

**Title 9: Land Use Regulation**  
**APPENDIX M:**  
**Form-Based Code**

**PUBLIC REVIEW DRAFT**  
**MARCH 24, 2021**



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## TITLE 9

### Land Use Code

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DRAFT

# General Provisions

# General Provisions

## PROPOSED UNDERLYING ZONING: PROVIDED HERE FOR REFERENCE ONLY



*Proposed Underlying Zoning. Recommended zone districts to be applied on the City's zoning map. (This map will not be included as part of Appendix M. Provided here for reference only.) Note that the FBC refers to the uses allowed in these zones in the building types, limiting them by story or site as needed.*

### Considerations:

- *RH-7/R7 (currently an unmapped zone?) allows both townhouse and attached by right. However, the R7 use module also allows with limitations: offices, medical clinics and labs, restaurants less than 1000sf, and hostels/B&Bs.*
- *Artist studios, daycares, and personal service uses are allowed in both R4, R7, and R8 with use review.*
- *MU-4/M4 use module allows townhouses, attached residential. It also allows personal service, restaurant uses (generally), and retail uses less than 20,000 sf. It also allows manufacturing at less than 15,000 sf, larger with use review. Offices are allowed but generally require a conditional use permit.*
- *Government facilities are allowed in MU-4 by right and in the R7 and R8 use modules with use review.*

### M-1-1. PURPOSE OF FORM-BASED CODE

The purpose of this appendix is to establish building form and design requirements for development within the areas designated in Appendix L to Title 9, “Form-Based Code Areas.” The requirements for these areas implement the desired development, including functional characteristics, form, design character and quality, as guided by the plans for each designated area and the Boulder Valley Comprehensive Plan.

### M-1-2. FORM-BASED CODE REQUIREMENTS

No person shall occupy, use, change the use of, alter or develop any building, structure or land within the areas shown in Appendix L, “Form-Based Code Areas,” B.R.C. 1981, and subject to form-based code review pursuant to Section 9-2-16, “Form-Based Code Review,” B.R.C. 1981, except in conformance with the requirements of this appendix unless modified through an exception under Subsection 9-2-16(i), B.R.C. 1981.

- (a) **Specific Locations.** The locations where form-based code standards apply are shown in Appendix L, “Form-Based Code Areas,” B.R.C. 1981, and include: Boulder Junction Phase I [and Alpine-Balsam Area](#).

### M-1-3. DESIGN GOALS FOR THE FORM-BASED CODE AREAS

The requirements of this appendix are intended to accomplish the following objectives:

- (a) **Character, Context, and Scale.** Preserve or enhance the character, context, and scale planned for the area while supporting a more sustainable future by accommodating future residents, reducing dependence on single occupant vehicles, increasing energy efficiency, and promoting safe transportation options for pedestrians and bicycles.
- (b) **Human-Scaled Building Design.** Design to a human scale and create a safe and vibrant pedestrian experience.
- (c) **Building Design Quality and Aesthetics.** Design high-quality buildings that are compatible with the character of the area or the character established by adopted plans for the area through simple, proportional, and varied design, high quality and natural building materials that create a sense of permanence, and building detailing, materials and proportions.
- (d) **A Variety of Housing Types.** Produce a variety of

housing types, such as multifamily, townhouses, and detached single family units, as well as a variety of lot sizes, number of bedrooms per unit, and sizes of units within the [form-based code areas](#).

- (e) **Adaptable Buildings.** Build adaptable buildings with flexible designs that allow changes in uses over time.
- (f) **Provision of Outdoor Space.** Provide outdoor space that is accessible and close to buildings. Active and passive recreation areas will be designed to meet the needs of anticipated residents, occupants, employees, and visitors to the property.
- (g) **Support of Multi-Modal Mobility.** Provide safe and convenient multi-modal connections and promote alternatives to the single occupant vehicle. Connections shall be accessible to the public within the project and between the project and the existing and proposed transportation systems, including, without limitation, streets, bikeways, paseos, and multi-use paths.

### M-1-4. ORGANIZATION AND SCOPE

This section describes how this appendix is organized to provide the user with some guidance using this appendix and it addresses the scope of its application.

- (a) **Organization.** This appendix is organized into the following sections:
  - (1) **Sections M-1-1 through M-1-8: General Provisions.** The general provisions include a purpose statement for the form-based code, a description of where the requirements for the form-based code apply, a description of this appendix’s organization and scope, the regulating plans for each form-based code area, and definitions that apply to the terms of this appendix.
  - (2) **Sections M-1-9 through M-1-12: Site Design.** These sections establish general site design and minimum outdoor space requirements, applicable to all form-based code areas, unless otherwise specified. Outdoor space types are established to guide the design of common outdoor spaces.
  - (3) **Sections M-1-13 through M-1-21: Building Types.** These sections establish a variety of building types and building form, design, location, and use requirements applicable to each building type. The regulating plans determine which building type may be used on a particular site.

# General Provisions

## Organization and Scope

- (4) **Sections M-1-22 through M-1-29: Building Design.** These sections establish general building design requirements that are applicable to all of the building types, unless otherwise stated.

**(b) Scope.** The requirements of this appendix supplement those imposed on the same lands by underlying zoning provisions and generally applicable development standards of this title and other ordinances of the city. If there is a conflict between the requirements of this appendix and Title 9, “Land Use Code,” B.R.C. 1981, the standards of this section control. The following describes how specific requirements of this title relate to requirements of this appendix:

- (1) **Chapter 9-6: Use Standards.** Chapter 9-6, “Use Standards,” B.R.C. 1981, regulates uses which are permitted, conditionally permitted, prohibited, or which may be permitted through use review. Additional use standards may be established for the different building types in sections **M-1-15 through M-1-19 of this appendix.**
- (2) **Chapter 9-7: Form and Bulk Standards.** This appendix supersedes the standards in Chapter 9-7, “Form and Bulk Standards,” B.R.C. 1981, with the exception of Sections 9-7-3, “Setback Encroachments,” 9-7-5, “Building Heights,” and 9-7-7, “Building Heights, Appurtenances,” B.R.C. 1981. Building height shall be measured in accordance with the requirements of Section 9-7-5, B.R.C. 1981.
- (3) **Chapter 9-8: Intensity Standards.** This appendix supersedes the standards in Chapter 9-8, “Intensity Standards,” B.R.C. 1981, with the exception of Sections 9-8-5, “Occupancy of Dwelling Units,” 9-8-6, “Occupancy Equivalencies for Group Residences,” and 9-8-7, “Density and Occupancy of Efficiency Living Units,” B.R.C. 1981.
- (4) **Chapter 9-9: Development Standards.** Chapter 9-9, “Development Standards,” B.R.C. 1981, applies to developments that are regulated by this appendix as follows:
- (5) **Applicable Sections.** The following sections of Chapter 9-9, “Development Standards,” B.R.C. 1981, are applicable:
- (A) **9-9-1. Intent.**

- (B) **9-9-2. General Provisions.**
- (C) **9-9-4. Public Improvements.**
- (D) **9-9-5. Site Access Control,** in addition to the access location requirements in Section M-1-11(a) “Driveways,” B.R.C. 1981.
- (E) **9-9-6. Parking Standards.**
- (F) **9-9-7. Sight Triangles.**
- (G) **9-9-8. Reservations, Dedication, and Improvement of Right of Way.**
- (H) **9-9-9. Loading.**
- (I) **9-9-10. Easements.**
- (J) **9-9-12. Landscape and Screening Standards.**
- (K) **9-9-13. Streetscape Design Standards,** in addition to the requirements established in M-1-10, Streetscape Design Requirements.
- (L) **9-9-14. Parking Lot Landscape Standards.**
- (M) **9-9-15. Fences and Walls.**
- (N) **9-9-16. Lighting, Outdoor.**
- (O) **9-9-17. Solar Access.**
- (P) **9-9-18. Trash Storage and Recycling Areas.**
- (Q) **9-9-19. Swimming Pools, Spas, and Hot Tubs.**
- (R) **9-9-20. Addressing.**
- (S) **9-9-21. Signs.**
- (T) **9-9-22. Trip Generation Requirements for the MU-4, RH-6, and RH-7 Zoning Districts.**
- (6) **Superceded Sections.** The following sections of Chapter 9-9, “Development Standards,” B.R.C. 1981, are superseded by this appendix:
- (A) 9-9-3, Building Design, is superseded by this appendix.
- (B) 9-9-11, Useable Open Space, is superseded by the requirements of this appendix.
- (c) Other Sections and Ordinances.** The Boulder Revised Code and other ordinances of the city are applicable unless expressly waived or modified in this appendix. If there is a conflict between the requirements of this appendix and other portions of the Boulder Revised Code other than Title 9, “Land Use Code,” B.R.C. 1981, the most restrictive standards shall control.

# General Provisions

## Existing Structures and Uses Not Conforming with this Appendix

### **M-1-5. EXISTING STRUCTURES AND USES NOT CONFORMING WITH THIS APPENDIX**

- (a) **Purpose.** Adoption of the requirements of this appendix will create buildings, structures, and uses that were legally established but do not conform to the requirements of this appendix. The purpose of this section is to allow these preexisting buildings, structure and uses to be changed and upgraded without requiring their elimination if the change would not substantially adversely affect the surrounding area and would not increase the degree of nonconformity of uses.
- (b) **Scope.** The provisions of this section apply to buildings and uses that were legally established prior to the adoption of this appendix. This section does not apply to sites that are subject to a valid site review or planned unit development. The buildings and uses can be continued, restored, modified or changed in compliance with Chapter 9-10, “ Nonconformance Standards,” B.R.C. 1981. The following modifications are not permitted to buildings as provided in Chapter 9-10, B.R.C. 1981: Subsection 9-10-2 (c), “Replacement of Nonstandard Architectural Building Features” and Subsection 9-10-3 (a) ,“Nonstandard Buildings and Structures,” B.R.C. 1981. For the purpose of applying the applicable standards of Chapter 9-10, B.R.C. 1981, the standards for nonstandard structures shall be applied to legally established buildings and structures that do not meet the requirements of this appendix and the standards for nonconforming uses shall be applied to legally established uses that do not meet the requirements of this appendix.
- (c) **Expansions and Modifications to Existing Structures That Do Not Meet the Standards of This Appendix.**
- (1) **Expansions of 60 Percent of Floor Area.** Any modification to a legally established building or structure that does not meet the standards of this appendix and was not approved as part of a site review or planned unit development that adds more than sixty percent to the floor area existing at the time of adoption of this appendix shall meet the requirements of this appendix. For the purposes of calculating the amount of floor area being added, all floor area added in the five years preceding the building permit application shall be included.
- (2) **Facade Additions or Replacement.** Any facade being added or replaced shall meet the applicable site and building design requirements of sections M-1-15 through M-1-29 of this appendix under any of the following circumstances:
- (A) New exterior facades added as a result of the addition of any floor area;
  - (B) Replacement of thirty percent or more of the exterior facade material;
  - (C) Replacement or addition of thirty percent or more of the windows on any exterior facade;
  - (D) Replacement of or addition to any door or balcony located on any exterior facade.
- (3) **Facade Requirements.** If the facade exists or will be constructed within the build-to zone, the facade requirements, not including the cap types, of the applicable building type shall be met if any one of the following is included in the building modification or expansion:
- (A) New exterior facades added as a result of the addition of any floor area.
  - (B) Installation or change of location of two or more additional doors.
  - (C) Expansion or change in location of thirty percent of window area.
  - (D) Replacement of thirty percent or more of facade materials with a different facade material.
- (4) **Roof Renovation.** The cap type requirements of the applicable building type shall be met when the shape or style of more than sixty percent of the roof is changed and thirty percent of the façade is within the build-to zone of the applicable building type.
- (5) **Other Expansions and Modifications.** All expansions and modifications to existing structures that do not meet the standards of this appendix and do not meet the thresholds of this subsection (c) shall be subject to the underlying zoning and standards of Title 9, “Land Use Code,” B.R.C. 1981.

# General Provisions

## Regulating Plans

### M-1-6. REGULATING PLANS

No person shall construct, develop, use or occupy a property located in the area designated in Appendix L, “Form-Based Code Areas,” except in conformance with Title 9, “Land Use Code,” B.R.C. 1981, this appendix, and the regulating plan that applies to such property, except as otherwise specified in this appendix.

(a) **Boulder Junction Phase I Regulating Plan.** Within the Regulating Plan: Boulder Junction Phase I, as shown on Figure M-1 (1), the following standards apply:

- (1) **Transportation Connections.** The arrangement, type, character, extent, and location of streets, alleys, paseos, paths, and other transportation connections shall conform to the regulating plans shown in Figure M-1 (1) and the Transit Village Area Plan.
- (2) **Required Building Types.** The building shall be of the building type shown for the property in Figure M-1 (1) or the civic building type meeting the requirements of Section M-1-19, “Civic Building Type,” B.R.C. 1981.
- (3) **Location Based Height Limits.** No building shall exceed the maximum height and number of stories established for specific locations by Figure M-1 (1) and Figure M-1 (3). These location-based maximum height and story limitations supercede the maximum height and number of stories established in this appendix for the applicable building type.
- (4) **Required Residential.** Developments that include general, main street, or row type buildings with a total combined floor area exceeding 15,000 square feet shall include a minimum of fifty percent of residential floor area.
- (5) **Required Storefront.** Buildings shall have storefronts in the locations shown on Figure M-1 (1) and Figure M-1 (3).
- (6) **Type A and Type B Streets.** Type A and B street designations establish design standards for how a building must address the street and regulate access to the property; all buildings shall meet the standards applicable to the types of street frontages shown for the property in Figure M-1 (1) and Figure M-1 (3). (See building type regulations and Section M-1-13, “General Requirements of Building Types,” B.R.C. 1981.)

(7) **Required Outdoor Space Locations.** Outdoor space shall be provided in the locations shown in Figure M-1 (1). The required outdoor space shall meet the standards of Section M-1-12 “Outdoor Space Requirements,” B.R.C. 1981.

(8) **Terminated Vistas.** When a street terminates or curves on a property as designated on Figure M-1 (1) or Figure M-1 (3), the site design or building shall include a feature to terminate the view from the street. The project shall meet the following standards:

- (A) If the property where the vista is required to be terminated is open space, one of the outdoor space types established in Section M-1-12, “Outdoor Space Types,” B.R.C. 1981, shall be utilized, and a vertical feature shall terminate the view. Acceptable vertical features include, but are not limited to, a stand or grid of at least three large maturing trees, as defined by Chapter 3 of the City of Boulder Design and Construction Standards, a sculpture, a gazebo, or a fountain.
- (B) If the property where the vista is required to be terminated is not utilized as open space, the facade of a building shall terminate the view. The building facade shall meet the standards applicable to a Type A frontage, whether or not fronting on a Type A street, with the exception of the entrance requirements. The building shall include a feature that terminates the view, such as, a tower, cupola, bay, or courtyard.
- (C) A parking structure, surface parking lot, or side or rear facade shall not terminate a vista.

# General Provisions

## Regulating Plans

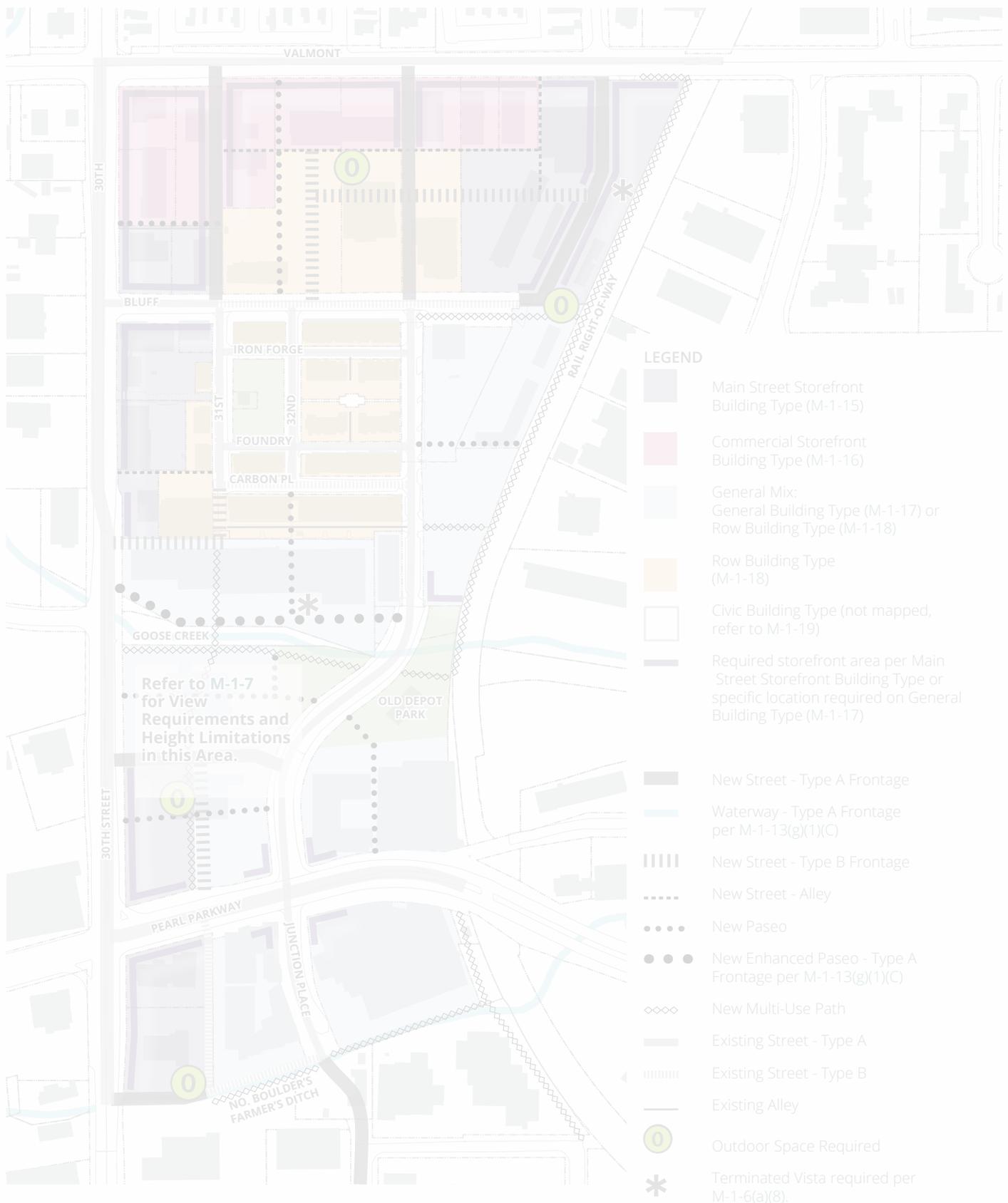


Figure M-1 (1). Regulating Plan: Boulder Junction Phase I

# General Provisions

## Regulating Plans

(b) **Alpine-Balsam Regulating Plan.** Within the Regulating Plan: Alpine-Balsam, as shown on Figure M-1 (2), the following standards apply:

- (1) **Transportation Connections.** The arrangement, type, character, extent, and location of streets, alleys, paseos, multi-use paths, and other transportation connections shall conform to the regulating plans shown in Figure M-1 (2) and the Alpine-Balsam Area Plan.
- (2) **Required Building Types.** The building shall be of the building type shown for the property in Figure M-1 (2).
- (3) **Location Based Height Limits.** No building shall exceed the maximum height and number of stories established for specific locations by Figure M-1 (2). These location-based maximum height and story limitations supercede the maximum height and number of stories established in this appendix for the applicable building type.
- (4) ~~**Required Residential. Developments that include general, main street, or row type buildings with a total combined floor area exceeding 15,000 square feet shall include a minimum of fifty percent of residential floor area.**~~<sup>1</sup>
- (5) **Required Storefront.** Buildings shall have storefronts in the locations shown on Figure M-1 (2) along the Broadway frontage, turning the corners of the building and extending west a minimum of thirty feet along the paseos, per Section M-1-13. “General Requirements of Building Types,” B.R.C. 1981.)
- (6) **Type A and Type B Streets.** Type A and B street designations establish design standards for how a building must address the street and regulate access to the property; all buildings shall meet the standards applicable to the types of street frontages shown for the property in Figure M-1 (2). (See building type regulations and Section M-1-13, “General Requirements of Building Types,” B.R.C. 1981.)
- (7) **Required Outdoor Space Locations.** Outdoor open space type shall be provided in the locations shown in Figure M-1 (2) per the Alpine-Balsam Area Plan. The required outdoor space shall meet

the standards of Section M-1-12 “Outdoor Space Requirements,” B.R.C. 1981.

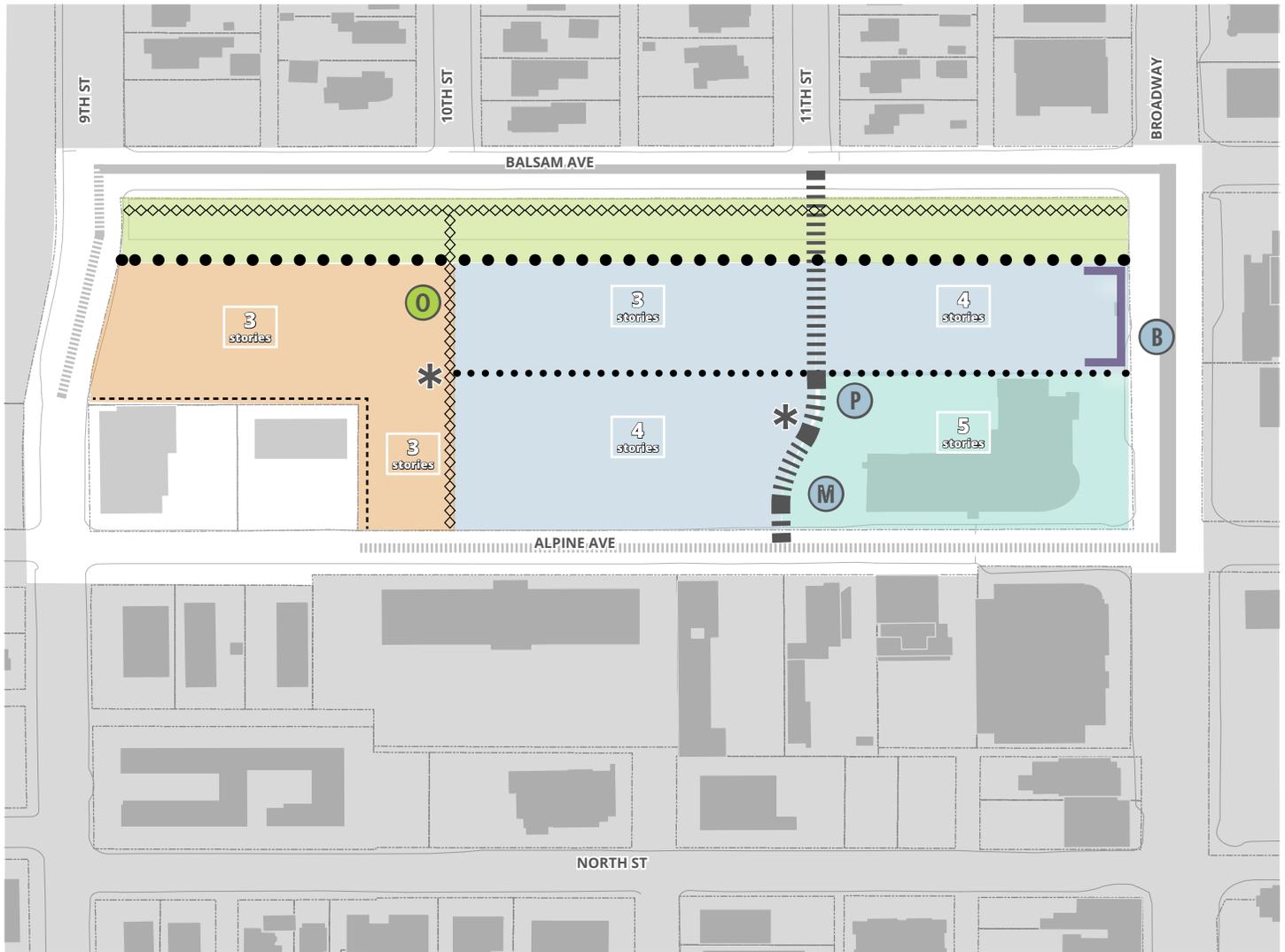
- (8) **Flood Mitigation Area and Greenway.**<sup>2</sup> The flood mitigation area and greenway, to be developed by the City, must be treated as a Type A frontage.
- (9) **Terminated Vistas.** When a street terminates or curves on a property as designated on Figure M-1 (2) , the site design or building shall include a feature to terminate the view from the street or path. The project shall meet the following standards:
  - (A) If the property where the vista is required to be terminated is open space, one of the outdoor space types established in Section M-1-12, “Outdoor Space Types,” B.R.C. 1981, shall be utilized, and a vertical feature shall terminate the view. Acceptable vertical features include, but are not limited to, a stand or grid of at least three large maturing trees, as defined by Chapter 3 of the City of Boulder Design and Construction Standards, a sculpture, a gazebo, or a fountain.
  - (B) If the property where the vista is required to be terminated is not utilized as open space, the facade of a building shall terminate the view. The building facade shall meet the standards applicable to a Type A frontage, whether or not fronting on a Type A street, with the exception of the entrance requirements. The building shall include a feature that terminates the view, such as, a tower, cupola, bay, or courtyard.
  - (C) A parking structure, surface parking lot, or side or rear facade shall not terminate a vista.

<sup>1</sup> (4) Required Residential is not necessary for this project, right?

<sup>2</sup> Is this the correct name?

# General Provisions

## Regulating Plans



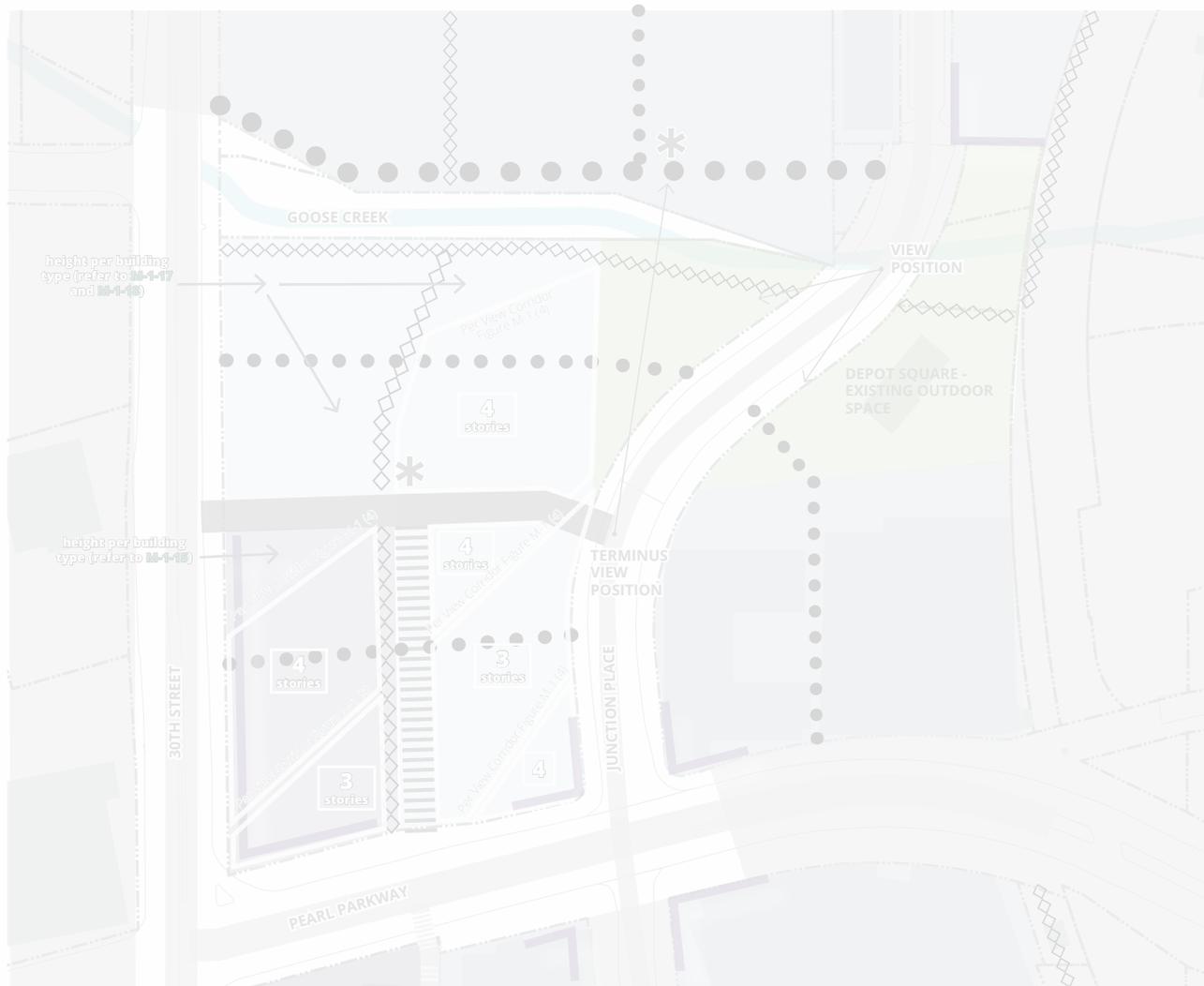
### LEGEND

	General Mix 1: General Building Type (M-1-17)		New Street - Alley		Outdoor Space Type required per M-1-12
	Required Storefront Treatment per General Building Type (M-1-17)		New Wide Paseo per M-1-10		Outdoor Space Type: Plaza (developed by the City)
	General Mix 2: General Building Type (M-1-17) or Row Building Type (M-1-18)		New Enhanced Paseo per M-1-10		Mobility Hub (developed by the City)
	Civic Building Type (refer to M-1-19)		New Multi-Use Path		Enhanced Bus Super Stop (developed by City)
	Flood Mitigation Area and Greenway by City - Type A Frontage per M-1-13(g)(1) (C)		Existing Street - Type A		Maximum building height (refer to building types)
	New Street - Type B Frontage with curbside management per Connections Plan - by City (Right-of-way location)		Existing Street - Type B		Terminated Vista required per M-1-6(b)(9)

Figure M-1 (2). Regulating Plan: Alpine-Balsam

# General Provisions

## Regulating Plans



### LEGEND

- |  |   |  |                              |
|--|---|--|------------------------------|
|  | Main Street Storefront Building Type (M-1-15)   |  | New Street - Type A Frontage |
|  | General Mix: General Building Type (M-1-17) or Row Building Type (M-1-18)   |  | Waterway - Type A Frontage   |
|  | Civic Building Type (not mapped, refer to M-1-19)   |  | New Street - Type B Frontage |
|  | Required storefront area per Main Street Storefront Building Type or specific location required on General Building Type (M-1-17) |  | New Street - Alley           |
|  | Maximum Height permitted in locations   |  | New Paseo                    |
|  | Street Terminus required per M-1-6(a)(8).   |  | New Enhanced Paseo           |
|  |   |  | New Multi-Use Path           |
|  |   |  | Existing Street - Type A     |
|  |   |  | Existing Street - Type B     |

Figure M-1 (3). Regulating Plan Inset: SE Corner of Boulder Junction Phase I

# General Provisions

## View Corridors



Figure M-1 (4). Boulder Junction Phase 1: View Corridors to Retain

### M-1-7. VIEW CORRIDORS

(a) **Purpose.** Projects should be designed to protect important public view corridors. The purpose of this section is to identify and preserve within the built environment view corridors of identified features when viewed from the public locations described in this section.

(b) **Boulder Junction Phase I.** The view corridors identified in Figure M-1 (4) and Figure M-1 (3) shall be preserved consistent with the requirements of this section.

(1) **View Corridors.** The following views are intended to be preserved:

- (A) From the southernmost point of the Depot Square bridge through the site to the Flatirons and west to tops of mountains as shown in yellow in Figure M-1 (4). The view corridor shall preserve the complete view of all five Flatirons when viewed from the identified location.
- (B) From Junction Place north of the Depot Square bridge, south to the old Depot Building in Depot Square as shown in light blue in Figure M-1 (4). The view corridor shall preserve the view of the entire Depot Building when viewed from the identified location.
- (C) From the north side of Goose Creek at approximately the intersection between the north-south multi-use path and the east-west enhanced paseo, to the old Depot Building in Depot Square as shown in light blue in Figure M-1 (4). The view corridor shall preserve the view of the entire Depot Building when viewed from the identified location.

(2) **Height Limitations.** Building heights shall be limited on the sites affected by the view corridors pursuant to the following standards:

- (A) The maximum number of stories shall not exceed the number of stories shown for a particular location in Figure M-1 (3). (Refer to the building types regulations for floor-to-floor heights requirements for stories.)
- (B) Roof top mechanical equipment, utilities, and appurtenances shall not be located within the view corridors.
- (C) Roof decks are permitted on all roofs provided they do not exceed any overall building height limitations and do not inhibit the views



Figure M-1 (5). Example Documentation of Preserved Views from Junction Place Bridge

# General Provisions

## Definitions

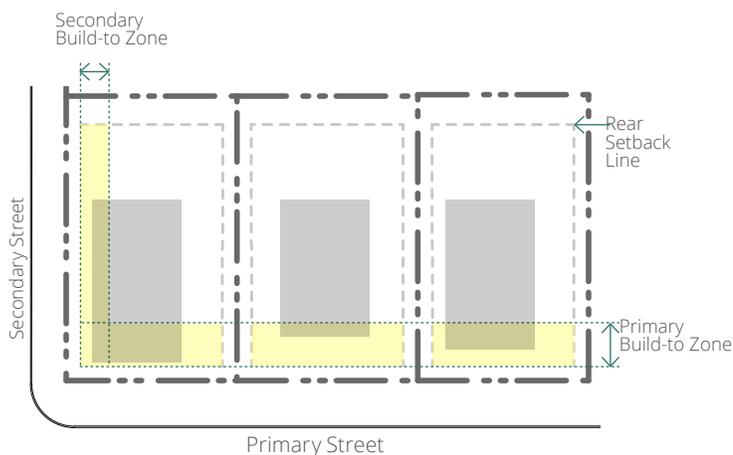
established by the view corridors. Roof deck structures are to be included in building modeling.

- (3) **Specific Location.** The specific location of the horizontal limits of the view corridors established in paragraph (1) of this subsection shall be established by the reviewing authority based on a view corridor analysis so as to preserve the views described in paragraph (b)(1) of this section.

## M-1-8. DEFINITIONS

The definitions in Chapter 1-2, "Definitions," and Chapter 9-16, "Definitions, B.R.C. 1981, apply to this appendix unless a term is defined different in this appendix or the context clearly indicates otherwise. For the purposes of this appendix, the following terms shall have the following meanings:

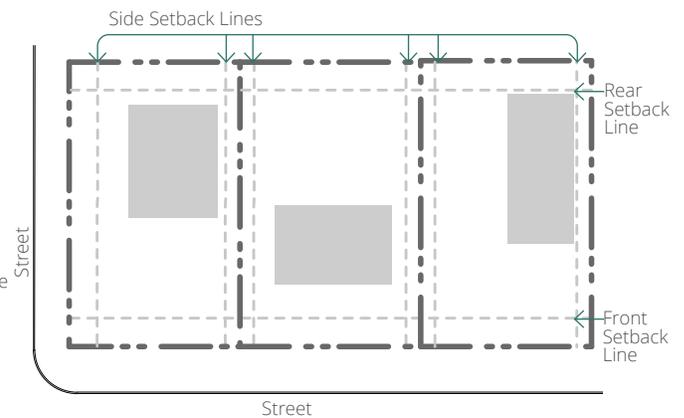
- (a) **Balcony.** Balcony means a platform that projects from a facade of a building above grade and is enclosed by a parapet or railing. This does not include false balconies that consist of a railing across a door with no outdoor platform.
- (b) **Build-to Zone.** Build-to zone means an area in which the facade of a building shall be placed; it may or may not be located directly adjacent to a lot line. The zone dictates the minimum and maximum distance a structure may be placed from a lot line. Refer to Figure M-1 (6). Build-to Zone and Setback Lines, and Figure M-1 (7). Facade Definition.
- (c) **Expression Line.** Expression line means an architectural feature consisting of a decorative, three-dimensional, linear element, horizontal or vertical, protruding or indented at least two inches from the exterior facade of a building. Vertical elements may include a column, pilaster, or other continuous vertical ornamentation. Horizontal elements may include a cornice, belt course, molding, string courses, canopy, balcony,



### BUILD-TO ZONES ALONG FRONTAGE LINE

A build-to zone indicates a zone or area in which the facade of a building must be located. The use of a build-to zone allows control over building placement, while the range provides some flexibility. This method provides more predictability in building placement.

Figure M-1 (6). Build-to Zone and Setback Lines



### SETBACK LINES ALONG FRONTAGE LINE

A setback line indicates the closest a building may be placed to a property line, but is silent on where behind that line a building may be placed.

# General Provisions

## Definitions

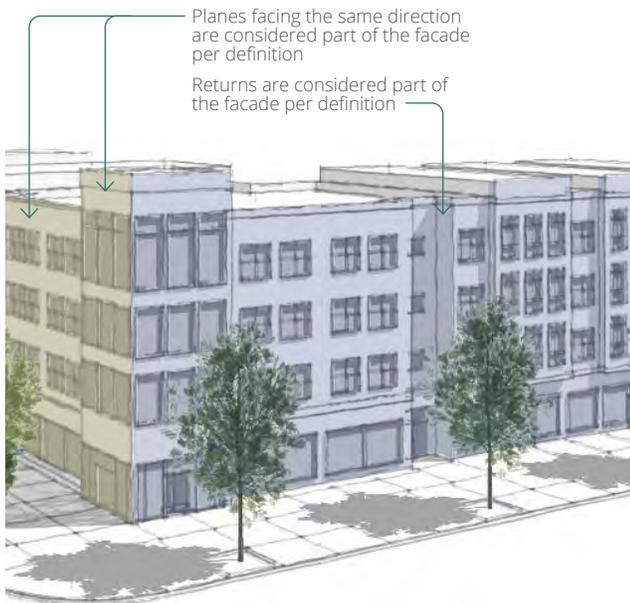


Figure M-1 (7). Facade Definition.

or other continuous horizontal ornamentation and projections. Expression lines are typically utilized to delineate the top or bottom of floors or stories of a building or divide a facade into smaller sections.

- (d) **Facade.** Facade means the exterior walls of a building exposed to public view and includes walls as shown in Figure M-1 (7). Facade Definition.
- (e) **Ground Story Transparency.** Ground story transparency means the measurement of the percentage of the ground story facade that has highly transparent, low reflectance windows with a minimum sixty percent transmittance factor and a reflectance factor of not greater than 0.25.
- (f) **Impervious Site Coverage.** Impervious site coverage means the percentage of a lot or parcel developed with principal or accessory structures and other surfaces that prevent the absorption of stormwater into the ground, including without limitation, driveways, sidewalks, and patios.
- (g) **Major Material.** Major material means a façade material meeting the standards for major materials established in Section M-1-24, “Façade Materials,” B.R.C. 1981.
- (h) **Minor Material.** Minor material means a façade

material meeting the standards for minor materials established in Section M-1-24, “Façade Materials,” B.R.C. 1981.

- (i) **Occupied Building Space.** Occupied building space means interior building spaces regularly occupied by the building users. It does not include storage areas, utility space, vehicle service areas, or parking, or other uninhabitable spaces.
- (j) **Parking Yard.** Parking yard means an area extending from the rear building facade to the rear property line between the side yards or, on a corner property, between the street adjacent side and side yards. Parking yards are fully screened from Type A streets frontages by the building and do not extend to any side lot line or street lot line.
- (k) **Paseo.** Paseo means a pathway designed for use by pedestrians, located mid-block, allowing pedestrian movement through the block from one street to another without traveling along the block’s perimeter.
- (l) **Porch.** Porch means a roofed, raised structure at the entrance to the building, and a transition between the interior of the building and the exterior yard or adjacent sidewalk. Refer to Figure M-1 (8). Example of a Porch.

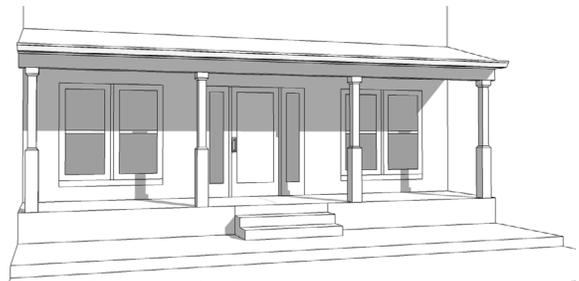


Figure M-1 (8). Example of a Porch.

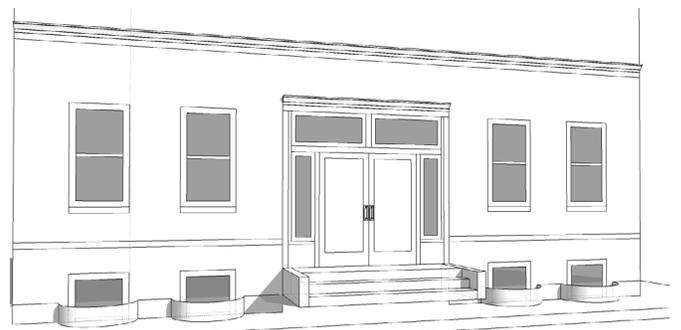


Figure M-1 (9). Example of a Stoop

# General Provisions

## Definitions

- (m) **Public Way.** Public way means streets, paseos, and multi-use paths, but not alleys.
- (n) **Semi-Pervious Surface or Material.** Semi-pervious surface or material means a material such as pervious pavers, permeable asphalt and concrete, or a green roof that allows for absorption of water into the ground or roof.
- (o) **Stoop.** Stoop means an elevated or at grade platform entranceway at the door to a building, providing a transition between the interior of the building and the sidewalk outside the building. The stoop may be covered by a canopy or awning. Refer to [Figure M-1 \(9\)](#). [Example of a Stoop](#).
- (p) **Storefront.** Storefront means a use limitation in specified areas that permits only dining and entertainment uses, personal service uses, and retail sales uses. Such uses must also meet the standards of Chapter 9-6, "Use Standards," B.R.C. 1981.
- (q) **Story, Ground.** Ground story means the first floor of a building that is level to or elevated above the finished grade on the front and corner facades. The ground story excludes basements or cellars. Refer to Section 9-16-1, "General Definitions," B.R.C. 1981, for a definition for basement.
- (r) **Story, Half.** Half story means either a story in the base of the building, partially below grade and partially above grade, or a story fully within the roof structure with windows or doors facing the street.
- (s) **Story, Upper.** Upper story means a story located one story or more above the ground story of a building.
- (t) **Transparency.** Transparency means the measurement of the percentage of a facade that has highly transparent, low reflectance windows with a minimum fifty percent transmittance factor and a reflectance factor of not greater than 0.25.
- (u) **Type A Frontage.** Type A frontage means a frontage along a Type A street [or other feature as defined in this appendix](#) that receives priority over other frontages in terms of locating principal entrances, prioritizing facade design elements, and incorporating design requirements associated with pedestrian orientation.
- (v) **Type A Street.** Type A street means a street designated on the regulating plan that receives priority over other streets in terms of setting front lot lines and locating building entrances.
- (w) **Type B Frontage.** Type B frontage means a frontage along a Type B street [or other feature as defined in this appendix](#) that allows for a lower level of facade treatment as well as [typically](#) permits locations for garage and parking lot driveway entrances.
- (x) **Type B Street.** Type B street means a street designated on the regulating plan that receives lower priority than Type A street in terms of building frontage and facade requirements ; it allows for a lower level of facade treatment as well as permits locations for garage and parking lot driveways entrances.
- (y) **Visible Basement.** Visible basement means a half story partially below grade and partially exposed above.

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# Site Design

# Site Design

## Rights-of-Way

### M-1-9. RIGHTS-OF-WAY

The arrangement, type, character, extent, and location of all rights-of-way shall conform to the requirements of Section M-1-6, "Regulating Plans," and Section 9-9-8, "Reservations, Dedication, and Improvement of Rights-of-Way," B.R.C. 1981, unless modified in accordance with this section.

(a) **Amendments.** Amendments to the location of rights-of-ways and addition to or deletion of rights-of-ways shown in the Transit Village Connections Plan or the regulating plan may be approved pursuant to the process and criteria established in the Transit Village Area Plan for amendments to the Transit Village Connections Plan. A request for such an amendment may be processed in conjunction with a form-based code review under Section 9-2-16, "Form-Based Code Review," B.R.C. 1981

### M-1-10. STREETScape AND PASEO DESIGN REQUIREMENTS

(a) **Streetscape.** In addition to the requirements of the Boulder Revised Code and the City of Boulder Design and Construction Standards, the streetscape of all new and existing streets, paseos, and enhanced paseos shall meet the standards of this section unless modified through approval of an exception under Section 9-2-16, "Form-Based Code Review," B.R.C. 1981.

- (1) **Conformance to Plans.** The streetscape shall be designed and completed consistent with the streetscape guidelines of the Transit Village Connections Plan in Boulder Junction or the Connections Plan in the Alpine-Balsam area plan.
- (2) **Streetscape Area.** The streetscape of any existing or new street shall occupy the full pedestrian realm, including the pedestrian facilities area and any street buffer required for the street type or similar area of an existing street. For enhanced paseos and paseos, the streetscape occupies the entire right-of-way or easement.
- (3) **Compatible Design.** The streetscape design, including but not limited to paving patterns, seating areas, and bulb-outs, of all street frontages within the development shall be designed to be compatible in character.

(4) **Additional Design Requirements.** The streetscape design shall meet the following standards:

(A) **Bulb-outs.** To shorten pedestrian crossings, pedestrian bulb-outs shall be installed at each end of any pedestrian crossing located at an intersection except in locations where the city manager determines that the street design would not adequately accommodate the turning movements of emergency vehicles.

(B) **Sight Triangle Area.** The requirements of Section 9-9-7, "Sight Triangle," B.R.C. 1981, shall be complied with.

(1) **Alternative Method of Compliance.** The approving authority may approve an alternative design to the sight triangle requirements of Section 9-9-7, "Sight Triangle," B.R.C. 1981, if the applicant demonstrates that accepted engineering practice would indicate that a modified visibility distance, either greater or lesser, would be acceptable or necessary for the safety of pedestrians, motorists, and bicyclists.

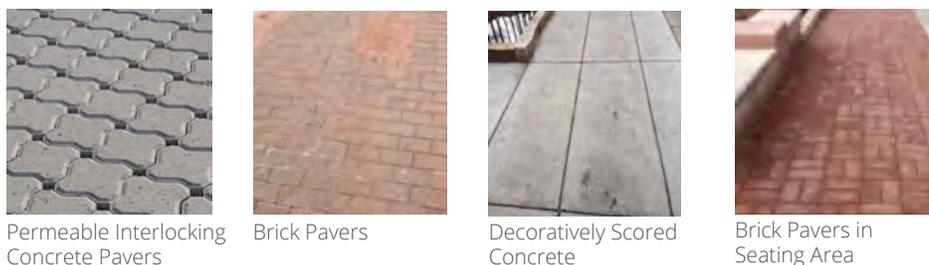
(C) **Street Furnishings.** At least two benches and one trash receptacle shall be installed in each block of a street.

(b) **Paseos.** Paseos shall be designed consistent with the following:

- (1) **General Paseo Design Requirements.** Paseos shall be designed to meet the standards of Figure M-1 (10). Table of Paseo Design Requirements.
- (2) **Paseo Surface Design.** The same paving pattern and materials shall be utilized for the entire length of the paseo.
- (3) **Maintenance.** Paseos shall be maintained by the property owner in good repair and safe and unobstructed condition. Any repairs or replacements to the paseo must be consistent with the form-based code review approval.
  - (A) If the city manager finds that any portion of a paseo does not meet this standard, the manager may require that the owner of the paseo or underlying property repair or replace the non-complying portion to bring it into conformity with city standards.

DESIGN STANDARDS	NARROW PASEO	WIDE PASEO	ENHANCED PASEO
Minimum Width of Paseo	9 feet	20 feet	25 feet
Minimum Width of Easement and Pedestrian Travel Way	6 feet	6 feet	25 feet minimum width of easement; 10 feet minimum width of pedestrian travel way
Elements within public access easement	All elements in the public access easement must be approved as part of a revocable permit or lease as applicable. Doors must be recessed and shall not open into the public access easement.		
Surface Treatment of Pedestrian Travel Way	Permeable interlocking concrete pavers or brick. See Figure M-1 (11). Images of Paseo Surface Treatment	Gray concrete with decorative scoring pattern and a border on each side that is composed of brick or pavers	Combination of gray concrete in a decorative scoring pattern, patterned brick and permeable pavers. Brick and pavers shall constitute at least 30% of the surface treatment of the pedestrian travel way and 100% of adjacent seating areas.
Minimum distance between Pedestrian Travel Way and Adjacent Buildings	18 inches	18 inches	18 inches
Minimum Slope between Pedestrian Travel Way and Adjacent Buildings	2%	2%	2%
Minimum dimensions for adjacent outdoor seating areas	6 feet by 6 feet	6 feet by 6 feet	5 feet by 10 feet
Outdoor Lighting	Pedestrian scaled wall mounted lighting at intervals of no less than 15 feet on center; catenary lighting, in the paseo between buildings or above outdoor seating areas and building entries.	Catenary lighting, in the paseo between buildings or above outdoor seating areas and building entries	Pedestrian scaled pole mounted lighting
Special Design Requirements	See paragraph M-1-10(b)(5) for special design requirements for each paseo.		

**Figure M-1 (10).** Table of Paseo Design Requirements



**Figure M-1 (11).** Images of Paseo Surface Treatment

# Site Design

## Rights-of-Way



Illustrative Examples of Paseos

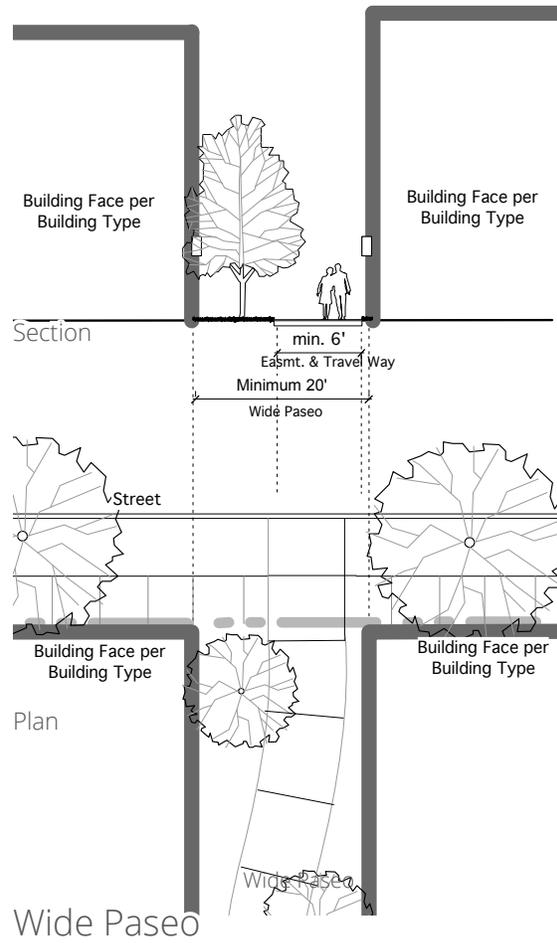
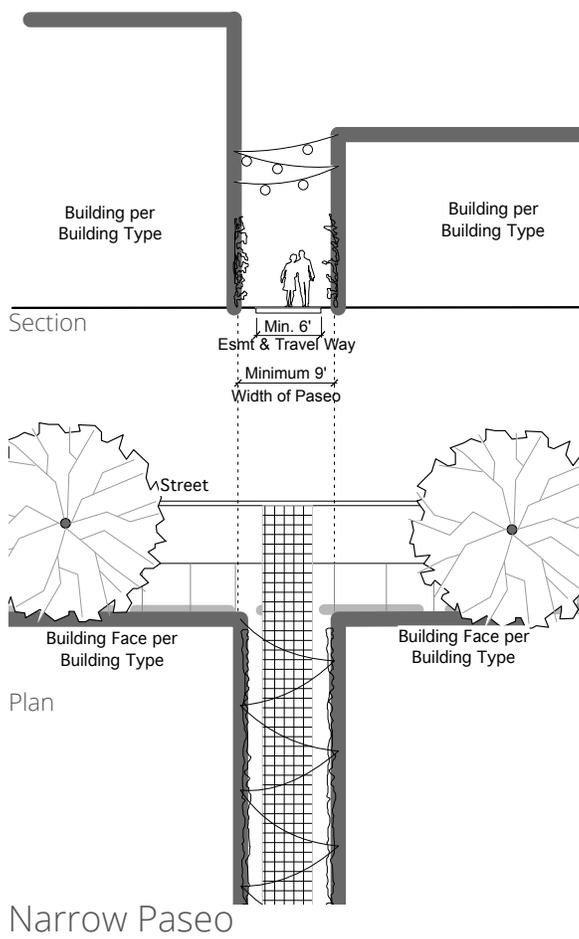


Figure M-1 (12). Paseo Illustrations

# Site Design

## Streetscape and Paseo Design Requirements

(B) If the city manager determines to proceed under paragraph (A) of this section, the manager shall notify the property owner of the duty to repair or replace, that such owner has thirty days from the date of the notice to commence such repair or replacement and has sixty days from the date of the notice to complete such repair or replacement. The manager may extend the time limit if weather would impede the work. Notice under this section is sufficient if it is mailed first class to the address of the last known owner of property on the records of the Boulder County Assessor, or hand delivered to an owner.

(C) If the property owner fails to commence or complete repair or replacement as required by the notice prescribed by paragraph (B) of this section, the manager may perform the repair or replacement and charge the costs thereof, plus up to fifteen percent for administrative costs, to the property owner.

(D) If any person fails or refuses to pay when due any charge imposed under this section, including any agreed charge, the city manager may, in addition to taking other collection remedies, certify due and unpaid charges to the Boulder County Treasurer for collection as provided by Section 2-2-12, "City Manager May Certify Taxes, Charges and Assessments to County Treasurer for Collection," B.R.C. 1981.

(4) **Outdoor Lighting.** The city manager may waive lighting standards under Subsection 9-9-16(g), "Outdoor Lighting," B.R.C. 1981, to allow catenary lighting between buildings and over paseos for bulbs greater than seven watts and no greater than eleven watts

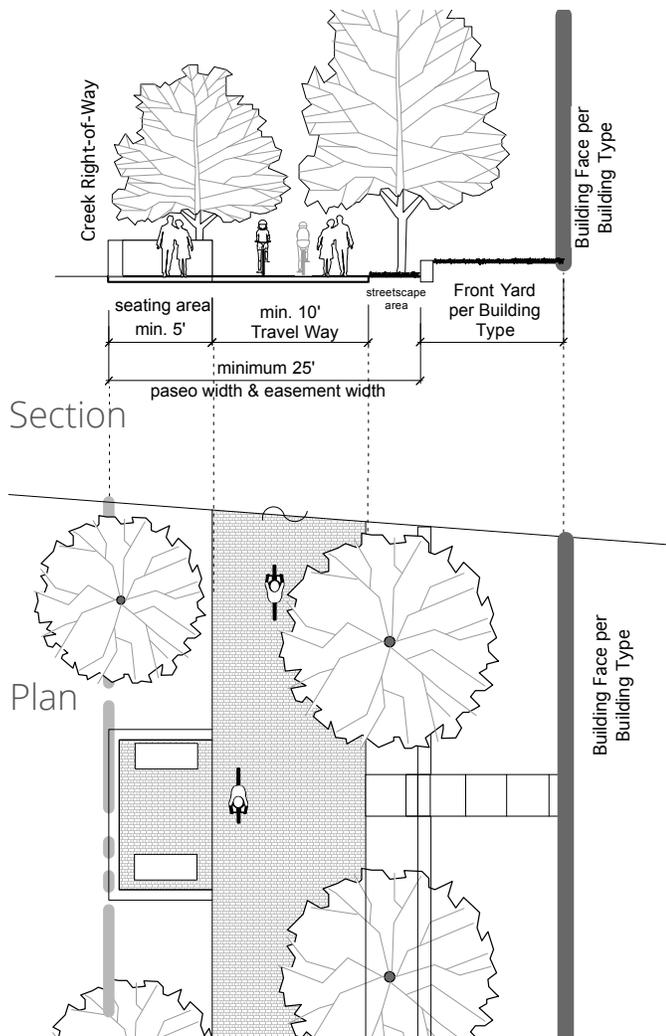
(5) **Special Design Requirements.**

(A) **Narrow Paseo.**

- (1) Narrow paseos shall be open to the sky. At least one of the buildings along a paseo shall be two stories or less along the paseo or the third and higher stories shall be set back a minimum of fifteen feet from the paseo.
- (2) Narrow paseos shall be designed to include landscaping in decorative pots and planters where sufficient space exists between the pedestrian travel path and the buildings.

(B) **Wide Paseo.**

- (1) Wide paseos shall be open to the sky with the exception of canopies and trellises.
- (2) Wide Paseos shall be designed to include art, such as a sculpture or mural.
- (3) Wide paseos shall include a mix of hardscaping and landscaping; no less than twenty-five percent of the paseo shall be landscaped, evenly distributed for the length of the paseo. Planters shall be at least six feet and no more than



### Enhanced Paseo

# Site Design

## Site Design Requirements

eleven feet wide and at least six feet, but no more than twenty feet long. Planters may be longer than twenty feet where not adjacent to a patio. Planting over underground parking structures shall be accommodated in recessed, extensive green roof planters and or full depth vaults and shall not project above the grade of the adjacent paseo. Ornamental or columnar trees adapted to the low light conditions of the paseo shall be planted where possible, at a distribution of no less than one per every fifty linear feet.

### (C) Enhanced Paseo.

- (1) Where a transitioning of grades occurs in an enhanced paseo, the grades shall transition with terraced retaining walls of a height not to exceed thirty-six inches; if the walls are intended for seating, their height shall not exceed twenty-four inches

## M-1-11. SITE DESIGN REQUIREMENTS

- (a) **Driveways.** Driveway locations are permitted consistent with Section 9-9-5, "Site Access Control," B.R.C. 1981. For the purposes of this appendix and determining site access, Type B frontages are lower category streets than Type A frontages.
- (b) **Treatment of Build-to Zones, Yards, and Setbacks.** All build-to zones, where not occupied by a building, all setbacks, and all yards shall be designed consistent with the following standards:
  - (1) **Site Open Space.** Build-to zones, setbacks, and yards, with the exception of parking areas, driveways, loading zones, mechanical equipment, and refuse and recycling areas, shall meet the design standards for useable open space established in Subsection 9-9-11(e), "Types of Useable Open Space," B.R.C. 1981.
  - (2) **Prohibited Uses.** Surface parking spaces, mechanical equipment, refuse and recycling areas, and loading areas shall not be located within any build-to zone or minimum setback.
  - (3) **Driveways.** Driveways may not be located in any build-to zone and setbacks unless consistent with Section 9-9-5, "Site Access Control," B.R.C. 1981, or with paragraph (b)(2) of this section to connect to an adjacent parking lot. When allowed, driveways shall may cross perpendicularly through build-to zones and setbacks.
- (c) **Inter-Lot Drives.** Adjacent parking lots in a development shall be connected with a shared drive that perpendicularly crosses any side and /or rear setback.

### M-1-12. OUTDOOR SPACE REQUIREMENTS

- (a) **Intent.** The intent of the outdoor space requirements is the provision of common outdoor spaces for gathering and socializing between neighbors as well as to provide breaks in the urban fabric of the area buildings.
- (b) **Applicability.** Outdoor space shall be designed and constructed or improved consistent with the requirements of this section.
- (c) **Outdoor Space Required by Location.** Outdoor space shall be provided in the following locations:
- (1) **Specific Locations.** Outdoor space shall be provided within 150 feet of the locations shown in Figure M-1 (14), Boulder Junction: Required Locations for Outdoor Space.
  - (2) **Underpass Outdoor Space.** Outdoor space shall be provided in any location where Figure M-1 (14) shows a future underpass. The minimum size of such outdoor space shall be determined by the city manager. The space shall be not less than 200 feet in length and 35 feet in width and must be long enough to provide for transition grades and wide enough to allow for landscaping and paving area.
- (d) **Outdoor Space on Site or within 1/8 Mile.** One outdoor space shall be provided on the project site unless one outdoor space that is a public outdoor space or to which the anticipated residents, tenants, employees, customers, and visitors to the development have a right of access and use is located within no more than 1/8 of a mile of all public entrances to the buildings of the development.
- (e) **Outdoor Space Types.** All required outdoor space shall comply with one of the outdoor space types defined in subsections M-1-10(p) through (t) of this section and the specifications applicable to the type used.
- (1) **Specified Type.** If a type of outdoor space is specified in Figure M-1 (14) for the project site, such type must be utilized.
  - (2) **No Specified Type.** If no type is specified in Figure M-1 (14) or the type is designated as flexible, any one of the outdoor space types defined in subsections M-1-10(p) through (t) of this section shall be utilized provided that the type utilized will result in a mix of outdoor spaces in the vicinity of the development.
- (f) **General Design Standards.** All outdoor space shall be designed and maintained to meet the following standards:
- (1) **Landscaped Areas.** Landscaped areas must meet the requirements of Section 9-9-12, "Landscaping and Screening Standards," B.R.C. 1981;
  - (2) **Exterior Paved Areas.** Exterior paved areas shall meet the standards of Subparagraphs 9-9-11 (e)(5) (A) and (B), B.R.C. 1981; and
  - (3) **Recreational Amenities.** Seating and other elements encouraging use and occupation of the space and spatially defining the space shall be included in the design so as to make the space attractive and an integral part of the circulation pattern of the development. Such elements may include benches, tables, ornamental lighting, sculptures, landscape planters or movable containers, trees, tree grates, water features, or other recreational amenities.
- (g) **Access.** All required outdoor spaces shall be accessible from a pedestrian route associated with a vehicular right-of-way and/or adjacent building entrances or exits.
- (h) **Fencing.** Outdoor space types may incorporate fencing provided that the following requirements are met:
- (1) **Height.** No fence shall exceed forty-eight inches in height. This maximum fence height may be modified by the approving authority to ensure functionality and safety of the users of the outdoor space, for example, in proximity to railroad right-of-way and around swimming pools, ball fields, and ballcourts.
  - (2) **Level of Opacity.** Fence opacity shall not exceed sixty percent.
  - (3) **Type.** Chain-link fencing is prohibited along any street frontage. The approving authority may modify this standard around sports field or courts to ensure the safety of the users and visitors to the property and functionality of the outdoor space use.
  - (4) **Openings.** Openings or operable, unlocked gates shall be provided on every street frontage at a minimum of one per every 100 feet of frontage.
- (i) **Open Water Body.** All open water bodies, such as lakes, ponds, pools, creeks, and streams, within an outdoor

# Site Design

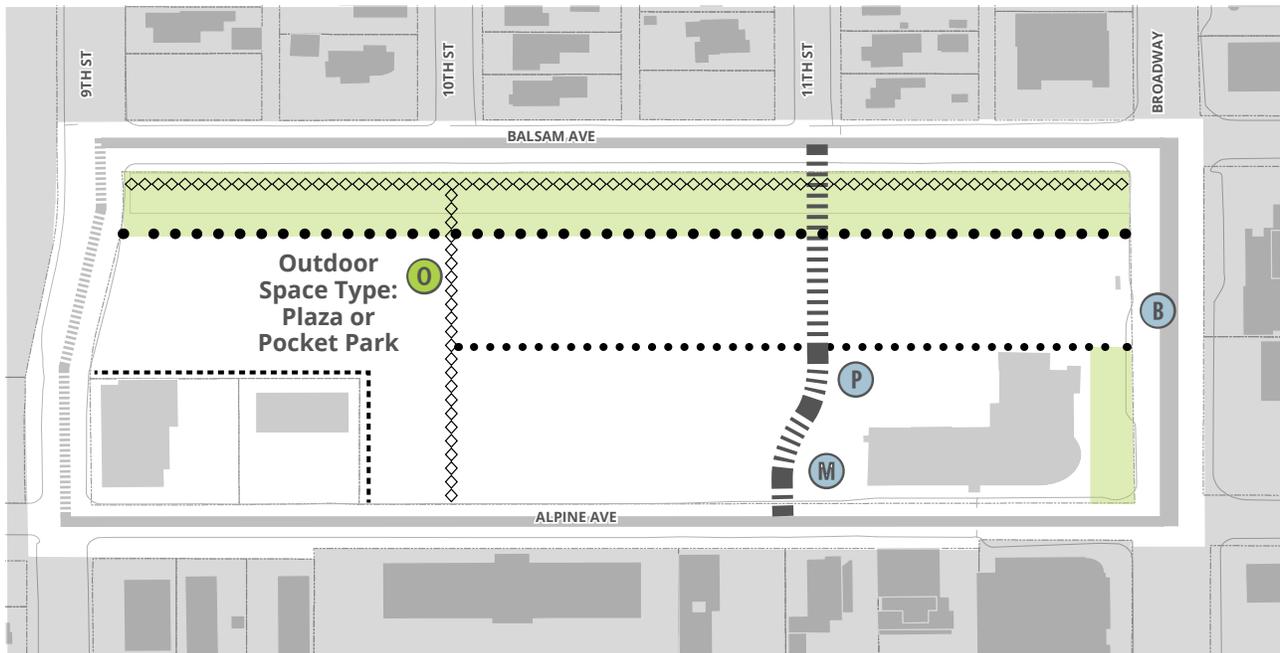
## Outdoor Space Requirements



**Figure M-1 (13).** Outdoor Space: Measuring Minimum Dimensions.



**Figure M-1 (14).** Boulder Junction: Required Locations for Outdoor Space



**Figure M-1 (15).** Alpine-Balsam: Required Locations for Outdoor Space

space type shall be located at least twenty feet from a property line to allow for pedestrian and bicycle access as well as a landscape area surrounding the water body.

(j) **Parking Requirements.** Parking shall not be required for any outdoor space type, unless a use other than open space is determined by the city manager.

(k) **Continuity.** New outdoor space shall connect to abutting or proximate existing or planned public way or open space.

(l) **Measuring Size.** When determining whether dimensions requirements of this section are met, the following standards apply:

(1) **Size.** The size of the outdoor space is measured to include all landscape and hardscape areas associated directly with the outdoor space.

(2) **Minimum Dimension.** The minimum length or width of the outdoor space type shall be measured along the longest two straight lines intersecting at a right angle defining the maximum length and width of the lot consistent with Figure M-1 (13). Outdoor Space: Measuring Minimum Dimensions. B.R.C. 1981.

(3) **Minimum Percentage of Street Frontage Required.** A minimum percentage of the outdoor space perimeter, as measured along the outer edge of the space, shall be located directly adjacent to a street.

(m) **Improvements.** When determining the specific improvement standards applicable to each outdoor space type, the following shall apply:

(1) **Designated Sports Fields.** Designated sports field shall mean sports fields or ball courts designated for one or more particular sports, including but not limited to baseball fields, softball fields, soccer fields, basketball courts, football fields, and tennis courts.

(2) **Playgrounds.** Playgrounds shall mean a defined area with play structures and equipment typically designed for children under twelve years of age, such as slides, swings, climbing structures, and skate parks. Where a playground is required, it shall include soft surfacing and structures and shall be a minimum of 1800 square feet in total area.

(3) **Fully Enclosed Structures.** Where permitted, fully enclosed structures may include such uses as small cafes, kiosks, community centers, and restrooms. For some outdoor space types, fully enclosed structures are subject to a maximum building coverage limitation, limiting the building coverage to a percentage of the outdoor space area.

(4) **Semi-Enclosed Structures.** Semi-enclosed structure shall mean open-air structure, such as a gazebo. Semi-enclosed structures are permitted in all outdoor space types.

(5) **Maximum Impervious and Semi-Pervious Surface.** Limitations on impervious and semi-pervious surfaces are provided separately for each open space type to allow an additional amount of semi-pervious surface, such as permeable paving, above the impervious surfaces permitted, including, but not limited to, sidewalks, paths, and structures as permitted.

(6) **Maximum Percentage of Open Water Body.** Maximum percentage of open water body shall mean the maximum amount of area within the outdoor space that may be covered by an open water body, including but not limited to ponds, lakes, and pools.

(n) **Stormwater in Outdoor Space Types.** Stormwater management practices, such as storage and retention facilities, may be integrated into any of the outdoor space types and utilized to meet stormwater requirements for surrounding parcels subject to the following standards:

(1) **Stormwater Features.** Stormwater features in outdoor space may be designed as formal or natural amenities with additional uses other than stormwater management, such as an amphitheater, sports field, pond, or pool, as part of the landscape design.

(2) **Fencing.** Stormwater features shall not be fenced and shall not impede public use of the space.

(3) **Walls.** Retaining walls over 2.5 feet in height are not permitted in any outdoor space accommodating stormwater. Exposed concrete is prohibited; all concrete shall be faced with stone or brick.

# Site Design

## Outdoor Space Requirements

- (4) **Structures.** All inlets, pipes, overflows, outfalls, and other structures required for the stormwater facility shall be incorporated into a landscape design and designed as unobtrusively as feasible. Exposed concrete is prohibited; all concrete shall be faced with stone or brick.
- (5) **Qualified Professional.** A qualified landscape architect shall be utilized to design the space for use by people, incorporating the stormwater features into the design.
- (o) **Small Projects.** The approving authority shall reduce the minimum size requirement of an outdoor space type to a size of fifteen percent of the project size if the applicant demonstrates the following:
  - (1) The outdoor space requirements cannot be met through an off-site outdoor space within 1/8 of a mile of all public entrances to the buildings of the development that is a public outdoor space or a space to which the anticipated residents, tenants, employees, customers, and visitors to the development have a right of access and use; and
  - (2) The project site is smaller than 0.7 acres in size. All contiguous lots or parcels under common ownership or control shall be considered the project site for purposes of determining the project size under this subparagraph. Contiguity shall not be affected by the existence of a platted street or alley or any other public or private right-of-way.



### (p) Plaza.

The intent of the plaza is to provide a formal outdoor space of medium scale that may serve as a gathering place for civic, social, and commercial purposes. The plaza may contain a greater amount of impervious coverage than any other type of outdoor space regulated in this section. Special features, such as fountains and public art installations, are encouraged.

#### PLAZA REQUIREMENTS

Dimensions	
Minimum Size	0.10 acres
Maximum Size	1 acres
Minimum Dimension	80 feet
Minimum Percentage of Street or Public Way Frontage Required	25%
Improvements	
Designated Sports Fields	Not permitted
Playgrounds	Not permitted
Fully Enclosed Structures	Permitted; may cover maximum 5% of plaza area
Maximum Impervious Surface + Semi-Pervious Surface	60%+ 20%
Maximum Percentage of Open Water	30%

# Site Design

## Outdoor Space Requirements



### (q) Green.

The intent of the green is to provide an informal outdoor space of medium scale for active or passive recreation located within walking distance for building occupants and visitors. The green is intended to be fronted mainly by streets.

### (r) Commons.

The intent of the commons is to provide an informal, small to medium scale outdoor space for active or passive recreation. Commons are typically internal to a block and tend to serve adjacent building occupants.

#### GREEN REQUIREMENTS

Dimensions	
Minimum Size	0.25 acres
Maximum Size	2 acres
Minimum Dimension	45 feet
Minimum Percentage of Street or Public Way Frontage Required	100% for greens less than 1.25 acres; 50% for greens 1.25 or more acres in size
Improvements	
Designated Sports Fields	Not permitted
Playgrounds	Permitted
Fully Enclosed Structures	Not permitted
Maximum Impervious Surface + Semi-Pervious Surface	20% + 15%
Maximum Percentage of Open Water	30%

#### COMMONS REQUIREMENTS

Dimensions	
Minimum Size	0.25 acres
Maximum Size	1.5 acres
Minimum Dimension	45 feet
Minimum Percentage of Street or Public Way Frontage Required	0%; requires a minimum of two access points (minimum 20 feet wide)
Improvements	
Designated Sports Fields	Not permitted
Playgrounds	Permitted
Fully Enclosed Structures	Not permitted
Maximum Impervious Surface + Semi-Pervious Surface	30% + 10%
Maximum Percentage of Open Water	30%

# Site Design

## Outdoor Space Requirements



### (s) Pocket Park.

The intent of the pocket park is to provide a small scale, primarily landscaped active or passive recreation and gathering space for neighborhood residents within walking distance.

### (t) Park/Greenway.

The intent of the park/greenway is to provide informal active and passive large-scale recreational amenities to local residents and the greater region. Parks have primarily natural plantings and are frequently created around an existing natural feature such as a water body or stands of trees.

#### POCKET PARK REQUIREMENTS

Dimensions	
Minimum Size	0.10 acres
Maximum Size	1 acre
Minimum Dimension	<del>None</del> 25 feet
Minimum Percentage of Street or Public Way Frontage Required	30%
Improvements	
Designated Sports Fields	Not permitted
Playgrounds	Required
Fully Enclosed Structures	Not permitted
Maximum Impervious Surface + Semi-Pervious Surface	30% + 10%
Maximum Percentage of Open Water	30%

#### PARK/GREENWAY REQUIREMENTS

Dimensions	
Minimum Size	2 acres
Maximum Size	None
Minimum Dimension	30 feet; minimum average width of <del>80</del> 60 feet
Minimum Percentage of Street or Public Way Frontage Required	30% for parks less than 5 acres; 20% for parks 5 or more acres in size
Improvements	
Designated Sports Fields	Permitted
Playgrounds	Permitted
Fully Enclosed Structures	Permitted in parks 5 acres or larger in size
Maximum Impervious Surface + Semi-Pervious Surface	20% + 10%
Maximum Percentage of Open Water	30%

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# Building Types

# Building Types

# Building Types

## General Requirements of Building Types

### M-1-13. GENERAL REQUIREMENTS OF BUILDING TYPES

- (a) **Purpose.** The purpose of the building types requirements is to establish standards for building design, building form, siting of buildings, and specific uses based on the building type that may be utilized on a property pursuant to the applicable regulating plan or as otherwise authorized.
- (b) **Building Types Requirements.** No person shall develop, use, or occupy any building or other property located within the area designated in Appendix L, “Form-Based Code Areas,” B.R.C. 1981, except in conformance with the building type standards of sections M-1-15 through M-1-19 of this appendix unless modified through an exception under Subsection 9-1-16(i), B.R.C. 1981.
- (c) **Uses in Building Types.** All uses of a property shall meet the requirements of Chapter 9-6, “Use Standards,” B.R.C. 1981. Where use regulations are imposed by this appendix based on the building type, the use of the property shall also be consistent with those standards.
- (d) **General Building Design Requirements.** All buildings shall comply with the building design requirements of sections M-1-21 through M-1-29 of this appendix.
- (e) **Multiple Principal Structures.** Multiple structures may be constructed on a lot or parcel. All structures shall meet the applicable building type requirements, including the build-to zone requirements.
- (f) **Build to the Corner.** On corners, a building or structure shall be located at the intersection of the two build-to zones as shown in Figure M-1 (16). The standards of Subparagraph M-1-10(a)(4)(B), “Sight Triangle Area,” B.R.C. 1981, must also be met.
- (g) **Type A & B Frontages.** A hierarchy of frontages is established for properties located within the area shown on Appendix L, “Form-Based Code Areas.” Frontages include streets, paths, waterways, and other public ways.
- (1) **Type A Frontage Description.** A Type A frontage designation establishes the fronts of lots and buildings and where to locate the principal entrance to the building. A Type A frontage designation requires the highest level of facade treatment and restricts locations for parking, driveways, and garage entrances. Type A frontages must be provided as follows:
- (A) **Type A Street Frontages.** Type A frontage requirements have to be met along those

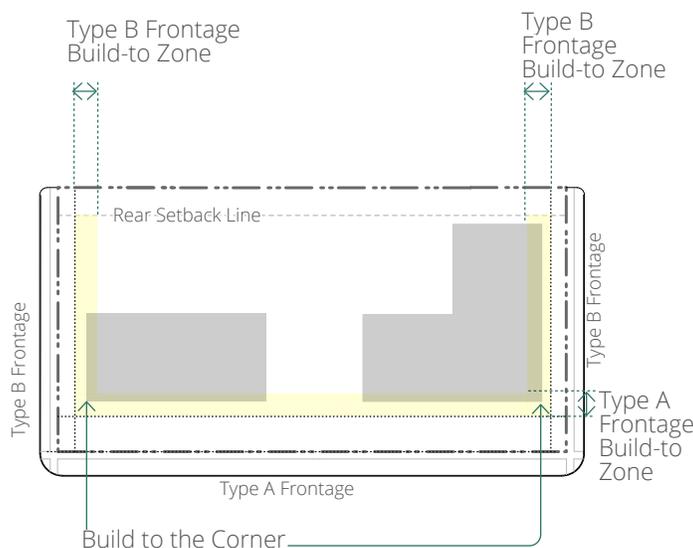


Figure M-1 (16). Build-to Corner and Build-to Zones

# Building Types

## General Requirements of Building Types

locations where a Type A frontage is designated on the regulating plan.

- (B) **Outdoor Space Types.** Where a lot or parcel contains or abuts a required outdoor space, the frontage of a building abutting the outdoor space shall meet Type A frontage requirements.
- (C) **Specific Type A Frontages.** Type A frontage requirements also have to be met along the following ways:
  - (1) **Boulder Junction Phase I.** Goose Creek, the North Boulder Farmer's Ditch, and all enhanced paseos.
  - (2) **Alpine-Balsam. Balsam Flood Mitigation Area and Greenway, City-developed plazas, not including the Mobility Hub.**
- (D) **Corners.** At corners of buildings on public ways, Type A frontage treatments shall be continued around the corner along the public way for a minimum of thirty feet.
- (E) **Multiple Type A Frontages and No Type B Frontage.** If multiple Type A frontages and no Type B frontages are required on a building, one Type A frontage may be treated as a Type B frontage for the building type requirements if the approving authority finds that one of the following standards is met with regard to such frontage:
  - (1) Configuration of other parcels along the street, including fronts of buildings and locations of vehicular access, are more consistent with Type B requirements.
  - (2) The classification of the street is more focused on traffic movement than pedestrian orientation.
  - (3) The area plan prioritizes the street lower than other Type A frontages.
- (F) **No Type A Frontage. If no Type A frontage is required on a building, one Type B frontage shall be treated as a Type A frontage for the building type requirements.**<sup>1</sup>

<sup>1</sup> This is added for Alpine-Balsam to account for Site D where all frontages are designated as Type B (for paseos, multi-use trails, see (2)(B) Other Ways in the next column.

- (2) **Type B Frontages Description.** A Type B frontage designation allows for a lower level of facade treatment and allows garage and parking lot driveway entrances on the frontage. Type B frontages have to be provided as follows:
  - (A) **Type B Street Frontages.** Type B frontage requirements shall be met along those locations where a Type B frontage is designated on the regulating plan.
  - (B) **Other Ways.** All ways other than streets or alleys, including but not limited to paseos, multi-use paths, waterways, busways, and rail lines, shall be treated as Type B frontages unless otherwise required in this appendix; however, vehicular access and recycling, refuse, and loading access is not permitted off these ways.
  - (C) **Yard Definition.** Yard is defined in Section 9-16-1, "General Definitions," B.R.C. 1981. For the purposes of this Appendix M, the following standards shall supplement and, where inconsistent, supersede the definition of Section 9-16-1, B.R.C. 1981:
    - (1) **Side and Rear Yards Abutting Other Lots, an Alley, or a Rail Right-of-Way.** On a property located in an area designated in Appendix L, "Form-Based Code Areas," only yards abutting a lot, an alley, or a rail right-of-way at the lot line, and not a street, waterway or other Type A or B frontage, are considered side or rear yards.
    - (2) **Front Yards, Side Adjacent Street Yards, and Side Equals Front Yards.** Front yards, side adjacent street yards, and side equals front yards are regulated through the designation of Type A and Type B frontages.
    - (3) **Parking Yard.** Parking yard shall have the meaning defined in Section M-1-8, "Definitions," B.R.C. 1981.
- (h) **Modifications.** The approving authority may approve the following modifications if the approving authority finds the proposed design substantially meets the intent of the requirement being modified:
  - (1) **Building Location.** The location of the building within up to one foot from any minimum setback or build-to zone width or location requirement.

- (2) **Impervious Coverage.** Up to a ten percent increase in total impervious coverage, not to exceed the total amount of allowed impervious plus semi-pervious coverage.
- (3) **Type A Frontage Lot Line Coverage.** For the commercial storefront building only, up to ten percent decrease in Type A frontage lot line coverage requirements.
- (4) **Story Height.** An additional height of any floor-to-floor story height up to two feet, provided the overall building height does not exceed the maximum permitted height.
- (5) **Transparency.** Up to two percent reduction of the required transparency on a non-Type A frontage facade; and up to four square feet increase of the blank wall area limitation of paragraph subsection M-1-20(f)(2) on a non-Type A frontage facade.

## M-1-14. DESCRIPTIONS OF BUILDING TYPES

This section generally describes the building types established for development on land designated in Appendix L, “Form-Based Code Areas.” Sections M-1-15 through M-1-19 establish standards applicable to a building type. Sections M-1-20 and M-1-21 regulate the application of the requirements specific to a building type. No person shall use land designated in Appendix L except in conformance with the building type requirements of those sections, unless modified through an exception under Subsection 9-2-16(i), B.R.C. 1981.

- (a) **Main Street Storefront Description.** The main street storefront building type is a highly pedestrian-oriented, mixed-use building. Ground story storefront is required along all Type A streets with only personal service, retail, dining, and entertainment uses to provide activity. Upper story uses are flexible. Parking is in the rear or off-site. Refer to Section M-1-15, B.R.C. 1981, for requirements.
- (b) **Commercial Storefront Description.** The commercial storefront building type permits single use buildings and more parking locations, but still addresses pedestrian orientation with buildings built up to the sidewalk and storefront glass requirements. This building type allows a broader variety of commercial, retail, and industrial uses on the ground story, including vehicle-related uses. Refer to Section M-1-16, B.R.C. 1981, for requirements.
- (c) **General Building Description.** The general building type

is a basic building that serves as urban fabric, built along the sidewalk connecting the more commercial spaces with open spaces. This building can accommodate a wide range of uses. It differs from the storefront by its lower requirement for ground story glass and allowance for an above-sidewalk level ground story elevation. Refer to Section M-1-17, B.R.C. 1981, for requirements.

- (d) **Row Building Description.** The row building type is similar to the general building, but is smaller in scale. The ground story is required to be divided into different units, each with separate entrances. Townhouses, rowhouses, live-work units, incubator space, or small width industrial or craftsman spaces fit well into this building type. Refer to Section M-1-18, B.R.C. 1981, for requirements.
- (e) **Civic Building Description.** The civic building type is the most flexible building, meant to allow for more iconic designs within the urban fabric of the area. This building type is limited to specific public and institutional uses, such as governmental facilities, religious assemblies, schools, colleges, and universities, as well as parks and recreation uses, museums, and live theaters. Refer to Section M-1-19, B.R.C. 1981, for requirements.

# Building Types

## Main Street Storefront Building Type

### M-1-15. MAIN STREET STOREFRONT BUILDING TYPE

Refer to M-1-6 Regulating Plans for the locations of buildings in the form-based code areas.

		BOULDER JUNCTION PHASE I	REFERENCES/ADDITIONAL REQUIREMENTS
<b>BUILDING SITING</b> Refer to Figure M-1 (17).			
1	Minimum Type A Frontage Build-to Zone Coverage	90% required	One courtyard, maximum of 30% of facade width or 30 feet wide, whichever is less, may count towards Type A frontage build-to zone coverage.
2	Type A Frontage Build-to Zone	0' to 5' from minimum public way or r.o.w., see note right	Build-to zones are measured from the outside edge of any public access or waterway easement for sidewalk or the right-of-way, if no public access easement is required or exists. Refer to M-1-20(b) for additional information.
3	Type B Frontage Build-to Zone	0' to 5' from minimum public way or r.o.w., see note right	
4	Minimum Side Setback	5'; 0' required at paseo or multi-use path	For paseos and multi-use paths, refer to the regulating plans and the Transit Village Connections Plan for locations and details.
5	Minimum Rear Setback	10'; minimum 25' if no alley; 0' required at paseo or multi-use path	
6	Maximum Building Length along any Public Way	150'	Refer to section M-1-28 for building massing requirements.
7	Maximum Site Impervious Coverage Additional Semi-Pervious Coverage	70% 25%	Refer to Section M-1-8, "Definitions, B.R.C. 1981, for semi-pervious coverage.
8	Surface or Accessory Parking, Refuse & Recycling, Utilities, & Loading Location	Parking yard only	Refer to Sections 9-9-9 and 9-9-12, B.R.C. 1981, for loading and screening requirements.
9	Permitted Driveway Access Locations Permitted Garage Entrance Location	Alley Rear facade only; if no rear facade, Type B frontage street is permitted	If no alley exists or is planned, driveway access off a Type B street is permitted.
<b>HEIGHT</b> Refer to Figure M-1 (18).			

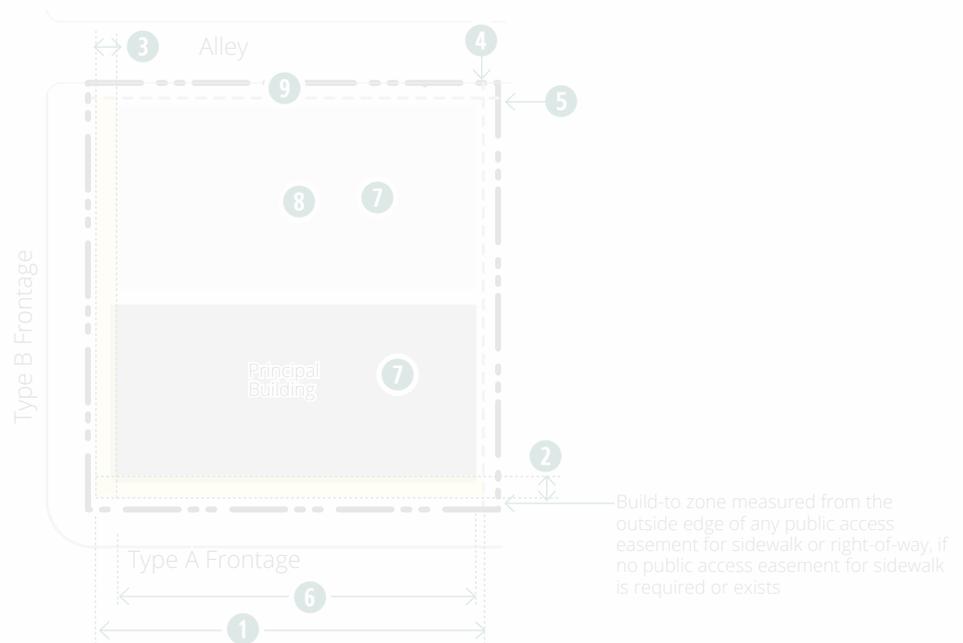


Figure M-1 (17). Storefront Building: Building Siting

# Building Types

## Main Street Storefront Building Type

		<b>BOULDER JUNCTION PHASE I</b>	REFERENCES/ADDITIONAL REQUIREMENTS
<b>10</b> Overall:	Minimum Height Maximum Height	2 stories minimum 3 stories maximum and up to 40' in height north of Goose Creek and west of Junction Place; 5 stories maximum elsewhere up to 55'; unless otherwise required by Sections M-1-6, "Regulating Plans," and/or M-1-8, "View Corridors," B.R.C. 1981.	Refer to subsection M-1-20(2) for height measuring requirements and section M-1-28 for building massing requirements. Subsection M-1-21(d), "Towers," B.R.C. 1981, allows additional height in a limited footprint.
<b>11</b> Ground Story:	Minimum Height Maximum Height	14' 22'	Stories are measured floor to floor. Refer to subsection M-1-20(e) for explanation of measurement.
<b>12</b> Upper Stories:	Minimum Height Maximum Height	9' 12'	Stories are measured floor to floor. Refer to subsection M-1-20(e) for explanation of measurement.
<b>USES</b> Refer to Figure M-1 (18).			
<b>13</b> Type A Frontage Ground Story		Only dining & entertainment uses, personal service uses, retail sales uses consistent with chapter 9-6	Refer to Chapter 9-6, B.R.C. 1981, for permitted uses per zoning district and definition of uses.
<b>14</b> Type B Frontage & All Upper Stories		All uses consistent with chapter 9-6	
<b>15</b> Required Occupied Building Space		Minimum 20' deep on all full height floors, not including basement, from any street facade	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for occupied building space.
<b>16</b> Parking within Building		Permitted fully in any basement and in rear of all other stories. Prohibited where occupied space is required.	Refer to occupied building space requirement above.
<b>FACADE &amp; CAP REQUIREMENTS</b> Refer to Figure M-1 (19).			
<b>17</b> Type A Frontage Ground Story Transparency		Minimum 75% measured between 2' and 10' vertically from average grade of adjacent sidewalk	Note that subsection M-1-13(g) requires this treatment to turn corners. Refer to subsection M-1-20(f) for information on measuring transparency.
<b>18</b> Required Transparency on All Street, Courtyard, & Public Way Facades		Minimum 20%, measured per story of all stories, including blank wall limitations defined in M-1-20(f).	Refer to subsection M-1-20(f) for information on measuring transparency.
<b>19</b> Entrance Location & Number		Principal entrance required on Type A frontage facade; entrances required a minimum of one per every 60' of building facade	Refer to section M-1-20(g) for information on measuring entrance location.
<b>20</b> Entryway Configuration		Recessed between 3' and 8', maximum 8' wide, from the portion of the Type A frontage facade closest to the street	Refer to subsection M-1-25(e) for principal entryway requirements.

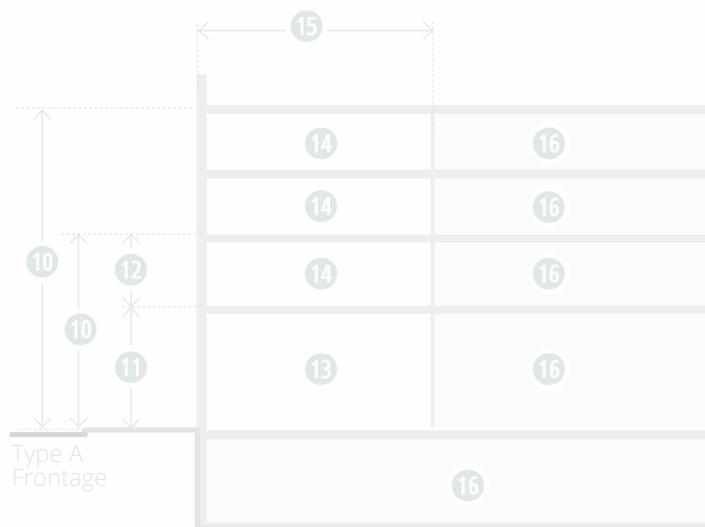


Figure M-1 (18). Storefront Building Section: Height & Use Requirements

# Building Types

## Main Street Storefront Building Type

	BOULDER JUNCTION PHASE I	REFERENCES/ADDITIONAL REQUIREMENTS
21 Entrance/Ground Story Elevation Grade	80% of entrances and the ground story shall be within 1.5' (vertically) of adjacent sidewalk elevation	
22 Ground Story Vertical Facade Divisions	One minimum 2" deep expression line per every 30' of facade width	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for expression line.
23 Horizontal Facade Divisions	One minimum 2" deep expression line within 3' of the top of the ground story and the bottom of any 5th story	
24 Permitted Cap Types	Parapet, pitched, flat	Refer to section M-1-21 for cap types; and other cap requirements.



**Figure M-1 (19).** Storefront Building Elevation: Facade Design Requirements

### M-1-16. COMMERCIAL STOREFRONT BUILDING TYPE

Refer to M-1-6 Regulating Plans for the locations of buildings in the form-based code areas.

		BOULDER JUNCTION PHASE I	REFERENCES/ ADDITIONAL REQUIREMENTS
<b>BUILDING SITING</b> Refer to <b>FIGURE M-1 (20)</b> .			
1	Minimum Type A Frontage Build-to Zone Coverage	60% required	
2	Type A Frontage Build-to Zone	12' to 20' along Valmont and 30th Street; 0' to 10' along new streets	Build-to zones are measured from the outside edge of any public access easement for sidewalk or the right-of-way, if no public access easement for sidewalk is required or exists. Refer to subsection M-1-20(b) for additional information.
3	Type B Frontage Build-to Zone	0' to 10'	
4	Minimum Side Setback	5'; 0' required at paseo or multi-use path	
5	Minimum Rear Setback	15'; 25' required if no alley; 0' required at paseo or multi-use path	For paseos and multi-use paths, refer to the regulating plans and the Transit Village Connections Plan for locations and details.
6	Maximum Building Length along any Public Way	90'	Refer to section M-1-28 for building massing requirements.
7	Maximum Site Impervious Coverage Additional Semi-Pervious Coverage	70% 25%	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for semi-pervious coverage.
8	Surface or Accessory Parking & Loading Location Refuse & Recycling, Utilities Location	Parking yard & interior side yard  Parking yard only	Refer to Sections 9-9-9 and 9-9-12, B.R.C. 1981, for loading and screening requirements.
9	Permitted Driveway Access Locations Permitted Garage Entrance Location	Alley Rear facade preferred, Interior side facade permitted, one permitted on Type B Frontage facade	If no alley exists or is planned, driveway access off a Type B street is permitted.

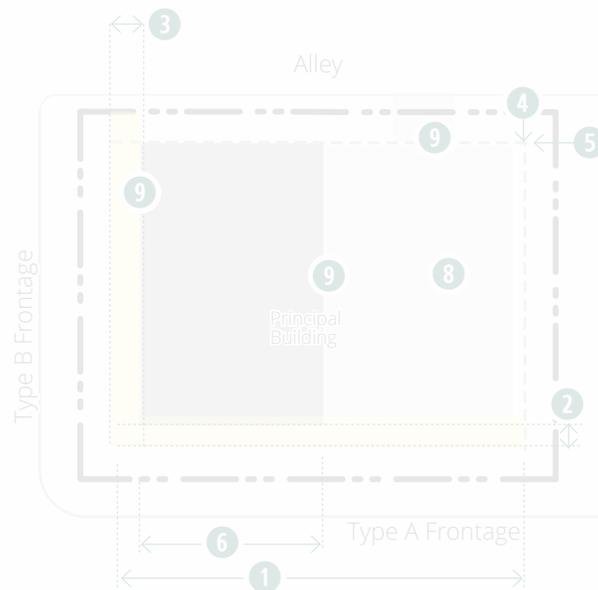


Figure M-1 (20). Commercial Storefront Building Plan: Building Siting Requirements

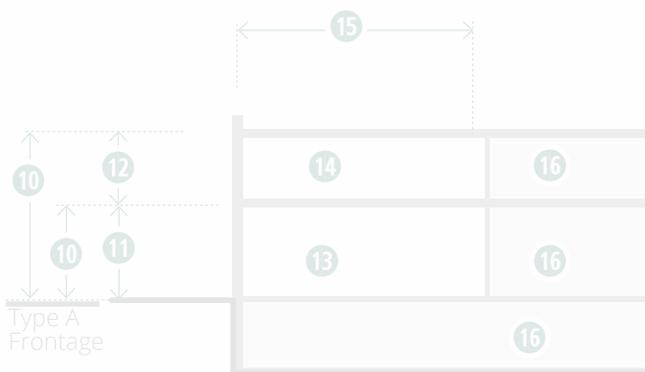
# Building Types

## Commercial Storefront Building Type

### BOULDER JUNCTION PHASE I

### REFERENCES/ ADDITIONAL REQUIREMENTS

HEIGHT Refer to <b>FIGURE M-1 (21)</b> .			REFERENCES/ ADDITIONAL REQUIREMENTS
<b>10</b> Overall:	Minimum Height Maximum Height	1 story minimum 3 stories maximum, up to 35'	Refer to subsection M-1-20(2) for height measuring requirements and section M-1-28 for building massing requirements. Subsection M-1-21(d), "Towers," B.R.C. 1981, allows additional height in a limited footprint.
<b>11</b> Ground Story:	Minimum Height Maximum Height	12' 18'	Stories are measured floor to floor. Refer to subsection M-1-20(e) for explanation of measurement.
<b>12</b> Upper Stories:	Minimum Height Maximum Height	9' 14'	Stories are measured floor to floor. Refer to subsection M-1-20(e) for explanation of measurement.
USES Refer to <b>FIGURE M-1 (21)</b> .			
<b>13</b> All Frontages & Stories		All uses consistent with chapter 9-6;	Refer to Chapter 9-6, B.R.C. 1981, for permitted uses per zoning district and definition of uses..
<b>15</b> Required Occupied Building Space		Minimum 20' deep on all full height floors from any street facade	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for occupied building space.
<b>16</b> Parking within Building		Permitted fully in any basement and in rear of all other stories. Prohibited where occupied space is required.	Refer to occupied building space requirement above.



**Figure M-1 (21).** Commercial Storefront Building Section: Height & Use Requirements



**Figure M-1 (22).** Storefront Building Elevation: Facade Design Requirements

# Building Types

## Commercial Storefront Building Type

### BOULDER JUNCTION PHASE I

### REFERENCES/ ADDITIONAL REQUIREMENTS

#### FACADE & CAP REQUIREMENTS Refer to FIGURE M-1 (22).

		REFERENCES/ ADDITIONAL REQUIREMENTS
17	Type A Frontage Ground Story Transparency	Minimum 55% measured between 2' and 8' vertically from average grade of adjacent sidewalk.
18	Required Transparency on All Street, Courtyards, & Public Way Facades	Minimum 15%, measured per story of all stories, including blank wall limitations defined in subsection M-1-20(f).
19	Entrance Location & Number	Principal entrance required on Type A frontage facade; entrances required a minimum of one per every 50' of building facade
20	Entrance Configuration	Recessed between 3' and 8', maximum 8' wide, from the portion of the Type A frontage facade closest to the street
21	Entrance/Ground Story Elevation Grade	80% of entrances and the ground story shall be within 1.5' (vertically) of adjacent sidewalk elevation
22	Ground Story Vertical Facade Divisions	One minimum 2" deep expression line per every 30' of facade width
23	Horizontal Facade Divisions	One minimum 2" deep expression line within 3' of the top of the ground story
24	Permitted Cap Types	Parapet, pitched, flat; one tower permitted per building.

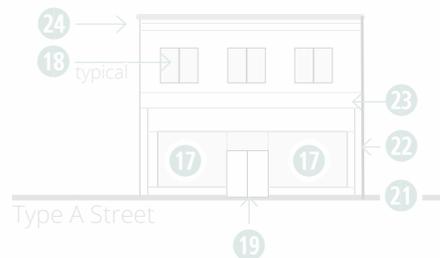


Figure M-1 (23). Storefront Building Elevation: Facade Design Requirements

# Building Types

## General Building Type

### M-1-17. GENERAL BUILDING TYPE

Refer to M-1-6 Regulating Plans for the locations of buildings in the form-based code areas.

	BOULDER JUNCTION PHASE I	ALPINE-BALSAM	REFERENCES/ ADDITIONAL REQUIREMENTS
<b>BUILDING SITING</b> Refer to FIGURE M-1 (24).			
1 Minimum Type A Frontage Build-to Zone Coverage	90% required	80% required	One courtyard, maximum of 30% of facade width or 30 feet wide, whichever is less, may count towards Type A frontage build-to zone coverage.
2 Type A Frontage Build-to Zone	5' to 10' from minimum streetscape, see note right	5' to 20' from minimum public way or r.o.w., see note right	Build-to zones are measured from the outside edge of any public access or waterway easement for sidewalk or the right-of-way, if no public access easement for sidewalk is required or exists. Refer to M-1-20(b) for additional information.
3 Type B Frontage Build-to Zone	5' to 10' from minimum streetscape, see note right	5' to 10' from minimum public way or r.o.w., see note right	
4 Minimum Side Setback	5'; 0' required at paseo or multi-use path		For paseos and multi-use paths, refer to the regulating plans and the Transit Village Connections Plan for locations and details.
5 Minimum Rear Setback	10'; 25' required if no alley; 0' required at paseo or multi-use path		
6 Maximum Building Length along any Public Way	150'	65' in General Mix 2; none in General Mix 1; refer to map, Figure M-1 (2).	Refer to section M-1-28 for building massing requirements.
7 Maximum Site Impervious Coverage Additional Semi-Pervious Coverage	70% 25%	65% 25%	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for semi-pervious coverage.
8 Surface or Accessory Parking, Refuse & Recycling, Utilities, & Loading Location	Parking yard only	No surface parking allowed; trash location in interior or outside on Type B street frontage, fully enclosed	Refer to Sections 9-9-9 and 9-9-12, B.R.C. 1981, for loading and screening requirements.
9 Permitted Driveway Access Locations Permitted Garage Entrance Location	Alley Rear facade only; if no rear facade, Type B Frontage street is permitted	Type B Frontage street Type B Frontage facade; limited to one street frontage only, must be same frontage as any use in 8, above.	If no alley exists or is planned, driveway access off a Type B street is permitted.

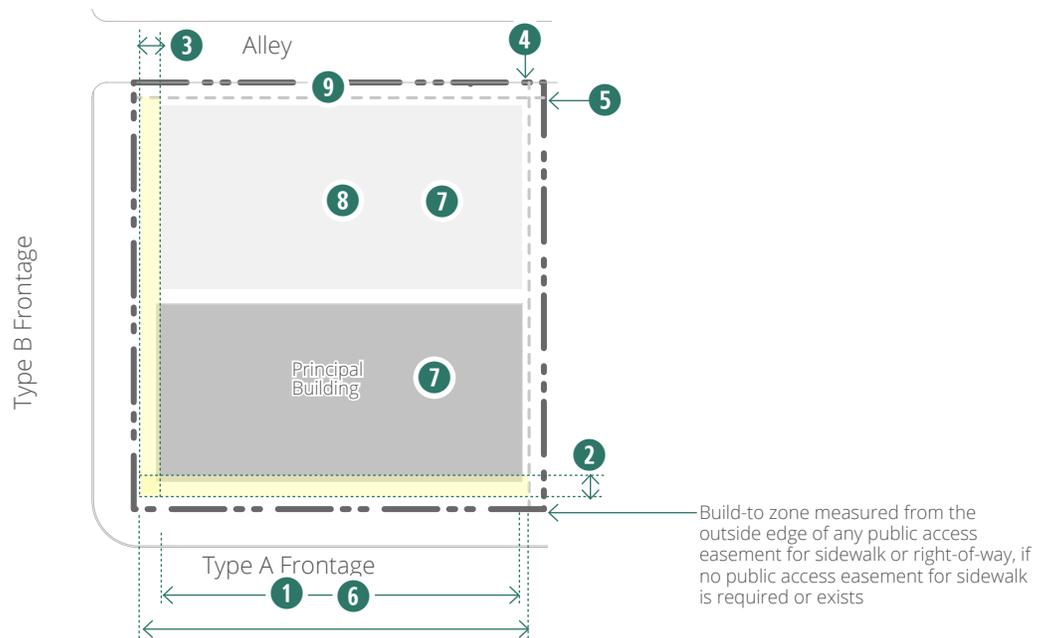


Figure M-1 (24). General Building: Building Siting

		BOULDER JUNCTION PHASE I	ALPINE-BALSAM	REFERENCES/ ADDITIONAL REQUIREMENTS
<b>HEIGHT</b> Refer to FIGURE M-1 (25).				
<b>10</b> Overall:	Minimum Height Maximum Height	2 stores minimum 3 stories maximum, up to 40' in height north of Goose Creek and west of Junction Place; 5 stories maximum, up to 55' unless otherwise required by sections M-1-6, Regulating Plans, and/or M-1-8, View Corridors.	2 stores minimum 3 stories maximum, maximum story height 35' plus any pitched roof per M-1-21, maximum 55'; 4 stories maximum, maximum overall height 55'; maximum height locations per Regulating Plan, Figure M-1 (2).	Refer to subsection M-1-20(2) for height measuring requirements and section M-1-28 for building massing requirements. Subsection M-1-21(d), "Towers," B.R.C. 1981, allows additional height in a limited footprint.
<b>11</b> All Stories:	Minimum Height	9'	9'; where storefront is required per section M-1-6, Regulating Plans, 15'	Stories are measured floor to floor. Refer to subsection M-1-20(e) for explanation of measurement.
	Maximum Height	18'	18'	
<b>USES</b> Refer to FIGURE M-1 (25).				
<b>13</b> Type A Frontage Ground Story		Where storefront is required per section M-1-6, Regulating Plans, limited to dining & entertainment, personal service, retail uses consistent with chapter 9-6		
<b>14</b> All Frontages & Stories		All uses consistent with chapter 9-6	All uses consistent with chapter 9-6; in General Mix 2, residential and accessory uses only, maximum 4 units per building, consistent with chapter 9-6; refer to map, Figure M-1 (2).	Refer to Chapter 9-6, B.R.C. 1981, for permitted uses per zoning district and definition of uses.
<b>15</b> Required Occupied Building Space		Minimum 20' deep on all full height floors from any street facade	Minimum 20' deep on all full height floors from any street and public way facade	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for occupied building space.
<b>16</b> Parking within Building		Permitted fully in any basement and in rear of all other stories. Prohibited where occupied space is required.		Refer to occupied building space requirement above.

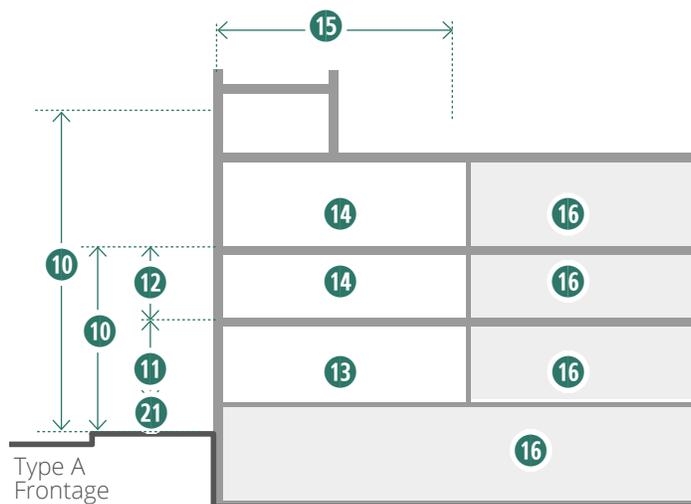


Figure M-1 (25). General Building: Height & Use Requirements

# Building Types

## General Building Type

	BOULDER JUNCTION PHASE I	ALPINE-BALSAM	REFERENCES/ ADDITIONAL REQUIREMENTS
<b>FACADE &amp; CAP REQUIREMENTS</b> Refer to FIGURE M-1 (26).			
17 Type A Frontage Ground Story Transparency	Where storefront is required per M-1-6, <i>Regulating Plans</i> , minimum 75% required between 2' and 10' vertically from average grade of adjacent sidewalk, extending a minimum of 60 feet horizontally along facade from building corner.		Note that subsection M-1-13(g) requires this treatment to turn corners. Refer to subsection M-1-20(f) for information on measuring transparency.
18 Required Transparency on All Street, Courtyard, & Public Way Facades	Minimum 20%, measured per story of all stories, including blank wall limitations defined in M-1-20(f).		Refer to subsection M-1-20(f) for information on measuring transparency.
19 Entrance Location & Number	Principal entrance required on Type A frontage facade: entrances required a minimum of one per ground story residential unit and/or one per every 50' of building facade for other uses. Where storefront is required per M-1-6, <i>Regulating Plans</i> , one entrance per 60 feet of storefront area.		Refer to subsection M-1-20(g) for information on measuring entrance location.
20 Entrance Configuration	Entry doors shall be off a stoop, minimum 6' wide and 3' deep. Where storefront is required per M-1-6, <i>Regulating Plans</i> , recessed between 3' and 8', maximum 8' wide, from the portion of the Type A frontage facade closest to street.		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for stoop and porch. Refer to subsection M-1-25(e) for principal entryway requirements.
21 Entrance/Ground Story Elevation Grade	80% of entrances and the ground story shall be within 30" (vertically) of adjacent street sidewalk average elevation OR between 30" and 5' (vertically) with visible basement (transparency required)		Exception: Entrances along Goose Creek frontage shall be located in reference to the elevation of 30th Street, Carbon Place, and/or Junction Place, whichever is closest.
22 Ground Story Vertical Facade Divisions	One minimum 2" deep expression line per every 60' of facade width		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for expression line.
23 Horizontal Facade Divisions	One minimum 2" deep expression line within 3' of the top of the ground story and the bottom of any 5th story		
24 Permitted Cap Types	Parapet, pitched, flat:	Parapet, pitched, flat:	Refer to section M-1-21 for cap types; and other cap requirements.

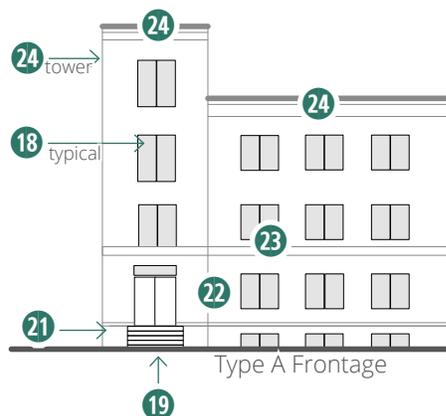


Figure M-1 (26). General Building: Facade Design Requirements

### M-1-18. ROW BUILDING TYPE

Refer to M-1-6 Regulating Plans for the locations of buildings in the form-based code areas.

	BOULDER JUNCTION PHASE I	ALPINE-BALSAM	REFERENCES/ADDITIONAL REQUIREMENTS
<b>BUILDING SITING</b> Refer to FIGURE M-1 (27).			For the purposes of the Row Building, a building consists of multiple vertical units.
1 Minimum Type A Frontage Build-to Zone Coverage	80% required	80% required	Each unit shall have a facade located within the build-to zone, except 1 of every 2 units may front a courtyard or outdoor space type. Courtyards, minimum 30 feet wide and 30 feet deep, may count towards Type A frontage build-to zone coverage.
2 Type A Frontage Build-to Zone	5' to 15' from minimum streetscape, see note right	5' to 15' from public way or r.o.w., see note right	Build-to zones are measured from the outside edge of any public access easement for sidewalk or the right-of-way, if no public access easement for sidewalk is required or exists. Refer to subsection M-1-20(b) for additional information.
3 Type B Frontage Build-to Zone	5' to 15' from minimum streetscape, see note right	5' to 15' from public way or r.o.w., see note right	
4 Minimum Side Setback	7.5'; 0' required at paseo or multi-use path		For paseos and multi-use paths, refer to the regulating plans and the Transit Village Connections Plan for locations and details.
5 Minimum Rear Setback	20'; 30' if no alley; 5' for detached garage		
6 Space between Buildings	Minimum 3 units; maximum 6 units or 120', whichever is less. Paseo or multi-use path is required between buildings.		For paseos and multi-use paths, refer to the regulating plans and the Transit Village Connections Plan for locations and details. Refer to section M-1-28 for building massing requirements.
7 Maximum Site Impervious Coverage Additional Semi-Pervious Coverage	60% 20%	60% 20%	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for semi-pervious coverage.
8 Minimum Yard Area	Minimum 225 square feet rear yard required for each unit not fronting a courtyard or outdoor space type.		Minimum courtyard and outdoor space area must meet the standards of one of the applicable types of useable outdoor space specified in Subsection 9-9-11(e), B.R.C. 1981.
9 Surface or Accessory Parking, Refuse & Recycling, Utilities, & Loading Location	Parking yard only	Parking yard only	Refer to Sections 9-9-9 and 9-9-12, B.R.C. 1981, for loading and screening requirements.
10 Permitted Driveway Access Locations Permitted Garage Entrance Location	Alley.  Rear facade only; if no rear facade, one shared entrance off a Type B frontage street is permitted.	Alley or one shared access off Type B street Rear or alley-facing facade only	If no alley exists or is planned, driveway access off a Type B street is permitted.

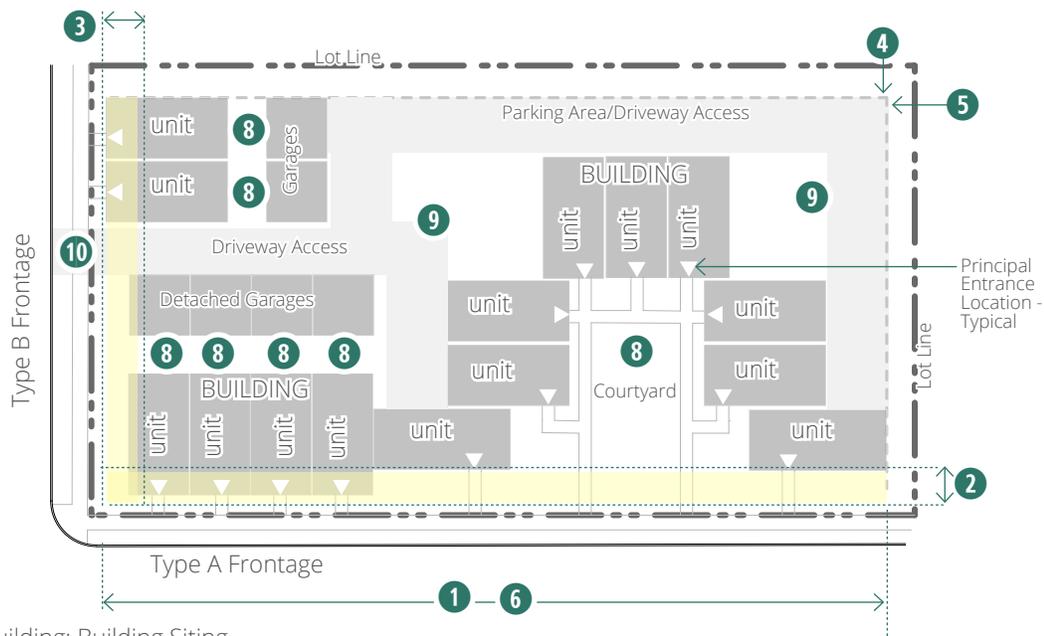


Figure M-1 (27). Row Building: Building Siting

# Building Types

## Row Building Type

		BOULDER JUNCTION PHASE I	ALPINE-BALSAM	REFERENCES/ADDITIONAL REQUIREMENTS
<b>HEIGHT</b> Refer to FIGURE M-1 (28).				
<b>11</b>	Overall: Minimum Height Maximum Height	2 stories minimum 3.5 stories maximum, up to 35'	2 stories minimum 3 stories maximum, up to 35'	Refer to subsection M-1-20(2) for height measuring requirements and section M-1-28 for building massing requirements. Subsection M-1-21(d), "Tower," B.R.C. 1981, allows additional height in a limited footprint.
<b>12</b>	All Stories: Minimum Height Maximum Height	9' 16'	9' 14'	Stories are measured floor to floor. Refer to subsection M-1-20(e) for explanation of measurement.
<b>USES</b> Refer to FIGURE M-1 (28).				
<b>14</b>	All Frontages & Stories	All uses consistent with chapter 9-6	Residential and accessory uses consistent with chapter 9-6	Refer to Chapter 9-6, B.R.C. 1981, for permitted uses per zoning district and definition of uses.
<b>15</b>	Required Occupied Building Space	Minimum 20' deep on all full height floors from any Type A facades		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for occupied building space.

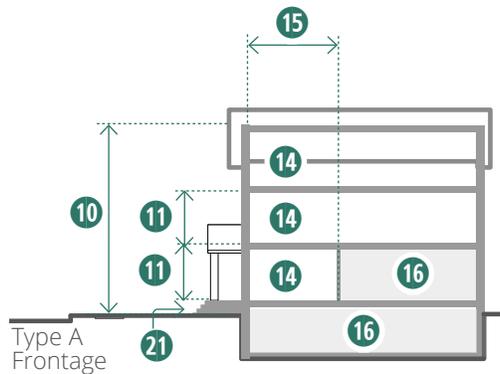


Figure M-1 (28). Row Building: Height & Use Requirements

	BOULDER JUNCTION PHASE I	ALPINE-BALSAM	REFERENCES/ADDITIONAL REQUIREMENTS
16 Parking within Building	Permitted fully in any basement and in rear of ground story. Prohibited where occupied space is required.		Refer to occupied building space requirement above.
<b>FAÇADE &amp; CAP REQUIREMENTS</b> Refer to FIGURE M-1 (29).			
18 Required Transparency on All Street, Courtyards, & Public Way Façades	Minimum 20%, measured per story of all stories, including blank wall limitations defined in subsection M-1-20(f).		Refer to subsection M-1-20(f) for information on measuring transparency.
19 Entrance Location & Number	One entrance required per unit on the Type A frontage façade except 1 of every 2 units may front a courtyard, outdoor space type, or Type B frontage; minimum of one principal entrance per 30' of façade.		Refer to subsection M-1-20(g) for information on measuring entrance location.
20 Entrance Configuration	Entry doors shall be off a stoop, minimum 4' wide and 3' deep; OR a porch, minimum 8' wide & 5' deep. No more than 2 entry doors may be located off each stoop or porch.		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for stoop and porch. Refer to subsection M-1-25(e) for principal entryway requirements.
21 Entrance/Ground Story Elevation Grade on Type A Frontage Façade	All Type A frontage façade entrances and the ground story shall be within 30" (vertically) of adjacent street sidewalk average elevation OR between 30" and 5' (vertically) with visible basement (transparency required)		Exception: Entrances along Goose Creek frontage shall be located in reference to the elevation of 30th Street, Carbon Place, and/or Junction Place, whichever is closest.
22 Ground Story Vertical Façade Divisions	One minimum 2" deep expression line per every 60' of façade width or every 2 units, whichever is less		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for expression line and visible basement.
23 Horizontal Façade Divisions	One minimum 2" deep expression line within 3' of any visible basement		
24 Permitted Cap Types	Parapet, pitched, flat; one tower is permitted per building.	Parapet, pitched, flat; one tower is permitted per every 8 units.	Refer to section M-1-21 for cap types; and other cap requirements.



Figure M-1 (29). Row Building: Façade Design Requirements

# Building Types

## Civic Building Type

### M-1-19. CIVIC BUILDING TYPE

The Civic building type is not mapped on the regulating plans, but is permitted in any location, limited by the permitted uses inside. Refer to M-1-6 Regulating Plans.

	<b>BOULDER JUNCTION PHASE I</b>	<b>ALPINE-BALSAM</b>	<b>REFERENCES/ ADDITIONAL REQUIREMENTS</b>
<b>BUILDING SITING</b> Refer to FIGURE M-1 (30).			
1 Minimum Type A Frontage Coverage	None required	None required	.
2 Type A Frontage Minimum Setback	20'	20'	
3 Type B Frontage Minimum Setback	15'	15'	
4 Minimum Side Setback	15'; 0' required at paseo or multi-use path		For paseos and multi-use paths, refer to the regulating plans and the Transit Village Connections Plan for locations and details.
5 Minimum Rear Setback	15'; 0' required at paseo or multi-use path		
6 Maximum Building Length	None required	None required	Refer to section M-1-28 for building massing requirements.
7 Maximum Site Impervious Coverage Additional Semi-Pervious Coverage	50% 20%	50% 20%	Refer to Section M-1-8, "Definitions," B.R.C. 1981, for semi-pervious coverage.
8 Surface or Accessory Parking, Refuse & Recycling, Utilities, & Loading Location	Parking yard only	No surface parking allowed; trash location in interior or outside on Type B street frontage, fully enclosed	Refer to Sections 9-9-9 and 9-9-12, B.R.C. 1981, for loading and screening requirements.
9 Permitted Driveway Access Locations Permitted Garage Entrance Location	Alley Rear facade only; if no rear facade, Type B frontage street is permitted	Type B Frontage street Type B Frontage facade; limited to one street frontage only, must be same frontage as any use in 8, above.	If no alley exists or is planned, driveway access off a Type B street is permitted.

### HEIGHT

Refer to FIGURE M-1 (31).

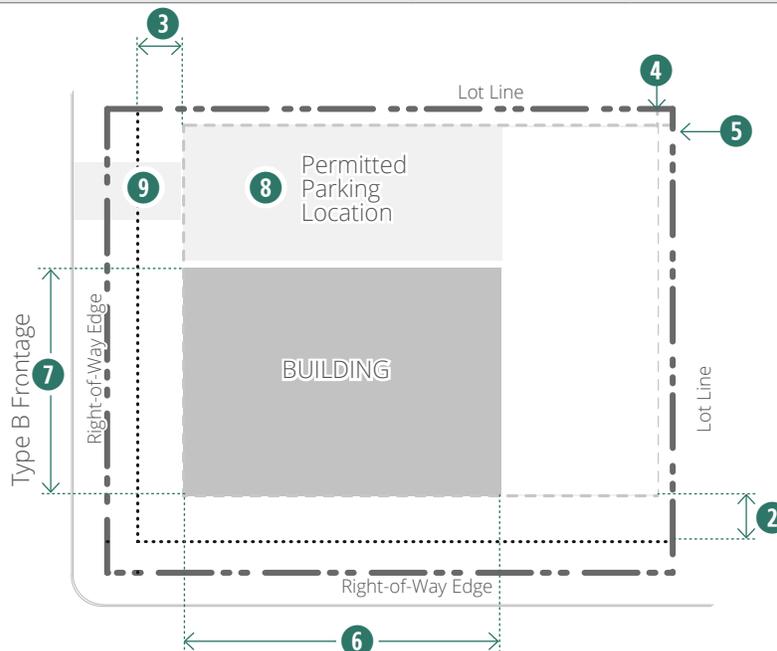
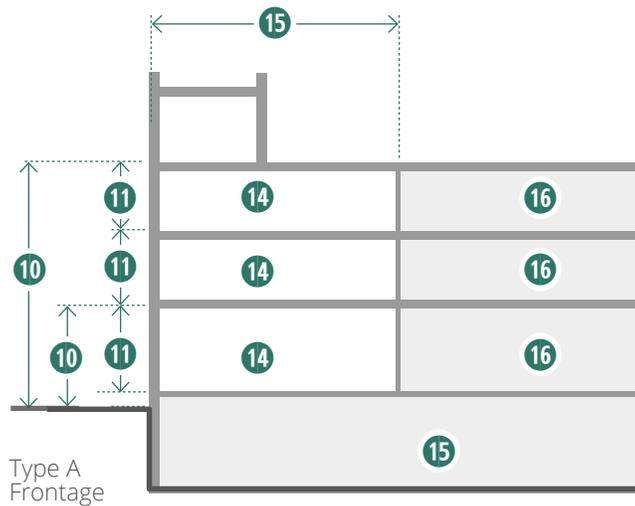


Figure M-1 (30). Civic Building: Building Siting

		<b>BOULDER JUNCTION PHASE I</b>	<b>ALPINE-BALSAM</b>	<b>REFERENCES/ ADDITIONAL REQUIREMENTS</b>
<b>10</b> Overall:	<b>Minimum Height Maximum Height</b>	1 stories 5 stories up to 55'	1 stories 5 stories up to 55'	Refer to subsection M-1-20(2) for height measuring requirements and section M-1-28 for building massing requirements. Subsection M-1-21(d), "Towers," B.R.C. 1981, allows additional height in a limited footprint.
<b>11</b> All Stories:	<b>Minimum Height Maximum Height</b>	9' 18'; 24' on single story building	9' 18'; 24' on single story building	Stories are measured floor to floor. Refer to subsection M-1-20(e) for explanation of measurement.
<b>USES</b> Refer to FIGURE M-1 (31).				
<b>14</b> All Frontages & Stories		Limited to museum, theater, governmental facilities, hospitals, religious assemblies, transportation stations, park & recreation uses, public schools consistent with chapter 9-6		Refer to Chapter 9-6, B.R.C. 1981, for permitted uses per zoning district and definition of uses.
<b>15</b> Required Occupied Building Space		Minimum 20' deep on all full height floors from any street facade		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for occupied building space.
<b>16</b> Parking within Building		Permitted fully in any basement and in rear of all other stories. Prohibited where occupied space is required.		Refer to occupied building space requirement above.
<b>FACADE &amp; CAP REQUIREMENTS</b> Refer to FIGURE M-1 (32).				

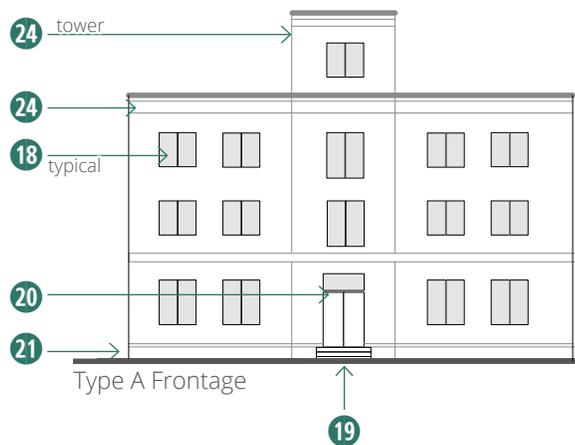


**Figure M-1 (31).** Civic Building: Height & Use Requirements

# Building Types

## Civic Building Type

	<b>BOULDER JUNCTION PHASE I</b>	<b>ALPINE-BALSAM</b>	<b>REFERENCES/ ADDITIONAL REQUIREMENTS</b>
<b>18</b> Required Transparency on All Street, Courtyards, & Public Way Facades	Minimum 15%, measured per story of all stories.		Refer to subsection M-1-20(f) for information on measuring transparency.
<b>19</b> Entrance Location & Number	Principal entrance required on Type A frontage facade		Refer to section M-1-20(g) for information on measuring entrance location.
<b>20</b> Entrance Configuration	No requirement other than principal entryway requirements		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for stoop and porch. Refer to subsection M-1-25(e) for principal entryway requirements.
<b>21</b> Entrance/Ground Story Elevation Grade	80% of entrances and the ground story shall be within 30" (vertically) of adjacent street sidewalk average elevation OR between 30" and 5' (vertically) with visible basement (transparency required)		Exception: entrances along Goose Creek frontage shall be located in reference to the elevation of 30th Street, Carbon Place, and/or Junction Place, whichever is closest.
<b>22</b> Ground Story Vertical Facade Divisions	No requirement		Refer to Section M-1-8, "Definitions," B.R.C. 1981, for expression line.
<b>23</b> Horizontal Facade Divisions	No requirement		
<b>24</b> Permitted Cap Types	Parapet, pitched, flat,		Refer to section M-1-21 for cap types; and other cap requirements.



**Figure M-1 (32).** Civic Building: Facade Design Requirements

# Building Types

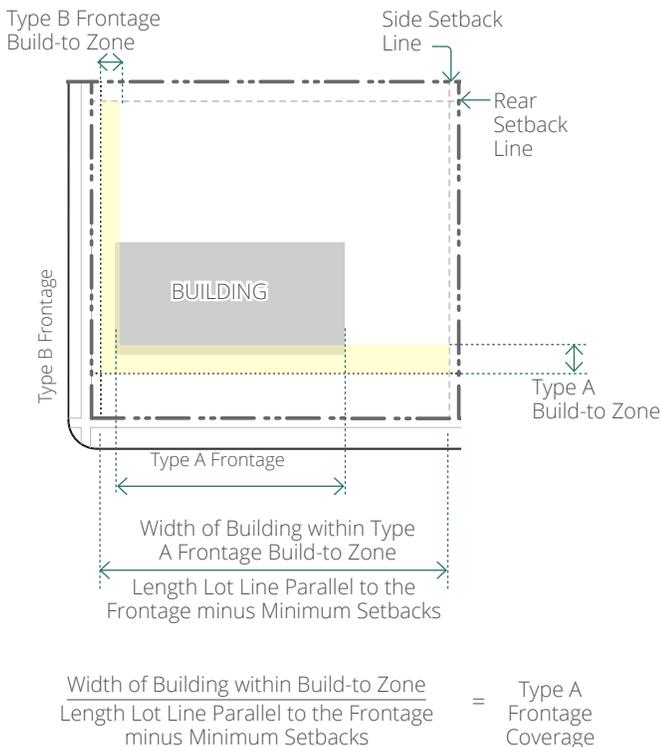
## Measurement of Building Type Requirements

### M-1-20. MEASUREMENT OF BUILDING TYPE REQUIREMENTS

The standards outlined in the tables in sections M-1-15 through M-1-19, applicable to each building type, shall be measured and calculated consistent with the following standards:

(a) **Minimum Type A Frontage Build-to Zone Coverage.** The minimum percentage of building facade along the Type A frontage of a lot is measured as follows:

- (1) **Measurement.** The minimum Type A frontage build-to zone coverage shall, at a minimum, equal the width of the principal structures, as measured within the build-to zone along the frontage edge, divided by the length of the frontage parallel to the property line following the street minus setbacks. Refer to Figure M-1 (33). **Minimum Type A Frontage Build-to Zone Coverage.**



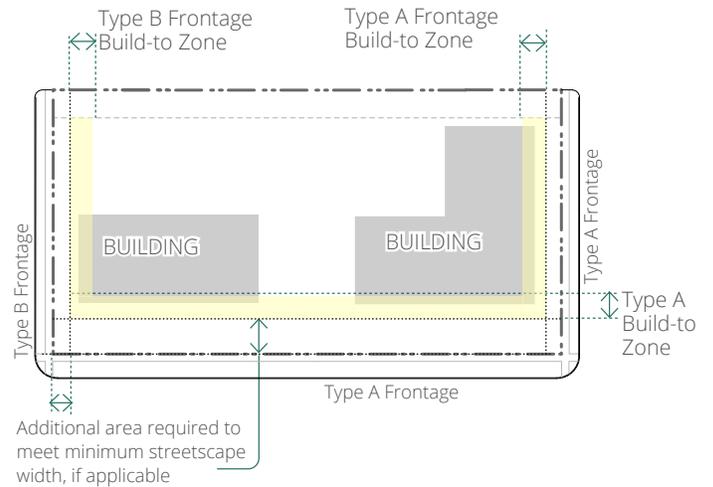
**Figure M-1 (33).** Minimum Type A Frontage Build-to Zone Coverage

- (2) **Courtyards.** For some building types, courtyards located along the facade in the build-to zone count towards the minimum coverage. Refer to building type requirements of Sections M-1-15 through M-1-19, B.R.C. 1981.

- (3) **Outdoor Space Type.** Open spaces meeting the requirements of one of the outdoor space types established in this appendix are exempt from the minimum Type A frontage build-to zone coverage requirement.

(b) **Build-to Zone.** The build-to zone shall be calculated and measured as follows. Refer to Figure M-1 (34). **Build-to Zones.**

- (1) **Measurement.** The build-to zone for all frontages is measured from the property line parallel to the frontage from any waterway easement or public access easement for sidewalk required under



**Figure M-1 (34).** Build-to Zones



**Figure M-1 (35).** Site Impervious and Semi-Pervious Coverage

# Building Types

## Measurement of Building Type Requirements

Section 9-9-8, “Reservations, Dedications, and Improvement of Rights-of-Way,” B.R.C. 1981, or the right-of-way if no public access easement for sidewalk is required or exists.

- (2) **Height.** All building facades located within the build-to zone shall meet the minimum building height of the building.
- (3) **Encroachments.** Awnings, architectural projections, balconies, and building mounted signage may extend beyond the build-to zone into any yard area, but shall not extend into the street right-of-way unless approved with a revocable permit or lease, as applicable.

**(c) Maximum Site Impervious and Additional Semi-Pervious Coverage.** Site impervious and additional semi-pervious coverage shall be calculated and measured as follows. Refer to Figure M-1 (35). Site Impervious and Semi-Pervious Coverage.

- (1) **Maximum Site Impervious Coverage.** The maximum site impervious coverage is the maximum

percentage of a lot permitted to be covered by structures, pavement, and other impervious surfaces.

- (2) **Additional Semi-Pervious Coverage.** In addition to the allowable impervious coverage on a site, a maximum amount of additional semi-pervious coverage is permitted.

**(d) Overall Minimum and Maximum Height.** (Refer to Figure M-1 (36). Measuring Stories with Floor-to-Floor Height).

- (1) **Minimum Overall Height.** Each building type requires a minimum number of stories. The building must meet the minimum required height along all Type A frontage facades and measured a minimum of thirty feet deep into the building.
- (2) **Maximum Overall Height.** Maximum heights are specified both in number of stories and overall dimension. This requirement applies to the entire building.

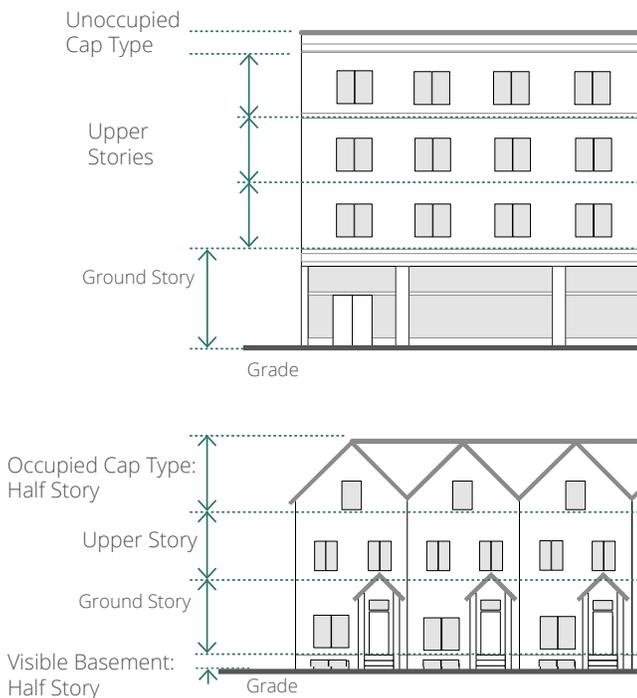
(A) **Towers.** Where specifically allowed in the building type tables, Sections M-1-15 through M-1-19, B.R.C. 1981, towers may exceed the overall maximum height of the building type per subsection (f) of Section M-1-21, “Cap Types,” B.R.C. 1981. Towers shall not exceed the maximum height per section 84 of the charter of the City of Boulder.

(B) **Cap Type.** Where specified in subsection (f) of Section M-1-21, “Cap Types,” B.R.C. 1981, certain cap types may allow additional height.

(C) **Maximum Heights per the City Charter.** Under no circumstances may any building or structure exceed the height limitations established in section 84 of the charter of the City of Boulder.

(D) **Height Measurement Standards.** Height shall be measured consistent with height measurement standards of Section 9-7-5, “Building Height,” B.R.C. 1981, and the definition of “height” within Section 9-16-1, “General Definitions,” B.R.C. 1981.

(E) **View Corridors.** Height is subject to additional limitations where maximum heights are restricted pursuant to the regulating plan to preserve a view corridor. Refer to Sections “M-1-6. Regulating Plans” on page 6,



**Figure M-1 (36).** Measuring Stories with Floor-to-Floor Height

# Building Types

## Measurement of Building Type Requirements

“Regulating Plans,” and M-1-7, “View Corridors,” B.R.C. 1981.

- (3) **Two Half Stories.** If a building has both a half story within the roof and a half story that is partially above and partially below grade, the combined height of the two half stories shall be considered one full story.

(e) **Minimum and Maximum Height per Story.** Each story is measured with a range of permitted floor-to-floor heights. Refer to Figure M-1 (36). **Measuring Stories with Floor-to-Floor Height.**

- (1) **Measurement.** Story height shall be measured in feet between the floor of a story to the floor of the story above it. Minimum and maximum floor-to-floor heights are required to be met along facades for a minimum of eighty percent of each story.
- (2) **Single Story Buildings and Top Story Measurement.** For single story buildings and the uppermost story of a multiple story building, the minimum floor-to-floor height shall be one foot less than that required per building type. The measurement shall be from the floor of the story to the ceiling.
- (3) **Mezzanines.** Mezzanines may be included within the floor-to-floor height of any story. Mezzanines occupying more than thirty percent of the floor area below and extending above the story’s allowable floor-to-floor height shall count as an additional story and shall meet transparency requirements in subsection (e)(5), below.
- (4) **Taller Spaces.** Spaces exceeding the allowable floor-to-floor heights of the building type are not permitted on Type A frontage facades; however, such spaces are allowed on interior lots and Type B frontage facades.

(f) **Minimum Required Transparency.** Per the requirements of each building type, a minimum amount of transparency is required on all stories of street, courtyard, and public way facades.

- (1) **Measurement.** Minimum facade transparency is measured from floor-to-floor of each story separately, except for required minimum ground story transparency (refer to Paragraph M-1-20(f) (4), B.R.C. 1981, below). Refer to Figure M-1 (37).

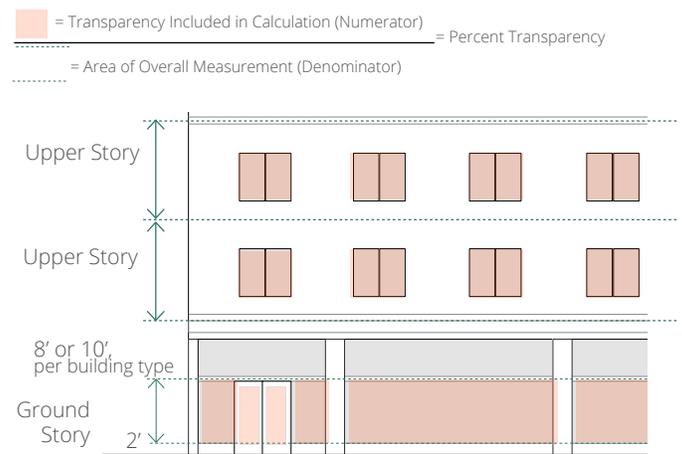


Figure M-1 (37). Measuring Minimum Facade Transparency

Examples of rectangular areas measured per story on a building facade, meeting the blank wall limitation requirement

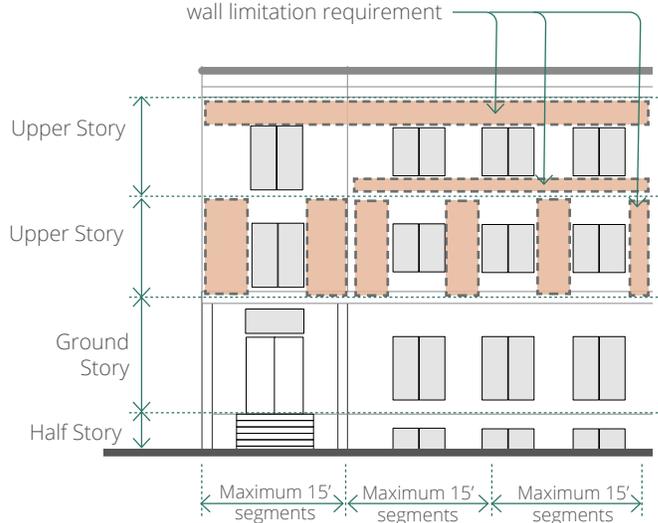


Figure M-1 (38). Measuring Blank Wall Limitations

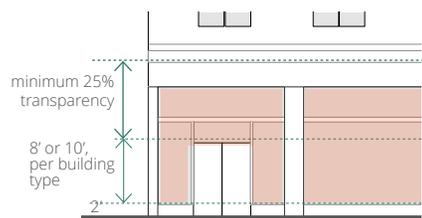
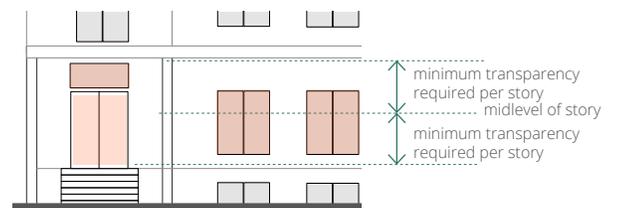


Figure M-1 (39). Transparency on Tall Stories

# Building Types

## Measurement of Building Type Requirements

### Measuring Minimum Facade Transparency.

Transparency requirements shall be met with windows meeting the standards for transparency as defined in Section M-1-8, "Definitions," B.R.C. 1981. The measurement may include the frame, mullions, and muntins, but shall not include trim or casing.

- (2) **Blank Wall Segments.** No rectangular area greater than thirty percent of the story's facade, as measured floor to floor, shall be without transparency. And, no horizontal segment of a story's facade greater than fifteen feet in width shall be without transparency. Refer to [Figure M-1 \(38\)](#). **Measuring Blank Wall Limitations.**
- (3) **Exception.** When the facade of any story is located less than six feet from another parallel building facade, no minimum transparency is required for that story.
- (4) **Minimum Ground Story Transparency.** When required by the building type tables of Sections [M-1-15](#) through [M-1-19](#), B.R.C. 1981, ground story transparency shall be measured between two feet and either eight or ten feet, as specified per building type, from the average grade at the base of the facade. The minimum ground story transparency requirements supersedes the minimum transparency required for the building type.
- (5) **Mezzanines.** Mezzanines shall be treated as a separate story and include the required upper story transparency amounts.
- (6) **Tall Stories.** Stories that are eighteen feet or taller in height shall include additional transparency consistent with the following standards. Refer to [Figure M-1 \(39\)](#). **Transparency on Tall Stories.**

#### (A) Separate Ground Story Transparency Required.

When a separate minimum ground story transparency is required per the building types requirements of Sections [M-1-15](#) through [M-1-19](#), B.R.C. 1981, the facade design shall fulfill that requirement in addition to a minimum of twenty-five percent transparency for the remainder of the ground story.

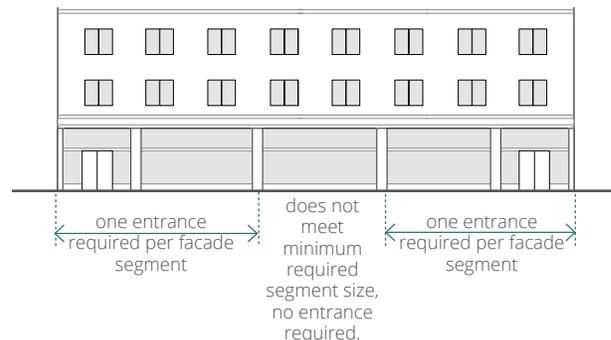
#### (B) No Separate Ground Story Transparency Required.

Except on a ground story facade to which a Type A frontage ground story facade transparency requirement applies, a tall story

shall be treated as two separate stories, divided in half horizontally, with the minimum transparency per story applied to each half.

- (7) **Half Stories.** All half stories located within the roof structure and within visible basements are required to meet the minimum required transparency.

- (g) **Minimum Number of Required Entrances.** Entrances shall be provided consistent with the entrance location and number requirements established for the building type and consistent with [Figure M-1 \(40\)](#). **Number of Required Entrances.**



**Figure M-1 (40).** Number of Required Entrances

### M-1-21. CAP TYPES

The major components of any roof shall meet the requirements of one of the cap types permitted for the building type pursuant to the building types requirements of Sections M-1-15 through M-1-19, B.R.C. 1981. Roofs for bay or bow windows, porches, canopies, and dormers are not required to meet the standards of a cap type.

**(a) Pitched Cap Type.** The pitched cap type has a sloped or pitched roof. Slope is measured with the vertical rise divided by the horizontal span or run, as shown in Figure M-1 (41). Examples of Pitched Cap Type.

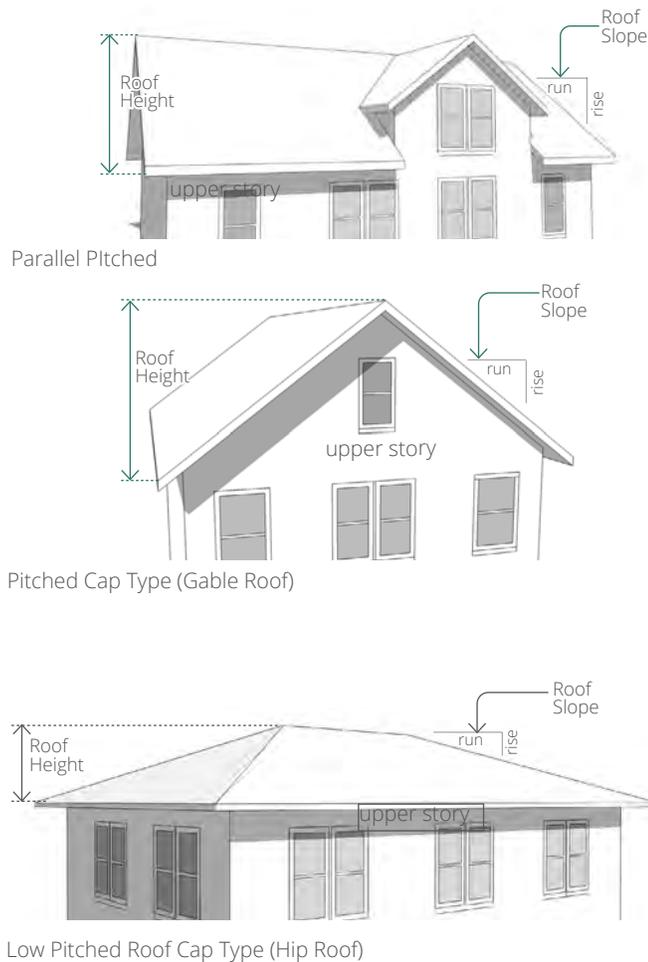


Figure M-1 (41). Examples of Pitched Cap Type

- (1) **Pitch Measure.** The roof shall not be sloped less than 4:12 (rise:run) or more than 14:12. Slopes less than 4:12 are permitted to occur on second story or higher roofs.
- (2) **Configurations.**
  - (A) Hipped, gabled, and a combination of hips and gables with or without dormers are permitted.
  - (B) Butterfly (inverted gable roof) and shed roofs are permitted
  - (C) Gambrel and mansard roofs are not permitted.
- (3) **Parallel Ridge Line.** A gabled end or perpendicular ridge line shall occur at least every 100 feet of the roof when the ridge line runs parallel to the front lot line. See Figure M-1 (41). Examples of Pitched Cap Type.
- (4) **Roof Height.** Roofs without occupied building space or dormers shall have a maximum height on Type A and Type B frontage facades equal to no more than 1.5 times the upper story floor-to-floor height used on the building.
- (5) **Occupied Building Space.** Occupied building space may be incorporated within the pitched cap type. If occupied, the space counts as a half story.
- (6) **Rooftop Appurtenances.** Any rooftop appurtenances shall be recessed within the pitched roof with no visibility when viewed from the sidewalk across the street and from any adjacent outdoor space. See Figure M-1 (42). **Recessed Mechanicals in Pitched Cap Type.** See Section M-1-26, "Mechanical Equipment & Appurtenances," B.R.C. 1981, for additional requirements.

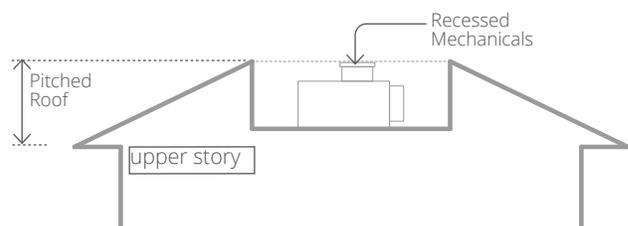


Figure M-1 (42). Recessed Mechanicals in Pitched Cap Type

# Building Types

## Cap Types

**(b) Parapet Cap Type.** A parapet is a low wall projecting above a building's roof along the perimeter of the building as shown in Figure M-1 (43). Example of a Parapet Cap Type.

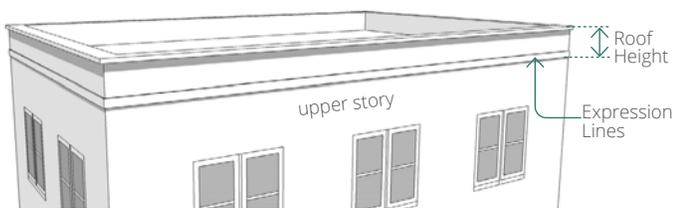
- (1) **Parapet Height.** Parapet height is measured from the top of the upper story to the top of the parapet.
  - (A) **General Parapet Heights.** Minimum parapet height is two feet with a maximum height of six feet.
  - (B) **Parapets Exceeding Maximum Height.** The approving authority may approve a parapet causing the building height to exceed the maximum permitted height if the approving authority finds the standards for parapet walls of Section 9-7-7, B.R.C. 1981, are met.
- (2) **Horizontal Expression Lines.** An expression line that is at least two inches deep and extends along at least eighty percent of the facade shall define the parapet from the upper stories of the building and shall define the top of the cap.
- (3) **Occupied Building Space.** No building shall have occupied space behind a parapet cap.
- (4) **Roof Terraces and Roof Decks.** Roof terraces and roof decks are permitted on the parapet cap type.
- (5) **Rooftop Appurtenances.** Any rooftop appurtenances shall be located towards the rear or interior of the parapet roof. The parapet shall screen the mechanicals when viewed from the

sidewalk across the street and from any adjacent outdoor space. See Section M-1-26, "Mechanical Equipment & Appurtenances," B.R.C. 1981, for additional requirements.

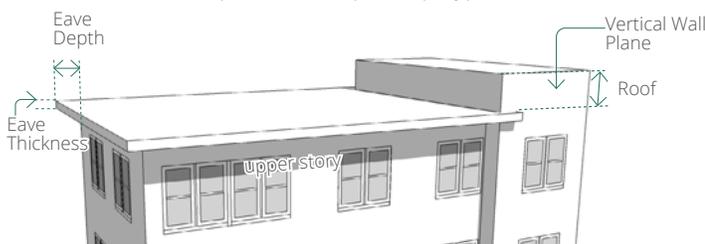
**(c) Flat Cap Type.** The flat cap type has a visually flat roof with overhanging eaves as shown in Figure M-1 (44). Example of a Flat Cap Type.

- (1) **Configuration.** The roof shall have no visible slope from the street, and eaves are required on all Type A and Type B frontage facades.
- (2) **Eave Depth.** Eave depth is measured from the building facade to the outside edge of the eave. Eaves shall have a depth of at least fourteen inches.
- (3) **Eave Thickness.** Eaves shall be a minimum of six inches thick. Eave thickness is measured at the midpoint of the eave depth, from the bottom of the eave to the top of the eave. The measurement may be taken from a structural support element of the eave to the top of the eave, provided the structural support element occurs at least every four feet along the entire length of the eave.
- (4) **Interrupting Vertical Walls.** Vertical walls may interrupt the eave and extend above the top of the eave with no discernible cap if the following requirements are met:
  - (A) No more than one-third of the front facade shall consist of an interrupting vertical wall.
  - (B) Vertical walls shall extend no more than six feet above the top of the eave. See Figure M-1 (44). Example of a Flat Cap Type.
- (5) **Occupied Building Space.** No building shall have occupied space behind a flat cap.
- (6) **Roof Terraces and Roof Decks.** Roof terraces and roof decks are permitted on the flat cap type.
- (7) **Rooftop Appurtenances.** If the interrupting vertical wall is utilized, any rooftop appurtenances shall be located behind the vertical wall with no visibility when viewed from the sidewalk across the street and from any adjacent outdoor space.

If no interrupting vertical wall is utilized, rooftop appurtenances shall be located such that the mechanicals are not visible when viewed from the sidewalk across the street or from any adjacent outdoor space. See Section M-1-26, "Mechanical



**Figure M-1 (43).** Example of a Parapet Cap Type



**Figure M-1 (44).** Example of a Flat Cap Type

Equipment & Appurtenances,” B.R.C. 1981, for additional requirements.

- (d) **Towers.** A tower is a vertical element, polygonal (simple), rectilinear, or cylindrical in plan that shall only be used with other cap types. See Figure M-1 (45). Example of a Tower.
- (1) **Additional Height.** Towers may add a single story of additional height beyond the maximum height allowed per building type.
  - (2) **Tower Width.** The maximum tower width along all facades shall be one-third the width of the front facade or fifteen feet, whichever is less. See Figure M-1 (45). Example of a Tower.
  - (3) **Transparency.** Towers that meet the minimum floor-to-floor height of the building type shall meet the minimum transparency requirements of the building.
  - (4) **Horizontal Expression Lines.** A minimum two inches deep expression line is required at the cap of the tower.
  - (5) **Occupied Building Space.** Towers with minimum floor-to-floor heights required by the building type shall be occupied space and may contain any of the uses allowed in upper stories of the building type to which it is attached.
  - (6) **Rooftop Appurtenances.** No rooftop appurtenances are permitted on tower roofs.
  - (7) **Tower Cap.** The tower shall be capped by a cap permitted on the building per the building type.

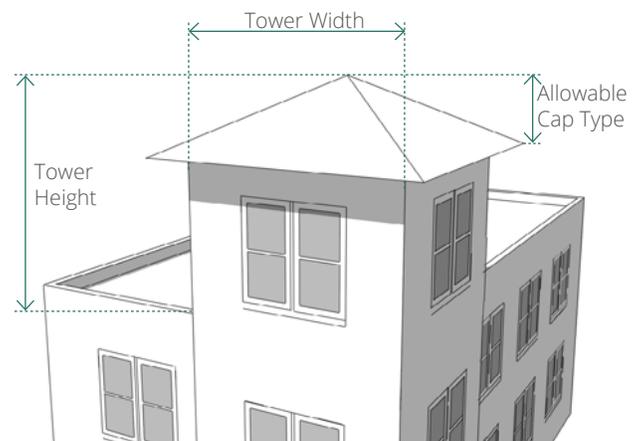


Figure M-1 (45). Example of a Tower

# Building Types

Cap Types

DRAFT

# Building Design

# Building Design

## Applicability and Intent of Building Design Requirements

### M-1-22. APPLICABILITY AND INTENT OF BUILDING DESIGN REQUIREMENTS

- (a) **Intent.** The intent of the requirements in Sections M-1-15 through M-1-19, B.R.C. 1981, is to implement the vision for the area as defined in adopted plans for the area, create a sense of place and community, elicit high quality, durable buildings of appropriate scale and massing that are visually interesting, aesthetically pleasing, create a sense of permanence, and are human scaled to enhance the pedestrian experience.
- All buildings are intended to be articulated in a simple, honest manner at human-scaled dimensions.
- (1) **Simple.** Simple means the building design is organized and easy to comprehend through the use of repetition, regularity, and a clear hierarchy.
  - (2) **Honest.** Honest means the building is easily interpreted by the casual observer. Entrances, floors, and building use are apparent and the form of the building follows the function. The overall bulk and mass of the building clearly represents the structure, spatial layout, and materiality.
  - (3) **Human-Scaled.** Human-scaled means the buildings are scaled to proportions comfortable to people. Typically, human-scaled buildings have smaller building material units, architectural detailing to accentuate building elements, and a predictable rhythm to the facade pattern. This design approach is used particularly on the ground story where people walk adjacent to the building.
- (b) **Applicability.** The requirements of Sections M-1-15 through M-1-19, B.R.C. 1981, establish general building design requirements applicable to all buildings located on a property designated in Appendix L, "Form-Based Code Areas," regardless of the building type. No person shall use or develop land in such areas except in conformance with the requirements of Sections M-1-15 through M-1-19, B.R.C. 1981, unless an exception has been granted pursuant to Subsection 9-2-16(j), B.R.C. 1981.

### M-1-23. FACADE MATERIALS

- (a) **Intent.** The intent of the facade materials standards of this section is to:
- (1) Provide minimum material standards to ensure use of well-tested, high quality, durable, weather-resistant, exterior grade, preferably natural materials on the majority of finished surfaces, while permitting a wider range of materials for details. High quality materials can improve quality of buildings in that they weather well, have a low failure rate, require a low level of maintenance, and create buildings with a longer life cycle and a sense of permanence;
  - (2) Limit the number of facade materials to promote simpler, clearly articulated facades; and
  - (3) Encourage a high level of detail from smaller scaled, less monolithic materials in order to relate facades to pedestrians, especially at the ground level.
- (b) **Major Materials.** A minimum of eighty percent of each facade, not including window and door areas, shall be composed of major materials, as specified in this section.
- (1) **Simplicity of Surface Materials.** A minimum of sixty percent of each facade, not including window and door areas, shall be faced of a single major material, not including architectural metal panel systems.
  - (2) **Allowed Major Materials.** The following are allowed major materials. See Figure M-1 (46). [Acceptable Materials](#) and Figure M-1 (47). [Unacceptable Major Materials](#).
    - (A) Stone.
    - (B) Brick.
    - (C) Wood.
    - (D) **Architectural metal panel systems in Boulder Junction only.**
  - (3) **Prohibited Major Materials.** The following materials are prohibited as major materials:
    - (A) Face-sealed EIFS synthetic stucco assemblies and decorative architectural elements.
    - (B) Synthetic stucco or elastomeric finishes on stucco.
    - (C) Unfinished or untreated wood.

# Building Design

## Facade Materials

- (D) Glass block.
- (E) Vinyl siding.
- (F) Plastic, including high-density polyethylene, polyvinyl chloride (PVC), and polycarbonate, panels.
- (G) Fiberglass and acrylic panels.
- (4) **Limited Use Major Materials.** The following materials are prohibited as a major material except consistent with the following:
  - (A) **Economy Bricks.** Brick types larger than three inches in height are allowed as major materials on rear, alley, and rail corridor facades.
  - (B) **Architectural metal panel systems are allowed as major materials on rear, alley, and Type B frontage facades.**
  - (C) **Fiber Cement Board.** Fiber cement building materials are allowed on the row building type.
  - (D) **Cement-Based Stucco.** Traditional cement-based, hard coat stucco is allowed on all

upper stories and on ground story facades facing rear yards, alleys, or the rail corridor. Where the ground story of a facade that is facing a rear yard, alley, or the rail corridor is adjacent to a facade where limited use major material may not be used on the ground story, major materials allowed pursuant to paragraph (2) of this subsection or approved pursuant subsection (d) of this section shall be continued around the corner on the ground story of the facade for no less than thirty feet along the cement-based stucco facade.

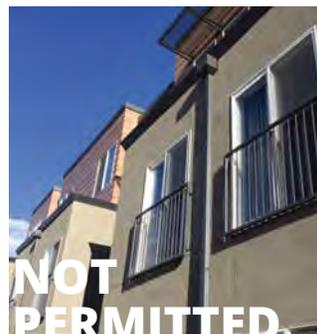
- (E) **Concrete Masonry Units.** Burnished, glazed, or honed concrete masonry units or blocks are allowed as major materials on facades facing rear, alley, and the rail corridor. Where the ground story of such a facade is adjacent to a ground story facade where a limited use major material may not be used, major materials allowed pursuant to paragraph (2) of this subsection or approved pursuant to subsection (d) of this section shall turn the corner of the ground story facade no less than thirty feet along the facade.



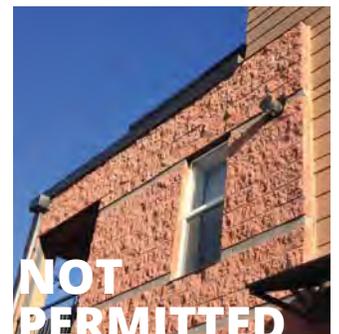
Brick with Metal Details



Architectural Metal Panels



Synthetic Stucco



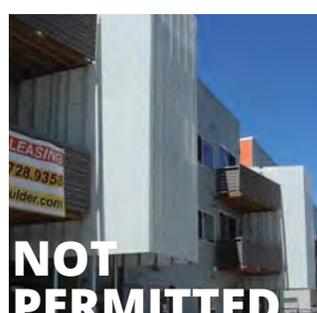
Concrete Masonry Units



Wood with Metal Details



Cut Stone



Plastic Panels



Vinyl Siding

**Figure M-1 (46).** Acceptable Materials

**Figure M-1 (47).** Unacceptable Major Materials

# Building Design

## Building Construction Quality

- (c) **Minor Materials.** Allowed minor materials are limited to trim, details, and other accent areas that combine to twenty percent or less of the total surface of each facade.
- (1) **Major Materials.** All allowed major materials may serve as minor materials.
  - (2) **Allowed Minor Materials.** The following are allowed minor materials:
    - (A) Fiber cement and wood trim pieces.
    - (B) Metal for beams, lintels, trim, exposed structure, and other ornamentation.
    - (C) Split-faced, burnished, glazed, or honed concrete masonry units or block cast stone concrete elements.
    - (D) Vinyl for window trim.
    - (E) Glass curtain wall.
    - (F) Two- or three-coat cement-based or cement-hybrid stucco for surfaces.
    - (G) Terra cotta or ceramic tiles or panels.
    - (H) **Architectural metal panel systems.**
  - (3) **Limited Use Minor Materials.** The following materials are allowed as minor surface materials on upper story facades only:
    - (A) **Fiber Cement Board.** Fiber cement building materials.
  - (4) **Prohibited Minor Materials.** The following materials are prohibited for use as minor materials:
    - (A) Face-sealed EIFS synthetic stucco assemblies and decorative architectural elements.
    - (B) Elastomeric finishes on stucco.
- (d) **Other Materials with Approval.** Materials that are not listed in this section for its proposed application as allowed major materials, limited use materials, or allowed minor materials, may not be installed on any facade unless approved by the reviewing authority pursuant to this subsection (d). The reviewing authority may approve facade materials that are not listed in this section for its proposed application if the applicant demonstrates the material in its proposed application meets the intent of the facade material standards described in subsection (a) of this section. Samples and examples of successful high quality local installation shall be provided by the applicant.

## M-1-24. BUILDING CONSTRUCTION QUALITY

- (a) **Intent.** The intent of the building construction quality requirements is to advance the quality of construction, durability, and aesthetics of new buildings, specifically related to application and detailing of facade materials.
- (b) **Changes in Material.** Changes in vertical surface materials shall meet the following standards:
- (1) **Changes in Surface Materials.** Changes in surface materials, whether major materials or minor materials, shall occur only at concave corners, where the distance to the next generally parallel facade plane is a minimum of twelve inches. Surface materials are materials intended to cover the facade surface (such as unit materials, siding, stucco, panels) and do not include detail materials, such as but not limited to cast stone for lintels or cornices, exposed metal beams, or any material used to create an expression line. See Figure M-1 (48). Diagram of Allowable Changes in Surface Materials.
  - (2) **Materials Hierarchy.** Unit materials shall be elevated from the face of the building above less detailed, surface materials. For example, stucco, as a constant surface material, shall be recessed behind a bricked surface.
  - (3) **Expression Lines on Surfaces.** Expression lines shall be created with solid materials of a thickness that is greater than two inches, such as cast stone, masonry, or stone. For example, cast stone pieces may be offset to create a shadow, where the convex corner of the piece is used to create the corner of the detail.
- (c) **Appropriate Grade of Materials.** Except on row buildings, all doors, windows, and hardware shall be of commercial quality.
- (d) **Applique Materials.** Materials with thickness of less than two and a half inches, including but not limited to stucco, shall not be used or formed to create expression lines.
- (e) **Stucco Installation.** Stucco, when allowed, shall be of the highest installation quality, meeting the following criteria:
- (1) **Contractor Submittal.** The contractor utilized for installing the stucco shall have a minimum of five years experience with a minimum of at least thirty

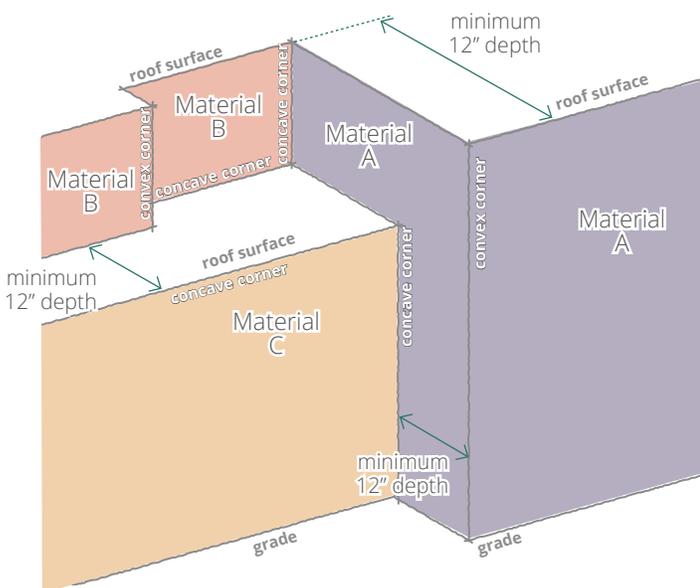
projects. The applicant shall submit as part of the design review application the contractor name, address, experience level, including years and number of projects, and examples of installations within the last five years. Examples of installation shall be of high quality installations meeting the requirements of this subsection (e).

- (2) Jointing. All stucco joints shall be aligned along the facade in the pattern shown on the elevations submitted for the design approval. Joints shall also align with the locations of windows and doors and other changes in material.
- (3) Construction. The stucco wall assembly shall be indicated on the plans specifying stucco type and construction.

## M-1-25. BUILDING FACADE ELEMENTS

(a) **Windows.** Windows on all buildings shall be constructed consistent with the following requirements:

- (1) **Amount.** Each building shall meet the transparency requirements applicable to the building type pursuant to Sections M-1-15 through M-1-19, B.R.C. 1981.
- (2) **Recessed.** All windows, with the exception of ground story storefront systems, shall be recessed with the glass a minimum of two inches back from the facade surface material or adjacent trim.
- (3) **Vertically Oriented.** All windows shall be vertically oriented unless the following standards are met:
  - (A) **Flat Cap Type.** When the flat cap type pursuant to Subsection M-1-21(e), “Flat Cap Types,” B.R.C. 1981, is used, horizontally oriented windows may be used for up to thirty percent of the total transparency area of each upper story.
  - (B) **Rear & Side Facades.** On facades facing the rear and interior side yards, up to fifty percent of the total transparency area of each story may include horizontally oriented windows.
  - (C) **Horizontally Oriented Windows.** Horizontally oriented windows may be used if the transparency of each story is forty percent or more, the height of at least seventy-five percent of the windows is a minimum of five feet, and



**Figure M-1 (48).** Diagram of Allowable Changes in Surface Materials



**Figure M-1 (49).** Vertically Oriented Windows with Expressed Lintels

# Building Design

## Building Facade Elements

the windows are located no more than three feet above the interior floor level.

- (4) **Visibility Through Glass.** Reflective glass and glass block are prohibited on street facades. Windows shall meet the transmittance and reflectance factors established in the transparency definition of Section M-1-8 “Definitions,” B.R.C. 1981. Windows on the ground story shall meet the transmittance and reflectance factors established in the ground story transparency definition in Section M-1-8, B.R.C. 1981.
- (5) **Expressed Lintels.** Lintels shall be expressed above all windows and doors by a change in brick coursing or by a separate element. See Figure M-1 (48). Diagram of Allowable Changes in Surface Materials.
- (b) **Awnings, Canopies, & Light Shelves.** Awnings, canopies, and light shelves shall be constructed consistent with the requirements of this subsection. See Figure M-1 (50). Examples of Permitted Awnings.
  - (1) **Encroachment.** Awnings, canopies, and light shelves shall not extend into a city right-of-way or easement except consistent with the requirements of Section 8-6-6, “Requirements for Revocable Permits, Short-Term Leases and Long-Term Leases,” B.R.C. 1981.
  - (2) **Attached Awnings & Canopies.** Awnings and canopies that are attached to the building and could be removed shall meet the following standards:
    - (A) **Material.** All awnings and canopies shall be canvas or metal. Plastic awnings are prohibited.
    - (B) **Solar Panels.** Solar awnings or canopies are allowed.
    - (C) **Shapes.** Waterfall or convex, dome, and elongated dome awnings are prohibited.
    - (D) **Lighting.** Backlit awnings are prohibited.
    - (E) **Structures.** Frames shall be metal and shall be wall mounted. Support poles are prohibited unless utilized for outdoor eating areas over eight feet in depth.
    - (F) **Multiple Awnings on the Facade.** When more than one awning is mounted on a facade, the awning types and colors shall be coordinated



Metal Awning

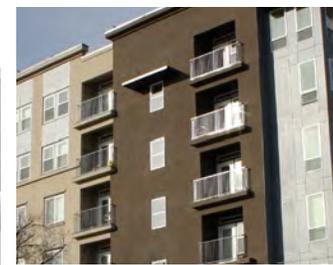


Canvas Awning

**Figure M-1 (50).** Examples of Permitted Awnings.



Balconies: Covers More than 40 Percent of Facade



Balconies Appropriately Attached to or Incorporated into Facade.

**Figure M-1 (51).** Examples of Balconies.

by matching the color, shape, material, or other element.

- (3) **Canopies & Light Shelves.** Permanent canopies, projections, or overhangs used as architectural features, light shelves, or shading devices are permitted, subject to materials standards of Section M-1-23, “Facade Materials,” B.R.C. 1981.
- (4) **Clearance.** All portions of any awning, canopy, or light shelf shall provide at least eight feet of clearance over any walkway and shall not extend over any driveway.

**(c) Balconies.** The installation or construction of balconies on street facades is encouraged, but not required.

The construction of any balcony on a facade facing any street or public way shall be consistent with the requirements of this subsection. See Figure M-1 (51). Examples of Balconies.

- (1) **Definition.** For the purpose of this subsection (c), balconies shall include any roofed or unroofed platform that projects from the wall of a building above grade and is enclosed only by a parapet or railing.
- (2) **False Balconies.** False balconies are not permitted on any Type A frontage facade. False balconies consist of a rail and door, and any outdoor platform less than eighteen inches in depth. The requirements of this subsection (c) shall not apply to false balconies.
- (3) **Size.** Balconies shall be a minimum of four feet deep and five feet wide.
- (4) **Integrated Design.** A minimum of thirty-five percent of the perimeter of each balcony shall abut an exterior wall of the building, partially enclosing the balcony. The balcony support structure shall be integrated with the building facade; separate columns or posts supporting any balcony from the ground are prohibited.
- (5) **Platform.** The balcony platform shall be at least three inches thick. Any underside of a balcony that is visible from any public way shall be finished.
- (6) **Facade Coverage.** A maximum of forty percent of the Type A and Type B frontage facades, calculated separately for each facade, may be covered by balconies. The balcony area is

calculated by drawing a rectangle around the platform or floor of the balcony, any columns or indentations, and any ceiling, roof, or upper balcony.

- (7) **Right-of-Way.** Balconies shall not extend into any city right-of-way or easements.

**(d) Shutters.** If included in the design, shutters, whether functional or not, shall meet the following requirements:

- (1) **Size.** All shutters shall be sized for the windows, so that, if the shutters were to be closed, they would not be too small for complete coverage of the window.
- (2) **Materials.** Shutters shall be wood, metal, or fiber cement. Vinyl shutters are prohibited. Other “engineered” woods may be approved provided that the applicant submits a sample and examples of high quality, local installations of the material, installed a minimum of five years earlier and showing no degradation or wear of the material.

**(e) Principal Entryway.** See Figure M-1 (52). Examples of Defined Principal Entryway. Principal entrances to buildings or units shall be clearly delineated through one or more of the design features listed in paragraphs (1) through (4) of this subsection:



**Figure M-1 (52).** Examples of Defined Principal Entryway.

# Building Design

## Mechanical Equipment & Appurtenances

- (1) **Cap or Canopy.** The entryway is covered by a cap or canopy differentiating it from the overall building cap.
- (2) **Porch.** The entryway is through a porch.
- (3) **Sidelights and Transom.** Sidelights or transom windows are included around the entryway.
- (4) **Extended Articulation.** The entryway is included in a separate bay of the building that extends up at least two stories.
- (5) **Other Design.** The approving authority may approve a design that does not meet the standards of this subsection if the authority finds that the design adds emphasis and draws attention to the entryway.
- (6) **Right-of-Way.** Doors shall not swing into city right-of-way or easement.

### M-1-26. MECHANICAL EQUIPMENT & APPURTENANCES

- (a) **Intent.** Mechanical equipment and appurtenances can have a negative visual impact and detract from the quality of the design of a building. The purpose of the standards of this section is to ensure that the visual impact of mechanical equipment and appurtenances is minimized.
- (b) **Mechanical Equipment in Building.** Mechanical equipment shall be located within the building, unless the applicant demonstrates the equipment is necessary for the function of the building and locating the equipment within the building would conflict with the equipment's function.
- (c) **Rooftop Mechanical Equipment.** Any rooftop mechanical equipment, including without limitation vents, ventilators, skylights, and antennas, and excluding solar energy and wind energy conversion systems, shall meet the following standards:
  - (1) Rooftop mechanical equipment shall be located consistent with one of the following methods:
    - (A) Incorporate equipment into the roof design consistent with the applicable standards of Section M-1-21, "Cap Types," B.R.C. 1981.
    - (B) Set the equipment back a minimum of twenty feet from any Type A or B frontage facade.
  - (2) The requirements of Section 9-7-7, "Building Height, Appurtenances," B.R.C. 1981, shall be met.
- (d) **Mechanical Appurtenances on Facades.** Mechanical appurtenances shall not be located on a facade unless the applicant demonstrates that locating the equipment in a different location would conflict with the equipment's function. Any mechanical appurtenance that may be carried on a facade, which may include, without limitation, dryer vents, gas meters, and air conditioners, shall be located consistent with the following standards:
  - (1) **Facade.** The mechanical equipment may be located on a non-Type A frontage facade. The mechanical equipment may be located on a Type A frontage facade only if the following requirements are met:
    - (A) The equipment is located on a surface perpendicular to any right-of-way;
    - (B) The equipment extends from the facade surface no more than three inches; and
    - (C) The equipment is screened from the sidewalk.
  - (2) **Alignment.** Multiple pieces of mechanical equipment shall be organized on the facade in a regular pattern and aligned. Compliance with this standard must be illustrated on the drawing elevations submitted as part of the application.
  - (3) **Material Coordination.** To the extent practicable, facade-mounted mechanical appurtenances shall be located on a material that limits their visibility. For example, dark colored vents will be more visible on light colored stucco than a textured, darker surface such as brick.
  - (4) **Screening.** Mechanical equipment shall be screened from view unless the approving authority finds that such screening conflicts with the function of the equipment. The form, material, and color of the screening shall meet the following criteria:
    - (A) Screening, other than landscaping, is consistent with the building design, colors, and materials;
    - (B) The equipment is placed where it is least visible from adjacent streets;
    - (C) The height of any screen is the minimum appropriate to adequately screen the mechanical equipment; and

(D) Screening does not increase the apparent height of the walls of the building.

(5) **No encroachment.** Mechanical equipment shall not extend into any city right-of-way or easement.

**(e) Mechanical Equipment on Other Horizontal Surfaces.**

Mechanical equipment located on the ground, decks, or horizontal surfaces other than the roof, such as, but not limited to, electrical equipment and air conditioners, shall be located consistent with the following standards:

- (1) All mechanical equipment may be located in the parking yard or a Type B street yard.
- (2) Mechanical equipment may be located in a side yard provided the side yard does not contain or abut a paseo.
- (3) All equipment shall be screened from view from any public way with landscaping, fencing, or walls consistent with the building design, colors, and materials.
- (4) The reviewing authority may approve appurtenances located on a Type A street or on a paseo only if the following conditions are met:
  - (A) The applicant demonstrates that the equipment cannot be located in a parking yard, Type B street yard, or in a side yard that does not contain a paseo.
  - (B) The appurtenance is fully screened with a wall that is consistent with the building design, colors, and materials and of a height that is the minimum to adequately screen the appurtenance and that does not prevent the facade from fulfilling any transparency requirements.

## M-1-27. BUILDING ARTICULATION

**(a) Intent.** The intent of this section is to require building design that achieves balanced and articulated building composition, a perceived intimate scale of buildings, and pedestrian interest.

**(b) Articulation of the Base.** With the exception of entryways, the ground story of a building with a required storefront pursuant to Section M-1-6 “Regulating Plans,” B.R.C. 1981, shall not be recessed more than eighteen inches from the second story facade.

**(c) Building Facade Variety.** See Figure M-1(50). Illustrations of Building Massing and Articulation. All buildings 120 feet in width or greater along any Type A or B frontage shall fulfill the following requirements:

- (1) **Increments.** Each Type A or B frontage facade shall be varied in segments less than or equal to ninety feet.
- (2) **Requirements.** Each facade segment shall vary by the type of dominant material or by color, scale, or orientation of that material, and by at least two of the following:
  - (A) The proportion of recesses and projections within the build-to zone.
  - (B) The location of the entrance and window placement, unless storefronts are utilized.
  - (C) Roof type, plane, or material, unless otherwise stated in the building type requirements.
  - (D) Building heights.
- (3) **Alternative Method of Compliance.** The reviewing authority may approve a facade design that does not meet requirements of this subsection (c) if the applicant demonstrates that the proposed design achieves the intent of the building articulation requirements of this section without meeting the building facade variety requirements. The applicant shall submit fully rendered elevations and 3-dimensional drawings of all street, paseo and multi-use path facades with materials samples for all surfaces to demonstrate that the intent of this section is met.

# Building Design

## Building Massing

### M-1-28. BUILDING MASSING

- (a) **Intent.** The goals of the building massing standards are to ensure an appropriate perceived scale of buildings from the public ways -- breaking up large buildings in a simple way to ensure a human-scaled place and to provide a high level of permeability to all blocks.
- (b) **Buildings over Forty Feet in Height.** See Figure M-1(50). Illustrations of Building Massing and Articulation. If any building of the project is over forty feet in height and not utilizing a pitched cap on at least sixty percent of the roof, the following standards shall be met:
- (1) **Varied Building Heights.** A minimum of thirty percent of the total footprint of all buildings combined on the site shall be at least one story lower than the tallest portion of the building footprint, not including towers.

- (A) **Along Type A Frontages.** The lower height shall occur along the Type A frontage.
- (B) **Stepped-Back Facade.** The requirement for varied building heights in paragraph (b)(1), above, shall not be met by a linear stepping-back of the facade along the top story, but shall constitute a change in massing of the building.
- (2) **Terraces & Pitched Roofs.** Roof areas on lower portions of buildings are encouraged to be used for roof terraces, located to maximize mountain views, or for pitched cap types per Subsection M-1-21(a), "Pitched Cap Type," B.R.C. 1981, to increase the variety of caps in the area.

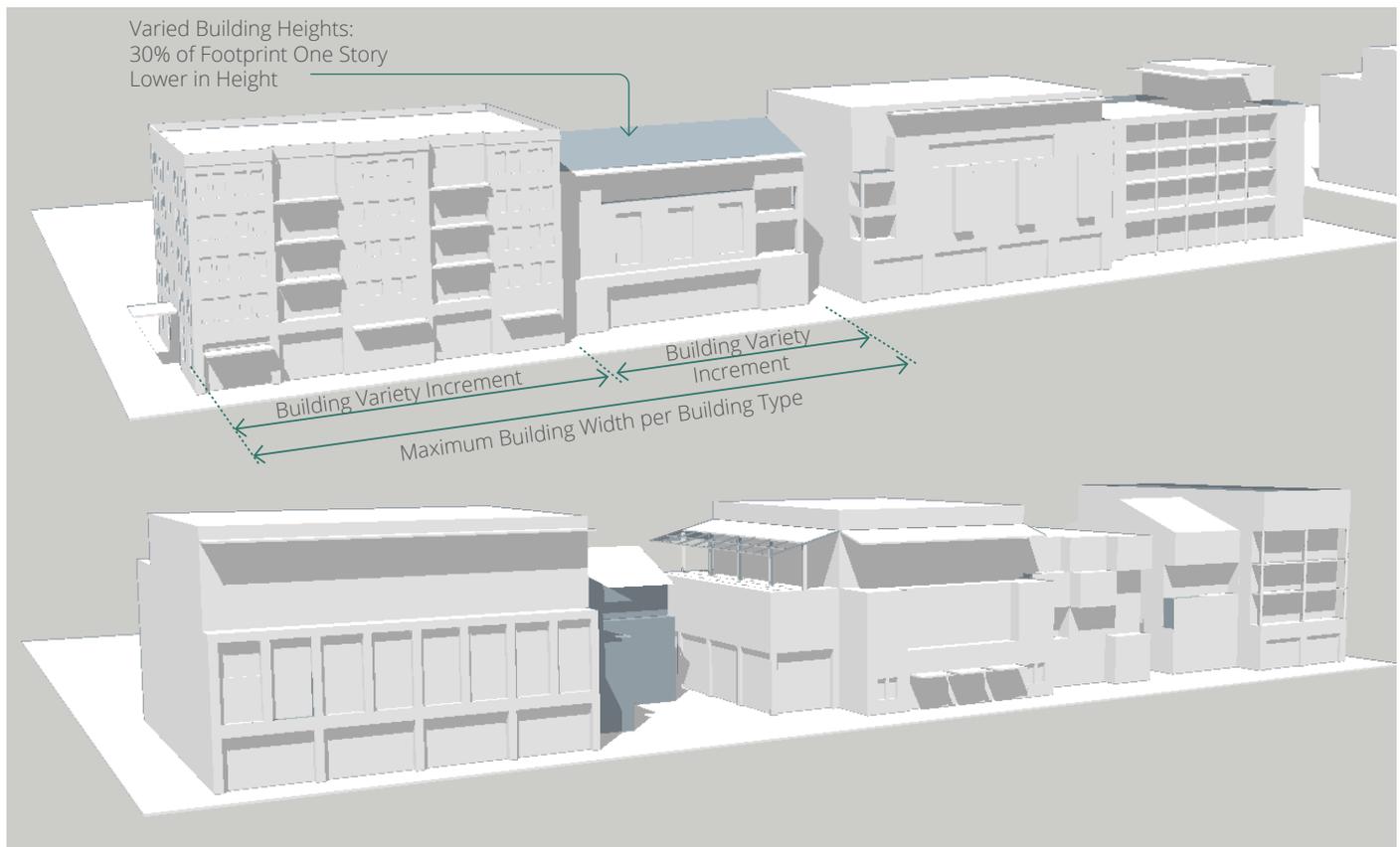


Figure M-1 (53). Illustrations of Building Massing and Articulation

### M-1-29. BUILDING PROPORTIONS

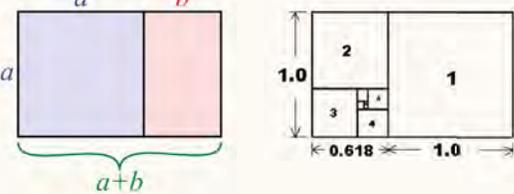
- (a) **Intent.** The golden ratio is a proportioning metric used throughout history in art and architecture to achieve what has been considered “divine” or visually pleasing proportions. The intent of this section is to achieve aesthetically pleasing building design through incorporation of the golden ratio into the exterior design of each building.
- (b) **Definition of the Golden Ratio and Golden Rectangle.** Two quantities are in the golden ratio if their ratio is the same as the ratio of their sum to the larger of the two quantities, as shown in Figure M-1 (54). Numerically, the ratio is approximately 1:1.6180339887.

A golden rectangle is a rectangle with side lengths that are in the golden ratio, as shown in Figure M-1 (54); if a square section is removed as shown in Figure M-1 (54), “Description of Golden Ratio,” the remainder is another golden rectangle.

- (c) **Use of Golden Ratio.** The design of facade elements or the massing of each building shall include expression of the golden ratio. Use of the golden ratio may include massing of building segments, windows, divisions of the facade, and overall height to width of the building. The preferred method of use is through the massing proportions and organization of facade components. See Figure M-1 (55), “Example of Documentation of Use of the Golden Ratio in the Building Design,” for examples of demonstrated use of the golden ratio.

**What is the Golden Ratio (AKA the Divine Proportion)?**

Two objects are in the golden ratio if their ratio is the same as the ratio of their sum to the larger of the two quantities. For example, a golden rectangle with longer side  $a$  and shorter side  $b$ , when placed adjacent to a square with sides of length  $a$ , will produce a similar golden rectangle with longer side  $a + b$  and shorter side  $a$ . This illustrates the relationship:

$$\frac{a + b}{a} = \frac{a}{b} = 1.6180\dots$$


Golden Rectangle = 1:1.618

The Golden Ratio is intimately related to the Fibonacci spiral, which is an approximation of the golden spiral created by drawing circular arcs connecting the opposite corners of squares in the Fibonacci tiling. The golden ratio appears in some patterns in nature, including the spiral arrangement of leaves and other plant parts.

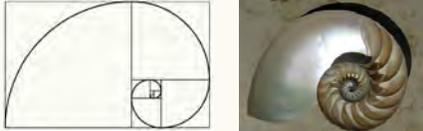


Figure M-1 (54). Description of the Golden Ratio

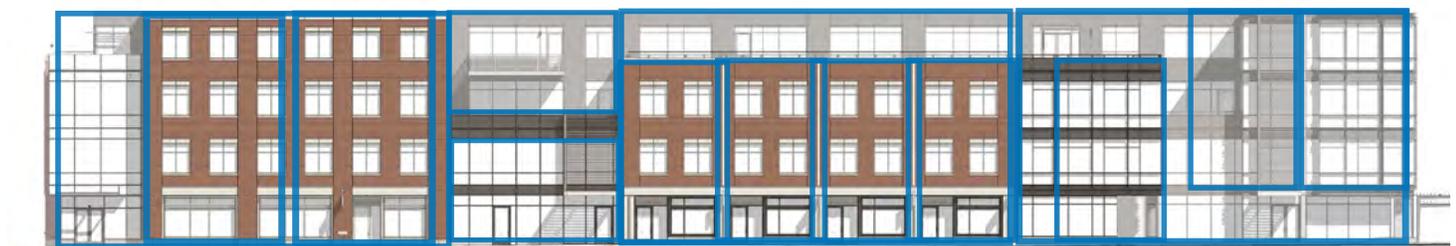


Figure M-1 (55). Example of Documentation of Use of the Golden Ratio in the Building Design