

# Cherry Creek North Streetscape Design Standards and Guidelines



9.25.18

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**CHERRY CREEK NORTH BUSINESS IMPROVEMENT DISTRICT**

Julie Underdahl, President & CEO  
Susan Fry, Director of Physical Environment  
Patrick Allison, Physical Environment Specialist  
Brian Phetteplace, Director of Economic Development  
Jenny Starkey, Director of Marketing and Community Relations  
Zach Wagner, Assistant Physical Environment Coordinator

**CHERRY CREEK NORTH BUSINESS IMPROVEMENT DISTRICT BOARD OF DIRECTORS**

Chair: Eric Buchanan, Oliver McMillan  
Vice Chair: Roy Kline, Western Development Group  
Secretary/Treasurer: Brett Pearson, Janus Henderson Investors  
Jan Lucas, Sage Hospitality  
Lynda Campbell, Stonebridge Companies  
John Conway, Parking Forward  
Karrie Fletcher, Alpine Bank  
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**DENVER CITY COUNCIL**

Wayne New, District 10

**DUNN + KILEY**

Chris Dunn  
Tom Gardner  
Eric Sakotas



## Introduction

# 1.0

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September 11, 2018

To: The City of Denver, CCN Design Advisory Board, Developers and Designers Undertaking the Design and Development of New Projects within the Cherry Creek North Business Improvement District

From: Eric Buchannan – Chairman of the Board  
Julie Underdahl – CEO and President of the CCN BID

Dear Colleagues:

The CCN BID Board is excited with the growth and change underway within the BID. The BID has worked diligently over the past 30 years to create a world-class Commercial and Residential District where people come to live, work, play and stay. In concurrence with our long-term goals for the neighborhood’s revitalization, we also must be cognizant of maintaining a livable, vibrant and desirable neighborhood that maintains the BID’s design standards during this transformation.

Our intention with this document is to inform the parties who will be undertaking the design of new projects within the BID of our design standards developed as part of the BID’s New North \$18 million Capital Improvement Project. We hope with these Design and Improvement Standards, combined with the companion document “Construction Compliance Standards for Construction within the Cherry Creek North Business Improvement District,” there will be a seamless relationship where your work can be completed efficiently and in a manner that complies with and enhances the BID’s high-quality design standards.

The Cherry Creek North Business Improvement District team.



## 1.0 Introduction



## 1.2 Introduction

Cherry Creek North (CCN) is an active, walkable, mixed-use district embedded within the fabric of Cherry Creek neighborhoods. It spans 16-blocks from 1st Avenue to 3rd Avenue, and from University Boulevard to Steele Street. Its special character is defined by the quality of the public realm and its outdoor, pedestrian-friendly shopping environment.

This publication addresses design and improvement standards that maintain and strengthen the unique public realm in CCN and the BID's investment in the many streetscape assets. The CCN BID is a compact urban area with significant vehicular and pedestrian traffic on a daily and nightly basis as well as regular community events. These standards are intended to inform developers and designers of what the standards and expectations are within the CCN BID. They were begun as part of the 2008 New North Capital Improvement Project and have evolved as new projects have been designed and built within the BID.

As the area continues to evolve, it is essential that developers, contractors and sub-contractors respect and reinforce the BID's standards and the District's mixed-use nature, while contributing to its special character.





### 1.3 History of Cherry Creek North

One hundred and forty years ago, Cherry Creek North was part of a small town called Harman. Since then, Cherry Creek North has emerged as a staple in the fabric of Denver and Colorado, blossoming into a very special mixed-use neighborhood.

Today, nearly 600 businesses make up the area's 16 walkable blocks, where you can find a variety of independent and international retailers featuring unique fashion, jewelry and home furnishing stores, spas, salons, art galleries, and restaurants.

The Cherry Creek North Business Improvement District (CCNBID) is a public organization primarily funded by private commercial tax payers. The BID's mission is to actively plan, manage and promote Cherry Creek North as a premier destination for shopping, dining, living, working and visiting.

The BID was established in 1989 as the first business improvement district in the state of Colorado. The BID's boundaries extend 16-blocks from 1st Avenue to 3rd Avenue, and from University Boulevard to Steele Street. The BID is a governmental special district chartered by State Statute. The District provides essential services that support property owners, merchants, and other users of the District that would otherwise not be available. The BID is governed by a board of directors that is appointed by the Mayor of Denver, approved by the Denver City Council, and serve at the pleasure of the Mayor and Council. Property taxes from the District property owners are the primary source of financial support. Based upon annual revenues, the Cherry Creek North BID is the second largest in Colorado.

The BID ensures that Cherry Creek North is a premier destination through day-to-day maintenance and operations, annual local and tourism marketing and advertising, constituent outreach, signature events including holidays, and other initiatives.







### 1.4 The New North - Capital Improvement Project

In 2008, the CCNBID undertook the first major renovation, the Cherry Creek North Capital Improvement Project (CIP), of the 16-block mixed-use retail area in 20 years. The CCNBID, one of the most popular mixed-use retail destinations in the City, became the first Colorado business improvement district to issue its own bonds when it sold \$18.5 million in debt to finance the project. The CIP project included improvements to landscaping to beautify the area and conserve water, new pedestrian lighting to enhance nighttime safety and ambiance, a new system of wayfinding, and a new visual identity for the District, improved parking with SmartMeters, stations for Denver's new Bike Sharing program, 20 "Art Garden Places" that promote dwell time among shoppers, and improved event infrastructure to better host the Cherry Creek Arts Festival and other events.

The final element was Fillmore Plaza, which has been redesigned as a hybrid plaza to enhance pedestrian, event and retail activity. Upgraded features include special trees and landscaping, lighting, environmental graphics, street furniture and a central canopy-like shade structure. The new plaza provides vehicular access and also has the ability to be closed off throughout the year for events such as the Cherry Creek Arts Festival, Sidewalk Sale, Cherry Creek North Food & Wine, and other CCN activities. The design and construction costs for the entire project were funded by the BID through the sale of its own bonds.

The CCNBID was granted a master encroachment permit by the City of Denver in 2012 granting the BID maintenance responsibilities for all of the streetscape improvements within the 16 block district.





## Objectives of Design Standard Recommendations

# 2.0





### 2.1 Purpose

The purpose of the Streetscape Design Standards and Guidelines is to provide a clear, comprehensive document articulating the expectations of new projects built within the BID's boundaries. This document provides the developer, designer and City with an understanding of the Design Standards and materials that are to be used within the public right-of-way of the District.

As part of the 2008 streetscape improvement project there were many new design details and standards created for the BID. During the past ten years most of these standards have held up and are still pertinent to the BID. However there are a couple of standards from 2008 that have been refined or replaced with higher quality and durable materials in an effort to enhance the District's streetscape. The following pages have attempted to define what the current standard includes.

### 2.2 Applicability

All new construction, exterior renovation, site impacts or utility projects proposed within the CCN BID are subject to the Standards. Failure to adhere to these standards will result in the project's Certificate of Occupancy review and approval being delayed. The CCN BID and its representatives shall be party to the final city R.O.W. inspection prior to the Certificate of Occupancy approval. In the event of non-compliance, the CCN BID may charge the general contractor for any repairs as well as an administrative fee.



## 2.0 Objectives of Design Standard Recommendations



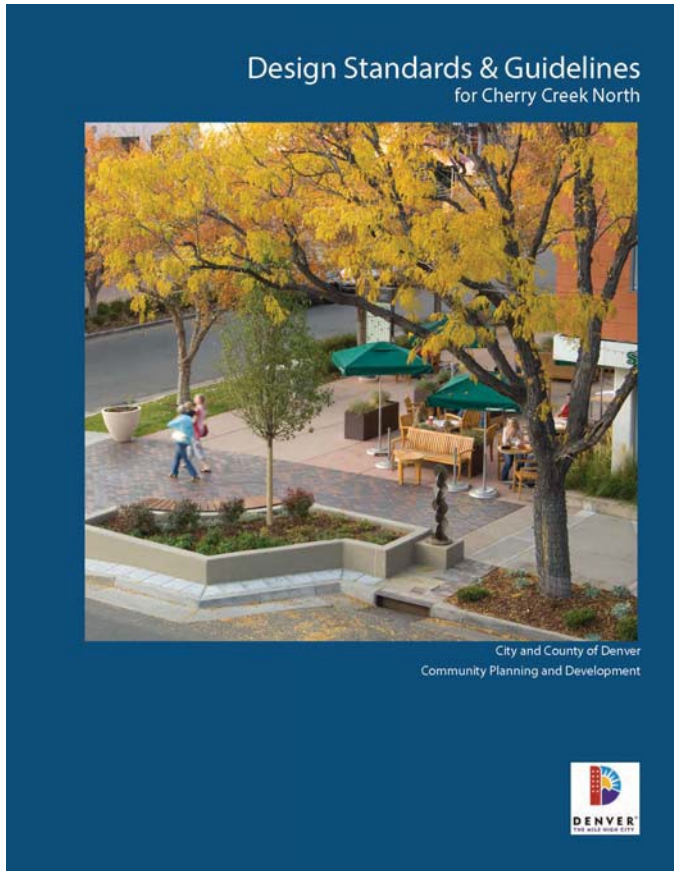
Map of Cherry Creek North Business Improvement District (CCN BID)

### 2.3 Context

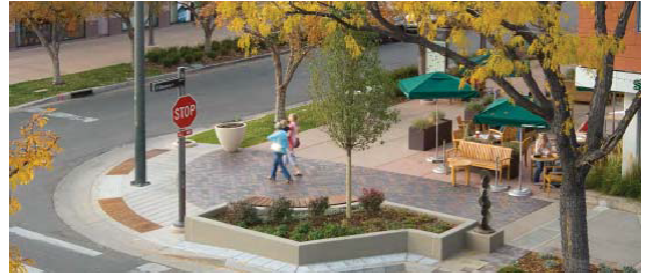
Cherry Creek North is bounded on two sides by important arterials, First Avenue on the south and University Boulevard on the west. These east-west and north-south connectors provide convenient access to the district. A major regional bike path runs two blocks to the south along Cherry Creek. On the north, east, and west sides, the District is bounded by vibrant neighborhoods, which generates pedestrian traffic. The Cherry Creek Shopping Center, a popular enclosed mall that provides a complement to Cherry Creek North's outdoor shopping experience, is located to the south of First Avenue and north of the Cherry Creek.

The combined efforts of the public and private sector have helped Cherry Creek North become the largest gathering of independent merchants in the region, and to be locally and regionally known for its events, dining, shopping, visiting and living opportunities as well as its inviting pedestrian environment. The Standards acknowledge the evolved complexity of Cherry Creek North, as well as blending of activities and the varying elements of character.





### 2.4 Streetscape



Streetscape design standards and guidelines address issues related to permeable paving, scooter and bicycle parking, street tree planters, streetscape furnishings, pedestrian lighting, and art garden places. This section draws upon the Cherry Creek North Capital Improvements Project (CIP).

The CIP was undertaken by the Cherry Creek North Business Improvement District (BID) to renovate and update the physical improvements in the public right-of-way in the district. The project included improvements to the landscape, irrigation, paving, lighting, electrical infrastructure and environmental graphics (i.e. banners, monuments and directories). The vision of the project was to enhance the status of the BID as the premier shopping district and to put in place the infrastructure and design elements that will ensure the district will continue to develop as a vibrant mixed-use neighborhood.

#### GUIDING PRINCIPLES

- The streetscape encompasses the space from building face to building face – pedestrians typically do not distinguish between the public right of way and private property in a mixed-use environment.
- The streetscape is the primary area of occupation by the pedestrian and, as such, has significant power to shape his or her experience.
- Shade, seating and areas in which to stop and rest or re-orient are as important as clear through walking zones and help to increase the time shoppers stay in the District (i.e. dwell time).
- Improvements that abut the public realm are contextual, harmonious and consistent with the improvements within the public right-of-way.
- Improvements in the Right of Way are to be maintained and enhanced through time.

**Note:** All projects in the public right-of-way are subject to review and approval by the Public Works Department of the City and County of Denver.

In September 2014, Design Standards and Guidelines for Cherry Creek North were adopted by the City of Denver. Administered by the Community Planning and Development Department and CCN Design Advisory Board, the Design Standards refers to this document for further detailed guidance regarding streetscape standards.

As public and private properties redevelop and evolve, it is essential that they respect and reinforce the District's goals and mixed-use nature, and that they contribute to its special character.

To advise and assist Community Planning and Development (CPD) in their review of projects within Cherry Creek North for consistency with the Cherry Creek North Design Standards and Guidelines, an eight-member Design Advisory Board (DAB) reviews submittals and makes recommendations for approval, approval with conditions or denial.

The purpose of the Design Standards and Guidelines (Guidelines) for Cherry Creek North is to provide a clear, comprehensive document articulating the level of design quality and specificity expected of improvements within Cherry Creek North.

The success of Cherry Creek North is its focus on the pedestrian environment, retail vitality, indoor and outdoor experiences, and placemaking. First and foremost, the District must provide engaging, attractive environments along its streets, creating experiences that make visitors, workers and residents want to stay. The Guidelines must shape the character and quality of development within the District to ensure that the pedestrian experience is enhanced.





## 2.0 Objectives of Design Standard Recommendations

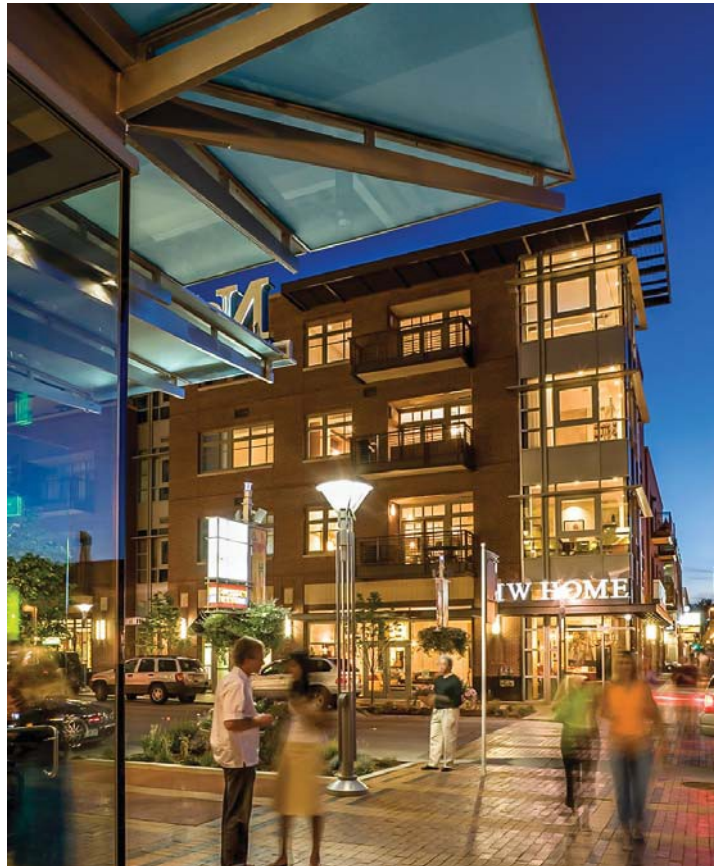


### 2.4 Goals

Maintain and enhance the streetscape standards that were designed and installed as part of the BID's Capital Improvement Project. New construction shall implement the design and construction standards that were adopted as part of the 18.2 million dollar streetscape improvement project. The BID assumes ownership responsibilities of the streetscape improvements once the project is completed with its warrantee period.

If the new streetscape is more complex and requires a higher level of maintenance than the current standards the BID will negotiate ongoing maintenance costs with the property owner. The BID requires that there is a consistency of materials and installation standards as well as visual unity within its maintenance boundary. This results in a visually cohesive streetscape that is the unifying element within the district and allows for efficient management and maintenance of the entire District's streetscape.





## CCN BID Streetscape Design Standards and Guidelines

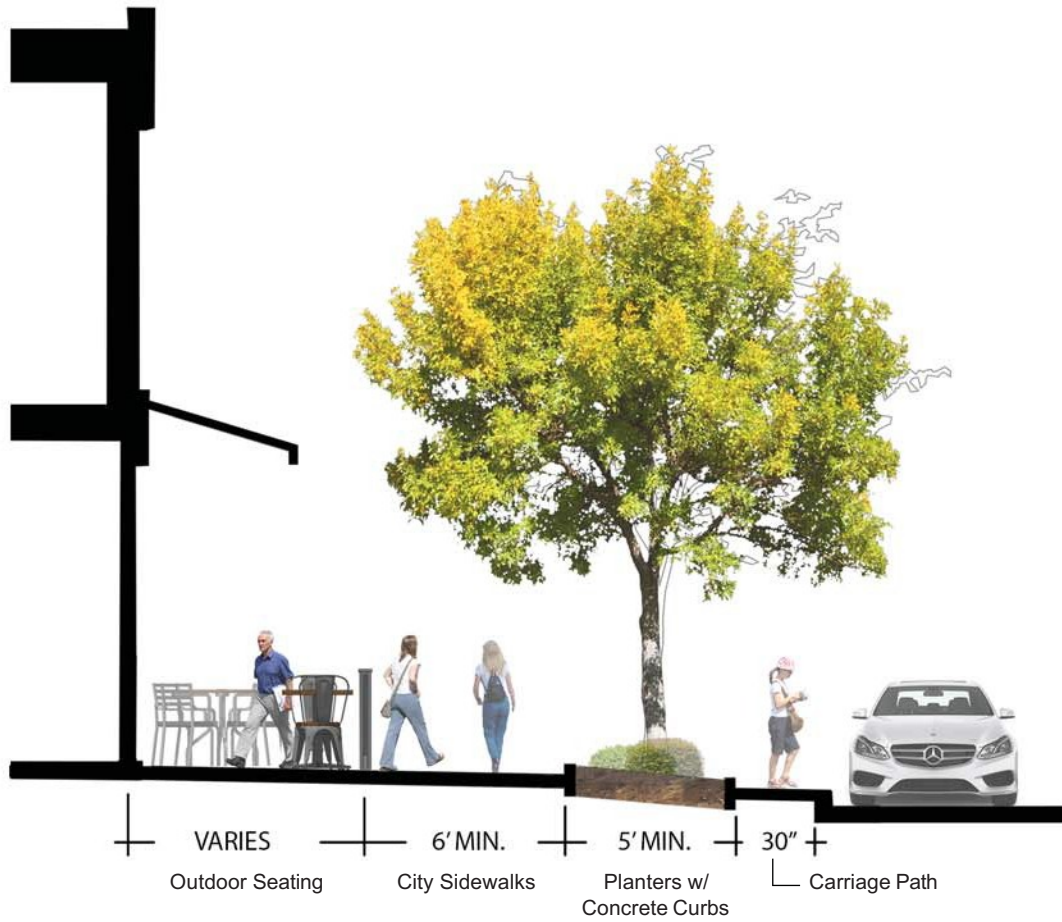
# 3.0



- 3.1 Typical Street Condition
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### 3.0 CCN BID Streetscape Design Standards and Guidelines







### 3.1 Typical Street Condition

The typical street condition within the CCN BID is a two way street with parking on either side. In most instances there is a tree lawn that separates the street edge from the sidewalk. With most new construction within the BID Denver Public Works (DPW) is requesting that a 30" wide storm flow channel be installed between the back of curb and edge of planter and that the new building's finish floor elevation be elevated to prevent storm water surges to infiltrate the building. This poses challenges and opportunities.

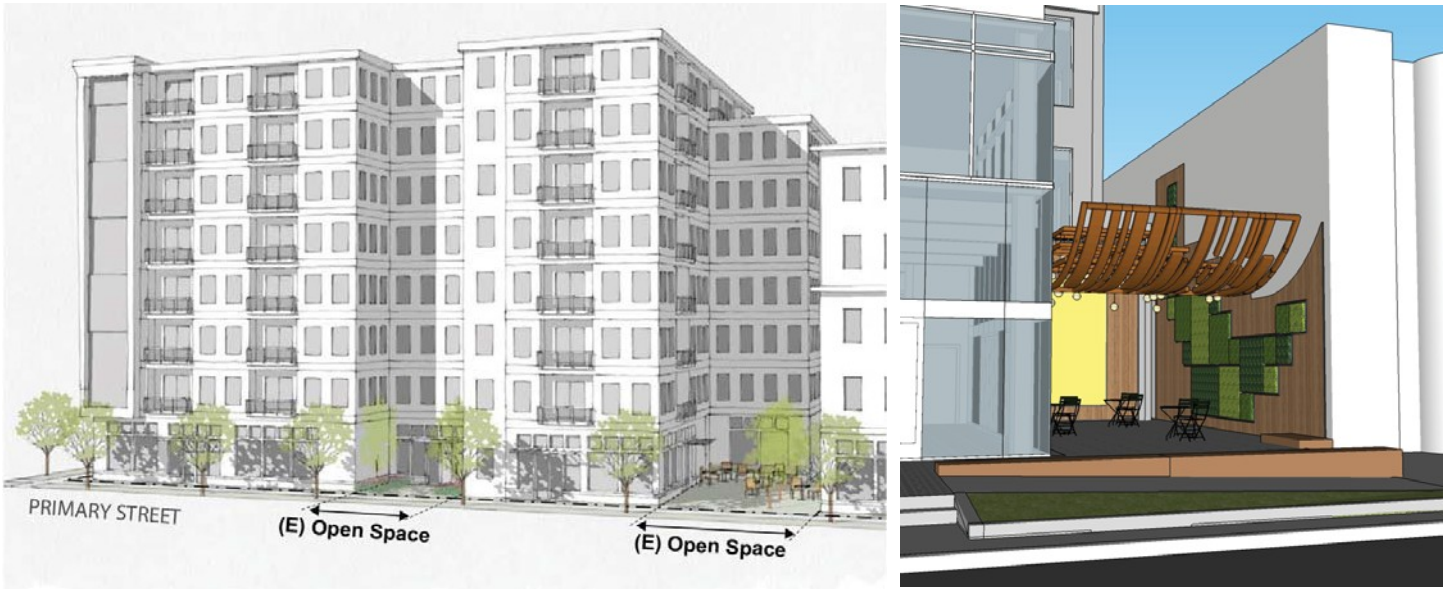
The 30" setback allows for a "carriage strip" along the street edge to allow vehicle occupants to exit the car without stepping into the planters along with easy access to parking meters. The elevated building finish floor creates a sloped and often curb defined planter where pedestrians are less likely to walk through and the sidewalks are further removed from vehicular traffic. The grade change between street and sidewalk/building often require a set of steps. It is important to note that the BID does not allow for single riser steps and a sloped ramp may be required in situations where two risers can not be accommodated.

At the intersection of streets the pedestrian intersection requires a special blend of pavers and must meet a number of ADA requirements as well as raised planters, wooden benches, trash receptacles and signage.





### 3.0 CCN BID Streetscape Design Standards and Guidelines



### 3.2 Open Space Design

Cherry Creek Zoning allows for the relief of building mass setbacks if Private Open Space is included within 15% (min.) of the property. The City zoning has created this provision “To establish a building form that encourages Private Open Space. In exchange for providing Private Open Space, buildings are exempt from the Mass Reduction that applies to the Cherry Creek General building form”.

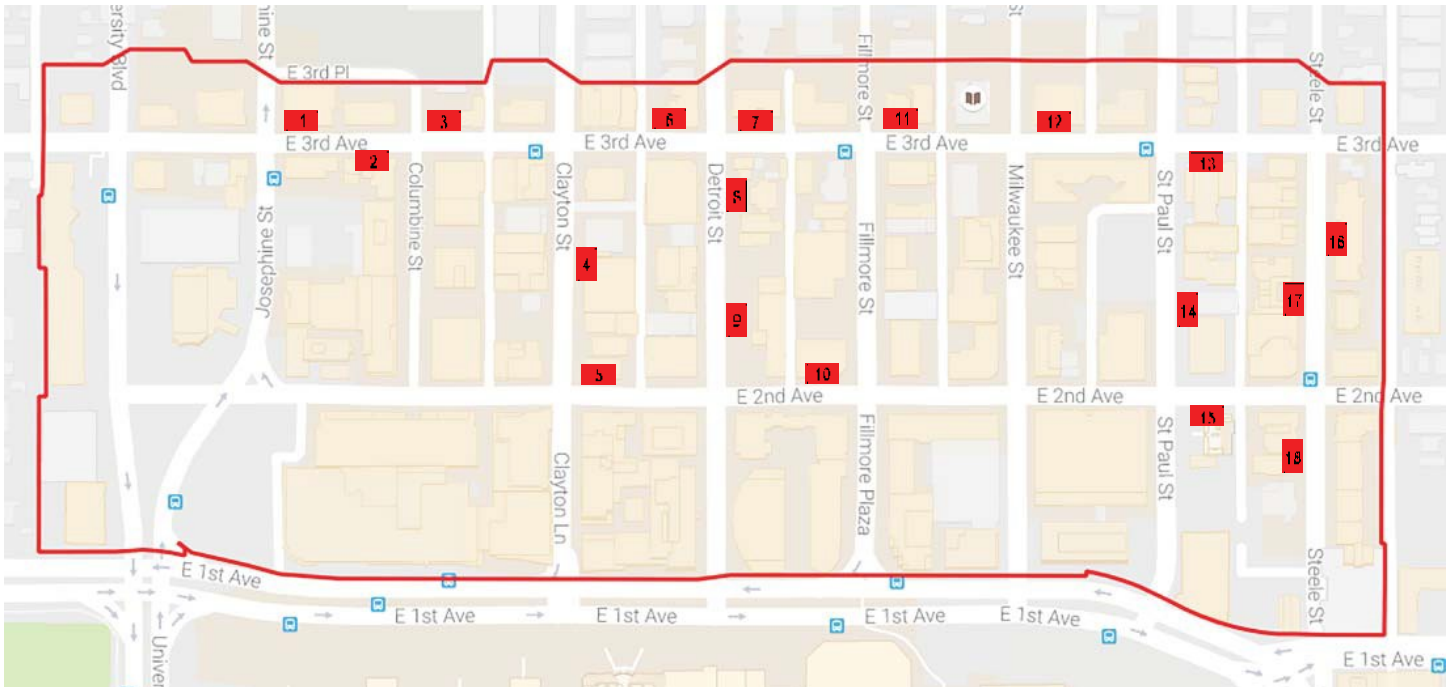
Private Open Space must be fully accessible and visible to the public without walls, hedges, or gates and open to the sky with no less than 60% transparency. The BID encourages the use of the Open Space alternative if possible in the project’s planning as it animates and engages the BID’s streetscape.







### 3.0 CCN BID Streetscape Design Standards and Guidelines



### 3.3 Art and Garden Spaces

The BID implemented 20 distinct Art and Garden spaces throughout the District, each with signature street furniture, lighting, public art or other special elements to encourage people to relax more and linger longer.

Preserving existing pieces and integrating new art and sculpture into a projects design is encouraged. Existing art and sculpture within the public right of way shall not be removed, relocated or replaced without BID review and written approval.









#### 3.4 Fillmore Plaza

As one of the major gateways in to Cherry Creek North, Fillmore Plaza was redesigned to enhance pedestrian, event and retail activity on the block.

Upgraded features included special trees and landscaping, lighting, environmental graphics, street furniture and a central canopy-like shade structure. Since its renovation in 2011, the plaza has hosted numerous events that bring thousands of people to the area. In 2013, Fillmore Plaza won the Denver Mayor's Design Award.



Before improvements



After improvements







## 3.0 CCN BID Streetscape Design Standards and Guidelines



### 3.5 Site Grading

Department of Public Works maintains standards for Flood and Storm Water flow levels within CCN. In many instances this results in new construction projects being required to raise the finish floor levels from 12 to 18 inches above the previous finish floor level. This change in finish floor results in challenging grading of the streetscape, especially on corner and small lots. Often the grade is higher than surrounding parcels and the street edge requires well designed grade transitions. The following are design standards encouraged by the CCN BID:

1. Back Edge of Curb, Carriage Path and parking meter stations to be 6" above the adjacent street level.
2. Sidewalks (6' wide min.) to be sloped down at less than 4.5% to meet adjacent sidewalks at each end of the property.
3. Planting beds and planters between the back of carriage path and the elevated sidewalk provide a sloped transition between the street level and new sidewalk.
4. Steps or ramps are to be installed to provide pedestrian access between the street and elevated sidewalk. If used, steps must have at least 2 risers to minimize tripping hazards. Single riser steps are not allowed.
5. Finish grade of topsoil shall be flush with adjacent sidewalks and top of walls and curbs.







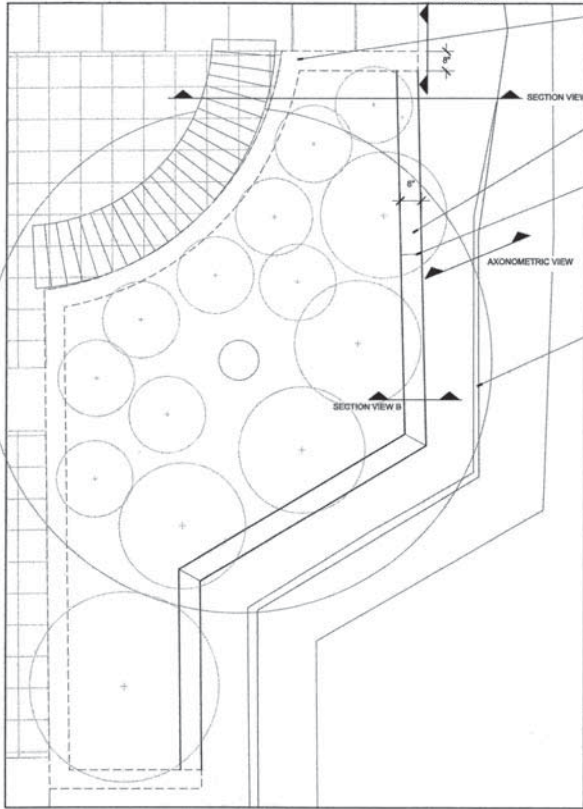
### 3.0 CCN BID Streetscape Design Standards and Guidelines



#### 3.6 Planters and Seat Walls

The district has historically had raised concrete planters at most street intersections. These are concrete walls, with a parged and painted finish and skateboard guards imbedded along the top of the planter. This pattern of raised planters within the district is a unique feature of Cherry Creek North and should be maintained and expanded where possible. All new and replacement planters are to match the existing.





EXISTING CONCRETE WALL TO REMAIN. PROVIDE MPC PROCESS TO ALL EXPOSED SURFACES. CUT WALL VERTICALLY TO MATCH HORIZONTAL LOCATION OF NEW WALL. EACH INSTANCE TO BE FIELD VERIFIED.

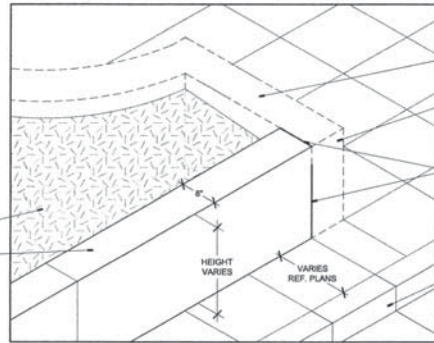
PROPOSED CONCRETE WALL. REFERENCE SPECS. FOR FINISH AND CONCRETE MIX DESIGN.

MATCH ON-CENTER CONTROL JOINT SPACING TO THE EXISTING WALLS

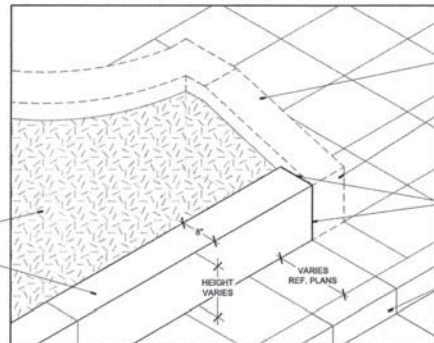
SHRUB PLANTING AREA

PROPOSED CONCRETE WALL

CURB AND GUTTER



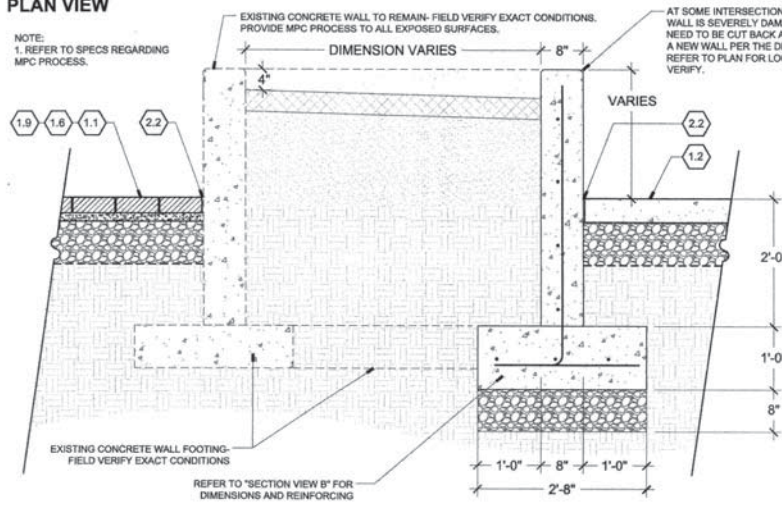
**AXONOMETRIC VIEW - FULL HEIGHT CONDITION**



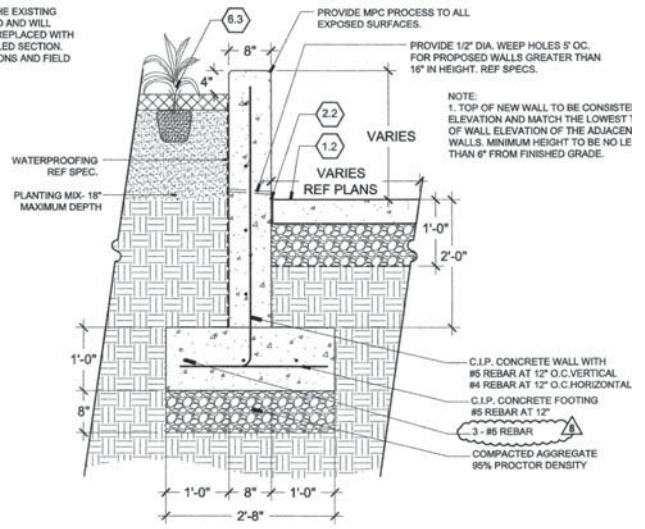
**AXONOMETRIC VIEW - ANGLED CONDITION**

**PLAN VIEW**

NOTE:  
1. REFER TO SPECS REGARDING MPC PROCESS.



**SECTION VIEW A**



**SECTION VIEW B**

**1 CIP CONCRETE PLANTER WALL**

1"=1'-0"



**3.6 Planters and Seat Walls**

Miracote MPC should be used to cover the concrete planters and seating walls. This should then be sealed with Miracote’s Colorbond XL Waterborne Sealer.

Miracote MPC (Multipurpose Protective Coating) is a polymerized, two component, cementitious protective coating that can be applied over a variety of surfaces including concrete, masonry, metal, wood and tile. It consists of a unique rubber-like polymer liquid that is mixed with a proprietary cement and aggregate blend. Miracote MPC is then typically applied in two or more coats by trowel, brush, roller, spray or notched squeegee and back roll.

Designed for both exterior and interior use, Miracote MPC restores and protects concrete surfaces from the consequences of exposure to water and chloride intrusion, freeze thaw damage and carbonation. Miracote MPC is an extremely durable, cost-effective protective coating that is “breathable” and allows for the transmission of inherent moisture vapor within concrete without blistering or delamination. By lowering moisture content within the concrete, Miracote MPC helps reduce the potential for corrosion of steel reinforcement.

**Application Overview**

Rough concrete patching/finish:

Fill a honeycomb or depression with Miracote RM 3000 as a patching mortar prior to first coat of MPC if necessary.

1st Finish application on top of the concrete planters:

MPC Polymer Cement:

1st coat = Regular

2nd coat = Smooth

Color Bond: Davis line of color. Taupe color within the Davis line.

**Contact:** Jim Rowe

Miracote Division of Crossfield Products

Central Regional Sales Manager

www.miracote.com

720-837-0059 **mobile** / jimr@cpcmail.net **email**

**TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)**

Vehicle Type.....Acrylate copolymer in aqueous dispersion

Gloss 60° Gloss Metter.....>75+

Cleaning Solvent.....Water

**Physical Properties**

Flexibility.....Excellent

Weathering.....Excellent

Abrasion Resistance.....Excellent

**Curing Time (77°F)**

Dry to Touch.....1 hour

Recoat.....4 hours

Traffic.....24 hours

Temperature Limit.....Continuous.....180°F

Intermittent.....255°F

**Color Retention**

No fading or deleterious effect. Atlas Twin-Arc Weatherometer - 20 mins: Cycle - 17 mins: Dry - 3 mins: Wet - 300 hours.

**Accelerated Ultraviolet Light Exposure**

No fading or visible deleterious effect under 10X magnification.

Desert Sunshine Exposure Test, Inc., Phoenix, Arizona

“Procedure EMMA” (mirror-accelerated exposure)

**CHEMICAL RESISTANCE CHART**

Environment.....	Immersion	Splash and Spillage	Exterior Weathering
Acid.....	LR	R	R
Alkali.....	LR	R	R
Solvent.....	LR	LR	LR
Salts.....	R	R	R
Water.....	R	R	R

R – recommended

NR – not recommended

LR – Limited recommendation

**ADVANTAGES**

- Tough, long lasting finish.
- Weather resistant.
- Excellent color retention.
- Environmentally friendly; VOC compliant.
- Available through Miracote distributors.

**COVERAGE RATES**

250-300 sq. ft. @ 5 mils (wet) application per coat.

**PACKAGING AND COLORS**

1-gallon can

5-gallon pail

Colors: Standard Colors, Custom Colors, Premium Colors.

Use Miracote Color Chart for MiraGard Colorbond XL &

ColorPax LIP.

**MIX RATIO**

Single component. Use as supplied.

**SHELF LIFE AND STORAGE**

Shelf life will be one year from the date of manufacture as long as containers remain unopened and when material is store in a protected environment that is free from moisture, excessive heat and freezing temperatures, and direct sunlight.

**WHERE TO USE**

Miracote MiraGard Colorbond XL comes in 15 colors plus black, white and charcoal. Custom matched colors are available.





Installation Guideline

Miracote MPC MT System Pigmented Interior /Exterior Nominal 3/32 Inch

Step #	Installation Steps	Installation Methods	Products & Mix Ratios	Theoretical Coverage Rates
1	<p><b>Mechanically Prepare and Presaturate the Concrete Substrate</b></p> <p><b>Note:</b> Minimum (CSP) concrete surface profile of CSP-3 or higher is required depending on substrate conditions &amp; coating requirements.</p>	<p>a. Sandblasting or b. Shotblasting or c. Diamond grinding or d. Other similar and approved mechanical methods. e. Saturate with potable water</p>	<p>Miracote MPC MT Systems must be applied to a clean, sound, and mechanically prepared concrete substrate, as per ICRI's Technical Guide No.03732, "Selecting and Specifying Concrete Surface Preparation". Concrete substrate should be (SSD) Saturated Surface Dry with no standing water at the time of application.</p>	N/A
2	<p><b>Apply 1st Miracote MPC MT Coat</b></p> <p><b>Note:</b> ColorPax-LIP (Liquid Integral Pigment) packs must be dispensed and mixed into the 5 Gal. pail of Miracote MPC Liquid Catalyst.</p>	<p>a. Hand Trowel or b. Magic trowel or c. Squeegee</p>	<p><b>Blend:</b> Colorpax-LIP + Miracote MPC Liquid Catalyst + Miracote MPC White Regular Powder</p> <p><b>Mix Ratio =</b> (1) ColorPax-LIP Container to (1) 5 Gal. Pail Miracote MPC Liquid Catalyst to (2) 55 LB Bags Miracote MPC White Regular Powder</p>	<p>500 SF/Unit</p> <p><b>Note:</b> Coverage can vary depending on surface profile &amp; condition.</p>
3	<p><b>Apply 2nd Miracote MPC MT Coat</b></p> <p><b>Note:</b> For the 2nd coat only, mixing a 50/50 blend of Regular and Smooth Miracote MPC Powder in White or Gray, is an acceptable option to modify desired trowelling characteristics.</p>	<p>a. Hand Trowel or b. Magic trowel or c. Squeegee</p>	<p><b>Blend:</b> Colorpax-LIP + Miracote MPC Liquid Catalyst + Miracote MPC White Regular or Smooth Powder</p> <p><b>Mix Ratio =</b> (1) ColorPax-LIP Container to (1) 5 Gal. Pail Miracote MPC Liquid Catalyst to (2) 55 LB Bags Miracote MPC White Regular Powder or (1.5 to 2) 40 LB Bags Miracote MPC White Smooth Powder</p>	<p>500 SF/Unit for Regular 580 SF/Unit for Smooth</p> <p><b>Note:</b> Coverage can vary depending on surface profile &amp; condition.</p>
4	<p><b>Apply 3rd Miracote MPC MT Coat</b></p>	<p>a. Hand Trowel or b. Magic trowel or c. Squeegee</p>	<p><b>Blend:</b> Colorpax-LIP + Miracote MPC Liquid Catalyst + Miracote MPC White Smooth Powder</p> <p><b>Mix Ratio =</b> (1) ColorPax-LIP Container to (1) 5 Gal. Pail Miracote MPC Liquid Catalyst to (1.5 to 2) 40 LB Bags Miracote MPC White Smooth Powder</p>	580+ SF/Unit
<p><b>For antiquing options with acid or water based stains/dyes, please review the IG's for Miracote Mirastain.</b></p>				
<p><b>Choose any of the Miracote sealers or topcoats for best results depending on location, service, use and exposure. Refer to the Product Technical Data Sheets and Installation Guides for MiraGard HDWB, MiraGard HD 400, MiraGard HD 100, MiraFlor WB, MiraThane WB, MiraFlor CQ Clear or MiraFlor Glazetop.</b></p>				

**Note:** Prior to starting the application of any Miracote Product or System be sure to read the Installation Guide(s), Product Data Sheets, MSDS and other pertinent documents published by Crossfield Product Corp. for information, including but not limited to, Precautions, Limitations, Disclaimers and Warranties.

Pay special attention to substrate moisture content, physical condition of the substrate, method(s) of surface preparation, surface restoration, detailing of cracks, joints, transitions and terminations, and any applicable specifications. Review carefully for unknown site conditions or defects.

The theoretical coverage rates stated in the Installation Guides are for estimating purposes only. Factors, such as, allowance for material waste, unusual or abnormal substrate conditions and other unforeseen job site conditions that may affect actual product yields are the responsibility of the installer.





#### 3.7 Skateboard Deterrents

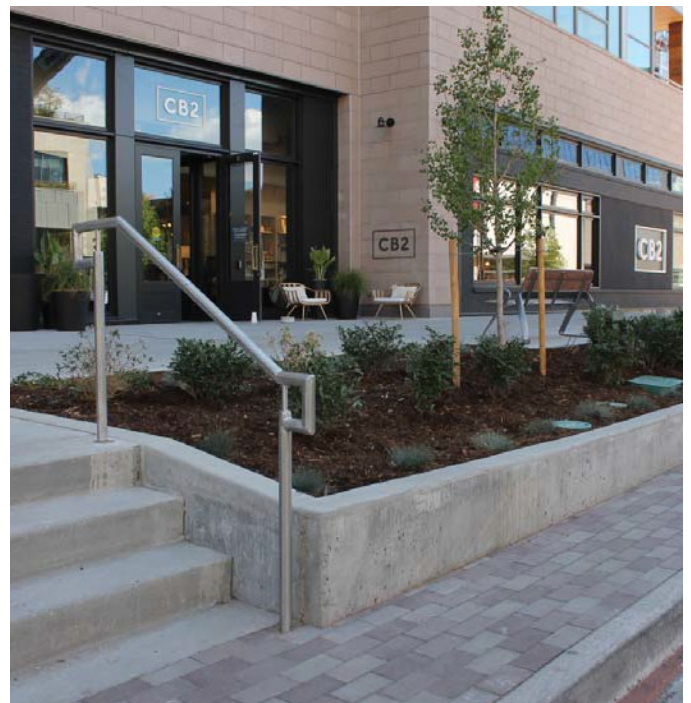
Skateboard deterrents shall be installed on all horizontal surfaces for planters, benches, railings, handrails and any other site improvement installed. The skateboard guard rails must have secure fasteners and be designed for the specific application.





### 3.8 Concrete Walks + Walls

Refer to the City and County of Denver Public Works Transportation Standards and Details for the Engineering Division (Approved April 2017) for the details in regards to concrete sidewalks within CCNBID.

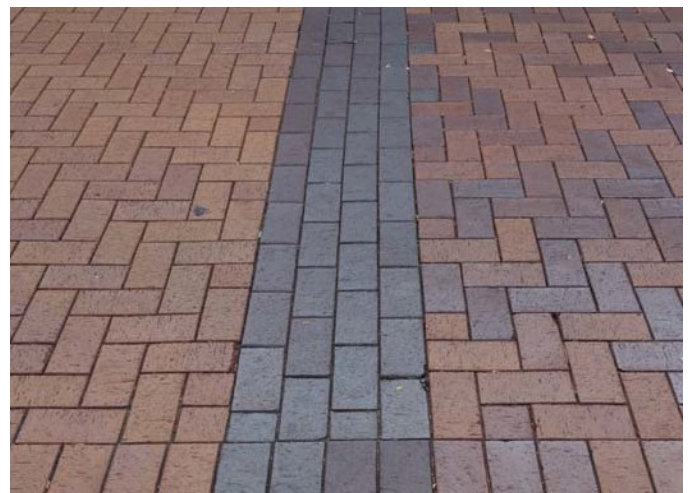
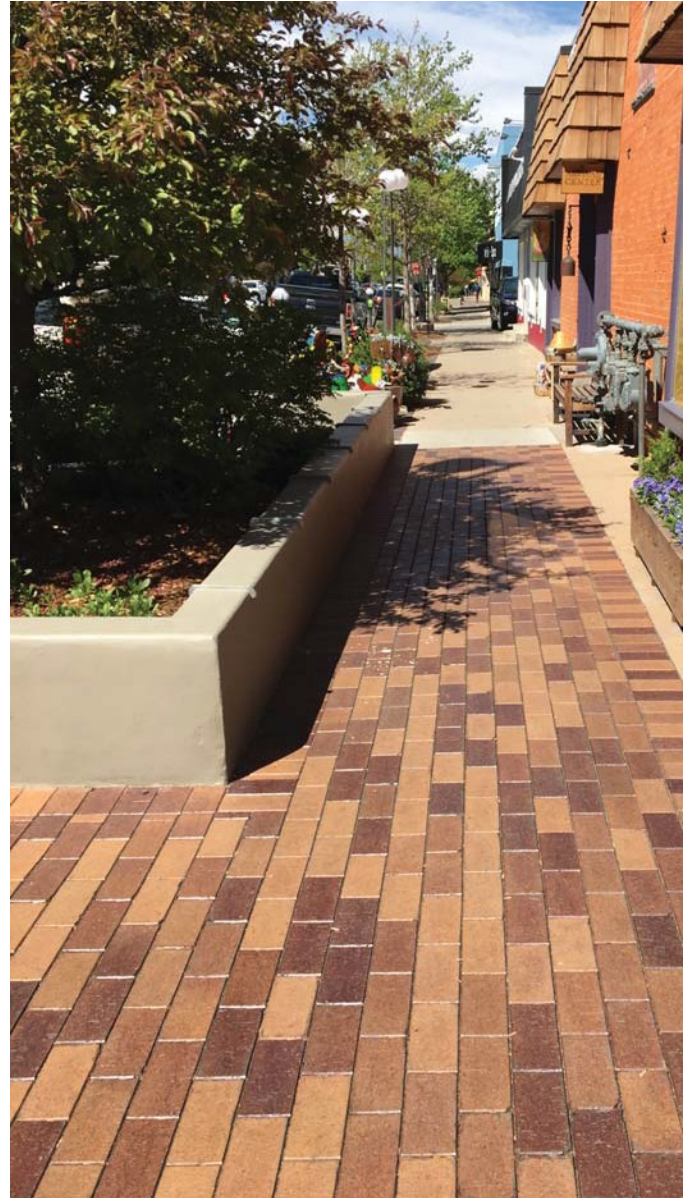




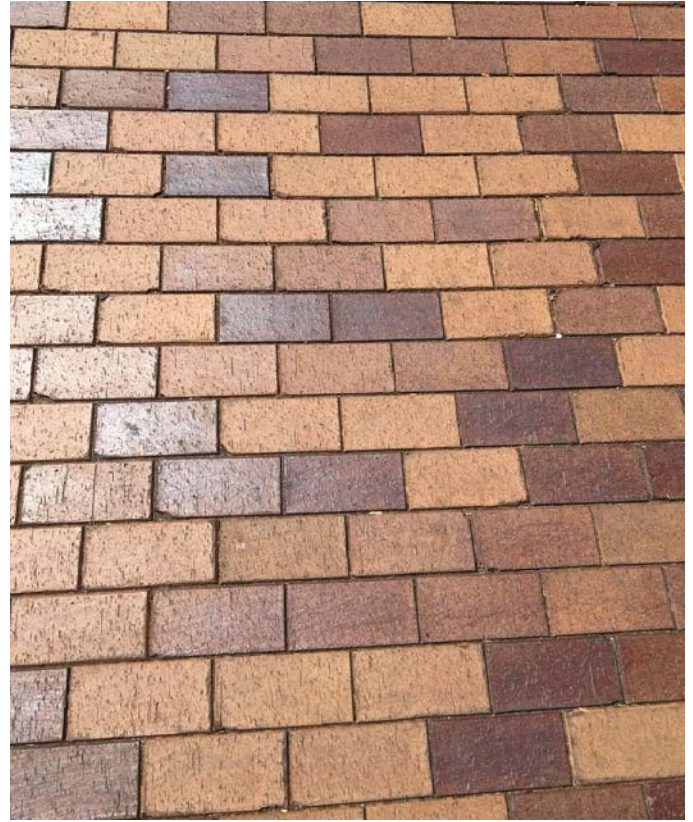


### 3.9 Brick Unit Pavers

The BID streetscape project utilized high quality fired brick pavers at key intersections, special streetscape locations and along the street edge combined with poured in place grey concrete and saw cut joints for the majority of sidewalks. The brick pavers are made of high density clay and fired at extreme temperatures resulting in a brick that has a rich texture and color and are water and stain resistant. Although pre-cast concrete pavers exist within the district, they have proven to be less durable and not as attractive as are the brick pavers and the BID discourages the use of pre-cast concrete pavers within the public streetscape. Brick paving manufacturers that have met the BID's standards for strength and porosity are the following manufactures.







Preferred color blends are also included:

**Pedestrian Intersections**

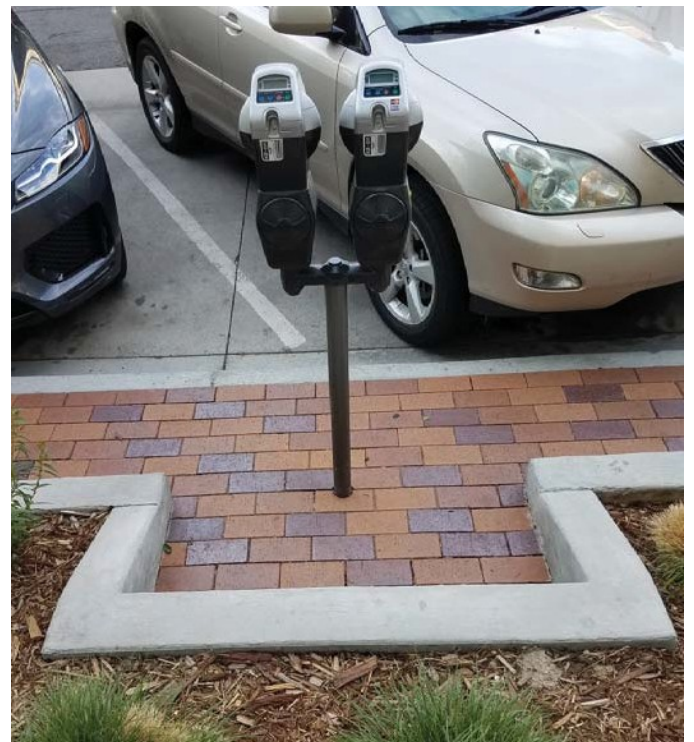
<i><b>Manufacturer</b></i>	<i><b>Brick Colors / Blends</b></i>	
Endicott	Dark Ironspot	25%
	Medium Iron Spot #77	25%
	Medium Iron Spot #46	25%
	Coppertone	25%

**Carriage Paths**

<i><b>Manufacturer</b></i>	<i><b>Brick Colors / Blends</b></i>	
Endicott	Medium Iron Spot #77	40%
	Medium Iron Spot #46	40%
	Coppertone	20%



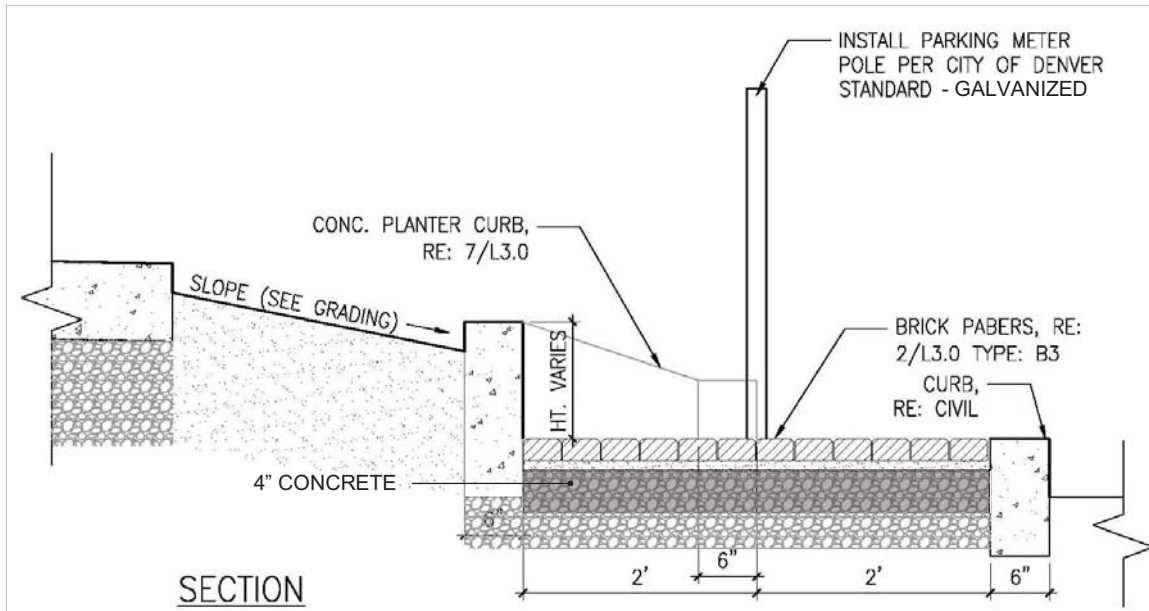




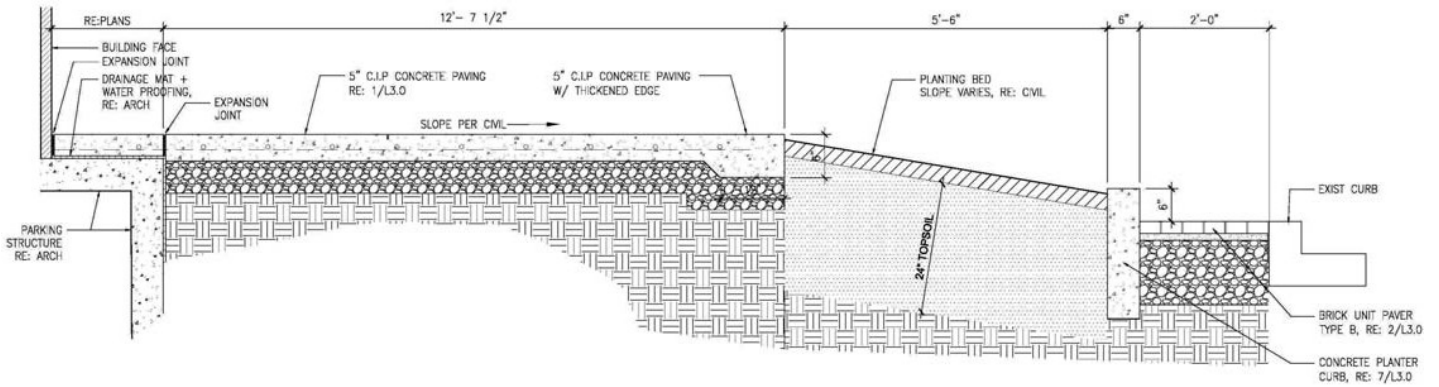
#### 3.10 Carriage Paths and Parking Meters

The City of Denver Department of Public Works has recently required that carriage paths be a minimum of 24" from back of curb. The areas around parking meters are to be 24" wide on each side of the meter and 30" deep behind the meter, allowing easy access to the rear of the meter. The BID standard is to pave the carriage path and meter pad with high quality brick pavers. Where the meter pad is built into a sloped planting bed, the sides of the meter pad are to be defined by a 6" high concrete curb and sloped to match the slope of the planting bed.





**5** PARKING METER PEDESTRIAN ZONE  
SCALE: 1/2" = 1'-0"



**6** STREETScape SECTION : 3RD AVENUE  
SCALE: 1" = 1'-0"





### 3.11 Steps and Handrails

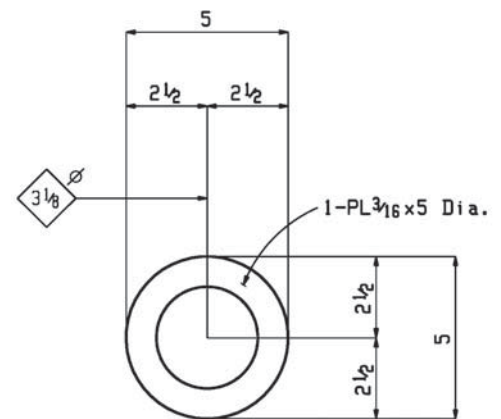
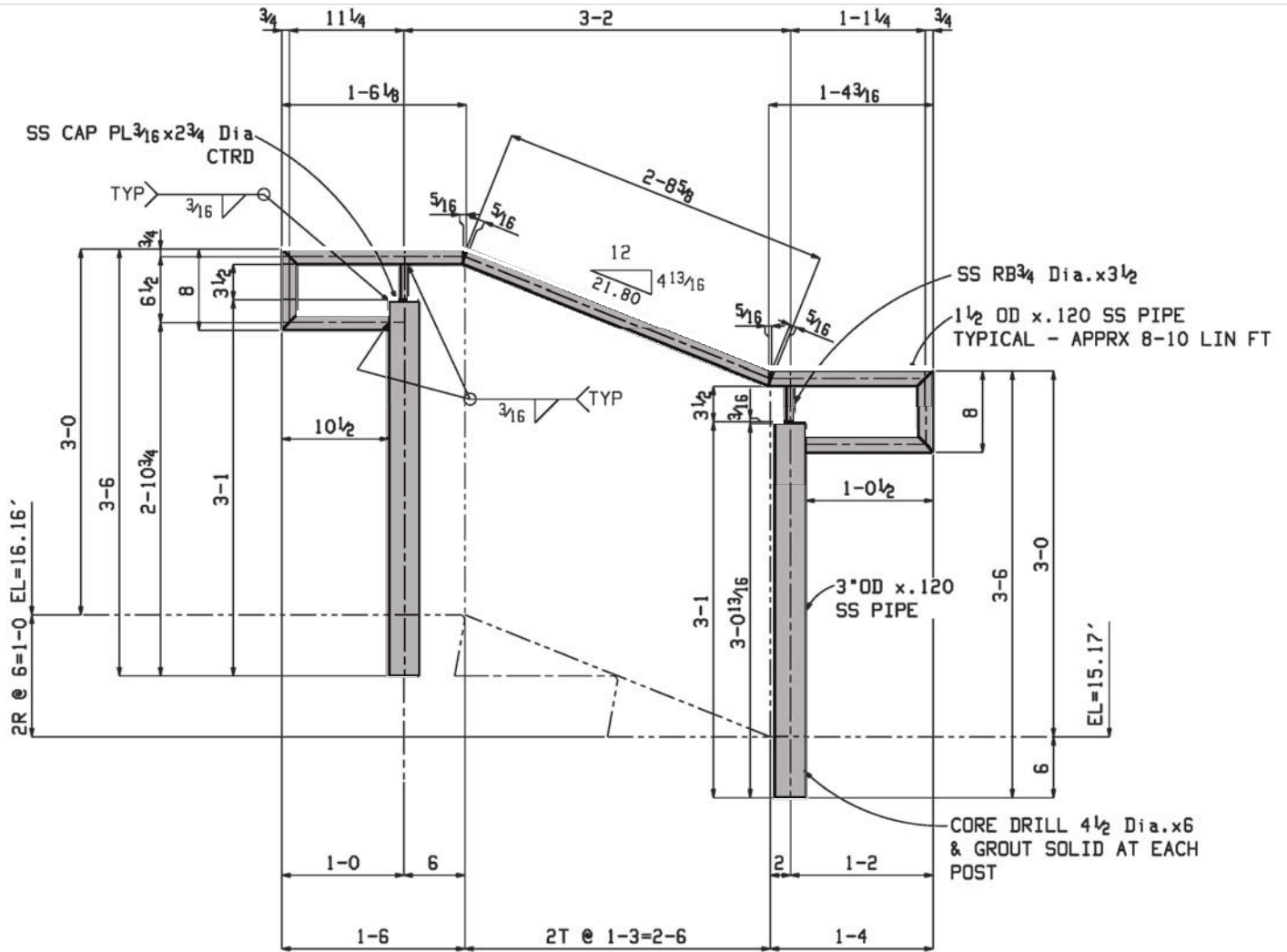
Most steps in the CCN BID are poured in place concrete with 6" risers and 14" treads. They also have concrete headers on each side of the steps creating a defined separation between the steps and the adjacent planter beds. Steps must have at least 2 risers to minimize tripping hazards. Single riser steps are not allowed.

Risers less than 5" tall are also discouraged unless the tread increases proportionately. The rule of thumb for a safe set of risers and treads is – tread width + 2 times the riser height = 26 inches total. Railings are to be stainless steel with 3" diameter vertical supports, 1.5 " diameter railings and a 3/4" diameter spindle support between the top of the support and bottom of railing. The ends of the railing shall be square and meet current ADA standards.

- Rail length and pitch will vary based on the dimensions and elevations provided in the design documents for each specific location.
- Individual shop drawings will be produced and submitted for review for each location.
- Rails are to be fabricated prior to concrete completion.
- All stainless material to be ASTM A304, with the exception of the 3" diameter posts, which will be ASTM A316L.
- Rails to receive #4 circumferential brushed finish.
- Use Escutcheon Plates - 100A with rails.

Fabricator: Cortek Systems





**ESCUTCHEON PLATES 100A**  
(STAINLESS STEEL-ASTM A316L)



## 3.0 CCN BID Streetscape Design Standards and Guidelines



### 3.12 Terraces, Patios and Railings

Due to the site grading requirements within the district a raised, level terrace is often necessary to provide access to the building or to create exterior seating areas. The current State liquor control standards for outdoor seating areas require railings around dining areas where alcohol is served.

Railings within the district are to be made of ornamental metal, with smooth edges and painted with enamel paint or power coated. Terraces and Railing must not extend into the pedestrian walk ways, maintaining at least 6 feet of open walkway to allow for BID maintenance access and operations.





Seasonal planters integrated into the railing are encouraged but not required.





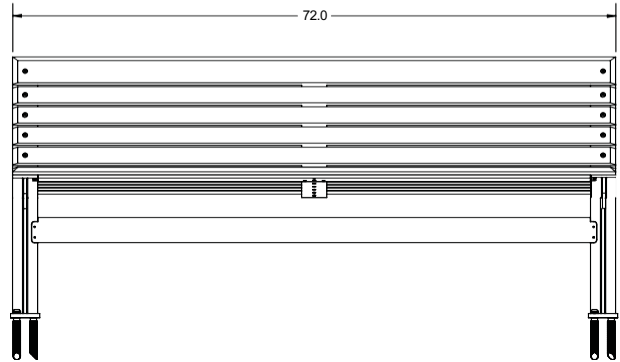
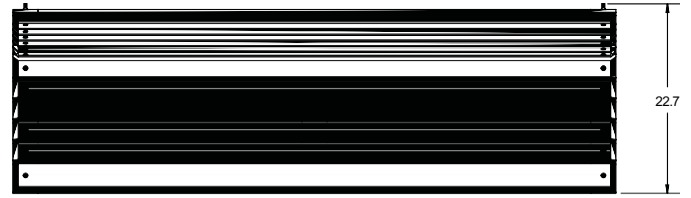
## 3.0 CCN BID Streetscape Design Standards and Guidelines



Knight Bench by Forms + Surfaces



Knight Bench by Forms + Surfaces



### FORMS+SURFACES®

30 Pine Street  
Pittsburgh, PA 15223  
800.451.0410 toll free  
412.781.7840 fax  
sales@forms-surfaces.com

### 3.13 Standard Bench Specification

Two bench types are allowed within the BID.

1. Forms + Surfaces Knight Bench
2. Landscape Forms Metro 40 Rest Bench

Each bench shall have a back be solid aluminum frame with wood slats, no arms and painted silver. Skate board guards shall be included with each bench and the bench shall be surface mounted through the brick pavers and into the concrete slab they sit upon.

Product: Knight Bench

Configuration: Backed

Dimensions: 72”L X 31.1”H X 22.7”D

Armrests: None

Slat Material: FSC 100% HARDWOOD

- 1) FSC 100% Ipé

Slat Finish: Natural Oiled Finish

Frame Material: Solid Aluminum

Frame Finish: Powder coated Inner Surfaces

**\*\*ALUMINUM TEXTURE\*\***

Polished Edges and Clear Top Coat

Mounting: Surface Mount





### 3.13 Standard Bench Specification

#### Landscape Forms

Metro40 Rest Bench

landscapeforms®

7800 E. Michigan Ave.  
Kalamazoo, MI 49048  
800.430.6209 toll free  
269.381.0396 phone  
269.381.3455 fax  
specify@landscapeforms.com

Product: Metro40 Rest Bench

Configuration: Backed without Arms

Dimensions: 80"L X 33.25"H X 26.5"D

Armrests: None

Slat Material: The wood for exterior applications is jarrah.

Frame Material: Solid Aluminum

- End frame is cast aluminum.
- Seat and back slats are aluminum extrusions or wood.
- Cast aluminum frame and aluminum extrusion slats shall be .

Mounting: Surface Mount







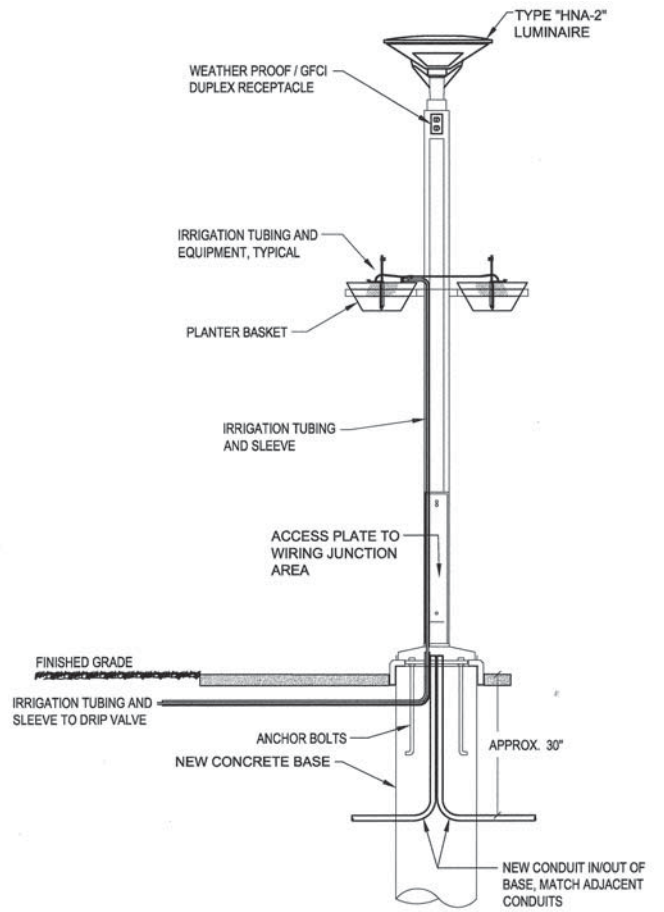
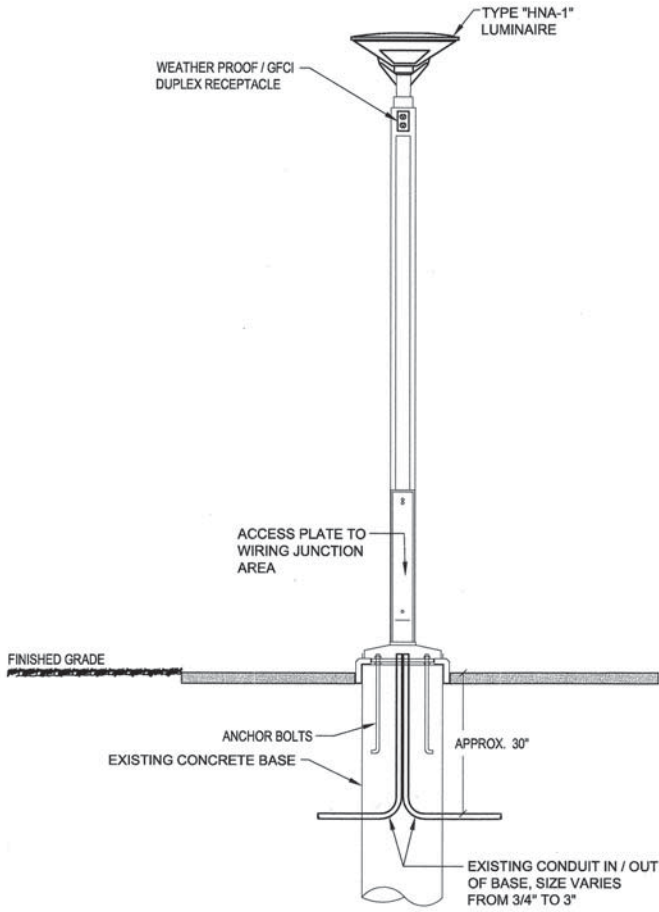
#### 3.14 Light Fixtures and Banner Poles

The light fixtures and banner poles within the District are important design elements that contribute to the unique character of the BID. These are custom made for the BID and can only be procured from a BID authorized manufacturer. This list of authorized suppliers can change so a current list of approved manufacturers shall be obtained from the BID prior to specifying providers. The banner poles are placed directly opposite each other to allow for a fabric banner to span across the street during special events. These poles can not be moved from their current location without BID review and written approval.

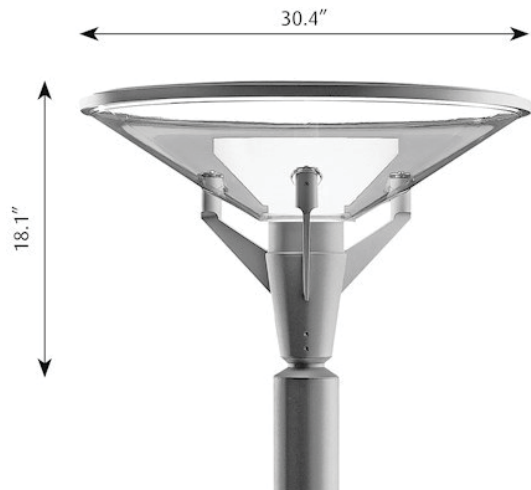
All light poles within the District shall have 110V electrical outlets integrated into their design to accommodate seasonal lighting.



### 3.0 CCN BID Streetscape Design Standards and Guidelines



**louis  
poulsen**





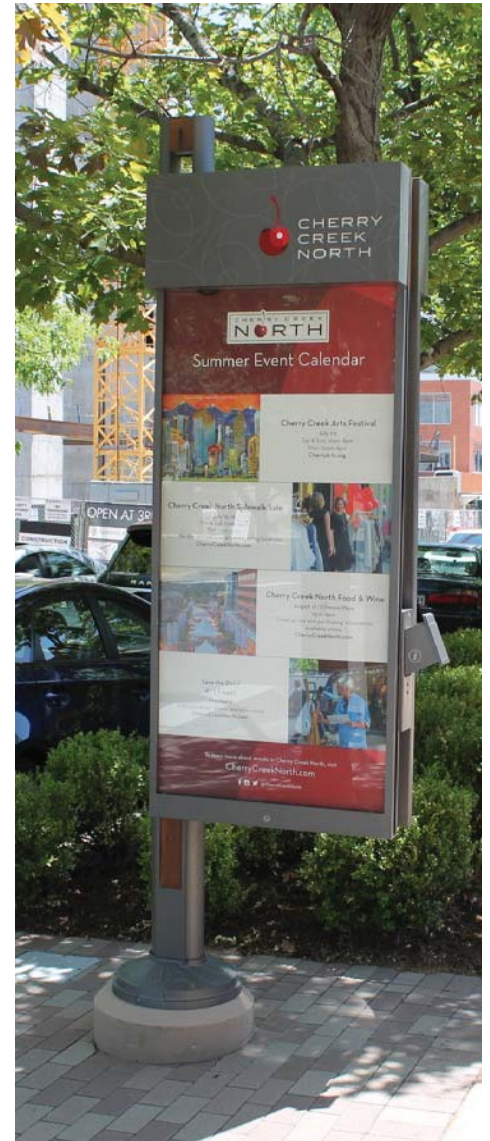
### 3.15 Electrical Systems

The electrical system within the BID is heavily used for multiple events and seasonal displays. There is a requirement for multiple outlets in the planters along each property.

The specifications for the outlets:

- Ground Outlets shall be 110 volt. The Outlet box and frame shall be black with a black conduit and rigid anchor for each outlet. The bottom of the box shall be 4" above the finish grade / 2" above the mulch level. The fixture shall include a smoke colored plastic protective cover over the outlets.
- The ground mounted electrical outlets are to be connected to the BID power panel on each block, but on a separate circuit than the holiday light circuits.
- All of the light poles within the BID are to include 110V outlets that are connected to the BID's panels and a control clock to manage holiday lighting.





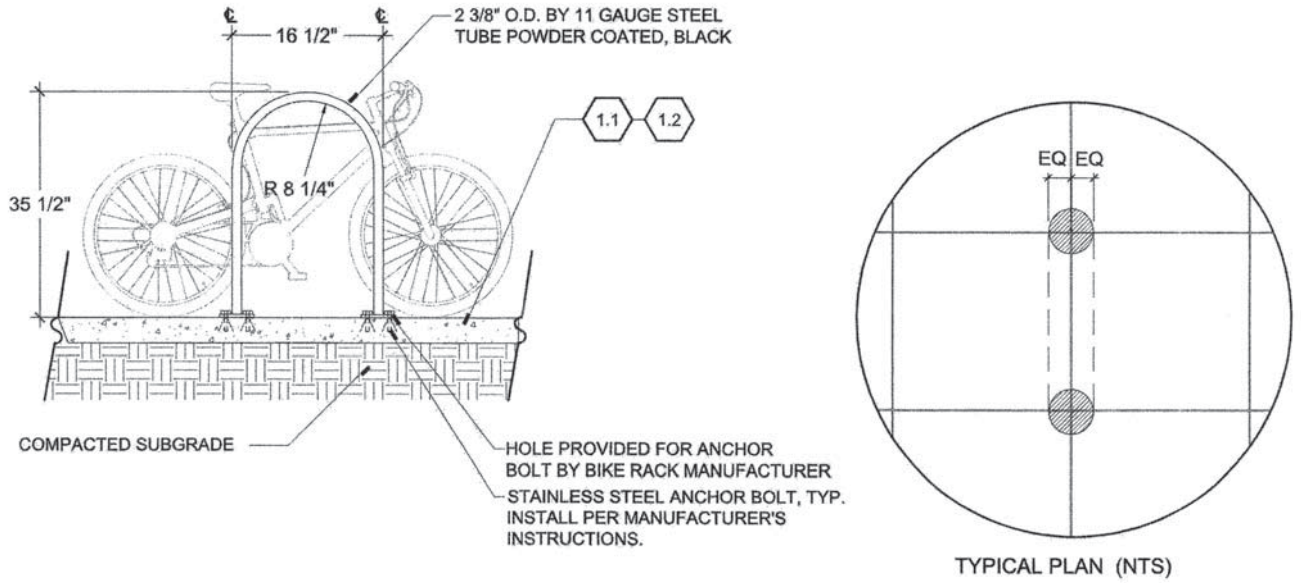
### 3.16 Signage

Building and storefront signage is regulated by the City of Denver Community Planning and Development office. Permit applications for all signage must be submitted to the City for review and approval. Stand alone directories and signage within the right of way is not allowed within the district. The BID has installed a series of kiosk directories placed in key locations. These kiosks must remain in place.



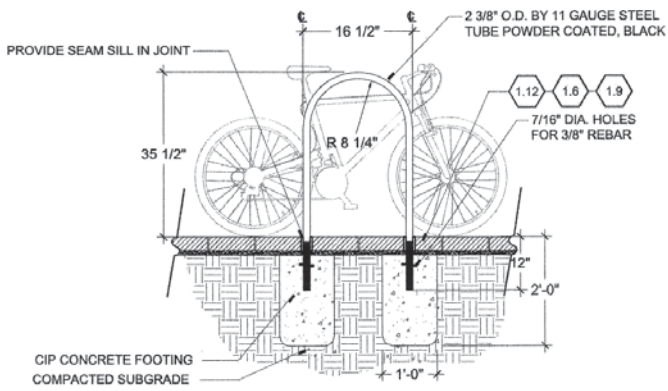


### 3.0 CCN BID Streetscape Design Standards and Guidelines



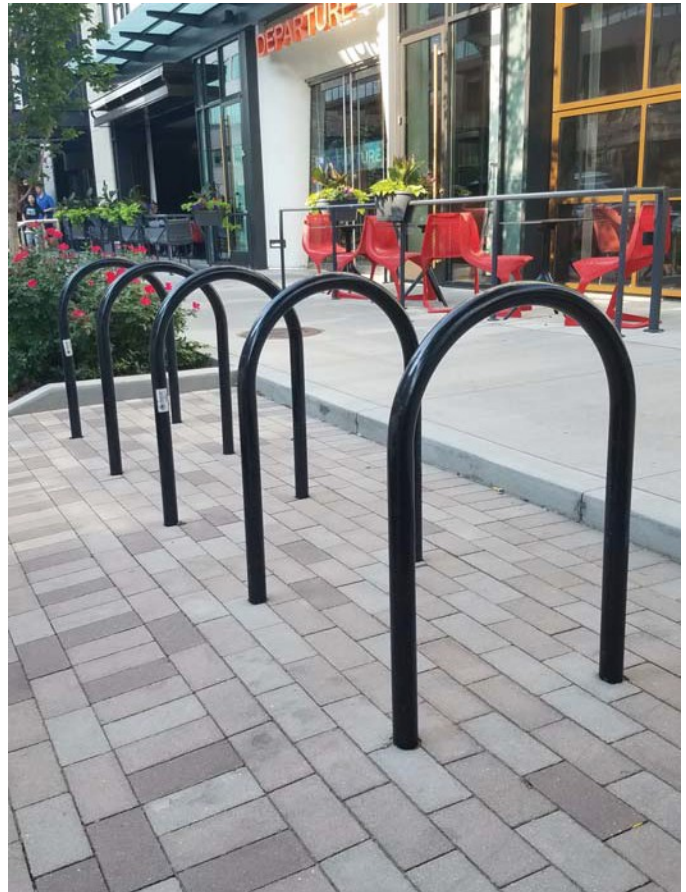
#### BIKE RACK ON CONCRETE

1/16"=1'-00"



#### BIKE RACK ON UNIT PAVERS

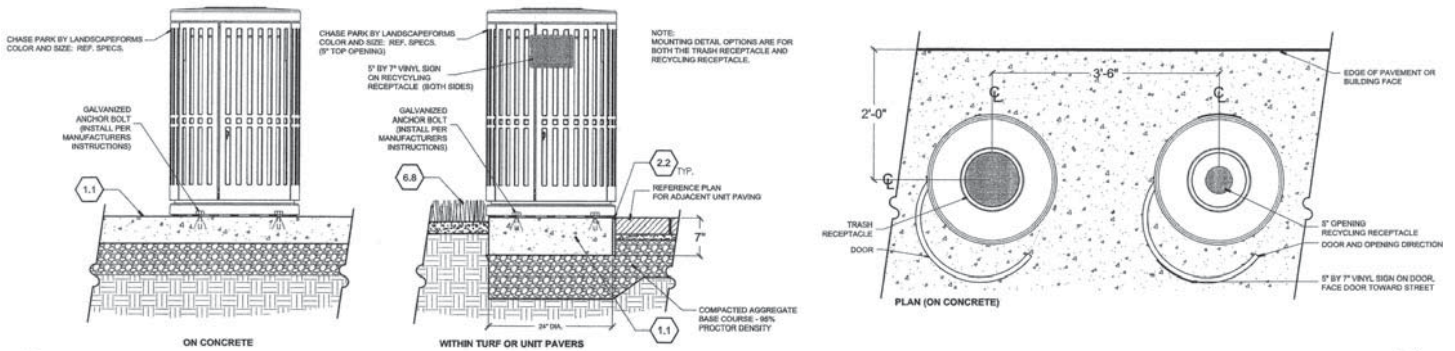
1/2"=1'-00"



### 3.17 Bike Racks

Standard loop bike rack, flush mounted, painted black.





**1 TRASH RECEPTACLE**  
1'-11" x 3'-0"

4.10

**3.18 Trash Receptacle**



All trash and recycling receptacles shall be Landscape Forms Chase Park trash receptacles:

- Top Opening
- 40 Gallon Capacity
- Cast Aluminum Sides and Door
- Spun Aluminum Top
- Cast Iron Base
- Silver Polyester Powder Coat

7800 E. Michigan Ave.  
 Kalamazoo, MI 49048  
 800.430.6209 toll free  
 269.381.0396 phone  
 269.381.3455 fax  
[specify@landscapeforms.com](mailto:specify@landscapeforms.com)





## 3.0 CCN BID Streetscape Design Standards and Guidelines



### 3.19 Planting Standards and Materials

The CCN BID identity is based upon many characteristics, but the most visible is its pedestrian scale and walkability. The design standards are focused on maintaining and enhancing this character.

All street trees must have a minimum 6-foot branching height clearance, measured from the sidewalk to the first branch of the tree. This is necessary to provide maximum circulation space beneath the tree canopy, allow for clear lines of sight, and to prevent pedestrian conflicts with tree branches.

The Denver Parks & Recreation Forestry Office has developed a list of approved trees and shrubs for use within the City. These plants have been selected for their non-invasive characteristics, disease resistance and general availability.

Working with this list and plant selection, the BID has created a preferred directory of plants that are suitable for the CCN BID environment. These plants have been selected to facilitate the high levels of maintenance required within the district and reflect the refined CCN BID streetscape standards.

To enhance the pedestrian experience, the BID would like to encourage similar trees, up to 4 in a row, to create a rhythm of size, form and texture.

Representatives from the CCN BID would like to be invited to accompany the designer to tag trees.





List of Approved Street Trees. Edited from the City of Denver Approved Street Tree List for Denver's Public rights-of-Way

<b>Botanic Name</b>	<b>Cultivar</b>	<b>Common Name</b>
Acer miyabei	Morton, JFS-AMI	State Street Maple
Aesculus Flava		Yellow Buckeye
Celtis laevigata	Magnifica	Sugar Hackberry
Ginkgo biloba	Autumn Gold	Autumn Gold Ginkgo
Ginkgo biloba	JFS-UGA2	Colonnade Ginkgo
Ginkgo biloba	Magyar	Magyar Ginkgo
Ginkgo biloba	The President	Presidential Ginkgo
Ginkgo biloba	Princeton Sentry	Princeton Ginkgo
Ginkgo biloba	Shangri-la	Ginkgo
Liquidambar styraciflua		Sweetgum
Quercus bicolor	JFS-KW12 PP23632	American Dream Oak
Quercus bicolor	Bonnie and Mike	Beacon Oak
Quercus x bimundorum	Midwest	Prairie Stature Oak
Quercus macrocarpa	JFS-KW14	Cobblestone Oak
Quercus macrocarpa	JFS-KW3PP22815	Urban Pinnacle Oak
Quercus muehlenbergii		Chinkapin Oak
Quercus robur		English Oak
Quercus robur x alba	Crimschmidt PP9103	Crimson Spire Oak
Quercus robur x alba	Tabor PP21382	Forest Knight Oak
Quercus robur x alba	JFS-KW2QX P.A.F.	Skinny Genes Oak
Quercus robur x alba	JFS-KW1QX	Streetspire Oak
Quercus robur	Asjes	Rosehill Oak
Quercus robur	Pyramich	Skymaster Oak
Quercus robur x ware	Long	Regal Prince Oak
Styphnolobium japonica		Japanese Pagodatree
Styphnolobium japonica	Regent	Japanese Pagodatree
Styphnolobium japonica	Halka	Millstone Pagodatree
Ulmus americana	7 Other Cultivars	
Ulmus japonica x wilsoniana	Morton Stalwart	Commendation Elm
Ulmus japonica x wilsoniana	Morton	Accolade Elm
Ulmus pumila x japonica	Morton Plainsman	Vanguard Elm
Ulmus pumila x japonica	Morton Glossy	Triumph Elm
Zelkova serrata	Green Vase	Green Vase Zelkova
Zelkova serrata	Halka	Halka Zelkova
Zelkova serrata	Village Green	Village Grn Zelkova





**Hunter**<sup>®</sup>  
The Irrigation Innovators



### 3.20 Irrigation and BID Loop System

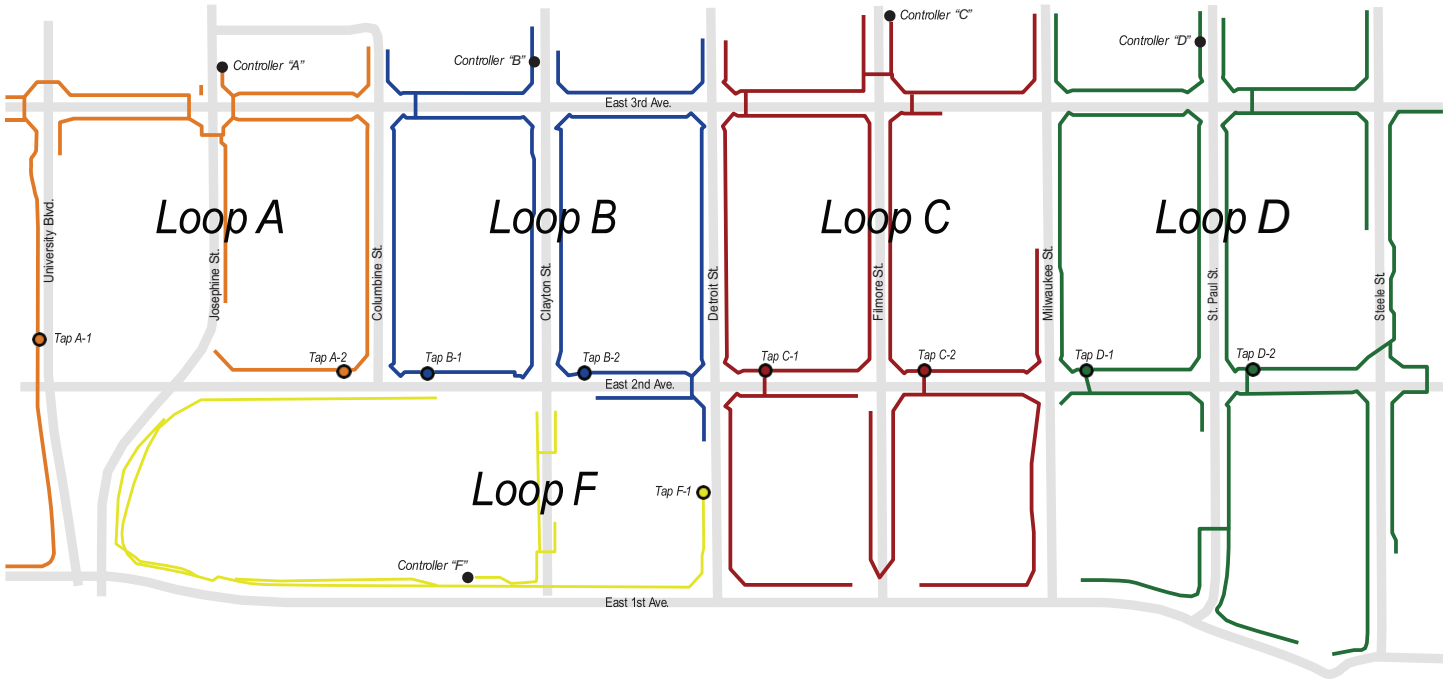
Unlike most projects, where the irrigation within the streetscape is provided by the building owner, the irrigation within the district is controlled by the BID. The streetscape, within the public right of way, has a central irrigation system that runs through all of the plant beds, tree pits and planters. New projects are required to tie into the BID's system and utilize the irrigation contractor that the BID uses. This insures that the system is correctly connected to the master irrigation loop and that all of the materials and installation standards are consistent. One of the challenges that the designer and contractor will face is that because the irrigation system is set up in a series of large loops, the irrigation loop passing through your site shall be maintained during the entire construction period, otherwise adjacent properties and their plants will not receive irrigation.

The majority of the irrigation is a drip system to limit water use and prevent overspray onto pedestrian zones. In limited areas turf is installed and these pop-up heads must be carefully placed to prevent overspray. New tree plantings will require bubblers at the base of the tree. Hanging pots on light and banner poles are a standard within the BID and the drip irrigation supply must be integrated into the fixture's foundation and pole so that the water supply is not visible. Each project will include quick couplers, an isolation vale and include a 2 year warrantee to coincide with the planting warrantee.

All of the irrigation is to be Hunter with two wire control to be consistent with the BID's system.

Irrigation for the project within the property line will be supplied by the projects independent irrigation system. This includes open space areas, rooftop decks and other plantings adjacent to the building.





**3.20 Irrigation Loop System**

The BID’s irrigation loop is an elegant system with master controllers and water taps for each loop at the north edge of the district. Mid-way through the loop, running along the north side of 2nd Avenue are water valves for the southern half of the loop. The challenge with this system is the requirement that the loop always maintains uninterrupted water supply from the controller to the end of the loop. During construction of specific projects, it is necessary to install a temporary connection around the construction site to maintain uninterrupted flow through the loop. If the loop is severed all the landscaped areas “downstream” of the break will not receive any water.

**Irrigation Loops**

- Loop A
- Loop B
- Loop C
- Loop D
- Loop F



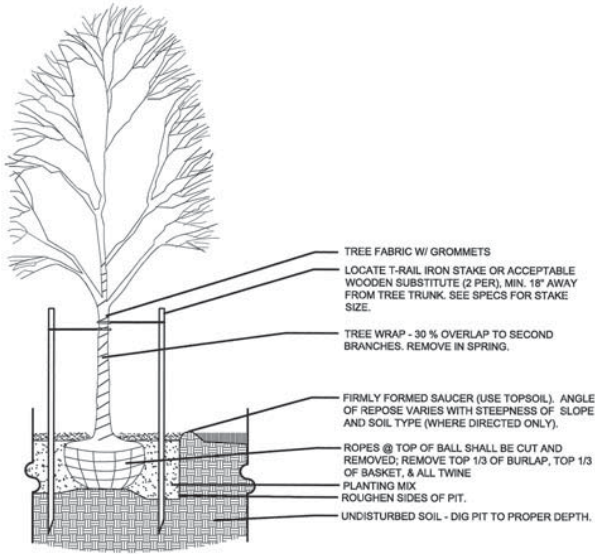


### 3.21 Staking, Tree Wrap and Mulch

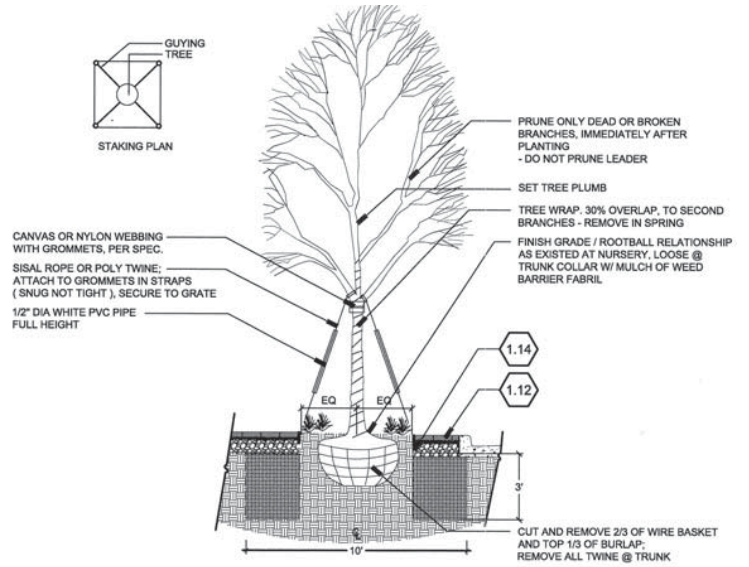
Mulch shall be 2" deep 100% shredded red cedar bark, natural color, no wood or large clumps to be included.

Staking shall consist of 6'-6" long metal t-bar posts with bottom anchor plate intact or square 2"x2" hardwood stakes,. Install protection on top of stakes to prevent injury to pedestrians from sharp edges. 12 gauge guide wires shall be used to run between stakes and tree trunk. Fabric tree straps shall be used around the tree trunk. Provide 12" long, 1-3/4" wide nylon straps with metal grommets at each end. Wrap tree trunk up to guide wires using tree wrap material, 4" wide, corrugated or crepe paper, brown in color, specifically manufactured for tree wrapping.

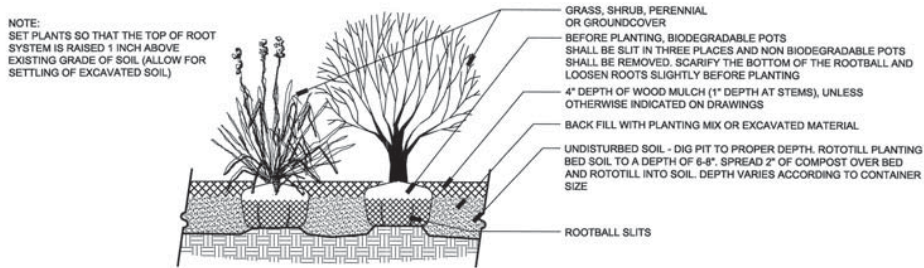




**1** DECIDUOUS TREE IN PLANTER 6.5  
1/4"=1'-00"



**2** DECIDUOUS TREE IN HARDSCAPE 6.6  
1/4"=1'-00"



**4** PLANTING BED 6.1  
1"=1'-00"



### 3.0 CCN BID Streetscape Design Standards and Guidelines



#### 3.22 Warranties and Maintenance

Guarantee all plantings for a period of two years from date of Final Completion against defects including death and unsatisfactory growth. Remove and replace plants found to be dead or in an unhealthy condition within one month of notice to replace such plants. Upon the BID's written approval, the Contractor may replace rejected plants at a later date, mutually agreed upon, provided that the Contractor removes all rejected plants within seven (7) calendar days of the notice to replace such plants. If the rejected plants are not removed in seven (7) calendar days, the Owner may remove and replace these plants and the cost of such removal and replanting shall be charged to the Contractor.

All areas damaged by replacement operations are to be fully restored to their original condition as specified.

Initial Maintenance Service: Provide maintenance by skilled employees of landscape Installer. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established but for not less than maintenance period below.

1. Maintenance Period for Trees and Shrubs: 24 months from date of planting completion.
2. Maintenance Period for Ground Cover and Other Plants: 24 months from date of planting completion.

Replacement plants shall have a 2 year replacement + maintenance on-going warrantee.





## Receipt and Acceptance of Design Standards

# 4.0



I have received and accept the CCN BID Design + Improvement Standards.

**Signee #1 (Developer)**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title / Company

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Signee #2 (Landscape Architect)**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title / Company

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Signee #3 (Civil Engineer)**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title / Company

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Signee #4 (CCN BID)**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title / Company

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date





## Cherry Creek North Business Improvement District

2401 E. 2nd Ave. Suite 150  
Denver, Colorado 80206

303.394.2904

Contact: Susan Fry, Director of Physical Environment  
[susan@cherrycreeknorth.com](mailto:susan@cherrycreeknorth.com)

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