



APRIL 2019
FINAL REPORT



NATIONAL WESTERN CENTER DESIGN HANDBOOK

IMAGINE. DISCOVER. CULTIVATE.



In association with Winter and Co. and Studio Insite



TABLE OF CONTENTS

Introduction	Page 2
Chapter 1: Campus Framework	Page 6
» Campus Character Areas Overview	Page 8
» Circulation and Mobility	Page 10
» Key Intersections and Decision Points	Page 14
» Interpretive Framework	Page 16
» Green Infrastructure Opportunities	Page 22
» Constraints	Page 24
Chapter 2: General Campus Design	Page 26
» Public Space Design Elements	Page 28
» Streetscape Design	Page 36
» Intersection Design	Page 40
» Signage and Wayfinding	Page 44
» General Building Design	Page 55
» Rehabilitation/Reuse of Existing Buildings	Page 69
Chapter 3: Character Area: Festival Grounds	Page 76
» Character Area Overview	Page 78
» Outdoor Programming Diagram	Page 80
» Arena Entry Plaza	Page 82
» Connection to Riverfront	Page 84
» Link Plaza	Page 86
» Armour Plaza	Page 88
» Connection to RTD Transit Station	Page 90
» Stockyards Event Center (SEC) Plaza	Page 92
» Stockyards	Page 94
» Stockyards Event Center (SEC)	Page 96
» Equestrian Center	Page 98
» Livestock Center	Page 100
» Equestrian Plaza	Page 102

Chapter 4: Character Area: Innovation Campus Page 104

- » Character Area OverviewPage 106
- » Campus Entry PlazaPage 108
- » Livestock Exchange Plaza Page 110
- » WSSA Legacy Building Page 112
- » CSU Animal Health Complex Page 114
- » CSU Center and Water Building Page 116

Chapter 5: Character Area: Riverfront Page 118

- » Character Area OverviewPage 120
- » Northern Drainage AreaPage 122
- » Central Riverfront Area and Sheep BridgePage 124
- » Southern Program Area and CafePage 126
- » Southern Drainage AreaPage 128

Appendix Page 130

Chapter 7: Character Area: Triangle North

Chapter 8: Character Area: Triangle South

Chapter 9: Character Area: South Campus

Chapter 10: Character Area: Elyria-Swansea Gateway

Sections to be provided following further work on the NWC Triangle

INTRODUCTION



VISION STATEMENT:
To be a global destination
for agricultural heritage and
innovation.

MISSION STATEMENT:
The mission is to convene the
world at the National Western
Center to lead, inspire, create,
educate, and entertain in pursuit
of global food solutions.

The National Western Center Campus (NWC or the Campus) presents a unique opportunity to honor and celebrate the spirit of the West, while also promoting research and progress in agriculture for the next 100 years. The revolutionary campus will host programs and house facilities that focus broadly on entertainment, food, animal health and performance, water, energy, agriculture, livestock and equestrian events, and sustainability and the environment. This document's vision, mission, and guiding principles were identified during the National Western Center Master Plan (2015) process.

DESIGN PRINCIPLES

ACHIEVE EXCELLENCE IN DESIGN: Each development should express excellence in design and raise the bar for others to follow. This includes using materials and construction methods that express depth of detail, shadow, contrast, and other similar rich visual qualities.

PROMOTE CREATIVITY: New ways of designing buildings and public amenity spaces should be explored when they contribute to a cohesive campus fabric. This type of creativity should be distinguished from simply being "different."

DESIGN WITH AUTHENTICITY: Buildings and public spaces should reflect authentic design and material choices, including distinct construction techniques. An authentic building design has a consistent design concept that speaks of its own time and does not convey a false history. It also is one that uses design concepts, materials and forms in a consistent manner such that an entire building is understood to be a single composition.

DESIGN FOR DURABILITY: Buildings and public spaces should be designed for the long term with high-quality, durable materials and infrastructure that supports amenities and allows for easy repair, replacement, and growth.

ENHANCE THE PEDESTRIAN EXPERIENCE: Define street edges and public spaces with buildings and amenities that are visually interesting and attract pedestrian activity. Public spaces should be inviting with wide sidewalks, universally accessible facilities, and landscape elements.

DESIGN FOR REGENERATION: Urban design and architecture should promote sustainability and regeneration.

DESIGN FOR FLEXIBILITY: Buildings and public spaces should accommodate flexible programming and can evolve over time in support of the NWC mission and vision.

DRAW UPON LOCAL AND REGIONAL DESIGN TRADITIONS: Surviving buildings and historic site features exemplify a unique character and authenticity, with lessons for design. Opportunities to reuse historic materials and reference existing buildings or buildings that have been demolished should be pursued. Development should consider how regional farming and ranching traditions can influence and inspire materials, building massing, and form, without copying an older style.

CREATE ENGAGING PUBLIC SPACES: Each project should incorporate engaging elements, features and public space amenities for pedestrians to move through and enjoy. These include promenades, plazas, courtyards and natural areas. Linking these while enhancing and restoring connections to the South Platte River in a cohesive circulation network will create a valuable public amenity.

EDUCATE, ENGAGE, AND INSPIRE VISITORS: Functional and historic features should be used to teach visitors about the past, current systems, and stories on the Campus. Public spaces should be used to teach and inspire visitors in interactive ways.



National Western Center Illustrative Site Plan

ABOUT THIS DOCUMENT



REGULATORY FRAMEWORK

PURPOSE OF THIS DOCUMENT

The Design Handbook (the Handbook) contains guidance for projects that will be commissioned or reviewed by the NWC Authority (NWCA or the Authority). It is intended to ensure consistency with the Campus Master Plan and Placemaking Study documents and will provide more detailed information and guidance about design character in specific areas than what appears in the Design Standards and Guidelines (DSG), which will be administered by Denver Community Planning and Development (CPD) when issuing development permits. The Handbook addresses more qualitative aspects of design that are not considered by CPD in development review, but these topics are important to the Authority in assuring that development is consistent with the vision and goals for the Campus.

Other documents to reference in the design of NWC projects include:

- The Denver Zoning Code (2010)
- The National Western Center Master Plan
- Elyria and Swansea Neighborhoods Plan
- Globeville Neighborhood Plan
- Blueprint Denver
- The Placemaking Study

DESIGN STANDARDS AND GUIDELINES (DSG)

The NWC DSG set clear regulatory criteria for design of the Campus. This CPD-administered document uses intent statements, standards, and guidelines that will be used in the review and permitting of projects. The Zoning Administrator shall utilize the DSG when making a determination of approval of any proposed project at the National Western Center.

The Design Handbook uses a separate review process through the NWCA to supplement the standards in the DSG and recommend designs above and beyond the regulatory scope.

ABOUT THE NATIONAL WESTERN CENTER AUTHORITY

The Authority is a Colorado nonprofit corporation that programs, operates, and maintains the year-round Campus. The actions of the Authority are guided by a 13-person Board made up of 11 voting directors and two non-voting directors. The Authority is working closely with adjacent neighborhoods to ensure development of the Campus is consistent with adopted plans and community vision.

ABOUT THE STRATEGIC DESIGN AND LEADERSHIP (SADL) COMMITTEE

The Strategic Design and Leadership (SADL, pronounced saddle) is a committee comprised of subject matter experts across a range of planning and design fields. SADL will advise the Mayor's Office of the National Western Center (NWCO) and the Authority regarding the design of site development and improvements. This Design Handbook will serve as a resource to reference when reviewing projects on the Campus.



HOW THIS DOCUMENT IS ORGANIZED

This document begins at a campus-wide scale, then provides design guidance for individual spaces on the Campus. The design suggestions in this document were developed through the NWC Campus Placemaking Study in conjunction with the Citizen’s Advisory Committee (CAC) and NWC project partners.

Chapter 1 contains a framework of important campus-wide considerations including circulation, signage and wayfinding, interpretive opportunities, green infrastructure opportunities, and constraints. Chapter 2 consists of overall design guidance that applies to all public spaces, streetscapes, and buildings on the Campus. Chapters 3-10 establish design considerations for the subareas within each Phase 1 and 2 Character Area: the Festival Grounds, Innovation Campus, and Riverfront. Design Guidelines are still forthcoming for Character Areas to be designed in future phases: Triangle North, Triangle South, the Elyria-Swansea Gateway, and the South Campus.

CAMPUS DESIGN

CHAPTER 1: CAMPUS FRAMEWORK

Provides diagrams and recommendations for campus-wide layout and design. Includes the Campus interpretive framework and “common thread.”

CHAPTER 2: GENERAL CAMPUS DESIGN

Provides detailed recommendations and material palettes for design elements (paving, landscaping, and site furnishings) as well as building and streetscape design.

CHARACTER AREA DESIGN

CHAPTER 3: FESTIVAL GROUNDS

Includes design considerations, diagrams, graphics, and images for individual spaces within the Festival Grounds Character Area.

CHAPTER 4: INNOVATION CAMPUS

Includes design considerations, diagrams, graphics, and images for individual spaces within the Innovation Campus Character Area.

CHAPTER 5: RIVERFRONT

Includes design considerations, diagrams, graphics, and images for individual spaces within the Riverfront Character Area.

IN PROGRESS

CHAPTERS 7-10: FUTURE PHASES

Character Areas that will be designed in future phases - the Triangle North and South, the Elyria Swansea Gateway, and the South Campus - will receive design standards and guidelines at a later date, following further design and





CAMPUS FRAMEWORK

CAMPUS CHARACTER AREAS OVERVIEW
CIRCULATION AND MOBILITY
SIGNAGE AND WAYFINDING
INTERPRETIVE FRAMEWORK
GREEN INFRASTRUCTURE OPPORTUNITIES
CONSTRAINTS

CAMPUS CHARACTER AREAS OVERVIEW

INTENT

The Handbook uses Character Areas as an organizing element to establish a unifying sense of place while supporting future function and programming of the overall site. The Character Areas recognize and encourage the distinct identities of different spaces within the Campus while ensuring there is a general design continuity. Site and building design character should support the NWC vision; one that celebrates the past, but clearly points to the future.



CHARACTER AREAS

FESTIVAL GROUNDS

This area will house the future Equestrian Center, Livestock Center, Stockyards Event Center, Stockyards, the existing Armour Administration Building, and a large amount of flexible outdoor space to be used for outdoor events, operations, and, in the Stockyards, temporary surface parking.

INNOVATION CAMPUS

The Innovation Campus includes the following existing buildings: the Livestock Exchange Building (anticipated future private ownership), McConnell Welders (anticipated to remain in place; has potential for reuse), and the Artist Studio (privately owned). Future new buildings include the CSU Animal Health Complex, CSU Water Building, CSU Center, and WSSA Legacy Building.

RIVERFRONT

This Character Area includes the area west of the new National Western Drive and extends to the site boundary east of the South Platte River. The Riverfront will be an area for year-round recreation, enjoyment, and education, with a potential for small, actively programmed buildings in the area north of Bettie Cram Drive.

MAINTENANCE AND OPERATIONS

This area is located south of Race Court, west of the BNSF/RTD rail tracks, and north of the DRIR tracks. An underpass (open to maintenance personnel and vehicles) under the DRIR tracks will connect this area to the Festival Grounds. Maximum design flexibility and the utilitarian needs of Campus are the highest priority in this area.

TRIANGLE NORTH

This area is on the eastern edge of the NWC, north of I-70 and directly west of Brighton Boulevard. The north western portion will include the new RTD commuter rail station. The remainder of this area is anticipated to be developed with the Triangle South area through a public/private partnership. Since this area contains the existing Stock Show Complex, it will not be developed until NWC Phases 1 & 2 are constructed. Uses may include a trade show/exhibition hall, arena, hospitality, housing, offices, research and development, retail, and food and dining. The use of these areas is to be determined through further study and public input.

TRIANGLE SOUTH

This area is located north of I-70, and east of the BNSF/RTD/DRIR rail lines. It will include the extension of Bettie Cram Drive that will continue beneath the rail tracks to connect Brighton Boulevard to Washington Street as well as the landmarked 1909 Stadium Arena, which is under study for use as a public market and maker space. See Triangle North (above) for other potential uses.

SOUTH CAMPUS

This area is located south of I-70 and west of Brighton Boulevard. It is home to the Denver Coliseum, an attached horse barn, surface parking, and Globeville Landing Park. Uses will be similar to those in the Triangle Character Areas with an emphasis on mixed use and neighborhood-serving uses.

ELYRIA/SWANSEA GATEWAY

This area is a former Denver Public Schools (DPS) bus site, located east of Brighton Boulevard and north of 48th Avenue. Uses will be similar to those in the Triangle Character Areas with an emphasis on mixed use and neighborhood-serving uses.

THE CAMPUS CULTURAL PLAN

Each Character Area should provide the opportunity for education/research and historic interpretation. The Campus Cultural Plan catalogs histories and heritages associated with each area and should be referenced in conjunction with the Handbook.

CHARACTER AREAS MAP



CIRCULATION AND MOBILITY

KEY TAKEAWAYS

- Create multi-modal connections to the Campus
- Co-locate mobility options in strategic areas
- Provide a robust pedestrian and bicycle network
- Prioritize pedestrian or bicycle travel along major routes
- Plan for future multi-modal connections



DESIGN CONSIDERATIONS

MOBILITY AND SHUTTLE CONNECTIONS

- Create “mobility zones” that include space and design considerations to accommodate bike parking; bike repair stations; and bike, scooter, and car share pickup and drop-off.
- Create pedestrian amenities such as transit stops and shuttle drop-offs; signage and wayfinding; seating and other furnishings; and shelters if feasible.
- Locate mobility zones near major campus entries and intersections.
- Clearly mark and guide visitors to mobility zones.
- Consider designing for shuttle routes that bring visitors to Campus mobility zones from other destinations, transit stations, or parking areas.

PEDESTRIAN CIRCULATION

- Provide frequent, well dispersed, and easily navigable pedestrian routes throughout the Campus.
- Use design elements and signage and wayfinding to clearly mark pedestrian travel.
- Provide safe pedestrian travel along major vehicular circulation routes.
- Provide physical and/or visual separation between pedestrian facilities and faster modes of travel, such as planting and changes in paving height, color, or texture.
- Design for a variety of abilities, ages, and users, including families attending to children as well as people experiencing mobility, endurance, mental, or visual challenges.
- Provide art and aesthetically pleasing materials that promote discovery, learning, enjoyment, and creativity.

BICYCLE CIRCULATION

- Provide frequent and easily navigable bicycle routes throughout the Campus.
- Design routes that allow for continuous pedaling with few stops and obstructions, including rough textures, gaps in pavement, vertical obstacles, encounters with vehicles, pedestrians, and slower moving transportation methods.
- Use design elements and signage and wayfinding to clearly mark bicycle travel.
- Connect interior Campus bicycle routes to the surrounding bike network.

DENVER MOVES

As part of the City of Denver’s Denveright outreach and planning effort, the City has created comprehensive transportation plans for Transit, Pedestrians, and Trails. The documents aim to create a reliable, safe, and efficient transportation network. Ensure compliance with City-wide modal policy within the Campus. These plans are split into three topics:

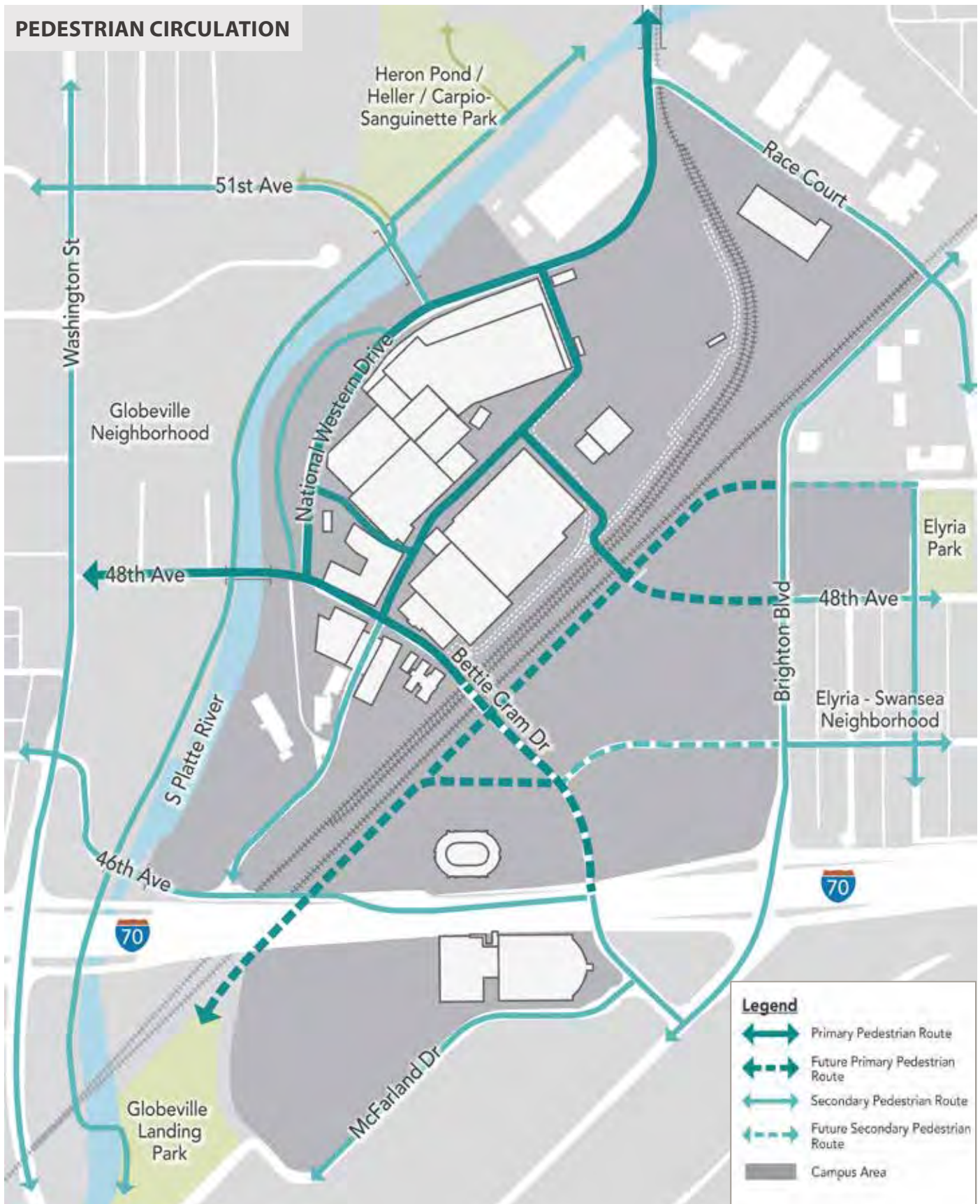
- » *Denver Moves Peds and Trails*
- » *Denver Moves Enhanced Bikeways*
- » *Denver Moves Transit*

MOBILITY AND SHUTTLE CONNECTIONS



CIRCULATION AND MOBILITY

PEDESTRIAN CIRCULATION



BICYCLE CIRCULATION



KEY INTERSECTIONS AND DECISION POINTS

KEY TAKEAWAYS

- Indicate the significance of Key Intersections and aid Campus wayfinding
- Co-located pedestrian amenities with Key Intersections and Key Decision Points
- Aid Campus wayfinding at Key Decision Points
- Scale design elements and signage and wayfinding at Key Intersections and Decision Points appropriately



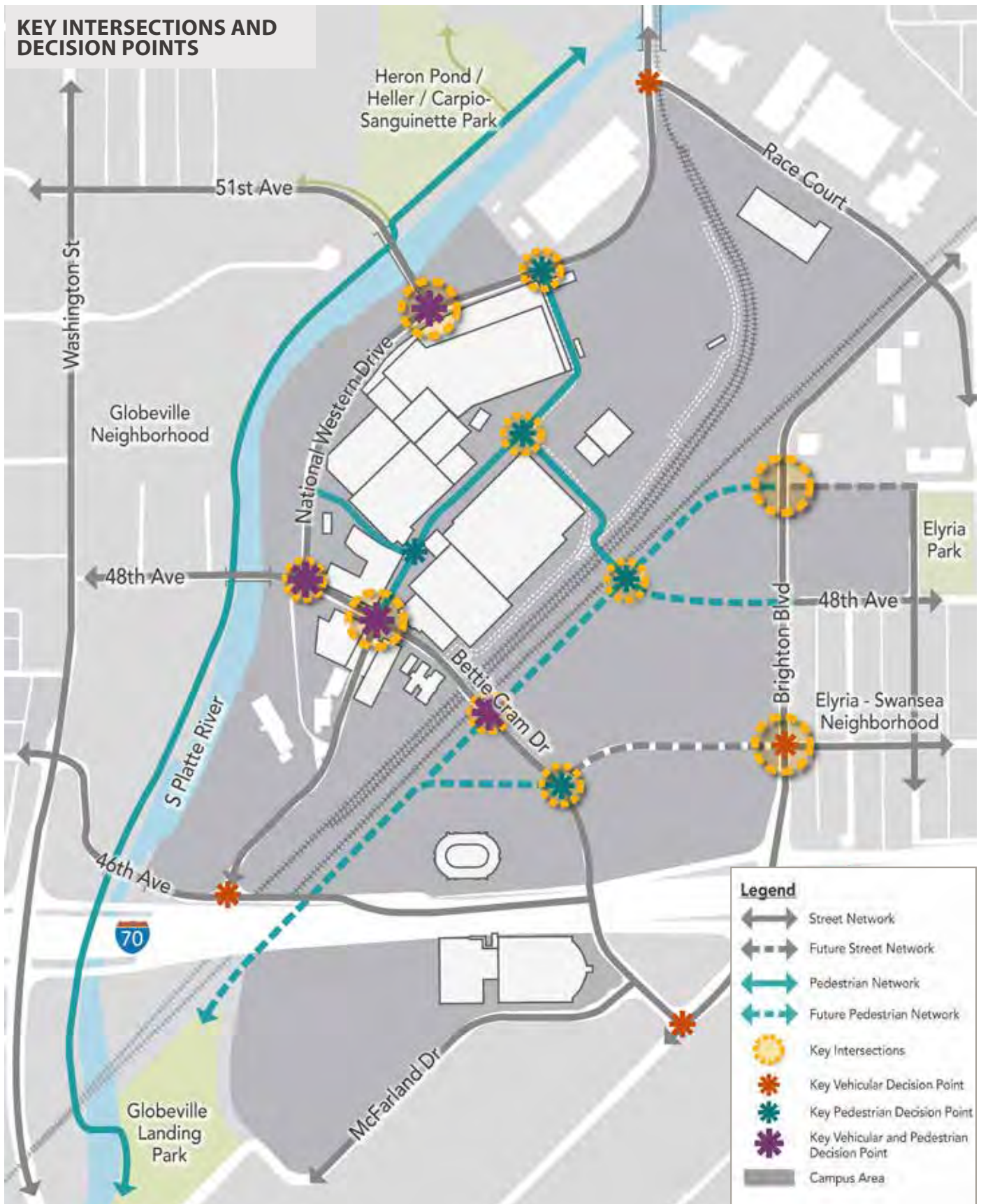
DESIGN CONSIDERATIONS

- Use iconic design features, vertical monumentation, signage, and wayfinding to indicate Key Intersections as major gateways, entries, and gathering areas on Campus.
- Use signage to direct users to major destinations via Key Intersections.
- Co-locate modal facilities (bike parking, drop-off and pickup areas, etc.) with Key Intersections whenever feasible.
- Ensure the Campus is marked at major entry points.
- Key Intersections along streets should be scaled to accommodate both pedestrians and vehicles.
- Key Intersections along pedestrian routes should be pedestrian-oriented.
- Use signage and wayfinding elements to help guide pedestrians through Key Decision Points.
- Signage at Vehicular Decision Points should be scaled to accommodate vehicular usage and large enough to ensure visibility at higher speeds.
- Signage at Pedestrian Decision Points should be scaled to comfortably accommodate pedestrian usage.
- When feasible, co-locate Pedestrian Decision Points with furnishings, landscaping, and lighting to maximize visitor comfort.

NWC CAMPUS PLACEMAKING SIGNAGE AND WAYFINDING PLAN

Refer to the NWC Campus Placemaking Signage and Wayfinding Vision Plan in conjunction with this Handbook for guidance on appropriate signage for Key Intersections and Decision Points. A District Sign Plan will be developed by CPD and NWCA at a later time and will supersede this document.

KEY INTERSECTIONS AND DECISION POINTS



INTERPRETIVE FRAMEWORK

INTERPRETIVE FRAMEWORK INTENT

To consider the needs of the NWCA, aspirations of partners and stakeholders, interests of users and potential users, and significance of site resources. This Framework offers a:

- » *Shared vision for interpretive elements and educational programs*
- » *Structure for understanding physical and facilitated programming types*
- » *Lens through which to consider future activities*

ABOUT THE INTERPRETIVE FRAMEWORK

An interpretive framework for the National Western Center unites interpretive elements and educational programs—physical features and facilitated activities—to ensure cohesive experiences for users on campus and consistent messaging about the site. The framework provides the scaffolding that connects National Western Center management with interpretive and educational programming efforts. The goal of the interpretive framework is to push the site beyond function and aesthetics to become a meaningful experience for users. Coordinated interpretive elements at the National Western Center will create opportunities for personal connections and encourage participatory relationships between users and the site’s landscape, facilities, history, and activities, foster appreciation of the guiding principles, and advance the National Western Center brand and its unique offerings.

COMMON THREAD

A “common thread” for the site conveys the unifying concept of the National Western Center. It straightforwardly articulates why the Campus exists, highlights the uniqueness of the site, and links components. The common thread is the lens through which interpretive elements are developed; it provides a flexible and adaptable framework that allows for a diversity of experiences while ensuring cohesion across the National Western Center.

As the filter through which interpretive elements, programs, and other activities are chosen, implemented, and evaluated, the common thread focuses the approach individuals and organizations take when embarking on interpretive projects. It’s broad enough to allow for the variety of activities that will take place at the National Western Center, yet specific enough to set appropriate parameters for ongoing development.

As the foundation underlying interpretive endeavors at the National Western Center, the common thread grounds the storyline of the Campus, ensuring a unified impression of the site by people who visit and use it, regardless of their backgrounds and motivations for being there. The common thread also reflects the physical layout, design, and architecture of the site, reinforcing a coordinated look, feel, and tone for user experiences.

CONVERGE, PIVOT, AND INNOVATE

This is where we come together to remember, celebrate and learn from our continual efforts to respond to, adapt to, and solve challenges related to water, agriculture, and our environment.

The common thread captures the essence of the National Western Center as an intersection—a unique place that brings together:

- History and Innovation
- Research and Commerce
- Science and Art
- Education and Entertainment
- Public and Private
- Young and Old
- Urban and Rural

CONVERGE

People come together at the National Western Center, on plazas and in iconic buildings, encountering carefully preserved historical remnants and brilliant new features.

PIVOT

Grounded and adaptable, the site encourages trial and change as reflected in its design—with streets, paths, and structures that radiate out toward the arch of the South Platte River.

INNOVATE

Interactions among diverse interests, activities, people, and experiences create a dynamic, productive atmosphere where solutions for the future come to life.



INTERPRETIVE INTENT AND ELEMENTS

The intent of interpretation is to inspire and spark interest among users of programs and projects on campus. Linking stories to place through the common thread Converge, Pivot, and Innovate requires the thoughtful use of various methods of storytelling. Intentionally planning how public art, historical features, and new campus elements come together will result in desirable experiences that make the site a destination for many types of users.

- Physical interpretive elements will be available for users to find and consume as they use the site according to their interests and motivations. Facilitated educational programs and activities—scheduled or drop-in—also offer a wide variety of potential ways to weave significant stories into the site. Types of interpretive elements include:
 - Exhibits—Free-choice informal learning environments, exhibits are specially-designed installations often in interior gallery spaces. They may be short-term (temporary) or long-term (core). Designed as self-guided experiences, exhibits often also accommodate guided tours and facilitated educational programs within galleries or in adjacent spaces.
 - Interpretive Markers—Fixed interpretive signs draw attention to specific site features, offering information through text and images. Coordinating a series of markers can connect features, like a trail along the river or a tour of historical and public art elements. Systematizing the amount of content markers contain makes them user friendly; a layered approach with a defined voice, tone, look, and feel provides the scaffolding needed create a seamless and effective user experience. Markers may fall into three categories:
 - » Story Stops—Content tied to a campus theme, location, or related story
 - » Campus Callouts—Succinct explanation of a topic
 - » What is It? Identifiers—Minimal information about a feature (e.g. title and artist)
 - Displays—Short-term installations of interpretive materials, often set up for special programs or events, may be part of a coordinated campus-wide themed event or series. Interpretive panels at demonstration gardens or signage associated with an artist-in-residence program are examples.

SUPPLEMENTAL ACTIVITIES

- » Self-guided tours using pamphlets and technology like mobile apps and audio tours
- » Coordinated campus-wide exhibition and event series designed and developed around a single topic
- » Family days and themed festivals
- » Seasonal tours and programs
- » Pop-up events
- » Cooperative history-based campus-wide scavenger hunts
- » Site, building, and room-scaled puzzle/escape experiences
- » Regularly-scheduled neighborhood events like weekly movies, farmers markets, and music showcases
- » Naturalization Ceremonies with related programs that acknowledge immigrants who have settled in nearby neighborhoods
- » Virtual exhibits and other online educational resources like podcasts, games, blogs, digital newsletters, and social media presence

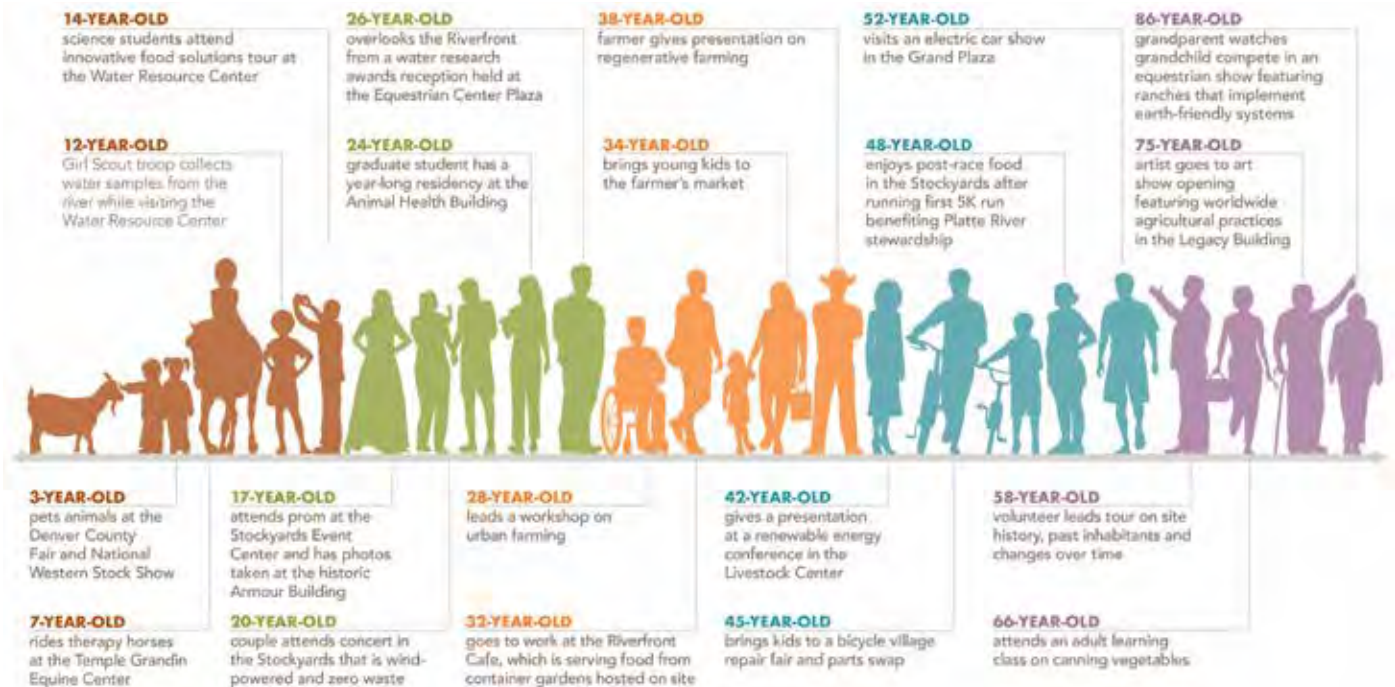
INTERPRETIVE FRAMEWORK



INTERPRETIVE INTENT AND ELEMENTS (CONT)

- Educational Programs—Facilitated encounters led by trained teachers, guides, counselors, or volunteers, educational programs take many forms. They may focus on particular audience segments (youth or adults for example), include regularly-scheduled opportunities and activities in conjunction with special events, and happen throughout the site. For example, formal classes may use dedicated interior classroom spaces as well as open-air learning labs. Types of educational programs include:
 - » Formal classes, workshops, lectures, and discussion forums
 - » Walking tours—Scheduled whole-site tours, or themed walks that focus on specific Character Areas and/or time periods (history of the Stock Show, neighborhoods and communities, public art, etc.)
 - » Costumed interpreters—Interactions with trained role players who give first-person accounts (emphasizes conversational approach with prepared back stories)
 - » Storytime, Shows, Concerts—Third person histories, including poetry and music that invite participation (emphasizes presentation style, with opportunities for questions, answers, and sharing)
 - » Staffed touch carts—Volunteers or staff roll carts to a plaza with objects, for example site feature salvaged from the stockyards or other areas
 - » Drop-in staffed activities—Includes: collaborative art projects; make-and-take coloring sheets, buttons, etc.; gardening, food preparation, and cooking demonstrations and activities; science experiments; share your story opportunities; and agricultural equipment showcases like sheep shearing and climb-on tractors.

The National Western Center Authority, partners, stakeholders, artists, and others involved in developing and designing interpretive experiences will consider what users will do as they explore the site. Casual users—those without a scheduled activity destination—will often be with partners or in groups, moving through the Campus. Catching and keeping their attention may be challenging. Strategically placing and designing storytelling opportunities will make those stories more likely to resonate. Taking into consideration the entirety of the site will strengthen the experience of the whole and its parts.



AUDIENCE

As the common thread Converge, Pivot, and Innovate implies, the National Western Center will provide a diverse and engaging mix of interpretive experiences for people of all ages, from different backgrounds, and with varying interests. Effective interpretive materials meet people where they are physically, mentally, and emotionally. Interpretation enhances user experiences by satisfying natural curiosities and sparking interest in unexpected ways. A variety of engagement types with layered content gives users multiple points of entry, making interpretation accessible to diverse audiences.

Interpretive planning is a highly iterative process that keeps efforts focused on campus users. It involves articulating results and refining direction based on further discussion, prioritizing, and development. Accessible interpretive projects, storytelling methods, and educational programs will be developed with partners and collaborators including the Denver Museum of Nature & Science, History Colorado, Colorado State University, the Western Stock Show Association, the City and County of Denver, Denver Public Library, the Buffalo Bill Museum and Grave, Forney Museum, public art organizations, and others.

Different user groups will be motivated by various activities and topics. A commitment to market testing and evaluation as part of the development and implementation of interpretive elements and educational programming ensures that it resonates with users.

PUBLIC ART

Denver's Public Art Program works to provide a variety of artistic elements across the City. This program also facilitated the creation of the NWC Public Art Master Plan, which provides guidance on appropriate placement and thematic content for art on the Campus. Public art should be incorporated into interpretive elements whenever feasible.

INTERPRETIVE FRAMEWORK

KEY TAKEAWAYS

- Consider taking advantage of interpretive opportunities, use the matrix below to find which types of interpretation are appropriate for each area
- Preserve historic resources whenever feasible

CAMPUS CULTURAL PLAN

For more information on historic elements, interpretation, and public art refer to the NWC Campus Cultural Plan, which also speaks to the vision for the Character Areas and the site's history.

TYPE 1 - INDIVIDUAL RESOURCES

Type 1 features are those that are relatively intact, or at least exist in a state that conveys their traditional form and function. They are buildings or structures. Where feasible, these features should remain in place or be located near their original location.

1a	Sheep Bridge	1b	Armour Administration Building	1c	Water Tower
1d	Stadium Arena	1e	Coliseum	1f	Livestock Exchange Building
1g	McConnell Welders	1h	Cluster of Historic Elyria Buildings		

TYPE 2 - SCULPTURAL, ARTISTIC ELEMENT

Type 2 features may be reused historic materials, contemporary artistic interpretations of historic forms/themes or a combination of both. These features may be located in prominent places or in places of historical significance.

2a	Identifying the history of the Stock Show	2b	History of the river and the Delgany Interceptor	2c	Entrance to the historical yards with imagery of the "grand champions"
2d	View of the historic context around the Livestock Exchange Building	2e	Elyria Town Hall and association with adjacent neighborhoods	2f	Rail lines embedded in the open space/ walkway
2g	Historic livestock flyover to the Cudahy Plant and sheep barns	2h	Traditional context surrounding the Stadium Arena and street car lines		

TYPE 3 - REUSE OF HISTORIC (SALVAGEABLE) MATERIALS AND SMALL STRUCTURES

Type 3 features are salvageable historic materials that are incorporated into the design of new site features and spaces, or into the design of new buildings. These features may be located in prominent places or in places of historical significance.

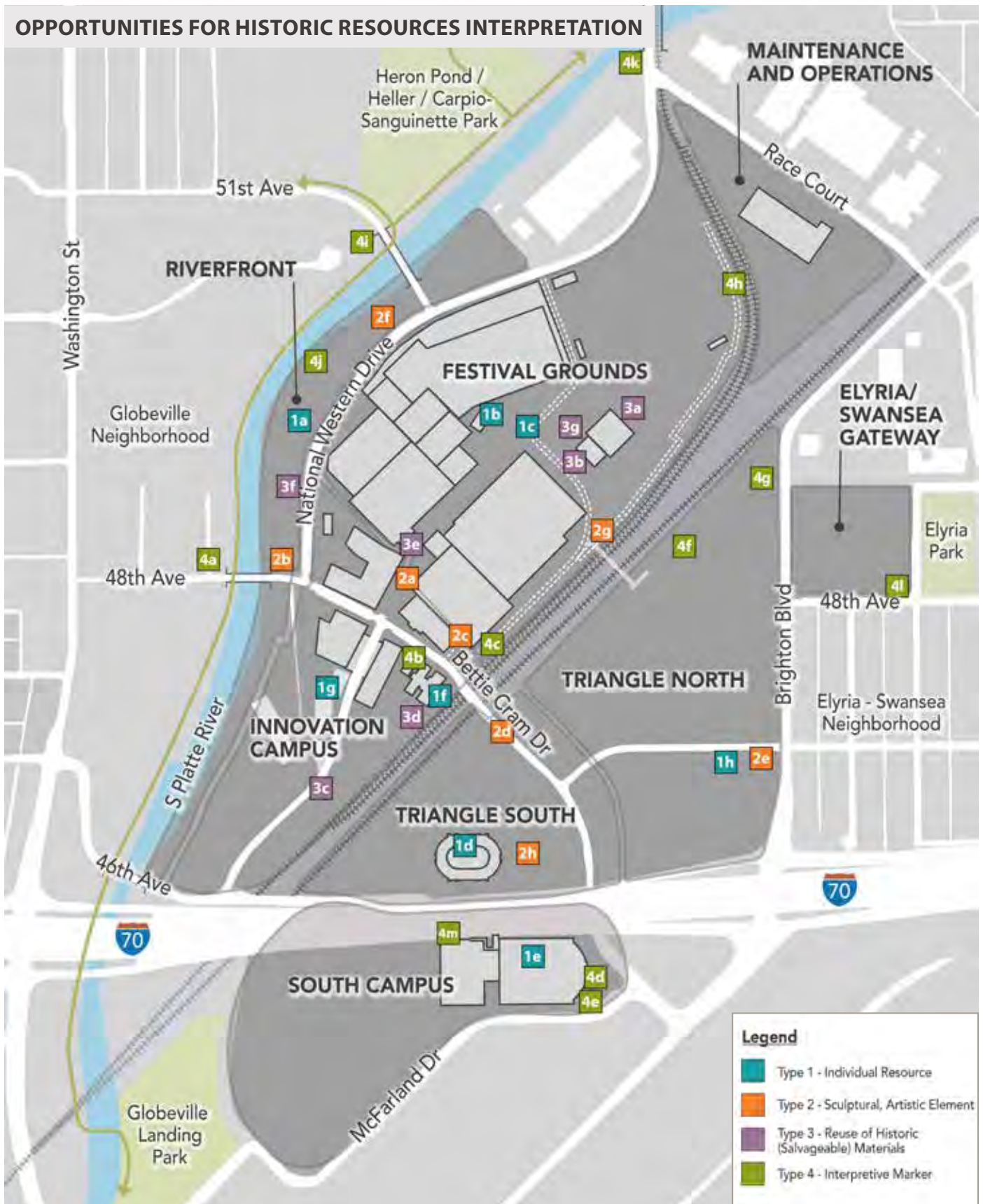
3a	Reclaimed pen materials, hinges, latches, posts, etc. throughout new pens area/as interpretive elements	3b	Preserved portion of historic pens	3c	Rail lines/elements embedded in the sidewalk/ storage area
3d	Rail lines/elements and historic pavers in the parking area	3e	Rail lines/elements and historic pavers in the plaza/walkway	3f	Rail lines/elements embedded in the greenway/walkway
3g	Reused historic pavers embedded in the pens area				

TYPE 4 - INTERPRETIVE MARKER (STORY STOPS, CAMPUS CALLOUTS, WHAT IS IT? IDENTIFIERS)

Type 4 features come in several potential levels of interpretation. Story Stops are a more in-depth exploration of a Campus theme and would include significant text and visual information. Campus Callouts are more succinct explanations of the significance of a particular location, historic element, or theme. What is it? Identifiers are simple signs identifying a building or art piece. Type 4 features should be located in a place that is relevant to the historic theme that is being conveyed.

4a	View of the meat packing plants and their iconic smoke stacks and the early Globeville neighborhood	4b	Historic catwalks that connected the Exchange Building to the Swift Plant and the yards	4c	Location of the first stockshow tent and other early buildings such as the Stockyards Hotel
4d	Construction and history of the Coliseum and I-70	4e	Marker dedicated to the area's period of smelting plants	4f	Overlooking the yards and indicating the location of the Cudahy Plant
4g	Illustrating the connection between historic street car lines and modern commuter rail	4h	Illustrating the farthest extent of the pens area at the peak of the meat packing era	4i	Showing view of the meat packing plants and Globeville neighborhood history
4j	Dedicated to the area's Native American inhabitants/early history	4k	Dedicated to the Riverside Cemetery	4l	Referencing the history of the Elyria and Swansea neighborhoods
4m	Identifying the Stockyards fly-over bridge				

Opportunities for Historic Resources Interpretation



GREEN INFRASTRUCTURE OPPORTUNITIES

KEY TAKEAWAYS

- Incorporate and combine Green Infrastructure and LID best practices

COMPLIMENTARY ONE WATER GOALS:

- Deliver the natural system the right water at the right time: maximize green infrastructure in support of water, storm water, and stream health, and enhance resilience to extreme weather.

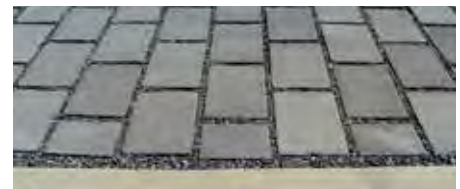


DESIGN CONSIDERATIONS

- Minimize impervious surfaces.
 - » Lanes, driveway cuts, etc. are right-sized and not larger than needed.
 - » Lower runoff surfacing materials are used, where applicable.
- Disconnect impervious areas. Disburse runoff from impervious areas to pervious areas wherever possible.
- Utilize high performance landscape materials and soil media.
 - » Minimize irrigation demand.
 - » Maximize vegetation canopy, water storage capacity and infiltration.
 - » Enhance resilience to extreme weather.
- Consider integrating educational elements into Green Infrastructure and LID designs to engage people in the functional and sustainable aspects of the Campus.
- Integrate green stormwater best management practices. The following Green Infrastructure Best Management Practices (BMPs) have been pre-screened for each area. The most applicable BMPs for each area are indicated on the adjacent map. At a minimum, the indicated BMPs should be evaluated during throughout the design phase. Additional BMPs may be applicable, as determined by the designer.
 - » Bioretention (such as rain gardens, stormwater planters/bump outs, green gutters)
 - » Green Roofs
 - » Permeable Pavement
 - » Tree Filters

ULTRA-URBAN GUIDELINES

The City of Denver is making Green Infrastructure a fundamental part of the city's long-term stormwater management strategy. The Ultra-Urban Green Infrastructure Guidelines provide valuable information and should be consulted when incorporating Green Infrastructure and LID strategies.



Permeable paving systems allow water to pass around pavers and infiltrate into the soil



Bioretention areas are planted areas with subsurface materials that store and filter stormwater while supporting vegetation



Tree trench filters are tree planting areas that include large underground areas with materials that store and filter stormwater

GREEN INFRASTRUCTURE OPPORTUNITIES



Legend
Green Infrastructure Best Management Practices

- ① Bioretention
- ② Green Roof
- ③ Permeable Paving
- ④ Tree Filter

CONSTRAINTS

KEY TAKEAWAYS

- Design public spaces to ensure clear space for truck turning
- Avoid conflicts with utility corridors
- Maximize landscaping and furnishings in areas of minimal constraints
- Consider the functional needs of the Campus when designing public spaces
- Plan for future constraints



DESIGN CONSIDERATIONS

- Locate utility corridors to have the least amount of impact on public space design.
- Design utility corridors to be comfortable pedestrian environments with flexible furnishings and paving materials that accommodate vehicle usage.
- Consider creative and flexible design approaches and programming for the areas of Campus needed for functional uses to make them comfortable and/or visually interesting for Campus visitors. Appropriate examples include:
 - » Overhead lighting elements;
 - » Moveable kiosks or food trucks;
 - » Moveable planters;
 - » Moveable furnishings;
 - » Green walls;
 - » Murals; and
 - » Temporary/moveable signage.
- Do not locate permanent furnishings, landscaping, or other design elements within utility corridors.
- Opportunity Areas that are free of site constraints should be maximized for tree planting, permanent furnishings, and lighting.
- Consider additional utility and truck turning needs across the Campus when laying out and designing future streets and public spaces.

PLACEMAKING STUDY

The anticipated utility easement and turning movements shown here are based on research and analysis completed during the Placemaking Study. These truck turning radii and utility easements are primarily a suggestion of an efficient layout, the functional needs of the Campus will likely change and adapt as the design reaches its final phases. For more information on how these constraints interact with the proposed public spaces on the site, see the October 12th Placemaking Presentation.

PHASE 1 & 2 CONSTRAINTS







GENERAL CAMPUS DESIGN

PUBLIC SPACE DESIGN ELEMENTS

STREETScape DESIGN

INTERSECTION DESIGN

SIGNAGE AND WAYFINDING

GENERAL BUILDING DESIGN

REHABILITATION/REUSE OF EXISTING BUILDINGS

PUBLIC SPACE DESIGN ELEMENTS

PUBLIC SPACE DESIGN ELEMENTS

Design elements are those features found in all public spaces. They define much of the pedestrian experience and should meet a consistent level of quality. The public spaces across Campus should also draw similarities to each other through a consistent stylistic palette. While design elements may be combined in different ways to respond to programmatic needs and to express the different Character Areas, a unifying palette should be expressed in paving, planting, and furnishings.



Paving materials refers to all elements of the ground-plane, for more information see pages 28-29 of this Chapter.



Planting includes all planted areas on campus, for more information see pages 30-31 of this Chapter.



Furnishings applies to the wide variety of user amenities on campus including benches, art, planters, and tables, for more information see pages 32-33.

PAVING MATERIALS

Given the large swaths of hardscape that are required for much of the service and programmatic activities that occur on the Campus' public spaces, it is critically important that these surfaces provide interest and character while maintaining superior durability and longevity. The texture, color, material type, and application method greatly contributes to the quality of the visitor experience at a pedestrian level. It is unlikely that premium finishes and materials can be integrated throughout the entirety of the Campus for cost reasons, therefore it is important to focus these finishes in key corridors, entry pedestrian areas, and high traffic zones where these materials provide the greatest impact.

In some locations, paving materials should be more directly drawn from historic precedents and in others a more contemporary palette may be applicable. The Campus includes strong natural and man-made features which help inform the appropriate paving materials. The dominant presence of the South Platte River acts as a seam that unifies many of the Character Areas and includes defining materials such as natural stone and cobble. Conversely, much of the industrial centric architecture uses manufactured and hand crafted materials such as wood, metal, and masonry. The degree to which the materials are manufactured should vary to create interest and encourage creativity. Four primary paving materials are included as unifying accent elements. These include the following:

- Masonry – Inspired by historic clay unit pavers, concrete support posts, and architectural brick
- Stone – Inspired by the river and the area's geologic history
- Concrete - Inspired by the industrial history, coloring and patterning can reflect other historic elements

- Wood - Inspired by historic features such as framing and pens as well as naturally occurring in the adjacent riparian corridor
- Metal - Inspired by industrial roofing and siding, trusses, and railroad tracks

Of these materials, masonry and stone are the most suitable choices for enhanced paving, where design, budget, or the use allows. Metal accents can be creatively integrated as interpretive pavement inlays and as artistic tree and drainage grates. Wood is not an appropriate material in most cases - except for possibly as a boardwalk element along the South Platte River. However, its texture may also be represented through board-form concrete.

The associated imagery highlights potential materials and finishes that are recommended on Campus.

PUBLIC WORKS COORDINATION

Detailed coordination is required with Public Works and utility providers to determine suggested paving materials within ROWs and above utility corridors. A maintenance agreement with the ownership group may be required for materials that deviate from these requirements.

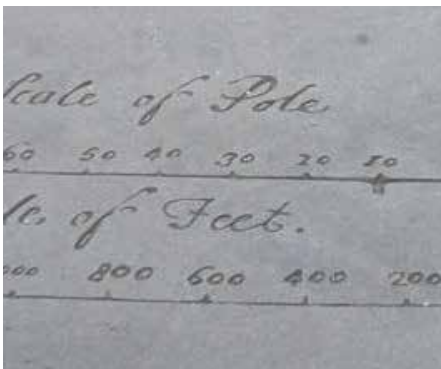
Refer to the Campus Placemaking Study documents for additional considerations about paving materials.



Natural colored concrete with sawn joints is a simple low-cost solution for low-use areas.



Integrally colored concrete with sandblasted finish and sawn joints can accent key features.



Integrally colored concrete with artist reliefs or decorative sandblasted patterns provide interpretive and artistic opportunities, which add to the user experience.



Decorative metal inlays such as re-purposed rails can add to the narrative and character of the Campus.



On site reused unit pavers could be utilized in pedestrian only zones near preserved structures to maintain the historic character of the Campus.



New concrete or clay unit pavers could be integrated with concrete inlays at key thresholds as a secondary wayfinding element.



Utilized in very select pedestrian-only zones, natural cut stone provides a high level of finish and natural character.



Permeable concrete unit pavers could be used where animals are prohibited to provide added stormwater infiltration.



Concrete unit pavers with decorative metal inlays could be used in pedestrian-only areas to express the Campus narrative.

PUBLIC SPACE DESIGN ELEMENTS



PLANTING

When complete, the Campus planting should serve as a precedent for large scale redevelopment projects in Denver. Key planting design considerations include the following:

- Primary use of drought tolerant species
- Grouping of plants with similar water needs
- Primary use of native cultivars
- Appropriate spacing
- Integration of Green Infrastructure design
- Appropriate soil media depth
- Appropriate irrigation design
- Scheduled maintenance with skilled staff

Both informal and formal planting arrangements are envisioned on the Campus and are informed by context. Most areas are suggested to receive a mostly formal planting arrangement. Areas adjacent to and extending from natural features such as the South Platte River are envisioned to feature more naturalistic and informal planting. In particular, several areas have been identified to receive informal planting arrangement including the following:

- National Western Drive between Bettie Cram Drive, Race Court, and at the Riverfront Open Space
- Stormwater planters on campus, specifically those on Bettie Cram Drive and at the Riverfront Open Space

These areas are intended to include irregular tree spacing, naturalistic plant species selection, and broader species diversity.

Naturally, not all areas are able to receive extensive planting due to additional cost, maintenance, and programming constraints. Extensive planting should be limited to highly visible or pedestrian-oriented areas and those areas without utility or event conflicts. Detailed coordination and understanding of the utility placement, easements, and requirements is required by the final designer.

In keeping with the Campus wide goals of sustainability and regeneration, planting areas should be designed to be pollinator-friendly. Appropriate strategies include:

- Plant diverse species that bloom throughout the season
- Plant clumps of the same species

The associated imagery highlights potential plants and planting arrangements that are recommended on campus.

FORESTRY STANDARDS

Tree planting within the ROW will require approval from the Office of the City Forester prior to installation.

Tree grates, planting areas, tree locations, tree species, and other details relating to trees must comply with current Office of the City Forester Vegetation Ordinance, Rules and Regulations, and Standards, which take precedence over the Handbook.

Refer to the Campus Placemaking Study documents for additional considerations about planting materials.



Colorful, drought tolerant, pollinator-friendly blends are recommended at high-impact locations such as entries.



Drought tolerant native grasses provide fall and winter interest in addition to their lush green texture during spring and summer.



The formal arrangement of trees is limited to civic areas of the Campus design.



In space constrained areas use structural cells to increase tree canopy while maintaining healthy root systems.



Groves of flowering trees accent key junctions and provide wayfinding cues.



Salvaged and reused industrial relics have the opportunity to act as decorative planters.



Building facades have the potential for vertical gardens that add interest and character.



Food production and research should be integrated throughout the design.



Stormwater infiltration basins should be integrated throughout the design to reduce off-site detention needs and improve water quality.



Use informally placed riparian trees to provide a connection to the riparian edge.

PUBLIC SPACE DESIGN ELEMENTS

SUGGESTED PLANT LIST

Refer to the “Approved Street Tree List for Denver’s Public Rights-of-way” for appropriate street trees. For all other areas, the below species are suggested but not required. Pollinator-friendly, low water, and native plants are encouraged.

DECIDUOUS TREES

BOTANICAL NAME	COMMON NAME
<i>Acer miyabei</i> ‘State Street’	Miyabei Maple
<i>Aesculus x carnea</i> ‘Ft. McNair’	Ft. McNair Horsechestnut
<i>Aesculus flava</i>	Yellow Buckeye
<i>Celtis occidentalis</i>	Common Hackberry
<i>Catalpa speciosa</i> ‘Hiawatha 2’	Heartland Catalpa
<i>Crataegus ambigua</i>	Russian Hawthorn
<i>Crataegus crus-galli inermis</i>	Thornless Cockspur Hawthorn
<i>Gleditsia triacanthos inermis</i> ‘Skyline’	Skyline Honey Locust
<i>Gymnocladus dioica</i>	Kentucky Coffee Tree
<i>Maclura pomifera</i> ‘White Shield’	Osage Orange
<i>Malus</i> cv	Crabapple
<i>Malus x</i> ‘Red Barron’	Red Barron Crab Apple
<i>Platanus occidentalis</i>	American Sycamore
<i>Platanus x acerifolia</i> ‘Bloodgold’	London Planetree
<i>Quercus bicolor</i>	Swamp white Oak
<i>Quercus frainetto</i> ‘Schmidt’	Forest Green Oak
<i>Quercus macrocarpa</i>	Bur Oak
<i>Quercus robur</i>	English Oak
<i>Quercus robur x bicolor</i> ‘Long’	Urban Pinnacle Oak
<i>Quercus x macdanielii</i> ‘Clemons’	Heritage Oak
<i>Sophora japonica</i>	Japanese Pagoda Tree
<i>Styphnolobium japonica</i> ‘Halka’	Millstone Japanese Pagoda Tree
<i>Syringa pekinensis</i> ‘Brandon, New Harmony, Princeton, Valley Forge’	Japanese Lilac Tree
<i>Syringa reticulata</i> ‘Ivory Silk’	Ivory Silk Tree Lilac
<i>Ulmus parvifolia</i> ‘Emer II’	Allee Lacebark Elm
<i>Ulmus x</i> ‘Morton Glossy’	Morton Glossy Triumph Elm
<i>Ulmus propinqua</i>	Emerald Sunshine Elm
<i>Ulmus wilsoniana</i> ‘Prospector’	Prospector Elm
<i>Zelkova serrata</i> ‘Halka’	Japanese Zelkova
<i>Zelkova serrata</i> ‘Green Vail’	Green Vase Japanese Zelkova



Gleditsia triacanthos inermis, Honey Locust



Malus cv, Crabapple



Zelkova serrata ‘Green Vase’, Green Vase Japanese Zelkova



Pinus nigra, Austrian Black Pine

EVERGREEN TREES

BOTANICAL NAME	COMMON NAME
<i>Pinus nigra</i>	Austrian Black Pine

SHRUBS AND PERENNIALS

BOTANICAL NAME	COMMON NAME
<i>Achillea millefolium</i> 'Moonshine'	Moonshine Yarrow
<i>Agastache</i> x 'Blue Fortune'	Anise Hyssop
<i>Agastache rupestris</i>	Sunset Hyssop
<i>Amelanchier</i> x <i>grandiflora</i>	Autumn Brilliance Serviceberry
<i>Amorpha canescens</i>	Leadplant
<i>Anaphalis margaritacea</i>	Pearly Everlasting
<i>Arctostaphylos</i> x <i>coloradoensis</i> 'Panchito'	Panchito Manzanita
<i>Bouteloua gracilis</i> 'Blonde Ambition'	Blue Grama Grass
<i>Calamagrostis</i> x <i>acutiflora</i> 'Avalanche'	Feather Reed Grass
<i>Calamagrostis</i> x <i>acutiflora</i> 'Overdam'	Feather Reed Grass
<i>Chamaebatiaria millefolium</i>	Fernbush
<i>Chrysothamnus nauseosus</i>	Rubber Rabbitbrush
<i>Clematis</i> x <i>jackmanii</i>	Jackman Clematis
<i>Deschampsia cespitosa</i>	Tufted Hair Grass
<i>Echinacea purpurea</i>	Coneflower
<i>Erigeron speciosus</i>	Aspen Daisy
<i>Eryngium alpinum</i> 'Blue Star'	Blue Star Sea Holly
<i>Festuca glauca</i> 'Elijah Blue'	Blue Fescue
<i>Geum triflorum</i> (<i>Erythrocoma triflorum</i>)	Prairie Smoke
<i>Helictotrichon sempervirens</i>	Blue Avena Grass
<i>Liatris punctata</i>	Dotted Gayfeather
<i>Nepeta</i> x 'Little Trudy'	Little Trudy Catmint
<i>Panicum virgatum</i> 'Shenendoah'	Burgundy Switch Grass
<i>Pennisetum orientale</i> 'Karley Rose'	Karley Rose Fountain Grass
<i>Penstemon mexicali</i> 'Pike's Peak Purple'	Penstemon
<i>Pinus mugo</i> 'Slowmound'	Mugo Pine
<i>Prunus besseyi</i> 'Pawnee Buttes'	Pawnee Buttes Sandcherry
<i>Rhus aromatica</i> 'Gro-Low'	Gro-Low Fragrant Sumac
<i>Ribes aureum</i>	Golden Currant
<i>Rudbeckia hirta</i>	Black-eyed Susan
<i>Salvia nemorosa</i> 'May Night'	May Night Sage
<i>Schizachyrium scoparium</i>	Little Bluestem
<i>Solidago rugosa</i> 'Fireworks'	Fireworks Goldenrod
<i>Sporobolus airoides</i>	Alkali Sacaton
<i>Stachys byzantia</i>	Lamb's Ears
<i>Viburnum plicatum</i>	Viburnum



Achillea millefolium 'Moonshine',
Moonshine Yarrow



Calamagrostis x *acutiflora* 'Avalanche',
Feather Reed Grass



Prunus besseyi 'Pawnee Buttes',
Pawnee Buttes Sand Cherry



Stachys byzantia

PUBLIC SPACE DESIGN ELEMENTS



FURNISHINGS

The many public spaces on Campus will require varied approaches to the placement and design of furnishings. Several broader considerations when selecting furnishings are highlighted in the following paragraphs which serve as a basis for consistent campus furnishings. Greater detail will be provided in the specific Character Areas.

QUALITY

A wide spectrum of site furnishings are acceptable for use on the Campus but should meet the following basic requirements:

- Durable
- Low-maintenance
- High-quality construction
- Vandal resistant
- Preference for local materials and manufacturing

STYLE

In most instances a simple, contemporary style is recommended. In areas where historic buildings are being renovated, the style may lend itself more to a traditional aesthetic, however a contemporary style might still provide an interesting contrast.

In order to create unique streetscapes and public spaces within individual Character Areas, it is recommended that uniform furnishings such as benches, tables, and chairs are not applied universally across the Campus. Possible exceptions to this include pedestrian and vehicular scale street lighting. These lighting elements are associated with a linear street experience and create consistent lighting levels throughout the corridor.

FLEXIBILITY

Given the highly programmed nature of many of the public spaces on Campus such as the Festival Grounds, many of these elements must be easily moved, stored, and relocated to allow for the easy transition of programmed activities. In other areas such as streetscapes, the seating is recommended to be fixed within the amenity zone to reduce vandalism, theft, and maintenance. Freestanding furnishings may be included in areas adjacent to permeable building edges.

MATERIALS

High quality materials are recommended due to their increased durability, performance, longevity, appearance, vandal resistance, and recycling potential. Recommended site furnishing materials include the following:

- Stainless steel
- Powdercoated aluminum
- Natural stone such as granite and sandstone
- High-quality concrete, can be pre-cast

In addition to these materials, the opportunity to re-purpose historic site elements such as reused pen timber or catwalk structural columns adds to the character and interest by integrating elements unique to the Campus.

The associated imagery highlights potential materials and finishes that are recommended on campus.



Strategically placed artistic seating provides added interest and appeal to high traffic spaces.



Adjustable seating creates a more dynamic experience and provides flexibility in more frequently programmed areas.



Natural materials such as wood can provide a rustic and natural feel to appropriate areas.



Moveable seating is recommended in highly programmed areas.



Wood from existing pens may be able to be reused for furnishings such as benches.



Use umbrellas and portable shade elements in highly programmed spaces.



Use fixed seating with durable, low-maintenance materials along streetscapes.



Catenary lights break down the scale for pedestrians and are recommended in plazas.



The existing catwalk stairs could be reused as a seating surface for benches.



Consistent lighting fixtures are recommended along Key Streets.

STREETSCAPE DESIGN

KEY TAKEAWAYS

- Streetscape design and level of finish should respond to the street's hierarchy, as shown on the map on the following page
- Include areas of accent paving; enhanced crosswalks, lighting, and signage; lush planting; and high-quality specialty furnishings on Landmark Streets
- Include primarily concrete paving; simple planting, lighting, and signage; and pre-fabricated furnishings with some areas of enhanced design on Primary Streets
- Include primarily concrete paving; simple planting, lighting, and signage; and pre-fabricated furnishings on Secondary Streets



DESIGN CONSIDERATIONS

All streets on campus are important to the overall framework but fall within different hierarchal categories in regard to their level of finish. More detailed design considerations for each street type can be found on the following spread. These categories include the following:

LANDMARK STREET

Only one landmark street exists on campus - Bettie Cram Drive. This is the primary east/west street that connects two major thoroughfares and gateways - Washington Street and Brighton Boulevard. Furthermore, the street intersects the Campus' primary north/south street - National Western Drive - and will act as the symbolic gateway to the Phase 1 campus design. Its location makes it the new center of campus with a large volume of pedestrian and vehicles expected to move through it. For this reason, it will feature higher quality materials and finishes, lush planting, prominent gateway signage, and art.

PRIMARY STREET

These streets will receive substantial vehicular and non-motorized travel and will consist primarily of durable, cost-effective materials. Decorative materials, increased planting, art, and signage will be included at Key Intersections and junctions, as mapped in Chapter 1, Campus Framework, page 15.

SECONDARY STREET

Located predominantly at the edges of the Phase 1 work and away from primary entry gateways, these streets will receive simple, durable materials and finishes. Decorative materials such as those included in Primary Streets are limited to key locations.

CAMPUS PLACEMAKING STUDY

Refer to the NWC Campus Placemaking Study for additional information regarding streetscape and intersection designs.

PHASE 1 AND 2 STREET HIERARCHY



STREETSCAPE DESIGN



DESIGN CONSIDERATIONS

LANDMARK STREET

- Incorporate paving accents within crosswalks and pedestrian areas with materials such as decorative concrete, unit pavers, clay pavers, or cut stone.
- Use lush planting with irrigated, freestanding planters in high-impact areas.
- Use high-quality custom or pre-fabricated furnishings with specialty materials, such as responsibly-sourced wood, natural stone, stainless steel, and pre-cast concrete.
- Incorporate enhanced pedestrian lighting such as lighted bollards, wall lights, pedestrian pole lights.
- Incorporate enhanced signage including interpretive signage and pole mounted event banners.

PRIMARY STREET

- Use concrete as the primary paving material with specialty finishes or integral color at Key Intersections.
- Design amenity zone planting to be simple and low-maintenance, with increased density at Key Intersections.
- Use high-quality pre-fabricated furnishings with durable materials such as stainless steel, powder-coated aluminum, or pre-cast concrete.
- Incorporate pedestrian pole lights with enhanced pedestrian lighting such as lighted bollards and wall lights at Key Intersections.
- Incorporate basic campus signage with pole mounted banners at select locations.

SECONDARY STREET

- Use concrete as the primary paving material (City of Denver minimum standard is acceptable); use simple finish enhancements at Key Intersections.
- Design amenity zone planting to be simple and low-maintenance with tree lawns and/or durable groundcover.
- Use high-quality pre-fabricated site furnishings made with simple, cost-effective materials.
- Incorporate enhanced pedestrian lighting such as lighted bollards, wall lights, pedestrian pole lights only at Key Intersections.
- Use standard campus signage.

LANDMARK STREET



High-quality articulated ground plane featuring unit pavers as an accent.



Lush understory and overstory planting.



High-quality custom and pre-fabricated site furnishings.

PRIMARY STREET



Standard concrete with decorative finishes and integral colors at Key Intersections.

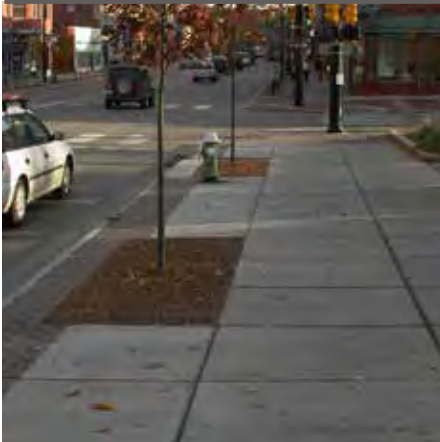


Simple amenity zone planting with increased plant density at Key Intersections.



Durable site furnishings with specialty materials and finishes at Key Intersections.

SECONDARY STREET



Standard concrete pavement with simple finish enhancements at Key Intersections.



Simple amenity zone planting with tree lawn and/or durable groundcover.



Durable yet stylistic pre-fabricated site furnishings.

INTERSECTION DESIGN

KEY TAKEAWAYS

- Utilize durable ground plane materials in the vehicular right-of-way
- Create clearly delineated pathways through signage and ground plane treatment
- Integrate pedestrian-scaled pavement systems high-use non-vehicular areas
- Provide amenities such as seating, interpretive elements, and art when appropriate at key areas
- Utilized enhanced signalization methods such as rectangular rapid flash beacons (RRFB) at Key Intersections



DESIGN CONSIDERATIONS

Several key campus intersections will be highly utilized by pedestrians, cyclists, and vehicles and require added design consideration. These include the following:

- 1. Bettie Cram Drive at National Western Drive (South) Intersection:** Acting as the symbolic grand entry, this key intersection is largely considered the center of campus due to the four new buildings that anchor and activate its corners.
 - » Use accent paving, planting, crosswalk position, and vertical elements such as bollards and planters to prioritize pedestrian safety and placemaking at this intersection, adjoining the Grand Entry Plaza.
 - » Consider specialty concrete as the primary material for long-term durability, due to the large vehicles frequently moving through this intersection.
 - » If a cycle track is incorporated, provide additional thought and consideration to navigate the mix of several transportation modes at intersection crosswalks. Use clear signage, signaling, and ground plane materials to improve safety in these areas.
- 2. National Western Drive (North) at Bettie Cram Drive intersection:** As the primary western gateway into the Campus, this intersection will receive similar pavement treatment to the other Bettie Cram intersection mentioned above.
 - » Use the western crosswalk to connect pedestrians and cyclists to the riverfront, providing a vital north/south crossing.
- 3. National Western Drive (North) at CSU Animal Health Mid-block Crossing:** A clearly defined mid-block crossing safely connects the programming and pedestrian flow between the Riverfront and Festival Grounds. This crossing allows easier access for CSU's Equine Therapy to reach Carpio Sanguinette Park and the Riverfront Open Space.
 - » Consider using additional pedestrian safety enhancements such as a user-activated rectangular rapid flash beacons (RRFB).

CAMPUS PLACEMAKING STUDY

Refer to the NWC Campus Placemaking Study for additional information regarding streetscape and intersection designs.

PHASE 1 AND 2 STREET INTERSECTIONS

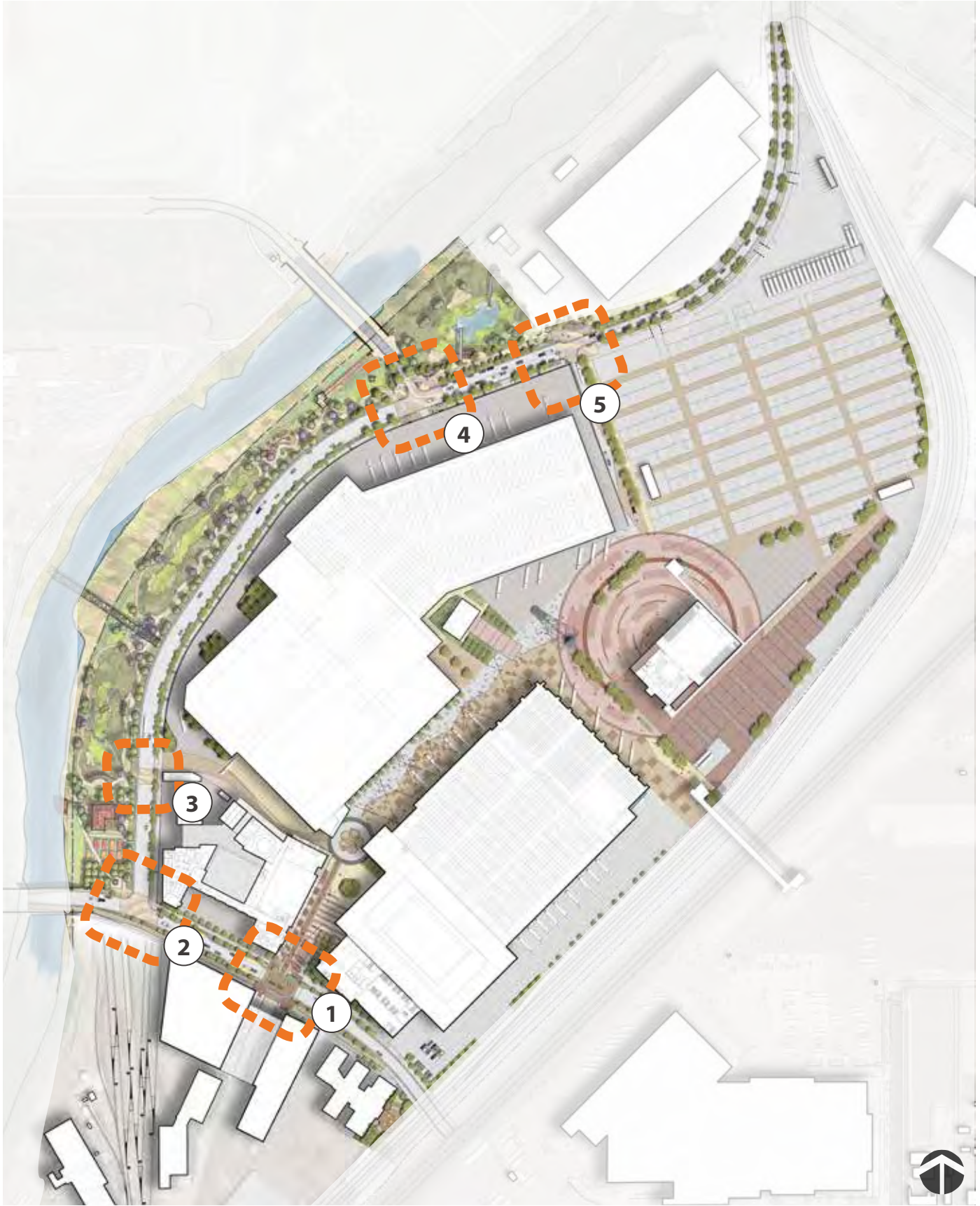


INTERSECTION DESIGN



DESIGN CONSIDERATIONS (CONT.)

4. **National Western Drive (North) at 51st Avenue Intersection:** As a secondary campus gateway, this intersection will receive substantial visitor and exhibitor traffic due to its adjacency to the campus parking structure and Festival Grounds entry. For many people, this will be the first impression of the campus and connect pedestrians to the riverfront. In addition, a clearly defined pedestrian link through the garage to the Armour Plaza draws extra pedestrians to this intersection.
 - » Use an integrally colored concrete intersection for added interest and durability.
 - » Consider pedestrian plazas with unit pavers, interpretive and wayfinding signage, and seating at this intersections.
 - » Incorporate a pause point along the National Western Drive multi-use path to help draw people to campus.
5. **National Western Drive (North) at Festival Grounds Entry Intersection:** Receiving similar treatment to the 51st Avenue intersection, this area provides a safe crossing that encourages movement to the riverfront and multi-use trail. Colored concrete crosswalks are also acceptable.
 - » Interpretive features and an artistic vertical element is recommended to link the spaces, if budget and other engineering constraints allow.
 - » Use the western crosswalk to provide a vital north/south crossing for pedestrians and cyclists connecting to the riverfront.
 - » Incorporate proper signage and ground plane delineation to provide a safe crossing.
 - » Locate gateway signage and monumentation on the western side of this intersection.



SIGNAGE AND WAYFINDING

INTENT STATEMENT:

Signage and wayfinding should work as a common, visually unifying thread throughout the Campus. Signage character, colors, design, and materials should reflect the National Western Center brand. The campus sign character should express the history of the site, while keeping a timeless sensibility.

Signage should contribute in a positive manner to the overall character of the Campus. It should be an extension of the landscape and architecture without specifically imitating it. Signage should inform, delight, and stimulate the visitor.



INTRODUCTION

Signs are an important feature of the Campus and contribute to the overall character and ease of circulation. They should balance functional requirements associated with building identification with the objective to create a unique and cohesive character across Campus. To ensure consistency with the Campus Master Plan and Placemaking documents, this section of the Handbook will provide additional detail, information, and guidance on appropriate design approaches and signage design character.

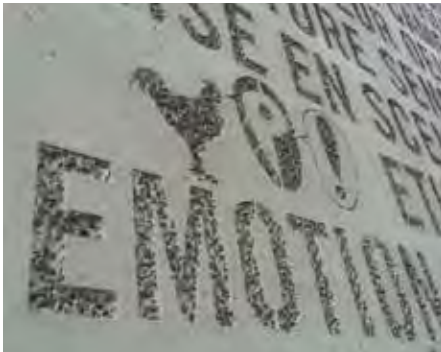
All final designs need to comply with any governing rules and regulations; this includes all local codes as well as any Federal regulations such as the Highway Beautification Act.

SIGNAGE AND WAYFINDING PLAN

Refer to the NWC Campus Signage and Wayfinding Vision Plan in conjunction with this Handbook. A District Sign Plan will be developed by CPD and NWCA at a later time and will supersede his document.

KEY TAKEAWAYS:

- Signage should enhance and extend the spirit of the Campus, as well as creates a lively and active atmosphere.
- Design signs to work together to create a cohesive identity for the Campus, in concert with the design elements of the National Western Center brand, architectural palette, and landscaping.
- Incorporate imaginative signage designs that utilize a variety of materials.
- Clearly articulate and enhance project information, including: identification, wayfinding, orientation, ornamentation, and regulations.
- Emphasize the existence, relationship, and connectivity of destinations, experiences, and events within the Campus through creative signage.
- Create one or more iconic or distinctive features that become identified with the Campus.
- Provide effective wayfinding and place identification, allowing users to easily navigate through the space.



SIGN TYPES

The typical Denver Zoning Code (DZC) sign types are defined and illustrated below. All signs should be compatible with the overall campus character and are subject to individual review. More specific recommendations for each sign type are laid out in the following pages.

GROUND SIGNS

A sign supported by poles, uprights or braces extending from the ground or an object on the ground but not attached to any part of any building.

WALL SIGNS

A sign attached to, painted on or erected against a wall, fascia, parapet wall or pitched roof of a building or structure (note that a wall sign may be used as a joint identification sign).

PROJECTING SIGNS

An iconographic three-dimensional sign attached to and projecting from the wall of a building, typically perpendicular to a facade.

ARCADE SIGNS

A sign attached to the roof or wall of an arcade and totally within the outside limits of the structural surfaces which are delineating the arcade.

WINDOW SIGNS

A sign which is applied or attached to, or located within three feet of the interior of a window or door, which sign can be seen through the window or door from the exterior of the structure.

BANNERS & FLAGS

A flexible and typically temporary sign mounted to light poles or other freestanding armatures.

SIGNAGE AND WAYFINDING

SIGN MATERIALS

Materials used in signage at NWC shall be high quality, durable, authentically portrayed, and code compliant. Materials and fabrication methods should retain the signage's appearance over time.

All fabricated materials, hardware, and finishes shall be new (i.e. not previously used or operated in any other application) and from the most recent manufacturer's production supply. There may be unique instances of repurposed materials or objects from the site that will be in exception to this.



Materials will play an important role in the successful outcome of the signage program. Metal, wood, and masonry all played a role in the history of the site's architecture and are used in the region's western vernacular. While these materials represent the past, they should be used in a modern design aesthetic. Signs shall incorporate materials that portray the NWC brand and architectural style. Appropriate materials may include:

- Finished cast concrete;
- Wood posts and beams;
- Forged steel connections;
- Cor-ten and natural steel;
- Painted metals; and
- Stone such as slate, marble, sandstone or granite.

High-quality material selections are expected. Materials should maintain their quality over time. The materials standards below shall apply to all Campus signs.

STONE OR MASONRY

- Includes slate, marble, sandstone, granite and other natural stone materials.
- May be polished, unpolished, sandblasted, flamed, honed, splitface or carved.
- Careful attention to detail is required at all connections and transitions to other materials.
- Edge details must prevent visible unfinished edges. Exposed edges must be quirk mitered, chamfered or polished to match adjacent surface finish.
- Natural stone must be protected against staining and discoloration by means of sealers appropriate to the material.

WOOD

- Painted, stained, or natural wood may be used.
- Painted wood must have a shop quality enamel finish.
- Wood without a paint finish must receive a clear, preservative sealant.

SIGN MATERIALS CONTINUED



METALS

- Includes forged steel, Cor-ten and natural steel, shop-painted aluminum and steel, stainless steel, solid brass, bronze, pewter, or enamel coated steel.
- Metals must be well designed and detailed.
 - » Lap joints and seams must be even and straight and concealed when possible. Outside corners are to be mitered or continuous break shaped.
 - » Fabrication must be either heavy gauge material or thinner gauge material shop laminated to solid backing. In no case are oil canning (resulting from light reflection from an uneven or buckled surface), scratches, warps, dents, occlusions, visible seams, or other imperfections allowed.
 - » Sealants on natural metals are required to prevent tarnishing.
 - » Textured or brushed stainless steel, galvanized, sandblasted, and etched metals are encouraged in creative applications.
 - » Unique treatments such as patina, rusted, etched, and imprinted metals will be considered for special design objectives.
 - » Simulated finishes, such as metallic laminates, are not permitted.

SIGN LIGHTING

Sign illumination should be inconspicuous and integrated into the overall design of the sign. Promote pedestrian-oriented lighting that enhances security and does not adversely affect adjacent neighborhoods. Products should maintain quality over time.

- Signs should be lit to enhance Legibility and to encourage pedestrian activity at night. Permitted illumination includes:
 - » Remote;
 - » Direct, including goose neck or contemporary lighting arms, in-ground lighting fixtures, and back lighting; and
 - » Internal, including halo-illuminated letters, edge-lit sign cabinets or letters, neon, and internally illuminated acrylic.
- Sign lighting should be shielded so as to avoid light pollution and eye glare.
- Sign lighting should be consistent with overall building lighting, when applicable.



SIGNAGE AND WAYFINDING

GROUND SIGNS

Ground signs are freestanding structures supported solely by attachment to the ground and located away from buildings. They should be well integrated with the adjacent architecture and landscape. They may be supported by poles, uprights or braces. Types of ground signs include pylons, monuments, and directional signage. These types should be used for specific applications, as described on the adjacent page.



DESIGN CONSIDERATIONS

- Materials used for ground mounted signs should be coordinated with materials used on adjacent buildings, whenever possible.
- Ground signs should be thoughtfully incorporated into the surround landscaping and hardscaping, such that all three elements work in concert with one another.
- Ground signs are encouraged to be sculptural or artistic in quality.
- Sign materials, finishes, and details should be appropriate for their placement and the Denver climate.
 - » If located in an area subject to snow removal, detail the sign base to withstand these conditions.
- Ground sign designs or fabrication methods to be encouraged include:
 - » Monumental stone or masonry, concrete, or fabricated cabinet numerals and letters. Setting can include landscaping.
 - » Monolithic form with applied, cast, carved, router-cut, or push through numerals and letters.
 - » Artfully conceived three-dimensional object or form with integrated numerals or letters.





GROUND SIGNS - PYLONS

- Pylons are encouraged to be creative, sculptural and artistic in form and quality.
- Pylons should be located to welcome visitors to the Campus Appropriate locations include:
 - » Threshold entries along Bettie Cram Drive;
 - » Threshold entries along Brighton Boulevard; and
 - » Threshold entries along National Western Drive.
- Pylons should be placed behind the adjoining public sidewalk. These entry monuments are not permitted to impede upon the sight triangles at the intersection as established in accordance with City regulations.



GROUND SIGNS - MONUMENTS

- Monuments should be located at primary intersections along the perimeter of the Campus. Appropriate locations include:
 - » At the intersection of an arterial road or collector street and a boundary street or road; and
 - » At the intersection of two boundary streets.
- Monuments should be placed behind the adjoining public sidewalk. These entry monuments are not permitted to impede upon the sight triangles at the intersection as established in accordance with City regulations.



GROUND SIGNS - DIRECTIONAL SIGNS

- Directional Signs should be located at Key Decision Points, as defined in Chapter 1, Campus Framework (page 15) to help visitors quickly and easily find their way on the campus. Appropriate locations include:
 - » At street intersections which require directional decision making;
 - » Upcoming points that lead to destinations, landmarks, and amenities within the campus; and
 - » Along parks, plazas, sidewalks, bike paths, and walking trails.
- Vehicular Directional signs should be placed an appropriate distance from the intersection to allow drivers to prepare for any upcoming lane changes or turns. This distance shall be determined by:
 - » The speed of traffic;
 - » Sight line obstructions;
 - » The number of drive lanes; and
 - » Other variables incumbent on the site.



SIGNAGE AND WAYFINDING

WALL SIGNS

Wall Signs are one of the most common and most versatile means of providing identity, directional messages, and project information, and should do so in a unique and creative manner.



DESIGN CONSIDERATIONS

- Wall sign designs or fabrication methods to be encouraged include:
 - » Dimensional letters and logo forms fabricated from suitable materials that have a translucent, painted, gilded, or metal finish.
 - » Letter and logo forms painted, gilded, pushed through, or screen printed onto continuous or individual metal panels. Panels may be layered to give the sign more visual interest and a three-dimensional quality.
 - » Reverse pan channel letter and logos with halo or edge illumination.
 - » Open pan channel letters and logos with exposed neon illumination are typically used for, but not limited to, food and beverage, and entertainment oriented venues.
 - » Internally illuminated pan channel letters with acrylic faces.
- These signs must employ high quality of materials and fabrication methods including:
 - » Raceways connecting letter forms must be concealed within the facade of the building.
 - » Flush, discreet attachment of the acrylic faces to the metal channel letters without typical trim cap edging.
 - » The acrylic face of the letter forms must have a matte finish to avoid reflections in the letter face when not illuminated.

PROJECTING SIGNS

Projecting signs give identity to a building and should be integrated into the overall building facade. They are a grander, more innovative, iconographic, and volumetric solution to enliven a building design. Projecting signs are typically designed and oriented for pedestrian use. However, there may be instances when a larger scale sign is suitable.



DESIGN CONSIDERATIONS

- Projecting sign design or fabrication methods to be encouraged include:
 - » Artistic, three-dimensional object of logo or primary identity fabricated/ sculpted from suitable materials.
 - » Router-cut or dimensional letters/logos attached to or pushed through sign panels or cabinet construction boxes.
 - » Painted, screen printed or gilded sign panels or cabinet construction boxes.
 - » Cut-out, layered, built up or pinned-off metal or wood borders or graphics.



SIGNAGE AND WAYFINDING

ARCADE SIGNS

Arcade signs give identity to a building and should be integrated into the overall facade design. Promote arcade sign designs that enliven and convey the personality and display the unique character of each individual use.



DESIGN CONSIDERATIONS

- Colors, finishes, and materials used shall be complementary to the arcade design and an integral part of the architecture.
- Arcade sign design or fabrication methods to be encouraged include:
 - » Artistic, three-dimensional object of logo or primary identity fabricated/ sculpted from suitable materials.
 - » Router-cut or dimensional letters/logos attached to or pushed through sign panels or cabinet construction boxes.
 - » Painted, screen printed or gilded sign panels or cabinet construction boxes.
 - » Cut-out, layered, built up or pinned-off metal or wood borders or graphics.

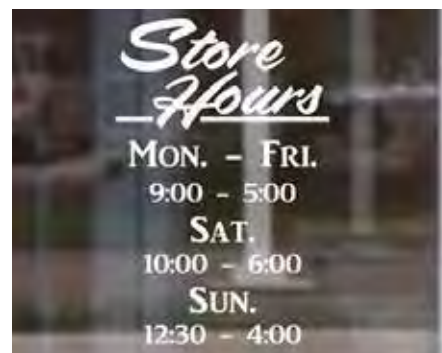
WINDOW SIGNS

Window signs are encouraged to add more interest and identity to a building facade with signage material placed directly on the glass of windows. Window signs should be subordinate to primary identification signs.



DESIGN CONSIDERATIONS

- Window sign designs or fabrication methods to be encouraged include:
 - » Screen-printing, gilding, and cut vinyl.
 - » Digitally printed graphics on opaque, translucent, or transparent material applied directly to the second surface of the glazing.
 - » Digitally printed graphics on opaque, translucent, or transparent material suspended or supported in the use's interior display zone within 2' of the glazing.
 - » Skeletal frame neon depicting the use's identity or artistic product graphic.
 - » Individual dimensional letter forms and/ or logos fastened directly to the glazing.
 - » Glass that incorporates rear projection, capacitive touch, sensors or other cutting-edge technologies to provide a rich interactive experience for visitors.



BANNERS AND FLAGS

Banners and flags provide identity, promote special events, and will generally enliven walkways, parking areas, and streets on Campus. Banners and flags should be used to help activate the street and linear public spaces and provide a sense of pageantry.



DESIGN CONSIDERATIONS

- Banners and flags are to be mounted to light poles or other freestanding armatures to promote special events or display Campus branding.
- Banners and flags are permitted to advertise products, goods, services, and events.
- Banners shall be perpendicular to the pole to which they are mounted; projecting no more than forty-two inches (42") from the surface; and using a fixed armature at top and bottom to keep the fabric taut.
- Banners that identify, advertise, or promote a temporary activity are subject to a temporary placement of forty-five (45) days.
- Appropriate materials include:
 - » Sewn or printed fabric; and
 - » Flexible vinyl.
- Banners relating to a particular season or holiday are limited to forty-five (45) calendar days in duration.
- Banners should not conflict with utility zones, programmed areas, or tree canopies.



INTRODUCTION TO BUILDING TYPES

The following pages identify design characteristics for anticipated and potential building types throughout Campus. Each building type is defined using an illustrative model, photograph examples, a descriptive paragraph and bullet points of key character-defining features. The appropriateness of each building type in the Character Areas is indicated in a matrix at the bottom of each page.



ARENAS



BARNES



RESEARCH AND DEVELOPMENT



CIVIC/VISITOR RELATED



UTILITY AND MAINTENANCE



MIXED USE



RESIDENTIAL APARTMENTS



RESIDENTIAL TOWNHOMES



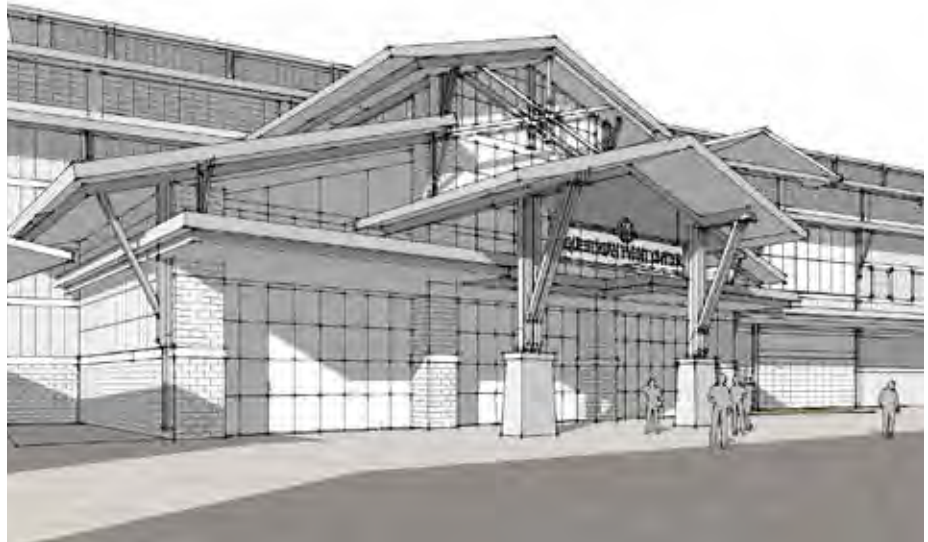
HOSPITALITY



GENERAL BUILDING DESIGN

ARENAS

Arenas are anticipated at the NWC to accommodate not only the Stock Show but also a variety of other programming, including educational, musical, athletic, and other events. Arenas will vary in size and will primarily be located in the Festival Grounds. Other arena facilities include the Stadium Arena and potentially others in the Triangle (North and South) Character Areas.



DESIGN CONSIDERATIONS

- Design buildings to have simple massing and long articulated walls.
 - » Aim to combine changes in materials with entrance locations and wall offsets to reduce perceived scale
- Use sloping roofs (gable and shed) or possibly some flat roofs.
- Use metal siding as the primary material with refined materials as accents.
- Design with durable materials such as masonry (stone, concrete or brick) at the base.
- Design clerestories and monitors to provide diffused daylighting where practical, depending on the interior use.
- Provide large loading docks and doors.
- Include more refined materials, transparency, and details at primary entrances and Key Streets.
- Provide changes in materials and door colors along long expanses of walls to create a rhythm and sense of scale (when possible).
- Incorporate exterior sustainable features (solar arrays, green roofs, light shelves).

PERMITTED CHARACTER AREAS

Festival Grounds	✓
Innovation Campus	✓
Maintenance and Operations	-
Elyria/Swansea Gateway	-
Triangle North	✓
Triangle South	✓
South Campus	-
Riverfront	-

✓ = Appropriate

- = Not Recommended

BARNES

Barn facilities will accompany the Livestock and Equestrian Centers in the Festival Grounds Character Area. Barns may also occur throughout the NWC as needed to support programming and events. These structures will be utilitarian in design to facilitate loading/unloading areas for animals, exhibitors, and patrons. These barns may also be used for other events throughout the year and should be designed for flexibility.



DESIGN CONSIDERATIONS

- Design buildings to have simple massing and long articulated walls.
 - » Aim to combine changes in materials with entrance locations and wall offsets to reduce perceived scale
- Use sloping roofs (gable and shed).
- Use metal siding as the primary material with refined materials as accents.
- Design with traditional, durable materials (stone, detailed concrete, or brick) at the base to withstand loading operations and reduce the perceived scale of the buildings.
- Design clerestories and monitors to provide diffused daylighting where practical, depending on the interior use.
- Provide large loading docks and doors.
- Include more refined materials, transparency, and details at primary entrance and along Key Streets.
- Incorporate exterior sustainable features (solar arrays, green roofs, light shelves).

PERMITTED CHARACTER AREAS

Festival Grounds	✓
Innovation Campus	✓
Maintenance and Operations	✓
Elyria/Swansea Gateway	-
Triangle North	✓
Triangle South	✓
South Campus	-
Riverfront	-

✓ = Appropriate

- = Not Recommended

GENERAL BUILDING DESIGN

RESEARCH & DEVELOPMENT AND EDUCATIONAL OUTREACH

The NWC will include high-tech, research, and lab facilities, including those of Colorado State University (CSU). These buildings have unique space and programming requirements. Their design will convey contemporary, innovative design and reflect current trends in technology, energy conservation, and generation as well as food production. More creativity is anticipated and encouraged in these buildings.



DESIGN CONSIDERATIONS

- Design buildings with varied massing and windows, reflecting internal functions.
- Provide a higher degree of transparency at the primary entrance and along Key Streets.
- Use varying roof forms.
- Design buildings with a wide range of building materials (including metal and glass).
- Incorporate exterior sustainable features (solar arrays, green roofs, light shelves, etc.).
- Provide service and loading areas.

PERMITTED CHARACTER AREAS

Festival Grounds	-
Innovation Campus	✓
Maintenance and Operations	-
Elyria/Swansea Gateway	-
Triangle North	-
Triangle South	-
South Campus	✓
Riverfront	✓

✓ = Appropriate

- = Not Recommended

CIVIC / VISITOR RELATED

Some buildings, such as the planned WSSA Legacy Building and CSU Center, will include a mixture of welcome center, educational facility, and museum. They will help activate the Campus on a daily basis with employees, tour buses, school buses, and regular visitors. These buildings should be iconic and unique. However, their design should also reflect the broader character objectives for their respective Character Areas as well as the particular theme or purpose of the intended space programming.



DESIGN CONSIDERATIONS

- Design buildings with varied massing and windows, reflecting internal functions.
- Provide a higher degree of transparency at primary public entrance and along Key Streets.
- Use varying roof forms.
- Design buildings with a wide range of building materials (including metal and glass).
- Incorporate exterior sustainable features (solar arrays, green roofs, light shelves, etc.).

PERMITTED CHARACTER AREAS

Festival Grounds	✓
Innovation Campus	✓
Maintenance and Operations	-
Elyria/Swansea Gateway	✓
Triangle North	✓
Triangle South	✓
South Campus	✓
Riverfront	✓

✓ = Appropriate

- = Not Recommended

GENERAL BUILDING DESIGN

UTILITY AND MAINTENANCE

Numerous support buildings will be located on campus, including the NWC Maintenance Facility. These buildings will be utilitarian in function and architectural design. Regardless, they should remain true to the character and mission of the Campus. Maintenance and support buildings may occur throughout the Campus, but they should be located so as not to interfere with circulation.



DESIGN CONSIDERATIONS

- Design buildings with simple massing with articulation.
- Design buildings to be no more than one or two stories.
- Use sloping or flat roofs.
- Use metal siding as the primary material, as well as CMU, brick or masonry.
- Use a low percentage of windows on side and rear walls.
- Provide loading docks and large doors.
- Consider more refined materials, transparency, and details at primary entrance and along Key Streets.
- Allow flexible design to accommodate functions needs.

PERMITTED CHARACTER AREAS

Festival Grounds	✓
Innovation Campus	✓
Maintenance and Operations	✓
Elyria/Swansea Gateway	-
Triangle North	✓
Triangle South	✓
South Campus	-
Riverfront	-

✓ = Appropriate

- = Not Recommended

MIXED-USE

Mixed-use buildings that include various combinations of commercial and residential activities are anticipated to occur in some parts of the Campus. The term, "mixed-use" applies to a specific building type of two or more stories with active uses at the ground level with housing, offices, or hotel uses above. Mixed-use buildings will exhibit more contemporary urban design in most cases, but their design should still contribute to a cohesive campus character.



DESIGN CONSIDERATIONS

- Design buildings with varied massing.
- Provide a pedestrian-oriented building frontage, usually with storefronts.
- Design buildings with a high degree of transparency at the street level.
- Design buildings with some transparency at upper floors.
- Use a range of roof forms.
- Use a mix of building materials (often masonry, wood, metal, and glass).

PERMITTED CHARACTER AREAS

Festival Grounds	-
Innovation Campus	✓
Maintenance and Operations	-
Elyria/Swansea Gateway	✓
Triangle North	✓
Triangle South	✓
South Campus	✓
Riverfront	-

✓ = Appropriate

- = Not Recommended

GENERAL BUILDING DESIGN

RESIDENTIAL APARTMENTS

Residential buildings will help activate and enliven the Campus on a daily basis. They also should help meet citywide initiatives for design excellence, diverse housing forms, and sustainability. These may include multi-level apartment and condominium buildings. Like mixed-use buildings, residential buildings will exhibit more contemporary urban design in most cases, but their design should still contribute to a cohesive campus character.



DESIGN CONSIDERATIONS

- Provide a pedestrian-oriented frontage, with a primary lobby entrance or individual entries with stoops.
- Design buildings to have a moderate degree of transparency at the street level.
- Design buildings to have some transparency at upper floors.
- Use a range of roof forms.
- Use a mix of building materials (often masonry, wood, metal, and glass).

PERMITTED CHARACTER AREAS

Festival Grounds	-
Innovation Campus	✓
Maintenance and Operations	-
Elyria/Swansea Gateway	✓
Triangle North	✓
Triangle South	✓
South Campus	✓
Riverfront	-

✓ = Appropriate

- = Not Recommended

RESIDENTIAL TOWNHOMES

Townhouses may occur in limited portions of some NWC Character Areas to be designed in future phases. They will be smaller in scale (1-3 stories) and may be located at the outer edges of the Campus. They may be contemporary or traditional in design and can contribute a compatible transitional edge where the Campus abuts the existing Elyria, Swansea and Globeville neighborhoods.



DESIGN CONSIDERATIONS

- Provide pedestrian-oriented frontages, with individual entries and stoops or porches.
- Design buildings to have a moderate degree of transparency at the street level.
- Design buildings to have some transparency at upper floors.
- Use a range of roof forms.
- Use a mix of building materials (often masonry or wood).

PERMITTED CHARACTER AREAS

Festival Grounds	-
Innovation Campus	-
Maintenance and Operations	-
Elyria/Swansea Gateway	✓
Triangle North	✓
Triangle South	✓
South Campus	✓
Riverfront	-

✓ = Appropriate

- = Not Recommended

GENERAL BUILDING DESIGN

HOSPITALITY

Hotels are a possible use on the Campus, particularly in the Character Areas to be designed in future phases. These building forms are similar to mixed-use and residential types but have unique requirements for drop-off, parking, and signage. They can also contribute to a lively campus and create foot traffic. Hotels should be designed to reflect the overall design objectives for their respective Character Areas, while contributing to a cohesive campus aesthetic.



DESIGN CONSIDERATIONS

- Provide a pedestrian-oriented frontage, with a primary lobby entrance.
- Design buildings to have a high degree of transparency at the street level.
- Design buildings to have some transparency at upper floors.
- Use a range of roof forms.
- Use a mix of building materials (often masonry, wood, metal, and glass).

PERMITTED CHARACTER AREAS

Festival Grounds	-
Innovation Campus	✓
Maintenance and Operations	-
Elyria/Swansea Gateway	-
Triangle North	✓
Triangle South	✓
South Campus	✓
Riverfront	-

✓ = Appropriate

- = Not Recommended

ROOF FORM

The following table provides generalized guidance on roof forms in the Campus Character Areas. Photographs illustrate the different types and options. This section should be used in conjunction with the design objectives and descriptions provided for each area in later sections, as well as the preceding Campus Framework section.



Flat



Barrel Vault



Gable



Hip



Sawtooth



Shed

APPROPRIATE ROOF FORMS FOR THE CHARACTER AREAS	Riverfront	Festival Grounds	Maintenance & Operations	Innovation Center	Triangle North	Triangle South	South Campus	Elyria Swansea Gateway
Flat	✓	✓	✓	✓	✓	✓	✓	✓
Barrel Vault	-	-	-	✓	✓	✓	-	-
Gable	✓	✓	✓	✓	✓	✓	-	✓
Hip	✓	-	-	-	-	-	-	✓
Sawtooth	-	-	-	-	✓	✓	✓	-
Shed	✓	✓	✓	✓	-	-	-	-

✓ = Appropriate

- = Not Recommended

GENERAL BUILDING DESIGN

BUILDING MATERIALS EXAMPLES

A number of building materials are illustrated on the following pages. See the table on the following spread to determine where these materials are appropriate. Regional materials should be used to the extent feasible. This section should be used in conjunction with the design objectives in the Character Area chapters, as well as the preceding Campus Framework section.

STUCCO

Authentic stucco, detailed



Authentic stucco, not detailed



Synthetic stucco, detailed



Synthetic stucco, not detailed



MASONRY

Brick, genuine



Brick, paneled



Stone, genuine



Stone, synthetic



WOOD

Shingled



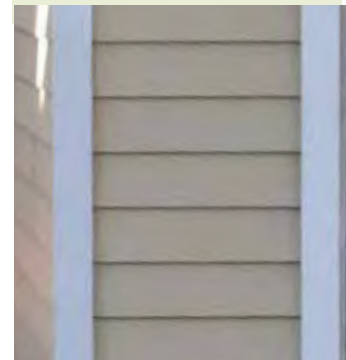
Horizontal lap



Vertical board and batten



Fiber cement board



METAL SIDING



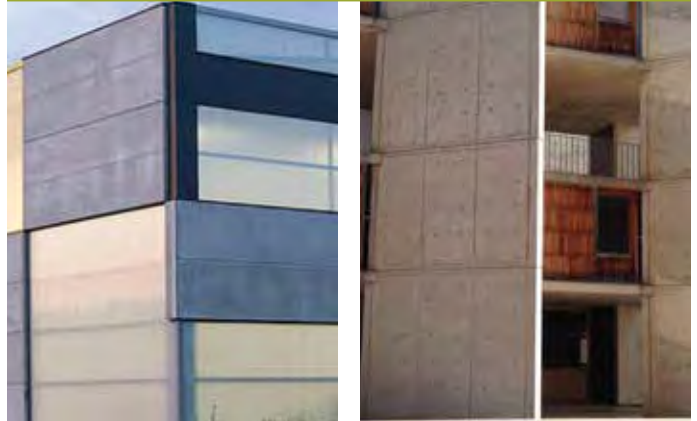
METAL SCREENS



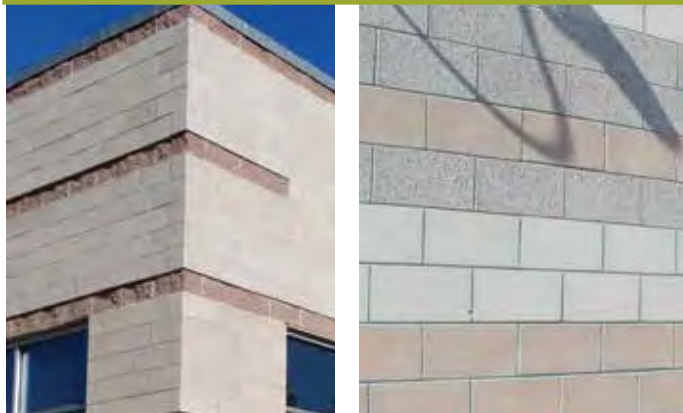
BOARD-FORMED CONCRETE



DETAILED CONCRETE



CONCRETE MASONRY UNIT BLOCK



METAL ACCENTS (DETAILS)



APPROPRIATE BUILDING MATERIALS FOR THE CHARACTER AREAS

The following table indicates which building materials are appropriate or inappropriate materials in each of the Character Areas. A primary application is one in which more than 60% of solid wall materials is of a specified material. A secondary application is one in which less than 40% of solid wall is the specified materials.

	Riverfront	Festival Grounds	Maintenance & Operations	Innovation Campus	Triangle North	Triangle South	South Campus	Elyria Swansea Gateway
Stucco								
Authentic, detailed	-	S	-	-	S	S	S	S
Synthetic, detailed	-	S	-	-	S	S	S	S
Brick and Stone								
Brick, genuine	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S
Brick, paneled	S	P/S	P/S	-	P/S	P/S	P/S	P/S
Stone, genuine	P/S	P/S	S	P/S	S	S	P/S	S
Stone, synthetic	P/S	P/S	S	P/S	S	S	P/S	S
Wood Siding								
Shingled (Wood or Cement Board Siding)	P/S	S	S	S	S	S	S	S
Horizontal Lap (Wood or Cement Board Siding)	P/S	S	S	S	S	S	S	P/S
Vertical Board & Batten (Wood or Cement Board Siding)	P/S	S	S	S	S	S	S	P/S
Metal								
Metal Panels	S	P/S	P	P/S	P/S	P/S	P/S	S
Metal Siding	S	P/S	P	P/S	P/S	P/S	P/S	S
Metal Accents	S	S	S	S	S	S	P/S	S
Concrete								
Detailed concrete	P/S	P/S	P/S	P/S	P/S	P/S	P/S	S
Patterned pre-cast concrete	P/S	P/S	P/S	P/S	P/S	P/S	P/S	S
Board-formed concrete	P/S	P/S	P/S	P/S	P/S	P/S	P/S	S

- P = Appropriate as a primary material (60% or more of wall application)
- S = Appropriate as a secondary material (40% or less of wall application)
- = Inappropriate

REHABILITATION/REUSE OF EXISTING BUILDINGS

The National Western Center campus includes a number of existing buildings. Some of these buildings reflect traditional building designs from earlier eras and are part of the heritage of the Campus. This section provides guidelines and considerations for these existing buildings.



REHABILITATION/REUSE PRINCIPLES AND BEST PRACTICES

When considering rehabilitation projects of existing buildings for reuse, the following set of best practices should be considered:

- **Protect and maintain key features and stylistic elements** - Distinctive stylistic features or examples of skilled craftsmanship should be treated with sensitivity. The best practice is to maintain key features from the outset.
- **Repair key features when possible** - Use best practices when repairing key features to minimize damage to the original materials.
- **Respect the character of the building** - Do not try to change the style of the building or make the structure look older than its actual age. Confusing the character by mixing elements of different styles can weaken the appearance and quality of the structure.
- **Design an addition or alteration to respect the existing structure and maintain its aesthetic and structural integrity** - When constructing an addition, do not try to emulate an existing style to make the addition look older than its actual age. A contemporary design for an alteration or addition to an existing structure should not be discouraged as long as it does not destroy character-defining features and the design is compatible with the Campus character. Additions should relate to the original building in general massing and scale, but should appear as new.

EXISTING BUILDINGS INVENTORY

These buildings were identified as resources that are a part of the heritage of the Campus and may have potential for reuse:

- » Livestock Exchange Buildings
- » McConnell Welders
- » Artist Studio
- » Hay Barn #3 (King Energy Building)
- » Chute Office
- » Scale House #6
- » Guard Shack
- » Brands Building
- » 4701 Brighton Blvd.
- » Commercial and residential Structures on Baldwin Ct. and 47th Ave.
- » Armour Administrative Building

REHABILITATION/REUSE OF EXISTING BUILDINGS

KEY FEATURES



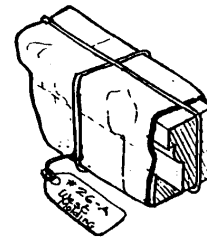
When reconstructing an element is impossible, develop a new design that is a compatible interpretation of it.

INTENT STATEMENT

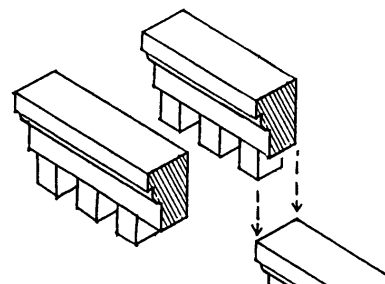
Maintain key features on buildings that reflect the heritage of the Campus, to the extent feasible.

DESIGN CONSIDERATIONS

- Keep key features such as details that define architectural styles as well as materials, doors, and windows.
- Retain a key feature that is in good condition. Repair, rather than replace a deteriorated key feature, when feasible.
- Avoid removing a damaged key feature that can be repaired.
- Patch, piece-in, splice, consolidate, or otherwise upgrade existing materials, using best building practices.
- When disassembly of a key feature is necessary for its repair, use methods that minimize damage to it. Document its location so it may be repositioned accurately.
- Use procedures for cleaning, refinishing, and repairing key features that will maintain the original finish.
- Employ best practice treatments such as rust removal, caulking, limited paint removal and reapplication of paint or stain where appropriate.
- Avoid adding a key feature that is not part of the original building fabric. For example, decorative millwork should not be added to a building if it was not an original feature.
- Use the same kind of material as the original if possible. A substitute material may be acceptable if the size, shape, texture, and finish conveys the appearance of the original.
- When reconstructing an element is impossible, develop a new design that is a compatible interpretation of it.



Document the location of an existing feature that must be removed and repaired so it may be repositioned accurately.

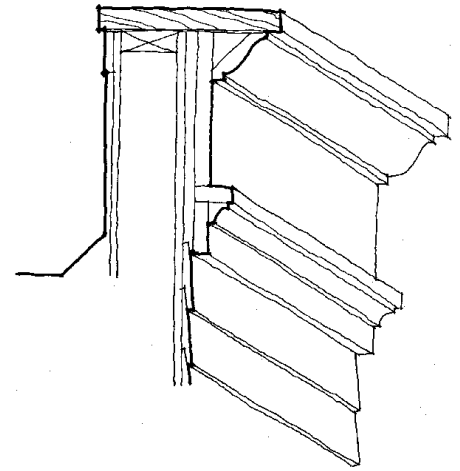


Patch, piece-in, splice, consolidate, or otherwise upgrade deteriorated features using recognized preservation methods.

ROOF FORM



Preserve the original eave depth of a sloping roof.



Provide functional coping that is compatible with the existing building facade.

INTENT STATEMENT

Maintain a roof form that is compatible with that of the original style . Utilize roof materials that are in keeping with the original roof.

DESIGN CONSIDERATIONS

- Maintain the original roof form of the structure.
- Avoid altering the angle of an existing roof.
- Preserve the original eave depth of a sloping roof.
- Maintain traditional overhangs, if feasible.
- When necessary to use a new roof material, convey a scale and texture similar to those used traditionally.
- For sloped roofs, shingles that contain embedded photovoltaic systems are appropriate.
- Maintain parapet walls and cornices on flat roofed structures.
- Provide functional coping that is compatible with the existing building facade.

REHABILITATION/REUSE OF EXISTING BUILDINGS

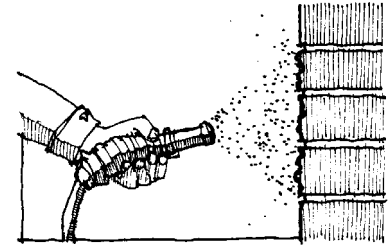
MATERIALS



Preserve original building materials, where feasible.



Repair deteriorated primary building materials.



Do not use harsh cleaning methods, which can inhibit the function and/or appearance of the existing material.

INTENT STATEMENT

Preserve traditional materials that define the overall character of the building.

DESIGN CONSIDERATIONS

- Preserve original building materials, where feasible.
- Avoid removing original materials that are in good condition.
- Remove only those materials which are deteriorated, and must be replaced.
- Preserve masonry features that define the overall character, such as walls, cornices, pediments, steps and foundations.
- Repair a deteriorated primary building material by patching, piecing-in, consolidating, or otherwise reinforcing the material.
- When replacing material on a primary surface, match the original in composition, scale, and finish, when feasible.
 - » If the original material is wood clapboard, for example, then the replacement material should be wood as well. It should match the original in size, the amount of exposed lap and in finish.
- Replace only the amount required. For example, if a few boards are damaged beyond repair, then only they should be replaced, not the entire wall.
- Do not strip existing painted wood surfaces to bare wood to achieve a “rustic look.”
- Do not use harsh cleaning methods, which can inhibit the function and/or appearance of the existing material, (such as sandblasting, which can damage its protective coating).

OPENINGS



Avoid changing the position of key door openings.



Preserve traditional doors with distinct stylistic features, if feasible.



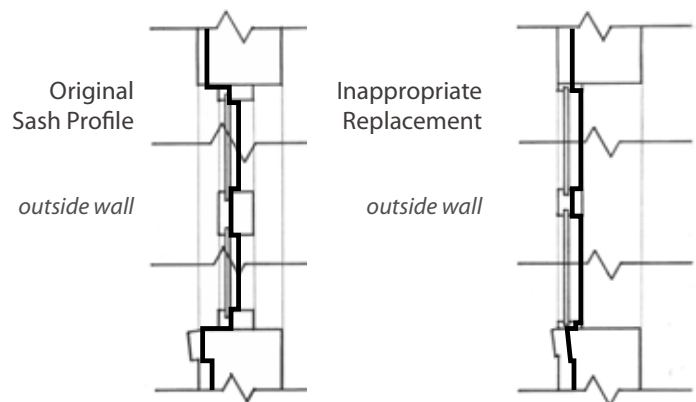
Preserve the ratio of window openings to solid wall on a primary facade.

INTENT STATEMENT

Maintain the fundamental alignment, spacing, and dimensions of openings. Preserve traditional windows and doors with distinct stylistic features, if feasible. When a new window or door is needed, design it to be in character with the building.

DESIGN CONSIDERATIONS

- Preserve the position, number, and arrangement of existing windows and doors in a primary building wall.
 - » On a primary facade, enclosing an existing window or door opening is inappropriate, as is adding a new opening.
 - » These include both primary entrances and large service entries on warehouse buildings.
- Preserve the ratio of window openings to solid wall on a primary facade.
 - » Significantly increasing the amount of glass on a character-defining facade will negatively affect the integrity of the structure.
- Preserve the size and proportion of an existing window or door opening on a primary wall.
 - » Reducing an original opening to accommodate a smaller window or door or increasing it to receive a larger window or door is inappropriate.
- Use durable window and door materials.
 - » Use a metal or wood frame, when possible.
 - » Avoid using a material that does not have a proven durability.
- Avoid using a thin window frame on a primary facade.
- In a replacement window or door on a primary wall, use a material that appears similar to the original, when feasible.
 - » Using the same material as the original is preferred, especially on street-facing facades. A substitute material should match the original profile.
- Preserve traditional doors with distinct stylistic features, if feasible.



These sketches show a section through two windows—the original and a proposed replacement. The proposed replacement is inappropriate as it does not match the profile of the original.

REHABILITATION/REUSE OF EXISTING BUILDINGS

ADDITIONS



Design a new addition to be a product of its own time.



For a larger addition, break up the mass of the addition into smaller modules.

INTENT STATEMENT

Ensure an addition relates to the fundamental characteristics of the building while also appearing as current construction. To minimize damage to the original structure and preserve key features when building an addition.

DESIGN CONSIDERATIONS

- Design an addition to minimize the visual impacts on an existing building.
- Locating an addition on the front of a building is inappropriate.
- Design a new addition to be a product of its own time.
 - » Do not attempt to replicate the appearance of the existing structure.
- Design a new addition to respect the mass and scale of the original structure.
 - » An addition should be simple in design and visually subordinate to the primary facade.
 - » For a larger addition, break up the mass of the addition into smaller modules that relate to the original building.
- Utilize a roof form for a new addition that is in character with the original structure.
 - » When constructing a rooftop addition, keep the mass and scale subordinate to the primary building.
- A balcony addition should be in character with the building.
 - » Mount a balcony to accentuate character-defining features.
 - » The balcony should fit within the opening when feasible.
 - » Use colors that are compatible with the overall color scheme of the building. In most cases dark metal matte finishes are appropriate.

RELOCATION



To save and reuse significant historic resources it may be necessary to temporarily remove an existing structure from its site. Use adequate methods to protect the building during moving and while stored off-site.

INTENT STATEMENT

Save and reuse significant historic resources. When relocating buildings, use preservation best practices

DESIGN CONSIDERATIONS

In some cases, it may be necessary to temporarily remove an existing structure from its site in order to facilitate construction of a new foundation and to accommodate construction of additions. Use the following criteria:

- Use adequate methods to protect the building during moving and while stored off-site.
 - » In considering this, a written description of the procedures proposed should be provided. Illustrations describing the process may also be required.
 - » If disassembly of a building is required, assure materials are properly managed using best preservation methods during transit, storage, and reassembly.
- Follow structural stabilization guidelines prepared by a qualified contractor under the direction of a structural engineer or a preservation specialist.
 - » Ensure that the added weight of the reinforcement can be sustained by the building and that the stabilization members do not harm existing finishes.
- Provide an appropriate context for the building.
 - » Ensure the new site conveys a character similar to that of the historic site, in terms of scale of neighboring buildings, site relationships and age, unless the buildings is being used as an interpretive feature.





FESTIVAL GROUNDS

ARENA ENTRY PLAZA
RIVERFRONT CONNECTION
LINK PLAZA
ARMOUR PLAZA
CONNECTION TO RTD TRANSIT STATION
STOCKYARD EVENT CENTER (SEC) PLAZA

STOCKYARDS
STOCKYARDS EVENT CENTER
EQUESTRIAN CENTER
LIVESTOCK CENTER
EQUESTRIAN PLAZA



51ST AVENUE

NATIONAL WESTERN DRIVE NORTH

HAY BARN #3

STOCKYARDS

WASH RACK

WASH RACK

FG 7

FG 7

FG 6

FG 6

FG 8

PERMANENT BISON PENS

WATER TOWER

FG 4

EQUESTRIAN CENTER

FG 9

FG 3

LIVESTOCK CENTER

FG 10

FG 5

FG 11

FG 2

FG 1

BETTIE CRAM DRIVE



FESTIVAL GROUNDS OVERVIEW

VISION: The Festival Grounds will be among the most highly programmed areas of Campus. It will accommodate a variety of events and user experiences throughout the year.

EXISTING CONDITIONS: This area currently includes the Stockyards for the National Western Stock Show, surface parking, industrial buildings, and railroads. Historically, development included meat packing facilities that were demolished in 2017 (see the NWC Campus Cultural Plan for more detail).

FUTURE CHARACTER: The Festival Grounds will contain major event facilities for the Campus. New buildings include the Equestrian Center, Livestock Center, and Stockyards Event Center. Existing structures to remain include the Armour Administration Building, the relocated Hay Barn #3, and the relocated Water Tower. Public spaces and thoroughfares should be easily navigable and safe for pedestrian, animal, and maintenance vehicle traffic. The design of this Character Area must support connections to the Riverfront, Innovation Campus, RTD Transit Station, and adjacent neighborhoods. The architecture and materiality of the Festival Grounds should celebrate the site's history and represent innovation through sustainable and regenerative practices (could be expressed through reuse of older building materials, using innovative materials and applying energy conservation/generation technologies). Buildings aim to reflect New West Architecture while providing references to the "Old West and have simple forms that reflect western agricultural traditions, while using a contemporary materials palette, detailing and new technologies. Signage, wayfinding, a variety of seating

types, places for rest and shade, plantings and site furnishings should be used to maintain a level of comfort for the pedestrian within the large public spaces of the Festival Grounds. Massing, articulation, detailing and visual scaling strategies should be thoughtfully incorporated to provide visual interest.

INTERPRETIVE ELEMENTS: The Festival Grounds character area has a particularly strong thread of past-present-future. As a contemporary place to converge, pivot, and innovate, it includes powerful elements that reflect the history of the site. Historic structures ground the area and become icons, while open spaces invite ingenuity.

Interpretive elements and experiences can highlight the preserved Armour Administration Building, Water Tower, and relocated Hay Barn while also revealing current activities at new facilities. Story stops honor the history of the National Western Stock Show and related activities. For example, this is the place animals came by train and truck to be penned and processed; catwalks allowed birds-eye views and rail lines and spurs provided infrastructure; the inaugural canvas tent that housed the Stock Show stood here in 1906.

NWC CAMPUS CULTURAL PLAN

The NWC Campus Cultural Plan is a reference for future designers and stakeholders who will make decisions regarding design and programming on the Campus. The Plan embraces the Vision of the NWC and defines the role that arts and heritage play in shaping its future.

INCLUDED IN THE FESTIVAL GROUND (FG) CHARACTER AREA

- | | |
|--|---|
| <p>FG 1 Arena Entry Plaza pg 82
Serves both Equestrian and Livestock Centers. Primary uses are event queuing and wayfinding to other campus destinations.</p> | <p>FG 6 Stockyards Event Center (SEC) Plaza pg 92
Serves as entry to the Stockyards. Water Tower acts as wayfinding. Will host a variety of events, including auctions.</p> |
| <p>FG 2 Riverfront Connection pg 84
Pedestrian and maintenance vehicle thoroughfare with potential uses for small events. Serves as the connection from Central Campus to the Riverfront.</p> | <p>FG 7 Stockyards pg 94
Open area, serving as primary stock location during Stock Show, parking or flexible event uses throughout the year.</p> |
| <p>FG 3 Link Plaza pg 86
Central spine of the Festival Grounds. Loading and maintenance uses on the South edge with an enhanced pedestrian walkway on the North edge.</p> | <p>FG 8 Stockyards Event Center (SEC) pg 96
Flexible indoor space for various events. Provides covered space for uses in Stockyards, Herd Sire, and Link Plaza.</p> |
| <p>FG 4 Armour Plaza pg 88
Small formal plaza that highlights historic Armour Administration Building. Primarily pedestrian leisure uses with capacity for small events.</p> | <p>FG 9 Equestrian Center pg 98
Building complex that includes equestrian barns, arenas, paddocks, warm up areas, and structured parking.</p> |
| <p>FG 5 Connection to RTD Transit Station pg 90
Loading and maintenance uses with a clearly defined pedestrian corridor. Includes bridge landing area. Serves as neighborhood connection to Riverfront and transit.</p> | <p>FG 10 Livestock Center pg 100
Building complex that includes the Livestock Hall and Arena. Accommodates major Stock Show needs and a variety of other large gatherings throughout the year.</p> |
| | <p>FG 11 Equestrian Plaza pg 102
Flexible indoor/outdoor event space linking equestrian uses to the Riverfront.</p> |

FESTIVAL GROUNDS

CAPACITY AND USE STUDY

The Outdoor Programming Diagram studies the event capacity of each outdoor program area (indicated by each colored area) during different types of events. For more information on outdoor space programming, see Appendix for how to access the Public Space Plan and October 12, 2018 Campus Placemaking Study Summary Presentation.

"GRAND PLAZA"

Programmable area includes Arena Entry Plaza, Riverfront Connection, and a portion of the Link Plaza

A	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Egress	10	16,000	1,600
B	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Egress	10	52,500	5,250
	Semi-structured Event	10	52,500	5,250
	Outdoor Performance	4.5	52,500	11,666

CENTRAL COURT

Programmable area includes a portion of the Link Plaza, Armour Plaza, and Connection to RTD Transit Station

C	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Egress	10	103,800	10,380
	Semi-structured Event	10	103,800	10,380
D	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Egress	10	143,000	14,300
	Semi-structured Event	10	143,000	14,300

STOCKYARDS

Programmable area includes the Stockyards Event Center Plaza and the Stockyards

E	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Semi-structured Event	10	121,500	12,150
	Outdoor Performance	4.5	121,500	27,000
F	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Semi-structured Event	10	580,200	58,020
	Outdoor Performance	4.5	580,200	128,933

EQUESTRIAN PLAZA

G	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Egress	10	25,900	2,590
	Semi-structured Event	10	25,900	2,590
	Outdoor Performance	4.5	25,900	5,755

LIVESTOCK EXCHANGE PLAZA

See Innovation Campus for more information on this space

H	PROGRAM USE	SPACE/PERSON (SF)	AREA (SF)	CAPACITY (PEOPLE)
	Egress	10	9,700	970
	Semi-structured Event	10	9,700	970
	Outdoor Performance	4.5	9,700	2,155

Outdoor Programming Diagram



FESTIVAL GROUNDS

ARENA ENTRY PLAZA



View of the Arena Entry Plaza looking north from the Innovation Campus



KEYMAP



The plaza will act as a queuing space for large events in the Equestrian and Livestock Centers.



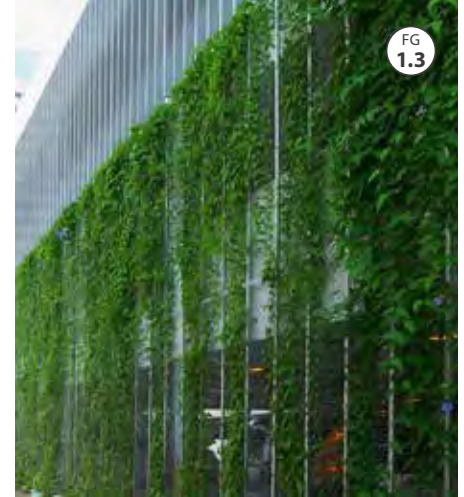
During non-event times, this plaza will be used for vehicular travel by loading and maintenance vehicles.

FG
1.1

Create a meaningful paving pattern

FG
1.2

Integrate flexible outdoor furniture

FG
1.3

Creatively integrate planting in tight spaces

INTENT STATEMENT:

This plaza serves as a flexible queuing and event space between the Equestrian and Livestock Center entries. It includes a creative and meaningful paving design that relates to the Campus vision and strategically integrates planting when appropriate. Highly transparent building facades enclose the space making it a focal point and natural wayfinding hub.

DESIGN CONSIDERATIONS

FG - 1.1 Create a meaningful paving pattern that defines the plaza as a central public space while contributing to the sense of place

- » Illustrate interpretive elements critical to the campus narrative and mission
- » Provides compatible transition between Link Plaza and Innovation Campus paving design and materiality
- » Utilize durable yet decorative materials such as integrally colored concrete and specialty finishes such as sand washed or sandblast

FG - 1.2 Integrate flexible outdoor furniture that can be easily rearranged to meet changing program needs

FG - 1.3 Provide planted areas wherever feasible

- » Strategically integrate planting around utility easements and vehicular access points
- » Use vertical planting screens, large movable planters, and other creative means to integrate planting in small spaces

FG - 1.4 Create a strong relationship between the buildings and adjacent public space

- » Create flow between the interior and exterior spaces with interactive elements inside the building and/or on the building facade
- » Maximize building transparency at entries and key access points where interaction is encouraged.

FG - 1.5 Use signage and wayfinding to provide a clear visual connection to Riverfront, Stockyards Event Center, Armour Administration Building, and RTD Transit Station

- » Integrate interpretive elements into signage and wayfinding design whenever feasible
- » Establish a signage system that emphasizes the pedestrian experience and scale

FG - 1.6 Design lighting to provide visual interest and aid in wayfinding

- » Accent arena entries for improved wayfinding
- » Integrate pedestrian lighting that leads visitors to the Riverfront Connection
- » Utilize catenary systems to reduce ground plane obstructions while creating pedestrian scaled environments

FESTIVAL GROUNDS

RIVERFRONT CONNECTION



View of the Riverfront Connection looking east from National Western Drive and the Riverfront Character Area.



KEYMAP



Paved areas in the Riverfront Connection space may be used for small events throughout the year.



During non-event times, this corridor will be an important loading area for the CSU Animal Health Complex and the Equestrian Arenas.



FG
2.1

Consider riparian-inspired paving design



FG
2.6

Encourage human - animal interaction



FG
2.7

Create a multi-functional gathering space

INTENT STATEMENT:

This linear space connects the Riverfront and central campus while providing service access and visibility to the adjacent equestrian facilities. Creating a well defined pedestrian passage is desired and the continuation of the riparian inspired theme from National Western Drive should be considered.

DESIGN CONSIDERATIONS

FG - 2.1 Create clearly distinguished pedestrian and vehicular areas through the creation of contrasting pavement patterns and textures

- » Due to the required vehicular service access, decorative concrete is recommended as the primary material.
- » Concrete unit pavers should be studied at pedestrian entries
- » Consider riparian-inspired patterns and forms that strengthen the river connection

FG - 2.2 Creatively embed directional wayfinding in paving to supplement other wayfinding elements

FG - 2.3 Strategically place trees and at-grade planters with consideration given to utilities, grading, and truck turning movements

- » Include irrigated seasonal pots at key entries
- » Integrate vertical gardens through mesh planting screens along facades when appropriate

FG - 2.4 Incorporate public art and interpretive elements

- » Meaningfully integrate and plan art along exterior building walls, columns, and paving, and crosswalk.
- » Integrate relics that enhance the campus narrative.

FG - 2.5 Create a dedicated pedestrian crossing across National Western Drive (North) with contrasting ground plane colors and clear signage that links the central Campus to the riverfront

- » Consider the use of a speed table and/or a rectangular rapid flashing beacon (RRFB) for enhanced pedestrian safety
- » Dedicate adequate space for vehicular service and loading functions

FG - 2.6 Encourage human - animal interaction

- » Create transparent building facades - particularly at the CSU Animal Health Complex - for educational interaction with visitors

FG - 2.7 Create a multi-functional gathering space below the Equestrian Center concourse

- » Provide open, flexible area for various event needs
- » Consider creating a space that is sheltered from the elements for outdoor event needs

FESTIVAL GROUNDS

LINK PLAZA



View of the Link Plaza looking south from the SEC Plaza and Water Tower.



KEYMAP



At about 120' wide and 550' long, the Link Plaza has the capacity to host major exhibitions and other large events.



Vehicular turning movements inform the design of the paving, planting and furnishings in the plaza.



Landscape buffer along pedestrian corridor



Integrate movable planters and seating



Use catenary lights with multi-functional poles

INTENT STATEMENT:

This large, linear plaza is the central organizing path of the NWC Campus that doubles as a large vehicular loading access point during off-peak times and a primary pedestrian thoroughfare that links Bettie Cram Drive to the Stockyard Event Center. In tandem with the service needs, this space will need to serve as a compelling pedestrian zone along the Equestrian Center facade.

DESIGN CONSIDERATIONS

FG - 3.1 Use decorative concrete as the primary material to accommodate the vehicular service access required along the pedestrian walkway, use accent materials or patterns in key areas

- » Integrate campus relics and interpretive elements, such as embedded rail lines to create a compelling linear experience
- » Consider an abstract paving design inspired by the geographical, industrial, or cultural history of the campus
- » Consider creative applications of the Colorado Brand Book or other heritage related elements in the pavement design

FG - 3.2 Create a cadence with vertical features, planting, and lighting that enhances the pedestrian experience while creating a safe delineation between vehicular and pedestrian areas

FG - 3.3 Concentrate planting along the Equestrian Center facade due to conflicts with utilities, fire access, and truck turning movements

- » Use movable planters, seating, and shade structures to create areas of respite during warm months
- » Integrate vertical gardens with the building facades when appropriate
- » Provide a landscape buffer along pedestrian corridors

FG - 3.4 Integrate covered walkways as part of the Equestrian Center facade

FG - 3.5 Create consistent signage along the corridor to direct visitors to major campus destinations and entries

- » Consider use of digital signage and vertical monumentation for wayfinding

FG - 3.6 Use a varied approach to lighting design as appropriate for various parts of the plaza, prioritize pedestrian lighting needs whenever feasible

- » Integrate pedestrian scale lighting such as catenary lighting across the space to improve the scale and ambiance. Consider using light poles for multiple uses
- » Minimize permanent vertical obstructions such as light poles near the vehicular loading zone of the Livestock Barn
- » Study tasteful lighting enhancements to the historic water tower to improve its presence as a wayfinding and historic beacon

FG - 3.7 Design for flexibility when placing site elements such as electrical hook ups and permanent features

FESTIVAL GROUNDS

ARMOUR PLAZA



View of the Armour Administration Building and Plaza, looking east from the Water Tower.



KEYMAP



The Armour Plaza can accommodate small events such as pop-up displays or markets.



Individuals and organizations may rent the space for private functions.



FG
4.3

Historic brick pavers accent architecture



FG
4.6

Provide a lush overstory



FG
4.5

Use movable furnishings and overhead lighting

INTENT STATEMENT:

This formal plaza should complement and take inspiration from the historic architecture of the Armour Administration Building. The lack of vehicular and utility conflicts allows for lush overstory planting, ample seating opportunities, pedestrian scaled pavement design, and interpretive elements that create a warm and inviting space.

DESIGN CONSIDERATIONS

FG - 4.1 Locate a single formal walkway centered on the building entrance to accommodate regulated entry for ticketed events

FG - 4.2 Consider layout of 10' x 10' tents in the plaza design to accommodate small pop up events

FG - 4.3 Utilize concrete or clay unit pavers with detailed pavement bonds in pedestrian areas that compliment the historic architecture

FG - 4.4 Use furnishings that compliment the historic building character and provide durability

- » Metal work for railings or other site elements such as pre-manufactured flexible seating should compliment the character of the restored building
- » Integrate custom seat walls made with brick, regional stone, or precast concrete

FG - 4.5 Consider overhead catenary lighting that emphasizes the pedestrian scale

FG - 4.6 Utilize formal planting arrangement and species selection that emphasizes a garden aesthetic with a lush overstory

FG - 4.7 Integrate Green Infrastructure elements wherever feasible

- » Consider bioretention and permeable paving to reduce off-site stormwater requirements
- » Refer to the Denver Ultra-Urban Green Infrastructure Guidelines for green infrastructure and low-impact development (LID) strategies

FG - 4.8 Use signage to aid in pedestrian wayfinding and highlight unique features

- » Locate directional wayfinding signage to the Riverfront, arenas, RTD transit station, parking, and other major campus destinations.
- » Highlight and integrate key interpretive elements

INTERPRETIVE OPPORTUNITIES

The Armour Administration Building Plaza offers interpretive opportunities that reveal the history of the building, the use of the adjacent site areas, and its relationship to the iconic water tower. During special events, pop-up displays can expand the storyline and draw people inside where exhibits and special events might be part of the building program.

FESTIVAL GROUNDS

CONNECTION TO RTD TRANSIT STATION



View of the Connection to RTD Transit Station, looking east from the rail wall.



KEYMAP



The RTD Transit Station Connection will protect pedestrians with separated travel paths and establish a clear walkway to central Campus.



Fencing and gates protect the pedestrian corridor while preserving vehicular movements along the Stockyards and the Livestock Center.



Maximize at-grade planting



Embed interpretive elements in paving



Emphasize corridors with enhanced lighting

INTENT STATEMENT:

The pedestrian bridge provides a vital link from the Elyria and Swansea neighborhoods to the Campus and the Riverfront while creating a meaningful entry plaza for those entering the site via light rail. A well defined plant buffered pathway will bring pedestrians past the Stockyard Exchange Building and Plaza with fencing, gates, and freestanding planters at key locations to improve safety.

DESIGN CONSIDERATIONS

FG - 5.1 Integrate gateway monumentation with directional and gateway signage at base of bridge landing to direct pedestrians

FG - 5.2 Provide planted areas that add to the pedestrian experience without conflicting with the functional needs of the campus

- » Maximize at-grade planting within utility and vehicular movement constraints
- » Integrate vertical gardens to the building facades and large walls - such as the RTD rail line wall when appropriate

FG - 5.3 Integrate planting and flexible fence and gate systems to separate pedestrian and vehicle circulation

FG - 5.4 Integrate high contrast paving to distinguish pedestrian and vehicular/loading areas.

- » Due to the vehicular service access required, decorative concrete is recommended as the primary material.
- » Utilize unit pavers at Stockyard Event Center (SEC) Plaza building entry
- » Embed interpretive elements in paving that convey the campus narrative and mission

FG - 5.5 Provide views to aid in pedestrian comfort and wayfinding

- » Provide a visual connection to the Link Plaza and the Stockyard Event Center Plaza
- » Emphasize the linear pedestrian path to the historic water tower

FG - 5.6 Emphasize pedestrian corridors with enhanced lighting such as tree uplights, planter mounted wall lights, bollard lights, and other small scale fixtures

FG - 5.7 Consider art opportunities on the pedestrian bridge, water tower, and stairs. Refer to the Public Art Master Plan.

INTERPRETIVE OPPORTUNITIES

Views from the bridge landing invite interpretation and could benefit from physical markers showing historic extents and uses. An interpretive panel may feature the historic livestock flyover to the Cudahy Plant and sheep barns. These elements could be enhanced by guided tours.

FESTIVAL GROUNDS

STOCKYARDS EVENT CENTER (SEC) PLAZA



View of the Stockyards Event Center (SEC) Plaza, looking south from the Catwalk and Stockyards.



KEYMAP



During the off-season of the National Western Stock Show, the SEC Plaza has capacity to host festivals and other events.



This plaza may be used in conjunction with the SEC building for equestrian and livestock events.

Programming Alternatives



Show Ring, 60' X 145'



Festival, 165 tents



Performance Venue, 740 people shown

INTENT STATEMENT:

The Stockyards Event Center (SEC) Plaza is a highly programmed activity hub that will host year-round events. During the National Western Stock Show, this area will be used for performances and animal pens. At all other times of the year, the plaza will host a variety of other events. A Catwalk defines the northern boundary and provides views overlooking the plaza and Stockyards.

DESIGN CONSIDERATIONS

FG - 6.1 Due to the activity volume in this space, decorative concrete is recommended as the primary plaza material

- » Consider agrarian patterns such as the patterns of pivot irrigation systems as an abstract paving pattern that unifies the plaza

FG - 6.2 Provide a combination of permanent and movable furnishings to activate the space without conflicting with the functional needs of the Campus

- » Locate all permanent furnishings under Water Tower, along Stockyards Event Center frontage, and around the perimeter of the space to prevent conflicts with programmed events
- » Integrate movable furnishings for everyday activation along SEC and throughout plaza

FG - 6.3 Locate all permanent trees and shrub beds around the perimeter of the space to prevent conflict with programmed events

- » Integrate hanging planters, climbing vines, or vertical agriculture opportunities
- » Include movable planters and shade structures to create shaded areas of respite during summer events

FG - 6.4 Provide lighting, A/V, and power to accommodate event needs

- » Provide pedestrian lighting along perimeter path linking the RTD Transit Station connection with the riverfront.
- » Integrate multi-functional poles with site power for use during programmed events.
- » Locate A/V connections for live performances.

FG - 6.5 Embed play and interpretive elements into pavement that reiterates the Campus narrative.

INTERPRETIVE OPPORTUNITIES

Pop-up displays and facilitated programs may feature test growing plots, vertical gardens, and water technology demonstrations.

FESTIVAL GROUNDS

STOCKYARDS



View of the Stockyards, looking south from the Maintenance and Operations Character Area.



KEYMAP



The Stockyards will be the largest paved area on the Campus, creating an area suitable for large festivals, concerts, and other events.



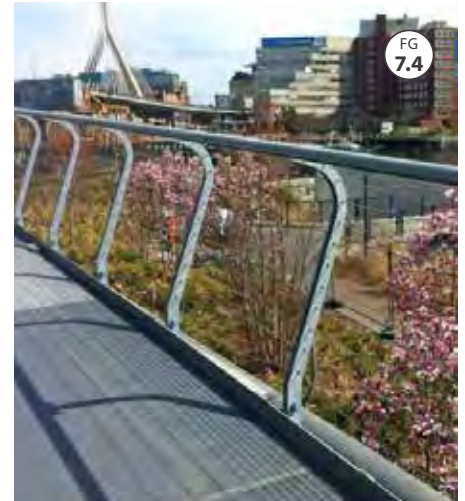
When the National Western Stock Show is not occupying this area, it will become a multi use space for events and parking.



Use standard concrete with decorative finishes



Create safe lighting levels



Maximizes guardrail transparency and safety

INTENT STATEMENT:

Occupied for a two week period every January, this space becomes the Stockyards for the National Western Stock Show (NWSS). During the rest of the year, the area will be used for visitor parking and large events. The Catwalk, while primarily used for viewing the NWSS, should be considered for creative year-round uses.

DESIGN CONSIDERATIONS

FG - 7.1 Use standard concrete as the primary material due to the high activity in this space, with decorative finishes at key locations

- » Proper finishes and detailing must be considered in order to provide adequate slip resistance for livestock during NWSS
- » Consider re-use of existing on-site pavers for use in bison pens

FG - 7.2 Strategically integrate light poles to maximize parking, stockyard layout, and other programmed events while creating safe lighting levels

- » Limit pole quantities to preserve flexibility
- » Integrate power and A/V connections for live performances and special events
- » Ensure proper luminaire cut-off to reduce light pollution to adjacent areas
- » Provide pedestrian lighting along pathway from RTD Station to the riverfront

FG - 7.3 Design Hay Barn #3 to be a multi-use facility for events and functions looking for a unique, historic venue

- » Ensure the building serves the needs of the National Western Stock Show
- » Integrate interpretive opportunities highlighting the historic structure

FG - 7.4 Design the catwalk to be a safe and pleasant pedestrian space

- » Provide universal access and proper egress
- » Provide a slip resistant walking surface such as a decorative metal grate that prevents build-up of ice
- » Consider enhanced programming opportunities such as balcony seating during concerts and other events
- » Consider sponsorship banners, signage, and other revenue generating programs
- » Integrate interpretive elements along the guardrail such as a historic timeline
- » Provide elegant guardrail design that maximizes transparency as well as safety

INTERPRETIVE OPPORTUNITIES

Interpretive materials call attention to a preserved portion of historic pens or reclaimed pen materials like hinges, latches, posts, and embedded historic pavers. A campus callout may mark the farthest extent of the pens area at the peak of the meat packing era.

FESTIVAL GROUNDS

STOCKYARDS EVENT CENTER



View of the Stockyards Event Center (SEC), looking northeast from the Livestock Center and Connection to RTD Transit Station.



KEYMAP



Participants and visitors at the National Western Stock Show will move through the SEC for events, using both indoor and outdoor spaces.



Throughout the year, organizations may rent out the SEC to host private events.



FG
8.2

Seamless design of architecture and plaza



FG
8.3

Balconies and views



FG
8.4

Local and regional building materials

INTENT STATEMENT:

Located between the Stockyards, SEC Plaza, Connection to the RTD Transit Station, and the railroad, this building will be used as a flexible event space throughout the year. Create an indoor-outdoor relationship between the building and the SEC Plaza and between the building and the Catwalk.

DESIGN CONSIDERATIONS

FG - 8.1 Design the Event Center with a contemporary building form that respects the adjacent historic architecture of the Armour Administration Building and Water Tower

- » Iconic forms to define primary public entries
- » Arcades and canopies at the ground level to help reduce perceived mass
- » Orient balconies and viewing areas toward visible vertical monuments such as the Water Tower, RTD pedestrian bridge, and the downtown Denver skyline

FG - 8.2 Durable materials used at base of building to withstand potential impacts from loading and unloading of animals

- » Consider the use of local and regional building materials

FG - 8.3 Differentiate the ground floor from upper levels with higher transparency and large entryways

FG - 8.4 Use building set backs and roof overhangs to create covered pedestrian spaces

FESTIVAL GROUNDS

EQUESTRIAN CENTER



View 1: Main entry to the Equestrian Center and the Arena Entry Plaza



View 2: Open air warm-up area and Equestrian Large Arena beyond against the Link Plaza and pedestrian walkway



View 3: Open air warm-up area and Equestrian Small Arena with flexible use paving areas and views to the Riverfront and to the Link Plaza and Armour Administration Building on the east side



KEYMAP



View 4: Back-of-house loading area for the Equestrian Barn



FG
9.1

Utilitarian building form



FG
9.5

Vegetated parking garage facade



FG
9.4

Building transparency

INTENT STATEMENT:

The Equestrian Center is the largest building on the Campus, and its design requires careful consideration of the pedestrian experience within, along, and through its architecture. Consider variations in massing, transparency, materials, and set backs. Prioritize key pedestrian frontages at the Link Plaza and the parking garage.

DESIGN CONSIDERATIONS

FG - 9.1 Use a simple, utilitarian overall building form that reflects Western agricultural traditions

FG - 9.2 Use materials reflecting agricultural traditions

FG - 9.3 Use high-quality materials, finishes and detailing at pedestrian level in as many locations as feasible

FG - 9.4 Create a campus-wide character by complementing the architecture of the Livestock Center without mirroring its design

FG - 9.5 Reduce perceived scale by stepping building forms or providing arcades and canopies along plaza edges

- » Consideration of varied building facade material or consistent lengths of set back variation along Link Plaza frontage

FG - 9.6 Provide varying levels of transparency along the ground floor of the building

- » Make some level of interior activity visible from adjacent public spaces
- » Major building entries and frontages to public spaces should have a higher glass-to-wall ratio, while back-of house and loading areas have a lower glass-to-wall ratio
- » Contemporary window designs should respect the character of historic buildings without replicating it

FG - 9.7 Add interest and activation to the parking garage facade

- » Vegetative screens enhance the pedestrian environment with a variation in texture and visual interest
- » Public art opportunities along wall
- » Wall openings for adequate ventilation of the parking garage

FG - 9.8 Provide additional safety measures and signage where the pedestrian walkway crosses parking garage entries

FG - 9.9 Design the building to be sensitive to nearby historic resources

- » Historic resources include the Armour Administration Building and the Water Tower
- » Step down massing to provide a similar scale or solar access opportunity to the historic property

FESTIVAL GROUNDS

LIVESTOCK CENTER



View 1: Entries to the Hall Arena and the Arena Entry Plaza



View 2: Main entrance to the Livestock Arena with ticketing windows



View 3: North face of Livestock Center along the Connection to RTD Transit Station



KEYMAP



View 4: Back-of-house loading area for the Livestock Center

FG
10.2*Contemporary building materials*FG
10.3*Activated pedestrian area*FG
10.4*Building transparency***INTENT STATEMENT:**

The Livestock Center should create and support functional and visually interesting event spaces that meet the needs of the National Western Stock Show and other events throughout the year. The building should create a friendly pedestrian edge along the Link Plaza.

DESIGN CONSIDERATIONS

FG - 10.1 Use simple, utilitarian overall building form that reflects Western agricultural traditions

FG - 10.2 Use a contemporary palette materials and detailing

- » Consider recycling older building materials
- » Use innovative new materials that apply energy conservation and generation technologies
- » High-quality materials and finishes should be concentrated at the pedestrian level
- » Create a campus-wide character by complementing the architecture of the Equestrian Center without mirroring its design

FG - 10.3 Use building transparency, site furnishings, shade structures, planting, bike racks, and pedestrian lighting along high pedestrian use areas to activate the space

- » Primary activation areas include the frontages at the Link Plaza and at the Connection to RTD Transit Station

FG - 10.4 Provide varying levels of transparency along the ground floor of the building

- » Provide some level of interior activity visible from adjacent public spaces
- » Major building entries and frontages to public spaces should have a higher glass-to-wall ratio, while back-of-house and loading areas should have a lower glass-to-wall ratio
- » Contemporary window designs should respect the character of historic buildings without replicating it
- » Use garage doors along the Link Plaza to provide opportunity for indoor/outdoor events

FESTIVAL GROUNDS

EQUESTRIAN PLAZA



Aerial view of the Equestrian Plaza (looking south). This plaza has views towards the Riverfront Open Space and Sheep Bridge.



KEYMAP



The Equestrian Arena could host small indoor / outdoor events associated with Event Center programming.



The Equestrian Plaza provides the opportunity for two large permanent planting areas due to the lack of utility and operational constraints.



Decorative concrete, temporary overhead lighting and event tents



Human - animal interaction



Transformable space with movable and fixed elements

INTENT STATEMENT:

This plaza west of the Equestrian Center arenas overlooks the Riverfront Open Space and has the opportunity to be a flexible event space with indoor / outdoor connections. Consider spaces for movable furniture and planters during events such as conferences, banquets, weddings, and more.

DESIGN CONSIDERATIONS

FG - 11.1 Create clearly distinguished pedestrian and vehicular areas through the creation of contrasting pavement patterns and textures.

- » Due to the vehicular service access required, concrete with decorative scoring is recommended as the primary material.
- » Concrete unit pavers should be studied at pedestrian entries.
- » Create fluid transitions between various pavement zones and types to create a meaningful and holistic design

FG - 11.2 Design the plaza to be a transformable space with movable and fixed elements

- » Strategically place trees and at-grade planters with consideration given to utilities, grading, storage areas and truck turning movements
- » Include irrigated seasonal pots at key entries
- » Integrate vertical gardens through mesh planting screens along facades when appropriate
- » Consider special events during which the Equestrian Center doors could be open to the plaza for indoor / outdoor events

FG - 11.3 Incorporate art and interpretive elements and coordinate with the campus-wide art and interpretive plans.

FG - 11.4 Dedicate adequate space for vehicular service and loading functions

FG - 11.5 Consider creating a covered area for indoor / outdoor events attached to the Equestrian Arena (if architecture and operations allow)





INNOVATION CAMPUS

- CAMPUS ENTRY PLAZA
- LIVESTOCK EXCHANGE PLAZA
- WSSA LEGACY BUILDING
- CSU ANIMAL HEALTH COMPLEX
- CSU CENTER AND WATER BUILDING



IC 4

IC 1

IC 3

IC 5

IC 2

INNOVATION CAMPUS OVERVIEW

VISION: The Innovation Campus Character Area becomes the epicenter of campus, housing institutional and research facilities that will provide year-round activation.

EXISTING CONDITIONS: This Character Area contains the three buildings associated with the Livestock Exchange built between 1898 and 1919, and includes the oldest building on site. It also includes two buildings built during the historic period by Swift & Company, the Artist Studio in 1918 and the McConnell Welders in 1930. The McDonald Farms Enterprises came after 1967. Buildings are sprinkled along the southern leg of National Western Drive.

FUTURE CHARACTER: This area should reflect a contemporary and future-looking center of Campus, with cutting-edge architecture and vibrant public spaces that have the ability to showcase experimental and innovative technologies and research. Bettie Cram Drive is envisioned to be a multi-functional “main street” experience with high levels of visual interest and activation. Connections should be made from Bettie Cram to the surrounding neighborhoods and the rest of Campus and visitors should be seamlessly guided into the Campus interior from the streetscape. The intersection of Bettie Cram Drive and National Western Drive South should, in particular, establish a memorable entry experience, creating the southwestern gateway

Allow flexible design of public spaces and buildings in the southern portion of this Character Area.

INTERPRETIVE ELEMENTS: Home to some of the Campus’s most innovative buildings and the “Main Street,” interpretation in this Character Area should combine the site’s history with the vision for the sustainable, regenerative, and educational future of the site.

CSU buildings should include interpretive and educational elements relating to the river and water resources, Green Infrastructure, urban agriculture and food production, and the site’s native and visitor plants and animals. The Livestock Exchange and Legacy Building and proximity to the rail corridor provide a platform to talk about the Campus’s rich Stock Show and railroad history. Historic elements such as rail lines, pavers, and the catwalk can be re-used or re-purposed as artistic or sculptural elements.

STATE-OWNED PROPERTIES

Most of the properties within the Innovation Campus are state-owned and Colorado State University (CSU) operated; in addition to City and County of Denver Regulations and the SADL review process, these properties are subject to state regulations and requirements.

INCLUDED IN THIS CHARACTER AREA

- | | | | | | |
|-------------|--|--------------|-------------|---|--------------|
| FG 1 | Campus Entry Plaza | p 108 | FG 4 | CSU Animal Health Complex | p 114 |
| | The main pedestrian entry into the central area of Campus, this plaza should be iconic and easily navigable. May host small events. | | | Visually interesting building that anchors one of the site’s key intersections. Tells the story of animals on the site, CSU, and provides a community benefit. | |
| FG 2 | Livestock Exchange Plaza | p 110 | FG 5 | CSU Center and Water Building | p 116 |
| | Plaza connecting parking to Bettie Cram Drive and celebrating the historic Livestock Exchange Building. Significant opportunities for tree planting and interpretation exist here. | | | Innovative and visually striking building that represents sustainability best practices and tells the story of CSU, the river, and its significance to the NWC. | |
| FG 3 | WSSA Legacy Building | p 112 | | | |
| | One of the primary visitor focused buildings on Campus. Modern while still in keeping with the NWC Character and welcoming to visitors and pedestrians along Bettie Cram Drive. | | | | |

INNOVATION CAMPUS

CAMPUS ENTRY PLAZA



View of the Entry Plaza, looking north from the intersection of Bettie Cram Drive and National Western Drive South.



KEYMAP



The Entry Plaza has capacity to host events such as markets and exhibitions.



Large planters can be used for urban agriculture and educational events.

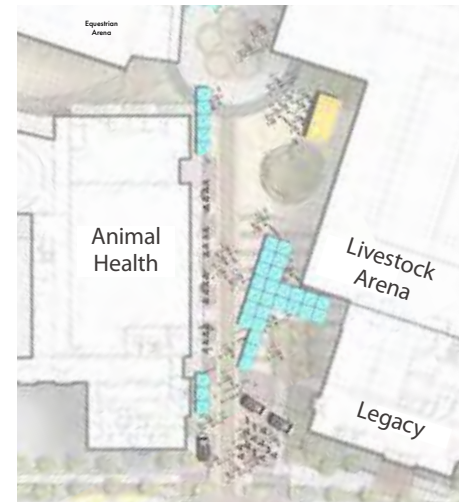
Programming Alternatives



CSU Special Event



Food Truck Festival



Event Stage and Festival

INTENT STATEMENT:

As one of the main pedestrian entry points to the interior portion of the Campus, the Entry Plaza provide an iconic and welcoming gateway to the Campus. This area will be a key wayfinding point that orients visitors to the surrounding buildings and public spaces, and creates a seamless transition from the Bettie Cram Drive streetscape.

DESIGN CONSIDERATIONS

IC - 1.1 Provide wayfinding into Campus

- » Large scale sponsorship or advertising signage that can be easily updated based on event needs
- » Pedestrian oriented directional wayfinding to aid navigation into the Campus interior
- » A campus map to help guide first time visitors

IC - 1.2 Design planting areas to be context sensitive

- » Informal planting areas along Bettie Cram Drive with an emphasis on water quality and Green Infrastructure features
- » More formal planting beds as the plaza moves into the center of campus to help lead visitors into the space and differentiate it from the street
- » Ensure planting areas do not conflict with vehicle movements and utility corridors

IC - 1.3 Provide separation between travel modes

- » Enhance pedestrian safety by providing vertical separation between vehicles and plaza space
- » Consider removable bollards to accommodate event and emergency vehicle needs

IC - 1.4 Design elements to draw visitors into campus

- » Use vertical elements such as planters, trees, and lighting at regular intervals to guide visitors through the plaza and into the campus core

IC - 1.5 Differentiate paving materials by use

- » Use distinct paving materials or finishes to differentiate areas of continuous travel in the streetscape and areas of pause in the plaza
- » Use distinct paving materials or finishes to indicate significant building entries

IC - 1.6 Consider public art opportunities to signal campus arrival

INTERPRETIVE OPPORTUNITIES

- » *Public art to signal grand entry to Campus*
- » *Sculptural or artistic element that tells the history of the Stock Show (where the entry plaza meets the Festival Grounds)*
- » *Planting along Bettie Cram that connects to the natural South Platte riparian corridor*

INNOVATION CAMPUS

LIVESTOCK EXCHANGE PLAZA



View of the Livestock Exchange Plaza, looking north from the surface parking at the Innovation Campus.



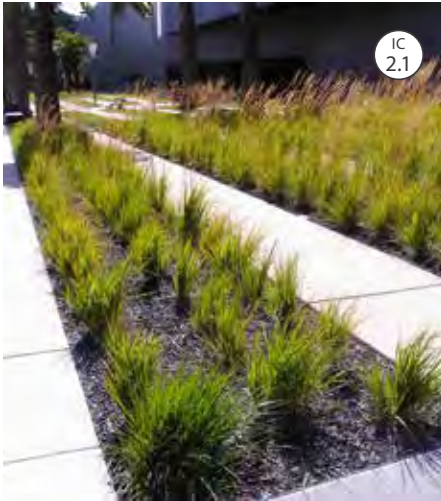
KEYMAP



This small plaza will primarily be used by the building tenants and by private organizations for small functions.



The Livestock Exchange Plaza may be used for minor events such as public speakers or small live music performances.



IC 2.1

Integrate formal planting areas



IC 2.2

Consider historic or adaptive re-use materials



IC 2.8

Incorporate public art opportunities

INTENT STATEMENT:

This plaza is adjacent to the historically significant Livestock Exchange building and the railroad corridor. The plaza design should reflect the heritage of these Campus features. It is also one of the areas on the Campus that can and should accommodate significant planting and tree canopy. The space should be comfortable and rich in pedestrian amenities.

DESIGN CONSIDERATIONS

IC - 2.1 Integrate formal planting areas with additional opportunities for urban agriculture

- » Maximize landscaping opportunities in this area
- » Plant trees on either side of the main path
- » Consider small garden plots or other functional landscaping

IC - 2.2 Connect to the heritage of the Livestock Exchange Building

- » Consider materials that match the historic building
- » Consider historic or adaptive re-use materials
- » Use design elements to frame the building and highlight its entrance
- » Consider interpretive opportunities relating to the historic building

IC - 2.3 Tree planting and canopy should not conflict with the Livestock Exchange building facade

IC - 2.4 Connect the design to the adjacent railroad

- » Consider materials that are modern and industrial
- » Consider public art and interpretive elements that tells the story of the railroad and the historic building

IC - 2.5 Use lighting and vertical elements to guide pedestrians from the street to building entrance and to the connecting parking area

IC - 2.6 Use paving materials to distinguish areas of continuous movement and pause

- » Use distinct materials and finishes to differentiate the plaza from the streetscape and main walkway

IC - 2.7 Provide flexible furnishings to encourage visitors to linger

- » Consider providing tables, seating, and other pedestrian amenities
- » Consider furnishings that activate the space
- » Use flexible furnishings to accommodate small events

IC - 2.8 Incorporate public art opportunities on the rail wall and in the plaza

INTERPRETIVE OPPORTUNITIES

- » *Paving or furnishings relating to freight and rail materials to relate to the adjacent rail corridor*
- » *Identifying the historic Livestock Exchange building and its importance to the Campus*
- » *Rail lines or historic pavers connecting to parking area*
- » *Reusing historic catwalk in an artistic or sculptural element*

INNOVATION CAMPUS

WSSA LEGACY BUILDING



View 1: The WSSA Legacy Building, looking east from the CSU Water Building.



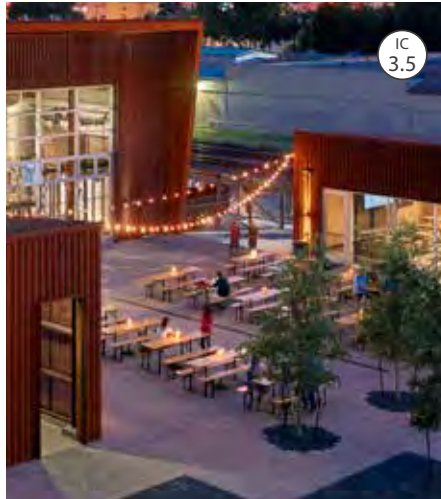
KEYMAP



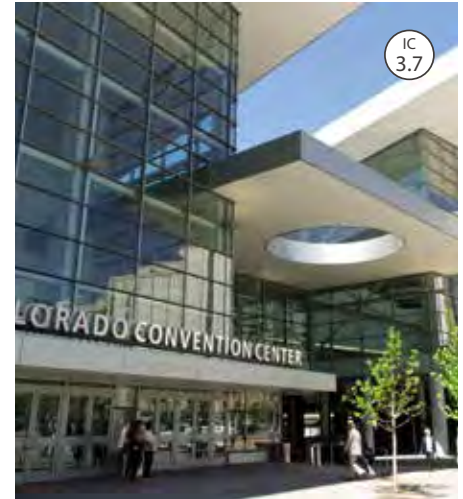
View 2: The WSSA Legacy Building, looking north from the CSU Center and Livestock Exchange Building.

IC
3.3

Use modern materials with a rustic influence

IC
3.5

Provide an active and transparent ground floor

IC
3.7

Use awnings and balconies to provide scale

INTENT STATEMENT:

One of the most prominent buildings along Bettie Cram Drive, the Legacy Building should visually reflect the site's history with a modern and innovative interpretation. This building should be highly transparent and serve as a key activation for the streetscape and adjacent plaza.

DESIGN CONSIDERATIONS

FG - 3.1 Use openings of a standard size to visually orient pedestrians and break up the scale of the large building

FG - 3.2 Provide significant articulation to create visual interest and break up the large facade

- » Consider accent lines, including moldings, sills, and pilasters, and changes in material and color to articulate the building facade

FG - 3.3 Use modern materials with an industrial and/or rustic interpretation

- » Consider wood, weathered steel, and masonry

FG - 3.4 Use visually prominent building entries that signal pedestrians

FG - 3.5 Provide an active and transparent ground floor design

- » Provide visual transparency and active ground floor uses to encourage pedestrian use and a lively campus entry plaza
- » Consider providing pedestrian furnishings adjacent to windows or active entries

FG - 3.6 Use landscaping to provide visual interest at the base of the large building

- » Use low-level and informal planting to visually soften the building edge

FG - 3.7 Use awnings and balconies to provide pedestrian comfort and scale and visual interest

FG - 3.8 Incorporate distinct paving materials around entries and building base to differentiate from plazas and streetscape

FG - 3.9 Incorporate opportunities for art and interpretation near building entries or interior entry/lobby spaces and in display cases along the facade

INTERPRETIVE OPPORTUNITIES

- » Artistic or sculptural elements around entry areas to invite visitors in and tell the story of the NWC
- » Image of "the Champions" displayed prominently in lobby area
- » Art and signage in display cases along the facade, elements should relate to Stock Show history

INNOVATION CAMPUS

CSU ANIMAL HEALTH COMPLEX



View 1 Buildings should have a strong indoor-outdoor relationship.



View 2: Entries should be defined with vertical features and amenities.



View 3: Large balconies should be placed to maximize potential views of the Riverfront.



KEYMAP



View 4: Transparency of the facade is particularly important along the Entry Plaza, where the CSU Animal Health Complex will have opportunities for public interaction and education.



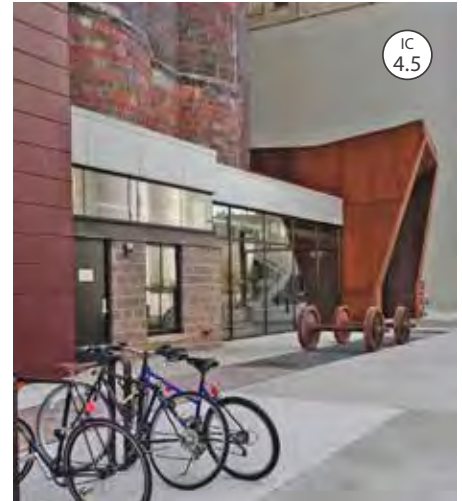
IC
4.2

Potential for green roofs and solar panels



IC
4.2

Bioretention and urban agriculture as educational/teaching opportunity for CSU



IC
4.5

Use high-quality, visually interesting materials

INTENT STATEMENT:

The CSU Animal Health Complex provide a strong anchoring use at the corner of Bettie Cram and National Western Drive that fits the overall Campus vision, provides a community benefit, and activates the surrounding streets and plazas.

DESIGN CONSIDERATIONS

FG - 4.1 Ensure a high degree of transparency along Bettie Cram Drive and the Entry Plaza

- » Use windows and active uses wherever possible along these critical pedestrian oriented edges

FG - 4.2 Design the building and surrounding area to contribute positively to the natural environment and exhibit best practices in green technology

- » Consider green roofs and solar panels
- » Incorporate planting areas and urban agriculture around the building
- » Consider Green Infrastructure strategies in all surrounding planting areas, consider incorporating educational opportunities for CSU
- » Incorporate habitable outdoor space around the building for visitors and potential inhabitants

FG - 4.3 Ensure the building is designed for animal comfort as there will be a variety of animal users in and around the building

- » Use durable paving that can withstand animal traffic
- » Avoid materials that create harsh contrasts or are highly reflective

FG - 4.4 Use architectural and vertical elements to signal entries clearly to pedestrians

FG - 4.5 Provide an active and visually interesting pedestrian realm along the building

- » Use high-quality and visually interesting materials, particularly along the first floor of the building
- » Provide a cadence of vertical features and building articulation along Bettie Cram Drive for visual interest
- » Consider art or vertical planting elements to activate and add visual interest along Bettie Cram and National Western Drive

FG - 4.6 Locate parking areas off the street and ensure they are screened from Bettie Cram and National Western Drive

INTERPRETIVE OPPORTUNITIES

- » Use art or signage to tell the story of animals on the site
- » Incorporate CSU branding
- » Urban agriculture should be accompanied by educational elements
- » Potential opportunity to talk about pollinator health in conjunction with pollinator friendly planting areas

INNOVATION CAMPUS

CSU CENTER AND WATER BUILDING



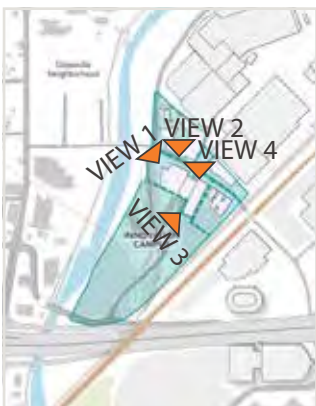
View 1: The CSU Water Building will have a west-facing facade with views and access to the Riverfront.



View 2: Activate the Bettie Cram Drive intersection with placemaking strategies.



View 3: Materiality and the use of advanced technologies creates an identity for the Innovation Campus.



KEYMAP



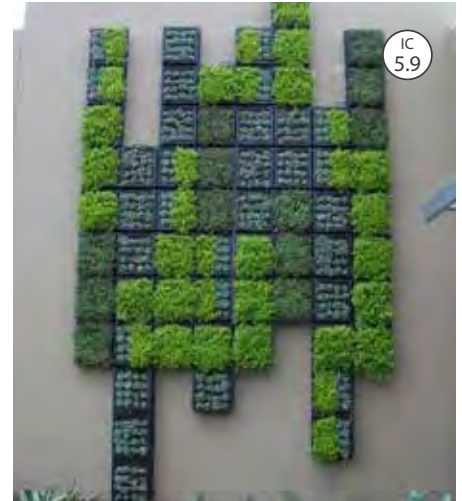
View 4: Opportunity for creative roadway crossings and connections between the CSU Center and the CSU Water Building.



Consider green roofs and solar panels



Provide outdoors space that activates the street



Consider art or vertical planting elements

INTENT STATEMENT:

To create an innovative building that meets CSU and Campus goals for innovation, research, education and sustainability and provides significant activation and visual interest along Bettie Cram Drive.

DESIGN CONSIDERATIONS

FG - 5.1 Ensure a high degree of transparency along Bettie Cram Drive and National Western Drive South

- » Use windows and active uses wherever possible along this critical pedestrian edge
- » Provide views of interesting internal uses

FG - 5.2 Activate both sides of National Western Drive South and provide a visually interesting means of crossing the street

FG - 5.3 Design the building to contribute positively to the natural environment and exhibit best practices in green technology

- » Consider green roofs and solar panels to the extent feasible
- » Connect the building design to the adjacent riparian and drainage area, consider educational elements that tie into the River and water quality

FG - 5.4 Design the surrounding landscape to exhibit excellence in sustainability and water quality best practices

- » Consider Green Infrastructure strategies in all surrounding planting areas

FG - 5.5 Provide outdoor space that activates the streetscape

- » Integrate pedestrian amenities including planting areas, furnishings, and tree canopy

FG - 5.6 Provide a cadence of vertical features and building articulation along Bettie Cram Drive for visual interest

FG - 5.7 Use architectural and vertical elements to signal entries clearly to pedestrians

FG - 5.8 Incorporate modern and iconic materials that reflect the innovative nature of the Character Area and building uses

FG - 5.9 Consider art or vertical planting elements to activate and add visual interest along Bettie Cram and National Western Drive South

FG - 5.10 Provide views of the adjacent Riverfront

INTERPRETIVE OPPORTUNITIES

- » Connect to the history of the river corridor and the importance the river played in the site's history
- » Educate users about Green Infrastructure and water resources
- » Artistic or sculptural elements around entry areas





RIVERFRONT

- NORTHERN DRAINAGE AREA**
- CENTRAL RIVERFRONT AREA AND SHEEP BRIDGE**
- SOUTHERN PROGRAM AREA AND CAFE**
- SOUTHERN DRAINAGE AREA**



RF 1

RF 2

RF 3

RF 4

RIVERFRONT OVERVIEW

VISION: The Riverfront becomes a celebrated community asset with a series of spaces and activities that allow the neighborhoods and the Campus to engage with the river.

EXISTING CONDITIONS: The Riverfront Character Area runs for approximately 1.3 miles from Globeville Landing Park to the Heron Pond, Heller and Carpio-Sanguinette Open Space along the western edge of the NWC. Today, the river is largely inaccessible due to overgrown vegetation, the Globeville Levee to the west and the Delgany Interceptor sanitary sewer lines and a portion of the Denver Rock Island Railroad (DRIR) to the east. The area also includes the historic Sheep Bridge.

FUTURE CHARACTER: Description

The riverfront area should create an open space amenity with a variety of recreation opportunities for the surrounding neighborhoods and make connections to the South Platte Trail and the rest of Denver. Natural elements, riparian plants, and sturdy rustic materials should be used throughout the river frontage. The Character Area's edge along National Western Drive should provide visual interest and activation while the edge along the South Platte should remain mostly natural with all designed elements remaining sensitive to the river and local flora and fauna. A few modestly scaled buildings can activate the space while ensuring compatibility with and sensitivity to the river.

INTERPRETIVE ELEMENTS: Include riparian habitat restoration and innovative storm water management. These elements should be made clear in the area's interpretive designs. Aspects of environmental education should be incorporated throughout the riverfront. Views of the river and large natural planting areas provide opportunities to inform visitors about the site's original form and even about early inhabitants of the area. The open green space should provide a significant community benefit and connect users to the surrounding neighborhoods and the rest of Denver.

EXISTING TREES

Almost all existing trees on the Campus are located in the Riverfront Character Area. Ensure that construction in this area does not conflict with tree protections zones, grades, drip-lines, and roots. Coordinate with City Staff such as Forestry Operations and Natural Areas to identify existing vegetation and what to preserve or remove.

INCLUDED IN THIS CHARACTER AREA

- | | |
|---|--|
| <p>RF 1 North Drainage Area pg 122
Less programmed area on the far north end, functioning as water filtration and habitat regeneration. Some public and event space along National Western Drive North.</p> | <p>RF 6 Southern Program Area and Cafe pg 126
A highly programmed area, including some small buildings, active plazas, and other activities and event areas. Some river access should be provided here.</p> |
| <p>RF 2 Central Riverfront Area and Sheep Bridge pg 124
A moderately programmed area with some plaza space and pathways through natural green space. More activation along National Western Drive North.</p> | <p>RF 7 Southern Drainage Area pg 128
Less programmed area on the far south end, functioning as water filtration and habitat regeneration. Includes walking loop and connections to the CSU Water Center.</p> |

RIVERFRONT

NORTH DRAINAGE AREA



View 1: The Riverfront Area, looking southeast.



KEYMAP

RF
1.1*Clean and filter Campus runoff*RF
1.2*Engage visitors with the natural landscape*RF
1.6*Provide open green space and water filtration***INTENT STATEMENT:**

This area provides a large swatch of open green space on the site that functions as a water filtration and natural riparian area. The area should be minimally accessible with public space primarily around the exterior to allow people to experience the space.

DESIGN CONSIDERATIONS**RF - 1.1 Clean and filter Campus runoff before it reaches the South Platte River**

- » Create a water quality inlet in this space

RF - 1.2 Engage visitors with the natural landscape

- » Provide native planting areas and tree canopy throughout this area

RF - 1.3 Provide maintenance access in the event the area needs cleaning, flood repair, or other maintenance**RF - 1.4 Incorporate flexible space along National Western Drive North for small events such as food trucks or market tents**

- » Use different paving materials or finishes to distinguish this area from the main sidewalk along the street

RF - 1.5 Consider canopies or shade structures to make the public space habitable in hotter seasons**RF - 1.6 Provide a community benefit through open green space and water filtration****RF - 1.7 Consider interpretive or educational markers to educate visitors about Green Infrastructure and the natural river riparian**

RIVERFRONT

CENTRAL RIVERFRONT AREA AND SHEEP BRIDGE



View 1: The Riverfront Area, looking southeast.



KEYMAP



View 2: The National Western Drive multi-use path, looking north.



The historic sheep bridge



Use mostly natural riparian planting



Consider a river access point



Incorporate water quality features

INTENT STATEMENT:

This large natural area brings visitors closer to the river. Small informal plazas and meandering paths allow people to interact more closely with the area's natural habitat and the historic sheep bridge.

DESIGN CONSIDERATIONS

- RF - 2.1 Use mostly natural riparian planting and some tree canopy
- RF - 2.2 Consider more formal planting within plaza spaces
- RF - 2.3 Provide access through this area with meandering paths
 - » Consider a river access point
- RF - 2.4 Locate some flexible plazas and gathering areas along the multi-use path off of National Western Drive North
 - » These plazas, in conjunction with pedestrian amenities, should provide activation along the streetscape
- RF - 2.5 Locate a plaza under the historic sheep bridge
 - » Provide historic and interpretive elements
 - » Consider public art and adaptive reuse
- RF - 2.6 Provide overlooks to the river and downtown whenever possible
- RF - 2.7 Include pedestrian furnishings including benches, tables, and shade structures
- RF - 2.8 Significant wayfinding should be provided in the areas along National Western Drive North
- RF - 2.9 Incorporate Green Infrastructure and water quality features, with the potential for educational opportunities

RIVERFRONT

SOUTHERN PROGRAM AREA AND CAFE



View 1: The Riverfront Area, looking east across the bridge at Bettie Cram Drive.



KEYMAP



Include an outdoor amphitheater



Locate small public spaces in this area



Use a combination of paved and soft surfaces

INTENT STATEMENT:

One of the most highly activated areas of the riverfront, this space should include small buildings such as a cafe, flexible plazas with furnishings, and other opportunities for activities and interpretation of the site's natural history and amenities.

DESIGN CONSIDERATIONS

RF - 3.1 Provide pedestrian amenities in highly programmed areas

- » Appropriate elements include furnishings, lighting, and some indoor uses

RF - 3.2 Include an outdoor amphitheater to host small events in this unique natural setting

RF - 3.3 Consider incorporating a learning lab

- » Provide activities for families and educate visitors about the river, the riparian habitat, and food production

RF - 3.4 A modestly scaled building should include a cafe with outdoor seating

- » Potential for seasonal activities such as corn-hole

RF - 3.5 Locate community gardens in this area, particularly in the area around the intersection of National Western and Bettie Cram Drive

- » Incorporate community participation and the opportunity for urban agriculture education

RF - 3.6 Locate small public spaces off of the multi-use path along National Western Drive North

- » Public spaces should remain flexible to accommodate a variety of small events

RF - 3.7 The adjacent bridge should provide an overlook onto this area and the Riverfront

RF - 3.8 Use a combination of paved and soft surface trails in this area to bring visitors closer to the Riverfront.

RIVERFRONT

SOUTHERN DRAINAGE AREA



View 1: The Riverfront Area, looking northeast.



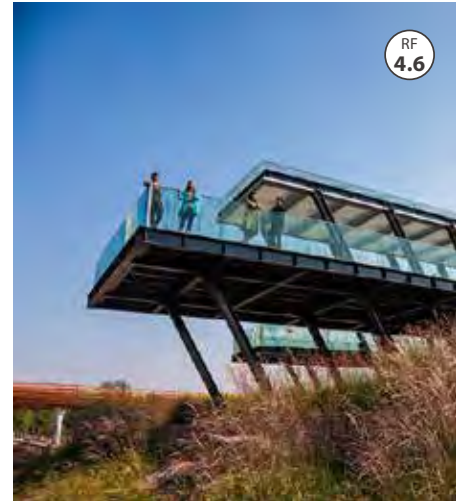
KEYMAP



Engage visitors with the natural landscape



Provide open green space and water filtration



Consider view opportunities

INTENT STATEMENT:

This area will mostly function as another major site for water filtration and habitat restoration. It should include mostly natural elements and Green Infrastructure design elements with some opportunities for people to interact with the space in a passive and educational capacity. This area should directly connect to the CSU Water Building.

DESIGN CONSIDERATIONS

RF - 4.1 Clean and filter Campus runoff before it reaches the South Platte River

- » Create a water quality inlet in this space

RF - 4.2 Engage visitors with the natural landscape

- » Provide native planting areas and tree canopy throughout this area
- » Design for habitat restoration

RF - 4.3 Provide a community benefit through open green space and water filtration

RF - 4.4 Consider interpretive or educational markers to educate visitors about Green Infrastructure, habitat restoration, and the natural river riparian corridor

RF - 4.5 Provide a walking loop to engage visitors with the natural area

RF - 4.6 Connect to the CSU Water Building

- » Provide opportunities for educational and interpretive elements including a “Learning Lab”
- » Consider view opportunities for Water Building visitors to view this area



NWC Placemaking Study Rendering: Looking north at Betty Cram Drive and the Entry Plaza

ADDITIONAL RESOURCES

NATIONAL WESTERN CENTER CAMPUS PLACEMAKING STUDY DOCUMENTS

The Campus Placemaking Study was an effort completed by a multi-disciplinary team in partnership with NWCO, the CAC, and public input to provide a refined framework (after the 2015 Master Plan) for all future development on the site, including the public spaces and how the site will stitch together the surrounding neighborhoods with great streets, exciting public spaces, public art and a vibrant mix of uses to complement the NWC's goals of world-class entertainment, experiential learning and research and agribusiness. The study also produced a final site plan, traffic impact study, 30% grading and infrastructure design, preliminary road and right-of-way design, and preliminary bridge design.

The documents delivered through the study are either available through the National Western Center website or by contacting the Mayor's Office of the National Western Center. The Study was divided into four Task Orders (projects or phases) and the documents are organized as such.

TASK ORDER #1 DOCUMENTS:

1. Public Meeting Notes (1.2e)
2. Equestrian Programming (1.3c)
3. Livestock Programming (1.3c)
4. Stockyards Programming (1.3c)
5. Treatment Recommendations for Historic Site Features (1.4b)
6. Stockyards Historic Feature Site Inventory Catalog (1.4b)
7. Campus Cultural Plan (1.4c)
8. Campus Character Area Memo (1.4d)
9. Public Space Plan (1.4d)

TASK ORDER #3 DOCUMENTS:

1. Updated Character Areas Memo (3.3)
2. User Experience Report (3.4a)
3. Operational Overlays and Memo (3.4c)
4. October 12, 2018 Campus Placemaking Study Summary Presentation (3.6)
5. Pedestrian Flow and Multi-Modal Connections (3.7)
6. Smart Campus Recommendations (3.8)
7. Signage and Wayfinding Concept Vision (3.10)
8. Open Space Programming Recommendations (3.13)
9. Building the First Phase of the National Western Center (Fly-through) (3.14)

TASK ORDER #4 DOCUMENTS:

1. Design Standards and Guidelines (4.4)
2. Outreach Videos (4.6)



NWC Placemaking Study Rendering: Ground level view looking northeast at the Entry Plaza



NWC Placemaking Study Rendering: Looking southeast at the Stockyards Event Center

ADDITIONAL RESOURCES

OTHER PROJECTS RELATED TO THE NATIONAL WESTERN CENTER (NWC):

The below projects are related to the future National Western Center or the surrounding neighborhoods, streets, natural resources, and infrastructure:

1. NWC Parking and Transportation Demand Management Plan
2. Brighton Boulevard Segment 3 Design
3. Historic Site Documentation (by NWCO)
4. Washington Street Study (North Denver Cornerstone Collaborative [NDCC])
5. Heron Pond/Heller Open Space/Northside Park Master Plan (NDCC/DPD)
6. NWC Delgany Interceptor Study (NDCC) (AECOM, managed by NWCO)
7. Colorado State University (CSU) Water Resources Center and Equine Sports Medicine Center Programming (Design currently underway)
8. Advertising and Sponsorship Study (by WSSA)
9. Historic Resources Assessment/Inventory (Mead & Hunt)
10. NextGEN Agribusiness Economic Development Study - 2017 Work Plan Objectives
11. Campus regeneration effort, including Net Zero Energy, Waste, and Water Technical Specifications
12. 1909 Stadium Arena Historic Structure Assessment and Economic Feasibility Study
13. NWC Branding Study
14. NWC Program Performance Management and Key Performance Indicators (KPI's) (from NWCO)
15. WSSA Legacy Building Programming
16. USACE Urban Waterways Study
17. NWC Phase 1 and 2 In-progress Design Efforts
18. NWC Public Art Master Plan