boulder’s Transportation Master Plan and are similar to the parking rates being utilized in the Boulder Junction TDM and Parking Districts. These parking supply rates include 0.8 parking spaces per residential unit and 1.9 spaces per 1,000 sq. ft. of office floor area. These rates have been used in the design of the parking supply for the Alpine Balsam city-owned parcel in the Maximum Residential Options. The Maximum Office Options have assumed a slightly higher parking supply rate for the Boulder County portion of the site. These TDM assumptions support the multi-modal trip reductions that have been incorporated into this evaluation.

The application of the SUMP principals (shared, unbundled, managed, paid) to the parking supply in the area is critical to this goal of Advanced Mobility/TDM. It is anticipated that the Alpine-Balsam area will need to become a TDM and Parking District, similar to the approach currently being taken in the City’s Boulder Junction area. Components of this TDM approach may include:

- Create a parking district to manage area parking.
- Implement paid parking practices building on procedures currently utilized in the downtown civic campus and CAGID parking district.
- Ensure that the parking spaces in the existing parking structure are managed to support shared parking between residents, employees, and short-term parkers in the area.
- Proactively implement a Neighborhood Permit Parking Program (NPP) that extends 2 to 3 blocks into the residential neighborhood surrounding the Alpine-Balsam site.
- Implement programs and facilities for employees and residents of the area, including ECO PASS, employee parking cash out, carpooling and car sharing, B-Cycle stations, etc.
- Provide safe, secure, and convenient bicycle parking facilities consistent with current city code.
- Include mobility hubs within the site to organize and encourage multi-modal access.


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- Manage the curb frontage within the TDM district to support efficient transit access and include designated areas for ride sharing service access.
  - Create a TDM district to manage the automobile trip generation of individual developments (with a goal of trips less than or equal to 45% of representative Institute of Transportation Engineers trip generation rates – consistent with Boulder Junction approach). Consequences for non-compliance with TDM district trip goals will need to be developed.
  - Develop a TDM monitoring program to track compliance with automobile trip targets.
  - Consider modifications to existing transit service and/or implementation of new local shuttle services to effectively link the Alpine-Balsam area with other key civic nodes including the downtown (commercial and civic uses), CU, Boulder Junction, 29<sup>th</sup> Street, etc.
  - Consider extending the TDM and parking districts to include adjacent medical, commercial and office uses in the area.

## 10.0 FACILITIES FOR ACCESS BY TRANSIT, PEDESTRIANS, BICYCLISTS AND RIDE SHARE SERVICES

The project team has discussed the future configuration of the southbound RTD bus stop on the west side of Broadway, just south of Balsam Avenue. Currently this bus stop has a pullout allowing or requiring the buses to move out of the outside of southbound lane of traffic on Broadway. As the Alpine-Balsam site is redeveloped, it is recommended that this bus pullout be removed and replace by a conventional stop against the outside of the southbound through lane. This bus stop reconfiguration will have the following advantages:

- Buses will be able to access the stop and easily reenter the southbound flow of traffic on Broadway without becoming “trapped” in the pullout as can happen today when the traffic signal is green for southbound traffic at the Balsam traffic signal. Note that bus stops without pullouts along Broadway are the norm.
- The lack of a pullout will help discourage ridesharing services (such as UBER and LYFT) from using the transit stop to load and unload passengers. This will improve the transit stop efficiency for buses and encourage ride sharing services to access the Alpine-Balsam site at other designated areas.
- The removal of the bus pullout will provide more space behind the curb for civic uses in this area.



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- The site design process should provide designated areas for ride sharing services to pick up and drop off passengers at designated areas on Balsam Avenue, Alpine Avenue, or along the north/south connections between Alpine and Balsam Avenues. Ridesharing services may also be encouraged to access the residential areas in the western half of the site at a centrally located mobility hub. Near term and longer-term solutions should be identified. One possibility on Alpine Avenue is to utilize the existing pullout loop on the north side of Alpine, just west of Broadway.

Safely and efficiently accommodating pedestrians across Broadway in the Alpine-Balsam area is an important goal of this process. In this context the topic of a mid-block at-grade pedestrian crossing of Broadway between Alpine Avenue and Balsam Avenue has been discussed. Given the existing signalized intersections (with signalized pedestrian crossings) in the area at Balsam, Alpine and North, a mid-block crossing is not recommended for the following reasons:

- Boulder's Pedestrian Crossing Treatment Installation Guidelines indicate that an at-grade crossing should not be installed if the crossing location is within 300 feet of a signalized pedestrian crossing.
- The southern crosswalk at Balsam Avenue and the northern crosswalk at Alpine Avenue are separated by approximately 380 feet. In this context, a pedestrian desiring to cross Broadway is always less than 190 feet from the nearest signalized pedestrian crossing where traffic on Broadway is required to stop for pedestrians crossing the street.
- A mid-block pedestrian crossing, even if equipped with rectangular rapid flash beacons, would be a less safe crossing alternative for pedestrians, and would result in increased congestion and less efficient flow for automobiles and transit vehicles moving along Broadway in the area.

Therefore, the design of the Alpine-Balsam site should include on-site facilities and amenities to focus and encourage the crossing of Broadway at one of the signalized intersections.

## 11.0 CONCLUSIONS


This traffic study addresses the potential traffic impacts caused by the redevelopment of the city- owned Alpine Balsam area and then tests the combined impact of the redevelopment of the city-owned site and increased residential density added in the area surrounding the city-owned site. These potential land use changes were evaluated for both the existing and long-term (Year 2040) planning horizons. The study has evaluated peak hour traffic conditions at 9 intersections in the study area, with and without the project generated traffic and surrounding area plan traffic increases. The four land use scenarios or options that were evaluated for redevelopment of the Alpine-Balsam area include:

- Option 1A      Maximum Office on Alpine Balsam site only
- Option 1B      Maximum Residential on Alpine Balsam site only
- Option 2A      Maximum Office on Alpine Balsam site plus Area Plan area land uses
- Option 2B      Maximum Residential on Alpine Balsam site plus Area Plan area land uses

This study focuses on the weekday AM and PM peak hours which historically have been the periods of highest automobile traffic for the proposed type of land uses.

Key findings include:

- Land uses within the Alpine Balsam site will generate approximately 2,900 automobile trips per day in the Maximum Office Options, and the Maximum Residential Options will generate approximately 2,600 trips per day (approx. 10% fewer trips).
- Both land use options will generate trips at a level that is less than half of the traffic that is estimated to have been generated by the site when it was a fully occupied and active hospital. In this context the traffic generated by the proposed new land uses should be easily accommodated by the existing roadway network in the area.
- The site is accessible on foot, by bike, or on transit. Sidewalks exist on both sides of all roadways in the area, on-street bicycle lanes and/or neighborhood bikeways connect to the area along 9<sup>th</sup> Street, 13<sup>th</sup> Street, and Balsam Avenue, and the area is well served by frequent bus service in the Broadway corridor.

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- All nine intersections in the study area currently operate well overall in the LOS A – C range during AM and PM peak hours on weekdays.
  - In the near term (existing plus site and area plan land uses) all nine intersections will continue to operate in the LOS A-C range. The only noticeable increase in delay is projected to occur on Alpine Avenue approaching 9<sup>th</sup> Street, and on Balsam Avenue approaching Broadway. Restriping to add separate left and right turn lanes on Alpine at 9<sup>th</sup> and adjusting the traffic signal timing at Balsam/Broadway are potential mitigation measures. If Balsam Avenue is reconstructed between 9<sup>th</sup> and Broadway as part of the site development process, consideration should be given to extending the length of the eastbound left turn lane approaching Broadway.
  - The addition of the Area Plan land uses to the Alpine Balsam site uses adds very little congestion or delay to area intersections.
  - Year 2040 traffic projections have incorporated the assumption that all existing traffic movements at all intersections will increase by 10%. This 10% increase is based on the historic growth in traffic along the Broadway corridor through the area. This is conservative given that most land uses surrounding the area are built out and will not likely increase traffic on the side streets approaching Broadway. In this context, the Year 2040 traffic projections are likely to be conservatively high.
  - In the Year 2040 horizon, with the addition of site and area plan land uses, eight of the nine intersections continue to operate in the LOS A-C range, and the Alpine/9<sup>th</sup> intersection drops into the LOS D range. The same measures described above will help mitigate the increased congestion at Alpine/9<sup>th</sup> and Balsam/Broadway intersections. All other intersections continue to operate very well.
  - Transportation Demand Management (TDM) measures will be important to reduce the demand for parking by the new land uses on the Alpine Balsam site and help minimize automobile access. Parking projections have considered “Enhanced Mobility/TDM” levels of parking supply, consistent with the City of Boulder Transportation Master Plan and the on-going efforts in the Boulder Junction area. A list of potential TDM measures to help achieve the Enhanced Mobility/TDM goal has been included.



## **Alpine-Balsam Flood Mitigation Study Chronology & Findings**

**Spring-Summer 2018** - Engineering and design consultants conducted the initial investigation into flood mitigation strategies for Alpine-Balsam.

*Study constraints included the following:*

- Assess and explore comprehensive flood mitigation for the area with detention options in North Boulder Park (NBP), expanding on earlier city studies, and the subsequent channel designs through the site in an effort to reduce the offsite runoff that flows on Balsam and across the Alpine-Balsam hospital site (site).
- Reduce the flood impacts to the site to increase safety and buildable area on the site by channelizing the conveyance, high-hazard, and 100-year flood plain.
- Explore detention options and/or conveyance channel designs to accommodate a 100-year event that include daylighting Goose Creek and preserve approximately 40' of the northern edge of the site to avoid the existing mature trees.
- Account for 521 cubic feet per second (cfs) total flows for a 100-year storm in the area and exploring splitting the flows between the detention and the site.

*Option variations studied:*

- (1) Detention in NBP to accommodate 17 acre-feet (AF) of water storage and a 72' wide greenway with a 26' wide and 2.5' deep, swale conveyance channel located along the northern edge of the site to convey 210 cfs of flood water in a 100-year event.
- (2) Detention in NBP to accommodate 17 AF of water storage and a 60' wide greenway with 15' wide and 2.5' deep, structured conveyance channel with vertical sides located along the northern edge of the site to convey 210 cfs of flood water in a 100-year event.
- (3) No detention in NBP and a 100' wide greenway with 40' wide, 2.5' deep conveyance channel (swale) located along the northern edge of the site to convey 521 cfs of flood water in a 100-year event.
- (4) No detention in NBP, a 40' wide greenway (no conveyance channel) and a culvert located under Balsam Avenue to convey 521 cfs of flood water in a 100-year event.

*Initial study findings:*

- A. Through conveyance and detention calculations, a 16-17 AF detention pond would cut the major 100-year storm runoff flow from the existing 521 cfs down to 210 cfs. All site channel design options were calculated to accommodate the remaining flow of 210 cfs in varying depths and configurations.
  1. Option 1 (listed above) with an open channel with a swale like quality was wider, provided the most natural greenway and is the least physically obstructed open channel conveyance.
  2. Option 2 (listed above) with an open channel with vertical, structured sides was narrower and deeper requiring less space, but could be a physical barrier.
  3. Option 3 (listed above) required the most amount (approximately 2 acres) of space to accommodate the open channel conveyance, area for trees and circulation in wider greenway, but maintains the existing condition of NBP.
  4. Option 4 (listed above) required the least amount of greenway space and maintains the existing condition of NBP but utilizes a below ground box culvert to convey water.

- B. Locating the conveyance along Balsam allows the conveyance design to follow the historic flow path and to take advantage of utilizing Balsam Avenue for emergency overflow of flood water (greater than 100-year flood).
- C. Initial conceptual detention pond modeling to reduce the storm runoff flow to 210 cfs indicated the need to stretch the basin north into the area occupied by the ballfields and into the wooded area to the south. This initial modeling impacted the trees and assumed integrating new ballfields within the detention basin as a shared use.
- D. To maintain 17 AF of detention in park would require revising the grading of the south half of the park and creating a berm around the western edge of the detention area. Berm heights vary from 4'-9' depending on the depth of the bottom of detention basin.
  - 1. The ability to cut below the existing grade of the park would lower the height of the berm.
  - 2. Berm heights above 4' obstruct views and access to the park and are undesirable.
- E. The feasibility of cutting below the existing grade in the park is affected by the elevation of the water table. From historical observation, the park regularly experiences soggy, wet conditions on the south end of the park.
- F. The conveyance channel along at the north edge of the site along Balsam Avenue utilizes the existing low point in the park and provides alignment of the detention outlet with the channel location.

**Fall 2018-Winter 2019** - Engineering and design consultants continued the investigation into flood mitigation strategies for Alpine-Balsam which included options for a center running conveyance channel through the site, detention modifications in NBP to mitigate impacts to the park and began a geotechnical study of the water table in NBP.

*In addition to study constraints from Spring/Summer 2018, the following were considered:*

- Based on council direction, investigate the options for a center running conveyance channel bisecting the site.
- Explore detention designs to maintain the usability and access to NBP and to maintain the healthy and/or notable existing trees.
- Continue to assume mitigation for a 100-year event by detaining 17 AF in NBP and a conveyance channel design to accommodate 210 cfs.
- Initiate study to determine water table elevation in NBP.

*Option variations studied:*

- (1) A modified detention design in the park to preserve the trees in the affected area by moving the detention edges and berm location, creating pockets for any trees located within berm areas, providing grading in the basin to accommodate the ballfields and easing the slope into the basin at the north.
- (2) Detention in NBP to accommodate 17 AF of water storage and a 65' wide greenway with a 30' wide, 3' deep structured conveyance channel with vertical sides located at the center of the site.
- (3) Detention in NBP to accommodate 17 AF of water storage and a 65' wide greenway with a 26' wide, 4.5' deep structured conveyance channel with vertical sides located at the center of the site.

*Initial study findings:*

- A. A center channel is possible, though it requires altering the low point to further south in the park raising the bottom of the basin and increasing the height of the berm (approximately 1-2') to accommodate 17 AF of water storage.
- B. A center running channel alters the historic flow path from along Balsam Avenue to the center of the site bisecting the proposed buildable area. Where a Balsam Avenue channel utilizes the street for emergency overflow (greater than 100-year storm), the center running channel will need to utilize the limited area of the central greenway and channel to accommodate both the remaining 210 cfs flow from the 100-year storm and the emergency overflow for larger storm events. This results in a structured channel with vertical sides that are deeper (4.5') and wider (up to 30') to traverse a narrower area with the increased flow. The ultimate depth and design of the channel will determine if safety railings will be necessary.
- C. A center running greenway and conveyance channel width is constrained by the location between future buildings, circulation and other amenities typically located along this type of green space, e.g. tree lawn and landscape strip, seating, building buffer space, etc.
- D. A center running conveyance channel is highly dependent on detention in NBP that achieves a significant amount of storage to reduce flows enough to accommodate a narrower and deeper channel.
- E. The initial findings from the geo-technical study on the ground water in the area indicates the water surface elevation to be at or within 6" of the existing ground surface of the park during the "dry" season, making excavating below the existing surface to achieve 17 AF of detention less than desirable as it would further increase costs and have greater environmental impacts.
- F. Modifying the detention around the trees reduces the detention capacity and requires dropping the bottom of the basin 4' below the water table to maintain a berm height less than 4' around the western edge of the detention area, or elevating the bottom of the basin above the water table resulting in a berm height of approximately 9'.
- G. Considering the water table elevation, to continue to assume flood mitigation for a 100-year event by detaining 17 AF of storage in NBP will result in higher berm heights (approximately 9'). To explore lower berm heights (<4') results in less detention capacity due to not being able to excavate below the existing water table and will impact the amount of the reduction of the flows.

**Spring 2019** - Engineering and design consultants continued the investigation into flood mitigation strategies for Alpine-Balsam based on the geotechnical study on the ground water table in North Boulder Park.

*Based on Fall 2018/Winter 2019 study findings, study constraints included the following:*

- Investigate two detention options in NBP that do not impact the water table:
  - One option that minimizes the berm height at 4' and is not constrained by a minimum detention capacity of 17 AF.
  - One option that defines the maximum detention capacity and is not constrained by a berm height or a minimum detention capacity of 17 AF.

*Options variations studied:*

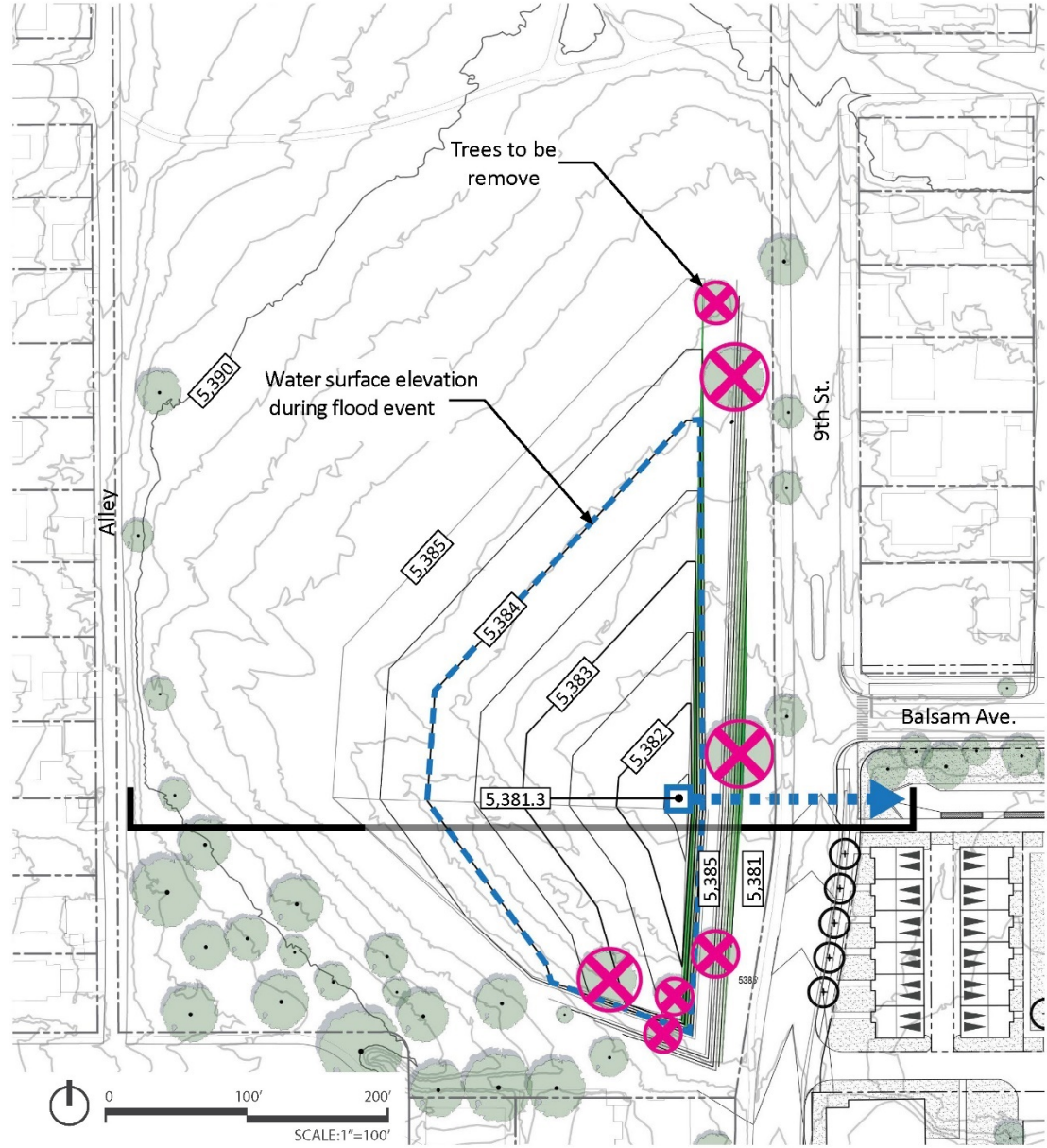
- (1) A minimize berm height detention capacity with a detention bottom above the water table, and a conveyance channel located along Balsam Avenue (Figure 1).



- (2) A maximize detention capacity with a detention bottom above the water table, and a conveyance channel located along Balsam Avenue (Figure 2).

*Initial study findings:*

- A. Minimizing the berm height to no more than 4' reduces the detention capacity to 1.27 AF, requires the removal of 7 trees, but has less impact to the southern ballfield. The detention capacity of 1.27 AF is well below the threshold to reduce flows along Balsam Avenue and through the site to 210 cfs and would provide minimal flood detention benefit. This would likely require a wide greenway, conveyance channel similar to Spring/Summer 2018 Option 3 - 100' wide greenway with 40' wide conveyance channel (swale) located along the northern edge of the site to convey 521 cfs of flood water or Option 4, a culvert below Balsam. As mentioned previously, Option 3 and Option 4 do not require detention in NBP (Figure 3). The existing storm drainage system downstream of the Alpine-Balsam site does not have the capacity to convey the 521 cfs flood flow associated with the 100-year flood event, so at Broadway, flood flows would spill back onto the streets and adjacent properties similar to existing conditions.
- B. Maximizing detention and staying above the water table results in the 15.41 AF of detention, but results in a berm height of 9', the removal of 17 trees around the east, south and west edges of the detention basin, and has grading impacts to the south ballfield.

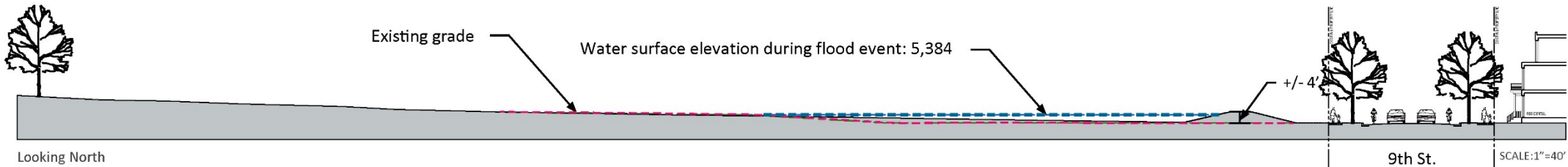
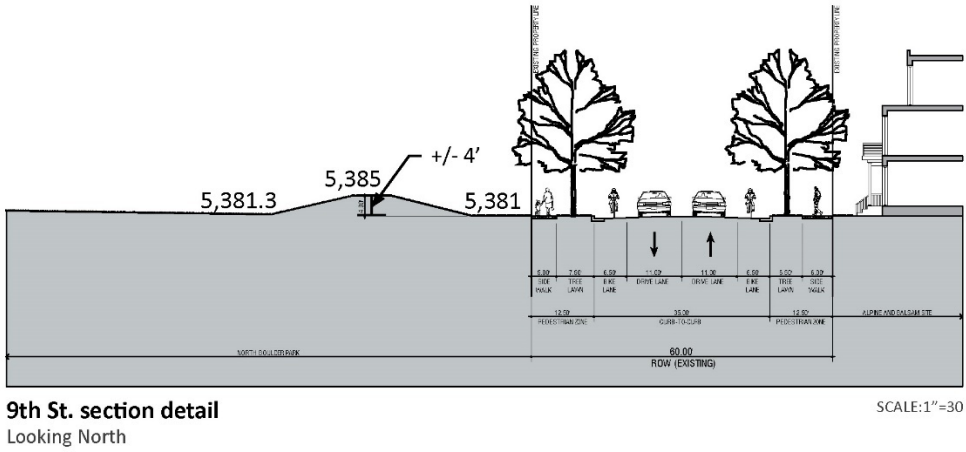


**CRITERIA**

- No impact to water table
- Minimize berm  $\leq 4'$

**OUTCOMES**

- **521 cfs** release rate is required for 100 yr floodplain
- **1.27 ac/ft** detention in the park
- Outfall located along the Balsam Ave.
- Requires **+/- 4' berm**
- Requires removal **7 trees**

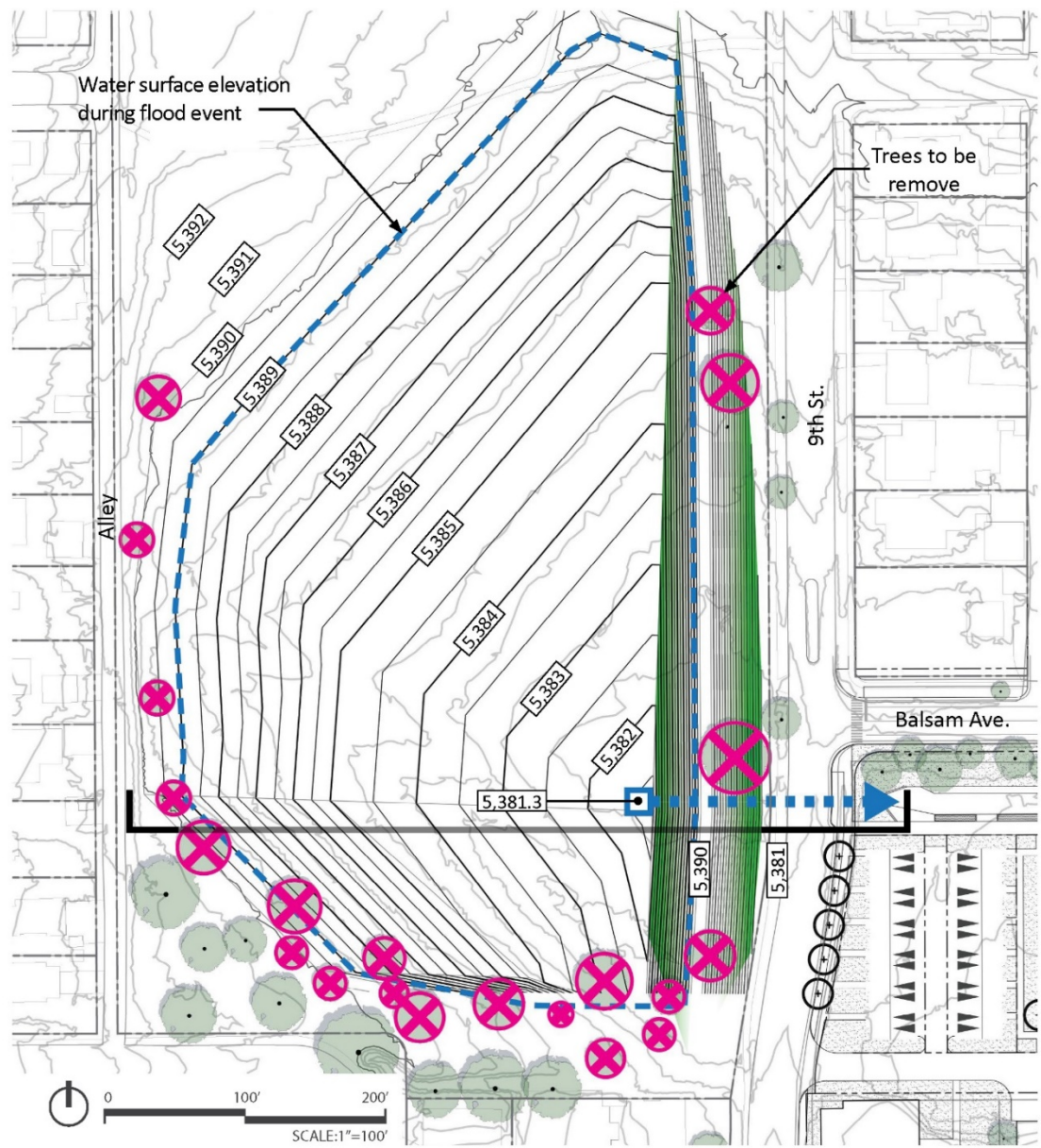


N. BOULDER FLOOD MITIGATION | MINIMIZE BERM OPTION

ALPINE AND BALSAM SITE PLAN  
5/23/2019

CIVITAS

Figure 1 - Minimize Berm Option

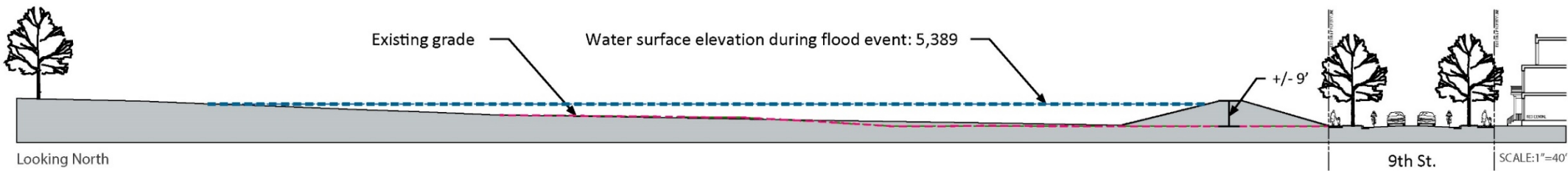
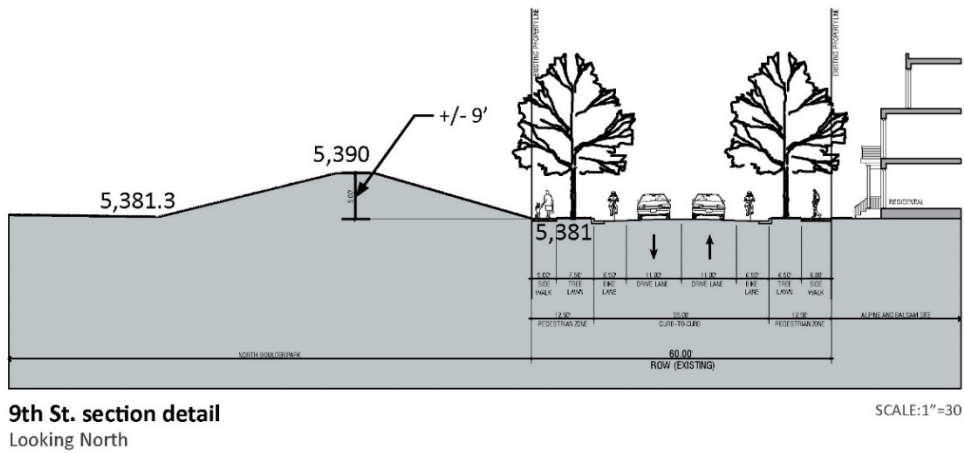


**CRITERIA**

- No impact to water table
- Maximize detention volume

**OUTCOMES**

- **210 cfs** release rate is required for 100 yr floodplain
- **15.41 ac/ft** detention in the park
- Outfall located along the Balsam Ave.
- Requires **+/- 9'** berm
- Requires removal **21 trees**



N. BOULDER FLOOD MITIGATION | **MAXIMIZE DETENTION OPTION**

ALPINE AND BALSAM SITE PLAN  
5/23/2019

CIVITAS

Figure 2 - Maximize Detention Option



NO DETENTION IN NORTH BOULDER PARK & BALSAM GREENWAY

DETENTION STRATEGY



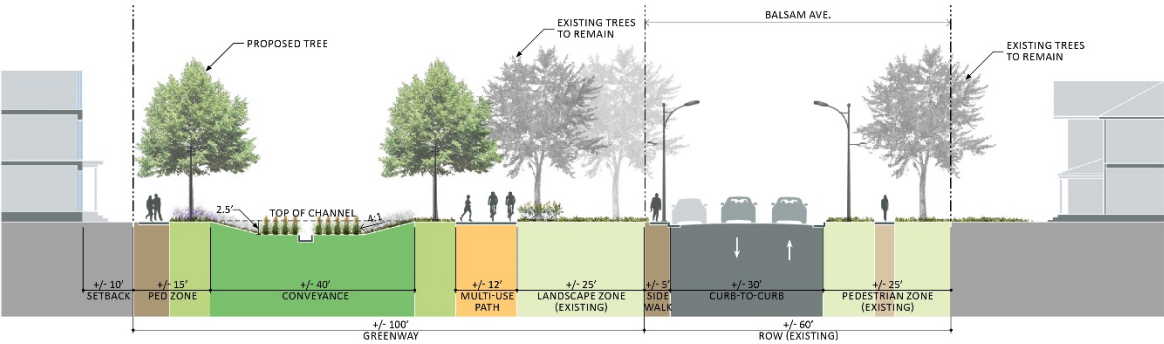
CRITERIA

- No impact to the water table
- Accommodate 521cfs (100-year flow) on site

OUTCOMES

- No detention in NBP
- No impact to the park usability
- No impact to existing trees on the site or park
- Requires approximately 2 acres of site in a 100' wide greenway with a +/- 40' wide at top and +/-2.5' deep channel, or a 50' wide greenway (no channel) and culvert under Broadway to accommodate 100-year flows .

CONVEYANCE CHANNEL & GREENWAY - A



CULVERT & GREENWAY - B

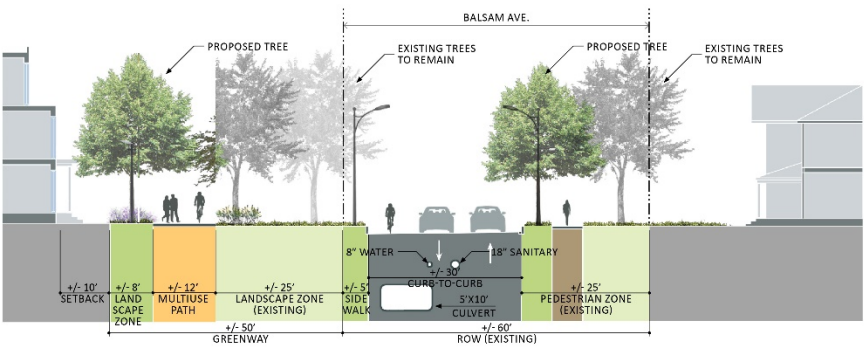


Figure 3 - No Detention in North Boulder Park

# Alpine-Balsam Facilities and Services Assessment DRAFT

An initial assessment of the area plan's potential impacts on both city capital and operating budgets for several public services has been conducted as part of the area planning process. As options are refined and a preferred option is identified, staff will refine the assessment of potential impacts and associated costs with estimates of potential revenue from impact fees or other sources.

The overall assessment is broken into the following service assessment topics:

1. Parks and Recreation (Neighborhood and Community Parks; Recreation facilities and programming)
2. Water and Wastewater Utilities
3. Fire and Emergency Response
4. Police Services
5. Library Services
6. Arts and Culture
7. Schools

Each assessment topic evaluates the proposed changes to population in the Alpine-Balsam area based on potential land use changes.

## Policy Context

The guiding principles for development in Boulder Valley are defined by the Boulder Valley Comprehensive Plan's (BVCP) policies regarding infrastructure development. The BVCP policies include statements that an adequate range of urban services must exist prior to development in order to support the development increase. The intent of these growth policies, as described in the BVCPs policies, is to strategically channel development. The channeling of development is intended to occur in areas with adequate infrastructure, or in areas designated for service improvements under the Capital Improvements Program (CIP). Where development potential exists, any new development should "pay its way" by paying the cost of added facilities, fair share of impact on services to mitigate negative impacts. A deferment or variance from the requirement to provide adequate urban services for urban development is considered in conflict with the best interests of public health, safety, and welfare, and therefore should not be supported.

The following questions have guided the assessment of city service impacts in the Alpine-Balsam area:

1. What is the **current level of service**?
2. What are the potential **impacts on level of service** from population or employment changes?
3. Are there **additional facility and service needs** required to meet current service standards for each option?
4. What is the **estimated cost of added** facilities and services? Will projected growth (over current trends) adequately pay for the projected added facility and service need (i.e. projected fees, taxes on property and sales)?

5. What impact does projected population growth have on existing and planned school facilities (relative to current trends)?

### Assessment Standards

Most public services are guided by level of service (LOS) targets determined by the corresponding department's master plan. The Alpine-Balsam options and projections are assessed according to the degree the options meet the LOS standard for a public facility or service. In instances where the incremental growth associated with an option diminish LOS below the adopted standard and can be applied to that reduction in service, the costs associated with making improvements to meet the LOS standard are summarized.

Whilst master plans may clearly identify a capital fund need, not all needs are fully funded. In many cases, the funding gap occurs due to timing of funds allocation relative to plan creation. Specifically, most City master plans are based on a 20-year timeframe, although the annual budget for Capital Improvements Program (CIP) is based on a 6-year timeframe.

### Assumptions

The initial impact assessments were made using broad assumptions for potential projected population growth. These include:

- Elimination of the hospital use (~230,000 sq ft; +/-500 staff; plus patients and visitors)
- Renovate the Medical Office Pavilion for 90,000 sq ft of city offices / service center
- Emphasize housing as the primary use on the city's site with up to 300 units of high-density housing in the form of stacked flats and/or townhomes (~650 population). Housing may serve to address needs of several of the more challenging types of housing needs including senior housing, permanently supportive housing for people transitioning out of homelessness, or housing for harder to serve populations and low/moderate and middle-income priced for-sale homes.
- Continue to explore partnering with Boulder County to locate their services that are currently at Iris/Broadway complex to Alpine-Balsam (+120,000 of county offices/service center instead of approx. 230 of the housing units).
- Explore potential land use changes in the nearby area to address housing goals and may propose changes that would potentially encourage redevelopment resulting in up to an additional 370 more units (over the next 15 years) (~800 population).

## Executive Summary

### Parks and Recreation

- The potential increased population associated with all options can be accommodated within Level of Service (LOS) for neighborhood parks established by the Parks and Recreation Master Plan.
- While North Boulder Park is classified as a neighborhood park, it serves a wider population because of the aesthetic value of the park and unique features. Given its already high amount of



use, staff recommend providing additional amenities within the park to serve an increase in population.

### Wastewater Collection System

- In general, the potential increase in flows can be served by the existing sewer system. The exception to this is a section of sewer in 20<sup>th</sup> St from Alpine Ave. to Bluff St. that is currently exceeding the city standard that peak dry weather flows shall not cause the sewer to flow more than half full. Although new development would exacerbate an existing deficiency, the Utilities Division will reassess the capacity needs during the next utility plan updates and program the capital project in the Capital Improvements Program accordingly.

### Water System

- This area is served with water pipeline infrastructure that is well looped and in close proximity to the city's larger transmission pipelines network. Static pressure in this area is very good and ranges from about 80 to 100 pounds per square inch (psi). However, as construction proceeds in the area there may be the opportunity to accomplish water infrastructure improvements in conjunction with other construction in order to support additional future development and system flexibility.

### Fire Rescue

- The area is primarily served by the units housed at Station 1 at 2441 13<sup>th</sup> Street, within the area plan boundary. In general, demand for fire rescue services is likely to increase over time due to the additional residents and the potential for an increase in calls. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community.

### Police

- Demand for police services are likely to increase over time due to the additional residents. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community. Including a small office space in the new city service center (i.e. renovated Medical Pavilion) for officers to complete paperwork, use the telephone, etc. would meet an identified capital need for facilities in the northwest section of the city.

### Library Services

- All potential additional population growth can be accommodated under the current Library Master Plan and not appreciably impact service levels.

### Arts and Culture

- Opportunities exist to integrate arts and cultural improvements in the area in conjunction with new civic facilities and other infrastructure.

## Schools

- Neighborhood schools have capacity for projected student yields from new residential development at the Alpine-Balsam site and in the wider area.

## Analysis

The following describes the assessment of each topic and projects impacts on each service. The cumulative cost impact on services is estimated and presented relative to the estimated revenues received in each option.

## Parks and Recreation

The Parks and Recreation Master Plan was adopted in 2014 and guides the Parks and Recreation programs and facilities in serving the Boulder community. An update to the master plan is planned for 2020-2021. The master plan is designed to provide strong direction and help the community decide which park and recreational needs are most pressing with revisions undertaken every five years.

The plan identifies levels of service (LOS) standards to measure the amount or type of the public service to be provided to meet community needs and expectations. Among other goals, the standards aim to provide a benchmark for evaluating deficiencies and defining needs for new facilities to serve areas of new development.

Impacts to park and recreation services were assessed based on service area standards outlined in the update to the Parks and Recreation Master Plan. Level of service standards for neighborhood and community parks are measured both by the amount of park land per resident on a city-wide and subcommunity basis and a service radius based on the maximum desired walking distance from residents' homes to a park in their neighborhood. The following are the standards for neighborhood and community parks:

### **Overall park acreage:**

Neighborhood parks:	3.15 acres per 1,000 population
Community parks:	1.5 acres per 1,000 population
City Park	7.3 acres per 1,000 population

### **Park size and location:**

#### Characteristics of Traditional Neighborhood Parks

- Typically, five acres or larger
- Typically serve residents living within easy walking and biking distance (half-mile/10-minute walk)
- Offer non-programmed outdoor space including paths, seating areas, places to picnic and play catch, children's play areas, and landscaping that enhances and preserves the site's natural character

#### Characteristics of Smaller Neighborhood Parks

- Smaller than five acres
- Flat, grassy, flexible-use space that is not programmed for active recreation
- Area for children's playground equipment
- Generally used for passive (not active) recreation
- Areas for sitting and picnicking
- Easily accessible to neighbors by sidewalks and/or paths
- Compared to traditional neighborhood parks, more expensive to maintain due to size, materials, and features

#### Characteristics of Community Parks

- Provide space for those recreational activities that serve a wider population than the surrounding neighborhood and are intended to serve several neighborhoods within a larger geographic area of the city.
- These parks can range from 20 to 100 acres in size and provide a balance of natural environments and developed facilities.
- Physical features commonly found in community parks include multiple sports fields for baseball, softball, soccer, football, and other related sports that are scheduled for leagues and tournaments.
- They can also provide tennis courts and multi-purpose courts for basketball, volleyball, and handball. Other areas include playgrounds, picnic shelters, tables, paths, and off-street parking lots.

The current Parks and Recreation Master Plan does not project housing in the current non-residential areas of the city. Addition of new housing in the commercial and industrial areas would trigger the application of the park service standards in these areas.

#### Analysis

Impacts to Parks and Recreation are assessed according to LOS standards for: 1) park size and location and, 3) recreational facilities and programming.

##### **1. Park Size and Location**

Under the existing service standards, the area surrounding the Alpine Balsam area in Central Boulder is well served by an existing park acreage of 41.4 acres provided by the following parks:

- North Boulder Park
- Columbine Park
- Salberg Park
- Eben G. Fine Park
- Civic Park
- Emma Gomez Martinez Park

This equates to a LOS of 3.66 acres per 1,000 population according to population estimates in the area totaling 11,300 residents. With an anticipated potential increase of approximately 1,450 residents, this LOS would only drop to 3.25 acres per 1,000 which is still within the master plan standard LOS of 3.15.



While North Boulder Park is classified as a neighborhood park, many users come from various parts of the city because of the aesthetic value of the park and unique features. Given this, the park can experience a high amount of use at certain times of day and especially weekends and holidays. Given the increased population, the only anticipated impacts would be increased use of amenities in North Boulder Park including the playground, pavilion and multi-use fields for pick up games and passive recreation. Staff recommend providing additional amenities within the park to serve an increase in population. These amenities should be evaluated in the up-coming master plan process and programmed in the Capital Improvements Program to align with the timing of new residents. The chart below describes the draft initial estimated costs of the proposed new amenities.

Table 1: Estimated potential costs for park amenities

Park Amenities	Costs
Playground Amenities (equipment, surfacing, fixtures and furnishings)	\$675,000
Pavilion (structure, plaza, furnishings)	\$125,000
Landscaping and Site Work	\$30,000
Design/Permitting	\$65,000
Contingency	\$89,500
<b>TOTAL PARK COSTS</b>	<b>\$984,500</b>

## 2. Recreational Facilities and Programming

The Parks and Recreation Master Plan does not outline the need for any additional recreation centers beyond what currently exists. An incremental increase in use of the facilities may result in limitations to available capacity. The existing North Boulder Recreation Center may be redesigned to meet expanded and changing needs of the community. Valmont Park and the regional park site in the Planning Reserve also are expected to address future active recreational needs as they arise. Also, the proposed development should consider best practice of providing a small multi-use fitness room to serve the new residents that might not want to travel to the rec center for strength training, programming and fitness equipment.

## Water and Wastewater Utilities

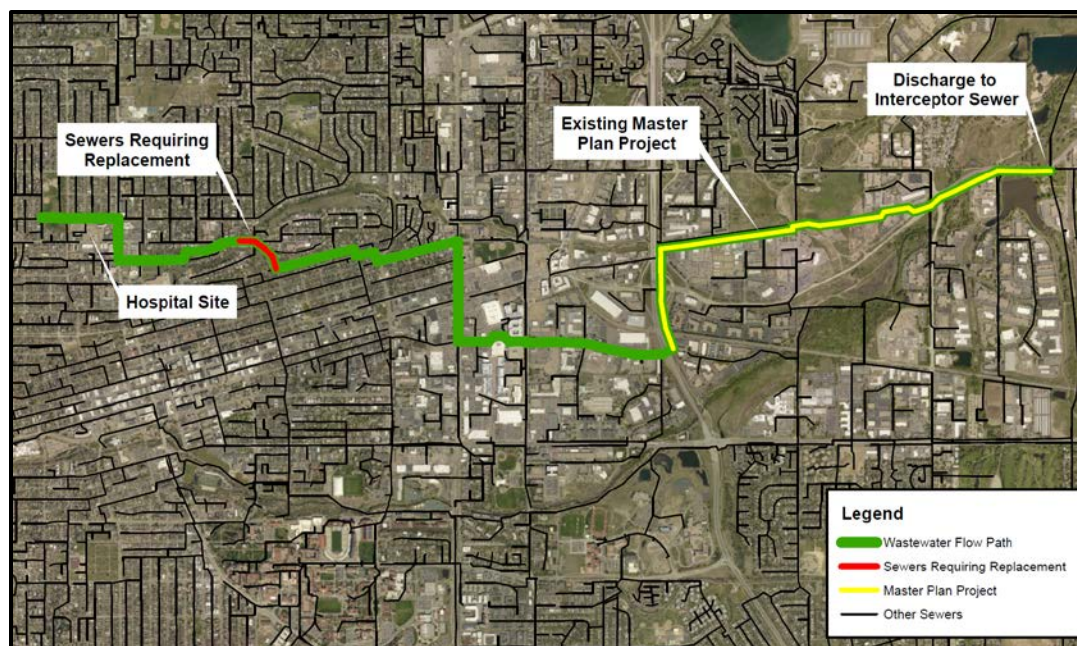
Impacts on water and wastewater utility capacity is assessed using the current master plan. The City's water and wastewater utility master plans outline future system capacity, rehabilitation, and development needs based on the BVCPs growth and development goals and policies. Master plans are generally updated every 5-10 years to reflect changes in projected growth. All of the currently adopted

utility master plans are based on population and employment projections that pre-date the Alpine-Balsam projections.

Wastewater from the area is collected by a series of sanitary sewers that flow generally to the east via the city's trunk sewer system to the city's main interceptor sewer at Valmont Rd and Butte Mill Rd. An overview map of the impacted sewers has been provided as *Figure 1 – Sewers Impacted by Proposed Development*.

In order to evaluate the impact of the proposed changes on these sewers the potential net change in wastewater flows was calculated and compared to the remaining capacity in the sewers as estimated by the city's hydraulic model and field inspections.

The wastewater flow changes were calculated using the guidelines provided in the city's Design and Construction Standards (DCS). The result of these calculations is provided in *Table 1 - Change in Dry Weather Wastewater Flows*.



**Figure 1- Sewers Impacted by Proposed Development**

**Table 2. Change in Dry Weather Wastewater Flows**

Change in Use	Change in Wastewater Flows
Elimination of the hospital use	-26,500 gpd
Conversion of medical offices to City offices	No Change
300 new housing units on City owned Site	+65,000 gpd
370 new housing units in surrounding Area	+80,000 gpd
<b>Net Change in Flow (gallons per day)</b>	<b>+118,500 gpd</b>

<b>Net Change in Flow (gallons per minute)</b>	<b>+82.3 gpm</b>
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In general, the potential increase in flows can be served by the existing sewer system. The exception to this is a section of sewer in 20<sup>th</sup> St from Alpine Ave to Bluff St that is currently exceeding the DCS standard that peak dry weather flows shall not cause the sewer to flow more than half full. Field inspections have shown that during peak flow times this section of sewer already flows at more than half full (~60% full). As a result, this section of sewer would require replacement to accommodate the potential additional wastewater flows. Staff have estimated the cost for this replacement as \$1.7M with a potential range from \$0.9M to \$3.4M (Class 5 Cost Estimate Range -50% to +100%). A detailed map of the sewers requiring replacement is provided in *Figure 2 – 20<sup>th</sup> St Sewers Requiring Replacement*.



**Figure 2 - 20<sup>th</sup> St Sewers Requiring Replacement**

In the downstream section of the wastewater flow path the city has also identified the need to increase sewer capacity to accommodate wet weather flows. This is being accomplished by the Goose Creek Trunk Sewer Replacement Project and the Main Interceptor Sewer Realignment Project. Both projects are currently under design with construction anticipated in 2020 for the Goose Creek project and 2021 for the Main Interceptor project. The redevelopment of the hospital site and land use changes in the surrounding area are not anticipated to have any impact on the design of these projects.

Although new development would exacerbate an existing deficiency, the Utilities Division will reassess the capacity needs during the next utility plan updates and program the capital project in the Capital



Improvements Program accordingly. Initial cost estimates for replacement of the sewer in 20<sup>th</sup> St from Alpine Ave to Bluff St is approximately \$1.7 million.

### Water System

In general, this area is served with water pipeline infrastructure that is well looped and in close proximity to the city's larger transmission pipelines network. Static pressure in this area is very good and ranges from about 80 to 100 pounds per square inch (psi). However, as construction proceeds in the area there may be the opportunity to accomplish water infrastructure improvements in conjunction with other construction in order to:

- 1) support higher densities possible for future development,
- 2) support flexibility in development type now and into the future, and
- 3) support flexibility in the specific locations of development density within the area.

These system improvements have a range of potential total cost of \$1.4M to \$4.2M. The cost is greatly influenced by many factors including whether other utility work is being constructed simultaneously and/or if other factors allow for shared expenses. Changes to these suggestions can be revisited as more information becomes available regarding development type and the location of density within the development area.



Figure 3 – Conceptual Water System Improvement

## Fire and Emergency Response

Impacts on fire rescue service has been assessed based on the level of service standards outlined in the BVCP and Boulder Fire-Rescue Master Plan and through discussions with the Fire Department staff about current facility and staffing needs.

The primary service standard used by the department is a call response time of six minutes or less. The response time standard is the maximum timeframe set for firefighters to arrive at the scene once a call is received. Response time standards are impacted by three related factors: (1) demand and capacity; (2) travel distance; and (3) traffic congestion and mitigation.

1. Demand for fire rescue services is likely to increase over time due to the additional residents and the potential for an increase in calls. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community.
2. The area is primarily served by the units housed at Station 1 at 2441 13<sup>th</sup> Street, within the area plan boundary. Currently the station has 2 units that respond to calls. Depending on call volume and concentration, the second unit may be relocated to the new Fire Station #3 at north 30<sup>th</sup> Street. Staffing levels are evaluated at a minimum at each master plan update and may be shifted over time as redevelopment occurs in this and other areas of the city.
3. Traffic impact studies have concluded that the changes in land use considered in the Alpine-Balsam area will result in significantly fewer trips than when the hospital was operating at full capacity.

Other considerations regarding the potential future uses at Alpine-Balsam that will factor into future planning and staffing include:

- Types of housing and populations served (i.e. senior housing may result in more frequent calls than other multi-family units)

## Police Service

Potential impacts to police services are assessed by basing current and projected population and staffing levels on level of service standards outlined in the Police Master Plan which is scheduled to be updated in 2020. The current service ratio standard is 1.7 officers per 1,000 inhabitants and 1 clerical position for every 5 officers. The standard provides a systematic method for translating the impact of growth into the number of police personnel required to maintain an adequate level of service. Even though the service standard only addresses population, staff estimates that 80% of calls for service are generated by individuals and 20% generated by businesses.

Demand for police services are likely to increase over time due to the additional residents. The need for additional staff based on growth of population or employment will be considered comprehensively as part of the master plan update in 2020 factoring potential changes in uses and growth from this planning effort as well as other areas of growth in the community.

There are several considerations regarding the potential future uses at Alpine-Balsam that would potentially provide a benefit to police service delivery:

- New housing for people who were previously unhoused (i.e. permanently supportive housing) may reduce service need to those individuals.
- Including a small office space in the new city service center (i.e. renovated Medical Pavilion) for officers to complete paperwork, use the telephone, etc. would meet an identified capital need for facilities in the northwest section of the city.

## Libraries

All potential additional population growth can be accommodated under the current master plan and not appreciably impact service levels. No additional new facilities are needed other than what is included in the current Master Plan (e.g. Mobile Service e.g. bookmobile, mobile maker/program lab, and North Boulder Branch Library). There may be need for some incremental increase in operating funds to support the collection and programs depending on increased demand, as anticipated in current Master Plan.

## Arts and Culture

Arts and Culture in public places and public art reflect a community's personality. These components can be integrated into the area with other infrastructure or development projects as they proceed. Types of improvements might include, but are not limited to:

- Access and Mobility (Transportation): corridor-wide public art components to unify routes and serve as innovative approaches to wayfinding; artist-designed crosswalks to promote safety and visibility; creative experiences for transit users, cyclists and pedestrians.
- Environment and Flood: artist-designed elements of flood mitigation projects
- Civic Facilities: integrate public art through the practices of civic dialogue and gathering spaces; small arts (or flex) spaces as locations for education, contemplative arts, community performing arts and civically programmed events.

## Schools

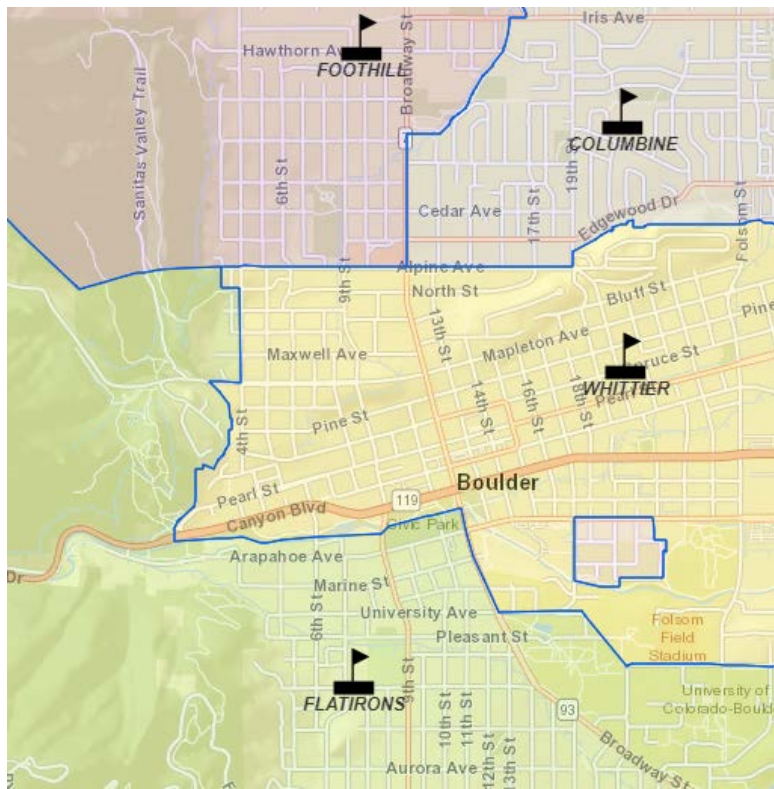
The elementary schools that currently serve the plan area are Whittier and Foothill Elementary. At the middle level all of the planning area falls within Casey's attendance area. Boulder High School serves this entire area.

Boulder Valley School District staff provided the following assessment of capacity in neighborhood schools.

- The Foothill Elementary neighborhood school is in its 5<sup>th</sup> year of decline and the school is only 69% of its capacity (even with open enrollment). Casey is 73% while Boulder High is 91% of capacity when looking at resident students only (both are close to full with open enrollment, but that can be managed) and can take the additional students from this development. The district is expecting far fewer high school students in Boulder in the next 10 years since the upcoming elementary classes in Boulder are much smaller than the ones that currently feed the High schools.



- The number of additional students generated by new housing units in the planning area will vary depending on the housing types, number of bedrooms and affordability. Multi-family units in Boulder have not historically yielded very many school-age children. Using student yield factors seen in multi-family areas in Boulder, the number of new students that could be generated from new housing on the city-owned site range from as few as 18 students (E=9, M=4, and H=6) to 42 students (E=20, M=10, and H=12) and not all would attend their neighborhood school. Even at the high end of the range, local schools can absorb the impact. Additional new housing in the area would likely generate additional students at the lower end of the range described for the Alpine-Balsam site. Even if the range doubled, the student impact can be accommodated by neighborhood schools.



(Source: Boulder Valley School District).

## Community Engagement Plan: June – September 2019



**Purpose of Engagement:** During this phase of engagement, the purposes include:

- facilitate community understanding about possible future changes and opportunities in the area;
- collect feedback on draft plan components including land use options, connections plan, and access and mobility strategy as well as identify common ground in divergent views in the community in order to inform development of a draft plan; and
- share decision-making process and schedule with community members.

Public Hearings will be held for community members to share views directly with decision-makers.

**Objectives:** Within the City of Boulder’s adopted Strategic Engagement Framework, engagement is focused on *inform* and *consult*.

*Inform:* the objective is to provide clear and complete information on past engagement, direction from Planning Board and City Council that has shaped options, current and future engagement opportunities, and area plan goals. Supplemental supporting documentation and analysis on a variety of topics such as flood mitigation, traffic analysis, housing affordability analysis, and land use prototypes will be shared with the community.

*Consult:* the objective is to collect feedback from community members on preferences on land use and urban design; and access and mobility; which will be presented through Land Use Options, Land Use Prototypes, draft Connections Plan and Improvements, and Access and Mobility Strategy.

**Format:** In-person events will consist of a guided open house format, with an array of boards and handouts and a detailed feedback form. The online BeHeard platform will seek to emulate this format by utilizing visual and written materials alongside a feedback form.

Public Hearings will be held for Planning Board and City Council meetings to review and provide direction on the draft and final area plans.

The Alpine-Balsam Area Plan has citywide impact and interest, and as such, there will be a variety of events and efforts to reach a broad citywide audience, interested nearby neighbors, and those who have not yet participated in engagement efforts for this project.

Format/Event	Target Audience
<b>Community Open House</b>	
<ul style="list-style-type: none"> <li>• Alpine-Balsam Open House with HAB (tentatively scheduled for June 19, Civic Area in conjunction with Farmers Market)</li> <li>• Alpine-Balsam Open House (2 dates TBD, Brenton building)</li> </ul>	<p>Families, younger adults, citywide</p> <p>Citywide but likely attendees are nearby neighbors</p>
<b>Pop-ups at various locations or other city events</b>	Citywide, focus on those not typically involved

<ul style="list-style-type: none"> <li>• Concert in the Park (Monday, June 24, North Boulder Park)</li> <li>• TBD</li> <li>• TBD</li> </ul>	Families with children, neighbors, and adults over 65 Renters Spanish-speakers
<b>Meetings with organizations</b>	Community, social and neighborhood organizations
<b>Walkabouts in neighborhood</b>	
<ul style="list-style-type: none"> <li>• Alpine-Balsam Walkabout focusing on access and mobility improvements (dates TBD, start at Brenton building)</li> </ul>	Immediate neighbors
<b>Informational Video</b>	Citywide
<b>Advisory Board meetings for feedback and recommendations</b>	TAB, HAB, PRAB
<b>Online Information and Feedback Exercise</b>	Citywide
<b>Public Hearings with Planning Board and City Council</b>	Citywide