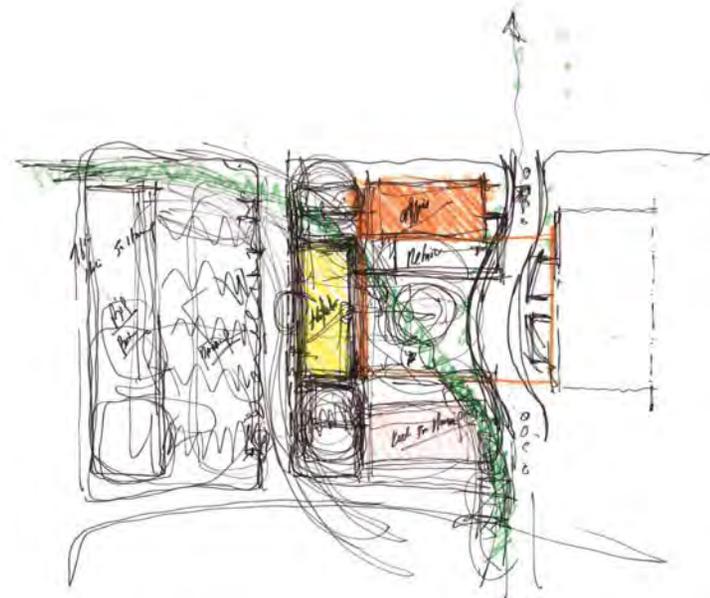


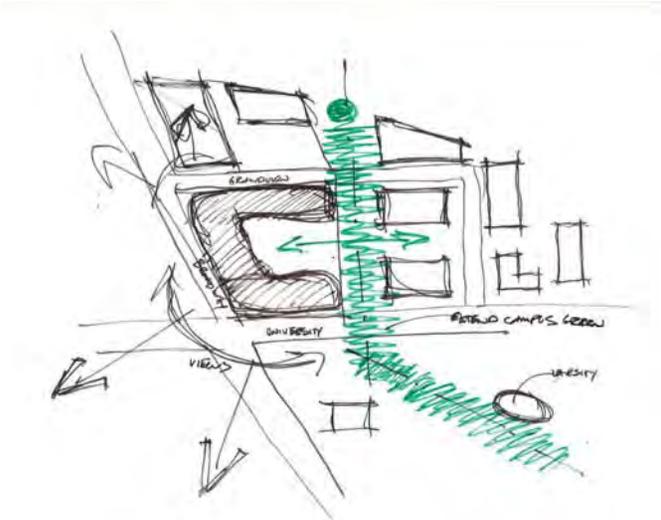
# Comparative Site Analysis

University of Colorado Boulder  
Hotel / Conference Center

13 August 2015  
4240 Architecture Inc









The Comparative Site Analysis for a CU Boulder Hotel / Conference Center was developed through collaborative analysis and review. The project includes the following committee members:

**Study Committee Members**

CU Boulder

- Jeffrey Lipton, Director, Real Estate

City of Boulder

- Sam Assefa, Senior Urban Planner
- Paul Leef, Senior Architect/Planner
- Molly Winter, Director of DUHMD/PS
- Joanna Crean, Senior Project Manager

Feasibility Consultants

4240 Architecture Inc.

- Lou Bieker
- Randy Johnson
- Christian Barlock
- Marc Snyder
- Felix Tannenbaum

JVA Consulting Engineers

- Charlie Hager
- Mark Rocheleau

Cumming

- Alan Plummer

CS&L International

- John Kaatz
- Kris Nelson

Anderson Hallas Architects

- Andy Duckett-Emke

Felsburg Holt & Ullevig

- Lyle DeVries
- Rachel Ackermann

Nelson/Nygaard Consulting Associates

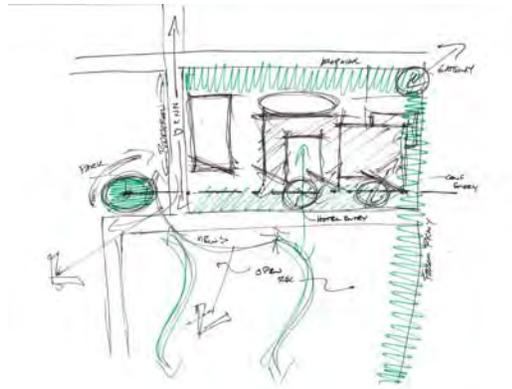
- Mathew Berkow
- Oren Eshel



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I. Executive Summary



## I. Executive Summary

### Study Overview

4240 and their consultants, Cumming and JVA Consulting Engineers, evaluated the strengths and weaknesses of two sites under consideration for the location of a potential University-affiliated Hotel and Conference Center (henceforth referred to as the Center).

In a parallel endeavour, CS&L was commissioned to provide an evaluation of the marketability and potential impacts of the preliminary development scenarios. CS&L's analysis focused on site factors that impact event planners, attendees and the overall marketability and economic/financial success of a potential Center. Further, FHU and Nelson Nygaard analyzed the off-site impacts to traffic conditions and multi-modal opportunities at each site. Additionally, Anderson Hallas provided a historical assessment of 1416 Broadway on the Grandview site for evaluation of potential for re purposing the structure on site.

### Site Boundaries

The University and the City are working together in reviewing the relative strengths and challenges of two specific sites for the Center:

**1. Grandview** - The mostly vacant University-owned land in the Grandview Terrace area adjacent to the University Hill commercial district. The site is bounded by Broadway to the west, University Avenue to the south, and 13th street to the east. An adjacent parcel north of Grandview Avenue is also being considered for this study. Reference pg. 80 for graphic representation of the site boundary.

The Grandview site is roughly 3.22 acres and is adjacent to a 25 year historical preserve to the east and parcels to the west owned by the Native American Rights Fund.

**2. Folsom** - Land owned by the University being planned for redevelopment known as North of Boulder Creek ("NBC") adjacent to Arapahoe Road

and Folsom Avenue. Reference page 112 for graphic representation of the potential site boundary. The Folsom site boundary under consideration for this study is roughly 4.3 acres. It is theoretically bound to the south by a future road but is flexible to expand to the west as future adjacent development relationships might dictate.

The University owns all land and buildings within the studied parcel boundaries so no future land or property acquisition has been anticipated (in terms of design and cost) as part of this study. However, the land is currently encumbered with existing university housing which will need to be addressed outside the scope of this project.

### Benefits of the Project

A combined hotel and conference center would

***"bring the academic world to the CU doorstep."***

The Center would be a gateway project that would help fill a void in needed multi-purpose meeting space. The study explored program options for both a CU-only facility as well as options that would serve multiple other entities, including the Federal Labs and private and non-profit businesses and organizations. By establishing a

**highly intuitive and elegant place**

that speaks to the values of the University of Colorado and the City of Boulder, this Center would be a catalyst for future opportunities and deliver a facility that helps build the CU brand and leverage the Boulder experience.



## I. Executive Summary



### Programmatic Justification

Large and small destinations throughout the country compete for convention and conference business. Event planners have so many venue options, that their focus in determining a destination often turns to the attendee experience. This experience is often defined as:

**combining walkable hotel, restaurant, retail and entertainment options in a highly unique and authentic environment.**

Unique design, materials and spaces that reflect and celebrate the CU / Boulder experience will set this project as a viable venue for the long-term. Appropriate sizing of conference and hotel spaces is also important for long-term viability and is discussed further in Section II, "Preliminary Market / Site Assessment".

### Program Development

A program summary has been developed by 4240 to define a theoretical limited service "boutique" hotel product combined with a conference venue that reflects the understood needs of the University and the findings of CS&L's market analysis. To note, the program summary was developed solely as a tool for understanding site capacity and potential cost drivers and is subject to change based on more detailed market demand and hotel operator standards. The program defined for the purpose of this analysis could serve as either a CU-only conference facility or, with the addition of nearby hotel rooms, provide a venue to serve other entities as well.

The hotel is anticipated to accommodate around **250 guest rooms** as well as a range of limited service amenities, specifically a 3-meal restaurant, small fitness center and quality open space. Additionally, in order to attract interest from a full range of hotel flags, the final program should allow for flexibility and be able to accommodate a range in room size per key and support program.

As defined to date, the gross building area for the hotel portion is projected at between 135,000gsf and 150,000gsf.

The conference portion of the Center is highlighted by a 20,000sf divide-able, clear span ballroom.

The ballroom will need to be able to be subdivided and have direct access to a dedicated banquet kitchen. Sufficient prefunction space will need to be planned for to accommodate large conferences. With that said, to help support diverse and/or smaller events, 8,000sf of meeting room space is anticipated which can be subdivided to provide eight (8) 1,000sf rooms. The total conference facility is rounded out with pre-function, support and storage spaces to be about 48,000gsf.

For the purposes of this site/ program test-fit study,

**the total gross building square footage for the Center is anticipated to be between 185,000-200,000gsf**

Each site test-fit assumed the same program in order to clearly understand the true development variances inherent between the two sites. On either site, conference program could be reduced to allow for the development of additional guest rooms, therefore, allowing for the hotel revenue to be more specifically calibrated with hotel ADR's and projected occupancies.

In addition to this, it can be assumed the Folsom site physical carrying capacity could support +/- 50 additional rooms but further market / proforma analysis will need to be conducted to determine the viability of this option.

***An efficient, limited service hotel model most likely is not compatible with 48,000gsf of conference space and may not be able to financially support it as a standalone development. There may be a gap that exists between conference expense and hotel revenue . In some other communities, this has been met with municipal support such as subsidies and TIFs.***

The full outline of an anticipated hotel/conference program can be found in Section IV, "Preliminary Architectural Program Assessment".

## Sustainability

With the University of Colorado and the City of Boulder serving as

### **national leaders in environmentally conscious living and working,**

the Center is ideally suited to embody and showcase the sustainability values of the community. In design and operation, both sites are inherently positioned to embrace a regenerative based design methodology that responds to the natural and contextual site flows, and, ultimately, contributes an inimitable, intrinsic value to the Center.

Design solutions, such as passive solar interfacing and smart footprints, can add significant value without adding cost on both sites.

**Both Sites** - The wind is predominately coming off of the mountains from the west / northwest with relatively little obstruction. Both sites have good access to southern solar exposure with no tall obstructions adjacent to the proposed development areas.

**Grandview** - Natural water flows relatively easily through the site to the north. For the most part, there is no significant vegetation on the site. A dense, foliage buffer to the north of the parcels will be maintained and potentially enhanced for use as part of the City's future 13th street multi-mode circulation improvements. Grandview has significant access to local and regional bus routes, as well as established pedestrian and bike paths.

Due to it's prominent location, the Grandview site also has the potential to become a signature building which showcases the sustainable ideals of the community it represents.

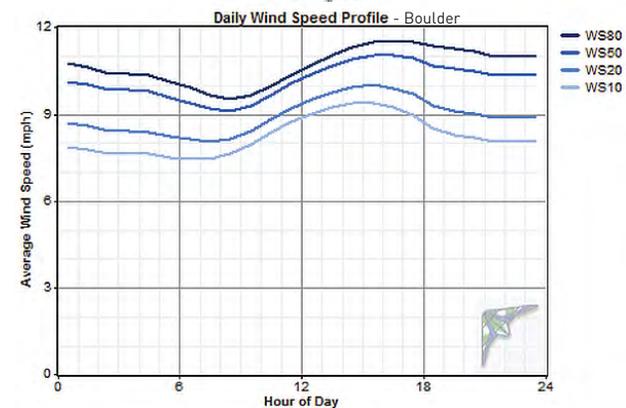
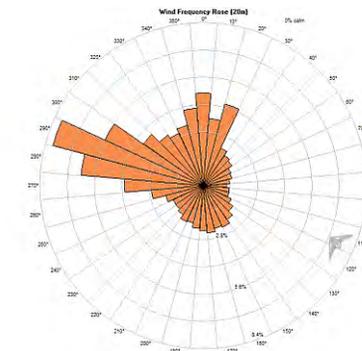
**Folsom** - The flexibility of the parcels can lend the project to more of an east west orientation, thus helping to potentially maximize solar harvesting as well as solar thermal control. The site does have some large, existing trees that need to be studied for their potential value and contributions to any future

development. Being adjacent to the Boulder Creek Greenway and within the 100 year floodplain, water management at the site will be critical and could become an opportunity for implementing outdoor recreational amenities. Sufficient local transit routes and pedestrian paths exist near the site. Future 22nd street connections through the North of Boulder Creek site and a regional transit bus stop at Arapahoe and 28th will enhance the alternative transportation opportunities at this site should these initiatives be developed further.

Under the direction of CU and the City, the Center has the potential to be a significant, marketable example for visitors of a more comprehensive stewardship. A stewardship that derives

### **innovation and inspiration from site characteristics**

and becomes an enduring model that ultimately shifts behaviors and future expectations.



## I. Executive Summary



## I. Executive Summary

### Potential Cost Drivers

It is anticipated that this project will pursue third party financing which may, therefore, influence the project delivery method. Project delivery method, depending on the economic climate at the time of starting a project, can have measurable influence on overall project costs. Operating costs are anticipated to be relatively the same between the two sites. Reference section VII for cost driver summary.

**Grandview** - Construction staging and access areas could be limited due to the “urban” nature of the site and could add a cost premium. This is identified in the cost driver analysis section under “Access Restrictions”. Building gross square feet per key is also anticipated to be higher due to the inherently inefficient shape of the site boundaries. Further, with the close proximity of campus and this being a prominent site, a facade premium is anticipated to assist in providing an integrated, CU branded architectural solution.

Due to site constraints, the necessity of an underground parking structure will add structural, mechanical, excavation and de-watering costs to the project. However, with its close proximity, the Grandview site could offer adjacent development access to on-site public parking when the Center is not fully occupied, therefore, providing additional revenue. Additionally, due to the high marketable value of a Center on this site and potential for public parking revenues, it is possible a

**premium could be realized to the average daily rates for the hotel,**

thereby increasing the revenue per available room (RevPar).

**Folsom** - It is expected due to the new roads and utility infrastructure needed to make the site developable, **the off-site infrastructure development costs will be 40%-50% more than Grandview** (see cost variance section VII).

It will need to be determined, however, by CU if the cost burden of the necessary off-site development costs will be funded (at least partially) by this project or if site infrastructure development will be funded by another source and completed prior to the start of construction.

Further, the development footprint for the Center on the Folsom site may be larger than Grandview to help provide a true “destination experience” to an otherwise unstructured site, therefore, increasing site costs. For this study, it was assumed the project will occupy one additional acre for the Center build-out and the cost value of this is reflected within the Folsom Cost Summary.

The existing buildings on the Folsom site will also have a significant additional abatement cost associated with their demolition. It is recommended that, if not already done, a full abatement assessment be undertaken for the Newton Court buildings. To note, the full cost of demolition and replacement of the Newton Court family housing units would be borne by CU’s Housing System and, therefore, should not be assigned to the development costs of this project.

**One additional inherent cost consideration is the potential negative impacts on attendee / planner perception if the existing gas station / restaurant are to remain at the intersection of Arapahoe and Folsom.**

***With the infrastructure improvements and extensive demolition / abatement needed, as well as necessary flood mitigation strategies, the time needed to make the site developable could be significant (multiple years) and will add additional development costs, including time and scope, to the project.***

## I. Executive Summary

### Additional Investment Potential (precursors to enable site development)

**Grandview** - There is no anticipated public or private investment needed prior to development on this site.

**Folsom** - The extension of 22nd street and Marine Street through the North of Boulder Creek area will need to occur to enable the viability of this site for project development. This includes all above and below grade infrastructure (see cost variance section VII for potential off-site costs). It is anticipated that a potential Center at this site will not incur the full cost of this, therefore, CU will need to determine how to proportion out the necessary off-site public improvements. Further, as previously mentioned, CU Housing System will need to be engaged regarding the schedule for replacing the displaced existing student housing impacted by project development. It is estimated the replacement costs of the Newton Court program could range from \$225/sf - \$275/sf in today's construction dollars.

### Future Expansion

**Grandview** - The site is relatively constrained by existing roads to the west and south. Land may be available to the east, such as the University's Paige Foundation building, but future demand for new academic space for the campus limits the full potential of this option. **In turn as something that should be considered, future academic growth will also be hindered by building the Center on this site.**

A consolidated footprint for the Center can also be considered by locating all program on site portion 1A while leaving site 1B for future hotel/conference development or academic development. This option, however, might exceed the 55' height restrictions set by zoning and would need further study.

**Folsom** - Immediately adjacent to the site are the Conoco Gas Station and Del Sol Mexican Restaurant parcels. Additionally, per the North of Boulder Creek Masterplan, the land between the west edge of the site under consideration and the future planned extension of 22nd street, should be considered for

**hotel / conference expansion opportunities and/or shared synergistic development opportunities.**

### Schedule

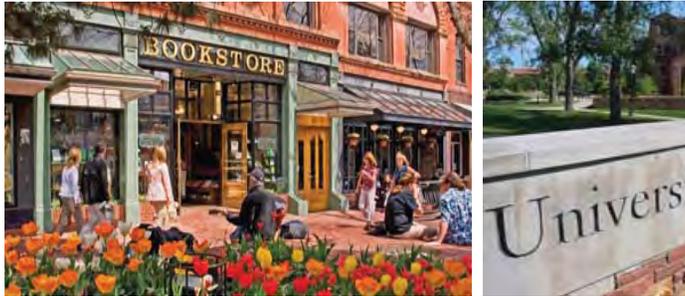
**Grandview** - The site will need to have a few structures removed but the demolition/abatement is not expected to cause significant delays. However, the city has identified one on-site structure as being of historical interest, and has expressed a desire to explore the potential for its reuse and/or incorporation into the Center development. See section V for full analysis. Potentially extensive excavation and the construction of underground parking structure would likely add to the construction schedule. Also, due to the constrained nature of the site, construction staging would be limited and could extend construction schedules.

**Folsom** - It is anticipated the current housing on the North of Boulder Creek site will need to be rebuilt prior to being able to pursue new development in this area, unless CU Housing System can lose some existing beds. Additionally, the abatement of the existing buildings could be significant and add substantial time to the schedule before the site would be developable. Site infrastructure will have to be completed with the construction of the Center (if not before) and will add to the complexity and scope of construction efforts. Also, the development of new floodmapping could lead to **construction delays and subsequent escalated development costs.**

## Standards

Being a CU project, the planning should be managed by the university and the architectural style should be sympathetic to the campus nomenclature. Also, given the catalytic nature of a potential Center,

**this project would expect to have CU branding elements as well as reflect the Boulder experience.**



## I. Executive Summary

### Zoning

Each site is designated as zoning district “P” in the Boulder Code Land Use Regulation. With that said, the land within each site being considered is fully owned and controlled by the University and, therefore, is not required to follow City zoning restrictions.

When referencing zoning regulations, building height and open space land use restrictions will need special attention for each site. For zoning district “P”, the City of Boulder’s height limits are 35’ by right and 55’ by special review. Minimum open space requirements will be 10-20% depending on final building height.

**Grandview** -Due to the relatively constricted footprint of the available parcels and the significant cross

slope, maintaining a building height limit under 55’ would most likely not be feasible if the desired program is to be achieved. A building above this height would fit with the surrounding academic buildings but would need special attention when addressing the adjacent city-scape. The current test fit performed for this report yielded a building height +/- 65’ above grade at the highest portion internal to the site, which is consistent with other university buildings.

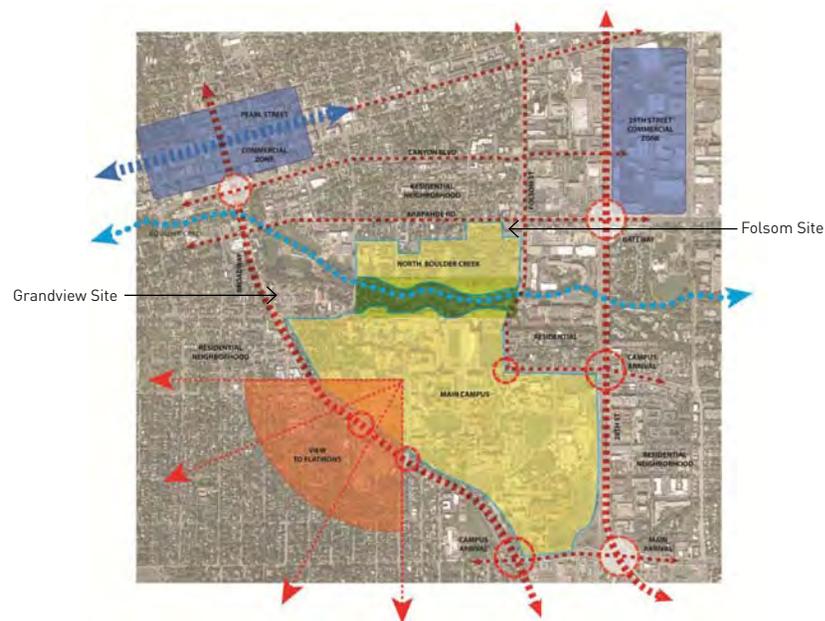
Also, to achieve the open-space requirements, it is anticipated the project would have significant elevated green terrace space, which is an additional cost driver for this site. (See cost driver section).

**Folsom** - Due to the large footprint of the North of Boulder Creek Masterplan area, this site has the potential to “stretch” out to stay within the City’s height limitations as well as provide the necessary open space on-grade. Careful consideration will be needed, however, to ensure that sufficient space is allocated to allow for future NBC development projects and not compromise the maximum potential land use value of the NBC area. Also, due to the residential nature of the Goss Grove neighborhood to the north, attention will be needed to appropriately mass along Arapahoe; which could ultimately push the height of structures on the interior portions of the site near or above the 55’ height restriction. Above grade structured parking will be necessary due to floodplain restrictions and will also need consideration in relation to the zoning regulations.





II. Preliminary Market / Site Assessment



## Overview of Conference & Convention Center Building Types

### Convention Centers

- Typically a dedicated venue with significant exhibit, meeting and ballroom space. Most often developed in urban core, with significant hotel inventory attached and adjacent to the center.
- The Colorado Convention Center provides over 800,000 square feet of sellable space. Small and mid-sized markets have centers with sellable space as limited as 50,000 square feet.

### Conference Centers

- Urban Hotel Centers – basically a large hotel property (400 to 1,000 rooms) with significant meeting and banquet space.
- Resort Centers – large room block with significant meeting/ ballroom space, and various resort amenities.
- University Centers – small to mid-sized sellable space with attached rooms (sometimes branded), operated by the college or university.

## Overview of Conference & Convention Center Event Markets

### Convention Centers

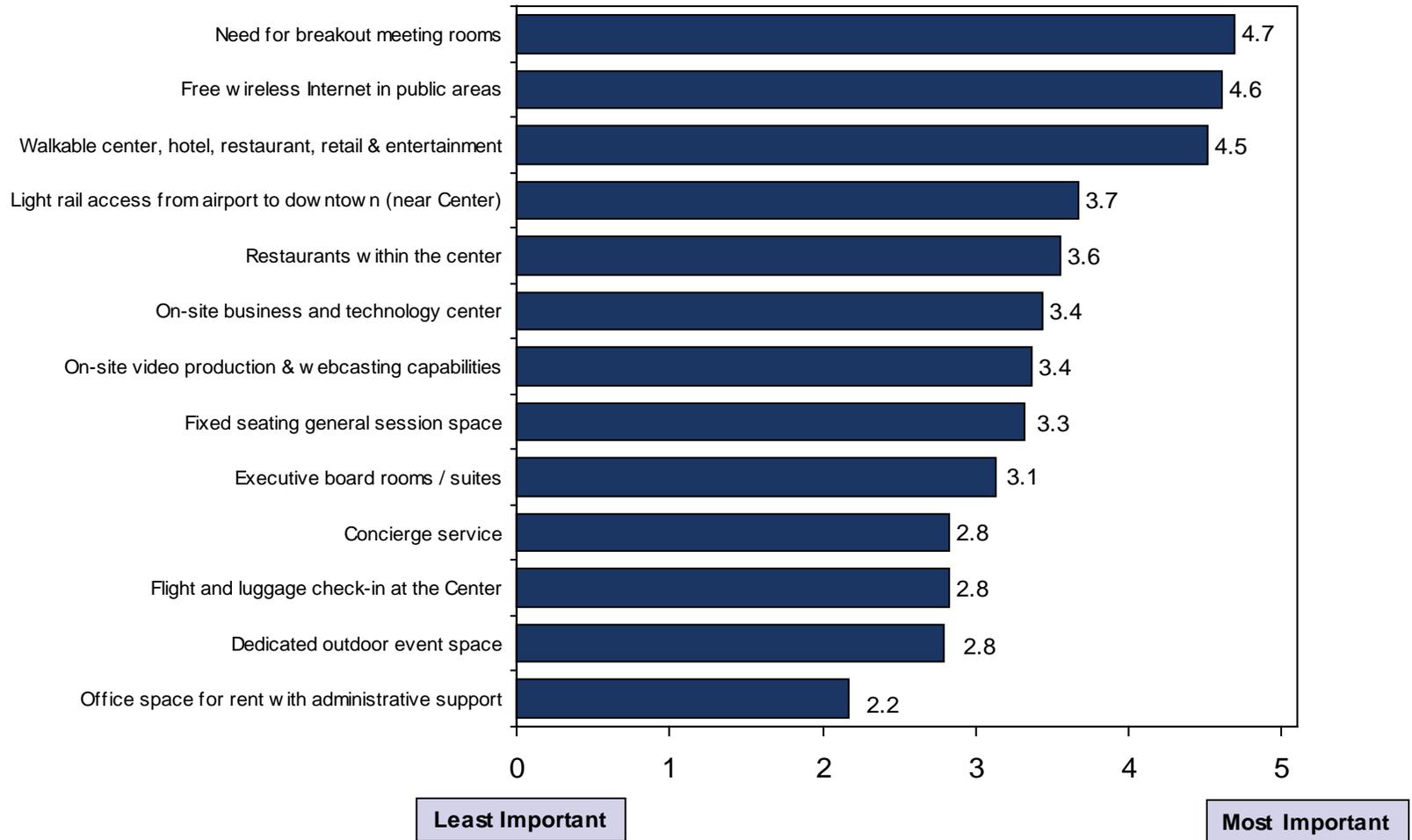
- Convention centers typically attract large convention and trade events produced by associations and corporations. These events are multi-day, with several days required for event setup and tear down. In addition, the center will accommodate consumer shows (boat, home, etc.), banquets, exams, large meetings and in some cases performances.

### Conference Centers

- Urban & Resort Centers – These centers are highly meetings focused, with a majority of demand from the corporate sector. Events are one or two days and include training, upper management, incentive, sales and related functions. The focus is on non-local events, although various local banquets and receptions are accommodated.
- University Centers – The primary focus is on university-sponsored educational events, with generally limited non-university use.

## Overview of Conference & Convention Center Industry Trends

### Expectations for Future Importance by Meeting Planners



Source: CSL interviews, 2014.

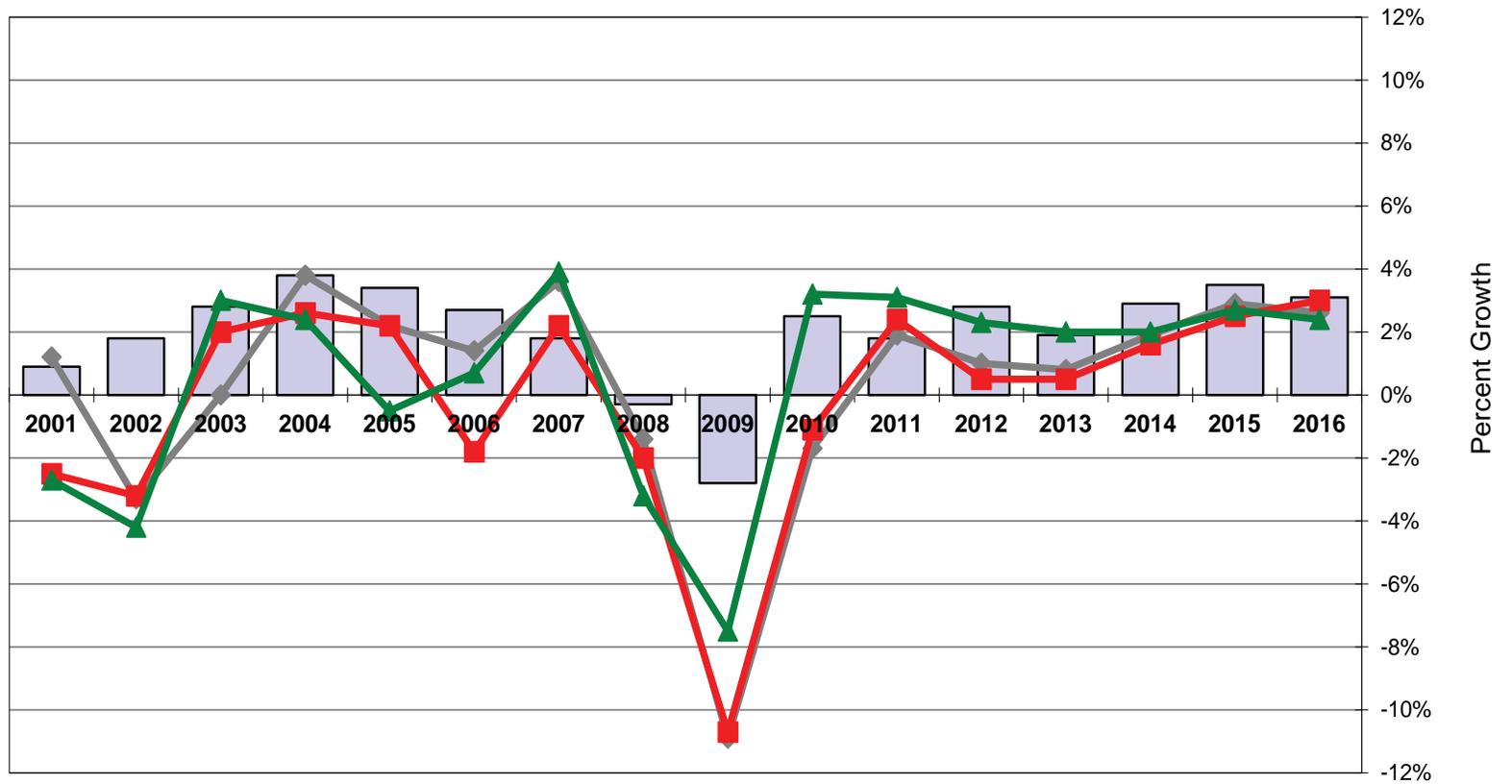
II. Preliminary Market / Site Assessment

## Overview of Conference & Convention Center Industry Trends

### Annual Demand Change vs. United States GDP



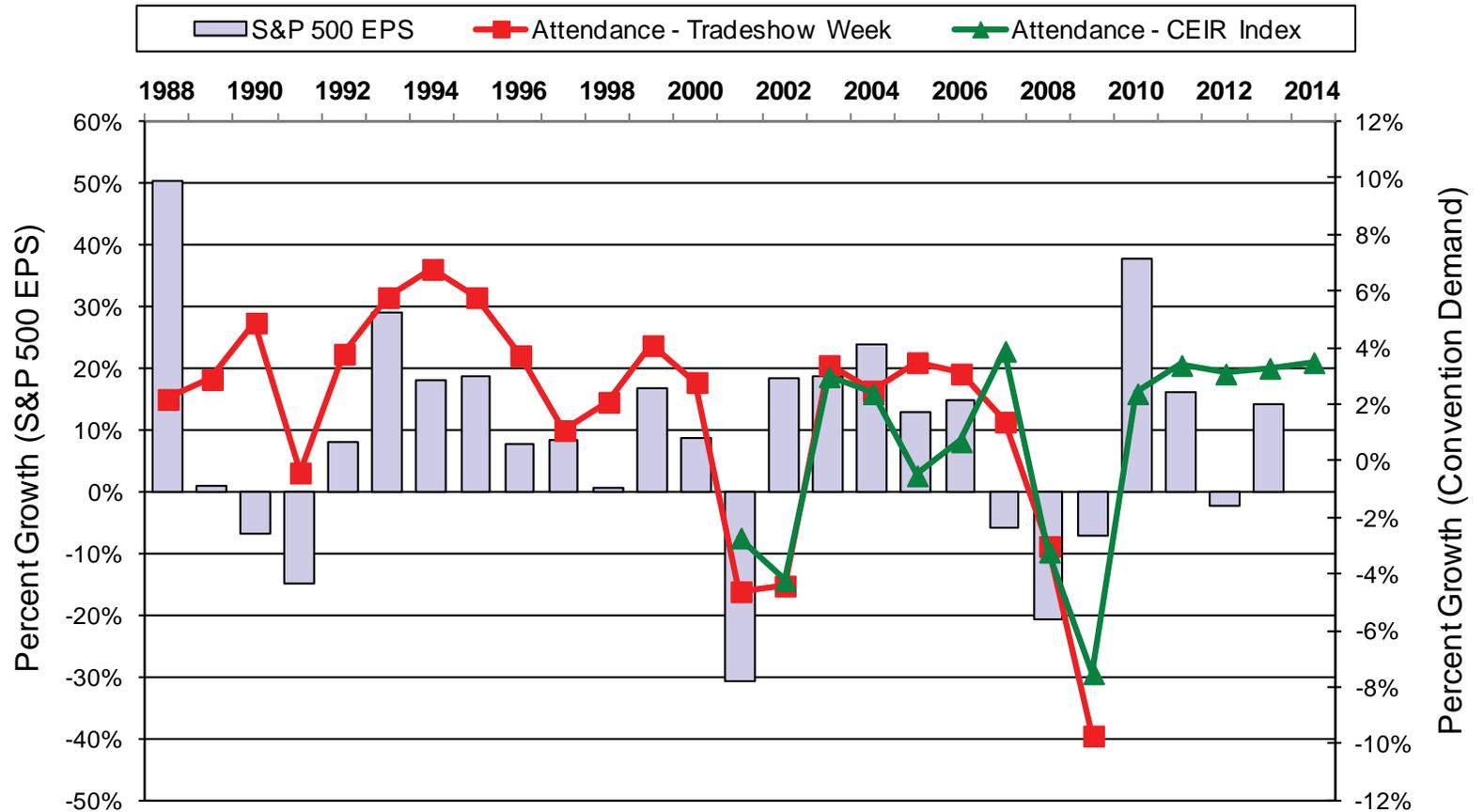
II. Preliminary Market / Site Assessment



Note: Data for 2014 through 2016 is based on forecasts.  
 Source: Center for Exhibition Industry Research (CEIR), 2014

## Overview of Conference & Convention Center Industry Trends

### Annual Changes to Convention & Tradeshow Attendance and S&P 500 EPS



II. Preliminary Market / Site Assessment

Sources: Tradeshow Week, 2010; Standard & Poor's, 2011; Center for Exhibition Industry Research (CEIR), 2012.

## Comparable Facility Case Studies

AT&T Executive Education and Conference Center  
University of Texas at Austin

**City, State:** Austin, TX

**Overview:** The AT&T Executive Education and Conference Center opened in 2008 at the University of Texas at Austin. It is attached a 297-room independent hotel.

In 2017, Robert B. Rowling Hall is to open as a new 458,000 square foot graduate business facility with a 15,000 square foot ballroom as well as additional meeting and breakout room space. It will cost \$172 million, with \$58.25 million coming from corporate and individual gifts.

**Owner:** University of Texas

**Operator:** Flik International  
(3<sup>rd</sup> party management company)

**Key Facility Components:** Total sellable space: 40,000 square feet  
37 meeting rooms: 30,000 square feet  
Grand Ballroom: 10,000 square feet  
Rowling Hall: 15,000 square feet (opening in 2017)  
300-Seat Amphitheater

**Events:** Around 1,000 events are hosted at this facility annually, including those sponsored both by University of Texas at Austin and outside organizations throughout the Austin area, such as corporations, non-profit groups, and local associations.

**Event Examples:** Texas Tribune Festival  
Venture Expo  
Texas Water Summit  
Innovation in health Care Delivery  
Systems Symposium  
Global Forum on Identity  
McCombs Executive Summit



## II. Preliminary Market / Site Assessment

## Comparable Facility Case Studies

### University of Wyoming Conference Center

**City, State:** Laramie, WY

**Overview:** The University of Wyoming Conference Center opened in February of 2008. It cost \$8.2 million to develop, funded largely through donations to the University of Wyoming Foundation. Financing was arranged, in part, by the Wyoming Business Council.

The Center is attached is a 135-room, \$15 million Hilton Garden Inn branded hotel.

**Owner:** University of Wyoming Foundation

**Operator:** Hotel Investment Services  
(3<sup>rd</sup> party management company)

**Key Facility Components:** Total sellable space: 11,000 square feet  
12 meeting rooms: 4,000 square feet  
Grand Ballroom: 7,000 square feet

**Events:** Annually, the conference center hosts around 300 events per year, anything from Association meetings to University of Wyoming business.

Attendance can be anywhere between 10 people in board meetings to 400 person association meetings.

**Event Examples:** MEGA Conference  
University of Wyoming School of Nursing Scholarship Reception  
International Conference on Future Technologies for Wind Energy  
Bar J Wrangler Concert  
Multicultural Graduation Celebration  
Clean Coal Technology Fund Research Symposium



II. Preliminary Market / Site Assessment

# Comparable Facility Case Studies

## Boise Center

**City, State:** Boise, ID

**Overview:** The Boise Centre is the largest convention facility in Idaho with over 33,000 square feet of total sellable space. In July 2014, workers broke ground on the expansion of the facility adding a 15,000 square feet ballroom, 14,000 square feet of additional meeting space, 8,000 square feet of meeting space and 7,000 square feet of additional pre-function and lobby space.

**Owner:** City of Boise

**Operator:** Greater Boise Auditorium District

**Key Facility Components:** Total sellable space: 33,300 square feet  
8 meeting rooms: 8,900 square feet  
Ballroom space: 24,400 square feet

375 fixed seat auditorium  
Undergoing a \$38 million expansion

**Events:** In 2013, hosted 215 events resulting in 347 event days

- 37 conventions
- 178 local events

Approximately 132,000 total attendees  
Nearly \$4,000,000 in total convention and meeting revenue

**Event Examples:** State of Idaho Governors' Trade & Business Conference  
Boise Valley Economic Partnership Meeting  
Idaho Humanities Council Lecture & Dinner  
St. Luke's Kid For a Night  
Saint Alphonsus Festival of Trees  
State of Idaho Industrial Commission Seminars  
Iron Man Pre Race Activities  
University of Idaho Graduation  
Botanical Society of America  
Dress For Success Luncheon



## II. Preliminary Market / Site Assessment

## Comparable Facility Case Studies

### Meydenbauer Center

**City, State:** Bellevue, WA

**Overview:** The Meydenbauer Center opened in 1993 as the greater Seattle area's second largest convention facility. The Center is owned and operated by the Bellevue Convention Center Authority, a public development authority. In 2013, it contributed \$34.6 million in economic impact for the community.

**Owner:** Bellevue Convention Center Authority

**Operator:** Bellevue Convention Center Authority

**Key Facility Components:** Total sellable space: 48,000  
Exhibit space: 36,000 square feet  
9 meeting rooms: 12,000 square feet  
Ballroom space: 0

Attached to the Theater at Meydenbauer  
In 2009, the facility added a 2,500 square feet executive conference suite



**Events:** In 2013 hosted 282 events and attracted a total of 138,200 attendees.

Conventions: 7%
Meetings: 62%
Tradeshows: 1.5%
Consumer shows: .5%
Banquets: 22%
Other: 8%



**Event Examples:**

- Youth America Grand Prix
- All Things Cheer
- Northwest Dairy Association Annual Meeting
- Newport High School graduation
- Crossfit Games
- Washington State Bar Exam
- 2013 Pacific Northwest Dental Convention
- Romanian Pentecostal Church Convention
- Creating Keepsakes Scrapbook Convention
- SalonCentric Hair Show

II. Preliminary Market / Site Assessment

## Comparable Facility Case Studies

### Monterey Conference Center

**City, State:** Monterey, CA

**Overview:** The \$8 million Monterey Conference Center opened in 1977. It is attached to the 341-room Monterey Marriott and 379-room Portola Hotel & Spa, combining to form the Monterey Conference Center and Meeting Connection. Operating costs of the Center are paid totally from revenues generated, and hotel room tax revenue the City receives.

**Owner:** City of Monterey

**Operator:** City of Monterey

**Key Facility Components:** Total sellable space: 30,300 square feet  
Exhibit space: 0  
10 meeting rooms: 10,700 square feet  
Ballroom space: 19,600

In early 2014, the City of Monterey approved of a plan to pay for a \$32 million renovation, with a goal of bringing more national association, corporate and incentive business to the facility.

## II. Preliminary Market / Site Assessment



**Events:** Historically, the Monterey Conference Center has hosted a variety of association, corporate, SMERF (social, military, educational, religious and fraternal), government/internal and other such events. In recent years, the Center has hosted an average of approximately 420 events per annum.

**Event Examples:** MISS Job Fair  
Boys and Girls Club of Monterey  
AT&T National Pro Am Golf Reception  
Technology, Entertainment & Design Conference  
California Credit Union League Meeting  
California State Chess Championship  
United States Golf Association Meetings

## Comparable Facility Case Studies

### Pueblo Convention Center

**City, State:** Pueblo, CO

**Overview:** Located in the heart of downtown Pueblo, the Pueblo Convention Center offers a total of 21,000 square feet of sellable space. It is attached to the 164-room Pueblo Marriott, and within one block of the Historic Arkansas Riverwalk of Pueblo. In FY 2013, total revenue at the Center was approximately \$1.6 million. Completed in 1997, the Center offers a total of 300 on-site parking spaces.

**Owner:** Pueblo Urban Renewal Authority

**Operator:** Global Spectrum

**Key Facility Components:** Total sellable space: 21,100 square feet  
Exhibit space: 0  
6 meeting rooms: 4,900 square feet  
Ballroom space: 16,200 square feet

**Events:** In 2013, the Pueblo Convention Center hosted 422 events which brought in over 45,000 attendees.

Meetings/seminars: 60%
Banquets/receptions: 25%
Conventions: 7%
Special events: 4%
Consumer shows: 3%
Trade shows: 1%



**Event Examples:**

- Zumba Glow Party
- Pueblo Convention Center Bridal Show
- Music Munchin'
- World Wine Tour
- Holiday Fair
- Quilt & Stitch Expo
- NCAA Division II Track & Field Banquet
- CSU-Pueblo Football Annual Signing Day Dinner
- Rotary Club of Pueblo District Conference
- Colorado Health Care Association
- Big Bear Brew Fest

II. Preliminary Market / Site Assessment

## Comparable Facility Case Studies

### Telluride Conference Center

**City, State:** Mountain Village, CO

**Overview:** The Telluride Conference Center is located in Mountain Village, Colorado, a winter ski resort destination. The \$8.5 million facility opened in 1999 and offers three meeting rooms totaling 1,400 square feet, as well as a 6,100 square feet ballroom.

**Owner:** Town of Mountain Village

**Operator:** Cadence Group

**Key Facility Components:** Total sellable space: 7,500 square feet  
Exhibit space: 0  
3 meeting rooms: 1,400 square feet  
Ballroom space: 6,100 square feet



#### Events:

	2008	2009	2010	2011	Avg.
<b>Number of Events</b>					
Conferences	5	7	5	5	6
Meetings	28	20	11	4	16
Banquets	21	5	11	19	14
Concerts & Events	20	15	13	16	16
Assemblies	16	11	0	0	7
<b>Total</b>	<b>90</b>	<b>58</b>	<b>40</b>	<b>44</b>	<b>58</b>
<b>Average Attendance</b>					
Conferences	443	332	161	83	255
Meetings	71	44	150	143	102
Banquets	150	297	264	262	243
Concerts & Events	720	567	527	446	565
Assemblies	119	126	0	0	61

## II. Preliminary Market / Site Assessment

## Comparable Facility Case Studies

### Two Rivers Center

**City, State:** Grand Junction, CO

**Overview:** The Two Rivers Convention Center is the largest multipurpose event facility between Denver and Salt Lake City. The convention center offers 22,900 square feet of total sellable space, and is attached to the 900+ seat Avalon Theater that was built in 1923. Located in downtown Grand Junction, the center provides 500 on-site parking spaces.

**Owner:** City of Grand Junction

**Operator:** City of Grand Junction

**Key Facility Components:** Total sellable space: 22,900 square feet  
Exhibit space: 0  
6 meeting rooms: 4,300 square feet  
Ballroom space: 18,600 square feet  
Concert capacity: 976

**Events:** Hosts a variety of meetings, seminars, reunions, weddings, receptions, banquets, concerts, galas and trade shows. In addition to business meetings, exhibits and concerts. The majority of events are locally-based.

Average tickets sold per concert is 936, resulting in average gross income of approximately \$36,000 per show.

**Event Examples:** West of I-50 Daily Sentinel Senior Fair  
Rocky Mountain Women's Expo  
HopeWest Fashion Show  
Grand Junction Chamber of Commerce Turkey Trot  
Ghost Busters – Dinner and a Movie  
Lime Street Entertainment  
Western Colorado Congress Film Fest  
Moscow Ballet Great Russian Nutcracker  
So You Think You Can Dance



## II. Preliminary Market / Site Assessment

## Boulder Area Market Strengths & Weaknesses (based on previous CSL research)

### Strengths

- Unique destination – Unique community with strong outdoor, art and cultural influences that support the brand perception.
- Proximity to major drive markets/international airports – 30 minute drive from downtown Denver and approximately one hour’s drive from Denver International Airport. Significant regional population base.
- Centralized geographic location – Considered a central location nationally with convenient air access to both coasts.
- Strong name/product recognition – Boulder has established a relatively strong name and “brand awareness” throughout Colorado, the Midwest and even the country.

### Weaknesses:

- Lack of a large concentration of traditional, full-service, convention-quality hotel properties.
- Lack of direct commercial air service to Boulder.
- Lack of industry reputation as a conference/convention “destination” (which can be addressed through marketing and branding efforts).

## II. Preliminary Market / Site Assessment

### Summary of Regional / Competitive Event Venues in Greater Denver

Facility	Location	Exhibit Space	Meeting Space	Ballroom Space	Total Space	Largest Contiguous Space	Number of Meeting Rooms
Hyatt Regency Denver	Denver, CO	0	13,800	30,000	43,800	30,000	16
Sheraton Denver Downtown Hotel	Denver, CO	0	46,100	48,700	94,800	28,000	41
The Westin Westminster	Westminster, CO	0	8,600	16,500	25,100	11,900	8
University Memorial Center	Boulder, CO	0	9,900	13,000	22,900	9,400	16
Omni Interlocken Hotel	Broomfield, CO	0	7,600	13,200	20,800	9,100	9
Grand Hyatt Denver	Denver, CO	0	6,600	14,300	20,900	8,400	11
Denver Marriott Westminster	Westminster, CO	0	3,800	8,300	12,100	8,300	5
The Ritz-Carlton, Denver	Denver, CO	0	6,100	6,300	12,400	6,300	8
Best Western Plus - Plaza Event Center	Longmont, CO	0	9,000	8,900	17,900	6,000	11
Millenium Hotel and Resort	Boulder, CO	0	6,700	5,600	12,300	5,600	5
DoubleTree by Hilton Hotel Denver - Westminster	Westminster, CO	0	3,400	5,200	8,600	5,200	8
St. Julian Hotel and Spa	Boulder, CO	0	2,800	4,100	6,900	4,100	6
Renaissance Boulder Flatiron Hotel	Broomfield, CO	0	3,000	2,900	5,900	2,900	5

Source: CSL; facility floor plans, 2014

## Boulder Hotel Inventory

II. Preliminary  
Market / Site  
Assessment

<u>Name</u>	<u>Room Count</u>	<u>Walking Distance From Grandview Site (miles)</u>	<u>Walking Distance From Folsom Site (miles)</u>
<b>1</b> Millennium Harvest House Boulder	269	1.1	0.3
<b>2</b> St. Julien Hotel & Spa	201	0.9	1.1
<b>3</b> Embassy Suites (1)	184	1.4	0.5
<b>4</b> Hilton Garden Inn (1)	177	1.4	0.5
<b>5</b> Residence Inn Boulder (1)	163	1.3	0.3
<b>6</b> Hotel Boulderado	160	1.0	1.1
<b>7</b> Boulder Marriott	157	1.3	0.4
<b>8</b> Hyatt Place Boulder/Pearl Street	150	2.1	1.1
<b>9</b> Courtyard by Marriott	149	2.7	1.7
<b>10</b> Residence Inn Boulder	128	2.9	1.9
<b>11</b> Rodeway Inn & Suites Boulder	115	1.4	1.6
<b>12</b> Homewood Suites by Hilton	112	2.6	2.6

(1) Approved for future construction

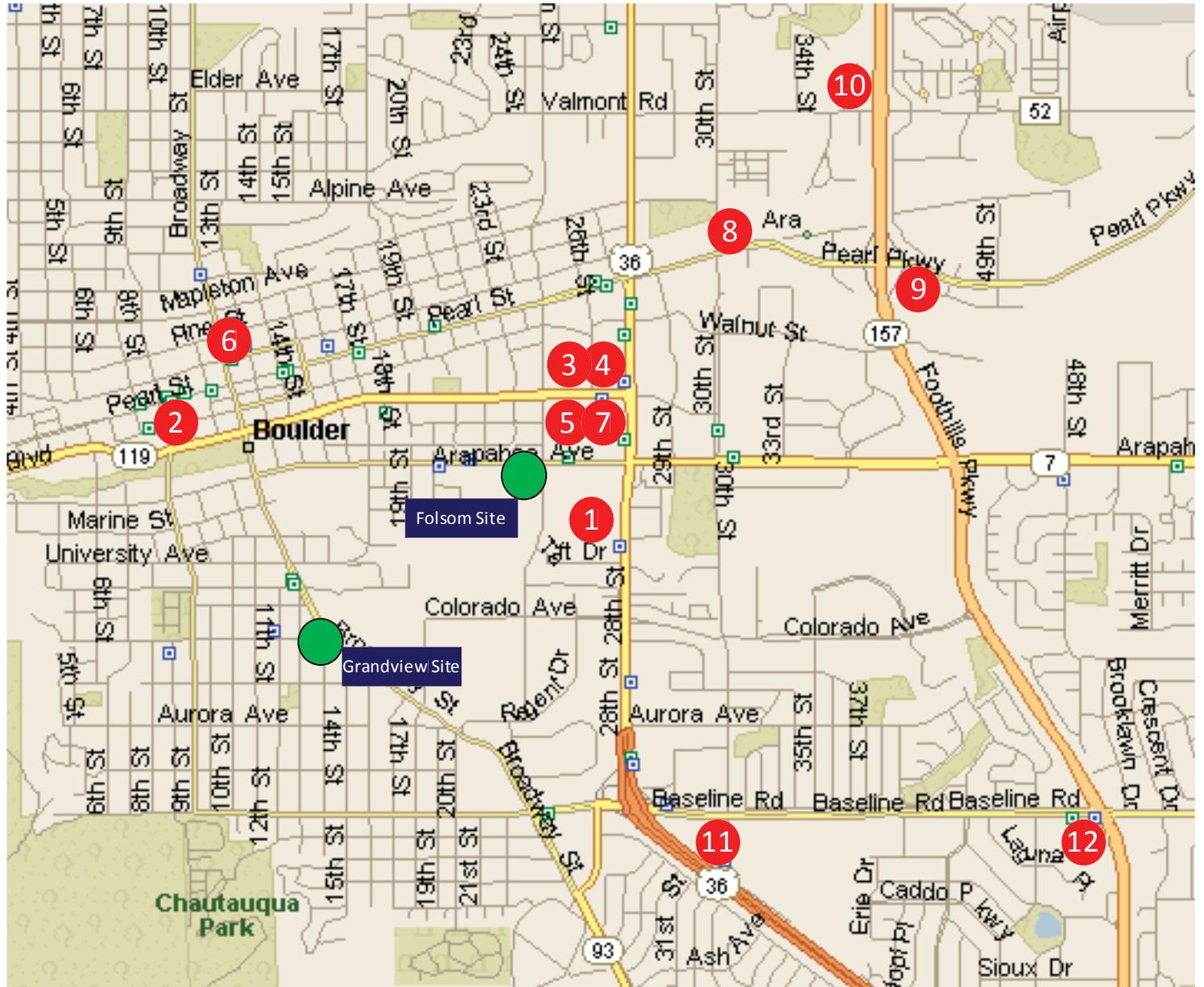
Note: Sorted by room count, only properties with 100+ rooms shown

Note: Walking distance in miles as calculated by GoogleMaps

Source: GoogleMaps, 2015

## Boulder Hotel Inventory

II. Preliminary Market / Site Assessment



## Broad Conference Center Program Parameters

Supportable program parameters for future conference center development are significantly impacted by the site area condition, intended customer base and operational philosophy of the project. We have summarized several broad space programs for conference center development in Boulder, taking into consideration the variables noted above.

### 1.0 Conference/Convention Center for the Boulder Market

This type of venue would provide for approximately 30,000 square feet of clear-span multipurpose space (carpeted); and 12,000 square feet of breakout meeting space.

### 2.0 Site Constrained Conference/Convention Center

Previous CSL research has explored the potential for smaller facility development, designed to be accommodated on various constrained sites. The program of space included 20,000 square feet of clear-span multipurpose space and 7,000 square feet of meeting space.

### 3.0 University Conference Center

The University has specified a facility with 20,000 square feet of clear-span multipurpose space and 8,000 square feet of breakout meetings space.

Every year, the International Association of Conference Centers conducts a statistical analysis various metrics related to the conference center industry nationwide. Based on information recently compiled by PKF Consulting, we have reviewed the average building program and hotel profile among executive conference centers, corporate facilities, resort venues and college/university facilities (similar to what is being considered in Boulder.

As shown, university facilities tend to be slightly smaller, in terms of both hotel and event space inventory.

***On average, conference center facilities utilized strictly for university needs tend to integrate fewer than 200 hotel rooms, approximately 23 meeting rooms and just over 30,000 sellable square feet of flexible meeting space.***

While not specific to the University of Colorado or the overall demand for event space in Boulder, these sizing parameters are important to consider when evaluating the supportable building program for a new facility in the market.

II. Preliminary Market / Site Assessment

## Industry Summary - Sizing Parameters for Various Facility Types

Profile of U.S. Conference Centers by Classification

	Executive	Corporate	Resort	College/Univ.
Number of Guestrooms (All)	213	233	261	175
Number of Meeting Rooms	26	45	27	23
Meeting Room Size (square feet)	1,104	869	1,428	1,313
Total Meeting Room Space (square feet)	28,522	38,955	37,842	30,200

Source: 2013 IACC - PKF Report

## Boulder Conference/Convention Center – Summary of Sizing Parameter Options

	Meets City and University Needs		Meets University Needs
	High	Low	
<b>Sellable Square Footage:</b>			
Multipurpose	30,000	20,000	20,000
Meeting	12,000	7,000	8,000
<b>Hotel Rooms:</b>			
On-site	250	250	250
Nearby	350	100	-

### Necessary Site Conditions:

Close walking distance to restaurants, retail and entertainment.

Convenient for University use.

Headquarter hotel, and close proximity to existing hotels.

Allows for future University development priorities.

Site that represents "unique Boulder".

There are two very distinct models to be considered in planning for a new conference center in Boulder.

*For a venue to meet the needs of both the City and the University, 20,000 to 30,000 square feet of contiguous, divisible multipurpose space, as well as 7,000 to 12,000 square feet of breakout meeting space would be necessary. In addition to 250 on-site hotel rooms, an additional 100 to 350 rooms would be preferable within close walking distance. However, in a number of markets across the country, shuttling event attendees to and from the event facility from their hotel is a common practice used to overcome such hotel proximity concerns among groups with a significant non-local attendee base. A site that highlights the unique elements that define Boulder and is surrounded by a very walkable environment offering restaurants, retail and entertainment could be successful when competing for nationally-rotating events.*

*If the primary goal of a new conference center in Boulder is strictly to meet the demand from the University, the need for event space and associated hotel inventory is reduced. Approximately 20,000 square feet of contiguous, divisible multipurpose space and 8,000 square feet of breakout meeting space is considered to be supportable. An on-site hotel offering 250 total guestrooms is recommended. The availability of nearby visitor amenities is less critical under these circumstances, with convenience for University groups being a top priority.*

II. Preliminary Market / Site Assessment

## Site Area and Walk-ability Factors

### Access to Hotels

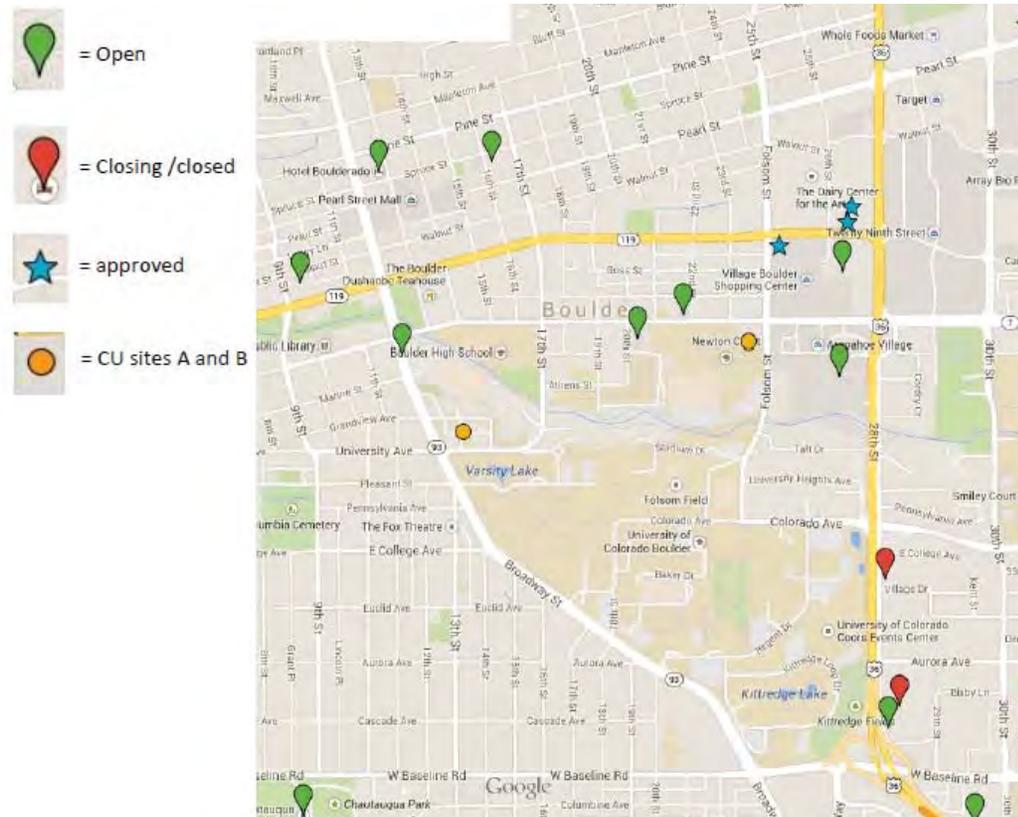
- The adjacent map shows existing and planned hotel inventory and the proximity to the two proposed conference center sites.
- The Folsom Avenue site provides for some nearby hotel inventory, although not directly adjacent.
- The Grandview site is not within close walking distance of existing or planned hotel inventory.

**A “walk-able” distance is defined as 1/2mile radius max if it is a pleasant walking experience.**

**Factors that influence a pleasant walking experience include, but are not limited to, safety, attractiveness, grade change, and weather.**

**Previous CSL research indicates that approximately one-half of national convention and conference planners require a room block in one or two hotels. Also, only 35 percent of planners would definitely use a shuttling system to access hotel properties.**

## II. Preliminary Market / Site Assessment



## Site Area and Walk-ability Factors

Large and small destinations throughout the country compete for convention and conference business. Event planners have so many venue options, that their focus in determining a destination often turns to the attendee experience. This experience is often defined as:

***combining walkable hotel, restaurant, retail and entertainment options in a highly unique and authentic environment.***

In Boulder, a center designed to attract non-local conferences and conventions in competition with other destinations will have to provide for this type of environment in order to be successful. When an event attendee thinks of Boulder, a certain perception is generated (outdoor, mountain, art, culture, etc.). In a competitive market for events, it would be very important to incorporate these aspects into the center and site area.

***A center that is developed in “just another space” will struggle to take advantage of the unique and authentic strengths of the destination.***

Conversely, a center with a primary focus on events produced by the University is less tied to the competitive events market, and can be designed and sited in a less restrictive manner. A description of site and walk-ability parameters for each building type is presented in the following paragraphs

1.0 Conference/Convention Center for the Boulder Market  
The larger “Boulder Conference/Convention Center” program would require significant hotel and entertainment walk-ability in order to be successful. The center would compete with larger hotels and smaller centers throughout the region, and will have to provide direct walkable access (2 blocks or less) to at least 600 hotel rooms. In addition, the center would have to be walkable to the type of restaurant/retail inventory available on the Pearl Street Mall. The site would have to be sufficiently sized to allow for sellable space, support areas (loading, prefunction, etc.), drop-off zones, green space, etc.

2.0 Site Constrained Conference/Convention Center  
A more modestly sized center has less need for significant attached/adjacent hotel room inventory, but would still need a modest amount of inventory. **Ideally, the project would include a new attached hotel of approximately 250 rooms, with another quality property within close walking distance.** The adjacencies to restaurant, retail and other commercial amenities is important.

3.0 University Conference Center  
A University focused and operated center will generate event activity from University sponsored events. Walk-ability factors become less important, however a well produced conference or symposium will require attached sleeping rooms.

## II. Preliminary Market / Site Assessment

## Industry Summary - Site Evaluation Criteria

The selection of a particular conference or convention center site generally involves the consideration of the types of factors listed to the right.

*Walk-ability, hotel access, surrounding area development opportunities are often considered paramount in the selection process, given the importance of these factors to event planners.*

Factors such as size, configuration and future expansion potential are critical to ownership given the desirability of planning for long-term development opportunities. These and other criteria are considered for each site on the following several pages.

### II. Preliminary Market / Site Assessment

#### Site Context and Land Issues

- Hotel Accessibility
- Walkability to Restaurants & Entertainment
- Surrounding area development opportunities
- Size and configuration
- Future expansion potential
- Image potential
- Safety (perception of area)
- Proximity and synergy with other event facilities

#### Accessibility

- Parking availability and location
- Pedestrian access
- Street/road capacity (ingress and egress)
- Traffic impact on adjacent areas

#### Community Compatibility

- Compatibility with neighborhood areas
- Compatibility with surrounding businesses

II. Preliminary Market / Site Assessment

**Site Evaluation Summary:**

***Grandview Site***

The four-acre Grandview site is located on vacant University-owned land on the northeast corner of the intersection of Broadway and University Avenue in the popular "University Hill" commercial district of Boulder. The site is comprised of numerous parcels that the University of Colorado has been acquiring for many years on the northwestern edge of the campus and currently includes several surface parking lots, a Starbucks coffee shop, the University of Colorado's Center for Asian Studies, and several other structures (all of which are already University owned).

**Site Context and Land Issues**

**Walkability to Restaurants & Entertainment**

- The site is located on the periphery of Boulder's "Hill" district--the active, historic and academic core of the city. An eclectic mix of restaurants, retail, nightlife and entertainment can be found within one to three blocks directly southwest of this location. This active area is home to a significant student population, resulting in a desirable flow of nearly constant pedestrian and bicycle traffic.
- Accessibility to downtown Boulder, including the well-known Pearl Street Mall, requires a mostly downhill walk (crossing Boulder Creek) of approximately eight blocks. Elevation changes going from downtown back to the site could be challenging for some attendees of events at the proposed venue.
- As currently envisioned, development on this site could also include a pedestrian-friendly, landscaped, connection/walkway that would lead north toward downtown. This could provide facility users and hotel guests with a unique alternative to walking along the heavily-traffic of Broadway. The landscaped, terraced, walking and bike path would stretch approximately one-quarter mile and provide direct access to Arapahoe Avenue. The Pearl Street Mall is located approximately five blocks from the intersection of Arapahoe and the planned pedestrian walkway.

**Hotel Accessibility**

- The Grandview site is approximately two blocks from the Boulder University Inn. This limited service property provides a total of 40 guestrooms and does not likely provide the features that would be preferred by the majority of attendees of events at the proposed conference center.
- The St. Julien Hotel & Spa offers 201 total guestrooms and is located approximately seven blocks from the Grandview site. This luxury hotel is the rate leader in all of Boulder, with room rates often exceeding \$300 per night. The historic, 160-room Boulderado Hotel is approximately ten blocks away from the site.

**Size and configuration**

- The Grandview site has a trapezoidal configuration with an overall study area footprint of approximately 140,300 gross square feet, or approximately 3.22 acres. The site is bordered to the north by the Boulder Creek Trail and athletic fields for Boulder High School. The somewhat constrained nature of the site will require a more vertical development. It is located at the top of a hill, which may present some additional development challenges and expenses.

**Future expansion potential**

- The ability to expand the proposed conference center to the east is a possibility that could be considered at a later date; however should not be planned for now.

**Image potential/consistency with city's "brand"**

- This site is amid the core of both the Hill district and the University campus. The active area provides a unique collegiate atmosphere/experience, as well as impressive views of the nearby Flatirons.

**Surrounding area development opportunities**

- There is a renewed interest in developing restaurants, retail and office space to the south and west of this site. The City of Boulder is currently in the process of conducting an analysis on how to best re-position the Hill district going forward, with an overall goal of creating more diversity of businesses (through less residential, more high-end retail offerings and additional office space). This could help to enhance the type of restaurant and retail options desired by conference planners and attendees.
- Development on this site does constrain future opportunities for on-campus academic buildings.

II. Preliminary Market / Site Assessment

**Relocation/abandonment of roads**

- Development on this site would likely result in the closure of 13th Street, to the immediate north and south of Grandview Avenue (the eastern most border of the site).
- As currently envisioned, the hotel structure will lie on a parcel to the south of Grandview Avenue (fronting Broadway). The conference center component would be situated north of Grandview Avenue and approximately one block east of Broadway, with many of the existing structures that front Broadway remaining.

**Accessibility**

**Parking availability and location**

- Given the fact that many conference center event attendees will be driving (both personal and rental vehicles), sufficient parking will be needed on-site to support a majority of both hotel guests and conference center attendees.
- Limited on-street and surface parking will be available in the immediate area surrounding the site.
- As currently envisioned, a total of approximately 400 stalls would be developed in conjunction with the hotel and conference center. These spaces would be spread over three below grade lots, with an estimated 130 stalls beneath the conference center and 270 stalls spread over two levels below the hotel.

**Pedestrian/bicycle access**

- The Grandview site is adjacent to the Hill district and lies within a walkable, active environment. Importantly, the long-term vision for this area is emerging and will continue to encourage unique and authentic developments and experiences, which will be beneficial to event planners and attendees.
- Downtown Boulder (and the Pearl Street Mall) is approximately eight blocks from the site. It is important to note that this distance (especially given the change in elevation) is greater than what a significant portion of conference and convention attendees would typically consider walking. The envisioned pedestrian walkway could create a unique, green connection to downtown, keeping foot traffic off of Broadway. This link will be critical to creating and encouraging this important connection to downtown.

**Street/road capacity (ingress and egress)**

- Broadway is a major thoroughfare that serves as a western border of the University of Colorado and connects to Canyon Boulevard.
- Access to downtown Denver and Denver International Airport are relatively easy given Broadway's proximity and connections to the Denver Boulder Turnpike (leading to Denver) and the E-470 expressway (leading to DIA).

**Public Transportation Accessibility**

- Broadway is on a number of primary local and regional bus routes with very high volume ridership that connect greater Boulder. Direct service is available to downtown Denver as well as Denver International Airport.
- Although conference attendees don't typically utilize bus transportation to access or navigate the host community, it's likely that international event attendees (which could be a focus of many University events) and millennials could benefit from the substantial public transportation access associated with this location.

**Community Compatibility**

**Compatibility with neighborhood and other planning initiatives**

- A conference center and hotel on the Grandview site could compliment the City's plan for the future of the Hill district. A project of this magnitude could serve as a catalyst to spur additional investment in the immediate area, thereby increasing the overall desirability of the district to planners and attendees of events at the proposed venue.
- The City of Boulder is planning to develop an outdoor, programmable, public event space in the Hill district. Public space of this nature, and associated events (i.e., concerts, University events, community functions, etc.) is desirable to event planners and attendees.
- The Grandview site will be approximately one quarter mile from the planned Boulder Civic Area. This planned development will provide a diversity of civic, commercial, recreational, artistic, cultural and educational amenities.

II. Preliminary Market / Site Assessment

- Development on this site would eliminate the potential for the University to add academic buildings on this site in the future

### Financial / Cost Impacts

#### Acquisition Costs/Concerns

- The University has already acquired numerous parcels of land that would be necessary to fully develop this site.
- To the extent possible, additional negotiations are encouraged with property owners on or near the Grandview site in an effort to assemble a single, seamless parcel for optimal future development on the site.

#### Infrastructure Costs/Concerns

- The relatively small size of this site will require a high degree of vertical development, including below grade parking. The costs associated with such vertical development can be significant and should be considered in the planning process.
- Additional demolition will be necessary for existing structures on the site (i.e., Starbucks, etc.).

### Summary

*The Grandview site provides the potential for the development of a new conference center and hotel that could **fully meet the needs of the University of Colorado** in a uniquely collegiate setting with views of the nearby Flatirons. Located adjacent to the active University Hill district, the site is within close walking distance of several restaurants, coffee shops, retail outlets, residential units, etc. The City's plan to encourage unique and authentic development, while creating more diversity of businesses in the Hill district, will be important to the success of a proposed conference center in this area. In turn, the Center could have a positive impact on future Hill district redevelopment.*

*The approximate ten minute walk to downtown Boulder (and the Pearl Street Mall) could be greatly improved and/or mitigated by the creation of a landscaped pedestrian and bicycle-friendly pathway linking the facility to downtown, via the planned new Civic Area.*

*Although this distance won't satisfy all planners and attendees, **the Grandview site does have the potential to connect to downtown Boulder, creating a unique conference experience for a sizable segment of the market.***



Intersection of Broadway and University Looking Southwest

## Folsom Site

The nearly 4.5 acre Folsom site is located on University-owned land on the southwest corner of the intersection of Folsom Street and Arapahoe Avenue. The site is on the northeastern edge of the campus and currently consists of approximately twenty 1960's era structures that make up the University of Colorado graduate and family student housing complex known as Newton Court. An active commercial district lies directly east and northeast of the Folsom site. It is bordered to the north by a residential neighborhood, consisting largely of University students.

### Site Context and Land Issues

#### Walkability to Restaurants & Entertainment

- The site is located on the northeastern edge of the University of Colorado campus. It is bordered to the north by Arapahoe Avenue and Folsom Street to the east. Directly west of the site is the University's Children's Center and the campus of Naropa University. Vehicular, pedestrian and bicycle traffic is heavy in this very mixed-use area.

## II. Preliminary Market / Site Assessment

- Based on research as part of the 2011 CU master plan study, the intersection of Folsom Street and Colorado Avenue (just south of the Folsom site) is the most highly utilized access point to the main campus of the University among pedestrian, bicycle and skateboard traffic.
- The Village Boulder Shopping Center is located on the northeast corner of the intersection of Folsom Street and Arapahoe Avenue—adjacent to the Folsom site. The complex is home to more than 40 shops, restaurants and service providers, approximately 90 percent of which are locally-owned businesses. Access to the Village Boulder Shopping Center requires crossing both Arapahoe Avenue and Folsom Street amid potentially heavy traffic. The experience is non-descript and does not highlight the unique offerings of the Boulder area.
- The Arapahoe Village retail complex is located on the southeast corner of the intersection of Folsom Street and Arapahoe Avenue—adjacent to the Folsom site. This shopping center offers a non-descript assortment of national retailers, chain restaurants, local shops and a large supermarket.
- Located approximately 0.7 miles from the Folsom site, the Twenty Ninth Street Mall is a premiere mixed-use, outdoor shopping center, with anchor tenants including Century Boulder Theatres, Colorado Athletic Club, Macy’s, and Trader Joe’s. Again, the pedestrian experience is somewhat generic and does not feature the unique offerings of the Boulder area.
- Downtown Boulder, including the well-known Pearl Street Mall, is approximately 1.1 miles from the Folsom site. This distance is significantly greater than what is typically considered walkable by conference attendees and would require vehicular transportation (i.e., rental cars, taxis, busses).
- The University Hill district is approximately 1.2 miles from the Folsom site and presents similar accessibility concerns. This active, historic and academic core of the city provides a mix of unique restaurants, retail, nightlife and entertainment that could be desired by planners and attendees of conference events.

### Hotel Accessibility

- The closest existing hotel to the Folsom site is the 269-room Millennium Harvest House Boulder, which

is located approximately 0.25 miles from the site. This property provides a total of approximately 12,300 square feet of event space, making it the largest local hotel in terms of both number of guestrooms and sellable square feet of meeting and banquet space. The 157-room Boulder Marriott is located approximately 0.7 miles from the site.

- Importantly, there are three planned hotel properties that will lie within walking distance of the Folsom site. Together, these properties will offer a total of 524 rooms and include:
  - Embassy Suites (184 rooms) – located 0.3 miles from the site
  - Hilton Garden Inn (177 rooms) – located 0.3 miles from the site
  - Residence Inn Boulder (163 rooms) – located 0.4 miles from the site
- Conference event planners typically seek destinations offering a variety of hotel, restaurant, retail and other hospitality/visitor industry amenities in a unique, walkable setting. The Folsom site may present some challenges in some of these areas going forward; however, over the long-term, opportunities may exist to develop these assets in the immediate area.

### Size and configuration

- The Folsom site has a rectangular configuration with an overall study area footprint of approximately 190,000 gross square feet, or approximately 4.36 acres. The site is bordered to the north by Arapahoe Avenue and to the east by Folsom Street. The University’s Children’s Center and the campus of Naropa University are directly west of the site. University practice and recreational athletic fields are directly southwest of the site.
- There is sufficient available acreage to develop the conference center, hotel and parking on this site.
- Given its proximity to Boulder Creek, the Folsom site lies within a floodplain. Based on conversations with project planners, this represents a threat to the site and will require significant additional development time and costs if this site is ultimately selected for conference center and hotel development.

II. Preliminary Market / Site Assessment

**Future expansion potential**

- The Folsom site is large enough to allow for a potential future expansion of the proposed venue. Future architectural planning for the build out of this site should carefully consider this option as a long-term consideration.

**Image potential/consistency with city's "brand"**

- The Folsom site is located more than one mile from both the Hill district and downtown Boulder. The immediate area surrounding the site feels "suburban" in nature and does not provide a uniquely Boulder or collegiate atmosphere/experience, which could limit its appeal among potential user groups that are considering Boulder among a variety of other options across the country.

**Surrounding area development opportunities**

- Although nothing is planned in the immediate future, based on conversations with City officials, the area is "ripe for re-development" over the longer-term. A number of the existing buildings are nearing the end of their useful life and will likely be replaced over time.

**Relocation/abandonment of roads**

- As currently envisioned, development on this site would not likely require the relocation and/or abandonment of any nearby roads.

**Accessibility**

**Parking availability and location**

- Given the fact that many conference center event attendees will be driving (both personal and rental vehicles), sufficient parking will be needed on-site to support a majority of both hotel guests and conference center attendees.
- Limited on-street and surface parking will be available in the immediate area surrounding the site. Opportunities may exist for shared parking utilizing existing University surface lots in the area.
- As currently envisioned, a total of approximately 400-410 spaces would be developed in conjunction with the hotel and conference center. A freestanding, above ground structure would provide 400 stalls. Additional surface parking spaces would be available on the site as well.

**Pedestrian/bicycle access**

- The site is located at a busy intersection that captures a mix of University, commuter and retail traffic.
- To access the main campus of the University, pedestrians must circumnavigate a series of existing and planned athletic practice fields before crossing Boulder Creek.
- The Greenbelt Boulder Creek Path, a popular pedestrian and bike path running east/west directly north of the University's main campus, provides a unique experience that could be enjoyed by conference center attendees. However, access to the path is approximately three blocks from the site.
- The pedestrian experience in the area is currently generic in nature, and would typically require lengthy walks along heavily-trafficked roadways. This runs directly counter to the more compact, walkable environment sought by most conference event planners. An extensive, long-term planning effort would be necessary to create the environment that is frequently sought by conference event planners.

**Street/road capacity (ingress and egress)**

- Arapahoe Avenue is a major east/west thoroughfare running through central Boulder. It bisects Highway 36 (the Boulder Denver Turnpike) approximately four blocks east of the Folsom site.
- Folsom Street runs north/south and forms the eastern border of the site. It bisects Highway 7 (Canyon Boulevard) approximately four blocks north of the site.

**Public Transportation Accessibility**

- Regularly scheduled bus service is available on both Arapahoe Avenue and Folsom Street. Based on conversations with City officials, the levels of bus connectivity and service available at the Folsom site is substantially less than what is offered at the Grandview Site.
- Although conference attendees don't typically utilize bus transportation to access or navigate the host community, it's likely that international event attendees (which could be a focus of many University events) and millennials could benefit from the substantial public transportation access associated with this location.

II. Preliminary Market / Site Assessment

**Community Compatibility**

**Compatibility with neighborhood and other planning initiatives**

- Based on conversations with University officials, the Newton Court graduate and family student housing complex is nearing the end of its useful life. It is likely that these structures will be demolished at some point regardless of future conference center development on the site.
- A conference center and hotel on the Folsom site could become a catalyst for a massive redevelopment effort of the area, with a goal of creating a less “fractured” environment including the adjacent commercial shopping district. Significant planning for and investment in the immediate area could increase the overall desirability of the proposed venue. This would likely have a very long-term development horizon, during which a conference center would operate at a competitive disadvantage.
- Conference center development on the Folsom site would eliminate the potential for the University to add university buildings on this site in the future.

**Financial/Cost Impacts**

**Acquisition Costs/Concerns**

- The University owns the majority of the land that would be necessary to fully develop this site; however, there are also two privately owned parcels, which are both located on the extreme northeast corner of the site (at the southeast intersection of intersection of Folsom Street and Arapahoe Avenue).
- To the extent possible, CU should try to acquire these properties to support any form of future development at the site.

**Infrastructure Costs/Concerns**

- Significant demolition will be necessary for existing structures on the site (i.e., Newton Court). It’s possible that additional costs could be incurred for asbestos removal.
- Additional development costs, specifically related to flood mitigation and construction delays, can be expected given the location of the entire Folsom site in a 500-year and 100-year floodplain and a portion of the site being located in the high hazard zone.

- These costs should be carefully considered as the site selection process continues.

**Summary**

*The Folsom site provides sufficient acreage on which to develop a conference center, hotel and associated parking. Located more than one mile from both the Hill district and downtown Boulder, **the immediate area surrounding the site does not provide a uniquely Boulder or collegiate atmosphere/experience, which could limit its appeal among potential user groups that are considering Boulder among a variety of other options across the country.***

*Although a variety of existing and planned hotel properties and retail offerings are located within walking distance of the site, vehicular traffic is heavy in the area and the pedestrian experience is non-descript and suburban in nature. This runs directly counter to the more compact, walkable environment sought by most conference event planners. **An extensive, long-term planning effort would be necessary to create a more desirable environment. A conference center and hotel on the Folsom site could become a catalyst for redevelopment efforts of the area, including the adjacent commercial shopping district. This would likely have a very long-term development horizon, during which a conference center would operate at a competitive disadvantage.***



Intersection of Arapahoe and Folsom looking towards proposed Folsom Site



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### Comparison of Multi-Modal Access

The measures developed are intended to evaluate regional (employees and regional/out-of-town attendees) and local (convention attendees / hotel guests) access via transit, walking and bicycling as well as TDM measures. These measures were also used to provide mode shift adjustments for traffic analysis.

Regional Travel measures include:

- Potential for direct access by transit from Denver and/or Denver International Airport – to identify the potential of conference attendees arriving from out of town or Denver to reach the respective sites using transit (and in turn be more likely to access destinations in Boulder without driving).
- Access by Regional Transit – to identify opportunities for employees that live in the region but outside Boulder to arrive at work via transit.

Local Access measures include:

- Proximity to major destinations – to measure opportunities for convention attendees to access retail destinations without driving (and in turn be more likely to choose a non-driving mode to access a hotel). Access to Downtown (14th & Pearl), University Memorial Center, 29th St Mall (29th & Canyon), CU Norlin Library (18th & Colorado), Folsom Stadium (Colorado & Franklin), Coors Events Center, and the CU Student Recreation Center was measured.
- Proximity to hotels w 100+ rooms – to identify opportunities for hotel guests to reach the conference center from their hotel without driving.

Existing TDM measures in the vicinity of each site as well as proposed parking availability are also noted as they have the opportunity to reduce single-occupant vehicle trips to the sites.

Figure 1 provides a high-level summary of the results for each metric. A more detailed summary of the results is provided in Figure 2 (see next page).

*The Grandview site has better access to regional transit (including Downtown Denver, Denver International Airport as well as Boulder Transit Center). Both sites have good access to retail and services. The Folsom site has many more hotels located within a relatively short walk, bike or transit trip; a potential benefit during large conventions requiring multiple hotels to house conventioners. The Folsom site also scored slightly better when the City of Boulder ran its neighborhood access tool, which measures the number of attractors than can be reached within a 15 minute walk shed. A similar amount of parking is proposed at each site, and neither site is in an Access District.*

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EVALUATION MEASURES		GRANDVIEW	FOLSOM
REGIONAL ACCESS: Employees and regional/out-of-town attendees	<b>DIRECT TRANSIT ACCESS FROM DOWNTOWN DENVER AND DENVER INTERNATIONAL AIRPORT.</b> Proximity to bus stops for US 36 BRT and AB bus (to DIA).	 Potentially close access to high-frequency US 36 BRT branch on Broadway (depends on final BRT stop locations). Close access to AB bus.	 More distant access (0.4 miles) to less frequent US 36 BRT branch on 28th. Good access to the HOP circulator route, which would provide access to the AB bus with a transfer.
	<b>ACCESS BY REGIONAL TRANSIT.</b> Number of daily trips by regional transit within a 1/4 mile walk of each sites.	 Direct access to transit on Broadway and walking access to Boulder Transit Center.	 Direct access to the HOP and JUMP routes, transfers to other services available at Boulder Transit Center.
LOCAL ACCESS: Convention attendees and hotel guests	<b>PROXIMITY TO MAJOR DESTINATIONS.</b> Transit, walking, and biking access time to destinations.	 Proximity to Downtown and CU.	 Proximity to 29th Street Mall and other retail. Slightly longer walk to Downtown and some CU destinations.
	<b>PROXIMITY TO HOTEL ROOMS.</b> Local rooms within 20-minute transit trip, 15-minute walk, or 15-minute bike rides (based on hotels with 100+ rooms hotels listed in Site Analysis Boulder Hotel Inventory). Proximity to US 36 BRT for access to hotels along US 36 corridor.	 More moderate level of existing and future local hotel rooms. Potentially closer access to higher-frequency branch of US 36 BRT.	 Access to a broader range of existing and future local hotel rooms. More distant access to lower-frequency branch of US 36 BRT.
	<b>LOCAL ACCESS.</b> Score based on attractors within 15-minute walkshed based on Boulder Neighborhood Access Tool.	 Average score of 63.1 out of a possible 86, with 26% of the walk shed in the top category and 54% in the second highest category.	 Average score of 69.2 out of a possible 86, with 60% of the walk shed in the top category and 35% in the second highest category.
TDM	<b>EXISTING TDM MEASURES.</b>	 Not in current access or NPP district, University Hill NPP district 2-3 blocks southwest.	 Not in current access or NPP district.
	<b>PROPOSED PARKING AVAILABILITY.</b> Based on Site Analysis report.	 Slightly fewer spots proposed.	 Slightly more spots proposed.

Figure 1



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Measure	Method (Tools/Data Sources)	Grandview	Folsom	Advantage
<b>Regional Travel - employees and regional/out-of-town attendees</b>				
Potential for direct access by transit from Denver and/or Denver International Airport	Proximity to bus stops for: <ul style="list-style-type: none"> <li>US 36 BRT (Denver Union Station)</li> <li>AB bus (Airport) (Google Trip Planner)</li> </ul>	Grandview site is served (<0.1 miles) by the AB airport bus service. US 36 BRT will provide a connection to Downtown Denver. Intermediate US 36 BRT stops between Euclid and Boulder TC are being finalized. Stops at University and/or Canyon/Arapahoe are being considered. A University stop would be < 0.1 miles from the site; a Canyon/Arapahoe stop would be 0.3 to 0.4 miles from the site.	Folsom has more distant access (0.4 miles) to the planned US 36 BRT stops at 28 <sup>th</sup> Street and Arapahoe. The AB may also provide service to the same stops along 28 <sup>th</sup> in the future. Service frequency for both planned US 36 BRT service and potential AB bus service on 28 <sup>th</sup> are lower as compared to Grandview site (on Broadway)	Grandview
Access by regional transit	# of daily trips by regional transit that stop within ¼ mile walk of each site (GIS/TMP)	Grandview has better access to downtown, including walking access to the downtown Boulder Transit Center. There is excellent local and regional transit service on Broadway.	Folsom has good access to the Hop, which provides access to other transit services at Boulder TC and at Boulder Junction.	Grandview
▪ Boulder Transit Center		0.5 mi.; Transit – 6 min; Walk – 11 min	0.9 mi.; Transit – 11 min; Walk – 18 min	
▪ Boulder Junction		2.1 mi.; Transit – 28 min; Walk – 42 min	1.2 mi.; Transit – 13 min; Walk – 25 min	
<b>Local Access - for convention attendees / hotel guests</b>				
Proximity to major destinations	Transit, walking and biking time to destination (Google Trip Planner)	Grandview has better access to Downtown and CU destinations	Folsom has better access to the 29th Street Mall	Both sites are close to retail and services
▪ Downtown (14th & Pearl)		0.7 mi.; Transit – 7 min; Walk – 13 min; Bike – 6 min	1 mi.; Transit – 12 min; Walk – 21 min; Bike – 9 min	
▪ University Memorial Center		0.4 mi.; Transit – 6 min; Walk – 9 min; Bike – 3 min	1 mi.; Transit – 8 min; Walk – 20 min; Bike – 8 min	
▪ 29th St Mall (29th & Canyon)		1.5 mi.; Transit – 21 min; Walk – 29 min; Bike – 8 min	0.5 mi.; Transit – 7 min; Walk – 11 min; Bike – 4 min	
▪ CU Norlin Library (18th & Colorado)		0.4 mi.; Transit – NA; Walk – 6 min; Bike – 2 min	0.7-0.9 mi.; Transit – 10 min; Walk – 16 min; Bike – 6 min	
▪ Folsom Stadium (Colorado & Franklin)		0.6 mi.; Transit – 13 min; Walk – 12 min; Bike – 4 min	0.6 mi.; Transit – 6 min; Walk – 13 min; Bike – 5 min	
▪ Coors Events Center		1.1 mi.; Transit – 15 min; Walk – 21 min; Bike – 6 min	0.8 mi.; Transit – 14 min; Walk – 17 min; Bike – 6 min	
▪ CU Student Recreation Center		0.7 mi.; Transit – NA; Walk – 13 min; Bike – 5 min	0.5 mi.; Transit – 10 min; Walk – 11 min; Bike – 6 min	
Proximity to hotels w 100+ rooms (as listed in the Boulder Hotel Inventory in the site analysis document)	Local rooms within 20-minute transit trip, 15 minute walk and 15 minute bike ride Proximity to bus stops for US 36 BRT (for access to hotels along US 36 corridor) (Google Trip Planner)	<u>Access to existing hotel rooms</u> Transit – 745; Walk – 361; Bike – 1,313 <u>Access to existing + approved hotel rooms</u> Transit – 1,269; Walk – 361; Bike – 1,867  Grandview site is served (<0.1 miles) by US36 BRT	<u>Access to existing hotel rooms</u> Transit – 1,052; Walk – 426; Bike – 1,414 <u>Access to existing + approved hotel rooms</u> Transit – 1,576; Walk – 950; Bike – 1,965  Folsom has more distant access (.4 miles) to US36 BRT and service frequency is lower as compared to Grandview access	Folsom has better transit, walk and bike access to a broader range of hotel rooms. Approved but not yet built hotels will greatly increase the number of hotels within walking distance of Folsom site.
Local Access	Number of attractors within 15-minute walkshed for each site (Boulder Neighborhood Access Tool)	Average Neighborhood Access Score: 63.1	Average Neighborhood Access Score: 69.2	Folsom has a greater number of attractors that can be reached within a 15 minute walk shed
<b>TDM – qualitative assessment of ability to hit mode share targets (e.g. for the city)</b>				
Existing TDM measures in vicinity of each location		Neither the Grandview nor the Folsom site is located within an Access District or a Neighborhood Parking Permit (NPP) zone. The University Hill NPP district begins two to three blocks southwest from the Grandview site.	Neither the Grandview nor the Folsom site is located within an Access District or a Neighborhood Parking Permit (NPP) zone.	Neither
Proposed Parking Availability	Site analysis report	Similar amount of parking is proposed for both sites 400 stalls proposed for Grandview site	445 stalls proposed for Folsom site	Neither

Figure 2

## PROXIMITY TO MAJOR DESTINATIONS

This analysis compares the degree of local and regional connectivity by walking, biking, and transit from the proposed Grandview and Folsom sites.

*Both sites feature robust walking, transit, and biking access: the Grandview site has a 93 Walk Score, 62 Transit Score, and 89 Bike Score; the Folsom site has an 87 Walk Score, 60 Transit Score, and 100 Bike Score.*

### Proximity to Boulder/CU Destinations:

Using Google Trip Planner the distance and travel times between the proposed sites and popular destinations in Boulder and the University of Colorado were mapped.

Both sites are close to retail and services, as illustrated in Figure 3.

*Grandview has better walk, bike and transit access to downtown and CU destinations, while Folsom has closer access to the 29th Street Mall. Access to Folsom Stadium, Coors Event Center and the CU Student Recreation Center is similar between the two sites. More generally, Grandview has great transit access on Broadway while Folsom has good access to the Hop.*

Figure 3 – Travel Time to Major Boulder / CU Destinations

	Pearl Street Mall (14th & Pearl)		University Memorial Center		29th Street Mall (29th & Canyon)		CU Norlin Library (18th & Colorado)		Folsom Stadium (Colorado & Franklin)		Coors Events Center		CU Student Recreation Center	
	Grand view	Folsom	Grand view	Folsom	Grand view	Folsom	Grand view	Folsom	Grand view	Folsom	Grand view	Folsom	Grand view	Folsom
<b>Distance</b>	0.7 miles	1 mile	0.4 miles	1 mile	1.5 miles	0.5 miles	0.4 miles	0.7-0.9 miles	0.6 miles	0.6 miles	1.1 miles	0.8 miles	0.7 miles	0.5 miles
<b>Transit</b>	7 min	12 min	6 min	8 min	21 min	7 min	N/A	10 min	13 min	6 min	15 min	14 min	N/A	10 min
<b>Walk</b>	13 min	21 min	9 min	20 min	29 min	11 min	6 min	15 min	12 min	13 min	21 min	17 min	13 min	11 min
<b>Bike</b>	6 min	9 min	3 min	8 min	8 min	4 min	2 min	6 min	4 min	5 min	6 min	6 min	5 min	6 min
Departing at 4 p.m., weekday; Google Trip Planner														
<b>Transit:</b> Short (green): 0-10 min; Moderate (yellow): 11-20 min; Long (red): >20 min														
<b>Walk/Bike:</b> Short (green): 0-10 min; Moderate (yellow): 11-15 min; Long (red): >15 min														

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## PROXIMITY TO HOTELS W 100+ ROOMS

Using Google Trip Planner the distance and travel times between the proposed sites and nearby existing and approved hotels (100+ rooms) were mapped. Transit, walk and bike travel times illustrate the potential for conference participants to access the convention center by modes other than a vehicle.

*The Folsom site is accessible to more existing hotel rooms by transit, walking, and biking, as illustrated in Figure 4.*

Folsom is within a 20 minute transit ride of approximately 307 more hotel rooms, within a 15 minute walk of 65 more rooms, and within a 15 minute bike ride of 128 more rooms than the Grandview site. Additional hotels that are approved for construction but not yet built will greatly increase the number of hotels within walking distance of the Folsom site. Figure 5 and Figure 6 detail the transit, walk, and bike travel times from each hotel to the Grandview and Folsom sites, respectively.

Figure 4 – Hotel Access\*

	Existing Hotel Rooms		Existing + Approved Rooms	
	Grandview	Folsom	Grandview	Folsom
Transit	745	1,052	1,269	1,576
Walk	361	426	361	950
Bike	1,313	1,414	1,867	1,965

\* Within 20 Minute Transit and 15 minute walk/bike

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Figure 5 – Travel Time from Hotels to Grandview Site

Grandview: Travel Time to Hotels					
Hotel	Rooms	Distance	Transit	Walk	Bike
Millennium Harvest House	269	1.1 miles	22 minutes	21 minutes	5 minutes
St. Julien Hotel & Spa	201	0.9 miles	9 minutes	13 minutes	5 minutes
Hotel Boulderado	160	0.7 miles	7 minutes	14 minutes	7 minutes
Boulder Marriott	157	1.3 miles	16 minutes	25 minutes	7 minutes
Hyatt Place Boulder/Pearl Street	150	2.1 miles	24 minutes	40 minutes	12 minutes
Courtyard Marriott Boulder	149	2.7 miles	25 minutes	52 minutes	12 minutes
Residence Inn Boulder	128	2.9 miles	33 minutes	55 minutes	18 minutes
Rodeway Inn & Suites	115	1.7 miles	15 minutes	33 minutes	9 minutes
Homewood Suites	112	2.8 miles	20 minutes	54 minutes	14 minutes
Embassy Suites*	184	1.4 miles	20 minutes	27 minutes	10 minutes
Hilton Garden Inn*	177	1.4 miles	20 minutes	27 minutes	10 minutes
Residence Inn Boulder*	163	1.3 miles	18 minutes	25 minutes	7 minutes
Existing Rooms within 20 Minute Transit Trip			745	361	1,313
Existing and Approved Rooms within 20 Minute Transit Trip			1,269	361	1,867
Transit: Short (green): 0-10 minutes; Moderate (yellow): 11-20 minutes; Long (red): >20 minutes					
Walk / Bike: Short (green): 0-10 minutes; Moderate (yellow): 11-15 minutes; Long (red): >15 minutes					

Notes: \*Approved, but not yet built

Figure 6 – Travel Time from Hotels to Folsom Site

Folsom: Travel Time to Hotels					
Hotel	Rooms	Distance	Transit	Walk	Bike
Millennium Harvest House	269	0.3 miles	6 minutes	6 minutes	2 minutes
St. Julien Hotel & Spa	201	1.1 miles	19 minutes	24 minutes	9 minutes
Hotel Boulderado	160	1.1 miles	17 minutes	24 minutes	10 minutes
Boulder Marriott	157	0.4 miles	3 minutes	7 minutes	3 minutes
Hyatt Place Boulder/Pearl Street	150	1.1 miles	15 minutes	23 minutes	8 minutes
Courtyard Marriott Boulder	149	1.7 miles	24 minutes	36 minutes	10 minutes
Residence Inn Boulder	128	1.9 miles	26 minutes	38 minutes	14 minutes
Rodeway Inn & Suites	115	1.6 miles	20 minutes	33 minutes	11 minutes
Homewood Suites	112	2.6 miles	29 minutes	52 minutes	15 minutes
Embassy Suites*	184	0.5 miles	6 minutes	9 minutes	6 minutes
Hilton Garden Inn*	177	0.5 miles	6 minutes	9 minutes	6 minutes
Residence Inn Boulder*	163	0.3 miles	4 minutes	6 minutes	3 minutes
Existing Rooms within 20 Minute Transit Trip			1,052	426	1,441
Existing and Approved Rooms within 20 Minute Transit Trip			1,576	950	1,965
Transit: Short (green): 0-10 minutes; Moderate (yellow): 11-20 minutes; Long (red): >20 minutes					
Walk / Bike: Short (green): 0-10 minutes; Moderate (yellow): 11-15 minutes; Long (red): >15 minutes					

Notes: \*Approved, but not yet built

## LOCAL ACCESS

The City of Boulder utilized its Neighborhood Access Tool to provide a snapshot of walkability within the vicinity of each of the two proposed sites. This tool considers the number of attractors that can be reached within a 15 minute walk shed. A map of the neighborhood access score within a ½ mile buffer of each site is provided in Figure 8.

The Folsom site scores better overall in this walkability measure. Figure 7 identifies the percentage of the area within the ½ mile walk shed of each site that scores within each access score category in Figure 8. An average access score for the entire area is provided at the bottom of the figure. For the Folsom site, more than half of the area within a ½ mile buffer falls within the highest weighted access score category in the figures. The Grandview site also scores well, though more than half of its area falls within the second rather than the first highest category.

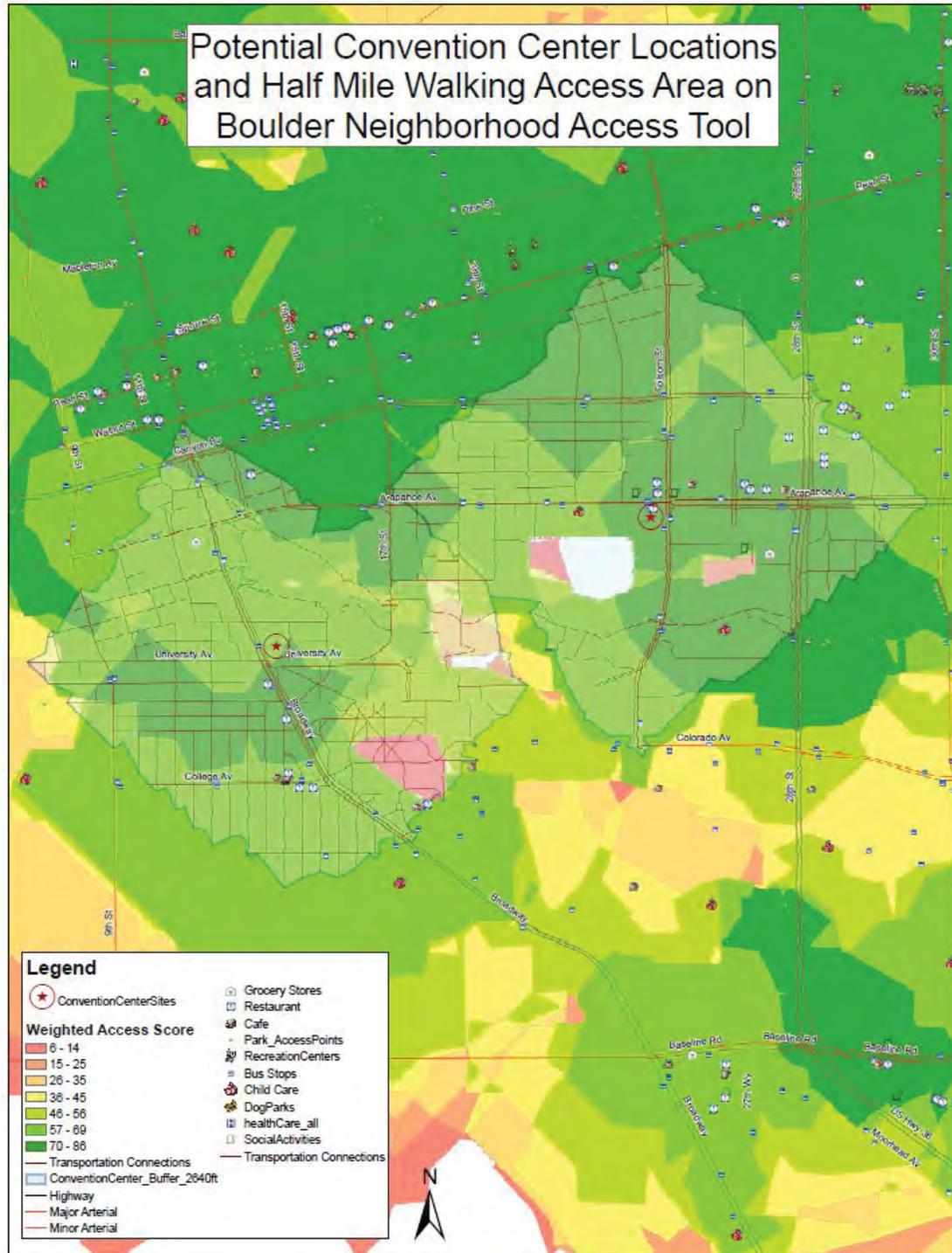
The Folsom site has a higher average area-wide neighborhood access score (69.2 for Folsom vs. 63.1 for Grandview).

**Figure 7 – Boulder Neighborhood Access Tool Scores**

Weighted Access Score	Percent of Area within each Access Score Range	
	Grandview	Folsom
6-14	3%	1%
15-25	0%	1%
26-35	2%	0%
36-45	1%	0%
46-56	14%	3%
57-69	54%	35%
70-86	26%	60%
<b>Average Access Score</b>	<b>63.1</b>	<b>69.2</b>

<sup>2</sup> The Neighborhood Access Tool characterizes people’s ability to walk to locations and businesses to meet daily needs. It illustrates aspects of the 15-minute neighborhood by displaying the area that can reach a given attractor in a 15-minute walk (walk shed). These walk sheds are aggregated to display the number of attractors available from a given location.

Figure 8 – Neighborhood Access Tool Results



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### REGIONAL TRANSIT ACCESS

This section identifies regional transit accessibility for each site, including access to Denver International Airport and Downtown Denver (via planned US 36 BRT) (Figure 9), Boulder Transit Center and Boulder Junction (Figure 10), as well as general transit access (Figure 11).

The Grandview site has direct access to Route AB to Denver International Airport via a stop at Broadway and University. The planned US-36 BRT service would provide the Grandview site with access to Downtown Denver. Final stop locations for US 36 BRT have not yet been finalized, but the City of Boulder has requested that RTD provide stops at University and Arapahoe/Canyon between Euclid and Boulder Transit Center. The University stop would provide direct access to US 36 BRT from the Grandview site. The nearest stop to the Route AB from the Folsom site is approximately 1.0 miles walk away, as described in Figure 9, and could also be accessed with a local transit trip. However, RTD has proposed to provide some Route AB trips along 28th, at the same stop that will be served by a branch of the planned US 36 BRT (28th and Arapahoe). If RTD implements this proposal in the future, it is possible that the AB bus could be within a 0.4 mile walk.

#### Future BRT

- Flatiron Flyer (US-36 BRT) service will begin in 2016, operating along US-36 between downtown Denver and Boulder. The 18-mile bus rapid-transit (BRT) line will provide service to Westminster, Broomfield, Superior and Louisville, and includes 4,200 station parking spaces. Service will operate every four to 15 minutes during the peak period, and at 15-minute intervals off-peak. From Table Mesa Park & Ride in Boulder, US 36 BRT will connect into Boulder along Broadway and 28th. As described above, final stop locations have not been determined, but the city of Boulder has requested two pairs of intermediate stations between Broadway & Euclid and Boulder TC, at Broadway & University and Broadway & Arapahoe/Canyon. The Folsom site will fall within a half-mile walk of the Arapahoe Avenue stations on 28th Street.

**Figure 9 - Transit Service to Downtown Denver/Denver International Airport (DIA)**

	Downtown Denver		Denver International Airport (DIA)	
	Grandview	Folsom	Grandview	Folsom
<b>Routes</b>	US-36 BRT	US-36 BRT	AB	AB <sup>[4]</sup>
<b>Nearest Stop</b>	Broadway and University <sup>[3]</sup>	28 <sup>th</sup> Street and Arapahoe	Broadway and University	Broadway and College <sup>[4]</sup>
<b>Walking Distance to Nearest Stop</b>	< 0.1 mile <sup>[3]</sup>	0.4 miles	< 0.1 mile	1.0 miles <sup>[4]</sup>
<b>Daily Weekday Trips</b>	201 <sup>[1]</sup>	56 <sup>[1]</sup>	21 <sup>[2]</sup>	21 <sup>[4]</sup>
<p>[1] Based on proposed future US-36 BRT service levels (as of January 2015)</p> <p>[2] Existing service levels</p> <p>[3] US 36 BRT stops along Broadway between Euclid and Boulder Transit Center have not been finalized</p> <p>[4] The US-36 BRT Draft Service Plan proposed that route AB serve the Boulder Transit Center and Boulder Junction on alternating trips, every half hour during peak periods. This could result in at least six daily round trips within 0.4 miles of the Folsom site, assuming six daily service hours and stops along 28<sup>th</sup> Street at Arapahoe. RTD does not have specific plans to implement this proposed service at this time, but may do so in the future.</p>				

### Access to Transit Centers

The Grandview site is an 11 minute walk or 6 minute transit ride to the Boulder Transit Center, as illustrated in Figure 10. The Folsom site is nearly twice as far from the Boulder Transit Center (slightly less than one-mile walk), though a relatively short transit trip from either Boulder Transit Center (11 minutes) or Boulder Junction (13 minutes).

**Figure 10 - Access to Transit Centers**

	Grandview		Folsom	
	Boulder Transit Center	Boulder Junction	Boulder Transit Center	Boulder Junction
<b>Distance</b>	<b>0.5 miles</b>	2.1 miles	<b>0.9 miles</b>	1.2 miles
<b>Walk</b>	<b>11 minutes</b>	42 minutes	<b>18 minutes</b>	25 minutes
<b>Transit</b>	<b>6 minutes</b>	28 minutes	<b>11 minutes</b>	<b>13 minutes</b>
<b>Routes</b>	225e, 204, SKIP, BMX	DASH-206, HOP	206F, HOP, JUMP	205, HOP, HX

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### General Transit Access

Grandview has access to four local or regional transit routes (in addition to US 36 BRT or Route AB) at a stop at Broadway & University. The Folsom site has access to five local or regional transit routes (in addition to US 36 BRT) at nearby transit stops.

**Figure 11 - Regional and Local Transit Access**

	Grandview	Folsom
<b>Routes</b>	225, 205, SKIP, DASH	HOP; JUMP; 205, 206, BOLT
<b>Nearest Stop(s)</b>	University and Broadway	Arapahoe and 23 <sup>rd</sup> Street; 28 <sup>th</sup> Street and Arapahoe; Canyon and Folsom
<b>Walking Distance to Nearest Stop(s)</b>	< 0.1 mile	< 0.1 mile; 0.4 miles; 0.2 miles
<b>Daily Weekday Trips</b>	152	233

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## Traffic Analysis

### Existing Conditions

Existing conditions were analyzed based on City of Boulder peak hour turning movement traffic counts at the intersections of (1) Folsom Street & Arapahoe Avenue, and (2) University Avenue and Broadway. Limited traffic count information was available. Existing traffic volumes at other study area intersections were estimated based on the volumes at the nearby intersections for which traffic count information was available. Weekday AM and PM peak hour conditions were evaluated along with evening event peak traffic, anticipated to occur in the 6:00-7:00 PM hour. Signal timing plans were furnished by City of Boulder Staff. Because no event peak hour turning movement counts are available, daily count data were used to factor the peak hour counts to reach evening event peak conditions.

Traffic operations within the study area were evaluated according to techniques documented in the Highway Capacity Manual (Transportation Research Board, 2010) using the existing traffic volumes, intersection geometry, and traffic control. Level of Service (LOS) is a qualitative measure of traffic operational conditions based on roadway capacity and vehicle delay. LOS is described by a letter designation ranging from A to F, with LOS A representing almost free-flow travel, while LOS F represents congested conditions. For signalized intersections, LOS is reported as an average for the entire intersection. For stop-sign controlled intersections, LOS is calculated for each movement that must yield the right-of-way. In urbanized areas, LOS D is typically considered to be acceptable for peak hour traffic operations.

### Folsom Site

Existing conditions were estimated for the Folsom site study area intersections using the peak hour turning movement counts provided by the City for the Folsom Street/Arapahoe Avenue intersection from August 23, 2011. A weekday daily count from March 4, 2013, along Arapahoe Avenue and west of 23rd, was also provided.

Figure 1 illustrates the existing traffic volumes within the proposed Folsom site study area. Figure 2 shows the existing traffic control, intersection geometry, and results of the LOS analyses.

***In general, intersection traffic operations within the Folsom study area are currently at LOS D or better, considered acceptable by the City of Boulder.***

- The signalized intersection of Folsom Street and Arapahoe Avenue currently operates at LOS C during the AM peak hour and LOS D during the PM and event peak hours.
- The unsignalized tee-intersection of Arapahoe Avenue and 21st Street has STOP control on the north leg and all movements currently operate with LOS C or better during the AM peak hour. During the PM and event peak hours, the north leg of the intersection operates at LOS E and the eastbound left turn off of Arapahoe operates at LOS B.
- Similarly, the unsignalized tee-intersection of Arapahoe Avenue and 22nd Street has STOP control on the north leg. All movements and the intersection of Arapahoe Avenue and 22nd Street currently operate with LOS C or better during the AM peak hour. During the PM and event peak hours, the north leg of the intersection operates at LOS E and the eastbound left turn from Arapahoe Avenue onto 22nd Street operates at LOS B.

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**Grandview Site**

Existing conditions were estimated for all study area intersections using the peak hour turning movement counts at the Broadway/University Avenue intersection recorded on October 17, 2012 and the daily count information available along Broadway, just north of the site from March 4, 2013. Figure 3 illustrates the existing traffic volumes within the proposed Grandview site study area. Figure 4 shows the existing traffic control, intersection geometry, and results of the LOS analysis.

**Traffic operations within the Grandview study area are generally acceptable.**

- The signalized intersection of Broadway and University Avenue currently operates at LOS B during the AM peak hour and LOS C during the PM and event peak hours.
- The unsignalized ¾-movement intersection of Broadway with Grandview Avenue has STOP control on the east and west legs. The STOP controlled legs of the Broadway and Grandview intersection operate at LOS B during the AM, PM and event peak hours. The southbound left turn currently operates at LOS A during the AM peak hour and LOS B during the PM and event peak hours.
- The unsignalized tee-intersection of University Avenue and 13th Street has STOP control on the north leg and all movements currently operate with LOS B or better during the AM, PM and event peak hours.
- Likewise, the unsignalized tee-intersection of University Avenue and 15th Street has STOP control on the north leg. All movements and the intersection of University Avenue and 15th Street currently operate at LOS B or better during the AM, PM and event peak hours.
- The unsignalized tee-intersection of Grandview Avenue and 13th Street has STOP control on the south leg. All movements through the intersection of Grandview Avenue and 13th Street currently operate at LOS A or better during the AM, PM and event peak hours.

**TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT**

Trip generation estimates associated with the proposed Hotel/Conference Center plan were calculated based on

information included in ITE Trip Generation Manual and information regarding the proposed facility programming.

Trip generation estimates for three design peak periods:

- AM Peak Hour (7:45-8:45am)
- PM Peak Hour (4:45-5:45pm)
- Event Peak Hour (Evening event arrival peak, 6:00-7:00pm)

Trip Generation Estimates have been made for the two sites with the following land use assumptions:

- 250 Room Hotel
- 20,000 square feet of ballroom space
- 8,000 square feet of meeting/breakout space
- Approximately 400 parking spots on-site
- 5,000 square feet retail (coffee shop/café)

Hotel visitors/guests would use the following travel mode options:

- personal/rental car
- taxi
- van/shuttle from other area hotels or the airport
- charter bus
- alternative modes such as bus, bike, walk, etc. (alternative mode split percentages have been applied based on the multi-modal analysis)

Total two-way vehicle-trip estimates are summarized below.

Site Trip Generation Estimates

Site:Estimated Inbound and Outbound Vehicle-trips (Vehicles Per Hour)

	AM Peak Hour	PM Peak Hour	Event Peak Hour
Folsom	180	345	1025
Grandvie	340	430	1200

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Of note, these estimates represent an approximate estimate of trip generation potential based on a series of preliminary assumptions about each site. Further definition would be provided at the time of formalized traffic impact evaluations.

As shown, the sites differ slightly in vehicle-trip generation potential because of differences in land use and differences in mode split due to proximity to bus stops, bike paths, other hotels, areas of interest, etc.

Directional distribution assumptions were made for each site based on existing travel patterns and surrounding land use. The site trip generation estimates were then assigned to the adjacent roadway network. *The distribution assumptions and resultant site generated traffic assignment is illustrated on Figure 5 for the Folsom site and Figure 6 for the Grandview site.*

#### TOTAL TRAFFIC CONDITIONS

Site generated traffic volumes were added to the corresponding existing traffic volumes for each site to produce total traffic volumes. Total peak hour volumes were used as the basis for intersection capacity analyses.

##### Folsom Site

Figure 7 illustrates the projected total traffic volumes within the proposed Folsom site study area. Figure 8 shows the total traffic control, intersection geometry, and results of the LOS analysis. In general, traffic operations within the Folsom study area would remain acceptable during the AM and PM peak hours. Anticipated conditions are summarized as follows by intersection/roadway:

- **Folsom Street/Arapahoe Avenue:** The signalized intersection of Folsom Street and Arapahoe Avenue is projected to operate at LOS C during the AM peak hour and LOS D during the PM peak hour.
- **Arapahoe Avenue/21st Street:** The unsignalized tee-intersection of Arapahoe Avenue and 21st Street has STOP control on the north leg and all movements are projected to operate with LOS C or better during the AM, PM and event peak hours.

- **Arapahoe Avenue/22nd Street:** A south leg will be added to the intersection of Arapahoe Avenue and 22nd Street. Movements at the intersection are projected to operate with LOS D or better during the AM peak hour. During the PM peak hour and event peak hour, the north and south legs of the intersection are projected to operate at LOS F. This is primarily due to the large through volumes on Arapahoe that provide limited gap opportunities for left-hand turns to enter the flow of traffic. The eastbound and westbound left turns are projected to operate at LOS B during the PM and event peak hours.
- **Arapahoe Avenue/Right-in/Right-out Access:** A new RIRO access along Arapahoe east of 22nd has been included to provide access to parking facilities. The right turn movement out of the parking facility onto Arapahoe is projected to operate at LOS C or better for all peak hours.
- **Marine Street:** Marine Street is expected to be extended east to connect with Folsom Street. A new tee-intersection will result at the intersection with 22nd Street extension with STOP control on the north leg. This intersection is projected to operate at a LOS D or better for the AM and PM peak hours. Between 22nd and Folsom, on Marine will be an additional tee-intersection that provides porte cochere and parking access. This intersection has been analyzed with STOP control on the access leg. All movements at this intersection are projected to operate at LOS B or better during the AM and PM peak hours. The event peak arrival hour is projected to more significantly increase traffic to the adjacent roadway network and operations are forecasted as over-capacity.
- **Folsom Street/Arapahoe Avenue:** The signalized intersection of Folsom Street and Arapahoe Avenue is projected to operate at LOS F during the event peak hour.
- **Hotel Porte Cochere:** During the event hour, operations at the porte cochere and parking access intersection are projected to experience higher volumes and delays. The southbound movement out of the porte cochere is projected to operate at LOS F during the event peak hour.
- **Folsom Street/Marine Street:** The eastbound left-turn movement at the new intersection of Folsom and Marine is projected to operate at LOS F during the event peak hour.

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### Grandview Site

Figure 9 illustrates the projected total traffic volumes within the proposed Grandview site study area. Figure 10 shows the total traffic control, intersection geometry, and results of the LOS analysis. In general, traffic operations within the Grandview study area would remain acceptable during the AM and PM peak hours. The event peak arrival hour is projected to more significantly increase traffic to the adjacent roadway network and operations are forecasted as over-capacity. Anticipated conditions are summarized as follows by intersection/roadway:

- **Broadway/University Avenue:** The signalized intersection of Broadway and University Avenue is projected to operate at LOS C during the AM peak hour and LOS C during the PM peak hour and LOS D during the projected event peak hour.
- **Broadway/Grandview Avenue:** Movements at the unsignalized ¾-movement intersection of Broadway and Grandview are projected to operate at LOS C or better during the AM, PM and event peak hours. The existing southbound left-turn storage of 75 feet is sufficient to handle the projected AM and PM peak hour queuing volumes at this intersection.
- **University Avenue/13th Street:** The unsignalized tee-intersection of University Avenue and 13th Street has STOP control on the north leg and all movements would operate with LOS C or better during the AM and PM peak hours.
- **University Avenue/15th Street:** All movements at the University Avenue/15th Street intersection are expected operate at LOS B or better during the AM, PM and event peak hours.
- **Grandview Avenue/13th Street:** All movements and the intersection of Grandview Avenue and 13th Street are projected to operate with LOS B or better during the AM, PM and event peak hours.
- **Grandview Avenue Tee-intersection:** A new tee-intersection will be added along Grandview Avenue between Broadway and 13th Street to provide access to the hotel/conference center parking facilities with STOP control on the parking access leg. All movements at the parking access intersection are projected to operate at LOS B or better for all design peak hours.

- **Hotel Porte Cochere:** A porte cochere provides pick-up/drop-off access to the hotel along 13th Street. All movements at the porte cochere access are projected to operate at LOS B or better for the AM and PM peak hours.

*The event peak arrival hour is projected to more significantly increase traffic to the adjacent roadway network and a few key operations are forecasted as over-capacity.*

- **Broadway/University Avenue:** The signalized intersection of Broadway and University Avenue is projected to operate at LOS D, an acceptable condition, during the event peak hour. However, the westbound queue lengths are anticipated to extend past the intersection of University and 13th Street. The resulting lane blocking is reflected in significant vehicle delay experienced at the intersection of University and 13th Street.
- **University Avenue/13th Street:** The southbound left at University and 13th Street would operate at LOS F during the event peak hour. The southbound queue length at University and 13th Street will negatively impact access to/from the porte cochere.
- **Hotel Porte Cochere:** The porte cochere access on 13th Street will experience delay and lane blocking from the southbound movement at University and 13th Street as reflected in the projected LOS F at the porte cochere eastbound movement onto 13th Street.

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### EVENT PARKING CONSIDERATIONS

As previously discussed, the influx of traffic associated with evening events at the hotel/conference center would significantly increase traffic flow along the adjacent roadway network and hotel accesses at both proposed sites. In addition to potential impact to traffic operations, preliminary parking analyses indicate that the proposed 400-space parking supply at ***each site would not provide sufficient parking space to accommodate the peak event demand.***

***A preliminary review of available surface parking in the area indicates that the Folsom site may be situated in a location where event attendees can find other available parking options, while options appear to be more limited in the vicinity of the Grandview site.***

Development of special event-specific parking and/or circulation plan may help mitigate the projected capacity related problems. Analyses of additional options have not been conducted at this time.

### RECOMMENDED IMPROVEMENTS

Preliminary analyses show that the recommended improvements summarized as follows by site would accommodate anticipated AM and PM peak hour conditions:

#### Folsom Site

##### ***Intersection Improvements/Additions:***

- Add a full movement south approach to the Arapahoe/22nd Street intersection with STOP control on 22nd Street; include a NBLT and WBLT lanes with 50 feet of storage each.
- Add a right-in/right-out (RIRO) intersection to the north parking structure on Arapahoe with STOP control on the access approach.
- Add a full movement intersection at Marine and Folsom with STOP control on the EB approach; include an auxiliary NBLT lane with approximately 75 feet of storage and an EBLT lane with approximately 100 feet of storage
- Add a full movement intersection at Marine and 22nd Street with STOP control on the SB approach.

- Increase the storage length of the northbound left turn lane at the intersection of Arapahoe and Folsom to 150 feet and add a southbound right-turn auxiliary lane with approximately 50 feet of storage.

##### **Roadway Improvements/Additions:**

- Marine Street extension between Grandview and Folsom should have one lane in each direction
- Extend 22nd Street south to connect with the new Marine Street extension; 22nd should have one-through lane in each direction
- The intersections of Marine with 22nd Street and Hotel access would be full movement with STOP control
- Re-stripe Arapahoe between 22nd Street and 23rd Street to include a WBLT lane with 100 feet of storage

#### Grandview Site

##### ***Intersection Improvements/Additions:***

- The intersection of 13th and University is projected to experience occasional queuing and blocking issues related to the close proximity of the intersection to the intersection of Broadway and University. Consideration has been given to the addition of an auxiliary lane on University Avenue, between 13th Street and Broadway, that would add a lane to the westbound approach at the intersection of University and Broadway. Cost estimates for this option have been included below. Another potential improvement would be to make this intersection a RIRO. However, a RIRO intersection would result in more complicated circulation patterns on the site.
- Restripe Broadway north of Grandview to provide additional vehicular storage length for southbound left turns.

##### **Roadway Improvements/Additions:**

- Remove on-street parking from Grandview Avenue and restripe with one through-lane in each direction
- Remove on-street parking from 13th Street and restripe with one through-lane in each direction as a part of reconstruction effort
- Reconstruct Grandview between Broadway and 13th Street following the installation of utilities

### COST ESTIMATES ARE DETAILED IN SECTION VII

III. Preliminary Off-Site Impact Analysis

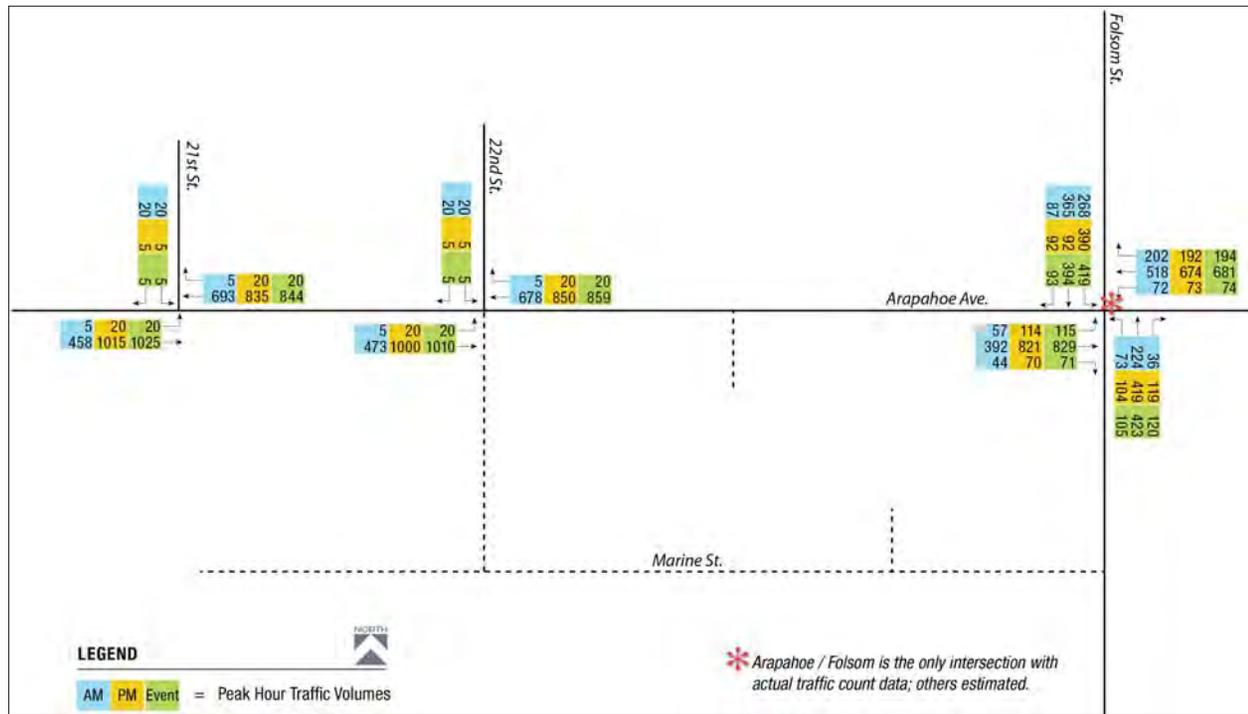


Figure 1 - Existing Volume @ Folsom Site

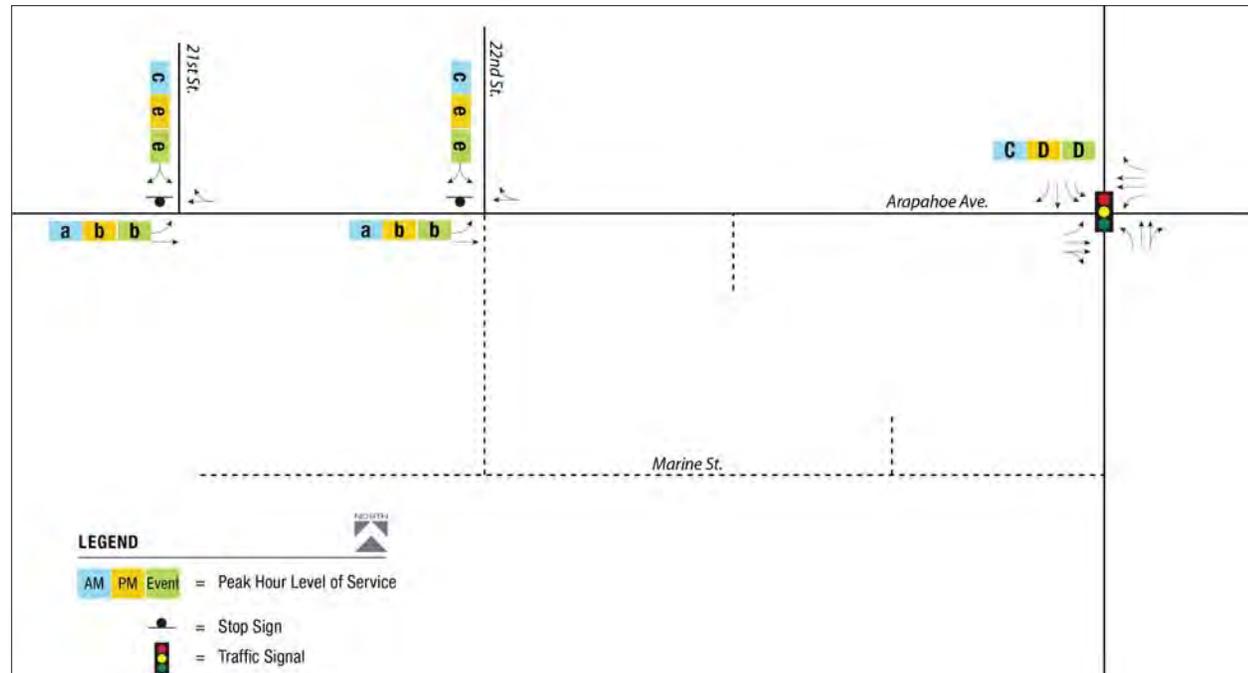


Figure 2 - Existing LOS @ Folsom Site

III. Preliminary Off-Site Impact Analysis



Figure 3 - Existing Volume @ Grandview Site

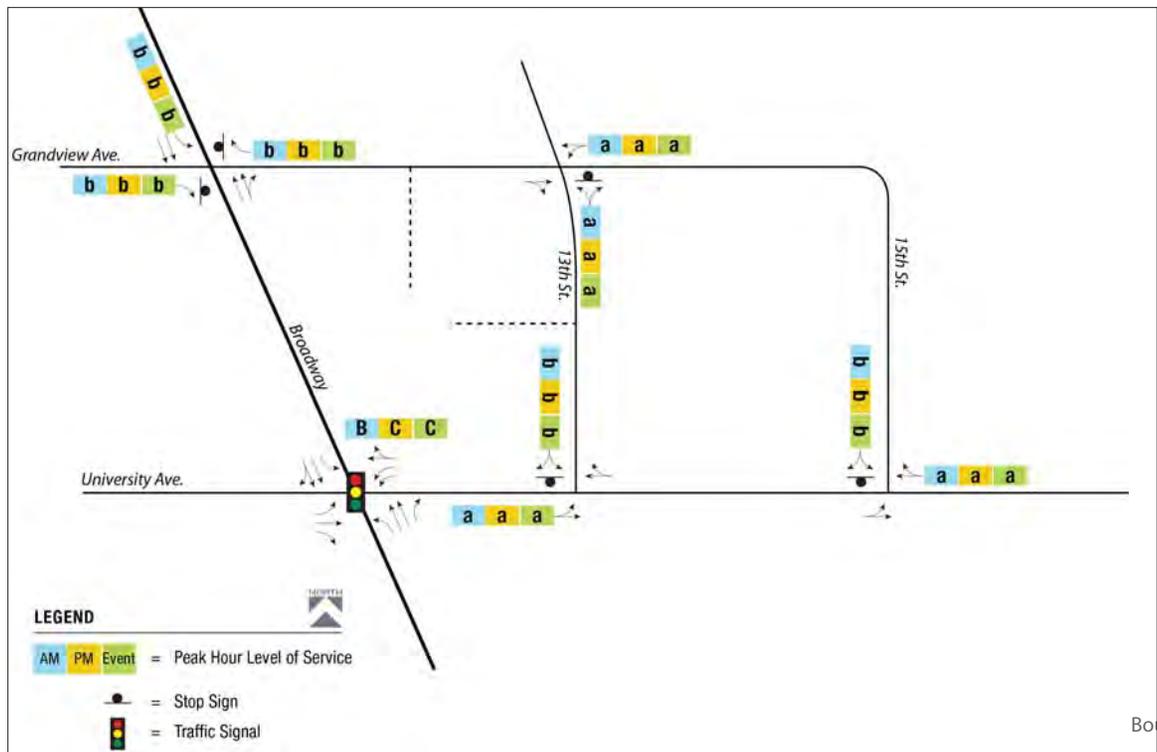


Figure 4 - Existing LOS @ Grandview Site

III. Preliminary Off-Site Impact Analysis



Figure 5 - Site Volume @ Folsom Site

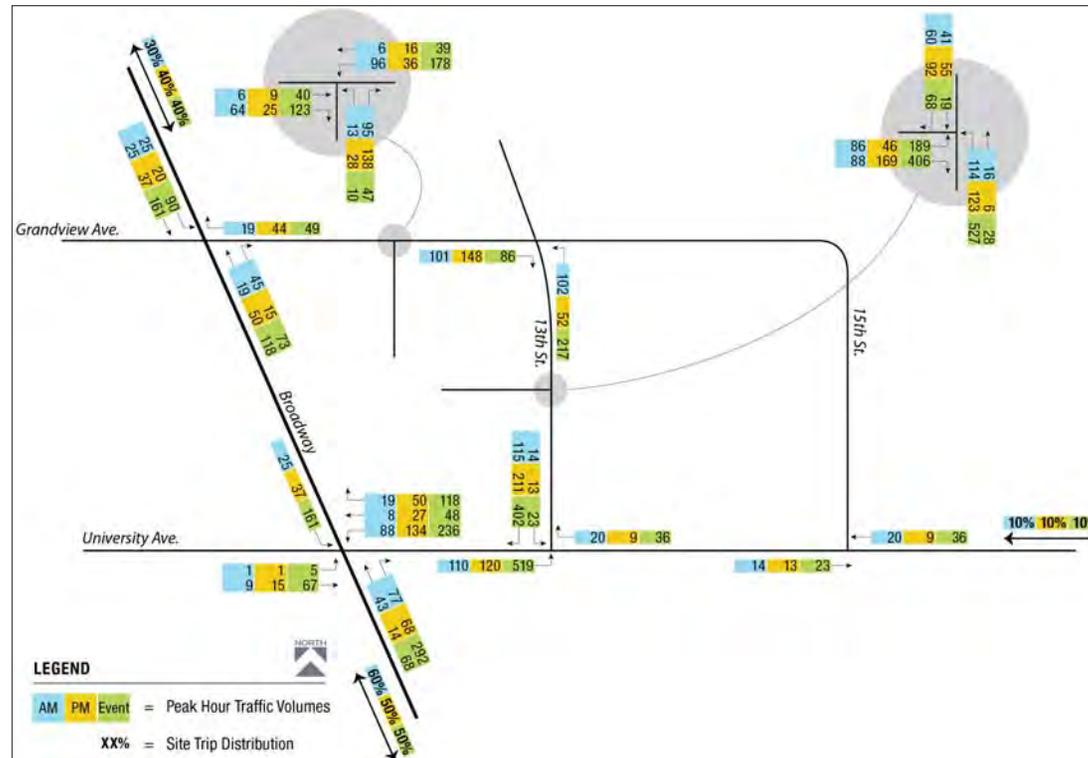


Figure 6 - Site Volume @ Grandview Site

III. Preliminary Off-Site Impact Analysis

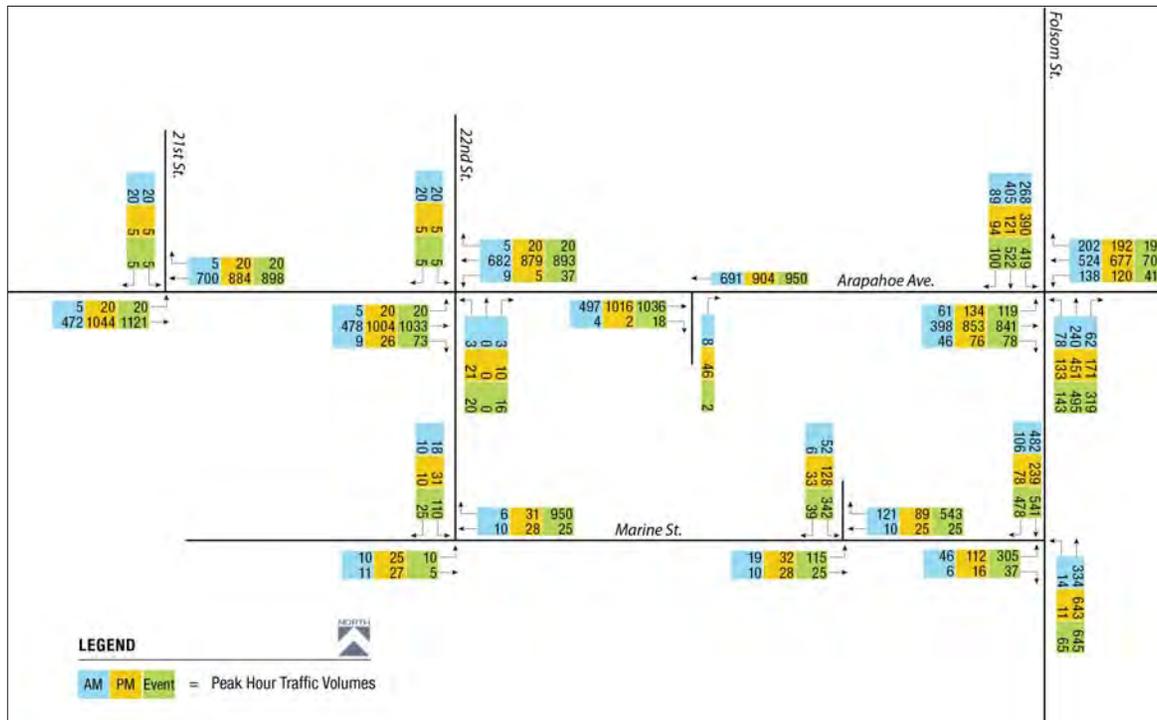


Figure 7 - Total Volumes @ Folsom Site

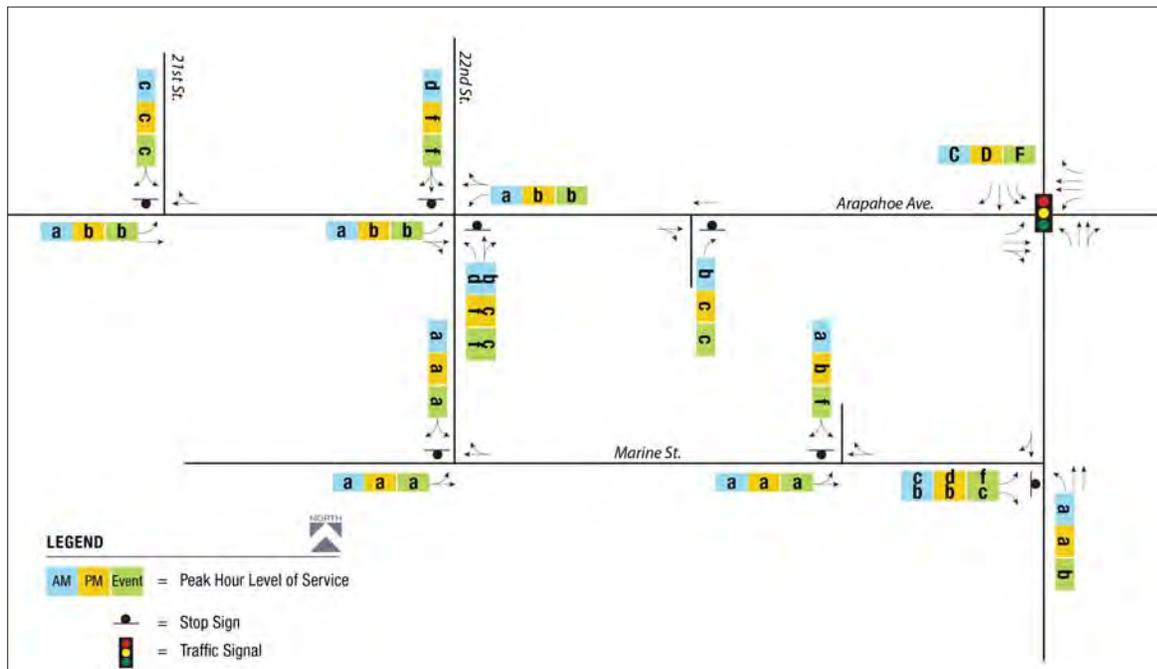


Figure 8 - Total LOS @ Folsom Site

III. Preliminary Off-Site Impact Analysis

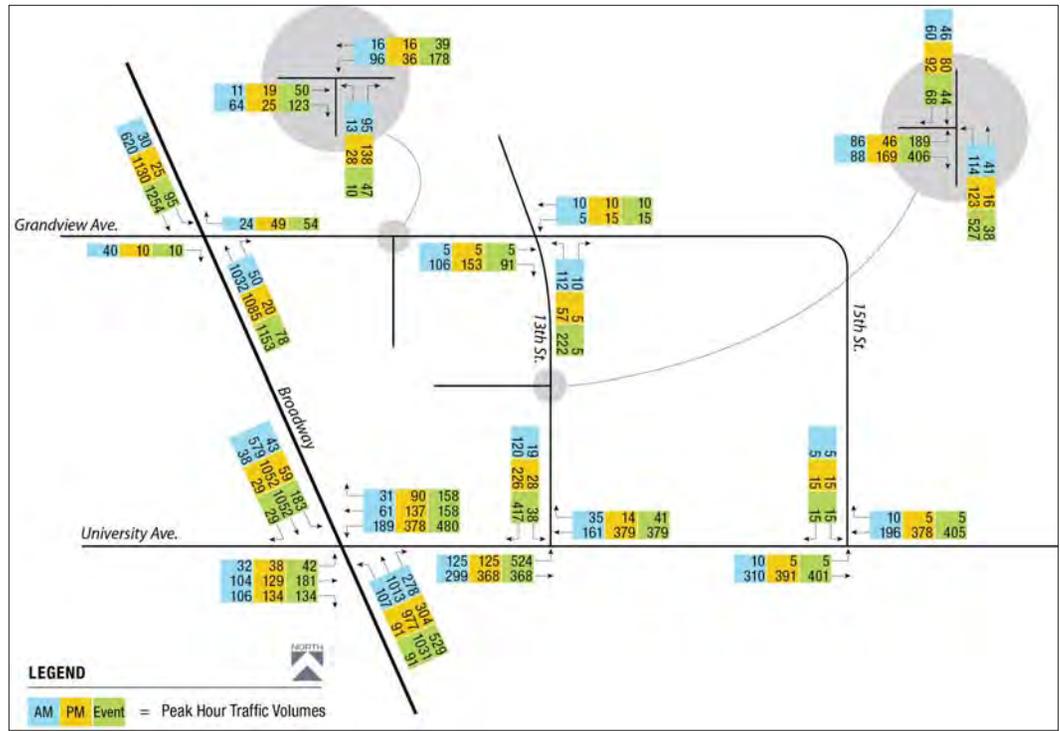


Figure 9 - Total Volumes @ Grandview Site

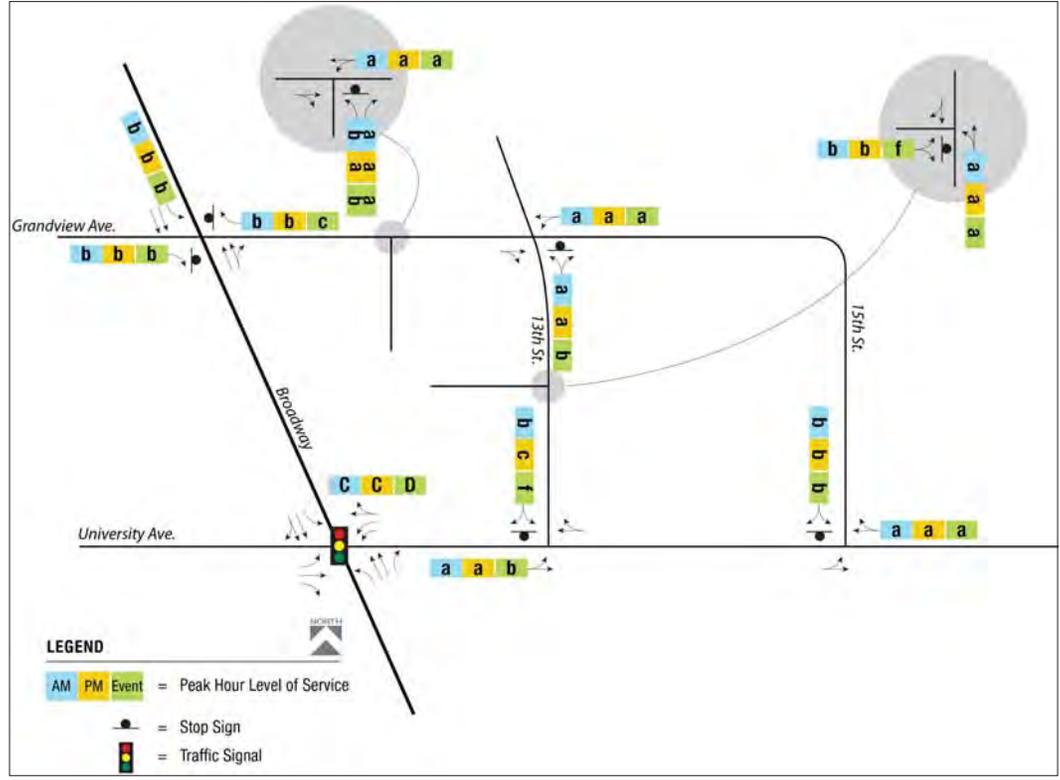
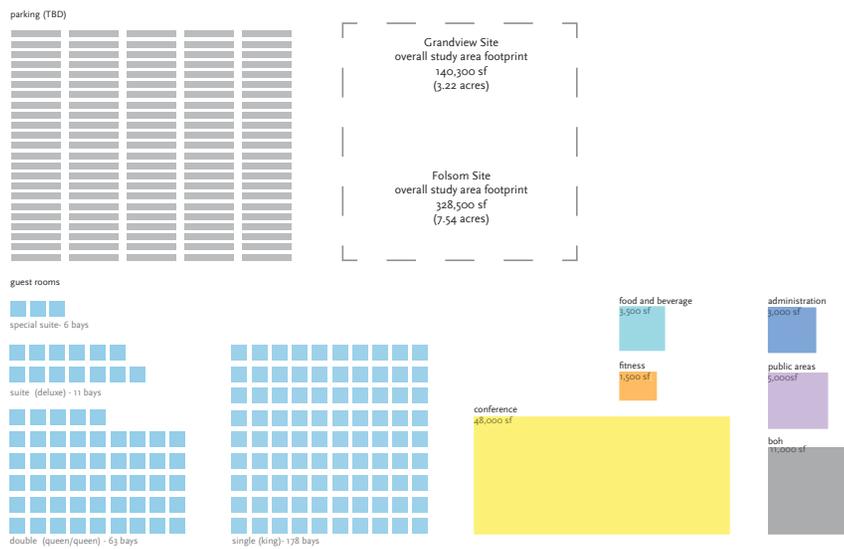


Figure 10 - Total LOS @ Grandview Site

# IV. Preliminary Architectural Program Assessment



## 4240 HOSPITALITY PROGRAMMING WORKSHEET (Current Trend Urban Hotel)

University of Colorado Hotel Program						
GUEST ROOMS	Units	Unit Area (Low)	Unit Area (High)	Total Net Low (SF)	Total Net High (SF)	Comments
Standard King Room	50%	125	310	350	38,750	43,750
King Alternate	15%	38	290	330	10,875	12,375
Double/Double Room	25%	63	310	350	19,375	21,875
Accessible King Room	4%	10	370	420	3,700	4,200
Accessible Double/Double Room	2%	5	370	420	1,850	2,100
1 1/2 Bay Suite	3%	7	470	520	3,055	3,380 7 keys
3 Bay Suite	1%	2	920	970	1,610	1,698 2 keys includes 1 Double/Double Room Connector
<b>Total Units</b>	100%	250				250 keys total
<b>Total Guest Room Area</b>				<b>79,215</b>	<b>89,378</b>	
Number of Guest Room Floors		3				
Number of Guest Room per Floor		83				

GUEST ROOMS FLOOR SUPPORT/CIRCULATION	Units	Unit Area	Total Net (SF)	Comments
Corridors/Elevator Lobby	1	3,433	10,298	13% of guestroom sf
Stairs	2	180	1,080	actual
Elevators	2	65	390	actual
Linen Storage/Chute	1	1667	5,000	20sf/room
Hydration Station	1	20	60	1/floor
<b>Total Guest Room Support/Circulation</b>			<b>16,828</b>	

FRONT OF HOUSE	Total Net (SF)	Comments
Food & Beverage		
Breakfast	0	6.9sf/key (use restaurant)
Lounge	3,550	14.2sf/key
Market	238	.95sf/key
Three-Meal Restaurant	3,600	160 seats +/-
Public Space		
Lobby	1,600	6.4sf/key
Front Desk	463	1.85sf/key
Library	650	2.6sf/key
Function		
Media Salon (2)	600	actual
Meeting Room	1,000	
Meeting Room Closet	100	
Recreation		
Fitness Room	1,500	
Pool - Optional		

### IV. Preliminary Architectural Program Assessment

Public Circulation and Guest Amenities		
Elevators	210	actual
Public Toilets	600	
Guest Laundry	160	.64sf/key
Circulation	2,487	17% of public space
Stairs	360	actual
<b>Total Front of House</b>	<b>17,117</b>	
	<b>14,630</b>	

Back of House	Total Net (SF)	Comments
Administration		
Work Area	230	actual
General Manager Office	155	actual
Sales Manager Office	290	actual
Luggage Storage Room	85	.34sf/key
Conference Facility Offices & Support	2,500	actual
	( 113,920 )	
Employee		
Employee Break Room	570	.005sf/cummulative program sf
Employee Restroom	228	.002sf/ cummulative program sf
Housekeeping		
Main Laundry	684	.006sf/ cummulative program sf
Linen Room	80	.0007sf/cummulative program sf
Laundry Chute	68	.0006sf/ cummulative program sf
Kitchen		
Food Preparation		7.42sf/ key
Restaurant Kitchen	3,600	
	( 119,149 )	
Engineering		
Engineering Office/Storage	238	.002sf/cummulative program sf
Miscellaneous Service		
Mechanical/Electrical	1,787	.015sf/cummulative program sf
Janitor's Closet	83	.0007sf/cummulative program sf
Video/Telephone Equipment Room	572	.0048sf/ cummulative program sf
Storage	453	.0038sf/cummulative program sf
The Market Storage	185	78% of The Market sf
Miscellaneous	381	.0032sf/cummulative program sf
<b>Total Back of House</b>	<b>12,189</b>	

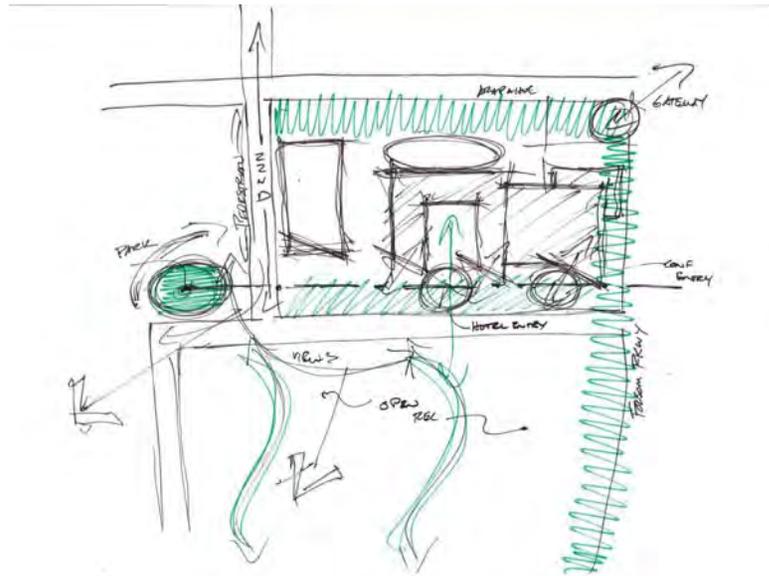
IV. Preliminary Architectural Program Assessment

IV. Preliminary  
Architectural Program  
Assessment

SUMMARY	Units	Total (SF)	Comments
Total Number of Guest Room Floors	3		
Total Number of Floors	4		
Total Number of Rooms	250		
Total Guest Rooms		79,215	89,378
Total Guest Room Support/Circulation		16,828	16,828
Total Front of House		17,117	17,117
Total Back of House		12,189	12,189
Total Net Building Area		125,349	135,512
Walls and Shafts Area (Estimated)		12,535	13,551 10% of net sf
<b>Total Gross Building Area</b>		<b>137,884</b>	<b>149,063</b>
Total Square Feet per Room		552	596
		<b>Low</b>	<b>High</b>

CONFERENCE FACILITY	Total Net (SF)	Comments
<b>Ballroom</b>	<b>20,000</b>	
Accommodates:		
Max requested CU theatre seating of 1200 x 10sf = 12,000sf		
Max requested CU banquet seating of 1200 x 15sf = 18,000sf		
Likely conference scenario of opening session & keynote lectures, combined w/poster session occurring in separate rms:		
½ ballroom (10,000sf/10sf theatre seating = 1000 attendees; or		
½ ballroom (10,000sf/15sf banquet seating = 666 attendees; and		
½ ballroom (10,000sf/10sf poster session = 1000 attendees		
<b>Meeting/Breakout</b>	<b>8,000</b>	
2 – 4,000sf rooms dividable into 8 – 1000sf rooms		
<b>Pre-function, back of house, kitchen, storage, etc (70% of meeting sf)</b>	<b>20,000</b>	
Conference admin and support in hotel (catering, sales, etc..@ 2500sf		
<b>Total Conference Facility</b>	<b>48,000</b>	
<b>Note – recommended city conference center would be 30,000sf ballroom + 15,0000 mtg/breakout + 80% of mtg space for BOH, pre-function, office, storage, etc = 80,000sf +/-</b>		

V. Architectural Site Analysis



## V. Architectural Site Analysis

### Existing Site Conditions

As previously mentioned, the sites under consideration are fully owned and controlled by the University.

**Grandview** - Located at the northeast corner of Broadway and University Avenue, *the entire development footprint under consideration is 3.22 acres (or about 140,000sf), including 13th street which has been vacated by the City.* Grandview

Avenue bisects the development footprint, so for the purposes of this document, the area to the south of Grandview Avenue will be referred to as "1A" and the area north will be "1B" (Reference page 80 for a diagram of the development footprint).

Site 1A, about 98,000sf, is relatively open with a large square footage currently dedicated to surface parking. On street parking also exists on 13th and Grandview Avenue. Reference the Parking and Biking section on pg. 72 for further discussion on parking. Six structures currently exist on site including a retail building, Starbucks, at the corner of Broadway and University. Currently, the University does not have any plans for keeping any of these structures. However, further analysis of the historic significance of these structures may be considered (reference section III). The site slopes from south to north and has an elevation change of approximately 10' between University and Grandview.

Access to the site will be predominately from Broadway and University. A left turn lane on Broadway (heading South) currently exists allowing for additional access to Grandview Avenue. To note, any future development should take under consideration the high volume and rate of speed of the bike traffic along Broadway. A multi-mode sidewalk connects the Hill, the University and Downtown Boulder along the east side of Broadway (adjacent to the site) and, therefore, will have significant influence on any traffic turning from Broadway onto Grandview. Along the south side of the site, University Avenue is four lanes wide with bike lanes either side. Consideration of traffic impacts should be made if trying to access the site

from the University. Reference section III.

Site 1B, about 42,000sf, sits to the north of Grandview Avenue and is bound by existing buildings to remain on the west and east. As of the time of this report, 1 structure remains on this site.

More mature vegetation exists on the north portion of the site which is part of the heavy foliage surrounding an existing pedestrian path to remain. Significant grade change of about 20' occurs in the northeast corner of this parcel and will need to be addressed in any future development.

**Folsom** - Located near the southwest corner of Folsom Street and Arapahoe Avenue, the development footprint under consideration is part of the North of Boulder Creek masterplan study recently conducted by the University. (Reference page 112 for a diagram of the development footprint). Allowing for maximum future development outside of this project, *the site under consideration for this report is approximately 4.3acres (or 190,000sf).*

The existing site is currently occupied by the University student housing buildings of Newton Court, which are over 40 years old and will require significant abatement. Within the site development boundaries, there are two surface parking lots adjacent to Arapahoe and Folsom with footpaths and landscaping occupying the rest of the open space. A few large, mature trees exist within the site. To the south are the CU recreation fields and the Boulder Creek Greenway. To the west is additional student housing which is also intended to be relocated per the masterplan. To the northeast of the site, remain the Conoco Gas Station and the Del Sol Mexican Restaurant parcels. These parcels are not University owned or controlled and, for this study, are anticipated to remain. This area is currently accessed from both Arapahoe Avenue and Folsom Street.



## V. Architectural Site Analysis



### Relation to Other Programs / Adjacencies

With the Center anticipated to be a limited service “boutique” hotel, leveraging the existing city and campus resources will be a desirable amenity (and potentially a necessity) for the project.

**Grandview** - The Grandview site is ideally located next to the main campus with close, walking proximity to the Koenig Alumni Center, Varsity Pond, Macky Auditorium, Norlin Quad and the campus recreation center. University based events will be able to leverage all of these elements for supplemental space planning needs. Further, the core of the University Hill Commercial District lies to the southwest of the intersection of Broadway and University Avenue and could be a highly utilized asset for hotel and conference guests.

*An upscale hotel restaurant could also serve as an amenity for the city, providing a restaurant type the “Hill” currently does not offer.*

Grandview is also in a transit rich area and will be able to take advantage of existing and future multi-mode transit opportunities, such as the enhancement of the 13th street pedestrian/bike path.

**One potential complication of the Grandview site is the competing demands with the expansion opportunities of the academic campus.** Currently, the main University academic campus is “land locked” and restricted in area to grow and the University has expressed a desire for the Grandview district to be a significant part of future academic campus expansion. Any future development in this area should be balanced with the University’s master plan.

Further, to help serve conference needs, having additional hotels within walking distance is desirable. Currently, only 2 hotels are within 1/2 mile, the Boulder University Inn along Broadway and the St. Julien at the corner of Canyon Boulevard and 9th

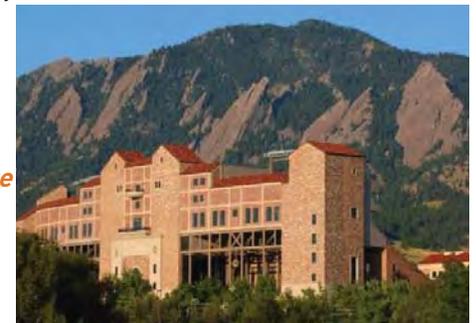
Street. A shuttle service would need to be considered for this site to ensure attendees of large conferences have access to the City’s other hotels. Parcels within the University Hill commercial district and civic area could potentially be redeveloped into hotels to take advantage of the conference center but were not considered for this analysis.

**Folsom** - The Folsom site is positively situated for conferences to take advantage of surrounding hotels being able to serve the needs of the attendees. The Boulder Marriott, Quality Inn and Suites and the Millennium Hotel are all within a 1/4 mile of the proposed site, with multiple future hotels currently already under development review. Further, a variety of retail exists within walking distance, including quick serve restaurants, on the northeast corner of Arapahoe Avenue and Folsom Street within the Village Shopping Center.

The 29th street mall and Pearl Street are located on the outer limits of the 1/2 mile walking radius, however, with the busy conditions of 28th street and a circuitous path to Pearl Street, a shuttle service should be considered to provide access to these key city amenities.

Further, due to the detached nature of this location from the main retail edges, the hotel restaurant, if not prominently located at the corner of Folsom and Arapahoe, would most likely not receive a sufficient draw from the surrounding community and would need to be self-sufficient.

Additionally, access to campus would be available along Folsom or via footpaths at several locations across Boulder Creek. *However, the distance and elevation gain would make any direct relationships difficult to facilitate.*



## V. Architectural Site Analysis

### Parking and Biking

For the purposes of this study, the costs and development footprint of a garage with a 400 vehicle space capacity was fully considered in program test fit and cost analysis in the event the project would need to bear the full cost of parking the needs of the Center.

This studied worked under the development assumption of a parking demand analysis based on the working program (250 keys + 28,000sf of conf. space). See preliminary program in section IV.

As per City of Boulder Code for vehicular parking:

Guestrooms: 1 stall per key = 250 stalls  
Restaurant: 1 stall per 3 seats (restaurant) @ 160 total seats = 53 stalls  
Conference: 1 stall per 300sf. Total demand 94 stalls.  
Other Uses: (Admin.) 1 stall per 300sf x 3,000sf = 10 stalls

***The projected total project parking demand is 400-410 stalls.*** This does not factor in any TOD overlays and/or shared mixed use building reductions, which could reduce the overall parking demand by 20%-30%. Further, this amount is strictly a planning effort to determine potential need and capacity for financing from a third party developer. Since this is a University development project, City parking requirements would not be mandated on either site.

Under the City of Boulder's "P" zoning district, at least 3 bicycle parking spaces or 10 percent of the required off-street parking spaces, whichever is greater, are required. After the first 50 bicycle parking spaces are provided, the required number of additional bicycle parking spaces is 5 percent of the required off-street parking spaces. Using the off-street parking range of 400-410, 40-41 bicycle parking spaces shall be provided following local

zoning. Bicycle racks / storage shall be located in convenient, highly visible, active, well-lighted areas but should not interfere with pedestrian movements

**Grandview** - Due to the limited site footprint and in an effort to minimize building height and mass, below grade parking was considered as part of this test-fit study. Parking about 400 cars below grade could lead to significant excavation and de-watering costs (Reference Cost Drivers Section VII). Parking reductions supported by a parking study should be considered due to the added potential cost of parking below grade as well as the transit rich nature of the Broadway corridor.

***The existing surface lot (approx. 120 spaces) and affected on-street parking areas (approx. 18 spaces) accommodating faculty and students will need to be replaced and should be considered for replacement. Reference Section VII for replacement ROM cost range.***

**Folsom** - The North of Boulder Creek (NBC) site is anticipated to have some shared parking with adjacency to future residential development and other uses. As part of the NBC, a shared parking garage could be considered. Any garage at the Folsom site will need to be constructed above grade due to the site being located within the 100 year floodplain of Boulder Creek. To park the anticipated 400 cars, a minimum of 3 levels of parking deck were included in the program test-fit / cost analysis. Consideration will need to be made, in terms of potential cost and program scope, to screen the public faces of the garage to help integrate the mass into the surrounding context.



## V. Architectural Site Analysis

### Flood Mitigation Analysis

**Grandview** - There is no concern for flooding at the Grandview site because it is outside the 500 year and high hazard floodplains.

**Folsom** - The City of Boulder is in the final approval stages of an extensive Boulder Creek floodplain modeling and remapping process. *The revised floodplain maps have been accepted by FEMA, but do not likely become the effective regulatory maps within the City until 2016 at the earliest according to City staff.* The included Arapahoe/Folsom Floodplain Exhibit (pg.119)- Comparison of Existing Boulder Creek vs. Revised Boulder Creek shows the current effective Boulder Creek floodplain map and the revised Boulder Creek floodplain map that will go into effect in 2016. It should be noted that the City of Boulder will review Floodplain Development Permit applications based on the current effective mapping; however, the City advises coordination with the forthcoming 2016 effective floodplain mapping floodplain extents and water surface elevations. The current effective floodplain map shows that the perimeter of the proposed site is in the 100-year floodplain and the majority of the residential apartment buildings (with the exception of the two westernmost buildings) are not within the 100-year floodplain. The conveyance zone breaches the proposed site in the southeasterly corner, and both the conveyance and high hazard zones breach along the easterly border. The future revised Boulder Creek floodplain maps show the expanded floodplain limits. These forthcoming regulatory maps show that the entire site will be in 500-year and 100-year floodplain. The revised floodplain map includes the conveyance zone perimeter of the site, and the high hazard zone along the easterly and southerly perimeter. *Floodplain modeling, building floodproofing, and a floodplain development permit, along with adherence to the City of Boulder's "critical facilities ordinance" (which governs residential and mobile population facilities within the floodplain), will be considered for the development of the project.*

Due to the nature of being in the 100/500 year floodplain, underground occupied space has not been considered for this study. Flood mitigation development costs have also been considered and are highlighted in the cost driver analysis section VII.

### Groundwater

Per City of Boulder development standards, if groundwater is encountered it will need to be treated before leaving the site. Groundwater test bores have not been conducted as part of this study. This could incur additional cost at Grandview which would require more below grade work to accommodate potential parking needs.

### Grading & Drainage

**Grandview** - The proposed site is currently developed and used for commercial/office and parking purposes. There is ongoing construction staging activity on the site. *The site slopes mostly from south to north at an average approximate 6.5% slope,* draining towards the Boulder High School and ultimately to Boulder Creek. A portion of the site drains towards Broadway which is a tributary to Boulder Creek. Based on site observations, there does not appear to be stormwater utility infrastructure throughout proposed site. Offsite to the west there are two inlets at the curbs on Broadway and Grandview Ave that capture stormwater. The north tract (Site 1A) is predominantly impervious containing buildings and parking lots with a few small strips of landscaping along University Avenue and Broadway. The north tract (Site 1B) contains two buildings and a large lawn and wooded area. The majority of stormwater runoff is collected and conveyed through concrete pans, and curb & gutters that ultimately flow to the northerly dead-end of 13th Street. Here the stormwater reaches vegetation for some infiltration, but is assumed to mostly flow to the southerly end of the Boulder High School athletic field complex.

## V. Architectural Site Analysis

**Based on initial building test fit studies, the proposed conference center will be required to provide below grade parking.** Future geotechnical investigations will need to provide structural engineering design parameters to address the hillside and slope of site. Groundwater depths and discharge issues will need to be addressed depending on the required below grade depth of the structure.

**The proposed conference center will likely be required to provide onsite detention and stormwater quality enhancement features per state and local stormwater management standards. Upgrades to the offsite drainage area near the Boulder High School athletic field complex will likely be required.**

**Folsom** - The site is currently developed with residential apartment buildings, a children's day-care facility, parking lots, sidewalks, and landscaped open space. The site generally slopes west to the east at an approximate 1.2% slope draining towards existing stormwater utility infrastructure as shown on the included Arapahoe/Folsom Utility Locations Exhibit (pgs 117-118). The existing stormwater infrastructure is generally located in parking lots and landscaped areas. The residential apartments appear to be elevated on fill, and roof drain downspouts release at the buildings' footprint perimeter flowing downhill and away from the foundations. The size, slopes, and available capacity are currently unknown at this time, and additional coordination and testing would be required with the City to determine the size, slopes, and available capacity.

Given the floodplain extents as previously described, below grade structures will require special design features to protect the facility from flooding and uplift forces.

According to GIS mapping, the "Smith & Goss Ditch Company" irrigation ditch crosses the northerly portion of the site from west to east. The ditch may need to be realigned depending on ditch status, needs, and the conference center footprint.

The proposed conference center will likely be required to provide onsite stormwater quality enhancement features per state and local stormwater

management standards. Per City standards, onsite detention may be waived if site stormwater runoff can be directly conveyed to Boulder Creek. Additional onsite storm infrastructure will be needed to accommodate runoff from the proposed site improvements and surrounding access drives/roads. Upgrades to the offsite public drainage system east of the site are not anticipated.

## Water

**Grandview** - There is an existing public water main system that is located within Broadway, University Avenue, Grandview Avenue, and 15th Street. There is no water main within 13th Street as shown in the attached Grandview Terrace Utility Locations Exhibit (pgs 85-86). **The water main sizes, available flows, and static pressures are typically adequate for new developments in this area.** After the initial conference center programming is complete, additional coordination, pressure testing, and modeling will be required by the City to determine the available flows and working pressures. It is assumed that the conference center will be served by a large domestic, fire and irrigation tap/metering system. The building systems will be connected to the city water mains and/or the University's master meter water system. For City connections, water tap fees will most likely be required, and multiple buildings will be required to incur the cost of separate domestic and fire service taps. The service sizes and tap fees will be determined during the initial design phases. Tap fee credits are typically provided by the city to reduce tap fees for new services where existing services are removed. The credit amount will be based on the removal of the numerous existing smaller diameter domestic water taps and meters that serve existing structures that will be demolished. Per discussions with University staff, the University Housing+Dining Services will maintain all existing fee credits for future development use.



## V. Architectural Site Analysis

### Water Cont.

**Folsom** - An existing water main loops through the existing site, and is as shown in the attached Arapahoe / Folsom Utility Locations Exhibit (pgs 117-118). *The water main sizes, available flows, and static pressures are typically adequate for new developments in this area.* After the initial conference center programming is complete, coordination, pressure testing, and modeling will be required by the City to determine the available flows and working pressures. It is anticipated that the looping water main will be realigned to accommodate the conference center footprint. It is assumed that the conference center will be served by a large domestic, fire and irrigation tap/metering system. The building systems will be connected to the City water mains and/or the University's master meter water system. For City connections, water tap fees will most likely be required, and multiple buildings will be required to incur the cost of separate domestic and fire service taps. The service sizes and tap fees will be determined during the initial design phases. Similar to the Grandview Terrace, tap fee credits will be provided for removal of the numerous existing smaller diameter domestic water taps and meters that serve existing structures that will be demolished. Per discussions with University staff, the University Housing + Dining Services will maintain all existing fee credits for future development use.

### Sanitary Sewer

**Grandview** - There are existing public sanitary sewer mains located along Broadway, University Avenue, Grandview Avenue, and northerly portion of 13th Street as shown in the attached Grandview Terrace Utility Locations Exhibit (pgs 85-86). Currently the sanitary sewer along University Avenue flows east, and the remainder of the sewer mains collect flow to Grandview Ave and then north of Broadway. *The sewer main sizes and available flow capacities are typically adequate for new developments in this area.* After the initial conference center programming is complete, additional coordination and modeling will be required by the City to verify the sewer main capacities.

**Folsom** - An existing public sanitary sewer system is located throughout the site, and as shown in the attached Arapahoe / Folsom Utility Locations Exhibit (pgs 117-118). Existing sewer mains flow along Arapahoe Avenue and Folsom Street, flowing east and north respectively until the two sewer mains intersect and combine to continue flowing east along Arapahoe Avenue. There is an existing sanitary sewer main that captures the residential apartments and flows north where it connects with the sewer main along Arapahoe Avenue. On the west side, near the children's day-care, there is a main that comes from the west traveling east, and turns north where it connects with the sewer main along Arapahoe Avenue. On the east side of the proposed site, there is a sanitary lateral that connects to the sewer main along Folsom Street that appears to capture two residential apartment buildings. *The sewer main sizes and available flow capacities are typically adequate for new developments in this area.* After the initial conference center programming is complete, additional coordination and modeling will be required by the City to verify the sewer main capacities.

### Street Improvements

**Grandview** - The site is divided by Grandview Avenue. The Grandview Avenue/Broadway intersection provides a non-signalized, three-quarter movement access with no left turn (southbound) turn allowed onto Broadway for westbound Grandview vehicles. The east side of the site is bound by 13th Street with a non-signalized, full movement intersection at 13th Street and University Avenue. The south tract includes an "L-shaped" alley which will likely be removed to accommodate the conference center. The north tract is bound by an alley that will likely remain in order to provide access to the existing buildings to the west which front Broadway.



## V. Architectural Site Analysis

### Street Improvements cont.

**Grandview cont.** - *There are numerous existing site vehicular accesses to the proposed Grandview Terrace location.* Starbucks includes a full movement drive access on University Avenue and a right-in/right-out Broadway access. The city will likely request that these University Avenue and Broadway vehicle access points be removed and relocated to either Grandview Avenue or 13th Street which have lower volume classifications. Vehicle stacking of the University Avenue eastbound traffic performing a left turn onto 13th street will need to be addressed. University Avenue has a sidewalk and bike lane for both the westbound and eastbound direction of travel, and Broadway has a multi-use path for bikers and pedestrians. *The Broadway multi-use path provides easy pedestrian and bike connection to both the Boulder Creek Path and the Pearl Street downtown area.* New multi-use paths will be provided to link the building to the surrounding educational, municipal, and business properties. In addition, Grandview Avenue and 13th Street have sidewalks on both sides of the street, however these streets do not have a designated bike lane. Bus service is provided by numerous RTD busses (204, 225, 225E, DASH, and SKIP) along Broadway. Additional coordination will be required with the City of Boulder and the project traffic engineer to design revised accesses and turning movements to City of Boulder streets.

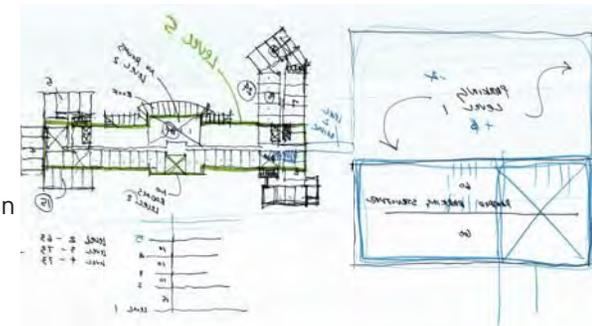
**Folsom** - The existing site is currently bounded by Arapahoe Avenue to the north, and Folsom Street to the west. *There are number of existing site vehicular accesses to the proposed Arapahoe Avenue / Folsom Street Location.* There are two parking lot access points on Arapahoe Avenue entry/exit for both eastbound and westbound traffic. Folsom Street provides one parking lot drive access that allows for entry/exit for both northbound and southbound traffic. *For bikers, Arapahoe Avenue does not have a designated bike lane. Folsom Street has a designated bike lane along each direction of travel.* For pedestrians, Arapahoe

Avenue and Folsom Street have sidewalks along both sides of the road, and crosswalks at the intersections and at high pedestrian traffic areas along each road. The site has access to the Boulder Creek Path to the south. Bus service is provided by the RTD Hop along Folsom Street and by the RTD Jump along Arapahoe Avenue. Additional coordination will be required with the City of Boulder and the project traffic engineer to design revised accesses to City of Boulder streets. New access drives will likely be required around the building and at the west side of the site to better serve the facility.

### Dry Utilities (Gas & Electric)

**Grandview** - Existing gas and electrical utilities surround the site for service, as shown in the attached Xcel Energy utility maps (pg. 86). These services will be coordinated with the service provider, Xcel Energy, to determine capacity and connection location. The alley in between Grandview Avenue and University Avenue is an Xcel Energy easement for dry utilities, and will require further coordination to reroute the systems free of building and site conflicts. Further coordination will be required with Xcel and the City of Boulder and other dry utility providers to determine the best point of connection for the utilities and verification of existing capacities.

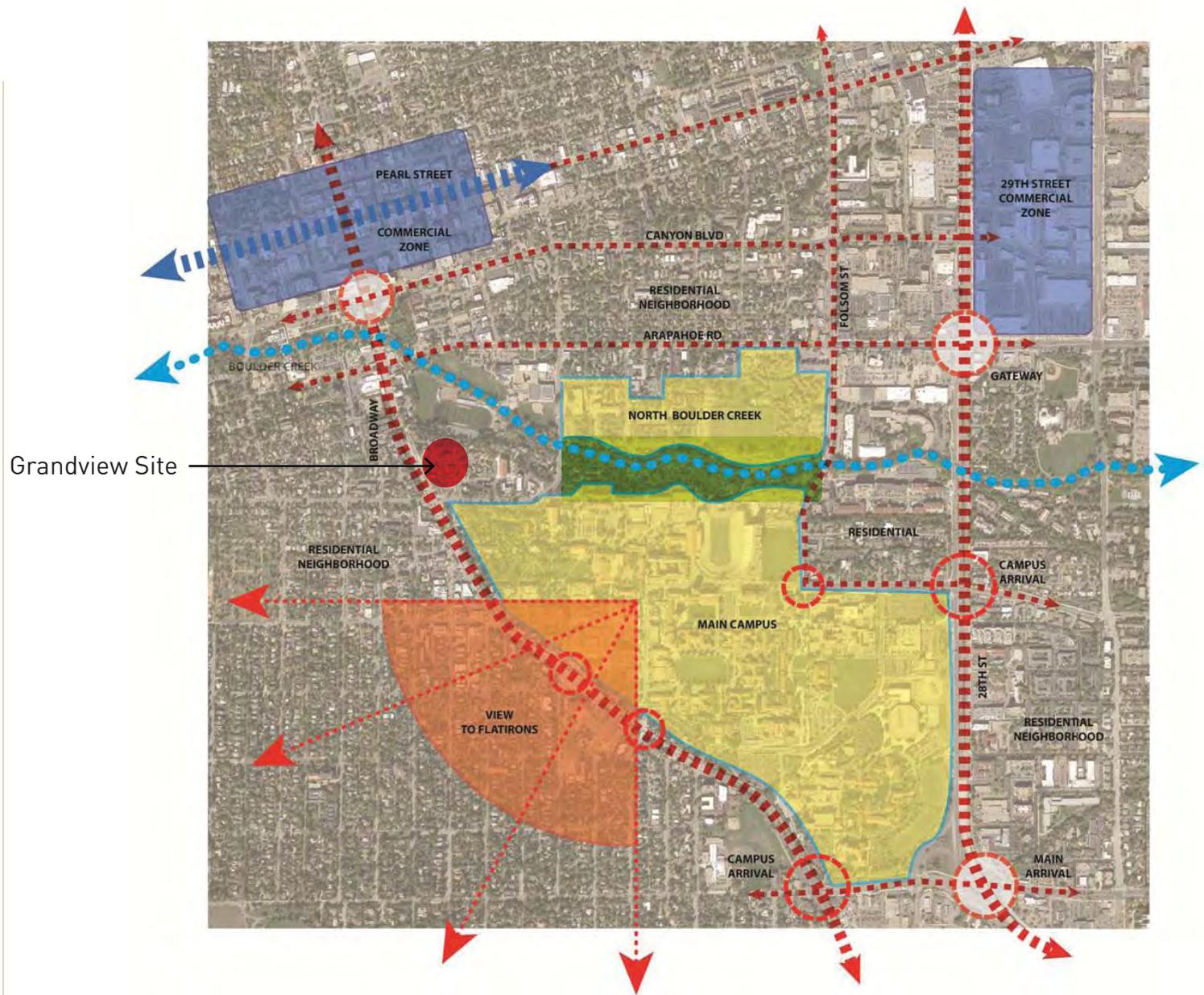
**Folsom** - Existing gas and electrical utilities surround the site for service, as shown by the attached Xcel Energy utility maps (pg. 118). These services will be coordinated with the service provider, Xcel Energy, to determine capacity and connection location. Further coordination will be required with the Xcel and the City of Boulder and other dry utility providers to determine the best point of connection for the utilities and verification of existing capacities.



V. Architectural Site  
Analysis



## Grandview



Grandview Site

V. Architectural Site Analysis  
 Grandview Connectivity

Macro elements that help create sense of place

V. Architectural Site  
Analysis  
Grandview  
Arrival

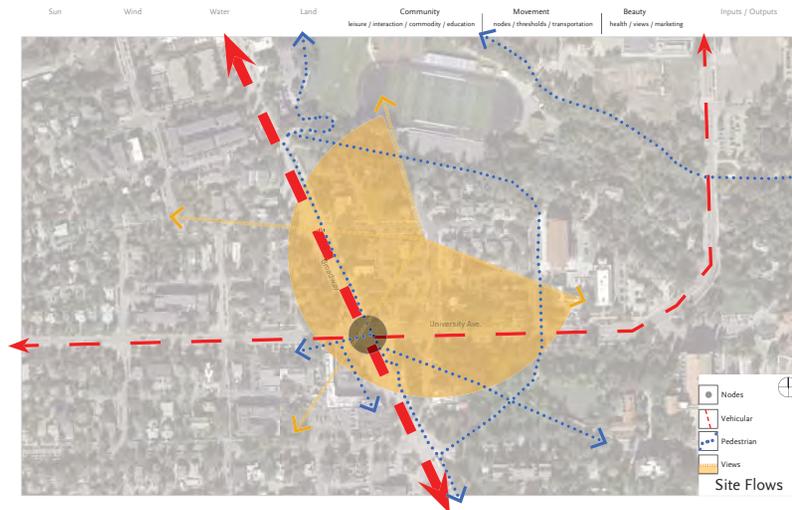
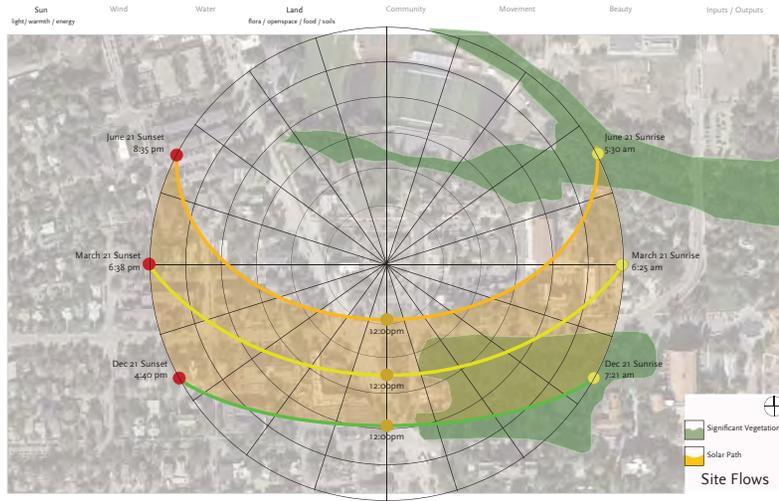


Sense of Arrival by Car/Public Transit

V. Architectural Site  
Analysis  
Grandview  
Site Boundaries



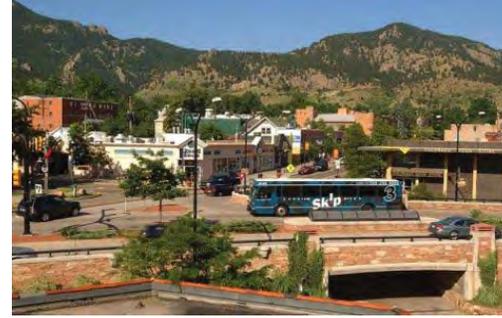
V. Architectural Site Analysis  
 Grandview  
 Site Flows



V. Architectural Site  
Analysis  
Grandview  
Site Character



IN-FILL



DEFINED / PROGRAMMED OPEN SPACE



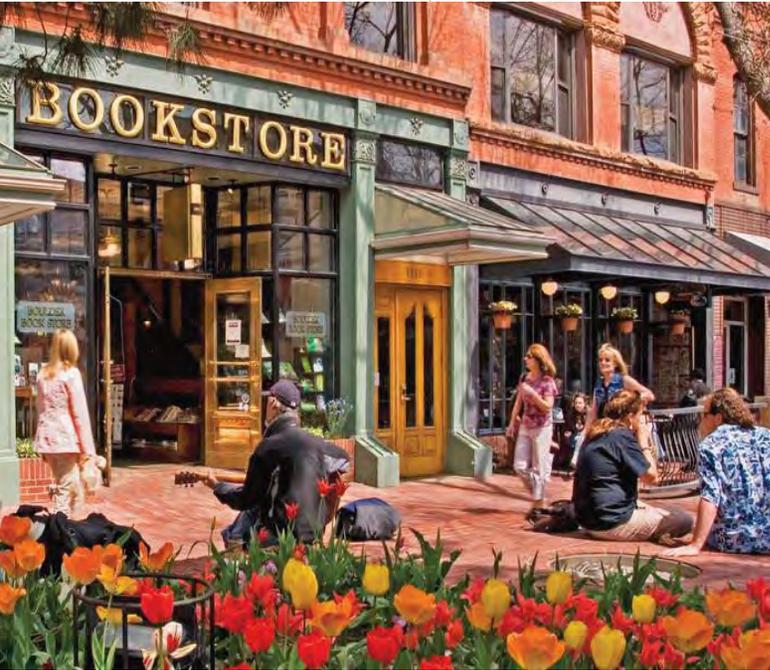
MIXED-USE



PEDESTRIAN-CENTRIC



VIBRANT



ESTABLISHED

IN THE MIX



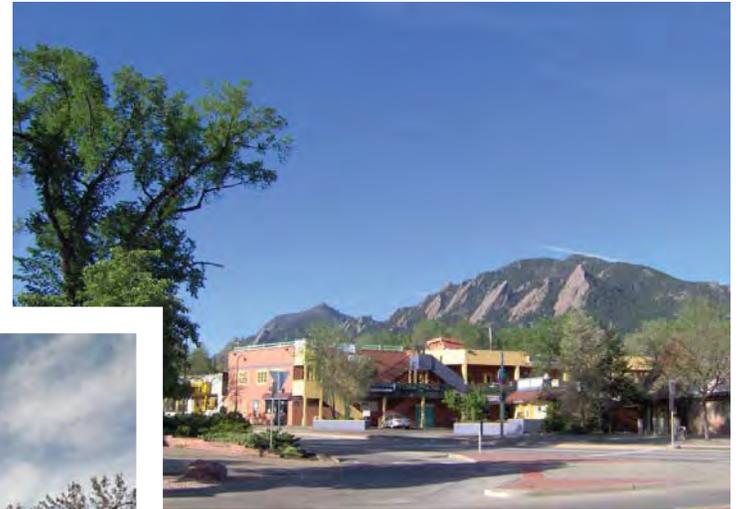
PASTORAL CONTEXT / COMMUNITY CHARACTER

V. Architectural Site  
Analysis  
Grandview  
Site Photos



Looking West on 13th

Broadway & University



Looking Southwest



Northwest Corner



On-site Looking East



On University Looking North



On Broadway Looking North

V. Architectural Site  
 Analysis  
 Grandview  
 Grading /  
 Utilities

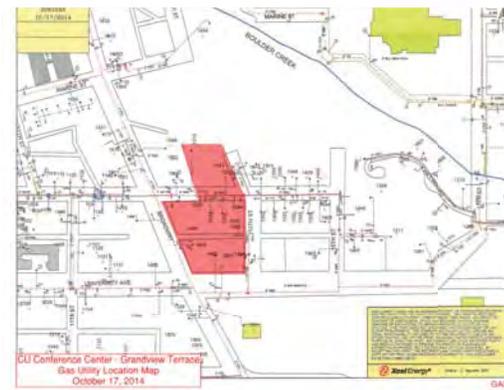


V. Architectural Site Analysis  
Grandview  
Existing Utilities



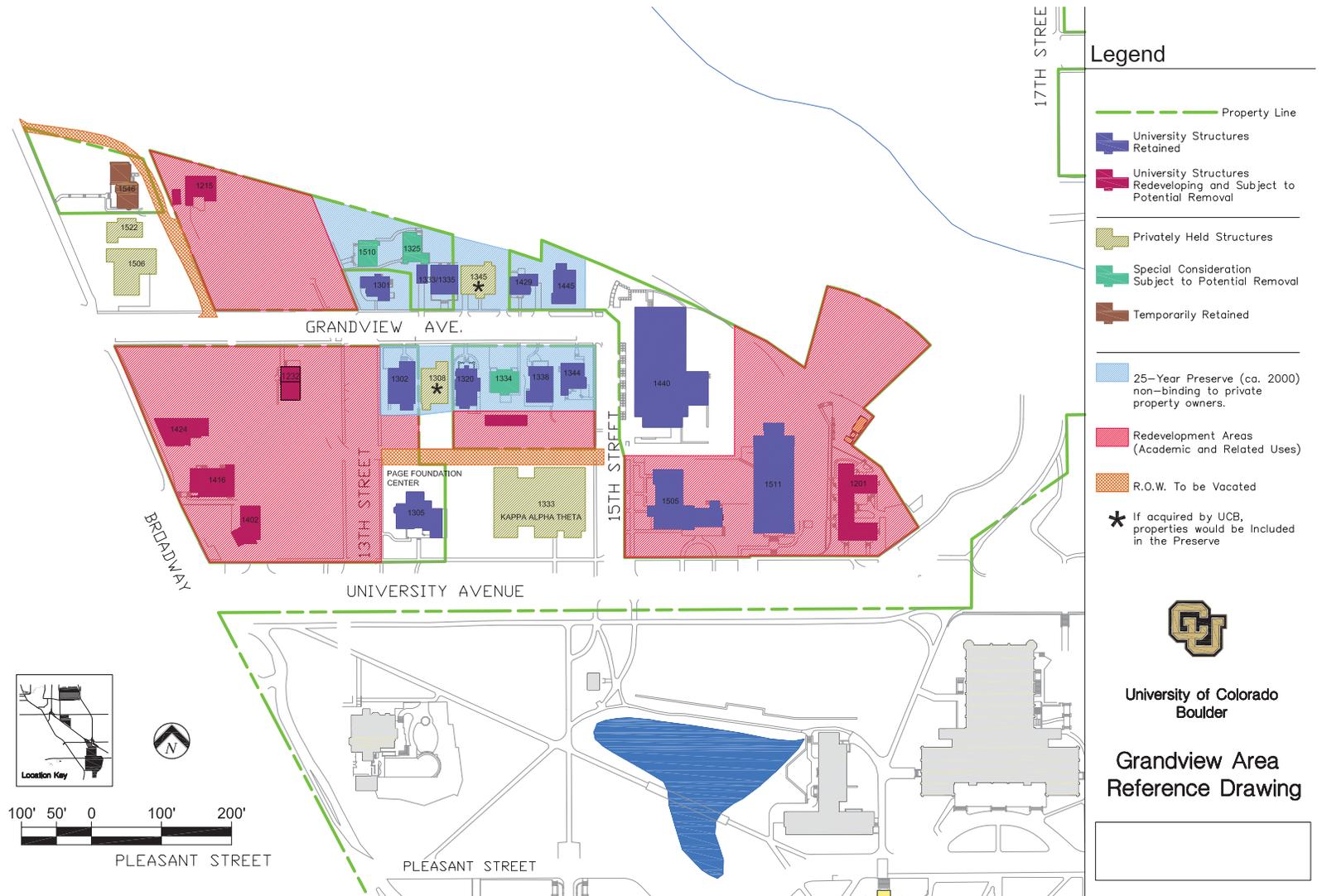
**JVA**  
CONSULTING ENGINEERS  
Civil, Structural, and Environmental Engineering  
303.444.1951 | www.jvajva.com

**CU Conference Center - Grandview Terrace**  
Utility Locations Exhibit  
September 30, 2014

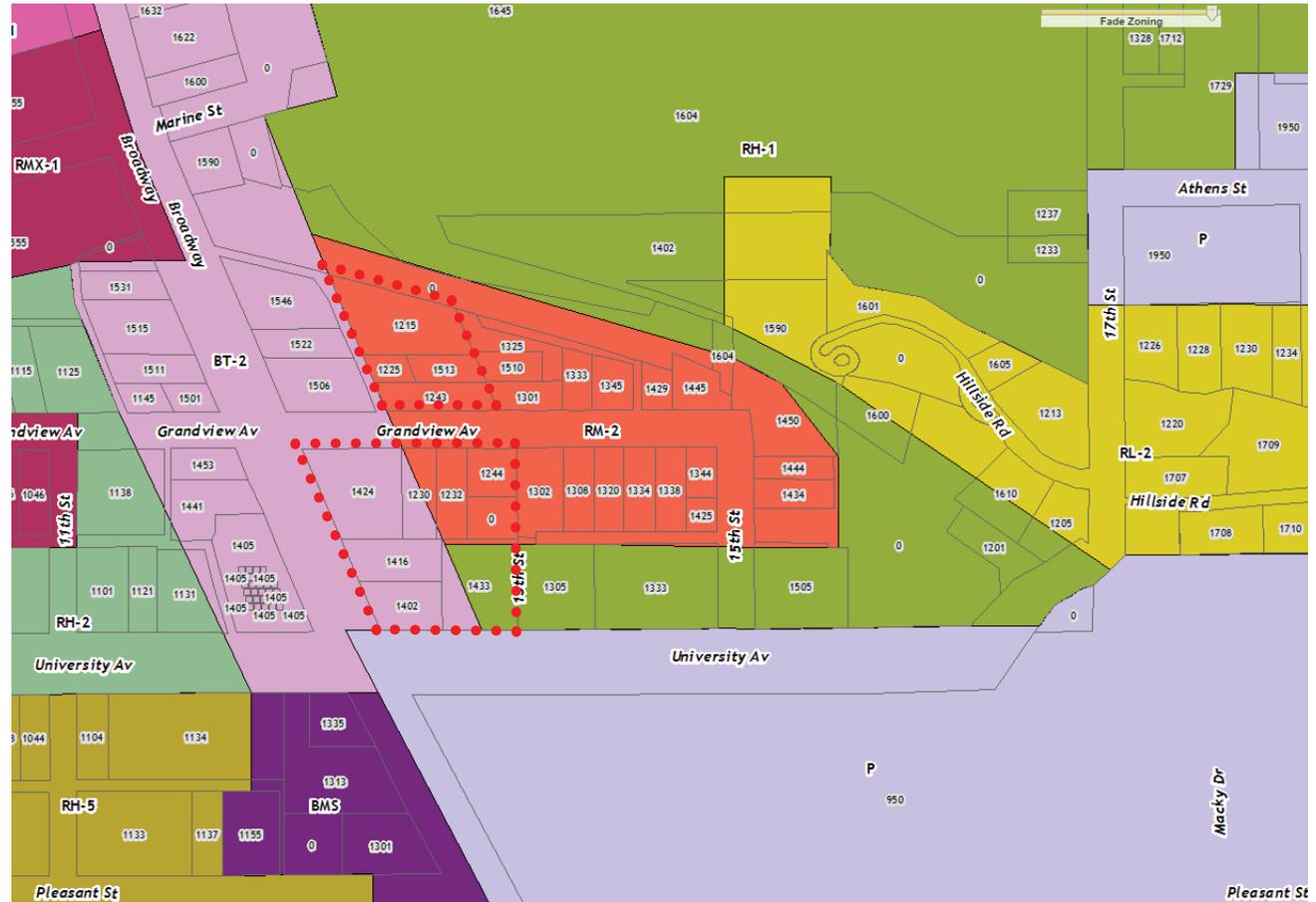


## V. Architectural Site Analysis

### Grandview Terrace Parcel Assignment



V. Architectural Site Analysis  
Grandview Existing Zoning



BT-2 - Business Transitional 2

Use Module - B1  
Form Module- e  
Intensity Module - 21  
F.A.R. - 0.5/1

Transitional business areas which generally buffer a residential area from a major street and are primarily used for commercial and complementary residential uses, including without limitation, temporary lodging and office uses.

Zoning Chp 9-9-11)

Buildings 35'-45' > 15% open space  
Buildings 45'-55' > 20% open space

RM-2 - Residential Medium 2

Use Module - R2  
Form Module- d  
Intensity Module - 13  
F.A.R. - 0

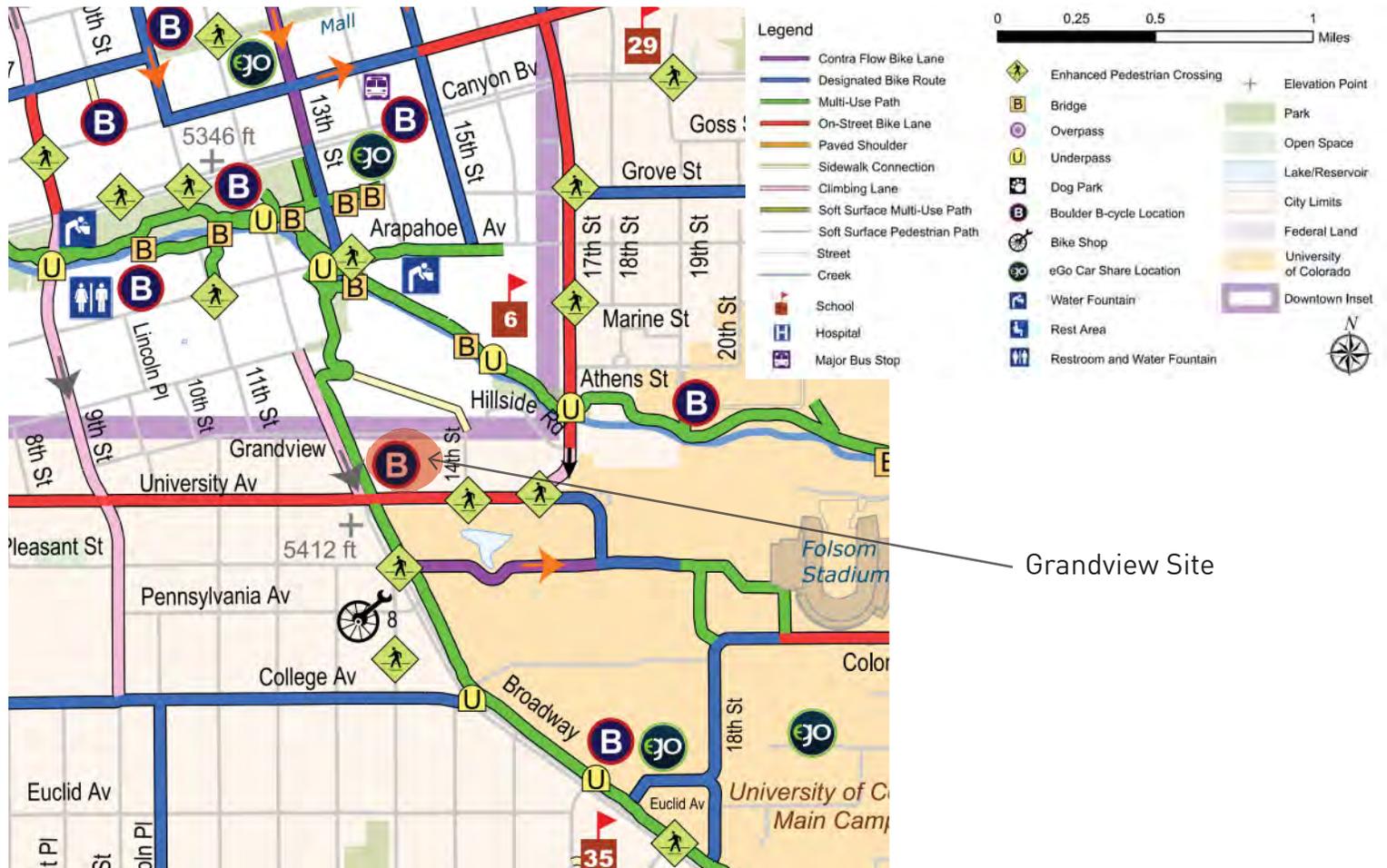
Medium density residential areas primarily used for small-lot residential development, including without limitation, duplexes, triplexes, or townhouses, where each unit generally has direct access at ground level.

RH-1 - Residential High 1

Use Module - R6  
Form Module- j  
Intensity Module - 12  
F.A.R. - 0

Purpose: High density residential areas primarily used for a variety of types of attached residential units, including without limitation, apartment buildings, and where complementary uses may be allowed.

V. Architectural Site Analysis  
 Grandview  
 Alternate  
 Transportation



Grandview Site

Figure 3-5  
**Proposed Modal Targets for 2035**

	Boulder's Current Mode Share		2020 Targets Established for Resident Trips in the Previous TMP	New Proposed 2035 Mode Share Targets	
	Resident Trips	Non-Resident Trips		Resident Trips	Non-Resident Trips
Ped	20%	0%	24%	25%	0%
Bike	19%	1%	15%	30%	2%
Transit	5%	9%	7%	10%	12%
SOV	36%	80%	25%	20%	60%
MOV	20%	10%	29%	15%	26%

Current Mode Share estimates are derived from the 2012 Travel Diary Survey. The Boulder Valley Employee survey was also used to establish current mode share.

## Historic Analysis Summary - 1416 Broadway (Grandview Site)

### V. Architectural Site Analysis 1416 Broadway

#### BUILDING ASSESSMENT:

- THIS LIMITED BUILDING ASSESSMENT IS INTENDED TO DESCRIBE EXISTING FEATURES AND INDICATE ANY DEFICIENCIES IN THOSE SYSTEMS AND PROPOSE A RECOMMENDED TREATMENT. THIS ASSESSMENT WILL EVALUATE ACCESSIBILITY AS IT IS LIMITED TO THE EXISTING ENTRY INTO THE BUILDING. MECHANICAL AND ELECTRICAL SYSTEMS WERE NOT REVIEWED IN THIS ASSESSMENT. THE ASSUMPTION MADE IS IF THE BUILDING IS REUSED ON SITE, ALL SYSTEMS WILL BE REPLACED AND INTEGRATED INTO A LARGER DEVELOPMENT. IF THE BUILDING IS RELOCATED, THOSE SYSTEMS WOULD NEED TO BE FULLY EVALUATED FOR EITHER RE-USE OR REPLACEMENT.

#### BUILDING ADAPTIVE RE-USE OPTIONS:

- KEEP BUILDING IN ITS CURRENT LOCATION, REMOVE THE SECOND FLOOR ON THE INTERIOR AND RECONFIGURE THE FIRST FLOOR & BASEMENT SPACES. LOAD BEARING WALLS, BEAMS, AND COLUMNS ARE IDENTIFIED ON STRUCTURAL PLANS. RE-PURPOSING WORK WILL INVOLVE REMOVING INTERIOR FINISHES SO THAT THE ORIGINAL SINGLE OPEN ROOM CAN BE REBUILT FOR A NEW MULTI-PURPOSE SERVING A NEW PROGRAM ON THE SITE. MOST INTERIOR WALLS AND FINISHES ARE MODERN AND HAVE LITTLE HISTORIC VALUE FOR REUSE. THE THREE PRIMARY ROOF TRUSSES APPEAR TO BE IN GOOD CONDITION (REF STRUCTURAL). THE SECOND FLOOR CEILING COULD BE REMOVED AND THE TRUSSES EXPOSED IN THE PRIMARY SPACE.
- RELOCATE THE BUILDING TO A NEARBY SITE. THE BUILDING CAN BE MOVED BY A QUALIFIED BUILDING MOVER. SINCE THE BUILDING IS IN GOOD PHYSICAL CONDITION, ONLY MINIMAL BRACING OF THE EXISTING STRUCTURE IS ANTICIPATED (REF STRUCTURAL).

#### ARCHITECTURAL DESCRIPTION:

- THE EXISTING BUILDING IS A BLONDE BRICK BUILDING BUILT IN THE MISSION REVIVAL STYLE (POPULAR BETWEEN 1890 AND 1930). THE BUILDING FRONTS BROADWAY AND IS A TWO STORY STRUCTURE WITH CORNER TOWER THAT MARKS THE ENTRY TO THE BUILDING. THE FRONT GABLE IS CURVED AND CAPPED WITH A FORMED CONCRETE PARAPET CAP. THE TOWER AND ENTRY ARE PUNCTUATED WITH BRICK COLUMNS THAT PIERCE THE ROOF LINE. PIERS ARE CAPPED WITH CONCRETE CAPS. WOOD WINDOWS ARE ARCHED WITH CURVED MULLIONS IN THE UPPER SASH. AT THE TIME OF THE SITE VISIT, THE ORIGINAL ROOFING MATERIAL WAS BEING REMOVED. THE TOWER ROOF AND MAIN ROOF HAVE EXPOSED RAFTER TAILS. CORNERSTONE READS "Estab. 1900, Erected 1917". THE STRUCTURE IS APPROACHED FROM BROADWAY BY TWO FLIGHTS OF CONCRETE STAIRS. THE SOUTH SIDE APPROACH IS VIA AN ACCESSIBLE WOOD & CONCRETE RAMP.

#### BUILDING HISTORY:

- THE BUILDING WAS CONSTRUCTED IN 1917 AS THE "FIRST FRIENDS CHURCH". CONSTRUCTED IN THE MISSION REVIVAL STYLE THE CHURCH IS REPRESENTATIVE OF THE GROWTH OF RELIGIOUS INSTITUTIONS IN BOULDER. THE CHURCH WAS LATER RE-ESTABLISHED AS THE "UNIVERSITY HEIGHTS EVANGELICAL UNITED BRETHREN CHURCH".



SOUTHWEST ELEVATION OF 1416 BROADWAY: CIRCA 1950  
NOTICE FRONT YARD HAS NOT BEEN GRADED TO CURRENT CONFIGURATION. THE TOWER ROOF HAS A SHALLOW PITCH AND APPEARS TO BE CAPPED WITH A METAL FINIAL. ROOFING MATERIAL IS A PRESSED METAL TILE.

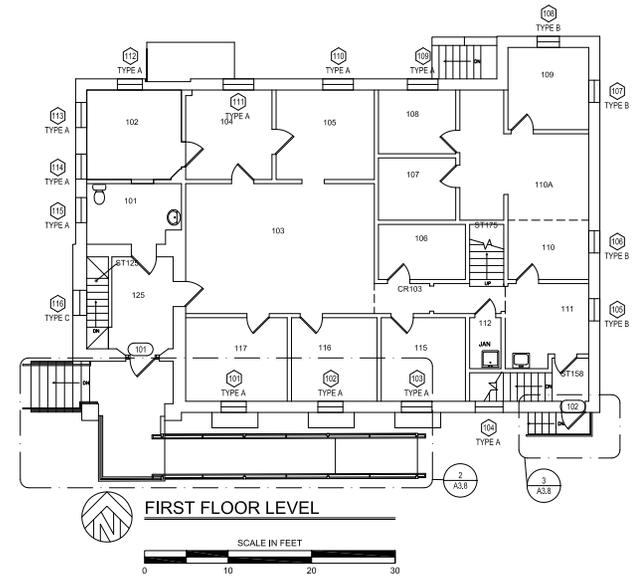
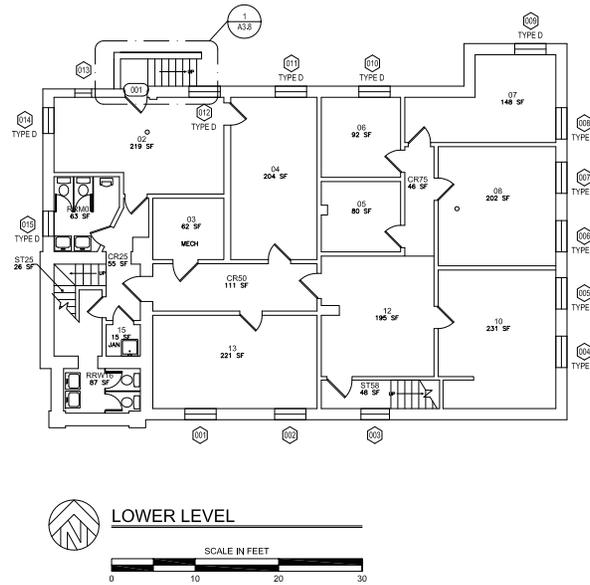


SOUTHWEST ELEVATION OF 1416 BROADWAY: CIRCA 1917  
NOTICE THE GLASS AND WOOD FRAME AT LOCATION OF EXISTING ACCESSIBLE RAMP. ALSO NOTE FINIAL AT TOP OF TOWER.



CONGREGANTS: CIRCA 1950

V. Architectural Site Analysis  
1416 Broadway



**Analysis Summary:**

**General Condition:** Overall the Existing building is in good shape.

**Structural:** The building is in good condition with structural condition issues. Only minimal bracing would be necessary if desired to move building.

**Exterior Wall:** The building's exterior brick masonry walls are in good condition with only minor cracking, few displaced units and few broken units.

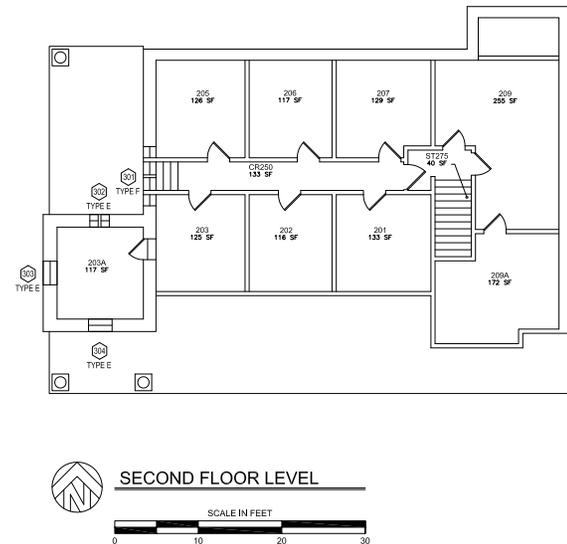
**Interiors:** The interiors of the existing building, with the exception of some remaining trim at exterior walls, has little reuse value and most interiors and second floor walls, structure and ceiling can be removed and the space re-imagined.

**Windows/Doors:** The windows and doors are in good to fair condition and could be rehabilitated with minimal effort.

**Thermal Efficiency:** Could be improved with new sealant, glazing compound and exterior storms.

**Roof:** Original roof was recently replaced. Recommend an option to replace roof to match original style.

**Challenges:** The largest challenge will be moving the building off-site (if so desired). Exterior wall is full wythe masonry and supporting and joining back the bricks would be significant challenge. Also, aligning existing floor levels with new levels could result in interior ramping.





V. Architectural Site  
Analysis



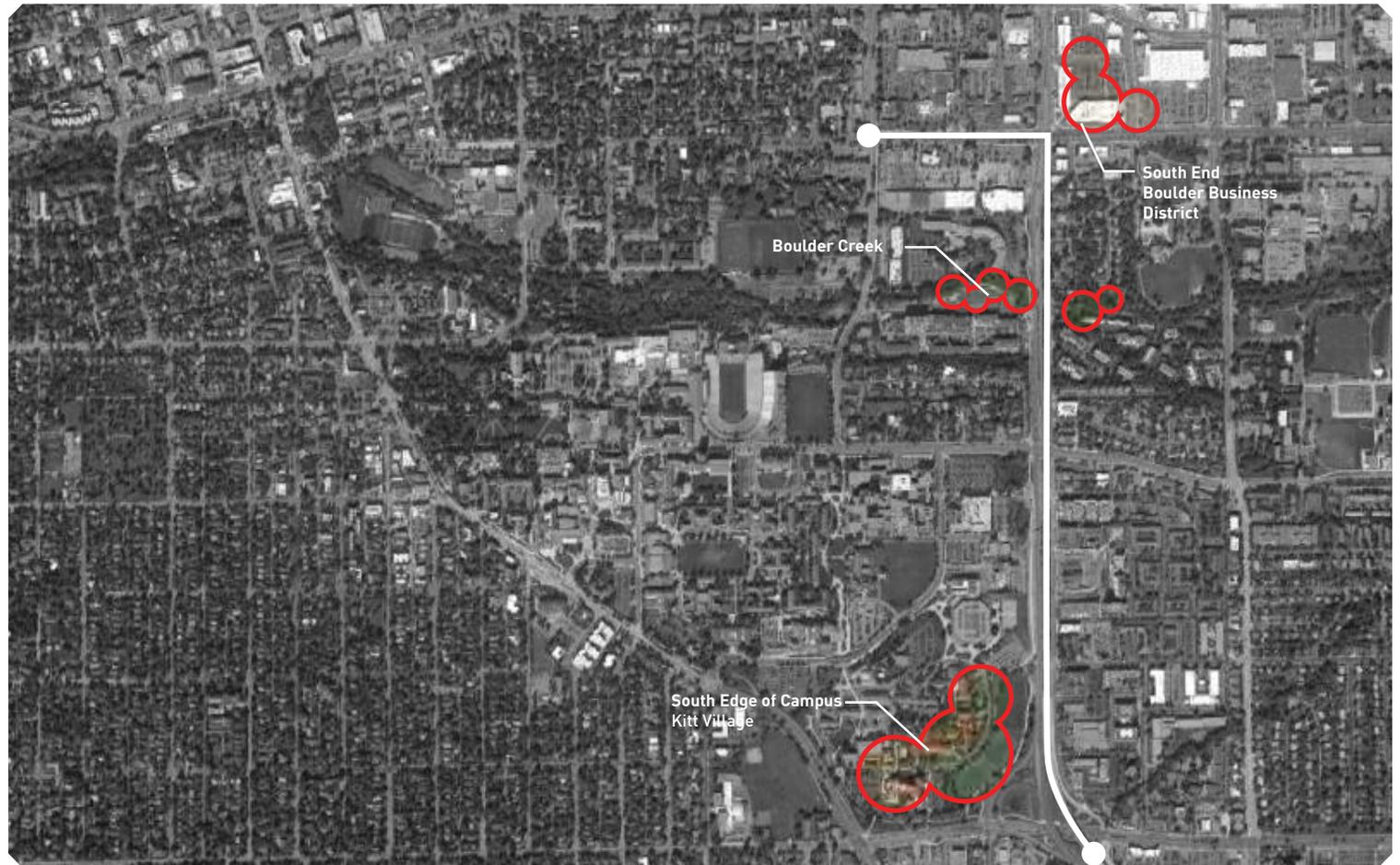
**Folsom**

V. Architectural Site Analysis  
Folsom  
Connectivity



Macro elements that help create sense of place

V. Architectural Site Analysis  
Folsom  
Arrival

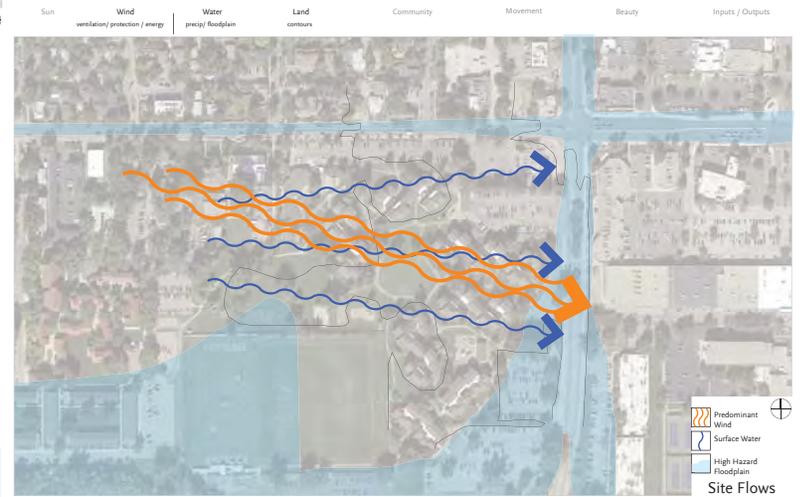
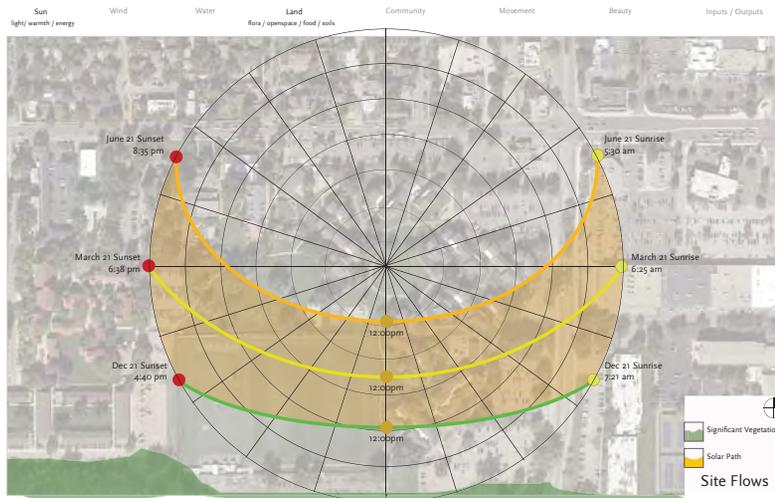


Sense of Arrival by Car/Public Transit

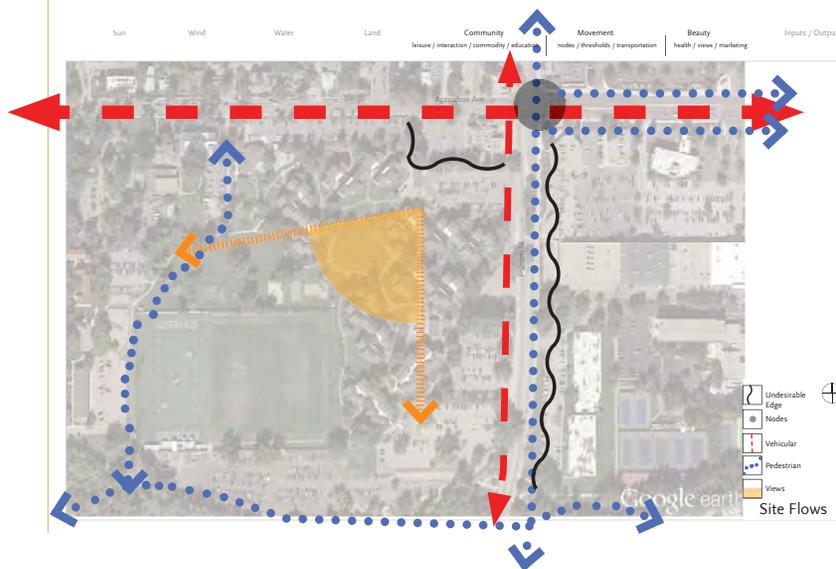
V. Architectural Site Analysis  
Folsom  
Site Boundaries



Project Limits of Work:  
Approximately: 190,000sf  
(4.36 acres)



V. Architectural Site Analysis  
Folsom  
Site Flows



V. Architectural Site Analysis  
Folsom  
Site Character



OBJECT IN THE PARK



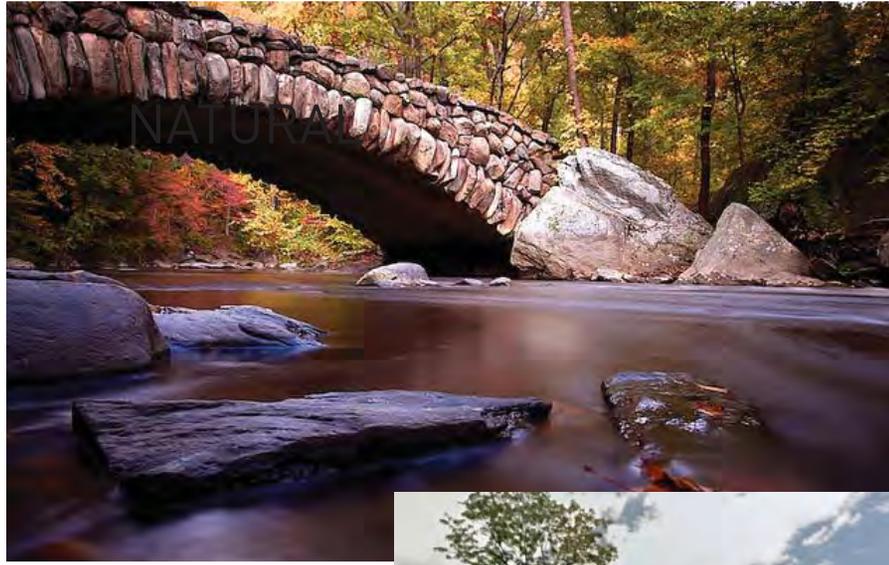
TRANSITIONAL



DESTINATION



ON THE EDGE



Structural Site Analysis



EMERGING



IN-BETWEEN



CONVENIENT



Corner of Arapahoe / Folsom Looking Southwest

## Folsom & Arapahoe



On-Site Looking Southwest



On-Site Community Garden

### V. Architectural Site Analysis Folsom Site Photos



Athletic Fields Looking West



Boulder Creek

V. Architectural Site  
Analysis  
Folsom  
Grading /  
Utilities





V. Architectural Site Analysis  
Folsom  
Floodplains

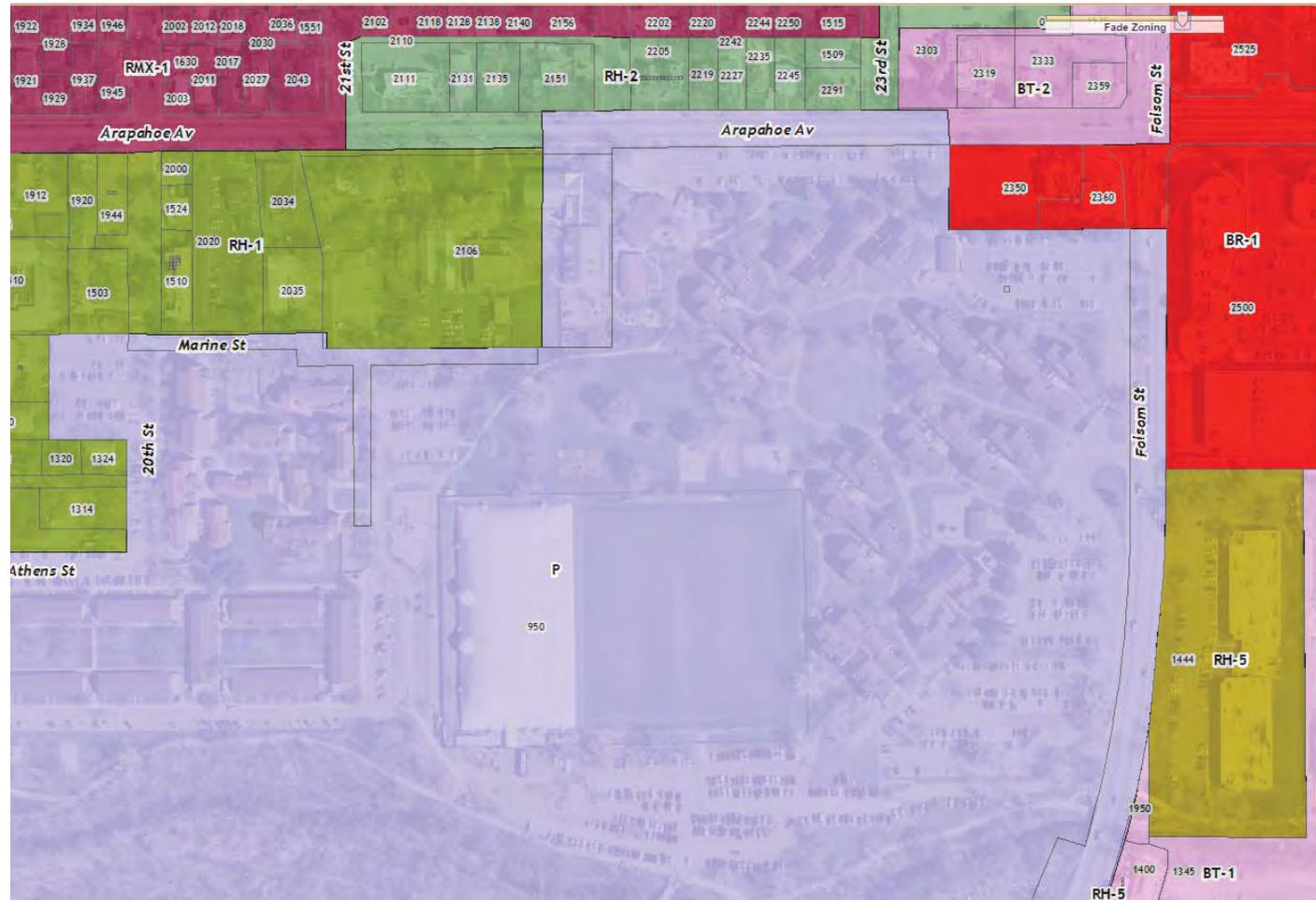


Existing Floodplain Map



Proposed Floodplain Map

V. Architectural Site Analysis  
 Folsom Existing Zoning



BR-1 - Business Regional 1

- Use Module - B5
- Form Module- f
- Intensity Module - 23
- F.A.R. - 2/1

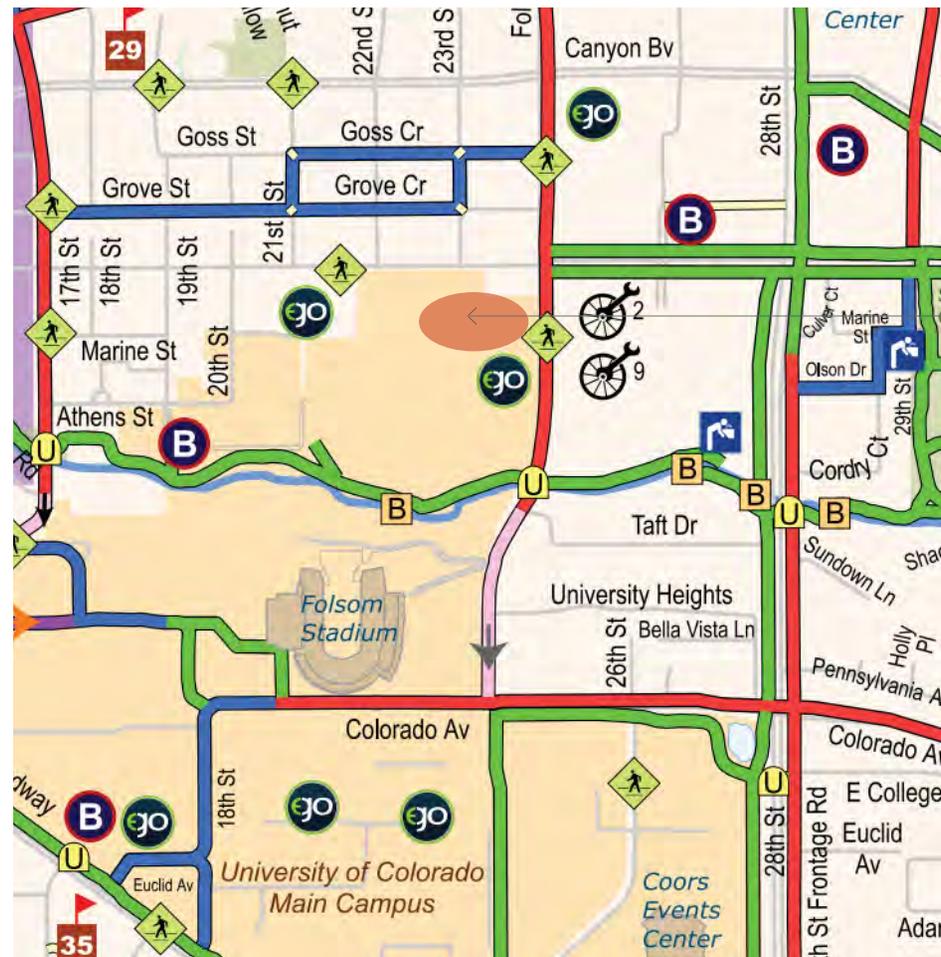
Purpose: Business centers of the Boulder Valley, containing a wide range of retail and commercial operations, including the largest regional-scale businesses, which serve outlying residential development; and where the goals of the Boulder Urban Renewal Plan are implemented.

P - Public

- Use Module - P
- Form Module- c
- Intensity Module - 5
- F.A.R. - 0

Purpose: Public areas in which public and semi-public facilities and uses are located, including without limitation, governmental and educational uses.

V. Architectural Site Analysis  
 Folsom  
 Alternate  
 Transportation

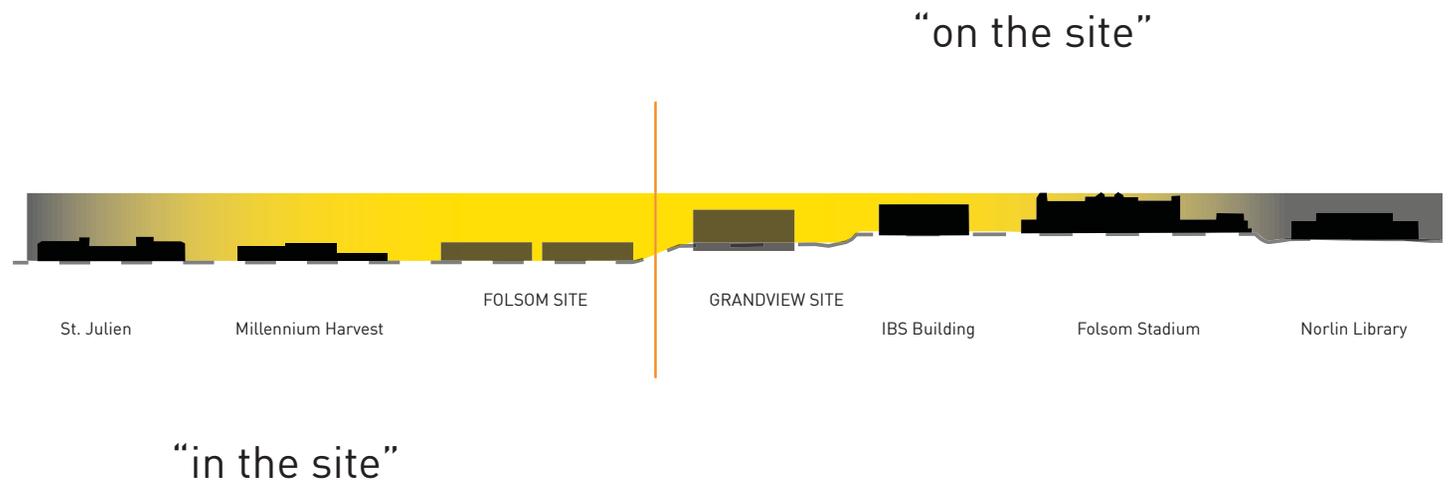


Folsom Site





VI. Architectural  
Program Test Fit



## VI. Architectural Program Test Fit



### Site Development Drivers

As part of testing each site for development potential, design drivers were identified to help accurately understand capacity, scope and place-making potential. Reference the following section for graphical representations of site driver information.

#### Grandview -

- Prominent site with a strong connection to that which is uniquely Boulder (The Hill, Pearl Street, CU) and all of the related amenities.
- Optimal access to multi-mode transit opportunities. Users will be able to take advantage of regional and local bus lines with a bus stop at the site. There is also a multi-lane bike and pedestrian path which helps connect the academic campus to downtown.
- Future consideration should be made for the 13th street pedestrian/bike corridor improvements which will engage Andrews Arboretum, which is located just north of the Grandview site
- Currently there exists a very strong, **physical connection to the main part of campus**. This connection will only be enhanced when the campus academic core grows to the north to occupy the other Grandview Terrace parcels. Overall, it is an easy and pleasant walk into campus.
- Koenig Alumni center is across University at the southeast corner of University Ave. and Broadway and will have immediate, synergistic benefits for conference/hotel users.
- Development on this site would stimulate adjacent development in the University Hill commercial district including potential future hotels to serve the conference center.
- The height on this prominent hill could be viewed as an asset or challenge. It would be an integrated yet prominent landmark building with great views of campus, downtown Boulder and the Flatirons but would most likely exceed the height restrictions set forth by the City of Boulder's Land Use Regulations due to the extensive slope on the site. (See Zoning summary on page 15).
- Development on this site would require structured parking, most likely below grade. (See Parking and

Biking summary on page 72).

- Broadway is a very active circulation corridor. Efforts should be made to buffer noise from the hotel experience.
- Immediate adjacency to University academic buildings most likely would dictate a facade premium for development on this site. See cost drivers section VII.
- Future academic campus growth will be restricted with the development of the Center, so careful planning is needed to maximize potential academic building development.

#### Folsom -

- Site offers good views to Folsom Field to the south and the mountains to the west.
- Proposed roads in the North of Boulder Creek Masterplan will set the main on site vehicular circulation to the west and south of the project site.
- The existing Del Sol Mexican Restaurant and Conoco Gas Station will partially obscure the development from the intersection of Arapahoe and Folsom, so the "front door" should be located on an adjacent facade away from the high traffic zones.
- High traffic volume / congestion along Arapahoe Avenue discourages any major entrances / exits fronting along this road.
- Main building access from Folsom Street is desirable to provide a more direct connection with campus.
- Creating a **"Folsom Parkway"** would help establish the Center as relating to the campus.
- No below grade development on this site should be pursued due to extensive flood concerns as previously discussed.
- Higher density should be developed toward the interior of the site to better relate the edges of the development with the lower density and scale of the surrounding neighborhoods and retail areas.
- Due to the separated nature of the site from the surrounding retail, the hotel restaurant will want to have a strong presence on the corner of Arapahoe and Folsom and to become a community amenity.
- Significant landscape buffering should be developed to help make it more of a destination experience.

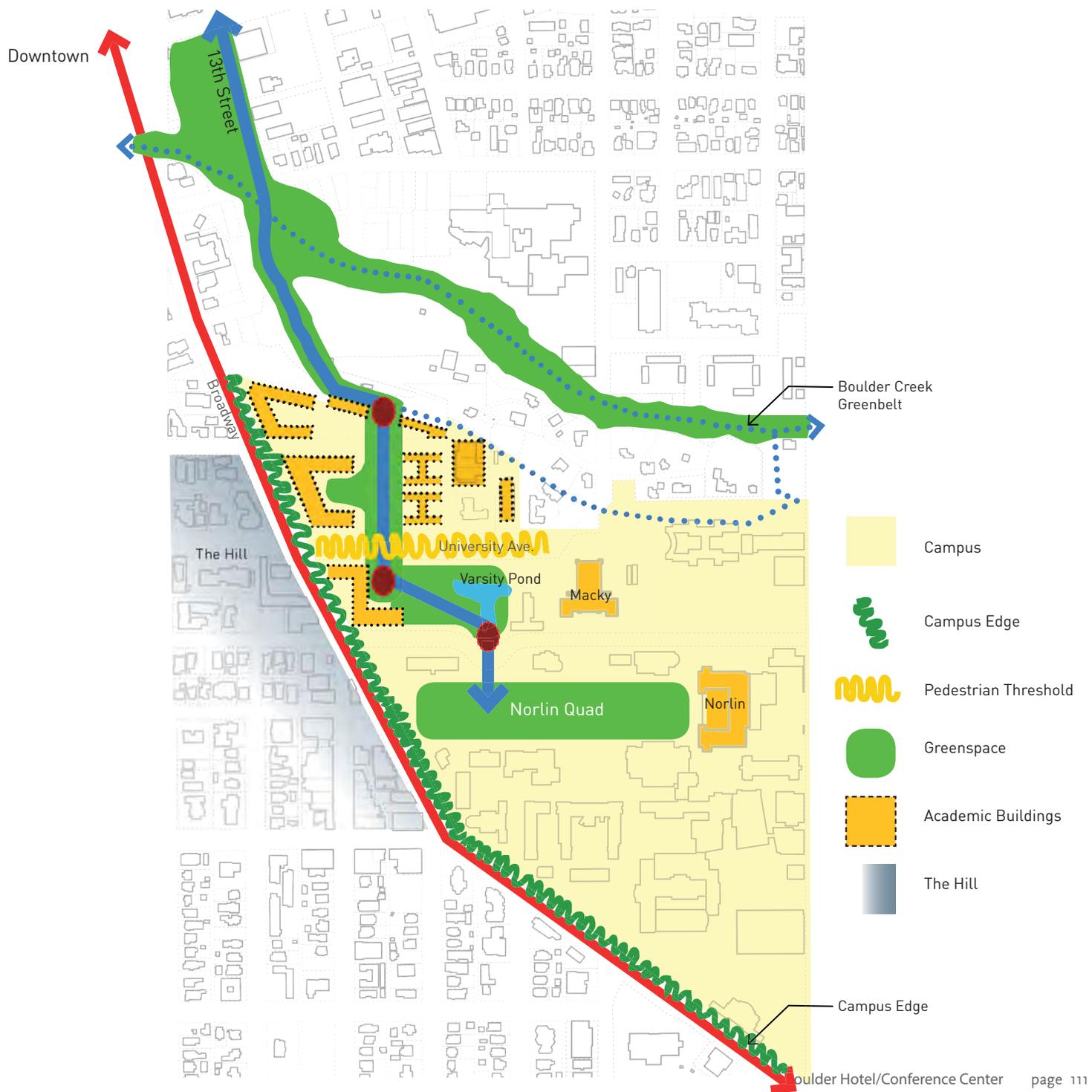
**VI. Architectural  
Program Test Fit**

*As a measure for compatibility and viability with program, both sites were analyzed with preliminary program test fits. The results are contained in the following pages.*

*Preliminary massing studies were performed to test possible fits of the program to each site. However, graphic representations of building mass are not included as they are often misconstrued as architectural design and do not fully account for the full range of design and program solutions possible. Further, it is necessary to ensure that any eventual proposal is appropriate for its context and in keeping with the goals and constraints of each site.*



VI. Architectural  
Program Test Fit  
Grandview  
Design Drivers

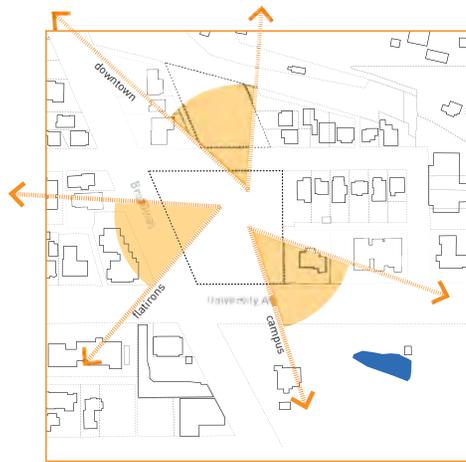




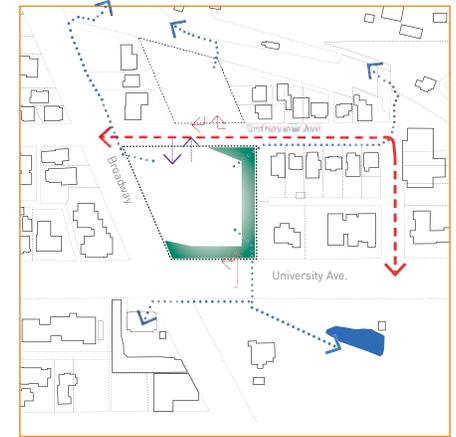
VI. Architectural  
Program Test Fit  
Grandview  
Design Drivers



Connect to Energy of "The Hill"

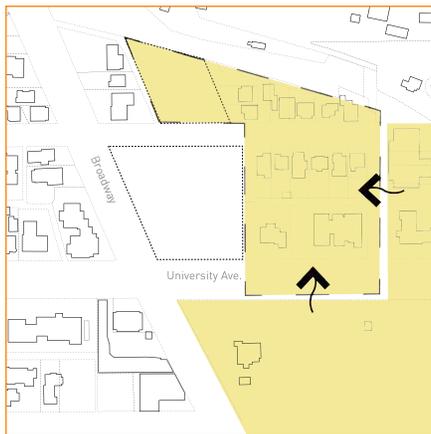


Connect to Views

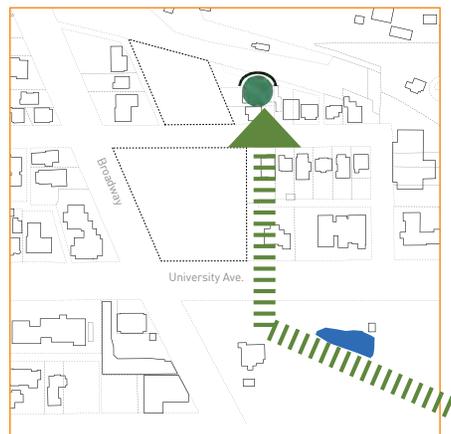


Access

- Pedestrian
- - - Vehicular
- · - · Non-Motorized Routes
- Service / Parking



Extend Academic Core



Extend Campus Green



Connect Building to Campus

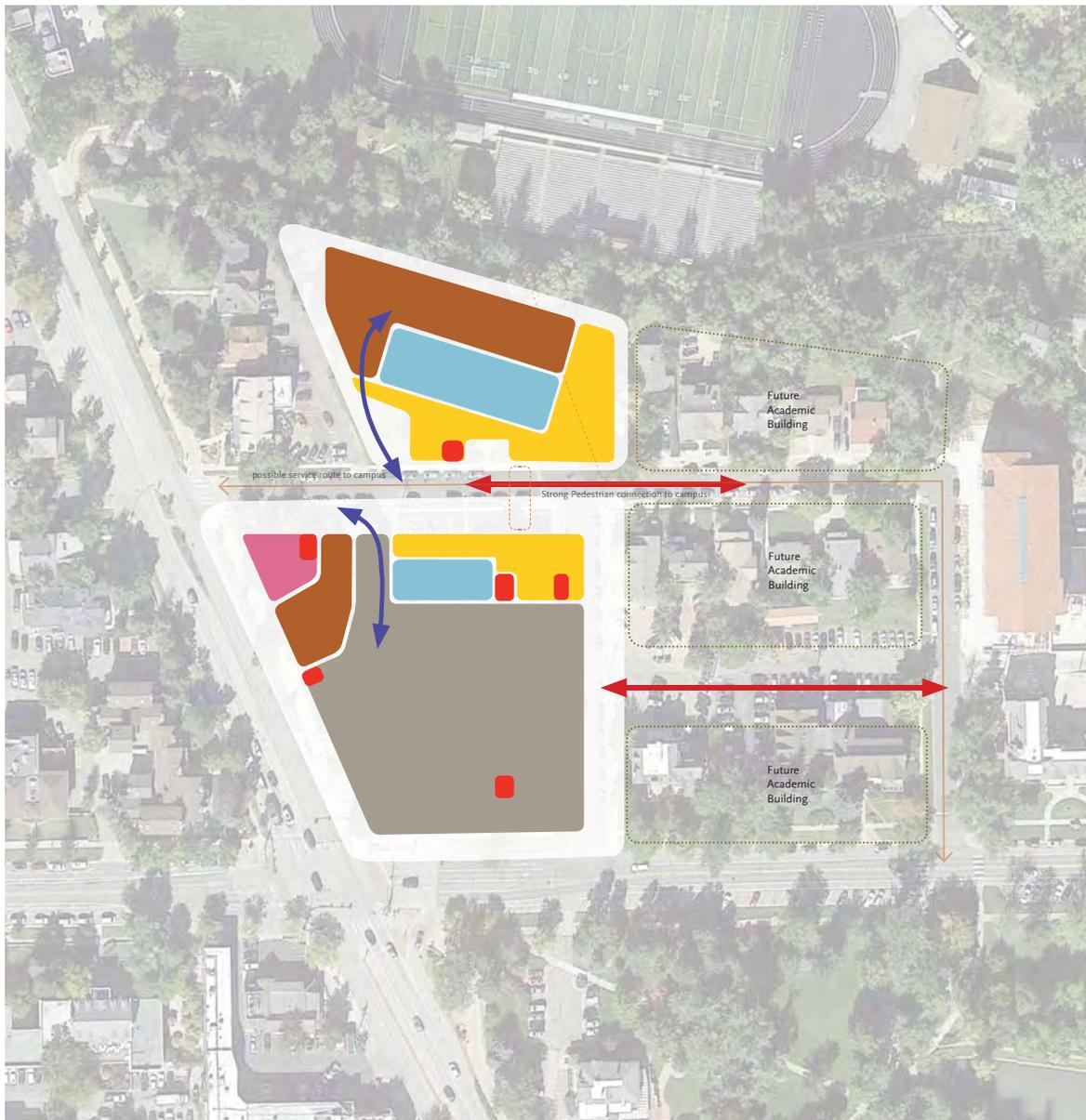
VI. Architectural  
Program Test Fit  
Grandview Test  
Fit Layout



-  Parking
-  Vertical Circulation

Parking Levels P<sub>3</sub> + P<sub>2</sub>  
-35', -25'

VI. Architectural Program Test Fit  
 Grandview Test Fit Layout



- Conference Rooms
- Pre Function
- Vertical Circulation
- Retail
- BOH/Parking
- Kitchen / Service/ BOH

Grandview Level  
 -15'

VI. Architectural Program Test Fit  
 Grandview Test Fit Layout



- Garden court
- Guestrooms
- Conference Rooms
- Pre Function
- Lobby / FOH
- Vertical Circulation
- Restaurant
- Retail
- BOH/Parking
- Kitchen / Service/ BOH

Lobby Level  
 +0'

VI. Architectural  
Program Test Fit

Grandview Test  
Fit Layout

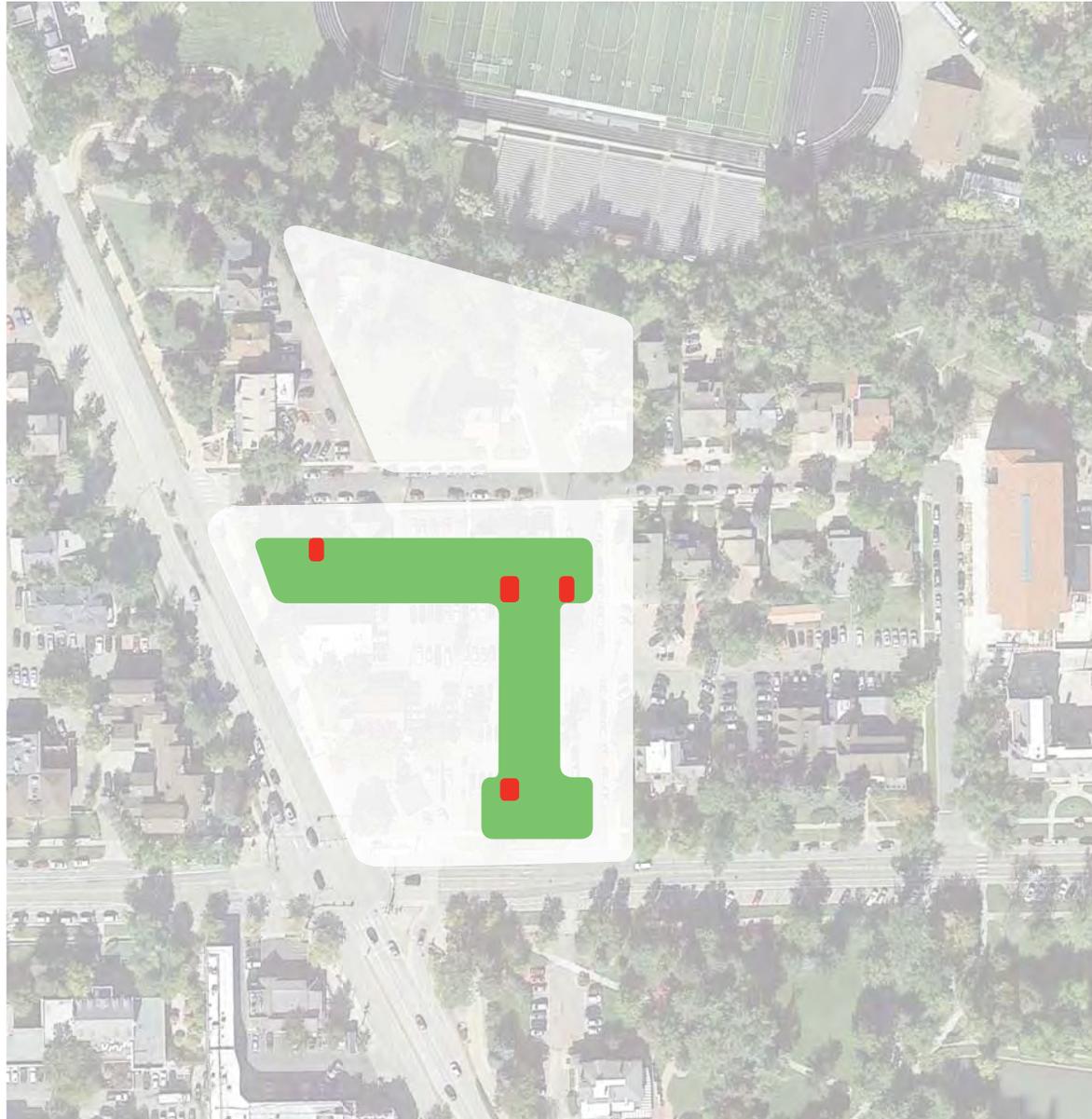


-  Guestrooms
-  Fitness
-  Bridge
-  Vertical Circulation

Second Level  
+15'

VI. Architectural  
Program Test Fit

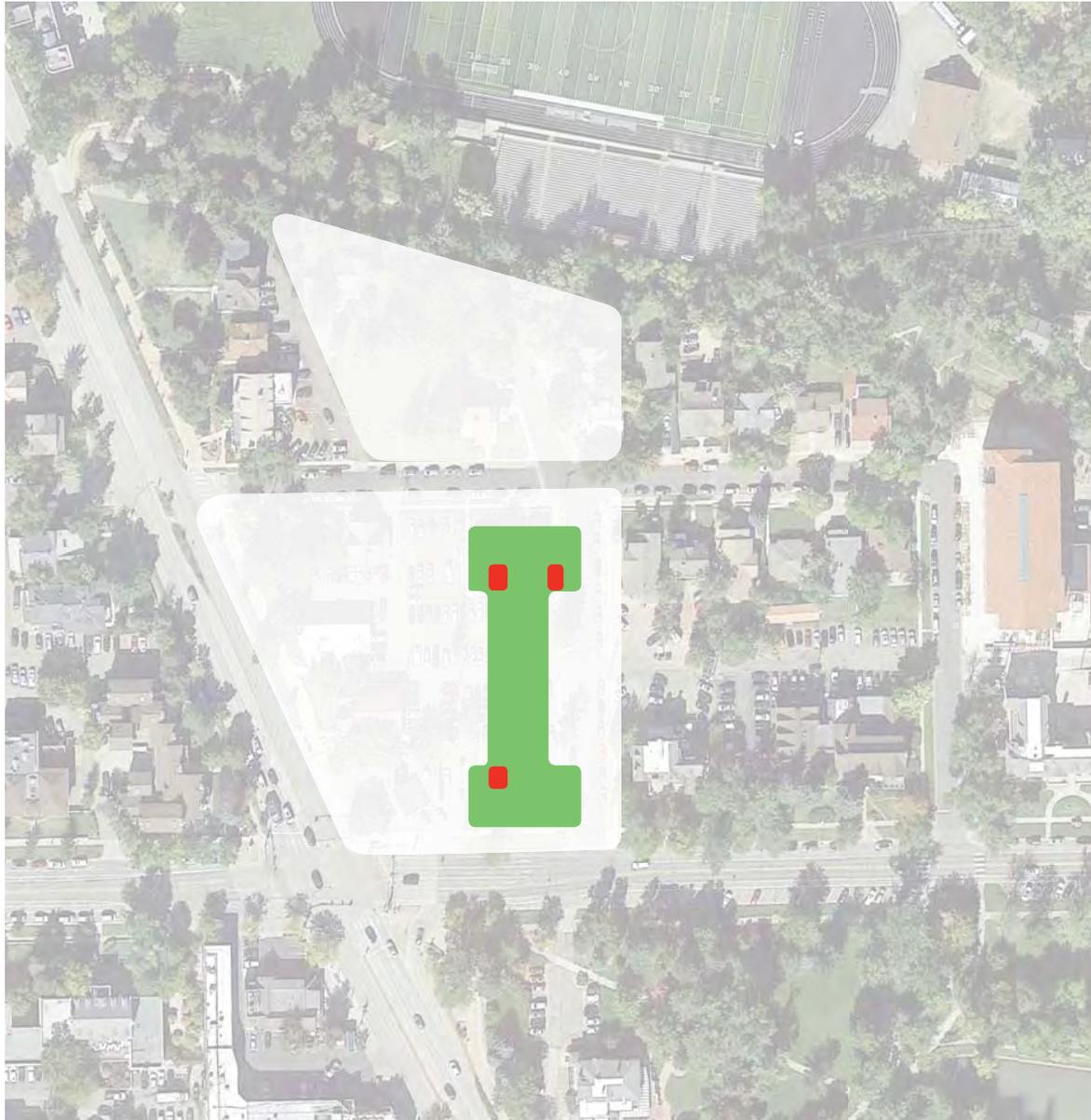
Grandview Test  
Fit Layout



- Guestrooms
- Vertical Circulation

Third Level  
+26'

VI. Architectural  
Program Test Fit  
Grandview Test  
Fit Layout



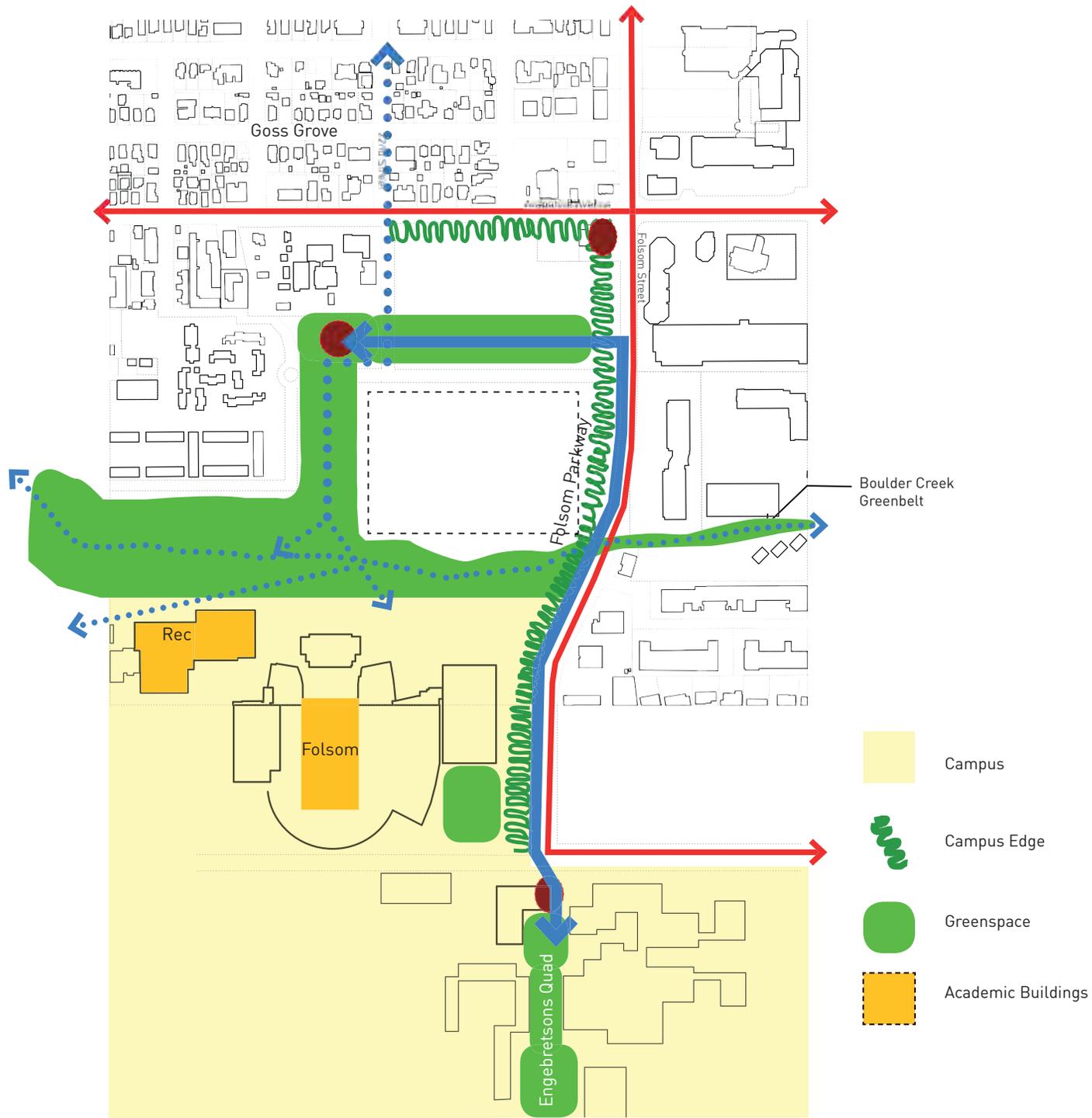
- Guestrooms
- Vertical Circulation

Fourth and Fifth Level  
+37', +48'

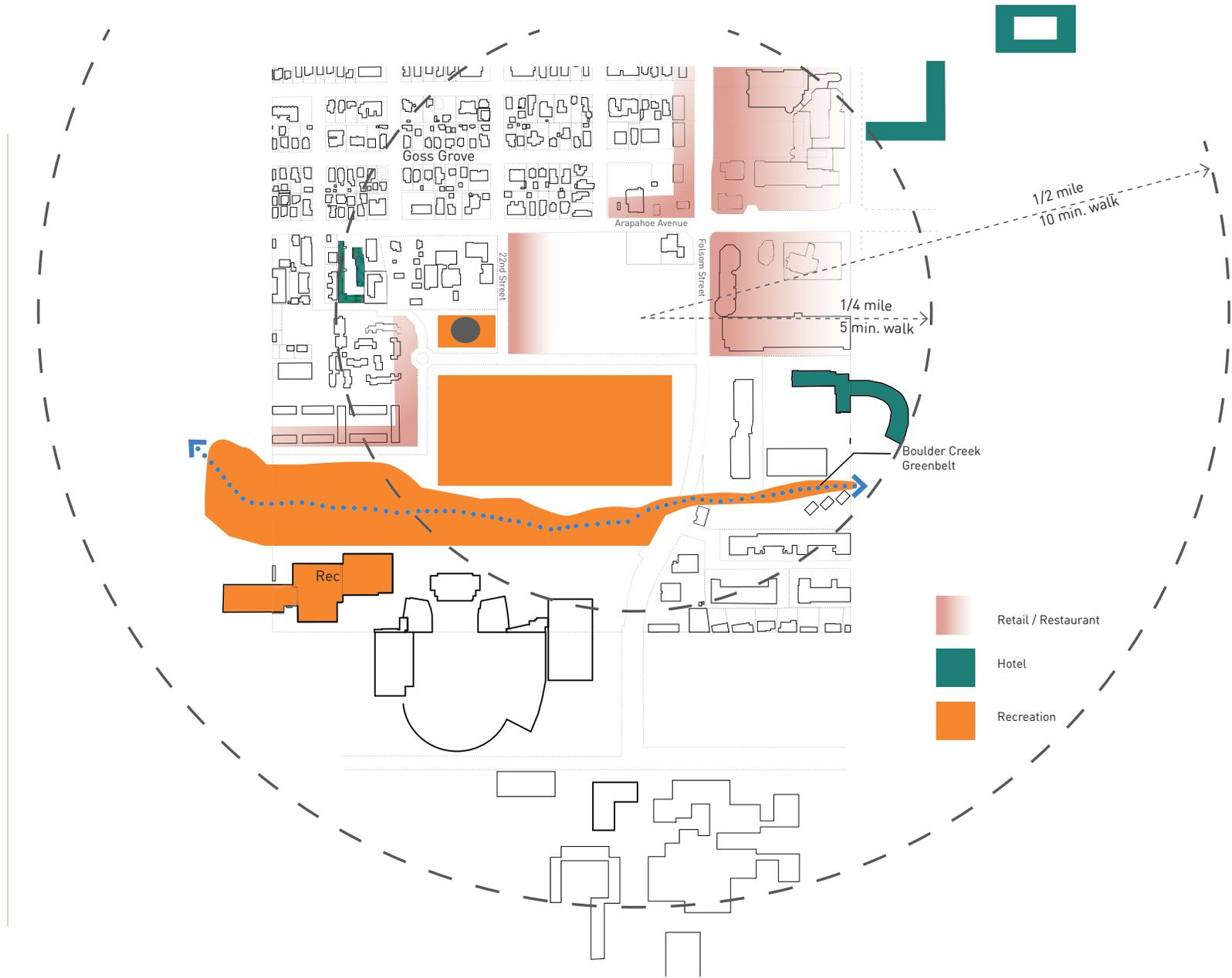
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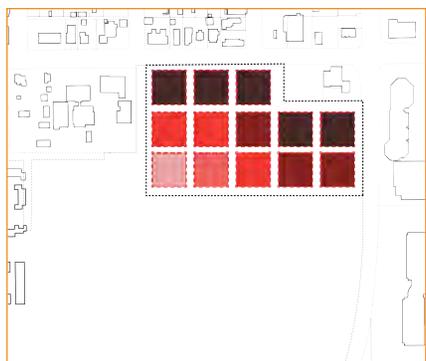
VI. Architectural  
Program Test Fit  
Folsom Design  
Drivers



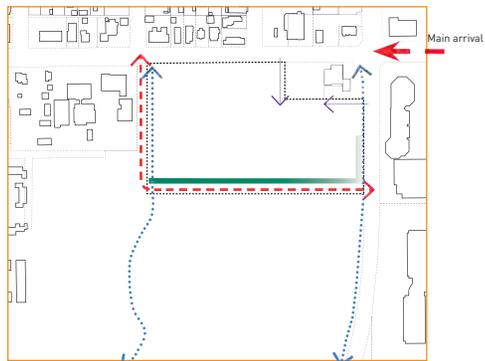
VI. Architectural  
Program Test Fit  
Folsom Design  
Drivers



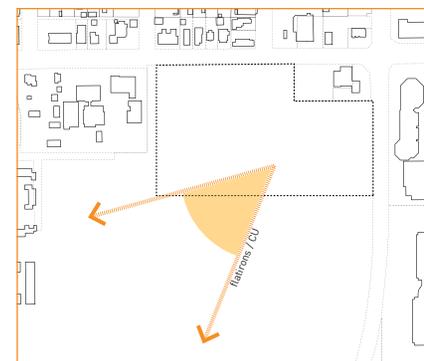
VI. Architectural  
Program Test Fit  
Folsom Design  
Drivers



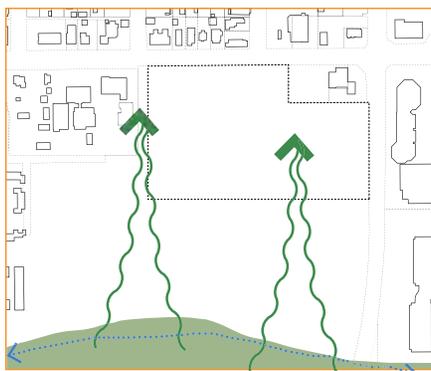
**Terraced Massing / Density**  
High Low



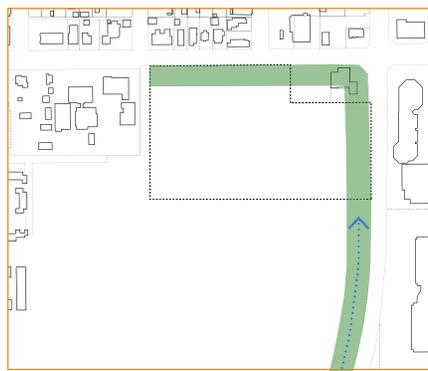
**Access**  
Pedestrian  
Vehicular  
Non-Motorized Routes  
Service / Parking



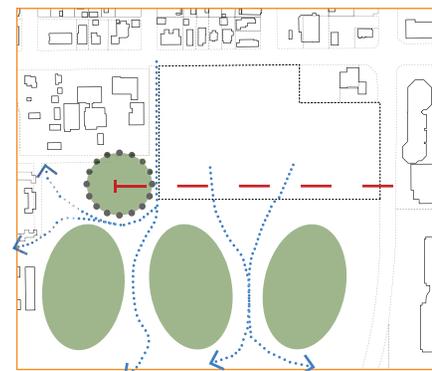
**Views**



**Extension of Greenbelt**

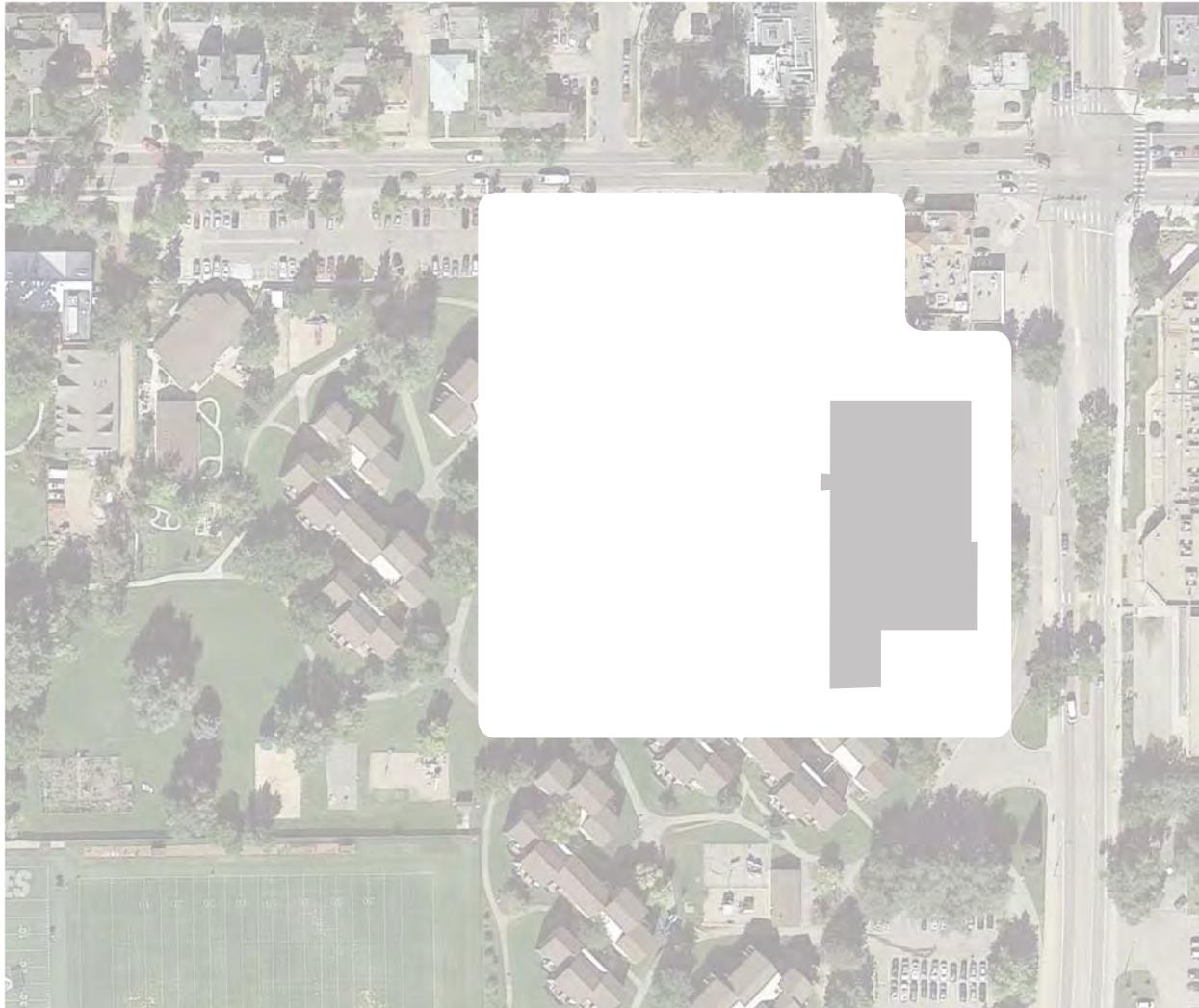


**Folsom Parkway**



**Relationship to Park / Open Space**

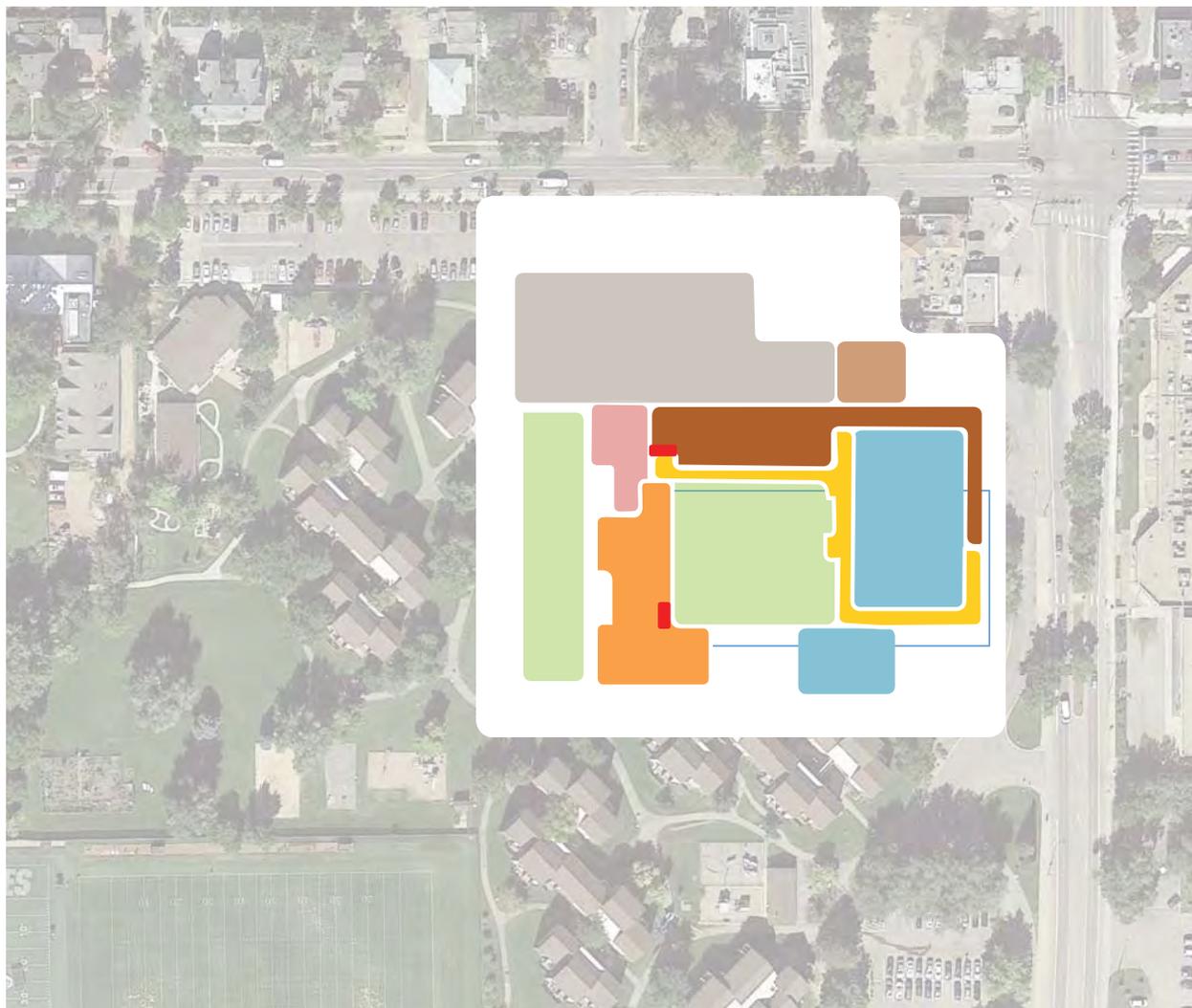
VI. Architectural  
Program Test Fit  
Folsom Test Fit  
Layout



Parking

Parking Level  
-4'

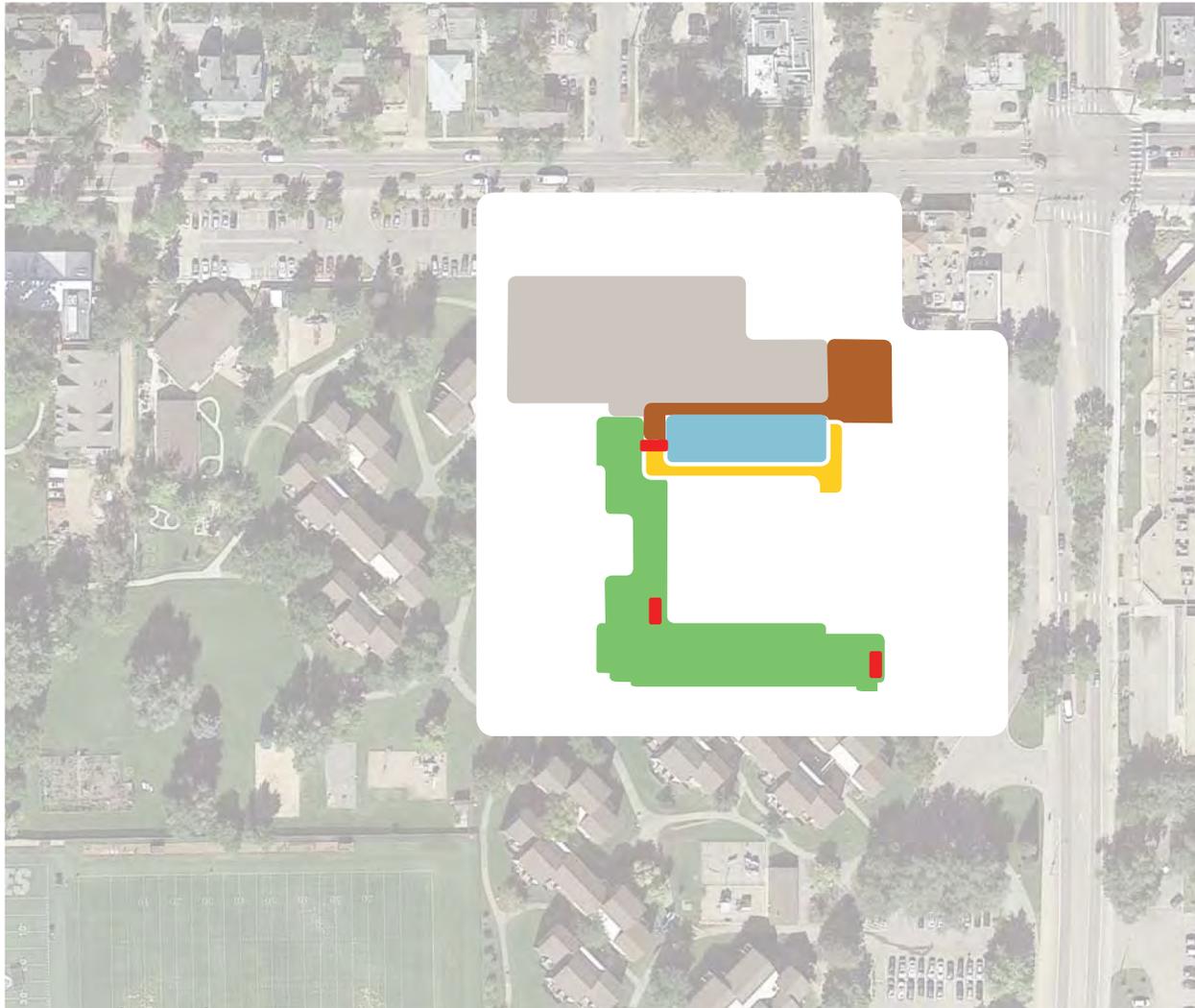
VI. Architectural  
Program Test Fit  
Folsom Test Fit  
Layout



- Garden court
- Guestrooms
- Conference Rooms
- Pre Function
- Lobby / FOH
- Vertical Circulation
- Restaurant
- Parking
- Loading
- Kitchen / Service / BOH

Lobby Level  
+6'

VI. Architectural  
Program Test Fit  
Folsom Test Fit  
Layout



- Garden court
- Guestrooms
- Conference Rooms
- Pre Function
- Lobby / FOH
- Vertical Circulation
- Restaurant
- Parking
- Loading
- Kitchen / Service / BOH

Second Level  
+18'

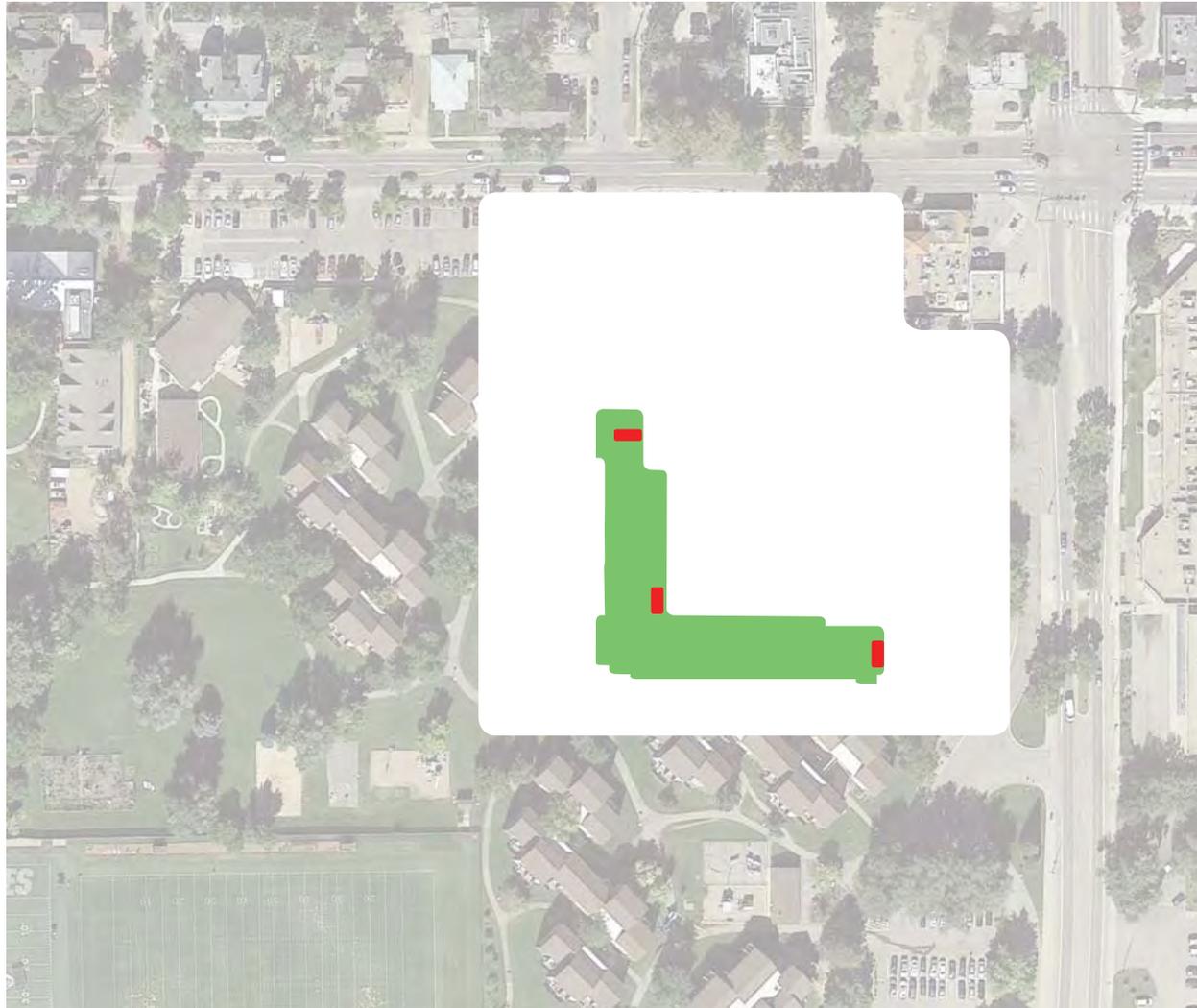
VI. Architectural  
Program Test Fit  
Folsom Test Fit  
Layout



- Guestrooms
- Vertical Circulation
- Parking

Third Level  
+27'

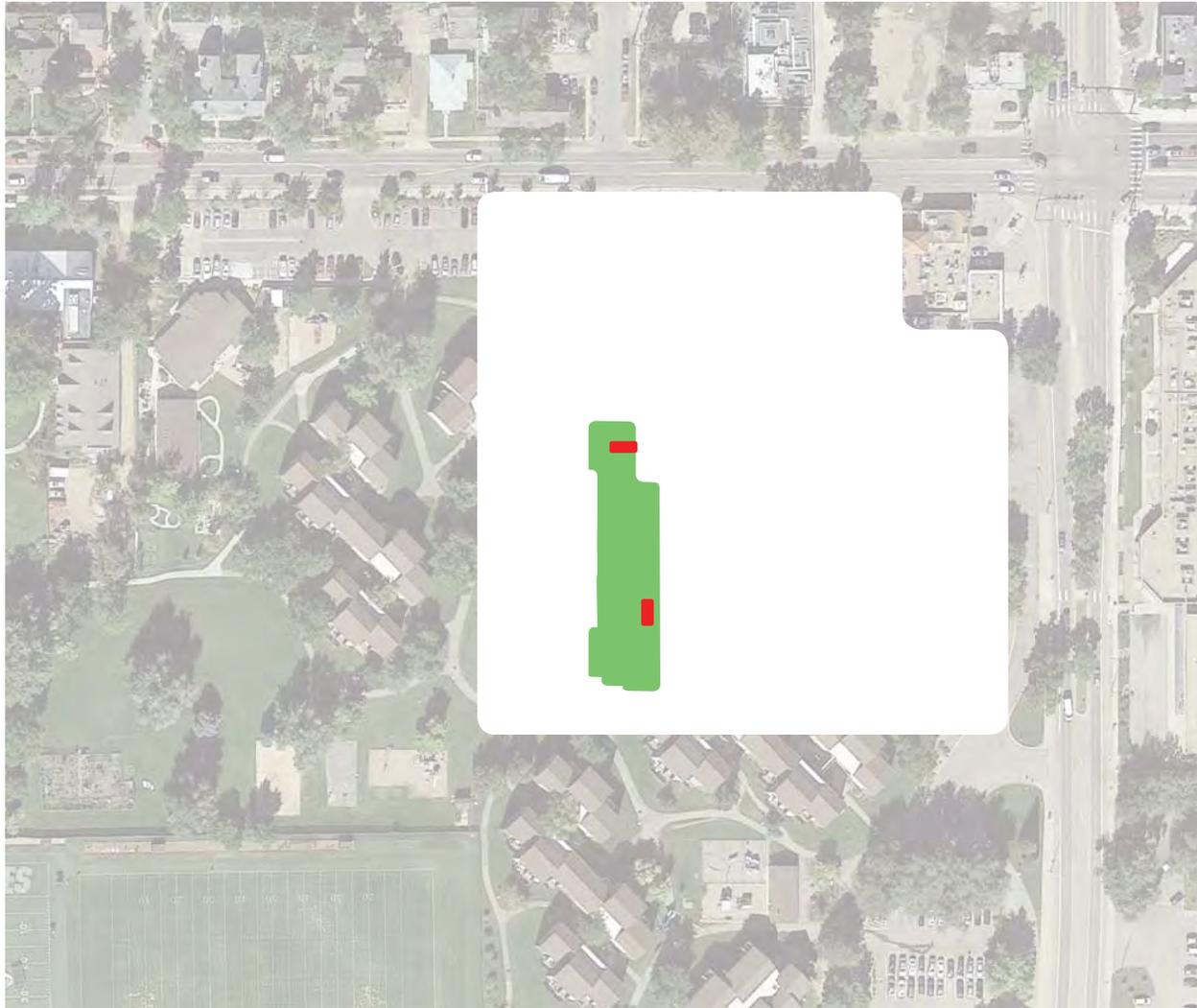
VI. Architectural  
Program Test Fit  
Folsom Test Fit  
Layout



- Guestrooms
- Vertical Circulation

Fourth Level  
+38'

VI. Architectural  
Program Test Fit  
Folsom Test Fit  
Layout



- Guestrooms
- Vertical Circulation

Fifth Level  
+49'

VII. Conceptual  
Statement  
of Probable  
Construction  
Costs

**Analysis of Cost Driver Variances Between Sites:**

## Analysis of On-Site Cost Driver Variance Between Sites:

This sheet summarizes the key cost drivers for constructing the "Center" on each site and compares estimated costs variances.

### Baseline Cost Analysis Assumptions

- Hotel / Conference Program the same between two sites
- No perceived hotel/conference operational cost difference between the two sites
- Probable Construction Cost - \$44 - \$48 million **(Hotel/Conference Buildings Only)**  
(Does not include site / parking cost drivers below nor soft costs)

VII. Conceptual Statement of Probable Construction Costs

Cost Drivers Between Grandview / Folsom	Grandview	Folsom	Difference
<b>Site Demolition / Preparation</b>	\$3,720,000	\$2,243,000	= \$1,477,000
Site Clearance / Demolition	\$124,000	\$144,000	
Earthwork / Erosion Control	\$2,234,000	\$1,158,000	
Access Restrictions	\$354,000	\$0	
Groundwater Treatment	\$538,000	\$269,000	
Abatement	\$470,000	\$0	
Flood Protection	\$0	\$672,000	
<b>Site Improvements</b>	\$1,358,000	\$2,134,000	= \$776,000
Site Electrical	\$101,000	\$134,000	
Hardscaping	\$283,000	\$515,000	
Landscaping	\$362,000	\$708,000	
Miscellaneous Site Improvements	\$113,000	\$60,000	
Water Distribution	\$248,000	\$323,000	
Sanitary Sewer	\$68,000	\$63,000	
Storm Drainage	\$183,000	\$331,000	
<b>Courtyard Costs (Elevated vs. On-Grade)</b>	\$1,117,000	\$621,000	= \$496,000
(Due to below grade parking on Grandview)			

Cost Drivers Between Grandview / Folsom	Grandview	Folsom	Difference
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Facade/Building Upgrades	\$1,093,000	\$0	= \$1,093,000
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Grandview Connector Bridge	\$543,000		
Grandview Hotel Facade Premium	\$450,000		
Grandview Conference Facade Premium	\$100,000		

Parking	\$9,524,000	\$6,318,000	= \$3,206,000
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Foundations / Basement Excavation	\$2,091,000	\$931,000	
Vertical Structure / Basement Walls	\$1,250,000	\$688,000	
Floor and Roof Structures	\$2,704,000	\$1,901,000	
Exterior Cladding	\$187,000	\$335,000	
Roofing and Waterproofing	\$129,000	\$34,000	
Interior Partitions, Doors and Glazing	\$12,000	\$16,000	
Floor, Wall and Ceiling Finishes	\$59,000	\$64,000	
Function Equipment and Specialties	\$17,000	\$34,000	
Vertical Transportation	\$202,000	\$246,000	
Plumbing Systems	\$400,000	\$358,000	
HVAC	\$320,000	\$0	
Electrical	\$1,804,000	\$1,398,000	
Fire Protection	\$349,000	\$313,000	

*Note: HVAC system at Grandview parking is anticipated to perform as a mechanically ventilated garage due to it being below grade. Due to it being located above ground, the Folsom parking is anticipated as a naturally ventilated garage.*

Overall Cost Driver Variance	\$16,812,000	\$11,315,000	= \$5,497,000
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### Additional Costs

*Reference cost of lost parking on Grandview (see page 136)*

*Note: This total does not reflect the additional cost to replace the lost housing units at the Folsom site which is estimated for the purposes of this study at \$225/sf-\$275/sf. Nor does it take in account cost for abatement and demo.*

*Note: Projected ADR Increase at Grandview*

VII. Conceptual Statement of Probable Construction Costs

## Analysis of Off-Site Cost Driver Variance Between Sites:

Off-site costs included below reflect current understanding of existing / proposed future conditions at the time of report submission. At the Grandview site, off-site costs reflect general above grade upgrades to Grandview Ave and 13th street and a connection to a future 13th street City bikeway. At the Folsom site, off-site costs include the complete above grade and below grade infrastructure for Marine Street and 22nd Street as deemed necessary for the Center viability. This includes detached sidewalks and utility mains.

VII. Conceptual Statement of Probable Construction Costs

Cost Drivers Between Grandview / Folsom	Grandview	Folsom	=	Difference
<b>Off Site Improvements (Below Grade)</b>	\$267,000	\$1,044,000	=	\$777,000
Concrete Walks /Retaining Walls Street Cut & Repair Storm Utilities Erosion Control				
<b>Off Site Improvements (Above Grade)</b>	\$260,000	\$601,000	=	\$341,000
Roadways Intersections Hardscaping Landscaping Miscellaneous Site Improvements				
<b>Utility Plant Investment Fees (PIF)</b>	\$1,106,000	\$1,222,000	=	\$116,000
Stormwater Connection Water Connection Sanitary Sewer Connection Irrigation Connection				
<b>Total Off-Site Improvement Costs</b> (Improvements necessary for / or will be triggered by Center development)	\$1,633,000	\$2,867,000	=	\$1,234,000

## Cost Analysis of Repurposing 1416 Broadway - Grandview Site

VII. Conceptual Statement of Probable Construction Costs

	Added Cost Increment (beyond baseline probable building construction cost)	
	Reposition On-Site	Maintain Location
Sitework	\$218,000	\$130,000
Hotel	\$360,000	\$650,000
Building Preservation	\$360,000	\$360,000
Church TI	\$505,000	\$505,000
Parking	\$62,000 (new foundation)	\$1,600,000
Cost of Moving Structure (onsite)	\$550,000	
Additional Cost of Moving Structure (w/temp location on-site during construction)	\$100,000+	
<b>Total:</b>	<b>\$2,155,000</b>	<b>\$3,245,000</b>

Relocation of structure off-site was not considered at this time due to:

- Cutting the building in half along the ridge would create an asymmetrical load. Asymmetrical loading makes moving such a structure extremely difficult/expensive.
- Because the building is through wythe masonry construction, reconnecting the masonry is not always successful.

## ROM cost for replacing displaced parking at Grandview Site

Total spaces displaced onsite: approx. 138 spaces

ROM surface parking @ \$8,000/space = \$1,104,000

ROM cost above grade structure @ \$30,000/space = \$4,140,000

ROM below grade structure @ \$40,000/space = \$5,520,000

*\*Note: Does not include land cost*

### VII. Conceptual Statement of Probable Construction Costs



End of Report