

East Arapahoe Transportation Network Plan

DRAFT

Arapahoe Road



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ATTACHMENTS

- A. East Arapahoe Transportation Network Plan - ACTION PLAN
- B. TNP Development and Approval Process
- C. BVRC Transportation Connections Plan Map

1.0 Summary

This East Arapahoe Transportation Network Plan (TNP) addresses the multi-modal transportation system needs for moving to and through the Arapahoe Avenue corridor from 35th Street (the eastern edge of the Boulder Valley Regional Center area) to Boulder's eastern city limits (the top of the hill just east of Westview Drive). The Transportation Network Plan area extends approximately one third of a mile north and one third of a mile south of the centerline of Arapahoe Avenue itself. Recommended transportation system improvements at the western end of the East Arapahoe Transportation Network Plan area overlap with, and are consistent with the recommended improvements in the Boulder Valley Regional Center Transportation Connections Plan.

The East Arapahoe Transportation Network Plan defines the desired future transportation network in the area for all modes of travel. The TNP will help land owners, developers, and the City plan for the connections needed in this area. Over time, the plan and the proposed improvements will be integrated into the Boulder Valley Transportation Master Plan (TMP) and the Transportation Capital Improvement Programs (CIP).

Some of the ways that the recommendations and requirements of the TNP will be implemented include:

- construction of capital improvements as part of Boulder's Capital Improvement Program
- reconstruction of Arapahoe Avenue from 63rd Street to 75th Street, as part of a phased CDOT project with input from Boulder and Boulder County
- reservation, dedication or acquisition of right-of-way, or construction within the right-of-way by developers pursuant to 9-3.3-14 Boulder Revised Code (BRC), 1981
- construction of on-site improvements by property owners as appropriate when parcels develop or redevelop, including but not limited to the new hospital at 48th / Arapahoe, the Jewish Center at Cherryvale / Arapahoe, and the Auto Park Expansion and Waterview Center at Cherryvale / Arapahoe.
- transportation system expansions and improvements in the CU Campus east of 30th Street and south of Arapahoe Avenue by CU.

The major components of this East Arapahoe Transportation Network Plan include:

- **Map Based Transportation Network Plan**, illustrated on Figure 1 including recommended multi-modal facilities and connections. Note that this is a right-of-way plan based on Section 9-3.3-14 of the 1981 BRC.
- **Boulder Valley Regional Center Transportation Connections Plan (BVRC TCP) recommendations** in the overlap area at the western end of the East Arapahoe TNP corridor. The BVRC TCP was adopted by City Council on October 15, 2002.
- **East Arapahoe TNP Document** (this document) including goals, objectives, policies, plan amendment procedures, standards and implementation guidance
- **East Arapahoe TNP Action Plan** which is a A to do@ list of steps necessary to implement this Transportation Network Plan (*in this document as Attachment A*).

Some action items are one time events; some have specific target dates attached; and some describe on-going activity needed. The TNP Action Plan will be updated periodically by Transportation Division staff.

Attachment B is a summary of the East Arapahoe TNP development and public review and adoption process.

2.0 Goals and Objectives

2.1 Goals The goals listed below represent the ultimate targets for the East Arapahoe TNP:

- Improve access and mobility to, through, and within the East Arapahoe area for all modes of travel by developing a multi-modal transportation grid where possible.
- Improve transportation safety for all modes and reduce traffic accidents.
- Provide visual continuity within the transportation corridor.
- Reduce vehicular congestion on arterial roadways in the area and minimize the need for traffic within the area to circulate on arterial roadways.
- Provide a transportation network that improves access to businesses in the area.
- Provide infrastructure that contributes to the overall goals of the Transportation Master Plan.
- Provide a transportation network that supports and encourages land development and/or redevelopment that is consistent with the Boulder Valley Comprehensive Plan and other city master plans.
- Provide path and roadway connections in locations and designs that minimize impacts to the natural environment.

2.2 Objectives The objectives listed below are divided by categories relating to general issues, capital improvements, programs, regulation changes, development review guidance, and planning activities that will be used to implement the goals of the TNP:

General Objectives:

- Develop and maintain a map-based plan for a multi-modal transportation network in the area that defines the needed transportation connections (roadways, paths, routes etc.) for pedestrian, bicycle, automobile, and transit travel. This map based plan is illustrated in Figure 1.
- Develop regulations and ordinances specific to this TNP as necessary that can be used to evaluate and direct development and redevelopment applications.
- Pursue the construction of a bicycle and pedestrian trail along the south side of the railroad right-of-way throughout the East Arapahoe TNP area that is continuous from the Boulder Transit Village on Pearl Street.
- Coordinate transportation planning efforts with Boulder County and CDOT in this critical intercity corridor.

- Support the use of best management practices that minimize community and environmental impacts.

Objectives geared toward capital project construction by the City, CDOT, or CU (may also have application to development review):

- Define short-term improvements and connections from the TNP map for inclusion in Boulder's Transportation CIP.
- Evaluate the potential for innovative transit improvements in the arterial roadway rights-of-way, such as bus queue jump lanes, bus-bike-right turn lanes, etc. These types of transit improvements are envisioned in the existing outside lanes of travel, particularly where six lanes already exist, without widening the overall roadway.
- Evaluate the potential for pedestrian refuge medians at signalized crossings of Arapahoe to mitigate the long crossing distances.
- Work with CDOT staff to develop roadway reconstruction plans that facilitate safe, efficient and enhanced travel for all modes as part of CDOT's phased reconstruction project on Arapahoe from Cherryvale to 75th.
- Work with CU staff to facilitate construction of pathway connections in the CU research park area.
- Include the East Arapahoe TNP recommendations in the Boulder Valley Transportation Master Plan update as appropriate.
- Identify and complete missing sidewalk links in the area.

Objectives geared toward development review regulations:

- Implement the map-based plan in a way that ensures the planned connections are made while maintaining as much flexibility for land development options as possible for property owners developing or redeveloping individual sites.
- Require the provision of internal pedestrian connections or removal of barriers to interior pedestrian travel between adjacent properties, in addition to public sidewalks.
- Accommodate cross-site automobile access between parking lots where practical when properties develop or redevelop to minimize travel on arterial roadways.
- When parcels develop or redevelop, require that a back door@ or Across site@automobile connections between commercial sites be provided where practical, often along the back of the property along both sides of arterial roadways to enhance access and minimize the need for automobile turns to and from the arterials.
- Where practical, require driveways on developing or redeveloping parcels to be located at the edge of the property such that they can be shared with adjacent properties (either in the near-term or when the adjacent parcel develops or redevelops).

3.0 The Map-Based Transportation Network Plan

The Transportation Network Plan Map for the East Arapahoe area (see Figure 1) illustrates the following existing and proposed transportation facilities:

- roadways or automobile connections of one of the following types:
 - primary roadways
 - secondary roadways

(Note that all roadways are assumed to have sidewalks on both sides unless modified for a specific roadway segment as part of a site review process)

- on-street bike lanes
- off-street bike / pedestrian multi-use pathways
- grade separated path crossings
- transit routes
- combination bus / bike / right-turn lanes
- transit super stops (typically at places where transit routes cross)
- traffic signals
- at-grade pedestrian crossings, either at an intersection or mid-block

On the maps, existing facilities are represented by solid lines and recommended future facilities are illustrated with dashed lines. Existing facilities that are in need of upgrade are illustrated with dotted lines.

The right-of-way for all future transportation facilities should be dedicated or reserved. Existing transportation facilities that are not in the public right-of-way will need to have their right-of-way dedicated or reserved at the time of redevelopment (see Section 4.4 of this TNP).

3.1 TNP Super Block Maps

The TNP area has been divided into 5 super blocks (see Figure 2 for a super block key) to allow a more detailed view of the recommended transportation connections. The super blocks are illustrated in Figures 3 - 7, which include written descriptions of the intended connections where appropriate.

3.2 Transit in the East Arapahoe Area

Transit is a critical component of the multi-modal transportation system in the East Arapahoe area, and all of the maps referenced above include corridors where transit currently exists or new transit services are proposed. The attached Future Transit Map (Figure 8) provides a more comprehensive look at transit facilities and connections in the East Arapahoe and surrounding areas, and includes:

- route specific information for existing and future transit on each roadway corridor

- a broader look at existing and future regional transit connections
- distinction between local and local high-frequency transit routes
- reference to a new high frequency circulator shuttle through the BVRC area
- the potential for future commuter rail service in the corridor
- the potential for a future park and ride facility to serve future commuter rail.

Additional high frequency shuttle service in the East Arapahoe TNP area includes the new STAMPEDE connecting CU's main campus with the east campus and the Arapahoe corridor. The proposed new circulator shuttle connecting the various parts of the BVRC is shown with a conceptual alignment that will allow users to access multiple destinations while leaving their cars parked. This two-way circulator should have a frequency of less than 10 minutes if it is to be successful.

The transit routes serving the Arapahoe corridor are defined in the maps discussed above. However, the actual roadway's functional utilization, its cross-section, and right-of-way, will receive additional study to determine its most appropriate configuration to support all modes. One possibility that has been discussed, and is scheduled for implementation in the North 28th Street Corridor, is the use of the outside lanes on a 6-lane roadway as bus-bike-right turning vehicle lanes.

Transit superstops are recommended at major intersections in the Arapahoe corridor where regional and local transit routes cross. RTD has expressed interest in a park and ride facility adjacent to the rail line and across from the Boulder Valley School District facility that one day may serve commuter rail users..

The resultant transit grid of local, regional, and high frequency shuttle services illustrated on Figure 8 will be necessary to help Boulder meet its aggressive multi-modal goals. And the grid of bicycle and pedestrian facilities illustrated throughout this Transportation Network Plan will be critical to ensuring the transit system's success.

4.0 Policies Needed to Support the East Arapahoe TNP

This section includes the policies that support the implementation of the TNP. In some cases additional rationale is provided for a topic after the policy statement to support its intent.

4.1 Connectivity to the City-wide Multi-Modal Transportation System

Policy: The multi-modal transportation facilities illustrated on Figure 1 that connect from the TNP area to the surrounding transportation network should be prioritized, programmed and implemented by the City of Boulder as part of the Boulder Valley Transportation Master Plan and CIP process.

4.2 Flexibility of Connection Location Regarding Development or Redevelopment

Policy: The multi-modal improvements illustrated on the East Arapahoe TNP map (Figure 1 and Figures 3 - 7) are intended to define the needed connectivity in that area. The alignments of these connections are specific to the area shown but are not intended to be precise, so long as the connection illustrated is created in a manner that facilitates efficient travel. The intent of the TNP is to maintain flexibility in the implementation of these connections so as to not hinder redevelopment potential of a parcel or parcels. Development or redevelopment proposals should illustrate that the intended connectivity is achieved. If the connection illustrated on the TNP map cannot be made where shown, the alignment may be varied as follows:

- development or redevelopment parcels that are 10 acres in size or less must achieve the connection within 50 feet on either side of the alignment illustrated on the TNP map.
- development or redevelopment parcels that are more than 10 acres in size must achieve the connection within 100 feet on either side of the alignment illustrated on the TNP map.
- In the case of larger parcels or aggregations of parcels (15 acres or larger), it is the intent of the TNP to allow flexibility in the number and type of connections made across a site, so long as the proposed connectivity goals of the TNP are achieved. This connectivity goal can best be described as the equivalent of the street / alley / sidewalk grid found in traditional downtown areas.

Changes in the proposed connections in development or redevelopment parcels that exceed the alignment limits described should be reviewed in the Plan Amendment Process as described in Section 6.6.

While there is flexibility in the alignment of sidewalks and multi-use pathways, serpentine routing should be avoided. Pedestrian and bicycle facilities should be as straight, level, and direct as possible to support their primary purpose as transportation connections. Exceptions to this policy will be made when a trail is on Open Space and Mountain Parks or other sensitive lands and recreational or resource protection goals justify a less direct routing.

4.3 Coordination of Access to Arterial Roadways with Arterial Roadway Frontage

Policy: Coordination and sharing of driveways between adjacent parcels along arterial roadways and consolidation of driveway access to roadways within a single parcel should be achieved as parcels redevelop along arterial roadways in the East Arapahoe area.

Driveways accessing arterial roadways in a developing or redeveloping parcel should be located as close as possible to an edge of the property so as to be shared with an adjacent property when the adjacent property develops or redevelops. If the adjacent property already has a driveway located at the common property line, a shared driveway should be created to serve both parcels.

No more than one driveway should be provided onto any roadway frontage when a parcel of 5 acres or less develops or redevelops, except that two driveways could be considered to serve a parcel only if both of the two driveways are located on the edges of the parcel such that they serve (or can in the future serve) the adjacent parcels on either side as well.

Consolidating driveway access onto arterial roadways will enhance safety and operational efficiency in the East Arapahoe area. Sharing driveways between adjacent parcels, coupled with the provision of secondary Aback door@ roadways at or near the rear property lines (as illustrated on Figures 1 and 3 - 7) can improve the access to any given parcel. Figure 9 illustrates this concept, comparing existing parcel access for a generic block of Arapahoe Avenue to an enhanced access pattern achieved through redevelopment and implementation of the TNP.

4.4 Right-Of-Way Dedication and Acquisition

Policy: Necessary rights-of-way or easements for the transportation facility improvements identified on the TNP map will be reserved, dedicated to, or acquired by the City as a condition of approval for applicants applying for development or redevelopment of a parcel. In cases where secondary roadways are to be added, right-of-way dedication for only the roadway portion of the right-of-way may be considered, with planting strips and sidewalks remaining in easements. The City of Boulder may need to acquire the necessary right-of-way or easement for projects to be constructed by the City.

4.5 Pedestrian Connections Between Buildings

Policy: Development or redevelopment of commercial properties in the East Arapahoe area should be designed to allow pedestrian travel between buildings. Physical barriers such as walls, fences, hedges, berms, or significant grade changes between parcels will be discouraged in order to allow for convenient pedestrian travel between buildings and thus avoid short vehicle trips between adjacent parking areas and additional circulating traffic on the arterial roadway system. If barriers can not be avoided, or cannot be removed where they already exist, they shall have breaks where needed for pedestrian cross-access. At least one pedestrian link shall be provided to each abutting property (in addition to the public sidewalk).

These pedestrian connections between building fronts are illustrated conceptually on Figure 9.

4.6 Coordination with the Boulder Valley Transportation Master Plan

Policy: The goals, objectives, policies, and multi-modal connections identified in this East Arapahoe TNP should be incorporated into future updates of the Boulder Valley Transportation Master Plan to facilitate their prioritization and implementation.

4.7 Coordination with Boulder's Greenways Program

Policy: Implementation of transportation connections in and connecting to the tributary greenways within the TNP area (as illustrated on the TNP maps) should be pursued in concert with Boulder's Greenways Master Plan and programmed into the City's CIP.

4.8 Consistency with the Boulder Valley Comprehensive Plan

Policy: The transportation system anticipated by the TNP in the East Arapahoe area is intended to be consistent with and facilitate the potential future land uses in the area as envisioned in the Boulder Valley Comprehensive Plan (BVCP). The TNP action items serve to implement BVCP transportation policies regarding multi-modal strategies and investments, accessibility, reduction of single occupancy auto trips, and transportation impacts.

4.9 Coordination with City of Boulder Open Space and Mountain Parks Department

Policy: Implementation of transportation connections that cross City of Boulder Open Space and Mountain Parks property (as illustrated on the TNP maps) should be coordinated with Open Space and Mountain Parks Department staff to minimize impacts on environmentally sensitive areas.

4.10 Coordination with City of Boulder Parks and Recreation Department

Policy: Implementation of transportation connections that cross City of Boulder Parks and Recreation Department property (as illustrated on the TNP maps) should be coordinated with Parks and Recreation Department staff to minimize impacts on recreational uses.

4.11 Coordination with CDOT

Policy: Implementation of transportation facilities in the Arapahoe R.O.W. should be coordinated with CDOT. City staff should also work closely with CDOT on the final design of planned multi-modal improvements to Arapahoe Avenue east of Cherryvale Road.

4.12 Consistency and Coordination with the BVRC Transportation Connections Plan

Policy: The transportation system anticipated by the East Arapahoe TNP is intended to be consistent with and connect to the transportation system at the eastern end of the BVRC area as detailed in the BVRC Transportation Connections Plan. A BVRC Transportation Connections Plan map is included in this document as Attachment C.

4.13 Coordination with the Transportation Plan component of CU's Campus Master Plan

Policy: The East Arapahoe Transportation Network Plan is intended to be consistent with the Transportation Plan in CU's Campus Master Plan, except where additional bicycle and pedestrian facilities have been added (working with CU's Campus Planner). Implementation of transportation connections that cross CU property should be coordinated with CU staff.

4.14 Coordination with the Boulder Valley School District

Policy: Implementation of transportation connections that are adjacent to and/or cross BVSD property should be coordinated with BVSD staff to insure that all BVSD security and operational issues are addressed. As noted on the attached maps, future roadway connections that cross the BVSD site should only be constructed if the site is redeveloped and current school bus operations on the site are discontinued.

4.15 Coordination with RTD and the Railroad

Policy: Implementation of transit stop improvements in the East Arapahoe corridor should be coordinated with RTD. The potential for a future park and ride facility to access bus and/or rail transit in the eastern end of the corridor should be coordinated with RTD and Railroad staff.

4.16 Development or Redevelopment Compliance with Boulder's City-wide Transportation Demand Management (TDM) Program

Policy: The City of Boulder is in the process of developing a Transportation Demand Management Program (TDM) for implementation throughout the city. This TDM Program will offer various transportation alternatives to the single occupancy vehicle (SOV). It will give people the flexibility to find transportation options that works for them. The program will attempt to reduce single occupancy vehicle trips and the resulting congestion, pollution, increased parking and reduced open space. The city-wide TDM Program, when finalized, will have application in the East Arapahoe TNP area, and may be incorporated specifically into this TNP when it is updated in the future.

5.0 TNP Design Parameters

5.1 Minimum Cross-Sections for Roadways, Sidewalks, Multi-use Pathways, and Bicycle Lanes

This section of the Plan defines minimum cross-sections for roadways, sidewalks, bikeways, and multi-use pathways on the TNP map.

Collector and Arterial Roadways

All collector, minor arterial, and principal arterial roadways within the TNP area (as defined on Boulder's Roadway Functional Classification Map in the Boulder Valley Transportation Master Plan) are intended to have minimum City of Boulder cross-sections (including landscaping buffers and sidewalks) as defined in the City's Design and Construction Standards (DCS).

Local Access Roadways

This map-based TNP includes two types of local access roadway standards as follows:

- *Primary Roadway* - the major local access routes in the area. The minimum standard in nonresidential areas is the Base Street standard in the DCS, including sidewalks and landscaping. The minimum standard in residential areas is the Residential Street standard in the DCS, including sidewalks and landscaping.
- *Secondary Roadways or Vehicular Connections* - typically providing access to and through the larger parcels, cross-site access between parcels, or connecting the back side of properties which front on an arterial roadway. The minimum standard in nonresidential areas is the Base Street standard in the DCS, including sidewalks and landscaping. The minimum standard in residential areas is the Residential Street standard in the DCS, including sidewalks and landscaping. Modifications to these minimum standards on Secondary Roadways may be considered on a case by case basis during the site review process. Right-of-way dedication for only the roadway portion of secondary roadways may be considered, with planting strips and sidewalks remaining in easements.

The property owner may elect to provide a cross-section with elements in excess of these minimum requirements so long as the cross-section of a facility that connects between properties has consistency necessary for safe and efficient travel.

Multi-use Pathways

Off-street bike/pedestrian pathways illustrated on the TNP map as AMulti-use Pathways@ shall have a minimum width of 12 feet and be paved in concrete, unless it can be shown in the site review process that a typical sidewalk cross-section or narrower pathway is more appropriate in selected areas. Pathways that are not within a roadway right-of-way should be placed in a pathway easement, except where the pathway is on Open Space and Mountain (OSMP) Parks property. In this case, the OSMP Department will maintain sole control of the pathway.

OSMP Department staff shall approve the alignment and design of multi-use path segments that cross OSMP property.

CU staff shall approve the alignment and design of multi-use path segments that cross CU property.

Other Hard or Soft Surface Paths

Off-street bike and/or pedestrian pathways illustrated on the TNP map as AOther Hard or Soft Surface Paths@ are pathway connections that do not need to meet the same design criteria as Multi-use Paths.

Where these AOther@pathways are on Open Space and Mountain Parks property they should be soft surface paths, generally 6 to 8 feet wide, and surfaced with crusher fines, consistent with OSMP standards. The alignment and design of these paths on OSMP property shall be approved by OSMP staff. No pathway easement will be given and the OSMP Department will maintain sole control of these areas.

In cases where these Other Path connections are not on open space land, their width should generally be 6 to 8 feet wide, and their surface may be hard or soft depending on the type and character of the area and the connection being made. If the Other Path is to be hard surfaced, it should be paved in concrete. If the Other Path is to be soft surfaced, it should be surfaced with crusher fines.

On-Street Bicycle Lanes

Bike lanes shall be designed and installed consistent with the City's bike lane standards.

6.0 Implementation

6.1 Ordinances to Support TNP Implementation

Implementation may, in part, require the City to adopt necessary ordinances so that portions of the Plan may be implemented as development and redevelopment occur. These ordinances will allow development to occur in a manner that is consistent with the connections illustrated on the TNP map.

6.2 Development or Redevelopment Triggers for TNP Compliance

The City should review and implement development and redevelopment thresholds to determine when compliance with the TNP will be required. Development or redevelopment thresholds that could be considered are detailed in City Code Section 9-3.3-14 (Reservation, Dedication and Improvement of Rights of Way) and include:

- building expansions (based on size of the expansion)
- a change of use
- the addition of more dwelling units
- any project that requires a Site Review
- annexation

6.3 Near Term Projects by the City of Boulder

The future connections illustrated on the Plan in Figures 1 and 3 - 7 include a wide range of transportation system enhancements. Some of the connections may be implemented in the near term (1-5 years) by the City as part of currently planned projects. Examples may include:

- multi-use path connections to the Boulder Creek Path
- improvements to the bicycle, pedestrian, transit and automobile systems at the Arapahoe / Foothills intersection area
- bus queue jump lanes at selected intersections
- path connections in the Sombrero Marsh area
- improvements to Arapahoe Avenue in association with CDOT
- multi-use pathway connections in the Skunk Creek area in association with CU
- TDM Program implementation.

6.4 Projects that will be Implemented with Development or Redevelopment

Many of the connections illustrated on Figures 1 and 3 - 7 can only be implemented with the development or redevelopment of one or more of the private parcels in the East Arapahoe area. These connections are shown so that they will be included as part of a development or redevelopment proposal.

6.5 The East Arapahoe TNP Action Plan

The Action Plan for the East Arapahoe TNP is a detailed listing of steps necessary to implement the TNP. The tasks are divided into groups as follows:

- TNP Finalization and Adoption
- Network Component Implementation - City Initiative
- Network Component Implementation - Local Development Initiative
- TDM Component Implementation

The Action Plan is included in this document as Attachment A.

6.6 Transportation Network Plan Amendment Process

The East Arapahoe TNP is intended to be specific and yet flexible enough to have application for the foreseeable future in this portion of Boulder. However, if the need arises, this section describes a two tiered approach to modify the TNP. Staff will determine if a proposed change to the TNP can be addressed with an Administrative Adjustment or will require a Plan Amendment.

Administrative Adjustments to the implementation of the TNP can be completed at the staff level after review and agreement by Planning, Transportation, and Development Review staffs as appropriate. For example, staff may authorize the administrative adjustment to the alignment of a connection illustrated on Figures 1 and 3 - 7 when the requested adjustment meets all of the following criteria:

- the adjustment results in a lateral shift in alignment of less than 100 feet in properties that are 10 acres in size or less, or less than 150 feet in properties that are 10 acres or more in size
- the adjustment is consistent with the Goals and Objectives of this Plan and has no adverse impacts on surrounding properties

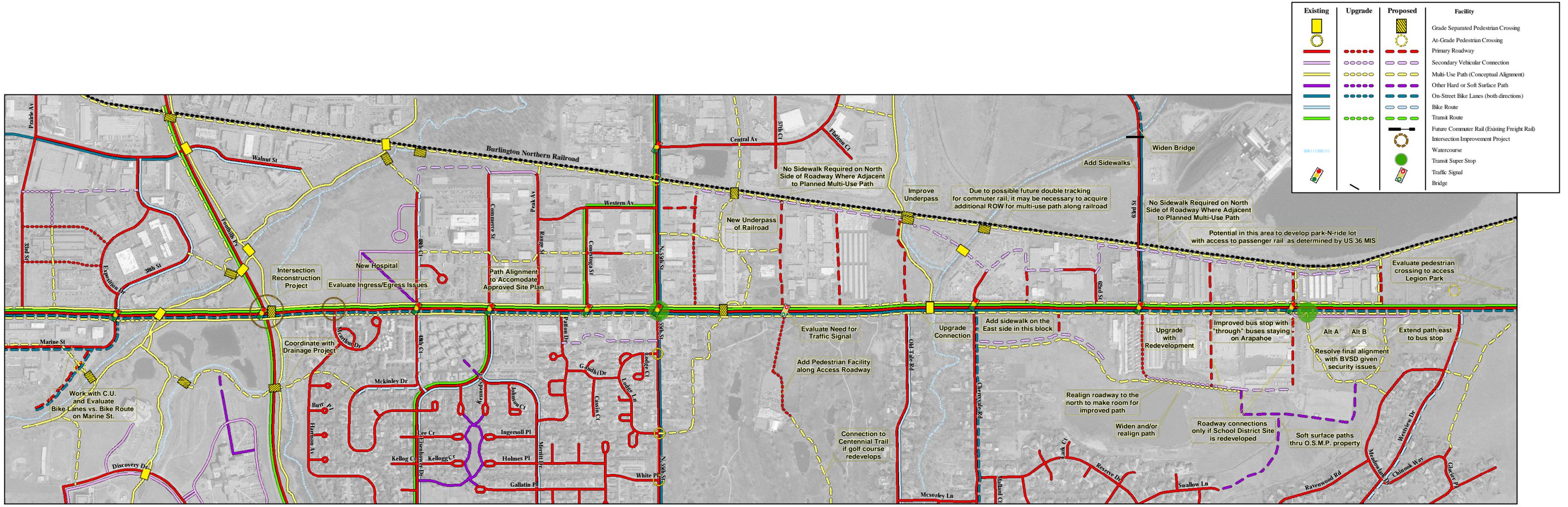
Another example of an administrative adjustment to the TNP is the periodic update of the TNP Action Plan by Transportation staff.

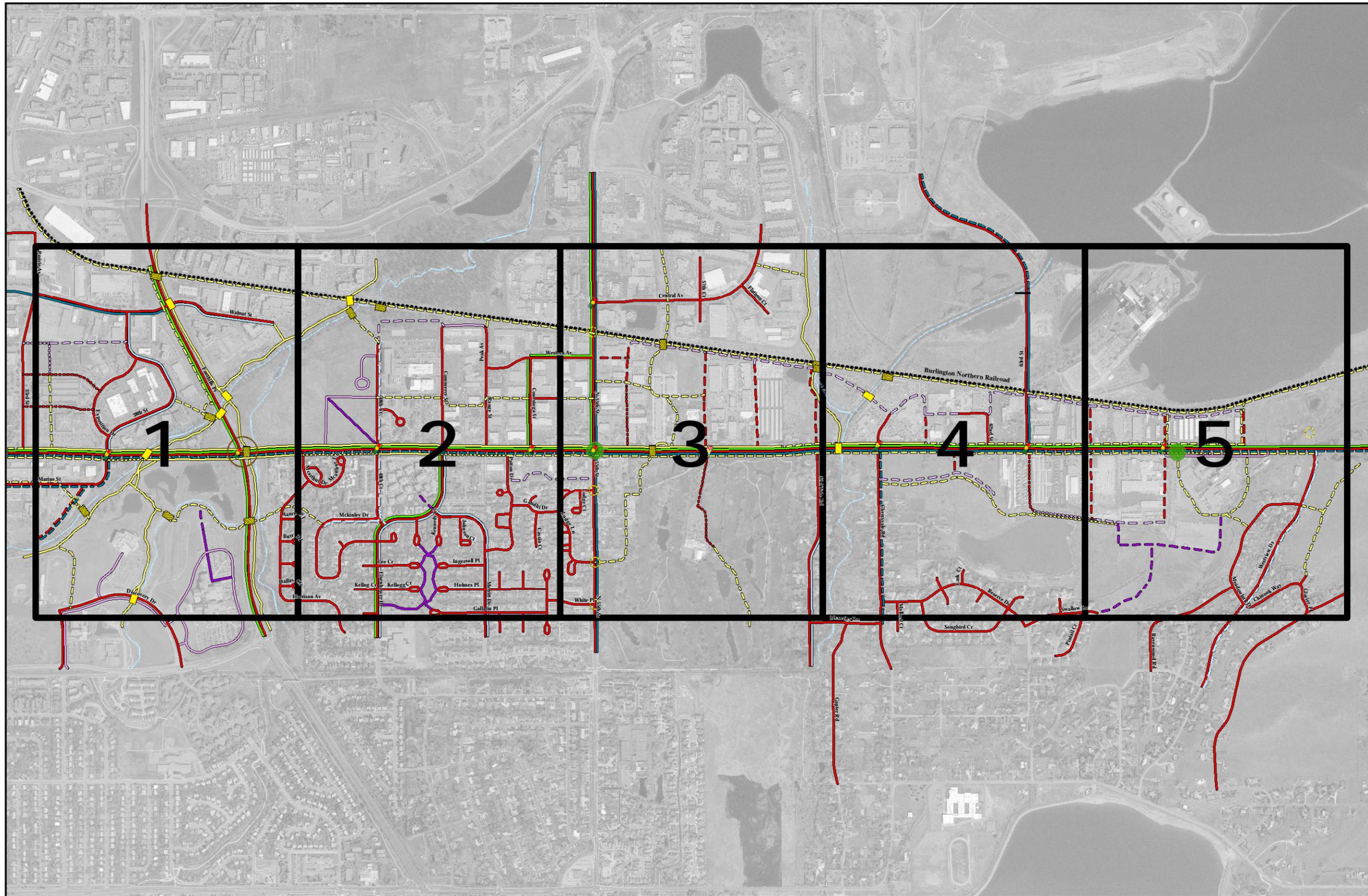
Plan Amendments represent modifications to the TNP document or modifications to the map based component of the plan that propose a change in connectivity that exceeds the alignment flexibility thresholds detailed above, deletes a planned connection, adds a new connection, or moves a proposed connection onto an adjacent property. The goals of the TNP will be used as criteria for supporting or denying a proposed amendment. Plan amendments require review and recommendation by the Transportation Advisory Board and a decision by the Planning Board, subject to City Council call-up. Figure 12 illustrates

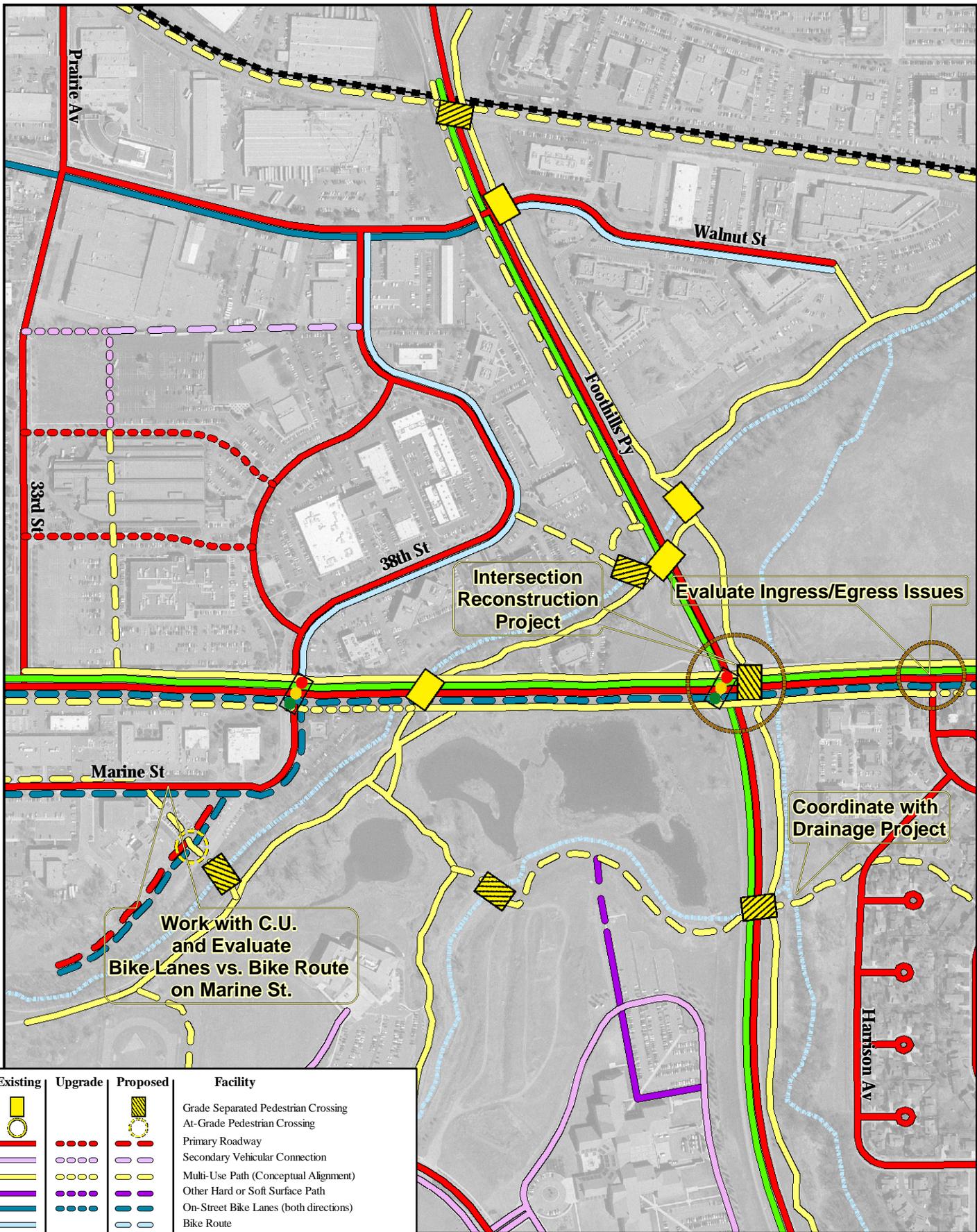
the plan adjustment and amendment process. The approving authority will consider the following when reviewing a proposed Plan Amendment:

- change of circumstance
- physical hardship
- practical hardship
- equivalency

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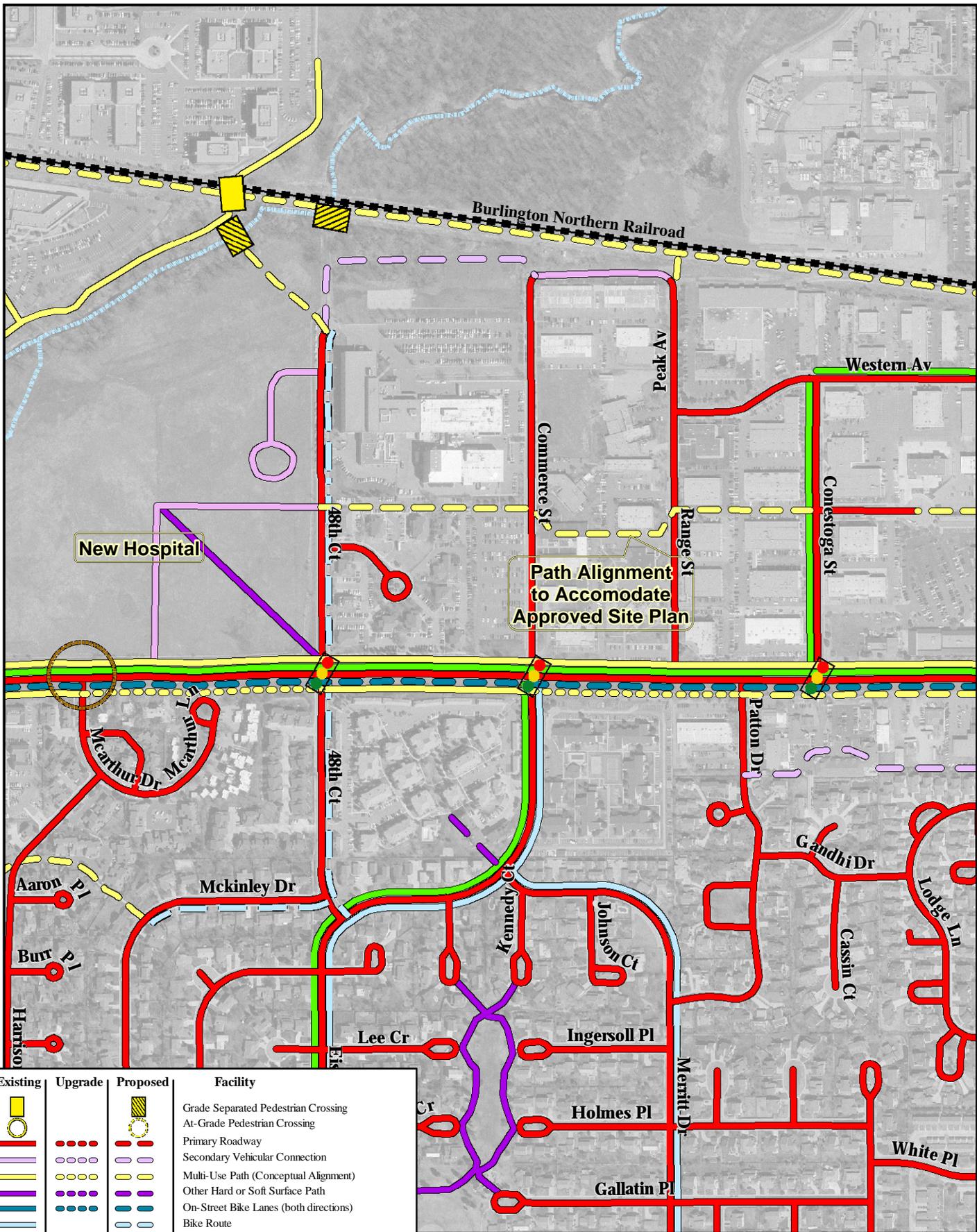
Existing	Upgrade	Proposed	Facility
			Grade Separated Pedestrian Crossing
			At-Grade Pedestrian Crossing
			Primary Roadway
			Secondary Vehicular Connection
			Multi-Use Path (Conceptual Alignment)
			Other Hard or Soft Surface Path
			On-Street Bike Lanes (both directions)
			Bike Route
			Transit Route
			Future Commuter Rail (Existing Freight Rail)
			Intersection Improvement Project
			Watercourse
			Transit Super Stop
			Traffic Signal
			Bridge



Boulder Valley Regional Center
 Transportation Connections Plan
 March 8, 2004

Super Block 1 Detail Figure 3





New Hospital

Path Alignment to Accomodate Approved Site Plan

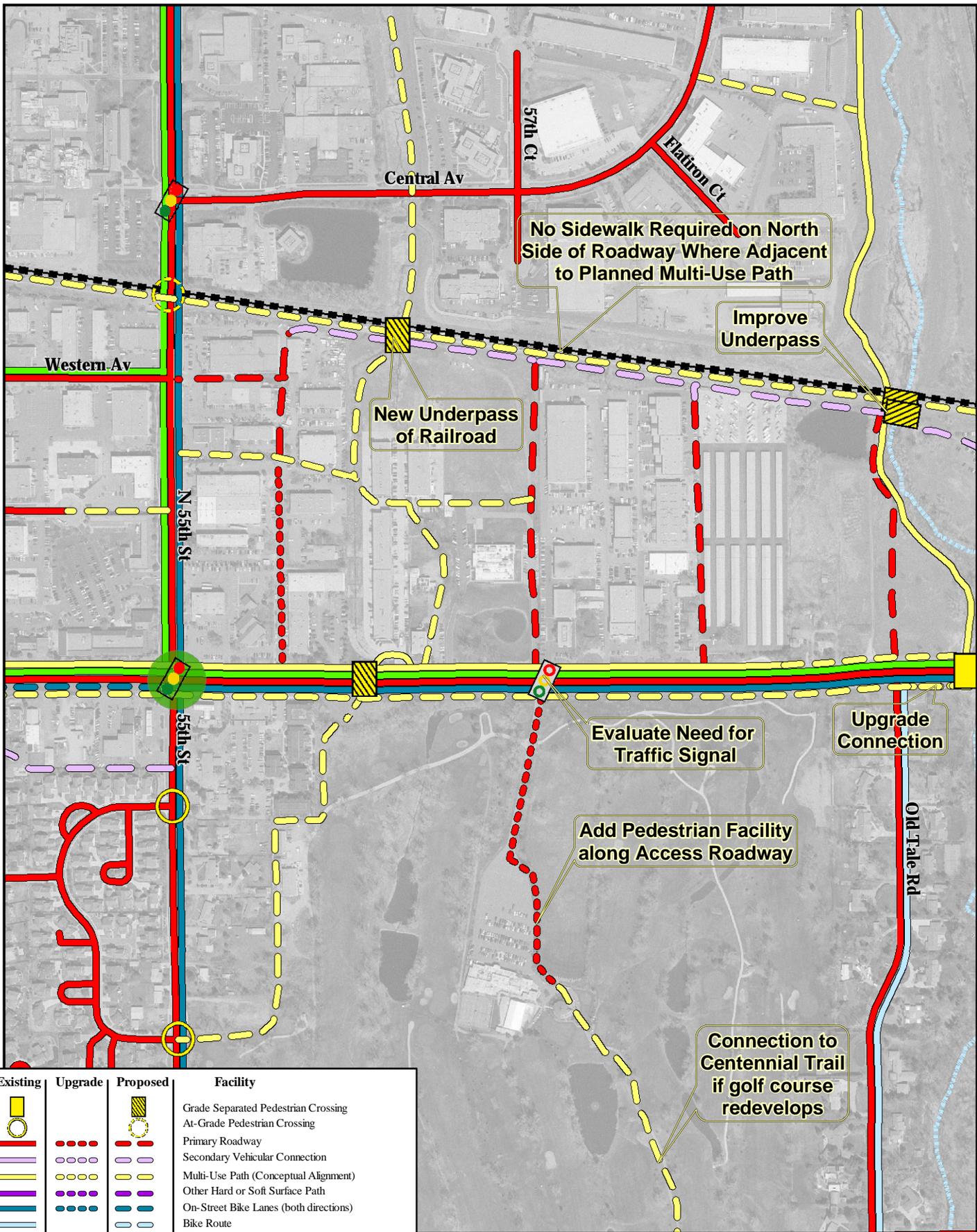
Existing	Upgrade	Proposed	Facility
			Grade Separated Pedestrian Crossing
			At-Grade Pedestrian Crossing
			Primary Roadway
			Secondary Vehicular Connection
			Multi-Use Path (Conceptual Alignment)
			Other Hard or Soft Surface Path
			On-Street Bike Lanes (both directions)
			Bike Route
			Transit Route
			Future Commuter Rail (Existing Freight Rail)
			Intersection Improvement Project
			Watercourse
			Transit Super Stop
			Traffic Signal
			Bridge



Boulder Valley Regional Center
 Transportation Connections Plan
 March 8, 2004

Super Block 2 Detail Figure 4





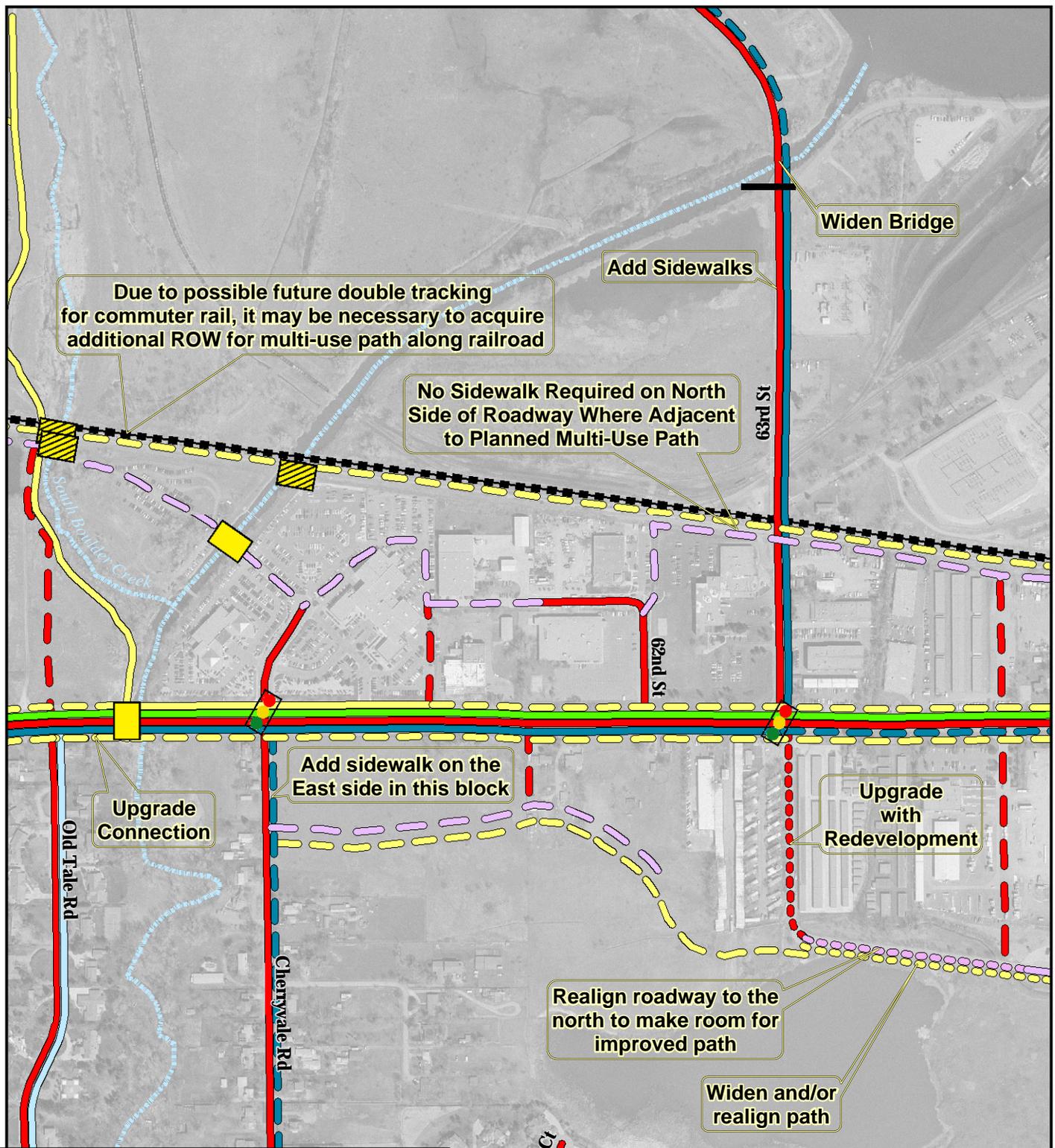
Existing	Upgrade	Proposed	Facility
			Grade Separated Pedestrian Crossing
			At-Grade Pedestrian Crossing
			Primary Roadway
			Secondary Vehicular Connection
			Multi-Use Path (Conceptual Alignment)
			Other Hard or Soft Surface Path
			On-Street Bike Lanes (both directions)
			Bike Route
			Transit Route
			Future Commuter Rail (Existing Freight Rail)
			Intersection Improvement Project
			Watercourse
			Transit Super Stop
			Traffic Signal
			Bridge



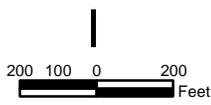
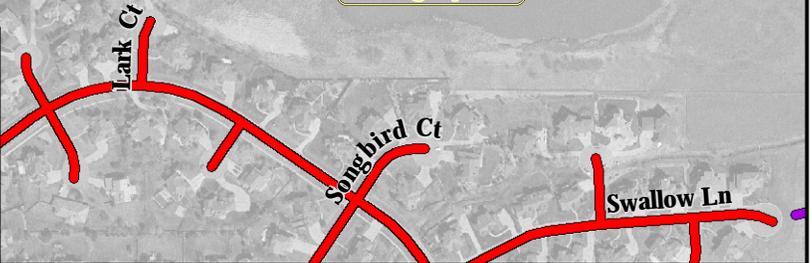
Boulder Valley Regional Center
 Transportation Connections Plan
 March 8, 2004

Super Block 3 Detail Figure 5





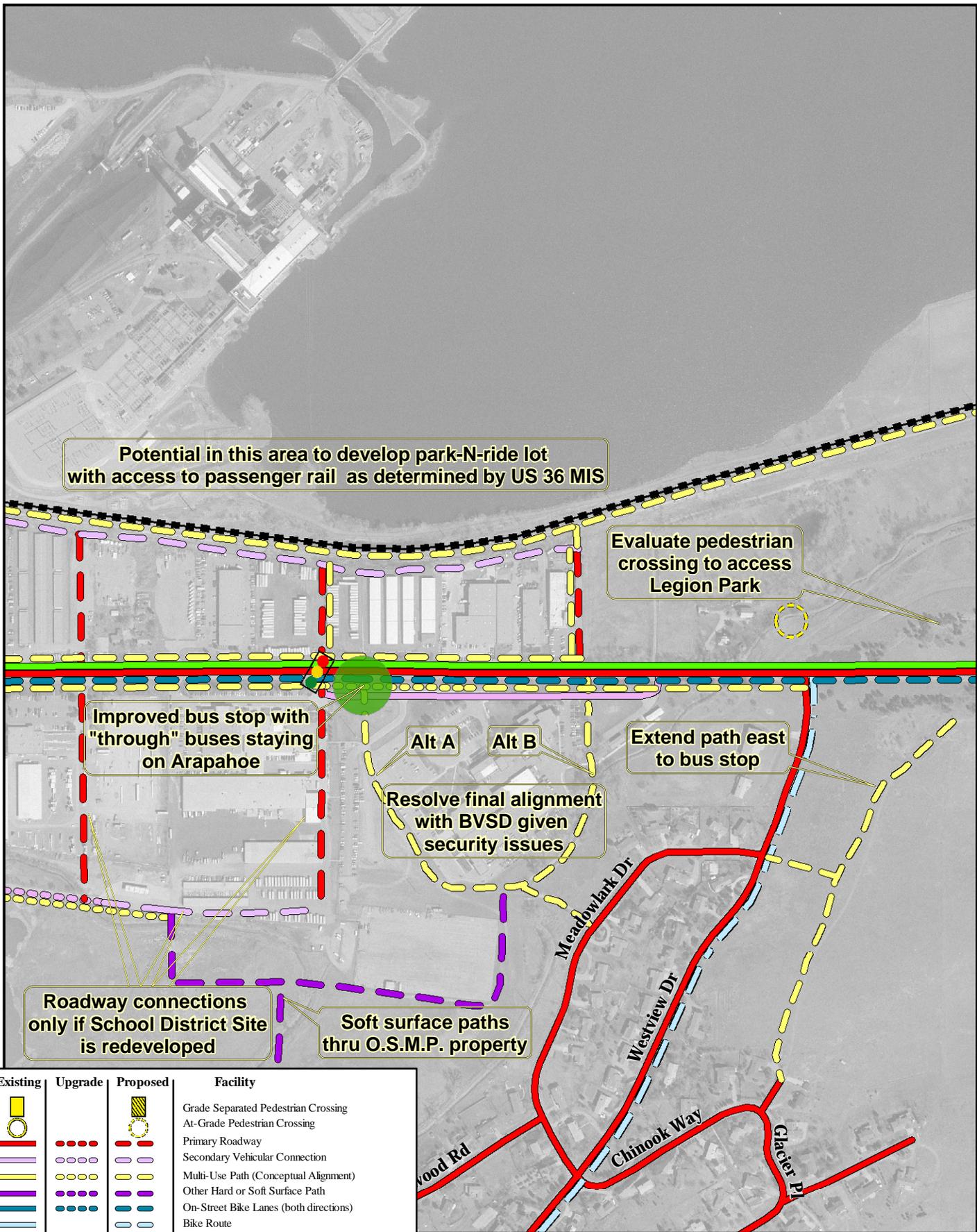
Existing	Upgrade	Proposed	Facility
			Grade Separated Pedestrian Crossing
			At-Grade Pedestrian Crossing
			Primary Roadway
			Secondary Vehicular Connection
			Multi-Use Path (Conceptual Alignment)
			Other Hard or Soft Surface Path
			On-Street Bike Lanes (both directions)
			Bike Route
			Transit Route
			Future Commuter Rail (Existing Freight Rail)
			Intersection Improvement Project
			Watercourse
			Transit Super Stop
			Traffic Signal
			Bridge



Boulder Valley Regional Center
 Transportation Connections Plan
 March 8, 2004

Super Block 4 Detail
 Figure 6





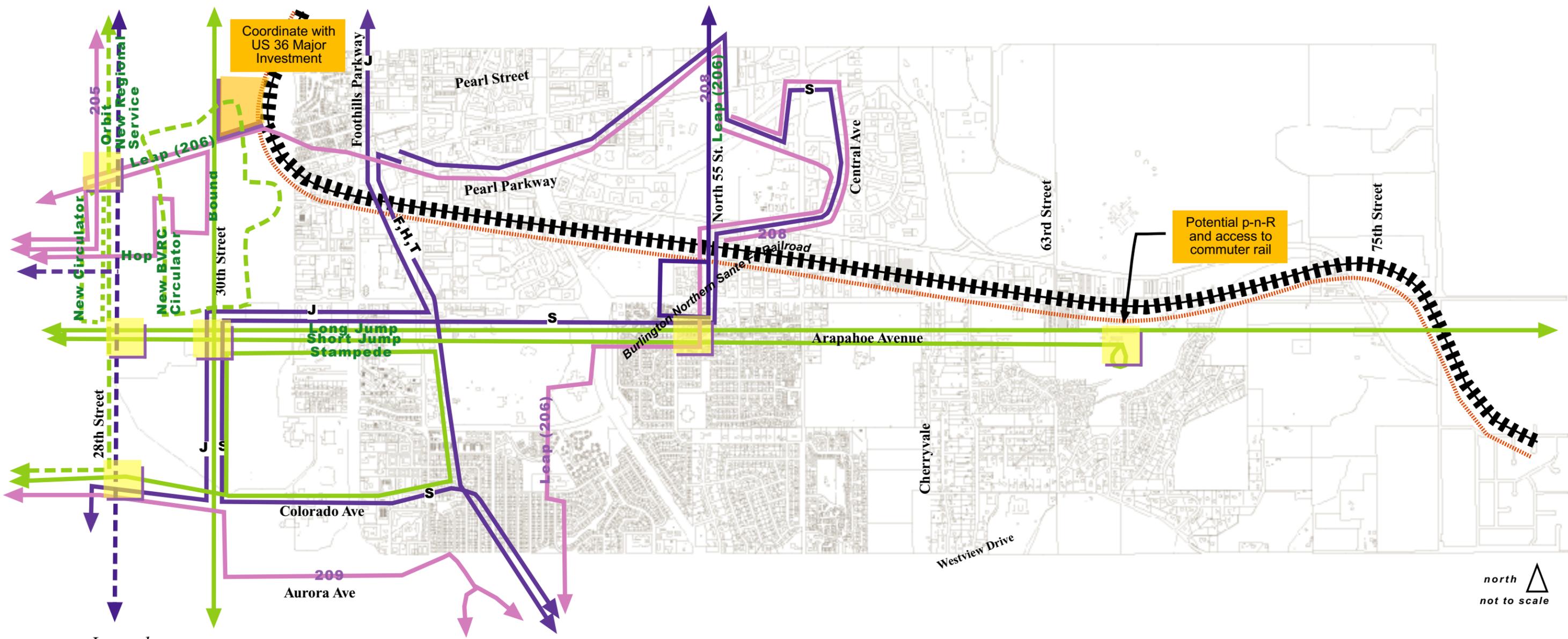
Existing	Upgrade	Proposed	Facility
			Grade Separated Pedestrian Crossing
			At-Grade Pedestrian Crossing
			Primary Roadway
			Secondary Vehicular Connection
			Multi-Use Path (Conceptual Alignment)
			Other Hard or Soft Surface Path
			On-Street Bike Lanes (both directions)
			Bike Route
			Transit Route
			Future Commuter Rail (Existing Freight Rail)
			Intersection Improvement Project
			Watercourse
			Transit Super Stop
			Traffic Signal
			Bridge



Boulder Valley Regional Center
 Transportation Connections Plan
 March 8, 2004

Super Block 5 Detail Figure 7





north 
not to scale

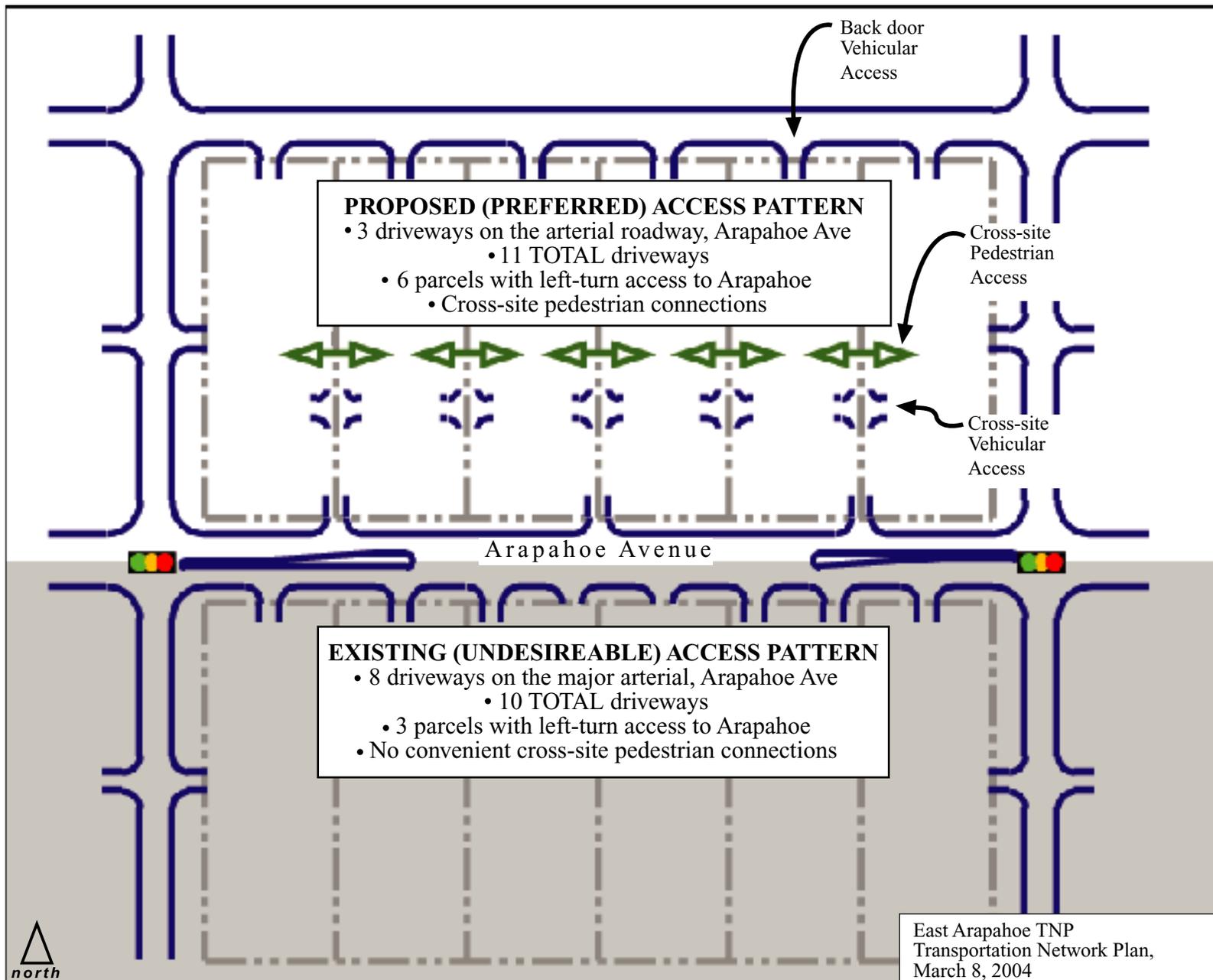
Legend

-  Future regional " Super Stop"
-  Future regional terminus: The Boulder Transit Village
-  Potential commuter rail
-  *existing* Local transit service
-  *proposed* Local transit service
-  *existing* Local, high-frequency transit service
-  *proposed* Local, high-frequency transit service
-  *existing* Regional transit service
-  *proposed* Regional transit service

Boulder Valley Regional Center
Transportation Connections Plan
March 8, 2004

Future Transit Map
Figure 8





Note:
The combination of the consolidation of driveways on the arterial roadway and the addition of vehicular and pedestrian "cross-site" and "back door" vehicular access will maintain or improve multi-modal access to all parcels while improving traffic safety along the arterial roadway.

East Arapahoe TNP
Transportation Network Plan,
March 8, 2004

Existing/Proposed Property Access Pattern, Figure 9

Scale 1" = 250'



Amendments to the East Arapahoe Transportation Network Plan (TNP) may be considered when the requested change does not meet the criteria for an

**Request TNP Amendment,
with or without Site Review
Process**



**Presentation to
Transportation Advisory
Board**
*TAB makes recommendation to
Planning Board*



**Presentation to Planning
Board as part of
Site Review Hearing**
Planning Board makes decision



City Council Call-Up

East Arapahoe
Transportation Network Plan
March 8, 2004
Plan Amendment Process
Figure 10



Attachment A

**EAST ARAPAHOE AVENUE
TRANSPORTATION NETWORK PLAN
ACTION PLAN**

STEPS FOR FINALIZATION, ADOPTION, AND IMPLEMENTATION OF THE TRANSPORTATION NETWORK PLAN (TNP)

ACTION	RESPONSIBILITY	TIMING
TNP Finalization and Adoption		
Project Team review of TNP document	Project Team	March, 2003
Staff (Planning, Legal, Transportation, Open Space and Mountain Parks) review of TNP document	Various staffs	March-April, 2003
Task Force review of TNP document	Task Force	March-April, 2003
TAB review of TNP document	TAB Transportation staff	TAB Meeting March 8., 2004
Planning Board review of TNP document	Planning Board Transportation staff	Planning Board Meeting April, 2004
Incorporate comments from TAB and Planning Board prior to City Council submittal	Project Team	April 2004
City Council review and adoption of TNP	City Council Transportation staff	Adoption anticipated – _____, 2004
Coordination and Follow-Up With Related Projects - City Initiative		
Develop Ordinances to support TNP implementation if needed	Attorneys, Planning, Development Review, and Transportation staffs	Summer, 2004
Coordinate TNP with the CDOT Project in the Arapahoe corridor – work with CDOT to finalize transit priority features and roadway cross-sections	Transportation staff	As needed
Coordinate TNP with the City-wide TDM Plan Development	Transportation staff	Summer 2004
Incorporate TNP recommendations into the city-wide Transportation Master Plan Update	Transportation staff	Done
Work with on-going development projects in the East Arapahoe Corridor, including Jewish Center, Auto Park expansion, Hospital construction, Naropa relocation, etc.	Transportation staff Development Review staff	As projects move through the development review process

Coordinate with RTD on the potential for a Park-N-Ride lot north of the Vo Tech Campus in association with the implementation of the US 36 corridor project	Transportation staff	As needed
Coordinate with CU on any modifications to the public R.O.W. as detailed in CU' s Master Plan (including evaluation of bike lanes v. bike route on Marine Street)	Transportation staff In association with CU staff	As needed
Coordinate with Boulder County on projects that extend beyond City limits, such as shoulders or bike lanes on Cherryvale	Transportation staff In association with Boulder County staff	As needed
Network Component Implementation - City Initiative		
Continue to support redevelopment efforts in the Crossroads area to the extent that they influence the East Arapahoe corridor	Various City Departments	On-going
Evaluate travel lane utilization in the Arapahoe R.O.W. through the East Arapahoe area to determine appropriate transit treatments and potential for bus/bike/right turn lanes	Transportation staff In association with CDOT staff	Summer 2004
Coordinate with Open Space and Mountain Parks on the implementation of soft surface path connections adjacent to the Sombrero Marsh	Transportation and OSMP staffs	As funding available
Coordinate with CU, City drainage project, and Open Space and Mountain Parks on implementation of Skunk Creek path under Foothills and across Open Space	Transportation staff In association with CU, Drainage, and OSMP staffs	As needed
Complete Foothills / Arapahoe intersection improvement project	Transportation staff	2004 / 2005
Evaluate traffic control needs at Arapahoe / MacArthur	Transportation staff	Summer 2004
Pursue implementation of multi-use paths and other improvements in the Arapahoe R.O.W. per the direction of the TMP on prioritized multi-modal corridor projects	Transportation staff	As funding becomes available for priority multi-modal corridor enhancements
Coordinate with BVSD staff on the most appropriate multiuse path alignment to connect the transit stop on Arapahoe with the trail to adjacent neighborhoods around the Sombrero Marsh	Transportation staff In association with BVSD and OSMP staffs	As funding becomes available
Coordinate TNP improvements with any storm drainage or floodway improvement projects in the area	Transportation and other Public Works staffs	As needed
Pursue specific transit superstop conceptual designs and then coordinate with redevelopment as appropriate	Transportation staff	As needed
Identify distinct projects within the TNP area that will be implemented by the City regardless of site-specific development or redevelopment.	Transportation staff	Summer 2004
Prioritize City transportation projects within the TNP area and prepare cost estimates - coordinate with Master Plan update	Transportation staff	Done as part of TMP Update process
Incorporate prioritized projects into the ongoing city-wide budget and CIP process	Transportation staff	Ongoing
Coordinate transportation project implementation with the implementation of Greenways projects within the TNP area	Transportation and Greenways staffs	On-going

Coordinate with RTD, CDOT, and Boulder Valley School District staffs to implement a reconfigured transit stop adjacent to the Vo Tech site	Transportation staff In association with BVSD, CDOT and RTD staffs	In coordination with CDOT roadway improvement project in this area
Evaluate railroad R.O.W. width, future need for double tracking for passenger rail, and the potential to add a multiuse path along the south side of the tracks	Transportation staff In association with PUC and RTD staffs	Prior to the redevelopment of any parcels that border the railroad R.O.W.
Network Component Implementation - Local Development Initiative		
All applications for development or redevelopment reviewed for compliance with the TNP	Development Review and Transportation staffs	On-going, with development / redevelopment
Standard review meeting for each application between Development Review and Transportation Staff	Development Review and Transportation staffs	On-going, with development / redevelopment
Identification of possible City projects to support, enhance, or make viable the developer initiated TNP improvement	Transportation and Development Review staffs	On-going, with development / redevelopment
Insure that redevelopment proposals address: <ul style="list-style-type: none"> • consolidate multiple curb cuts • remove travel barriers to pedestrians and autos • add pedestrian connectivity • improves bicycle parking facilities 	Transportation and Development Review staffs	On-going, with development / redevelopment
TDM Component Implementation		
TDM Program Development –complete city-wide TDM program	Planning and Transportation staffs	On-going
Identify potential for TDM Program implementation in the EAST ARAPAHOE TNP area with a focus on new development or redevelopment projects	Planning and Transportation staffs	Pending completion of City-wide TDM program and development applications

East Arapahoe Transportation Network Plan

Attachment B

Development, Review and Approval of the East Arapahoe Transportation Network Plan

Coordination with the BVRC Transportation Connections Plan

The development of a Transportation Network Plan in the Arapahoe corridor from Folsom to the eastern city limits began with a focus on the Boulder Valley Regional Center. The net result of that initial effort was the BVRC Transportation Connections Plan that was adopted by City Council on October 15, 2002. The development of this East Arapahoe TNP followed, building on the momentum generated during the BVRC effort. The transportation connections recommended in this TNP are consistent with those recommended in the BVRC Transportation Connections Plan, and provide a broader transportation planning focus in the Arapahoe Avenue corridor.

The Arapahoe TNP Task Force

The Arapahoe TNP Task Force was created at the beginning of the TNP / TCP development process, and was modeled after the successful work of the North 28th Street TNP Task Force that helped shape the North 28th Street TNP (adopted by the Boulder City Council on December 4, 2001). The Task Force of business owners, property owners, residents, representatives from the Boulder Bicycle Commuters, Boulder County staff, CDOT, RTD, and CU staff, totaled over 24 members. They were assisted by consultants and City staff, including representatives from Transportation, Planning, Mountain Parks and Open Space, and Parks and Recreation. At their first meeting in February, 2002, Task Force members focused on the BVRC Transportation Connections Plan map. Staff incorporated the Task Force's comments into the BVRC TCP map and the Task Force reviewed the results at their second meeting in April, 2002. After adoption of the BVRC Transportation Connections Plan, the Task Force was reconvened to focus on the rest of the Arapahoe Avenue corridor extending east to the city limits. The Task Force met in November of 2002, and then again in January of 2003 to develop and refine the TNP map for this corridor.

Staff and Public Review

The East Arapahoe TNP has undergone a series of staff reviews by members of Transportation, Planning, Open Space and Mountain Parks, Development Review, and City Attorney staffs with a focus on developing a plan that can be implemented. Transportation staff received comments during a series of review meetings with staff from these other departments.

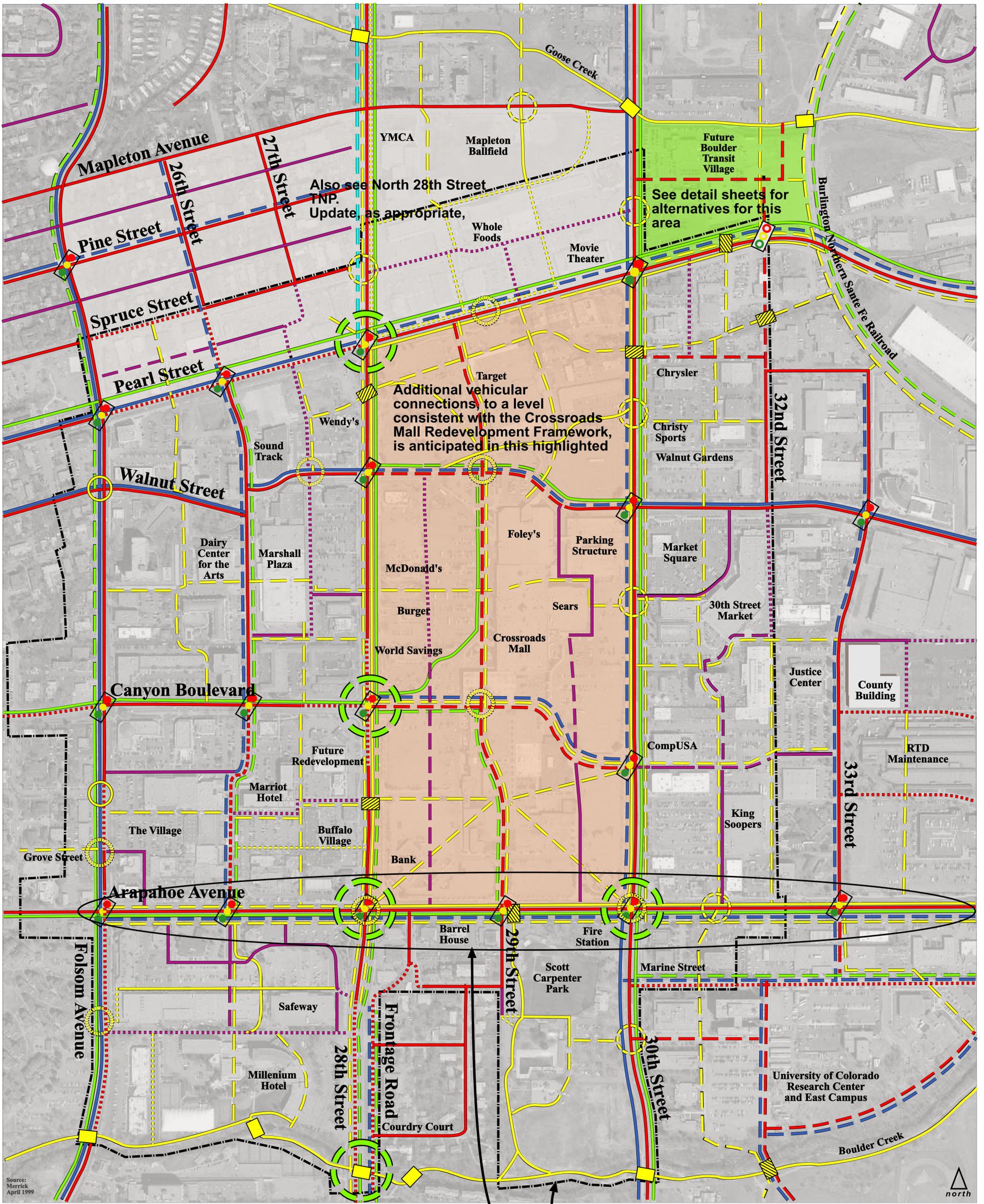
A Public Open House was held in December of 2003 at the new hospital facility to give residents, property owners, and business owners a chance to review and comment on the EATNP maps. Over 20 people were in attendance, and comments received resulted in a number of updates to the maps and policy document. Staff conducted a series of follow-up meetings with individual property and/or business owners in January and February of 2004.

The TNP also received public input at public hearings in front of the Transportation Advisory Board, the Planning Board, and City Council during the review and adoption process.

Approval Process with TAB, Planning Board, and City Council

The approval process for the TNP included formal review by the Transportation Advisory Board (TAB), Planning Board, and City Council. Staff also provided the TAB with a number of informational updates at regularly scheduled meetings during the TNP development process.

DRAFT



Source: Merrick, April 1999



Boulder Valley Regional Center Boundary

Legend			Facility
Existing	Upgrade	Proposed	
			Grade Separated Pedestrian Crossing
			At Grade Pedestrian Crossing
			Primary Roadway
			Secondary Vehicular Connection
			Multi-Use Path (Conceptual Alignment)
			On-Street Bike Facility
			Bus / Bike Lane
			Transit Route (see Future Transit Map, p. 29)
			Transit Super Stop
			Traffic Signal

The following options will be further studied in context of the entire Arapahoe corridor in the study area, from Folsom to Westview.

1. Existing roadway with multi-use paths on the north and south sides of the street
2. Continuous, six travel lanes with bicycle lanes.
3. Option two, plus queue jumps at all or certain intersections.

Boulder Valley Regional Center
Transportation Connections Plan
October 24, 2002

Comprehensive Map Figure 1

Scale 1" = 475'



Attachment