



**CITY OF BOULDER**  
**PLANNING BOARD MEETING AGENDA**  
**DATE:** June 4, 2015  
**TIME:** 5 p.m.  
**PLACE:** 1777 Broadway, Council Chambers

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**1. CALL TO ORDER**

**2. APPROVAL OF MINUTES**

The [May 7, 2015](#) Planning Board meeting minutes are scheduled for approval.

**3. PUBLIC PARTICIPATION**

**4. DISCUSSION OF DISPOSITIONS, PLANNING BOARD CALL-UPS/CONTINUATIONS**

- A. [Information Item](#): Floodplain mapping revisions for Skunk Creek, Bluebell Canyon Creek and King's Gulch

**5. PUBLIC HEARING ITEMS**

- A. [Public hearing and Concept Plan Review](#) of a proposal for the expansion and renovation of an existing automobile sales and service facility at 2465 48<sup>th</sup> Court (Larry H. Miller Toyota), Case No. LUR2015-00026. Proposal includes various site improvements and an approximately 28,500 square foot addition to the north (rear) side of the building, which requires merging the two existing parcels.

Applicant: Alexandra Schuchter, John Mahoney Architects  
Property Owner: Miller Family Real Estate LLC

**6. MATTERS FROM THE PLANNING BOARD, PLANNING DIRECTOR, AND CITY ATTORNEY**

- A. [Update and Feedback from the Planning Board on the Form-Based Code \(FBC\) pilot project](#) in Boulder Junction and receive input from the board on the following:

1. Draft Guiding Principles for the pilot FBC area in Boulder Junction (prepared by CodaMetrics).

B. Boulder Valley Comprehensive Plan Briefing

C. [Community Cultural Plan Update](#)

**7. DEBRIEF MEETING/CALENDAR CHECK**

**8. ADJOURNMENT**

**CITY OF BOULDER PLANNING BOARD  
MEETING GUIDELINES**

**CALL TO ORDER**

The Board must have a quorum (four members present) before the meeting can be called to order.

**AGENDA**

The Board may rearrange the order of the Agenda or delete items for good cause. The Board may not add items requiring public notice.

**PUBLIC PARTICIPATION**

The public is welcome to address the Board (3 minutes\* maximum per speaker) during the Public Participation portion of the meeting regarding any item not scheduled for a public hearing. The only items scheduled for a public hearing are those listed under the category PUBLIC HEARING ITEMS on the Agenda. Any exhibits introduced into the record at this time must be provided in quantities of ten (10) to the Board Secretary for distribution to the Board and admission into the record.

**DISCUSSION AND STUDY SESSION ITEMS**

Discussion and study session items do not require motions of approval or recommendation.

**PUBLIC HEARING ITEMS**

A Public Hearing item requires a motion and a vote. The general format for hearing of an action item is as follows:

**1. Presentations**

- a. Staff presentation (5 minutes maximum\*)
- b. Applicant presentation (15 minute maximum\*). Any exhibits introduced into the record at this time must be provided in quantities of ten (10) to the Board Secretary for distribution to the Board and admission into the record.
- c. Planning Board questioning of staff or applicant for information only.

**2. Public Hearing**

Each speaker will be allowed an oral presentation (3 minutes maximum\*). All speakers wishing to pool their time must be present, and time allotted will be determined by the Chair. No pooled time presentation will be permitted to exceed ten minutes total.

- Time remaining is presented by a Green blinking light that means one minute remains, a Yellow light means 30 seconds remain, and a Red light and beep means time has expired.
- Speakers should introduce themselves, giving name and address. If officially representing a group, homeowners' association, etc., please state that for the record as well.
- Speakers are requested not to repeat items addressed by previous speakers other than to express points of agreement or disagreement. Refrain from reading long documents, and summarize comments wherever possible. Long documents may be submitted and will become a part of the official record.
- Speakers should address the Land Use Regulation criteria and, if possible, reference the rules that the Board uses to decide a case.
- Any exhibits introduced into the record at the hearing must be provided in quantities of ten (10) to the Secretary for distribution to the Board and admission into the record.
- Citizens can send a letter to the Planning staff at 1739 Broadway, Boulder, CO 80302, two weeks before the Planning Board meeting, to be included in the Board packet. Correspondence received after this time will be distributed at the Board meeting.

**3. Board Action**

- d. Board motion. Motions may take any number of forms. With regard to a specific development proposal, the motion generally is to either approve the project (with or without conditions), to deny it, or to continue the matter to a date certain (generally in order to obtain additional information).
- e. Board discussion. This is undertaken entirely by members of the Board. The applicant, members of the public or city staff participate only if called upon by the Chair.
- f. Board action (the vote). An affirmative vote of at least four members of the Board is required to pass a motion approving any action. If the vote taken results in either a tie, a vote of three to two, or a vote of three to one in favor of approval, the applicant shall be automatically allowed a rehearing upon requesting the same in writing within seven days.

**MATTERS FROM THE PLANNING BOARD, DIRECTOR, AND CITY ATTORNEY**

Any Planning Board member, the Planning Director, or the City Attorney may introduce before the Board matters which are not included in the formal agenda.

**ADJOURNMENT**

The Board's goal is that regular meetings adjourn by 10:30 p.m. and that study sessions adjourn by 10:00 p.m. Agenda items will not be commenced after 10:00 p.m. except by majority vote of Board members present.

\*The Chair may lengthen or shorten the time allotted as appropriate. If the allotted time is exceeded, the Chair may request that the speaker conclude his or her comments.

**CITY OF BOULDER**  
**PLANNING BOARD ACTION MINUTES**  
**May 7, 2015**  
**1777 Broadway, Council Chambers**

A permanent set of these minutes and a tape recording (maintained for a period of seven years) are retained in Central Records (telephone: 303-441-3043). Minutes and streaming audio are also available on the web at: <http://www.bouldercolorado.gov/>

**PLANNING BOARD MEMBERS PRESENT:**

Aaron Brockett, Chair  
Bryan Bowen  
Crystal Gray  
John Putnam  
John Gerstle  
Leonard May  
Liz Payton

**PLANNING BOARD MEMBERS ABSENT:**

**STAFF PRESENT:**

Hella Pannewig, Assistant City Attorney  
Susan Meissner, Administrative Assistant III  
Charles Ferro, Development Review Manager for CP&S  
Elaine McLaughlin, Senior Planner  
David Thompson, Civil Engineer- Traffic

**1. CALL TO ORDER**

Chair, **A. Brockett**, declared a quorum at 6:03 p.m. and the following business was conducted.

**2. APPROVAL OF MINUTES**

On a motion by **C. Gray** and seconded by **J. Putnam** the Planning Board approved 7-0 the August 28, 2014 minutes.

**3. PUBLIC PARTICIPATION**

1. **Dean Dinair, 1507 Bluebell Avenue**, thanked Sloane Walbert for explaining the Bluebell project to him. He wanted to assure that the project is sensitive to the neighborhood character. He also felt that the limits for subdivision should be limited.

#### **4. DISCUSSION OF DISPOSITIONS, PLANNING BOARD CALL-UPS/CONTINUATIONS**

- A.** Call Up Item: USE REVIEW to establish a 1,605 square foot restaurant, "Troovi Eatery & Juice Bar" in currently unoccupied retail space at Solana Apartments 3060 Pearl Parkway under case no. LUR2015-00025. Expires May 8, 2015.
- B.** Call-Up Item: Minor subdivision review, case no. LUR2015-00008, for the creation of a second residential lot with frontage on 15th Street. Lot 1A to be 7,605 square feet and Lot 2A to be 7,404 square feet. This approval is subject to potential call-up on or before May 11, 2015.
- C.** Call-Up Item: NONCONFORMING USE REVIEW (LUR2015-00017): Request for an expansion to a nonconforming use to remodel the kitchen facilities at the Alpha Chi Omega house located at 1162 12<sup>th</sup> Street, including mechanical equipment and screening located on the building rooftop and associated ductwork within the rear yard setback. The project site is zoned Residential - High 5 (RH-5). The call-up period expires on May 15, 2015.

#### **Board Questions:**

- C. Gray** asked a question about item 4B.
- D. Thompson** answered board questions.

None of these items were called up.

#### **5. PUBLIC HEARING ITEMS**

- A. CONCEPT PLAN & REVIEW** - Proposed mixed-use development (Alexan Flatirons) located at McKenzie Junction, 3600 Highway 119 (Diagonal Highway), that includes 295 market-rate multi-family units, 83 affordable-rate multi-family units, associated community buildings and 54,000 SF of commercial office space (with options for partial retail and coffee shop). Reviewed under case no. LUR2015-00028.

Applicant: Bill Holicky  
Property Owner: Birch Mountain, LLC

#### **Staff Presentation:**

- C. Ferro** introduced the item.
- E. McLaughlin** presented the item to the board.

#### **Board Questions:**

- E. McLaughlin** answered questions from the board.
- D. Thompson** answered questions from the board.

#### **Applicant Presentation:**

**Bill Holicky**, the architect, presented the item to the board.

#### **Board Questions:**

**Bill Holicky**, the architect, answered questions from the board.

1. **Michael O’Keeffe, 4520 Nassan Place**, asked for clarification and spoke in opposition to the project. He did not feel that the location was conducive to residential for health and transportation reasons.
2. **David Williard, 3975 Dehesa Court**, expressed some concerns about this development. He supports affordable housing but noted that this is a loud area and is not a pleasant place to be. He did not think that people would use the proposed open space and would instead go to the park adjacent to his house. He thought it would put pressure on the existing community. He asked that the applicant put a playground into the complex in an area that would be utilized.
3. **Hunter Smith, 5105 Independence Rd**, is a neighbor and felt that this development would impact the rural character of the properties to the north and east. He was concerned about the impacts on traffic and noted that the intersection at Independence is a dangerous intersection; he recommended slowing traffic or adding a traffic light.
4. **John Harneg, 3880 N. 57<sup>th</sup> Street**, lives east of the development and expressed concerns regarding safety and traffic. The Intersection at Independence and the Diagonal is very dangerous. He thought the impact of the residential units and commercial space would be problematic. Traffic speeds are fast on Independence and 57<sup>th</sup> Street. The airport is close by and asked where this sits in relation to the flight path.
5. **Holly Hyatt Langdon, 3702 Star Lane**, expressed concerns about the impact of the views of open space and surrounding areas. She did not think that the community would be conducive to bike and bus connections for seniors. She felt that it was in a median and would not be a nice place to live.
6. **Jean Aschenbrenner, 4816 Baldwin Place**, noted that the train tracks will be loud for residents. She noted that the current traffic bottlenecks at that location and causes backups. She did not think that there would be sufficient space to expand the highway. Consider the cost of flood repairs to the open space area.
7. **Bob Murphy, 4075 N. 57<sup>th</sup> Street**, expressed concerns about the air traffic over that development. Other neighbors in the area already do not like the air traffic. He had traffic concerns as well; there are already traffic jams and this would add pressure to that area. He noted that there are many runners, cyclists and horses that use Independence Road; he wanted to assure the safety of all users.

#### **Board Comments:**

##### **Summary:**

- Board members did not find the proposed project to be entirely compliant with the BCVP.
- Residential use is allowed per the zoning but many board members did not feel that it was an appropriate use. Though not currently allowed, the board thought business industrial or other light commercial uses could be more appropriate given traffic, noise, siting and accessibility concerns.
- Members recommended that Open Space consider purchasing the property or rezoning it during the BVCP update.

- Some board members recommended that the site be considered for a park and ride. Others did not feel that would be an appropriate use given the existing traffic congestion.
- The edge conditions of the site are challenging. The board members felt that the proposed plan allowed for views of the Flatirons and liked that “soft” edge to the city.
- Move the historic well out into the open space on the site.

### **Detailed Comments:**

#### **Consistency with the BVCP and Land Use**

**J. Putnam** was unsure about this project as it has many contradictory cross currents. Though the current vacant state seems to provide a good edge, it is private property and allowed to be developed. Unless the city changes its mind about acquiring this property, they must allow for it to be developed. Service industrial uses, especially with the Kum and Go adjacent to the property, could be an appropriate use.

**L. May** did not think that the proposal was entirely consistent w the BVCP policies; it would be better suited as an infill project within the city. He agreed that service industrial uses might make better sense on the site. Given that it has a current land use designation, he didn’t think it was appropriate to say that nothing should be built there. He did not think that office space would be appropriate for the same reason as residential because it is a large traffic generator. He thought uses like service industrial with light traffic impacts were most appropriate.

**J. Gerstle** agreed that service industrial would be a better use for the site. He expressed concerns about senior housing given the transportation limitations for residents who may not drive. Though the residential use was granted by-right, he did not think that it met the BVCP intentions.

**A. Brockett** thought that this site would function best as open space and expressed concern about putting residential uses on this site. He did not think that this would be a good place to live given the fumes and noise from the two highways, trains and planes. He thought service industrial or office would be a better use for the site. He could possibly imagine a small amount of residential cloaked within other uses. Though there are bus stops, they are difficult to access and thought cyclists would not likely use the path regularly to run errands. Community Cycles did not advocate for this proposal.

**B. Bowen** felt warmer to the site than the others. He used to commute by bike through this site and understood why cycling could be a theme for the project and the way to tackle residential on this site.

**C. Gray** thought that the applicant did a good job with a tough site but did not think the predominant use should be residential. She worried that it would not be a liveable place for residents and felt the site was isolated on an island. She would prefer to see commercial uses and buffer the site as has been proposed.

**L. Payton** appreciated the staff memo and wanted to incorporate staff's concerns into her comments without reiterating them. She noted that when a development was last proposed on this site, the Planning Board said it was uninhabitable. The Dr. Cogg report said that the traffic will increase considerably in the future and habitability will get worse. She did not think that the residents would open windows or go out to use the open space.

### **Edge Conditions**

**J. Putnam** felt that the site is challenged, but he did not consider this to be a median. He did not think that a park and ride would be appropriate in this location as the traffic was already problematic. He thought that the McKensie well should be sited to stand out by itself in the field. This could serve as an historical reminder of fossil fuel use.

**L. May** thought a natural edge to the city would be most effective and suggested that the city should buy this site.

**J. Gerstle** thought that a park and ride or rest station would be a good use and was worth considering in conjunction with service industrial.

**A. Brockett** agreed with the applicant that the view of the Flatirons should be the gateway, but thought the proposal was less of a gateway and more of an edge. Keep it subtle to let the views of the Flatirons be the edge. He cited the large art project at the entry point to Longmont. Something of that nature could be incorporated on this site.

**B. Bowen** agreed that softer edge to town was more appropriate than a large and powerful building. Small houses make good edges from rural highways. The gateway is the view to the flatirons.

**C. Gray** liked the landscape concept but felt that it would be more natural to continue the softer edge from Four Mile Creek. She did not think that iconic architecture was appropriate and noted that it is unlikely that the city would purchase the site for open space; the city's policy is not to buy Area 1 properties due to cost.

### **Residential Use**

**J. Putnam** noted that there are other residential sites that have higher noise loads and asked that the applicant address acoustic considerations through design. This will be a rental property and therefore will likely have a higher tolerance for noise. He asked the applicant to return with noise levels in terms of LEQ and day/night levels integrating the train and aircraft considerations. His largest concern about residential uses on this site pertained to the islanding effect. Bike connections could help. Use alternate transit data to show that the site will not be isolated.

**A. Brockett** thought this site would always be predominantly accessed by cars. Consider incorporating retail that is predominantly accessed by car, i.e. washing machine vendors.

**B. Bowen** agreed that the site could be good for other uses with less traffic and trips. He thought the proposed neighborhoods functioned well without the open space within them as mountains and views work as open space.

**C. Gray** thought transition and office uses would be okay for the property but expressed concern about residential use. Some office uses generate less traffic than others. Keep bike connection concept. Don't underestimate Boulder bikers and where they'll ride.

**L. Payton** felt that the site should be used as a well designed rest stop as opposed to residential. Incorporate interpretive signage with the history of the oil rig, Diagonal Highway, etc. Consider AMPS goals as well; this could be a site for well-designed parking outside of the city to connect to bus service. She felt that the site is a median; the continuity of the median from Boulder to Longmont is important

### **Transportation and Access**

**J. Putnam** requested that the applicant provide an intense traffic analysis with a TDM plan that includes a large amount of alternate modes and traffic generation potential. Look at planned improvements to sidewalks and access. Include vehicle charging infrastructure. He liked the proposed bike and locker infrastructure.

**A. Brockett** noted that the proposed underpass is critical and important.

**B. Bowen** noted that the traffic concerns were important and questioned what the surrounding roads will be like in the future. Look at means for mitigating and funneling traffic. Have good retail exposure and mental mapping for parking. Look at simplifying traffic circulation specifically driving through retail to get to residential areas and the absence of a left hand turn onto Jay Road. Work with the County to add infrastructure connections through adjacent open space.

**C. Gray** wanted to see a vibrant TDM plan and possible Eco Passes through she noted that bus access is difficult from this site.

**L. Payton** requested that the applicant provide an analysis of the expected traffic on all adjacent roads in the future, not just traffic to and from the development.

### **Other Comments**

**B. Holicky**, the applicant, noted that service industrial and some of those uses discussed by the Planning Board are not currently allowed on this site.

**L. May** recommended that the BVCP update consider this parcel and make other uses allowable. He did not feel that the current land use and zoning are appropriate for this parcel because of its isolation and location between highways.

## 5. MATTERS FROM THE PLANNING BOARD, PLANNING DIRECTOR, AND CITY ATTORNEY

- The Planning Board will meet at 5 p.m. before the next meeting to discuss findings from the APA conference.
- **Brockett** mentioned that staff might consider a two night hearing for the SPARK project.
- BDAB would like feedback from the Planning Board where they would be the most useful.
- **B. Bowen** noted that it is difficult for the Planning Board to make changes to architecture during site review; it could be appropriate to send such items to BDAB and to clarify their focus areas.
- **L. May** thought it would be valuable for BDAB to focus on the architecture. There have been times that projects went to BDAB before they came to Planning Board and there were problems with discrepancies in feedback/opinions. He thought it would be better for projects to go to BDAB after Concept Review and before Site Review. That would allow the boards to work together better. He thought Design Review on Landmarks Board works well and suggested instating a similar process utilizing BDAB.
- **A. Brockett** requested that BDAB concentrate on architecture and refrain from commenting on use, scale and mass.
- **C. Gray** agreed and asked that BDAB also address public realm.
- **L. May** noted that he and **C. Gray** are on the Housing Process Committee. Council is interested in having a similar committee for the Comp Plan update. Reserve space to discuss this at the June agenda.

## 6. DEBRIEF MEETING/CALENDAR CHECK

## 7. ADJOURNMENT

The Planning Board adjourned the meeting at 8:22 p.m.

APPROVED BY

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Board Chair

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DATE

## MEMORANDUM

**TO:** Planning Board

**FROM:** Katie Knapp, Engineering Project Manager, Public Works, Utilities

**DATE:** May 21, 2015

**SUBJECT:** **Information Item:** Floodplain mapping revisions for Skunk Creek, Bluebell Canyon Creek and King's Gulch

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Floodplain mapping provides the basis for the city's floodplain management program by identifying the areas at the highest risk for flooding. Changes in land use, updated topographic mapping and upgrades to hydrologic and hydraulic models warrant periodic mapping updates.

On May 18, 2015 the Water Resources Advisory Board (WRAB) recommended City Council approval of the proposed Skunk Creek, Bluebell Canyon Creek and King's Gulch floodplain mapping revisions. Information about the proposed changes is included in the WRAB Agenda Memo ([Attachment A](#)).

The proposed floodplain map revision will be considered by City Council on July 21, 2015. If City Council approves the map revision, the city will submit a request to FEMA for review and approval.

Following formal adoption by FEMA, the city would regulate solely based on the new mapping. However, during the FEMA review and approval process (2-4 years) it is recommended that development within the newly identified flood zones be subject to city floodplain regulations. In order to comply with FEMA requirements, development within the areas that are being removed from the floodplain would still be subject to the city's floodplain regulations until FEMA officially adopts the new floodplain mapping.

Although the proposed mapping is not currently regulatory, the Planning Board should be aware of the proposed changes and how the new floodplain mapping may impact any current projects under review.

Questions regarding these floodplain mapping revisions should be directed to Katie Knapp in Public Works, Utilities at 303-441-4077 or [knappk@bouldercolorado.gov](mailto:knappk@bouldercolorado.gov).

Attachments:

A. [WRAB Agenda memo](#)

**CITY OF BOULDER  
WATER RESOURCES ADVISORY BOARD  
AGENDA ITEM**

**MEETING DATE: May 18, 2015**

**AGENDA TITLE:** Public hearing and consideration of a recommendation to City Council regarding the Skunk Creek, Bluebell Canyon Creek and King's Gulch Floodplain Mapping Update

**PRESENTER/S:**

Jeff Arthur, Director of Public Works for Utilities  
Annie Noble, Acting Principal Engineer for Flood and Greenways  
Katie Knapp, Engineering Project Manager

**EXECUTIVE SUMMARY**

Floodplain mapping provides the basis for flood management by identifying the areas at the highest risk of flooding. This information is essential for determining areas where life safety is threatened and property damage is likely and is the basis for floodplain regulations and the National Flood Insurance Program (NFIP). The city's floodplain maps need to be periodically updated to reflect changes in the floodplain resulting from land development, flood mitigation improvements, new topographic mapping information and new mapping study technologies.

The Skunk Creek Floodplain Mapping Update includes the King's Gulch, Skunk and Bluebell Canyon Creek floodplains between the city limits to east of Foothills Parkway where Skunk Creek confluent into Bear Canyon Creek as shown in red below.



Engineering consultants provided hydraulic modeling to update the existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) and City of Boulder floodplains, water surface elevations, conveyance and high hazard zones.

The proposed mapping of the Skunk Creek Floodplain would result in a net:

- Increase of 38 structures identified in the 100-year floodplain;
- Decrease of 22 structures identified in the conveyance zone and;
- Decrease of 19 structures identified in the high hazard zone.

### **STAFF RECOMMENDATION:**

Staff requests Water Resources Advisory Board consideration of this matter and action in the form of the following motion:

Motion to recommend that City Council adopt the Skunk Creek, Bluebell Canyon Creek and King's Gulch floodplain mapping update.

### **COUNCIL FILTER IMPACTS:**

- **Economic:** Flood insurance is required for properties located in the 100-year floodplain if they are financed by a federally-backed mortgage. Flood insurance rates are set by FEMA based on the flood risk as shown on the flood insurance rate maps. Accurate floodplain mapping helps facilitate accurate flood insurance rates. The average annual rate for flood insurance within the city in 2014 was \$760 (3,830 policies), including “preferred risk” policies for structures outside of the 100-year floodplain. Flood protection land use regulations also create costs for property owners in the form of permit fees, increased costs of remodeling, and restrictions on development. Flood insurance and land use regulations do, however, provide protection from potentially catastrophic losses due to floods.
- **Environmental:** Flood events can result in damage or destruction to buildings and corresponding release of man-made contaminants. Flood waters can also cause erosion and damage to areas of the natural environment that are not capable of conveying high-velocity stormwater. Updated flood mapping more accurately identifies the areas with the greatest flooding risks and potential mitigation opportunities.
- **Social:** Floodplain mapping provides the basis for flood management by identifying the areas subject to flooding. This information is essential for determining areas where life safety is threatened and property damage is likely. Land use regulations help reduce risks to people and property in these high flood-risk areas. Accurate mapping of flood risks also helps implement effective flood preparedness and response programs, thereby increasing the safety of people living, working or visiting the City of Boulder.

### **OTHER IMPACTS:**

- **Fiscal:** Funding for this study is included in the Department of Public Works Utilities Division budget.

- **Staff Time:** Time for completing the study is included in existing work plans.

## **BOARD AND COMMISSION FEEDBACK**

The Skunk Creek, Bluebell Canyon Creek and King's Gulch floodplain mapping was first presented to the WRAB as an information item on August 18, 2014. The board requested that staff continue to work with the public to inform them about the proposed floodplain mapping and address comments and concerns. It was also requested that information about FEMA's Letter of Map Amendment (LOMA) process be made available on the city's website. In response to the WRAB's feedback, staff worked with the public and will continue to send out notification letters and postcards. Information about FEMA's LOMA process has also been included on the project website and on the city's general website about floodplain mapping.

The floodplain mapping was then presented to the WRAB on September 15, 2014. At the time of the WRAB meeting, additional refinements were being done to the mapping. The WRAB passed the following motion with a vote of 3-2 (Clancy, Squillace opposed):

Motion to recommend that City Council adopt the Skunk Creek floodplain mapping update including potential additional refinements made prior to Council's consideration and with the understanding that should such additional refinements result in substantial modifications to affected properties, that WRAB would have the opportunity to review the results prior to Council's review.

The opposition expressed a concern that an additional peer review should be conducted for the work completed by Icon Engineering.

Icon Engineering had completed an initial peer review for the project in 2013 when the mapping study was being done by Belt Collins. To address the boards concerns, a second peer review was completed in January, 2015 by a third party consultant, Anderson Consulting Engineers, Inc. The peer review comments are included as **Attachment A**. In response to the peer review comments, additional clarifications and minor revisions were made to the study as described in **Attachment B**.

After WRAB considers the mapping update, it will be provided to the Planning Board as an informational item and presented to City Council for their consideration.

## **PUBLIC FEEDBACK**

Public notification post cards about the mapping update have been sent to all property owners in the study area and a project web site has been developed to provide information (<https://bouldercolorado.gov/water/skunk-creek-floodplain-mapping-update>).

An open house was held on August 18, 2014 immediately prior to the WRAB meeting to inform the public about the mapping update and hear comments and concerns about the study. Staff has also met with residents in person and responded to phone calls and emails. In general, most of the comments and questions have been about impacts to specific properties and requests for more detailed information such as proposed base

flood water elevations. There were also concerns about the high hazard zone delineations and the distribution of the Bluebell Canyon Creek split flow paths downstream of 15<sup>th</sup> St. In response to the public feedback, the high hazard zone delineations have been re-evaluated and refined. The flow distribution at 15<sup>th</sup> Street has also been reviewed. A summary of the public feedback is provided in **Attachment C**.

## **BACKGROUND**

The risk of flash flooding is an important issue for the City of Boulder primarily due to its location at the mouth of Boulder Canyon and other canyon creeks. Approximately 13 percent of the city is located within the 100-year floodplains of Boulder Creek and its 14 tributaries. Additional information about the city's floodplain management program, floodplain regulations and flood insurance can be found at: [Floodplain Management Overview](#).

The city delineates four flood zones as described below:

*500-year floodplain:* The 500-year floodplain delineates the flood limits resulting from a storm that has a 0.2 percent chance of occurring in any given year.

*100-year floodplain:* The 100-year floodplain delineates the flood limits resulting from a storm that has a one percent chance of occurring in any given year (26 percent chance over a 30-year mortgage).

*Conveyance zone:* The conveyance zone is defined as the areas in the floodplain that are reserved for the main passage of the entire 100-year flood flow when the 100-year floodplain is artificially narrowed until a maximum six-inch increase in flood water depth is created. This zone is delineated to allow development to occur up to the narrowed floodplain and still provide passage of 100-year storm flows.

*High hazard zone:* The high hazard zone defines the area of the floodplain where water depth and velocity pose a threat to life and safety. This area is delineated for areas in the floodplain where water depths are four feet or greater or where the water velocity multiplied by water depth equals or exceeds the number four.

Skunk Creek, Bluebell Canyon Creek, and Kings Gulch were first studied in 1987 by the consulting firm Greenhorne & O'Mara and the resulting Flood Hazard Area Delineation (FHAD) report included the delineation of the 100-year floodplain along these creeks. The Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) approved for these creeks were originally based on the 1987 FHAD and included a federally-regulated one-foot rise floodway. Since that time, both the City of Boulder and the State of Colorado have adopted a ½ foot rise floodway, which the City refers to as the Conveyance Zone.

In 1989, Love and Associates delineated the High Hazard Zone and City of Boulder Conveyance Zone (½ foot rise floodway). The delineations were based on the hydraulic models used in the 1987 FHAD.

On May 6, 1991, FEMA issued a Letter of Map Revision (LOMR) for Skunk Creek to incorporate the results of a channel improvement project. The limit of the LOMR was in the University of Colorado's Research Park, downstream of Colorado Avenue to just upstream of the confluence of Boulder Creek.

Several road-crossing structures for Skunk Creek have been improved since the regulatory floodplain was adopted in 1991. Culverts at Broadway and at 27th Way, crossings at Anderson Ditch and the cemetery maintenance road, and the low water crossing upstream of 27th Way were not included in the 1991 regulatory model, but were incorporated into the current mapping study.

The City initially contracted with Belt Collins to develop the updated floodplain maps but they closed their Boulder office in 2013. ICON Engineering provided a peer review of Belt Collin's 2011 initial study and was selected to complete the project.

In 2013, the city acquired state-of-the-art Light Detection and Ranging (LiDAR) technology to produce high-resolution topographic mapping. The new LiDAR mapping was compared to the 2003 topographic base mapping and areas showing substantial differences were updated in the hydraulic models.

In December, 2014, Anderson Consulting Engineers was selected to complete a peer review of the floodplain mapping study completed by ICON Engineering. The peer review comments are included as **Attachment A**. In response to the peer review comments, additional clarifications and minor revisions were made to the study as described in **Attachment B**.

## **ANALYSIS**

This mapping study updates the hydraulic models and flood hazard mapping for the 100-year floodplain, Conveyance and High Hazard Zones for the entire reach of Skunk Creek, including the King's Gulch, and Bluebell Canyon Creek tributaries.

A 2-dimensional hydraulic model was developed for the creek system to determine primary flow paths and split flow areas. Information from the 2-dimensional model was used as a "roadmap" to develop the conventional 1-dimensional hydraulic model used for the analysis.

The existing 100-year floodplain for Skunk Creek, King's Gulch and Bluebell Canyon Creek is primarily along the creek corridors and roadway areas with some spillage into surrounding properties. The proposed 100-year floodplain is more extensive than the existing mapping in most areas and bears resemblance to the September 2013 flood extents. The September 2013 flood extents were not used to delineate the floodplains but were used to check assumptions on flow paths. For Skunk Creek, King's Gulch and Bluebell Canyon Creek, the September 2013 flood extents are similar to the proposed floodplain mapping.

The existing Conveyance and High Hazard Zone mapping for Bluebell Canyon Creek and King's Gulch did not include a significant neighborhood area that has a history of flooding east of 15<sup>th</sup> Street. The proposed mapping extends the Conveyance and High Hazard Zones through this residential area to their confluence with Skunk Creek along Broadway. The proposed mapping also extends the Conveyance and High Hazard Zones for Skunk Creek north of Broadway to include more roadways, split flows and other areas not previously mapped.

The revised mapping indicates a greater flood risk area in the Skunk Creek Drainage Basin than was shown in the previous mapping. A majority of the structures newly identified as being at risk are located within the bounds of 15<sup>th</sup> Street to the east, Broadway to the west, Baseline to the north and King Avenue to the south.

The High Hazard Zone (HHZ) was initially delineated based solely on the 1-dimensional model results, which was the standard approach used in previous studies. Similar to the new approach taken for the Upper Goose Creek and Two-Mile Canyon Creek floodplain mapping study, the HHZ areas were re-evaluated by reviewing the 2-dimensional model results. The proposed mapping was revised to delineate HHZ only in areas where results from both the 2-dimensional and 1-dimensional models indicate HHZ areas. As a result, several of the HHZ areas were modified and some isolated pockets were eliminated.

**Attachment D** includes figures showing a comparison between existing and proposed floodplain mapping and how the mapping impacts existing structures.

### **NEXT STEPS:**

Following a recommendation of approval from the WRAB, the floodplain mapping study will be provided to the Planning Board as an informational item so that it can be considered for planning purposes. The study will also be considered by City Council for adoption. If City Council approves the study, the city will submit a request to FEMA for review. During the 2-4 year FEMA review and approval process, it is recommended that the new mapping be used for regulatory purposes by regulating to the more restrictive of the existing and proposed mapping. This would mean that development within the newly identified flood zones would be subject to the city floodplain regulations. In accordance with FEMA requirements, development within areas being removed from the floodplain are subject to the city's floodplain regulations until FEMA officially adopts the new floodplain mapping. Following formal adoption by FEMA, the city would regulate solely based on the new mapping.

### **ATTACHMENTS**

- A. Peer Review Memo dated Feb. 5, 2015
- B. Response to Peer Review Apr. 27, 2015
- C. Public Comments
- D. Existing and Proposed Floodplain Maps

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# MEMORANDUM



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**DATE:** February 5, 2015 **ACE PROJECT NO.:** COBLDR16  
**TO:** Katie Knapp, City of Boulder Planning and Development Department  
**FROM:** Brian Van Zanten, Anderson Consulting Engineers, Inc. *BLV*  
Greg Koch, Anderson Consulting Engineers, Inc. *GTK*  
**SUBJECT:** Peer Review – Skunk Creek, Bluebell Canyon Creek, and King’s Gulch Request for Physical Map Revision Report, Boulder, Colorado

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## Report/Peer Review Summary

Anderson Consulting Engineers, Inc. (ACE) has completed our peer review of the report entitled "Skunk Creek, Bluebell Canyon Creek, and King’s Gulch, Request for Physical Map Revision (PMR)," ICON Engineering, Inc., draft, August 1, 2014. The City of Boulder (COB) contracted with ACE to perform the current peer review which focuses on minor hydrologic adjustments, hydraulic modeling and techniques, and flood hazard delineations, including 100-year, 500-year, conveyance zone (CZ), and high hazard zone (HHZ) limits. This report is requesting a Physical Map Revision (PMR) for Skunk Creek, Bluebell Canyon Creek, and King’s Gulch.

ICON provided ACE with the PMR report, along with all associated hydraulic models and flood hazard mapping in GIS format. Effective FHAD hydrology for Bluebell Canyon Creek and King’s Gulch as well as effective FEMA hydrology for Skunk Creek were compiled as part of ICON’s study. ICON interpolated 25-year discharge values for all three drainages and extrapolated the 500-year discharges for Bluebell Canyon Creek and King’s Gulch. Additional flow change locations were added along each stream in order to further refine existing discharge profiles.

Effective hydraulics on Skunk Creek (downstream study limit to downstream side of King Avenue) were also compiled. Skunk Creek upstream of this location as well as Bluebell Canyon Creek and King’s Gulch are currently approximate studies. Information related to current hydraulic modeling, including the use of boundary conditions, roughness coefficients, hydraulic structures (including assumed and updated blockage percentages for the current study), blocked obstructions, split flow modeling, and conveyance zone modeling were also included.

Due to the complexity of the hydraulic modeling, including the use of junctions, lateral structures, and the two-dimensional hydraulic model FLO-2D, numerous flow and convergence instabilities were encountered. As a result multiple geometry files were created, with each file specific to a specified discharge profile. In some instances hydraulic modeling software, such as HY-8, external to HEC-RAS was required in order to determine discharge/water surface elevation rating curves for select hydraulic structures.

Both a conveyance zone (CZ – aka 0.5-foot rise floodway) and high hazard zone (HHZ) mapping were also defined using HEC-RAS along all relevant flow paths for the 100-year event. The 10-, 25-, 50-, and 500-year discharges were also evaluated. Flood hazard mapping was completed on all streams including base flood elevations (BFEs), 100- and 500-year floodplain boundaries, CZ boundaries, and HHZ boundaries.

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## Comments and Recommendations

The following comments and recommendations are offered below, related to the report, hydraulic models, and flood hazard mapping.

### Report Text

- (1) On Page 6, Table 1, please change the location of Flow Change ID from 20<sup>th</sup> Street to 16<sup>th</sup> Street. Also, the 500-year discharge value appears to be incorrect at the upstream study limit (the table indicates a discharge of 50 cfs, which is lower than the 100-year discharge at this location). Please add a flow change location at Cross Section No. 4282 in order to account for the inflow from Node B\_2 from the FLO-2D analysis as well as providing some explanation as to how this value was determined.
- (2) On Page 8, the FHAD Design Point on the Skunk Creek outfall should be labeled "306" instead of "302".
- (3) On Page 9, Table 2 please change the River Station ID at Flow Change ID No. 1 from 4034 to 3841.
- (4) It is unclear as to why the 100-year discharge on King's Gulch is 14 cfs lower at the upstream study limit than at Bellevue Drive. It seems unlikely the discharge would change over this short distance. Consider maintaining the higher discharge at the upstream study limit for all return periods.
- (5) Please explain why the peak discharges are lower (approximately 8-9%) in the last line of Table 2 on page 9 than what is listed in the FHAD. For example, the 100-year discharge in King's Gulch is stated as 340 cfs in the table; the FHAD lists the 100-year discharge equal to 373 cfs.
- (6) The first paragraph on page 10 describing a hydrologic adjustment factor and the distribution of flows into the Skunk Creek model from Bluebell Canyon Creek and King's Gulch is confusing. We would recommend reviewing the effective HEC-1 model in order to ascertain the timing of the flows at confluences. For example, it appears as if the peak 100-year discharge between FHAD DP 301 and FHAD DP 302 should be between 640 and 710 cfs (based on the FHAD, the peak 100-year discharge of 640 cfs at FHAD DP 301 appears to include the King's Gulch drainage area; however, this should be verified). The model indicates the total flow coming from these two drainages to this point is approximately 900 cfs.
- (7) On Page 10, Table 3 of the report please change River Station ID from 11437 to 11847. It appears that Flow Change ID No. 2 was omitted when it should be included in the table as well. Please provide justification as to how the discharges were determined at FHAD DP 302. For consistency, the values in this row should not be bolded as they are not listed as being effective discharges. River Station 1022 associated with FHAD DP is located along Baseline Road and not the main Skunk Creek flow path. Please include a cross section in the table along Skunk Creek associated with the flow change. Please change Flow Change Location from "Upstream of 29<sup>th</sup> Street" to "Downstream of 29<sup>th</sup> Street". Please change the River Station ID from 5277 to 4497 and Flow Change Location from "Upstream of Euclid Avenue" to "Upstream of 34<sup>th</sup> Street".

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Also, to be consistent, the Flow Change ID No. 7 row should be bold and include all applicable 500-year discharges as they were included in the FIS.

- (8) On Page 16 in the first paragraph, the second to last sentence is not clear. Please revise this discussion to provide additional clarity.
- (9) On Page 18 in the first paragraph at the top of the page, revise “27<sup>th</sup> Street” to “27<sup>th</sup> Way”.
- (10) On Page 18, please consider revising the downstream boundary condition on the King’s Gulch reaches to normal depth to be consistent with the other flow paths. It is standard for FEMA to require using normal depth. The use of tailwater from receiving streams normally requires justification (which can simply be previous precedent).
- (11) On Page 28, the description of the hydraulic model from its upstream limit to 20<sup>th</sup> Street along Bluebell Canyon Creek does not describe how flows are able to split out to the east along the Mariposa-US-16<sup>th</sup> flow path. Also, the 500-year spill is mentioned upstream of 15<sup>th</sup> Street to the south along Mariposa Avenue, but not the 100-year spill. Junctions are mentioned at 16<sup>th</sup> and 17<sup>th</sup> Streets that distribute the flow; however, they do not appear to be present in the HEC-RAS model. Also, a majority of the flow is said to go north and east along Columbine; however, it appears a majority of flow heads east down Mariposa Avenue. Please revise the text as necessary.
- (12) On Page 28 under the “Baseline Spills” section, it states that flows are lost to the north along Baseline Road but return at the US-36 interchange in the Skunk Creek model. It does not appear that local topography would support this assumption. Please justify. Also, this 100-year spill appears to be approximately 90 cfs; a split flow path or shallow flooding zone may need to be defined for this spill.
- (13) On Page 29 under the “Broadway to Skunk Creek” section, the discussion regarding the adding in of flows to satisfy the hydrology of DP 212 is confusing. Please revise as necessary.
- (14) On Page 29 under the “Kings Gulch from the upstream limit to 20<sup>th</sup> Street” section, it mentions that the 500-year floodplain upstream of 15<sup>th</sup> Street includes Bellevue Drive from 15<sup>th</sup> Street to the Bellevue Drive culvert pipe. The 500-year floodplain mapping appears to be confined to the main channel in this reach. Please revise as necessary.
- (15) On Page 30 change any references from “22<sup>nd</sup> Avenue” to “22<sup>nd</sup> Street”.
- (16) On Page 31, the final paragraph describes how flow splits were determined for the 25-, 50-, and 500-year events into the NIST reach by pro-rating the 100-year spill along the right bank lateral structures. Please provide additional explanation for this assumption. Also, it states that the discharges were pro-rated down to Bluebell Avenue which is downstream of the NIST reach. Please provide clarification.

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- (17) Page 34 indicates the 100-year discharge was increased by 10 percent at Cross Section No. 7407 (increases from 1,350 cfs to 1,525 cfs, an increase of 175 cfs). Please provide justification for this increase. It is noted the FHAD hydrology indicates that not until Madison Avenue and 35<sup>th</sup> Street does the 100-year discharge increase by 520 cfs (1,350 cfs to 1,870 cfs).
- (18) On Page 35 under the “Wellman Canal” section at the bottom of the page, the second sentence is lengthy and confusing. Please revise to provide additional clarity.

## **Skunk Creek HEC-RAS Model**

- (1) The HEC-RAS model indicates the downstream boundary condition along the main flow path is normal depth. It appears that the culverts immediately downstream at Foothills Parkway could create backwater. Please consider moving the downstream cross section for the Skunk Creek model downstream of Foothills Parkway.
- (2) The lateral structures modeled along the left overbank immediately upstream of Foothills Parkway (12 total) are modeled using a weir coefficient of 2.4. The report states in Section 3.5.2 (page 36) that “weirs were coded...using a weir coefficient of 2.4 to reflect high backwater in the left overbank (Boulder Creek floodplain).” This assumes concurrent flood peaks. Please verify that these weir coefficients are reasonable.
- (3) Cross Section No. 1635 is being exceeded along the left overbank during the 100-year event. Consider placing a lateral structure(s) upstream and downstream of this cross section.
- (4) It appears that Lateral Structure No. 12535 (Reach 1.020-Innova, located along the left overbank between Cross Section Nos. 12550 and 12500) spills across the flow path into Reach 1.010-Inova, which is located along the right overbank. Please confirm this model configuration is appropriate. Please consider eliminating the lateral structure as the spill appears to be minimal and mapping the floodplain as a backwater area.
- (5) Both ends of Cross Section No. 12000 are being exceeded during the 100-year event. Please extend the endpoints of this cross section to contain the flow.
- (6) The cross sections along Innovation Drive between Discovery Drive and Colorado Avenue show 100-year water surface elevations exceeding the left overbank ground elevations. Please extend the left ends of the cross sections in order to contain the water surface elevation.
- (7) Cross sections between Euclid Avenue and Colorado Avenue along Skunk Creek do not appear to be perpendicular to flow streamlines; it appears as if two flow paths could be modeled through this area. Please review and revise if necessary.
- (8) There appear to be a number of areas that have limited or no use of blocked obstructions and/or ineffective flow areas. Rather, higher assumed n-values appear to have been used to represent the presence of flow obstructions. This is not consistent with other areas in the model and may influence the definition of the CZ and HHZ. Please review, along all flow paths, including Bluebell Canyon Creek and King’s Gulch, and explain or revise as necessary.

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- (9) The report (Table 3) indicates the total 100-year discharge at Cross Section No. 6517 should be 1,780 cfs; the model indicates a total flow coming to this point (before splits) of approximately 1,529 cfs. Also, the report (Table 3) indicates the 100-year discharge should be 2,230 cfs at Cross Section No. 4886; however, the FHAD indicates that this is the discharge at the outfall. Please revise as necessary.
- (10) The cross sections immediately upstream of 29<sup>th</sup> Street are very tightly spaced (within approximately five feet in the overbank). Please consider eliminating some of these cross sections, unless the spacing is necessary for modeling accuracy.
- (11) The flow path along Baseline Road crosses over the Skunk Creek hydraulic baseline, and the lateral spill along the right overbank spills back underneath Baseline Road. Please clarify the flow splits in this area.
- (12) Flows that split from Skunk Creek (334 cfs) south along U.S. Highway 36 are assumed to return to the creek north of Baseline Road. It appears that the local topography might preclude this from happening. Please review and revise as necessary. If this is justified, an additional flow path may be required to define this split.
- (13) The total 100-year discharge passing beneath Broadway on Skunk Creek is approximately 1,090 cfs. Was the timing of the hydrographs from FHAD Design Points 212 and 302 investigated in order to define this peak discharge? It appears the discharge at this point could be roughly between 1,200 and 1,300 cfs. Please explain or revise as necessary.
- (14) There are a number of lateral structures in the model that are not optimized. Please provide justification as to why these structures were not optimized (notes in the model are also recommended) and justification for the split flows that are represented.
- (15) There are a number of locations where discharges change across crossing structures. Please verify modeling results in these cases are appropriate. It is recommended that discharges remain constant through each crossing.

## **Bluebell Canyon Creek/King's Gulch HEC-RAS Model**

- (1) Lateral Structure No. 2450 (King's Gulch – Kings-US-17<sup>th</sup> Reach) should have the tailwater set at Cross Section No. 15814 instead of Cross Section No. 15731. Please revise as necessary.
- (2) It appears that split flow paths should be considered off of King Avenue along 18<sup>th</sup> and 19<sup>th</sup> Streets. Please review and add flow paths as required.
- (3) It appears that several cross sections along Bluebell Avenue east of 20<sup>th</sup> Street are angled downstream farther than would be consistent with lines of constant water surface elevation. Please re-orient these cross sections to be more perpendicular to the flow (this would apply to BFEs as well).

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- (4) Cross Section Nos. 1885, 1936, and 2055 along King's Gulch have Manning's n-values of 0.45. Please provide justification as to the use of such conservatively high values. Also, please refer to Comment No. 8 in the Skunk Creek HEC-RAS model comments section concerning the use of flow obstructions and physically representative n-values.
- (5) It appears as if there is a flow split occurring along the right overbank between Cross Section Nos. 5696 and 5828 (37 cfs toward Bellevue Drive) on Bluebell Canyon Creek; however, the discharge profile along Bluebell Canyon Creek does not reflect this reduction in flow. Please revise or explain as necessary.
- (6) Based on the flow split occurring between Cross Section Nos. 4282 and 4258 on the Bluebell Canyon Creek flow path, it appears to be reasonable that the flow change along Mariposa Avenue should occur at Cross Section No. 3141 (adjacent to Cross Section No. 4258) instead of at Cross Section No. 3081 (i.e., upstream of 15<sup>th</sup> Street). Please revise as necessary.
- (7) Cross sections in the vicinity of 20<sup>th</sup> Street and Columbine Avenue do not appear to be oriented perpendicular to the flow and, in some cases, cross over one another, or are nearly concurrent with one another. The 5440 BFE also crosses Cross Section No. 11998 on 20<sup>th</sup> Street. Please revise.
- (8) It does not appear that the discharge profile in the HEC-RAS model along Bluebell Canyon Creek matches the profile provided in the report. For example, the 100-year discharge along Mariposa Avenue just east of 19<sup>th</sup> Street is 273 cfs, and the discharge one block north along Columbine Avenue just east of 19<sup>th</sup> Street is 121 cfs. The total discharge at this point is 394 cfs, and according to the table, the discharge at Flow Change ID No. 3 should be 590 cfs. Please revise or explain as necessary.
- (9) The lateral structures along Baseline Road between 21<sup>st</sup> Street and Broadway are not optimized. Please explain how these splits are determined. Also, adding notes within the model is highly recommended.
- (10) The 100-year flow splits to the north from the main Bluebell Canyon Creek flow path to the upstream end of Columbine Avenue do not match. It appears as if there is 70 cfs splitting to the north (121 cfs to 51 cfs), while the Columbine flow path has 65 cfs. Please revise as necessary.
- (11) The flow is reduced from approximately 80 cfs to 20 cfs during the 100-year event between Cross Section Nos. 11100 and 11030 along Baseline Road. Is there a flow split occurring to the north? If so, please explain how the split was determined.
- (12) The 100-year flows at the intersection of Baseline Road and Broadway do not seem to maintain continuity. The model indicates there is approximately 20 cfs along Baseline Road both upstream and downstream of Broadway, whereas the upstream end of Broadway has 150 cfs, directly downstream of Baseline Road. The 100-year WSEL at Cross Section No. 14900 is also nearly 0.3 feet higher than at Cross Section No. 10725 immediately upstream. Please revise as necessary.

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- (13) The source of an additional 70 cfs along Broadway between Baseline Road and Columbine Avenue during the 100-year event is not apparent. Please explain.
- (14) According to the 100-year discharges in each reach, the total flow that could potentially reach Broadway (assuming no splits north off of Baseline Road and no splits south off of Mariposa Avenue toward Bluebell Avenue) is 616 cfs (Bluebell Canyon Creek only). Assuming that the split of 37 cfs off of Bluebell Canyon Creek onto Bellevue Drive should be accounted for, the total discharge would drop to 579 cfs. Table 1 indicates the total discharge should be 740 cfs. Please revise accordingly.
- (15) The residual 100-year discharge along Baseline Road is approximately 20 cfs, and the flows in front of the Basemar Shopping Center are approximately 41 cfs. The discharge east of this intersection is approximately 10 cfs rather than what would appear to be 61 cfs. Please explain or revise as necessary. Further downstream, the flows tie into the Skunk Creek model, and the flow at the upstream end of this reach (Cross Section No. 1548) is 225 cfs. It appears continuity may be an issue at this location. Please review and revise.
- (16) Cross Section Nos. 1570 and 1520 along Columbine Avenue have n-values for the street portion of the cross section of 0.1. Please provide justification for this roughness value or revise as necessary.
- (17) Cross Section No. 2793 has a negative surcharge (-0.2 ft) in the conveyance zone plan. Please revise as necessary.

## **Floodplain Workmaps**

- (1) According to the HEC-RAS model, 100-year flows begin spilling over the left overbank on the main Skunk Creek flow path downstream of Cross Section 1437. Figure 4.9 depicts the 100-year floodplain boundary extending past this point to Cross Section 1237. Please revise as necessary.
- (2) The 100- and 500-year floodplain mapping limits along the split flow path 1.020-Innova, in particular between Discovery Drive and Colorado Avenue, are mapped against adjacent structures. Please use the bare earth topography to map the floodplain limits.
- (3) General mapping note: BFEs need to be coincident with the 100-year floodplain limits as well as the associated contour elevation unless being tied to the DEM. As an example, BFE 5255 on Skunk Creek, immediately upstream of Cross Section No. 1968, extends past the 100-year floodplain limit (as well as the 5255 contour). Other examples include the 5590 BFE (King's Gulch; ties to the 5591 contour on one side) and the 5595 BFE (King's Gulch; extends past the 5595 contour on one side and doesn't reach it on the other).
- (4) The 5490 BFEs along Bluebell Avenue and King Avenue should tie to the floodplain limits and not extend into the shallow flooding area.
- (5) It appears that Shaded Zone X should be mapped between 19<sup>th</sup> Street and 22<sup>nd</sup> Street and Mariposa Avenue and Bluebell Avenue. Please review and revise as needed.

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- (6) There are a number of locations where cross section alignments intersect one another on differing flow paths, in particular at the intersection of King Avenue and Skunk Creek. Please orient the cross sections to not intersect.
- (7) The BFEs along and south of Columbine Avenue between 18<sup>th</sup> and 19<sup>th</sup> Streets are generally not parallel to the adjacent cross sections and some cross between flow paths. Also, as an example, the 5470 BFE is shown crossing the 5472 contour elevation. Please adjust as necessary.
- (8) A detailed floodplain with BFEs is mapped along Columbine Avenue between 20<sup>th</sup> Street and 22<sup>nd</sup> Street at a 100-year discharge of 13 cfs; however, a detailed floodplain is not mapped along Bellevue Drive and Mariposa Avenue upstream of 15<sup>th</sup> Street for a 100-year discharge of 37 cfs (mapped as Shaded Zone X). Please explain or revise as necessary.
- (9) The 100- and 500-year floodplain limits do not extend upstream through Cross Section No. 20270 on the Skunk Creek – 7.122 NIST S flow path. It appears as if there is a split occurring along the main Skunk Creek flow path into this flow path. Also, please add a gutter line between the Skunk 7.121 NIST N and 7.122 NIST S flow paths.
- (10) Please indicate that minor flows would leave the system east of the intersection of 29<sup>th</sup> Street and Baseline Road. One option would be to use dashed floodplain boundaries with a flow arrow heading east.
- (11) BFE 5335 at the intersection of 29<sup>th</sup> Street and Skunk Creek crosses two separate flow paths, crosses Cross Section 7489, and runs parallel to the flow split going north down 29<sup>th</sup> Street. BFEs 5300 and 5305 have similar orientation issues. Please revise as necessary.
- (12) Please show the 500-year floodplain boundary on the south side of Mariposa Avenue west of 19<sup>th</sup> Street.
- (13) Please add flow path identification on the work maps.



Planning



Design



Management

April 27, 2015

Ms. Katie Knapp, P.E.  
Engineering Project Manager  
Department of Public Works / Utilities Division  
1739 Broadway, 2<sup>nd</sup> Floor  
Boulder, Colorado 80302

**RE: Skunk Creek, Bluebell Canyon Creek, and King's Gulch Request for Physical Map Revision**

Dear Ms. Knapp,

This letter provides responses to the comments provided by Anderson Consulting Engineers as part of their peer review regarding the Skunk Creek, Bluebell Canyon Creek, and King's Gulch Request for Physical Map Revision – Hydraulic Report, dated August 1, 2014. A revised Hydraulic report will be provided under separate cover.

**Report Text**

- 1. On Page 6, Table 1, please change the location of Flow Change ID from 20<sup>th</sup> Street to 16<sup>th</sup> Street. Also, the 500-year discharge value appears to be incorrect at the upstream study limit (the table indicates a discharge of 50 cfs, which is lower than the 100-year discharge at this location). Please add a flow change location at Cross Section No. 4282 in order to account for the inflow from Node B\_2 from the FLO-2D analysis as well as providing some explanation as to how this value was determined.**

Table 1 has been updated. The 500-year discharge has been revised. A flow change occurs at cross section 4258 in order to account for the inflow from Node B\_2. Please note that the flow distribution between the Bluebell Canyon Creek and Mariposa Avenue has been determined by the 2D model. The B\_2 inflow value was determined by its relative contributing size within the full drainage basin (flows to design point 212 in the effective information).

- 2. On Page 8, the FHAD Design Point on the Skunk Creek outfall should be labeled "306" instead of "302".**

The label has been revised.

- 3. On Page 9, Table 2, please change the River Station ID at Flow Change ID No. 1 from 4034 to 3841.**

The table has been revised.

4. It is unclear as to why the 100-year discharge on King's Gulch is 14 cfs lower at the upstream study limit than at Bellevue Drive. It seems unlikely that discharge would change over this short distance. Consider maintaining the higher discharge at the upstream study limit for all return periods.

This was done to reflect reduced contributing area at the upstream limit of the study. Discharges have not been revised.

5. Please explain why the peak discharges are lower (approximately 8-9%) in the last line of Table 2 on page 9 than what is listed in the FHAD. For example, the 100-year discharge in King's Gulch is stated as 340 cfs in the table; the FHAD lists the 100-year discharge equal to 373 cfs.

This was done as part of the original project approach in order to address slight changes in contributing area between this study and the FHAD.

6. The first paragraph on page 10 describing a hydrologic adjustment factor and the distribution of flows into the Skunk Creek model from Bluebell Canyon Creek and King's Gulch is confusing. We would recommend reviewing the effective HEC-1 model in order to ascertain the timing of the flows at confluences. For example, it appears as if the peak 100-year discharge between FHAD DP 301 and FHAD DP 302 should be between 640 and 710 cfs (based on the FHAD, the peak 100-year discharge of 640 cfs at FHAD DP 301 appears to include the King's Gulch drainage area; however, this should be verified). The model indicates the total flow coming from these two drainages to this point is approximately 900 cfs.

The revised models have approximately 1098 cfs flowing into Skunk Creek from Bluebell Canyon Creek and King's Gulch. The total increase in discharge along Skunk Creek is 630 cfs as a result Bluebell Canyon Creek and King's Gulch. In order for the discharge along Skunk Creek to not exceed the effective hydrology, the flow increases along Skunk Creek were reduced in order to match the effective hydrology total discharges. This was done as described in the first paragraph on page 10.

7. On Page 10, Table 3 of the report please change River Station ID from 11437 to 11847. It appears that Flow Change ID No. 2 was omitted when it should be included in the table as well. Please provide justification as to how the discharges were determined at FHAD DP 302. For consistency, the values in this row should not be bolded as they are not listed as being effective discharges. River Station 1022 associated with FHAD DP is located along Baseline Road and not the main Skunk Creek flow path. Please include a cross section in the table along Skunk Creek associated with the flow change. Please change Flow Change Location from "Upstream of 29<sup>th</sup> Street" to "Downstream of 29<sup>th</sup> Street". Please change the River Station ID from 5277 to 4497 and Flow Change Location from "Upstream of Euclid Avenue" to "Upstream of 34<sup>th</sup> Street". Also, to be consistent, the Flow Change ID No. 7 row should be bold and include all applicable 500-year discharges as they were included in the FIS.

The table has been revised.

8. **On Page 16 in the first paragraph, the second to last sentence is not clear. Please revise this discussion to provide additional clarity.**

The text has been revised.

9. **On Page 18 in the first paragraph at the top of the page, revise “27<sup>th</sup> Street” to “27<sup>th</sup> Way”.**

The text has been revised.

10. **On Page 18, please consider revising the downstream boundary condition on the King’s Gulch reaches to normal depth to be consistent with the other flow paths. It is standard for FEMA to require using normal depth. The use of tailwater from receiving streams normally requires justification (which can simply be previous precedent).**

The starting water surface elevations for King’s Gulch have been revised to normal depth.

11. **On Page 28, the description of the hydraulic model from its upstream limit to 20<sup>th</sup> Street along Bluebell Canyon Creek does not describe how flows are able to split out to the east along the Mariposa-US-16<sup>th</sup> flow path. Also, the 500-year spill is mentioned upstream of 15<sup>th</sup> Street to the south along Mariposa Avenue, but not the 100-year spill. Junctions are mentioned at 16<sup>th</sup> and 17<sup>th</sup> Streets that distribute the flow; however, they do not appear to be present in the HEC-RAS model. Also, a majority of the flow is said to go north and east along Columbine; however, it appears a majority of flow heads east down Mariposa Avenue. Please revise the text as necessary.**

Report text has been revised.

12. **On Page 28 under the “Baseline Spills” section, it states that flows are lost to the north along Baseline Road but return at the US-36 interchange in the Skunk Creek model. It does not appear that local topography would support this assumption. Please justify. Also, this 100-year spill appears to be approximately 90 cfs; a split flow path or shallow flooding zone may need to be defined for this spill.**

The watershed boundary and spill flows north of Baseline Road were discussed with the City of Boulder and Belt Collins West, who initiated the mapping update. It was agreed that these flows would predominately return to Skunk Creek further downstream, closer to Aurora Avenue. However, the flows were requested by the City to be added back to Skunk Creek at the US-36 interchange to remain consistent with the current effective FEMA discharges at that location. This decision was believed to be consistent with past

input provided by both the City of Boulder and UDFCD. No additional revisions have been completed.

- 13. On Page 29 under the “Broadway to Skunk Creek” section, the discussion regarding the adding in of flows to satisfy the hydrology of DP 212 is confusing. Please revise as necessary.**

Report text has been revised.

- 14. On Page 29 under the “Kings Gulch from the upstream limit to 20<sup>th</sup> Street” section, it mentions that the 500-year floodplain upstream of 15<sup>th</sup> Street includes Bellevue Drive from 15<sup>th</sup> Street to the Bellevue Drive culvert pipe. The 500-year floodplain mapping appears to be confined to the main channel in this reach. Please revise as necessary.**

Report text has been revised.

- 15. On Page 30 change any references from “22<sup>nd</sup> Avenue” to “22<sup>nd</sup> Street”.**

Report text has been revised.

- 16. On Page 31, the final paragraph describes how flow splits were determined for the 25-, 50-, and 500-year events into the NIST reach by pro-rating the 100-year spill along the right bank lateral structures. Please provide additional explanation for this assumption. Also, it states that the discharges were pro-rated down to Bluebell Avenue which is downstream of the NIST reach. Please provide clarification.**

Based on the original modeling approach and discussions with the City, this method of split flow determination is considered reasonable. The text has been reviewed and revised to provide additional clarification.

- 17. Page 34 indicates the 100-year discharge was increased by 10 percent at Cross Section No. 7407 (increases from 1,350 cfs to 1,525 cfs, an increase of 175 cfs). Please provide justification for this increase. It is noted the FHAD hydrology indicates that not until Madison Avenue and 35<sup>th</sup> Street does the 100-year discharge increase by 520 cfs (1,350 cfs to 1,870 cfs).**

This reflects the previous modeling approach and provides a more gradual increase in discharge. No revisions have been made.

18. On Page 35 under the “Wellman Canal” section at the bottom of the page, the second sentence is lengthy and confusing. Please revise to provide additional clarity.

Report text has been revised.

### **Skunk Creek HEC-RAS Model**

19. The HEC-RAS model indicates the downstream boundary condition along the main flow path is normal depth. It appears that the culverts immediately downstream at Foothills Parkway could create backwater. Please consider moving the downstream cross section for the Skunk Creek model downstream of Foothills Parkway.

The downstream tie-in area with both Bear Creek and Boulder Creek has been revised. The HEC-RAS model now extends downstream of Foothills and ultimately to Boulder Creek using modeling taken from the pending Boulder Creek and Bear Creek studies.

20. The lateral structures modeled along the left overbank immediately upstream of Foothills Parkway (12 total) are modeled using a weir coefficient of 2.4. The report states in Section 3.5.2 (page 36) that “weirs were coded...using a weir coefficient of 2.4 to reflect high backwater in the left overbank (Boulder Creek floodplain).” This assumes concurrent flood peaks. Please verify that these weir coefficients are reasonable.

The weir coefficients have not been revised as they consider the backwater (from spill out of Skunk Creek – not from concurrent flood peaks) in the Boulder Creek overbank.

21. Cross Section No. 1635 is being exceeded along the left overbank during the 100-year event. Consider placing a lateral structure(s) upstream and downstream of this cross section.

Cross section 1635 has been revised to reflect the ground elevations at the top of the embankment. The cross section is now contained.

22. It appears that Lateral Structure No. 12535 (Reach 1.020-Innova, located along the left overbank between Cross Section Nos. 12550 and 12500) spills across the flow path into Reach 1.010-Innova, which is located along the right overbank. Please confirm this model configuration is appropriate. Please consider eliminating the lateral structure as the spill appears to be minimal and mapping the floodplain as a backwater area.

This configuration reflects the storm sewer system that collects discharges in the left overbank and then outfalls into the open channel on the east side of Innovation Drive. No revisions to the model have been made.

- 23. Both ends of Cross Section No. 12000 are being exceeded during the 100-year event. Please extend the endpoints of this cross section to contain the flow.**

Cross section 12000 has been revised and is now contained.

- 24. The cross sections along Innovation Drive between Discovery Drive and Colorado Avenue show 100-year water surface elevations exceeding the left overbank ground elevations. Please extend the left ends of the cross sections in order to contain the water surface elevation.**

This reach of innovation drive is bounded by large buildings on the left overbank. It is not necessary to extend the sections as the flow will be adequately contained by the structures.

- 25. Cross sections between Euclid Avenue and Colorado Avenue along Skunk Creek do not appear to be perpendicular to flow streamlines; it appears as if two flow paths could be modeled through this area. Please review and revise if necessary.**

This approach reflects the original modeling efforts. This area has also undergone a 2D confirmation of split flows that confirmed the original modeling approach.

- 26. There appear to be a number of areas that have limited or no use of blocked obstructions and/or ineffective flow areas. Rather, higher assumed n-values appear to have been used to represent the presence of flow obstructions. This is not consistent with other areas in the model and may influence the definition of the CZ and HHZ. Please review, along all flow paths, including Bluebell Canyon Creek and King's Gulch, and explain or revise as necessary.**

This approach was discussed with the City. With exception to areas where new modeling was developed, the original modeling approach was maintained.

- 27. The report (Table 3) indicates the total 100-year discharge at Cross Section No. 6517 should be 1,780 cfs; the model indicates a total flow coming to this point (before splits) of approximately 1,529 cfs. Also, the report (Table 3) indicates the 100-year discharge should be 2,230 cfs at Cross Section No. 4886; however, the FHAD indicates that this is the discharge at the outfall. Please revise as necessary.**

These discharge issues were reviewed and the application of the flow was not changed. The 2233 cfs total occurs somewhere between Madison Avenue and the confluence with Bear Creek. Given the presence of multiple split flow paths and the tributary basin partially located both north and south of Colorado Avenue, the total discharge values were considered reasonable.

- 28. The cross sections immediately upstream of 29<sup>th</sup> Street are very tightly spaced (within approximately five feet in the overbank). Please consider eliminating some of these cross sections, unless the spacing is necessary for modeling accuracy.**

This was done per the original modeling approach and will not be revised.

- 29. The flow path along Baseline Road crosses over the Skunk Creek hydraulic baseline, and the lateral spill along the right overbank spills back underneath Baseline Road. Please clarify the flow splits in this area.**

The right overbank spill will enter a multi-use trail underpass and flow north underneath Baseline Road.

- 30. Flows that split from Skunk Creek (334 cfs) south along U.S. Highway 36 are assumed to return to the creek north of Baseline Road. It appears that the local topography might preclude this from happening. Please review and revise as necessary. If this is justified, an additional flow path may be required to define this split.**

This reflects original project approach and is based on previous direction provided by the City of Boulder. This area was reviewed with the City, who elected to not add the additional flow path.

- 31. The total 100-year discharge passing beneath Broadway on Skunk Creek is approximately 1,090 cfs. Was the timing of the hydrographs from FHAD Design Points 212 and 302 investigated in order to define this peak discharge? It appears the discharge at this point could be roughly between 1,200 and 1,300 cfs. Please explain or revise as necessary.**

As a result of revisions to drainage basin B-2, there is a portion of that basin that contributes discharge to Skunk Creek downstream of Broadway. This contribution of approximately 293 cfs accounts for the noted discrepancy.

- 32. There are a number of lateral structures in the model that are not optimized. Please provide justification as to why these structures were not optimized (notes in the model are also recommended) and justification for the split flows that are represented.**

Some lateral structures were not optimized in order to get the model(s) to converge. Split flows that are represented are based on vertically extended cross sections and topography that indicates that the split flow would not immediately return to the main flow path.

- 33. There are a number of locations where discharges change across crossing structures. Please verify modeling results in these cases are appropriate. It is recommended that discharges remain constant through each crossing.**

In these areas it has been assumed that surface discharge will flow from the roadways and enter the channel on the downstream side of the crossing structure. For this reason it was common for discharges to change across crossing structures.

### **Bluebell Canyon Creek & King's Gulch HEC-RAS Model**

- 34. Lateral Structure No. 2450 (King's Gulch – Kings-US-17<sup>th</sup> Reach) should have the tailwater set at Cross Section No. 15814 instead of Cross Section No. 15731. Please revise as necessary.**

Discharge that flows through lateral structure no. 2450 will flow into cross section no. 15731. The model has not been revised.

- 35. It appears that split flow paths should be considered off of King Avenue along 18<sup>th</sup> and 19<sup>th</sup> Streets. Please review and add flow paths as required.**

The depth of flow that would travel north along 18<sup>th</sup> and 19<sup>th</sup> Streets is estimated to be less than 0.5 feet, which is consistent with the Zone X shaded designation that has been used in these areas. Additionally, these two flow paths were not identified during flooding in September 2013.

- 36. It appears that several cross sections along Bluebell Avenue east of 20<sup>th</sup> Street are angled downstream farther than would be consistent with lines of constant water surface elevation. Please re-orient these cross sections to be more perpendicular to the flow (this would apply to BFEs as well).**

Due to the split flows in this area and the ditch influence, the cross sections are aligned as best possible to facilitate reasonable floodplain delineation. The cross sections have not been revised.

- 37. Cross Section Nos. 1885, 1936, and 2055 along King's Gulch have Manning's n-values of 0.45. Please provide justification as to the use of such conservatively high values. Also, please refer to Comment No. 8 in the Skunk Creek HEC-RAS model comments section concerning the use of flow obstructions and physically representative n-values.**

Manning's n values at cross sections 1885, 1936, 2055, and 2208 have been reduced to a value of 0.06. Please note that this change affects the flow over the adjacent lateral weir and downstream flow distributions which have been revised accordingly.

- 38. It appears as if there is a flow split occurring along the right overbank between Cross Section Nos. 5696 and 5828 (37 cfs toward Bellevue Drive) on Bluebell Canyon Creek; however, the discharge profile along Bluebell Canyon Creek does not reflect this reduction in flow. Please revise or explain as necessary.**

This flow split was identified by the 2D model but is not evident by the 1D model. In an effort to remain conservative with the main channel of Bluebell Canyon Creek, yet show the identified flow split, the minor reduction in discharge for flows leaving the main channel has not been accounted for along the main channel.

- 39. Based on the flow split occurring between Cross Section Nos. 4282 and 4258 on the Bluebell Canyon Creek flow path, it appears to be reasonable that the flow change along Mariposa Avenue should occur at Cross Section No. 3141 (adjacent to Cross Section No. 4258) instead of at Cross Section No. 3081 (i.e., upstream of 15<sup>th</sup> Street). Please revise as necessary.**

The discharge increase for Mariposa Avenue has been moved upstream from cross section 3081 to 3141.

- 40. Cross sections in the vicinity of 20<sup>th</sup> Street and Columbine Avenue do not appear to be oriented perpendicular to the flow and, in some cases, cross over one another, or are nearly concurrent with one another. The 5440 BFE also crosses Cross Section No. 11998 on 20<sup>th</sup> Street. Please revise.**

The cross section layout in this area is complicated by the Anderson Ditch, junction of a split flow reach, and the start of another split flow reach. As a result, the cross sections were aligned as best possible given the modeling and topographic constraints.

- 41. It does not appear that the discharge profile in the HEC-RAS model along Bluebell Canyon Creek matches the profile provided in the report. For example, the 100-year discharge along Mariposa Avenue just east of 19<sup>th</sup> Street is 273 cfs, and the discharge one block north along Columbine Avenue just east of 19<sup>th</sup> Street is 121 cfs. The total discharge at this point is 394 cfs, and according to the table, the discharge at Flow Change ID No. 3 should be 590 cfs. Please revise or explain as necessary.**

Upon further review of the hydrology for drainage basin B-2 (draining to FHAD design point 212) it was determined that the area north of Baseline Road does not contribute to Bluebell Canyon Creek upstream of US Highway 36. As a result, B\_2 inflow node has been adjusted and the B\_3 inflow node has been removed. The 394 cfs value is valid from 15<sup>th</sup> street east to Broadway.

- 42. The lateral structures along Baseline Road between 21<sup>st</sup> Street and Broadway are not optimized. Please explain how these splits are determined. Also, adding notes within the model is highly recommended.**

All lateral structures along Baseline Road between 21<sup>st</sup> Street and Broadway are now optimized and reflect the split flows that occur in this area.

- 43. The 100-year flow splits to the north from the main Bluebell Canyon Creek flow path to the upstream end of Columbine Avenue do not match. It appears as if there is 70 cfs splitting to the north (121 cfs to 51 cfs), while the Columbine flow path has 65 cfs. Please revise as necessary.**

At this location, the discharge values have been based on a 2D model and compare within 5 cfs (4% of total flow). This difference was not further refined.

- 44. The flow is reduced from approximately 80 cfs to 20 cfs during the 100-year event between Cross Section Nos. 11100 and 11030 along Baseline Road. Is there a flow split occurring to the north? If so, please explain how the split was determined.**

Yes, a flow split occurs at this location. Discharge values are now based on lateral weir spills that are now optimized accordingly.

- 45. The 100-year flows at the intersection of Baseline Road and Broadway do not seem to maintain continuity. The model indicates there is approximately 20 cfs along Baseline Road both upstream and downstream of Broadway, whereas the upstream end of Broadway has 150 cfs, directly downstream of Baseline Road. The 100-year WSEL at Cross Section No. 14900 is also nearly 0.3 feet higher than at Cross Section No. 10725 immediately upstream. Please revise as necessary.**

This is a result of the B\_4 inflow location. No model revisions were completed.

- 46. The source of an additional 70 cfs along Broadway between Baseline Road and Columbine Avenue during the 100-year event is not apparent. Please explain.**

This errant addition of 70 cfs along Broadway between Baseline Road and Columbine Avenue has been fixed. The B\_4 inflow is the only discharge increase in this general vicinity.

- 47. According to the 100-year discharges in each reach, the total flow that could potentially reach Broadway (assuming no splits north off of Baseline Road and no splits south off of Mariposa Avenue toward Bluebell Avenue) is 616 cfs (Bluebell Canyon Creek only). Assuming that the split of 37 cfs off of Bluebell Canyon Creek onto Bellevue Drive should be accounted for, the total discharge would drop to 579 cfs. Table 1 indicates the total discharge should be 740 cfs. Please revise accordingly.**

This discrepancy is the result of recent changes to Basin B-2 in order to more accurately account for the portion of the basin north of Baseline Road that will not be accounted for until downstream of US Highway 36. Table 1 has been revised and Figures 3.1 and 3.2 have been created to provide a map showing the flow increases and discharges along the various split flow reaches of Bluebell Canyon Creek. Please note that the flow profiles reflect total flow and may not necessary accurately reflect discharge within a given split flow reach.

- 48. The residual 100-year discharge along Baseline Road is approximately 20 cfs, and the flows in front of the Basemar Shopping Center are approximately 41 cfs. The discharge east of this intersection is approximately 10 cfs rather than what would appear to be 61 cfs. Please explain or revise as necessary. Further downstream, the flows tie into the Skunk Creek model, and the flow at the upstream end of this reach (Cross Section No. 1548) is 225 cfs. It appears continuity may be an issue at this location. Please review and revise.**

Due to minor changes the residual discharge along Baseline Road is now approximately 23 cfs and the flows in front of the Basemar Shopping Center are approximately 29 cfs. The discharge east of the intersection of these two split flows has been revised to 52 cfs. Further downstream the discharge increase to 225 cfs is a result of an increase in discharge as a result of flows that originate or spill into the drainage basin on the north side of Baseline Road. In order to match the FEMA flows along Bluebell Canyon Creek and ultimately Skunk Creek, the full discharge has been returned to the model at US Highway 36, as discussed previously.

- 49. Cross Section Nos. 1570 and 1520 along Columbine Avenue have n-values for the street portion of the cross section of 0.1. Please provide justification for this roughness value or revise as necessary.**

The Manning's n values have been revised to reflect a value of 0.03 within the roadway sections in similar fashion to sections upstream and downstream.

- 50. Cross Section No. 2793 has a negative surcharge (-0.2 ft) in the conveyance zone plan. Please revise as necessary.**

This section does not have floodway encroachment into the effective conveyance area. Also note that the change in energy grade is +0.49 feet.

## Floodplain Workmaps

- 51. According to the HEC-RAS model, 100-year flows begin spilling over the left overbank on the main Skunk Creek flow path downstream of Cross Section 1437. Figure 4.9 depicts the 100-year floodplain boundary extending past this point to Cross Section 1237. Please revise as necessary.**

This area has been revised to reflect the spill downstream of cross section 1437.

- 52. The 100- and 500-year floodplain mapping limits along the split flow path 1.020-Innova, in particular between Discovery Drive and Colorado Avenue, are mapped against adjacent structures. Please use the bare earth topography to map the floodplain limits.**

Given the size of these structures and the mapping source (LiDAR) there is not reasonable bare earth topography available for use. Additionally, the size of structures is such that they will provide significant containment of the floodplain. In order to remove any ambiguity, the floodplain mapping limits were adjusted in order to clearly show buildings that are impacted by the adjacent floodplain boundary.

- 53. General mapping note: BFEs need to be coincident with the 100-year floodplain limits as well as the associated contour elevation unless being tied to the DEM. As an example, BFE 5255 on Skunk Creek, immediately upstream of Cross Section No. 1968, extends past the 100-year floodplain limit (as well as the 5255 contour). Other examples include the 5590 BFE (King's Gulch; ties to the 5591 contour on one side) and the 5595 BFE (King's Gulch; extends past the 5595 contour on one side and doesn't reach it on the other).**

This issue (generally less than 2 feet in size) appears to result from the use of survey data in place of mapping.

- 54. The 5490 BFEs along Bluebell Avenue and King Avenue should tie to the floodplain limits and not extend into the shallow flooding area.**

These BFEs have been revised.

- 55. It appears that Shaded Zone X should be mapped between 19<sup>th</sup> Street and 22<sup>nd</sup> Street and Mariposa Avenue and Bluebell Avenue. Please review and revise as needed.**

This area has been revised to reflect a Zone X shaded designation.

- 56. There are a number of locations where cross section alignments intersect one another on differing flow paths, in particular at the intersection of King Avenue and Skunk Creek. Please orient the cross sections to not intersect.**

The cross sections were aligned as best possible given the modeling and topographic constraints. This issue is generally a result of the alignment of multiple flow paths where there is not a reasonable approach to alternative orientation.

- 57. The BFEs along and south of Columbine Avenue between 18<sup>th</sup> and 19<sup>th</sup> Streets are generally not parallel to the adjacent cross sections and some cross between flow paths. Also, as an example, the 5470 BFE is shown crossing the 5472 contour elevation. Please adjust as necessary.**

The orientation of the BFEs reflect the condition of discharges transferring from the south to the north. The 5470 BFE is shown as crossing the 5472 contour in order to avoid showing a small island in the middle of the floodplain.

- 58. A detailed floodplain with BFEs is mapped along Columbine Avenue between 20<sup>th</sup> Street and 22<sup>nd</sup> Street at a 100-year discharge of 13 cfs; however, a detailed floodplain is not mapped along Bellevue Drive and Mariposa Avenue upstream of 15<sup>th</sup> Street for a 100-year discharge of 37 cfs (mapped as Shaded Zone X). Please explain or revise as necessary.**

The 13 cfs along Columbine has been shown as detailed study as it eventually receives additional discharges for a total flow of 58 cfs. The 37 cfs along Mariposa Avenue has been mapped as Shaded Zone X as a result of continuously shallow flooding and a lack of discharge increase.

- 59. The 100- and 500-year floodplain limits do not extend upstream through Cross Section No. 20270 on the Skunk Creek – 7.122 NIST S flow path. It appears as if there is a split occurring along the main Skunk Creek flow path into this flow path. Also, please add a gutter line between the Skunk 7.121 NIST N and 7.122 NIST S flow paths.**

The delineation for 20270 reflects the original modeling approach and has not been revised. Similarly, the gutter line has not been added as the floodplains are joined.

- 60. Please indicate that minor flows would leave the system east of the intersection of 29<sup>th</sup> Street and Baseline Road. One option would be to use dashed floodplain boundaries with a flow arrow heading east.**

The flows leaving have been determined to be insignificant and shallow enough to not warrant additional designation. Likewise, the full discharge has been accounted for within Skunk Creek to remain conservative. No revisions have been completed.

**61. BFE 5335 at the intersection of 29<sup>th</sup> Street and Skunk Creek crosses two separate flow paths, crosses Cross Section 7489, and runs parallel to the flow split going north down 29<sup>th</sup> Street. BFEs 5300 and 5305 have similar orientation issues. Please revise as necessary.**

Given the urban shallow flooding condition, this has been a challenge to depict. The BFEs have been drawn to best illustrate the respective flood risk and also to reflect the major flow directions. In an effort to keep the mapping simple, extensive use of gutter lines has not been used.

**62. Please show the 500-year floodplain boundary on the south side of Mariposa Avenue west of 19<sup>th</sup> Street.**

This area has been designated as Zone X shaded.

**63. Please add flow path identification on the work maps.**

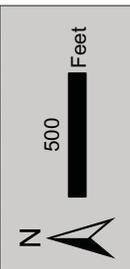
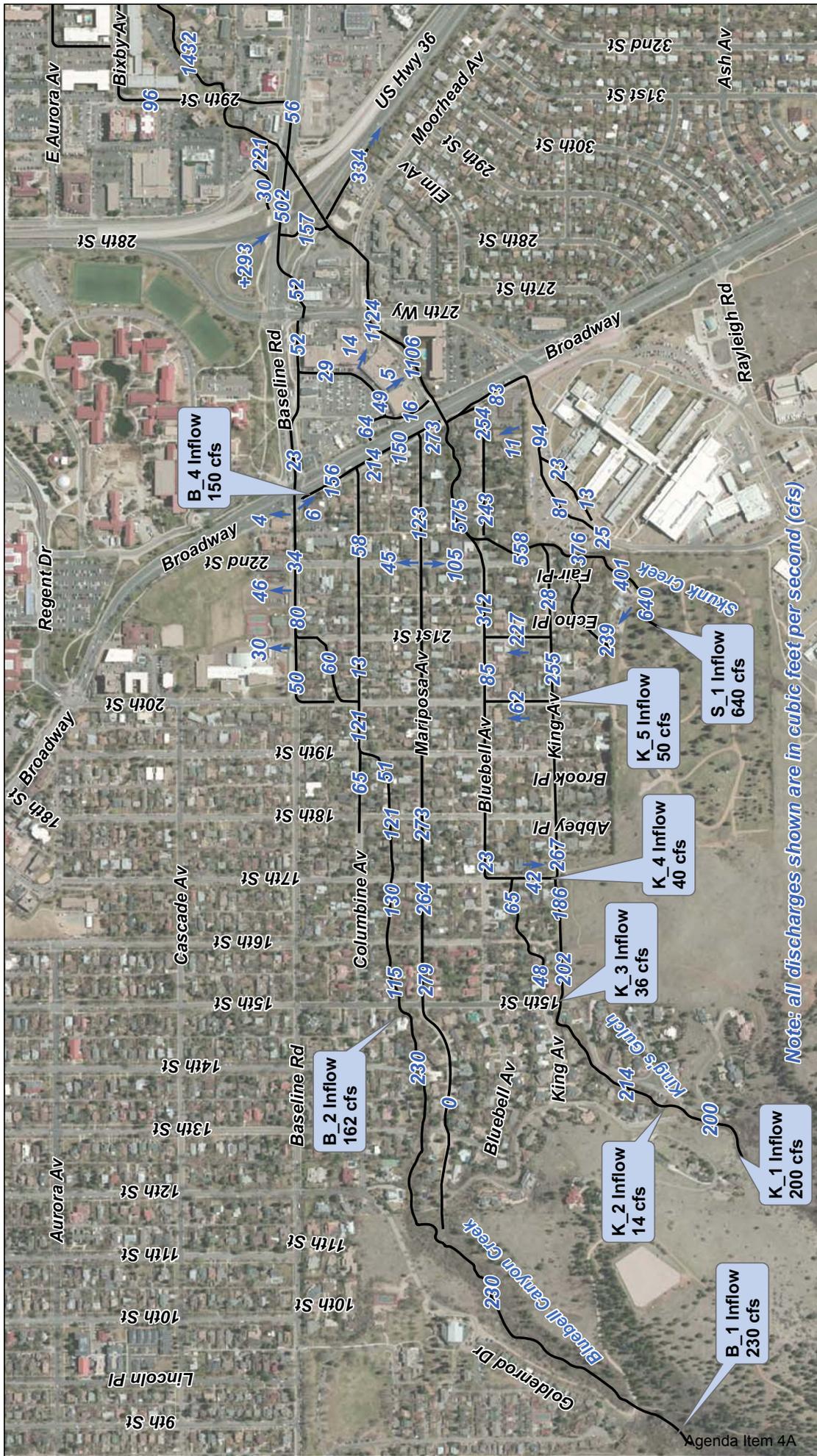
Separate flow path identification work maps have been prepared. Please see figures 4 and 5.

Please let me know if there is any additional information needed to clarify our responses to the above review comments.

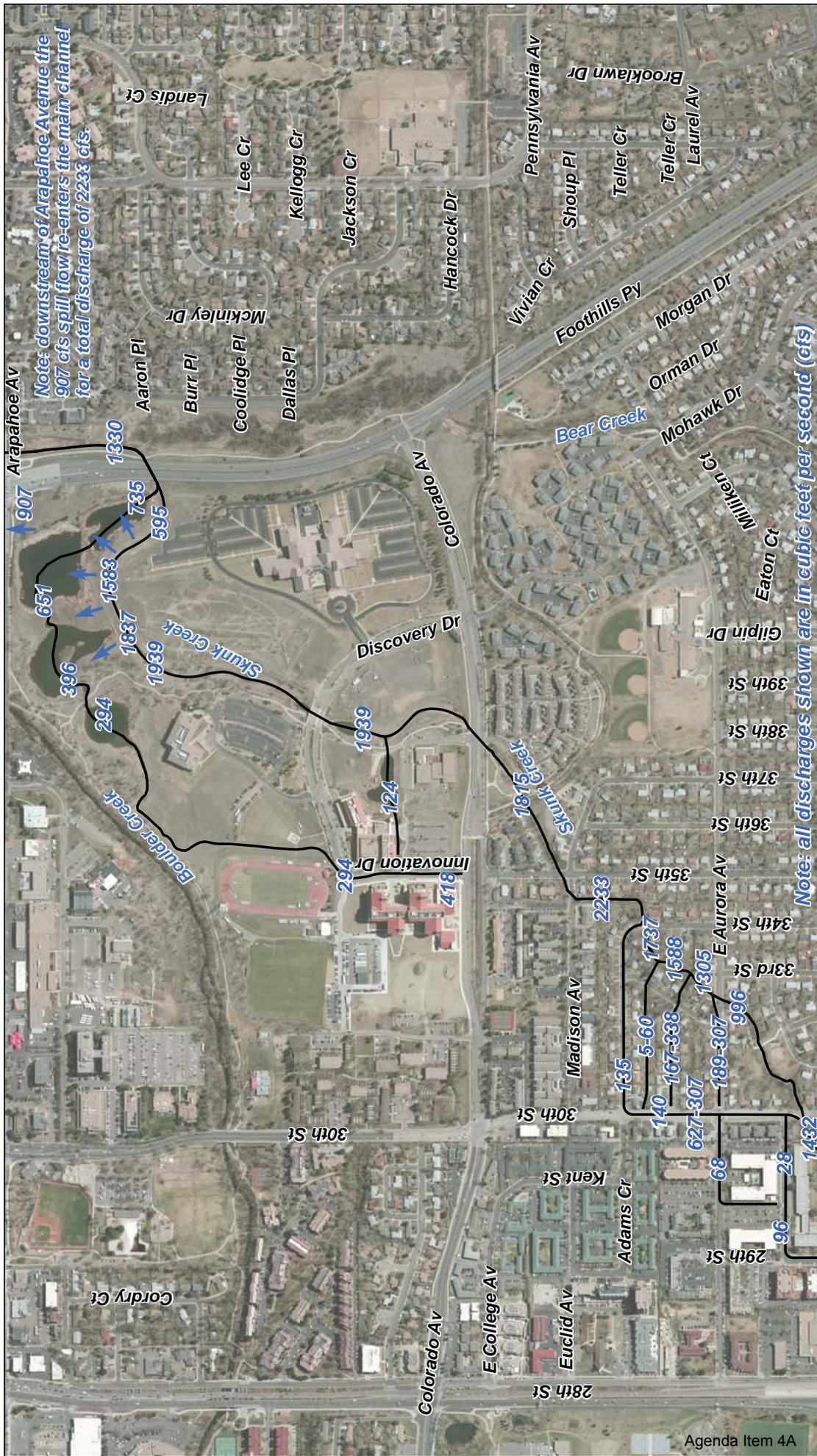
Sincerely,



Brian LeDoux, P.E., CFM  
ICON Engineering, Inc.

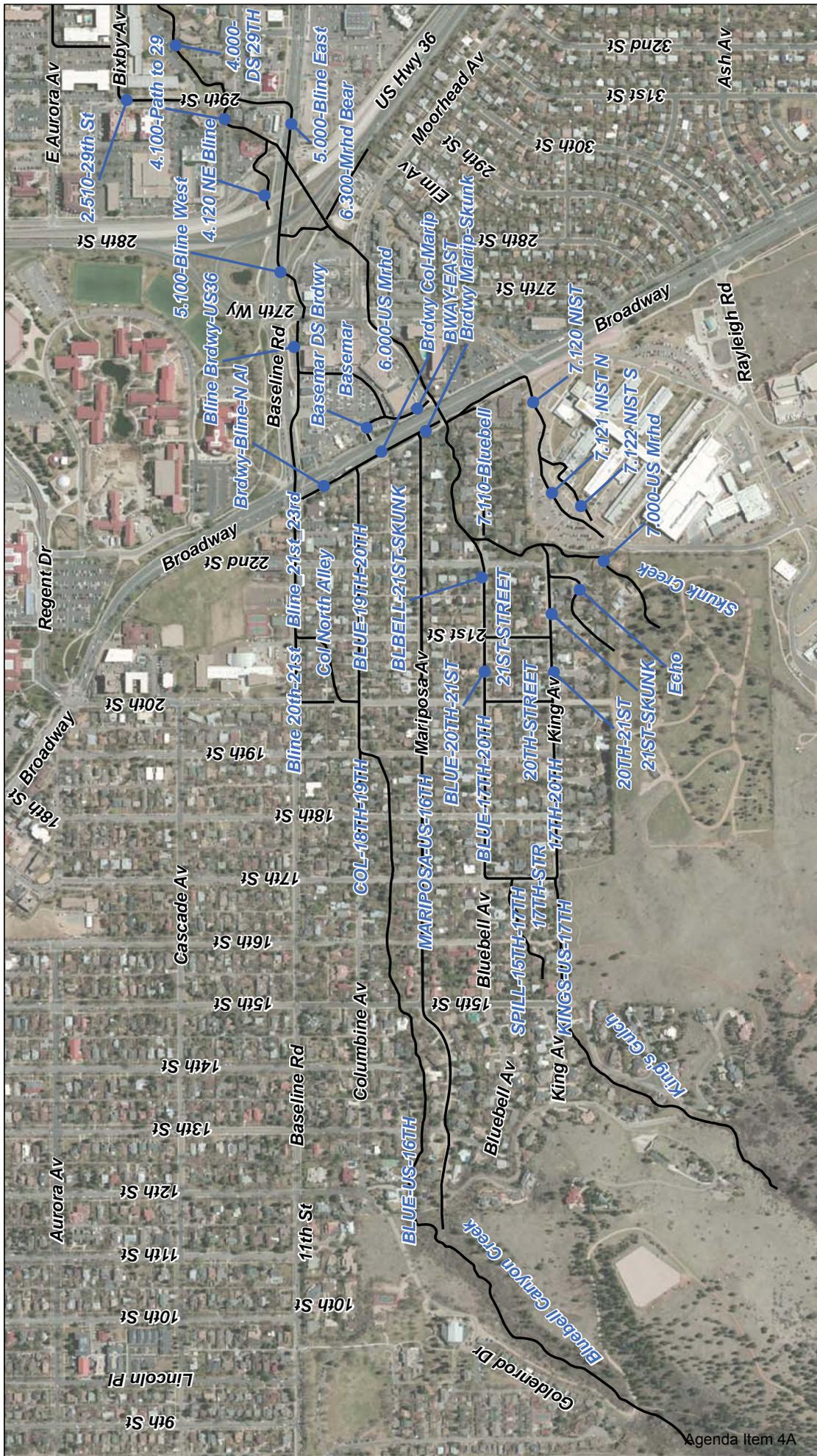


**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
**Figure 3.1: HEC-RAS 100-Year Discharges Upstream of Highway 36**



**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
**Figure 3.2: HEC-RAS 100-year Discharges Downstream of Highway 36**

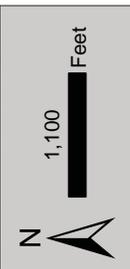
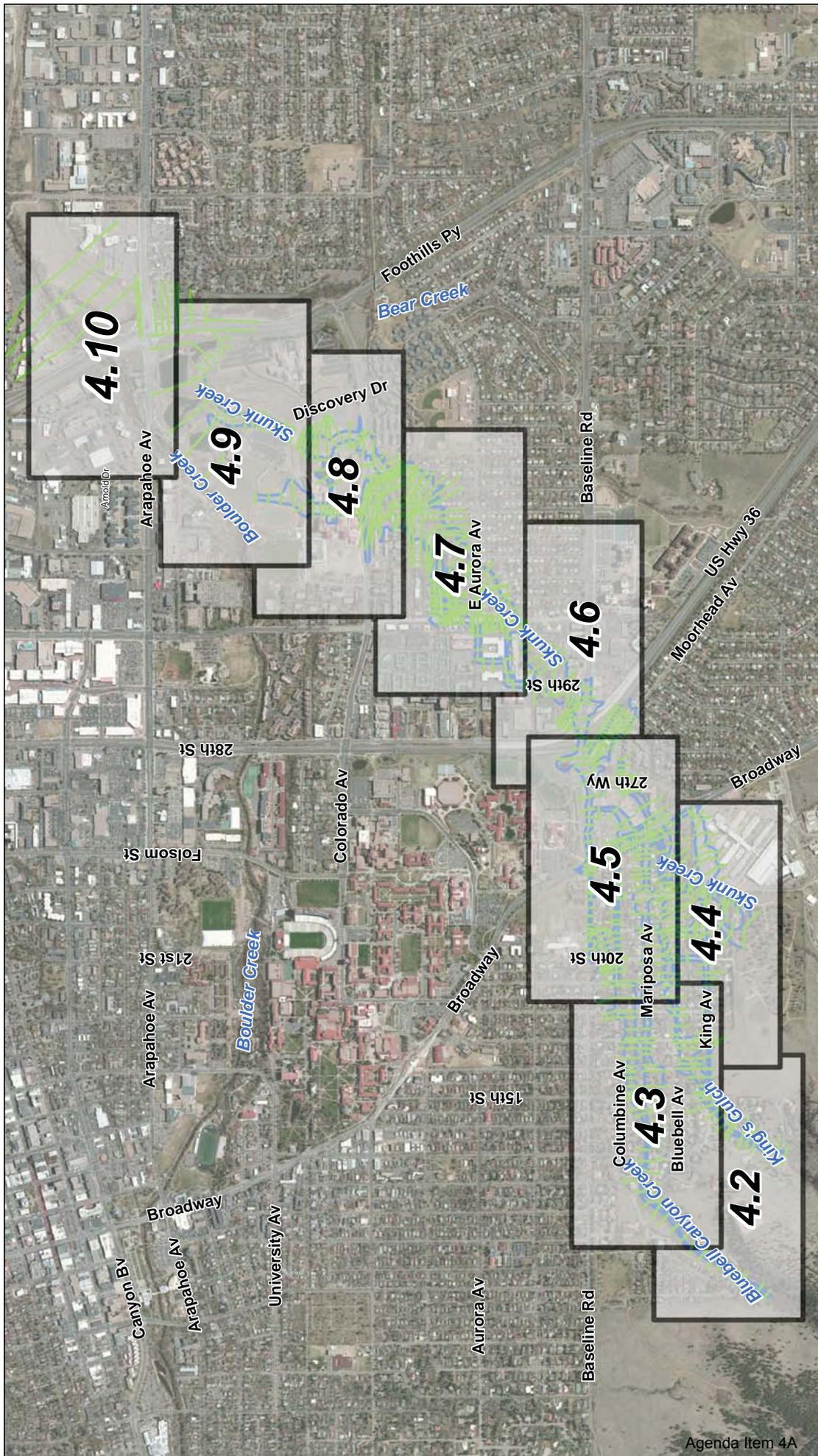




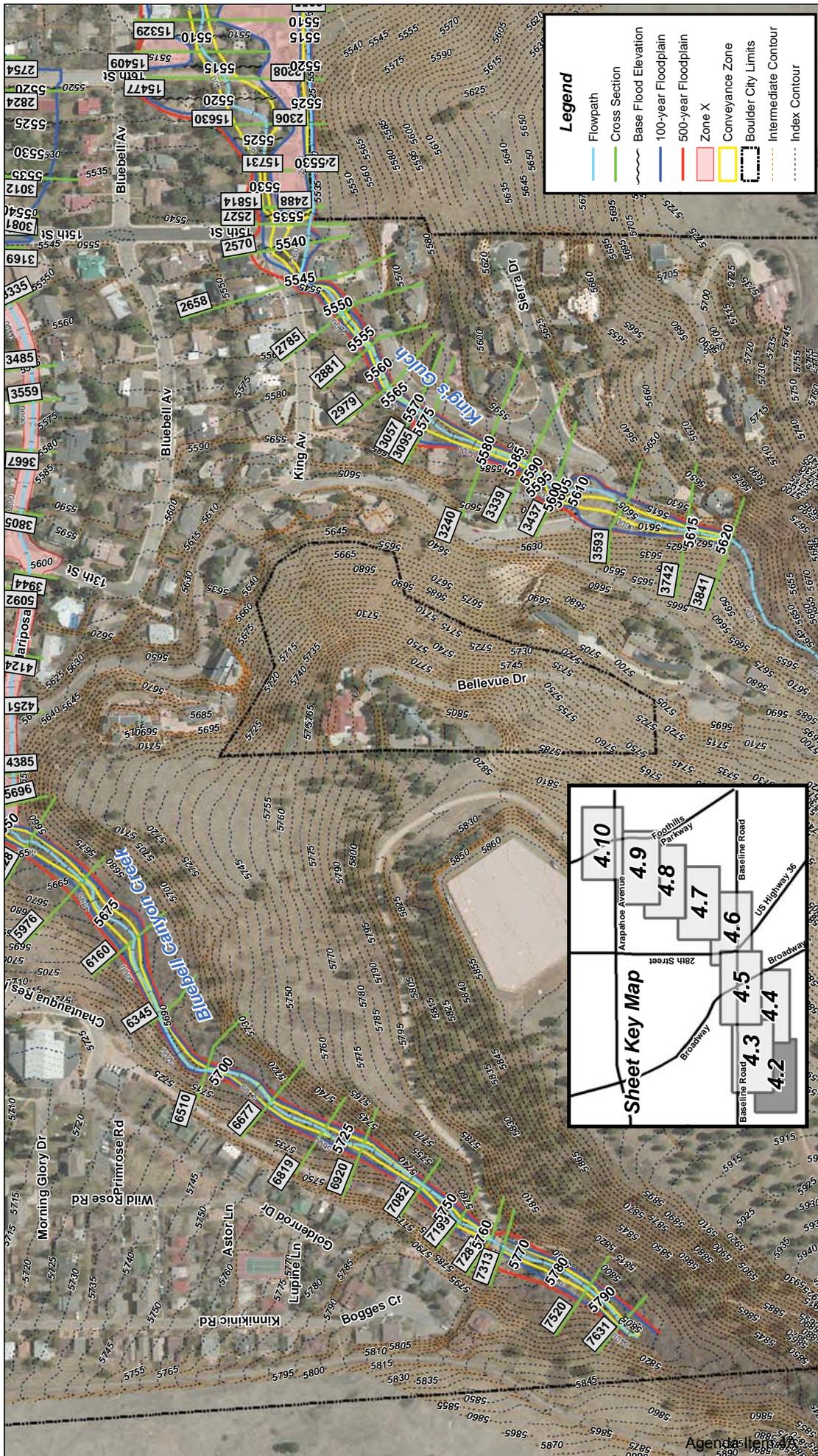
**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
**Figure 4: HEC-RAS Reach Names Upstream of Highway 36**



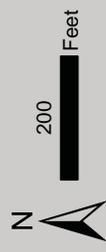


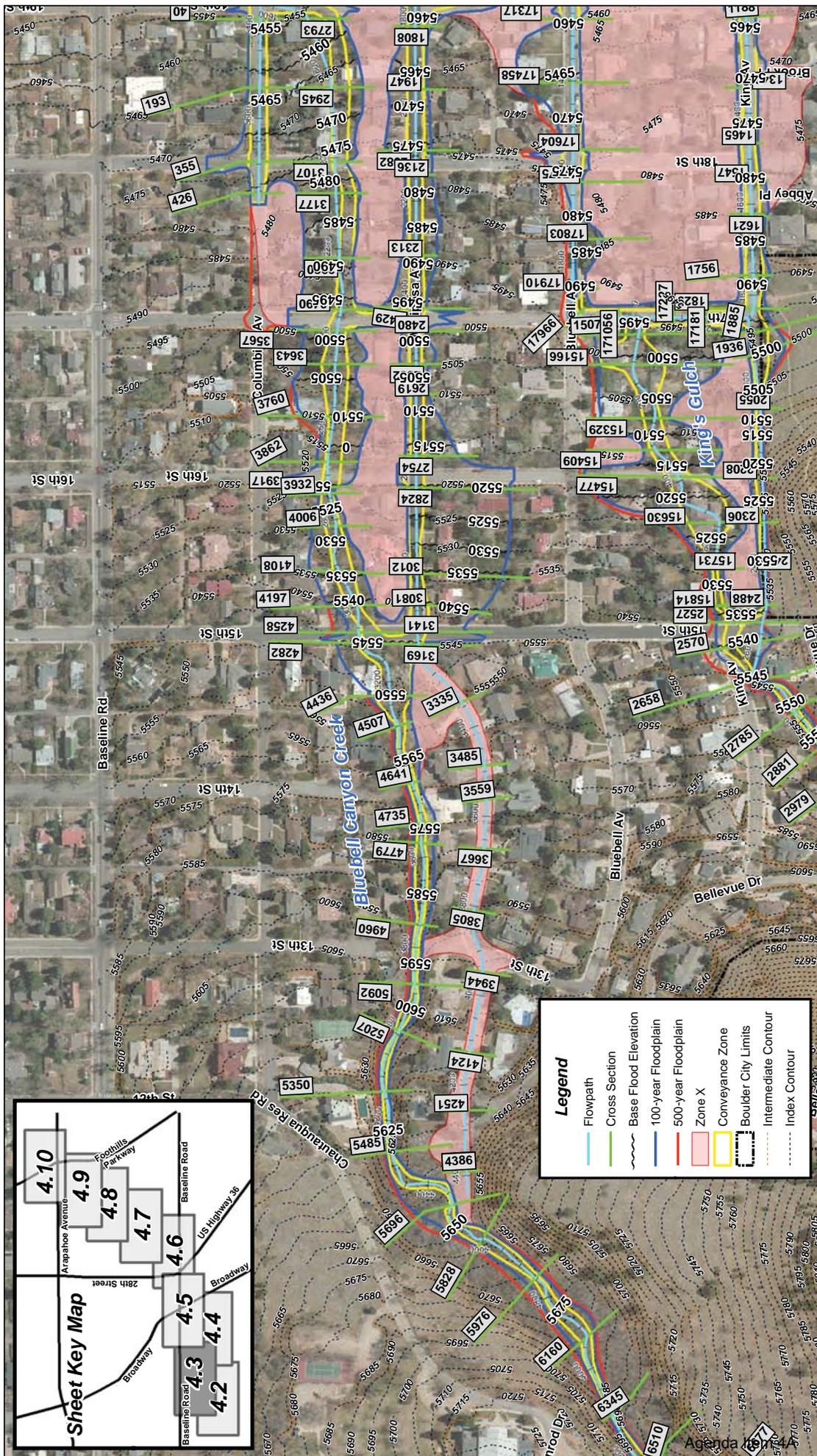


**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
**Figure 4.1: Floodplain Workmap Index**

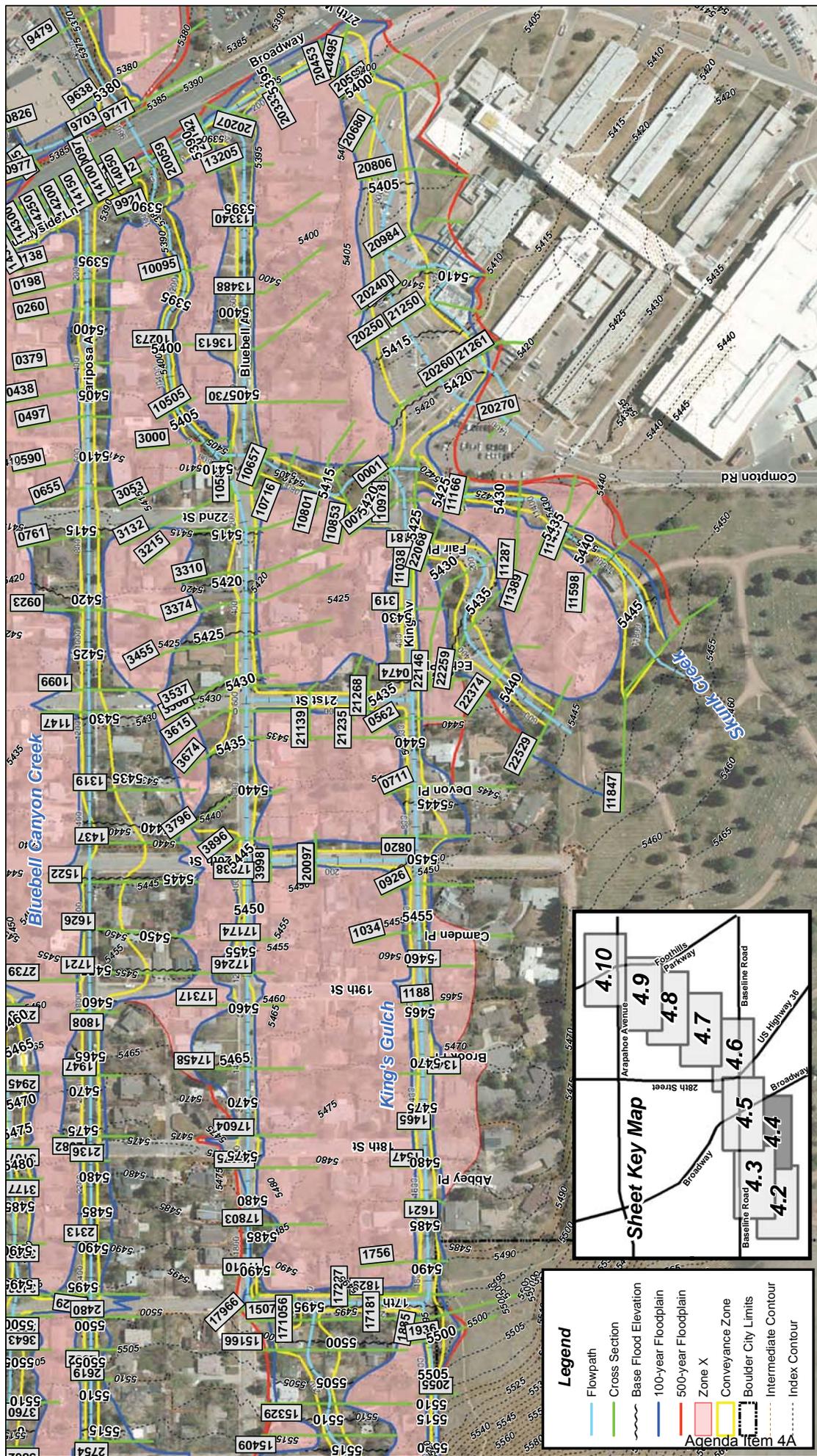


**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
 Figure 4.2: Floodplain Workmap

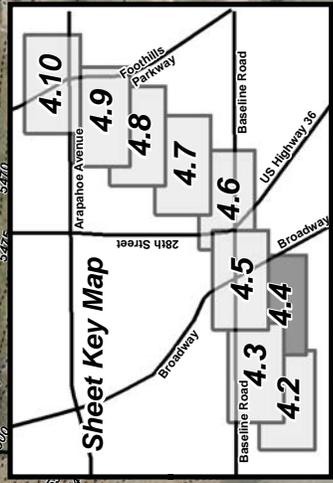




Skunk Creek, Bluebell Canyon Creek, King's Gulch  
 Request for Physical Map Revision (PMR)  
 Figure 4.3: Floodplain Workmap



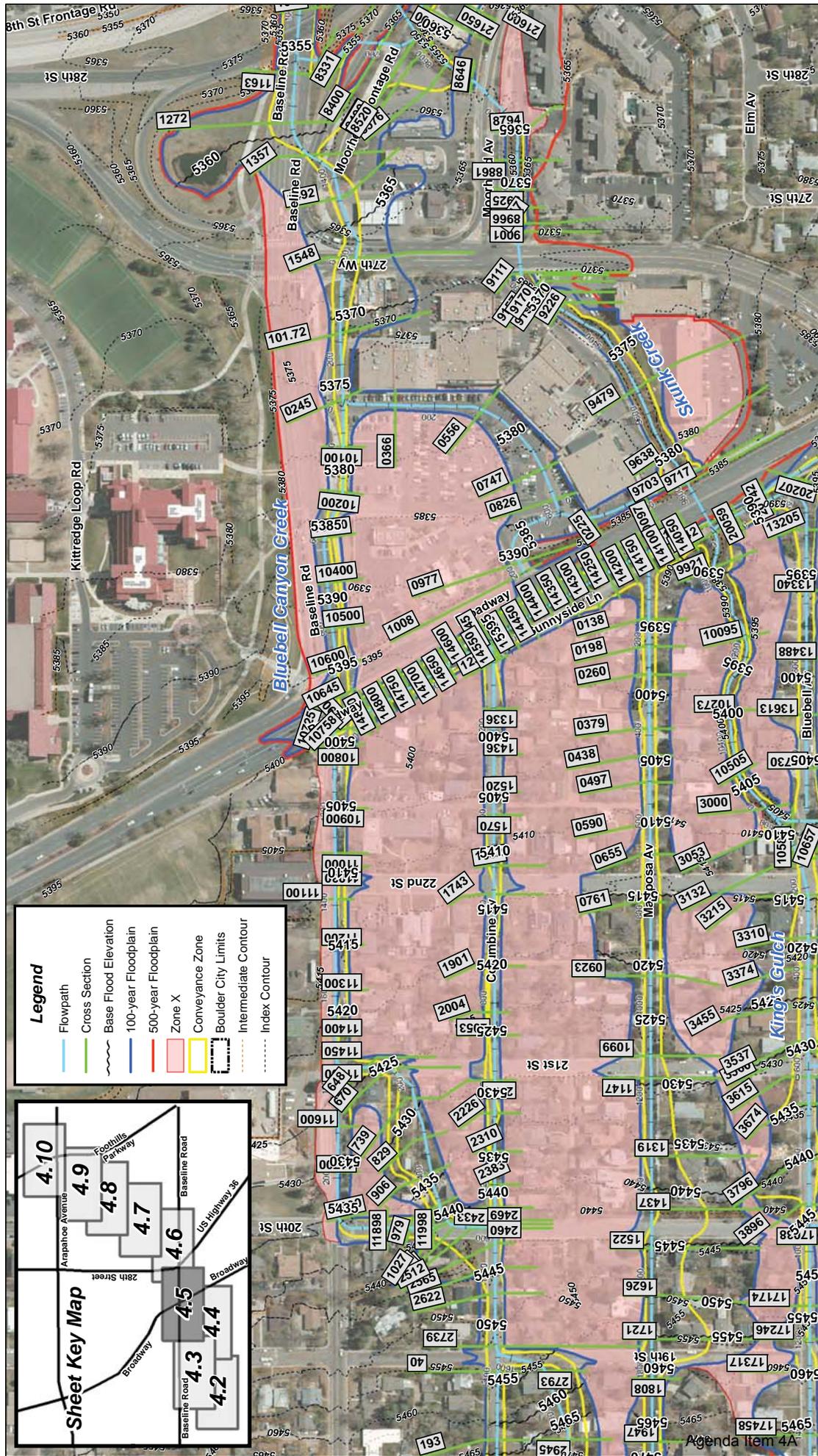
**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
**Figure 4.4: Floodplain Workmap**



**Legend**

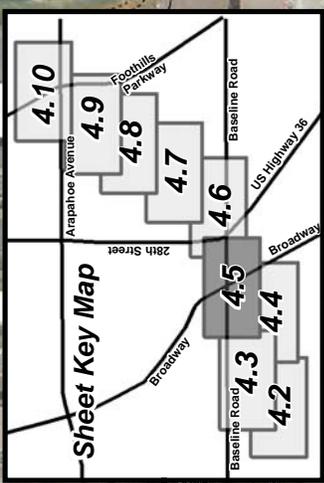
- Flowpath
- Cross Section
- Base Flood Elevation
- 100-year Floodplain
- 500-year Floodplain
- Zone X
- Conveyance Zone
- Boulder City Limits
- Intermediate Contour
- Index Contour

Agenda Item 4A

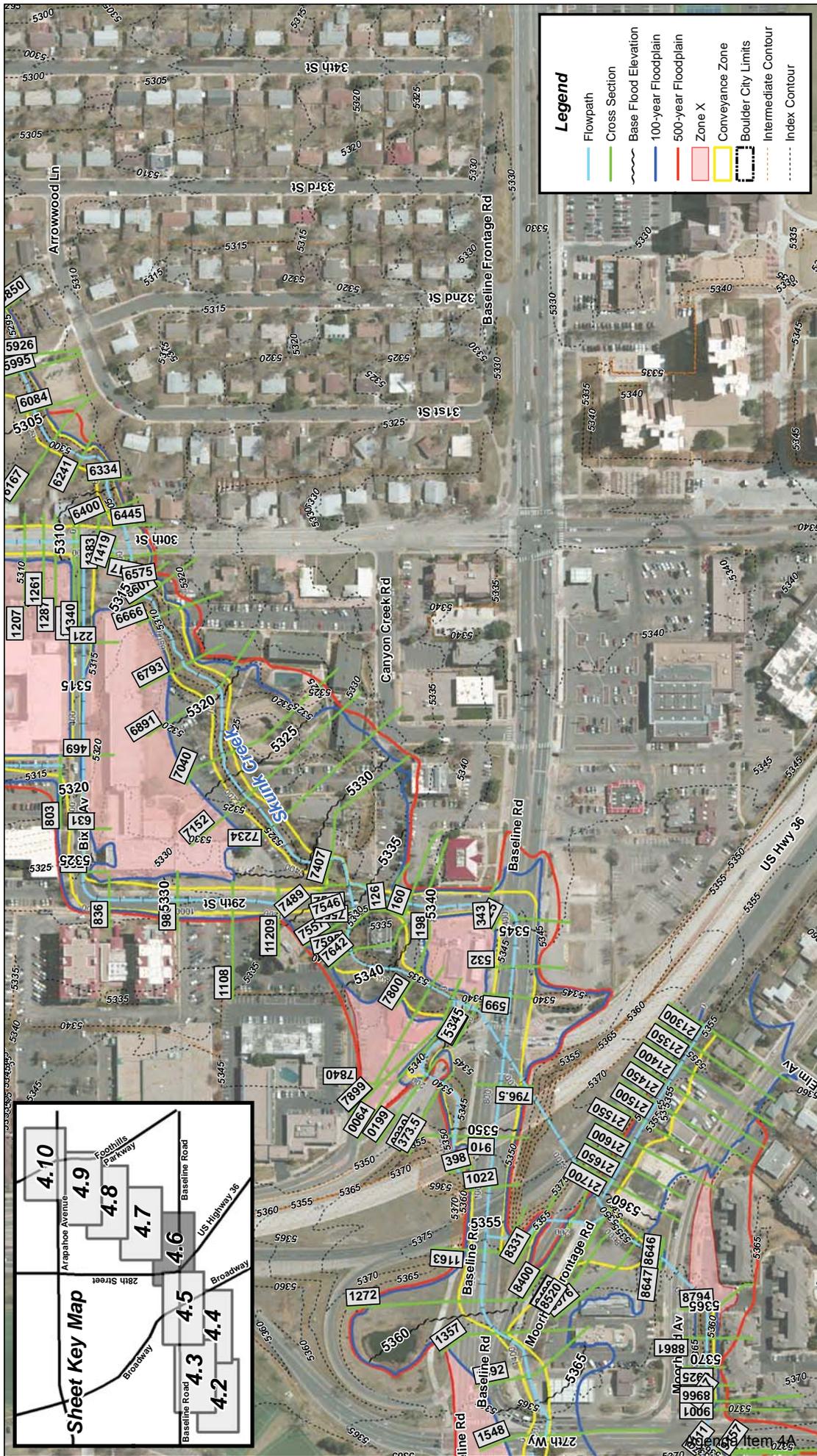


**Legend**

- Flowpath
- Cross Section
- Base Flood Elevation
- 100-year Floodplain
- 500-year Floodplain
- Zone X
- Conveyance Zone
- Boulder City Limits
- Intermediate Contour
- Index Contour



**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
 Figure 4.5: Floodplain Workmap



**Legend**

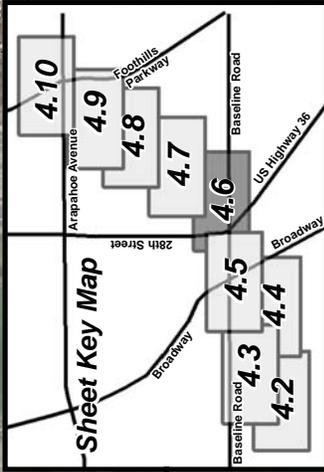
- Flowpath
- Cross Section
- Base Flood Elevation
- 100-year Floodplain
- 500-year Floodplain
- Zone X
- Conveyance Zone
- Boulder City Limits
- Intermediate Contour
- Index Contour

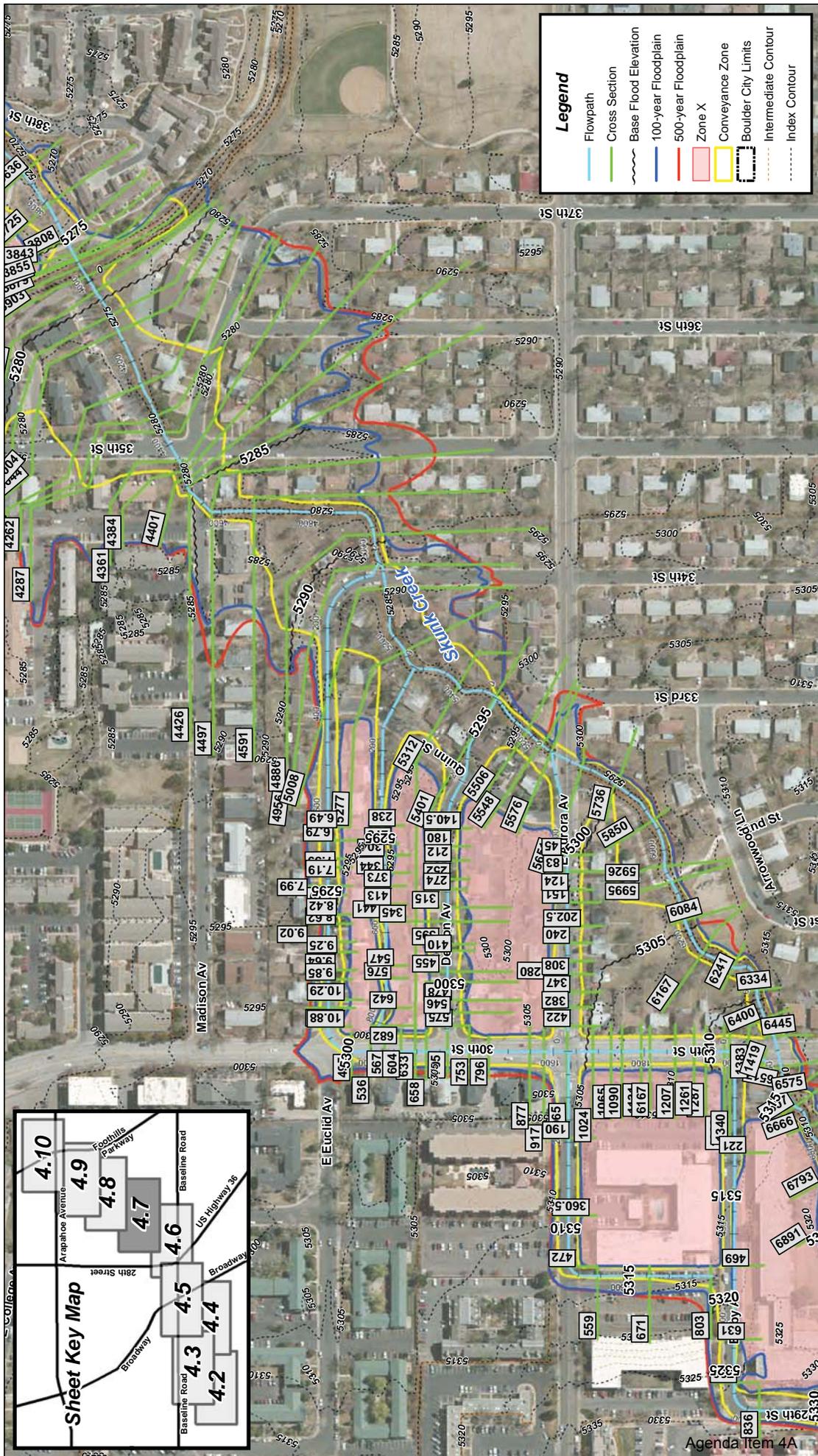
N

200 Feet

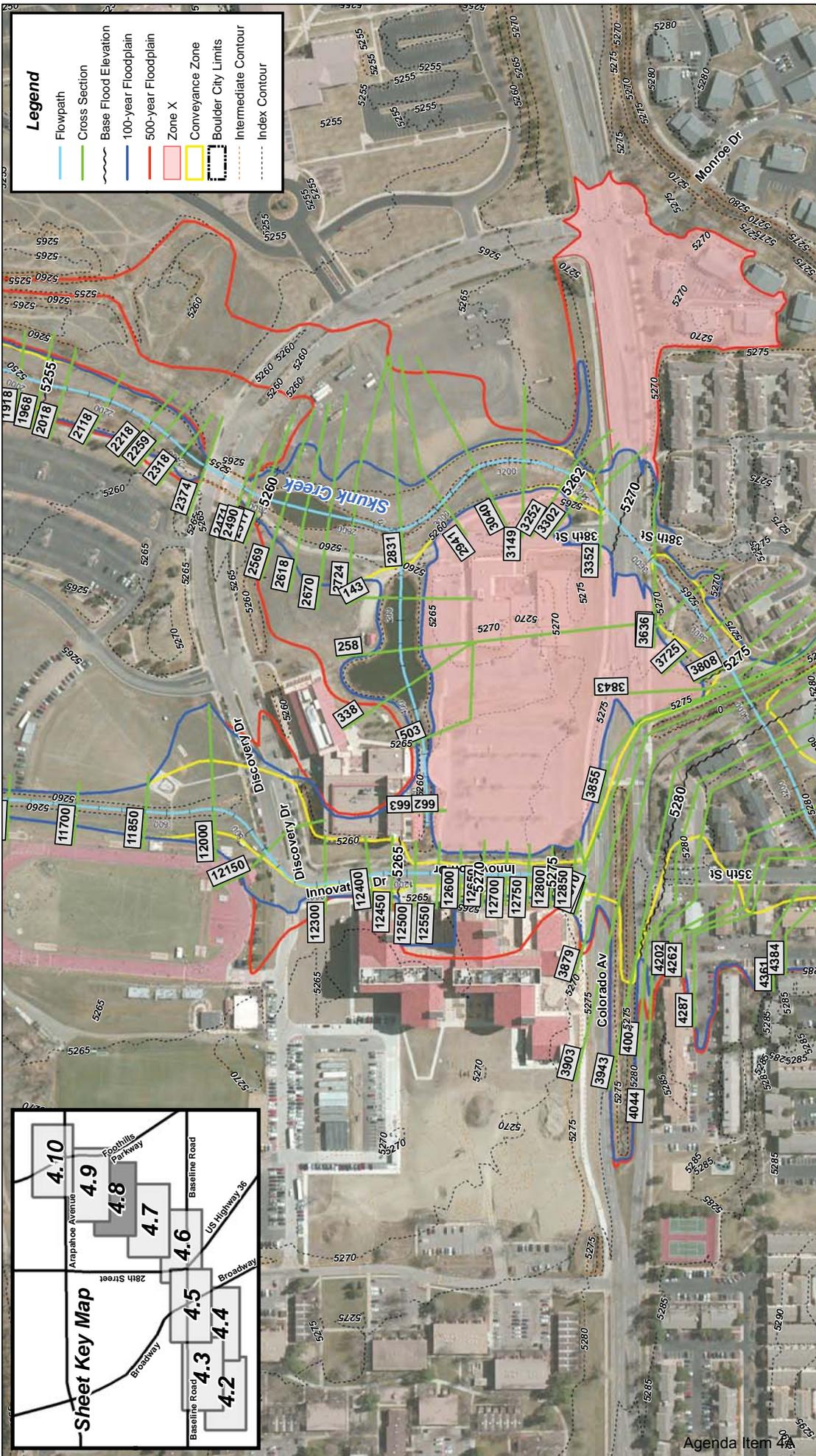


**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
 Figure 4.6: Floodplain Workmap

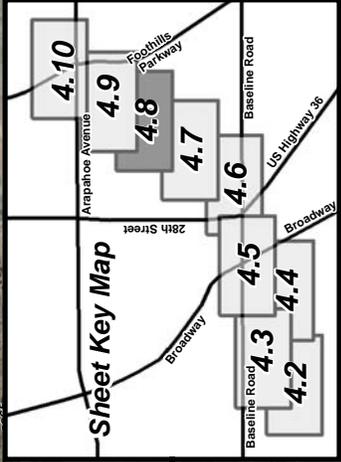


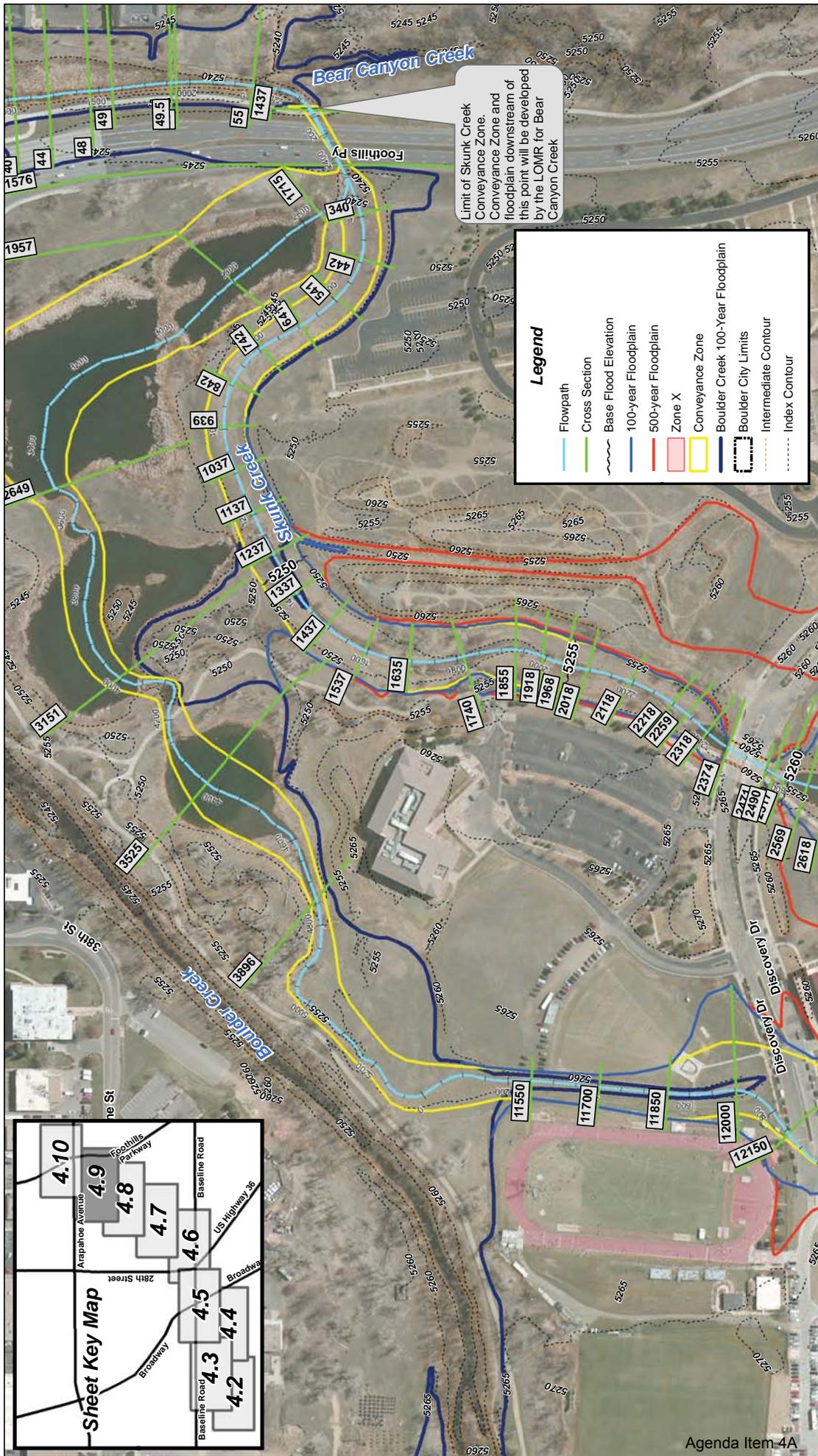


**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
 Figure 4.7: Floodplain Workmap

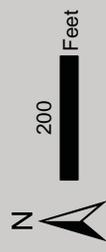


**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
 Figure 4.8: Floodplain Workmap





**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
 Figure 4.9: Floodplain Workmap





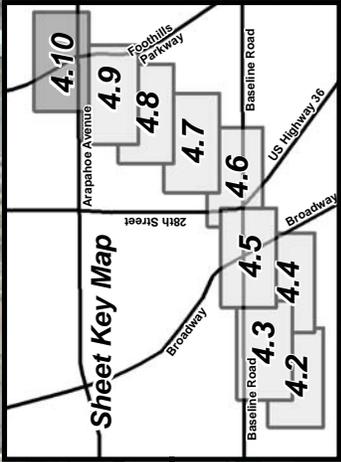
Note: Conveyance Zone and floodplain downstream of Foothills Parkway and Arapahoe Avenue will be developed by the separate LOMR for Bear Canyon Creek and PMR for Boulder Creek.

**Legend**

- Flowpath
- Cross Section
- Base Flood Elevation
- 100-year Floodplain
- 500-year Floodplain
- Zone X
- Conveyance Zone
- Boulder Creek 100-Year Floodplain
- Boulder City Limits
- Intermediate Contour
- Index Contour



**Skunk Creek, Bluebell Canyon Creek, King's Gulch**  
 Request for Physical Map Revision (PMR)  
 Figure 4.10: Floodplain Workmap





# Skunk Creek, Bluebell Canyon Creek and King's Gulch Remapping Study Public Comment Summary

**Open House Date:** Aug. 18, 2014

**Open House Meeting Location:** Municipal Building Lobby

**Number of attendees that signed-in:** 23

## **Staff in Attendance:**

Robert Harberg

Katie Knapp

Kristin Dean

Laurel Olsen-Horen

Douglas Sullivan

## **Public Comments:**

### 1. **Location:** 2042 Baseline

**Commenter:** Property owner (Ben Chancellor; Christina Jurgens)

**Comment:** Did not see flooding in September 2013 and do not feel that the high hazard designation is warranted; question split values for Mariposa vs. Columbine

**Response:** The high hazard zone delineations have been refined based on a review of adjacent grades. Adjacent to the structure at 2042 baseline, the delineation was revised such that the structure sits just outside of the high hazard zone. Split flow values for Mariposa and Columbine are being re-evaluated using 2D modeling to see if the September flood event can be more closely replicated in the modeling. It should be noted that the September 2013 flooding reflected a lower intensity and longer duration storm compared to the regulatory 100-year design storm that is a significantly higher intensity but shorter duration storm. This difference in storms can result in significant differences between the regulatory 100-year floodplain mapping and what was experienced in the September flood event.

### 2. **Location:** Area south of Baseline Road between 20th and Broadway

**Commenter:** Several property owners

**Comment:** Flooding in September 2013 was confined to streets; no flow behind homes; water did not appear to be originating from Bluebell Canyon Creek proper.

**Response:** Split flow values for Mariposa and Columbine are being re-evaluated using 2D modeling to see if the September flood event can be more closely replicated in the modeling. It should be noted that the September 2013 flooding reflected a lower intensity and longer duration storm compared to the regulatory 100-year design storm that is a significantly higher intensity but shorter duration storm. This difference in storms can result

in significant differences between the regulatory 100-year floodplain mapping and what was experienced in the September flood event.

3. **Location:** 22nd and Mariposa Avenue  
**Commenter:** Several property owners  
**Comment:** Flows traveling east on Mariposa turned north on 22nd Street and continued to Columbine Avenue; this is not shown as 100-year flooding.  
**Response:** This flow path has been added to the documentation of the September flood event. The portion of 22nd Street between Mariposa and Columbine is shown as shallow flooding (Zone X) for the proposed floodplain. The proposed floodplain mapping in this area is being re-evaluated.
4. **Location:** 19th and Mariposa Avenue  
**Commenter:** Property owner  
**Comment:** structure at south east corner is shown in the 100-year floodplain but did not experience damage during the September 2013 event; please review assumptions here.  
**Response:** Split flow values for Mariposa and Columbine are being re-evaluated using 2D modeling to see if the September flood event can be more closely replicated in the modeling. It should be noted that the September 2013 flooding reflected a lower intensity and longer duration storm compared to the regulatory 100-year design storm that is a significantly higher intensity but shorter duration storm. This difference in storms can result in significant differences between the regulatory 100-year floodplain mapping and what was experienced in the September flood event.
5. **Location:** 955 Quinn Street  
**Commenter:** Property owner (Lee Payne)  
**Comment:** Structure does not show as impacted on floodplain maps (tree cover issue?); how was floodplain delineated at corner of Denton Avenue and Quinn Street.  
**Response:** Due to the large amount of tree cover, the structure was inadvertently excluded from the proposed floodplain map exhibit. The maps have been corrected to show the principal structure located outside of the proposed 100-year floodplain.
6. **Location:** 3130 Aurora  
**Commenter:** Property Owner  
**Comment:** It seems like the HHZ could be the result of a small depression that we may not want to include in the mapping.  
**Response:**
7. **Location:** 1700 Bluebell  
**Commenter:** Property Owner (Bill Mooz)  
**Comment:** Structure is shown as in proposed floodplain but was not impacted by September 2013 event; wants to know why actual data was disregarded.

**Response:** The September 2013 flooding reflected a lower intensity and longer duration storm compared to the regulatory 100-year design storm that is a significantly higher intensity but shorter duration storm. This difference in storms can result in significant differences between the regulatory 100-year floodplain mapping and what was experienced in the September flood event. Split flow values for Mariposa and Columbine are being re-evaluated using 2D modeling to see if the September flood event can be more closely replicated in the modeling.

8. **Location:** 1849 Mariposa Ave,

**Commenter:** Property Owner (Steve Brown, Guen Simons)

**Comment:** Water from Bluebell creek did not flow to Mariposa. It flowed down the Bluebell drainage but primarily to the north along 19th Street and down Columbine.

**Response:** Split flow values for Mariposa and Columbine are being re-evaluated using 2D modeling to see if the September flood event can be more closely replicated in the modeling. It should be noted that the September 2013 flooding reflected a lower intensity and longer duration storm compared to the regulatory 100-year design storm that is a significantly higher intensity but shorter duration storm. This difference in storms can result in significant differences between the regulatory 100-year floodplain mapping and what was experienced in the September flood event.

9. **Location:** 2100 Baseline

**Commenter:** Property Owner (Jamie Karpohl)

**Comment:** a) There were no eastbound flows observed on Columbine west of 20th Street. b) The flooding at 20th and Columbine originated from the Anderson ditch on the north side of Columbine. This water flowed through properties to the north-east and down the Columbine North alley towards 21st. At 21st the flows split - continuing down the alley and heading north towards Baseline. c) During the flood, there was no flow observed coming down Columbine west of 20th. The only flows observed in Columbine were from Anderson ditch on the north side of the street. When I visited the location of Bluebell Canyon Creek at 15<sup>th</sup> St. on the morning of September 14th, I observed all of the flow heading down Mariposa. I did not observe any man-made diversions at this location.

**Response:** a) The city has received conflicting information about the flooding observed along Columbine between 19<sup>th</sup> and 20<sup>th</sup> Streets. At this time the flood extent documentation shows this area as having flows that came north from Mariposa along 19<sup>th</sup> Street and then continuing east on Columbine. The documentation of the September 2013 flood extents will continue to be refined as additional information is received.

b) Split flow values for Mariposa and Columbine are being re-evaluated using 2D modeling to see if the September flood event can be more closely replicated in the modeling. It should be noted that the September 2013 flooding reflected a lower intensity and longer duration storm compared to the regulatory 100-year design storm that is a significantly higher intensity but shorter duration storm. This difference in storms can result in significant differences between the regulatory 100-year floodplain mapping and what was experienced in the September flood event.

**Public Hearing:** WRAB Meeting, Aug. 18, 2014

**Meeting Location:** Council Chambers

**Public Comments:**

1. Steve Brown, Guen Simons - Water from Bluebell creek did not flow to Mariposa. It flowed down the Bluebell drainage but primarily to the north along 19<sup>th</sup> Street and down Columbine.
2. Lee Payne - My home does not show up as either added, removed or remaining in the 100 year floodplain on the "structures affected proposed 100 year floodplain". I believe this is due to the dense tree cover on my lot. The buildings on this lot look to be un-included in the 100 year flood zone, but it is unclear. The grading and slopes on my lot are high from the street and I believe the new mapping to be close to reality in that the homes are excluded. Can you please contact me to clarify if the structures are excluded and what the base flood elevation is in this area? There is also no information on sections or elevations for this lot on the city's website. Thank you!

**Public Hearing:** WRAB Meeting, Sept. 15, 2014

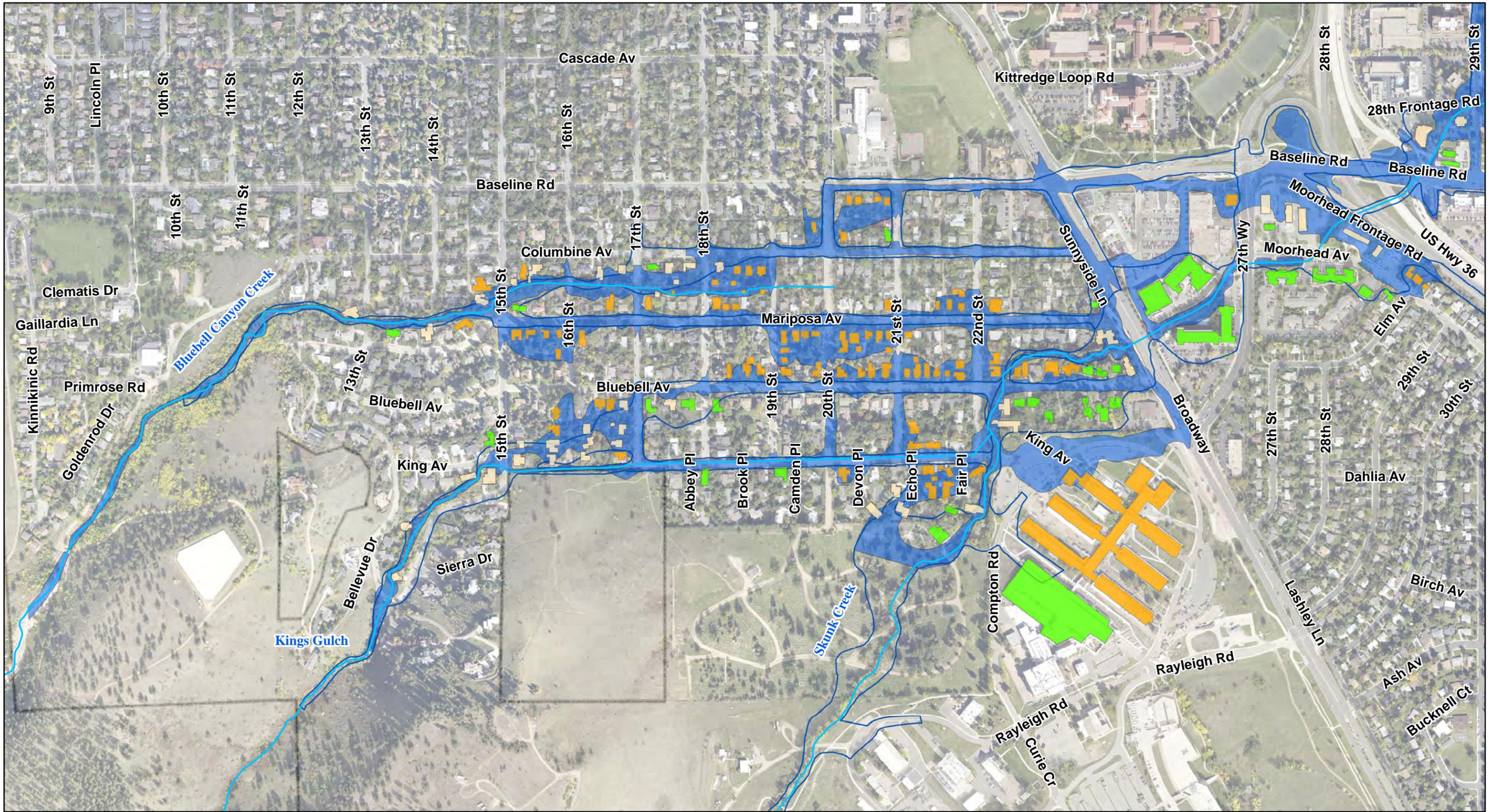
**Meeting Location:** Council Chambers

**Public Comments:**

1. Christina Jurgens – Concerns are with the Bluebell and that there were no diversions, which isn't reflected accurately in the mapping presented. Question is if a lot of water falls in the area, water will not flow uphill to 19th street and over Columbine if it's natural direction is downhill. She would like for this to be considered when moving forward with the amendment.
2. Bryan Boots – Owns a home at 20th and Columbine, which is in a newly designated hazard zone. He was completely unaware of the changes in zoning and is feeling like he is coming to the conversation late. Questions the assumptions that are going into this decision making and having a hard time reconciling the recent studies with what he actually experienced last September. He would like to better understand the next steps in the process regarding what is decided. It doesn't seem reasonable to put the burden on residents. He is requesting better, more effective outreach to citizens.
3. Tim Fuller-Rowell – Lives on Columbine Avenue, which is affected by the new floodplain, which now makes up half of his property. Increase in the water table flooded the basement. Flow down Mariposa didn't affect us. Rock dam broke causing a flash flood and persistent rainfall and wonders if that was factored into the analysis, but didn't see any major flow on

Columbine. Wants to understand the actual impact of flood to his property and physical reasons why it is now included on the floodplain. What is the process for deciding how the new boundaries are drawn and decided? Premature to start approving a new floodplain before the previous event is fully understood and would like the city to have more interaction with the people who are actually affected.

4. Jamie Krapohl – Property owner affected by the proposed flow split changes at 15th is his major concern. He didn't observe what is being shown on the maps and feels there is a lack of correlation in how the split affects these three blocks. On the Saturday of the flood, he was at 15th and Mariposa and didn't observe any diversions that were put into place by residents. The flooding on his corner was due to the Anderson Ditch overflowing, which is not represented in the changes. Since the open house, he has reached out to neighbors, but there are many renters around his property. He contacted three other property owners and informed them of the recent flood mapping changes. Feels that neighbors were not aware of these new changes. Concerned with the accuracy of the models, based on observations from walking around the neighborhood and what is being reflected in the updated maps. He feels this just doesn't make sense.



**Legend**

	FEMA Effective 100 Year Floodplain		Buildings Newly Affected by 100 Year Floodplain (104)		Creek
	Proposed Skunk Creek 100 Year Floodplain		Buildings Remaining in the 100 Year Floodplain (113)		City Limits
	Revised Boulder Creek 100 Year Floodplain		Buildings No Longer Affected by 100 Year Floodplain (66)		

0 250 500 1,000 1,500 Feet  
1:5,500

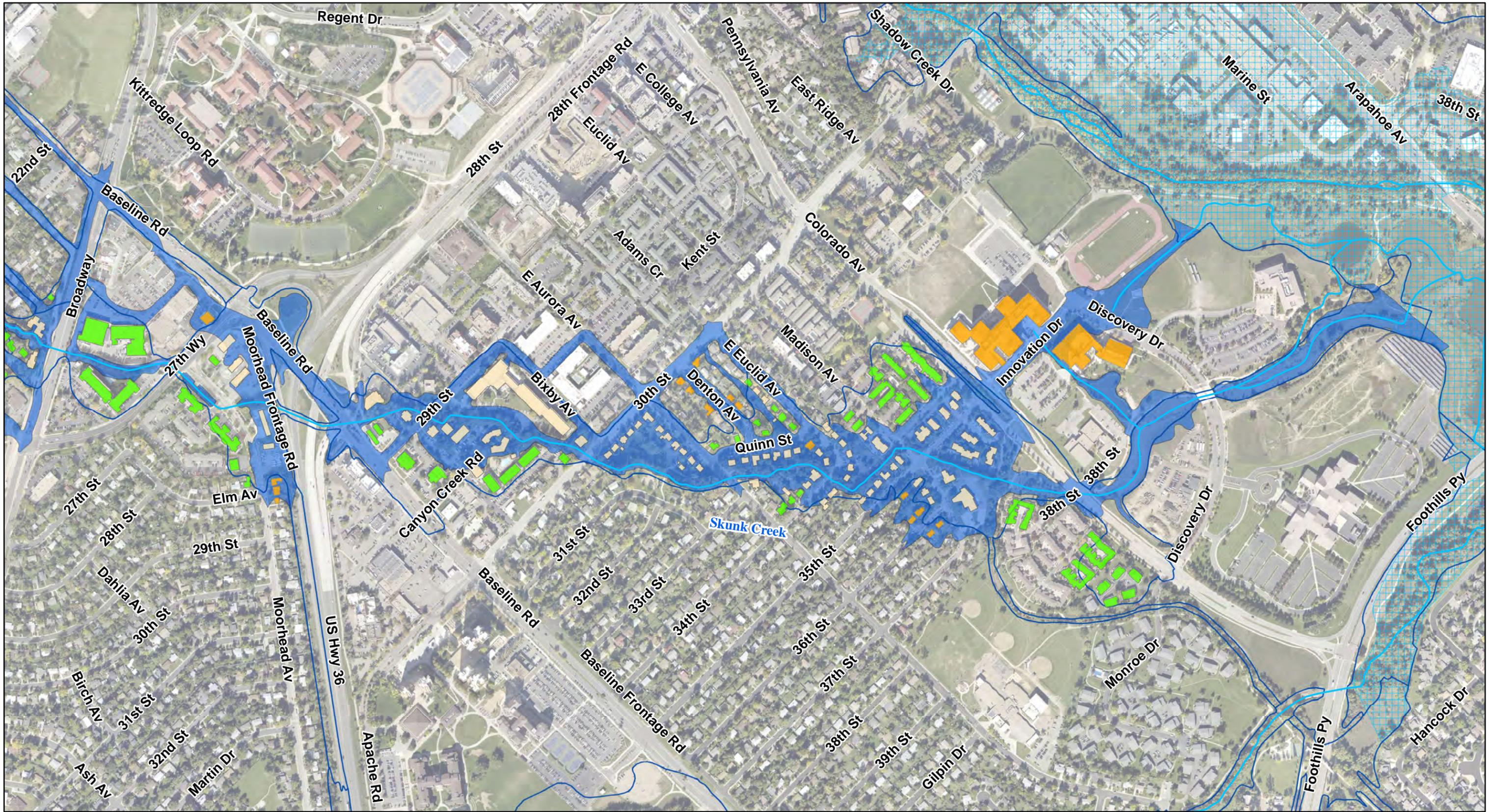
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## Skunk Creek

*Proposed 100 Year Floodplain Compared to FEMA Effective*

Map 1 of 2

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 Rev. 4/28/2015



**Legend**

- FEMA Effective 100 Year Floodplain
- Proposed Skunk Creek 100 Year Floodplain
- Revised Boulder Creek 100 Year Floodplain
- Buildings Newly Affected by 100 Year Floodplain (104)
- Buildings Remaining in the 100 Year Floodplain (113)
- Buildings No Longer Affected by 100 Year Floodplain (66)
- Creek
- City Limits

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1:6,000

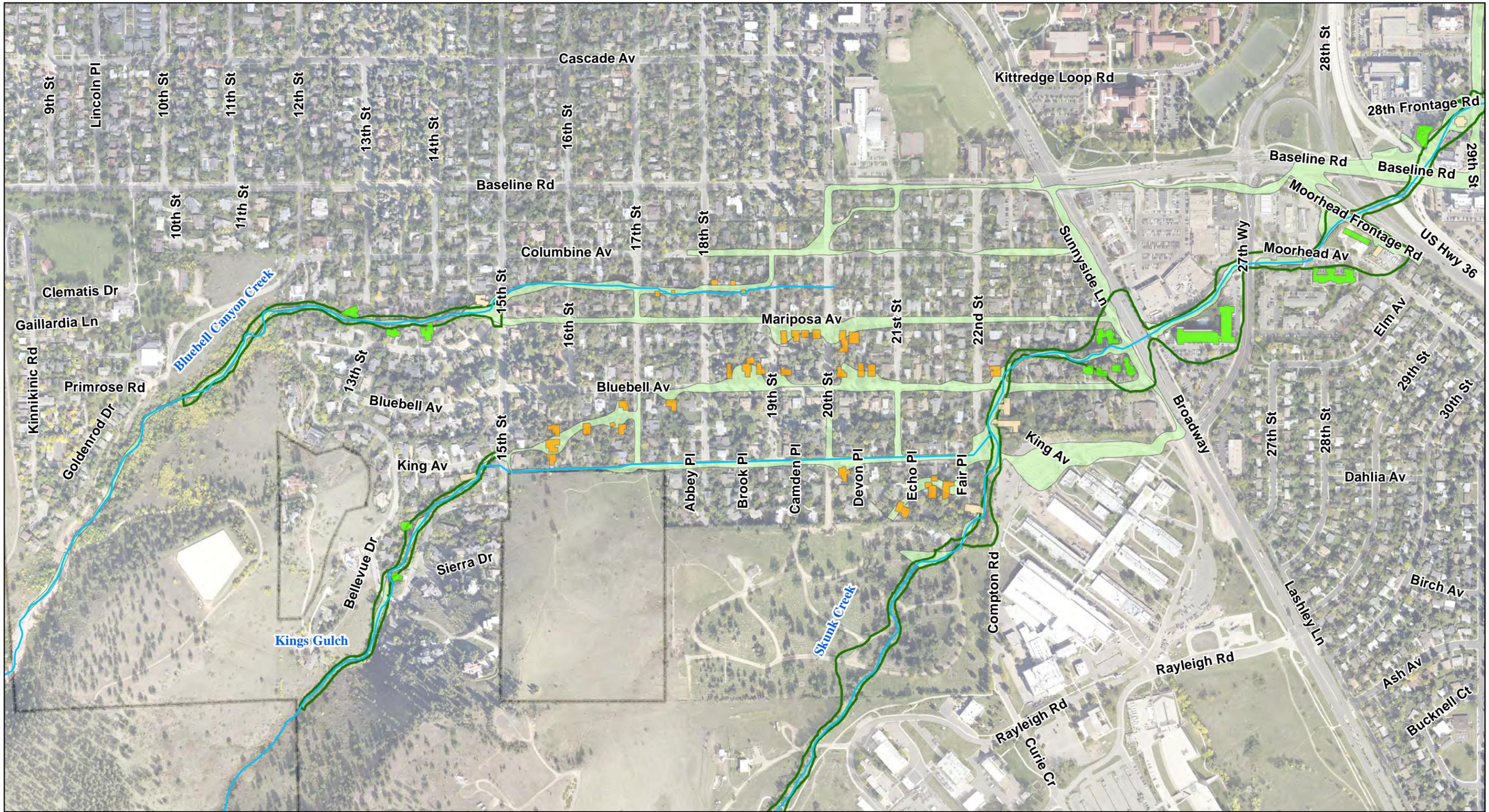
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## Skunk Creek

Proposed 100 Year Floodplain  
Compared to FEMA Effective

Map 2 of 2

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 Rev. 4/28/2015



**Legend**

- Effective Conveyance Zone
- Proposed Skunk Creek Conveyance Zone
- Revised Boulder Creek Conveyance Zone
- Buildings Newly Affected by Conveyance Zone (33)
- Buildings Remaining in the Conveyance Zone (28)
- Buildings No Longer Affected by Conveyance Zone (55)
- Creek
- City Limits

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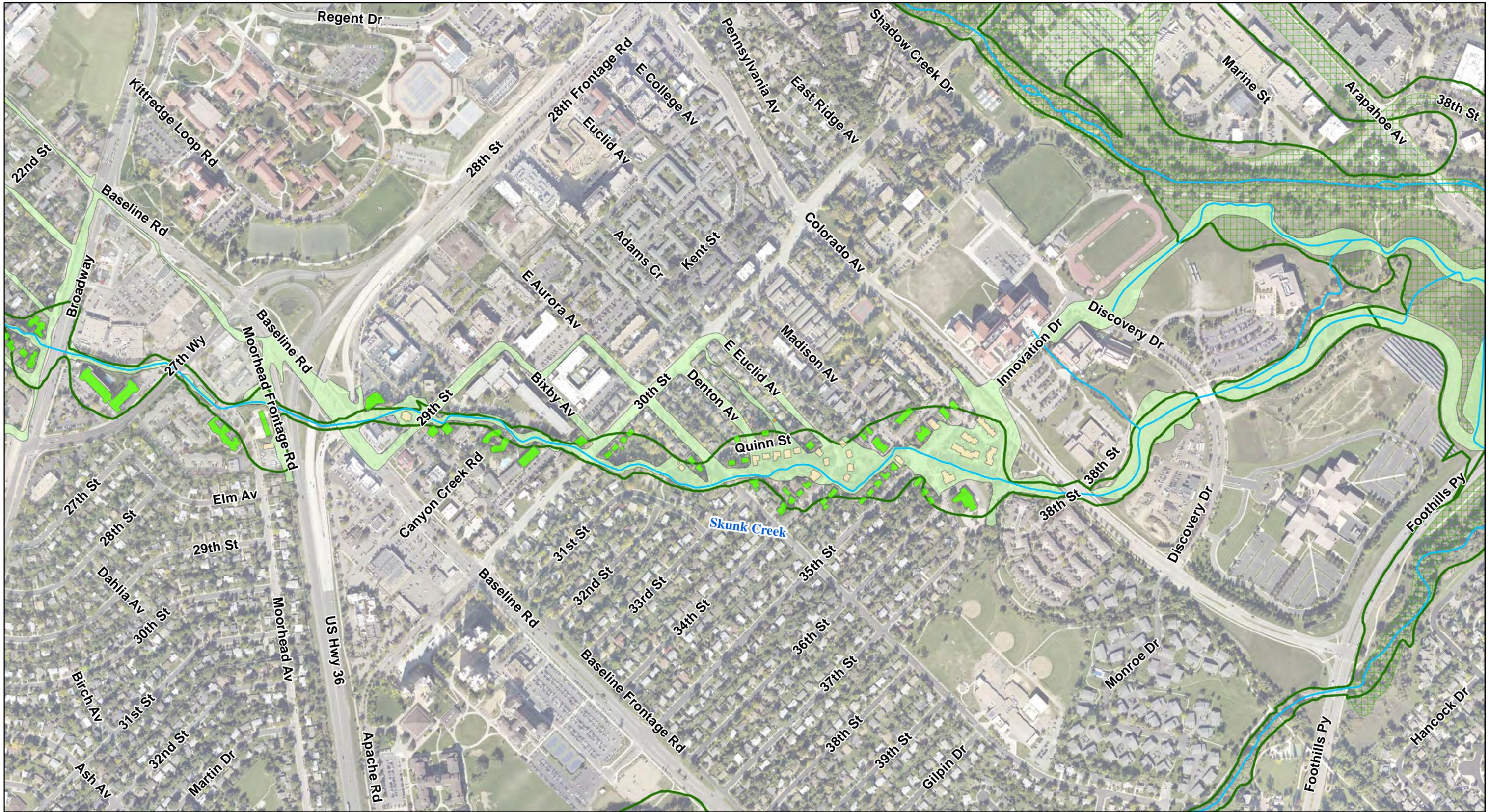
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## Skunk Creek

Proposed Conveyance Zone  
Compared to FEMA Effective

Map 1 of 2

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 Rev. 4/28/2015



**Legend**

- Effective Conveyance Zone
- Proposed Skunk Creek Conveyance Zone
- Revised Boulder Creek Conveyance Zone
- Buildings Newly Affected by Conveyance Zone (33)
- Buildings Remaining in the Conveyance Zone (28)
- Buildings No Longer Affected by Conveyance Zone (55)
- Creek
- City Limits

0 250 500 1,000 1,500 Feet  
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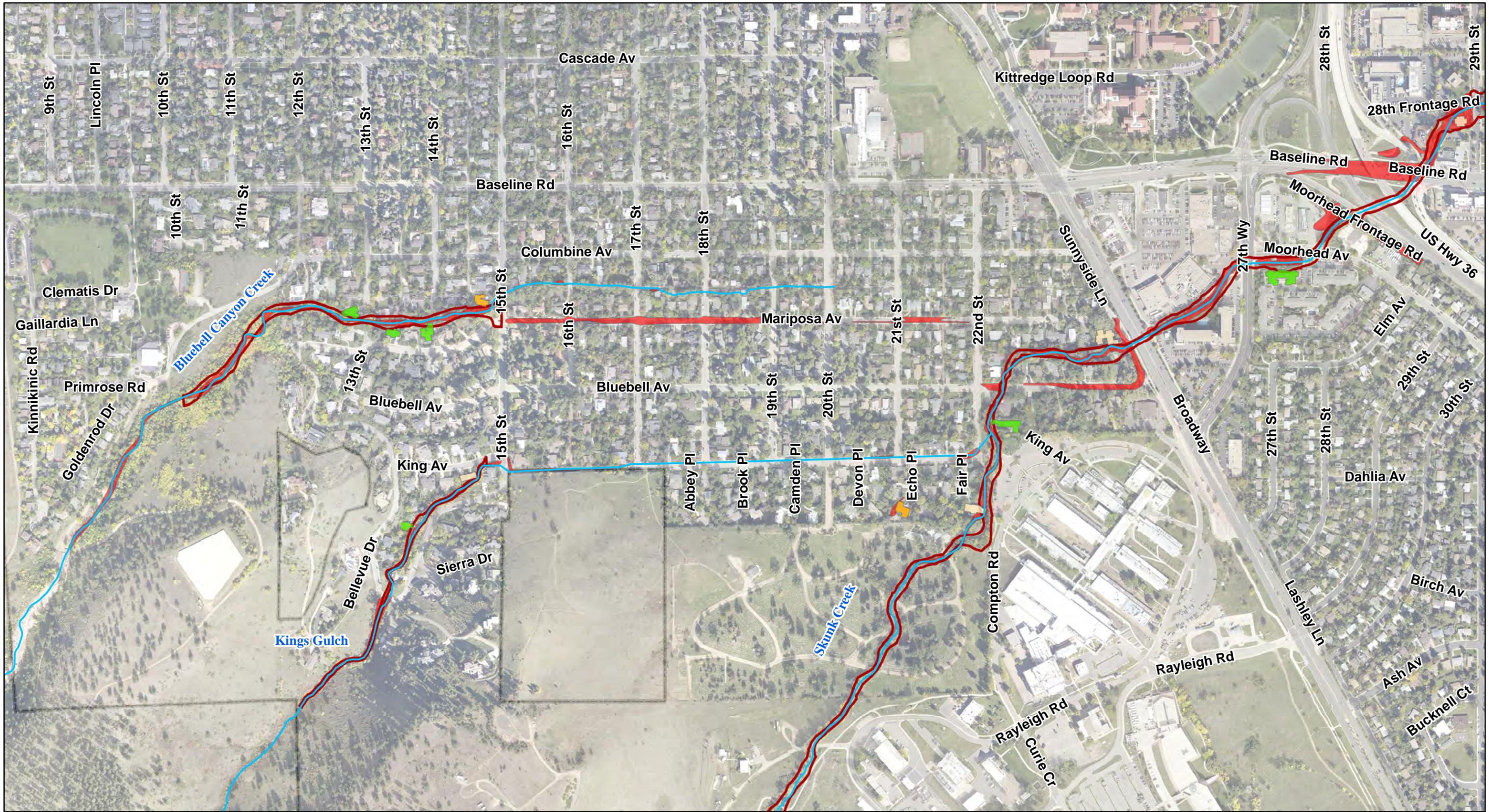
*The information depicted on this map is provided as graphical representation only. The City of Boulder provides no warranty, expressed or implied, as to the accuracy and/or completeness of the information contained hereon.*

## Skunk Creek

*Proposed Conveyance Zone Compared to FEMA Effective*

**Map 2 of 2**

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**Legend**

	Effective High Hazard Zone		Buildings Newly Affected by High Hazard Zone (3)		Creek
	Proposed Skunk Creek High Hazard Zone		Buildings Remaining in the High Hazard Zone (7)		City Limits
	Revised Boulder Creek High Hazard Zone		Buildings No Longer Affected by High Hazard Zone (22)		



  
 1:5,500

*The information depicted on this map is provided as graphical representation only. The City of Boulder provides no warranty, expressed or implied, as to the accuracy and/or completeness of the information contained hereon.*

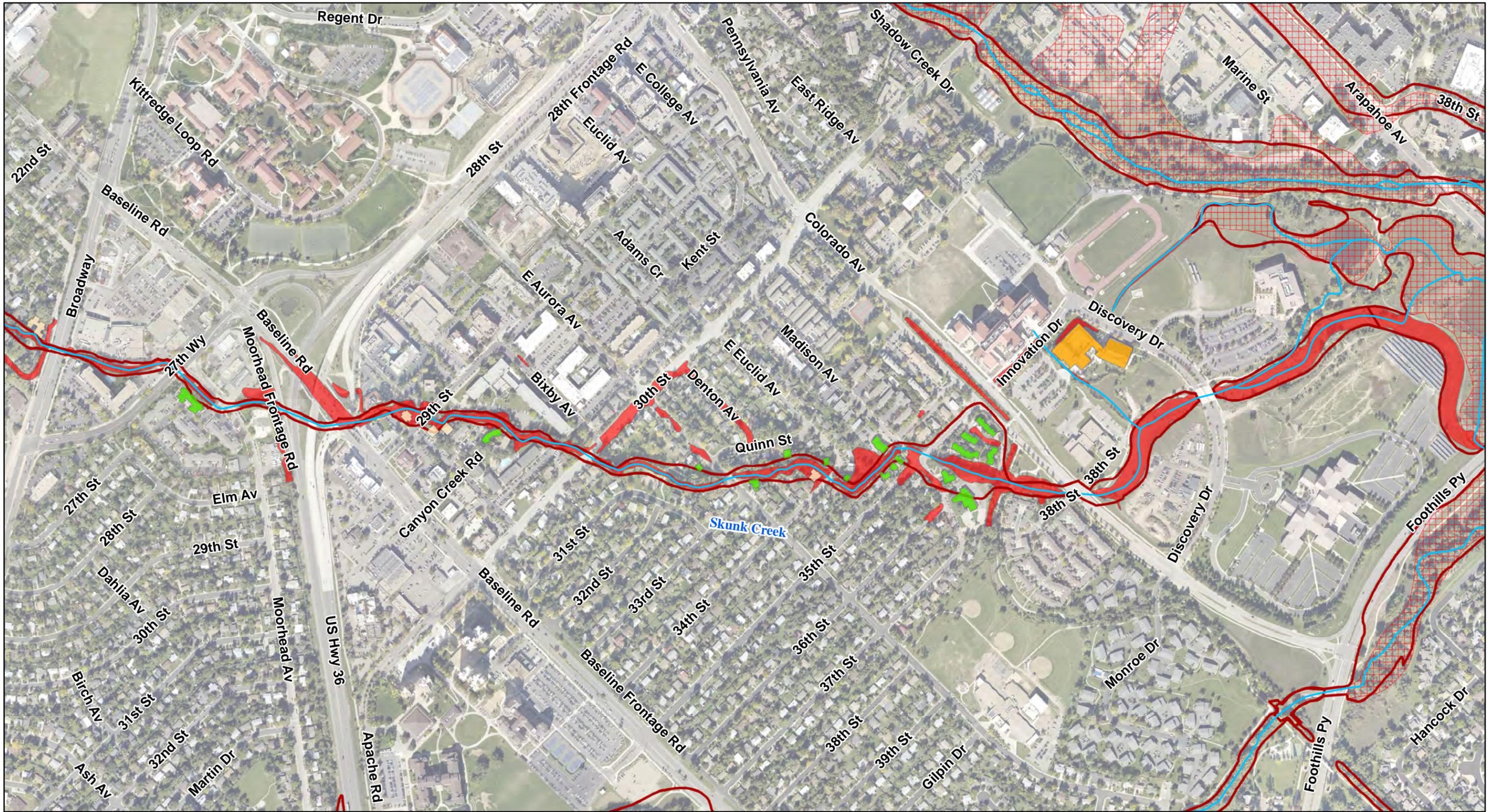
## Skunk Creek

Proposed High Hazard Zone  
 Compared to FEMA Effective

Map 1 of 2



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**Legend**

- Effective High Hazard Zone
- Proposed Skunk Creek High Hazard Zone
- Revised Boulder Creek High Hazard Zone
- Buildings Newly Affected by High Hazard Zone (3)
- Buildings Remaining in the High Hazard Zone (7)
- Buildings No Longer Affected by High Hazard Zone (22)
- Creek
- City Limits



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# Skunk Creek

*Proposed High Hazard Zone Compared to FEMA Effective*

**Map 2 of 2**

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**CITY OF BOULDER**  
**AGENDA ITEM PLANNING BOARD**  
**MEETING DATE: June 4, 2015**

**AGENDA TITLE:**

Public hearing and Concept Plan Review of a proposal for the expansion and renovation of an existing automobile sales and service facility at 2465 48<sup>th</sup> Court (Larry H. Miller Toyota). Proposal includes various site improvements and an approximately 28,500 square foot addition to the north (rear) side of the building, which requires merging the two existing parcels.

Applicant: Alexandra Schuchter, John Mahoney Architects  
Property Owner: Miller Family Real Estate LLC

**REQUESTING DEPARTMENT:**

**Community Planning and Sustainability:**

David Driskell, Executive Director  
Susan Richstone, Deputy Director  
Charles Ferro, Development Review Manager  
Sloane Walbert, Planner I

**OBJECTIVE:**

1. Hear applicant and staff presentations.
2. Hold public hearing.
3. Planning Board discussion and comment on Concept Plan. No action is required by Planning Board.

**PROPOSAL AND SITE SUMMARY:**

**Proposal:** Concept Plan Review of a proposal for an expanded and improved automobile sales and service center (Larry H. Miller Toyota). Proposal includes merging the two existing parcels into one and building an addition across the existing property line. The project also includes relocating the existing access on 47<sup>th</sup> Street, a five-foot wide detached sidewalk on 47<sup>th</sup> Street, building façade improvements and upgraded outdoor lighting and landscaping.

**Project Name:** Larry H. Miller Toyota Expansion

**Location:** 2465 48<sup>th</sup> Court

**Zoning:** Industrial – Service 2 (IS-2), Industrial – Service 1 (IS-1)

**Comprehensive Plan:** Community Industrial

**Key Issues for Discussion:**

In addition to an analysis of the criteria for Concept Plan review, staff has identified the following key issues for the board's consideration. Staff's analysis of the criteria and the key issues can be found in Section IV of this memo.

1. Is the redevelopment of the site consistent with Boulder Valley Comprehensive Plan (BVCP) policies?
2. Does the exterior of buildings present a sense of permanence through the use of authentic, high quality materials?

## I. INTRODUCTION AND BACKGROUND

### PROCESS

Per section 9-2-14(b)(1), B.R.C. 1981, Concept Plan and Site Review are required for projects in the IS-1 and IS-2 zone districts that are over 5 acres in area or include 100,000 square feet of floor area. The purpose of the Concept Plan review is to determine the general development plan for a particular site and to help identify key issues in advance of a Site Review submittal. This step in the development process is intended to give the applicant an opportunity to solicit comments from the Planning Board as well as the public early in the development process as to whether a development concept is consistent with the requirements of the city as set forth in its adopted plans, ordinances and policies (section 9-2-13, B.R.C. 1981). Concept Plan review requires staff review and a public hearing before the Planning Board. The existing car dealership predates these requirements and must now undergo a Concept Plan and an eventual Site Review based on the size of the property.

### BACKGROUND

The subject property is located on the northeast corner of Pearl Parkway and 47<sup>th</sup> Street, just east of Foothills Parkway (refer to *Figure 1* below). The Boulder Junction Transit Village is located approximately a half a mile to the west on Pearl Parkway. The approximately six-acre site was annexed into the city in 1979 and consists of Lot 1 of the Southbend Subdivision (1986) and the southerly portion of Lot 1, Brown-Pelle Subdivision (1986). The existing approximately 64,600 square foot building was constructed in 1986 for a car dealership. Major transition power lines cross the north side of the property, which is currently used as parking and vehicular storage. The development has two access points, one located on 47<sup>th</sup> Street and one at the terminus of the 48<sup>th</sup> Court cul-de-sac. South Goose Creek runs along the south property line, which is a significant barrier between the property and Pearl Parkway. This portion of the property is impacted by the 100-year floodplain, conveyance zone and high hazard floodplain as well as wetlands and wetlands buffer areas.

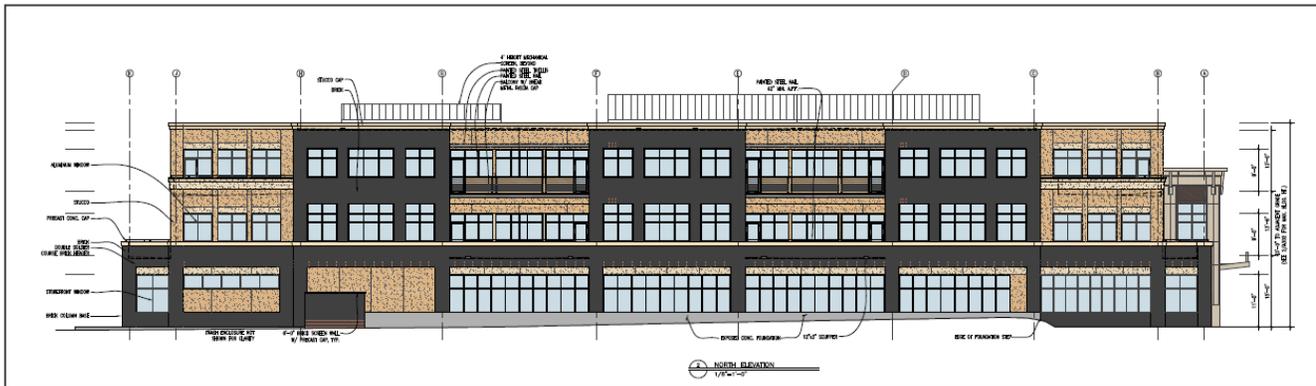


Figure 1: Birds-Eye View of Existing Context

The surrounding area is characterized by automotive sales and service facilities, industrial service uses, and office uses. Please refer to the images below, which illustrate the general neighborhood character. *Figure 2* depicts the existing car dealerships to the east on Pearl Parkway, McCaddon Cadillac Buick GMC and Gebhardt Volkswagen. *Figure 3* depicts the recently approved Pearl Parkway Centre development directly across Pearl Parkway in the location of the former RTD park-n-ride, which is currently under construction. Lastly, *Figure 4* depicts the character of the large Pearl East business park to the southeast, which predominantly contains professional offices.



**Figure 2: Dealerships to the East**



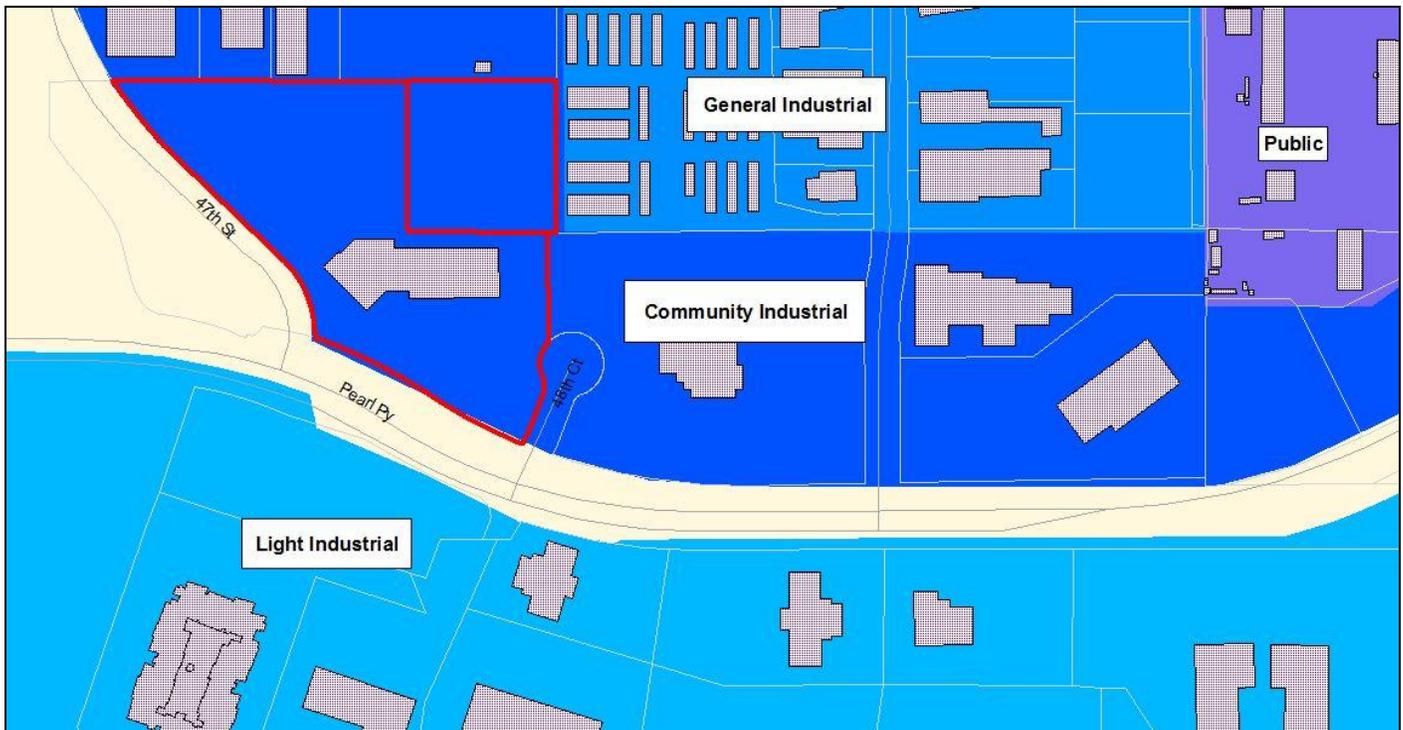
**Figure 3: Pearl Parkway Centre**



**Figure 4: Pearl East Business Park**

RTD operates several transit routes on Pearl Parkway, including the 206 local route and S regional route. Bus stops are located directly across Pearl Parkway and to the east on 49th Street. The site has access to several multi-use paths located in the vicinity, including the Foothills Parkway path directly to the west and the Pearl Parkway path on south side of Pearl Parkway. There is currently no pedestrian access along 47th Street from Pearl Parkway to the north.

As shown in *Figure 5* below, the site is designated as Community Industrial under the Boulder Valley Comprehensive Plan (BVCP), which includes those areas where the predominant uses provide a direct service to the planning area. These uses often have ancillary commercial activity and are essential to the life of the Boulder community. The BVCP lists possible uses in this designation as smaller scale auto-related uses, small printing operations, building contractors, building supply warehouses, small manufacturing operations and similar uses.



**Figure 5: BVCP Land Use**

As shown in *Figure 6*, the property is split between the Industrial – Service 2 (IS-2) and Industrial – Service 1 (IS-1) zone districts. Both zones are described under section 9-5-2, B.R.C. 1981 as “service industrial areas primarily used to provide to the community a wide range of repair and service uses and small-scale manufacturing uses.”

The two zones have the same form and bulk standards and permitted uses but have different intensity standards. The proposed uses of the property (sales and rental of vehicles and service of vehicles with limited outdoor storage) are allowed without special review in the subject zone districts.



**Figure 6: Zoning**

## II. PROJECT DESCRIPTION

The proposal includes the remodel and expansion of an existing automotive sales and service facility (Larry H. Miller Toyota). The dealership proposes to remodel and expand their operations to enhance the building character and increase customer service and sales potential in order to meet corporate requirements for Toyota sales. Refer to [Attachment A](#) for the applicant's written statement. Proposal is to expand the existing two-story building by 28,579 square feet on the north (rear) side of the building to provide a new showroom, customer service reception area, indoor vehicle delivery, service bays and car wash. The car wash will be for exclusive use of the dealership. The building addition is proposed in the location of existing vehicle storage/parking spaces. The applicant intends to seek LEED certification of the remodel and expansion of the building. Regardless, the applicant will be required to meet the city's energy code (IECC + 30%).

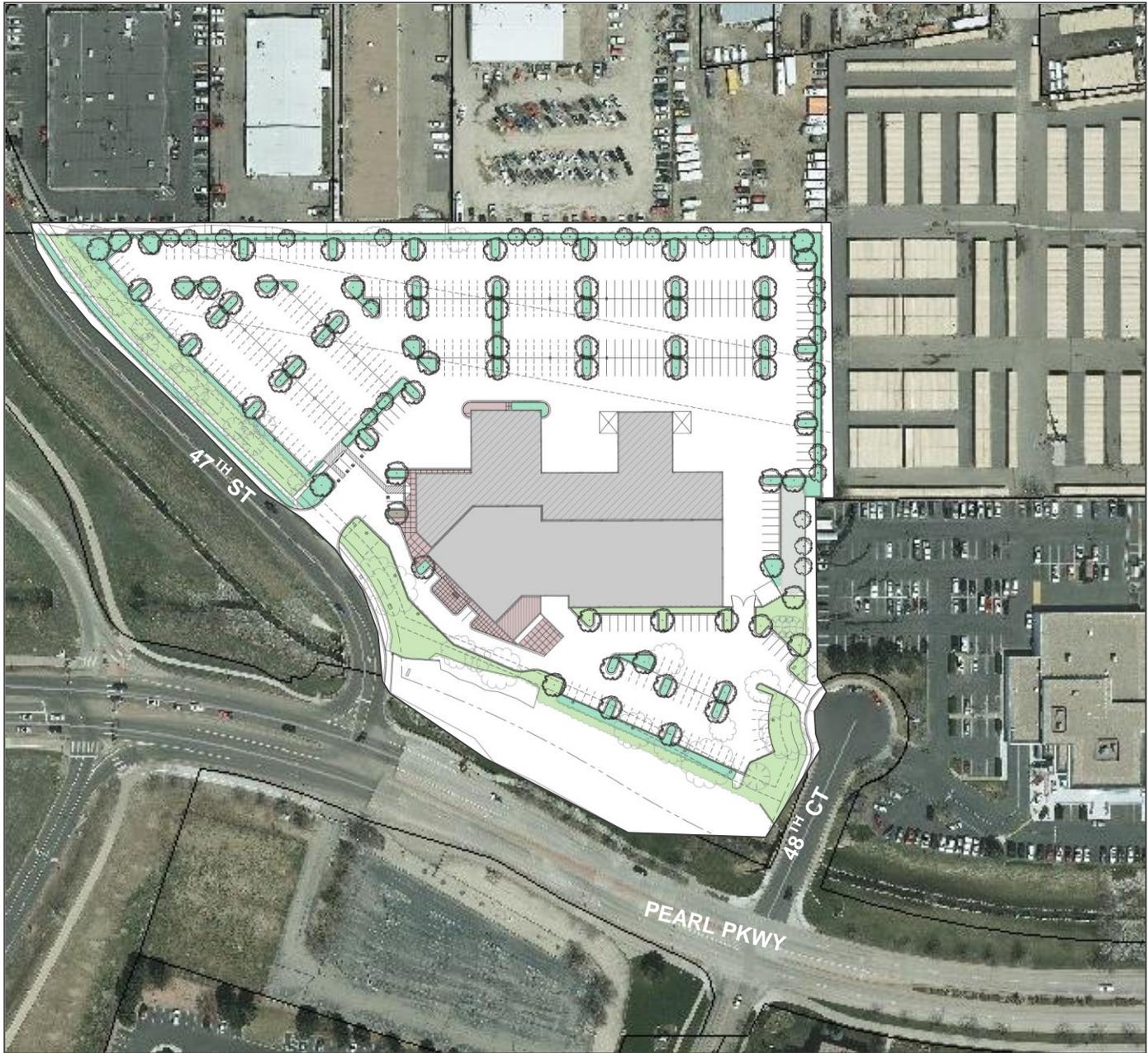
### Site Plan.

As shown in *Figure 7* below, the general site layout will be unchanged. The majority of the site will continue to be used for vehicular display and storage. However, as part of redevelopment the parking areas will be re-constructed in order to meet the city's landscaping and outdoor lighting standards. The proposal includes landscape screening of the vehicle parking lot from the street and adjacent properties and parking lot landscaping islands that will support large trees. The existing lighting fixtures will also be replaced to meet the city's dark sky ordinance and outdoor lighting code.

### Access and Parking.

The parking standards in the IS-1 and IS-2 zoning districts require a minimum of one off-street parking space for every 400 square feet of floor area. There is no maximum parking standard in this zone district. With the proposed addition, the development will be required to provide 161 spaces. The concept plan includes 471 spaces that meet parking standards, 295 of which would be used for display purposes. 176 spaces would be dedicated to employee and customer parking and the storage of excess automobile inventory. The overall number of spaces will be reduced with the project. No information on bicycle parking was provided with this application. However, the project will be required to provide short- and long-term

bicycle parking in the quantities specified in Table 9-8 of the land use code. Vehicle-related uses are required to provide one space per 1,125 square feet of associated office space or production areas. Based on the submitted floor plans, approximately 23 spaces will be required. Seventy five percent (17 spaces) are required to meet the requirements for short-term bicycle parking and twenty five percent (6 spaces) must meet the requirements for long-term storage.



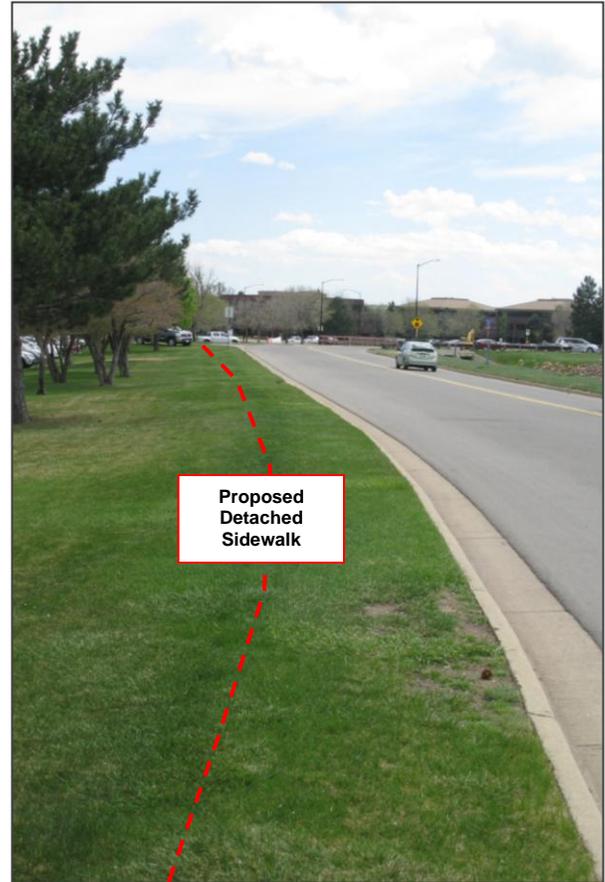
**Figure 7: Site Plan**

The proposal includes the relocation of the main access and curb cut on 47<sup>th</sup> Street to reduce the congestion that currently occurs as cars turn from Pearl Parkway onto 47<sup>th</sup> Street. The access would be relocated to the northwest by approximately 45 feet and expanded to 40 feet in width (refer to *Figure 9* below). Staff is in support of shifting the existing drive entry on 47<sup>th</sup> Street away from the intersection however, the curb cut may not be larger than 35-feet in width per the City of Boulder Design and Construction Standards (DCS). This detail will be required to be addressed at the time of Site Review. There is

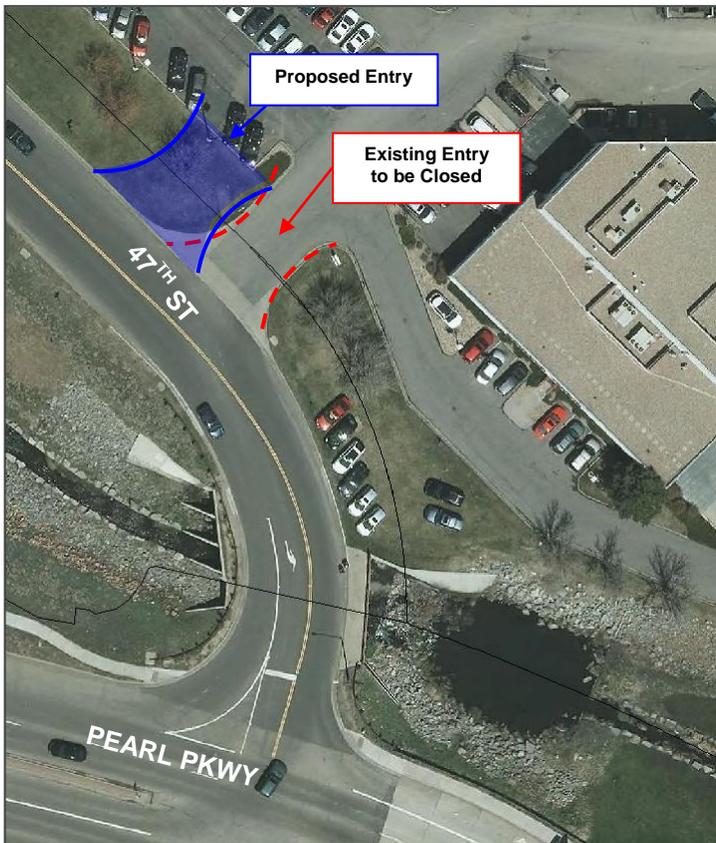
currently no pedestrian access along 47th Street from Pearl Parkway to Pearl Street to the north. The proposal includes the construction of a 5-foot sidewalk and 8-foot tree lawn along this frontage (see *Figure 8*). Staff will also likely require a detached 5-foot sidewalk along the property's frontage with the 48th Street Court at time of Site Review.

**Open Space Areas.**

Nonresidential buildings up to 35 feet in height in the IS-1 and IS-2 zone districts must provide at least ten percent of the total land area as usable open space. The building is 32 feet in height and the development is required to provide at least 26,570 square feet of open space. It appears that the development will meet the minimum open space required, particularly on the south side of the property adjacent to South Goose Creek. The proposal also includes a decorative concrete plaza. Open space areas will be accessible from public areas and open to use by the public. Refer to the applicant's Landscape Concept Plan (sheet L 1.0) of [Attachment A](#).



**Figure 8: 47<sup>th</sup> Street Looking South**



**Figure 9: Access on 47<sup>th</sup> Street**

**Architecture and Building Design.**

The proposal includes upgrading the building facades to improve the building character and better address the street. Aluminum composite panel siding and EIFS are the primary materials that are proposed on the south and west elevations. Entrance features are proposed, also composed of aluminum siding, to address 47<sup>th</sup> Street and Pearl Parkway. The new addition in the rear will consist of EIFS to match the existing building. It appears that the intent of the new entrance features is to highlight signage and branding for the dealership. *Figure 10* depicts the existing northwest building elevation facing Pearl Parkway and *Figure 11* depicts the proposed façade changes. A detailed analysis of the building materials and building design can be found below under Section IV.



**Figure 10: Existing Northwest Corner Elevation**



**Figure 11: Proposed Northwest Corner Elevation with Addition**

**Requested Modifications.**

No modifications to the land use code have been identified during Concept Plan Review.

**III. Concept Plan Review Criteria for Planning Section 9-2-13(e)**

**Guidelines for Review and Comment:** The following guidelines will be used to guide the Planning Board's discussion regarding the site. It is anticipated that issues other than those listed in this section will be identified as part of the Concept Plan review and comment process. The Planning Board may consider the following guidelines when providing comments on a concept plan:

- 1) **Characteristics of the site and surrounding areas, including, without limitation, its location, surrounding neighborhoods, development and architecture, any known natural features of the site including, without limitation, mature trees, watercourses, hills, depressions, steep slopes and prominent views to and from the site;**

**Site Context.** The property is located north of and adjacent to Pearl Parkway, between 48th Court and 47th Street, directly east of the on-ramp to northbound Foothills Parkway. The site is just over 6 acres with a mild slope to the east. An existing two-story building, constructed in 1986, is located on the southern portion of the property. The utilitarian architecture is characteristic of auto dealerships built during this period. Major transition power lines cross the north side of the property, which is currently used as parking and vehicle storage.

A majority of the property is used for parking and vehicular display and is lacking landscaping. However, several mature trees are located along the west property line and serve as screening. South Goose Creek runs along the south property line, which is a significant barrier between the property and Pearl Parkway. This portion of the property is impacted by the 100-year floodplain, conveyance zone and high hazard floodplain as well as wetlands and wetlands buffer areas. Recent habitat restoration was done on this portion of Goose Creek, including a new meandering channel and a wide floodplain terrace where the bike trail was previously located. In addition, the rock weirs and in stream boulders were installed as the primary method to encourage the stream into the newly excavated channel. Views of the Flatirons and Foothills are evident from the property, mostly on the south side of the site (refer to *Figure 15* below).



**Figure 12: Vicinity Map**

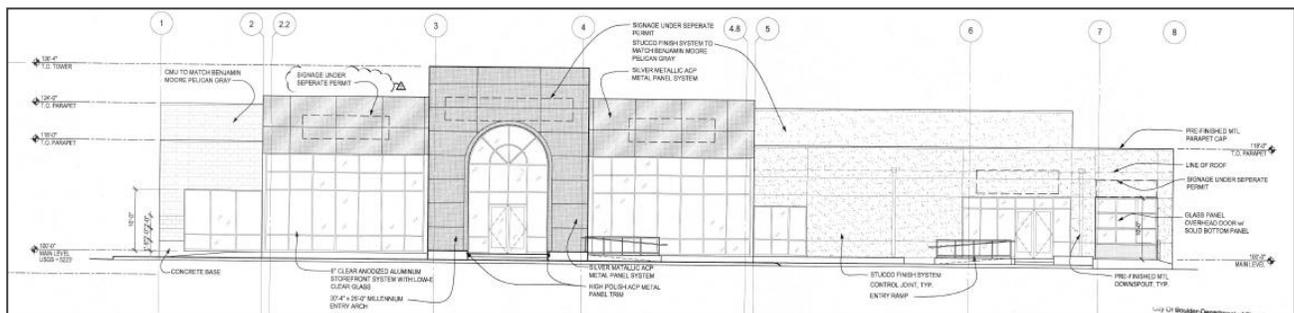
**Surrounding Context.** The character of the area surrounding the property is distinctly service oriented. Commercial buildings containing auto service uses are located directly to the north, a self-storage facility is to the northeast and the McCaddon Cadillac Buick GMC dealership is directly to the west. On the north side of Pearl Parkway, the Gebhardt Volkswagen dealership is further to the west on Pearl Parkway and the Pollard Motor dealership has been approved to relocate at 5075 Pearl Parkway. Several other auto repair uses are in the vicinity, contributing to the auto industry cluster in the area.

The area to the south contains the large Pearl East business park, which predominantly contains professional offices. The Courtyard by Marriott hotel is directly to the west of the park. A new development has been approved directly across Pearl Parkway for a three-story office building, in the former location of the RTD park-n-ride.

Many of the surrounding buildings characterize commercial architecture representative of the 1980's and 1990's (refer to *Figures 2 and 4* above). However, new development is distinctly more modern in character, particularly a new warehouse structure at 5025 Pearl Street.



**Figure 13: Warehouse Use at 5025 Pearl Parkway**



**Figure 14: Approved South Elevation for Pollard Motors (5075 Pearl Parkway)**

- 2) **Community policy considerations including, without limitation, the review process and likely conformity of the proposed development with the Boulder Valley Comprehensive Plan and other ordinances, goals, policies, and plans, including, without limitation, subcommunity and subarea plans;**

The proposed project will be evaluated through the Site Review process for conformance with the following:

- The Community Industrial land use designation of the BVCP;
- All relevant policies of the BVCP;
- The Site Review criteria of the Land Use Code;
- Zoning regulations for the IS-1 and IS-2 zone districts;
- Subdivision regulations of Chapter 9-12 of the land use code. The proposal does not meet the criteria for the abbreviated process of a Lot Line Elimination;
- The criteria of Section 9-9-11 of the land use code for usable open space. Open space areas must be accessible from public areas and open to use by the public; and
- The City of Boulder Design and Construction Standards (DCS).

As a potential Site Review project, development of the site is subject to compliance with the Boulder Valley Comprehensive Plan (BVCP), which has a wide variety of policies that apply. Approval of a Site Review application requires consistency with the BVCP. Preliminarily, the proposal appears to meet several policies. Please see the key issues section of this document for further analysis on conformance with the BVCP and the city's [Economic Sustainability Strategy](#).

### **3) Applicable criteria, review procedures, and submission requirements for a Site Review;**

The proposed project will be subject to all applicable criteria in [section 9-2-14\(h\)](#) of the Land Use Regulations for Site Review. Special consideration will be given to the provision of open space (criterion (h)(2)(A)) and the proposed building design (criterion (h)(2)(F)). Additional consideration will be given to the design of parking areas to ensure efficient use of the land and to reduce the visual impacts. Consideration will also be given to the design of detention and water quality.

At the time of Site Review, a Transportation Demand Management (TDM) Plan will be required, which outlines strategies to mitigate traffic impacts created by the proposed development and implementable measures for promoting alternate modes of travel. All public infrastructure, improvements and landscaping built in the city's public rights-of-way and public easements must meet the DCS. Staff has recommended that the applicant consider Eco Passes for employees, bike share for auto maintenance/repair customers and providing bike parking in excess of the minimum requirements as possible TDM measures.

Review of the Site Review application would follow a three-week review track where comments or a decision would be rendered at the end of that time. If revisions were required, two additional review tracks could be scheduled. If the project required Planning Board review, it would be scheduled during that time. If the project could be decided by staff, it would be subject to Board or citizen call-up.

### **4) Permits that may need to be obtained and processes that may need to be completed prior to, concurrent with, or subsequent to Site Review approval;**

Following a Site Review approval, the applicant would be required to submit an application for Technical Document Review (TEC doc) prior to application for building permit. Technical Documents would be required to allow staff to review more detailed plans to affirm compliance with regulations related to engineering, architecture, landscaping, drainage, lighting etc.

In addition, a subdivision is necessary to merge the two existing parcels into one lot and build an addition across the

property line. The applicant must submit a preliminary and final plat for review. The preliminary plat is a Land Use Review application. See sections [9-12-6](#) and [9-12-7](#) of the land use code for application requirements and approval process for a preliminary plat. An approved site plan may substitute for a preliminary plat if it meets the requirements of section [9-12-6](#), "Application Requirements for a Preliminary Plat," B.R.C. 1981. A final plat is a Technical Document Review application and must meet the criteria in sections [9-12-8](#), [9-12-9](#), [9-12-10](#), and [9-12-12](#), B.R.C. 1981. A preliminary plat can be processed simultaneously with a final plat, at the option of the applicant. Applications for subdivision are typically submitted following the Site Review process.

A future multi-use path and associated underpasses are identified on the north side of Goose Creek in the City's Greenways Master Plan. However, there are no immediate plans to construct these improvements. Note that the applicant may be required to dedicate a public access easement across an existing drainage and floodway easement on the north side of Goose Creek in order to accommodate this connection. The dedication would help to offset the impacts of development on this property.

The building addition and site work would require a building permit that is consistent with the approved Site Review and Technical Documents.

**5) Opportunities and constraints in relation to the transportation system, including, without limitation, access, linkage, signalization, signage, and circulation, existing transportation system capacity problems serving the requirements of the transportation master plan, possible trail links, and the possible need for a traffic or transportation study;**

The site has access to several multi-use paths located in the vicinity, including the Foothills Parkway path directly to the west and the Pearl Parkway path on south side of Pearl Parkway. A multi-use path connection is planned for the north side of Pearl Parkway adjacent to the creek. There is currently no pedestrian access along 47<sup>th</sup> Street from Pearl Parkway to the north. The proposal includes the addition of a detached sidewalk along this frontage, which would greatly improve pedestrian connectivity and the support of a multi-modal transportation system, as envisioned in the Transportation Master Plan. Inherent in a business associated with automobile sales is the movement of a number of vehicles on site in any given day. The establishment of defined areas for vehicle display and storage, as a part of the proposed project, will help to separate pedestrian, bicycle and vehicular movements.

In addition, several transit routes run along Pearl Parkway, including the 206 local route and S regional route. An additional LEAP local route is proposed to run along Pearl Parkway. Bus stops are located directly across Pearl Parkway and to the east on 49<sup>th</sup> Street. Although the site is in close proximity to various multimodal facilities it is anticipated only a small percentage of employees and customers would utilize alternative modes of transportation.

Several transportation related issues would need to be addressed as the project moves toward Site Review. The applicant will be required to develop a Transportation Demand Management (TDM) Plan, which outlines strategies to mitigate traffic impacts created by the proposed development and implementable measures for promoting alternate modes of travel. Additionally, the configuration of the detached sidewalk on 47<sup>th</sup> Street and 48<sup>th</sup> Court and proposed new access on 47<sup>th</sup> Street will need to be refined.

**6) Environmental opportunities and constraints including, without limitation, the identification of wetlands, important view corridors, floodplains and other natural hazards, wildlife corridors, endangered and protected species and habitats, the need for further biological inventories of the site and at what point in the process the information will be necessary;**

The site is already developed with a two-story building and surface parking. Minimal impact to natural systems would occur. The proposed project would add more pervious surface, plantings and open space and would be considered an

enhancement over the existing condition.

Environmental Opportunities: Views of the Flatirons and foothills are evident from the property, mostly on the south side of the site. South Goose Creek runs along the south property line and provides a buffer to Pearl Parkway and natural open space for the development (refer to *Figures 15 and 16* below).



**Figure 15: View of Flatirons and Foothills to the South**

Environmental Constraints: The south portion of the property is impacted by the 100-year floodplain, conveyance zone and high hazard floodplain as well as wetlands and wetlands buffer areas. Any development in this area may require a floodplain development permit and a wetlands permit. In addition, there are active prairie dog colonies in the area. Urban Wildlife Conservation staff conducted a preliminary site visit and did not observe any prairie dog burrows on the property. However, Prairie dogs can expand their colony and move to new areas. Should prairie dogs establish on the property, they would need to be removed prior to any ground or burrow disturbance. City ordinance requires landowners to obtain a permit from the city before using any form of lethal control on prairie dogs.



**Figure 16: South Goose Creek**

## 7) **Appropriate ranges of land uses;**

The proposed uses of the property (sales and rental of vehicles and service of vehicles with limited outdoor storage) are allowed uses in the IS-1 and IS-2 zone districts. The character of the area surrounding the property is distinctly service oriented. Commercial buildings containing auto service uses are located to the north and east, and the McCaddon Cadillac Buick GMC and Gebhardt Volkswagen dealerships are located to the west on Pearl Parkway. Given that the proposal is to expand an existing use of the site, the site's proximity to other auto-related uses, as well as the proximity to several major roadways, the proposed expansion is an appropriate use.

8) **The appropriateness of or necessity for housing.**

Not applicable; no housing is proposed for the site.

**IV. KEY ISSUE ANALYSIS**

**Key Issue #1: Is the addition and improvement of the site consistent with Boulder Valley Comprehensive Plan (BVCP) policies?**

Preliminarily, the proposal appears to meet several policies, particularly economic sustainability policies that support the retention and expansion of existing local businesses and create and sustain a favorable business climate. Given the intent of the Community Industrial land use designation of the site within the BVCP, along with a number of BVCP policies, the proposed project appears to be conceptually consistent with the BVCP.

There are a number of BVCP policies that the proposed concept plan is consistent with including:

**Relevant BVCP Policies:**

**Sustainability Framework:**

• **1.03 Principles of Economic Sustainability**

*The city and county will strive to develop and maintain a healthy, adaptable economy that is vital to the community's quality of life and high level of services and amenities by:*

- a) *Promoting a diverse economy that supports the needs of all community members;*
- b) *Promoting a qualified and diversified work force that meets employers' needs and supports a range of jobs; and*
- c) *Providing for and investing in a quality of life, unique amenities, and infrastructure that attracts, sustains, and retains businesses and entrepreneurs.*

**Land Use and Building Design:**

• **4.05 Energy-Efficient Building Design**

*The city and county will pursue efforts to improve the energy and resource efficiency of new and existing buildings. The city and county will improve regulations ensuring energy and resource efficiency in new construction, remodels and renovation projects and will establish energy efficiency requirements for existing buildings. Energy conservation programs will be sensitive to the unique situations that involve historic preservation and low-income homeowners and renters and will ensure that programs assisting these groups are continued.*

**Urban Design Linkages:**

• **2.22 Improve Mobility Grid**

*The walkability, bikeability and transit access should be improved in parts of the city that need better connectivity and mobility, for example, in East Boulder. This should be achieved by coordinating and integrating land use and transportation planning and will occur through both public investment and private development.*

**Strategic Redevelopment Opportunities and Sustainable Employment:**

- **5.01 Revitalizing Commercial and Industrial Areas**

*The city will develop specific strategies to optimize redevelopment opportunities, partner with the private sector and proactively support redevelopment of commercial and industrial areas. Examples of areas for revitalization that have been identified are Diagonal Plaza, University Hill Commercial district and the East Boulder Industrial area.*

*The city will use a variety of tools to create public/private partnerships that lead to successful redevelopment. These tools may include, but are not limited to, area planning, infrastructure improvements, changes to zoning or development standards and incentives including financial incentives, increased development potential or urban renewal authority.*

- **5.02 Regional Job Center**

*The city is one of several job centers in the region, and significant additional employment growth is projected in the future. The city will adopt policies and strategies that support the city's role as a regional job center in the future consistent with sustainability goals. The city will support the growth and success of existing businesses, including primary and secondary employers.*

**Diverse Economic Base:**

- **5.03 Diverse Mix of Uses and Business Types**

*The city and county will support a diversified employment base within the Boulder Valley, reflecting labor force capabilities and recognizing the community's strengths in scientific, professional, technological and related industries. The city will identify areas that should be protected for industrial, service and office uses and will evaluate areas with non-residential zoning to ensure that the existing and future needs of a rapidly changing and technologically oriented global economy and employment base are adequately accommodated. Where appropriate, mixed use development will be encouraged incorporating residential uses and support services for the employment base. As an integral part of redevelopment and area planning efforts, the city acknowledges that displacement and loss of service and affordable retail uses will be considered in the context of redevelopment and planning goals.*

- **5.04 Vital and Productive Retail Base**

*The city will develop and implement a retail strategy that will address the market opportunities and shopping needs of the community, ensure an appropriate mix of retail and identify strategies to improve the retail base and the city's sales tax revenues including affordable retail.*

- **5.05 Support for Local Business and Business Retention**

*The city and county recognize the significant contribution of existing businesses in the local economy and will work to nurture and support established businesses and maintain a positive climate to retain businesses. Business retention and expansion is a primary focus for the city. The existing jobs that are in Boulder are the city's most important jobs.*

**Design Quality:**

• **2.35 Outdoor Lighting/Light Pollution**

*The city and county will encourage the efficient use of outdoor lighting to reduce light pollution and conserves energy while providing for public safety. The city will seek to provide a nighttime environment that includes the ability to view the stars against a dark sky so that people can see the Milky Way Galaxy from residential and other appropriate viewing areas. Measures such as using more energy-efficient lights, ensuring that the level of outdoor lighting is appropriate to the application, minimizing glare, and using shielding techniques to direct light downward will be required.*

• **2.37 Enhanced Design for Private Sector Projects**

*Through its policies and programs, the city will encourage or require quality architecture and urban design in private sector development that encourages alternative modes of transportation, provides a livable environment and addresses the elements listed below.*

- (a) The context. Projects should become a coherent part of the neighborhood in which they are placed. They should be preserved and enhanced where the surroundings have a distinctive character. Where there is a desire to improve the character of the surroundings, a new character and positive identity as established through area planning or a community involvement process should be created for the area. Special attention will be given to protecting and enhancing the quality of established residential areas that are adjacent to business areas.*
- (b) Relationship to the public realm. Projects should relate positively to public streets, plazas, sidewalks, paths, ditches and natural features. Buildings and landscaped areas—not parking lots—should present a well-designed face to the public realm, should not block access to unlight, and should be sensitive to important public view corridors. Future strip commercial development will be discouraged.*
- (c) Transportation connections. Projects should provide a complete network of vehicular, bicycle and pedestrian connections both internal to the project and connecting to adjacent properties, streets and paths, including dedication of public rights-of-way and easements where required.*
- (d) Human scale. Projects should provide pedestrian interest along streets, paths and public spaces.*
- (e) Permeability. Projects should provide multiple opportunities to walk from the street into projects, thus presenting a street face that is permeable. Where appropriate, they should provide opportunities for visual permeability into a site to create pedestrian interest.*
- (f) On-site open spaces. Projects should incorporate well-designed functional open spaces with quality landscaping, access to sunlight and places to sit comfortably. Where public parks or open spaces are not within close proximity, shared open spaces for a variety of activities should also be provided within developments.*
- (g) Buildings. Buildings should be designed with a cohesive design that is comfortable to the pedestrian, with inviting entries that are visible from public rights of way. Design innovation and the use of high quality building materials are encouraged.*

In addition, the expansion and improvement of the auto dealership is consistent with the city's [Economic Sustainability Strategy](#). A full evaluation will occur at the time of Site Review.

**Key Issue #2: Does the exterior of building present a sense of permanence through the use of authentic, high quality materials?**

At the time of Site Review, the applicant will be required to demonstrate that the “exterior of buildings present a sense of permanence through the use of authentic materials such as stone, brick, wood, metal or similar products and building

detailing.” While the proposal represents an overall improvement and presents a clean, modern building design, staff has some concerns about the use of EFIS and aluminum composite as the primary building materials, especially on the south side of the building. Additionally, staff has some concerns regarding the architectural legibility of the showroom. The southern portion of the building reads almost as a one-story office space. Based on the car dealership showroom use, it seems like this is an opportunity to use more floor to ceiling architectural glass storefront and interior lighting to create a simpler, more elegant, well-pronounced retail showroom. Refer to *Figures 17, 18, 19 and 20* below for examples of architecturally pronounced vehicular showrooms.



**Figure 17: Showroom Example**



**Figure 18: Showroom Example**



**Figure 19: Showroom Example**



**Figure 20: Showroom Example**

## V. PUBLIC COMMENT AND PROCESS

Required public notice was given in the form of written notification mailed to all property owners within 600 feet of the subject site and a sign posted on the property for at least 10 days. All notice requirements of section 9-4-3, B.R.C. 1981 have been met.

### Neighborhood Comments

At the time of preparation of the memorandum, staff had received one phone call from a neighbor but they did not express any specific concerns with the proposal.

## VI. PLANNING BOARD ACTION

**No action is required on behalf of the Planning Board. Public comment, staff, and Planning Board comments will be documented for the applicant's use.** Concept Plan Review and comment is intended to give the applicant feedback on the proposed development plan and provide the applicant direction on submittal of the Site Review plans.

### **Attachments**

**[Attachment A: Applicant's Submittal Materials](#)**

Miller Family Real Estate LLC  
Concept Plan Review Statement

The Applicant, Miller Family Real Estate LLC, is the owner of the Miller Toyota sales and service center located at 2465 48<sup>th</sup> Court in Boulder, Colorado. The existing center is located on a 6.087 acre parcel (Lot 1 on the Site Plan), which includes an approximately 64,654 square foot building and 6 acres of surface car storage/parking. The existing building was constructed in 1986. Access to the site is from 47<sup>th</sup> Street. The site is zoned IS-2.

The Applicant desires to redevelop the site into an expanded and upgraded sales and service center, to be compliant with Toyota's requirements for car sales (in particular the Prius model, which is a very popular model in Boulder given its low-emissions and high-fuel-economy attributes). In addition, the upgraded center will be consistent with the neighboring redevelopment projects along Pearl Parkway. As the Boulder Junction Transit Village continues to expand to the west of this site, the Pearl Parkway corridor is emerging from the industrial look which has characterized this area for the past several decades.

The proposed redevelopment and expansion of the Miller Toyota sales and services center will include an additional 28,579 square feet of new building area, and approximately 200 fewer vehicle storage/parking spaces on the existing site and adjacent real property owned by Applicant (Lot 2 on the Site Plan). Parking areas will be re-constructed to provide ordinance compliant landscape islands and energy saving lighting. The redeveloped sales and service center will include the following environmentally-friendly aspects:

The project will seek LEED certification of the remodel and expansion of the existing automotive sales and service facility. The proposed design will enhance the building character and facilitate the dealership's ability to provide state of the art customer experience and increased environmentally friendly hybrid vehicle sales and service.

The existing two story building will be expanded by approximately 28,000 SF. This expansion will include new showroom, customer service reception, indoor vehicle delivery, service bays and car wash. The car wash will not be for retail and public use.

The existing ingress/egress point to the site from 47<sup>th</sup> Street will be relocated approximately 45 feet to the west, and widened by 14 feet, to reduce the congestion that currently occurs as cars turn from Pearl Parkway on to 47<sup>th</sup> Street. In addition, Applicant construct an new 6-foot wide pedestrian sidewalk along the entire southwestern boundary of the site to facilitate better pedestrian flow between the neighboring parcels to the north and east.

The Applicant anticipates an increase in employment opportunities at the Miller Toyota sales and service center as a result of the proposed redevelopment. Miller Toyota is committed to exploring options to incentivize existing and future additional employees to use public transportation to and from the facility, as well as throughout Boulder during work hours.

**PROJECT INFO**

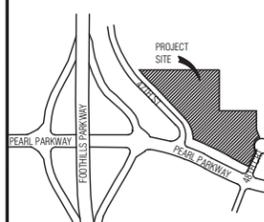
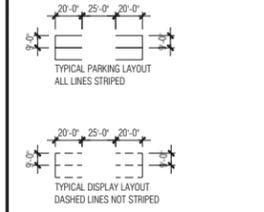
PROJECT NAME: LARRY H. MILLER BOULDER TOYOTA  
 PROJECT ADDRESS: 2465 48TH CT  
 OWNER: MILLER FAMILY REAL ESTATE  
 9350 S. 150 E  
 STE 1000  
 SANDY, UTAH 84070-2721  
 PROJECT DESCRIPTION: ADDITION AND RENOVATION TO EXISTING AUTOMOBILE SALES AND SERVICE FACILITY AND RELATED SITE IMPROVEMENTS. PROPERTY TO BE RE-PLATTED  
 ZONING (EXISTING): IS-2  
 SITE AREA: 265,700 S.F. (6.0996 AC)  
 GROSS BUILDING AREA: 64,654 S.F.  
 GROUND FLOOR AREA: 58,274 S.F.  
 SECOND FLOOR AREA: 6,380 S.F.  
 FLOOR AREA RATIO: 64,654/265,700 = 24%  
 LOT COVERAGE: 58,274/265,700 = 21.9%  
 OCCUPANCY: B, S-1  
 CONSTRUCTION TYPE: II-B WITH AUTOMATIC FIRE EXTINGUISHING SYSTEM  
 MAXIMUM BUILDING HEIGHT: 32 FEET

**PARKING CALCULATIONS**  
 PARKING REQUIRED: 1/400 = 64,654 S.F./400 = 162  
 ACCESSIBLE PARKING REQUIRED = 6  
 PARKING PROVIDED = 176  
 ACCESSIBLE PARKING PROVIDED = 6  
 BICYCLE PARKING REQUIRED = 0  
 VEHICLE DISPLAY SPACES = 295

**KEYNOTES**

- 1 TYP ASPHALT PAVING
- 2 TYP ROLL TYPE CONCRETE CURB
- 3 6" HIGH PAINTED STEEL GATE W/ KNOX LOCK BOX
- 4 6" H. CMU WALL TO MATCH BUILDING
- 5 DECORATIVE CONCRETE PLAZA
- 6 ACCESSIBLE PARKING PER ADA STANDARDS
- 7 LANDSCAPING
- 8 EXISTING WALL/FENCE
- 9 EXISTING DRIVEWAY TO BE RELOCATED
- 10 REFUSE YARD PER CITY OF BOULDER WITH CONCRETE APPROACH
- 11 MONUMENT SIGN (BY SEPARATE PERMIT)
- 12 DIRECTIONAL SIGN (BY SEPARATE PERMIT)
- 13 ACCESSIBLE ROUTE OF TRAVEL  
 RUNNING SLOPE SHALL NOT EXCEED 1:20  
 CROSS SLOPE SHALL NOT EXCEED 1:50  
 MINIMUM WIDTH 5'-0"  
 SURFACE SHALL BE FIRM, STABLE AND SLIP RESISTANT
- 14 EXISTING FENCE/WALL TO REMAIN
- 15 NEW 5' WIDE CONCRETE SIDEWALK
- 16 CONCRETE RAMP FOR VEHICLE ACCESS TO SHOWROOM
- 17 EXISTING OVERHEAD POWER POLE
- 18 CONCRETE PAVING - DRIP CONTAINMENT SLAB

**LEGEND**

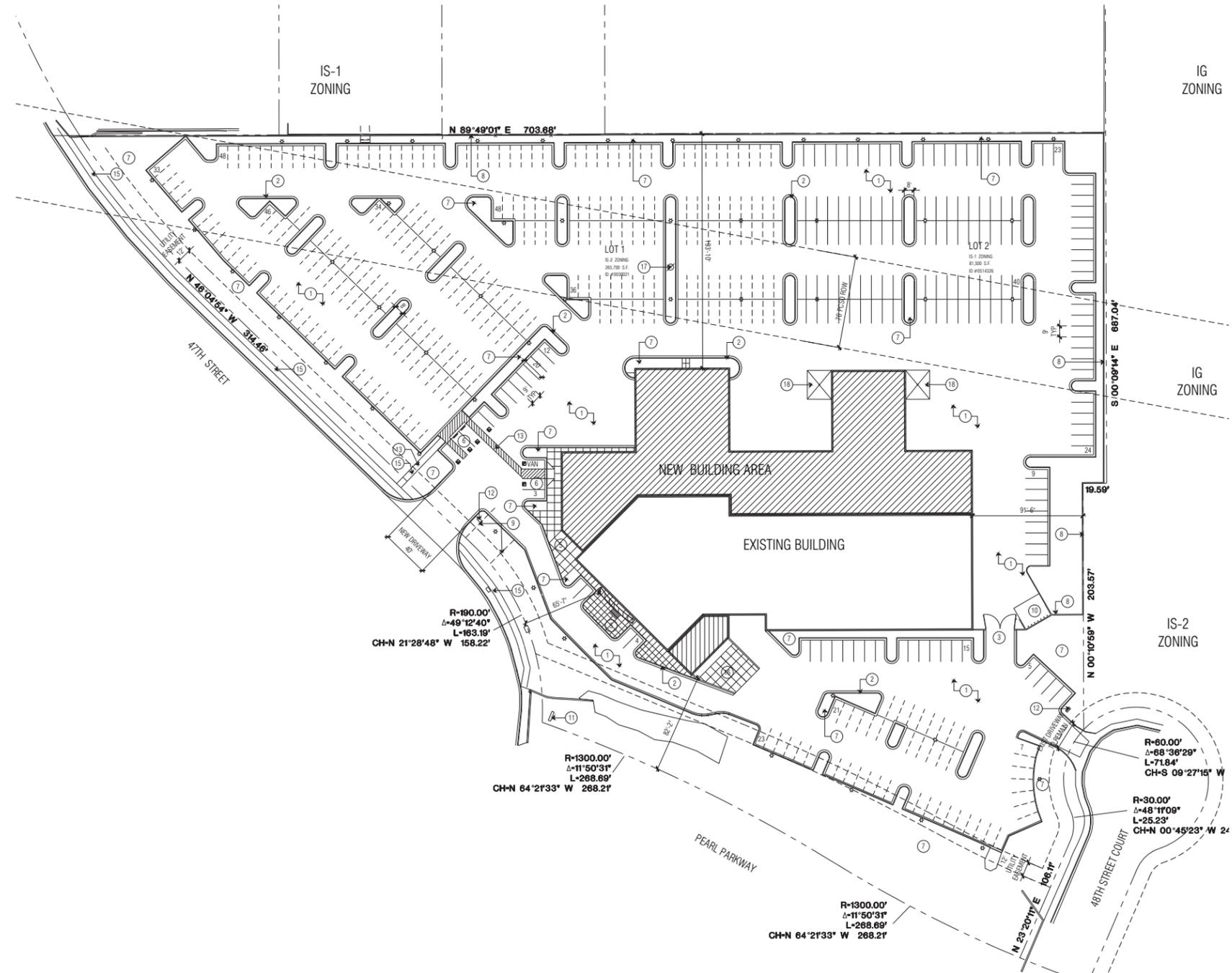


**JOHN MAHONEY ARCHITECT**  
 850 W. ELLIOT ROAD, #108  
 TEMPE, ARIZONA 85284  
 P 480.345.8457 F 480.345.1759

LARRY H. MILLER  
 TOYOTA  
 2465 48TH CT  
 BOULDER, COLORADO

PROJECT NO. 1840  
 ISSUE DATE 3/2/16

**SITE PLAN**



**SITE PLAN**



**VICINITY MAP**

**A100**







SHEET NO.

SHEET CONTENTS

R01.00

ENHANCED PHOTO  
RENDERING

NO.	DATE	ISSUE	BY	CHK
1	05/21/14	DRAFT SCHEMATIC DESIGN	SF	SF
2	05/21/14	FINAL SCHEMATIC DESIGN	SF	SF

ARCHITECT:

**JOHN MAHONEY ARCHITECT**

850 W. ELLIOT ROAD, #108  
 TEMPE, ARIZONA 85284  
 P 480.345.8457 F 480.345.1759

**LARRY H. MILLER TOYOTA**  
 2465 48TH COURT  
 BOULDER, COLORADO

DATE:	REVISION:
02-23-2015	CONCEPT PLAN SUBMITTAL
03-04-2015	CONCEPT PLAN REVISION

SHEET NAME:  
 CONCEPTUAL  
 LANDSCAPE PLAN

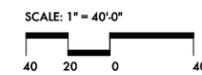
SHEET NUMBER:

**L10**

**LEGEND**

-  LARGE MATURING SHADE TREE
-  ORNAMENTAL TREE
-  LANDSCAPE PLANTINGS - SHRUB BED OR LAWN AREA
-  EXISTING LANDSCAPE (ESP. TREES) TO REMAIN. LANDSCAPE PLANTINGS TO BE SUPPLEMENTED, AS NEEDED TO ATTAIN FULL COVERAGE
-  DETENTION POND - SEEDED WITH APPROPRIATE GRASSES AND WILDFLOWERS

ALL PLANTINGS TO BE IRRIGATED WITH AN AUTOMATED IRRIGATION SYSTEM.  
 ALL LAWN AREAS TO BE SODDED WITH LOW WATER DEMAND TURFGRASS BLEND.





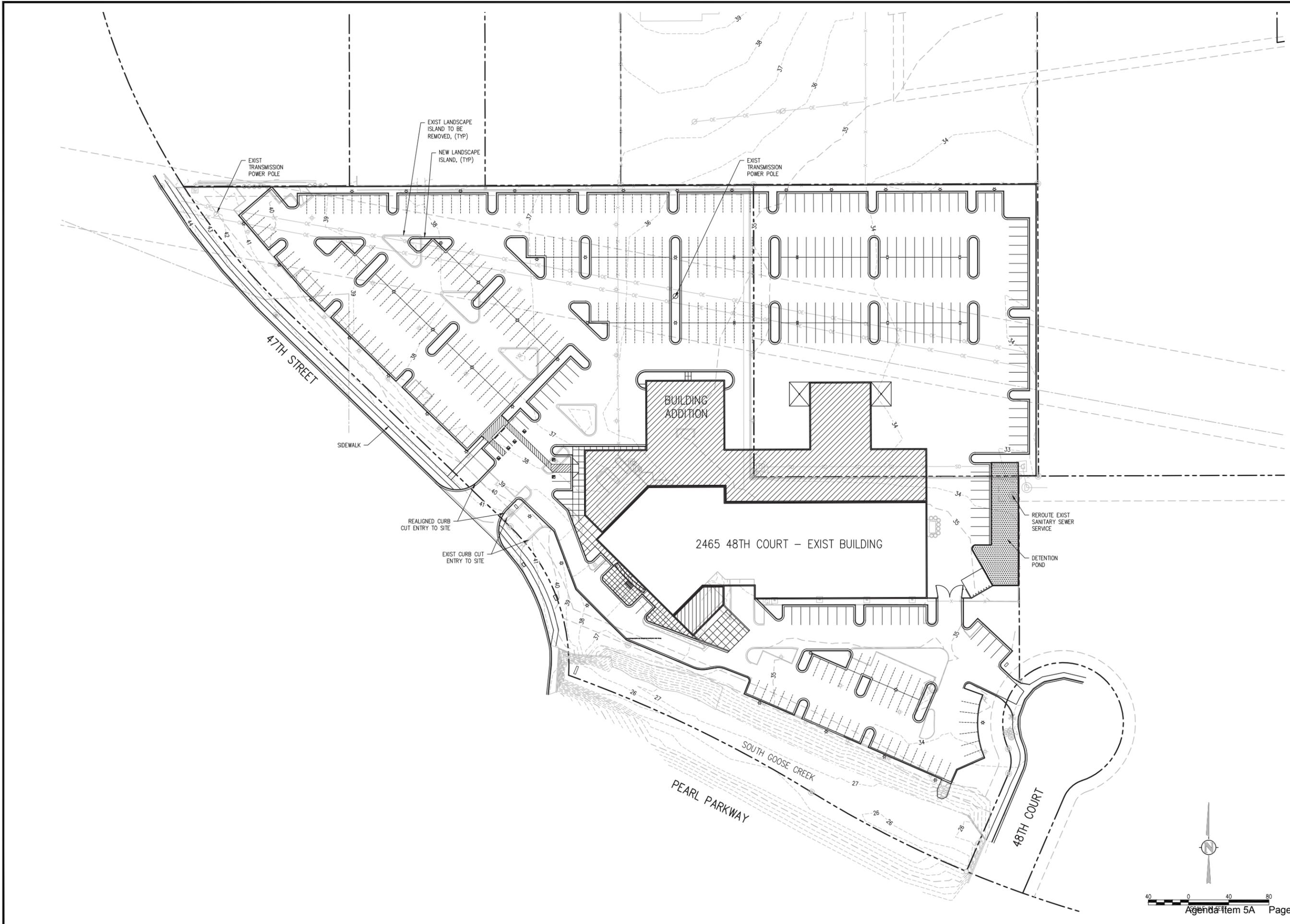
JVA, Incorporated 1319 Spruce Street  
 Boulder, CO 80302 Phone: 303.444.1951  
 www.jvaja.com E-mail: info@jvaja.com

NO. DATE DESD DWN

DESIGNED BY: MDE  
 DRAWN BY: MDE  
 CHECKED BY: HMM  
 JOB #: 2367c  
 DATE: 03/06/2015  
 © JVA INC

LARRY H. MILLER TOYOTA  
 2465 48TH CT  
 BOULDER, COLORADO  
 CONCEPTUAL CIVIL SITE PLAN

SHEET NO.



**MEMORANDUM**

**To:** City of Boulder Planning & Development Services  
**From:** Steve Tuttle, PE, PTOE; Cassie Slade, PE  
**Date:** January 28, 2015  
**Project:** Boulder Toyota Traffic Analysis (FTH #14060)  
**Subject:** Traffic Assessment

The existing Larry H. Miller Toyota in Boulder plans to remodel and expand the current operations to enhance the building character, increase customer services, and increase sales potential. The site is located in the northeast corner of Pearl Parkway and 47<sup>th</sup> Street, which is just east of Foothills Parkway. The project proposes to expand the existing building by approximately 28,000 square feet (sq. ft.) to provide a new showroom, customer service reception area, indoor vehicle delivery, service bays and car wash. The site is bounded by commercial/industrial businesses to the north and east, Pearl Parkway to the south, and 47<sup>th</sup> Street on the west. A vicinity map is shown on **Figure 1**.

In accordance with the City of Boulder site review process, an initial Traffic Assessment is required which includes an analysis of trip generation, distribution, and trip reduction assumptions for the project. This memorandum summarizes this analysis for the subject project.

**Trip Generation**

To establish the volume of new trips that will be added to the area roadway network with expansion of the current Boulder Toyota, trip generation estimates were calculated based on rates contained in the *Institute of Transportation Engineers (ITE) Trip Generation Manual*.

The trip generation estimates are summarized on **Table 1** for weekday daily, weekday AM, and weekday PM periods. As shown on **Table 1**, the proposed development represents an increase in daily and hourly traffic to the adjacent roadway network.

---

## Auto Trip Reductions

The project is located in an industrial area and surrounded by other automotive sales and repair service businesses. Pearl Parkway has the F, S, and 206 transit routes along it with bus stops near the southeast corner of the property. Currently, there are multi-use paths on the south side of Pearl Parkway and on both sides of Foothills Parkway that link to local and regional pedestrian/bicycle facilities and lead to various destinations within the City of Boulder. There are no bicycle lanes on the roadways adjacent to the Boulder Toyota.

Although there are multimodal facilities within close proximity to the project site, it is anticipated that only a small percentage of employees would utilize these alternative mode choices to get to the dealership. For the purposes of providing a conservative analysis of the site traffic impacts, it was assumed that all trips will be auto and no reductions will be applied.

## Trip Types

Due to the nature of automobile sale and service centers, it is anticipated the majority of trips associated with the expansion project will be “new” trips. The following describes the types that will be evaluated for this study:

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

## Proposed Access

The Boulder Toyota currently has two accesses: (1) 47<sup>th</sup> Street approximately 170 feet north of Pearl Parkway and (2) at end of the 48<sup>th</sup> Court cul-de-sac. The expansion project proposes to relocate the main access on 47<sup>th</sup> Street by moving it north by approximately 50 feet. The access on 48<sup>th</sup> Court will remain the same. It is proposed to add a 3<sup>rd</sup> access by extending the existing gravel roadway that leads to Pearl Street. It is anticipated that this will serve vehicle and service deliveries.

## Site Trip Distribution

Site trips will be distributed onto the study area roadway network as shown on **Figure 2**. The distribution percentages are based on regional land use destinations, existing travel patterns, and other area traffic studies. The following assumptions were made:

- 40 percent to/from Pearl Parkway to/from the west
- 20 percent to/from Pearl Parkway to/from the east
- 15 percent to/from Foothills Parkway to/from the north

- 
- 20 percent to/from Foothills Parkway to/from the south
  - 5 percent to/from 47<sup>th</sup> Street to/from the north.

The proposed distribution at the three accesses is as follows:

- Access 1 on 47<sup>th</sup> Street: 60 percent
- Access 2 on 49<sup>th</sup> Court: 35 percent
- Access 3 on Pearl Street: 5 percent

### **Traffic Impact Study**

Per the procedures outlined in the City of Boulder Design and Construction Standards, a full Traffic Impact Study may be required for this project. This traffic assessment serves as a basis for the trip generation and distribution assumptions that would be incorporated into the Traffic Impact Study.

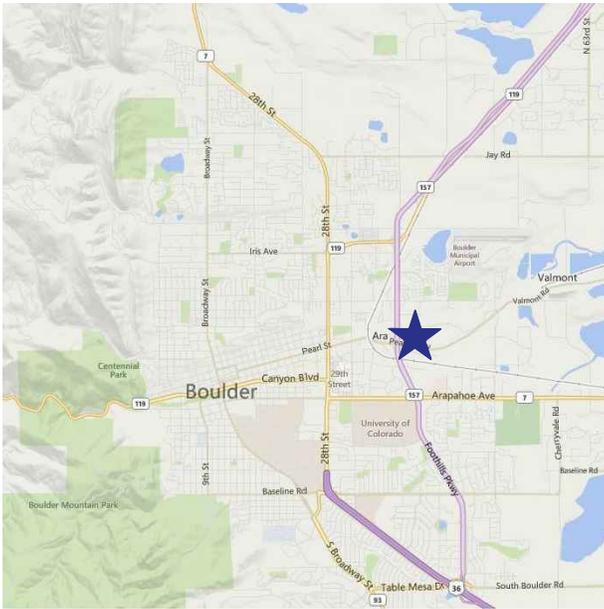
/CRS

Attachments:

Figure 1 – Vicinity Map

Figure 2 – Site Trip Distribution

Table 1 – Trip Generation Summary



**15%**

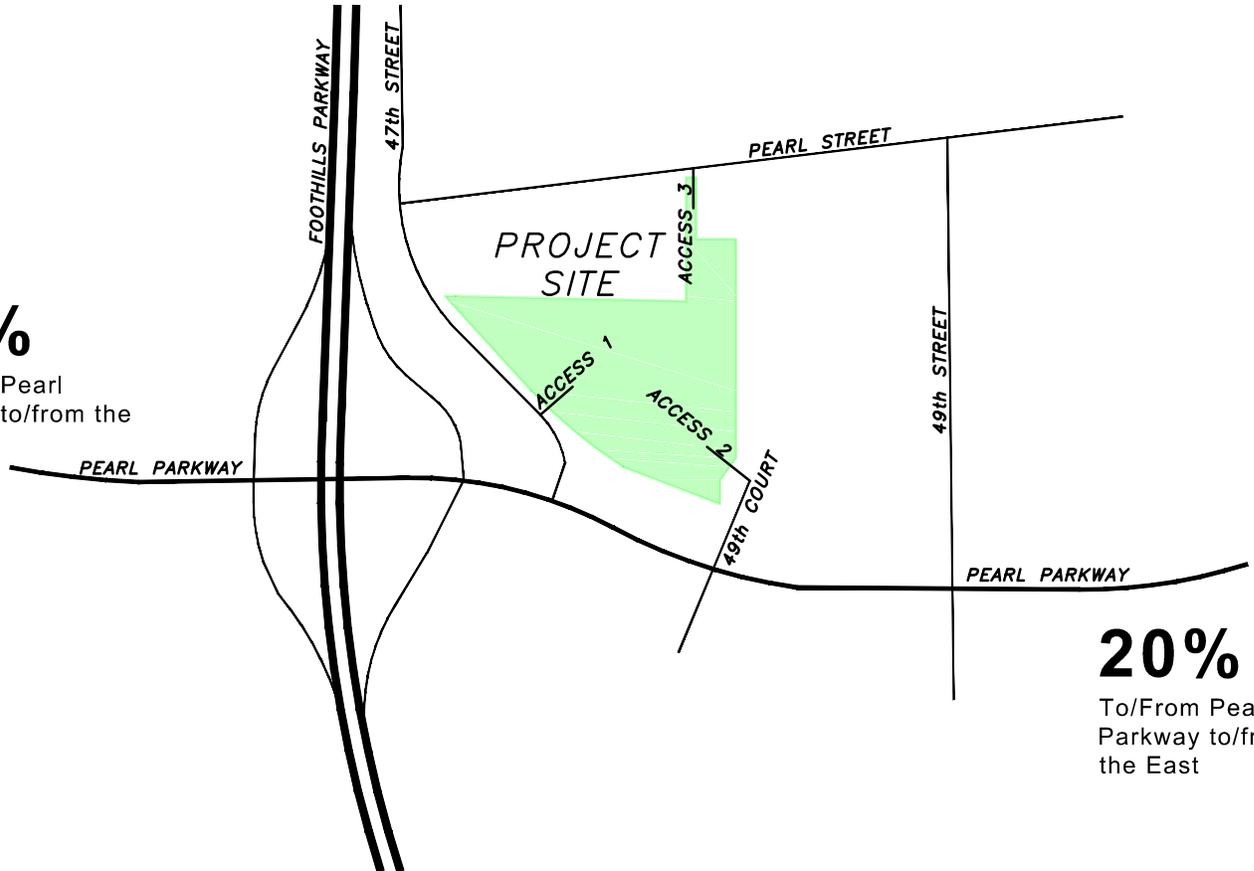
To/From Foothills Parkway to/from the North

**5%**

To/From 47th Street to/from the North

**40%**

To/From Pearl Parkway to/from the West



**20%**

To/From Foothills Parkway to/from the South

**20%**

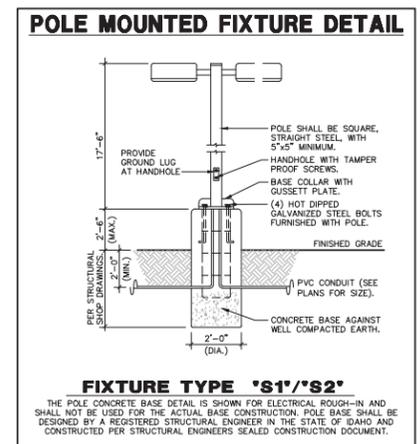
To/From Pearl Parkway to/from the East



**Table 1 - Trip Generation Summary**

Land Use	Size	Unit	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
			Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
ITE 841 - Automobile Sales	28	1,000 sf	32.30	904	452	452	1.92	54	41	13	2.62	73	29	44
<b>Total New Trips</b>			<b>Daily &gt;</b>	<b>904</b>	<b>452</b>	<b>452</b>	<b>AM &gt;</b>	<b>54</b>	<b>41</b>	<b>13</b>	<b>PM &gt;</b>	<b>73</b>	<b>29</b>	<b>44</b>

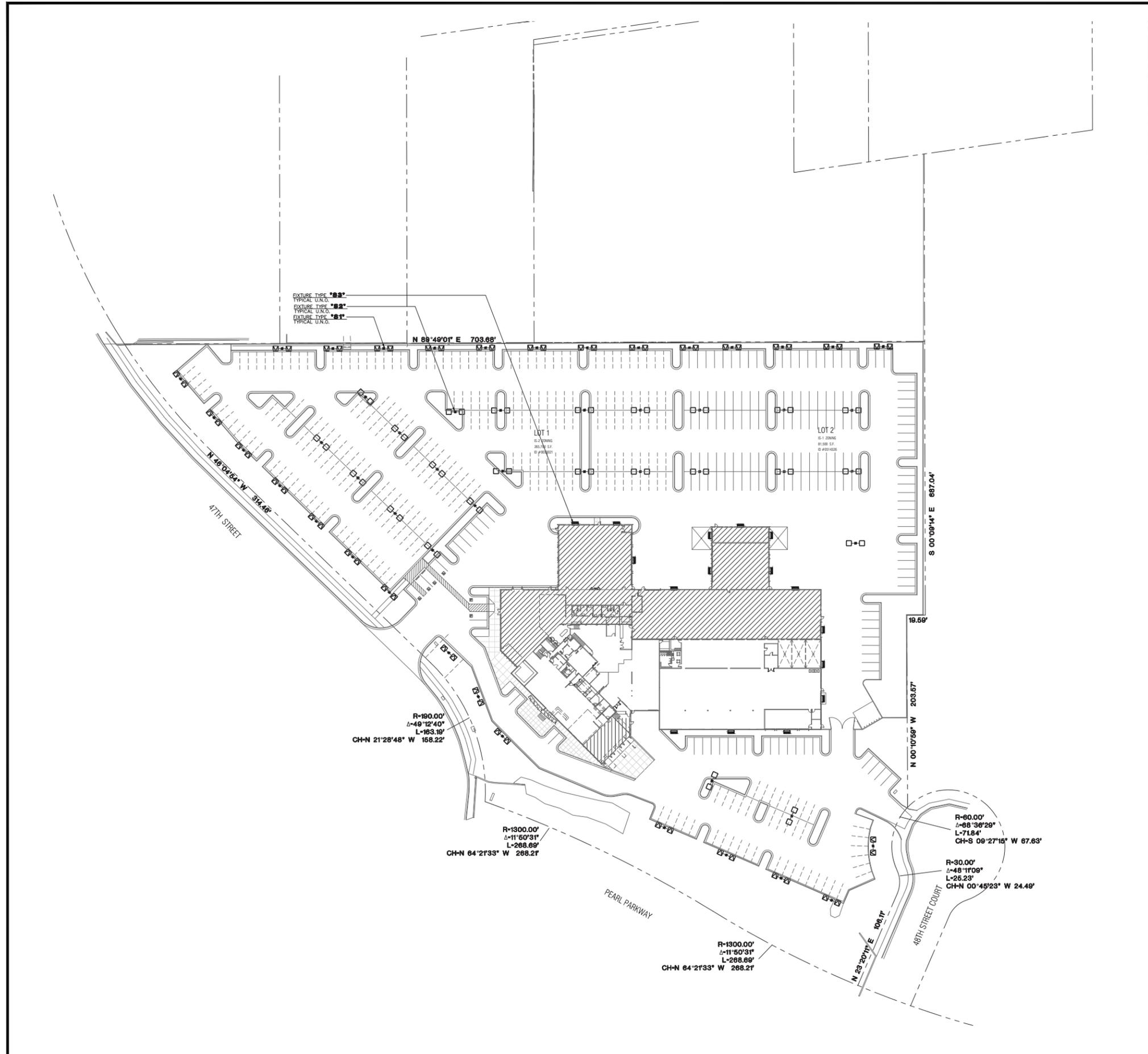
Source: ITE Trip Generation Manual, 9<sup>th</sup> Edition (2012)



### LUMINAIRE SCHEDULE

- PROVIDE 1400 LUMEN OR FULL OUTPUT, 90 MINUTE EMERGENCY BATTERY BALLAST FOR ALL EMERGENCY FIXTURES.
- MODULAR WIRING FOR LIGHT FIXTURES IS AN ACCEPTABLE ALTERNATE.
- BASE BID FOR LUMINAIRES SHALL BE BASED ON MANUFACTURERS LISTED "IN CONTRACT DOCUMENTS" UPON AWARD OF PROJECT. ALTERNATE LUMINAIRES NOT LISTED AND PROPOSED BY CONTRACTOR SHALL BE SUBMITTED WITH WRITTEN OWNER APPROVAL AND A DEDUCT TO THE BASE BID IF APPLICABLE.
- PROVIDE MINIMUM 10 MINUTE TIME DELAY TO EMERGENCY FIXTURES WHEN USED WITH HID AREA LIGHTING.

MARK	MANUFACTURER	MODEL NUMBER	VOLTS	LAMPS/ INPUT WATTS	REMARKS/MOUNTING
S1	OREE	ARE-EDG-2MS-DA-08-E UL-FINSH-525mm-40K	UNV	LED 133W/4000K 8,915 LUMENS	2-HEAD POLE MOUNTED LED FIXTURE. PROVIDE OPTICS ROTATED AS SHOWN. SEE DETAIL, THIS SHEET.
S2	OREE	ARE-EDG-5M-DA-08-E UL-FINSH-525mm-40K	UNV	LED 133W/4000K 12,450 LUMENS	2-HEAD POLE MOUNTED LED FIXTURE. SEE DETAIL, THIS SHEET.
S3	OREE LIGHTING	SEC-EDG-M-WM-06-E UL-FINSH-525mm-40K	UNV	LED 101W/4000K 8,415 LUMENS	LED WALL PACK. COORDINATE EXACT MOUNTING HEIGHT W/ ARCHITECT'S ELEVATIONS.



LARRY H. MILLER  
 TOYOTA  
 2465 48TH CT  
 BOULDER, COLORADO

*Larry H. Miller*  
**Toyota**

PROJECT NO. 1340  
 ISSUE DATE: 1/19/15

Project Contact/Designer: BRIAN R. SANDON  
 Project # 134025

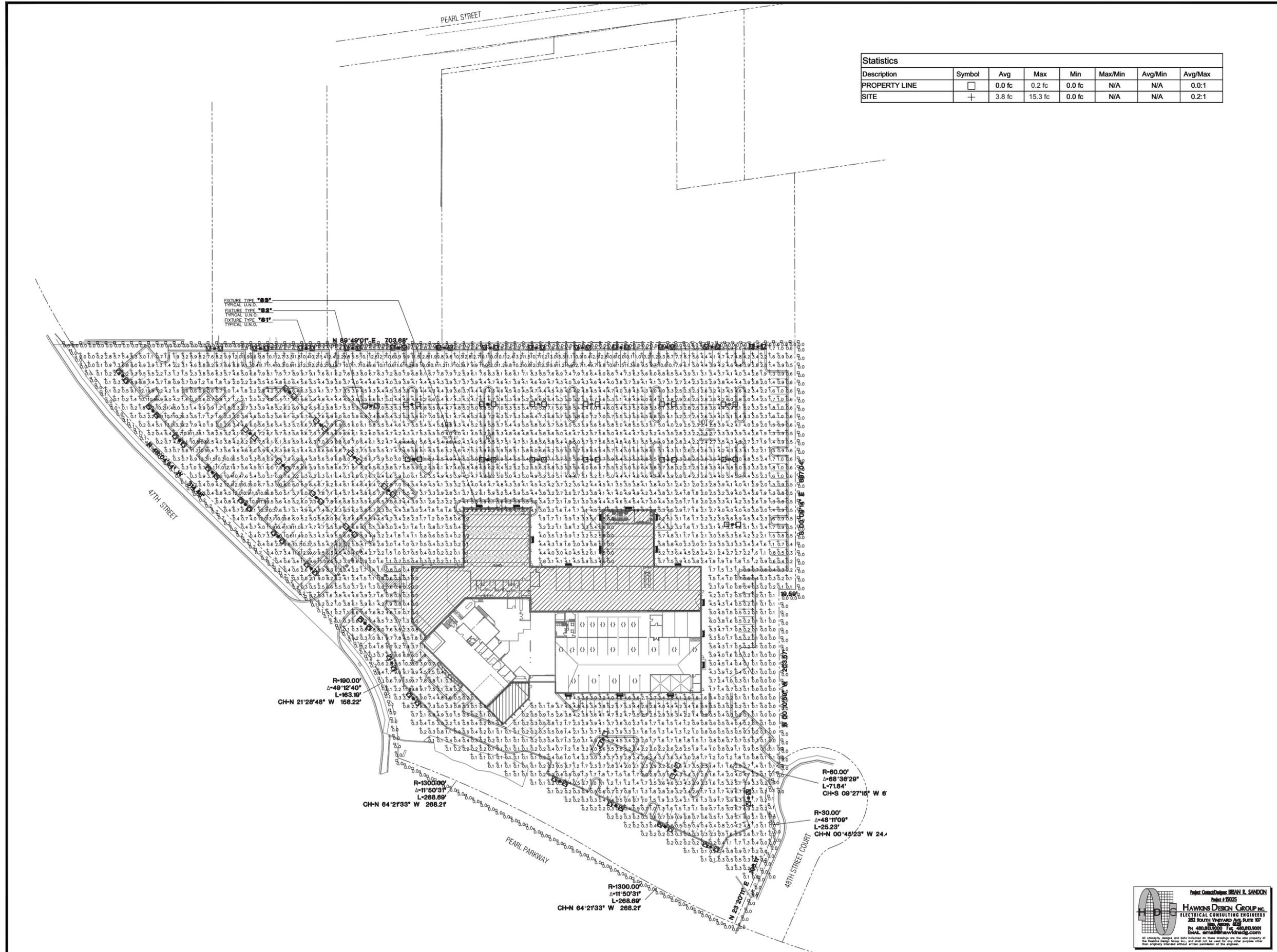
**HAWKINS DESIGN GROUP INC.**  
 ELECTRICAL CONSULTING ENGINEERS  
 282 SOUTH VINEYARD AVENUE, SUITE 107  
 BOULDER, CO 80501  
 PH 480.345.5002 FAX 480.345.9001  
 EMAIL: INFO@HAWKINSDESIGN.COM

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SITE LIGHTING PLAN

DR SUBMITTAL  
NOT FOR  
CONSTRUCTION

Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
PROPERTY LINE	□	0.0 fc	0.2 fc	0.0 fc	N/A	N/A	0.0:1
SITE	+	3.8 fc	15.3 fc	0.0 fc	N/A	N/A	0.2:1



LARRY H. MILLER  
TOYOTA  
2465 48TH CT  
BOULDER, COLORADO

*Larry H. Miller*  
**Toyota**  
BOULDER, COLORADO

PROJECT NO. 1340  
ISSUE DATE: 1/19/15

PHOTOMETRICS  
PLAN

Project Contact/Owner: BRIAN R. SANDON  
Phone: 438.025

**HAWKINS DESIGN GROUP INC.**  
ELECTRICAL CONSULTING ENGINEERS  
282 SOUTH VINEYARD AVE, SUITE 107  
BOULDER, CO 80501  
PH 480.658.0007 FAX 480.658.0001  
EMAIL: info@hawkinsdesign.com

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**PHOTOMETRICS SITE LIGHTING PLAN**



**CITY OF BOULDER  
PLANNING BOARD AGENDA ITEM**

**MEETING DATE: June 4, 2015**

**AGENDA TITLE:** Update and Feedback from the Planning Board on the Form-Based Code (FBC) pilot project in Boulder Junction and receive input from the board on the following:

1. Draft Guiding Principles for the pilot FBC area in Boulder Junction (prepared by CodaMetrics).

**REQUESTING DEPARTMENTS:**

David Driskell, Executive Director of Community Planning and Sustainability (CP&S)  
Susan Richstone, Deputy Director of CP&S  
Charles Ferro, Development Review Manager, CP&S  
Sam Assefa, Senior Urban Designer, CP&S  
Karl Guiler, Senior Planner/Code Amendment Specialist, CP&S

**OBJECTIVES:**

1. Present update of Form-Based Code pilot project to Planning Board
2. Planning Board feedback on the FBC Guiding Principles

**EXECUTIVE SUMMARY**

The purpose of this memorandum is to update the Planning Board about the FBC pilot project, which commenced in April and included a joint boards work session with the board and other boards on May 14<sup>th</sup>. A "Form-Based Code 101" forum was held on May 15<sup>th</sup> to discuss design issues in Boulder as part of the Design Excellence Initiative as well as a community workshop on May 16<sup>th</sup> to seek public feedback on design options for the Boulder Junction Phase I area as part of the pilot project. The Form-Based Code 101 forum can be viewed [here](#).

The Draft FBC Guiding Principles ([Attachment A](#)), which were prepared by the consultant, CodaMetrics, is attached to this memo. Staff is requesting feedback from the board on the draft FBC Guiding Principles before bringing them forward to City Council for its consideration. The questions that are the focus of the Planning Board's review are:

1. Does the Planning Board have any feedback on the Draft FBC Guiding Principles?
2. Does the Planning Board have any additional items that should be included in the Guiding Principles?

## **BACKGROUND**

As part of the Design Excellence Initiative, the city is piloting a Form-Based Code (FBC) in Boulder Junction, defined as the area within the adopted Transit Village Area Plan. This area was selected on a recommendation by Victor Dover of Dover/Kohl Partners based on his work on the Design Excellence Initiative last winter. That work culminated with a recommendation to City Council last January for piloting a FBC for a limited area such as Boulder Junction where there is already a consensus on land use and urban design policy articulated in an adopted Transit Village Area Plan.

As requested by City Council, the FBC project was commenced in April of this year and is anticipated to be a six-month process. The project will involve outreach to the community and coordination with review boards (i.e., Planning Board, Transportation Advisory Board, Design Advisory Board and Boulder Junction Access District) and council about desired building designs and forms that would inform the final pilot FBC. A working group composed of representatives of above referenced boards will also inform the pilot FBC. The purpose and composition of the group is found in [Attachment B](#).

The overall purpose of considering FBC as a new tool for Boulder is to address design quality and provide more predictability on development review issues recently articulated through community, board and council conversations, as summarized in the January 20, 2015 memo from Dover Kohl ([link to memo](#)). The City of Boulder's Community Planning & Sustainability Department (CP&S) is leading the effort in collaboration with other city departments and two consultant teams: Dover Kohl and Partners and CodaMetrics. Dover Kohl and Partners will assist in the broad, citywide Design Excellence discussions that would ultimately inform changes to the land use code, and CodaMetrics will assist in preparation of the pilot FBC.

Completion of the pilot FBC project for Boulder Junction is targeted for October 2015 (i.e., six months). A work plan has been developed which specifies the scheduled meetings and deliverables at each phase of the process. The work plan can be viewed [here](#). For more information on the FBC project, including the roles of the consultants, the desired outcomes, and how projects in Boulder Junction will be reviewed during this process, please see the attached FAQ document in [Attachment C](#).

If adopted, the FBC pilot would apply to the Phase I area of Boulder Junction. Victor Dover's recommendation was that it be tested in a small geographic area where an adopted vision is already established. Staff understands that this is challenging considering that there are already development projects in the review pipeline within the area that may be acted upon prior to adoption of the FBC. Staff and CodaMetrics are currently working with applicants of the S\*park, Reve and The Commons projects in a two-way conversation of how the projects could be informed by the progress of the FBC. While the projects may not end up 100 percent consistent with the final FBC pilot, the hope is that they will adopt and address design elements within their projects to reflect the evolution of the FBC. It is important to note that the city is embarking on what could be a longer process of determining whether FBC is appropriate for Boulder to achieve better design outcomes. Boulder Junction is an opportunity to test the FBC tool itself as well as the process. If successful, staff anticipates more robust processes in the future if FBC is applied elsewhere (e.g., Phase II Boulder Junction, Downtown, North Boulder etc.).

## **DISCUSSION**

### Update on FBC pilot project

Events related to the FBC pilot commenced in the week of May 11<sup>th</sup> and included a joint meeting of Planning Board, Boulder Design Advisory Board (BJAD), Transportation Advisory Board (TAB) and the Boulder Junction Access District on Thursday, May 14<sup>th</sup>. At the May 14<sup>th</sup> board workshop, CodaMetrics lead a discussion with board members on desired and undesired design elements that would help inform what the FBC should include and the types of prescriptive standards needed to achieve the desired outcomes that may be incorporated into the draft FBC. A summary of the joint boards and community workshop is included in [Attachment D](#).

On May 15<sup>th</sup>, Dover Kohl and Partners presented to the public, "[Form-Based Code 101](#)", which summarized what form-based codes are, the benefits of a form-based code for the Boulder Junction area, how it might be useful elsewhere in Boulder, as well as some of the limitations of form-based codes. The event also included a question and answers session that can be viewed at the link above.

Lastly, CodaMetrics held a community workshop open to the greater public on Saturday, May 16<sup>th</sup> at the Hotel Boulderado. The event was attended by roughly 30 persons and involved lively discussion about design and what would be appropriate in the Boulder Junction area. While there were expressions of varying architectural taste, there were also common themes of agreement. (See [Attachment D](#)).

### Guiding Principles for Excellent Design to inform the pilot FBC area in Boulder Junction

CodaMetrics has been contracted with the city as part of the broader Boulder Design Excellence Initiative to draft the pilot FBC for the Boulder Junction area. The first deliverable of this six-month endeavor is to prepare a document of Guiding Principles based on analysis of the city's land use and zoning regulations, stakeholder interviews, community feedback, input from the FBC Pilot Working Group, as well as relevant boards and commissions, will be used to help inform the pilot FBC. The document is also important because there are several projects already in the review pipeline in Boulder Junction that can help inform the development of the FBC and also be informed by the direction of the FBC itself.

[Attachment A](#) contains CodaMetric's document of draft Guiding Principles for the FBC area. Given the tight turnaround since the events of May 14-16<sup>th</sup>, it is still a working draft. Staff is looking to get feedback from the Planning Board on its development before bringing a draft to City Council on June 16<sup>th</sup>. In a cursory review of the document, staff finds that many of the principal design issues expressed at the workshops and stakeholder meetings are covered. The working group, which met on May 19<sup>th</sup> and will meet again prior to the June 4<sup>th</sup> meeting, has also received the working draft and has provided some comments. Additional comments from the working group will be conveyed to Planning Board at the time of the public hearing.

### Next Steps

Staff will provide a briefing to City Council on June 16<sup>th</sup> and will continue working with the working group on design issues that could inform the FBC. The FBC staff team will also continue working with CodaMetrics on incorporating the input received through the community outreach and board communications and determine the content and structure of the FBC.

CodaMetrics is planning to return to Boulder in July to hold a Code Workshop with the community where a draft FBC will be presented for feedback with respect to its structure and table of contents as informed by

the guiding principles. A joint board meeting of the Planning Board, Boulder Design Advisory Board, Transportation Advisory Board and Boulder Junction Access District is also scheduled for June 23<sup>rd</sup>.

### **PUBLIC INPUT**

A summary of the community workshop is within [Attachment D](#) and other public comments received in this process are found in [Attachment E](#).

### **QUESTIONS TO THE PLANNING BOARD**

1. Does the Planning Board have any feedback on the Draft FBC Guiding Principles?
2. Does the Planning Board have any additional items that should be included in the Guiding Principles?

### **ATTACHMENTS**

[Attachment A](#): Draft FBC Guiding Principles

[Attachment B](#): Boulder Junction Form-Based Code (FBC) Pilot Working Group

[Attachment C](#): FAQ document on FBC pilot

[Attachment D](#): Summary of Joint Board and Community Workshops

[Attachment E](#): Public Comments

# CODAMETRICS

## MEMORANDUM

**TO:** Karl Guiler, City of Boulder  
Samuel Assefa, City of Boulder

**FROM:** Leslie Oberholtzer Codametrics

**DATE:** May 18, 2015

**SUBJECT: Draft FBC Pilot Guiding Principles/Regulations**

Karl and Sam,

Below is a rough outline of the potential regulations or areas of regulations I would anticipate for the Boulder Junction code, based on the meetings last week. I have also begun to group these into categories each with an intent statement that I would suggest could become the guiding principles.

## Building Form

### OVERALL BUILDING SITING

#### **Draft Statement of Intent**

To define the location of the building on the site with reference to the sidewalk, provide an appropriate level of flexibility for the different frontage treatments, while maintaining the composition of the blockface and street space.

#### **Potential Regulations**

- Set build-to zones/lines for each frontage type (storefront, stoop, porch, forecourt, etc. as appropriate), possibly set by location on Regulating Plan.
- Set percent of build-to zone occupied by building to establish enclosure of street space.
- Require that the building be located up to the corner, unless an open space type is permitted
- Locate allowable parking areas to the rear of the building. Allow any side yard parking for the interim, to be infilled later? (sometimes this parking is necessary for successful retail...). Set by location on Regulating Plan?
- Define permitted locations for garage and driveway entrances, usually via designation of primary and secondary streets.
- Define specific no-or low-build locations for plazas, courtyards, views or access through the site. Locate these spaces on Regulating Plan or define by specific site parameters (view corridors, long blocks, access to trails).
- Establish limitations on building footprint/length, apart from defining segments of façade differentiation? Specifically to increase permeability of sites, allow access through, to break up buildings to smaller scale along sidewalk, to read as decision points

along the lines of the most walkable blocks (downtown blocks are 300x300) even though streets may not cut through.

## OVERALL BUILDING HEIGHT

### Draft Statement of Intent

To guide the scale of the building and relate the height of the building to people, preserving low slung feel of Boulder, maximizing views of the mountains..

### Potential Regulations

- Establish requirements for minimum and maximum building heights by setting the heights in stories and not just overall height.
- Define a range of allowable heights for each story, measured from floor to floor. May set ground story heights based on frontages that may house uses such as retail, service, restaurants, or maker spaces.
- In certain locations, [carefully] require stepped-back floors above certain floors (use 2/3 proportions? No more than 2 floors?) to allow more sky and light? Set minimum and maximum range of depth for the step-back.
- Permit Towers at key locations to terminate a vista or add interest to/break up a façade. And allow generally for roof access/decks?
- Ground floor elevation to be set by building or frontage type. Within X' of average sidewalk grade for storefronts, elevated a minimum of X feet, maximum X feet for residential. Define "visible basement": requirements for transparency when basement is exposed X feet above average grade.

## Façade Design

### General Materials and Façade Design

#### Draft Statement of Intent

To guide the design of the overall façade to result in an appropriate mix and quality building materials, and a comfortable but interesting level of façade variety and articulation.

#### Potential Regulations

- Set maximum façade segments with courtyards or entry courts define to break up long buildings? *The façade of north building of Reve along 30<sup>th</sup> is about 240 feet long. A typical block in downtown is about 300 x 300, with the alley division along the side streets (approx. 140 long buildings). Downtown block faces are rarely one building. Two Nine North is almost 400' along 30<sup>th</sup>, with three building sections (one 115', then 140', then 105', with two inset entrances about 20' wide each. Each segment is treated with the same material mix and lots of changes in planes. Hotel Boulderado is only 140' long; conference center is approx. 200' long.*
- Set allowable materials palette of main background façade materials applied to the main planes of the building or building segments defined by Building Siting. High quality, natural materials (stone, brick, wood?, glass?) Set high percentage of façade to be main materials (80% of the façade). *Require façade details to break up the facades instead of variety of materials to avoid the busy-ness? Allow for ground and upper stories to be a different background material to define the different portions of the façade?*

- Set palette of accent materials to be limited to details and not planes. In addition to main materials, allow for metal? panels? Cast stone concrete, others?
- Require vertical proportioning by requiring the ground story to be divided vertically on a small increment based on building or frontage type. For example, setting divisions based upon 30' historic façade divisions in the downtown for ground floor storefronts. Set higher for residential or office buildings (study historic buildings in Boulder).
- Require horizontal proportioning by requiring the ground story to be set apart from base and upper floors with an expression line/design element. May also require horizontal division for top floor?
  - Building variety. Carefully define differentiation between different buildings and building segments, avoiding too many materials and too many planar changes. Simpler buildings seem to be the most appealing to most participants? (verify with response)

## General Building Elements Design

### **Draft Statement of Intent**

To define certain design characteristics of building elements resulting in higher quality buildings, scaled to people, and creating a higher level of activity on the sidewalk and permeability between the building and street providing "eyes on the street".

### **Potential Regulations: Windows**

- Require minimum amounts of windows/transparency (clear transparent, low-reflectance glass in windows and doors) for a high level of permeability between the interiors of the buildings and the street. Different requirements set to different frontages. Typically minimum of 20% for all building facades, though historic buildings tend to be 12 to 15%. Store window frontages require at least 60% (some places require 75%). Allow flexibility to include or not a knee wall below the storefront? Require transom definition across storefronts to bring the overall height of the storefronts down to more human scale?
- Set maximum amount of glass to avoid curtain wall?
- Require window glass and frames to be inset a minimum amount to avoid flat looking facades.
- Require windows to include some articulation of the base and top of the window with sills and lintels expressed through a change in material or a change in application of the adjacent material? Set minimum vertical dimension?

### **Potential Regulations: Entrances**

- Define a set of allowable entrance/frontage types: through a porch, a stoop, a recessed storefront entrance, a forecourt, etc. based on historic types of entry ways.
- Require principal building or shop entrance on primary street frontage
- Require regularly spaced entrances to activate the street. Spacing determined by building or frontage type.
- Doorways to be delineated by a lintel on some entrance/frontage types.
- Types and grades of doors can also be defined.

### **Potential Regulations: Balconies**

- Limit ways in which to incorporate balconies? Study different balcony designs: inset, attached, structures mounted, different types of supports, separate roofs, etc.
- Required minimum sizes (and maximums?)
- Limit the number connected together?
- Limit the coverage of the façade? (Toronto has lots of new buildings where the entire façade is covered by balconies...some very appealing...)

### **Potential Regulations: Other Elements?**

#### **Cap/Roof Design**

##### **Draft Statement of Intent**

To address the top of the building, setting the base by the frontage/entrance type, defining requirements for the middle, then capping the building.

##### **Potential Regulations**

- Define a series of acceptable caps to buildings: parapets, pitched roofs acceptable in the region, "flat" roofs with extended eaves and range of thickness, others? (butterfly roofs with limitations to façade height extension to achieve the roof design, barrel vaults limited – someone said Boulder doesn't need any more curved roofs, "special" roofs available through special review – for domes, steeples, other unique (Gehry?) roof designs – with parameters)
- Require horizontal expression line at base of most cap types, delineating and adding more definition/depth.

#### **General Quality of Construction & Detailing**

##### **Draft Statement of Intent**

To require certain details and construction practices that tend to result in higher quality construction and buildings with a more permanent presence.

##### **Potential Regulations**

- Define details related to changes in materials at corners, changes in materials on the same plane
- Define trim detail requirements for doors and windows
- Limit materials that tend to be executed poorly?
- Require sample mock-ups of certain materials for approval? (very time intensive for staff...building inspectors probably can't do this...but if limited to materials concerned about? Have a contractor approved list for certain materials?)
- Others?
- Address concerns of materials that do not age well?

#### **General Façade Composition**

##### **Draft Statement of Intent**

To address the composition and change in materials of façades, relying on historic proportions and vocabularies of building composition. ?

### Potential Regulations

- Establish "rules" of composition such as the golden section, golden mean ratio, golden spiral to be utilized on the façade? *This ratio has been used throughout history to define both classical buildings and modern buildings of architects like Corbusier and Mies. The golden ratio is evident on the human body and in nature, and, therefore, provides a basis for mathematics/metrics in aesthetics. This may be pushing it a bit in terms of confining the architect's creativity...?*

- Rule of Thirds, while used for general composition, is also discussed in the book Victor Dover mentioned in his presentations (John Beverley Robinson's Architectural Composition, available as a pdf from google books). Specifically on pages 126-7, it discusses dividing a building into horizontal thirds, while dividing into more means those other parts should be subordinated. We may be able to craft code language that limits those rule-breakers in a way that is not too confining? Perhaps these can be guidelines, but are required to be delineated on the building elevations? Study: I am asking CGA to do a bit of a study of all this on some of the *façade elevations we have...*

- rules would be applied to protrusions and recesses along the façade, window distribution?

### Streetscape Types

We will set up some parameters for streetscape design based on the frontage types.

### Open Space Types

Parameters defined for different types of open space types that would be applicable to building design: center court, corner court, interior court, rear commons, internal square, internal green, edge greenway. May be more than needed here with so many open spaces already defined....

## Questions

1. Ways to address the scale of longer buildings: limiting overall length of building, required deep insets of the façade to separate the building into segments, require different treatments of the façades of each segment, or simply require maximum (and probably minimum) façade divisions (vs deep insets).

- The façade of north building of Reve along 30<sup>th</sup> is about 240 feet long.
- A typical block in downtown is about 300 x 300, with the alley division along the side streets (approx. 140 long buildings).
- Two Nine North is almost 400' along 30<sup>th</sup>, with three building sections (one 115', then 140', then 105', with two inset entrances about 20' wide each. Each segment is treated with the same material mix and lots of changes in planes. Pretty unsuccessful.

2. Ways to address over-articulation of facades? Simplify the number of materials, require only high quality materials (will be cheaper with only one or two – economies of scale?), limit the amount of push/pull on the façade, require bays to extend multiple stories?

3. Style?

4. No FAR, DU/A, OS/DU...

### **Boulder Junction Form-Based Code (FBC) Pilot Working Group**

**Purposes and Responsibilities:** The FBC Pilot Working Group will function in an advisory capacity on the development of a pilot FBC for Boulder Junction, with city staff and review boards having responsibility for recommendations to City Council. The group will provide input into the pilot FBC, including the development of guiding principles, content of the FBC, and reviewing draft documents.

**Members:** Members of the Working Group serve on behalf of boards and commissions and are expected to provide updates to their respective boards/commissions on key issues and/or milestones regarding the FBC. The following is the list of the FBC Pilot Working Group:

- Planning Board: Crystal Gray & Liz Payton
- Boulder Design Advisory Board: Jamison Brown & Jeff Dawson
- Transportation Advisory Board: Andrea Bilich & Zane Selvans
- Boulder Junction Access District Board: Susan Osborne & John Pawlowski

**Meetings:** Meetings will be scheduled periodically through the process of the FBC development. Where possible, meeting will be when the consultant, CodaMetrics, is in Boulder, or alternatively, the consultant could be a part of the meetings via telephone or Webex. At least one or two meetings are anticipated per month prior to October.

**What is a Form-Based Code?**

A form-based code is a land development regulation that fosters predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle for the code. A form-based code is a regulation, not a mere guideline, adopted into city, town, or county law. A form-based code offers an alternative to conventional zoning regulation.

Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in form-based codes are presented in both words and clearly drawn diagrams and other visuals. They are keyed to a regulating plan that designates the appropriate form and scale (and therefore, character) of development, rather than only distinctions in land-use types.

**What is the “Form-Based Code Pilot”?**

As part of the Design Excellence Initiative, the city is piloting a Form-Based Code (FBC) in Boulder Junction, defined as the area within the adopted Transit Village Area Plan. This area was selected because the community visioning and plan adoption processes were recently completed, so the project can focus more on the FBC as an implementation tool rather than having to start from scratch in articulating a vision for the area. As requested by City Council, the FBC project was commenced in April of this year and is anticipated to be a six-month process. The project will involve outreach to the community and coordination with review boards (i.e., Planning Board, Transportation Advisory Board, Design Advisory Board and Boulder Junction Access District) and council about desired building designs and forms that would inform the final pilot FBC.

**Why are we doing it and what do we hope to achieve?**

The purpose of the effort is to test FBC as an approach to address design quality and development review issues recently articulated through community, board and council conversations, as summarized in the January 20, 2015 memo from Dover Kohl ([link to memo](#)). The City of Boulder’s Community Planning & Sustainability Department (CP&S) is leading the effort in collaboration with other city departments and two consultant teams: Dover Kohl and Partners and CodaMetrics. Dover Kohl and Partners will assist in the broad, citywide Design Excellence discussions that would ultimately inform changes to the land use code, and CodaMetrics will assist in preparation of the pilot FBC.

### **What is the project schedule?**

Completion of the pilot FBC project for Boulder Junction is targeted for October 2015 (i.e., six months). A work plan has been developed which specifies the scheduled meetings and deliverables at each phase of the process. The work plan can be viewed [here](#).

### **What do we expect to be the outcome, and what will happen after that?**

CodaMetrics will assist the city team in conducting community workshops with the public and coordination with review boards to determine acceptable building types and forms as applied to the Boulder Junction area. A working group comprised of board members will also inform the FBC. A draft will be prepared for Planning Board and City Council consideration in September and October.

The anticipated outcome is an adopted FBC that will apply only to the Boulder Junction area. The exact content and how an FBC would fit into the current land use code is not yet determined; however, it is expected to prescribe acceptable building forms, heights, locations, façade detailing (e.g., window glazing, proportionality, etc.) , materials and design amenities, etc.

Dover Kohl and Partners will assist the city in working with the community and review boards to provide recommendations on the following:

- How FBC should fit into the format of the land use code and the current discretionary review process?
- What is great design in Boulder?
- What specific changes should be made to the land use code (principally the Site Review criteria) that would enable better design outcomes citywide?
- What other areas of the city should be considered for FBC?

Following adoption of the pilot FBC, the city will begin work on changes to the land use code considering the recommendations above and direction from City Council. Next steps may also include preparing FBCs in other areas of the city.

### **There are projects already submitted for review in the same area where the FBC pilot is taking place. How will it affect them?**

The applicants of three projects have indicated their interest in working with the city and the consultants as part of the FBC pilot's development. The three projects are:

- S\*PARK (3390 Valmont Road)
- Reve (3000 Pearl Street)
- The Commons (2490 Junction Place)

As no FBC is currently in place or will be in place until October, projects would continue to be evaluated pursuant to the existing Site Review criteria at time of decision. Nevertheless, the applicants have indicated that they would play a part in the process to formulate the FBC as well as expressing openness to being informed directly by the evolving FBC. While it is not expected that the resultant projects will be 100 percent consistent with the final FBC given the project timeline, the city views the three projects as an opportunity for seeing how the evolving FBC may improve certain design aspects of projects. The city has requested that guiding principles for FBC in Boulder Junction be developed by the CodaMetrics mid-summer after receiving input from the community and boards in order to more clearly specify how the case study projects could be influenced.

### **How will we coordinate between the FBC discussions and the Site Review processes?**

City staff has already contacted and met with each applicant about the process. Staff and CodaMetrics will continue to work with them through the review process as the FBC is developed. The applicants' decision to work with the city is voluntary and any such guiding principles that are prepared would not be legally binding as are the currently adopted Site Review criteria. The hope is that the general design of projects could be enhanced by what is learned through the FBC pilot enabling for a greater consistency with the Site Review criteria. That review will include compatibility of proposed projects with the height, mass, scale, orientation, architecture and configuration of the existing character of the area or character established by the Transit Village Area Plan. Consistency with the evolving FBC is not a standard under which the decision can be made for site review applications filed prior to the adoption of the FBC. Projects submitted after adoption of the FBC would be fully subject to the new code.

# Boulder Junction: Pilot Form-Based Code



## image preference survey **results**

May 21, 2015

The results within this report summarize the image preference surveys conducted with the Joint Board on May 14, 2015, and a public community workshop on May 16, 2015.

An Image Preference Survey (IPS) is a powerful tool used for eliciting group preferences on community character and appearance. It can help create a visual vocabulary to enhance discussion of image and definition of place. In our IPS, participants were shown a series of PowerPoint slides, each containing photographs related to geographic areas within the station areas. To offer a full range of options, images were drawn from local, regional, and national examples. Participants scored each image from -5 to +5 (most negative to most positive), and then images with the highest and lowest overall scores were discussed at smaller table gatherings.

This summary shows the average score for each image, as well as comments from participants recorded during the discussions following the survey. Average scores and comments are colored coded per the key at the top of each page. These results will be used to help establish preferred building design to write the pilot form-based code for Boulder Junction.

# Boulder Junction: Pilot Form-Based Code

image preference

survey **results**

# Mixed-Use Buildings

# Mixed-Use Buildings IPS Results

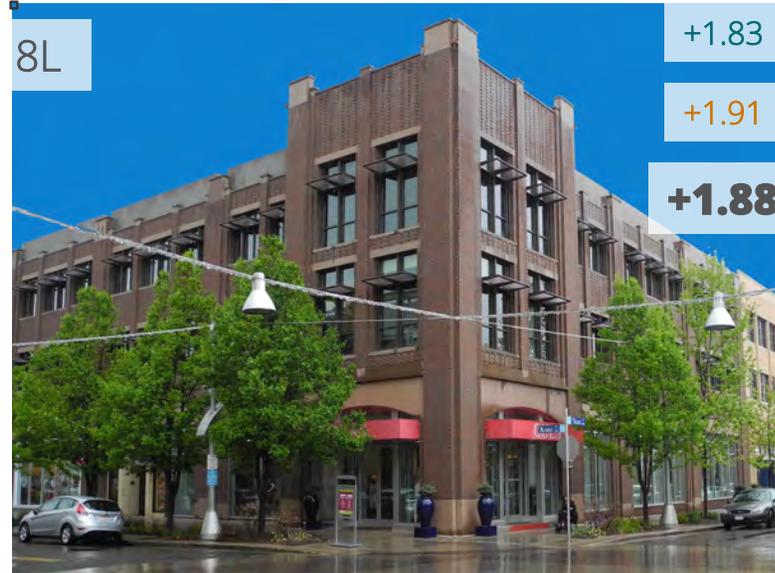
KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



20L

+2.61  
+1.65  
**+2.07**

- Taller corner as punctuation to corner
- Variety
- Good openings
- Obvious storefront
- Lots of doorways on street
- Like scale, materials, articulation
- Not enough shade or street proximity in high summer sun
- Shorter buildings feel more "human scale"
- This works well – holds corner well



8L

+1.83  
+1.91  
**+1.88**

- Elegant proportions
- Lots of windows/depth despite being massy
- Holds corner
- Windows set in
- Street trees
- Depth
- Awnings
- Like corner presence
- Like recess of windows in the buildings



12R

+1.56  
+1.45  
**+1.50**

- Approachable
- Good pedestrian scale
- Kick plate better than floor to ceiling windows
- Like - Balcony extended, not recessed
- Friendly pedestrian zone
- Like - Base bays extend
- Don't like static form
- Balconies are strange



15R

+1.44  
+1.48  
**+1.46**

- Stronger corner would be good
- Store front
- Balconies varied, not roof lines – also help with depth and shadow
- Exposed balcony is bad, compared to protected balconies or setback balconies

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



11L

+1.33

+1.55

**+1.45**

- Like public space and stepping down towards it



5R

+0.59

+2.04

**+1.43**

- Not enough
- Looks cheap – materials and way the building is done
- Disneyland-ish
- Flimsy
- Windows too high



22L

+1.39

+1.43

**+1.41**

- Public space is important for mixed-use
- Safe but inviting place is important
- Has some private space
- Façade material too homogenous



2L

+0.89

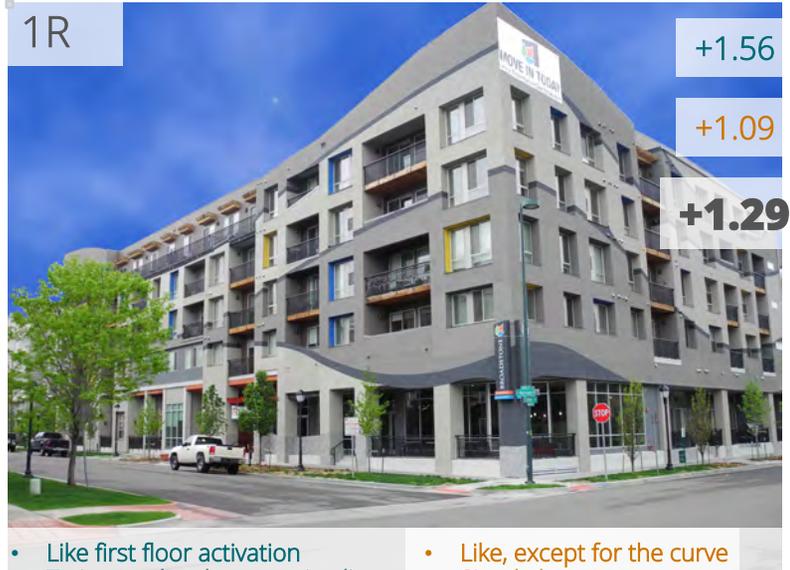
+1.65

**+1.32**

- Jumbled
- Too much
- Like lines
- Like depth
- Like setback

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



1R

+1.56

+1.09

+1.29

- Like first floor activation
- Trying too hard – swooping lines
- Like – holds corner
- Like symmetry
- Like, except for the curve
- Simple but strong
- Like balconies for weather protection
- Like balconies to open up facade



11R

+1.06

+1.48

+1.28

- Balconies give outside access, like windows – lots of natural light
- Looks too “busy” – varied materials, textures, windows
- Not pedestrian-friendly
- Too “square”
- Like warm feel of material – higher quality
- Nice proportion of features (windows)
- Decoration at smaller scale is nice (window details)
- Strong corner
- Simpler
- Good retail on ground



18R

+0.83

+1.55

+1.23

- Very tall first floor – feels like traditional retail
- Rhythm on façade
- Quality materials
- Urban and traditional
- Windows indicate use
- Identifiable entrances



9R

+0.83

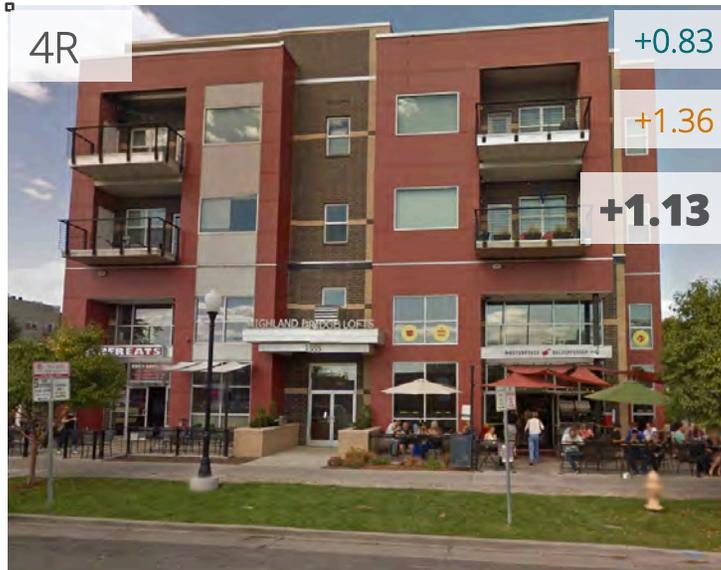
+1.50

+1.20

- Great because it has people
- Opening on streets, uses make or break a place
- Important corner; gateway
- Like materials and scale
- Like doors
- Authentic corner

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



4R

+0.83

+1.36

**+1.13**

- Good activation at ground level
- Strong middle & top
- Like dimension and depth
- Like entry
- Too plain
- Safe and inviting to pedestrians



10R

+1.17

+1.00

**+1.08**

- No relationship between top and bottom
- Successful mixed-use building
- Wish corner had more going on
- Should not dishonor building
- Feels like simple commercial



17L

+0.94

+0.91

**+0.93**

- Industrial materials – metal materials
- Boxy
- Do not know what it is
- Like alternating facades



1L

-0.06

+1.61

**+0.80**

- Shadowy, looming
- Street activation
- Nice depth
- Like accessibility to the street – pedestrian friendly windows
- 2<sup>nd</sup> story overhang is pedestrian friendly – provides shade
- Don't like plainness – it fulfills FAR, not visually interesting
- Like that brick matches many Boulder buildings
- Width of overhang walkway is narrow but acceptable for use, but too low

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



8R

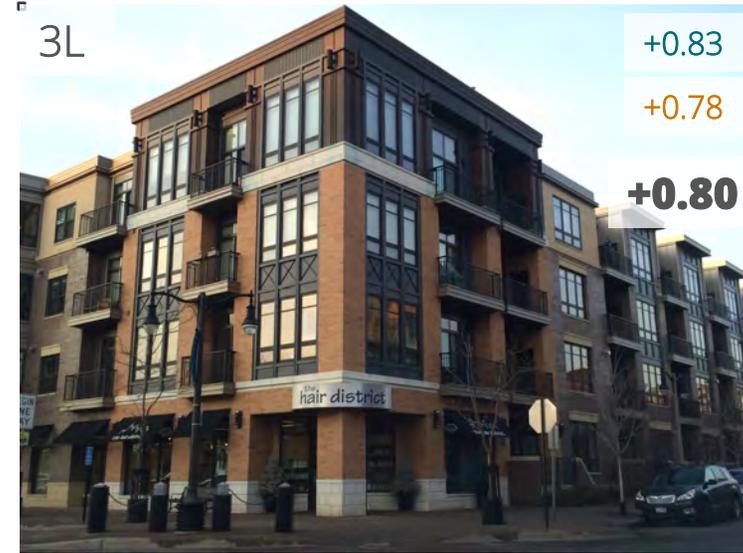
+0.72

+0.96

**+0.85**

- Too much ground floor transparency
- Recessed balcony gives depth
- Building is light and airy – floats

- Like modern architecture
- Although a flat façade, small variations in decoration and variation in fiber cement façade color help it not feel flat
- Scale/proportion feels contemporary/ European – good for the junction
- 1<sup>st</sup> story might not work for pedestrians
- 1<sup>st</sup> story windows help lessen
- “heaviness” of red materials
- Like materials, but not roof – flat rooflines are boring
- No cornice
- Strange protrusion
- Square glass – bad!



3L

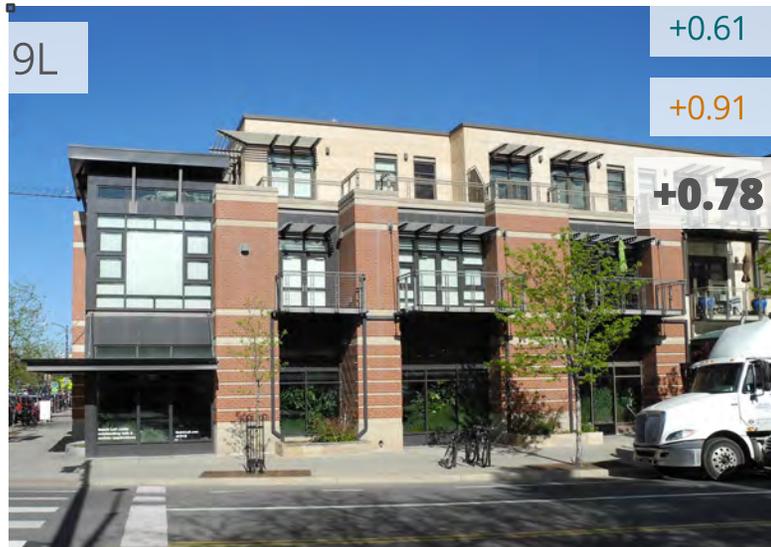
+0.83

+0.78

**+0.80**

- Decent streetface
- Defined top, middle, and bottom
- Good balance
- A little too much
- Columns keep pedestrians away

- Don't like – too many materials
- Like traditional proportion of windows – window shape, simple and symmetrical
- Like strong corner anchor
- Very transit-oriented
- Like variety of forms, but to a certain degree
- Like strong cornice
- Like industrial feel
- Love industrial modern with traditional elements, and metal



9L

+0.61

+0.91

**+0.78**



7L

+0.22

+1.04

**+0.68**

- Like scale, that it is so close to street
- Architecture could be better

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



10L  
+0.83  
+0.22  
**+0.49**

- Tower complements the rest of the building
- Reminds of Walgreens (negative)
- Don't like balconies enclosed by walls



24L  
+0.82  
+0.17  
**+0.45**

- Like arch, varied windows, variation in façade color
- But no relationship to the street (overhang, etc.)



24R  
+1.06  
+0.00  
**+0.45**

- Looked active – had people
- Tall ground floor scale
- Highly constrained
- Simple palette
- Bright
- Deep set windows
- Protected entrance
- Like artistic varied panels (“so Boulder”)
- Like porch-like walkways, possibility of rooftop gardens
- Functional busy-ness is okay
- Height of 2<sup>nd</sup> story overhang is good
- Vertical outdoor space (multilevel porch) is good – feels integrated



6R  
-0.24  
+0.87  
**+0.40**

- Do not like parking orientation – people will drive
- Like corner
- Simplicity glass corner

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



- No comfortable space for eyes
- Didn't work as a whole
- Imbalanced
- Flimsy
- Like canopy, arched passages (arcade)
- Like modern architecture
- Color is too bright
- Like shade
- Like form, connects to street
- Busy
- If it was simpler and had less ins/outs, would work better



- Varied, non-square shapes are better than square shapes
- No easy pedestrian access



- Like architecture and color palette
- Maybe not good for Boulder Junction
- Open storefronts on bottom floor is more inviting

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



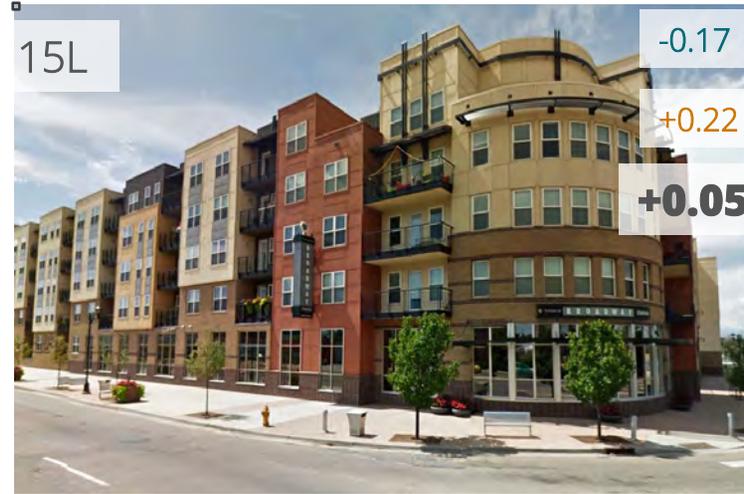
3R

-1.06

+1.00

**+0.13**

- Nice color
- Like pop of color, but too many colors overall
- Uncharming
- Not activated at ground level
- Too contrasting
- Green is too bright



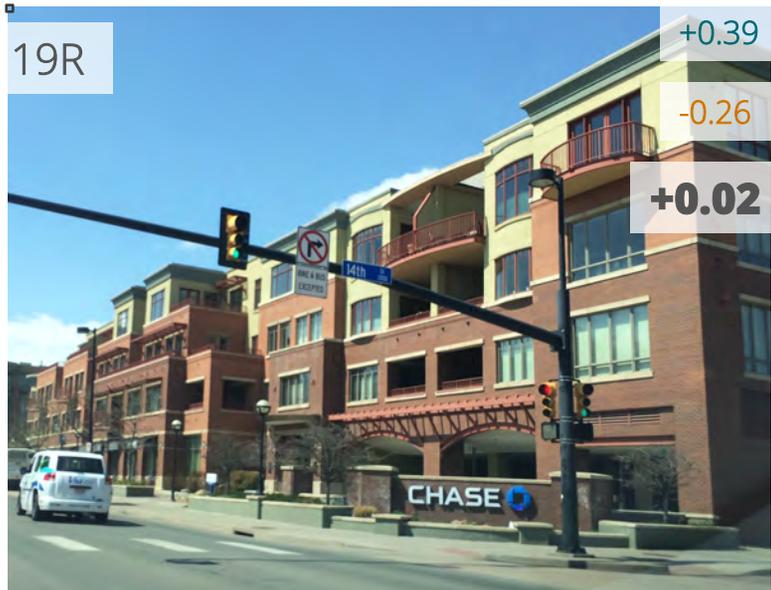
15L

-0.17

+0.22

**+0.05**

- Negative – rounded corners
- Looks bad – be a punctuation, rather than not
- Don't like – too massive
- Absolute biggest scale allowable
- Variation breaks the flatness of the building



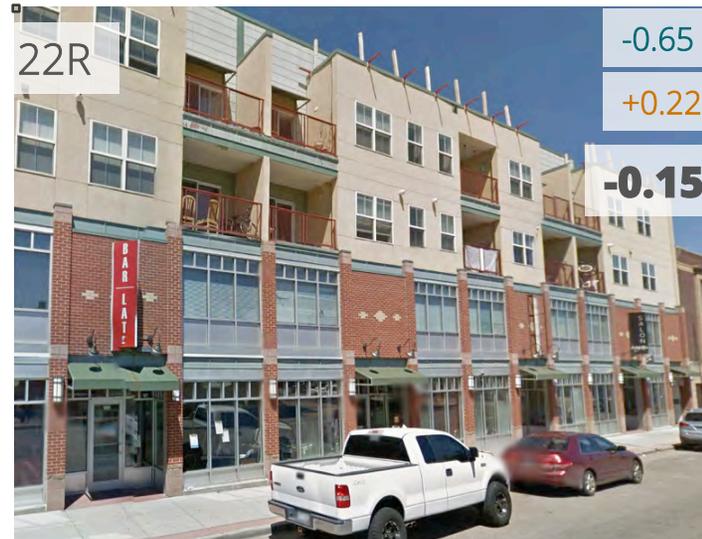
19R

+0.39

-0.26

**+0.02**

- Prefer varied façade setback depth and shadow



22R

-0.65

+0.22

**-0.15**

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



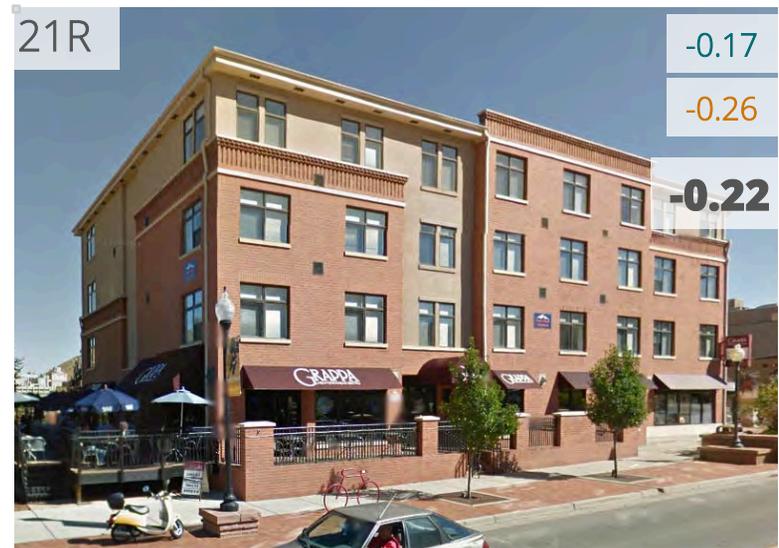
23R

-0.12

-0.27

**-0.21**

- Too many ins/outs



21R

-0.17

-0.26

**-0.22**

- Separation is too abrupt
- Scaling – different context on different roads. It would be helpful to do by typology



14R

-0.82

+0.22

**-0.23**

- Needs more entrances
- Feels like office building
- Totally dead
- Too uniform



4L

-1.11

+0.35

**-0.29**

- Like ground level & overhang
- Overwhelming top – like wedding cake
- Looks like a chain motel
- EIF
- Single ground floor tenant
- Parking lot-oriented
- Monochromatic; flat

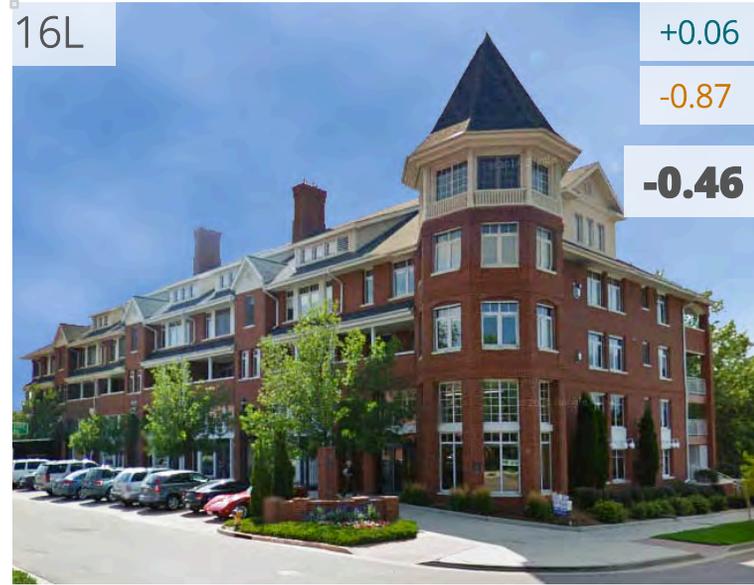
# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



16R  
-0.31  
-0.52  
**-0.44**

- “random note building” – form is random
- Inviting way in
- Overdone articulation
- Too chaotic; busy
- Where do I go? – confusing
- Sunken in – bad
- Too busy
- Good palette
- Sick of arcs
- Balconies on front of building are nice



16L  
+0.06  
-0.87  
**-0.46**

- Like trees
- Cheesy tower, abrupt
- Bad to see on each corner
- Don't like corner – looks like Disneyland
- Do not like architecture
- A lot of cars parked along the street



13R  
-0.94  
-0.22  
**-0.54**

- Because windows are sunken and in brick, not enough texture in façade
- Need atmosphere to bring interest



23L  
-1.11  
-0.17  
**-0.59**

- Suburban looking – car-oriented
- Like rhythm
- Like arcade
- Mixed use on 2<sup>nd</sup> story could change over time; might be timeless
- Receives good sun through windows
- 1<sup>st</sup> story proportions work well for pedestrians
- 2<sup>nd</sup> story walkway overhang height feels too high; walkway too narrow
- Like roof overhang
- Good transparency
- Don't like fake gables

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



13L

-0.17

-1.00

**-0.63**

- Militant looking (black metal)
- Negative – rounded corners
- Crown of thorns
- Chaotic
- Drab colors
- Too much corner
- Building is designed for lighting to come in
- Spinner top feels like building will take off and isn't grounded



6L

-0.61

-0.91

**-0.78**

- Like industrial roots
- A little too big
- Needs more interesting storefronts
- Façade materials are too homogenous
- Busy with push-ins/outs
- Confined
- Sterile; like a hospital



19L

-0.61

-1.00

**-0.83**

- Too bold/expansive color expression; works better in smaller-scale decoration



17R

-0.78

-1.13

**-0.98**

- Nice use of color as accents
- Lack of overhang for balconies feels too exposed
- Very random materials not good
- Like the variations in color

# Mixed-Use Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



- Strange roof lines; poor roofline
- No relationship between top and bottom of building
- Roof line bugs me, but base works
- Arbitrary roofline is no good
- Looks too indicative of east coast/seaport style; should feel more agrarian (should reflect local vernacular)
- Looks out of place



- Would like mass on corner rather than void
- First floor is squat
- Dropped out of the 1960s
- White material choice looks shoddy – panels might look better



- Artful and well done
- Pedestrian experience not great
- No depth to façade
- Monolithic
- Boxy
- Looks like legos
- Color scheme is problematic
- Too separated from sidewalk

# Boulder Junction: Pilot Form-Based Code

image preference

survey **results**

# Residential Buildings

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score

48L

+2.28

+1.87

**+2.05**

- Visually interesting
- Not too repetitive
- Good social spaces
- Railings look out of place
- Don't like the ornamentation of brick – draws eye up in the wrong way
- Porches are great
- Like traditional brick façade
- Good proportion, scale, and windows
- Not urban enough; porch is country-look

44R

+0.83

+2.83

**+1.95**

- Porches are great to interact
- Seems urban enough

28R

+1.50

+2.13

**+1.85**

- Nice stoops
- Friendly/ inviting
- Traditional flare
- Windows are dimensioned appropriately
- Like tree line
- Too much brick facade

26R

+1.44

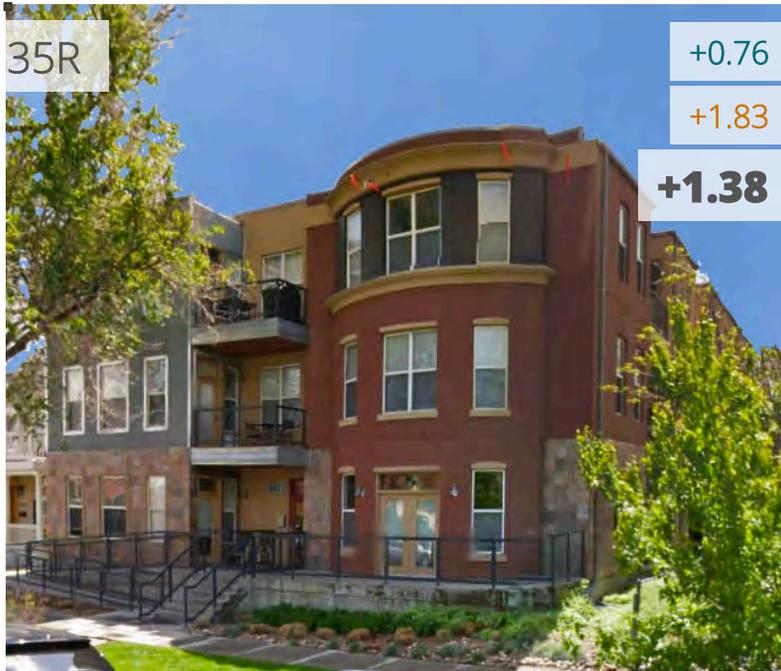
+1.83

**+1.66**

- Kentucky or New Orleans cottage; does not mix with TOD or modern transit development
- Materials are the problem, not concept or composition
- Porches
- Small scale
- Mix of shapes
- Opportunity to create new precedent – more urban
- Like mix of color – playful
- Like articulation
- Differentiation between the units/entry ways
- Roofing inappropriate
- Elements of traditional housing
- Amateur
- Form is good
- Colors are appealing

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



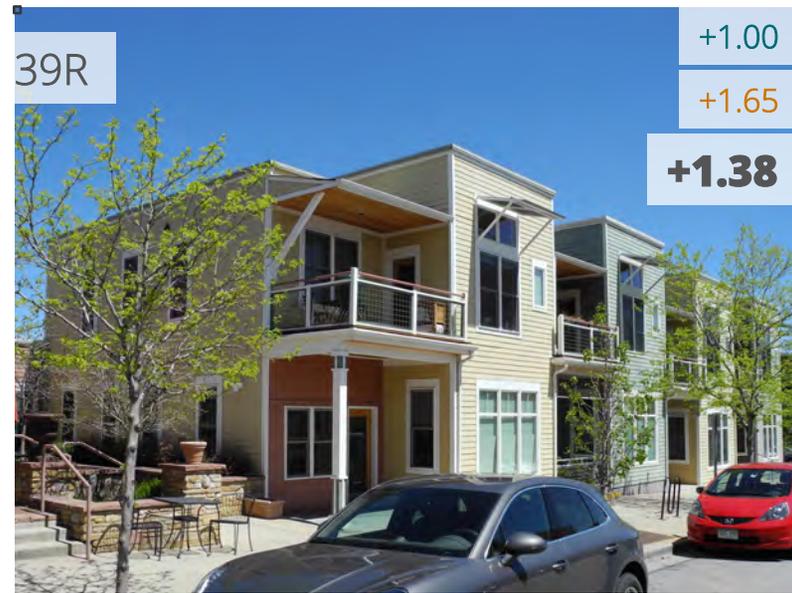
35R

+0.76

+1.83

**+1.38**

- Too many materials
- Traditional



39R

+1.00

+1.65

**+1.38**

- Like the seating congregation spaces
- Balconies are good
- Great proximity to transit
- Walkable
- Old-town feel
- Small scale, overhang/awning



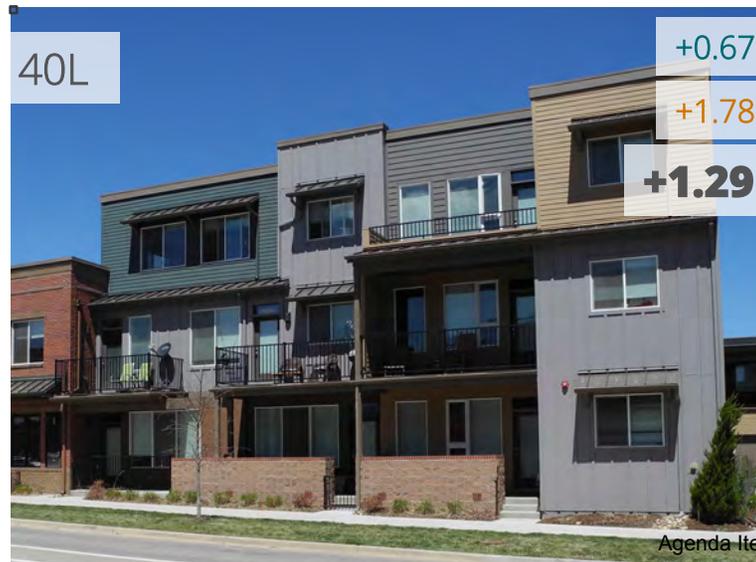
27L

+0.83

+1.70

**+1.32**

- Good window proportions



40L

+0.67

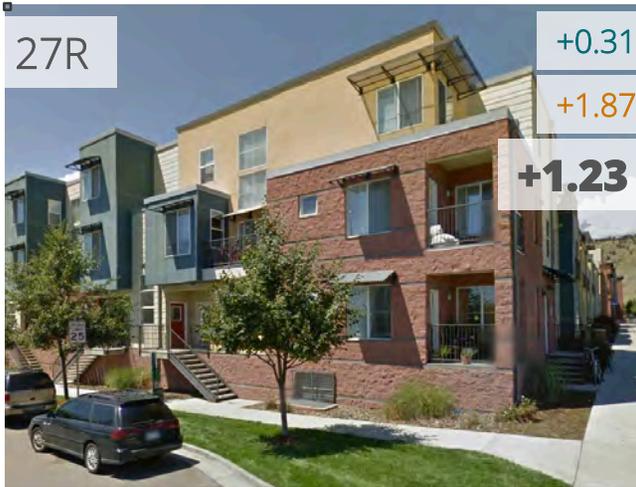
+1.78

**+1.29**

- Haphazard materials and colors
- Too chaotic
- No rhyme or reason
- Looks cheap
- Too many colors and too many materials
- Not transit-oriented
- Not welcoming
- Top floor is great; lower floor doesn't work well (dark and uninviting), but overall really like the building

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



27R

+0.31

+1.87

**+1.23**

- Looks livable
- Negative – stark
- Dimensions of shapes



45L

+1.39

+0.96

**+1.15**

- Positive – limited palette of materials
- Like ins and outs, but consistent plane without being busy
- Like transparent
- Unifying elements throughout
- Don't like dark color
- Like stores on street, activity on sidewalk
- Too large of scale for Boulder Junction
- Tall – like big blocks of matching materials
- Simple and holds its pieces as unique and separate instead of commingling
- Multiple materials feel like a “trick” to break down the scale
- 3 stories would be good
- Enjoy corner feature – strength on the corner, clocktower or some element



36L

+0.78

+1.35

**+1.10**

- Like rhythm
- Like richness of materials
- Stoops engage the street
- Good street presence
- Negative – reads more like office, don't like flatness of roof
- Pedestrian-friendly
- Good interface with street
- Looks lived-in
- Good materials
- Negative – hiding upper story?
- Good material palette
- Recessed balcony
- Durability and maintenance of façade will be expensive, but looks better than the bright wood
- Quality of materials, simplicity, and spacing



42L

+1.53

+0.74

**+1.08**

- Good materiality – looks durable, simple, two dominant materials
- Like vertical elements
- Like compact, efficiency
- Like discernible pattern – not random, but enough variation
- Roofline is interesting
- Like rhythm, repeating forms
- Like richness of materials
- Strong streetscape, like street trees
- Like distinct top and bottom
- Negative – dated (could be)
- Really like the 2 materials – stucco and red; like 2 colors – not too many
- Vertical proportions feel compact and efficient – appropriate for Boulder Junction
- Glass looks “market rate” not “low-income” – is there enough privacy? Glass is interesting. Like glass.
- Like multiple entrances – articulates façade
- Roof is interesting
- Simple, progressive, but modest
- Tower, roof lines are too stark
- Stairs are good
- Like towers.
- Hat[?] is hideous – for lighting?

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



47R

+0.72

+1.35

**+1.07**

- Lack of green elements on street
- Like wood/organic materials

- 2<sup>nd</sup> and 3<sup>rd</sup> floor façade should extend to first floor
- Too much concrete
- Needs furniture and light
- Like wood façade
- Materials important – should reflect younger generation
- Typical modern
- Well done balance, colors, materials, put well together



46L

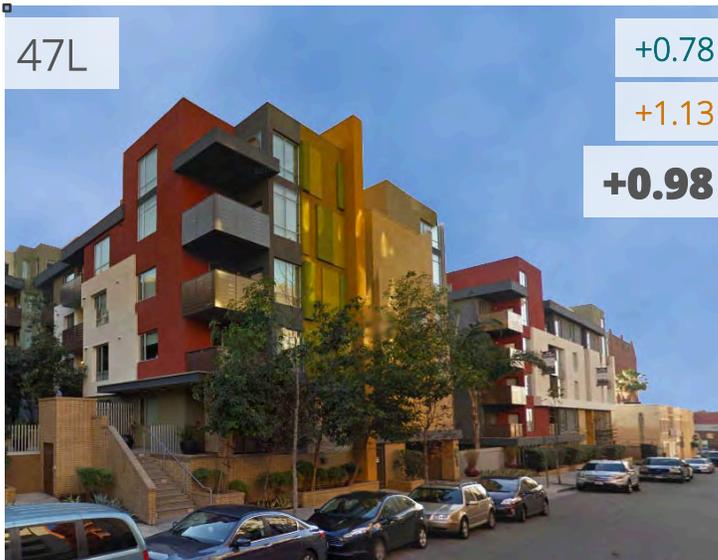
+1.22

+0.87

**+1.02**

- Like attached gutter – it is efficient
- Don't like material change on side; different siding is bad
- Don't like "brick retro legacy transit feel"
- Like façade
- Like landscaping
- Need functional porch
- Easy to get in and out of – makes it feel communal so people can talk
- Engaging transition and welcoming entrance; much more accessible
- Love colored doors
- Human scale

- Good materials, not busy
- Like style/good repetition
- Looks relatable
- Kind of plain/boxy
- Stairs – no transition to inner-space, no porch
- Negative – material changes at corners



47L

+0.78

+1.13

**+0.98**

- Tries to be too funky
- Don't like dark red and mustard colors together
- Not opposed to metal or brick



37L

+0.56

+1.22

**+0.93**

- Lost space in middle
- Looks livable for residential – not trying to be NY or somewhere super urban
- Out of context – smaller-scale neighborhood
- Better for multifamily – much better scale
- Like traditional peaked roofs
- Charming, pleasant, lovely
- Good materials
- Reads residential
- Easily understood spaces
- Separate entrances

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



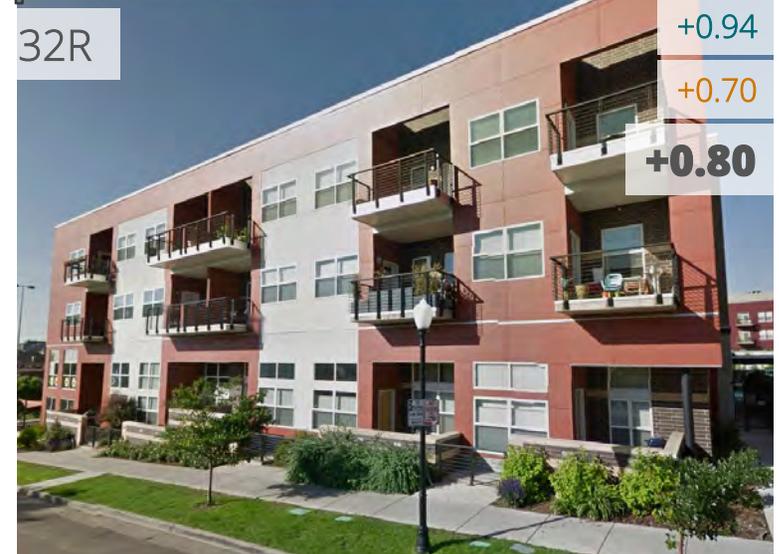
29L

+0.39

+1.13

**+0.80**

- Good – not a monolith
- Simplest pieces work together well
- Porches understated and subtle
- Proportions are well done
- Meaningful use of materials
- Texture and variety and subtle progression



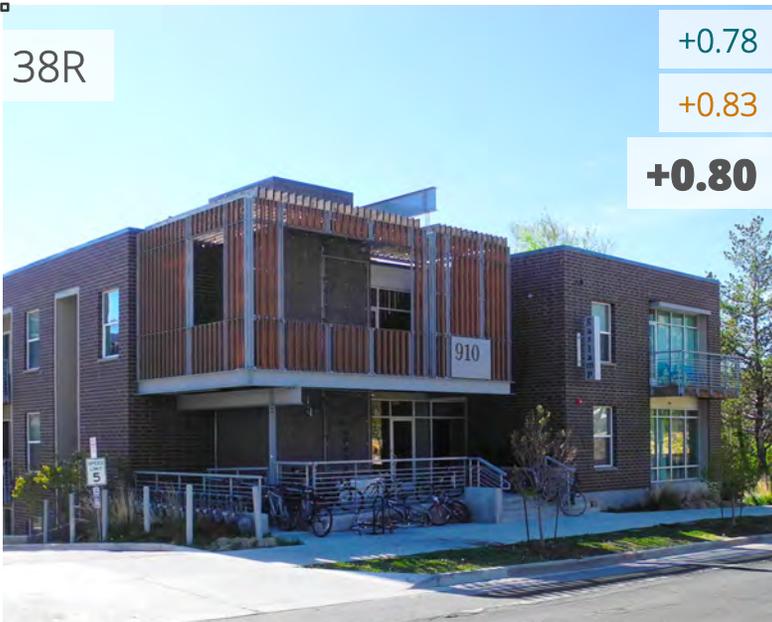
32R

+0.94

+0.70

**+0.80**

- Simple recessed balconies – clean



38R

+0.78

+0.83

**+0.80**

- Appropriate materials to Boulder Junction
- Too heavy
- Looks inviting
- Heavy and light
- It is super fun – like the mixed materials, feel appropriate for Boulder Junction
- Lots of bike parking is great
- Want more windows, but big windows are good
- Do not like the materials
- Cool, open



31R

+0.06

+0.70

**+0.43**

- Separate entrances
- Articulation, smaller scale
- Porches/entry way

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



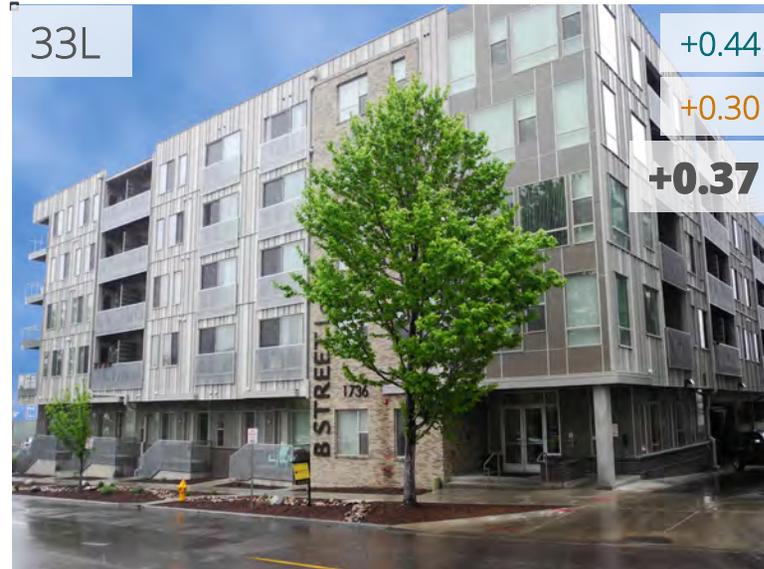
38L

-0.17

+0.83

**+0.39**

- Like cohesion within building
- Don't like gate in front
- Like the resident court
- Like the transition and fence
- Like the rounded façade; good facade



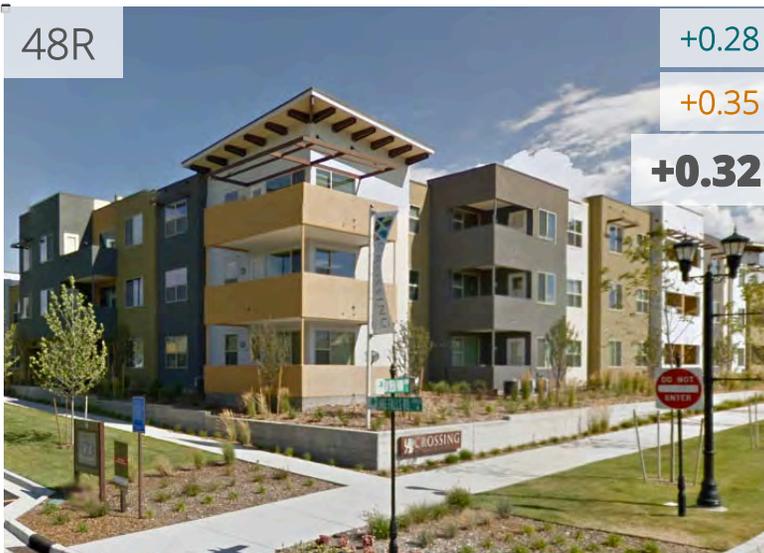
33L

+0.44

+0.30

**+0.37**

- Like balconies – integrated clean shapes and transparency
- Don't like ground floor
- Interesting – a good palette alternative to brick
- Industrial feel fits Boulder Junction
- Feels a little “cold”
- Would pick a different warmer brick – or maybe dark?
- More engagement on street front (mixed use)
- Materials are contemporary
- More likely to be enduringly “cool”
- Higher quality construction, materials, and detailing
- Extends into a long and monotonous building; scale is too large
- Needs more pop-out façade elements
- Simple, urban, modern, clean, not cluttered



48R

+0.28

+0.35

**+0.32**

- Like mulch, but need a way to get up these? But depends on how public/private you want it
- Bring it to street
- 50's architecture



37R

-0.12

+0.59

**+0.28**

- Density/scale is good
- Like 1<sup>st</sup> floor retail; mixture of uses

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



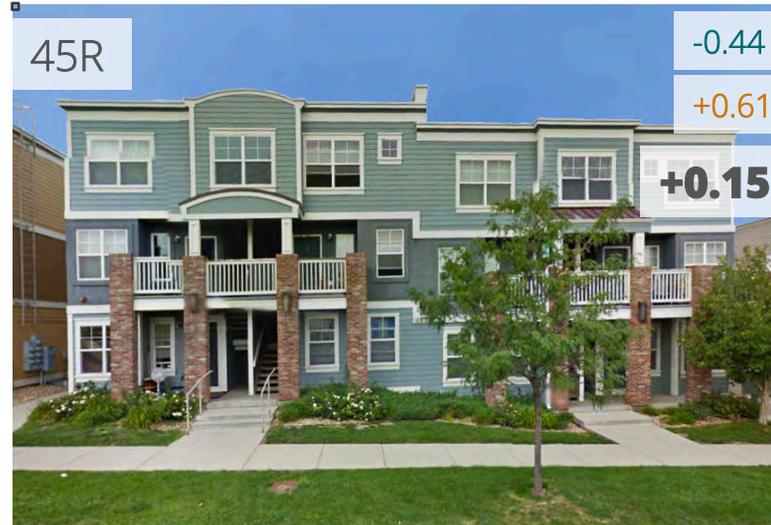
33R

0.11

0.35

**0.24**

- Too many colors and too many materials
- Like the way the balconies work



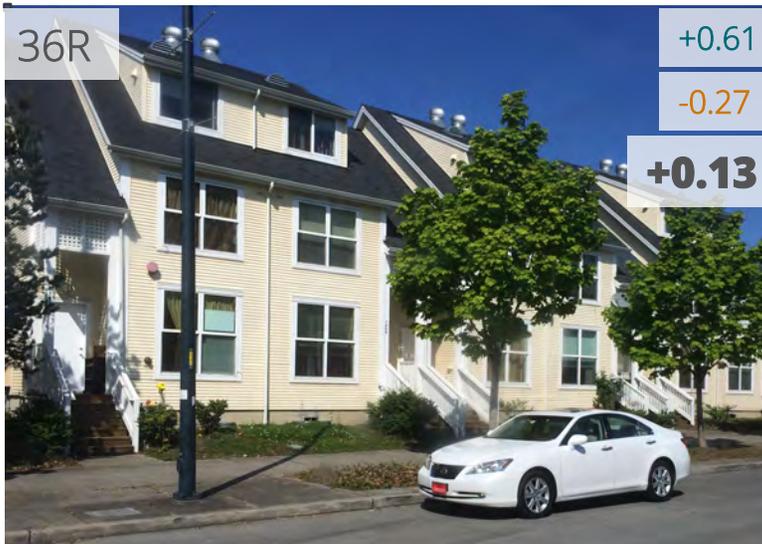
45R

-0.44

+0.61

**+0.15**

- Negative – too detached
- Not suitable for anywhere
- Too random!
- Odd materials
- Cheap and cheesy
- Chaotic form
- Nice entrances
- Too generic
- No vibrancy
- How many materials are too many? It depends on what they are – typical cottage siding from the 1950s
- Columns are awful
- Doesn't fit into context – need more modern look



36R

+0.61

-0.27

**+0.13**



25R

-0.06

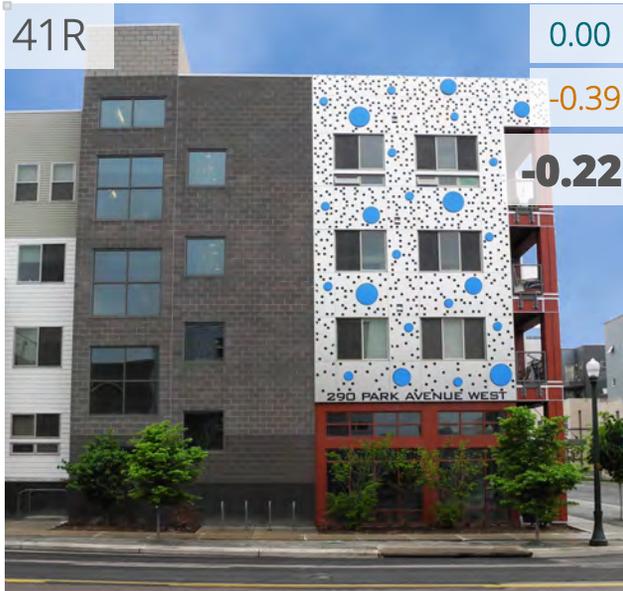
+0.17

**+0.07**

- Too many colors/materials
- Too busy
- “lost potential” – but the small gardens are nice – brings beds closer to street for protected pedestrian area but would be better if bottom floor was commercial, not residential
- Haphazard, incoherent, although broken up

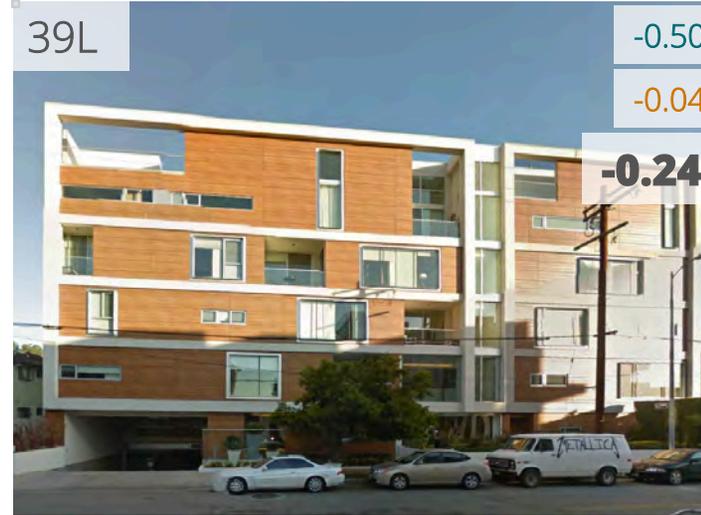
# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



41R  
0.00  
-0.39  
**-0.22**

- Like windows reflect underlying structure
- No way – too goofy!
- Dot façade/art is good – need more public art
- Slick but has façade layers
- Like the modern façade and colors
- Don't like dots; look like a bathroom
- Not artistic – not for a building



39L  
-0.50  
-0.04  
**-0.24**

- Like materiality
- Architectural interest
- Interesting window placement
- Like linear terraces
- Negative – parking access, unsafe
- Negative – lack of ornamentation
- Negative – dated
- Bad how it meets the ground
- Don't like this – feels weird and retro
- Okay if it is a small structure, not if it goes on for blocks
- Playful proportions
- Nice but powerlines



41L  
-0.33  
-0.26  
**-0.29**

- Like angled roof
- Placement of solar panels is strange
- No rationale, no connection for colors and shapes
- Like the dual-function solar panels; like how these are incorporated – wonderful feature

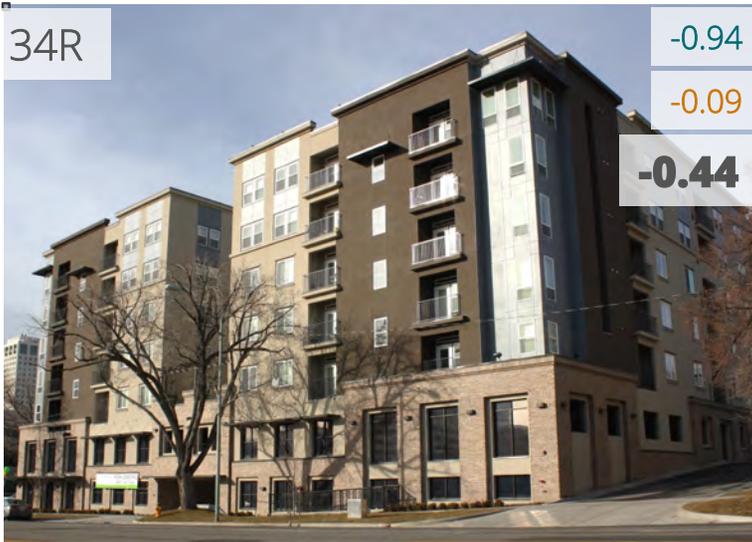


30R  
-1.11  
+0.13  
**-0.41**

- Don't like "moat" (wall)
- Top portion is strange
- Complicated
- Top heavy
- Arbitrary design moves
- Tall windows are great, especially on top floors, helps create diverse price points
- Scale, seems never-ending complex broken into separate buildings
- Site relationship is okay, but depends on the site
- Like separation between private and public realm
- Like separation of buildings, instead of one long row – easier to manage an emergency
- Windows on the sides of the home; pattern language lights in 2/3 bedrooms

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



34R

-0.94

-0.09

**-0.44**

- Too tall/boxy/monolithic
- Looks anonymous/unlivable
- Like street interface
- Height is okay
- Parking not great
- Materials are okay-ish



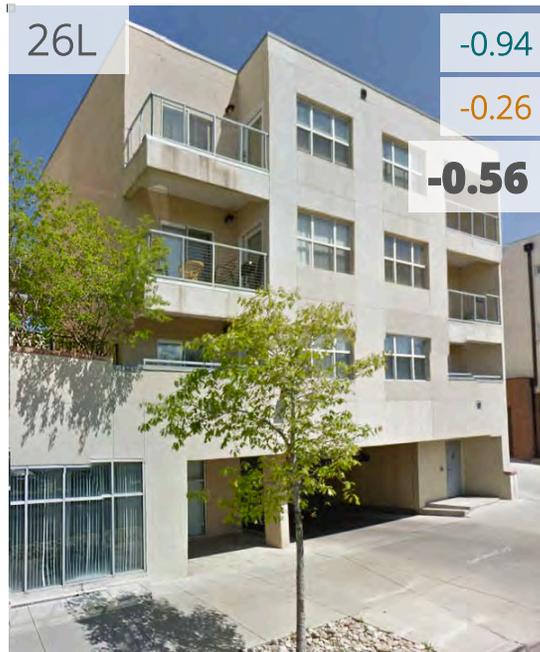
44L

-0.33

-0.65

**-0.51**

- Strong looking
- Like presence on corner
- Ground level is strange



26L

-0.94

-0.26

**-0.56**

- Monolithic with no life
- No pedestrian scale
- Boxy and a lot of concrete
- Has broken façade variation
- Looks like it has community activity area
- Street environment is not great
- Factory-ish
- Downtown Denver feel – lack of detail



25L

-1.00

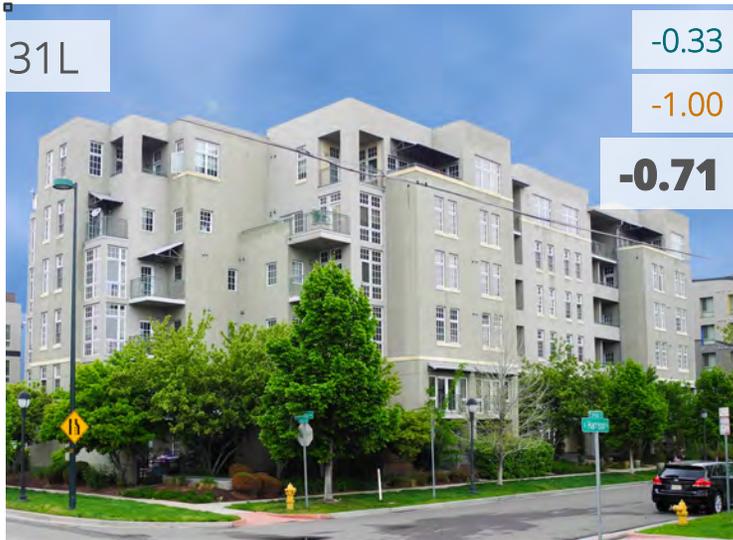
-0.48

**-0.71**

- Bottom structure feels stable
- Negative street relationship
- Materials look cheap

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



31L

-0.33

-1.00

**-0.71**

- Good window proportions, but very flat façade
- Too much going on – mullions are too much with the amount going on
- Paint or materials could be better used to simplify and articulate façade
- Good maximum urban look
- Impersonal; imposing



43L

-0.44

-1.17

**-0.85**

- Too much green lawn – not appropriate for Boulder Junction
- Too much grass/landscape to maintain; very tricky
- No enclosure
- No public/community space



46R

-0.89

-1.26

**-1.10**

- Looks like a prison
- Uninviting
- Useless courtyard
- Disconnected from street
- Should have hedges, not fence
- Like landscaping and seating areas, but not the fence; privacy is good, but the material is bad
- "this is where you go for rehab"
- "electric fence"
- No chainlink fence and landscape
- Modern looking courtyard
- Need more seating areas
- Good open space
- A lot of concrete
- Like variety and colors of façade



29R

-1.33

-1.09

**-1.20**

- Garage creates gaping hole in sidewalk
- The worst of LA – materials, color, boxy balconies look cheesy and cheap
- Underground parking looks like a hotel
- Like colors, façade; colors are appealing
- Car entrance okay

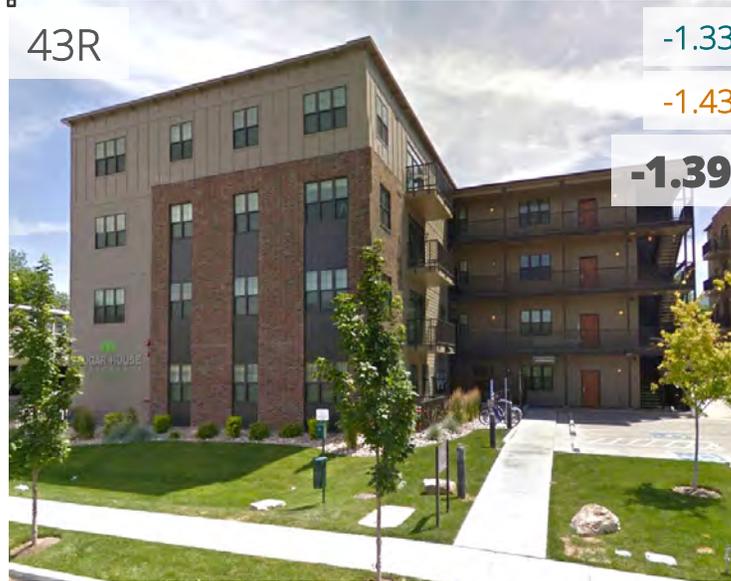
# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



30L  
-1.22  
-1.50  
**-1.38**

- Boring – too much of the same
- Bad pedestrian-scape – lack of street activity
- Wasted space by fence
- Material change at corner
- Cheap
- This scares me!
- Terrible roof, colors, street front
- Like this one – inside color gives more light; good combination of colors



43R  
-1.33  
-1.43  
**-1.39**

- Looks like student housing – not appropriate for Boulder Junction
- Like scale
- Like residential public space
- Calm peaceful colors, facade



35L  
-1.44  
-1.39  
**-1.41**

- No interface with street
- Nice simplicity, materials



42R  
-0.65  
-2.17  
**-1.53**

- Looks like senior housing
- Negative – suburban, not inviting
- Generic, but not offensive
- Enclosed porches
- Too suburban
- Looks like a Hampton Inn
- Hip roof not urban
- Monochromatic
- Balconies are good

# Residential Buildings IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



28L

-1.83

-1.59

**-1.70**

- Materials look dated
- Too many colors/materials
- Too 2-dimensional
- Looks like wallpaper
- Why cut off with fence



34L

-1.29

-2.13

**-1.78**

- Horrific; blocky
- Reads industrial
- Poor details; zero ornamentation
- Feels temporary
- Prefer vertical windows to horizontal
- Landscape is bad
- Use industrial materials
- Rocks are bulky and weird
- Doesn't fit, feels cheap
- Rip rock foundation walls – materials are good, modern
- Fits the street traffic on 28<sup>th</sup>
- Do not like covered stairway
- Lacks appeal because it looks cheap, window construction and simplistic building overly styled and will not stand the test of time – not an enduring cool



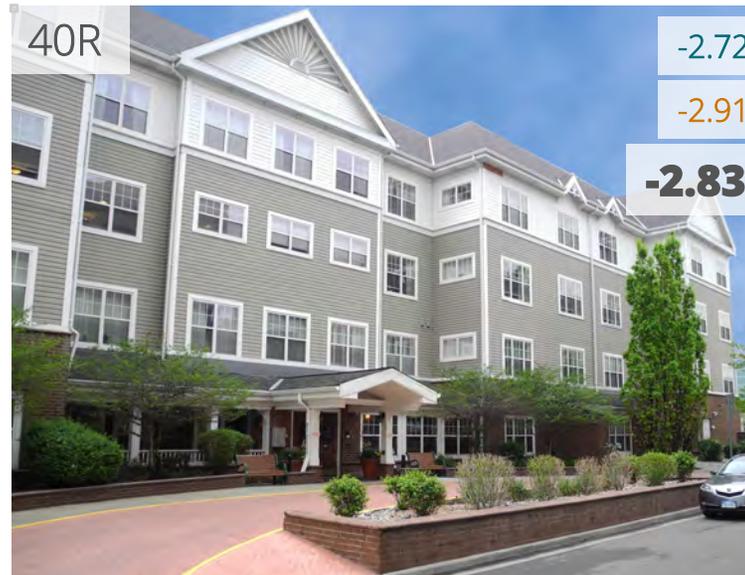
32L

-1.67

-2.48

**-2.12**

- Too suburban
- Set back too far
- Visual clutter
- Too many white elements
- Like green in front of building
- This scares me!
- “visual noise”
- Ghastly; looks cheap and decorated
- Lacks site specificity and integration
- Roof line not good; too peaked
- Didn't like scale
- Reminds me of Westminster



40R

-2.72

-2.91

**-2.83**

- Looks institutional
- Not pedestrian friendly
- Suburban/cookie-cutter
- Not Boulder character
- Not progressive
- Window proportion is too small
- Very flat, cheap façade
- Feels institutional
- Do not like the secluded car-oriented entrance
- White trim needs to be contextual
- Dining hall
- Shouldn't be duplicated

# Boulder Junction: Pilot Form-Based Code

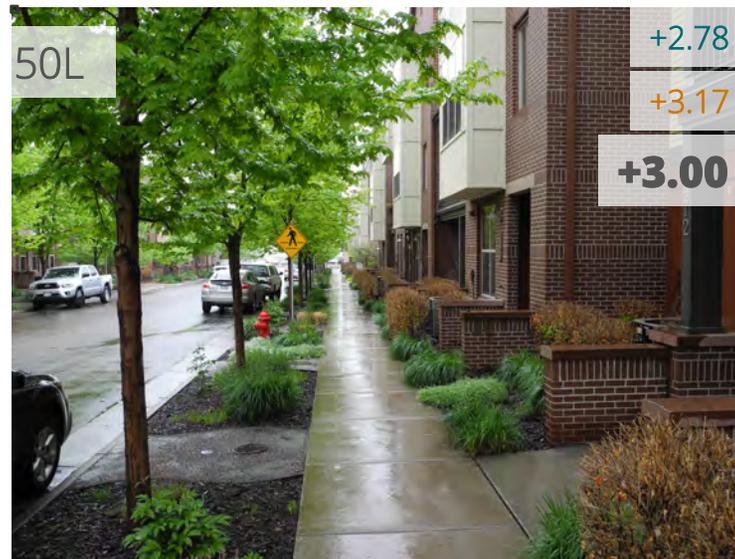
image preference

survey **results**

# **Pedestrian Realm**

# Pedestrian Realm IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



- Positive – hide sidewalk, but interesting
- Tall windows – transparency
- Like simplicity of materials
- Building has variation, but not overly
- Like interest on both sides of walk
- Sidewalk feels narrow
- Feeling of enclosure

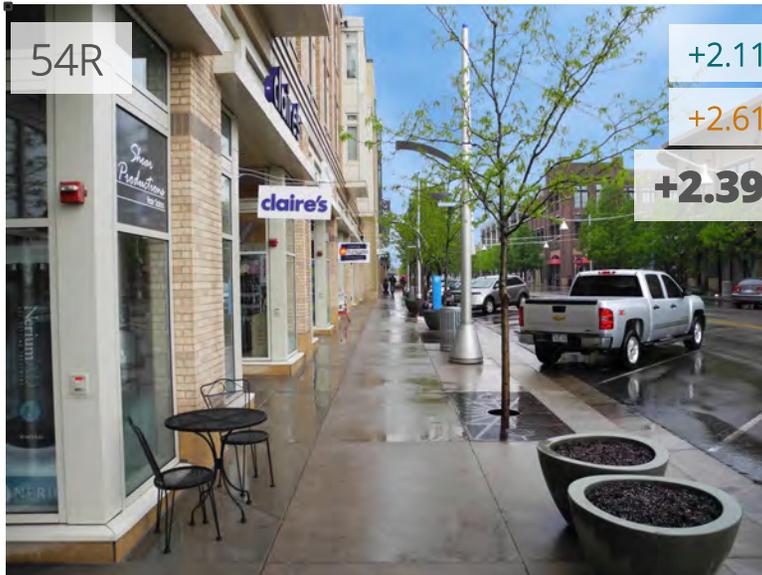
- Like building design
- Like light fixture, planters, width of sidewalk
- Awning feeling good
- Narrow sidewalk
- Active space
- Inviting building entrances
- Love this – recessed doors, varied landscape, glass
- Like the transparency of the windows
- Overhang of façade extending into street

- Negative – narrow, but feels intimate
- Likes softness with materials, and not uninviting
- Likes canopy, but mulch might be too much
- Healthy landscape materials
- Like detached walk with plants on both sides
- Like on-street parking, parallel parking is friendly
- Like building height and trees – provide more comfortable sidewalk
- Building has variation, but not overly
- Sidewalk is a bit narrow, but good in residential
- Like green and entryways
- Seems comfortable, nice to sit on porches

- Inviting; like landscaping
- Good setback
- Is tree or planting bed better? – can tree thrive?
- Sidewalk is narrow – should be wider
- Appropriate for residential
- Greenery
- Front is set back, but not a place to stop; building has a social space – set back
- Shade and green overwhelmed with too much concrete
- Not bike friendly
- Sense of enclosure – mature trees
- Too close with branches; safety issue with snow and branches falling down
- Narrower sidewalk perhaps more efficient for lower traffic areas
- Should use separated bike lanes
- Porches toward pedestrian streets are good – not toward car streets
- Love narrow width – feels urban and comfortable
- Like break between sidewalk and street
- Transition is great with help of vegetation

# Pedestrian Realm IPS Results

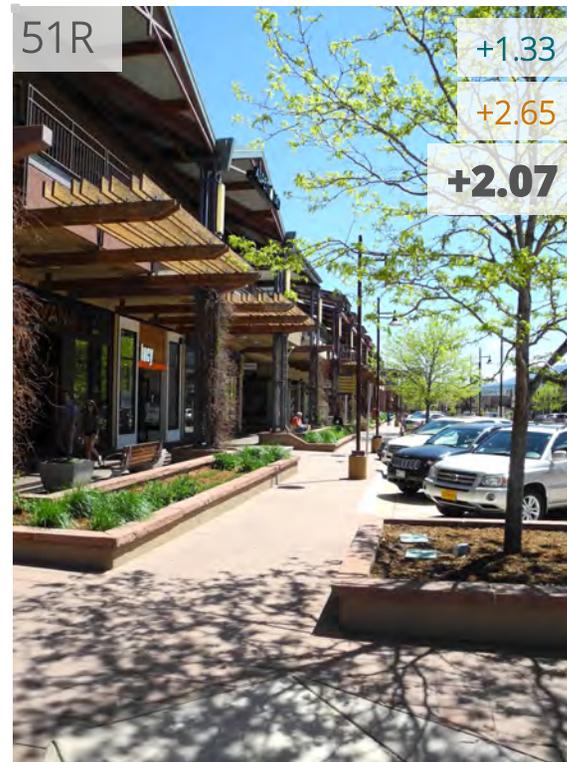
KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



- Like seating, but needs to be interesting
- Building face is pleasant; like articulation
- Like mixture of plants
- Like width of sidewalk-scape
- Like staggered depths of buildings
- Narrow sidewalk makes more cozy and width of street
- Like buffer between parking and walk – room for street furniture
- Attractive place to linger – slanted parking, trees need to grow up
- Like seating, parking
- Good for pedestrians
- Angle parking has more mass
- Variation of building materials at ped level is good; material change; in and out of façade; differing articulation
- Planter not good; too small to be useful, and feels in the way
- Tree grates better than grass – raised beds okay too; mulch or rocks okay
- Love – feels interesting
- Proportion of width in walkway is nice



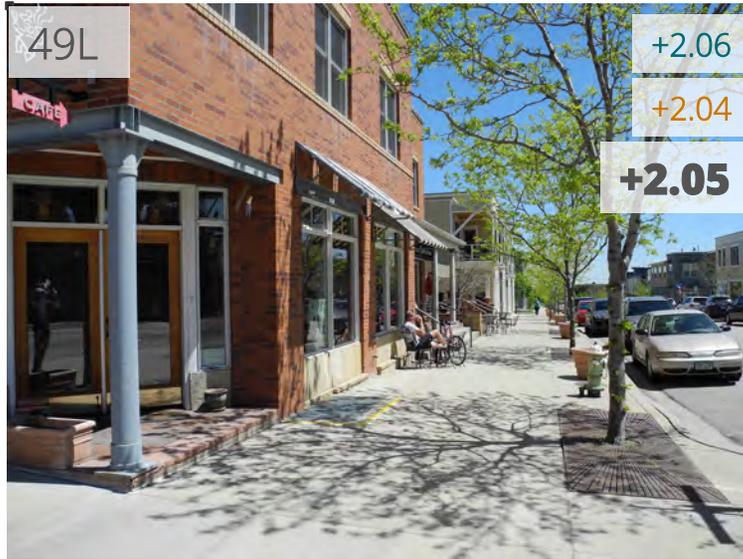
- Like tree/landscaping separation
- And is long enough buffer
- Wide sidewalk
- Good landscaping
- Elevation change
- Not drawing in, no access points
- Landscape, buildings feel good
- Street trees
- Like awnings and flags



- Negative – Pull-in is more aggressive than parallel parking
- Like head-in parking
- Like cars and landscaping and seating
- Seating is key
- Overhangs are very pedestrian-friendly
- Like canopy overhead
- Like materials, shape, and landscaping
- Very attractive space
- Okay for retail only – like overhangs
- Having 2 walking areas is weird
- Too much grade change
- Flower bed rather than ground cover is more inviting

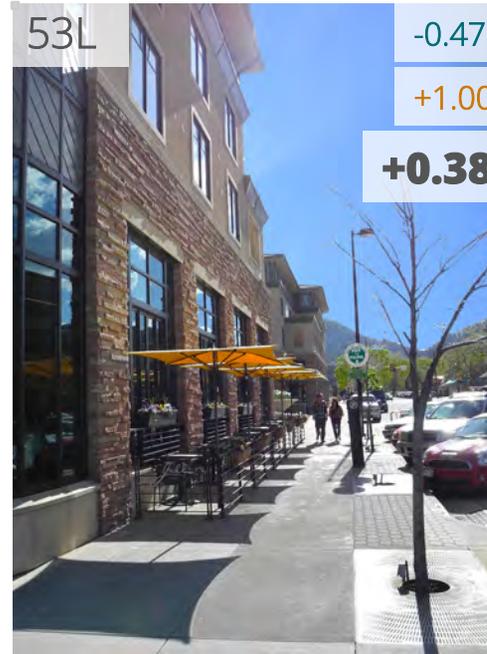
# Pedestrian Realm IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



49L  
+2.06  
+2.04  
**+2.05**

- Like traditional, and simple palette
- Shops were visible
- Trees and interesting and wide entryway
- Wide sidewalk, but not too wide
- Like close to street, like trees
- Too wide
- People congregate here
- Familiarity
- Wise ped area is good for varied ped use



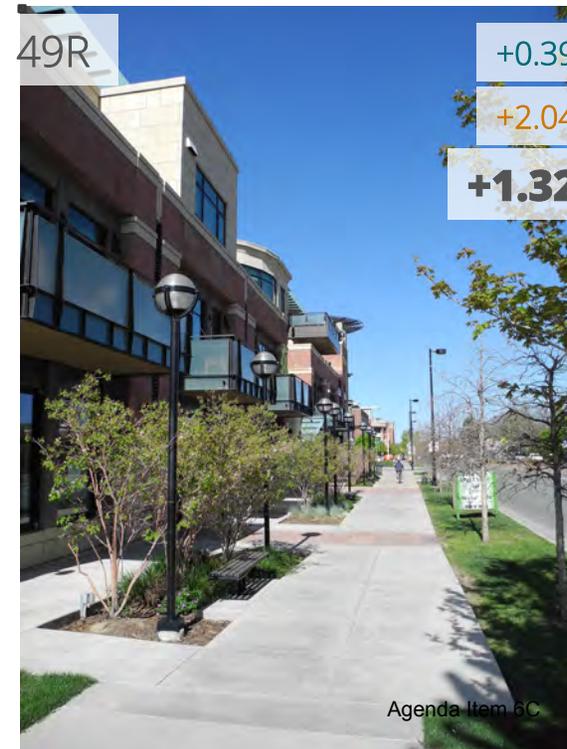
53L  
-0.47  
+1.00  
**+0.38**

- Like outdoor seats, trees, cars help protect sidewalk
- Architecture is bad
- Like street furniture & trees
- Like sidewalk dining, though may be narrow
- Texture variation good
- Like café zone
- There are going to be people – umbrellas make it feel like people
- Single-person wide sidewalks ruin pedestrian experience



57R  
+1.06  
+2.27  
**+1.74**

- Like open space
- Like separation from street
- Little separation between street and buildings
- Very exposed – doesn't feel like a cozy room
- Inaccessible to hang out in space
- Need to activate space
- Sign is overkill
- Public art and sidewalk is great that connect different places
- Plaza adds great element – creates interest

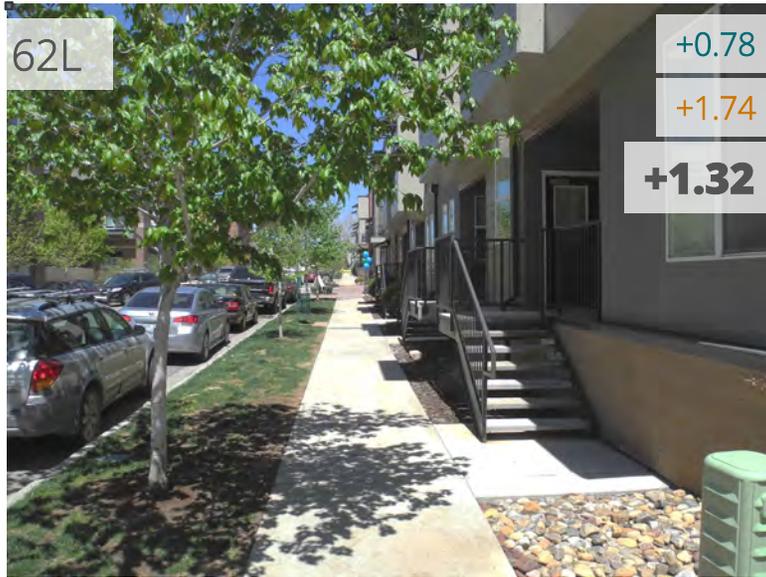


49R  
+0.39  
+2.04  
**+1.32**

- Like landscaping
- Like scale of buildings and light fixtures
- Looks nice, but area is dead because of heavy canyon traffic and lack of uses
- Do not like shrubs
- Needs more places for people to go – too loud
- Too much exposed space in bright sun

# Pedestrian Realm IPS Results

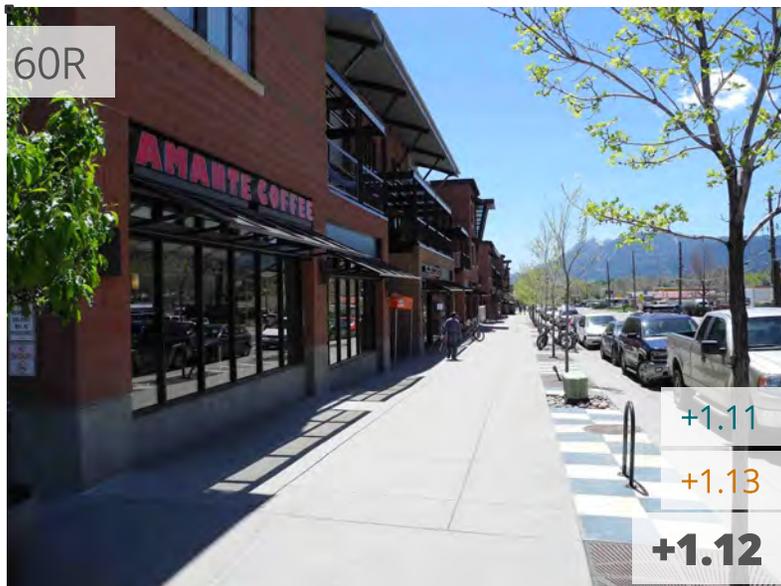
KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



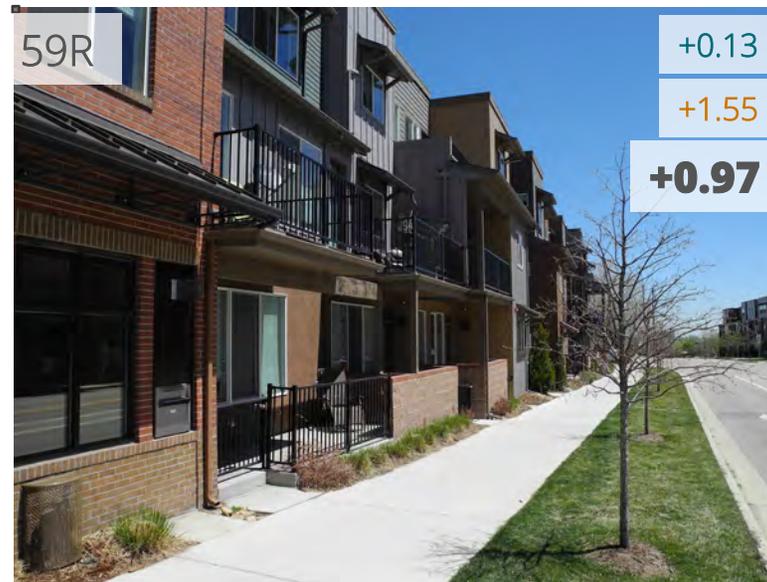
- This works if moved Uptown to Boulder Junction



- Not inviting to go down into space
- View may be good from shop, and may like view going by
- Looks complicated and uninviting, but looks nice if you are a resident
- Slower traffic next to sidewalk
- Back from traffic and noise
- Sunken committed space is okay (like this one), but don't like sunken passive spaces



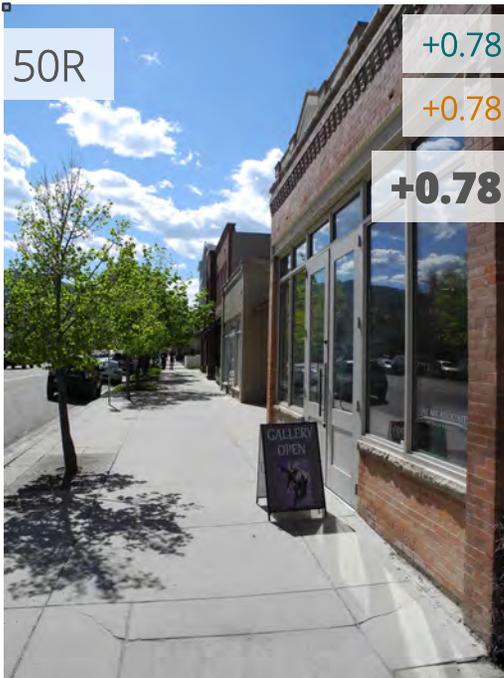
- Sidewalk feels too wide; and not enough interest
- Bike parking helps reduce parking congestion where not planned (e.g. restaurant porch fence)
- Like the proportion of street width and building
- Large sidewalks!



- Like orderly trees – all lined up
- Very good proportions and transitions
- Communication of public/private

# Pedestrian Realm IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



50R

+0.78  
+0.78  
**+0.78**

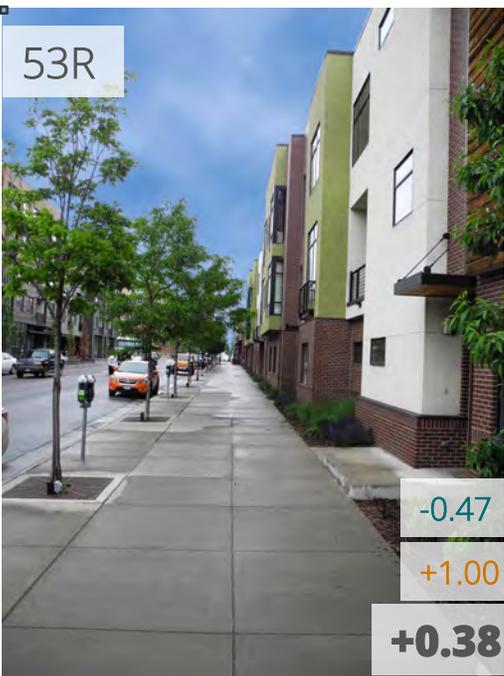
- Negative – bleak street
- Need width between street and building, but not stark
- Trees in grates without landscaping feel lonely



61R

+0.13  
+0.91  
**+0.59**

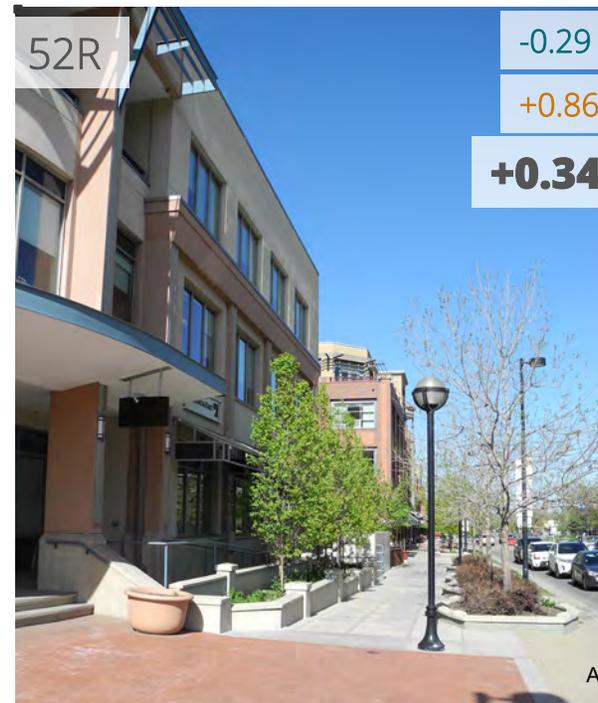
- Never sit there; not inviting
- Close to freeway
- Like overhang
- No grass



53R

-0.47  
+1.00  
**+0.38**

- Negative – sidewalk is way too wide
- Tiny planters – eye catches street harshness
- Bad buildings that don't intercut with street, such as shops, signs
- Negative – no eyes on streets
- Don't like trees in grates
- Had to tell where to go in?
- Need relationship between street and building



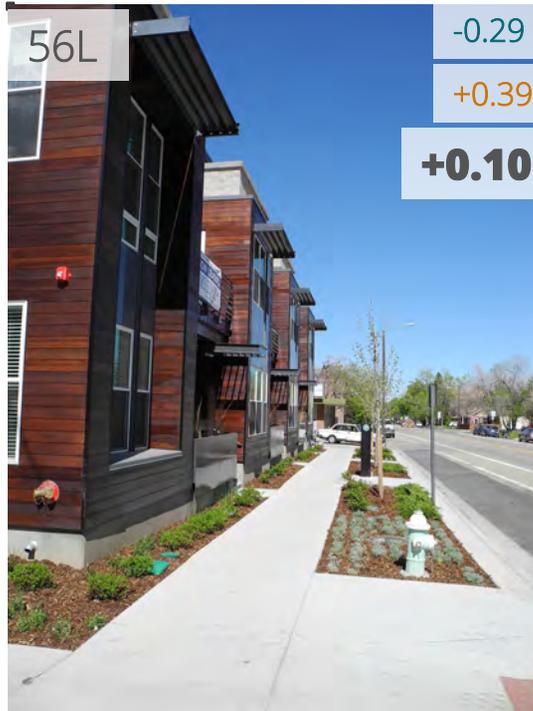
52R

-0.29  
+0.86  
**+0.34**

- Like sidewalk close to building
- Privacy trees might be a necessary evil
- Allows public space
- Sidewalk not integrated into retail/building
- Raised beds work great!
- Large sidewalks
- Variations of different vegetation

# Pedestrian Realm IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



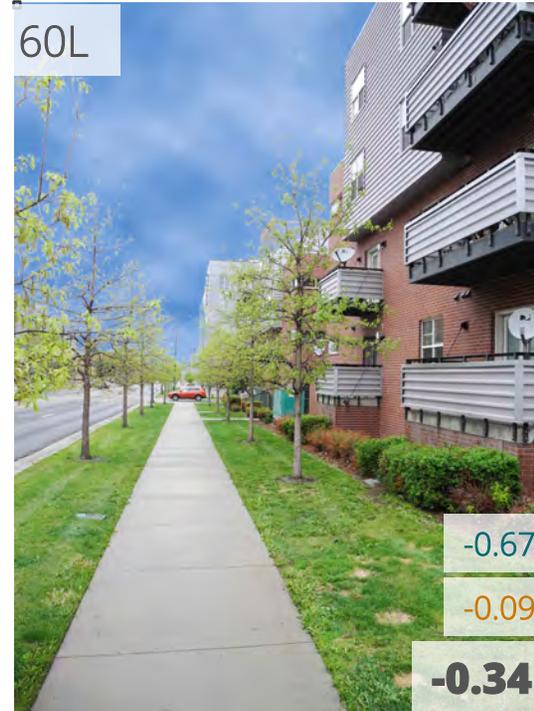
56L

-0.29

+0.39

**+0.10**

- Like the void and solid rhythms of building
- Like dual side planters between building and sidewalk
- Like the little bit against the building
- Trees growing will help
- Like light fixture
- For modern style
- Wider sidewalk generally best – invites more people; good, big and wide enough
- Like the stoops – good transition
- Created interaction
- Less organic to have divided gardens
- Great eyes on street and right depth



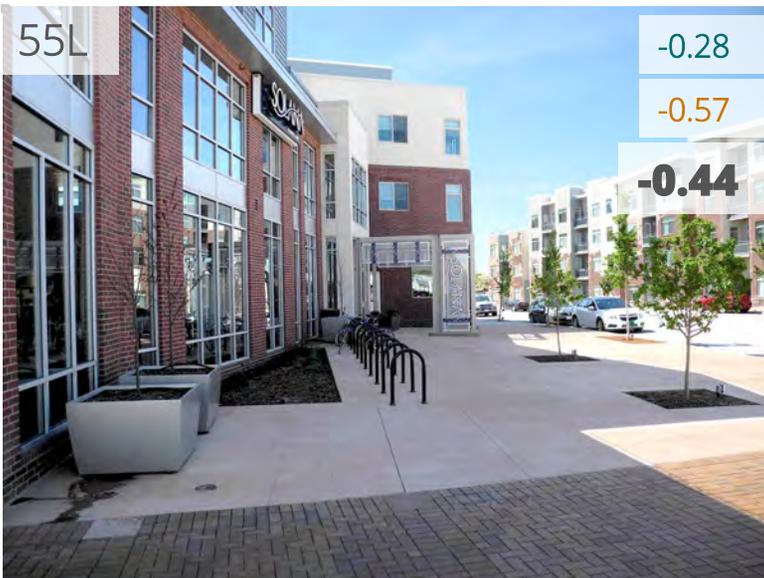
60L

-0.67

-0.09

**-0.34**

- No parking, too sterile, vacant space, vacant space, no character
- Sidewalk is too far from building, not commanding with entryway to sidewalk
- Back end of building to street, no energy from people entering
- No relationship of walk to buildings and lack of access
- Good balance
- Like seeing balcony
- No front doors
- Small sidewalks
- Underutilized



55L

-0.28

-0.57

**-0.44**

- Too wide
- Too wide
- No transition between sidewalk and building
- Bike parking nearby but not in front is great. Covered is even better.
- Simple, but some decoration on bike structures
- Dead plaza with bike racks cluttering it up



62R

-0.89

-0.43

**-0.63**

- Roof line doesn't match junction style
- Too grey – needs trees
- Weird dead space – no grass

# Pedestrian Ream IPS Results

KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



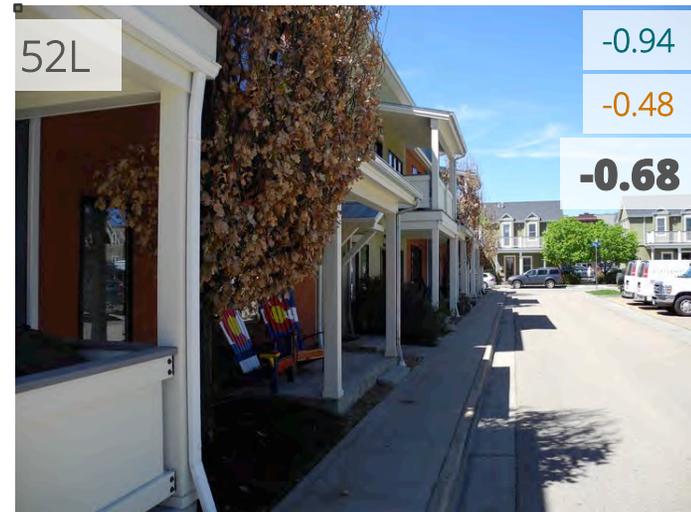
51L

-1.33

-0.13

**-0.66**

- Poor pedestrian experience, looking down and see entrance far away
- Don't like that building is below sidewalk
- Sloping landscape is bad
- Odd to go down to entrance – prefer to go up
- If residence, gives privacy
- Bike not like it
- Sinking off of sidewalks detracts from public use
- Grade separation makes it uncomfortable and divisive



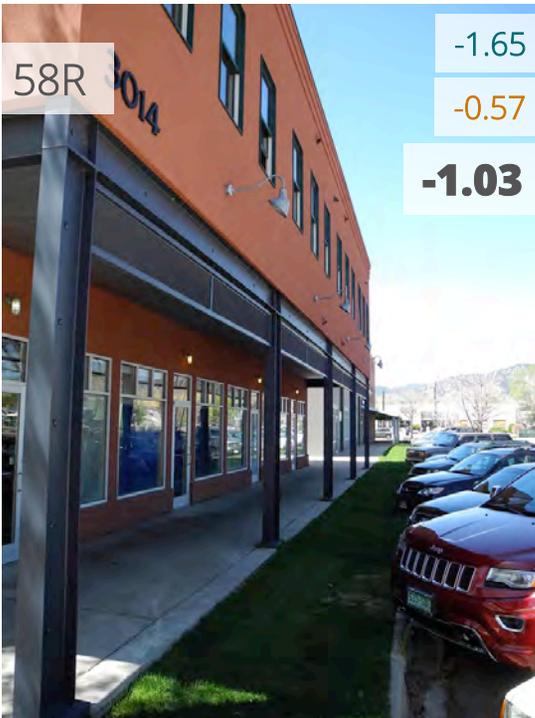
52L

-0.94

-0.48

**-0.68**

- Close to street, trees, column
- Looks a little cheap
- Weird sidewalk feels like you will fall off onto street
- Design of building does not give a strong residential feel
- Building is very enclosed



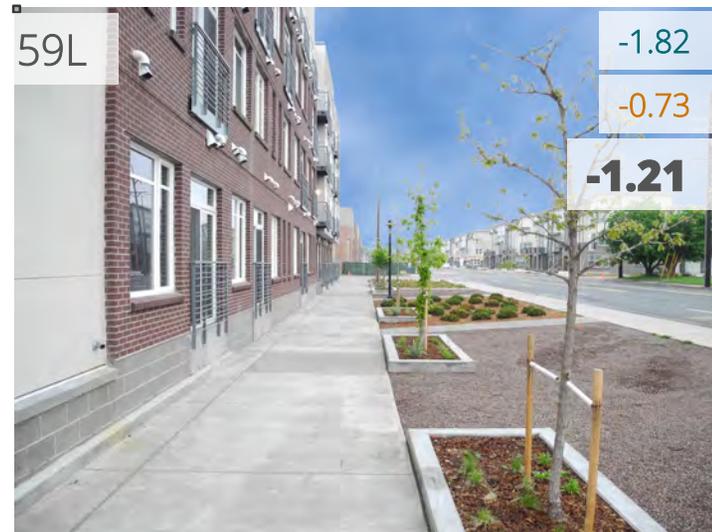
58R

-1.65

-0.57

**-1.03**

- Feels weird with building, overhang feels overbearing
- Like arcade but is narrow, and has hard edge
- Proportion is off too much for parking – need more people
- Needs parallel parking
- Black/brown nice
- Nice if there were plants
- Has to interact with other place and people – needs to connect more
- Windows should be set in
- Tasteful modern design
- Quality building
- Needs more human scale
- Arcade is okay, but needs landscaping
- Feel like sitting in parking lot; cars too close
- Not inviting; dark, unsafe looking; arcade is cave-like
- Canopy & seating can help
- Arcade coverage good to provide shade/multiuse, but must be wide/high enough for multiple use



59L

-1.82

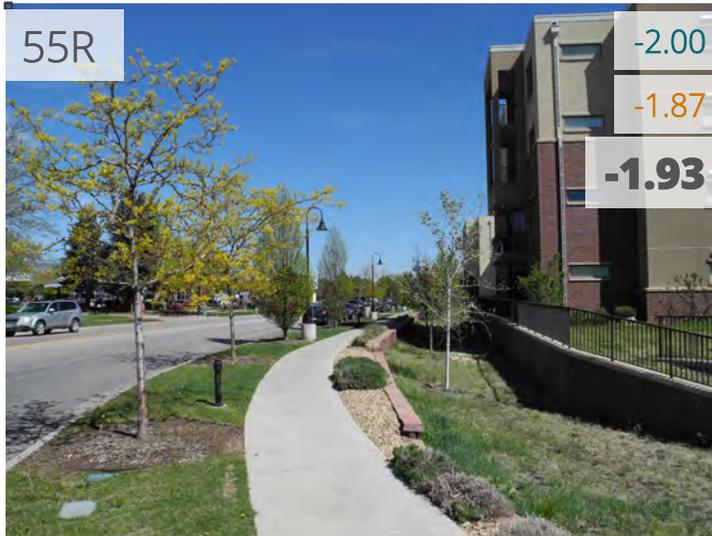
-0.73

**-1.21**

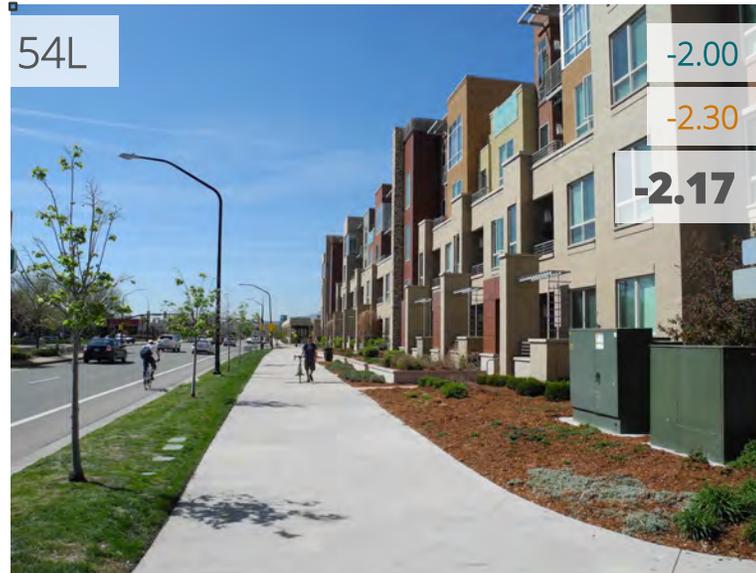
- Hard to activate space, too big of setback and dead space
- Barren, no landscaping
- Big windows, but no doors
- Very little awnings (negative)
- Trying to add variation in landscaping, but fails
- Barren and straight
- Materials are good, but façade is still boring
- Don't like zero setback – too harsh
- Like planting area and space with trees and benches

# Pedestrian Realm IPS Results

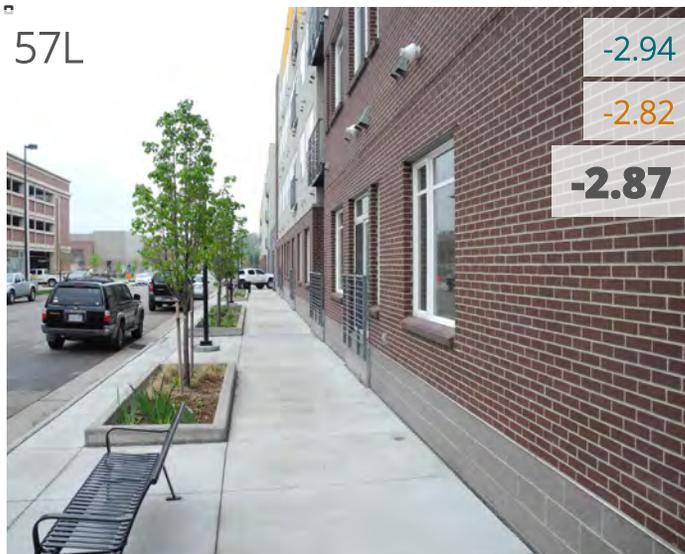
KEY: Joint Board Average Score/Comments Community Average Score/Comments Overall Average Score



- Too much setback
- No relationship to street
- Street is too far – dividing private/public
- Fence is a barrier
- Should not separate public and commercial
- Building set back too far; don't see people using area
- Poor connectivity
- Don't like wall and fence
- Walking freeway
- Narrow sidewalk – like space between sidewalk & building
- Kid can move
- Moat condition is impenetrable



- Ugly transformers along sidewalk – don't have utility boxes along street
- Has too much void and solid articulation
- Too much space between building and street edge
- No trees
- Building façade too busy
- Light fixtures are not pedestrian scale or anything
- human scale
- Street speed is too fast to make intimate space
- Like street parking along 30<sup>th</sup> and remove traffic lanes
- However, not terrible and functional sidewalk but transit-only (bike)
- Have to endure to go through buildings
- Like wide sidewalk
- Not inviting – too wide
- Invites bike because it's too wide
- Sidewalk not tied to building
- Don't like lawn on urban street; ugly, too much water needed



- Façade is flat, boring, institutional
- Street is not pedestrian friendly
- Planting strips "in center" of sidewalk
- Sitting there doesn't feel nice
- Building ruins streetscape and pedestrian experience
- Zero setback; no soft edge – is too harsh
- Don't like lack of base
- Not enough variation – blank wall, monolithic
- Windows do not invite
- No entries, activity, or awning
- Lack of shape and form

-----Original Message-----

From: [noreply@bouldercolorado.gov](mailto:noreply@bouldercolorado.gov) [<mailto:noreply@bouldercolorado.gov>]

Sent: Sunday, May 17, 2015 8:06 AM

To: Guiler, Karl

Subject: Form Based Code Feedback Form Results

name: David Takahashi

phone: 1234567890

email: [the.dragons.be.here@gmail.com](mailto:the.dragons.be.here@gmail.com)

comments: I believe Form Based Codes will help the world move away from the current zoning single use paradigm to a multi-use paradigm more in line with todays, and more importantly, tomorrow's reality.

The single use zoning almost guarantees vehicle miles traveled between residential and commercial zones. In an age of reducing carbon footprint, this seems like a likely place to affect a cause of automobile dependence, instead of a symptom.

Further, the lack of prescription in the by right process creates needless work in the permitting process, and ends up consuming our planning board docket with developer plans almost exclusively, which leaves little time for the planning board to set the vision for the future in terms of our desired future outcome.

The decision to do a pilot project is commendable. I believe the incremental iterative approach, learn as you go, is one proven to scale well.

Finally, our work today must consider the legacy we will be leaving future generations and the world we bequeath them as an inheritance. Our job is to attempt to leave a BETTER world than the one we were given. I think moving to a form based code can help us.

Keep up the great work!

-----Original Message-----

From: [noreply@bouldercolorado.gov](mailto:noreply@bouldercolorado.gov) [<mailto:noreply@bouldercolorado.gov>]

Sent: Thursday, May 14, 2015 4:18 PM

To: Guiler, Karl

Subject: Form Based Code Feedback Form Results

name: Amy Helen Tremper

phone: 303-709-9102

email: [40inseam@gmail.com](mailto:40inseam@gmail.com)

comments: I am excited about the potential for better design in Boulder.



## MEMORANDUM

**TO:** Members of the Planning Board

**FROM:** David Farnan, Library and Arts Director  
Matthew Chasansky, Office of Arts and Culture Manager  
Jean Gatzka, Community Sustainability Coordinator

**DATE:** June 4, 2015

**SUBJECT:** Preliminary Review of the Draft Community Cultural Plan

---

The purpose of this item is to garner the Planning Board's input on the draft Community Cultural Plan. The draft plan has implications for capital funding, major public capital projects, Civic Area and potentially other future area plans, and anticipates revisions to policies on arts and culture in the Boulder Valley Comprehensive Plan in the major update process.

For master plans and strategic plans, the Planning Board usually provides a recommendation to City Council to insure consistency with the goals and policies and growth projections of the comprehensive plan and to insure that each plan describes and assesses capital needs and a funding plan for them.

Master plans provide a bridge between the Boulder Valley Comprehensive Plan (BVCP), service delivery, future capital needs, and the Capital Improvements Program (CIP). The Planning Board's role in reviewing master plans is to look for consistency with BVCP goals and policies before the plans are accepted by City Council. Because of its role in reviewing the Capital Improvements Program (CIP), the Planning Board also reviews master plans to ensure that capital improvements needs and funding strategies have been identified to meet adopted service standards. While the purpose of this item is not a formal recommendation but input for the draft plan, the questions that are the focus of the Planning Board's review are:

1. Is the master plan consistent with the goals, policies, and growth projections of the BVCP?
2. Does the master plan outline the BVCP service standards and a plan to meet them in the future?
3. Does the plan describe and assess capital needs and a funding plan for them?

## **Consistency with the goals, policies and growth projections of the BVCP**

The current BVCP policies on art are below. It is anticipated that the Community Cultural Plan will inform changes to the BVCP as the update process progresses.

### **8.17 Performing and Visual Arts**

The city, recognizing the need to enhance the personal development of the public and to build a sense of community by providing for cultural needs, will encourage the provision of facilities for the performing and visual arts and the provision of art in public buildings and spaces.

### **8.18 The Arts**

The city and county recognize and support the arts. They are central to the cultural life for children, youth and adults of the Boulder community and a clean industry that contributes significantly to the Boulder economy. They present significant quality of life advantages to the Boulder community through education, entertainment and the aesthetic environment and provide a vehicle to bring together people of all walks of life and diverse ages, genders, religions, abilities, opinions, races, ethnicities, classes, and economic means for better communication and mutual understanding.

### **8.19 Public Art**

The city and county will incorporate artistic elements in public projects whenever possible.

### **8.20 Canyon Boulevard Cultural Corridor**

The city will encourage public and private projects within the Canyon Boulevard Cultural Corridor to have an arts focus and to incorporate public art.

## **Capital Funding Planning**

As the discussion about sustainable funding sources for public art progresses, the Planning Board may receive additional information in regard to the Capital Improvements Program (CIP) and public art associated with capital projects.

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Below and attached is information provided to City Council for their study session on May 26, 2015. Staff will provide a brief presentation on this information during the June 4 meeting, and will be welcoming the board's questions and suggestions.

### **I. PURPOSE**

The purpose of the May 26, 2015 study session is to update City Council on the preliminary draft of the Community Cultural Plan and obtain Council feedback. The preliminary plan is presented in outline form as Appendix A.

## **II. SUMMARY**

The Community Cultural Plan (CCP) is intended to respond to a City Council priority to define strategies for arts and culture and the creative sector in our community. This preliminary draft documents the community's vision related to the arts, culture, and creative vitality. It outlines how the city can provide tools to assist the community in achieving that vision.

The CCP is aspirational. It reflects the highest expectations of the community. The public vetting of these aspirations and securing sustainable funding for the future are important steps that will be undertaken in the execution of the plan over the next nine years.

## **III. BACKGROUND**

The Community Cultural Plan will be presented to Council for approval later this fall. The final plan will be the result of over 20 months of cultural assessment, research, and community engagement. It is meant to help define the city's role in the development of arts and culture in Boulder over the next nine years. As the plan is implemented city staff will seek ongoing input from Council on how to build supportive policies, secure sustainable funding, and considerations of future capital investment.

A clear consensus exists in the broader community and among civic leadership to elevate culture as a priority. It has been ten years since the last plan was completed and it no longer reflects current community needs. This past fall, Boulder voters overwhelmingly approved the 2A ballot initiative. This initiative funds up to \$8M in capital project support to The Dairy and the Museum of Boulder, and \$600K in funding for public art.

This is a great first step to building a sustainable arts and culture program for the city. The success of 2A raised the community's expectations for what culture and the creative economy can mean for Boulder. For at least the past two decades, the community has grappled with the question: "where do arts and culture fit within the community's priorities?" The international perception of our city has been shaped by our natural beauty, advanced scientific research, and technology industries. Progressive policy development on environmental stewardship and social equity has further defined Boulder as one of the top rated cities to live and work in the country. The City of Boulder continues to explore new avenues for enhancing the livability of our community. Recent investments and ongoing discussions regarding multi-modal transportation, affordable housing, and walkable neighborhoods are an extension of the community's commitment to making Boulder a socially responsible and attractive community. Arts and creative vitality are ascending among these community priorities.

Boulder is already home to a broad and diverse community of arts and culture and has a vibrant creative economy. Research conducted during this plan indicates that Boulder has cultural assets and a creative workforce that are in the highest echelons of benchmark cities. Boulder has more than 130 registered nonprofit cultural organizations. The top 52 of these nonprofits had a combined 2014 budget of roughly \$28M. Creative professionals who live and work in Boulder make up nearly 9% of the population. This exceeds benchmark cities, and easily outpaces neighboring cities as a percentage of our overall population by a margin

of nearly 3 to 1. Cultural opportunities in the form of music, dramatic performance and visual arts are prevalent year round.

Boulder leads other cities in its investment in open space, human services and housing. A city's priorities for funding take shape over time. The strong interest from the community, supported by the success of 2A and data in the CCP indicates that the ascending priority of culture should be examined. It is worth noting that the arts and cultural community has a long history in Boulder. Many institutions and artists have found a strong foothold in the community through earned income and/or philanthropic means without relying on direct support from city funding.

Arts and culture are among a community's most powerful assets. They contribute to a unique sense of identity and speak volumes about the commitment to quality of life, diversity of expression, and inclusivity. The "Smart Cities" movement illustrates that arts and culture are a competitive tool, strengthening civic life, economic and workforce development, education, youth engagement, neighborhood vitality, sustainability, and cultural equity. In addition, the Knight Soul of the Community Study found Boulder to be advanced in nearly all of the ten measures of community attachment, five of which are related to culture. An increasing body of research documents how thoughtful cultural policy is essential to civic health. Cultural planning is a primary tool for organizing the best use of this critical asset. The CCP fundamentally views cultural planning as holding up a mirror to the Boulder community and reflecting our diverse needs and aspirations.

In conjunction with the data gathering and community engagement process, the continued development of the Civic Area Plan and the successful 2A ballot measure have been instrumental in the evolution of the community's thoughts about how the Community Cultural Plan will take shape. Staff continues to make every effort to work in collaboration with the Civic Area planning team and with cultural partners as substantive plans take shape for public art and investment in cultural facility development. The community's energy around the Civic Area Plan and 2A has raised expectations for the potential of the CCP to deliver high quality arts and cultural services in Boulder.

At the June 10, 2014 Council Meeting, staff outlined the scope of the Community Cultural Plan that would address three key questions:

- What are the community's goals for arts, culture and the creative sector?
- What strategies [programs and tools] will the city provide to support the community in achieving these goals?
- What capacities and resources are required to fully implement these strategies?

Staff also outlined some basic values for the process: Transparency, Inclusion, Openness, Collaboration, and Sustainability. The priorities were to focus the plan on public art, the creative sector of the economy, secure and sustainable funding for cultural amenities, advancing cultural tourism, and building upon the vibrancy of everyday experiences for all Boulder residents and visitors. In the course of a four month community engagement process, the CCP team surveyed approximately 2,000 residents and visitors. In that process,

the city received nearly 1,000 unique comments and ideas from participants about their vision for arts and culture in Boulder.

The community's priorities are clear. Staff is still in the process of articulating a vision statement that brings the community's aspirations into focus. Staff has proposed core strategies meant to address the community priorities. These are outlined in the Preliminary Draft Plan included as an attachment to this memo. This study session is the next step toward presentation of a final plan this fall and outlines a series of strategies that redefine Boulder's relation to arts and culture and enable us to continue the dialogue about how to enhance the creative lives and experiences of all of our residents. The CCP's community engagement process has discovered a strong interest in the community's desire to lift art and culture to a new priority level.

#### **IV. OVERVIEW OF PRELIMINARY DRAFT PLAN**

The CCP proposes eight strategies to support the community in achieving its vision.

1) Support for Cultural Organizations and 2) Reinventing our Public Art Program are cornerstone strategies for the CCP. These strategies have the most significant long term budget implications and have the most potential to result in major lasting positive impacts. Thanks in part to the passage of 2A and a proposal to reframe the Office of Arts and Culture Grant Program, work can begin on each in 2016. With secure funding, defined parameters, and careful execution these strategies can have a broad and lasting impact on the structure of arts and culture in Boulder for years to come.

Key near-term priorities for the CCP include 3) Creating and Enhancing Spaces and Facilities, 4) Enhancing the Vitality of the Creative Economy, 5) Emphasizing Culture in Neighborhoods and Communities, and 6) Support for Individual Artists and Creative Professionals.

Creating and Enhancing Spaces and Facilities - The Civic Area will be a particular focus for this strategy. Venues and performance space were a significant factor in the Civic Area Vision Plan. Staff has begun conducting a feasibility analysis of the north library site, but a full plan for capital investment is a few years away. This plan will be conducted in conjunction with Planning and Sustainability, Parks and Recreation and the Civic Area Planning Team.

Enhancing the Vitality of the Creative Economy - Bolstering the creative and cultural economy may be reflected in several tactics: workforce initiatives, convening the discussion of best practices and innovation, and an arts district in North Boulder. Partnering with city agencies to establish and support a creative district and following the lead of neighborhood groups will raise awareness and enhance the city as an attractive home for creative professionals.

Emphasizing Culture in Neighborhoods and Communities - A new program designed to celebrate neighborhood arts, culture, and heritage programming are components of the plan that can activate and engage our diverse community and promote civic dialogue about the value of culture to our community at a local level.

Support for Individual Artists and Creative Professionals - Building a support mechanism for creative professionals was one of the top priorities that emerged in the community engagement process. The issue of recognition of artists and creative professionals is clearly an area where the city can have an immediate impact. But the larger issue of how affordability may threaten our position in the regional and national market for attracting artists and creative professionals to live and work in Boulder will require public and private groups examining opportunities and coming up with creative solutions.

Finally, 7) Advancing Civic Dialogue, Awareness and Participation and 8) Engaging our Youth are future priorities. Both strategies are pivotal to communicating and sustaining the plan over the next nine years. Facilitating the community conversation, projecting Boulder's unique cultural identity, supporting arts education, and convening youth leadership will allow a fresh voice and a viable plan over the course of the nine-year time horizon.

## **V. QUESTIONS FOR COUNCIL**

- a. Does Council have any questions on the public feedback or recommended strategies proposed for meeting the community's goals for arts and culture?
- b. Does Council have feedback regarding the proposed next steps?

## **VI. KEY FOCUS AREAS OF THE DRAFT COMMUNITY CULTURAL PLAN: VISIONING PROCESS**

The most critical component of the Community Cultural Plan is the visioning process. This will articulate the goals of the community with regards to culture and will guide the city.

The first step to set a vision was in establishing a set of "Community Priorities". During The Culture Kitchen, staff was able to collect data and stories that emphasize a few key indicators. These indicators were studied alongside the research projects and dialogue with stakeholders.

The second step in articulating a community vision is to establish the foundation of Boulder's assets: a set of Vision Elements. These can be understood as a community profile: those things that make Boulder's culture unique.

Articulating a Vision Declaration is the third step. This statement assembles the Community Priorities and Vision Elements into a proclamation: how will cultural life change in nine years? What work will we, together, do to accomplish the vision?

In the attachment, sections D and E give specific proposed language for the Community Priorities, Vision Elements, and Vision Declaration. This core element of the CCP, supported by community input and research, indicates the ascendant priority of culture in Boulder.

## **VII. NEXT STEPS**

Staff will incorporate City Council's feedback from the May 26 study session and revise the preliminary draft of the Community Cultural Plan accordingly. The updated plan will be reviewed by the Boulder Arts Commission as a public hearing June 17, 2015. The Community Cultural Plan will be presented to City Council later this year as a public hearing item for review and consideration for approval. Staff continues to work with the Civic Area Planning team to refine and examine plans for expanded performance and visual arts space in the Civic Area. Staff anticipates presenting this information to Council by July 2015. Staff continues to evaluate funding mechanisms and revenue sources for a 1 % for art program in anticipation of bringing forward a long term sustainable funding model by 2017 when 2A funding for public art expires. Staff will continue to evaluate public art policies in anticipation of bringing forward a permanent public art policy by January of 2016.

## **VIII. ATTACHMENT & APPENDICES**

[Attachment A: Preliminary Draft of the Community Cultural Plan](#)

### **Appendices:**

1. [Community Cultural Plan Process Timeline and Roles & Responsibilities Chart](#)
2. [Preliminary Creative Vitality Index Findings](#)
3. [Selections from the Community Cultural Plan Benchmark Study](#)
4. [Summary of Findings from the Community Cultural Plan Inquiry](#)
5. [Comparison: Public Art Programs in Colorado](#)
6. [Review of Performing Arts Center Study](#)

# Community Cultural Plan

City of Boulder Library & Arts Department

Draft: May 26, 2015

DRAFT

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## A. Introduction

(To be addressed in the final draft.)

DRAFT

## B. Background

(To be addressed in the final draft.)

DRAFT

## C. Planning Process

(To be addressed in the final draft.)

DRAFT

## D. Community Feedback

(Staff continues to work on the Community Feedback section.)

The planning process for the CCP relied heavily on an investigation of community sentiment to establish the vision. If this community vision is to be successful, the responsibility of executing the CCP falls to all of Boulder. This is not merely a municipal government work plan. Rather, we all have a role to play: public and private, non-profit and for-profit, in education, in personal and professional life.

By emphasizing the public inquiry components of the process, staff was able to collect data and stories that emphasize a few key indicators. These “Community Priorities” are summaries of common responses in the surveys which answer the question “What is your vision for Boulder’s culture and creative economy over the next nine years?”. The statements are derived directly from the comments of a few individuals, but represent broader trends that appear in the data combined with dialog directly with key stakeholders and results from the research projects. Thus, the Community Priorities are the first step in articulating the community’s vision:

### Community Priorities:

- Support the resiliency of cultural organizations to enhance their ability to benefit the community.
- Build a city that is a supportive environment for artists and creative professionals, while fostering innovative thinking and leadership among them.
- Prioritize the civic dialogue about the ability of culture to positively contribute to the economy, social offerings, the environment, and the authentic expression of diversity.
- Project Boulder’s identity as an innovative world leader in cultural matters to the region and the world.
- Focus on the expression of culture and creativity in the public realm through public art, the urban landscape, culture in the neighborhoods, and serendipitous encounters with the arts.
- Amplify the vibrancy of Boulder’s cultural destinations: the museums, performance venues, events, districts, studios, maker spaces, and other facilities. Work to fill in the gaps and address issues of access and affordability.

## E. Vision

(Staff continues to work on a draft vision statement utilizing community feedback noted below as vision elements and a vision declaration.)

### E.1 VISION ELEMENTS

The second step in articulating a community vision is to establish what elements are most important. These can be understood as a community profile: those things that make Boulder's culture unique.

It is in Boulder's nature to lead. Our community appreciates that the world's most creative innovators call this place home. Our community takes seriously leadership in arts, culture, science, technology, outdoor life, environmental sustainability, and social justice.

It is in Boulder's nature to build thoughtful and engaging public spaces. Our community demands the urban environment, those places in which we live, work, and play, be full of vibrant and diverse encounters with public art, architecture, natural & built landscapes, destinations, festivals, events, and unexpected encounters with culture.

It is in Boulder's nature to engage in creative expression. Ours is a community of active participants, hobbyists, students, and teachers in all forms of artistic expression, especially: photography, writing & reading, music, gardening & cooking, dance, crafting, video & animation, painting & sculpting, and the contemplative arts.

It is in Boulder's nature to support our talented workforce, creative businesses, and cultural destinations. Ours is a community of museum-goers, audience members, and cultural tourists. Ours is a community of volunteers, philanthropists, consumers, and thought-leaders. We are professionals in photography, creative & technical writing, the music industry, education, graphic design, landscape & architecture, advertising, animation & digital media, fine arts, craft industries, performing arts, film & video, and industrial design.

## E.2 VISION DECLARATION

The final step in articulating a community vision is to assemble the Community Priorities and Vision Elements into a Vision Declaration: how will cultural life change in nine years? What work will we, together, do to accomplish the vision?

Every person that calls Boulder home will find that they value culture in their life. Every person who visits Boulder will experience culture as integral to their visit. Every person who does creative work will find Boulder to be a vibrant place to succeed in their endeavors. All the decisions we make together about the future of Boulder will include a consideration of culture.

Together, we will improve Boulder in three ways:

Together, we will achieve a high level of Creative Vitality. A diverse mix of cultural, economic and social activity affects the life of every person who works, plays, or lives in Boulder.

Together, we will nurture the Cultural Identity of Boulder. Every person who visits Boulder counts culture at the top of their list of grand expectations and memories.

Together, we will cultivate a Vibrant Environment. Thoughtfully applied creativity positively affects the public spaces, mix of destinations, and encounters with culture.

# I. Strategies

The eight strategies identified below establish the framework the city will utilize to support the community in achieving the vision.

1. Support for Cultural Organizations
2. Reinvent our Public Art Program
3. Create and Enhance Spaces and Facilities
4. Enhance the Vitality of the Creative Economy
5. Emphasize Culture in Neighborhoods and Communities
6. Support for Individual Artists and Creative Professionals
7. Advance Civic Dialogue, Awareness, and Participation
8. Engage our Youth

These eight strategies are tools the city government will provide to support the community in achieving the vision. Each addresses several Community Priorities, though in most cases a single Priority is the primary driver around which the Strategy is designed. And, each of these strategies has thoughtful tactics that address all three components of the Vision Declaration: Creative Vitality, Cultural Identity, and a Vibrant Environment.

## I.1 Strategy One: Support for Cultural Organizations

### I.1.1 Program Areas:

- A. Support for Cultural Organizations
- B. Sponsorships / Partnerships
- C. Leadership Development and Convening

### I.1.2 Goal:

Have a substantial and positive effect on the ability of Boulder's many cultural organizations to advance their operational capacity, promote organizational resiliency, and encourage innovation for the benefit of the community.

### I.1.3 Community Priority:

- Support the resiliency of cultural organizations to enhance their ability to benefit the community.

### I.1.4 Challenge:

Institutional Support - This plan recommends increased funding for cultural organizations and institutions that are not necessarily owned by the city; yet have the potential to significantly contribute to the community vision. A metric for identifying which institutions would qualify for support has not yet been developed. Several nonprofit institutions already receive some level of city funding in the form of annual support. That level of funding is typically less than 1/50<sup>th</sup> of the operating costs of these institutions. It is easy to assume that many of Boulder's long time 'legacy' institutions that provide a community benefit, bring tourist to town, and provide an economic benefit would receive an increased level of support if they continue to meet the goals of the Community Cultural Plan. Institutional support will allow these legacy institutions and some emerging and innovative nonprofits increased stability and allow them to advance operational capacity and encourage innovation.

For the past twenty years, the Office of Arts and Culture has been a grantor organization that funds programming, with a grant making capacity in 2015 of \$225,000. The primary recipients of the city's arts and culture grants have been individual artists or groups who need funds to create or perform a program. While some projects have succeeded beyond expectations, the overall grants program has had limited success in altering the sustainability of the cultural landscape of Boulder. Consideration may need to be given to altering the grants program away from primarily funding individual projects and toward institutional support for organizations. This shift would definitely impact some individual artists and nonprofit groups who are used to seeing the Office of Arts and Culture as a funding source for programming.

I.1.5 Priority Recommendations:

- Funding - Establish a focused, sustainable, and adequate revenue source that increases the Office of Arts and Culture's annual grant and institutional support funds from its current level of \$250K per year to \$1.2M per year by 2023.
- Grants Process - Reorganize the structure and processes of the grants program in a strategic manner in which the grants respond to the vision for the Community Cultural Plan and the goal of this strategy. This strategy should take into account the needs of long-standing institutions while continuing to invest in new ideas and emerging organizations. Structure the grant-making strategy over the nine years of this plan to specifically recognize the unique characteristics and needs of:
  - Large Institutions
  - Mid and Smaller Organizations at various stages of their life cycle, including new and emerging organizations
  - Investments in innovation, entrepreneurship and artistic risk
  - Building leadership capacity for more effective management

I.1.6 Partners: (To be addressed in the final draft.)

I.1.7 Operational Framework: (To be addressed in the final draft.)

I.1.8 Action Items: (To be addressed in the final draft.)

## I.2 Strategy Two: Reinvent our Public Art Program

### I.2.1 Program Areas:

- A. Public Art Commissioning
- B. Maintenance and Conservation Program

### I.2.3 Goal:

Build on the success of the public art investments made by the City of Boulder Transportation, Parking, and Parks & Recreation Departments to establish a publicly transparent, sustainable, and innovative public art program.

### I.2.4 Community Priority:

- Focus on the expression of culture and creativity in the public realm through public art, the urban landscape, culture in the neighborhoods, and serendipitous encounters with the arts.

### I.2.5 Challenges:

Sustainable Funding - There is a strong level of community support for increased funding to support arts and culture, including public art. Neighboring cities, such as Denver, Loveland and Fort Collins have had success integrating art into all aspects of the public realm. On a national level, cities such as Seattle, Chicago and Kansas City have passed bold measures to ensure that funding for public art is a priority and a securely committed for the future. At this time, city staff continues to investigate funding for public art programs throughout the State of Colorado. (Please see appendix six.) Funding available for public art as a result of the passage of 2A will generate approximately \$600K through 2017. This works out to an average annual contribution nearly equal to 1% of CIP based upon the 5-year average of actual capital expenditures. Other possible financial increments are noted in the chart, below.

Percentage for Art	Dollar Amount
1.00%	\$ 299,906
0.75%	\$ 224,930
0.50%	\$ 149,953
0.25%	\$ 74,977

Long term sustainable funding beyond 2017 will require further investigation. It is a recommendation of this plan to seek a commitment of general fund support for 2018 based upon an average of 1% of CIP expenditures. It is also staff's recommendation to research other sources of revenue including impact fees, accommodations tax, and private funding generated by development to supplement or enhance general fund support for public art. Many cities have utilized city/public funding to encourage more aggressive philanthropic campaigns, and it is staff's expectation that the CCP will proceed in this manner. City staff

recommends ongoing evaluation of revenue options through the course of this plan to ensure a vibrant public art program.

Unified Approach - The City of Boulder has invested money in public art over the past decade. The dollar amount expended shifts from year to year depending upon city projects. A review of the past five years of public art expenditures in Transportation, Parks and Recreation, and Downtown & University Hill shows that the city has expended on average approximately \$128K per year on public art. This funding does not have a consistent revenue source, but the departments listed above have consistently and aggressively pursued funds to add art to significant capital improvement projects. These public art projects are mostly 'ad-hoc' and project specific. A public art policy will recommend taking an integrated approach to folding these programs into a seamless, public process with community selection committees to solicit and review artist's submissions and approval from the Arts Commission and the Office of the City Manager. It is vital that the public process not serve as a disincentive to city departments seeking additional funding within Capital Improvement Project budgets for arts. On the contrary, it is staff's expectation that sustainable and secure funding for public art could be used to supplement funding for these project-specific programs.

Capacity - (To be addressed in the final draft.)

I.2.5 Priority Recommendations:

- Best Practices and Innovation - Utilize the most advanced approaches to public art. - In thinking of the full life cycle of a project, consider the most profound processes and don't be afraid to take risks. Be nimble in the selection process. Consider maximizing access to the public process through careful communications and technology. Explore new ways of doing public art including temporary commissions, innovative media, new approaches to site, and the most sophisticated approaches that artists are deploying.
- Sustainable Funding - Structure funding to be sustainable over many years. Public art needs to be considered in terms of decades: well after the time horizon of this plan. This funding should not only be secure, but also flexible and at an adequate level to maintain a desirable level of new commissions on a regular basis.
- Staffing - (To be addressed in the final draft.)

I.2.6 Partners: (To be addressed in the final draft.)

I.2.6 Operational Framework: (To be addressed in the final draft.)

I.2.7 Action Items: (To be addressed in the final draft.)

## I.3 Strategy Three: Create and Enhance Spaces and Facilities

### I.3.1 Program Areas:

- A. Municipal Venues for the Arts
- B. Rental Assistance Grants

### I.3.2 Goal:

Improve the conditions of visual and performing arts organizations, and their audiences, that are currently challenged by gaps in venues. Mitigate the barriers to innovation and sustainability that are encountered due to affordability of space.

### I.3.3 Community Priority:

- Amplify the vibrancy of Boulder’s cultural destinations: the museums, performance venues, events, districts, studios, maker spaces, and other facilities. Work to fill in the gaps and address issues of access and affordability.

### I.3.4 Challenges:

Civic Area Venue - The Civic Area planning process has included the community’s vision for a small to medium sized performing arts facility and community space. In the 2013 Civic Area Vision Plan consideration was given to building a performing arts facility on the east or west end of the park. At a study session in March 2015, City Council directed staff to fully investigate the feasibility of renovating and/or redeveloping the north library building site on the western part of the park to accommodate a performing arts venue. Staff anticipates presenting the results of the analysis in July 2015.

In concert with the Civic Area plan, an independent nonprofit, the Boulder Center for Performing Arts (BCPA) contracted with performing arts consultant Duncan Webb to conduct a community needs assessment for performance venues in Boulder. Duncan Webb’s study was completed in 2014 and makes a strong recommendation that Boulder can support a medium sized performing arts center. BCPA continues to refine a complete business plan for operation of the facility. Their stated intent has been to form a partnership with the city for land prior to executing a capital fundraising campaign.

As part of the Civic Area planning process, the city contracted with the Cultural Planning Group (CPG) to conduct an independent analysis of the BCPA study in February 2015. This analysis confirmed many of the findings of the Duncan Webb study. CPG agrees with the BCPA study that a performance space that accommodates at least 500 seats is optimal and is needed in Boulder. The BCPA plan projects that additional ‘black box’ space is required in the facility to meet their program. While CPG agrees that building conjoined space is a ‘nice to have,’ it does not contend that such space is essential. In addition, a black-box-style space is included in the plans for the renovation of The Dairy Center for the Arts.

Conversations between city staff and the BCPA board are ongoing. Over the past month the conversation has focused on how the city and BCPA can partner on plans for a performing arts center if it were to be located on the site of the current North Library building. At its latest meeting, the BCPA board indicated it would only be willing to partner with the city on the project if plans included a minimum of 500 seats, and a robust plan for parking on the site was executed in conjunction with build out of the performance space.

The Civic Area Vision Plan also recommended the continued exploration of a blend of indoor and outdoor “arts facilities” as an integral and important component of the Civic Area. Of note; housing the Boulder Museum of Contemporary Art [BMOCA] in a new facility such as the Municipal Building or in an expanded facility at its existing location remains a part of the planning process and would respond to the community’s interest in expanded arts and cultural venues within the city.

Fill In the Gaps - Community feedback also notes the need for rehearsal and flexible space. Staff should fully investigate the feasibility of incorporating rehearsal and small performance spaces into the city’s current facility assessment. The recreation centers are an example of city facilities that are easily accessible, well staffed, and have adequate parking. These facilities may have space that could be evaluated to see if it could meet some of the community’s rehearsal and performance space needs. Executing a plan to incorporate rehearsal and performance space within the city’s current facility inventory could likely be done at a fraction of the cost of new construction downtown. Staff will collaborate with Facilities and Asset Management and Parks and Recreation on this issue.

I.3.5 Priority Recommendations:

- Convene a community working group to assess performing and visual arts venues within the Civic Area.
- Pursue existing and potential new opportunities within existing city facilities to include cultural venues.

I.3.6 Partners: (To be addressed in the final draft.)

I.3.7 Operational Framework: (To be addressed in the final draft.)

I.3.8 Action Items: (To be addressed in the final draft.)

## I.4 Strategy Four: Enhance the Vitality of the Creative Economy

### I.4.1 Program Areas:

- A. Partner with City Agencies for the Creative Sector
- B. Creative Districts
- C. Creative Sector Programs and Research

### I.4.2 Goal:

Enhance Boulder's leading position as a home to creative professionals.

### I.4.3 Community Priority:

- Build a city that is a supportive environment for artists and creative professionals, while fostering innovative thinking and leadership among them.

### I.4.4 Priority Recommendations:

- Creative District in North Boulder – Support the grass-roots effort that has successfully assembled the energy of neighbors, businesses, artists, and organizations in North Boulder around the creative district. Work with the NoBo Arts District organization on the success of artists: the cornerstone of the creative district's future.
- Creative Economy - Investigate an incentives program specifically designed for creative businesses and entrepreneurs to retain or attract jobs and businesses. Investigate the regulatory environment to find efficiencies that will assist the creative sector

I.4.5 Partners: (To be addressed in the final draft.)

I.4.6 Operational Framework: (To be addressed in the final draft.)

I.4.7 Action Items: (To be addressed in the final draft.)

## I.5 Strategy Five: Strengthen Culture in our Neighborhoods and Communities

### I.5.1 Program Areas:

- A. Creative Neighborhoods
- B. Diversity and Inclusion

### I.5.2 Goal:

Every resident of Boulder finds ways to creatively impact their neighborhoods and social communities, and has easy access to impactful cultural experiences in the places that are most emotionally important to their everyday lives.

### I.5.3 Community Priorities:

- Focus on the expression of culture and creativity in the public realm through public art, the urban landscape, culture in the neighborhoods, and serendipitous encounters with the arts.
- Prioritize the civic dialogue about the ability of culture to positively contribute to the economy, social offerings, the environment, and the authentic expression of diversity.

### I.5.4 Challenge:

Diversity - The efforts to reach out to diverse communities in the Community Cultural Plan process were purposeful and profound. The people who participated in the process provided valuable insight. However, in order to authentically represent the needs of all communities in Boulder, the most important thing staff learned was just how much more is to be accomplished. It is recommended that the Office of Arts and Culture embrace very high standards in principles of outreach and communications to diverse groups. It is a priority in the first phase of this plan to build those bridges, engage minority communities, and associate the efforts of the Office of Arts and Culture with agencies that have been successful in this effort.

I.5.5 Priority Recommendations: (To be addressed in the final draft.)

I.5.6 Partners: (To be addressed in the final draft.)

I.5.7 Operational Framework: (To be addressed in the final draft.)

I.5.8 Action Items: (To be addressed in the final draft.)

## I.6 Strategy Six: Fostering the Environment for Individual Artists and Creative Professionals

### I.6.1 Program Areas:

- A. Artist and Creative Professional Support and Recognition
- B. Livability and Affordability Issues

### I.6.2 Goal:

Boulder will increasingly attract artists and creative professionals for all it has to offer, not only in beautiful surroundings and quality of life, but also in the ability to thrive in the creative sector.

### I.6.3 Community Priority:

- Build a city that is a supportive environment for artists and creative professionals, while fostering innovative thinking and leadership among them.

### I.6.4 Challenge:

Livability - Without question the issues of affordability and livability are the most complex to address in the Community Cultural Plan. These issues are a priority among survey respondents; the issue of affordability ranked second among critical issues among residents filling out the surveys. Addressing these issues implies working with many stakeholders, inside and outside the city government: affordability and access to housing, studio space, display and performance venues, and livability in general are critical to artists who are trying to get a foothold in Boulder's creative economy. These challenges compromise our position in the regional and national economy as a magnet for attracting creative professionals and artists.

### I.6.5 Priority Recommendations:

- The City of Boulder is working with many public partners and private groups to address the issue of affordability and access in residential and commercial markets. It is recommended that the Office of Arts and Culture work with these groups on means to resolve this challenge for all professions, including artists.

I.6.6 Partners: (To be addressed in the final draft.)

I.6.7 Operational Framework: (To be addressed in the final draft.)

I.6.8 Action Items: (To be addressed in the final draft.)

## I.7 Strategy Seven: Civic Dialogue, Awareness, and Participation

### I.7.1 Program Areas:

- A. Promoting the Community Cultural Plan
- B. Facilitate the Civic Dialogue
- C. Project Boulder's Cultural Identity
- D. Partner a Community Creative Calendar

### I.7.2 Goal:

Every person in Boulder will understand their role in the culture of the community, feel that access to information about culture is readily at hand, and will feel invited into the conversation.

### I.7.3 Community Priorities:

- Prioritize the civic dialogue about the ability of culture to positively contribute to the economy, social offerings, the environment, and the authentic expression of diversity.
- Project Boulder's identity as an innovative world leader in cultural matters to the region and the world.

I.7.4 Partners: (To be addressed in the final draft.)

I.7.5 Operational Framework: (To be addressed in the final draft.)

I.7.6 Action Items: (To be addressed in the final draft.)

## I.8 Strategy Eight: Engage our Youth

### I.8.1 Program Areas:

- A. Youth Council
- B. Arts in Education Grants
- C. Mentoring Program

### I.8.2 Goal:

At the end of this nine-year plan, the young people who are now studying the creative pursuits will find Boulder the perfect place to grow into cultural leaders.

### I.8.3 Community Priority:

- Build a city that is a supportive environment for artists and creative professionals, while fostering innovative thinking and leadership among them.

I.8.4 Partners: (To be addressed in the final draft.)

I.8.5 Operational Framework: (To be addressed in the final draft.)

I.8.6 Action Items: (To be addressed in the final draft.)

## III. Guiding Principles

(Staff continues to work on draft guiding principles.)

The eight strategies and their specific programming elements describe the tools that the city will provide to the community. And, they provide a framework for work plans that will be necessary for implementation. However, the success of the strategies relies on a strong set of principles to guide leadership and management of the work plans. These principles should be considered habits: a set of standard practices that staff should deploy in considering any decision or action.

### II.1 Stewardship:

The staff members of the Office of Arts and Culture are stewards of the public dollar, our system of laws and policies, and trust in local government. Respecting this responsibility is all the more important in the emotional, sometimes contentious, civic dialogue about culture.

- Staff will consider the proper stewardship of the public trust for every decision made to implement the CCP.

### II.2 Boulder Arts Commission:

The BAC is an advisory and decision-making body representing the residents of Boulder. Appointed by City Council, the members of the BAC have the responsibility of a) serving in a jury capacity for the awarding of cultural grants, b) serving as an approval body for the selection process of the public art program, c) serving as an advisory body for the execution of the CCP, d) serving on several non-governmental boards or committees related to the execution of the CCP, and e) serving as ambassadors to the community. What is more, the members of the BAC are experts in different aspects of culture and creative life and are keenly invested in the success of the city government.

- In addition to the mandated decision making that is their responsibility; staff will utilize the talents, experience, and enthusiasm of the members of the BAC to the best benefit of the implementation of the CCP.

### II.3 Public Inquiry:

The BAC should serve as the pinnacle of many opportunities for the community to participate in the conversation about the implementation of the CCP. Every strategy depends on a degree of public inquiry to be successful. This practice works best when staff is diligent in stewarding public dialogue, but also thoughtfully designing that dialogue to fit the needs of the program. Also, a careful consideration of access is important; be sure that the program to consult with the community considers accessibility, availability, affordability, acceptability and accommodations. Public art, in particular, requires a careful consideration of community input.

- Staff will thoughtfully design public inquiry tools for each strategy as well as, in some cases, individual programs or projects to ensure that the community is fully invested in the success of the CCP.

#### II.4 Best Practices:

Some of the eight strategies are part of an industry: a national sector of cultural activity. Other strategies are novel: experiments in new ways of delivering cultural tools to the public. When possible, staff will best serve the community by utilizing accepted best practices which are responsive to special circumstances in Boulder. When no such commonly accepted system of best practices exists, staff should consider establishing them. Staff should also participate in the national conversation about best practices, ensuring that Boulder's voice is a part of the dialogue on how to best implement government cultural programs.

- Staff will apply best practices to ensure that programs and projects have every chance to succeed.

#### II.5 Partnerships and Collaboration:

The eight strategies are tools which the city provides to the community in our common aspiration to achieve the vision. In many cases, deploying these strategies will only be successful by collaborating directly with other city agencies, non-profits, for-profits, and leaders in the community. Also, some aspects of the vision are best addressed in the private sector; the city government is an interested party, but not in a position to lead. And, finally, there are situations where the role of government is to "clear the path" for others to achieve. In all cases, a sophisticated look at collaboration is critical. Each strategy should be considered with these thoughts in mind: Who is already doing this in the community? Who connects us with the people and organizations the CCP is designed to benefit? Who stands to gain from this course of action?

- In addition to regular consultation and collaboration with city agencies, staff will make partnerships the standard practice of doing business.

#### II.6 Professionalism:

The practices of professionalism are far more than a simple courtesy. The quality of service that staff provides to the public impacts expectations about the whole of city government. The ways in which staff conducts business, from answering the phone, to designing documents, to marketing and promotions all matter to how the public, partners, and other city staff can trust the government and feel invested in the process.

- Staff will conduct their business with the most professional manner that reflects well on the city government and the high expectations of City of Boulder's workplace culture.

#### II.7 Diversity:

Diversity of all kinds is critical to the success of the Community Cultural Plan: for leadership, for public inquiry, and for the results of programming. Diversity is first addressed in terms of dialogue. Actively pursue the voices necessary to ensure broad and deep perspectives on all issues. Diverse perspectives on culture, ethnicity, ability, age, socio-economic position, and beliefs are among the important elements for quality programming. Diversity is secondly a consideration of results. For instance, the collection of public art should include a spectrum of diverse artists: their styles, media, and narratives.

- Staff will actively seek out diverse perspectives, and diverse results, in community dialog, leadership, tactics, and results.

## II.8 City of Boulder Vision and Values:

The implementation of the CCP should be inexorably linked to the City of Boulder's vision and values.

### Vision:

- Service Excellence for an Inspired Future

### Values:

- Customer Service - We are dedicated to exceeding the expectations of our community and our co-workers by demonstrating consistent and professional service with a solution-oriented approach.
- Respect - We champion diversity and welcome individual perspectives, backgrounds and opinions. We are open-minded and treat all individuals with respect and dignity.
- Integrity - We are stewards of the public's trust and are committed to service that is transparent and consistent with city regulations and policies. We are honorable, follow through on our commitments and accept responsibility.
- Collaboration - We are committed to organizational success and celebrate our shared dedication to public service. We believe community collaboration and the sum of our individual contributions leads to great results.
- Innovation - We promote a forward-thinking environment that supports creativity, calculated risks and continuous improvement. We embrace change and learn from others in order to deliver leading edge service.

# III. Implementation

(Staff continues to work on draft implementation elements.)

## III.1 CCP Time Horizon:

The implementation of the above strategies will occur over a nine-year time horizon:



This nine year scope is divided into three year increments. Individual strategic planning will provide structure to the development of each of the eight strategies. These incremental strategic plans will undergo a planning and public inquiry process in “year three” of each phase.

Additionally, yearly work plans will be developed to guide staff through the day-to-day implementation of the strategies.

## III.2 Staff Capacities: (To be addressed in the final draft.)

## III.3 Structure: (To be addressed in the final draft.)

## III.4 Funding:

The budget of the Office of Arts and Culture will necessarily require review and increases over time as new components of the CCP are implemented. In collaboration with the Budget office, these needs will be assessed and city leadership will decide on the best action.

We anticipate that the following budget increments will be considered:

First Third: Increase from a 2015 budget of ~\$550,000 to ~\$900,000.

Second Third: Increase from ~\$900,000 to \$1.2M.

Final Third: Increase from ~\$1.2M to ~\$2.2M.

Note: it is important to understand that these figures are approximations developed by Cultural Planning Group. Much work will be done in the first phase of the plan to refine these numbers, conduct the appropriate studies, and evaluate the final budget requests.

## III.5 Partnerships: (To be addressed in the final draft.)

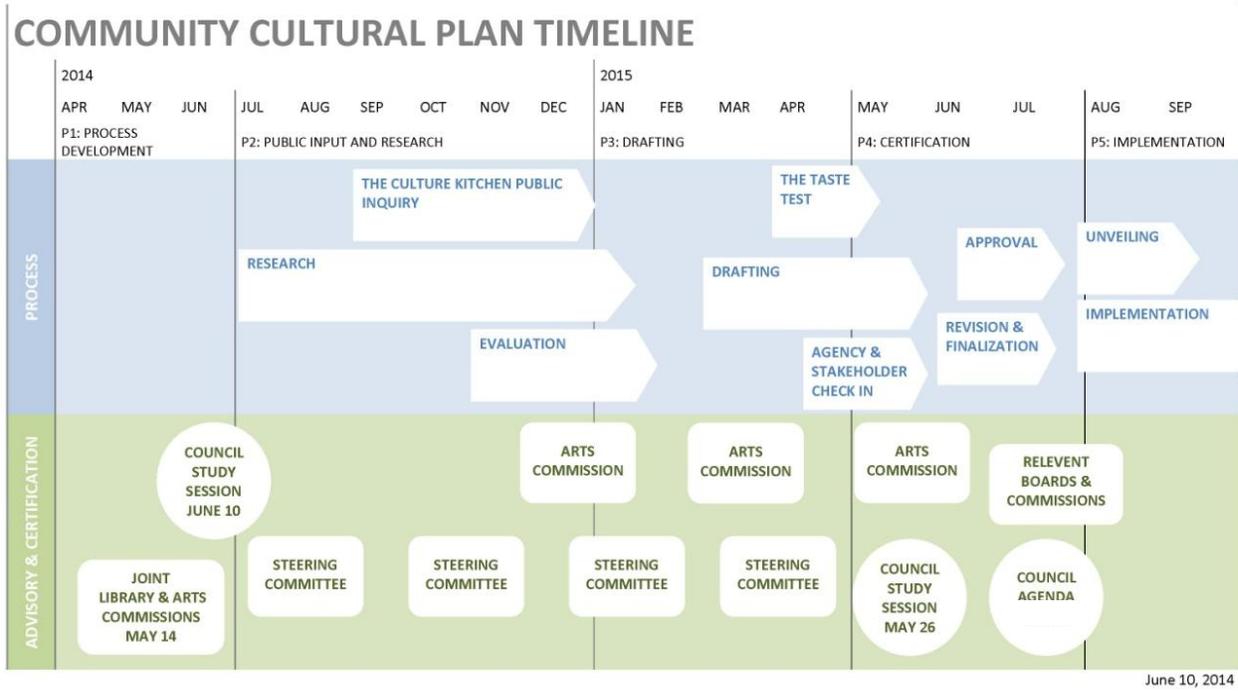
## IV. Appendices

- IV.1 Community Cultural Plan Process Timeline
- IV.2 Creative Vitality Index Findings
- IV.3 Selections from the Community Cultural Plan Benchmark Study
- IV.4 Summary of Findings from the Community Cultural Plan Inquiry
- IV.5 Comparison: Public Art Programs in Colorado
- IV.6 Review of Performing Arts Center Study

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APPENDIX ONE

Community Cultural Plan Process Timeline



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APPENDIX TWO

Creative Vitality Index Findings, page one

CPG has contracted with Westaf to conduct a Creative Vitality Index study. Using data from several sources, this tool dissects the creative sector of the economy based on postal codes to compare key indicators with similar geographical areas.

<b>2013 Occupation Figures</b>	<b>Boulder CO</b>	<b>Ft. Collins CO</b>	<b>Loveland CO</b>	<b>Madison WI</b>	<b>Tempe AZ</b>	<b>Eugene OR</b>
City Population	<b>103,166</b>	152,061	71,344	243,344	168,288	159,190
Study Population	<b>118,362</b>	181,350	87,733	338,408	169,425	193,334
Advertising and promotions managers	<b>41</b>	20	8	78	53	48
Public relations and fundraising	<b>24</b>	11	5	156	79	88
Agents and business managers	<b>80</b>	51	16	73	55	36
Architects, except landscape and naval	<b>419</b>	151	72	331	282	160
Landscape architects	<b>89</b>	34	16	73	41	16
Architectural and civil drafters	<b>178</b>	85	45	190	199	121
Anthropologists and archeologists	<b>25</b>	11	3	40	16	50
Historians	<b>7</b>	6	3	23	5	6
Religious activities and education	<b>45</b>	73	40	262	78	70
Postsecondary teachers	<b>749</b>	161	33	7,790	1,404	2,807
Archivists	<b>7</b>	4	1	21	5	4
Curators	<b>13</b>	7	3	28	6	10
Museum technicians and conservators	<b>3</b>	5	2	10	4	4
Librarians	<b>29</b>	14	66	339	47	84
Library technicians	<b>49</b>	22	53	375	87	167
AV and multimedia collections specialists	<b>5</b>	2	4	27	12	5
Art directors	<b>337</b>	177	59	300	138	137
Craft artists	<b>153</b>	98	52	118	57	97
Fine artists	<b>124</b>	86	41	145	64	81
Multimedia artists and animators	<b>304</b>	167	56	378	124	154
Artists and related workers, all other	<b>64</b>	45	16	58	33	30
Commercial and industrial designers	<b>84</b>	56	20	142	102	53
Fashion designers	<b>46</b>	17	3	25	22	21
Floral designers	<b>49</b>	62	20	119	63	62
Graphic designers	<b>728</b>	405	116	1,012	640	452
Interior designers	<b>238</b>	207	38	323	224	124
Merchandise displayers and trimmers	<b>114</b>	82	39	131	295	39
Set and exhibit designers	<b>17</b>	11	3	19	19	14
Designers, all other	<b>31</b>	15	4	34	24	11
Actors	<b>146</b>	84	28	143	130	62
Producers and directors	<b>130</b>	62	25	263	95	117
Dancers	<b>44</b>	36	10	54	21	22
Choreographers	<b>17</b>	11	3	11	11	10

Creative Vitality Index Findings, page two

Continued from page one.

<b>2013 Occupation Figures</b>	<b>Boulder CO</b>	<b>Ft. Collins CO</b>	<b>Loveland CO</b>	<b>Madison WI</b>	<b>Tempe AZ</b>	<b>Eugene OR</b>
Music directors and composers	96	69	31	181	52	76
Musicians and singers	751	477	166	659	271	432
Radio and television announcers	59	29	21	178	24	60
Broadcast news analysts	24	14	6	25	8	13
Reporters and correspondents	83	40	16	116	29	93
Public relations specialists	360	188	82	1,020	263	137
Editors	302	147	71	486	210	140
Technical writers	124	63	23	194	129	24
Writers and authors	786	429	156	722	343	380
Interpreters and translators	263	327	56	712	888	150
Media and communication workers, all other	89	88	14	193	252	55
Audio and video equipment technicians	62	44	13	117	151	67
Broadcast technicians	17	4	6	94	12	18
Sound engineering technicians	35	14	3	95	12	20
Photographers	990	1,122	181	2,270	2,645	471
Camera operators, television, video, and motion picture	33	18	7	93	42	40
Film and video editors	50	15	6	39	35	17
Media and communication equipment workers, all other	41	17	6	20	21	17
Ushers, lobby attendants, and ticket takers	107	189	52	159	172	96
Costume attendants	4	5	1	14	4	7
Entertainment attendants and related workers, all other	4	3	1	39	29	4
Makeup artists, theatrical and performance	18	12	3	18	10	11
Advertising sales agents	325	124	61	475	246	204
Library assistants, clerical	32	21	44	275	79	114
Musical instrument repairers and tuners	21	29	8	52	43	17
Jewelers and metal workers	69	68	60	78	82	77
<b>TOTAL</b>	<b>9,134</b>	<b>5,834</b>	<b>1,996</b>	<b>21,415</b>	<b>10,488</b>	<b>7,902</b>
% of population	8.85%	3.84%	2.80%	8.80%	6.23%	4.96%

(Cultural Planning Group continues to work on the completion of the Cultural Vitality Index study for inclusion in the final CCP document.)

APPENDIX THREE

Selections from the Community Cultural Plan Benchmark Study

2013 Data	Boulder CO	Ft. Collins CO	Loveland CO	Madison WI	Tempe AZ	Eugene OR
City Population	103,166	155,000	66,859	243,344	168,228	159,190
Geographic Size	25.7 sq. miles	57.0 sq. miles	25.5 sq. miles	76.8 sq. miles	40 sq. miles	43.7 sq. miles
Total General Fund Budget	\$319,600,000	\$556,500,000	\$222,400,00	Figures to come.	Figures to come.	\$493,900,00
Staff Level	2.00 FTE	21.30 FTE	13.00 FTE	1.00 FTE	Figures to come.	29.25 FTE
Annual Budget	\$587,872	\$5,066,866	\$2,376,310	Figures to come.	Figures to come.	\$4,975,964
Public Art Funding	\$128,000*	\$325,100	\$351,040	\$150,000	Figures to come.	Figures to come.
Grant Program Funding	\$225,000	\$364,500	Figures to come.	\$150,000	Figures to come.	\$110,995
Per Capita Funding for the Arts	\$6.93	\$34.78	\$35.54	Figures to come.	Figures to come.	\$31.25

*\*Public art funding calculations for the City of Boulder fluctuates dramatically from year to year. To provide more comparable data, this figure is calculated as an approximate average derived from 5 years of data.*

(Cultural Planning Group continues to work on the completion of the benchmarking study for inclusion in the final CCP document.)

# Summary Findings from the Public Inquiry Process

The Community Cultural Plan public inquiry was conducted online and on the streets from October – December 2014 in a series of engagements that were collectively branded as “The Culture Kitchen”. The priorities of this process were to a) hear from as wide and diverse a group as possible, b) to assemble a sample that was large enough to be convincingly valid, and c) establish measures that could be repeated and improved over the time horizon of the CCP.

## Culture Kitchen Inputs:

1. Pop-up Events
2. Onsite Interviews and Group Discussions
3. Neighborhood Conversations
4. MindMixer (The Recipe Box)
5. Full Online Survey
6. Intercept Survey

## Response:

- **25** Culture Kitchen Pop-up Events
- Over **75** Onsite Interviews and Group Discussions
- **300+** Intercept Surveys
- **20+** Neighborhood Conversations, More Than **100** Participants
- MindMixer Engagement: **1,132** Unique Visitors, **4,867** Page Views, **500+** Interactions
- **1,087** Respondents to the Full Online Survey in English and Spanish
- Total Interactions Topped **2,000**

## Respondent Profiles:

### Full Online Survey

Gender Identification	Age	Education	Race Identification
Female = 68% Male = 32% PNTA = 0%	Under 21 = 1% 21-44 = 34% 45-54 = 21% 55-64 = 24% Over 65 = 17% PNTA = 3%	High School = 1% Some college = 5% Undergraduate = 40% Graduate Degree = 52% PNTA = 2%	American Ind/Alaska = 0% Asian = 1% Black/Multi-racial = 3% Hispanic/Latino = 4% White = 84% PNTA = 8%
Income Range	Professional in the Arts	Volunteers at Arts or Cultural Orgs	Engaged in the Arts
Less than \$50K = 22% \$50K-\$100K = 27% \$100K - \$250K = 33% PTNA = 18%	Yes = 43% No = 55% Not Sure = 1%	Yes = 23% No = 42% Sometimes = 35%	Very = 47% Somewhat = 34% Mildly = 15% Not Really = 3% Not At All = 1%

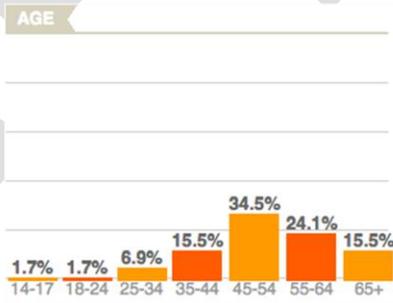
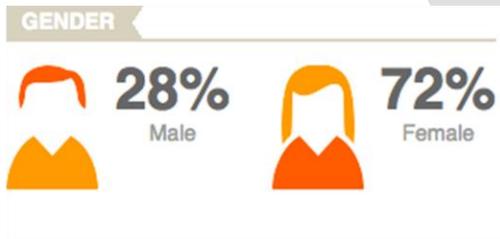
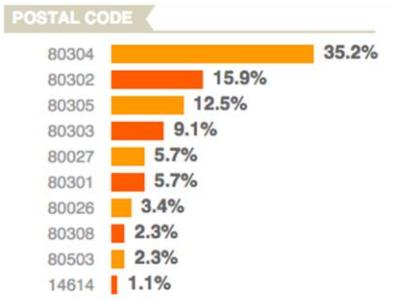
### Intercept Survey

Gender Identification	Age	Race Identification	Residency
Male = 28% Female = 63% PNTA = 9%	Under 21 = 5% 21-44 = 43% 45-54 = 15% 55-64 = 18% Over 65 = 17% PNTA = 2%	American Ind/Alaska = 1% Asian = 3% Black/Multi-racial = 6% Hispanic/Latino = 4% White = 86% PNTA = 0%	Live and work in Boulder = 54% Only Live in Boulder = 20% Only Work in Boulder = 7% Live and Work Outside Boulder = 19%

\*PNTA = Prefer not to answer.

# “The Recipe Box” MindMixer Website

## MindMixer Stats



## Findings: Key Themes

The resource of artists as an asset to Boulder:

- Addressing affordable venues and spaces
- Developing a city focus on arts and cultural activities/events
- More support for individual artists
- Authentically celebrating diversity
- A focus on historic preservation
- Addressing access and affordability ( housing, lifelong arts education)

Fostering involvement and support from the City government:

- Funding (more than just The Dairy and BMOCA)
- Communications
- Cultural diversity

Cultivating private sector support:

- Venture capitalist community
- Tech community
- Foundations

Creating an arts district in Boulder:

- Collaborative spaces for artists to live/work
- Performing spaces/rehearsal spaces
- Use of existing building (industrial)
- Multi-use

Improved communications, artist collaborations and press coverage:

- Community awareness
- One source with all events, programming, opportunities, etc (currently there are 19 different sites but events-oriented)
- Media relations

## Findings: What Do You Love About Boulder?

Open Spaces: Trails, outdoor sports, competitive sports environment

- The Culinary Culture: past, present, and future.
- Farm-to-table origins
- Sustainability and support of local agriculture industry
- The Independent Music Scene:
- Collaborative culture
- Local venues

What is your favorite cultural place or activity in Boulder?

- Farmer's market
- BMOCA
- NoBo ARTs
- Macky Auditorium
- E-Town Hall
- International film festival
- Chautauqua summers
- Dinner theater
- Open Studio
- The Dairy
- The Bluegrass Festival
- Dushanbe Teahouse
- The Library
- Story Slams
- CU arts and cultural events
- Visiting Denver for arts and cultural experiences

What is your vision for Boulder's culture?

- Cultural equity for all groups in the city
- A community with a distinct culture of philanthropy
- A cultural center for the arts and the community
- An affordable signature event which brings together all of the diverse neighborhood and groups – ethnicities, ages, social groups
- An arts and cultural district within the city
- A "community" of the arts – sharing resources, better use of space, communications
- Public art– planning, temporary exhibits (A Glass Room)

## Findings: Thoughts on Vision

Some common themes arose when we asked people for the vision for Boulder’s culture and creative sector. Below are samples that represent some of those ideas that came up frequently:

*“Boulder should have a designated arts district where people could view art studios and galleries, have coffee or a nice meal, and be close to other venues for music, theatre and dance all within walking distance of each other.”*

*“To create a culture of philanthropy for the arts, if this could be encouraged, public / private partnerships could be established to fund some great art and culture in Boulder.”*

*“I would like for Boulder to value art as an integral aspect of our humanity and sense of wellbeing. And, to make art accessible to all, regardless of income.”*

*“A more diverse and integrated representation of art; including African American, Hispanic, Jewish, etc. cultures.”*

*“20 years ago Boulder was known as an ‘Arts’ city. I would love for Boulder to once again be known nationally as a community that is supporting and generating avant guard art. Having more festivals does not achieve this goal, the City needs to support artist living here and producing art.”*

*“I would like to see more public art that represents the current, more educated and sophisticated art appreciators that live and work here.”*

## Findings: The Role of the City

Respondents also answered the question of the municipal government's role in some key ways:

*"It's important for the City government to provide funding and structure such as initiatives and zoning changes to accomplish a new art and culture vision."*

*"The City should create more funding through taxation and partnership with private donors."*

*"It is within the best interests for Boulder for the city to value art as an integral part of our humanity, then plan and fund accordingly."*

*"The city should connect people and geographic areas and provide the necessary ongoing support to ensure projects are completed. And, importantly, the city is in a unique position to encourage philanthropy."*

*"Provide incentives for developing an arts/cultural district. City needs to motivate redevelopment that allows for arts spaces – finding spaces for all creatives, commercial as well as non-commercial."*

## Findings: The Latino Perspective

During the Culture Kitchen events, the CCP team put out a special call to the Latino community of Boulder. Online and intercept surveys were distributed, and a special forum was held. Below are some key results of that inquiry.

- More representation for the Latino community in city government is needed.
- Latino community marginalized from main Boulder community.
- City treats events with “Latino agenda add-ons” rather than integrated into the events.
- Want events which integrate all cultures and show “real” culture rather than the stereotypical.
- Zoning is a significant issue when organizing neighborhood events.
- Lack of cultural understanding within city communications.
- A distinct split between Latino and White begins in middle school – there is a need to change the patterns.
- Latino youth need space outside of school – access and affordability are issues.
- Arts and cultural opportunities for youth is significantly lacking.
- Creation of a family-oriented cultural center is a need – “Gathering places create understanding”.
- The investigation of how the government can support culture in minority communities needs more time, resources, and tools to complete.

*“It’s a puzzle – Boulder is a beautiful place, but a contradiction at times. There are so many good things: the natural wealth, everything is clean and safe, but we don’t participate in it. We are left on the outside; someone else owns it”.*

*“We need a voice...a champion in city government ... someone who really knows the community and understands the needs. “*

*“Arts and culture for us is a way of life...it is in our everyday routines, part of all of our celebrations...we can share that with Boulder”.*

*“Great events include the Latino Youth Conference and the Women’s Conference...they are life changing for some Latinos.*

## Critical Insights

- Respondents are creatively active, with almost all respondents indicating they participate in arts and cultural activities.
- Both residents and non residents want to see better support of artists and arts and cultural nonprofits.
- The majority of respondents cite more traditional modes of participation such as attending live performances, art galleries and shows, museums, and festivals. Many want to see more arts and cultural activities within their own neighborhoods, and at non-traditional venues.
- There is significant support for a tax increase to support arts and cultural activities.
- There is a significant call to the city to increase their support arts and culture

***"I have a vision of a Boulder where artists are more involved and active in the planning and spending decisions."***

***"I would like to feel like Boulder citizens and city Council hold and support art as a vital aspect of "what we value" and "who we are" as a culture, and to recognize that art is a valuable economic resource. There are so many talented people who call Boulder home."***

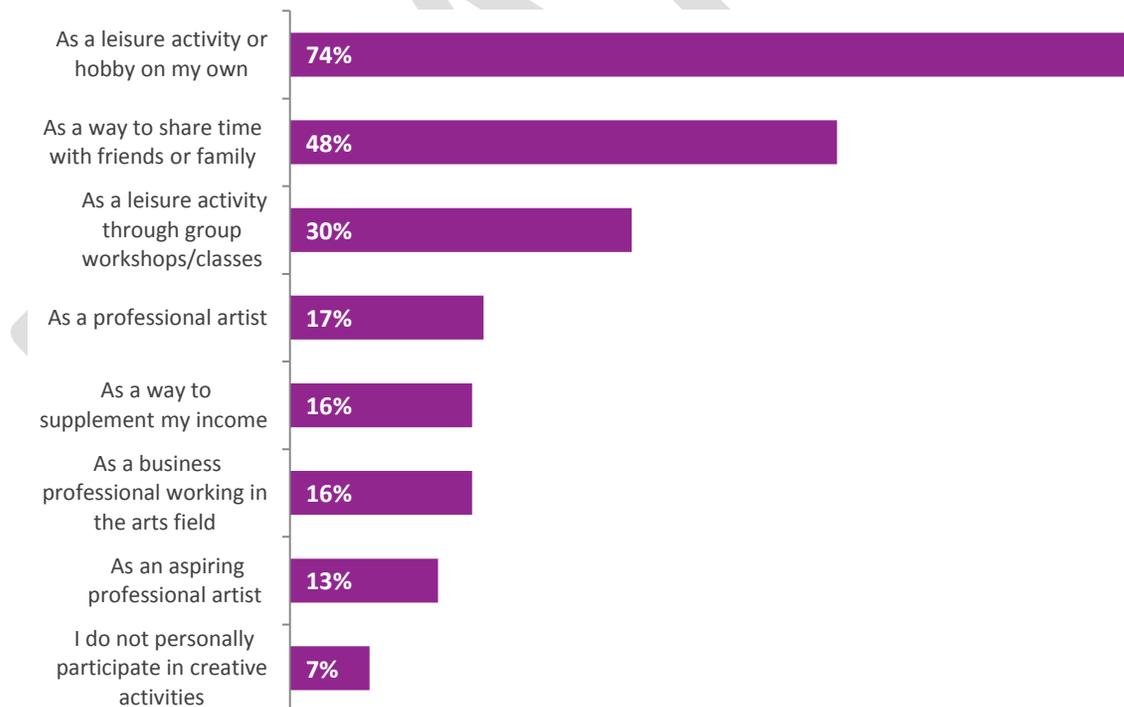
***"The best single feature of Boulder has been Pearl Street. It is walker friendly, and the collection of sidewalk cafes brings people out of the buildings. It's a great place to people watch. I would love to see more participatory cultural activities in different parts of the city."***

***Boulder is at a crossroads...needs to choose between being an "elite" destination or a unique creative community...it can't be both.***

## Community Profile: Creative Activities

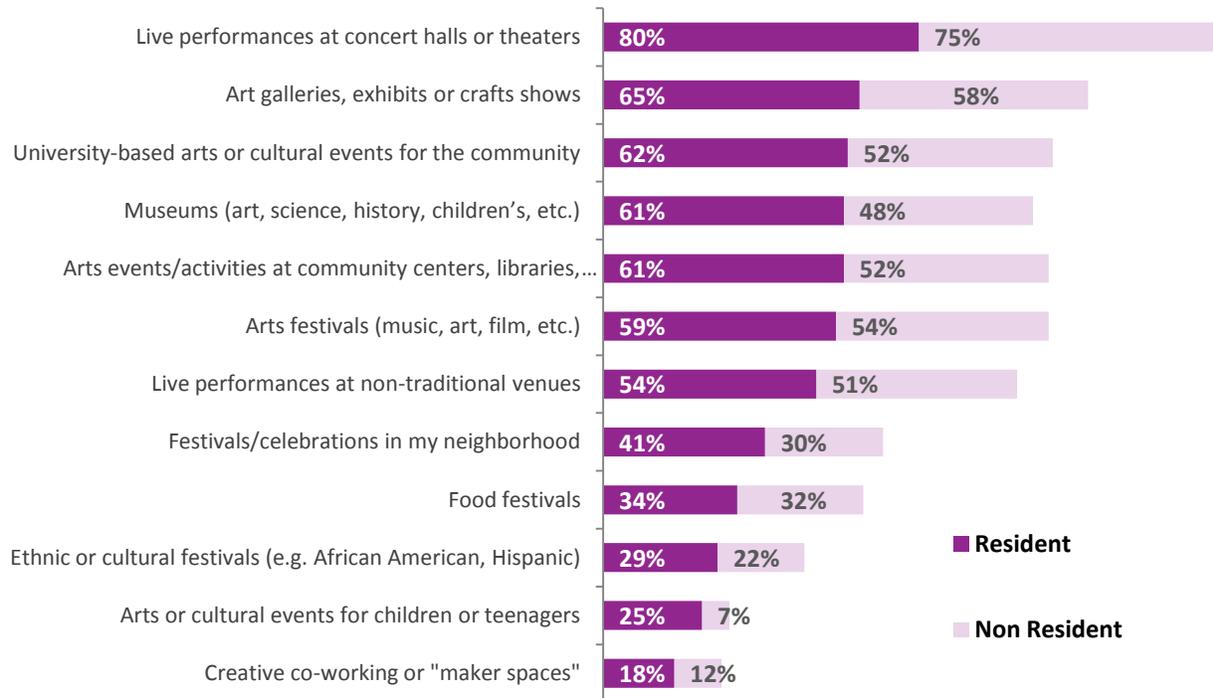
76%	Took photographs
68%	Read novels, sort stories, or poems
67%	Cooked creative dishes or meals
38%	Played a musical instrument
33%	Danced socially or with a group
31%	Made crafts such as jewelry, sewing, knitting, or quilting
30%	Painted or drew pictures, or did print-making or collage
21%	Wrote novels, short stories, or poems
20%	Made videos, short films or animation
18%	Sung in choir, with a group, or solo
18%	Worked with fiber arts such as knitting, sewing, embroidery
14%	Made sculptures, woodwork, or ceramics
11%	Made digital illustrations or 3-D digital art
13%	Played live music or performed rap
8%	Wrote music, composed lyrics
7%	Acted in plays, musicals, or theatre
6%	Performed in storytelling events or poetry slams
5%	Choreographed dance, ballet, modern, etc.

Why do you take part in these activities?

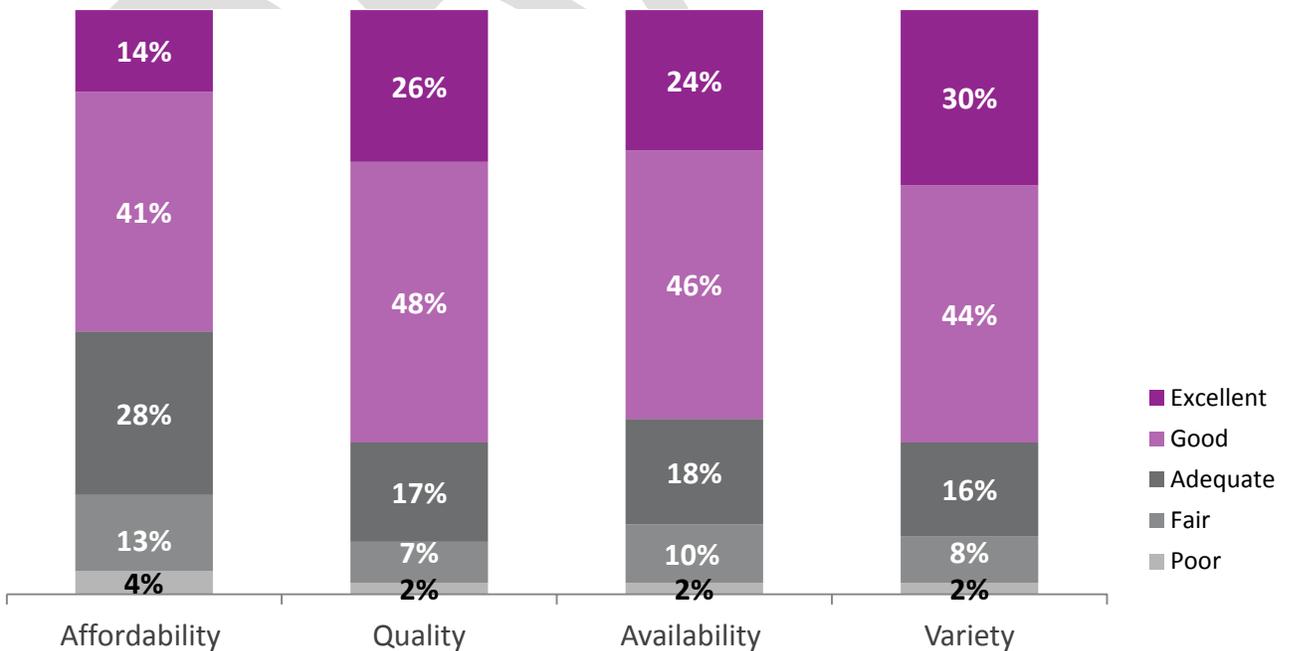


## Community Profile: Destinations

Where do you get your culture?

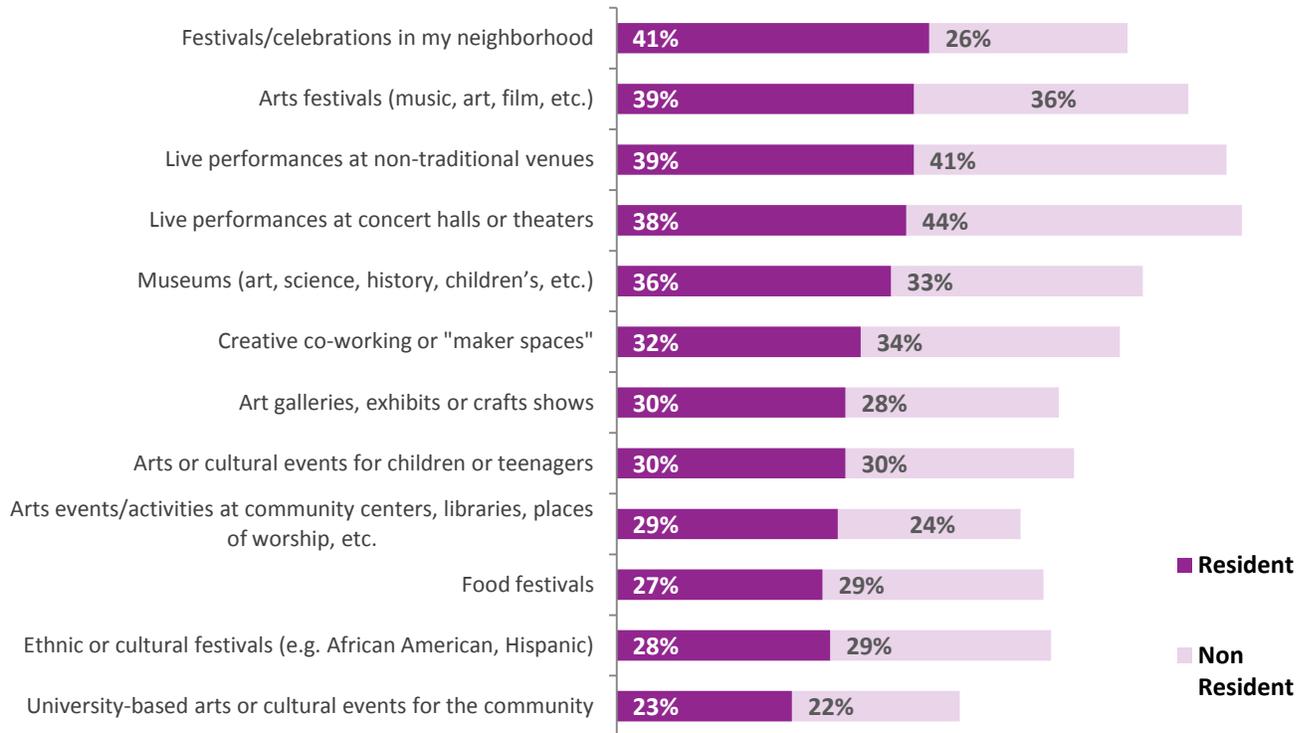


How do you rate cultural offerings in Boulder?

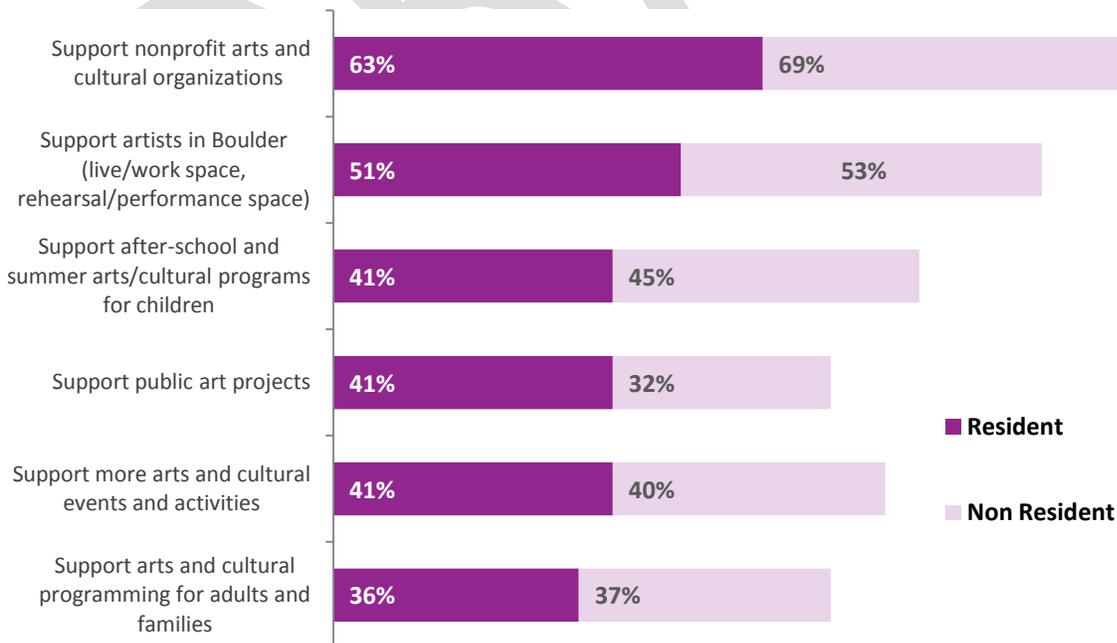


## Community Profile: Desires

What would you like to see more of in Boulder?

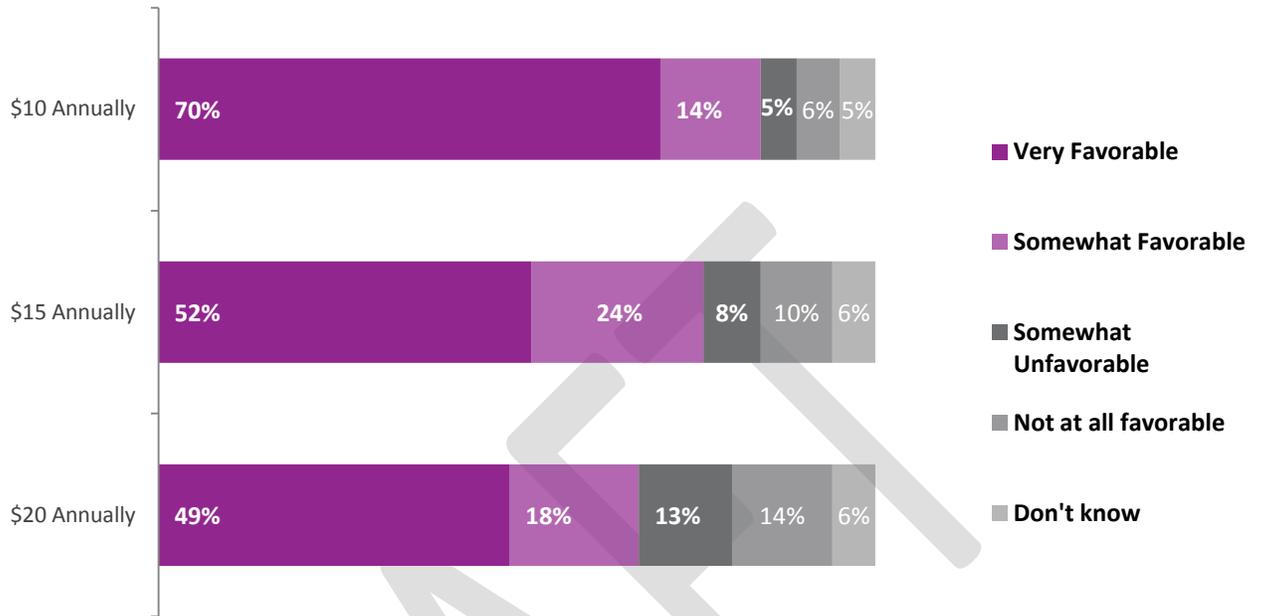


What are the most important things for the city to support?

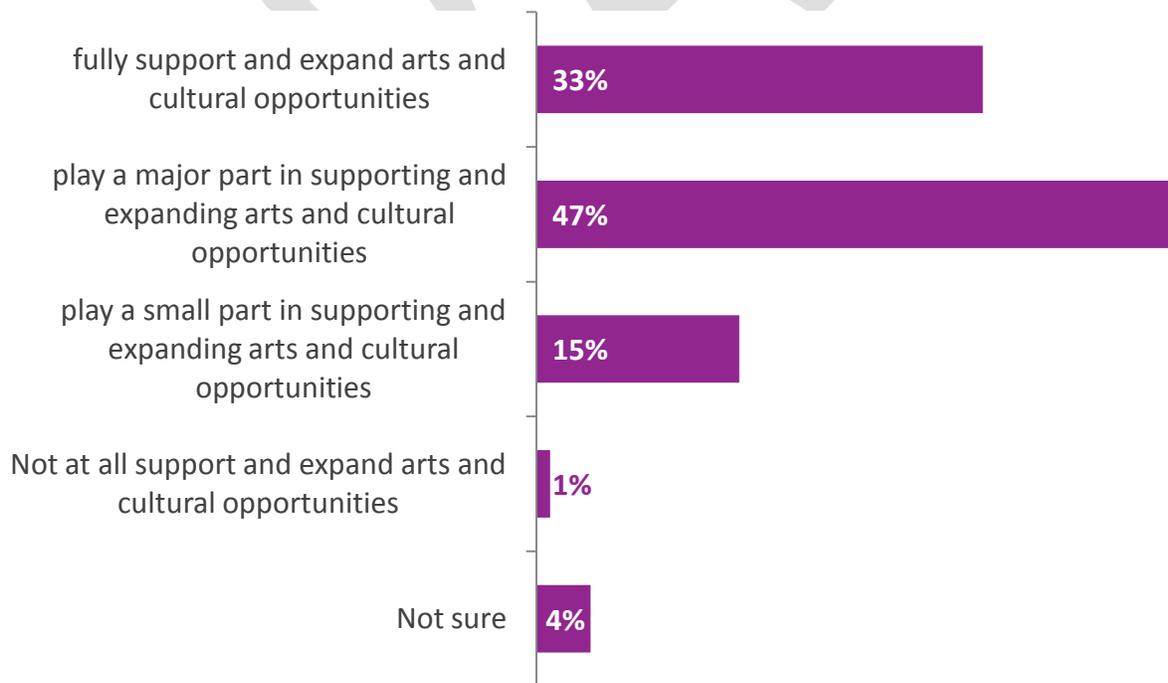


## Community Profile: Support from the City

I would support additional funding for city programs. (Residents Only)

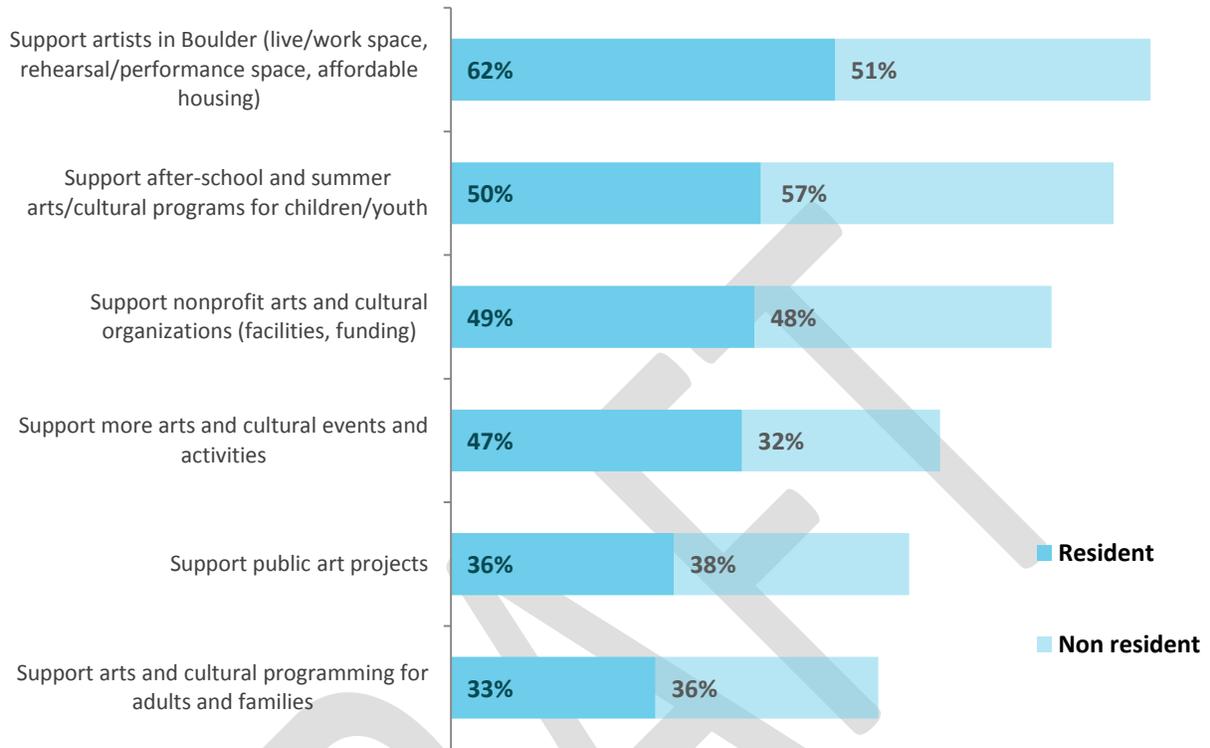


The City of Boulder should... (Residents Only)

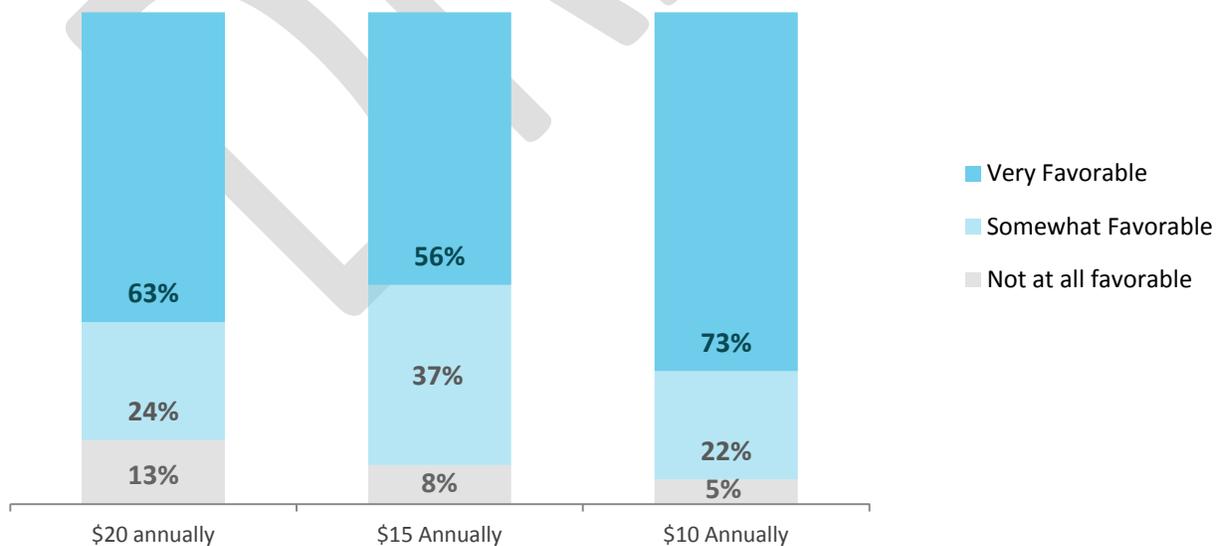


## Intercept Survey Results: Findings

What should the city support?



I would support additional funding for city programs. (Residents Only)



APPENDIX FIVE

Comparison of Public Art Programs in Colorado, page one

<u>City</u>	<u>Funding Mechanism</u>	<u>Eligible Projects</u>	<u>Benchmark Budgets</u>
Fort Collins	Standard Percent for Art	1% of CIP; Over \$250,000; Artists added to projects of \$50,000 - \$250,000 at the discretion of PM.	2013-2014= \$272,232.00 (Calculated Biennially)
Lakewood	Standard Percent for Art	1% of CIP; New Projects Only	2013= \$41,000 2014= \$45,000
Littleton	General Fund	Includes capital funds, operating revenue, donations, etc.	2013= \$69,475.00 2014= \$71,778.98
Loveland	Pooled Percent for Art (at least 1% stated in ordinance)	CIP; Over \$50,000 excl engineering, admin, fees, permits, and indirect costs; excl special impr. districts.	2013= \$273,501.00 2014= \$607,120.00 2015= \$351,040.00
Vail	Private Fee and Tax Increment	Real Estate Transfer Tax (set amount)	Approx. \$80,000/year

## Comparison of Public Art Programs in Colorado, page two

Type	Funding	Pros	Cons	Models
1. Traditional Percent-for-art	A portion (typically 1% - 3%) of the construction budget of municipal capital improvement projects is set aside from the project budget for the purposes of commissioning public artworks. In most cases, a threshold amount is set; for instance the rule might apply only for projects that have a total budget of more than \$50,000.00.	<ul style="list-style-type: none"> <li>• Protected politically over the long term.</li> <li>• Public is invested in founding the program.</li> <li>• Palatable implications to tax rates.</li> <li>• Could be applied to utilities spending to increase capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• Funding will be inconsistent over time.</li> <li>• Funding is typically low, and projects few, for our size city.</li> <li>• Project sites only associated with their source construction projects.</li> </ul>	Denver, Longmont, Ft. Collins, Grand Junction.
2. Public Benefit / Private Mandate	Private developers are required to set aside a portion of commercial projects to acquire artwork for public display. Often, additional rules are included such as a threshold budget, or the stipulation that the owner may contribute the amount to a pool which is spent by public commissioning.	<ul style="list-style-type: none"> <li>• Adds a source of funding and projects to build a critical mass of artworks.</li> <li>• Adds a tool for fulfilling public benefit requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• May not be palatable to developers.</li> </ul>	Aurora (in addition to traditional percent-for-art).
3. Percent-for-art Pooled	Rather than being derived directly from CIP project budgets, the funds are calculated according to the budgets of CIP projects, and then transferred from the general fund into a pooled account. Funds are then spent based on a strategic plan, rather than solely based on an association with the CIP project site. Note: transportation and/or Parks and Recreation projects may be exempted from the rule.	<ul style="list-style-type: none"> <li>• More flexible budgets and sites.</li> <li>• Projects can be distributed geographically in a more strategic way, rather than only adjacent to city buildings.</li> </ul>	<ul style="list-style-type: none"> <li>• Possibly less politically stable.</li> <li>• Requires complex budgeting and analysis, and risks incomplete calculations.</li> </ul>	Loveland.
4. General Fund	An account within the city budget, derived from the general fund or some other reliable source, is assigned to the commissioning of public art. In many cases the amount is determined by a formula, such as a percentage of the total general fund.	<ul style="list-style-type: none"> <li>• Offers flexibility for the implementation of a strategy over short periods of time.</li> </ul>	<ul style="list-style-type: none"> <li>• Most precarious in terms of sustainable funding.</li> </ul>	Co Springs.
5. Private Fee or Tax Increment	A specific allocation derived from an incremental tax or fee is transferred to a special account. For instance, a portion of the fees on permits or a portion of the seat tax for a convention or theater district can be applied to commissioning public art.	<ul style="list-style-type: none"> <li>• Offers a complimentary funding mechanism that can bolster a standard model.</li> </ul>	<ul style="list-style-type: none"> <li>• May not be palatable to those impacted by the fees or taxes.</li> </ul>	Wheat Ridge.

APPENDIX SIX

Review of Boulder Performing Arts Facilities Assessment  
and Alignment with Community Cultural Plan Research  
by Cultural Planning Group

Follows next page.

DRAFT