



DRAFT

MAY 30, 2018  
PLACEMAKING STUDY



# NATIONAL WESTERN CENTER PUBLIC SPACE PROGRAMMING



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## INTRODUCTION

This report focuses on the **programming and activation of public realm spaces** within the initial phasing build-out of the National Western Center (NWC) campus (Figure 1). Generally speaking, the “public realm” includes the outdoor spaces between and surrounding the permanent indoor structures. This report may reference and shall work in concert with the following deliverables for the National Western Center Placemaking Study.

- Campus Cultural Plan
- Market Study
- Demand Projections
- Building/Facility Programming

### DOCUMENTATION OF INPUT

The content herein was developed through a collaborative process including the Placemaking Study team, Mayor’s Office of the National Western Center (NWCO), Colorado State University (CSU), Western Stock Show Association (WSSA), the Community Advisory Committee (CAC) and featured interviews with potential event hosts. Documenting ideas explored is important for the National Western Center Authority (NWCA) to be able to consider, prioritize, and implement in the future. For a full list of documented input refer to **Appendix A - Public Realm Programming Interviews and Input**.

It is important to note that programming for public spaces began prior to the selection of an approved site plan. While this allowed for flexibility of spaces due to unknowns, it also complicated programming because the arrangement of public spaces was always changing and therefore ideas could not be fully tested. Due to an evolving site plan, many programming concepts herein are kept broad. Future task orders will continue to determine the applicability and space requirements for such programs.

### CONSIDERATIONS FOR FUTURE TASK ORDERS

The public realm programming provided in this document is intended to narrow the potential universe of uses for the Phase 1 and 2 public spaces within the National Western Center Campus. The programming information provided herein will be utilized to inform future site design, including the Task Order 2 infrastructure and grading framework.

In Task Order 3, the public realm programming information will provide the basis of conceptual design for the Phase 1 and 2 public spaces. The Placemaking Study team will work with stakeholders to further refine the programming information in Task Order 3 to ensure that the conceptual design and design guidelines (developed in Task Order 4) respond to the vertical construction, adjacent streets and open spaces, and community needs and desires.

### THE ROLE OF THE AUTHORITY

As part of the National Western Center Framework Agreement dated August 2017, the National Western Center Authority will be responsible for the coordination of community outreach, relations related to campus-wide operations, finance, programming and other campus-wide matters as they arise. The Authority will complete an Operations Master Plan for campus-wide operations, programs, and activities for the succeeding two years, including permanent improvements or programmatic strategies. The authority will act as the Master scheduler in charge of programming and events for the campus.



A place for exploration and teaching.



A place for research and therapy (Fort Collins, CO).



A place for entertainment.



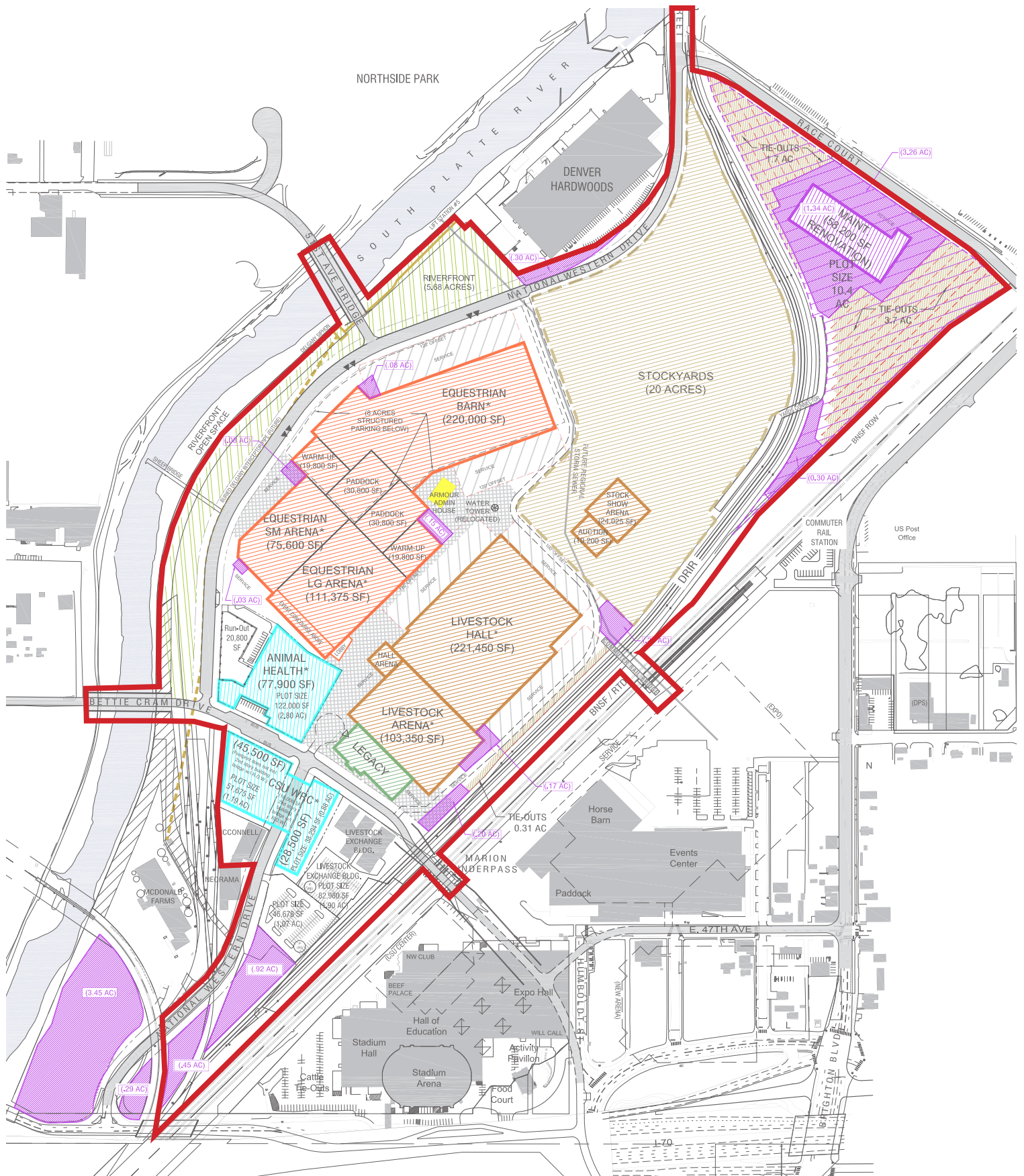


Figure 1: Extent of Programming Area - Phases 1 and 2



Before getting into the public realm programming content, it is important to reiterate the National Western Center’s Mission Statement and Guiding Principles, which serve as the foundation for the Placemaking Study:

### VISION STATEMENT

To be a global destination for agricultural heritage and innovation.

### MISSION STATEMENT

Our 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 presents a once in a lifetime 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 provide a broad focus on entertainment, food, animal health and performance, water, energy, agriculture, rodeo, livestock, equestrian, and sustainability and the environment.

With each successive generation, greater concern is focused on global challenges that impact all, including how to feed nine billion people, solve freshwater shortages, and address climate change. Within these challenges lies an opportunity for the National Western Center to engage current and future generations through programs, facilities, and messages accessible to those from all walks of life.

The National Western Center envisions a “campus” or “community” of partnerships between the public and private sectors that blur the line between entertainment, competition, education, and industry. It envisions a Center that offers lifelong educational opportunities impacting the pre-school through college population, as well as lifelong learners throughout Colorado and the Rocky Mountain region.

The National Western Center benefits the local neighborhoods, the Denver metropolitan area, the P-12 school system, our interwoven network of higher education and cultural institutions and the state of Colorado — all while delivering outcomes that can be broadly applied and scaled to address similar challenges globally.

The National Western Center will become an international model for a educational, business, entertainment, and research and community development, made stronger by the lasting commitment and vision of the founding National Western Center partner entities, and the many partners to come.

### GUIDING PRINCIPLES (FROM NWC MASTER PLAN, MARCH 2015)

- Community and neighborhood integration;
- Engage the river and nature;
- Celebrate Western heritage;
- Inspire health and wellness;
- Build cultural crossroads;
- Be pioneering: break trail and foster innovation;
- Create fun and entertaining experiences;
- Grow local, regional, and global intelligence; and
- Embrace an ethic of regeneration.



A place for curiosity and learning.



A place to relax and enjoy nature and people watching.



A place of the past and of the future (Denver, CO).





Public safety is of paramount importance on the campus and Denver's Mounted Patrol fit in well with the equestrian culture.



A century-old tradition will progress into the future (Denver, CO).



NWC will become a laboratory for agricultural innovation.

### WHY PROGRAM?

Programming for exterior public spaces on the campus is important for:

- **Destination** - to create a special place for visitors, the neighborhoods, families, employees - a place for everyone to find something special;
- **Activation** - to provide daily activation of the campus that energizes surrounding neighborhoods;
- **Flexibility** - understanding various user groups and how different people will use and interact with spaces, as well as to get the most out of every space;
- **Revenue** - provide a place for private investment and revenue generation;
- **Public safety** - maintaining appropriate access and space for emergencies as well as using environmental design principles to naturally activate and keep "eyes on the public spaces" to prevent crime;
- **Infrastructure** - to develop a "systems" approach to infrastructure and think about how public realm spaces could serve as: multimodal connections, stormwater management, maintenance and storage, and energy and food production facilities. This is especially important given the mission and goals for the NWC campus;
- **Design** - to influence the design phase of public realm spaces;
- **Program Guide** - to provide a guide for potential programming ideas to the NWC Authority Board who will manage and operate the site and who will be in charge of programming the campus when it is up and operational.

### THE ROLE OF PUBLIC SPACE

The build-out of the NWC campus is not only about the facilities that will host hundreds of events annually - although they are a critical element - it is also about contributing to the community in the form of public space and creating a world-renowned campus that is pioneering and innovative.

In November 2015, Denver voters overwhelmingly passed measure 2C, authorizing the City of Denver funding for Phases 1 and 2 of the master plan (including the Stockyards, Livestock Center, Equestrian Center, and all land acquisition, pad-ready site conditioning, and horizontal development.) At its core, the master plan set out to accomplish the following broad objectives:

- **A promise to the neighborhoods** - The Plan plays a key role in connecting Globeville, Elyria and Swansea through new and improved multimodal connections. The NWC campus is regenerative, improves health via spaces for activity and fresh food, and provides amenities that can be used and enjoyed by the community.
- **A promise to the National Western Stock Show** - The Plan advances the City's intent to secure and grow the National Western Stock Show for the next 100 years as the state's largest agriculture convention;
- **A promise to promote tourism** - The Plan sets in motion the creation of a year-round destination to promote new out-of-state tourism in partnership with new and existing partners such as Visit Denver, Western Stock Show Association, Colorado State University, the Denver Museum of Nature & Science and History Colorado; and
- **A promise to the world** - The Plan positions Denver as a global player in 21st-century agricultural issues that will help advance, through new public/private partnerships, our knowledge around food production, safety, and the expansion of healthy foods at an international scale. It also incorporates regeneration principles, demonstrating sustainability and a holistic approach to integrating multiple sectors to benefit the world, while also hosting entertainment.



## PUBLIC SPACE TYPES

Phases 1 and 2 of the NWC campus include a variety of public space types. The following five prototypes have been determined:

- **Large plazas** - these spaces are associated with primary buildings on the campus. They are flexible spaces that can host outdoor events, serve as queuing space for large indoor events, or simply serve as a pleasant space to relax, learn, or play. They are more formal, public-facing spaces that are well-designed and detailed as well as safe and welcoming. They will also have a hierarchy of space - including both large, open areas as well as more intimate and secluded spaces.
- **Small plazas** - these spaces are smaller and have more defined roles in most cases. They may still be flexible in terms of use, but spatially are much more intimate than the large plazas.
- **Transformable space** - this space type is unique to the new stockyards area, which has always been planned as a unique and highly flexible space that serves multiple purposes. This space will serve the following purposes:
  - National Western Stock Show Stockyards - the entire space during the 16-day show in January will be solely dedicated to and programmed for the outdoor stockyards.
  - Outdoor pens - during other events some of the space may still be used for temporary or permanent animal pens
  - Special events - having a large, flat surface on the campus provides a flexible space where large outdoor events could occur, such as: music festivals, farmer's and flea markets, car shows, and more.
  - Parking - much of this space will become surface parking for the campus when not in use by pens or other events.
- **Streets, Bridges, and Underpasses** - new multimodal connections are included as part of phases 1 and 2. The streets will serve as connections to the surrounding neighborhoods and through the campus as well as being a "public face" and gateway to the campus. Bridges and underpasses will provide connections as well as vistas and overlooks and places for public art and storytelling.
- **Open Space** - this space type, primarily dedicated to the riverfront, is a public amenity for recreation, relaxation, education, storytelling, public art, and water quality.

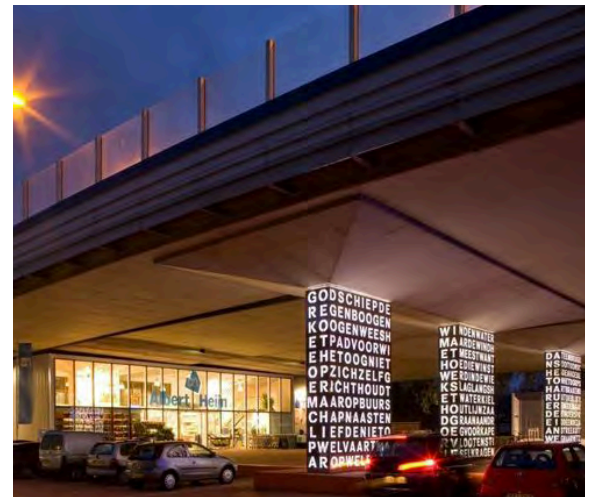
Throughout this document, the terms "inside the fence" and "outside the fence" are used. While the exact boundaries will be established in future task orders, the general definitions are as follows:

**INSIDE THE FENCE** - During the National Western Stock Show and other large events, these spaces will be accessible via ticketed entry. In other words, they are not always accessible to the public.

**OUTSIDE THE FENCE** - These spaces are accessible to the general public most times of the year (e.g. nighttime hours for parks, plazas and open space may be enforced but otherwise, they are free for the public to use).



Large plazas are well-designed and flexible spaces that include a hierarchy of space (Denver, CO).



Streets, bridges and underpasses are part of the public realm and should be designed as special places too.



Educational programming is a primary goal for the campus.





Active ground floor uses are desired.



Activities for families and children help keep the campus vibrant and interesting year-round.



Access to fresh food for nearby neighborhood residents and the general public is a key mission.

## PROGRAMMING TYPES

Generally, there are two types of programming for public realm spaces:

- **Everyday Activation** - this includes programming that brings people to and through the campus 365 days a year, such as:
  - active ground floor uses that draw people to use the site on a daily basis such as restaurants and retail;
  - opportunities for "pop up" restaurants, retail and activation such as food trucks, temporary art installations, and more;
  - amenities such as recreation opportunities and public tours;
  - outdoor education such as open air classrooms, learning laboratories, etc.
  - heritage tourism and public art; and
  - public transit and access via streets and trails
- **Special Events** - this includes planned programming that brings people to the campus for a particular reason, such as:
  - "The Big Three" major events managed by WSSA:
    - » National Western Stock Show,
    - » Denver County Fair, and
    - » Pro Rodeo;
  - Concerts;
  - Rodeos;
  - Car shows, boat shows, RV shows;
  - Equestrian and Livestock shows;
  - Trade shows;
  - Education and professional summits/conferences;
  - Outdoor markets;
  - Outdoor festivals for food and art;
  - Races; and more...



## ENVIRONMENTAL CONSIDERATIONS

Given the mission for the National Western Center, it is absolutely critical that environmental considerations are taken seriously with every step. The public realm is an opportunity to showcase the planning, design and thoughtful consideration of these elements.

The following documents are provided in **Appendix B: Environmental Considerations** and should be referenced for design and engineering:

- National Western Center Master Plan, Appendix D (March, 2015) - includes **Sustainability and Regeneration Framework Goals** for each of the principles which should be referenced.
- National Western Center Capital Build Program, Performance Management Framework, **Table 5: Capital Build Draft Performance Management Framework - ReNEWW** (September, 2017) - includes sustainable site strategies and key performance indicators (KPIs) for design developed by NWC Partners from the Regeneration of Natural Environments, Energy, Water and Waste (ReNEWW) section.

At a very high level, target goals from the Performance Management Framework include:

### GENERAL KEY PERFORMANCE INDICATOR

- LEED Gold +

### WATER

- Water conservation throughout
- Decrease impervious surfaces
- Water reuse potential

### NATURAL ENVIRONMENT

- Engaging landscapes
- Increase tree canopy, biodiversity
- Improve riverfront; eliminate invasive species

### ENERGY

- Minimize annual energy demand
- Maximize renewable energy
- Minimize single occupancy trips
- Explore district energy solutions
- Energy Star compliance
- Alternative fuel charging stations

### WASTE

- Demolition waste diversion and reuse program
- Construction waste diversion program
- Minimize, reuse and recycle waste during operation
- Reuse of historic elements in new site design (refer to Cultural Plan)
- Aim for net zero waste events and operations



Clean energy generation for the campus is a key component to meeting environmental goals.



Water conservation and management shall be demonstrated throughout the campus (Denver, CO).



NWC campus will serve as a laboratory and demonstration for environmental design.

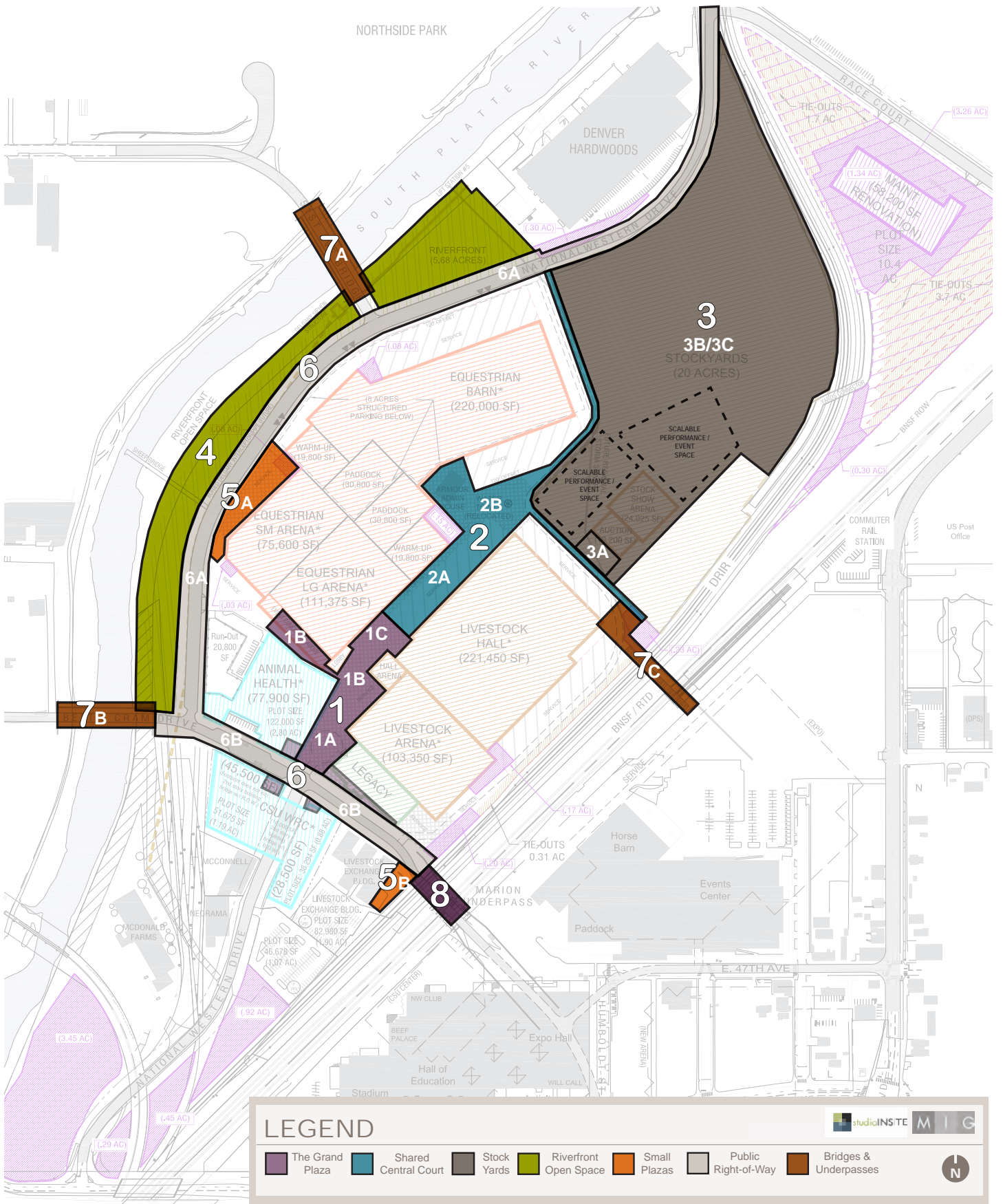


Figure 2: Public Spaces





## PUBLIC REALM PROGRAMMING

The following section outlines in more detail the programming for each individual public space - as identified in the updated and approved site plan (see Figure 2.) Most identified public realm spaces also have sub-areas within them to better define and program each space. Figure 2 shows the overarching public realm spaces and each space and sub-area are listed below:

Public Realm Space	Sub-areas
1 - Grand Plaza	1A - Campus Gateway Plaza + Drop-Off Zone 1B - Livestock and Equestrian Arenas Plaza + Elevated Concourse Zone 1C - Transitional Zone
2 - Shared Central Court	2A - Shared Service Area + Pedestrian Travel Zones 2B - Water Tower and Armour Administration Building Plaza
3 - Stock Yards	3A - Stock Yards Event Center Plaza 3B - Stock Yards (during stock show) 3C - Stock Yards (non-stock show)
4 - Riverfront Open Space	4 - Riverfront Open Space
5 - Small Plazas	5A - Small Equestrian Arena Plaza 5B - Livestock Exchange Plaza
6 - Public Rights-of-Way	6A - National Western Drive 6B - Bettie Cram Drive
7 - Bridges	7A - 51st Avenue Bridge 7B - Bettie Cram Drive Bridge 7C - NWC Commuter Rail Pedestrian Bridge
8 - Underpasses	8 - Marion Underpass

For each space, the following is included:

- **Concept Statement** - overarching vision for each space
- **Programming Matrix that includes:**
  - **Programmatic / Functional Recommendations** - spatial, accessibility, security, and infrastructure needs for each space and sub-area. These are generally compiled through a combination of original master plan and baseline book recommendations with refinements from the Campus Placemaking Study programming team.
  - **Urban Design Recommendations** - to assist with future design and costing, some preliminary urban design considerations are provided for each space and sub-area as well as considerations for special events.
- **Precedent Images** - photographs of inspiring places that are similar in programming and activation, and design character.

To reduce redundancy, this report should be referenced in concert with the other reports listed on page 3. For example, it is highly recommended to incorporate and reuse historic elements from the campus for urban design elements and public art, but recommendations for historic elements and public art will be found in those other documents.



A unique paving treatment provides an interesting texture and is pervious to allow for water to penetrate.



A grade change is celebrated with informal steps and seating area.



Trees, custom benches and planters provide a layering of textures and smooth transition to large buildings.



## 1 - GRAND PLAZA

### CONCEPT STATEMENT:

The Grand Plaza, located at the “heart” of the campus, serves as a **focal point and destination** for visitors, tourists, and everyday employees. The Grand Plaza is located at the terminus of original National Western Drive at the intersection of (new) Bettie Cram Drive. It will be **activated daily** with employees from CSU and NWSS, P-12 students on field trips, and the adjoining neighborhood community members. Small retail and restaurant uses are recommended to be attached to larger facilities fronting the Grand Plaza for activation. Public art, informational kiosks, educational landscapes/experimental demonstrations, and cultural artifacts will also help tell the story behind this global destination for **education, agricultural heritage and innovation**. It will **clearly articulate the mission statement and guiding principles** for the National Western Center campus. The space will be designed to be flexible enough to host **special events** as well - from small events that take over a portion of the space, to large events that consume the entire Grand Plaza.



A water feature provides a focal point and common destination as well as adding to the experience.



A large plaza is transformed into a festival space with food trucks and vendor tents.



Layers of lighting is important for public safety and ambiance.



This large plaza includes places for people to gather or sit alone. The paving patterns break up a large space and trees soften the hardscape and provide shade.



A pop jet fountain activates a large plaza.



Public art adds interest and delight in the experience of a place.



PROGRAMMING MATRIX:

1 - Grand Plaza			
1A - Campus Gateway Plaza and Drop-Off Zone		1B - Livestock and Equestrian Arenas Plaza and Elevated Concourse Zone	1C - Transitional Zone
<b>PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS</b>			
Functional / Spatial Requirements	Entrances to CSU Animal Health Building, CSU Water Resources Center and WSSA Legacy Buildings Ticketing gateway for large events (for attendees to enter "inside the fence") Iconic gathering spot (for tours, large groups, etc.) Space for vendor booths and outdoor displays Entrances to ground floor active uses and adjacent outdoor space (retail, dining, etc.) Drop-off area (bus, shuttle, ride share, VIP, valet, disabled, etc.) Educational programming	Entrances to Equestrian and Livestock Arenas Concourse level entrance to Equestrian Arena (and potentially CSU Animal Health) Queuing space for large events Roped areas for people entering arenas vs. through-circulation space Vertical circulation to concourse level public overlook Space for vendor booths and outdoor displays Educational programming	Space for vendor booths and outdoor displays Flexible space so can be activated during non-event days
ADA Accessible?	Yes	Yes	Yes
Publicly Accessible?	Yes	Except for campus-wide ticketed events	Except for campus-wide ticketed events
Security Needs <i>(Note: detailed security plan to be developed in Task Order #3)</i>	Surveillance cameras Lighting "inside fence" during NWSS Crash-resistant site walls designed for high impact (or slightly elevated public space) Natural surveillance through active ground floor uses and vendor booths Fire access	Surveillance cameras Lighting "inside fence" during NWSS confirm w/ NWSS Natural surveillance through active ground floor uses and vendor booths	Surveillance cameras Lighting "inside fence" during NWSS confirm w/ NWSS Careful design of space so activities are visible and do not create hiding areas or welcome bad behavior
Mechanical / Plumbing Needs	HW/CW distribution Irrigation Water hookups for cleaning and maintenance	Water feature (location and feasibility TBD in Task Order #3) Gas for potential outdoor fire feature (location and feasibility TBD in Task Order #3)	Area to serve as general campus utility corridor
Electrical / AV Needs	Electric outlets (vendors, food carts, etc.) Pedestrian light fixtures (LED; fixtures TBD) Accent/ambient lighting (fixtures TBD)	High-quality, campus-wide sound/PA system Cellular phone/emergency radio reinforcement	Campus-wide IT infrastructure Surveillance cameras
<b>URBAN DESIGN RECOMMENDATIONS (PHYSICAL ELEMENTS)</b>			
Landscape vs. Hardscape	Primarily hardscape Low native grasses to provide visibility through space Strategic trees	Mix of hardscape (70%) and landscape (30%) Low native grasses to provide visibility through space Strategic trees	
Horizontal Urban Design Elements	High quality and distinct ground plane (i.e. pavers, sand-blasted concrete design, variation of materials to define space, etc.) Incorporate salvaged DRIR rail line (reuse) Pavement markings that direct users and/or tell a story (history/environment/agriculture related) Blending with streetscape of Bettie Cram Drive Drop-off area with removable bollards Creation of clear pedestrian pathway between Grand Plaza (1A) and Stockyards (3)	High quality ground and distinct ground plane Incorporate salvaged DRIR rail line (reuse) Pavement markings that direct users and/or tell a story (history/environment/agriculture related) 20K sf pedestrian paving and site lighting at outdoor exhibit/concessions space* Creation of clear pedestrian pathway between Grand Plaza (1A) and Stockyards (3)	High quality ground plane in pedestrian areas whereas traffic/loading areas may be more utilitarian Expose former DRIR rail line, if feasible (remove and replace) Pavement markings that direct users and/or tell a story (history/environment/agriculture related) Creation of clear pedestrian pathway between Grand Plaza (1A) and Stockyards (3)
Vertical Urban Design Elements <i>(Note: also refer to Campus Cultural Plan for recommendations for reuse of historic elements)</i>	Gateway or iconic public art feature / focal point Banner poles; flag poles Pedestrian lighting to match campus aesthetic Overhead "festival" lighting Seating (benches; table/chairs) Trash and recycling receptacles Signage/wayfinding to direct users through space Display/award space(s) Overhead/shade structure (strategic location) Outdoor furnishings and planters create intimate spaces for a broad array of event activities outside of large events*	Pedestrian lighting to match campus aesthetic Overhead "festival" lighting Seating (benches; table/chairs) Trash and recycling receptacles Signage/wayfinding Use outdoor furnishings, lights and planters to define queuing space for entry into arenas versus through-circulation Outdoor furnishings and planters create intimate spaces for a broad array of event activities outside of large events*	Pedestrian lighting to match campus aesthetic Overhead "festival" lighting Group seating accommodations - "outdoor living room" Trash and recycling receptacles Signage/wayfinding Screening for service areas Outdoor furnishings and planters create intimate spaces for a broad array of event activities outside of large events*
Events / Special Use of Space Considerations <i>(Note: also reference Events section of report)</i>	Farmer's markets Vendors Outdoor animal health clinics Outdoor public health clinics Space (pedestals?) for special features related to events (Jurassic Quest, Dreamhack, Car Shows, etc.) Art Fairs	Space (pedestals?) for special features related to events (Jurassic Quest, Dreamhack, Car Shows, etc.) Vendors Elevated Concourse could host special events such as: weddings, private parties, outdoor classroom, corporate events, marketplace, etc.	Outdoor classroom space Outdoor movies (intimate) Corporate events (defined space) Live horse carousel and/or petting zoo Food/Drink Events Equestrian/Livestock Events/spillover

\* - Indicates carry-over notes from original Master Plan and/or Baseline Book

GENERAL NOTE - all spaces should be designed for vehicular loads (semi trucks) for loading and access

## 2 - SHARED CENTRAL COURT

### CONCEPT STATEMENT:

The **Shared Central Court** is a semi-public zone in between the Livestock Hall and Equestrian Center. This area is a **utilitarian space** that is active with loading/unloading of animals and tack during large events, so the **delineation of pedestrian travel and auto/animal travel** is key in the design of the space. When large equestrian/livestock events are not happening, this space can become an extension of the Grand Plaza to serve as a space for **outdoor events and public gathering**. A special **public plaza** is located around the (relocated) water tower and Armour Administration Building.



Bollards delineate pedestrian realm from auto traffic and seating with umbrellas welcome people to sit.



Bollards delineate pedestrian realm from auto traffic and overhead festival lighting softens the space.



Paving patterns delineate space and use. Lighting poles with banners and flowers soften the space.



A shared space between autos and pedestrians, yet unique paving patterns and vertical poles guide pedestrians



The base of a historic water tower is re-purposed as a picnic area.



PROGRAMMING MATRIX:

2 - Shared Central Court		
2A - Shared Service Area + Pedestrian Travel Zones		2B - Water Tower and Armour Administration Building Plaza
<b>PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS</b>		
Functional / Spatial Requirements	Clear areas for loading/unloading into barns and temporary parking Clear areas for pedestrian travel to/from stock yards and transit Educational programming	A unique public plaza that facilitates interaction of and serves exhibitors Educational programming
ADA Accessible?	Yes	Yes
Publicly Accessible?	Except for campus-wide ticketed events and some large special events related to Equestrian and Livestock Centers	Except for campus-wide ticketed events and some large special events related to Equestrian and Livestock Centers
Security Needs <small>(Note: detailed security plan to be developed in Task Order #3)</small>	Surveillance cameras Well lit, active day/night "inside fence" during NWSS	Surveillance cameras No public access to water tower Well lit, active day/night "inside fence" during NWSS
Mechanical / Plumbing Needs	HW/CW distribution Irrigation Area to serve as general campus utility corridor	
Electrical / AV Needs	Electric outlets (vendors, food carts, etc.) Pedestrian light fixtures (LED; fixtures TBD) Street lights (LED; fixtures TBD) High-quality, campus-wide sound/PA system Cellular phone/emergency radio reinforcement Campus-wide IT infrastructure Surveillance cameras	
<b>URBAN DESIGN RECOMMENDATIONS</b>		
Landscape vs. Hardscape	Primarily hardscape Use landscaping to soften area and delineate space Stormwater/LID techniques	Mixture of landscape (60%) and hardscape (40%)
Horizontal Urban Design Elements	Concrete ground plane (?) Articulated pedestrian zone (adjacent to Equestrian Center through central spine) Articulated auto zones near loading areas of barns Creation of clear pedestrian pathway between Grand Plaza (1A) and Stockyards (3)	Ground plane can be more rustic / multi-purpose where shared with automobiles High quality pedestrian-oriented surfaces (pavers, etc.) around the building and plaza Creation of clear pedestrian pathway between Grand Plaza (1A) and Stockyards (3)
Vertical Urban Design Elements <small>(Note: also refer to historic elements inventory and recommendations for reuse)</small>	Pedestrian Lighting to match campus Trash and recycling receptacles Use landscaping to soften area and delineate space Signage/wayfinding	Pedestrian lighting to match campus Seating accommodations (benches/artistic/recycled) Trash and recycling receptacles Signage/wayfinding Public art
Events / Special Use of Space Considerations <small>(Note: also reference Events section of report)</small>	This space could be used for outdoor events (farmer's markets, flea markets, food/drink festivals, etc.)	Markets, festivals, weddings, corporate events, ceremonies, etc. Grade change in this area could allow for small amphitheater or performance/display space

\* - Indicates carry-over notes from original Master Plan and/or Baseline Book

GENERAL NOTE - all spaces should be designed for vehicular loads (semi trucks) for loading and access

### 3 - STOCKYARDS

#### CONCEPT STATEMENT:

**3A - Stockyards Event Center Plaza** - The Stockyards Event Center Plaza will be a less-formal space where visitors and exhibitors can intermingle. This area will likely be on the north side of the Event Center.

**3B - Stockyards (during stock show)** - The Stockyards, during the stock show, will be set up with removable pens to host the “Super Bowl of Stock Shows”. The Stockyards shall serve as the cultural centerpiece of the show. This area shall reflect the “new age” while remembering the rich, historic past of the stockyards and their relationship to the existing surroundings, the neighborhoods, the city, the state and the nation.

**3C - Stockyards (non-stock show)** - This area, when not hosting the National Western Stock Show (16-days in January), will be multi-use. It will provide a flexible, level surface for outdoor events. Potential events include large music festivals, car/boat shows, athletic race start/finish, outdoor programming associated with Stockyards Event Center, outdoor movies, monster truck shows, midway for fairs, and more. Other uses include animal penning and vehicle staging associated with Equestrian Center events, storage, and finally, flexible surface parking.



When the stockyards are not being used to house animals, large festivals can be staged in the space.



Spectating in the stockyards is a popular component during the Stock Show (Denver, CO).



While the “In The Yards” sign is not historic, it does provide nostalgia and should thoughtfully be re-purposed (Denver, CO).



A large parking lot is transformed into a music and arts festival (Denver, CO).



A fair with vendors and rides pops up on a parking lot site.





PROGRAMMING MATRIX:

3 - Stock Yards			
3A - Stock Yards Event Center Plaza		3B - Stock Yards (during stock show)	3C - Stock Yards (non-stock show)
<b>PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS</b>			
Functional / Spatial Requirements	Space for vendor booths and outdoor displays Iconic gathering spot (for tours, large groups, etc.) Line-up / Make-up areas for both Stock Yard Auction Arena and Stockyard Show Arena adjacent to arena entrances*	Refer to Building/Facility Programming document	Hard service / flexible space* Multi-use festival, event, concert space* Parking during non-events for 2,700 vehicles* Equestrian RV spaces - 100 full service drive-through spaces (or water/power hookups only)*
ADA Accessible?	Yes	Yes	Yes
Publicly Accessible?	Except for campus-wide ticketed events or other large events using stockyards area for program	For stock show ticket holders	Except for campus-wide ticketed events or other large events using stockyards area for program
Security Needs  (Note: detailed security plan to be developed in Task Order #3)	Surveillance cameras Lighting "inside fence" during NWSS or other large/special events Special event security		
Mechanical / Plumbing Needs	HW/CW distribution Irrigation	Flush-mounted water outlets Water supply for herd sire, heifer mart and dog open space* Water outlets and drains at 1 every 30-35 feet* Sanitary sewer pretreatment system*	
Electrical / AV Needs	Electric outlets (vendors, food carts, etc.) Pedestrian light fixtures (LED; fixtures TBD) High-quality, campus-wide sound/PA system Cellular phone/emergency radio reinforcement Campus-wide IT infrastructure Surveillance cameras	Electricity* Utility hookups for main stage* Dimmable LED lighting with multiple zone switching/controls* High quality campus PA system to take multiple inputs and provide discrete sound reinforcement to multiple spaces* (1,200) 30 amp duplex electrical outlets spread across site with 60 amps available at temporary pen locations*  Also refer to Baseline for specific requirements* Campus-wide IT infrastructure	
<b>URBAN DESIGN RECOMMENDATIONS</b>			
Landscape vs. Hardscape	Primarily hardscape with permeable paving in key areas Prairie grasses to break up large space and integrate stormwater* Lines of trees in select areas or around edges		
Horizontal Urban Design Elements	Rustic, durable ground plane (animal traffic) with potential for strategically placed permeable paving Farm / ranch aesthetic* Broom finished colored concrete at each main pedestrian aisle* Strategic use of paving materials and patterns to differentiate between uses and functions in the stock yards. Many pens had brick paving with distinctive pattern (running bond). The alleys and walkways consisted of varied materials and patterns. Some were brick and others were scored concrete. This "hierarchy" of paving materials should inform and inspire the design palette for new walkways and outdoor use areas of the complex* Integrating pavement color or markings throughout the Stockyards that tell the story about its history and importance to Denver and the region* Use paving materials to convey connection from pedestrian bridge to 51st during non-stock show. Interpretive element to illustrate when runoff is conveyed		
Vertical Urban Design Elements  (Note: also refer to historic elements inventory and recommendations for reuse)	Yards Entry Wayfinding Marker (reuse "In The Yards" sign?) Farm / ranch aesthetic* Pedestrian lighting to match campus around Stockyards Event Center Auto lighting in parking area Accent/ambient lighting (fixtures TBD) Movable seating (benches; table/chairs) Movable planters Trash and recycling receptacles Signage/wayfinding Fencing / defined perimeter edges (Rock Bottoms) Shade structures		
Events / Special Use of Space Considerations  (Note: also reference Events section of report)	Private/corporate events Weddings Small performances Concerts Festivals	Stock show and various events that occur throughout 16-day	Festivals Movies (Spud Drive-In Idaho) Concerts Farmer's /Flea Markets Outdoor events (car/boat/RV shows, motocross, etc.) Athletic events (races, tournaments) Auto and RV parking

\* - Indicates carry-over notes from original Master Plan and/or Baseline Book

GENERAL NOTE - all spaces should be designed for vehicular loads (semi trucks) for loading and access

## 4 - RIVERFRONT OPEN SPACE

### CONCEPT STATEMENT:

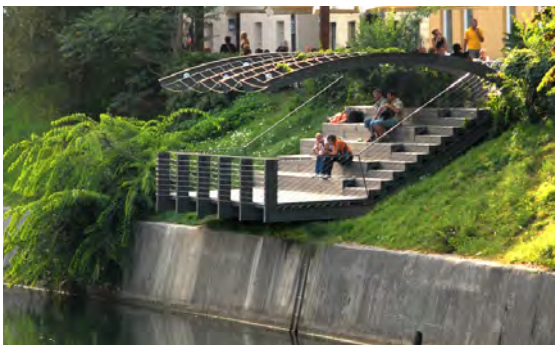
The **Riverfront Open Space** will be a **public amenity and natural experience** that reflects the natural conditions of the riverside, allows community connections to the river, experience with nature and environmental education while **strategically activating** the area. It is also an opportunity for integration and demonstration of water quality and a transition between the riparian corridor and urban area that is context sensitive.



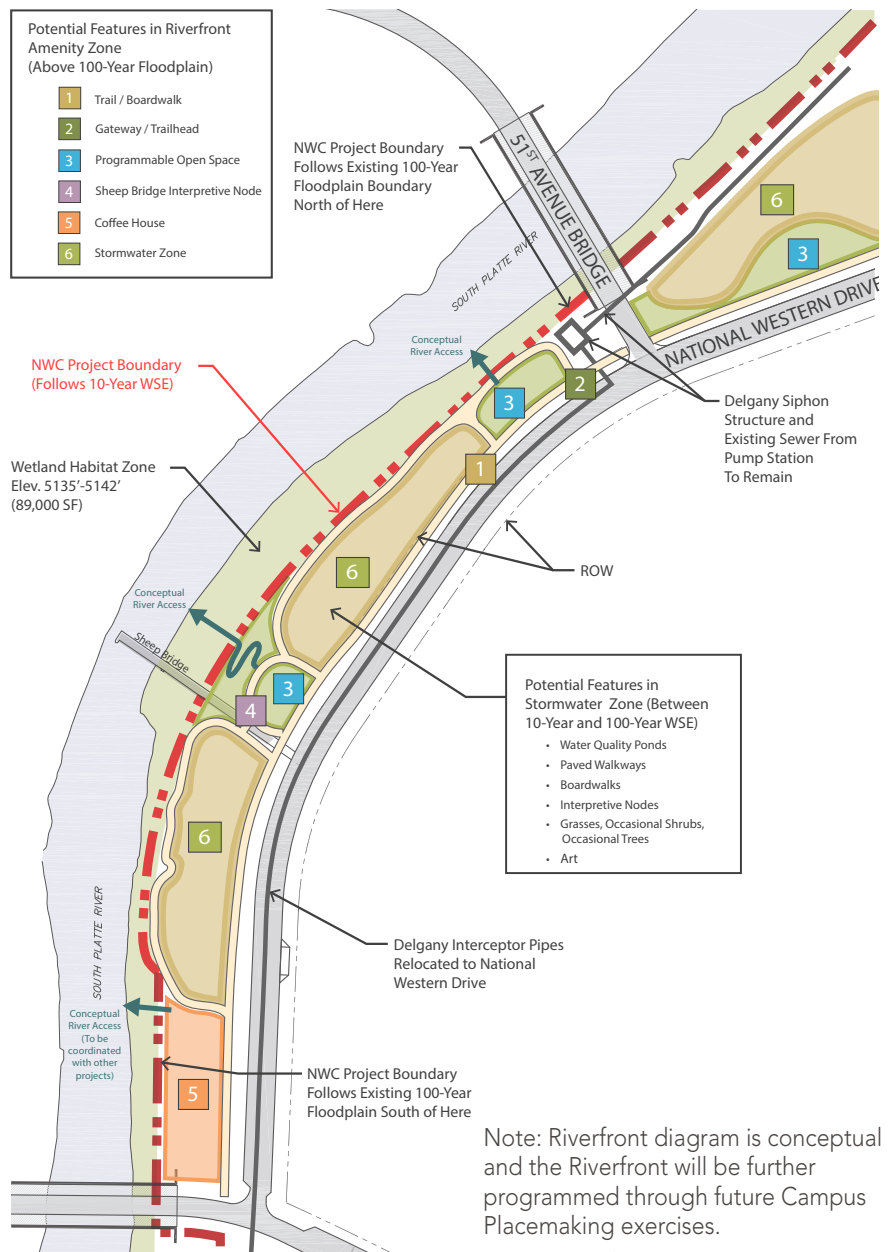
Public art suspended over a river activates and adds interest.



A boardwalk provides public access over preserved habitat and stormwater retention areas.



A small constructed amphitheater overlooks a river and allows for people to interact with the river within a steep grade.





PROGRAMMING MATRIX:

4 - Riverfront Open Space

4 - Riverfront Open Space

PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS	
Functional / Spatial Requirements	Multiple "activity nodes" (May be one of the following or similar: coffee shop/brewery beer garden/restaurant/community gathering space; outdoor classroom; interpretive signage; overlook; picnic spaces); Flex-space for education / event programming Water quality features and demonstration Space for temporary activation (food trucks/carts); this could be along National Western Drive Continue to explore options for direct access to the river Educational programming related to Platte River and its watershed
ADA Accessible?	Yes, portions will be ADA accessible
Publicly Accessible?	Yes - 365
Security Needs (Note: detailed security plan to be developed in Task Order #3)	Lighting Crime Prevention through Environmental Design (CPTED) - activation, programming, buildings fronting open space, etc.
Mechanical / Plumbing Needs	Irrigation MEP for any structures (retail/restaurant/educational/etc.)
Electrical / AV Needs	Electrical Outlets potentially along trail Outlets along park edge of National Western Drive Campus-wide IT infrastructure
URBAN DESIGN RECOMMENDATIONS	
Landscape vs. Hardscape	Primarily landscape Water Quality/Detention Basin or Wetland (if sufficient groundwater or recycled water is available) Riparian corridor with thoughtful plant choices/landscape design for erosion control, biodiversity, and flood mitigation Bioretention areas Incorporate biomimicry and biophilic design principles whenever feasible
Horizontal Urban Design Elements	Walking paths throughout open space (boardwalk - reclaimed wood?) Strategic hardscape areas and overlooks Small concrete amphitheater for educational purposes and small performances
Vertical Urban Design Elements (Note: also refer to historic elements inventory and recommendations for reuse)	Signage/wayfinding Lighting to complement campus Trash/recycling receptacles Seating (benches, table/chairs) Small Trailhead with potential for parking Public art Shelters/pavilions Potential for small retail/restaurant/coffee house
Events / Special Use of Space Considerations (Note: also reference Events section of report)	Water quality and riparian corridor education Educational opportunities tied to Water Resources Center, Denver Museum of Nature and Science and History Colorado Small events Vendors Small restaurant

## 5 - SMALL PLAZAS

### CONCEPT STATEMENT:

**5A - Small Equestrian Arena Plaza** - While the primary use of this space is for loading/unloading and circulation, there is also an opportunity for this space to serve as a secondary plaza/outdoor space for the Equestrian Center to use for **special events** and in concert with the Small Equestrian Arena, as well as to serve as an **entry space** for the small arena events. This plaza overlooks the river and open space as well, offering **"eyes on the river"**.

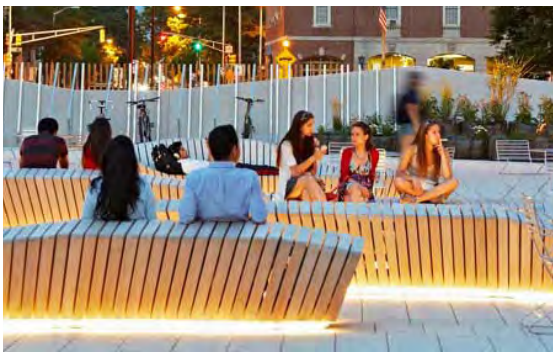
**5B - Livestock Exchange Plaza** - The historic Livestock Exchange building will be renovated and occupied by future uses (TBD). The plaza in front of the building should be used as a **semi-public space that contributes to the campus**.



A plaza is overlooked by a building and includes a mix of landscape and hardscape.



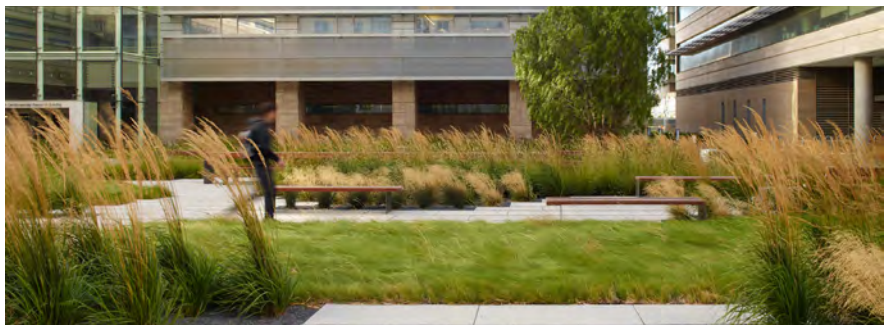
Chairs are placed randomly on a plaza allowing for users to move them for different configurations.



Custom benches add artistic flair and lighting as well as places for people to gather.



This space frames a view of a historic building and is proportioned so that many people can enjoy the space at once.



Native grasses provide a pastoral, agrarian feel to the landscape.



PROGRAMMING MATRIX:

5 - Small Plazas		
5A - Small Equestrian Arena Plaza		5B - Livestock Exchange Plaza
<b>PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS</b>		
Functional / Spatial Requirements	Ideally flows out from small arena via large overhead doors Space for vendors Tied to events on National Western Drive and Riverfront Open Space (if grading allows) Service access for vehicles using Equestrian Center and Barn	Space for vendors Use retaining wall for public art/murals
ADA Accessible?	Yes	Yes
Publicly Accessible?	No	Yes
Security Needs (Note: detailed security plan to be developed in Task Order #3)	Surveillance cameras Lighting "inside fence" during NWSS and other large events	Surveillance cameras
Mechanical / Plumbing Needs	HW/CW distribution Irrigation	
Electrical / AV Needs	Electric outlets (vendors, food carts, etc.) Pedestrian light fixtures (LED; fixtures TBD) High-quality, campus-wide sound/PA system Cellular phone/emergency radio reinforcement High-speed WiFi with option for fee-based system	Electric outlets (vendors, food carts, etc.) Pedestrian light fixtures (LED; fixtures TBD)
<b>URBAN DESIGN RECOMMENDATIONS</b>		
Landscape vs. Hardscape	Primarily hardscape stormwater management	Mixture of landscape and hardscape (target 50%/50%) Formal lawn area
Horizontal Urban Design Elements	Ground plane can be more rustic / multi-purpose	High quality ground plane
Vertical Urban Design Elements (Note: also refer to historic elements inventory and recommendations for reuse)	Pedestrian Lighting to match campus Trash and recycling receptacles Signage/wayfinding Seating accommodations (benches, table/chairs) Planters to delineate space	Pedestrian lighting Seating accommodations (benches, table/chairs) Trash and recycling receptacles Signage/wayfinding Public art Planters
Events / Special Use of Space Considerations (Note: also reference Events section of report)	Could host special private events such as: weddings, private parties, executive events, etc.	Private/executive events Pocket park for campus

\* - Indicates carry-over notes from original Master Plan and/or Baseline Book

GENERAL NOTE - all spaces should be designed for vehicular loads (semi trucks) for loading and access

## 6 -PUBLIC RIGHTS-OF-WAYS

### CONCEPT STATEMENT:

**6A - National Western Drive** - National Western Drive will be the **primary north-south access** to the campus. Its function is generally to provide **access to riverfront open space and parking** but it also has opportunity to be closed for **NWSS and other special events**. It may also be used for **staging and transit** functions during Stock Show.

**6B - Bettie Cram Drive** - Bettie Cram Drive will be the **primary east-west access** to the campus. This is the **"quality" street** on campus and needs to have a main street-type of feel. This is the **neighborhood connector** street as well between the east and west sides of the site.



B-Cycle stations provide a quick and easy spontaneous way to get around the city (Denver, CO).



An elevated and protected bike lane provides a safe way for bicyclists to get around without having conflicts with cars or pedestrians.



Streetscapes should be layered, organizing the use of spaces and creating a safe and inviting environment to walk in (Indianapolis, IN).



Planters and trees delineate space for pedestrians while softening the streetscape (Denver, CO).



Benches built into the landscape provide a peaceful place to rest.



PROGRAMMING MATRIX:

6 - Public Rights-of-Ways		
	6A - National Western Drive	6B - Bettie Cram Drive
<b>PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS</b>		
Functional / Spatial Requirements	<p>90' ROW from Bettie Cram to 51st including: (2) vehicular lanes, flexible parking lanes (use for access during large events), sidewalks, dedicated bicycle facility, tree lawn/amenity zone</p> <p>60' ROW south of Bettie Cram Drive and north of 51st Avenue including: (2) vehicular lanes, sidewalks, dedicated bicycle facility, tree lawn/amenity zone</p> <p>Primary access to Riverfront Open Space and river bridges</p> <p>This street has multi-modal elements but its focus is on providing auto access and shuttle opportunities.</p> <p>Section between Bettie Cram Drive and 51st Avenue will typically be closed for NWSS events and may be closed for other special events.</p>	<p>84' ROW including: (2) vehicular lanes, on-street parking/loading zones, sidewalks, dedicated bicycle facility, and tree lawn/amenity zone.</p> <p>May need space for cafe seating, bike-share facilities, ride-share zones, etc.</p> <p>This street should emphasize pedestrians and urban design over auto movements and capacity.</p>
ADA Accessible?	Yes	Yes
Publicly Accessible?	Yes	Yes
Security Needs <small>(Note: detailed security plan to be developed in Task Order #3)</small>	<p>Crime Prevention through Environmental Design (CPTED)</p> <p>Controlled access during Stock Show</p>	<p>CPTED</p> <p>Portion of street closed with controlled access during Stock Show</p>
Mechanical / Plumbing Needs	wet and dry utilities irrigation	
Electrical / AV Needs	lighting	
<b>URBAN DESIGN RECOMMENDATIONS</b>		
Landscape vs. Hardscape	<p>North of BCD this street should have more of a landscape feel. South of BCD more hardscape similar to BCD.</p> <p>Ultra Urban Water Quality Standards should be followed</p>	<p>BCD in front of Animal Health should have a urban/hardscape feel but needs a street trees and other natural elements.</p> <p>Ultra Urban Water Quality Standards should be followed</p>
Horizontal Urban Design Elements	<p>Ultra Urban water quality standards</p> <p>bike/ped facility interface</p> <p>mobility hubs</p> <p>ride-share areas</p>	<p>Ultra Urban Water Quality standards</p> <p>ped/bike facility interface</p> <p>mobility hubs</p> <p>ride-share areas</p>
Vertical Urban Design Elements <small>(Note: also refer to historic elements inventory and recommendations for reuse)</small>	<p>street trees</p> <p>pedestrian/bike wayfinding</p> <p>auto wayfinding</p> <p>entry ID elements</p> <p>bicycle parking</p> <p>trash receptacles</p>	<p>street trees</p> <p>planters</p> <p>benches</p> <p>information kiosks</p> <p>pedestrian/bike wayfinding</p> <p>auto wayfinding</p> <p>entry ID elements</p> <p>bicycle parking</p> <p>trash receptacles</p>
Events / Special Use of Space Considerations <small>(Note: also reference Events section of report)</small>	<p>During NWSS it is anticipated that this street is closed to the public between BCD and Race Court and will be used to truck/trailer staging.</p> <p>During other large events this street could be configured as a four lane or three lane roadway to allow for efficient ingress and egress from the parking facilities.</p> <p>Street could be closed for special events such as festivals that engage the riverfront open space.</p>	<p>There are no current plans to use this space for special events or as a festival street. However, the street may be closed during NWSS and other large/special events or festivals associated with the riverfront.</p> <p>There should be some thought given to this topic as it might be a good space for outdoor events.</p>

## 7 - BRIDGES

### CONCEPT STATEMENT:

**7A - 51st Avenue Bridge** - Neighborhood connector and direct access to parking structure. Provides connections between planned Riverfront Open Space and Heron Pond Park. Provides views of downtown and river.

**7B - Bettie Cram Drive Bridge** - Neighborhood connector on main bike and pedestrian spine through campus. Provides vehicular access to heart of site and parking. Bridge across river for NWC with gateway elements.

**7C - Pedestrian Bridge** - The pedestrian bridge is the main site connection from the RTD commuter rail station. It will link visitors directly into the stockyards / pedestrian travel zone / campus parking area. It should be welcoming and safe and incorporate storytelling into the bridge design.



This pathway along a bridge safely separates pedestrians and offers picnic areas to overlook the river (Golden, CO).



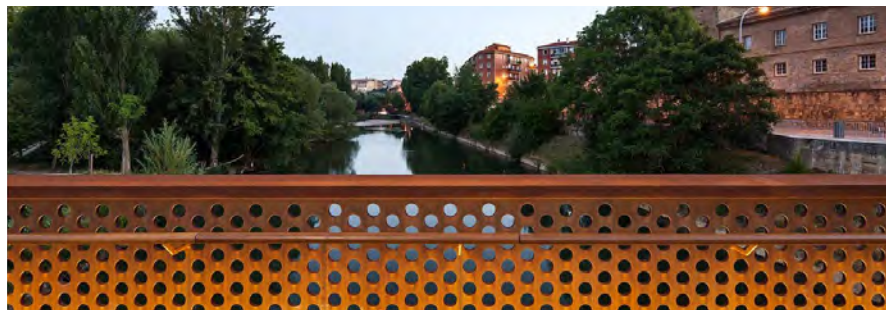
A suspension pedestrian bridge provides safe access surrounded by nature.



Lighting is especially important on bridges.



The pedestrian bridge will serve as an important connection between the neighborhoods.



Bridge railings offer space to artistically and architecturally enhance the space.



PROGRAMMING MATRIX:

7 - Bridges			
	7A - 51st Avenue Bridge	7B - Bettie Cram Drive Bridge	7C - NWC Commuter Rail Pedestrian Bridge
<b>PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS</b>			
Functional / Spatial Requirements	60' ROW including: (2-3) travel lanes, sidewalks on both sides, and a dedicated bike facility.	60' ROW including: (2-3) travel lanes, sidewalks on both sides, and a dedicated bike facility.	10'-15' wide pedestrian bridge with stair and elevator access
ADA Accessible?	Yes	Yes	Yes
Publicly Accessible?	Yes	Yes	Yes - 365 (however access to stockyards/campus may be closed for large ticketed events such as NWSS)
Security Needs (Note: detailed security plan to be developed in Task Order #3)	Crime prevention through environmental design (CPTED)	Crime prevention through environmental design (CPTED)	High - aerial risk Controlled access during NWSS Lighting Railings Vertical circulation
Mechanical / Plumbing Needs	N/A		
Electrical / AV Needs	Pedestrian and roadway lighting	Pedestrian and roadway lighting	Pedestrian lighting
<b>URBAN DESIGN RECOMMENDATIONS</b>			
Landscape vs. Hardscape	Hardscape	Hardscape	Hardscape
Horizontal Urban Design Elements	Park space at west end of bridge and open space on east end of bridge, potential event programming in the adjacent spaces, ped/bike interface, river views, history, neighborhood info/history, public art, wayfinding for bikes/peds/autos	Story telling, art, ped/bike interface, river views, history, neighborhood info/history, mobility elements, entry ID, wayfinding for bikes/peds/autos	Unique, eye-catching design that captures the spirit of new vs. old and helps tell the story of the campus from a "birds-eye" perspective
Vertical Urban Design Elements (Note: also refer to historic elements inventory and recommendations for reuse)			
Events / Special Use of Space Considerations (Note: also reference Events section of report)	Could be used for special events	Could be used for special events	During NWSS and other large events the bridge may serve as an entry to NWSS and will likely not be open to the general public.

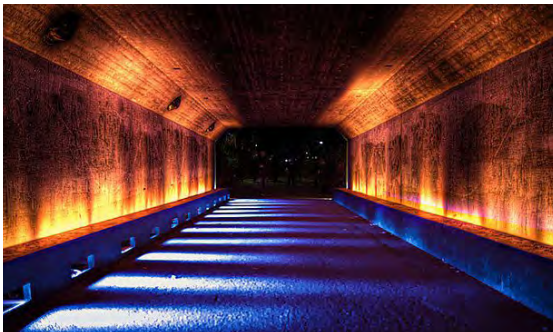
## 8 - UNDERPASSES

### CONCEPT STATEMENT:

**8A - Marion Underpass** - This underpass below the rail lines will serve as a interim pedestrian/bike/animal connection to "the hill" from newly forming campus (Phase 1 and 2). Future phases will include an extension of BCD to allow vehicular traffic as well. Ideal location for unique public art/murals and lighting. This will be "inside the fence" during NWSS.



Colorful poles are added to enhance the space and complement the structural posts of the bridge above.



Artistic lighting adds to the ambiance and increases safety.



A colored ground plane and public art make this underpass feel welcoming.



High quality landscaping and materials provide an inviting approach to an underpass.



Mosaic tiles are a simple way to add color and art to a concrete underpass.



PROGRAMMING MATRIX:

8 - Marion Underpass	
8 - Marion Underpass	
PROGRAMMATIC / FUNCTIONAL RECOMMENDATIONS	
Functional / Spatial Requirements	56' ROW available - Needs to accommodate two traffic lanes plus wide sidewalks/shared use paths on both sides. Consider stepping outer walls back and doing a "light" railing between sidewalk and traffic lane. Sidewalk is elevated as compared to traffic lanes.
ADA Accessible?	Yes
Publicly Accessible?	Yes
Security Needs  (Note: detailed security plan to be developed in Task Order #3)	Crime prevention through environmental design (CPTED) Lighting Public Art
Mechanical / Plumbing Needs	N/A
Electrical / AV Needs	Lighting
URBAN DESIGN RECOMMENDATIONS	
Landscape vs. Hardscape	Hardscape
Horizontal Urban Design Elements	Mural Railing
Vertical Urban Design Elements  (Note: also refer to historic elements inventory and recommendations for reuse)	As much natural light as possible Treatments to emphasize openness, safety, comfort, security
Events / Special Use of Space Considerations  (Note: also reference Events section of report)	



Colorful circus performers put on a show that delights audiences of all ages.

**SPECIAL EVENTS**

Special events are planned events that may last as little as a couple hours to as many as two weeks (i.e. Stock Show). They are both a major tourism draw as well as revenue generation for the campus - both of which are critical to the long-term success of the campus.

Brainstorming about the possibility of hosting different events has occurred throughout the development of the master plan and continued into the programming task for the Placemaking Study. Documentation of exhaustive lists can be found in the Appendix.

For the purposes of this report, the focus is on events that could occur partially or fully outdoor (public realm spaces) - and trying to understand in which space(s) these events could be held. Potential locations are indicated in the matrices on the next few pages for special events and activation. These are still hypothetical and further design is needed to understand feasibility. Some events could also be held in future phases of development. However, these lists are to be used by the Authority and the design team to consider. Note that these lists include events that could be held on CSU facilities and/or some of these events could be hosted by CSU at their facilities. These lists do not include programming at the WSSA Legacy Building.



A car show brings in cruisers from all over the region, state and beyond.



Rodeos are forever a fan favorite for the National Western Center.



Carnival rides provide whimsical fun and light up the site.



Bike races are popular in Colorado - especially the new Velorama event held nearby.



SPECIAL EVENTS											
POSSIBLE LOCATION(S)										REVENUE?	REACH?
1	2	3	4	5	6	7	8	NH	Y/N	L/R/N/G	

AGRICULTURAL / FOOD / ANIMAL											
Agricultural shows / Ag Equipment shows / Hay auction										Y	N
Dog shows + run/agility/obedience training										Y	N
Farmer's Markets										Y	R
Food shows (Top Taco / Colorado Food & Wine / Food Truck Festivals)										Y	R
Rodeo - Outdoor / Rodeo school										Y	N
Path to My Plate										Y	N
EDUCATIONAL											
Graduation ceremonies										Y	R
P-12 Summer Camps / Field Trips (History, Ag, food or water focused) / Youth Competitions (Science Fairs/4H)										Y	R
Natural Resources Conference (RTA) and many others										Y	G
Tent City / Quarterly Resource Fair (+ job fair/training and home finding)										N	L
Ag Career Expo / Ag Town Field Trips / International Programming										Y	G
SPORTS / ATHLETIC											
Denver Cyclovia / Tour de Fat / Velorama										Y	R
Derby Party										Y	R
Fishing / Tournaments										Y	N
Marching Band Tournaments										Y	R
Races (bicycle, running, triathlon) / Colfax Marathon Race Events / Velorama										Y	R
Ski and Snowboard shows (Big Air)										Y	R
Sports Tournaments (outdoor)										Y	R
X Games / Outdoor sports comp. (American Ninja Warrior)										Y	N
Velodrome (temporary, not permanent)										Y	N
CULTURAL / ENTERTAINMENT											
Arts and Crafts Shows / Makers Mart / First Friday										Y	R
Beer / Wine Festivals (Collaboration Fest)										Y	R
Burner (Burner Bazaar?) / Performance Art / Fire shows										N	L
Car Auction (Meekum 400,000 SF; Barrett Auto Auctions)										Y	N
Cars, Coffee, and Cows / Car Shows / Ride and Drive space / Jeep tracks										Y	R
Circus events / Cirque de Soleil / Teatro Zinzanni										Y	R
Concerts										Y	R
Festivals - Large, Multi-day (People's Fair / Taste of Colorado / Pridefest / Music / Wanderlust / etc.)										Y	R
Festivals - Moderate, single day (Denver Flea / Big Wonderful / etc)										Y	R
First Friday										Y	L
Movies (Drive-in / Outdoor)										Y	R
Private Events / Parties										Y	R
Rocky Mountain Winter Festival (RTA)										Y	R
Tours - Art, Historic, Rail History, Segway, Walking, River										Y	N
Wedding Chapel										Y	R
Western Art and Cultural Celebration (RTA)										Y	N

NH = Neighborhood  
L = Local; R = Regional; N = National; G = Global

GENERAL NOTE - also reference Demand Projections Report by Johnson Consulting (2018)



Providing infrastructure for organized or spontaneous education and learning is key for public spaces.

### DAILY ACTIVATION

Daily activation is different than special events in that these types of activation are more regularly scheduled. They might be year-round or seasonal and they may or may not generate revenue. However, the benefit they offer is bringing people to the site and adding to the vibrancy and experience of the place.

This is not an exhaustive list - not all of these will be feasible - but for the purposes of this report shall be considered. Refer to the matrix on the next page for ideas.



Outdoor athletic opportunities, such as a climbing wall will help activate the campus daily.



Fun and interesting places to sit and relax will encourage people to stay longer and feel welcome.



Food trucks temporarily activate public space and go with the theme of food and agriculture.



An active use is desired along the Riverfront, such as a brewhouse, coffee shop, or restaurant.





DAILY ACTIVATION											
POSSIBLE LOCATION(S)										REVENUE?	REACH?
1	2	3	4	5	6	7	8	NH		Y / N	L / R / N / G

AGRICULTURAL / FOOD / ANIMAL												
Agricultural Arboretum											N	R
Beer Garden / Museum / Hops growing											Y	R
Community Garden plots											Y	L
Demonstration Gardens / Teaching Farm / CSA											N	R
Food trucks / carts / vendors											Y	L
Greenhouse (iconic/geodesic dome/vertical)											N	R
Petting Zoo / small animal husbandry for locals											Y	R
Pet Clinic (PetAid in CSU Animal Health)											Y	R
Pop up retailers / vendors (local goods)											Y	L
EDUCATIONAL												
Sandbox - Prehistoric Dig											N	L
Science Stations (carbon, nitrogen, water, botany)											N	G
Solar panels/Energy generation											N	G
Water quality/conservation/re-use/compost demonstration & education											N	G
Interactive Maps of Colorado Agriculture											N	G
SPORTS / ATHLETIC												
Climbing Walls											N	R
Drone flying / training											N	R
Fishing											N	R
Fitness Trail											N	R
Fitness Classes (Yoga/Tai Chi/HIIT/Boot Camps/etc.)											N	R
Horseback riding / Horse carousel											Y	R
Go Cart Racing											Y	R
Ice Skating / Skate Ribbon / Ice rental time / Hockey											Y	R
Mountain bike / Strider tot / BMX course											N	R
Ninja Warrior Course/Training / Zipline											Y	R
Paintball / Laser Tag											Y	R
Putt Putt Golf											Y	R
Skate Park											N	R
CULTURAL / ENTERTAINMENT												
Beach / Swimming (National Western Beach)											N	R
Church events											N	R
Gondola (TOD to Globeville) or permanent Ferris Wheel											Y	R
Musicians / buskers											N	L
Outdoor Western Art exhibit											N	R
Pop up swimming pool/slide in summer											Y	R
Tours - walking or segway (public art, history, heritage, agriculture, nature/river)											N	R

NH = Neighborhood

L = Local; R = Regional; N = National; G = Global

GENERAL NOTE - also reference Demand Projections Report by Johnson Consulting (2018)





MAY 30, 2018  
PUBLIC REALM PROGRAMMING



# APPENDIX A: PUBLIC REALM PROGRAMMING INTERVIEWS & INPUT



In association with Winter & Co.

IMAGINE. DISCOVER. CULTIVATE.

## **National Western Center**

Campus Programming Ideas

Updated January 24, 2018

**DRAFT**

### **Key Discussion Points**

- Year round activities-daily revenue and visitor drivers
- Family and community friendly
- Visitor Destination
- Private Investment Opportunities
- Possible Revenue Opportunities
- Flexible Space
- Multiple uses for all spaces
- Create Awesomeness!

### **Potential Revenue Producing Events**

- Rodeo (WSSA)
- Agricultural Shows
- Festivals
- Concerts
- Markers Mart/Makers Fair
- Equestrian Shows (WSSA)
- Trade Shows
- Food Market in 1909 Stadium Arena
- Colorado Welcome Center (in 1909 Stadium Arena)
- Art Markets/Art Shows
- Local Craft Market
- Sports Tournaments
- Car/Classic Car/Boat/Motorcycle/RV Shows and Sales
- Ice Skating/Ice rental time
- Hockey
- Rodeo School
- Climbing Walls
- Laser Tag/Paint Ball
- Conferences
- Trainings
- Meetings and Banquets
- Consumer shows
- Cars, Coffee and Cows-weekly Saturday morning
- Outdoor Rodeo-weekly in the summer
- Agricultural Equipment Sales/shows Auctions
- Hay auction
- Big Boy (+Girls) Sand box-equipment try outs
- Mini-Golf
- Bicycle races/criterion/circuit
- Running races



- Mountain bike course
- Skate Park
- Triathlons
- Outdoor shows
- X Games/Outdoor sports competitions
- Adventure Sports Training Center
- Peoples Fair, Taste of Colorado or other large events currently held at Civic Center Park
- Escaramuza Festival/Competition
- Barda Palooza (Mariachi Palooza)
- Zip Line/Obstacle course-year round
- Velodrome
- Ninja Warrior-Event and Training
- Go-Cart Racing
- Drone Flying/Training
- Pop-Up retail
- Gondola-connecting the rail station to Globeville
- Colorado Craft Beer Museum
- Wedding Chapel
- Transit Oriented Development signature draw
- Apple Store/Google Store
- Commercial Kitchen

#### **Non Revenue/Educational/Interpretive**

- Hay Auctions
- Farmers Markets
- Fitness Trail
- Local Food Carts/Trucks
- Outdoor neighborhood movies-regular neighborhood events
- Traveling Art Shows
- Youth Competitions
  - Science Fairs
  - 4H
- CSU Pet Clinics
- Art tours
- Artist Studio Space
- Art Pedestals for traveling or temporary art
- Fire Shows-Fire Art opportunities
- Dance Parties
- Mariachi Band Competitions - monthly
- Pop Up swimming pool and water slide in the summer
- Historic tours
- Rail History
- Segway tours
- Archeologic Dig Site
- Business Incubator
- Walking tours

- Nature/River Tours
- Fishing
- Music Concerts in the yards
- Home food growing classes
- Community Room/Meeting and Gathering space
- Energy conservation education
- Equine Education
- Horseback Riding
- Museum for Colorado/Denver's diverse western history
- Agricultural Education Summer Camps
- Educational Field Trips
- Science Stations
  - Carbon cycle, nitrogen cycle, water cycle
  - Regional Botany
- Agricultural Product Showcases
- Petting Zoo for horses, cattle, pigs, goats....
- Horseback Riding
- Super Hi-Technology Education
- Urban 4-H clubs with agricultural focus
- Small animal husbandry for urban dwellers
- Water quality BMP demonstration areas
- Best practices in agricultural water conservation
- Permaculture classes and demonstration gardens
- Bee Keeping classes
- Seed saving classes
- Future Farmers of America sponsorships for area schools
- Introduction to Urban Farming classes for local neighborhoods
- Water re-use best practices and demonstration
- Local school partnership-field trips-educational opportunities
  - Programming
  - Mentoring
  - Career exploration fairs
  - Shadowing
- Sponsor neighborhood kids to visit/work on farms and ranches
- Ted Style talks

Other ideas from WSSA:

- Dog shows, runs, agility, obedience trials.
- Public health screenings/fairs
- Alpaca shows
- Cat shows
- Pet expos
- Cattle shows
- Trade testing and exams
- Reptile show



- Graduations
- Scrap booking events
- Gem shows
- Tattoo shows/conventions
- Spa shows
- Wrestling
- Grappling
- Cheerleading
- Volleyball/basketball/hockey/soccer tournaments
- Marching band competitions
- Cage fighting
- Boxing
- Cup stacking
- Arena football
- Roller derby
- Circus events
- Disney on ice
- Monster truck
- Dinosaur show
- Quinceneara
- Beer festival
- Equine Clinics (Parelli, Clinton Anderson, etc)
- Flea Market
- Motivational speakers
- Golf show
- Hunting & fishing shows/expos
- Railroad fairs
- Senior citizen fairs/events
- Ski swap
- Indoor eventing (equestrian)
- Woodworking show
- Plays and ballets
- Talent show
- Mounted shooting
- Filming – multiple sources
- Fundraising dinners/banquets/private event
- Municipal elections/political events
- Mounted police
- Pridefest
- Proms
- BMX Blackjack Nationals
- Harlem Globetrotters

- Paintball tournaments
- Energy show
- International science & electronics fair
- Wine Competition
- Construction and architectural suppliers show
- Homebuilders Association
- Qwest Dex Phone Book Distribution
- Bison sale
- Colorado Beef Expo
- Farm Implement trade show – John Deere, Massey-Ferguson, Kubota, New Holland
- Livestock Convention
- National Boer Goat Show
- National Llama Show
- National Swine Show



**National Western Center Master Plan**

**NWCAC**

Neighborhood Programming Summary and Alignment with NWC Program

~~DRAFT-062614~~ Draft 8/28/14

Identified Facilities from NWCAC Facility Fit with NWC	Integrated Facility Program (IFP)
Facility and plan should span the river	Part of overall Site Circulation plan
A place like Seattle Pike Street Market – on the S. Platte River	Multiple Options-Yards, Outdoor Trade Show Space, Stadium Arena
Walkable-	Entire Site-All facilities
Open Access to the public-priority	Open except during Stock Show and larger events
Bring the inside out!	Entire Site
<b>Public Space</b>	Throughout the site to connect facilities and the neighborhoods
Parks relationship to nature/agriculture	Connections and access along the river from Globeville Landing Park to Heron Pond
Park-Like Atmosphere across the entire community	Center in an 'agricultural green" concept
Outdoor venues for entertainment	Multiple Options for outdoor venues-Stock Pens, plaza and open space for small events, entertainment, gatherings
Inclusive of Parks	Plan to include integration of Globeville Landing, Northside, Elyria and Argo Parks, Heron Pond and Heller Open Space
River walk – Connection to River	Trail and access throughout the site
A great public amenity	Entire site
A Community gathering place	Multiple locations throughout the site-plazas, parks, green space, facilities
Public spaces that are reflective of the community and are fun to spend time in	Multiple locations throughout the site-plazas, parks, green space, facilities
Outside Venues	Multiple Options for outdoor venues-Stock Pens, plaza and open space for small events, entertainment, gatherings
A place to walk and exercise	Trail and access throughout the site
Surrounding parks need to be a part of the overall plan	Plan to include integration of Globeville Landing, Northside, Elyria and Argo Parks, Herron Pond and Heller Open Space

Tell the story about the place using historic landmarks and use new facilities to help the story continue	Heritage Center and throughout the overall center-indoor and outdoor education about the history of the neighborhoods and the NWSS
Western History – Indigenous History	Heritage Center and throughout the overall center-indoor and outdoor education about the history of the neighborhoods and the NWSS
Neighborhood Cultural Center	Heritage Center and throughout the overall center-indoor and outdoor education about the history of the neighborhoods and the NWSS. <del>Specific facility not identified in the program</del> This element can be part of the Heritage Center and include uses such as the Globeville/Elyria Swansea display that was at the Denver Public Library
Coliseum/Stadium Arena/Livestock Exchange	Reuse studies of these 3 facilities pending
Take advantage of the river opportunity	Plan to provide access to river and river crossings
River open to the public-not closed off by private development	Plan to provide access to river and river crossings
Protect uniqueness of neighborhood-integrate the 'now' of the neighborhoods	Part of overall Master Plan development
Re-introduce Horses into the community	<del>Currently not in program</del> but could be shared with equine center. Needs to be discussed with CSU, NWSS & City; would require some zoning modifications
Horse Boarding Facilities	<del>Currently not in program</del> but could be shared with equine center. Needs to be discussed with CSU, NWSS & City; would require some zoning modifications. This will remain a possible programmed use pending ownership and staffing issue resolution.
4-H programming	Part of overall NWSS mission
Riding Stables/Trails	<del>Currently not in program</del> trails will be incorporated into the plan. Needs to be discussed with Parks and Recreation. This will remain a possible programmed use pending ownership and staffing issue resolution.
Horse rehab program	<del>Currently not in program as discussed</del> CSU Equine Center is part of plan
Development around the transit station	Part of the overall Master Plan and Vision and the Neighborhood planning efforts
<b>Education for Children</b>	
Facilities for children that teach the relationship between water systems, animals and the food we eat	Overall education program to be developed-CSU and NWSS
A place to create better futures for the younger generation	Part of the overall Master Plan and Vision



A place to educate the neighborhood about health and wellness	Overall education program to be developed-CSU and NWSS
Equestrian education for young children	Overall education program to be developed-CSU and NWSS
Dedicated horse stalls to teach people about horses/riding	<del>Currently not in program</del> Overall education program to be developed-CSU and NWSS
Water/Water Management Education for kids and adults	Overall education program to be developed-CSU and NWSS
<b>Culinary Arts</b>	
Teaching kitchen/commissary kitchen to help people learn healthy cooking	Overall education program to be developed-CSU and NWSS
A shared community kitchen space with education on cooking and relationships between agriculture and the animal industries	Kitchen for Farm to Table as part of CSU program- <del>Community kitchen currently not in Program</del> -This is a program element that can be incorporated into the larger CSU food and kitchen program
Chefs Kitchen for the Neighborhood	Kitchen for Farm to Table as part of CSU program- <del>Community kitchen currently not in program</del> -This is a program element that can be incorporated into the larger CSU food and kitchen program
Academy dedicated to food and agriculture	Possible through CSU-needs to be discussed in collaboration w/ DPS This is a program element that can be incorporated into the larger CSU food and kitchen program
<b>Business Activities</b>	
A place for commerce-support local businesses, artists, entrepreneurs	Part of Overall Vision
Vendor Space for markets and local goods sales/festivals	Multiple locations throughout the site for vendor space and sale of local goods
A place that helps to create jobs in the new economy	Work Force and job development program needs to be developed
A Main Street Economy	The neighborhood plans and NWCMP will recommend land use changes and encourage a main street economy.
Opportunities for Urban Farm / Urban Ranch	Urban farm and garden/growing plots is part of the CSU program
Enterprise market space	Multiple locations throughout the site for vendor space and sale of local goods
Business Incubator Space	Multiple locations throughout the site for vendor space and sale of local goods

Collaborative economy with neighborhoods – Enterprising Economy	Multiple locations throughout the site for vendor space and sale of local goods
Work Force Development opportunities on the site	<del>Work Force and job development program needs to be developed</del> This is a program element that can be incorporated into the business component of the overall program
Reinforce local investment	Part of Overall Vision
<b>Sport/Recreation Opportunities</b>	<del>Currently not in program but multiple opportunities throughout the site-indoor and outdoor</del>
Olympic sized pool, wellness center, Recreational Facility – State of the Art	<del>Currently not in program.</del> The primary study area site is very constrained, but there is an opportunity to explore additional recreation facilities outside of the primary study area. The GES HIA identifies the need for better access to recreation opportunities. This need will be reiterated in the GES Plans. The City will comment on the I-70 SDEIS requesting that indoor recreation facilities are included as mitigation. The Recreation Center Master Plan calls for a focus on more regional-scale recreation centers and getting away from building new neighborhood centers that are no longer sustainable to operate. The master plan proposes relying heavily on partnerships to complete these goals, one reason there has been so much discussion with CDOT for a potential GES recreation center. Without strong partnerships, the CCD is required to prioritize costs of a new recreation facility against the millions of dollars of needed infrastructure improvements throughout the entire park and recreation system. This is an annual process where opportunities are weighed one against the other.
Velodrome	<del>Currently not in program.</del> A permanent velodrome will not be provided, but this could be a temporary use based on need. Could be set up at multiple locations on the site.
Health education – wellness center	<del>Currently not in program</del> Health Education - Overall education program to be developed-CSU and NWSS (see above for wellness center)
Recreational Facility – State of the Art	<del>Currently not in program;</del> placeholder for possible rec center in I-70 East project as part of activating the lid/cover @ Swansea School (See above for recreation center)
RV and Camper Space	Part of NWSS Program-200 RV spaces
<b>Art Related</b>	



Gallery spaces	Part of Coors Art-Western Heritage program
Public art spaces	Part of overall open space and connections
Outdoor Western Art Venue	Multiple opportunities in the overall open space and connections
Spaces for musicians / vendors	Multiple opportunities in the overall open space and connections
Affordable Artist Housing	<del>Currently not in program</del> —This is a program element that can be incorporated into the performing arts component of the overall program. The need for Affordable housing will be identified in the GES neighborhood plans.
Incubator	Flexible space in the program for this activity
Dance Studios	<del>Currently not in program; flexible space on the site could accommodate dance classes</del> —This is a program element that can be incorporated into the performing arts component of the overall program
<b>Other Identified Program Needs</b>	
Integrate local church events	Multiple opportunities in the overall site facilities open space
Recycling and Composting	Part of overall site regeneration vision and program
NWC as a Partnership with the Community	Part of the overall Master Plan and Vision
Mixed Income Housing	<del>Currently not in program</del> The need for mixed income housing will be identified in the GES neighborhood plans.
Project should recognize farmers	Opportunity to be part of Western Heiritage
Recognize the Military	Opportunity to be part of Western Heiritage
Mustang Adoption Program	<del>Currently not in program</del> —This will remain a possible programmed use pending ownership and staffing issue resolution.
New School Site	<del>Currently not in program</del> —dependent on DPS analysis. A new school site will not be provided for the overall NWC program. At the June CAC meeting, DPS presented that there was not a need for an additional school site in the area of North Denver.
Work with DPS to determine new school needs in the area	<del>Currently not in program</del> —dependent on DPS analysis. A new school site will not be provided for the overall NWC program. At the June CAC meeting, DPS presented that there was not a need for an additional school site in the area of North Denver.
Connection to Adams County	Part of overall Master Plan
Livestock Exchange Building as a museum	Reuse study to look at opportunities for uses in Livestock Exchange Building. <del>Traditional museum currently not in program</del> —This element can be part of the Heritage Center



MAY 30, 2018  
PUBLIC REALM PROGRAMMING



## APPENDIX B: ENVIRONMENTAL CONSIDERATIONS



In association with Winter & Co.

IMAGINE. DISCOVER. CULTIVATE.



## NWC Sustainability and Regeneration Framework and Goals

Engage the River and Nature					
<i>Guidelines</i>					
Recognizes the historic, ecological, and economic value of the site's proximity to the South Platte River as a key component of the National Western Center experience					
Celebrates and respects the natural world by promoting the restoration of the River's ecosystem, water quality and animal habitat					
Builds on current successes and recreational activity along the River, establishing a river-focused urban environment that is healthy, habitable and connected					
Enhances the safety of the River corridor and the surrounding region, serving as an integral connector of the adjacent neighborhoods					
Serves as one of several new gateways into and out of downtown Denver					
Engage the River and Nature	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<i>Goals</i>					
<b>ERN 1:</b> Create safe, intentional connections to the river and natural areas	<ul style="list-style-type: none"> <li>◆Percentage of area dedicated to green space</li> <li>◆Number of connections to River</li> </ul>	Building District Programming	Immediate Ongoing	See below	See below
<b>ERN 1.1:</b> Provide diverse yet focused visual and physical access to nature and the River	<ul style="list-style-type: none"> <li>◆Number and type of connections to River</li> </ul>	Building District	Design Construction	<ul style="list-style-type: none"> <li>◆Leverage existing infrastructure</li> <li>◆Use Water Resources Center</li> <li>◆Create Boardwalks</li> <li>◆Stairs to river</li> </ul>	<u>Steps:</u> Create NWC River Master Plan <u>Partners:</u> Greenway Foundation, CSU Water Center, The Water Connection
<b>ERN 1.2:</b> Create series of green spaces on site that connect to one another and to nearby greenspaces, trails, parks	<ul style="list-style-type: none"> <li>◆Number of connections per greenspace</li> <li>◆Confirmation of connection to spaces outside NWC</li> </ul>	District Neighborhood	Design Construction	<ul style="list-style-type: none"> <li>◆Use trails and vegetated corridors to link greenspaces</li> </ul>	<u>Steps:</u> Create NWC River Master Plan <u>Partners:</u> Parks and Recreation
<b>ERN 2:</b> Use nationally or internationally recognized rating system for landscape design and maintenance, favor the use of native plants, and integrate with water use goals (EER 3).	<ul style="list-style-type: none"> <li>◆Sustainable Sites or similar system metrics</li> </ul>	Building District	Design Construction	<ul style="list-style-type: none"> <li>◆Restrict non-native plants to small percentage (or 0%)</li> <li>◆Xeriscape</li> <li>◆Provide variety of landscape experiences</li> </ul>	<u>Steps:</u> Research rating systems and determine appropriate system or benchmarks <u>Partners:</u> Public Works, Parks and Recreation, CSU Landscape Architecture

NWC Sustainability and Regeneration Framework and Goals

Engage the River and Nature	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>ERN 3:</b> Replace or integrate physical infrastructure with natural systems and/or incorporate functional biomimicry and biophilic design principles wherever possible</p>	<ul style="list-style-type: none"> <li>◆Infrastructure plans must address alternatives</li> </ul>	<p>Building District</p>	<p>Design Construction Programming</p>	<ul style="list-style-type: none"> <li>◆Green infrastructure</li> <li>◆Integrate natural systems from surrounding areas</li> <li>◆Use ecosystem services as part of life-cycle costing during design</li> </ul>	<p><u>Steps:</u> Assign ecosystem services, establish design criteria, research comparable projects <u>Partners:</u> The Water Connection, Public Works, CSU Institute for the Built Environment</p>
<p><b>ERN 3.1:</b> Treat stormwater onsite, using various methods throughout the site, to create net zero or net positive impact on stormwater quality and quantity entering the South Platte River</p>	<ul style="list-style-type: none"> <li>◆City and state water quality standards</li> <li>◆MS4 permit requirements</li> <li>◆Percent pervious surface</li> </ul>	<p>Building District</p>	<p>Design Construction Programming</p>	<ul style="list-style-type: none"> <li>◆Maximize pervious surface</li> <li>◆Create stormwater treatment and infiltration measures throughout site</li> <li>◆Increase tree canopy</li> </ul>	<p><u>Steps:</u> Create stormwater master plan <u>Partners:</u> Public Works, Greenway Foundation, The Water Connection, CSU Institute for the Built Environment</p>
<p><b>ERN 4:</b> Provide education and outreach on site related to the Platte River and its watershed and include educational components in water quality features, wastewater treatment, and water conservation measures</p>	<ul style="list-style-type: none"> <li>◆User survey results</li> </ul>	<p>Building District Programming</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆Informational kiosks w/Interactive displays in Water Resources Center</li> <li>◆Partnership with environmental education programs</li> </ul>	<p><u>Steps:</u> Create educational program plan <u>Partners:</u> Greenway Foundation SPREE Program, Environmental Learning for Kids, The Water Connection</p>
<p><b>ERN 5:</b> Consider impacts to the Platte River watershed during all stages of decision making (design, construction, operations, etc.) to support the river containing swimmable, fishable water</p>	<ul style="list-style-type: none"> <li>◆City and state water quality standards</li> </ul>	<p>Building District</p>	<p>Design Construction</p>	<ul style="list-style-type: none"> <li>◆Construction management plans</li> <li>◆Sedimentation control</li> <li>◆Stormwater treatment</li> </ul>	<p><u>Steps:</u> Compile strategies from other cities and watersheds, establish water quality monitoring strategy and goals <u>Partners:</u> Public Works, CSU Water Center and Construction Management Program, The Water Connection</p>
<p><b>ERN 6:</b> Habitats along the River meet key diversity and health indicators and provide appropriate biological corridors linking to other habitats in surrounding areas</p>	<ul style="list-style-type: none"> <li>◆Percent and diversity of native species</li> <li>◆Removal of invasive species</li> </ul>	<p>District</p>	<p>Design Construction</p>	<ul style="list-style-type: none"> <li>◆Invasive species removal</li> <li>◆Bank modification</li> <li>◆Species and/or biodiversity management plans</li> </ul>	<p><u>Steps:</u> Create NWC River Master Plan, create baseline evaluations and goals for River health <u>Partners:</u> CSU Water Center, Greenway Foundation, Warner College of Natural Resources, The Water Connection</p>

## NWC Sustainability and Regeneration Framework and Goals

<b>Inspire Health and Wellness</b>					
<i>Guidelines</i>					
The site and the surrounding neighborhoods inspire a healthy and vibrant way of life locally, regionally and nationally through a demonstrated mix of housing, parks and open space, jobs and range of services, all of which consider active design principles.					
Promotes recreational opportunities, multi-model connections, and access to healthy food for all populations.					
Inspire Health and Wellness	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<i>Goals</i>					
<b>IHW 1:</b> Promote healthy food options, food security, and locally sourced foods	See below	Building District Neighborhood Programming	Programming (Short- and Long-term)	See below	See below
<b>IHW 1.1:</b> Increase availability of healthy, affordable, culturally appropriate food sources, ideally year-round, either on site or in partnership with surrounding businesses and organizations	<ul style="list-style-type: none"> <li>◆Number of markets and community gardens onsite or in surrounding areas</li> <li>◆Number of community gardens</li> <li>◆Proximity of markets to populated areas</li> </ul>	Building District Programming	Programming (Short- and Long-term)	<ul style="list-style-type: none"> <li>◆Mitigate contamination to allow cultivation onsite</li> <li>◆Work with community to create NWC market</li> </ul>	<p><u>Steps:</u> Create food strategic plan for NWC</p> <p><u>Partners:</u> CSU College of Health and Human Sciences, Colorado Fresh Food Finance Fund (CHFA), The GrowHaus, Denver Fresh, Denver OED</p>
<b>IHW 1.2:</b> Support evidence-based models that increase food security for community members, either onsite or in partnership with surrounding businesses and organizations	<ul style="list-style-type: none"> <li>◆Number of markets onsite accepting SNAP benefits</li> <li>◆USDA Standards of Food Insecurity</li> </ul>	Neighborhood Programming	Programming (Short- and Long-term)	<ul style="list-style-type: none"> <li>◆Set up dual pricing or sliding scale, implement SNAP</li> <li>◆Provide SNAP trainings for seasonal markets, local retailers</li> </ul>	<p><u>Steps:</u> Create food strategic plan for NWC</p> <p><u>Partners:</u> CSU College of Health and Human Sciences, Colorado Fresh Food Finance Fund (CHFA), The GrowHaus, Denver Fresh, Denver OED</p>
<b>IHW 1.3:</b> Promote year-round availability of locally sourced foods, either onsite or in partnership with surrounding businesses and organizations	<ul style="list-style-type: none"> <li>◆Volume or weight of available food</li> <li>◆Origin of foods</li> <li>◆Number of partnerships</li> </ul>	Neighborhood Programming	Programming (Short- and Long-term)	<ul style="list-style-type: none"> <li>◆ Seasonal mapping of food sources in the area by type</li> <li>◆Identify sources of fresh and prepared food, including community businesses</li> </ul>	<p><u>Steps:</u> Create food strategic plan for NWC</p> <p><u>Partners:</u> CSU College of Health and Human Sciences, Colorado Fresh Food Finance Fund (CHFA), The GrowHaus, Denver Fresh, Denver OED</p>



NWC Sustainability and Regeneration Framework and Goals

Inspire Health and Wellness	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<b>IHW 2:</b> Promote active transportation, active lifestyles, and access to nature for all site users to increase physical activity, promote mental wellbeing	<ul style="list-style-type: none"> <li>◆Health indicators identified in GES HIA, other fitness metrics</li> <li>◆User survey results</li> </ul>	Building District Neighborhood	Programming (Short- and Long-term)	See below	See below
<b>IHW 2.1:</b> Provide multi-modal transportation connections, particularly to major transit stops, neighborhoods, employment centers, parks, and other destinations	<ul style="list-style-type: none"> <li>◆Linear feet of bicycle lanes</li> <li>◆Linear feet of sidewalks</li> <li>◆Number of bus stops with amenities such as benches, lighting, etc.</li> </ul>	Building District Neighborhood	Design Construction	<ul style="list-style-type: none"> <li>◆Provide bus stop amenities to promote bus ridership.</li> <li>◆Provide bike lockers at transit stops and centers of employment.</li> <li>◆Provide bike racks</li> </ul>	<u>Steps:</u> Create bike/ped/transit maps and identify and fill gaps <u>Partners:</u> RTD, WalkDenver, BikeDenver
<b>IHW 2.2:</b> Design the site for extensive active use (e.g., biking, recreation, walking)	<ul style="list-style-type: none"> <li>◆Number of annual users of park and recreational amenities</li> <li>◆Number of site users who walk or bike to/from site</li> <li>◆Number of open stairwells in buildings</li> </ul>	Building District Neighborhood	Design	<ul style="list-style-type: none"> <li>◆Use wayfinding signs to increase walkability</li> <li>◆Provide bike racks at parks, all venues.</li> <li>◆Design buildings for activity</li> <li>◆Ensure bike/ped route safety (real, perceived)</li> </ul>	<u>Steps:</u> Create design guidelines for buildings and outdoor spaces <u>Partners:</u> ULI Healthy Places Committee, CO Health Foundation, Center for Active Living, CSU College of Health and Human Sciences
<b>IHW 2.3:</b> Improve connectivity to natural areas and places of respite, including the South Platte River	<ul style="list-style-type: none"> <li>◆Number of new connections to natural areas</li> </ul>	Building District Neighborhood	Design	<ul style="list-style-type: none"> <li>◆Create strategic connections between neighborhoods and the River, natural areas</li> <li>◆Provide amenities for pedestrian comfort</li> <li>◆Plant trees</li> <li>◆Design the site to provide variety of respite areas</li> </ul>	<u>Steps:</u> Create NWC River Master Plan, create map of connectivity between on and offsite destinations and natural areas <u>Partners:</u> BikeDenver, WalkDenver, Greenway Foundation, Trust for Public Land

NWC Sustainability and Regeneration Framework and Goals

Inspire Health and Wellness	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<b>IHW 3:</b> Design buildings to nationally or internationally recognize standards for physical and mental health of occupants	<ul style="list-style-type: none"> <li>◆LEED Health Credits</li> <li>◆Living Building Health</li> <li>◆Delos Metrics</li> </ul>	Building	Design Construction	<ul style="list-style-type: none"> <li>◆Use certified low emissions materials</li> <li>◆Set goals for daylighting, occupant control for each building</li> <li>◆Set appropriate ventilation levels</li> <li>◆Consider workplace flow, noise</li> </ul>	<p><u>Steps:</u> Create design guidelines</p> <p><u>Partners:</u> Delos, ULI Healthy Places Committee, CSU College of Health and Human Sciences, CSU Institute for the Built Environment</p>
<b>IHW 4:</b> Establish and meet or exceed quality of life indicators (odor, noise, light pollution, traffic, etc.) for visitors and neighbors	<ul style="list-style-type: none"> <li>◆FHA/DOT Noise Standards</li> <li>◆Backlight Uplight Glare (BUG) Standards (IES TM-15-11, Add A)</li> <li>◆LEED</li> <li>◆IESTMA Standard RP 33</li> </ul>	Building District Neighborhood	Design Construction	<ul style="list-style-type: none"> <li>◆Consider strategies identified in GES HIA Assessment</li> <li>◆Install appropriate BUG rated lighting</li> <li>◆Reroute truck traffic as appropriate/feasible</li> <li>◆Install ventilation systems that reduce indoor/outdoor odor</li> </ul>	<p><u>Steps:</u> Establish specific indicators and benchmarks for quality of life categories</p> <p><u>Partners:</u> Groundwork Denver, UCAN, NDCC Projects Office, DEH</p>
<b>IHW 5:</b> Reduce and/or mitigate heat island effect to reduce its impact on health, energy use, etc.	<ul style="list-style-type: none"> <li>◆Onsite temperature</li> <li>◆SRI for Materials</li> <li>◆Hardscape percentage</li> <li>◆Site albedo</li> </ul>	Building District	Design Construction	<ul style="list-style-type: none"> <li>◆Use high SRI materials for roofs, pavement, other surfaces</li> <li>◆Increase tree canopy</li> <li>◆Reduce air conditioning need</li> </ul>	<p><u>Steps:</u> Establish design guidelines for SRI, albedo, percent natural areas, tree canopy</p> <p><u>Partners:</u> Urban Climate Lab at Georgia Tech, CSU Institute for the Built Environment</p>

## NWC Sustainability and Regeneration Framework and Goals

<b>Embrace an Ethic of Regeneration</b>					
<i>Guidelines</i>					
Celebrates interdependence of natural, social and economic systems					
Restores regional healthy habits and ecosystems					
Uses building remodeling and new construction to improve the site and regional environmental quality, while creating healthy work spaces.					
Creates measurable positive social, economic, and environmental impacts on the community and the region					
Embrace an Ethic of Regeneration	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<i>Goals</i>					
<b>EER 1:</b> Integrate high performance sustainable design and operations in all buildings	See below	Building	Design Construction Operations	See below	See below
<b>EER 1.1:</b> Design all buildings to meet a nationally or internationally recognized rating system's (e.g., LEED) "Gold" level or higher, or current City and partner requirements, and design for efficient adaptive reuse over time	<ul style="list-style-type: none"> <li>◆ Living Building, LEED, etc. system metrics</li> <li>◆ Waste reduction during renovations (compare to traditional)</li> </ul>	Building	Design Construction Operations	<ul style="list-style-type: none"> <li>◆ Consider materials, energy efficiency, water efficiency, etc. in building design to also meet Goal EER 3</li> <li>◆ Modular structural elements</li> <li>◆ Simple finishes to reduce renovation waste</li> </ul>	<p><u>Steps:</u> Determine rating system for initial phases</p> <p><u>Partners:</u> CSU Institute for the Built Environment, NWC Sustainability Task Force, USGBC CO</p>
<b>EER 1.2:</b> Train all staff working in buildings and/or on grounds in behaviors that maximize the efficacy of sustainable design and will be accountable for seeing that such behaviors are practiced	<ul style="list-style-type: none"> <li>◆ ISO Operations and Management Standards (14001)</li> <li>◆ Staff Performance Metrics</li> </ul>	Building	Operations	<ul style="list-style-type: none"> <li>◆ Continuous staff training modules</li> <li>◆ Include performance metrics into job descriptions and performance review</li> </ul>	<p><u>Steps:</u> Begin training existing NWSS Complex staff, meet with concessionaires and vendors</p> <p><u>Partners:</u> NWSS, vendors, CSU Institute for the Built Environment</p>
<b>EER 1.3:</b> Guide visitors, through appropriate defaults and instructions, in behaviors on site that maximize the efficacy of sustainable design and to similar behaviors they can practice at home and at work	<ul style="list-style-type: none"> <li>◆ Visitor Evaluations and Surveys</li> </ul>	Building	Design Operations	<ul style="list-style-type: none"> <li>◆ Intelligent signage</li> <li>◆ Continuous evaluation</li> </ul>	<p><u>Steps:</u> Begin designing educational components for existing NWSS</p> <p><u>Partners:</u> CSU College of Health and Human Sciences, CSU Institute for the Built Environment, Denver Museum of Nature &amp; Science</p>



NWC Sustainability and Regeneration Framework and Goals

Embrace an Ethic of Regeneration	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>EER 2:</b> Design and operate facilities to maximize efficiency of facilities and resources per user</p>	<ul style="list-style-type: none"> <li>◆Occupancy Levels</li> <li>◆Energy, Water Use per User/Time</li> </ul>	District	Operations	<ul style="list-style-type: none"> <li>◆Maximize occupancy and facility use</li> <li>◆Create zones that can be shut down completely when not in use</li> </ul>	<p><u>Steps:</u> Identify existing underused space and appropriate potential use (community, etc.) at NWSS  <u>Partners:</u> NWSS, UCAN, Groundwork Denver, GrowHaus</p>
<p><b>EER 3:</b> Create "net zero" or "closed loop" systems for energy, waste, and water</p>	See below	District	Design Construction Operations	See below	See below
<p><b>EER 3.1:</b> Create a "net zero" energy district, prioritizing technical and behavioral strategies to increase efficiency and using on-site renewable energy sources (by 5 years after full build-out)</p>	<ul style="list-style-type: none"> <li>◆Percentage of energy produced onsite</li> <li>◆Energy metering</li> </ul>	District	Design Construction Operations	<ul style="list-style-type: none"> <li>◆District and/or building level controls</li> <li>◆Energy efficient buildings and finishes</li> <li>◆Solar PV, hot water</li> <li>◆Combined heat/power</li> <li>◆Wind turbines</li> <li>◆Waste-to-energy</li> <li>◆Heat capture off sewer</li> <li>◆Groundsource heat</li> </ul>	<p><u>Steps:</u> Evaluate site for feasibility of various energy sources, establish efficiency benchmarks and design guidelines  <u>Partners:</u> NREL, CSU Institute for the Built Environment, CSU College of Engineering, Xcel Energy, renewable infrastructure providers (e.g., PV, wind, etc.)</p>
<p><b>EER 3.2:</b> Create a "net zero" or "closed loop" district for waste streams and apply relevant techniques and training during operations (by 5 years after full build-out)</p>	<ul style="list-style-type: none"> <li>◆Weight/volume of waste diverted</li> </ul>	District	Design Construction Operations	<ul style="list-style-type: none"> <li>◆Biogas digester</li> <li>◆Waste-to-energy</li> <li>◆Composting</li> <li>◆Recycling, reuse</li> <li>◆Sustainable purchasing</li> <li>◆Train users on waste reduction</li> </ul>	<p><u>Steps:</u> Create initial waste balance and estimate future waste streams, investigate waste-to-energy feasibility, implement composting for food waste  <u>Partners:</u> Denver Zoo, NWSS vendors/concessionaires, Waste Management, CCD Recycling</p>
<p><b>EER 3.3:</b> Create a "net zero" district for water use, use zero potable water for landscaping, and apply relevant techniques and training during operations (by 5 years after full build-out).</p>	<ul style="list-style-type: none"> <li>◆Potable water use/site user</li> <li>◆Amount used compared to traditional design</li> <li>◆Non-potable water use/sq ft exterior space</li> </ul>	District	Design Construction Operations	<ul style="list-style-type: none"> <li>◆Apply relevant technologies and training to use non-potable water for landscaping and other acceptable uses</li> <li>◆Install water efficient fixtures and train users on water conservation techniques</li> </ul>	<p><u>Steps:</u> Water balance study to determine baseline rainfall, ground water use to frame water use goals  <u>Partners:</u> CSU College of Engineering, CSU Institute for the Built Environment</p>

NWC Sustainability and Regeneration Framework and Goals

Embrace an Ethic of Regeneration	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>EER 4:</b> Divert at least 90% of allowable waste from landfill during all site manipulation and demolition processes</p>	<ul style="list-style-type: none"> <li>◆Weight or volume of diverted waste</li> </ul>	<p>Building District</p>	<p>All Construction Phases</p>	<ul style="list-style-type: none"> <li>◆Recycling</li> <li>◆Reuse</li> </ul>	<p><u>Steps:</u> Create construction management plan, identify materials in existing buildings  <u>Partners:</u> CSU Construction Management, CCD Waste Management and Recycling</p>
<p><b>EER 5:</b> Maintain or reduce greenhouse gas emissions (GHG) levels, including transportation, at or below 2016 GHG emissions and strive for continuous reduction over time, aiming for alignment with City and County GHG and climate goals</p>	<ul style="list-style-type: none"> <li>◆Greenhouse gas emissions from buildings, transportation, operations</li> <li>◆Amount of carbon sequestered</li> </ul>	<p>Building District</p>	<p>Design Construction Operations</p>	<ul style="list-style-type: none"> <li>◆Energy efficiency and renewable energy production</li> <li>◆Creating carbon sinks onsite</li> <li>◆Purchasing offsets for transportation emissions</li> <li>◆Using lower GHG cement</li> </ul>	<p><u>Steps:</u> Determine best GHG tracking system, evaluate attendee transportation modes  <u>Partners:</u> NREL, CSU Natural Resource Ecology Lab, CSU College of Engineering, CSU Facilities, CCD Office of Sustainability, Rocky Mountain Institute</p>
<p><b>EER 6:</b> Explore using a district scale rating system, such as EcoDistricts, LEED-ND (or similar) or following STAR Communities (or similar) metrics</p>	<ul style="list-style-type: none"> <li>◆Listed in each system</li> </ul>	<p>Building District</p>	<p>Design</p>	<ul style="list-style-type: none"> <li>◆Work with rating systems to determine which rating system is applicable</li> </ul>	<p><u>Steps:</u> Determine cost and applicability of various rating systems  <u>Partners:</u> CSU Institute for the Built Environment, USGBC CO, Living Building, EcoDistricts, DEH/CCD Office of Sustainability</p>

NWC Sustainability and Regeneration Framework and Goals

Community and Neighborhood Integration					
<i>Guidelines</i>					
Creates a welcoming and open “campus” to the adjacent communities					
Provides critical multi-modal connections and access points to the adjacent communities to engage the river, access transit and promote a healthy lifestyle					
Establishes a positive community benefit					
Community and Neighborhood Integration	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<i>Goals</i>					
<b>CNI 1:</b> Create porous district boundaries and physical, spatial, and psychological connections	See below	Building District Neighborhood	Design Construction	See below	See below
<b>CNI 1.1:</b> Ensure access for neighbors and visitors to public transportation stops, NWC venues and amenities, and increase connectivity and mobility overall	<ul style="list-style-type: none"> <li>♦Walkscore</li> <li>♦Traffic studies</li> <li>♦User surveys to determine neighborhood use of facilities</li> <li>♦NWC visitor use of neighborhood amenities</li> <li>♦Number of new connecting thoroughways</li> </ul>	District	Design Construction	<ul style="list-style-type: none"> <li>♦Provide new vehicular and bike/ped connections through the NWC site, both north/south and east/west</li> <li>♦Marketing/outreach campaign to get users on and through site</li> </ul>	<p><u>Steps:</u> Create mobility plan to ensure access to amenities, work over time to market NWC services in GES and beyond</p> <p><u>Partners:</u> UCAN Metro Denver, WalkDenver, BikeDenver, NDCC Projects Office</p>
<b>CNI 1.2:</b> Blend the boundary between site and surrounding neighborhoods while allowing for efficient event operations and ticketing	<ul style="list-style-type: none"> <li>♦Scale of structures at edges of NWC</li> <li>♦Number of design elements pulled into neighborhoods and vice versa</li> </ul>	Building District	Design Construction	<ul style="list-style-type: none"> <li>♦Ensure neighborhood-friendly and appropriately scaled uses at site boundaries (e.g. building footprints, massing, block faces, street level amenities, and setbacks)</li> <li>♦Integrate space types and uses</li> <li>♦Echo architectural features on and offsite</li> </ul>	<p><u>Steps:</u> Engage GES neighborhoods and NWCAC in design guideline creation, identifying themes and locations for direct connection to neighborhoods</p> <p><u>Partners:</u> NWCAC, UCAN, E-S United, ESG Business Association, designers</p>
<b>CNI 1.3:</b> Design site to a human scale for optimal user experience	<ul style="list-style-type: none"> <li>♦Size of public facing facades</li> </ul>	Building	Design Construction	<ul style="list-style-type: none"> <li>♦Provide range of sizes of structures and open spaces to provide interest and comfort</li> </ul>	<p><u>Steps:</u> Classify structures and open spaces by size, begin constructing guidelines for development</p> <p><u>Partners:</u> ULI Healthy Places Committee, CU Planning Dept.</p>



NWC Sustainability and Regeneration Framework and Goals

Community and Neighborhood Integration	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>CNI 2:</b> Continue relationship building, communication, and interaction with surrounding communities and Denver metro region, including culturally relevant engagement methods, to address community needs and reduce uncertainty</p>	<ul style="list-style-type: none"> <li>◆ Engagement Plans and Strategies</li> <li>◆ Survey results, interviews</li> </ul>	<p>Building District Neighborhood</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆ Continue NWCAC and expand other engagement opportunities</li> <li>◆ Continue to leverage NDCC projects' planning processes for further engagement</li> <li>◆ Continue identifying neighborhood groups/organizations for partnership</li> </ul>	<p><u>Steps:</u> Create ongoing strategy in partnership with NWCAC <u>Partners:</u> NWCAC, UCAN Metro Denver, ES United, The GrowHaus, Focus Points, LiveWell</p>
<p><b>CNI 3:</b> Create programming that supports neighborhood identity, the local economy, job opportunities, and economic development through training, local business incubation, fostering entrepreneurship, local partnerships, etc.</p>	<ul style="list-style-type: none"> <li>◆ Number of trainings and participants</li> <li>◆ Number of new businesses fostered at NWC</li> <li>◆ Number of NWC-Community business partnerships</li> </ul>	<p>Neighborhood City Regional</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆ Survey and document the residential and industrial history of the area</li> <li>◆ Create business incubation opportunities for local startup businesses</li> </ul>	<p><u>Steps:</u> Draft strategic plan for business incubation and begin relationship building, determine business development interests of community <u>Partners:</u> CSU College of Business, CSU Public History Department, Denver OED, ESG Business Association, Denver Chamber</p>

NWC Sustainability and Regeneration Framework and Goals

**Build Cultural Crossroads**

*Guidelines*

Educate the public about the historical importance of this site. The NWC site has been shaped by over 10,000 years of human activity and helped create the unique cultures of Denver and Colorado.  
 Foster the crossing of cultures locally, regionally, nationally or globally  
 Serve as a gathering place where ideas and diverse cultures can be exchanged in this 'hub' of the west  
 Celebrate local and regional artistic and creative talent  
 Integrate the "arts", in all its various forms, into the site and provides a platform that is inclusive of a broad range of cultural expressions  
 Create a unique region of the city that celebrates the past yet focuses on a mutually beneficial shared future through the combination of neighborhood, commercial and cultural experiences

<b>Build Cultural Crossroads</b>	<b>Potential Metric(s)</b>	<b>Scale(s)</b>	<b>Timing</b>	<b>Potential Implementation Strategies</b>	<b>Potential Initial Steps and Partners</b>
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*Goals*

<b>BCC 1:</b> Provide physical and programmatic space for cultural and artistic activity, and for innovation to emerge from the crossing of cultures	♦Number of potentially programmed spaces	Building District	Design Construction Programming	See below	See below
<b>BCC 1.1:</b> Highlight current cultural and artistic activities locally, regionally, nationally, globally	♦Characteristics of annual programming ♦Demographics of attendees at various events ♦Media coverage in diverse publications	District	Programming (Short- and Long-term)	♦Create framework for inclusion of arts that has scale, location of origin, other criteria to ensure diversity ♦Create and implement plan for appropriate capture of user information at events/programs ♦Develop programming that provides cross-section of art	<u>Steps:</u> Develop initial strategic plans for bringing in diverse cultural events and programs at current NWSS, establish advisory group <u>Partners:</u> Coors Western Art Association, RiNO District, Art Museums, CO Business Committee for the Arts, Hispanic Chamber of Commerce, Native American Chamber of Commerce
<b>BCC 1.2:</b> Foster new forms of cultural and artistic expression, particularly as these activities relate to the American West	♦Number of novel events, exhibitions, and programs	District	Programming (Short- and Long-term)	♦Develop strategic plans among NWC partners to support arts as part of overall programming ♦Use permanent and temporary public art to showcase Western art in various forms	<u>Steps:</u> Develop initial strategic plans for collaborative programming onsite currently, establish advisory group <u>Partners:</u> Coors Western Art Association, RiNO District, Art Museums, CO Business Committee for the Arts

NWC Sustainability and Regeneration Framework and Goals

Build Cultural Crossroads	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>BCC 2:</b> Create a virtual and physical global cultural destination that fosters the crossing of cultures locally, regionally, nationally or globally</p>	<ul style="list-style-type: none"> <li>◆ Mix of demographics of users, both in person and virtual</li> <li>◆ User survey results</li> </ul>	<p>All</p>	<p>Design Construction Programming</p>	<ul style="list-style-type: none"> <li>◆ Develop an online presence for the NWC that shares information, history, etc. and fosters interaction</li> </ul>	<p><u>Steps:</u> Develop plan for creation of NWC website, develop programming on current site that fosters cultural exchange <u>Partners:</u> CSU External Relations</p>
<p><b>BCC 2.1:</b> Provide physical and programmatic space for innovation to emerge from the crossing of cultures (e.g., local and large scale businesses, US and overseas companies, etc.)</p>	<ul style="list-style-type: none"> <li>◆ Mix of demographics of users, both in person and virtual</li> <li>◆ User survey results</li> </ul>	<p>Building District Neighborhood</p>	<p>Design Construction Programming</p>	<ul style="list-style-type: none"> <li>◆ Intentionally program events (live and virtual) with diverse audiences that focus on creativity and innovation</li> </ul>	<p><u>Steps:</u> Create strategic plan for innovative cross-cultural programming <u>Partners:</u> Biennial of the Americas, Chambers of Commerce, DDP Start-up Week</p>
<p><b>BCC 3:</b> Practice inclusiveness and consider multiple cultural viewpoints at all decision-making stages, including design, construction, operations, events, etc.</p>	<ul style="list-style-type: none"> <li>◆ Characteristics of annual programming</li> <li>◆ Demographics of attendees at various events</li> <li>◆ Media coverage in diverse publications</li> </ul>	<p>Building District Neighborhood</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆ Create criteria for decision-making process that ensure inclusivity and cultural sensitivity</li> </ul>	<p><u>Steps:</u> Develop initial criteria for decision-making, establish advisory group <u>Partners:</u> NWCAC, Hispanic Chamber of Commerce, Native American Chamber of Commerce, CO Black Chamber of Commerce, Denver Women's Commission, Groundwork Denver, etc.</p>



NWC Sustainability and Regeneration Framework and Goals

Celebrate Western Heritage	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>CWH 3:</b> Honor the authenticity and origins of the site, preserving architecture and features that have historic and cultural merit, while efficiently reusing them and integrating with new facilities.</p>	<ul style="list-style-type: none"> <li>◆Percent/number of historic features preserved.</li> <li>◆Use of preservation incentives.</li> <li>◆Number of visitors to historic buildings/features.</li> </ul>	<p>Building District</p>	<p>Design Construction</p>	<ul style="list-style-type: none"> <li>◆Pursue other partnerships and creative opportunities to record and document the history of the site and surrounding neighborhoods.</li> <li>◆Educate potential developers on the incentives available for existing buildings. (See more in Part 7: Historic Resources)</li> </ul>	<p><u>Steps:</u> Complete a National Register Historic Places District nomination or equivalent level of documentation, complete Historic Structure Assessments for buildings considered for reuse <u>Partners:</u> Professional Historians CSU History Department, Historic Denver, History Colorado</p>
<p><b>CWH 4:</b> Offer robust educational programming and features that provide a balanced presentation about the natural, geological, agricultural, and cultural history of Colorado and the West</p>	<ul style="list-style-type: none"> <li>◆User survey results</li> <li>◆Number and characteristics of programs offered</li> <li>◆Number and distribution of onsite educational features</li> </ul>	<p>Programming</p>	<p>Long-term Programming</p>	<ul style="list-style-type: none"> <li>◆Develop and implement an Interpretative Plan</li> </ul>	<p><u>Steps:</u> Initiate interpretive plan process <u>Partners:</u> CSU, DMSN, History Colorado, NWSS, Historic Denver</p>
<p><b>CWH 5:</b> Honor the historic significance of human/animal relationships and continue to use best-in-class animal treatment and care</p>	<ul style="list-style-type: none"> <li>◆Humane Society or other standards for treatment</li> </ul>	<p>Programming</p>	<p>Long-term Programming</p>	<ul style="list-style-type: none"> <li>◆Develop public standards for animal care and treatment</li> <li>◆Work with Dr. Temple Grandin on design, implementation</li> </ul>	<p><u>Steps:</u> Develop design standards for animal movement, care <u>Partners:</u> Dr. Temple Grandin, CSU Animal Sciences Department</p>

## NWC Sustainability and Regeneration Framework and Goals

<b>Celebrate Western Heritage</b>					
<i>Guidelines</i>					
The site reflects, respects, and celebrates the meaning of the Western way of life and its unique influence on culture, competition, and commerce Celebrate the West's pioneering past and desire for continual discovery, while pointing visitors toward the future of how life in the West is evolving Honestly acknowledge aspects of Western history that may not be cause for pride today, while celebrating efforts to redress them Solidifies and sustains the National Western Stock Show (NWSS) as the top stock show and rodeo in the world Creates a world class equestrian facility to attract the highest level of competition in equestrian events Honors the connection between land and people, and how the Western landscape has shaped different generations and cultures Consider incorporating Western heritage in each stage of design and implementation					
Celebrate Western Heritage	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<i>Goals</i>					
<b>CWH 1:</b> Ensure that the NWC has world-class, multi-purpose stock show, rodeo, equestrian, and event facilities that support diverse year-round programming and a sustainable business model for the NWSS	<ul style="list-style-type: none"> <li>◆Percentage of programming that has specific diversity criteria</li> <li>◆Diversity of media coverage</li> <li>◆Facility occupancy and number of events</li> <li>◆NWSS revenue streams</li> </ul>	Building District	Design Construction Programming	<ul style="list-style-type: none"> <li>◆Establish criteria for events/programs/uses that help diversify programming</li> <li>◆Create and implement plan for appropriate capture of user information at events/programs</li> </ul>	<u>Steps:</u> Develop strategic and business plan to program new spaces with variety of events and ensure financial success <u>Partners:</u> Bill Pickett Rodeo, Indian National Finals Rodeo
<b>CWH 2:</b> Support and promote culturally sensitive and diverse events and social gathering places that highlight the history and present of the American West	<ul style="list-style-type: none"> <li>◆Percentage of programming that has specific diversity criteria</li> <li>◆Number of events spaces, booking rates, types of events</li> </ul>	Building District Programming	Design Long-term Programming	<ul style="list-style-type: none"> <li>◆Create Western cultural plan for NWC to use events and spaces</li> </ul>	<u>Steps:</u> Identify goals of Western cultural plan for NWC, research potential programs <u>Partners:</u> History CO, Denver Museum of Nature & Science, CSU History Department, Parks and Rec

## NWC Sustainability and Regeneration Framework and Goals

### Be Pioneering: Break Trail and Foster Innovation

#### Guidelines

Fosters global linkages to advance cutting edge research and development for products and services in the agricultural industry. This includes, but is not limited to, fields of study in food production and safety, nutritional health, technology, energy efficiency, animal husbandry and public policy.

Embraces innovation, independence and ingenuity

Is a place where "breaking trail" is in our founding charter and represents our forward-looking spirit

Encourages new ideas that serve as catalysts for recurring job creation, neighborhood entrepreneurialism, ongoing public and private capital investment, and a sustainable business model for the National Western Stock Show, new equestrian events, and the National Western Center Partners.

Be Pioneering: Break Trail and Foster Innovation	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>BPFI 1:</b> Advance the state of the art using site and facility design, operations, and events as experimental and educational "Living Labs"</p>	<ul style="list-style-type: none"> <li>◆Number of educational components designed into systems</li> <li>◆User surveys on educational effectiveness</li> </ul>	<p>Building District</p>	<p>Design Long-term Programming</p>	<ul style="list-style-type: none"> <li>◆Design each facility and/or public space with research question driving design criteria</li> <li>◆Monitor user and staff experiences to evaluate and understand facility use</li> <li>◆Design monitoring systems into facilities</li> </ul>	<p><u>Steps:</u> Inventory and learn from existing "Living Lab" facilities, identify initial goals for research/application <u>Partners:</u> NREL, CSU Institute for the Built Environment, CSU Warner Collage of Natural Resources, UBC, Rocky Mountain Institute</p>
<p><b>BPFI 2:</b> Foster entrepreneurship and innovation, particularly around food and food systems, water, energy, entertainment, livestock management, etc. through partnerships, research, training, outreach</p>	<ul style="list-style-type: none"> <li>◆Number of new partnerships</li> <li>◆Number of new businesses conceived/fostered at NWC</li> </ul>	<p>Building District</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆Create business incubation opportunities for local startup businesses</li> <li>◆Provide job training, business classes, and mentorship to entrepreneurs</li> </ul>	<p><u>Steps:</u> Identify local entrepreneurs to help shape NWC activities, identify gaps in training for entrepreneurs (esp. in food systems) <u>Partners:</u> CSU College of Business, Chambers of Commerce, Startup community</p>
<p><b>BPFI 3:</b> Showcase relevant innovation at the NWSS event each year</p>	<ul style="list-style-type: none"> <li>◆Number of talks, booths, events related to innovation in ag/livestock/food/other</li> <li>◆User surveys on impact</li> </ul>	<p>Building District</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆Convene panels, speakers, Q&amp;A with innovators in field</li> <li>◆Create innovation awards</li> </ul>	<p><u>Steps:</u> Identify innovators in field, determine plan for showcasing as early at 2016 NWSS <u>Partners:</u> NWSS, CSU President's Agricultural Advisory Council, CSU Office of Engagement</p>



NWC Sustainability and Regeneration Framework and Goals

Be Pioneering: Break Trail and Foster Innovation	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>BPFI 4:</b> Use virtual and physical space to host cross-sector and cross-discipline conversations, speaker series, demonstrations, conferences, etc.</p>	<ul style="list-style-type: none"> <li>◆Number of attendees at interdisciplinary conferences (live, virtual)</li> <li>◆Number of interdisciplinary discussions annually</li> <li>◆Partnerships and/or products emerging out of NWC</li> </ul>	<p>Building District</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆Use existing interdisciplinary groups to help convene conversations</li> <li>◆Design and host interdisciplinary conferences</li> </ul>	<p><u>Steps:</u> Identify controversial conversations or areas lacking interdisciplinary approach as initial conversations to address, potentially at current NWSS  <u>Partners:</u> NWSS, CSU Office of Engagement and College of Agricultural Sciences, School of Global Environmental Sustainability, DMNS, History Colorado</p>
<p><b>BPFI 5:</b> Establish adaptive management processes in operations and maintenance that drive continual improvement, measurement, monitoring and adaptation</p>	<ul style="list-style-type: none"> <li>◆Revenue and operating costs</li> <li>◆Resource use (water, energy)</li> <li>◆Waste volumes and types</li> <li>◆User satisfaction</li> <li>◆Employee satisfaction</li> </ul>	<p>Building District</p>	<p>Programming (Short- and Long-term)</p>	<ul style="list-style-type: none"> <li>◆Design monitoring systems into facilities</li> <li>◆Create user/employee satisfaction survey protocol</li> <li>◆Develop systems for evaluation and improvement</li> </ul>	<p><u>Steps:</u> Establish baselines in resource use, efficiency, revenue, user and employee satisfaction  <u>Partners:</u> NWSS, CCD, CSU Institute for the Built Environment and College of Health and Human Sciences</p>

NWC Sustainability and Regeneration Framework and Goals

Create Fun and Entertaining Experiences					
<i>Guidelines</i>					
An interactive and engaging site for visitors					
A place that establishes, for young and old visitors alike, memorable and enjoyable experiences that encourage them to return to the NWC					
Provides a broad range of year-round entertainment, competition, and educational programming					
Create Fun and Entertaining Experiences	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<i>Goals</i>					
<b>CFE 1:</b> Create programming that emphasizes health (e.g., NWC 5K, farmers market)	♦Number of health-related events	Building District	Programming (Short- and Long-term)	♦Create annual plan for healthy, fun events	<u>Steps:</u> Create initial health-related event at current NWSS Complex (e.g., run or market) <u>Partners:</u> CO Health Foundation, LiveWell GES, The GrowHaus, Focus Points
<b>CFE 2:</b> Ensure design and operations allow for safe interactivity and hands-on learning for all ages	♦Number of learning opportunities throughout site, both formal and informal	Building District	Programming (Short- and Long-term)	♦Create Interpretive Plan that includes structures, infrastructure, River and novel, fun learning experiences that change	<u>Steps:</u> Begin collecting concepts and developing Interpretive Plan <u>Partners:</u> DMNS, CSU, History CO, NWSS, CCD Parks and Rec
<b>CFE 3:</b> Create outdoor activity spaces to provide flexible uses and a variety of experiences related to food, agriculture, livestock, energy, water, etc.	♦Number of potential uses for each public space ♦Occupancy rates of public spaces for events annually	District Programming	Design Programming	♦Design a variety of public spaces that allow for different types of activity (passive, active, etc.) and events (markets, sports, etc.)	<u>Steps:</u> Create inventory of desired public spaces, begin collecting concepts and developing plan for public spaces <u>Partners:</u> DMNS, CSU, History CO, NWSS, CCD Parks and Rec
<b>CFE 4:</b> Integrate local and regional visual and performing art and artists into the site design, programming, and operations	♦Number of locally/regionally sourced public art pieces, programs ♦Participation of local/regional artists in design process, review	Building District Programming	Design Programming	♦Use local/regional arts community as design guideline developers, reviewers ♦Conduct local/regional competitions for arts installations ♦Conduct local/regional design competitions for specific site elements (e.g., sections of walking/biking paths)	<u>Steps:</u> Develop arts engagement plan, establish arts advisory group <u>Partners:</u> CCD Parks and Rec, Coors Western Art, MCA, DAM, NWSS, CSU

## NWC Sustainability and Regeneration Framework and Goals

<b>Grow Local, Regional, and Global Intelligence</b>					
<i>Guidelines</i>					
Stimulates pre-school through post-secondary experiential education and cultivates new partnerships for life-long learning around the issues of agriculture, food systems, land and livestock management, veterinary medicine, history, ecology, business, the arts, and engineering					
Creates a spirit of engaged learning by investing in local and regional intelligence, linked to an ever-expanding global knowledge base					
Serves as a key Corridor of Opportunity gateway, linking downtown Denver and the local neighborhoods from Denver Union Station to Denver International Airport through new multi-modal connections					
Grow Local, Regional, and Global Intelligence	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<i>Goals</i>					
<b>GLRGI 1:</b> Provide programming that complements local and regional education, including (but not limited to) topics of agriculture, food systems, land and livestock management, veterinary medicine, history, ecology, business, the arts, and engineering	<ul style="list-style-type: none"> <li>◆Number of educational programs</li> <li>◆Number of educational partner organizations</li> </ul>	Building District	Programming (Short- and Long-term)	<ul style="list-style-type: none"> <li>◆Daily demonstrations on animal care at "Urban Farm"</li> <li>◆Viewing windows into vet facilities</li> <li>Interpretive activities at crop plots</li> <li>◆Harvest days and nutrition classes</li> <li>◆Student competitions on NWC art, design, engineering problems</li> </ul>	<p><u>Steps:</u> Identify gaps in local/regional/statewide programming that NWC can fill with experiential learning, etc. to develop strategic plan</p> <p><u>Partners:</u> DPS, CSU School of Education, DMNS, History CO, Urban Farm at Stapleton</p>
<b>GLRGI 2:</b> Work with local and regional schools to provide on- and off-site educational opportunities and pathways for life-long learning for students of all ages	<ul style="list-style-type: none"> <li>◆Number of NWC programs in schools in CO</li> <li>◆Number of school programs onsite</li> </ul>	District Neighborhood City Regional	Programming (Short- and Long-term)	<ul style="list-style-type: none"> <li>◆NWC mobile lessons that can travel to schools</li> <li>◆Curricula development</li> <li>◆School visits to site with age-appropriate activities</li> </ul>	<p><u>Steps:</u> Identify gaps in local/regional/statewide programming that NWC can fill as partners with schools, curricula development</p> <p><u>Partners:</u> DPS, CSU School of Education, DMNS, History CO, Urban Farm at Stapleton, CO Montessori Academy</p>



NWC Sustainability and Regeneration Framework and Goals

Grow Local, Regional, and Global Intelligence	Potential Metric(s)	Scale(s)	Timing	Potential Implementation Strategies	Potential Initial Steps and Partners
<p><b>GLRGI 3:</b> Use infrastructure, natural systems, buildings, animal care, crop production, operations, monitoring, etc. as public, formal, and informal educational opportunities, including (but not limited to) STEM subjects</p>	<ul style="list-style-type: none"> <li>◆Number of educational components designed into systems</li> <li>◆User surveys on educational effectiveness</li> </ul>	<p>Building District</p>	<p>Design Construction Operations Programming</p>	<ul style="list-style-type: none"> <li>◆Real-time energy, water monitors in facilities and on energy generation infrastructure</li> <li>◆Stormwater management (e.g., bioswales) with interpretive signs</li> <li>◆Viewing windows into composting, gasification or other waste facilities</li> <li>◆Health information on actively using site (e.g., you burn X calories walking up stairs) or on crop plots</li> <li>◆Viewing windows into animal care areas</li> </ul>	<p><u>Steps:</u> Education/interpretive plan for use of site as educational tool <u>Partners:</u> DMNS, History Colorado, CCD Parks and Rec, Greenway Foudation, CSU Warner College of Natural Resources, CSU Institute for the Built Environment, CSU School of Education</p>
<p><b>GLRGI 4:</b> Create or extend existing programs to support mentorships, training, and internships at the NWC</p>	<ul style="list-style-type: none"> <li>◆Number of mentor/mentees</li> <li>◆Number of local/regional interns</li> <li>◆Number of job training programs</li> </ul>	<p>Building District</p>	<p>Design Construction Operations Programming</p>	<ul style="list-style-type: none"> <li>◆Internship Program for facility operations, program development, education, animal care, etc.</li> <li>◆Job training in areas identified by communities as desirable</li> <li>◆Partnerships with businesses for mentorships, internships (e.g., ag businesses)</li> </ul>	<p><u>Steps:</u> Identify local/regional needs for internships, mentorships, begin developing business relationships as needed, expand existing programs at NWSS <u>Partners:</u> NWSS, CSU College of Business, ESG Business Association, high school programs, DPS</p>
<p><b>GLRGI 5:</b> Use the NWC platform, both physical and virtual, to convene discussions that inform and improve the state of the art, including (but not limited to) topics of agriculture, food systems, land and livestock management, veterinary medicine, history, ecology, business, the arts, and engineering.</p>	<ul style="list-style-type: none"> <li>◆Number of attendees at conferences (live, virtual)</li> <li>◆Number of discussions annually</li> <li>◆Partnerships emerging out of NWC</li> </ul>	<p>Building District</p>	<p>Design Construction Operations Programming</p>	<ul style="list-style-type: none"> <li>◆Host conferences at the NWC</li> <li>◆Host business association meetings</li> <li>◆Convene virtual discussions</li> <li>◆Host maker events, hack-a-thons, design charrettes, other creative events to provide concrete outcomes</li> </ul>	<p><u>Steps:</u> Begin creating online presence (see above), assess current events hosted by NWC partners that may be hosted at NWC in the future <u>Partners:</u> CSU, DMNS, History Colorado, CCD, NWSS, Visit Denver</p>

# ReNEWW Performance Management Framework

Table 5 presents a summary of the “ReNEWW” PMF. A detailed description of the ReNEWW KPI supporting details follows the table.

Table 5. Capital Build Draft Performance Management Framework — ReNEWW

Key Performance Indicator	Description	Proposed Measure	Target	Justification
<b>ReNEWW: Sustainable Site Renewal of Energy, Water, Waste, and Natural Environment systems</b>				
<b>Programmatic Strategy: Align LEED GOLD certification with specific optional credits that support the desired outcomes in the four theme areas</b>				
LEED GOLD +	Develop LEED GOLD strategy to identify optional credits that support four themes	Design milestone review compliance	95% of designs compliant with LEED GOLD+ strategy	EO 123
<b>Water: Create an Inspiring “One Water” District</b>				
<b>Desired Outcome: Apply the right quality of water to the right use throughout the site: reduce overall water consumption, and minimize potable water use</b>				
Municipal water usage (per final design)	Emphasis on water conservation	Average gallons of municipal water used Per employee Per visitor Per irrigated areas	Per employee: 2.4 gal/day Per visitor: 1.3 gal/day Per gpsf irrigated area: 12 gal/year	CCD EO 123 Ch. 6 Water Wise CCD 2020 Gov. Ops Goals (18 gpsf average target for irrigation)
Due diligence regarding right water use at the right time	Evaluate potential water sources for Capital Build and the feasibility, e.g. purple pipe for irrigation	Due diligence documentation and presentation for Steer-COM consideration	Completion of due diligence milestones	Opportunities unique to campus scale energy portfolio
<b>Desired Outcome: Deliver the natural system the right water at the right time: maximize landscape and green infrastructure in support of water, stormwater, stream health, and enhanced resilience to extreme weather</b>				
Effective impervious area	Support overall site water quality	Sq ft impervious/total sq ft	TBD after placemaking	CCD Ultra Urban Green Infrastructure Guideline; Urban Drainage and Flood Control Manual
<b>Natural Environment: Create a campus that encourages visitors to engage with the natural environment</b>				
<b>Desired Outcome: Thriving urban ecosystem that enhances the relationship between people and nature</b>				
Greenspace integration	Public space	TBD after Campus Placemaking	TBD after Campus Placemaking	Advisory group
Tree canopy	Existing tree canopy of capital build acreage	Per CCD	TBD based on benchmark/treatment of invasive tree removal	CCD EO 123 Ch. 8: Tree protect—maintain Denver’s 19% coverage

Table 5. Capital Build Draft Performance Management Framework — ReNEWW

Key Performance Indicator	Description	Proposed Measure	Target	Justification
<b>Desired Outcome: Improve the current state of the riverfront</b>				
Eliminate evasive species	First step to improve habitat	Restored acreage for what we touch/Baseline invasive species acreage	90% improved acreage invasive species removal	Industry best practice
<b>Desired Outcome: Design materials to be avoided and which inhibit ReNEWW; or that are preferred and which enhance ReNEWW</b>				
Material selection	Evidence of red, amber, green list items used in design	Number of red items used in design versus number of green items. Assurance report from CCD OOS of meeting intent of EO 123 Chapters 2 and 5	0 red items; TBD green items	CCD EO 123 Ch. 5: Materials and Waste Management Memoranda 123-D; concrete-specific requirement per EO 123
<b>Energy: Start the journey towards achieving Net Zero (or positive) energy</b>				
<b>Desired Outcome: Minimize annualized energy demand of campus each phase of buildout</b>				
Annual energy use	Energy demand	Million British thermal units (MBTU)	TBD; see LEED GOLD + KPI	CCD EO 123
<b>Desired Outcome: Maximize installed renewable energy generation</b>				
Renewable ready campus	Energy supply	% renewable ready capacity	TBD based on place making results/ procurement due diligence	Enable future investments in renewables
Installed renewable energy		Installation	Renewable energy installation/ demonstration	CCD 2020 vision to double renewable energy production
<b>Desired Outcome: Maximize campus connections for alternative modes of transportation like biking, walking, transit, and alternative vehicles</b>				
Charging stations	First step in mobility improvements	# of charging stations	1:100 public parking spots	EO 123; CCD street light design standards
<b>Desired Outcome: Determine and enable appropriate energy system for thermal, electric, and transportation energy</b>				
Due diligence of district energy and/or microgrid solutions	Define feasibility of nontraditional energy	Due diligence documentation and presentation for Steer-COM consideration	Completion of due diligence milestones	Opportunities unique to campus scale energy portfolio
<b>Desired Outcome: Site and buildings operate to maximize energy efficiency performance with low maintenance and operational liability</b>				
Energy star ready		Energy model score/target energy score	75 score; average for NWC building portfolio	EO 123 Energy Star



Table 5. Capital Build Draft Performance Management Framework — ReNEWW

Key Performance Indicator	Description	Proposed Measure	Target	Justification
<b>Waste: Move towards Zero waste campus – leading by example</b>				
<b>Desired Outcome: Minimize disposal to landfill during demolition</b>				
Demolition waste diversion	Allowable demolition waste reuse, recycling, and deconstruction	Weight of repurposed material/total weight and volume of demo material	90%	EO 123 Ch. 5 *Already included in demo procurement
<b>Desired Outcome: Design space in the Capital Build facilities and public realm to support minimization, reuse, and recycling of waste strategies generated during operations</b>				
OM Waste Design review compliance	Design to accommodate OM waste management objectives	Acceptance by design review board that waste recycling and management infrastructure has been accommodated in final building and infrastructure design	95% design review compliance with OM waste management strategy	EO 123 Ch. 5
<b>Desired Outcome: Minimize waste generation on site during construction</b>				
Construction waste diversion	Allowable construction waste diversion	lb of waste recycled/lb of total waste	50%	EO 123 Ch. 5

## 8.1 General Principles

- City and County of Denver (CCD) Executive Orders (EO) 123 (March 11, 2013) establishes the minimum compliance requirement for sustainability.
- The National Western Center (NWC) Program focuses on specific Leadership in Energy and Environmental Design (LEED) points that align with the four ReNEWW goal areas of Natural Environments, Energy, Water, and Waste. Such a laser focus assures alignment with the LEED GOLD standard compliance requirement while avoiding duplication, gaps, or tension with program desired outcomes.

## 8.2 Key Performance Indicators and Supporting Details

Table 6 describes the ReNEWW KPIs and their corresponding supporting details.

Table 6. Performance Management Framework Workshop Participants

Key Performance Indicator	Supporting Details
LEED GOLD+	<p>LEED promotes renewal of the built environment, focusing on performance in five areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. LEED is a third-party certification program and the nationally accepted benchmark for the design, construction, and operation of high-performance green buildings.</p> <p>LEED GOLD (required by CCD) entails attaining 60 points under the rating system and fulfilling all prerequisites. The LEED GOLD+ target will seek specific optional credits to support NWC's goals in the areas of Energy, Water, Waste, and Natural Environment. The LEED GOLD strategy considers</p>