

DENVER'S CIVIC CENTER
Design Guidelines



*A supplement to
Denver's Civic Center
Park Master Plan
October 2005*

March 17, 2009

ACKNOWLEDGEMENTS

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As one of the premier civic and cultural centers in the Rocky Mountain region, Civic Center has defined Denver's urban landscape. The Park has thrived and been the centerpiece of large events and gatherings for nearly 100-years. However, the historic infrastructure has also deteriorated. Faced with the challenge of revitalizing the Park, Denver is about to embark upon a comprehensive transformation for the first time since the City Beautiful Movement and Mayor Speer's administration. With the support of voters and the 2007 Better Denver Bond, the Park's major contributing features – Greek Theater, Voorhies Memorial and the Broadway Terrace- will be rehabilitated. These improvements in addition to the adaptive reuse of the McNichols Building will require collaborative partnerships with multiple city agencies, the Civic Center Conservancy, the development community and other stakeholders.

The Civic Center Design Guidelines embody a year long process of research, analysis and public input from an advisory group and other stakeholders. With the intent of evaluating future improvements in the Park, the Guidelines are a crucial tool that will be utilized by city agencies, the Landmark Preservation Commission and other review bodies. The principles, guidelines and standards outlined in the Design Guidelines reflect departmental goals and objectives and ensure the vision of the *2005 Denver's Civic Center Park Master Plan* remains intact.

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**Rules and Regulations
For
Civic Center Park
Design Guidelines**

Adopted March 23, 2009

Approved for Legality



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4/7/09

Date

Approved and Adopted


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Table of Contents

Letter from City and County of Denver	i
I. Introduction	1
a. Purpose of the Design Guidelines	
b. How to Use These Guidelines	
c. Study Area and Area of Influence	
II. Guiding Principles	6
III. Context	7
a. Historic Context	
b. Urban Context	
c. Architectural and Landscape Architectural Significance	
IV. Civic Role and Park Character	16
a. Civic Role	
b. Park Character	
V. General Park Guidelines	17
a. Introduction	
b. Connectivity and Park Composition	18
1. Activity Nodes	18
2. Pedestrian Circulation	20
3. Connectivity and Circulation	22
4. Spatial Organization	24
5. Composition of Park Spaces	26
c. Architectural Scale	28
d. Preservation, Restoration and Rehabilitation	31
e. New Elements	34
f. Materials	38
g. Site Furnishings	40
h. Lighting	42
i. Art and Commemoration	44
j. Vegetation and New Plantings	47
k. Environmental Stewardship	48
VI. McNichols Civic Center Building (Carnegie Library)	49
VII. Broadway Terrace	53
VIII. Central Gathering	56
IX. South Garden	59
X. Greek Theater and Colonnade of Civic Benefactors	62
XI. Voorhies Memorial	64
XII. Park Kiosks	65

■ Diagrammatic Map

Figures

Figure 1. Study Area and Area of Influence	5
Figure 2. The Evolution of Civic Center	9
Figure 3. Urban Context	11
Figure 4. Contributing Features	15
Figure 5. Activity Nodes	19
Figure 6. Pedestrian Circulation	21
Figure 7. Connectivity and Circulation	23
Figure 8. Spatial Organization	25
Figure 9. Composition of Park Spaces	27
Figure 10. Architectural Scale	29
Figure 11. Rehabilitation and New Elements	33
Figure 12. New Elements	35
Figure 13. Architectural Scale for New Elements	37

Appendix

- A. Executive Order No.123 Greenprint Denver Office and Sustainability Policy
- B. Commemoration – Colonnade of Civic Benefactors Standard Operating Procedures
- C. Technical Specification for Civic Center Concrete

I. Introduction

a. Purpose of the Design Guidelines

In October 2005, guided by an active public representing a broad cross section of interests, Denver's Civic Center Park Master Plan was adopted by the City & County of Denver. Adoption of the Plan was the important first step in restoring Civic Center as the symbolic and physical center of Denver's civic life.

The Design Guidelines serve as a supplement to the 2005 Park Master Plan, providing criteria to evaluate all proposed improvements or modifications to Civic Center.

The Design Guidelines for Denver's Civic Center, prepared by the Department of Parks and Recreation in conjunction with public input and a citizen advisory group, will inform the rehabilitation of Civic Center.

These Guidelines provide parameters for materials, park structures such as kiosks, benches and signage, mass and scale for potential New Elements and guidance for the rehabilitation of historic features and other improvements so they are consistent with the Park's historic character.

1. Related Planning Studies

The following planning studies share key principles supporting the integrity of Civic Center: design excellence, maintaining the symbolism of Civic Center as the region's government and cultural center and preserving Park structures and buildings.

- Denver Justice Center Framework Plan - 2006
- Denver's Civic Center Park Master Plan - 2005
- Civic Center District Plan - 2005
- State Capitol View Place Ordinance; RMC Chapter 10, Article IV - 2001
- Historic Structure Assessment and Exterior Preservation Plan - 1999
- Civic Center Historic District Design Guidelines - 1996
- Division 4. Public Art Program, Ordinance Nos. 717-91 and 650-96-1996

2. Denver's Civic Center Park Master Plan, October 2005

The Park Master Plan for Denver's Civic Center was completed in 2005 to provide a cohesive vision for the future of the Park and its immediate surroundings. The City & County of Denver and its partners will use the Plan as the primary tool to manage change at Civic Center.

These Guidelines build upon the recommendations of the Master Plan:

- Restoring its significant building, structures and landscape
- Improving pedestrian access
- Attracting more daily casual users
- Continuing to allow a limited number of festivals
- Improving safety within the Park
- Ensuring access for all including the elderly and disabled
- Ensuring physical improvements are environmentally, fiscally and physically sustainable

3. Related Designations

- Civic Center District, National Register of Historic Places - 1974
- Denver Landmark District for the Civic Center Ordinance No. 173 - 1976

4. The Civic Center Conservancy

This non-profit organization, formed in 2004, works in partnership with the City to assist in Civic Center's restoration; add compatible features, offer free events and work to reintroduce people to Denver's downtown jewel. The mission of the Conservancy is:

"The Civic Center Conservancy, in partnership with the City & County of Denver Department of Parks and Recreation, will enhance, restore and revitalize Civic Center. The Civic Center Park Master Plan serves as our guide and we strive to implement the Master Plan. This initiative will return the Park to its historical role as the center of cultural life in Denver."



b. How to Use These Guidelines

1. These Guidelines will instruct the restoration and rehabilitation of Denver's Civic Center, reestablishing the Park as the region's premiere public gathering space. The principles, description and intent statements and standards and guidelines set forth in this document reflect and respond to Edward Bennett's City Beautiful design of the Park.
2. These Guidelines will ensure the preservation, restoration and rehabilitation of Civic Center and its contributing features are consistent with the 2005 Park Master Plan and responsive to community expectations. The Guidelines will also inform possible New Elements to the Park:
 - Central Gathering
 - South Garden
 - Two transitional New Elements at McNichols Building (Carnegie Library)
 - Park Kiosks (three)
 - Greek Theater modifications

These Guidelines are intended to advance the legacy of collaboration, balance, human-scale and civic art expressed by visionary leaders and planners a century ago. They are meant to inspire rather than constrain today's and tomorrow's designers.

3. These Guidelines will inform the design of all improvements or modifications proposed for Civic Center, including those initiated by City agencies, the private sector, potential non-profit partnerships and the Civic Center Conservancy.

4. These Guidelines will be used to evaluate all proposed improvements or modifications for Civic Center within the boundaries of the Study Area (Section I. c. Study Area and Area of Influence).
 - Civic Center is designated as part of a Denver Landmark District. All proposed improvements or modifications should be reviewed by the Denver Landmark Preservation Commission (LPC) in a process open to public comment. A member of the LPC will be included as a voting member and advisor during any art selection process undertaken by Denver's Office of Cultural Affairs.
 - Review and evaluation of proposed projects shall be done in tandem with the most current City review processes.
 - Depending on the nature of the improvements, plans will be subject to review and approval by City agencies to ensure work complies with federal, state and local requirements.
 - Denver Department of Parks and Recreation (all divisions)
 - Denver Department of Public Works (all divisions including DES-Development Engineering Services)
 - Denver Office of Cultural Affairs
 - Denver Department of General Services and Revenue (McNichols Building)
 - Department of Community Planning and Development
 - Denver Commission for People with Disabilities (ADA compliance)
 - Denver Department of Environmental Health (environmental issues)
5. These Guidelines should inform the design and evaluation of proposed improvements with the Area of Influence (Section I. c. Study Area and Area of Influence).

c. Study Area and Area of Influence

1. Study Area

Restoring Civic Center as Denver's premiere gathering place is the basis for these Guidelines. These Guidelines shall be used to evaluate and review proposed improvements for Civic Center within the area defined as the Study Area.

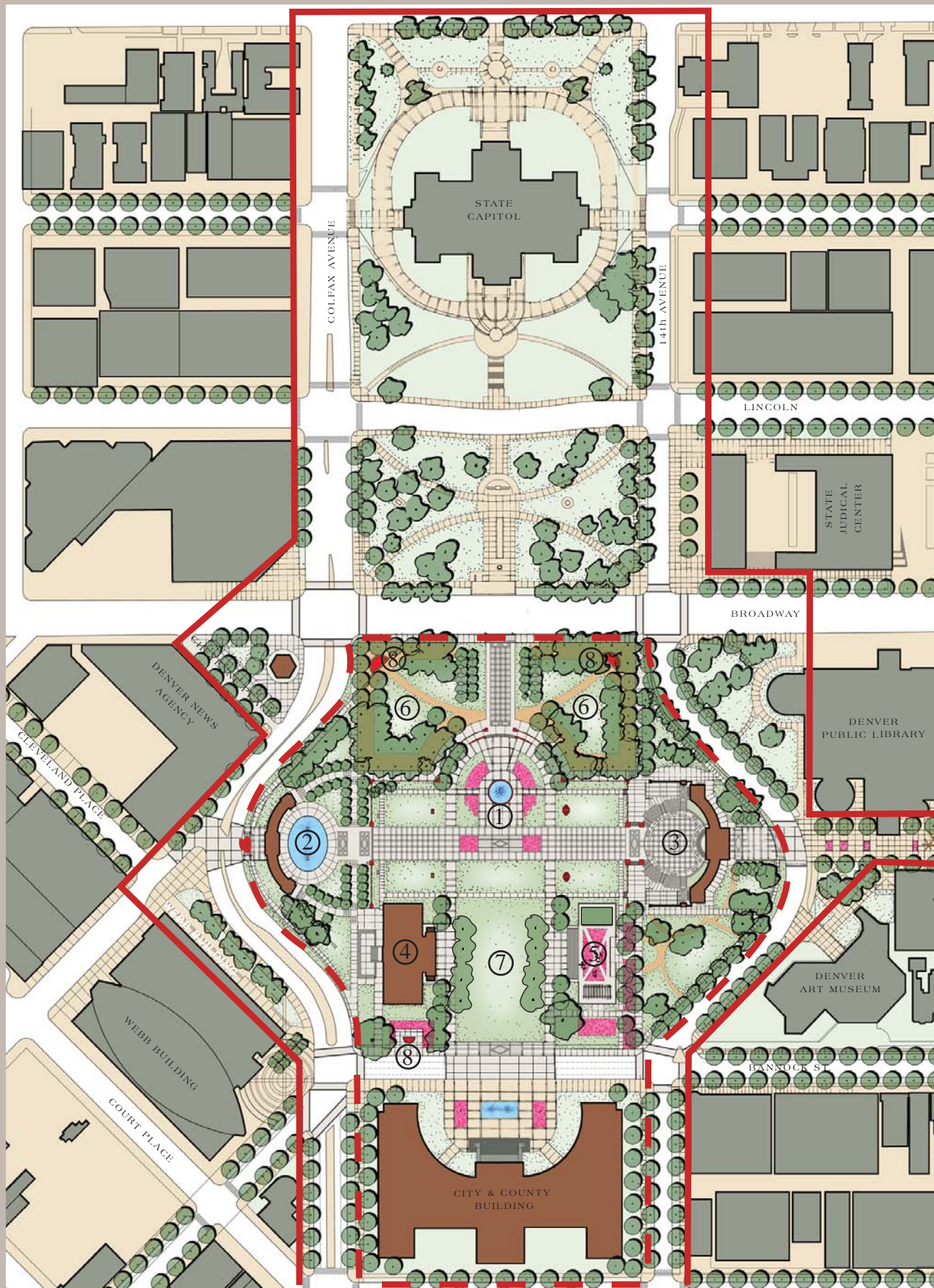
Civic Center's boundaries, illustrated on the adjoining diagram, are defined by Colfax Avenue on the north; 14th Avenue on the south; Cherokee Street on the west; and Broadway on the east.

2. Area of Influence

The Area of Influence is the immediate area extending around Civic Center. It includes the buildings that define the Park as a green space, including the State Capitol and the City & County Building—the structures defining Civic Center's primary (east-west) axis. With the completion of Denver's Justice Center Campus, west of the City & County Building, Civic Center's Area of Influence extends from Speer Boulevard on the west to Grant Street at the eastern boundary of the State Capitol grounds.

These Guidelines should be used to assist in the evaluation of proposed improvements within the Area of Influence. These may include, but are not limited to, urban spaces created by the spatial relationships between the Park's edges and its adjacent landscape and public right-of-way, as well as vehicular and pedestrian circulation improvements.

Study Area and Area of Influence 2005 Park Master Plan



- 1. Central Gathering
- 2. Voorhies Memorial
- 3. Greek Theater
- 4. McNichols Building
- 5. South Garden
- 6. Broadway Terrace
- 7. Great Lawn
- 8. Park Kiosks

Study Area - - - - -
 Area of Influence —————



Figure 1
5

II. Guiding Principles

Civic Center is a green, urban oasis surrounded by an ensemble of the region's most prominent and architecturally significant public and cultural buildings. Designed more than 100 years ago as Denver's primary public gathering space, today's citizens want to restore its vibrancy, maintain its beauty and design integrity and celebrate its prominence as the regional center of government and culture. These shared values will guide the transformation of Civic Center into a clean, safe and connected place of civic engagement.

1. Civic Center is the civic and cultural crossroads of the New West, where its history as a place of free speech and festivals will be honored.
2. Celebrating Civic Center as the symbolic and physical center of Denver's civic life requires restoring historic features and amenities, improving pedestrian access and attracting more daily and casual users.
3. Civic Center's historic integrity will be preserved and protected as modifications to the Park are considered:
 - Primary (Civic) and Secondary (Cultural) axial symmetry will be honored and enhanced.
 - The Park's building, structures, landscape and features will be rehabilitated to match its original standard of excellence, inspire the human spirit and promote civic pride.
4. New improvements to the Park will reflect the highest standards of excellence: design, material, craft and sustainability.
5. The Park will be a model for environmental, physical and fiscal sustainability, including sound conservation practices and use of resources and energy in construction/reconstruction, park operations and management.
 - Denver's commitment to civic stewardship begins with the conservation and adaptive reuse of historic buildings, spaces, features and materials.
 - The restoration of historic features and the introduction of New Elements will be environmentally, physically and fiscally sustainable.
6. Civic Center will be a vibrant, active park and civic space that is visually and physically connected to its urban surroundings. A safe and clearly identifiable pedestrian circulation system and pedestrian access into and through Civic Center will provide the foundation of the Park's composition.
 - Civic Center will be characterized by safe pedestrian routes, clear visual sight lines, respect for the Park's composition and reinforcement of the hierarchy of the Civic Axis and Cultural Axis.
 - Clear, visual connections from the perimeter into the Park as well as from the interior to the Park edges will assist in linking Civic Center to its surroundings.
 - Civic Center will be accessible to all.

III. Context

a. Historic Context

Denver's Civic Center was conceived at the turn of the 19th Century, heavily influenced by Chicago's 1893 Colombian Exposition. The Exposition inspired the City Beautiful Movement, setting the tone for a style of civic improvements that swept the country. Efforts to refashion cities into beautiful and functional entities included a cultural agenda; aesthetics expressed as beauty, order and harmony; and public improvements – parks, parkways and boulevards, elegant public buildings and civic centers. Underlying these physical improvements was the belief that beautification of the public realm would lead to civic patriotism, greater productivity and economic vitality.

1. The Evolution of Denver's Civic Center

1 1886 - 1904 Colorado State Capitol

E.E. Myers and Frank E. Edbrooke designed the Federal Revival structure on the hill donated to the state by Henry C. Brown in 1868. Anchoring the eastern terminus of Civic Center's Civic Axis, the west façade squarely faces the 200-mile vista of Colorado's Front Range.

2 1903 - 1916 Denver's Municipal Art League

Instrumental in transforming the area west of the State Capitol into the new civic center, art commissioners led efforts to consolidate local government into the home rule charter – the City & County of Denver.

Denver's civic beautification moved to the forefront in 1906 when Mayor Robert Speer and his Art Commission hired renowned planner Charles Mulford Robinson. Robinson proposed a "civic renaissance" for the dusty mining town. The centerpiece of his proposal was a civic center in the heart of the city to *... "emphasize and dignify the State Capitol (with) ... the preservation of a very grand mountain view ... a series of boulevards and parkways that would tie the scattered parks into a system."*

The ambitious agenda was derailed when voters rejected a bond initiative. Speer persisted, commissioning sculptor Frederick MacMonnies in 1909 to revise the plan. MacMonnies proposed a simple grand central park oriented in axial symmetry with the State Capitol's east-west axis and a new city building at the western terminus. He included the Bates Triangle where the Voorhies Memorial stands and the parcel now occupied by the Greek Theater. In 1912 a reform coalition determined to abolish Denver's strong mayoral form of government replaced Speer. During this time a tapis vert scheme was built, designed by the Olmsted Brothers.

Frederick Law Olmsted Jr., hired to plan Denver's mountain park system, designed a civic center that though consistent with City Beautiful principles, ignored MacMonnies' defining axial structure. Olmsted's gravel walks, central lawns and concert grove were short-lived. Robert Speer was reelected mayor in 1916 and his powerful home rule charter restored.

3 1916 - 1932 The Bennett Plan - City Beautiful Redux

Displeased by the Olmsted improvements, Speer hired architect Edward H. Bennett of Chicago to further his vision. Having worked with master architect Daniel Burnham, Bennett was well versed in City Beautiful principles. Bennett organized his composition along MacMonnies's east-west axis, in a symmetrical arrangement where the southern half mirrored the northern. To accentuate the site's topography, Bennett created two stepped terraces separated by a Balustrade Wall. He placed a large gathering space at the Park's center and proposed a municipal building to serve as the western terminus.

Bennett's 1917 plan fully embraced City Beautiful planning and architectural style and its social conviction. Bennett expanded his proposal to include a beautiful ensemble of buildings to surround the Park, creating a harmonious balance of open space and buildings. To balance the composition, Bennett proposed enlarging the Carnegie Library and building a complementary structure to the south. Neither the expansion nor the additional structure were realized.

4 1955 - 1971 Neglect and Deterioration

Coincidental with the demolition of many of downtown Denver's historic buildings, city planning increasingly focused on accommodating the automobile rather than the pedestrian. The 1950s and 1960s also brought changes to Civic Center. With scant attention to the role of aesthetics or knowledge of the Park's character, intention or history, modifications were made in the interest of maintenance. As a result internal gravel walkways were removed and the quality of materials degraded. Asphalt and concrete replaced stone. The repair and maintenance of historic features were deferred.

In 1956 the Denver Public Library moved into its new Burnham Hoyt designed building at 14th Avenue and Broadway. The Denver Water Board moved into the elegant Carnegie Library, making numerous compromising alterations to the interior and adding a paved parking lot adjacent to the building's south facade.

5 The Present - Hope and Resurgence

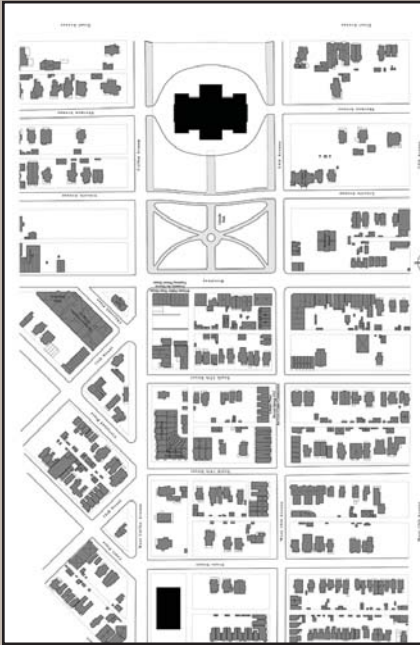
In 1971 the Denver Art Museum, designed by Italian architect Gio Ponti and local architect James Sudler, opened at 14th Avenue and Bannock Street. In the early 1990s, the Colorado Historical Society, Denver Public Library and Denver Art Museum joined in developing a conceptual master plan. They hired Venturi, Scott Brown & Associates, to facilitate and design The Civic Center Cultural Complex Master Plan. The plan focused on the five-block area occupied by the institutions and their parking, also addressing a broader planning and design setting. The most distinctive urban design element was a shallow, landscaped forecourt, located in the city-owned blocks south of East 13th Avenue and defined by an arc embracing all three institutions. Completed in 1995, the plan was never fully realized.

Twenty-four years after the completion of the Ponti Building in 1995, Michael Graves, in association with Klipp architects, completed an addition to Burnham Hoyt's library building across the plaza from the Denver Art Museum. In 2006 the museum expanded south, across 13th Avenue into a new building including a pedestrian plaza and residential structure designed by architect Daniel Libeskind in association with Davis Partnership.

Following citizen approval of the 2005 bond to build a new Justice Center west of the City & County Building, an architectural competition was held to select the design teams for the new buildings comprising the Justice Center:

- Courthouse: Klipp/Ricci Greene Associates/ Harold Massop Associates Architects
- Detention Center: Hartman-Cox Architects/ Oz Architecture/ Ricci Greene Associates
- Post Office/ Parking Structure: AR7 Architects
- Landscape and Urban Design: studioINSITE
- Master Urban Design Architect: Tryba Architects with Mundus Bishop Design, Inc.

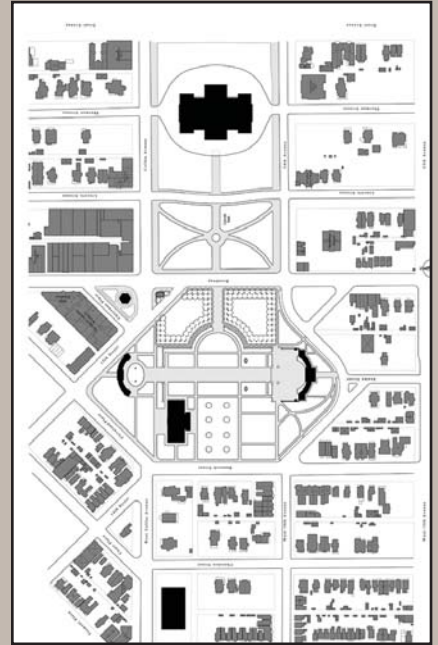
The Evolution of Civic Center



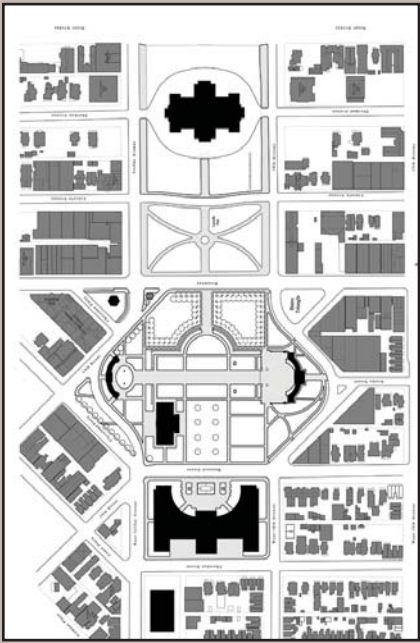
1 1897



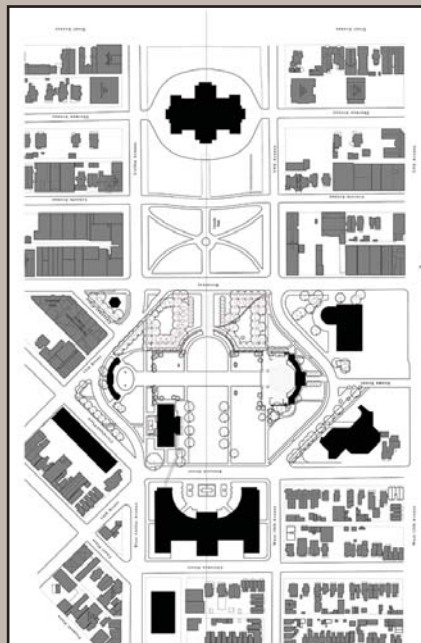
2 1912



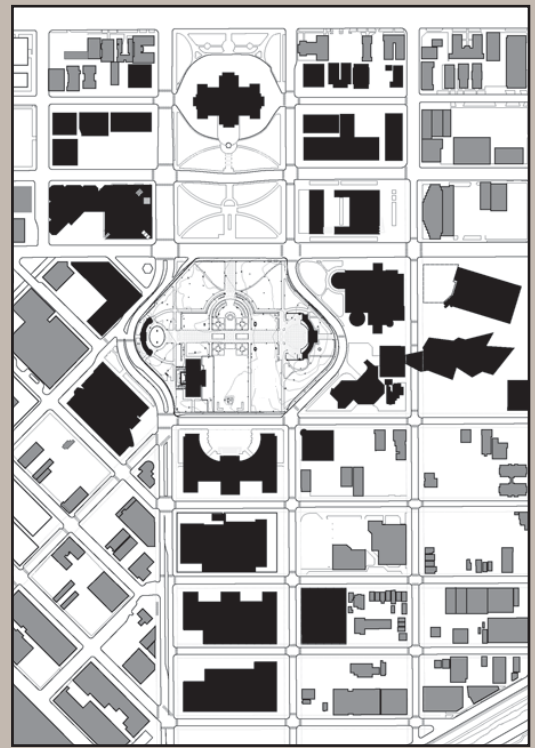
3 1917



3 1929



4 1955-71



5 Present

Figure 2
9



b. Urban Context

1. Part of Larger Campus

Civic Center is part of the larger urban context of downtown Denver and is at the heart of the Civic Center District. From east to west the District extends from the eastern boundary of the State Capitol west to Speer Boulevard and includes the State Capitol, Lincoln Park, Civic Center, Denver's City & County Building, U.S. Mint and the Denver Justice Center Campus. The District's southern boundary encompasses the Capitol Complex, Denver Public Library and the Denver Art Museum's Hamilton Wing, Ponti Building and Museum Residences. The District's northern boundary includes the Capitol Complex north to East 16th Avenue. Civic Center is just one block from the 16th Street Mall. It serves as a neighborhood park for numerous neighborhoods: Capitol Hill, Golden Triangle, Silver Triangle and Central Business District.

For nearly 100 years, Edward Bennett's 1917 Plan has informed this urban campus. Future plans to improve the campus include providing consistent scale, strong east-west axis, grand boulevards and the thorough integration of architecture and landscape to define the entire District. The complexity of Civic Center's adjacencies—land use, roadways, scale and orientation—offer opportunities and challenges for the revitalization of the Park. On the one hand are opportunities—density and diversity; on the other are poor physical and visual connections, busy multi-laned thoroughfares and a preponderance of office and institutional uses surrounding the Park. Mixed-use and residential neighborhoods are nearby; but traffic, physical barriers and an absence of activity in the Park discourage daily use.

2. Civic Precedent

Civic Center's immediate surroundings and adjacent neighborhoods are enjoying a resurgence. Denver opened a new municipal office building on a vacant site at 14th Avenue and Colfax Avenue in 2003, linking the mid-century modern Annex One building with a 12-story tower, designed by Tryba Architects. Denver's Justice Center Campus—new post office and garage, courthouse and jail—west of Denver's City & County Building expands the Civic Center District almost to Speer Boulevard. Residential and mixed-use development in the adjacent Golden Triangle, Uptown and Capitol Hill neighborhoods and along downtown's 14th Avenue is transforming the Civic Center District into a 24-hour neighborhood. Civic Center is once again at the heart of a vibrant city, poised to serve as its grand, central public gathering place.

Urban Context



Figure 3
11



c. Architectural and Landscape Architectural Significance

1. Beaux Arts City Beautiful Park

Denver's Civic Center exemplifies the Beaux Arts design aesthetic of the City Beautiful Movement. It is one of the nation's few remaining intact City Beautiful-era civic centers. The Park's iconic ensemble of neoclassical architecture and its formal alignment along primary and secondary axes are key characteristics of Beaux Arts design. Height limitations, preservation of the grand view of Colorado's Front Range and the careful balance of open space and structure also reflect the Movement's commitment to proportion, harmony, symmetry and scale.

2. Beaux Arts Design

The principles of classical Greek and Roman architecture define Beaux Arts design. A favored style for public buildings at the turn of the 20th Century, neoclassical architecture is characterized by careful attention to scale, material, symmetry and proportion. Edward Bennett collaborated with Daniel Burnham on the design of the 1893 Chicago Exposition, and his plan for Denver's Civic Center reflects his mastery of this style. Called the White City, the palette of the 1893 Exposition's massive and grandiose structures was stone—marble and granite. Other characteristics were balustrades, balconies, columns, cornices, pediments, pilasters and arches.

3. Denver's Central Gathering Place

Denver's great central space, surrounded by an ensemble of public buildings connecting state and city government remains intact, though unfinished. At its center, where the primary axis drops below the historic Balustrade, the Park awaits a cohesive park space.

"Civic Center is conceived as a large open space to be used as a place of public concourse. It is therefore essential that a large portion of the center be paved or graveled in such a way as to accommodate large numbers. A considerable portion of the area should be shaded and there should be small areas devoted to lawn and planting space for shrubbery to offer variety and background for statues, balustrades and decorative features."

- Edward Bennett, "The Denver Civic Center - Recommendations to Accompany Preliminary Plan," 1918.

4. Period of Significance

The Period of Significance as defined by the Denver Landmark Preservation Commission is 1909 to 1979.

Civic Center's period of significance begins in 1909 with the construction of the Carnegie Library and ends in 1979, 30 years prior to 2009, the year these Guidelines were adapted by the Landmark Preservation Commission. The Period of Significance includes the 1917 park design by Edward H. Bennett. The Park was substantially complete by the early 1920s when the Balustrade Wall, lighted columns and Upper and Lower Terraces were finished. In 1932 Denver's City & County Building was completed.

The Period of Significance includes the entire Park landscape as well as its structures, features and vegetation including the Voorhies Memorial (1919), Greek Theater (1918), Pioneer Fountain (1911) and two original sculptures in the Lower Terrace—*Bronco Buster* (1920) and *On the War Trail* (1922) by Alexander Phimister Proctor. The Period of Significance also includes the 1916 Red Oak groves in the Upper Terrace that remain from the first park design by the Olmsted Brothers.

Over time additional features have been added to Civic Center, contributing to its significance. These include the Columbus Statue and the Powerhouse Plaque. Contributing Features are noted on page 14.

1930s Civic Center



c. Architectural and Landscape Architectural Significance, continued

5. Contributing Features

The Beaux Arts public square carefully balances a beautiful ensemble of structures in an axially symmetrical composition. The diagram and photograph on page 15 illustrate those features that contribute to the significance and integrity of Civic Center.

Contributing features include those present during the Period of Significance; those that possess historical or architectural integrity; and those that add to the architectural qualities for which Civic Center is significant.¹ These features include:

- Greek Theater and Colonnade of Civic Benefactors
- Voorhies Memorial, Seal Pond and setting
- Balustrade Wall, lighted columns and topographic grade change
- McNichols Building (formerly Carnegie Library)
- Red Oak groves and Broadway Terrace composition
- Park composition of Upper and Lower Terraces, arrangement along Civic and Cultural Axis, internal pathways and planting arrangements
- Columbus Statue (1970), Emily Griffith Drinking Fountain (1954), Powerhouse Plaque (1950) and United Nations Square Flagpole

Additional contributing features may be identified during the design of Park improvements. Designating additional contributing features is encouraged and allowed if they possess the qualities listed above.

¹ Adapted from the Secretary of Interior Standards for the Treatment of Historic Properties and Guidelines for The Treatment of Cultural Landscapes.

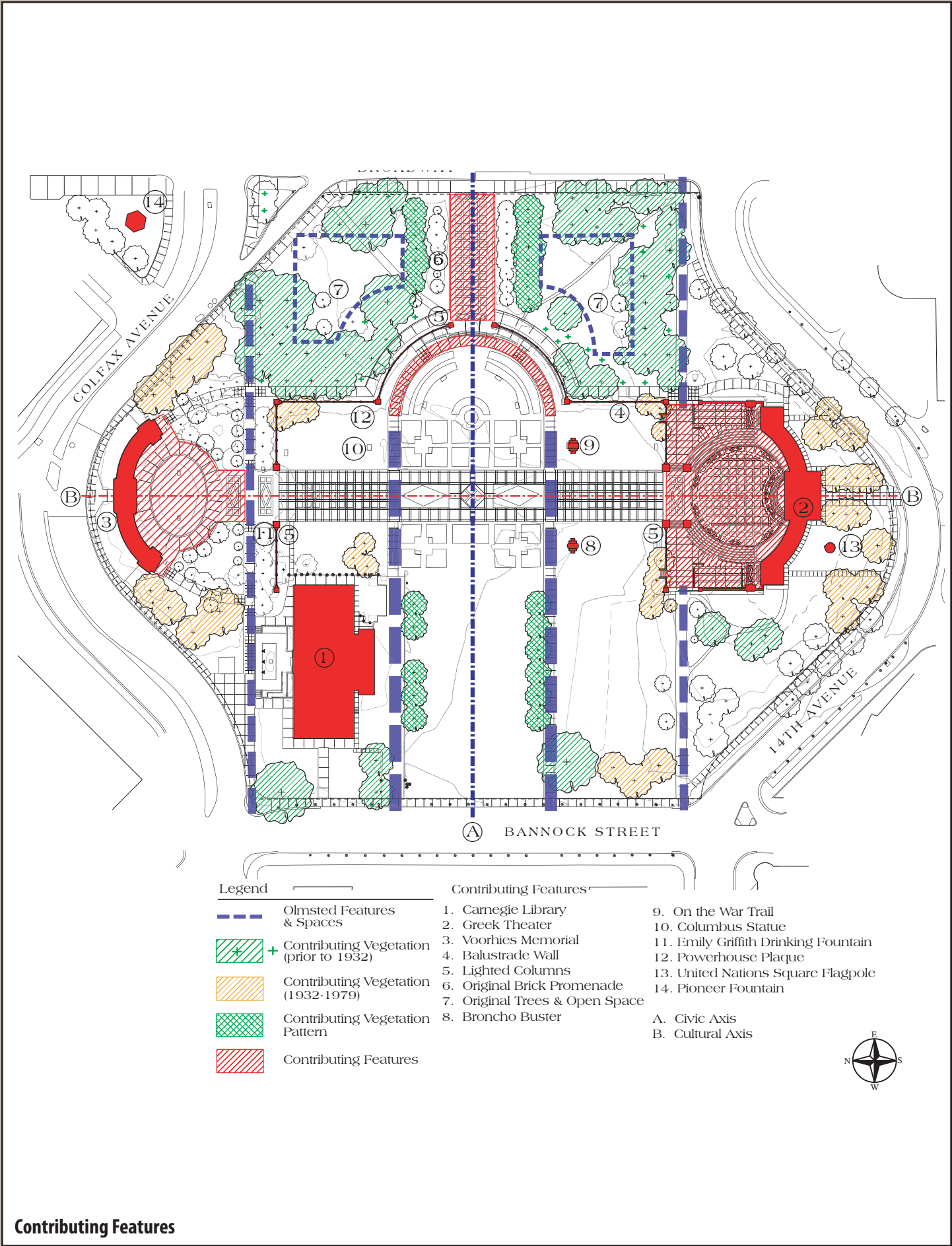


Figure 4
15

IV. Civic Role and Park Character

Civic Center plays two important roles in Denver’s defining system of parks and parkways. The Park serves as Denver’s premiere public square – housing the institutions that define democracy: local and state government, art and culture, history and freedom of expression. In this civic role as the region’s most prominent public square, Civic Center is host to large festivals, civic events and public gatherings.

Civic Center plays an equally important role as a green oasis and place of refuge and reflection for the burgeoning 24-hour neighborhoods close-by and for those who work in or visit the surrounding public buildings.

a. Civic Role

Originally envisioned as Denver’s ‘town square,’ Civic Center continues to serve as the region’s premiere venue for public festivals, gatherings and the right to assemble. Large and small events such as rallies, special celebrations, protests, speeches and marches have been held in the Park. Notable events include speeches by presidential candidates Richard Nixon in 1947, John F. Kennedy in 1960, William J. Clinton in 1992, and Barack H. Obama, Jr. in September 2008. A rally held by the Communist party in 1947 and the decision by Mayor Quigg Newton to allow the Communist Day, represent the numerous controversial demonstrations of free speech that occurred in Civic Center.

Annual festivals and community events continue to take place. In 1998 the Denver Broncos celebrated their Super Bowl victory in Civic Center with 650,000 fans. On a smaller scale Civic Center serves as a delightful venue for music, theater and daily events such as the Wednesday Farmer’s Market. Enhancing the Park’s role as a place for daily activities and small events is especially important.

b. Park Character

Civic Center is one of only three public parks in downtown Denver and is the closest to one of Denver’s fastest growing neighborhoods—the Golden Triangle. Several other dense, mixed-use districts are close to the Park: Uptown, Capitol Hill and the Silver Triangle.



The Park offers a place of quiet reflection from the frenzy of city life. While this elegant urban amenity does not offer active recreation – ball fields or swimming pools – its role as a passive park, providing shade, seating and a distinct park atmosphere is important to nearby residents and visitors.

The formal composition and beauty of Civic Center’s contributing structures, statues and landscape can be enhanced by stronger connections both within and adjacent to the Park. Improved sight lines and human-scaled amenities, such as restrooms, food service and more programming, are equally important to the revitalization of this civic treasure.

V. General Park Guidelines

a. Introduction

The Design Guidelines are divided into two sections, General Park Guidelines and guidelines for individual park spaces such as the McNichols Building.

The General Park Guidelines, Section b. through k., shall be used to evaluate all improvements or modifications proposed within the Study Area (Section I.c. Study Area and Area of Influence).

- b. Connectivity and Park Composition
 - 1. Activity Nodes
 - 2. Pedestrian Circulation
 - 3. Connectivity and Circulation
 - 4. Spatial Organization
 - 5. Composition of Park Spaces
- c. Architectural Scale
- d. Preservation, Restoration and Rehabilitation
- e. New Elements
- f. Materials
- g. Site Furnishings
- h. Lighting
- i. Art and Commemoration
- j. Vegetation and New Plantings
- k. Environmental Stewardship

The standards and guidelines presented in Section b. Connectivity and Park Composition, should also be used to evaluate improvements and modifications proposed for the Area of Influence. Particular attention should be paid to improvements or modifications proposed for circulation and any impacts they may have on the Park's pedestrian circulation.

1. Related Guidelines and Standards

- Public Art Policy, Denver Office of Cultural Affairs—2008
- Public Art Program Ordinance
- Contemporary Design in Historic Districts, New Construction, and Additions and Alternatives to Existing Structures, Denver Landmark Preservation Commission - 2006
- Denver's Civic Center Park Master Plan - 2005

- Design Guidelines for Landmark Lighting, Denver Landmark Preservation Commission - 1997
- Civic Center Design Guidelines, Community Planning and Development, City & County of Denver - 1996
- Design Guidelines for Landmark Structures and Districts, Denver Landmark Preservation Commission - 1995
- U.S. Secretary of the Interior's Standards for Rehabilitation of Historic Buildings
- U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes

2. Preservation, Restoration and Rehabilitation

Rehabilitation is the primary design approach that shall be undertaken for Civic Center. These Guidelines provide for the rehabilitation of the entire Park landscape and its contributing features.

- Balustrade Wall
- Voorhies Memorial
- Greek Theater and Colonnade of Civic Benefactors
- McNichols Building
- Upper Terrace and Lower Terrace

Each project undertaken should defer to the preservation, restoration and rehabilitation approaches as defined in Section V d. Preservation, Restoration and Rehabilitation, page 31.

3. New Elements to Civic Center

These Guidelines allow New Elements within Civic Center. These are limited to those listed below (Section V. e. New Elements page 34).

- Central Gathering
- South Garden
- Two transitional elements for the McNichols Building (Carnegie Library)
- Greek Theater modifications
- Park Kiosks (three)

■ b. Connectivity and Park Composition

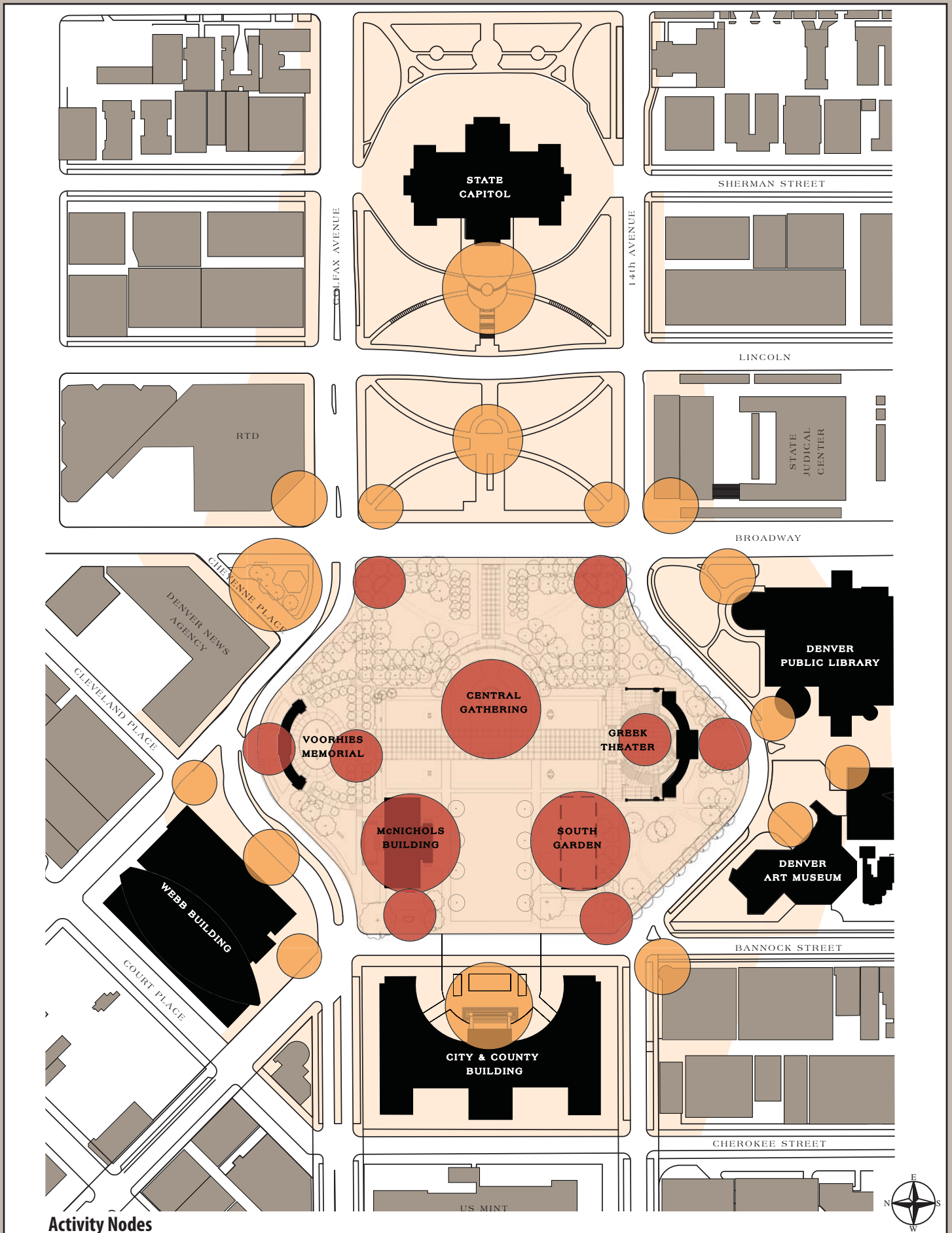
b1. Activity Nodes

Description and Intent:

- Several locations within Civic Center are identified as places where daily activity should be encouraged. These key activity nodes are represented by red dots. The larger dots represent primary activity nodes where the greatest activity should be encouraged. The smaller dots represent important secondary activity nodes.
- Increased activity around Civic Center is key to enlivening the Park. Locations within the Area of Influence where heightened activity should be encouraged are represented by orange dots. These are support activity nodes.

Guidelines:

1. Encourage park activity within Civic Center at key activity nodes.
2. Provide physical infrastructure improvements within Civic Center to support and encourage activity.
 - Ensure new improvements are compatible with the Park's architectural and historical significance.
 - Design and construction of new improvements shall follow applicable sections of these Guidelines.
3. Encourage activities supporting the civic role and park character of Civic Center ensuring they are compatible with its historic character (Section IV. Civic Role and Park Character page 16).
 - Create programs and events in Civic Center to encourage daily activity within the Park.
4. Encourage programs, events and related minor improvements at support activity nodes to increase daily activity around Civic Center.
5. Encourage public gatherings supporting the civic role of Civic Center and reinforcing its importance as Denver's primary public gathering space.



Activity Nodes

Figure 5
19

■ b 2. Pedestrian Circulation ¹

Description and Intent:

An active and enjoyable park experience requires a hierarchy of pedestrian routes to bring users into the Park's interior, provide for safe crossings at park edges, provide access for all and create strong connections to the larger urban context. This hierarchy of pedestrian circulation shall be accomplished by respecting Civic Center's characteristic Beaux Arts composition. This requires reinforcing the primary pedestrian routes such as the east-west routes along Colfax and 14th Avenues, while allowing for direct routes into the Park at its corners. The Pedestrian Circulation diagram illustrates the pedestrian circulation hierarchy.



Standards ²:

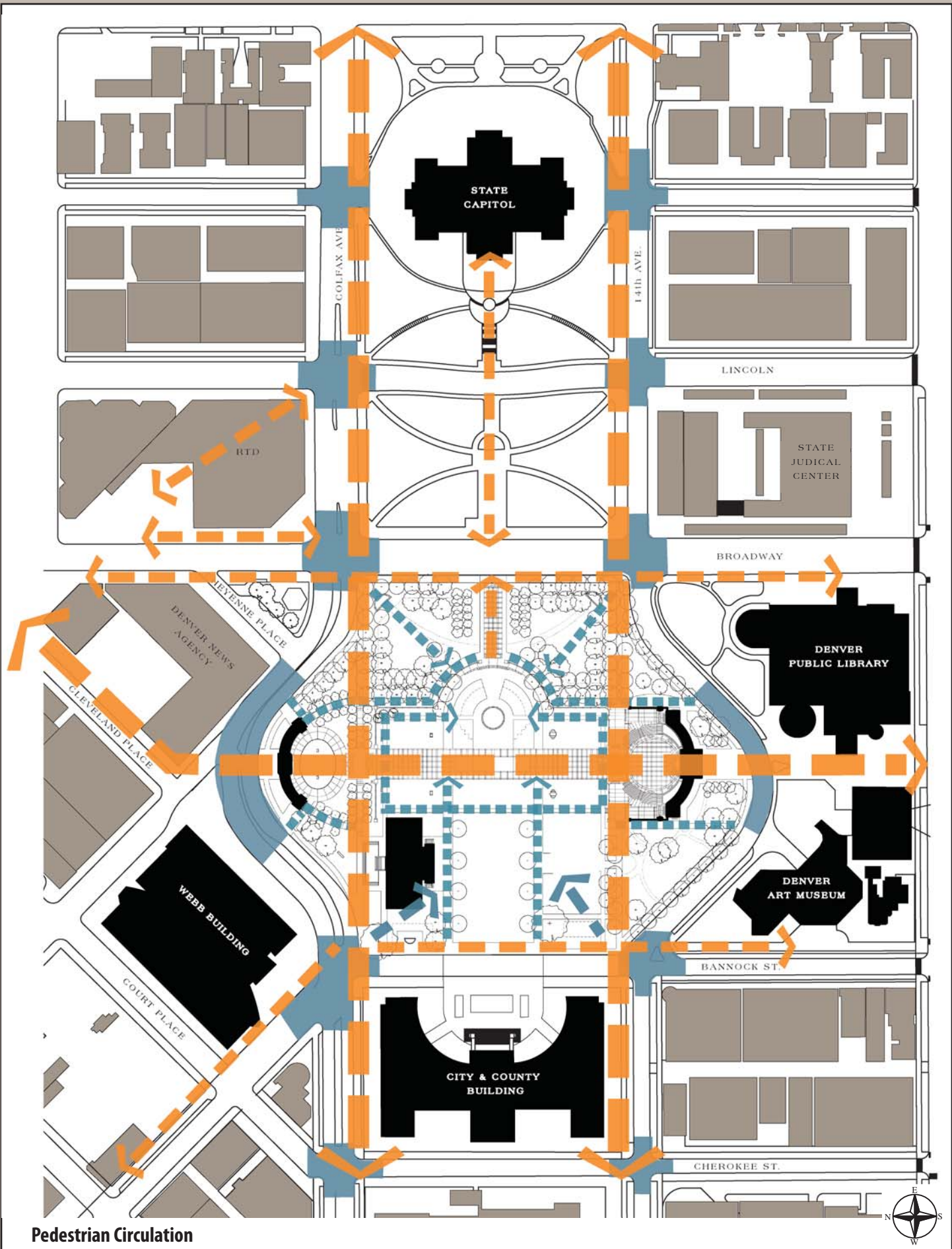
1. Respect Civic Center's Beaux Arts composition by improving and strengthening those pedestrian routes that support and define this composition.
 - These pedestrian routes are the east-west walk along Colfax and 14th Avenues extending from the State Capitol west to Speer Boulevard.
 - The primary north-south route is the Cultural Axis promenade that extends from Colfax Avenue into the Denver Art Museum Campus.
2. Provide universally accessible routes into each building, structure and park space within Civic Center, while respecting its architectural and historical integrity.
3. Provide clearly identified, accessible routes to and from the Park, creating movement through the Park.
4. Provide a hierarchy of pedestrian circulation, ensuring safe pedestrian access into Civic Center's interior. Ensure pedestrian routes are compatible with the Park's composition.

Guidelines:

1. Strengthen connections to the 16th Street Mall from Civic Center along Broadway and along Cleveland Place.
 - Encourage visual and pedestrian connections between the 16th Street Mall and the State Capitol.

¹ Space Syntax's 2007 study of the Civic Center for the University of Colorado was consulted in the development of these Guidelines.

² Civic Center Conservancy Connections Committee contributed to the development of these Standards and Guidelines.



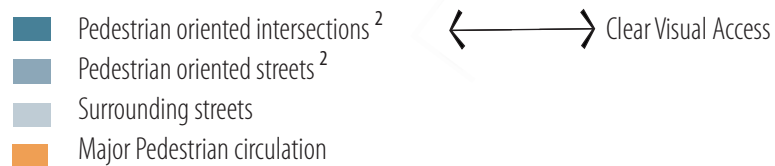
Pedestrian Circulation

Figure 6
21

■ b 3. Connectivity and Circulation ¹

Description and Intent:

Connecting Civic Center to the surrounding civic buildings, urban streets and adjacent neighborhoods through a legible pedestrian and vehicular circulation system is essential to the Park's long-term viability. Balance the needs of vehicular traffic with pedestrian access to the Park to achieve safety and mobility throughout the Civic Center District.



Connectivity includes visual access into Civic Center at key points from its perimeter. Visual access shall support and reinforce the physical connections mentioned above.

Standards:

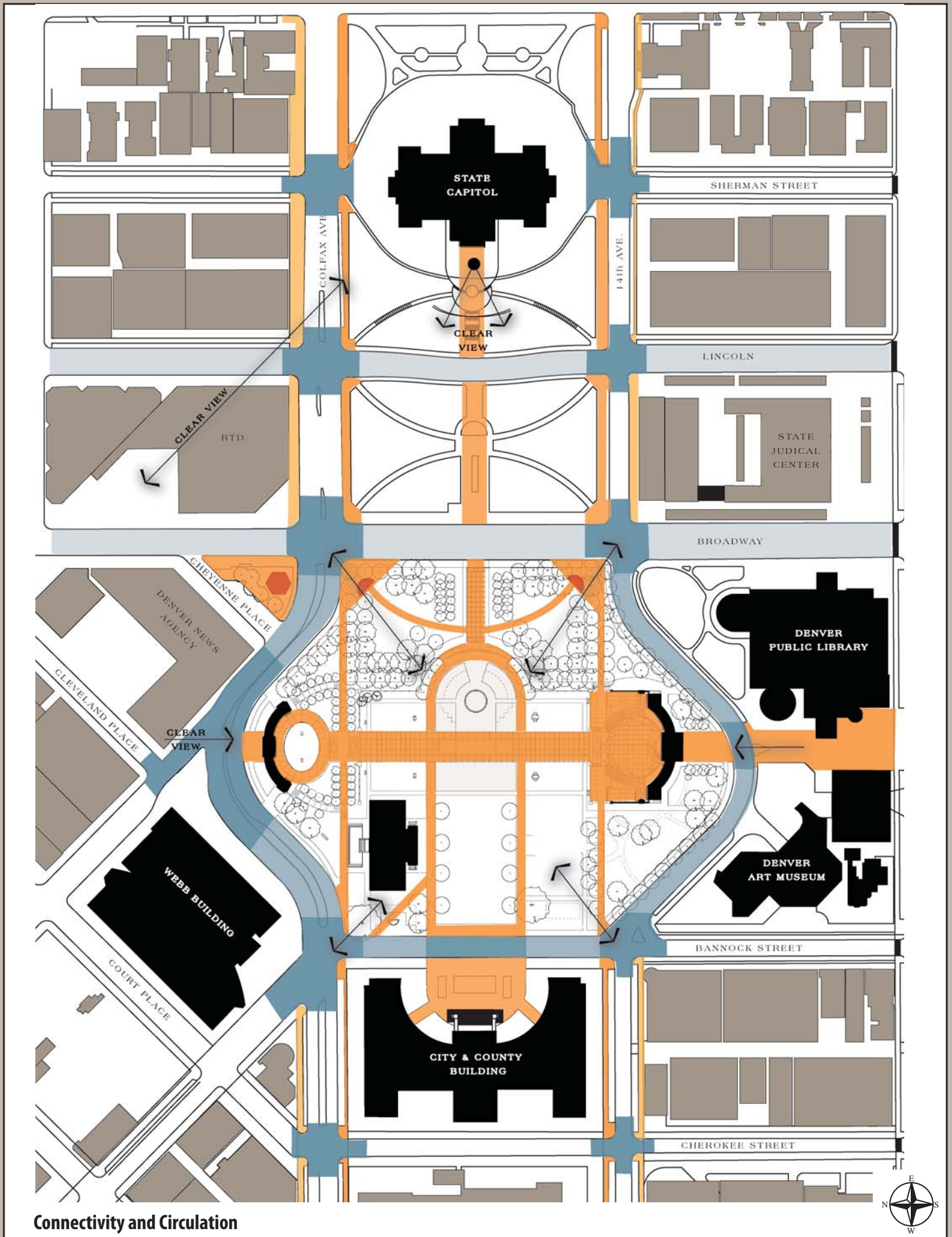
1. Encourage clear and safe pedestrian connections to Civic Center across the surrounding streets and at key intersections.
 - These intersections are illustrated in dark blue on the Connectivity and Circulation Diagram and include places where Cherokee and Bannock Street, Broadway, Lincoln and Sherman Street intersect with 14th Avenue and with Colfax Avenue.
2. Encourage clear visual access into and from the Park.
 - Maintain clear visual access between the Colorado State Capitol and Denver's City & County Building along the Civic Axis.

Guidelines:

1. Encourage the development of pedestrian-oriented streets on streets adjacent to Civic Center.
 - These streets are Colfax Avenue, 14th Avenue and Bannock Street, as illustrated in medium blue on the Diagram.
 - Lincoln and Broadway should also be pedestrian friendly streets, illustrated in light blue on the Diagram.
2. Encourage the development of civic spaces extending across the streets surrounding Civic Center.
 - Encourage the creation of a civic space across Bannock Street, along the Civic Axis.
 - Encourage the narrowing of Bannock Street, connecting Civic Center with the City & County Building.

¹ Space Syntax's 2007 study of the Civic Center for the University of Colorado was consulted in the development of these Guidelines.

² These are streets and intersections that safely blend vehicular, bicycle and pedestrian traffic to favor the pedestrian.



Connectivity and Circulation

Figure 7
23

■ b 4. Spatial Organization

Description and Intent:

Edward Bennett organized his 1917 plan for Civic Center to resonate with the State Capitol's east-west orientation towards the Rocky Mountains. Using a series of Regulating Lines that originally extended only to Carnegie Library (McNichols Building), Bennett created an axially symmetrical arrangement for Civic Center with this east-west axis (Civic Axis) as its main organizing component. To this he added a north-south axis (Cultural Axis), placing a major civic structure at each edge—the Voorhies Memorial on the north and the Greek Theater on the south.

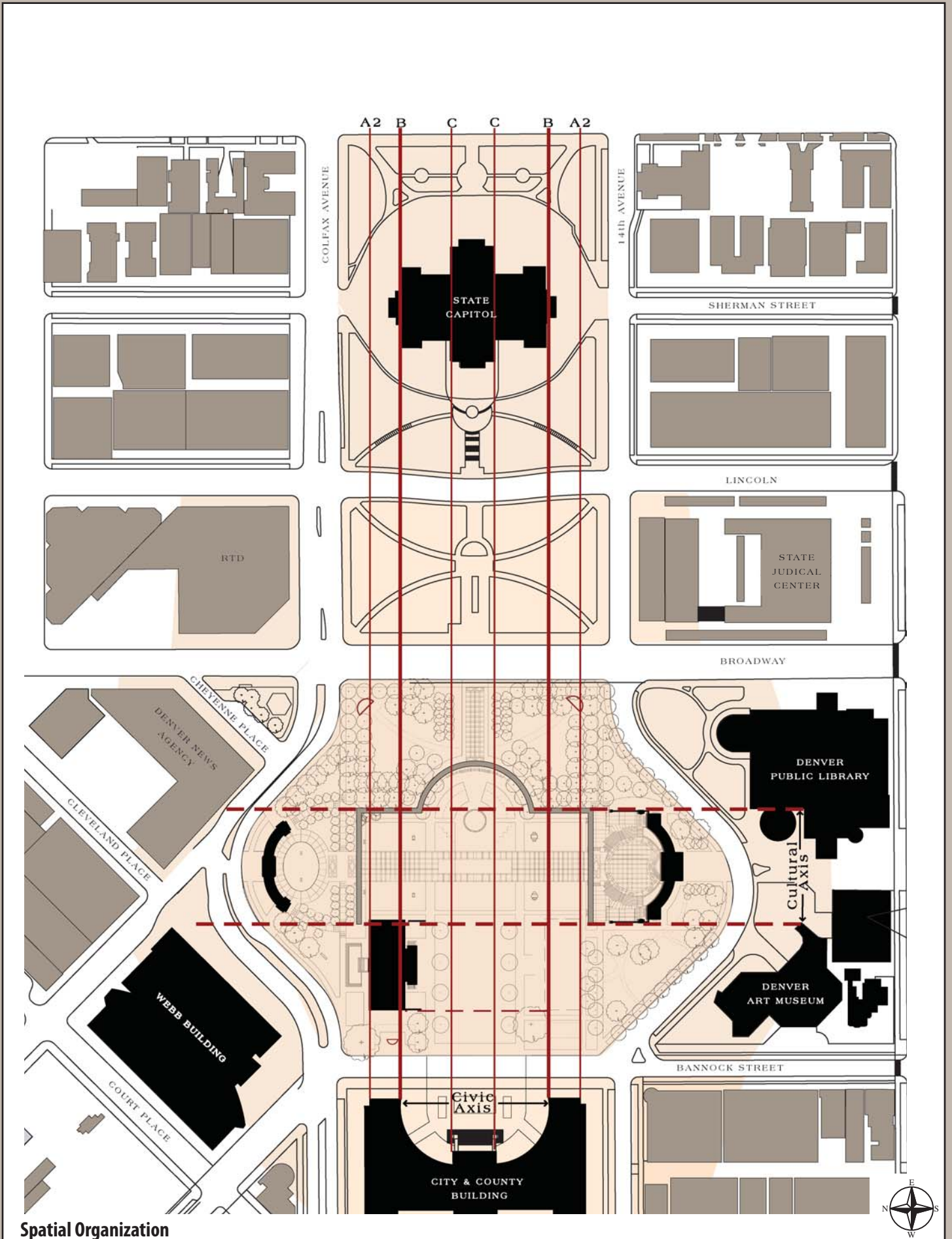
These Regulating Lines and the formal spatial organization of the Park were expanded with the design of Denver's City & County Building, oriented to Civic Center. The McNichols Building is oriented to the State Capitol along these Regulating Lines, as is Denver's City & County Building.

The Civic Axis extends between the **B** Regulating Line from the State Capitol through Civic Center and the City & County Building to the new Denver Justice Center Campus.

The Cultural Axis spans the width of the Greek Theater and includes the Voorhies Memorial, extending to the Denver Art Museum on the south and across Colfax Avenue to Cleveland Place on the north.

Guidelines:

1. Maintain and strengthen the Civic Axis and the Cultural Axis as the primary organizing features of Civic Center.
 - Maintain the open view and spatial relationship between the State Capitol and the City & County Building along the Civic Axis.
 - Maintain the view and the sense of openness between the Voorhies Memorial and the Greek Theater along the Cultural Axis.
2. Respect Civic Center's spatial organization and series of Regulating Lines when placing New Elements in the Park.
 - New Elements may include park features, gardens or spaces (Section V. e. New Elements, page 34).
3. Comply with the State Capitol View Plane Ordinance (Municipal Code, Chapter 10, Article IV, 2001) protecting the view from the State Capitol to the west.
 - Comply with height restrictions described in the Ordinance when placing New Elements or undertaking rehabilitation work.



Spatial Organization

Figure 8
25

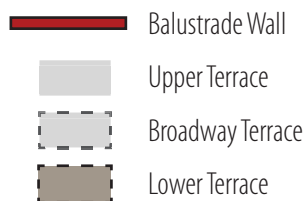
■ b 5. Composition of Park Spaces

Description and Intent:

Civic Center is artfully arranged as a series of distinct but overlapping park spaces defined by topographic change, walls, steps, structures, buildings and plantings.

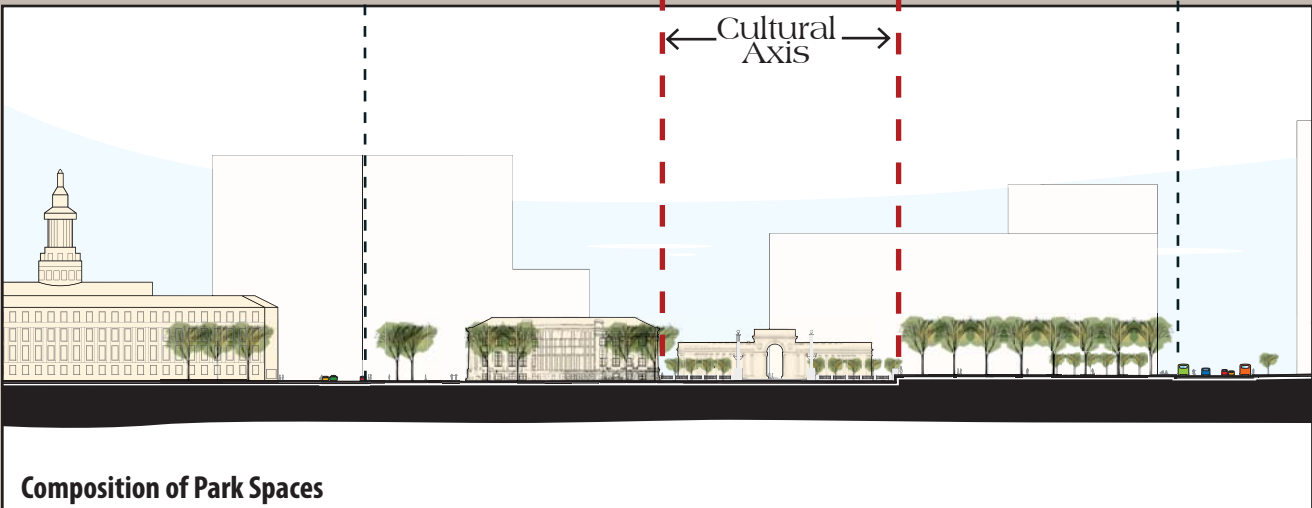
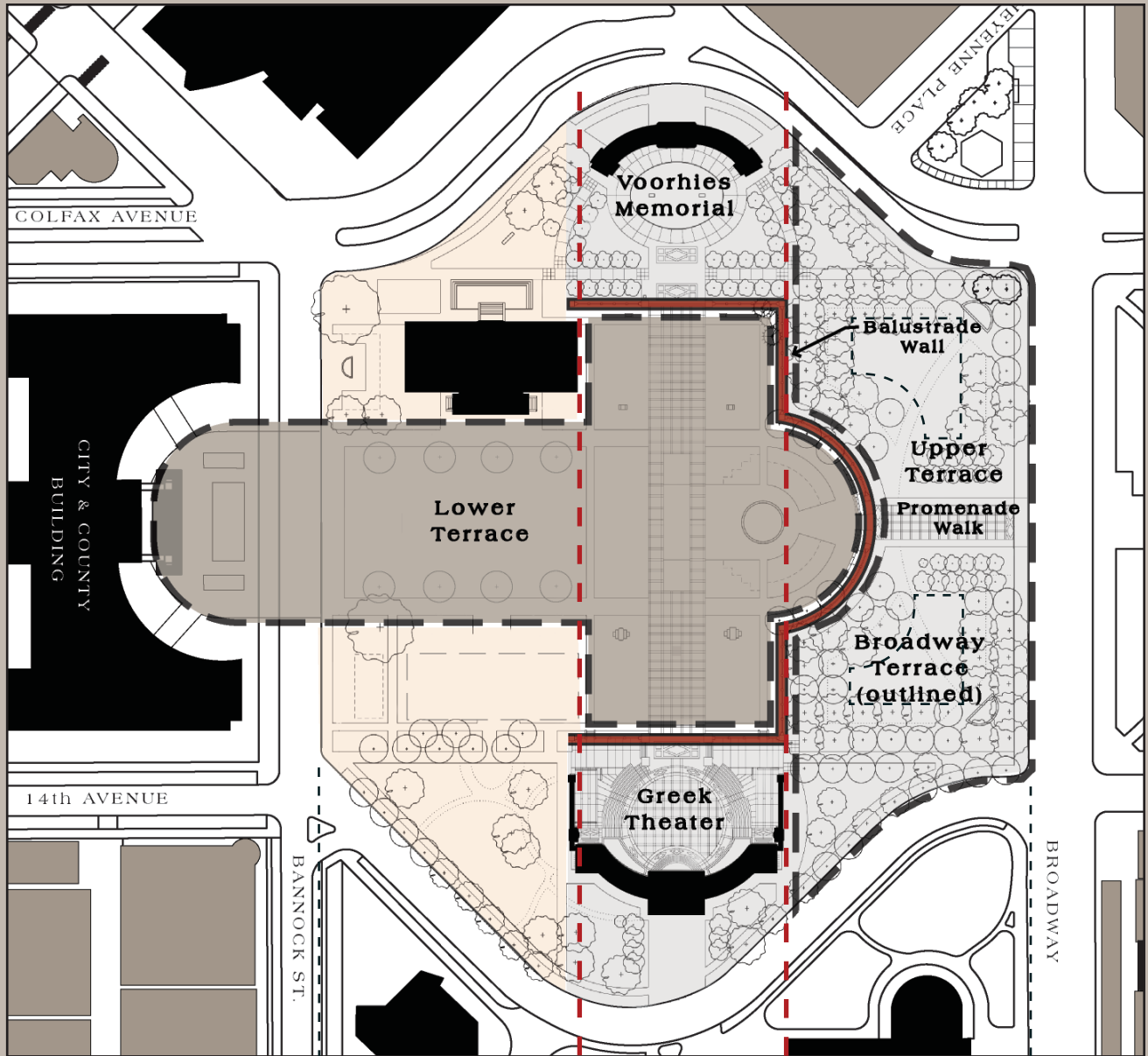
The two primary park spaces are the Upper and Lower Terraces separated by the formal Balustrade Wall. The Upper Terrace extends the full length of Broadway. It wraps around the north to include the Voorhies Memorial and on the south to include the Greek Theater. The area between Colfax Avenue and 14th Avenue is the Broadway Terrace.

The Lower Terrace is set several feet below and includes the promenade connecting the Voorhies Memorial, the Greek Theater and the Great Lawn. The McNichols Building (Carnegie Library) defines the north edge of the Lower Terrace. A complementary building to the south was proposed but never built. The South Garden proposed for this space will help define the Lower Terrace on the south.



Guidelines:

1. Maintain Civic Center's distinct composition of Park spaces and the individual features that assist in defining these spaces.
 - Individual features include the Balustrade Wall, topographic change, steps, walls, lighted columns, lights and trees.
2. Respect and reinforce the composition of Park spaces when adding new features.
 - Design features to complement the Park's contributing features and to assist in defining park spaces.



Composition of Park Spaces



Figure 9
27

■ c. Architectural Scale

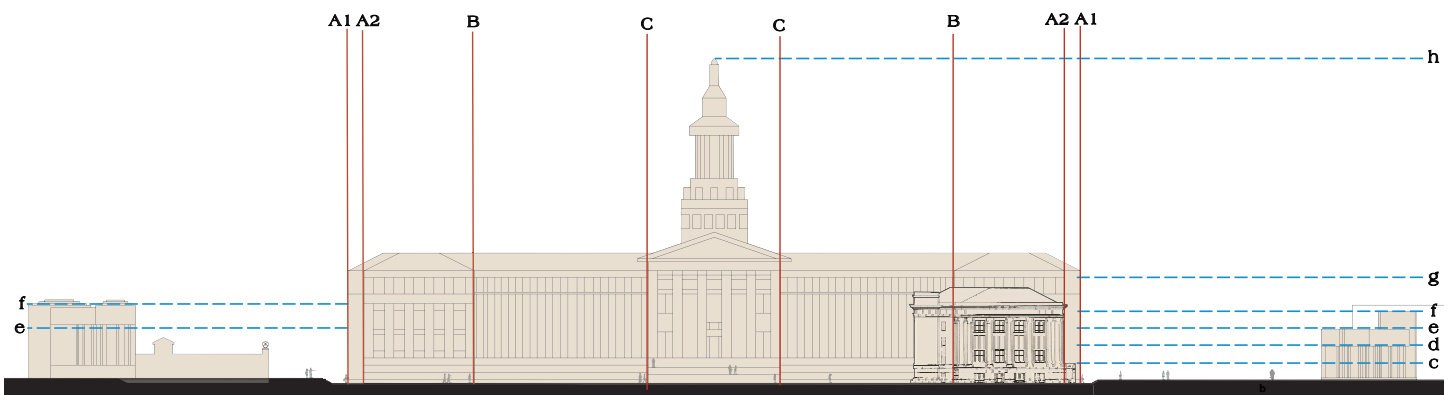
Description and Intent:

Civic Center's three-dimensional buildings, structures and features exhibit a distinct neoclassical architectural scale, inspired by the classical architecture of ancient Greece and Rome. Neoclassical structures are typically symmetrical, feature columns rising the full height of the building and are frequently topped by a triangular pediment with a domed roof. The State Capitol, Denver's City & Country Building and the McNichols Building reflect these principles.

The proportions of Civic Center's historic features provide the Park's cohesive architectural character and inform its spatial organization. These proportions shall be reflected in the design of New Elements and all modifications proposed for the Park, including existing building, structures or features.

Civic Center's architectural scale is described by a series of distinct vertical heights consistently reflected in the facades of the Park's building and features. This is illustrated on the diagrams of the Voorhies Memorial and the McNichols Building on page 29, and on the section of the Park on this page.

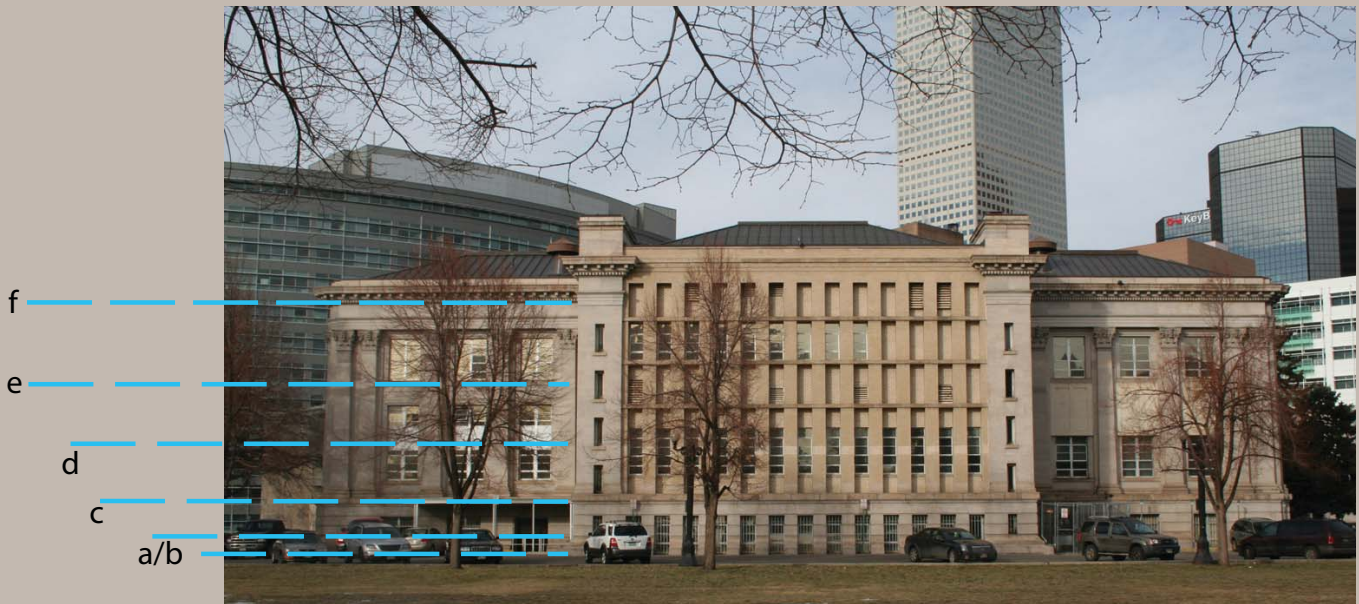
- a/b** - 2 to 4-foot height (human-scale)
- c** - 12-foot height (human-scale, McNichols base)
- d** - 20-foot height (Park kiosks, bottom of Voorhies cornice)
- e** - Top of Voorhies Memorial cornice, bottom of Greek Theater cornice, and bottom of windows on McNichols Building
- f** - Top of Voorhies Memorial and Greek Theater and bottom of McNichols Building cornice
- g** - Top of City & County Building cornice
- h** - Top of City & County Building obelisk



Architectural Scale



Voorhies Memorial



McNichols Building

Architectural Scale

■ c. Architectural Scale, continued

Guidelines:

1. Maintain and respect the architectural scale of Civic Center and its contributing features when rehabilitating the historic building, structures or features.
2. Reflect the proportions of Civic Center's architectural scale in the design of New Elements.
 - Refer to the individual sections in these Guidelines for guidelines and standards for specific park spaces and possible New Elements.
3. Reflect the proportions of Civic Center's architectural scale in the design of any improvements or modifications to the Park.

■ d. Preservation, Restoration and Rehabilitation

Description and Intent:

Rehabilitation is the primary design approach that shall be undertaken for Civic Center. Rehabilitation is a broad approach allowing for the preservation of the Park's contributing features (pages 14 and 15) and for specific alterations necessary to continue its civic role and accommodate civic and park use.

As a design approach, rehabilitation allows for repairs or alterations to historic buildings, structures and features as well as modifications to the Park's landscape that are compatible with its historic character. Rehabilitation allows for New Elements designed to be compatible with Civic Center's distinct spatial organization and architectural scale. Rehabilitation also allows for the preservation of historic features including measures to sustain their existing form, integrity and materials.

Civic Center's contributing features—building, structures and park features—and their relationships to one another will be rehabilitated. These features include the McNichols Building, Voorhies Memorial, Greek Theater, Upper Terrace, Lower Terrace and the Balustrade Wall.

Definitions:¹

Adaptive Reuse - modifying a building or property to meet a new use while fulfilling contemporary needs and retaining historic features.

Preservation - the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Includes preliminary measures to protect and stabilize the property.

Rehabilitation - the act or process of making possible a compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural or architectural values.

Restoration - the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time by removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate.

New Element - a new feature to assist with the continued use of the Park, designed and constructed so the contributing features of the Park and/or its historic features are not obscured or damaged by the New Element.

¹ adapted from the Secretary of Interior Standards for the Treatment of Historic Properties as amended and annotated 1995.

■ d. Preservation, Restoration and Rehabilitation, continued

■ Restoration / Rehabilitation

■ Rehabilitation

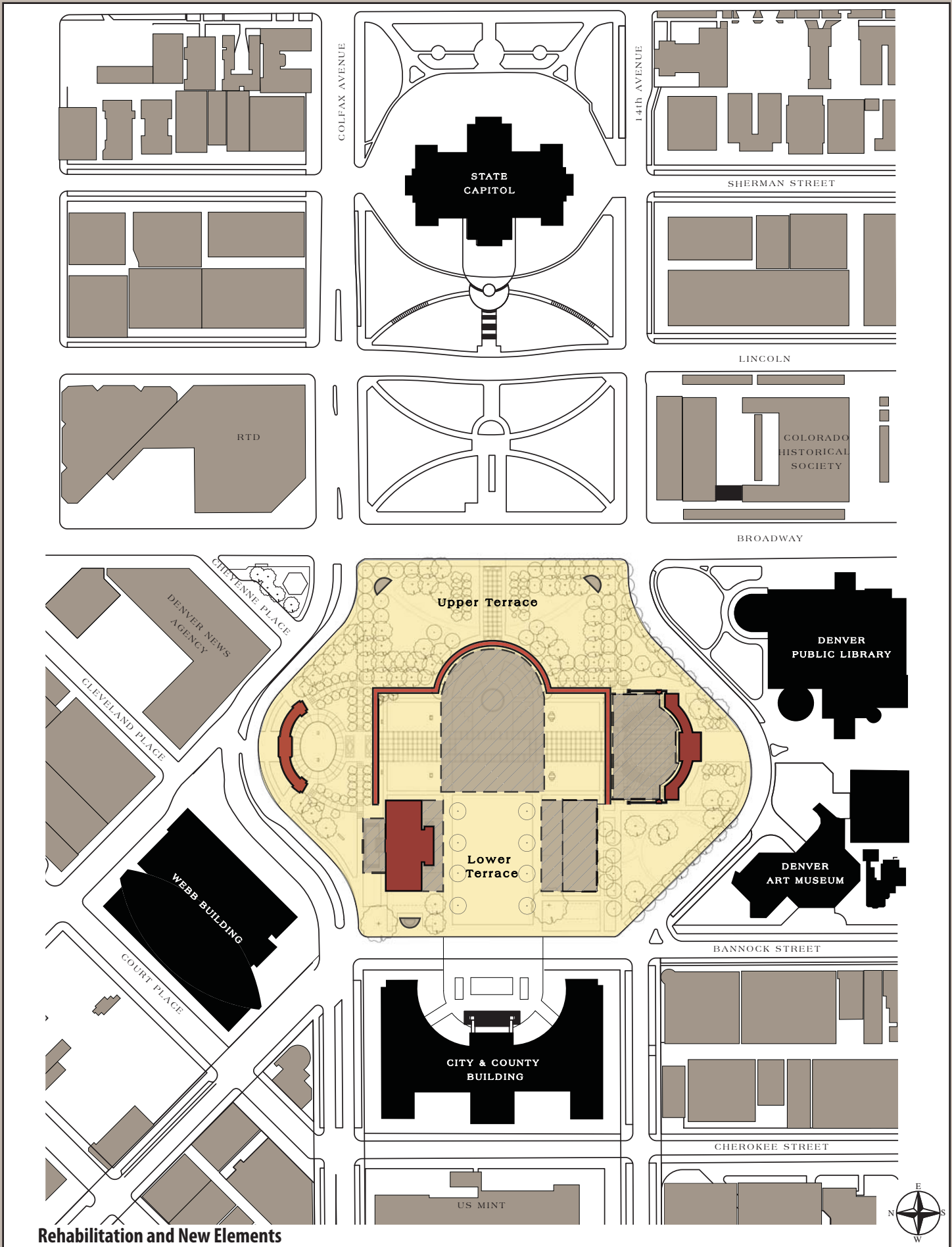
■ New Elements

Standards:

1. Rehabilitate Civic Center's contributing building, structures and features using accepted preservation practices.
 - Restore the facades of the Park's structures.
 - Rehabilitate the McNichols Building.
 - Restore individual features such as the Balustrade Wall with its columns and lights.
 - Refer to the individual sections on specific park spaces, beginning on page 49, for specific treatments for individual features within those park spaces.

2. Rehabilitate Civic Center's park landscape.
 - Civic Center's distinct balance of structure, civic art and landscape uniquely characterizes the Park's Beaux Arts composition and contributes to its prominence. Surrounded by an ensemble of civic and cultural institutions, the Park's value as a green, urban oasis shall be protected.
 - Follow the Guidelines for Spatial Organization (section V. b4., page 24) and Composition of Park Spaces (section V. b5., page 26) in rehabilitating Civic Center's park landscape.
 - Rehabilitate contributing features within the Park's landscape such as the circulation patterns, the Red Oak Grove and the Balustrade Wall.

3. Allow New Elements as provided for in Section V. e. page 34 and illustrated on the Diagram on page 35, and in conformance with the Standards and Guidelines articulated in Section V. b4. Spatial Organization, page 24.
 - New Elements are identified by the 2005 Park Master Plan as new park spaces. These include: 1) two transitional elements to McNichols Building; 2) Central Gathering; 3) South Garden (known as Festival Garden in the 2005 Park Master Plan); and 4) three Park Kiosks and their settings.
 - Modifications to the Greek Theater may be considered as a possible New Element to the Park.
 - Comply with the Standards and Guidelines in the individual sections on specific park spaces, beginning on page 49.



Rehabilitation and New Elements

Figure 11
33

■ e. New Elements

Description and Intent:

The ideals of Edward Bennett are reflected in Civic Center's formal symmetrical composition and Beaux Arts detailing, as well as in the Park's role as Denver's great public gathering space. However, Bennett's vision was never fully executed. Changes made in the middle of the 20th Century modified his original composition.

Civic Center is meant to be a place for people to enjoy on a daily basis. As recommended by the 2005 Park Master Plan, new park spaces are intended to add programming and amenities to increase the daily use of the Park. These new spaces are intended to transform Civic Center from a disconnected space into a lively place of engagement.

Civic Center's Regulating Lines, Cultural and Civic axes and spatial organization point to three acceptable locations for New Elements: 1) Central Gathering; 2) South Garden; and 3) two transitional elements to the McNichols Building. Three smaller, human-scaled structures (kiosks) at three corners of the Park also complement the Park's historic design. Modifications to the Greek Theater are considered the fourth possible New Element.

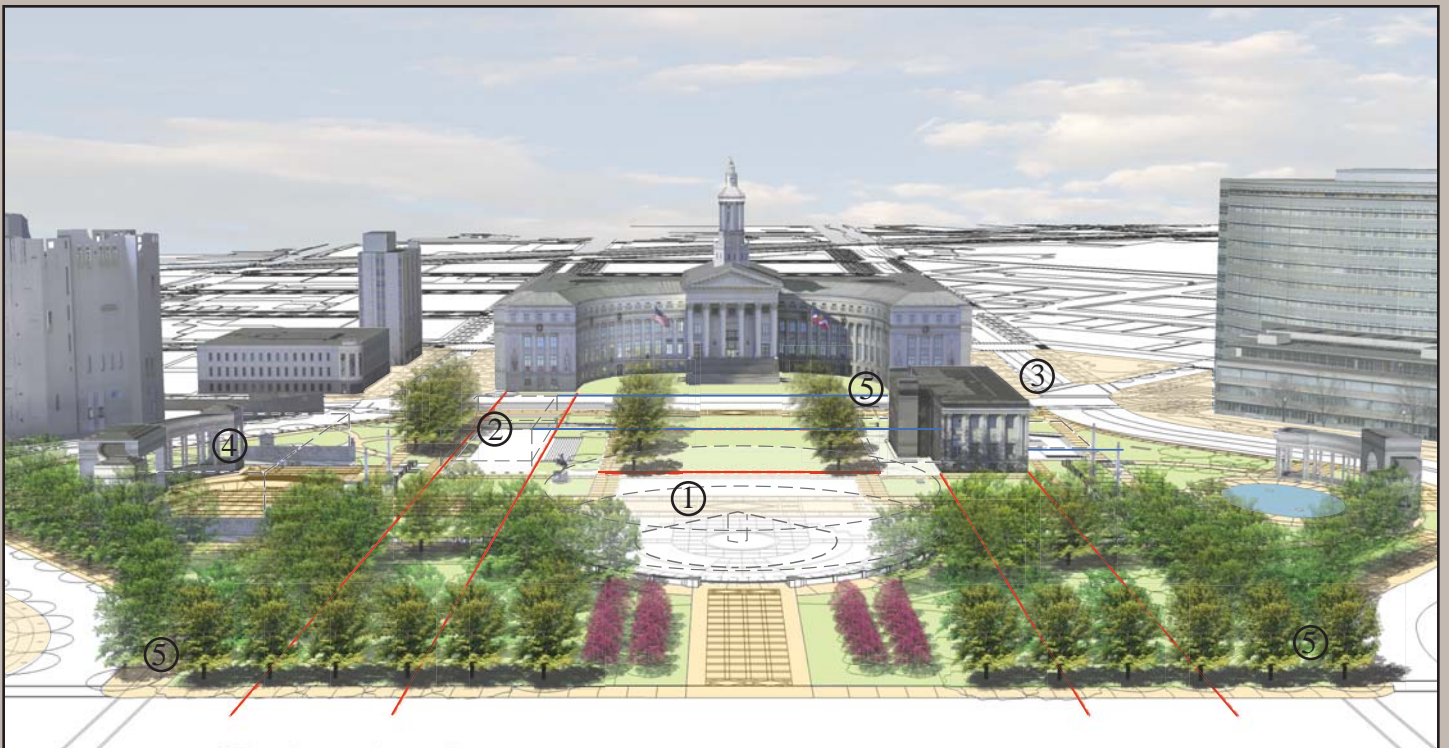
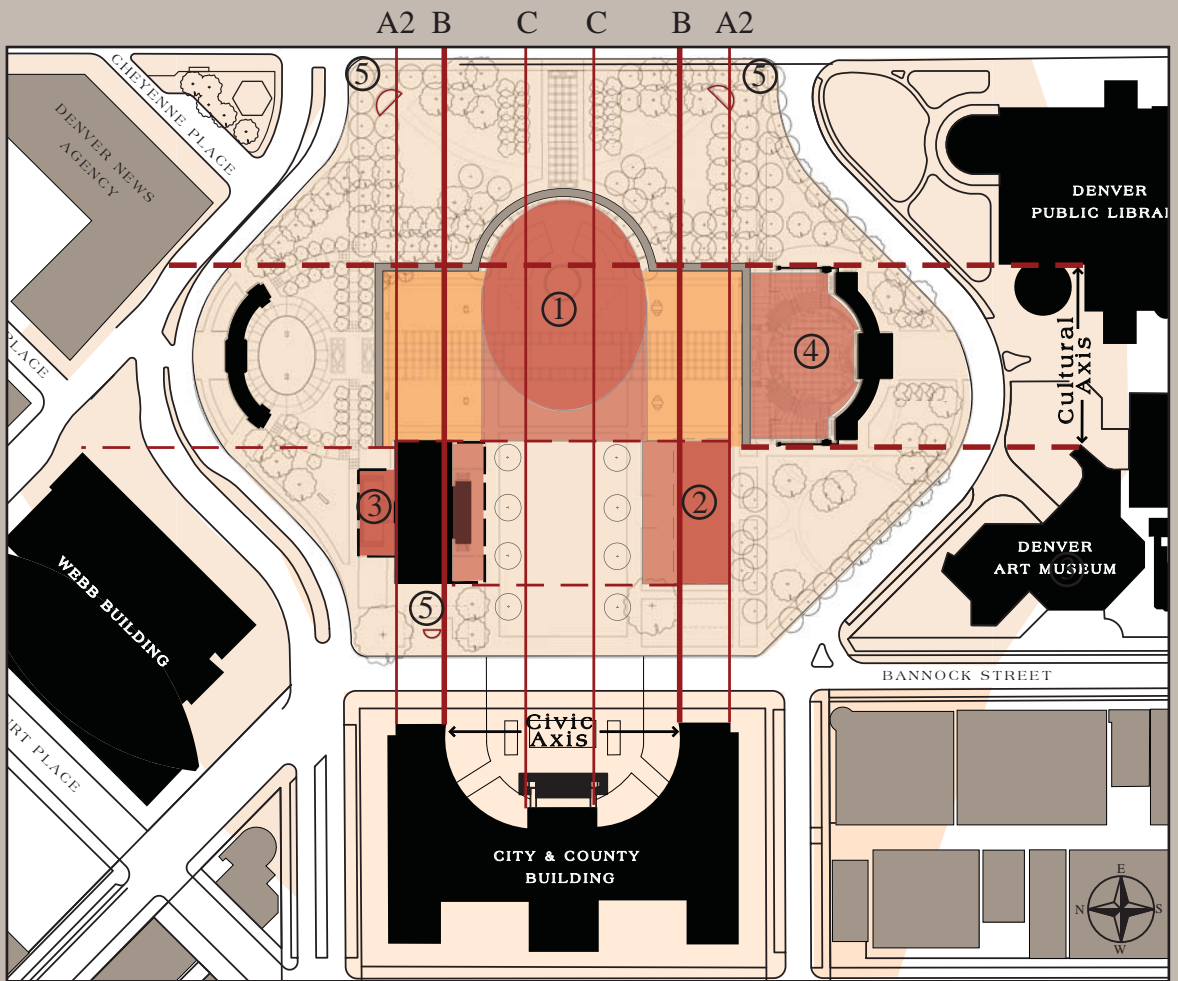
Guidelines:

1. Respect the two Areas of Influence identified for each New Element.

- • The Primary Area of Influence is the horizontal space where new improvements may occur. The design should consider the entire Area of Influence, but not necessarily result in the form indicated on the Diagram.
- • The Secondary Area of Influence is an additional horizontal space that the design may include. Limitations on mass and scale in these areas are more restrictive than in the Primary Area of Influence.

2. Reestablish and reinforce key park spaces.

- • Encourage opening up the original park spaces in the Broadway Terrace, following the standards and guidelines that begin on page 53.
- • Design the area between the Voorhies Memorial and the Greek Theater in the Lower Terrace as a unified space, integrating the Cultural Axis promenade with the design of the new Central Gathering.



1. Central Gathering 2. South Garden 3. McNichols Building 4. Greek Theater 5. Park Kiosks

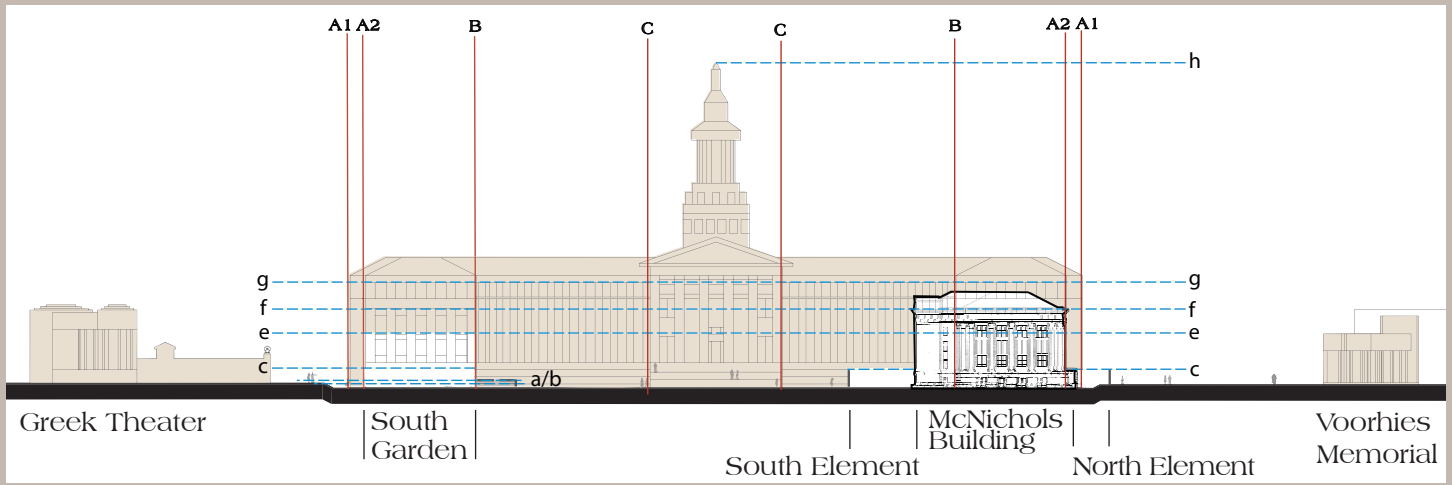
3D Illustratives indicates the Area of Influence where improvements are allowed. It is not meant to imply a solid or filled space.

Figure 12
35

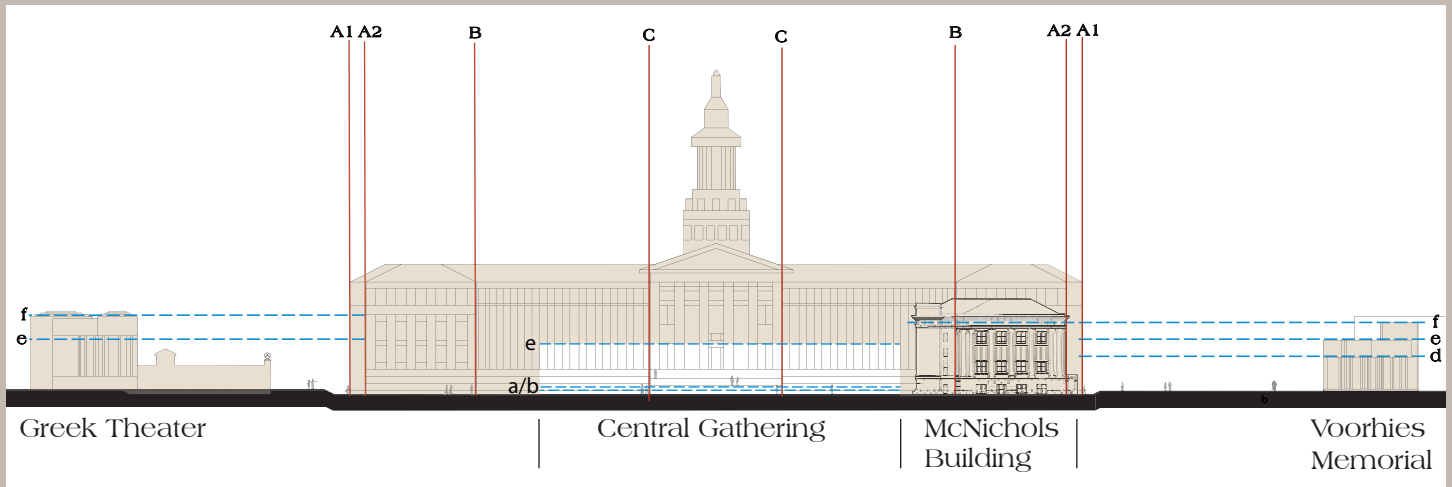
■ e. New Elements, continued

Guidelines, continued:

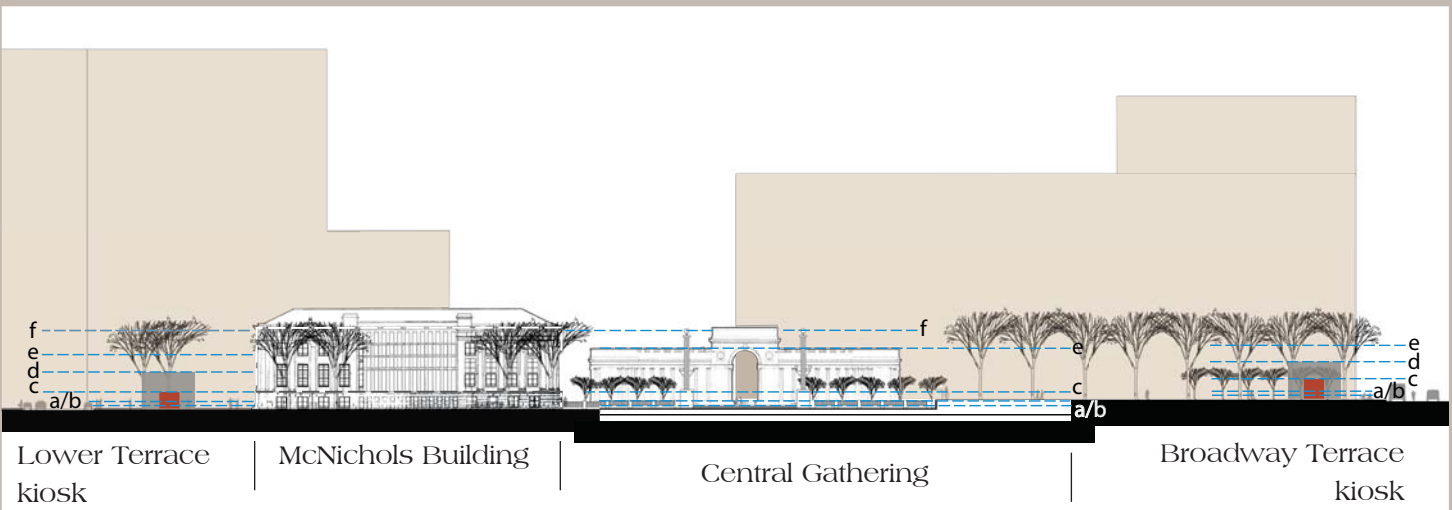
3. Respect Civic Center's architectural scale when determining the mass and scale of New Elements.
 - Refer to Section V. c. Architectural Scale on page 28 for a description of Civic Center's distinct vertical heights.
 - a/b** - 2 to 4-foot height (human-scale)
 - c** - 12-foot height (human-scale, McNichols base)
 - d** - 20-foot height (Park kiosks, bottom of Voorhies cornice)
 - e** - Top of Voorhies Memorial cornice, bottom of Greek Theater cornice, and bottom of windows on McNichols Building
 - f** - Top of Voorhies Memorial and Greek Theater and bottom of McNichols Building cornice
 - g** - Top of City & County Building cornice
 - h** - Top of City & County Building obelisk
 - Refer to the individual sections on park spaces, beginning on page 49, for specific guidelines for each park space.
4. Preserve and optimize the views into and from Civic Center and protect the views along the Civic and Cultural Axes.
 - Encourage opening the center area of the Red Oak groves in the Broadway Terrace to provide views into the center of the Park.
 - Ensure New Elements do not block views, either looking into the Park or looking out from the Park.



South/North Section - South Garden



South/North Section - Central Gathering



West/East Section

3D Illustration indicates the Area of Influence where improvements are allowed. It is not meant to imply a solid or filled volume.

Architectural Scale for New Elements

f. Materials

Description and Intent:

Civic Center's Beaux Arts design legacy is clearly evident in the materials of its early buildings, monuments and statues. These structures are crafted of native stone—marble and granite, as well as bronze—all with subtle variations in color, texture and finish. This palette reflects the cohesive aesthetic typical of Beaux Arts neoclassical architecture.

Turkey Creek sandstone—originally quarried in the area now occupied by the Fort Carson Army Base south of Pueblo, Colorado—is the dominant three-dimensional material in the Park. It serves as the façade for the McNichols Building, Greek Theater and Voorhies Memorial. The columns of the Greek Theater and the Voorhies Memorial—as well as the caps, columns and balustrades of the Balustrade Wall—are carved from the same Turkey Creek Sandstone.

A base material of pink granite is used in the Greek Theater. The base of the McNichols Building is a Platte Canyon granite. This may be the original granite of both features. This granite is actually a Pikes Peak granite historically quarried from South Platte Canyon near Buffalo Creek. Another granite of a similar color and texture (Sunset Beige) is quarried at Cold Spring Granite in Marble Falls, Texas.

The concrete paving and brick insets in the Broadway Terrace promenade and the floors of the Greek Theater and Voorhies Memorial are original materials. Granite of varying color, texture and finish, as well as bronze and painted steel are the primary materials of the newer art installations. Painted steel and painted aluminum are the materials of the site furnishings and lights, respectively. Glass occurs in the McNichols Building and is the material of the original extant screen at the Greek Theater.



Standards:

1. Preserve and restore original materials using accepted preservation practices.
 - Restore original materials before replacement. Use materials from the same source as the original, of the same color, texture and finish.
 - If replacement materials are necessary because the original material is not available, use material similar in color and texture, matching the finish of the original.
 - Repair original materials to preserve their original character, using original materials for patching or replacement.
 - If replacement mortar is necessary, use a mix that matches the original in color and texture, including aggregate that matches the color and gradation of the original mortar aggregate. Avoid using cement-rich repointing mortars.

Guidelines:

1. Continue the Beaux Arts tradition by using materials compatible with the Park's neoclassical design.
 - Install materials in keeping with their original design and composition. For example, use brick insets as an accent and Turkey Creek Sandstone as a façade material.

2. Allow the use of new, contemporary materials complementing the Park's original materials and compatible with its neoclassical design.
 - Acceptable primary materials for three-dimensional features—such as walls, columns or structures are:
 - Turkey Creek sandstone or a substitute consistent in color, texture and finish
 - Granite compatible with the neoclassical aesthetic
 - Civic Center Concrete
 - Steel or painted steel
 - Bronze, copper, aluminum or painted aluminum
 - Glass may be used in conjunction with other primary materials
 - Brick may be used as a paving or flooring material with Civic Center Concrete.
 - Acceptable materials for paving are:
 - Civic Center Concrete, granite, brick insets and crusher fines

3. Refer to individual sections in these Guidelines for additional acceptable materials for individual park spaces.



g. Site Furnishings

Description and Intent:

Civic Center's site furnishings are intended to provide comfort and address the functional needs of Park users. Site furnishings have an equally important role in providing a human-scale, complementing the otherwise monumental scale of the Park's structures and the McNichols Building. Site furnishings can assist to define space and orchestrate views.

Site furnishings include seating such as benches, movable chairs and seating integrated into the design of individual Park spaces. Hand rails, guard rails, trash receptacles, bicycles racks, tree grates, drinking fountains, signs and other ancillary features such as newspaper enclosures are also considered site furnishings.

Site furnishings are important; however they are intended as background features to support Park functions. They are not intended to be artistic or ornate, rather as features that blend with the Park.

Standards:

1. Use the standard Civic Center benches for fixed seating.
 - Civic Center bench is a powder coated steel bench, in the style of a modern bowery bench. Denver Park's standard is the Steelsites™ bench, Model RB-28 manufactured by Victor Stanley.
 - Acceptable benches include backless benches (RB-12) and benches (RB-28) with backs. Lengths may be four, six or eight feet long.
 - Each bench shall include an intermediary armrest in the center of the bench.
 - If the Denver standard is not available, use a bench equal in style, color, comfort, material and durability.
 - The color shall be Civic Center Green (RAL 6015 Black Olive).
 - If the seating is located in New Elements such as the Central Gathering, follow the Guidelines for Site Furnishings beginning on page 41.



Standards, continued:

2. Use the standard Civic Center trash receptacle.
 - Civic Center trash receptacle is a powder coated steel litter receptacle that complements the modern bowery bench. Denver Park's standard is the Steelsites™ Model RB-36 manufactured by Victor Stanley.
 - If the Denver standard is not available use a trash receptacle equal in style, color, material and durability.
 - The color shall be Civic Center Green (RAL 6015 Black Olive).
3. Placement of fixed seating and trash receptacles shall be integrated with the design of their immediate settings. The placement shall respect the Park's composition and spatial organization.
4. Use the standard Civic Center chair for movable seating.
 - Civic Center chair is a contemporary folding chair in a bistro style. The chair frame is aluminum with green resin slats. Denver Park's standard is Cannes Folding Chair manufactured by Eurostyle, Tiburon, CA.
 - If the Denver standard is not available use a chair equal in style, color, comfort, material and durability.
5. Use stainless steel or painted steel (RAL 6015 Black Olive) hand rails and guard rails. If the railings are located in a New Element follow the Guidelines.
 - Design ancillary site furnishings such as hand rails, guard rail and newspaper enclosures to be harmonious with their immediate settings.

Guidelines:

1. Encourage seating in the design of New Elements (Section V. e. New Elements).
 - Integrate the design of seating with the overall composition of the New Element.
 - Use the standard Civic Center bench where possible.

- Design new seating using the same material or similar material compatible with that being used for the New Element. Comply with all Guidelines that apply to the New Element when designing seating.
3. Allow signs within Civic Center to provide regulatory information, wayfinding and identification of Park features.
 - Design signs to be harmonious and in context with their immediate setting.
 - Ensure placement of signs respects the Park's composition and spatial organization.
 - Design wayfinding signs to reflect the civic nature of the Park and to be subordinate to the Park's art installations.
 - Do not install signs onto the Park's contributing features such as building, structures or features.
 4. Allow limited use of commercial signs.
 - Commercial signs should be allowed in the McNichols Building, South Garden and at Park kiosks. Refer to the individual sections in these Guidelines for these Park spaces.
 - Follow the most current Denver Parks and Recreation sign standards for commercial signs in Denver parks. The more stringent will apply.
 - Internally lighted signs, neon free-standing signs or signs with advertisements or sponsorships will not be allowed.
 - Lighting for signs should be externally illuminated with lighting turned off one hour after close of business.
 - Do not install commercial signs onto the Park's contributing features.
 - Design signs to be subordinate to the architectural detailing of the Park space where it is located.
 - Off-site advertising will not be allowed.
 5. Allow temporary signs such as banners or signs for park events or those including content related to Civic Center use.
 - Installations requiring more than 72 hours in the Park will be reviewed as commercial signs, noted above.

h. Lighting

Description and Intent:

Lighting in Civic Center is intended to recapture the traditional Beaux Arts composition, where lighting was a major design feature used to showcase the formal design of the Park. Lighting should provide adequate light throughout the Park for security. It should also mark circulation transitions between park spaces and accentuate individual structures.

Many of the historic lighting fixtures are intact and are contributing features. Existing historic lighting includes the original fixtures on the columns of the Balustrade, marking the entrances into the Voorhies Memorial and the Greek Theater along the Cultural Axis. Complementary historic fixtures are also set on the columns marking the transition between the Upper and Lower Terrace along the Civic Axis.

Replicas of Civic Center's original light pole and fixtures provide pedestrian lighting and are placed in the Park in a pattern reminiscent of the original placement. These include two styles, one with two fixtures and the other with five.



Standards:

1. Retain existing pedestrian poles (replicas of the historic pole and light) in their current pattern, allowing for modifications for safety or when the pattern does not follow the historic arrangement.
 - Civic Center pole and fixture shall be a painted aluminum pole and fixture to match the existing pole and globe. Color shall be Civic Center Green (RAL 6015 Black Olive).
 - Rehabilitate the existing poles and fixtures before installing new.
 - In placing new pedestrian lighting, follow the intent of the original lighting to showcase the Park's composition.
 - Allow the relocation of existing pedestrian poles and lights from locations that are not consistent with the historic pattern.
 - Place pedestrian lighting to improve security, ensuring locations respect the Park's composition and spatial organization.
2. Limit the installation of new pedestrian lighting to materials from the same source as the original, of the same color, texture and finish. (Section V. f. Materials, page 38).

Guidelines:

1. Encourage installation of architectural lighting to showcase Civic Center's historic building, structures and features, including landscape features.
 - Allow lighting of architectural detailing at the McNichols Building, Voorhies Memorial, Greek Theater, Central Gathering, South Garden and Park Kiosks.
 - Focus architectural lighting to illuminate specific architectural details and features, and landscape features.

- Ensure architectural lighting fixtures and associated elements are unobtrusive. They should not be visible during daylight hours.
 - Ensure installation of architectural lighting complements and does not detract from the historic fabric of the building, structures or features where it is allowed.
 - Ensure installation of ancillary equipment—including conduit and switches—is not attached to historic materials of building, structures or features.
 - Consult the Denver Landmark Commission Lighting Design Guidelines for additional guidance.
2. Allow temporary lighting for Park events.
 - Installations for longer than one season (such as the holiday season or a calendar season such as summer) will be evaluated as if permanent.

i. Art and Commemoration

Description and Intent:

In every aspect of its design, Civic Center expresses the citizens' highest goals: City and State government and the values of culture, art, knowledge and justice. Art installations within Civic Center evoke civic pride and responsibility. Civic art has been integrated into the design of the Park since the early 1900s, beginning with Frederick MacMonnies' Pioneer Monument at its northeast edge on Broadway.

The Colonnade of Civic Benefactors (1919), the Allan True pioneer murals in the Greek Theater and Voorhies Memorial and the individual statues and fountains in Civic Center offer human-scale and historic context to the Park. Most—like the Lion statues gracing the Greek Theater, the Voorhies Memorial or the Lafayette Plaque—were gifts of prominent citizens, harmoniously integrated into buildings and structures.

All civic art shall be selected and sited with the same attention to civic pride, stature, scale and context as the ensemble of civic art both within and adjacent to Civic Center.

Standards:

1. Commemoration of individuals who contributed to Denver's culture and community shall be allowed at the Colonnade of Civic of Benefactors.
 - Additions to the Colonnade of Civic Benefactors shall be evaluated according to Denver Department of Parks and Recreation's Standard Operating Procedures (Appendix B).
 - Names of individuals meeting the criteria shall be added to the west façade of the Colonnade of Civic Benefactors.



Standards, continued:

2. Preserve, restore and rehabilitate Civic Center's existing significant art installations, such as murals, water features and sculpture using accepted preservation practices.
 - Retain civic art installations in their original locations.
 - Clean and restore original materials before replacement. Use accepted restoration and conservation methods, accomplished by professionals skilled in the preservation of museum quality civic art (Section V. f. Materials, page 38).
3. No other commemoration within Civic Center shall be allowed.
4. The installation of public art shall not be allowed on Civic Center's contributing building, structures or features.

Guidelines:

1. Permanent installations of artwork in Civic Center will be allowed on a case-by-case basis. Selection of artwork will follow Denver's Public Art selection guidelines with special attention to recommendations set forth by Denver's Landmark Preservation Commission.
 - A member of the LPC will be included as a voting member and advisor to the panel during the art selection process. Proposed artwork will be reviewed by the Landmark Preservation Commission.
2. The installation of new public artwork will respect and express the civic nature of Civic Center and be harmoniously integrated with the Park and any selected park space.
 - Ensure the scale of new civic art is compatible with other Civic Center art installations.
 - Allow an additional free-standing public art installation in the Lower Terrace in the location identified in the 2005 Park Master Plan. No other free-standing installations are allowed.
 - Allow installation and full integration of public art into the design of New Elements.
 - Public art installations should be encouraged as integral features in the design of the Broadway Terrace, Central Gathering, South Garden and at the McNichols Building (either in the interior or within the Area of Influence for New Elements at the McNichols Building).
 - Ensure art installations are works of superior artistic merit, executed with the highest level of craftsmanship and quality materials.
 - Ensure that materials and craftsmanship are of a durable quality, able to withstand weathering.

i. Art and Commemoration, continued:

Guidelines, continued:

3. Encourage temporary art installations. All proposed temporary art installations will be reviewed on a case-by-case basis by Denver's public art program administrators. All temporary art installations will follow these guidelines.
 - Exhibitions will be short-term, lasting between 90 and 120 days. If it is desired for an art installation to exceed this time frame, it will be evaluated according to the requirements for permanent art.
 - A period of 90 to 120 days is recommended between exhibitions.
 - Temporary art installations should not impede views into the Park or along the Civic or Cultural Axes.
 - Temporary art installations should not exceed architectural scale **d** (approximately 20 feet in height).
 - The location and number of temporary art installations should be reviewed by the Denver Landmark Preservation Commission.
 - Proposals that deviate from these guidelines will be considered on a case-by-case basis. Special cases should be reviewed by the Denver Landmark Preservation Commission.

j. Vegetation and New Plantings

Description and Intent:

The City Beautiful principles defining Civic Center call for the careful balance of open space and structure to plantings, vegetation and hardscape. Together vegetation and hardscape, sculpted into a series of distinct but overlapping park spaces, reflect an axially symmetric composition where landscape material, scale and palette contribute equally to the harmony of the whole. The Red Oak groves in the Broadway Terrace, the linear gardens, South Gardens and Central Gathering will add human scale while enlivening the Park's natural context.

Standards:

1. Preserve Civic Center's extant contributing trees.
 - Contributing trees include the Broadway Terrace's Red Oak groves and crabapples, the shade trees lining the walks of the Great Lawn and the trees along Bannock Street.
 - Use accepted horticultural maintenance practice such as pruning for form and health to ensure the longevity of the contributing trees.
2. Restore original tree patterns that contribute to Civic Center, respecting the Park's composition and spatial organization.
 - Restore historic tree patterns and reestablish park spaces as noted in this document and the 2005 Park Master Plan. Allow the removal of trees or vegetation or transplanting of trees to reestablish these patterns.
 - Restore original tree patterns that define the Park's historic landscape pattern.
 - Allow the replacement of missing trees with in-fill plantings of the same tree species. If the same species is not desirable due to disease or horticultural reasons, allow the use of a similar form and habit as the original. If the tree is a flowering tree, use a tree of a similar form, habit and bloom.



Guidelines:

1. Encourage the installation of new plantings to assist in defining park spaces, and in establishing the Park composition as illustrated in the 2005 Park Master Plan.
2. Encourage the installation of shrubbery and garden plantings to provide human-scale.
 - Allow shrubbery and garden plantings in the Broadway Terrace, Central Gathering and South Garden.
3. Encourage the use of drought-tolerant and climate tolerant plantings that meet low-water use and are hardy or native to Colorado.
 - Allow shrubbery, trees and garden plantings in the Broadway Terrace, Central Gathering and South Garden.
 - Use low-water irrigation technologies.
4. Allow the removal of vegetation that does not contribute to the historical or architectural significance of Civic Center. For example, allow the removal of shrubbery surrounding the McNichols Building.

k. Environmental Stewardship

Description and Intent:

The City Beautiful Movement at the turn of the 20th Century captured the attention of progressive reformers who believed that refashioning cities into beautiful and functional places would inspire civic patriotism and elevate human behavior. Broadly considered, this focus on planning, urban infrastructure, civic buildings, grand boulevards and parks reflected a commitment to environmental stewardship. The belief that the ordering and beautification of cities advanced the health and well-being of citizens recognized the importance of landscape and natural beauty to urban residents.

One hundred years later a new form of urban beautification is underway. Today's environmentalism requires dedication and commitment to preserve and enhance natural resources for future generations. Modern principles range from the careful rehabilitation and reuse of historic buildings, structures, landscape and materials; the predictable maintenance and upkeep of public and civic space; to the application of current technology for energy conservation and efficiency; water use; and the reduction of light and noise pollution. Various strategies from the use of lasting materials to LEED certification, maximizing solar access and emphasizing human-scale should be adopted in the restoration and revitalization of Civic Center.

Guidelines:

1. Respect the historic integrity of the interior spaces of the Park's building and structures:
 - Reuse and restore historic materials before considering the use of new materials (Section V. f. Materials, page 38).
 - Use materials that do not emit noxious gases.
 - Use water-based paint to reduce light glare.
 - Maximize the use of natural day-lighting, while preserving the Park's historic character.
 - To reduce heat gain, shade windows using interior window coverings, blinds or other measures compatible with the building's historic character.
 - Install automated light controls and electric ballasts.
2. Conserve the historic fabric of building and structure exteriors and the Park landscape.
 - Conserve energy by promoting energy efficient technologies and the use of renewable energy.
 - Recycle materials.
3. Integrate storm water runoff and water quality measures into the existing topography and composition of the Park design using best management practices.
 - Modifications to the Park landscape that require altering the Park topography (i.e., water quality basins) are not allowed.
4. Conserve water and improve water quality through the use of drought-tolerant and climate-appropriate landscape materials.
5. Minimize light pollution, applying dark sky principles when selecting and installing light fixtures.
 - Design lighting to be functional and safe, and to be free of glare or spot lighting.

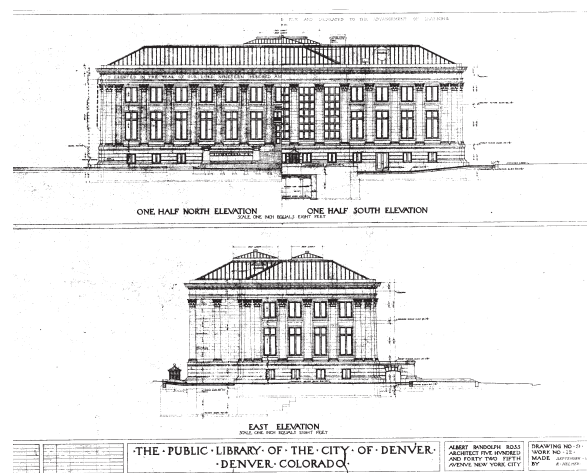
VI. McNichols Civic Center Building (Carnegie Library)

a. Description and Intent:

Civic Center's only building is the McNichols Civic Center Building (McNichols Building), built in 1909 as the city's public library with funds donated by philanthropist Andrew Carnegie. Originally known as the Carnegie Library, it was renamed in 1999 to commemorate William H. McNichols, Jr., who served as Denver's mayor from 1968 to 1983. The building exemplifies the neoclassical design of the Beaux Arts.

Designed by architect Albert Ross of New York in the Greek Revival style, the building was completed before Civic Center was designed. However, the relationship between the McNichols Building and the State Capitol is part of the organizing structure for the Park's composition. This relationship is expressed as a series of Regulating Lines (Section b4. Spatial Organization, page 24). The Regulating Lines also directed the design of the City & County Building, establishing a clear relationship between these buildings.

The 2005 Park Master Plan recommends the McNichols Building be rehabilitated to serve as an active public facility, supporting Park activities and as a catalyst for civic endeavors.



VI. McNichols Civic Center Building (Carnegie Library), continued:

b. Standards:

1. Rehabilitation shall be the primary approach to modifications to the McNichols Building.
 - Consult the Secretary of Interior Standards for the Treatment of Historic Buildings and the Denver Landmark Preservation Design Guidelines for accepted rehabilitation practices.
2. Preserve and rehabilitate the exterior of the McNichols Building using accepted preservation practices.
 - Restore original materials before replacement (Section f. Materials, page 38).
 - Refer to the 1999 Historic Structure Assessment and Exterior Preservation Plan prepared by Slater Paull & Associates for recommendations for the rehabilitation of the exterior. Recommendations range from cleaning exterior stone; repointing joints; rehabilitating original window hardware; to replacing the entire rooftop membrane.
3. Rehabilitate the interior of the McNichols Building using accepted preservation practices. (Note: Interior modifications will be reviewed by Denver Department of General Services and Revenue with assistance from the Denver Department of Parks and Recreation).
 - Encourage the restoration of the original two-story central space, respecting its volume and scale and the building's significant features.
 - Restore original materials before replacement (Section f. Materials, page 38).
 - Allow new construction that is contemporary and of its own time, ensuring it is compatible with the building's historic character.
 - Ensure that removal or modification of non-contributing interior materials does not impact original historic materials.
 - Prior to making modifications identify non-contributing versus contributing features of the interior of the McNichols Building.



b. Standards, continued:

4. If changes are made to the area immediately south of the McNichols Building, replace the parking lot with a new park use.
 - Encourage a new use that serves the Park and is compatible with the Park's and the McNichols Building's historic character.

c. Guidelines:

1. Encourage the adaptive reuse of the McNichols Building to reestablish its role as a civic building with uses that support and enliven Civic Center.
 - Encourage new uses that create an active facility, open to the public.
 - Encourage the addition of accessible routes, ensuring the design is compatible with the historic character of the McNichols Building and the Park.
 - Ensure that modifications necessary to accommodate new uses follow these Guidelines.
 - Ensure that delivery access, utility requirements or any ancillary functions are designed as integral components, are not visually intrusive and do not impede daily park functions or pedestrian circulation.
2. Allow modifications to the south façade of the McNichols Building to improve its physical and visual connection to Civic Center.
 - Allow fenestration modifications to the south façade that respect the pattern, dimension and scale of the original windows and doors.
 - Allow modifications for a new transitional feature to the south façade in the Primary Area of Influence. Vertical scale should not exceed the architectural scale \underline{c} (Section V.e. New Elements, page 36).
 - The Primary Area of Influence for the transitional feature is the area between the east-west walk and the building's south façade (approximately 40 feet in width) and extends the length of the building.

VI. McNichols Civic Center Building (Carnegie Library), continued:

c. Guidelines, continued:

3. Encourage reestablishing the original entry into the McNichols Building on the north façade, reinforcing the building's presence on Colfax Avenue.

- Encourage reestablishing the original entrance so that it is similar in mass, scale and form to the entrance present during the Period of Significance.
- Allow minor fenestration changes to the north façade to accommodate a new entry. Allow for the removal of non-historic materials including the existing rails, walls, steps and sunken terrace. Vertical scale should not exceed the architectural scale \underline{c} (Section V.e New Elements, page 36).
- The Primary Area of Influence is the area between the east-west walk and the building's north façade (approximately 45 feet in width), extending for approximately 50 feet from either side of the center-line of the original door.

4. For New Elements, use materials compatible with the McNichols Building's neoclassical design and its original materials. Allow the use of contemporary materials complementing the Park's original materials and compatible with the Park's neoclassical design.

The exterior of the McNichols Building is faced with three different building stones—Platte Canyon Granite, Turkey Creek Sandstone and Indiana Limestone. The base of the building is faced with Platte Canyon Granite, which is actually a Pikes Peak Granite historically quarried from South Platte Canyon near Buffalo Creek. The majority of the building is faced with Turkey Creek Sandstone originally quarried near Stone City in Pueblo County at a site now in the Fort Carson Army Reservation. This stone is now available. Indiana Limestone panels were added to the building exterior in the 1957 renovation by the Denver Water Board.

- Install materials in keeping with the original design and composition.
 - Acceptable primary materials for three-dimensional features, such as walls, columns or structures are:
 - Turkey Creek sandstone or a substitute consistent in color, texture and finish
 - Granite compatible with the neoclassical aesthetic and used in a manner similar to the existing granite
 - Civic Center Concrete in a color, finish, texture and quality compatible with the materials of the building façade
 - Acceptable secondary materials are:
 - Bronze
 - Steel or painted steel or when used in conjunction with a primary material
 - Glass may be used as a secondary material, in conjunction with other primary materials.
 - Acceptable primary materials for paving, such as walks, steps and associated curbs or walls are:
 - Granite compatible with the neoclassical aesthetic and used in a manner similar to the existing granite
 - Civic Center Concrete in a color, finish, texture and quality compatible with the materials of the building façade
5. Encourage the installation of lighting to showcase architectural detailing on the McNichols Building.
- Follow the Standards and Guidelines for lighting (Section V.h. Lighting, page 42).

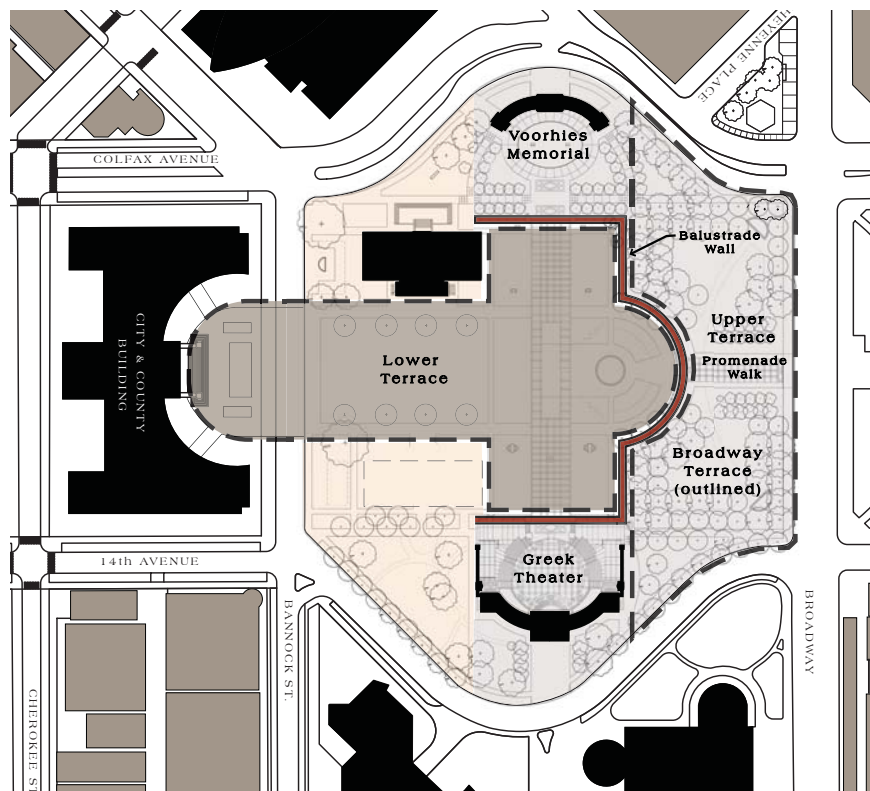
VII. **Broadway Terrace**

a. **Description and Intent:**

The Broadway Terrace stretches the entire length of Civic Center along Broadway, hence its name. It is within the Upper Terrace of Civic Center's two stepped terraces, separated from the Lower Terrace by the Balustrade Wall and the grade change it creates. Two majestic groves of Red Oaks, symmetrically placed on either side of the central Promenade Walk, define the character of this park space. These groves were originally planted in 1914 when the Olmsted design was implemented and integrated into Edward Bennett's 1917 design.

The Broadway Terrace is composed as one large space with two smaller spaces set symmetrically along the Civic Axis, divided by the Promenade Walk. Because the two spaces are not equal in size and have slightly different planting patterns, their characteristics differ slightly, providing an interesting and complex aesthetic. Crabapple trees line the Promenade Walk, helping to define it as another park space in the Broadway Terrace.

The Broadway Terrace is intended to be an elegant park space with many seating opportunities, offering the shade of the Red Oak groves, the Promenade Walk or views into the Central Gathering and the Balustrade Wall. The edge along Broadway is envisioned as an active place, providing seating and amenities to draw people into Civic Center. The 2005 Park Master Plan recommends two Park kiosks in the Broadway Terrace, one at Colfax Avenue and another at 14th Avenue.



VII. **Broadway Terrace, continued:**

b. Contributing Features:

Contributing features of the Broadway Terrace include:

- Civic Axis and Promenade Walk
- Red Oak groves
- Balustrade Wall (refer to Central Gathering, page 56 for additional Standards and Guidelines) .
- Composition of one large symmetrical space with two smaller spaces

Non-contributing features include the RTD bus shelter, magazine and newspaper boxes and trees in the center of the Red Oak groves.

c. Standards:

1. Rehabilitation shall be the primary approach to modifications undertaken at the Broadway Terrace.
2. Preserve, restore and rehabilitate the spatial organization of the Broadway Terrace by respecting its historic patterns, arrangement of open and closed spaces and its original sequence of spaces.
 - Reestablish original walks, walk alignments, park spaces and plantings to reinforce Broadway Terrace's presence along Broadway.
 - Opening up park spaces in the Red Oak groves and open up views into the Park.
 - Respect the 2005 Park Master Plan's organization of spaces (Section V.b.4. Spatial Organization on page 24) in designing the composition for the Broadway Terrace.
3. Preserve and rehabilitate the historic Balustrade Wall using accepted preservation practices.
 - Refer to Section VIII. Central Gathering on page 56 for specific Standards and Guidelines related to the rehabilitation of the Balustrade Wall.

4. Preserve and rehabilitate the historic Red Oak Groves using accepted preservation practices.

- Move and/or remove individual trees and add new trees to assist in reestablishing the spatial organization and composition of the Broadway Terrace.

5. Preserve and rehabilitate the Promenade Walk along the Civic Axis using accepted preservation practices.

- Introduce human-scaled features such as seating, civic art, plantings and water to assist in defining the Broadway Terrace as an important park space.

d. Guidelines:

1. Respect the composition of the Broadway Terrace as one holistic space composed of two slightly dissimilar smaller spaces separated by the Civic Axis.
 - Reinforce the Civic Axis and retain the view between the State Capitol and the City & County Building along the Civic Axis.
 - Reinforce the axial symmetry of the Broadway Terrace's overall composition, while allowing for a difference in composition and design in its two smaller spaces.
2. Reflect the architectural scale of Civic Center and its contributing features in the design of the Broadway Terrace (Refer to Section V.c. Architectural Scale, page 28).

d. Guidelines, continued:

3. Encourage new park features and programming to reestablish the role of Broadway Terrace as a lively and engaging park space.
 - Allow seating, plantings, water and civic art.
 - Allow new walks and modifications to existing walks, ensuring their placement assists in the rehabilitation of the Park's spatial organization and preserves its historic form and sequence of spaces.
 - Allow three-dimensional features such as water, gardens, plantings, civic art and sculpture within the Broadway Terrace. Ensure they are designed as integral components, respecting and reinforcing the composition of the Broadway Terrace and the symmetry of the Civic Axis.
 - Features that may obscure the view between the State Capitol and City & County Building are not allowed.
 - Allow Park Kiosks at Colfax Avenue and 14th Avenue (refer to Section V. e. New Elements to Civic Center, page 34).

4. Acceptable primary materials for three-dimensional features such as walls, columns, art and sculptures include:
 - Turkey Creek Sandstone or a substitute consistent in color, texture and finish
 - Granite, compatible with the Park's existing granite
 - Bronze, stainless steel, painted steel or aluminum
 - Civic Center Concrete with a finish and texture compatible with the Park's historic three-dimensional features.
 - Water

5. Acceptable materials for paving include:

- Civic Center Concrete as a primary material used in conjunction with other acceptable materials
- Granite, compatible with the Park's existing granite, used in conjunction with other acceptable materials
- Brick insets used as an accent or threshold (similar to its historic use) in conjunction with Civic Center Concrete
- Crusher fines

VIII. Central Gathering

a. Description and Intent:

Located at the nexus of Civic Center's Civic and Cultural Axes, the Central Gathering is envisioned as a lively and active gathering spot, drawing people into the Park. Edward Bennett planned this space as the heart of the Park as the city's premiere public gathering place, featuring a grand water feature and open terraces. These visions should converge to create a new space, respecting the Park's design aesthetic with a design that is of its own time.

The Central Gathering is one of the Park's New Elements, intended to enhance the Park's use and support its civic role. The realization of this hundred-year-old vision calls for a cohesive aesthetic, integrating artistic beauty and function in a memorable civic space. The design of the Central Gathering will complement Civic Center's composition and spatial organization, harmoniously integrating new features complementary to the Park's character.

b. Contributing Features:

Contributing features in the Central Gathering include:

- Alignment of the promenade along the Cultural Axis
- Civic Axis
- Balustrade Wall that defines the Lower Terrace
- Composition of the park space and relationship to Denver's City & County Building

A previous rehabilitation project replaced approximately 40-percent of the original individual balustrades (damaged beyond repair) with a pre-cast concrete balustrade, which may have incorporated ground sandstone from the removed balustrades.

Non-contributing features include the stairs, ramp and steel railings, the flower garden installed in the 1990s and evergreen trees at the corners of the Balustrade Wall.



c. Standards:

1. Preserve and rehabilitate the historic Balustrade Wall using accepted preservation practices.
 - Restore the original caps, balustrades, columns, lighted columns, light fixtures, walls and other features of the Balustrade Wall, not including the stairs, ramps or steel hand rails. Repair and reuse existing Turkey Creek Sandstone materials.
 - Allow replacement of individual balustrades damaged beyond repair with a pre-cast concrete balustrade that matches the original in form, color and texture.
 - Allow replacement of stairs, ramp and railings that follow the Civic Axis and the replacement of the steps on the north and south sides of the Balustrade Wall.
 - Acceptable materials for replacement include Turkey Creek Sandstone or a material similar in color, finish and texture.

d. Guidelines:

1. Integrate the Central Gathering with the axial symmetry of the Park's composition.
 - Locate the Central Gathering within the Areas of Influence (Section e. New Elements to Civic Center on page 34).
 - Respect the 2005 Park Master Plan's organization of spaces (Section V.b.4. Spatial Organization on page 24) in designing the composition for the Central Gathering.
2. Respect the major views along the Civic and Cultural Axes when placing vertical features in the Central Gathering.
 - Retain the view between the State Capitol and the City & County Building along the Civic Axis.
 - Retain the view between the Voorhies Memorial and the Greek Theater along the Cultural Axis. Do not place major features along the promenade.
3. Reflect the architectural scale of Civic Center and its contributing features in the design of the Central Gathering (Section V.c. Architectural Scale, page 28).
4. Provide a seamless transition between the Central Gathering and the surrounding park spaces including the Broadway Terrace, Lower Terrace, Cultural Axis Promenade Walk and the Great Lawn.
5. The Central Gathering's setting is defined as two areas: the Primary Area of Influence and the Secondary Area of Influence.
 - The design composition should address the combined area. Individual features set randomly in this space will not be allowed.
 - Incorporate human-scaled elements in the Primary and Secondary Areas of Influence to assist in defining the Central Gathering.
6. Encourage three-dimensional features such as water, civic art and plantings within the Primary Area of Influence (Section e. New Elements, page 34).
 - Allow for one or more three-dimensional features, ensuring design and placement respect and reinforce the symmetry of Civic Axis.
 - Do not obscure the view between the State Capitol and City & County Building.
 - Respect the architectural scale of Civic Center. Subordinate three-dimensional features to the Park's contributing features. The maximum vertical scale of any solid feature should not exceed the architectural scale **c** (approximately 12 feet), and the maximum vertical scale of any feature and punctuation should not exceed the architectural scale **e**.
 - Provide a vertical transition from taller three-dimensional features to human-scaled features in the Primary Area of Influence.
7. Encourage human-scaled features such as seating, civic art, gardens and plantings in the Secondary Area of Influence (Section e. New Elements, page 34).
 - Respect the architectural scale of Civic Center (Section V.c. Architectural Scale, page 28). Integrate features that provide architectural scale **a/b**, approximately two to four feet in height.

VIII. **Central Gathering, continued:**

d. **Guidelines, continued:**

8. Integrate human-scaled elements into the architectural detailing of the Central Gathering.
 - Allow for site furnishing, such as seating, to be integrally designed as a feature of the Central Gathering.
 - Use the same materials and detailing for site furnishings as are used for major features.

9. Allow for the use of contemporary materials, complementing the Park's original materials and compatible with its neoclassical design.

10. Acceptable primary materials for three dimensional elements – walls, columns, or civic art—are:
 - Turkey Creek Sandstone or a substitute consistent in color, texture and finish
 - Granite compatible with the Park's existing granite and consistent with its neoclassical style
 - Stainless steel or painted steel or aluminum in a color that compliments the Park's neoclassical aesthetic
 - Bronze
 - Civic Center Concrete with a finish and texture compatible with the Park's historic three- dimensional features
 - A limited amount of glass may be used in conjunction with other materials
 - Water

11. Acceptable materials for paving are:
 - Civic Center Concrete as a primary material used in conjunction with other acceptable materials
 - Granite compatible with the Park's existing granite, continuing the neoclassical style and used in conjunction with other acceptable materials
 - Brick insets may be used as an accent or threshold (similar to its historic use), in conjunction with Civic Center Concrete

IX. South Garden

a. Description and Intent:

Parks spaces providing shade, interest and visual engagement from the surrounding streets are key to reinvigorating Civic Center. The South Garden addresses this opportunity with a new park space that offers refuge and assists in completing the Park's composition. The South Garden will complement the McNichols Building, providing a new park space that defines the Great Lawn. The South Garden will provide a presence in a manner consistent with Civic Center's contemporary role as a public park.

The South Garden is envisioned as a park space with seating and shade that has an open and airy quality, contributing to Park activity. The South Garden will assist in defining the Great Lawn as the key feature along the Civic Axis as a broad, rectangular green space in the center of the Park.

To define edges and provide Park amenities, this new park space may include non-habitable three-dimensional features such as walls and trellises. Plantings, trees, water, sculpture and civic art are important features that may be used to complete the South Garden.

b. Guidelines:

1. Integrate the arrangement and form of the South Garden with the axial symmetry of the Park's composition, complementing the McNichols Building and defining the Great Lawn.
 - Locate the South Garden within the Areas of Influence (Section e. New Elements, page 34).
 - Respect the Regulating Lines, using the Area of Influence to define the dimensions of the South Garden.
 - The setting for the South Garden is defined by two areas: the Primary Area of Influence and the Secondary Area of Influence. The design composition should address this combined area. Individual features set randomly in this space will not be allowed.
 - Incorporate human-scaled features in the Primary Area of Influence to assist in defining the spatial organization of the South Garden.
 - Respect the 2005 Park Master Plan's organization of spaces (Section V.b.4. Spatial Organization on page 24) in designing the composition of the South Garden.
2. Use the arrangement and form of the South Garden to define the central space described in the 2005 Park Master Plan as the Great Lawn.
 - Retain the view between the State Capitol and the City & County Building along the Civic Axis.
3. Provide a seamless transition between the South Garden and adjacent park spaces including the Great Lawn, Greek Theater, Lower Terrace and the connection to 14th Avenue.

VIII. South Garden, continued:

b. Guidelines, continued:

4. Design the South Garden to provide transparency, openness and an airy quality. Ensure that clear visual access is possible into and across the park space, allowing a view from one end to the other.
5. Encourage three-dimensional features such as plantings, trellises, water, and civic art within the Primary Area of Influence.
 - Encourage a design compatible with the mass and scale of Civic Center's contributing features.
 - Ensure three-dimensional features are designed holistically as part of the entire South Garden composition. Ensure that all features are harmoniously integrated with the composition and aesthetic of the South Garden.
 - Respect the architectural scale of Civic Center and its contributing features in the design of the South Garden (Section V.c. Architectural Scale, page 28). The vertical scale of any three-dimensional feature should not exceed the architectural scale e.
 - Subordinate three-dimensional features to the Park's contributing building and structures.
 - Three-dimensional features should be non-habitable and should provide an open and airy quality.
 - Encourage a design that retains and frames views into Civic Center from the surrounding streets and walks and offers a compatible presence to draw users into the Park from the edges.
6. Encourage human-scaled features such as seating, civic art, gardens and plantings in the Secondary Area of Influence.
 - Respect the architectural scale of Civic Center. (Section V.c. Architectural Scale, page 28).
 - Integrate features that provide the architectural scale a/b.



b. Guidelines, continued:

7. Allow the use of contemporary materials, complementing the Park's original materials and compatible with its neoclassical design.
8. Acceptable primary materials for three dimensional features – walls, columns, trellises, or civic art—are:
 - Turkey Creek Sandstone or a substitute consistent in color, texture and finish
 - Granite compatible with the Park's existing granite and consistent with its neoclassical style
 - Stainless steel or painted steel, aluminum or painted aluminum in a color that complements the Park's neoclassical aesthetic
 - Bronze, copper
 - Civic Center Concrete with a finish and texture compatible with the Park's historic three-dimensional features
 - A limited amount of glass may be used in conjunction with other materials
 - Water
9. Acceptable materials for paving are:
 - Civic Center Concrete as a primary material used in conjunction with other acceptable materials
 - Granite compatible with the Park's existing granite, continuing the neoclassical style and used in conjunction with other acceptable materials
 - Brick insets may be used as an accent or threshold (similar to its historic use), in conjunction with Civic Center Concrete
 - Crusher fines may be used within the Primary Area of Influence, or as a transition material within the Secondary Area of Influence. Crusher fines may not be used along connecting walks.

X. Greek Theater and Colonnade of Civic Benefactors

a. Description and Intent:

Placed as the southern anchor of Civic Center's Cultural Axis, this open-air theater is the Park's primary performance space. Defined by a neoclassical semi-circular building embracing a circular amphitheater, the Greek Theater seats 1200 people.

The commemorative Colonnade of Civic Benefactors honoring Denver's civic leaders, flanks the theater's entrance. Designed by Denver architects Marean & Norton and completed in 1919, the Greek Theater and Colonnade of Civic Benefactors is the realization of an idea that inspired MacMonnies, the Olmsted Brothers and Edward Bennett.

b. Contributing Features:

Contributing features include:

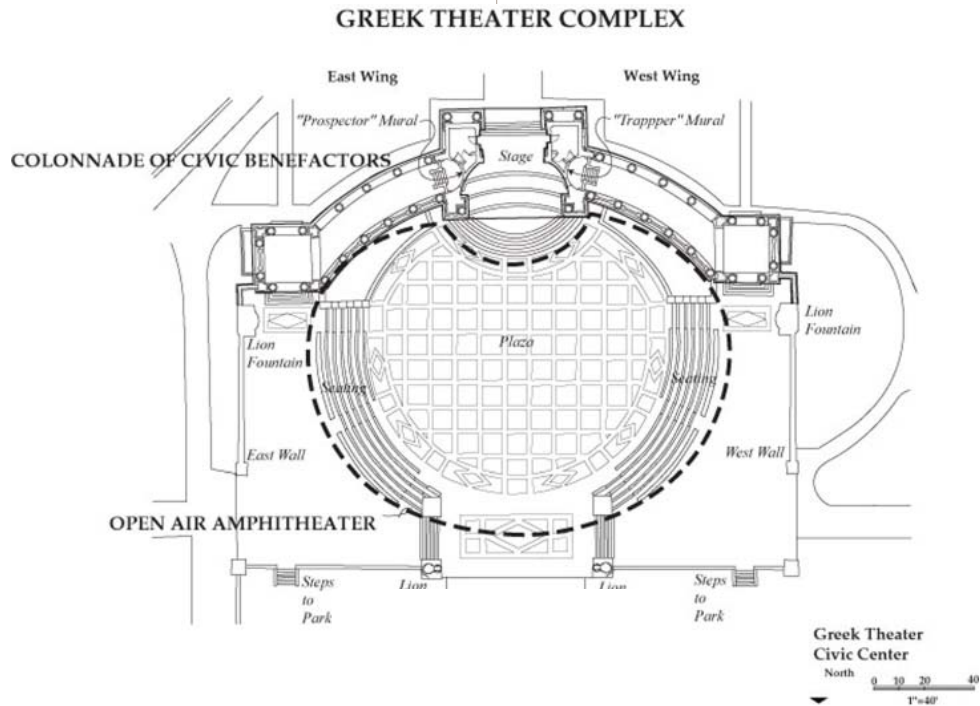
- The Greek Theater structure and amphitheater
- Colonnade of Civic Benefactors and its forecourts, and east and west walls
- Lion Statues, Lion Fountains and Allan True murals
- Balustrade Wall, colonnades, lights and steps to Lower Terrace

c. Standards:

1. Rehabilitation shall be the primary approach to modifications to the Greek Theater and Colonnade of Civic Benefactors.
2. Preserve and rehabilitate the Greek Theater using accepted preservation practices.
 - Restore original materials before replacement (Section V.f. Materials page 38).
 - Preserve the Greek Theater structure including the semi-circular form and original materials.
 - Rehabilitate the interior of the Greek Theater including the dressing rooms, restrooms and storage spaces.
 - Allow modifications that provide universally accessible routes, ensuring that modifications are fully integrated with the historic design of the Greek Theater.



3. Preserve and rehabilitate the original glass screen and its components, making it fully functional.
4. Restore Allan True's historic murals using accepted preservation practices.
 - Retain the historic murals in their original locations.
 - Clean and restore the original paintings using accepted restoration and conservation methods.
 - Use professional restorers, skilled in the cleaning and restoration of museum quality civic art with expertise in exterior murals.
5. Preserve and rehabilitate the Colonnade of Civic Benefactors using accepted preservation practices.
 - Preserve the walls, balustrade and architectural detailing.
 - Rehabilitate the paving and steps.
 - Restore the civic art including the historic Lion Statues, Lion Fountains and Lafayette Plaque.
 - Allow the commemoration of individuals who have contributed to Denver's culture and community on the west wall of the Colonnade of Civic Benefactors. Evaluate the merits of proposed individuals according to Denver Department of Parks and Recreation Standard Operating Procedures (see Appendix B).



d. Guidelines:

1. Encourage the continued use of the Greek Theater as Civic Center's primary performance venue.
 - Allow for modifications to enhance its use as a performance venue, ensuring that modifications are compatible with its historic design.

2. If modifications to the Greek Theater are needed to assist with its continued use as Civic Center's premier performance venue, follow these guidelines:
 - Allow for protection from the sun and provide shade.
 - Subordinate any modifications to the mass and scale of the Greek Theater. Respect the architectural scale of Civic Center and the Greek Theater (Section V.c. Architectural Scale, page 28).
 - Retain the iconic presence of the Greek Theater. Do not obscure any façade or architectural detailing with new modifications.
 - Retain the original views into and from the Park, including those along the Cultural Axis.
 - Ensure that any modifications are equal to, or match the design excellence of the Greek Theater, are compatible with its neoclassical aesthetic yet clearly of its own time.
 - Ensure that modifications do not attach to or impact the Greek Theater or its contributing features. Ensure all ancillary features are removable with no impact to the historic fabric.
 - Allow the use of contemporary materials, complementing the Park's original materials and compatible with its neoclassical design.

XI. Voorhies Memorial

a. Description and Intent:

Designed by Denver architects Fisher and Fisher and completed in 1920, The Voorhies Memorial sits on the historic Bates Triangle – balancing the Greek Theater – and defining the northern edge of Civic Center’s Cultural Axis. Designed in neoclassical style, the Memorial includes a forecourt with the Seal Fountain – a curvilinear pool with spouting Seal Lion Fountains designed by Robert Garrison in 1920 – as its central feature.

With the design and completion of the Voorhies Memorial, Colfax Avenue was routed to the north adding a curved edge to Civic Center’s northern perimeter, in a similar form as its southern perimeter. The Voorhies Memorial serves as the symbolic and visual gateway to downtown, marking an important point of transition between Denver’s orthogonal grid and downtown’s historic grid.

Very little restoration has occurred and all of the structure’s historic fabric remains, making the Voorhies Memorial an important contributing feature to the Park and the Civic Center District. Because of its prominent location, historic integrity and the engaging beauty of the Seal Pond, the Voorhies Memorial should become a valued civic asset, enlivened with uses supporting Park activity.

b. Contributing Features:

Contributing features include:

- Voorhies Memorial, its orientation along the Cultural Axis and relationship to the Greek Theater; its orientation to downtown
- Allan True murals on the interior
- Forecourt on the Memorial’s south side with Seal Fountain and surrounding plaza
- Emily Griffith drinking fountain

Non-contributing features include the groves of crabapples encircling the forecourt.



c. Standards:

1. Rehabilitation shall be the primary approach to modifications to the Voorhies Memorial.
2. Preserve and rehabilitate the Voorhies Memorial and its forecourt using accepted preservation practices.
 - Restore original materials before replacement (Section f. Materials, page 38).
 - Allow for modifications to provide universally accessible routes, ensuring that modifications are fully integrated with its historic design.
3. Preserve and restore Allan True’s historic murals using accepted preservation practices.
 - Retain the historic murals in their original locations.
 - Clean and restore the original paintings using accepted restoration and conservation methods.
 - Use professional restorers skilled in the cleaning and restoration of museum quality civic art with expertise in exterior murals.

XII. Park Kiosks

a. Description and Intent:

One of the key recommendations of the 2005 Park Master Plan is to provide infrastructure improvements within Civic Center to enhance its daily use. These improvements are envisioned as park amenities that provide a human-scale to the Park while also enlivening park use. Three small-scale structures are included in the 2005 Park Master Plan recommendations and are identified by these Guidelines as potential New Elements. These three structures are the Park Kiosks.

Two Park Kiosks are sited within the Broadway Terrace, which stretches the entire length of Civic Center along Broadway. They are located at the Park corners where Broadway meets Colfax Avenue on the north and 14th Avenue on the south.

A third Park Kiosk is recommended by the 2005 Park Master Plan for the park edge along Bannock Street, immediately west of the McNichols Building.

b. Guidelines:

1. Encourage the installation of three Park Kiosks and their associated areas as illustrated in Figure 1, Study Area and Area of Influence on page 5.
2. Design each Park Kiosk as an integral feature to the Park and the park spaces in which it is placed.
 - Design each Park Kiosk and its setting as part of an overall rehabilitation plan with the intent of enhancing any exterior useable space, including using the Park Kiosk to frame the space.
 - Allow seating, terrace space and plantings to harmoniously integrate each Park Kiosk with its surrounding park spaces.
 - Design each Park Kiosk and its setting to add human-scale to Civic Center.



XII. Park Kiosks, continued:

b. Guidelines, continued:

3. Design each Park Kiosk as an architectural gem compatible with the character and neoclassical aesthetic of Civic Center.
 - Design all elevations as primary facades.
 - Design each Park Kiosk to be subordinate to the architectural scale of the Park's contributing building, structures, and features.
 - Design each Park Kiosk so that it has a quality of transparency.
4. Design each Park Kiosk to comply with the architectural scale of Civic Center (Section V.c. Architectural Scale, page 28 and Section V.e. New Element, page 36 and 37).
 - The vertical scale of the kiosk structure should not exceed the architectural scale **d** (approximately 20 feet), which includes an allowance for mechanical equipment or other punctuations not to exceed three feet.
 - The footprint of the kiosk structure should include all auxiliary features necessary for the programming of the Park kiosk including trash, restrooms or other needs.
 - The footprint of the kiosk structure should not exceed 25 feet in length in any one direction, or if round, should not exceed 30 feet in diameter. If Park Kiosk has more than four sides, it will be considered round.
 - Awnings or overhangs may extend beyond the footprint of the kiosk structure, designed in proportion to the scale of the kiosk.
 - Ensure that delivery access, utility needs or any auxiliary functions are integrated with the Park Kiosk and its setting, and do not impede pedestrian connectivity or circulation.
5. Allow the use of materials that complement the Park's original materials and are compatible with its neoclassical design.
 - Acceptable materials are:
 - Turkey Creek sandstone or a substitute consistent in color, texture and finish
 - Granite compatible with the Park's neoclassical aesthetic
 - Civic Center Concrete
 - Steel or painted steel
 - Bronze, copper, aluminum or painted aluminum
 - Glass may be used in conjunction with other primary materials
 - Painted wood in conjunction with other primary materials
 - Acceptable materials for paving are:
 - Civic Center Concrete, granite, brick insets and crusher fines
6. Allow a temporary structure at McNichols Building location for a Park Kiosk in lieu of a permanent structure.

Appendix

APPENDIX A.

EXECUTIVE ORDER NO. 123

TO: All Agencies Under the Mayor

FROM: John W. Hickenlooper, Mayor

DATE: October 24, 2007

SUBJECT: Greenprint Denver Office and Sustainability Policy

PURPOSE: This Executive Order creates the Greenprint Denver Office from the existing Greenprint Denver initiative and establishes the sustainability policy for the City and County of Denver. The following Executive Orders and Memoranda are hereby canceled and superseded by this Executive Order, dated October 24, 2007: Executive Order 87, dated March 2, 1993; Executive Order 108, dated January 7, 1997; Executive Order 120, dated February 5, 1980; and Executive Order 123, dated May 20, 2003.

The applicable authority relevant to the provisions and requirements of this Executive Order 123 is found in Section 2.2.10 of the 2002 Revised Charter.

This Executive Order is divided into the following chapters and subjects:

- Chapter 1 – Greenprint Denver Office
- Chapter 2 – Green Building and Energy Conservation
- Chapter 3 – Vehicle Replacement and Operation
- Chapter 4 – Materials and Waste Management
- Chapter 5 – Water Conservation
- Chapter 6 – Environmental Public Health Policy
- Chapter 7 – Memorandum Attachments

Chapter 1 – Greenprint Denver Office

- 1.0 The mission of the Greenprint Denver Office is to position Denver as a national leader in sustainability by developing and implementing solutions to resource challenges that meet the needs of current Denver residents while securing the economic, social, and environmental health of future generations.
- 1.1 The following functions shall be the responsibility of the Greenprint Denver Office:
 - a. Promote sustainability as a core business value in City government to seek efficiencies in resource use, reduce environmental impacts, and invoke cultural change.
 - b. Work with City agencies and promote interagency cooperation to adapt operational and administrative processes towards accomplishment of sustainability goals. City government targets can be found in Memorandum 123-A of this Executive Order.

- c. Ensure that all City policy and program decisions incorporate “triple bottom line” analysis, balancing short- and long-term economic, social, and environmental considerations. Procedural information regarding the structure, function, and responsibilities of the Greenprint Denver Implementation Committee can be found in Memorandum 123-B of this Executive Order.
- d. Set clear metrics of success and report progress annually.
- e. Communicate sustainability as a public value and expand the concept of the City as a steward of public resources.
- f. Partner with community organizations, cultural institutions, and businesses to achieve broad impact.
- g. Continually monitor advancements in the science and technology of sustainability to ensure that best management practices are utilized within the City.

Chapter 2 – Green Building and Energy Conservation

- 2.0 In order to mitigate the negative environmental impacts of the built environment, all buildings constructed with City funds are to be designed, constructed, operated, and maintained according to the principles outlined in the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) standards, and according to recognized best management practices for sustainability.
 - a. All applicable new City building construction and major renovations will be built and certified to at least the LEED-NC (New Construction) Silver standard, and achieve Energy Star status.
 - b. All capital improvement projects as well as small renovation and repair projects shall be designed and constructed using LEED principles.
 - c. All existing and future City-owned and operated facilities shall incorporate all appropriate LEED-EB (Existing Buildings) principles into facility operation and maintenance.
 - d. All projects that are not eligible for LEED certification shall implement recognized best management practices for sustainability appropriate to Denver’s regional environment.
- 2.1 It shall be the policy of the City to improve energy conservation and increase efficiency in all City facilities, and to pursue renewable energy projects and programs.
- 2.2 Procedural information regarding green building guidelines can be found in Memorandum 123-C of this Executive Order.

Chapter 3 – Vehicle Replacement and Operation

- 3.0 The City's Green Fleet program is designed to ensure that the City procures and operates a fleet of vehicles that minimizes environmental impact, enhances domestic energy security, and maximizes fuel efficiency and diversification.
- 3.1 All light-duty vehicles in need of replacement will be replaced with hybrids, alternative fuel vehicles, or the most fuel-efficient and least-polluting vehicles available for specific functions whenever cost and reliability are similar to traditional vehicles.
- 3.2 All City diesel vehicles will use biodiesel fuel that replaces at least 20% of the petroleum content with fuel derived from biological sources when operationally and economically feasible. The use of biodiesel substantially reduces hydrocarbon and particulate emissions compared to 100% petroleum diesel fuel.
- 3.3 The City will reduce petroleum use by the City's fleet through an increase in the fleet's average fuel economy; increased purchase of hybrid, alternative fuel, and fuel-efficient vehicles; and a decrease in vehicle miles traveled.
- 3.4 Procedural information regarding the structure, function, and responsibilities of the Green Fleet Committee can be found in Memorandum 123-D of this Executive Order.

Chapter 4 – Materials and Waste Management

- 4.0 All agencies shall direct efforts to utilize recycling services and pursue integrated waste management strategies that include reducing consumption, collecting used materials for reuse or recycling, and purchasing cost-competitive recycled and recyclable products.
- 4.1 The City's policy for environmentally preferable purchasing is established in Executive Order No. 33, Memorandum No. 33A, Section 8.0 et seq. It is the policy of the City to procure products and services that minimize harmful effects to human health and the environment. All City agencies shall consider the environmental impact of products and services to be provided to the City and this consideration shall be a component of evaluation, along with the traditional criteria of price, performance, availability, and other factors.
- 4.2 Environmentally preferable products and services have a reduced impact on worker health and safety, public health and safety, and the environment when compared with competing products and services that perform the same function. The product or service comparison shall consider raw material acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, and disposal. Examples include but are not limited to products and services that are energy efficient or durable; can be recycled or reused; contain recycled materials (especially post-consumer content); are free of toxic substances; emit lower levels of volatile organic compounds; pose minimal health hazards, pollution potential, or regulatory liability; and save natural resources. Particular attention should be given to products where manufacturer take-back recycling can be utilized.

- 4.3 All City building and infrastructure projects will utilize concrete consisting of at least 20% fly ash and will use recycled aggregates wherever appropriate, and as long as the availability and price of fly ash and aggregates are similar to cement. Fly ash is a waste product generated from coal-burning power plants that produces a highly durable, less expensive, and eco-efficient concrete.
- 4.4 All construction projects using City funds, including new construction, large and small renovations, and CIP projects shall recycle construction and demolition waste, and install building materials that contain recycled content wherever possible. Project teams shall use the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program for guidance in construction and demolition waste recycling and use of recycled materials.
- 4.5 Recommendations to reduce waste and reuse resources can be found in Memorandum 123-E of this Executive Order.

Chapter 5 – Water Conservation

- 5.0 The City will demonstrate wise water use in City facilities, buildings, and parks through identification of water inefficiencies and implementation of water conservation projects to improve plumbing fixtures, irrigation systems, cooling towers, kitchen operations, swimming pool operations, laundries, and other water uses.
- 5.1 City agencies will promote water conservation in all operations, and lead in early adoption of Denver Water's conservation programs.

Chapter 6 – Environmental Public Health Policy

- 6.0 All City employees and contractors must be familiar with and follow the City's Environmental Public Health Policy, which has been signed by the Mayor and is attached in Memorandum 123-F. The Policy shall be used as a tool to complement the sustainability directives described in this Executive Order, and will support systematic environmental management in all City agencies.

Chapter 7 – Memorandum Attachments

- 7.0 The procedures for implementing this Executive Order may be defined by Memorandum Attachments to the Executive Order, which shall become a part of the Executive Order. The Greenprint Denver Office, which is responsible for the content of this Executive Order, shall have the authority to issue procedural Memorandum Attachments relative to this Executive Order.

Approved for Legality:

Arlene V. Dykstra
City Attorney for the City and County
of Denver

Approved:

John W. Hickenlooper
Mayor

Turner West
Manager of Aviation

Nancy Severson
Manager of Environmental Health

Kevin Patterson
Manager of General Services

Kim Bailey
Manager of Parks and Recreation

Guillermo "Bill" Vidal
Manager of Public Works

Claude Pumilia
Manager of Revenue

Alvin J. LaCabe, Jr.
Manager of Safety

Roxane White
Manager of Human Services

Peter Park
Manager of Community Planning
and Development

Memorandum 123-A

TO: All Agencies Under the Mayor

FROM: John W. Hickenlooper, Mayor

DATE: October 24, 2007

SUBJECT: City Government Sustainability Targets

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 All City agencies shall adapt operational and administrative processes towards accomplishment of sustainability goals, including the internal goals listed below as well as the goals identified in the Greenprint Denver Action Agenda.
 - a. The City will reduce energy use one percent annually, and five percent by 2011 relative to the 2006 baseline level, measured per building square foot in City facilities, and per passenger at the Denver International Airport.
 - b. The City fleet will attain a 15% volumetric reduction in vehicle petroleum use by 2011, relative to the 2001 baseline. The DIA fleet will reduce gasoline consumption one percent annually.
 - c. The City shall reduce paper consumption across all agencies 20% by 2011, relative to the 2006 baseline.
 - d. The City shall increase the proportion of eco-efficient annual commodity and service bids 10% annually, and 60% by 2011 relative to the 2004 baseline.
 - e. The City will support and promote the Denver Water Tap-Smart goal to reduce per capita water use 22% by 2016, relative to the 2000 baseline.

Memorandum 123-B

TO: All Agencies Under the Mayor

FROM: John W. Hickenlooper, Mayor

DATE: October 24, 2007

SUBJECT: Greenprint Denver Implementation Committee

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 A Greenprint Denver Implementation Committee shall be established and meet regularly. The purpose of this committee is to make recommendations to the Greenprint Denver Office to ensure that "triple bottom line" analysis, balancing short- and long-term economic, environmental, and social considerations, is incorporated into all agency policy and program decisions. This committee shall be expected to provide updates on current sustainability efforts within each agency, and give members the opportunity to discuss citywide sustainability policy issues.
- 1.1 This committee shall be diverse and represent major agencies within the City. The core membership will consist of representatives from the following:
 - a. Greenprint Denver Office – Facilitator
 - b. Budget and Management Office
 - c. Career Service Authority
 - d. Department of Aviation
 - e. Department of Community Planning and Development
 - f. Department of Environmental Health
 - g. Department of General Services
 - h. Department of Parks and Recreation
 - i. Department of Public Works
 - j. Office of Economic Development
 - k. Technology Services
- 1.2 The committee shall consider the effectiveness, efficiency, and implementation of citywide sustainability initiatives, including but not limited to energy conservation, paper reduction, waste reduction and management, and water reduction. When technical expertise is necessary, additional department staff will be added to the committee on an ad hoc basis.
- 1.3 When additional sustainability policies and procedures become necessary, ad hoc subcommittees will be created to research specific issues. These subcommittees will report findings and recommendations to the full Committee.

Memorandum 123-C

TO: All Agencies Under the Mayor

FROM: John W. Hickenlooper, Mayor

DATE: October 24, 2007

SUBJECT: Green Building Guidelines

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 This policy will apply to all new City building projects over 5,000 square feet (ft²) that are funded after July 12, 2006. Projects between 5,000 ft² and 10,000 ft² are expected to achieve LEED-NC (New Construction) Silver certification and Energy Star status whenever technically and financially feasible. If it is determined that certification is not feasible, the project team must receive a policy exemption from the Mayor and instead shall use LEED-NC guidelines to achieve the equivalent of LEED-NC Silver certification.
- 1.1 This policy also applies to major renovations that affect more than 25% of a City building's square footage *or* that include major HVAC renovation, envelope modifications, and interior rehabilitation *and* where the building has a useful life of more than 15 years. In the rare case that a building's design (e.g., historic or unique features) renders LEED certification cost-prohibitive or technically infeasible, the Mayor may declare a specific project unsuitable for certification.
- 1.2 All General Fund agencies are directed to work with the Utilities and Facilities Planning and Management Divisions of the Department of General Services to implement LEED-EB (Existing Buildings) operational and maintenance improvements, and with the Departments of General Services and Public Works during the planning, development, design, and construction of all new City projects and major renovations.
- 1.3 The Property Planning and Real Estate Sections of the Facility Planning and Management Division will evaluate all acquisitions and leases to ensure compliance with the requirements of this Executive Order. An evaluation of potential building upgrades to meet the requirements of this Executive Order will also be conducted on any proposed acquisitions.

Memorandum 123-D

TO: All Agencies Under the Mayor

FROM: John W. Hickenlooper, Mayor

DATE: October 24, 2007

SUBJECT: Green Fleet Committee

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

1.0 A Green Fleet Committee shall be established and meet regularly. The purpose of this committee is to ensure that that the City procures and operates a fleet of vehicles that minimizes environmental impact, enhances domestic energy security, and maximizes fuel efficiency and diversification. The Committee is responsible for maintaining an approved list of hybrid, alternative fuel, and fuel-efficient vehicles for purchase, and developing policies and procedures to implement this Executive Order.

1.1 The Committee shall consist of representatives from:

- a. Department of Environmental Health - Facilitator
- b. Budget and Management Office
- c. City Council (invited and if accepted, appointed by Council President)
- d. Greenprint Denver Office
- e. Managers and/or Fleet Directors from the Department of Public Works, Department of Aviation, Department of Safety, and Department of Parks and Recreation
- f. Purchasing Division of General Services

1.2 The following goals will determine the success of the Green Fleet program:

- a. Increase the average fuel economy of the fleet
- b. Increase the number of hybrid, alternative fuel, and fuel-efficient vehicles in the fleet
- c. Minimize the total vehicle miles traveled by City employees using fleet vehicles

1.3 Each Fleet Director is responsible for providing data regarding accomplishment of the Committee's goals. A report detailing the current year fleet and a comparison to previous years will be generated on an annual basis and submitted to the Greenprint Denver Office. This report will contain:

- a. Fuel efficiency of new vehicles purchased during the previous year
- b. Total number of vehicles in the fleet
- c. Total miles driven by all vehicles
- d. Total gallons of gasoline (or equivalent alternative fuel) consumed, by fuel type
- e. Any additional information required for the annual report

Memorandum 123-E

TO: All Agencies Under the Mayor

FROM: John W. Hickenlooper, Mayor

DATE: October 24, 2007

SUBJECT: Recommendations to reduce waste and reuse resources

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 The Solid Waste Management Division of the Department of Public Works and the Facilities Planning and Management and Purchasing Divisions of the Department of General Services shall be responsible for the development and implementation of cost-effective initiatives that will advance the programs established by this Executive Order and the Greenprint Denver Office.
- 1.1 All City employees shall take measures to reduce waste and reuse resources, and implement the following strategies whenever possible:
 - Use electronic media in place of paper
 - Store documents electronically, use email, edit online, and employ all possible paper reduction strategies
 - Office-wide memoranda should be emailed, placed in a common area, or circulated for staff to review
 - Refrain from printing meeting agendas and minutes and instead use electronic media and erasable whiteboards
 - Print and copy documents, including letters, memoranda, and reports, on both sides of the page
 - Reduce font size and margins in appropriate documents
 - Disable cover pages and confirmation pages on fax machines
 - Printer banner pages should be used only in high-traffic environments (more than 25 users)
 - Use efficient and cost-effective multi-function devices (MFDs) in lieu of desk jet and laser jet printers. If there is a compelling business or legal reason why MFDs are not appropriate, laser printers should be used.
 - Network printing devices should be used and placed no less than 30 feet apart from each other, which should provide ample coverage to all employees
 - Purchase paper containing at least 35% post-consumer content for all general office paper needs
 - Agencies and contract custodial services should use recycled content items such as paper towels, toilet paper, and trash can liners
 - Direct internal mail to be delivered in reusable inter-office envelopes
 - Require contractors and consultants to use recycled-content products, submit documents electronically, and duplex print and copy all City documents and correspondence

Memorandum 123-F

TO: All Agencies Under the Mayor
FROM: John W. Hickenlooper, Mayor
DATE: October 24, 2007
SUBJECT: City Environmental Public Health Policy


This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 The City and County of Denver (CCD) is dedicated to environmental public health stewardship and leadership. CCD commits to environmental public health policies, actions, and programs that:
- Maximize environmental, social, and economic benefits
 - Empower, seek input from, partner with, inform, respect, and value individuals, organizations, and communities
 - Use prevention to reduce environmental health and safety risks and responsibly manage remaining risks
 - Conserve energy and natural resources through efficient use, reuse and recycling, preference for renewable over non-renewable resources, purchasing, planning and design
 - Prevent pollution
 - Promote best management practices
 - Utilize sound business practices and demonstrate accountability
 - Meet or exceed all legal requirements and voluntary commitments
 - Continually improve performance, measure progress, and communicate results to employees and the public
- 1.1 This policy shall be communicated to all employees, individuals working on behalf of or under the direction of CCD or one of its agencies, and others operating on CCD premises. Each is expected to follow this policy and report any environmental, health, or safety concern to the Mayor's Office or to management of the applicable CCD agency. Managers are expected to take prompt action.

APPENDIX B.

Denver Parks and Recreation Policies and Procedures
Policy name: Colonnade of Civic Benefactors Inscriptions

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Policy name: Colonnade of Civic Benefactors Inscriptions	Effective: November 1, 2008 Supersedes: NA Application: Applies to all requests
Number: 08-001 Division / Section: Planning, Design and Construction Approved by Deputy Manager or Division Head: NA Approved by Parks and Recreation Advisory Board: NA Approved by Manager: Kevin Patterson 	See also Gift Policy and Corporate Sponsorship Policy

Policy It is the policy of Denver Parks and Recreation that inscriptions made to the Colonnade of Civic Benefactors in Civic Center be reserved as a lasting tribute for people or groups who have made significant contributions either to the physical beauty and culture of Civic Center or of Denver, or to Denver’s civic life. Requests must follow these guidelines.

1. Purpose.

This policy and these guidelines are intended to guide the decisions of the DPR Manager, DPR Advisory Board, and elected officials when reviewing requests for inscriptions to be made to the Colonnade of Civic Benefactors in Civic Center. They also help inform the public, potential donors, park foundations and alliances, and other city departments and Boards who may be interested in submitting a proposal for an inscription.

2. Definition of terms

2.1 Colonnade of Civic Benefactors. This refers to the monumental gateway structure on the south end of Civic Center. The colonnade has curved walls that extend from each end of the monument. Inscriptions can be made to the two faces on each wall. Each wall has an east face and a west face.

3. Authority

3.1 Under section 2.4.4(A) of the City Charter, the management, operation and control of all facilities owned by the City and County of Denver for park and recreational purposes are under the exclusive control of DPR and its Manager.

4. Background

The early 20th century was a time of intense park and parkway building and generosity on part of the Denver public. City and park gifts ranged from the Voorhies Memorial in Civic Center, other park gateways, buildings, statues, and fountains to the municipal organ. Inscriptions on the Colonnade of the Civic Benefactors were intended to be a “fitting tribute to their generosity.” A group of prominent citizens, selected by the Mayor and his Cabinet, reviewed the gifts and authorized the inscriptions. As the *Municipal Facts* (October, 1918) noted, it was a citywide campaign to “**Give While You Live**”:

“In connection with Denver’s civic center, the colonnade of Civic Benefactors was conceived with the idea that this should be a local hall of fame, dedicated, not to the great of past generations, but to those, living or dead, whose love for their home city

should inspire them to present it with works calculated to increase its beauty or culture in a dignified, substantial manner. The plan is to inscribe upon the columns of this colonnade the names of this colonnade the names of these civic benefactors together with a fitting tribute to their generosity.”

In reality, no inscriptions were made on the columns themselves, but only on the east face of the east wall. Many inscriptions were made early in the 20th century, with few added after 1950.

Other than the 1918 article which noted that prominent citizens would help the mayor select which gifts would be commemorated on the wall, no written criteria, process, or guidelines have existed to ensure that a tribute on the walls is reserved for the most significant contributions made to Civic Center itself or to Denver as a whole. In addition, only one side of the wall (East Face/East Wall) has ever been used for inscriptions and few have been added in the last 50 years. As gift-giving and partnerships grow more complex in the 21st century, a clear policy and procedures are needed.

5. Criteria

5.1 It is recommended that each face on the two walls (total of four faces) be developed as different tributes. The following (5.2 – 5.5) are descriptions of each wall face.

5.2 **The 20th Century Benefactors and Civic Leaders Wall** (the East Wall/East Face). This wall face, with its existing inscriptions, will remain as it is, as a tribute to the original benefactors and civic leaders of the 20th century. No new names will be added to the wall face.

5.3 **The 21st Century Benefactors and Civic Leaders Wall** (the East Wall/West Face). This wall face will be used to recognize Denver’s most significant civic leaders and benefactors of the 21st Century. Any new names (as of 2008) added to recognize major benefactors to the City will be on the west side of the current wall. Criteria for those benefactors or civic leaders include:

- Recognition for a life-time of contribution to the civic life of Denver.
- Recognition for a major gift to the City of real property or goods that is in the spirit of the original Wall to “increase the beauty or culture in a dignified, substantial manner.” This would be an alternative (and not in addition) to any recognition plaques or naming of a park, building, or major park feature for a major gift. (The minimum gift amounts are in 2008 dollars and may be changed at any time by the DPR Advisory Board.)

A) Capital gifts of \$100,000 or more in one year would warrant individual name listing.

B) Capital gifts of \$500,000 or more in one year would warrant corporate or group name listing.

5.4 **The Civic Center Wall** (the West Wall/West Face). This wall face will be used to recognize major capital gifts or civic contributions to Civic Center itself. This would be an alternative (and not in addition) to any recognition plaques or naming of a major park feature. Criteria for those benefactors or civic leaders include:

- Capital gifts or contributions of \$25,000 or more to Civic Center in one year would warrant individual name listing.
- Capital gifts or contributions of \$250,000 or more to Civic Center in one year would warrant corporate or group name listing.
- Recognition for significant or lifelong civic contributions from a citizen to Civic Center.
- The minimum gift amounts are in 2008 dollars and may be changed at any time by the DPR Advisory Board.

5.5 **The Future Benefactors Wall** (the West Wall/East Face). This wall face will be reserved for future tributes.

5.6 **Design Guidelines.** All inscriptions must meet DPR design standards, guidelines and the 2008 Civic Center Design Guidelines, and be approved by the department. Inscriptions will be limited to text only.

5.7 **Approval.**

5.7.1 **The Civic Center Wall.** Inscriptions to the Civic Center wall (the West Wall/West face) need approval of the Manager and DPR Advisory Board.

5.7.2 **The 21st Century Benefactors and Civic Leaders.** Inscriptions for the 21st Century Benefactors and Civic Leaders Wall (the East wall/West face) need approval of the Manager and DPR Advisory Board and approval (and Ordinance) by City Council.

Procedures

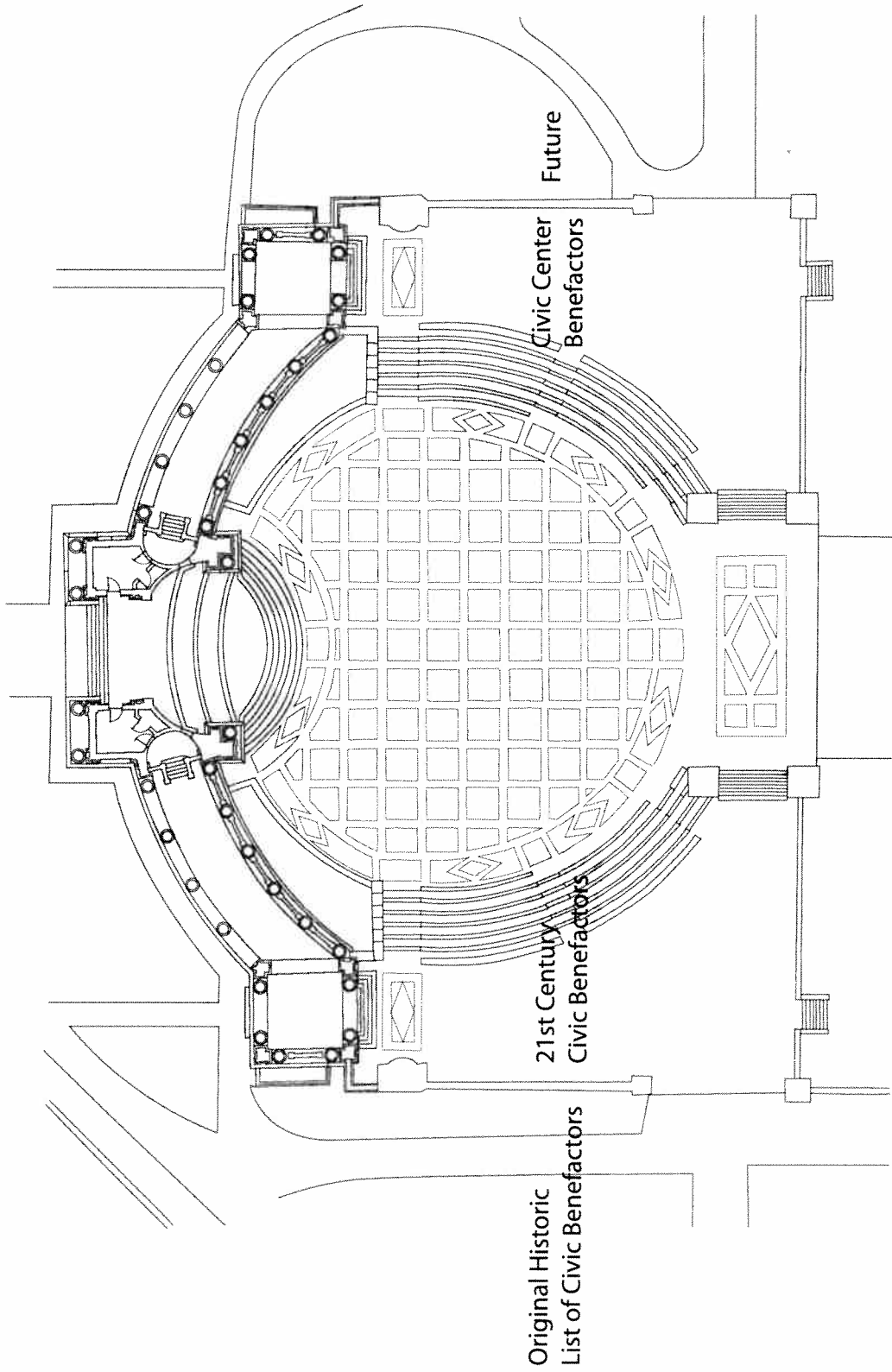
1. Process.

- A written proposal should go to the Manager of Parks and Recreation. The Manager will schedule the presentation for one of the monthly Advisory Board meetings.

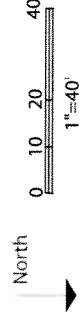
Manager of Denver Parks and Recreation
201 West Colfax Avenue, Department 601
Denver, Colorado 80202
720-913-0741

- Upon the Board's recommendation and Manager's approval, the department can move ahead with an inscription on the *Civic Center Wall*.
- Inscriptions on the *21st Century Benefactors and Civic Leaders Wall* require City Council approval and Ordinance. Upon the Board's recommendation and Manager's approval, the department will work with City Council to find a sponsor for the Ordinance.
- Denver Parks and Recreation will develop and ensure that all inscriptions comply with design standards and the 2008 Civic Center Design Guidelines. Installations must meet departmental standards, as well.

2. Training. Advisory Board members, City Council, DPR Planning and Design staff, and the Marketing and Communications staff should be familiar with these policies.



Greek Theater
Civic Center Park



PART 1 - GENERAL

1.1 RELATED DOCUMENTS: The General Contract Conditions, including General and Special Conditions, Drawings, and Division - 1 Specification sections apply to Work of this section.

1.2 SUMMARY:

- A. Work Includes: The extent of concrete paving work is shown on the Drawings and includes excavating, backfilling, furnishing, forming, jointing, placing, finishing and curing of SAND FINISH concrete in conformance with the lines and grades shown on the Drawings.

1.3 SUBMITTALS:

- A. In compliance with Paragraph 5.3.2 of ASTM C94, furnish statement of composition of concrete mix and admixtures and evidence that mix meets specified quality.
- B. Produce Certification: Submit to Owner not less than 14 days prior to scheduled delivery of materials.
1. Manufacturer's data for joint material, rebar, dowels, curing compounds, additives, admixtures and sealants.
- C. Mix Design: Submit to Owner not less than 14 days prior to installation of materials. Concrete: Including proportions of fine and coarse aggregate, water cement, air content and admixtures. Mix design shall be made by testing laboratory.
- D. Batch Tickets: The Contractor shall collect delivery or batch tickets from the ready-mix driver for all concrete used on the project and turn them over to the Owner. Batch tickets shall provide weights of fine and coarse aggregates: weight (or gallons) of water; including surface water on the aggregates; sack mix content; quantity (cubic yards) of batch; slump; times of batching and discharging of concrete; name of batch plant; name of Contractor; type, name and amount of admixture; date and truck number.
- E. Submit samples as required showing color, finish and sealer
- F. Color chart
- G. Product data
- H. Equipment data
- I. Color chart & sealant color samples in field for expansion joint sealant.
- J. Test reports as indicated below.

1.4 SAMPLE PANELS:

- A. Sample Panel 1: Concrete Paving and Concrete Edging Samples: Prepare two sample finished panels using specified materials. Each sample section shall be a minimum of two (2) foot square. Sample shall reflect specified concrete color, finish and sealer.
- B. Sample Panel 2: Once Sample Panel 1 has been approved, Contractor shall build a panel at the site of full thickness and approximately 10 feet by 10 feet, including expansion joints, control joint, fillers, sealant, etc. Provide the workmanship proposed for the work. Correct and replace sample panel until Project Manager's acceptance of the work. Retain panel during construction as a standard for completed paving work. The approved sample panel may be a portion of the work and remain in place. Locations as directed by the Project Manager.

1.5 QUALITY ASSURANCE:

- A. Contractor Qualifications: Install work using skilled persons, proficient in the trades required, in a neat, orderly and responsible manner with recognized standards of workmanship. Contractor shall have not less than 3 years successful experience with installation of similar work. If requested by Owner, submit list of three projects completed in the last two years of similar complexity to this project with name and location of project, owner's name and telephone number, name of project landscape architect and telephone number.
- B. Standards: Conform to applicable AASHTO, ASTM, ACI and PCA standards including:
 - ACI 301 Specifications for Structural Concrete for Buildings
 - ACI 304 Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete
 - ACI 305 Hot Weather Concreting
 - ACI 306 Cold Weather Concreting
 - ASTM C-94 Specifications for Ready-Mixed Concrete
- C. All concrete for flatwork shall be Class P (4200 PSI) unless otherwise requested by the Project Manager. Concrete shall be tested by the City's testing agency. Contractor shall contact the agency to arrange for testing at least 48 hours prior to each pour.

1.6 DELIVERY, STORAGE AND HANDLING:

- A. General: Materials handling and batching shall conform to applicable provisions of ASTM C94.
- B. Reinforcing: Unload and store reinforcing bars so they will be kept free of mud and damage.
- C. Hauling Time for Concrete: Discharge all concrete transmitted in a truck mixer, agitator, or other transportation device not later than 1-1/2 hours, or 300 revolutions of the drum after the mixing water has been added, whichever is earliest.
- D. Extra Water:
 - 1. Deliver concrete to site in exact quantities required by design mix.
 - 2. Should extra water be required for workability before depositing concrete, and the water/cement ratio of accepted mix design will not be exceeded, the General Contractor's superintendent shall have the sole authority to authorize addition of water. Additional water shall not exceed 1 gal/cu. yd. Any additional water added

to mix after leaving batch plant shall be indicated on truck ticket and signed by person responsible.

3. Where extra water is added to concrete it shall be mixed thoroughly for 30 revolutions of drum before depositing.
4. Water may be added at the site only once for each batch.
5. A full set of tests shall be performed after addition of water. Excessive slump or other out of range tests will be cause for rejection.

1.7 PROJECT CONDITIONS:

- A. Place concrete only when ambient air temperatures are above 45 degrees F and rising unless it is protected from freezing. Do not place concrete on frozen ground.

PART 2 - PRODUCTS

2.1 **SUBGRADE MATERIAL:** Dense, readily compactable material, free from vegetable matter and lumps of clay. Material excavated from on-site that meets this requirement may be used if approved.

2.2 **DESCRIPTION – Civic Center Concrete Includes:**

- A. Materials: concrete, integral color, surface treatment.
- B. Pressurized cleaning equipment
- C. Concrete placement and finish
- D. Surface treatment
- E. Sealer Application

2.3 **REINFORCING:** Reinforcing bars shall be billet steel conforming to ASTM A615 Grade 40 for #5 and smaller and ASTM A615 Grade 60 for #6 and larger. Use of heat in bending bars is not permitted. Splices where permitted, shall be as specified in ACI-318.

2.4 **ANCHOR AND EXPANSION BOLTS:** Anchor bolts shall meet the requirements of ASTM A449, ASTM A307 or ASTM F1554. High strength bolts shall meet the requirements of ASTM A325. Expansion bolts shall be “Thrubolt Wedge Anchor” by ITW RAMSET/Redhead.

2.5 **CONCRETE:**

- A. **Materials:** Materials, including cement, aggregates, water, and admixtures, shall meet the requirements of ASTM C94. Refer to Section 03300 for additional requirements.
 1. Cement: Type II, complying with ASTM C 150.
 2. Coarse Aggregate: Maximum size 3/8 inch river rock to match the color of fine aggregate, complying with ASTM C33.
 3. Fly Ash: Shall be 20% fly ash Type C or F, in compliance with CDOT 701.02.
 4. Water: Potable
 5. Air Entraining Admixture: ASTM C260. No chlorides will be permitted.
 6. Water Reducing Admixture: ASTM C494 Type A. Provide for all flatwork. No

chlorides will be permitted.

- B. Quality of Concrete: Concrete shall be furnished under Option C, ASTM C94, where by the manufacturer assumes full responsibility for the selection of the proportions for the concrete mixture. Submit statement of composition as called for in Part 1 of this section.
 - C. Total Average Air Content: 5 to 7 percent.
 - D. Minimum Cement Content: 6 sacks per cubic yard.
 - E. Water Cement Ratio: Max. (.48 ±).
 - F. Slump: Maximum 4 inches.
 - G. Compressive Strength: 4,200 PSI minimum at twenty-eight days.
 - H. Manufacture and Delivery: Measurement of materials, batching, mixing, transporting, and delivery shall be as specified in ASTM C94. Discharge concrete into forms within 1-1/2 hours after introduction of water to cement. When temperature of concrete is 85 degrees F or above, the time between introduction of water to cement and complete discharge of concrete into forms shall not exceed 45 minutes.
- 2.6 FIBROUS CONCRETE REINFORCEMENT: Shall be 100% virgin polypropylene, fibrillated fibers containing no reprocessed olefin materials and specifically manufactured to an optimum gradation utilizing 25 individual fiber designs for use as concrete secondary reinforcement. Volume per cubic yard shall equal a minimum of 0.1% (1.5 pounds). Fiber manufacturer must document evidence of 5 year satisfactory performance history, compliance with applicable building codes and ASTM C1116 Type III 4.1.3 and ASTM C1116 Performance Level I. Acceptable manufacturer: Fibermesh Company, 4019 Industry Drive, Chattanooga, Tennessee, USA, 37416 or approved equal. Fibrous concrete reinforcement shall be utilized in all trail and walk applications.
- 2.7 CURING MATERIALS: Compound shall be Bomanite Clear Cure or approved equal.
- 2.8 EXPANSION JOINT FILLERS: Pre-molded closed cell polyethylene foam, equal to "Sonoflex F" by Sonneborn, Minneapolis, Minnesota. Provide ½-inch thick by depth of the slab material, allow ½ thickness for joint sealer.
- 2.9 EXPANSION JOINT SEALANT: Shall be a silicone material that is on CDOT's approved silicone sealant list. Where color additive is used, color to match.
- 2.10 JOINT DOWEL BARS: Plain steel bars, ASTM A 615, Grade 60. Cut bars true to length with ends square and free of burrs.
- 2.11 BONDING AGENT: Chemical or epoxy type, as approved.
- 2.12 COLORING, TEXTURE AND SEALING MATERIALS
- A. Concrete color shall match sample provided by City and County of Denver.

- B. Surface retarder shall be Bomanite Surface Deactivator or Grace Top-Cast Concrete surface retarder, No. Code 05 (Sandblast Finish) or 15 (up to ¼ in. (6.5mm)) or approved equivalent.
- C. Burn off exposed fibrous reinforcement.
- D. Slabs shall be sealed in accordance with the manufacturer's recommendations.

PART 3 – EXECUTION

- 3.1 **PREPARATION OF SUBGRADE:** Excavate to required depth. Remove soft, yielding material and replace with select fill. Compact to min. 95% Standard Proctor within 2% of optimum moisture. Do fine hand grading as required to assure minimum thickness of concrete as indicated. Be sure any required gravel subgrade, or drainage system is in place. Be sure any required gravel base course is in place and compacted to 95% standard proctor density. Proof-roll prepared sub-base surface to check for unstable areas and need for additional compaction. Do not begin work until such conditions have been corrected and are ready to receive paving.
- 3.2 **MAINTENANCE OF SUBGRADE:** Maintain subgrade in a compacted condition until concrete is placed.
- 3.3 **FORMS:**
 - A. Metal or uniform warp free lumber, coated with form release agent. Slope forms to give slabs positive drainage and stake securely. Obtain approval of Project Manager for alignment and grade before placing concrete. Radii shall be continuous and flowing to avoid angular intersections in the horizontal alignment.
 - B. Provide for openings, offsets, sinkages, recesses, chamfers, blocking, screeds, anchorages, and inserts and other features required.
 - C. Provide openings in forms to accommodate other work, including mechanical and electrical work.
- 3.4 **CLEANING AND TIGHTENING:** Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt and other debris just before concrete is to be placed. Retighten forms immediately after concrete placement as required to reduce mortar leaks.
- 3.5 **RE-USE OF FORMS:** Clean and repair surface of forms to be re-used in the work. Split, frayed, delaminated or otherwise damaged form facing material will not be acceptable. Apply new form coating compound material to concrete contact surfaces as specified for new form work.
- 3.6 **REINFORCING:** General: install as indicated on the Drawings. Reinforcing bars shall have a minimum of 2" clean cover unless otherwise noted on the Drawings. Lap splices for reinforcing shall be 30 bar diameters minimum. Provide bent corner bars to match and lap horizontal reinforcing at corners and intersections in concrete footings and walls, masonry bond beams.
- 3.7 **PLACING:**
 - A. Concrete shall be formed, placed, vibrated and finished by hand using conventional methods. Concrete shall be placed at the line and grade shown on plans.

- B. Place concrete on moistened subgrade monolithically between construction joints. Deposit to full depth in one operation. Consolidate immediately. After depositing concrete, screed and darby or bullfloat.
- C. Notify Owner not less than 8 working hours in advance of any pour and as soon as form work and reinforcing are substantially complete.
- D. See Drawings regarding items to be embedded in concrete, including but not restricted to the following:
 - Miscellaneous Steel
 - Expansion Joints
 - Anchor Bolts
- E. Deposit concrete continuously or in layers of such thickness that no concrete will be placed on concrete which has hardened sufficiently to cause the formation of seams or planes of weakness within the section. If a section cannot be placed continuously, provide construction joints as herein specified. Perform concrete placing at such a rate that concrete which is being integrated with fresh concrete is still plastic. Deposit concrete as nearly as practicable to its final location to avoid segregation due to rehandling or flowing.
- F. Screed concrete which is to receive other construction to the proper level to avoid excessive skimming or grouting.
- G. Do not use concrete which becomes non-plastic and unworkable, or does not meet the required quality control limits, or which has been contaminated by foreign materials. Do not use retempered concrete.
- H. Remove rejected concrete from the project site and dispose of in an acceptable location.
- I. Isolate flatwork from building elements, walls, columns with expansion joints unless otherwise indicated.
- J. Saw cutting of divider joints may be used providing cutting occurs as soon as it can be done without dislodging coarse aggregate and before initial shrinkage stresses have occurred.
- K. Consolidation: Consolidate concrete placed in forms by hand-spading, rodding or tamping. Use equipment and procedures for consolidation of concrete in accordance with the recommended practices of ACI 309, to suit the type of concrete and project conditions. Vibration of forms and reinforcing will not be permitted. Bring slab surfaces to the correct level; smooth the surface, leaving it free of humps or hollows. Do not sprinkle water on the plastic surface. Do not disturb the slab surfaces prior to beginning finishing operations.
- L. Bonding: Roughen surfaces of set concrete at all joints, except where bonding is obtained by use of concrete bonding agent, and clean surfaces of coatings loose particles and foreign matter. Roughen surfaces in a manner to expose bonded aggregate uniformly and to not leave loose particles or aggregate, or damaged concrete at the surface.

3.8 **FORM REMOVAL:** Remove forms after concrete surface is hard enough so as not to be injured in any way. Reasonable care is to be used in removing forms. Repair minor defects with mortar.

Plastering will not be permitted on exposed faces.

3.9 JOINTS: Construct joints true to line with faces perpendicular to surface. Construct transverse joints at right angles to the centerline, unless otherwise indicated.

- A. Expansion Joints: Expansion joint material shall be provided at the following locations and shall be in place prior to the placing of concrete: 1) at each end of curb return; 2) between sidewalk and driveway slabs or service walks; 3) between new concrete and existing concrete; 4) as shown on the plans; 5) between new concrete and fixed vertical objects, 5) at max. 120 foot spacing, or 6) as directed by the Project Manager.
 - 1. Thoroughly clean all surfaces prior to installation of caulking material.
- B. Contraction (Control) Joints in Walks: Contraction joints shall be formed with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 3/8-inch/wide joints into concrete that has hardened sufficiently that cutting action will not tear, abrade, or otherwise damage surface, but before development of random contraction cracks. Saw cut joints shall be spaced at a distance equal to the width of the walk, but not over 10 feet unless approved by the Project Manager. Depth of joints shall be one-fourth the slab thickness.
- C. Curb and Gutter Contraction (Control) Joints: Space curb and gutter joints not more than 12 feet 6 inches on center, and align them with sidewalk joints. Contraction joints shall be tooled. Form plane of weakness by inserting and later removing a metal divider, finish with an edger or groover, or by saw cutting a previously tooled joint.
- D. When joining existing structures, place transverse joints to align with previously placed joints, unless otherwise indicated.
- E. Contractor shall advise and work with Project Manager to determine the best location for joints to minimize visibility of joints and unsightly cracking.
- F. Cold Pour Joints: Place construction joints at end of placements and at locations where placement operations are stopped for more than 1/2 hour, except where such placements terminate at expansion joints.
 - 1. Construct joints as shown or if not shown, use standard metal keyway-section forms.
- G. Extend joint fillers full width and depth of joint, not less than .5 inch or more than 1 inch below finished surface where joint sealer is indicated. If no joint sealer, place top of joint filler flush with finished concrete surface.
- H. Furnish joint fillers in one-piece lengths for full width being placed wherever possible. Where more than one length is required, lace or clip joint filler sections together.
- I. Protect top edge of joint filler during concrete placement with a metal cap or other temporary material. Remove protection after concrete has been placed on both sides of joint.
 - 1. Fillers and Sealants: Comply with requirements of manufacturer's specifications.

3.10 FINISH:

- A. Concrete shall be placed and screened to the finished grade, and floated to a uniform surface using standard finishing techniques.
- B. Surface treatment will be applied and cleaned off with proper equipment.
- C. Uniformly apply the concrete surface retarder.
- D. Install control joints in a timely manner to minimize random cracking.
- E. Remove the surface down to the fine aggregate using pressurized equipment. Care is to be taken in not leaving any deep or shallow inconsistencies in the overall finish.
- F. Exposed horizontal surfaces shall be finished as indicated on the Drawings.
- G. After striking off and consolidating concrete, smooth surface by screeding and floating. Adjust floating to compact surface and produce uniform texture.
- H. After floating, test surface for trueness with a 10 foot straightedge. Distribute concrete as required to remove surface irregularities, and refloat repaired areas to provide a continuous smooth finish.
- I. Do not remove forms for 24 hours after concrete has been placed. After form removal, clean ends of joints and point-up any minor honeycombed areas. Remove and replace areas or sections with major defects, as directed by Owner.

3.11 CONCRETE SEALER:

- A. After the initial curing period the surface slab shall be sealed.
- B. Evenly apply the concrete sealer, as recommended by the manufacturer.

3.12 CURING:

- A. General: Protect freshly placed concrete from premature drying and excessive cold and hot temperature, and maintain without drying at a relatively constant temperature for the period of time necessary for hydration of the cement and proper hardening of the concrete.
 - 1. Start initial curing as soon as free moisture has disappeared from the concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 72 hours.
 - 2. Begin final curing procedures immediately following initial curing and before the concrete has dried. Continue final curing for at least 7 days in accordance with ACI 301 procedures. Avoid rapid drying at the end of the final curing period.
 - 3. Protection from vandalism and traffic is the responsibility of the Contractor.
- B. Curing Methods: Apply specified curing compound at full strength with coverage rate not to exceed 200 square feet per gallon.
 - 1. If rainy weather is imminent, steps shall be taken to properly protect the concrete

from washing or addition of excess water until such time as it has sufficiently hardened, (minimum 7 day strength). Use canvas or tarp coverings to resist scouring from rain water.

2. On exposed slabs with integral color, do not use polyethylene or paper sheeting.
- 3.13 FIELD QUALITY CONTROL: Surfaces shall not vary more than 1/8-inch when tested with a 10 foot straightedge.
- 3.14 PROTECTION: Contractor shall be responsible for protecting the concrete flatwork until it is sufficiently hard. Concrete that is damaged by footprints, writing implements, or weather conditions is subject to replacement at no cost to the City.

END OF SECTION

CITY AND COUNTY OF DENVER

*Mayor
John W. Hickenlooper*

*Manager of Denver Parks and Recreation
Kevin Patterson*

*City Council
District 1 - Rick Garcia
District 2 - Jeanne Faatz
District 3 - Paul D. Lopez
District 4 - Peggy Lehman
District 5 - Marcia Johnson
District 6 - Charlie Brown
District 7 - Chris Nevitt
District 8 - Carla Madison
District 9 - Judy H. Montero
District 10 - Jeanne Robb
District 11 - Michael B. Hancock
Carol Boigon, At-Large
Doug Linkhart, At-Large*

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