



STREETSCAPE MANUAL

Standards, Specifications, & *Guidelines for the Planning and Design of Town Streetscape Projects*

Prepared By:

Department of Community Development

Town of Herndon, Virginia

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Adopted by reference in the Herndon Town Code

Sec. 1-16, Standards for Public Improvements

Town of Herndon

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CHAPTER I: INTRODUCTION

Standards, Specifications, & *Guidelines for the Planning and Design of
Town Streetscape Projects*



I. INTRODUCTION

PURPOSE & USE OF THE MANUAL

This manual serves as a guide describing the standards, guidelines, specifications, procedures and requirements for planning and design of streetscape improvement projects throughout the Town of Herndon. It is applicable to both public and private streets. It is intended for use by town staff, development applicants and their architects, engineers, and contractors. Streetscape improvement projects addressed by these guidelines may be capital improvement projects designed and constructed by the town, or private development projects designed and constructed by a developer. This manual was developed and updated to ensure a connected and consistent plan for improving streets, to enhance coordination between staff, the development community, design professionals, and builders, and to consolidate and formalize town policies, processes, and standards regarding public street design. It is also meant to function as a design tool that implements a particular town image and identity and bolsters the quality and character of the townscape.

This manual categorizes streetscape designs into types that are then specified in the applicable streetscape type chapter. The Streetscape Type Map on page 6 shows the locations of each design type. The chapter for each type provides the design guidelines and standards for each facet of the streetscape such as the surface materials, the landscaping, the lighting, and the furnishings. Any specifications explained within this manual are subject to periodic updating as materials may become unavailable, construction and engineering details may change, and Town of Herndon policy may change.

OBJECTIVES

Streetscapes present the public face of the Town's built environment and offer a town identity to residents and visitors. As Herndon grows the treatment of the streetscape will continue to be a defining feature of the town's public sense of place. The combination of standards for sidewalks, streetlights, landscaping, and other streetscape elements covered within this manual were developed to not only enhance the town's image and character but to help create a safe, pleasing, and convenient experience along town streets.

In its [2035 Vision Statement](#), the Herndon Town Council emphasizes the importance of streetscape design and connectivity. The vision for ***Cultivating a Sustainable Environment*** states that:

Through thoughtful planning, the town has a network of sidewalks, trails, streets and connections to public transportation that provides the residents the opportunity for one-car or no-car living.

The vision for ***Celebrating Community Spirit*** states that:

Council and staff members proactively work together to create attractive, comfortable, and pleasant public spaces.

The sidewalk environment in Herndon should be celebrated as being a significant link in the Town's multimodal transportation system. The sidewalks within the streetscape must have a rational scheme of connectivity and convenience. Coordination with the greater pedestrian circulation system (public or private) outside of the streetscape both in town and in adjacent communities is important to the functionality of the town-wide sidewalk system. Streetscape objectives should mirror the Standards for Pedestrian Movement from the Town of Herndon Zoning Ordinance Section 78-100.10, as listed in the following table.

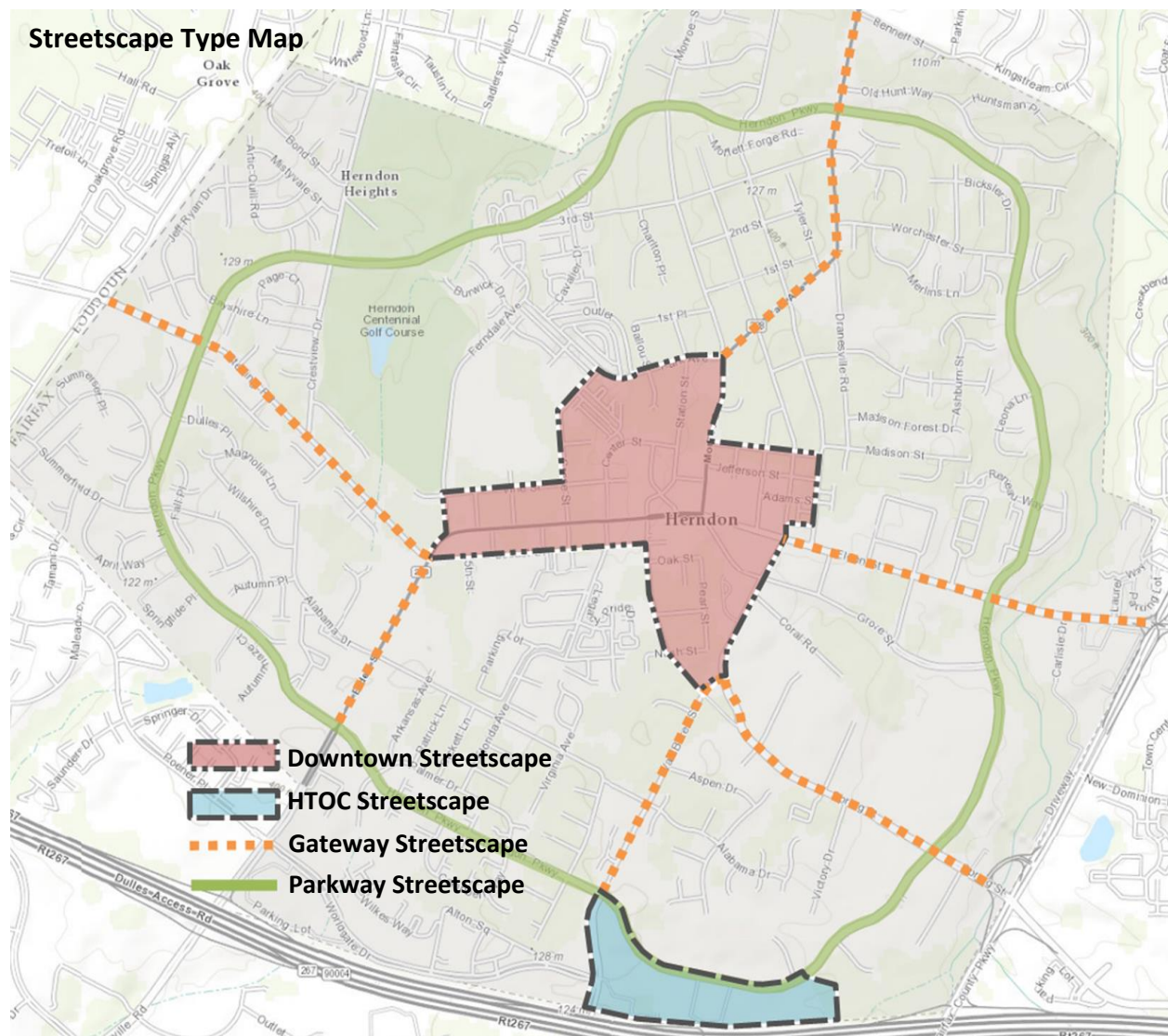
Standards for Pedestrian Movement (Section 78-100.10)	
1.	Pedestrian access is designed so as to provide safe and convenient pedestrian ways to, from and within a proposed development. Pedestrian ways within a development are provided to connect the buildings within the development.
2.	Sidewalks are provided on both sides of every street (including private streets), except in cases where environmental or topographic features make such provision impractical.
3.	Connections to existing or planned sidewalks are made at the property boundaries by incorporating and continuing all sidewalks stubbed to or shown as stubbed to the boundary of the development by previously approved plans. In addition, future sidewalk connections to adjacent developable parcels are located at planned or current street connections along each side of the development's boundary.
4.	Developed recreation space and open space intended for pedestrian use, and schools, religious institutions, and other pedestrian-oriented uses, are connected by pedestrian ways to residential and office uses, with a minimum of street crossings. Where possible, office and residential uses are to be connected by an integrated pedestrian way system.
5.	Pedestrian crossing(s) at the perimeter of the development are marked and controlled. Where pedestrians are exposed to substantial vehicular traffic, barriers may be warranted to prevent crossing at other than designated points.
6.	Pedestrian passages over and under vehicular routes are used wherever possible.
7.	Bicycle paths, trails or lanes are coordinated with the on-site traffic circulation and pedestrian system, to the maximum extent feasible. Where feasible, bicycle crossings and pedestrian crossings are combined.

This manual leverages the vision statement and pedestrian movement standards as streetscape planning and design objectives in addition to following objectives from the Transportation Chapter in the Herndon 2030 Comprehensive Plan:

- **Design and construct road improvements that preserve the small-town character and scale of Herndon, to include traffic management, landscaping and noise abatement amenities conducive to minimize disruption and maintain quiet streets.**

- Continue to support the Herndon Metrorail Station of the Dulles Corridor rail system and develop plans for surrounding access to the station.
- Continue to integrate pedestrian and bicycle facilities with the street and transit network through the Trail and Sidewalk Program and other project components of the town's capital improvement program involving transportation improvements.
- Apply appropriate traffic calming techniques and improvements to enhance vehicular and pedestrian safety and to preserve neighborhood character.

STREETSCAPE TYPES



The map on the previous page displays the locations of each streetscape type.

The town leverages different streetscape designs to demarcate and identify various neighborhoods and activity centers while creating visual interest and character-defining townscapes throughout town.

The **HTOC Streetscape** applies to streets within and bordered by the Herndon Transit-Oriented Core which comprises of all the properties zoned PD-TOC near the Herndon Metro Station. The **Parkway Streetscape** applies only to the Herndon Parkway. The **Gateway Streetscape** is used for the six primary entrances into Herndon between the town boundary and the downtown area. The **Downtown Streetscape** applies to streets within and bordered by the area defined by both the Downtown Master Plan and the downtown Herndon Heritage Preservation District. For all areas not otherwise covered by the above streetscape types, the **Standard Streetscape** design applies. This includes mostly residential local streets.

STANDARDS FOR ALL STREETSCAPE TYPES

All streetscapes in town shall follow the standards listed below.

1. **DESIGN FLEXIBILITY & CREATIVITY:** The standards and guidelines contained within this document present a baseline to follow when improving the streetscape in downtown Herndon to ensure a degree of uniformity and identifiable characteristics for the town and specific neighborhoods in town. They should not however be used as a hindrance to future consideration or implementation of occasional varied and unique streetscape solutions. Creative design elements within public spaces help enhance visual appeal and pedestrian level of service. Streetscape design creativity and flexibility should be explored often as a tool for place-making. As a small town within a rapidly urbanizing area, Herndon relies on context sensitive streetscape design solutions. Any project or site specific streetscape that offers alternative design options shall be considered individually by town staff. Staff may approve such a customization when general compatibility is demonstrated and the level of design exceeds the design and material quality of the standard streetscape type.
2. **OVERALL WALKABILITY:** For all streetscape improvements every condition, design detail, and material specification must account for pedestrian safety, security, and mobility. Pedestrian comfort and convenience are also vital ingredients for acceptable pedestrian level of service. Environmental variables for each block of streetscape must be evaluated for their influence on walkability.
3. **ACCESSIBILITY:** All standards contained within shall comply with the American with Disabilities Act (ADA). Design specifications for certain items such as curb ramps and pedestrian signals are particularly reliant on ADA accessibility guidelines. It is important that all streetscape design decisions are reviewed for appropriate and compliant accessibility measures.

4. **CONNECTIVITY:** Walkable communities require a diverse and highly integrated system of interconnected non-motorized travel paths. Sidewalk and trail connectivity must be considered and accommodated whenever possible as part of any streetscape improvement project. This may require some adjustments to project scopes to ensure linkages to existing facilities. During streetscape improvement projects or projects that incorporate a streetscape component; staff should evaluate any possible needs for new connections or new right-of-way crossings.
5. **DESIGN & MATERIAL QUALITY:** All streetscapes shall have a thoughtful and professional design and all materials and products used within the streetscape shall be built and specified for maximum durability and longevity.
6. **INTERGRATION OF BICYCLE FACILITIES:** Herndon's bicycle path system is currently guided by the Herndon Master Trails Plan and the Herndon Town Council endorsed Fairfax County Bicycle Master Plan. The system is currently comprised of mostly off-street mixed use facilities such as trails and wide sidewalks. Recent and planned facilities however have been largely on-street bicycle lanes or sharrows and off-street single use (cycle track) facilities. Whether on-street or off-street bicycle facilities have streetscape implications. Bicycle amenities such as racks, lockers, shelters, maintenance stations, and even bikeshare stations should be integrated into the adjacent streetscape design. This may require additional streetscape width to accommodate parked bicycles. In instances where the dedicated bicycle facility is within the streetscape ample signage and markings and other strong visual conditions must be employed to notify all users of bicycle traffic and create a safe and separate movement between pedestrian, cyclists, and transit users. A successful streetscape acts as a convergence point for the various non-motorized modes of travel and conduit for mass transit access.
7. **ARTWORK:** Town streetscapes can offer a good venue for art installations. Artwork in public spaces is encouraged for its unique place making ability. Artwork may be integrated into specific streetscape components such as sidewalk surface treatments or retaining wall veneers or and it function as a standalone feature. It may have some degree of utility such as also serving as a bicycle rack help mask a streetscape eyesore such as a painting a utility box. It may be interactive or passive. Regardless of the type of art, it shall be integrated into the streetscape design in a manner that assures pedestrian, cyclist, and transit user safety and mobility. As an exhibit presented outside with constant public access, it shall also be designed and built for maximum durability.
8. **BIO-RETENTION:** Streetscapes offer a good opportunity for bio-retention. When the treatment of water quality and quantity is required as part of any new development or public improvement, using on-street stormwater BMPs is encouraged. When used, options such as extended tree pits shall be integrated in to the streetscape design. Additional streetscape width may be necessary to accommodate functioning urban bio-retention BMPs. Specifications for on-street bio-retention is not included in this document and shall be considered individually by town staff.

For guidance and specifications for on-street stormwater bio-retention practices the Environmental Protection Agency's *Stormwater to Street Trees* Guide (EPA 841-B-13-001) Guide and the Virginia Department of Conservation and Recreation's Storm Water Design Specification No.9, *Appendix 9-A Urban Bioretention* shall be used. This appendix includes all specifications for the urban bio-retention options approved by Virginia.

9. **TRAFFIC CALMING:** Streetscape improvements may involve the construction of certain traffic calming techniques in an attempt to enhance pedestrian safety, reduce vehicle speeds, and improve the character of the street. Curb extensions, chokers, urban lane widths, medians with pedestrian refuges, and markings have been used to calm traffic in Herndon. Other techniques such as traffic circles or raised intersections may be considered. Many if not all traffic calming devices require thoughtful and unique design considerations. Specialized markings or surface treatments or landscaping should be employed especially if located within one of the town's specialty streetscape zones. Consideration of whether any traffic calming measures are necessary should be incorporated during the development of any streetscape project.
10. **OTHER STREETScape ITEMS:** This document does not contain specifications for streetscape features and amenities that may be used infrequently or have not yet been designed such as information kiosks and bicycle shelters. Streetscape items not covered here may be allowed but are reviewed by town staff on an individual basis for compatibility with these standards.

STREETScape IMPROVEMENTS PROCESS

Streetscape improvements occurs either through private development applications or through public improvement programs or capital improvement projects.

If part of a development application, the review of the streetscape is conducted by staff through the plan review process. Streetscape may also be included in the review of rezoning or special exception applications. Streetscape features are evaluated by staff based on the criteria and standards found in this manual, the 2030 Comprehensive Plan, applicable master plans, town code, the PFM, the building code, and other applicable policies and guides. Streetscape comments are provided to applicants in conjunction with the other plan review comments.

When the project is managed by the town, the lead department requests comments from other appropriate departments in the town to review the proposed plan during scoping and various stages of design.

Town staff re-verifies compliance with this document at during review board processes, at permitting, and during site inspections. Coordination should occur with the utility companies throughout the town review of streetscape improvements.

SPONSORING A STREETScape AMENITY

Sponsorship of certain streetscape amenities is available to individuals, businesses, organizations, or other private groups. To sponsor a streetscape amenity, sponsors will reach out to town staff for information on the amenities that are currently needed. In partnership with the Town, sponsors may make a donation for the purchase of the sponsor’s chosen amenity. The Town completes procurement and installation and provides the maintenance of the item. Most amenities can accommodate plaques identifying the sponsor. Plaque design and message must be reviewed by staff and approved by the Town Manager. Sponsors should contact the Department of Community Development for additional information on this program. Typical streetscape amenities that may be used for sponsorship include:

Bus Shelters – Benches - Recycling Stations - Bicycle Racks - Street Clocks – Planters

PLACEMENT OF UTILITIES

The visual character of the streetscape is significantly affected by the location and appearance of public utility devices, such as traffic control boxes, and by public signage. The location and design of these streetscape elements should be evaluated and properly managed as early in the design phase of any public or private development of improvement plan as possible. The following Principles for Utility Placement should be followed.

Principles for Utility Placement	
1.	Aboveground utility equipment does not block the view of drivers or cyclists and their placement should adhere to applicable sight distance standards and visibility clearance standards.
2.	Aboveground utility equipment does not block other traffic safety features, such as traffic signage and traffic signals, located within the right-of-way.
3.	Aboveground utility equipment does not obstruct any curb ramp or sidewalk or be situated in any manner that negatively impacts streetscape accessibility.
4.	If visible from the public right-of-way, utility boxes are screened using landscaping or a built means of screening.
5.	Belowground utilities are not to be located within a tree zone and in such a manner that would conflict or hinder future tree and root growth.
6.	Traffic signage is not placed within a sidewalk and placed in a manner that impacts accessibility or mobility for streetscape users.

UTILITY UNDERGROUNDING

Few streetscape improvements are as noticeable and provide immediate visual appeal as relocating existing overhead utility poles and wires below ground. Not only does the relocation of utilities immediately improve the appearance of the streetscape, but it increases the useable sidewalk width for pedestrians. The placement of utilities underground also provides additional space for streetlights, street trees, landscaping elements, and street furnishings in the public rights-of-way.

The zoning ordinance requires the undergrounding of utilities for any new developments on-site, and adjacent to the site, with certain exceptions. The zoning ordinance also prohibits the installation of utilities within required landscape buffers unless the utilities run perpendicular to the street.

REFERENCES

The guidelines and standards were informed by the following sources. For design matters not addressed or specified within this document, staff may utilize these sources for further guidance.

- TOH Herndon 2030 Comprehensive Plan
- TOH Zoning and Subdivision Ordinances
- TOH Public Facilities Manual
- TOH Downtown Herndon Master Plan and Pattern Book
- TOH Herndon Transit-Oriented Core Plan
- VDOT Memo "Guidelines for the Placement of Curb Ramps for Pedestrian Access Routes (2012)
- VDOT Memo "Context Sensitive Solutions" (2006)
- VDOT Guidelines for the Installation of Marked Crosswalks
- VDOT Roadway Design Section A-5 Bicycle and Pedestrian Facility Guidelines
- VDOT Subdivision Street Design Guide
- AASHTO Guide for the Development of Bicycle Facilities (2012)
- AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities (2004)
- AASHTO Policy on Geometric Design of Highways and Streets
- American with Disabilities Act Accessibility Design Guidelines
- Virginia Uniform Statewide Building Code
- NACTO Urban Bikeway Design Guide
- NACTO Urban Street Stormwater Guide
- Virginia DCR Stormwater Design Specification No.9 Appendix 9-A

CHAPTER II: STANDARD STREETScape

Standards, Specifications, & *Guidelines for the Planning and Design of
Town Streetscape Projects*



II. STANDARD STREETScape

STANDARD STREETScape DESIGN CONCEPT

These guidelines and specifications apply to streets outside downtown Herndon and the Herndon Transit-Oriented Core, and streets not designated Gateway or Parkway Streets. The Standard Streetscape is largely used on local public right-of-ways throughout Herndon’s residential neighborhoods and on secondary commercial streets. Standard Streetscapes have more conventional and less decorative suburban designs but are still specified to ensure safe and comfortable environments for pedestrians, cyclists, and motorists.

Some of the standards set forth in this section also apply to other streetscape types. For example, Gateway and Parkway Streetscapes site furnishings and bus shelters use the Standard Streetscape specified site furnishing and bus shelters. When another streetscape type does not include specific standards on a streetscape component or detail, the Standard Streetscape specification for that component or detail applies as the default. The Standard Streetscape may include features or amenities not specifically regulated by the guidelines and standards in this chapter. In those instances, Community Development and Public Works Departments shall review such options, evaluate for compatibility and appropriateness, and assist in determining the acceptable specifications.

Standard Streetscapes must comply with the **Herndon Streetscape Design Standards** found on Page 10 of this document which applies to all streetscape designs in Town.

There are two Standard Streetscapes; the Commercial Standard Streetscape used on streets abutting mostly commercial zoning districts and the Residential Standard Streetscape meant for streets in predominantly residential zoning districts. There are options for each standard streetscape type that requires an additional 10’ landscaped buffer. Those options may be considered for occasional implementation when full tree zones behind the curb are not feasible due to physical constraints.

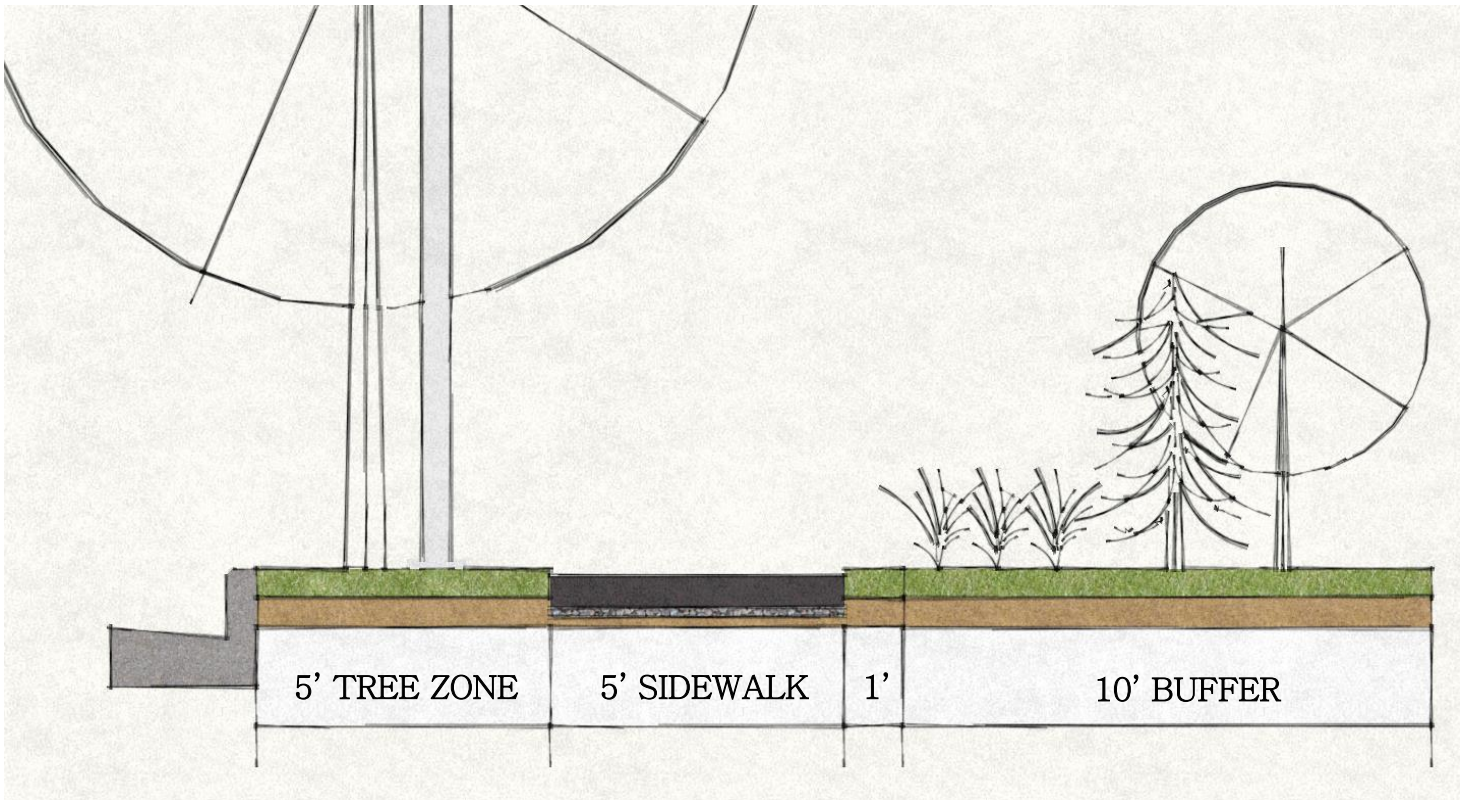
The following table lists the subsections of this chapter.

Standard Streetscape Component	Page #
Design & Dimensions.....	Page 17
Crosswalks & Curb Ramps.....	Page 18
Lighting & Signals.....	Page 20
Landscaping.....	Page 24
Site Furnishings.....	Page 25
Bus Shelter.....	Page 29
Other Streetscape Features.....	Page 31

DESIGN & DIMENSIONS standard

The Standard Streetscape designs shall be designed in accordance with the section view exhibit on the following page, **Detail 2.1**, and the plan view exhibit, **Detail 2.5**, in the landscaping section on Page 25. In addition, the Standard Streetscape design shall meet the following standards.

- The Standard Streetscape shall be comprised of a minimum five foot wide tree zone from back of curb, minimum five foot wide sidewalk, and minimum one foot wide landscape buffer between the sidewalk and private property line. On commercial streets, an additional ten foot wide buffer on private property abutting the street is required. On residential streets, where the five foot wide tree zone must be reduced due to environmental constraints, the same ten foot wide buffer on private property abutting the street is required. For further information on buffer requirements, refer to Section 78-110.4 of the zoning ordinance.
- Sidewalk width may be reduced to four foot in certain instances with town staff approval where environmental or topographic features prohibit a five foot width.
- The sidewalk shall be brushed concrete to meet VDOT and PFM standards. The tree zone shall contain a continuous planting bed. See Page 24 for further landscaping information.



DETAIL 2.1 Standard Streetscape Section

CROSSWALKS & CURB RAMPS standard

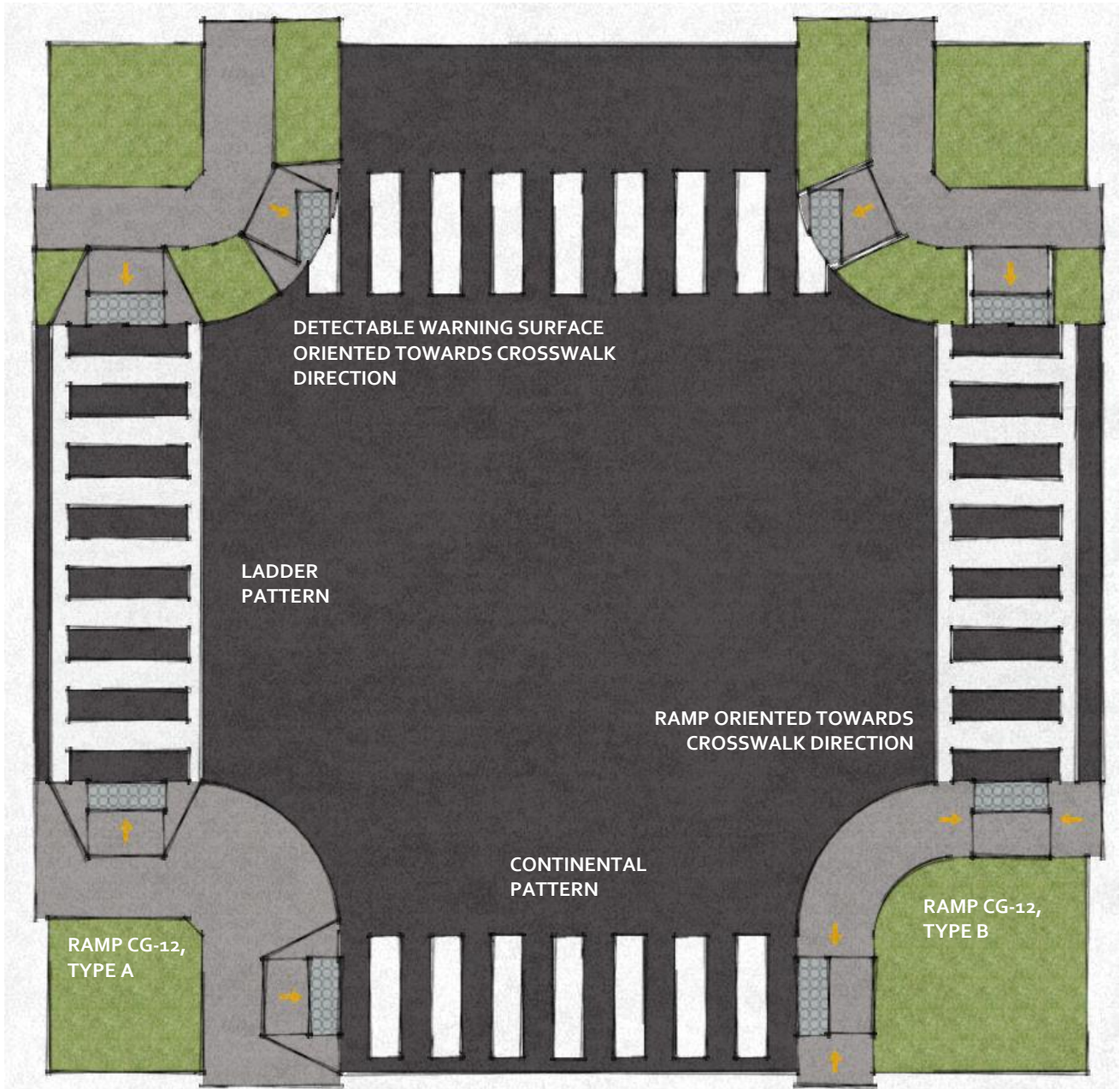
GENERAL USE:

The Standard Streetscape shall use marked crosswalks at all approaches to controlled intersections where sidewalks are present and may also be considered at uncontrolled locations. Staff will determine when marked crosswalks should be considered based on need and evaluated using VDOT's *Guidelines for the Installation of Marked Crosswalks*. Crosswalks shall also be used at private commercial property curb cuts.

ACCESSIBILITY:

All pedestrian crosswalks shall be accessible via ADA compliant ramps using VDOT CG-12, Type A designs where possible and Type B where space is constrained. The direction of the ramps should align with the crosswalk orientation as much as possible. This may require ramp separation and ramp locations pushed away towards the edges or past the curb return. Ramps shall not be oriented diagonally across the intersection.

Ramps shall use truncated domes as the detectable warning surface and shall not exceed a 12:1 slope. Maximum ramp flange slope is also 12:1 and the adjacent gutter pan slope maximum is 20:1. Obstructions such as signs, poles, or utility cabinets shall not be placed within 4' of any ramps, ramp flanges, and ramp landings.



DETAIL 2.2 Standard Streetscape Crosswalk & Ramp Options

SURFACE DESIGN & TREATMENTS:

Ramps in the Standards Streetscape shall be brushed concrete with Armor-Tile cast-in-place, or approved equal, truncated domes in a *Brick Red* (Fed No. RAL20109) color.

Crosswalks in the Standard Streetscape shall use reflective thermoplastic in accordance with MUTCD standards. Marked crosswalks shall use the Ladder or Continental pattern. Transverse lines shall not be used singly to mark crosswalks. To the greatest extent possible, crosswalks to be squared up the intersection, oriented perpendicular to the road alignment. All crosswalks shall be a minimum of 8' wide. A greater width may be required as determined by staff in certain instances.

LIGHTING & SIGNALS standard

STREETLIGHTS

Standards for roadway lights are informed by the Fairfax County Public Facilities Manual, Section 7-1000. For the Standard Streetscape, there are two lighting options. The Cobrahead style light (RF-1 & RF-2) is generally used on major roadways and in non-residential areas and the Colonial Lantern style light (RF-3) is generally used on local, largely residential streets. Details 4.3 and 4.4 on the following pages provides the specifications for both light types. Streetlights intended to illuminate a right-of-way should be designed in accordance with the AASHTO guide for Roadway Lighting and the Illuminated Engineering Society of North America (IESNA) Standards.

USE & LOCATION:

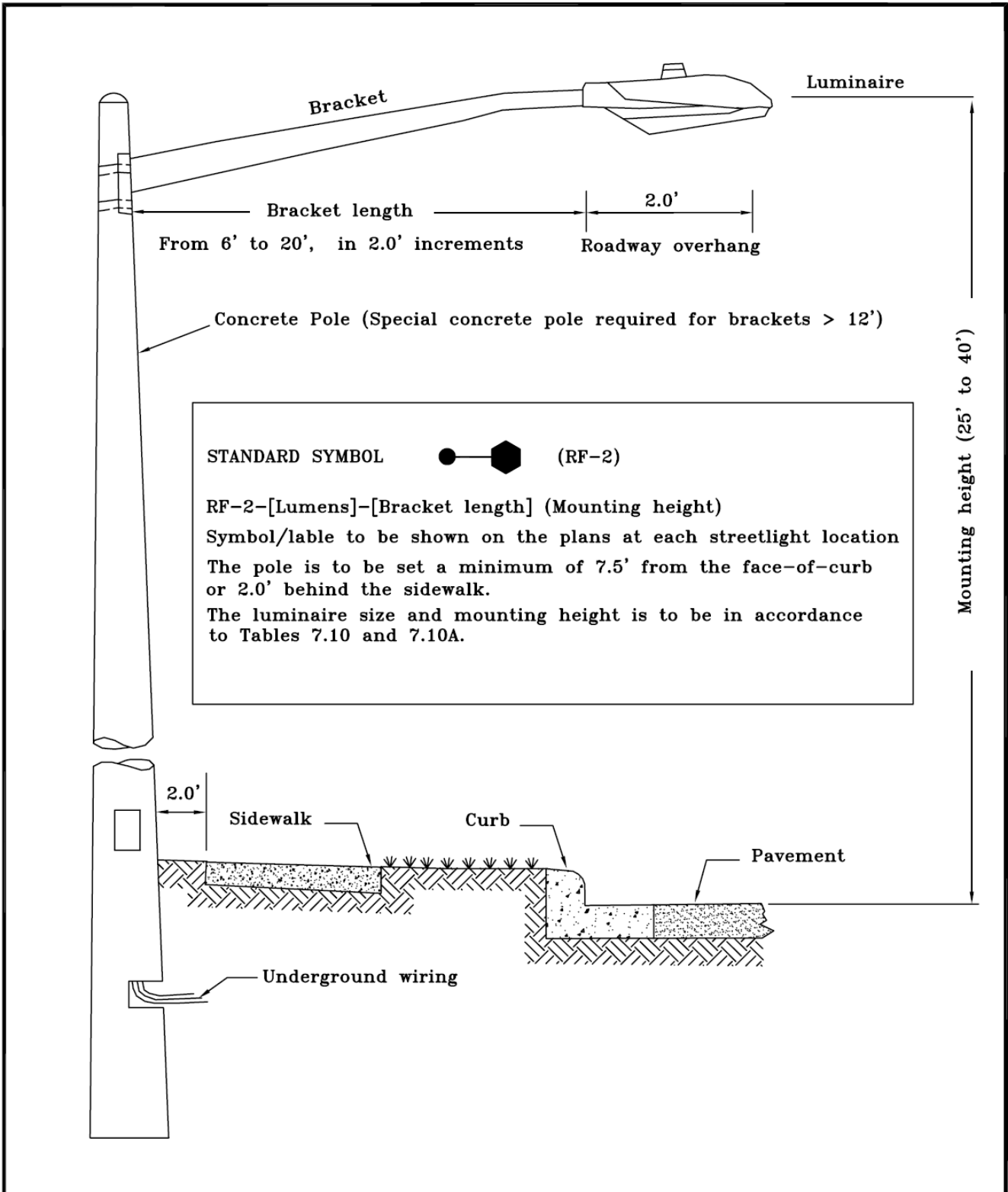
Pole locations will depend on specific site conditions including right-of-way width and environmental constraints and be influenced by clear zone requirements and light coverage and uniformity requirements. Whenever possible, poles should be placed between the curb and sidewalks. In Standard Streetscapes, streetlights should only be used to illuminate sidewalks, and point of decision such as intersections, pedestrian crossings, bus stops, arrival points, and other special locations determined by staff to benefit from the added illumination for safety and security purposes. Regardless of location, all lights, shall be shielded in a manner to prevent unreasonable spillage onto private property and manage point source glare to the greatest extent possible.

TRAFFIC SIGNALS

For following specifications are provided for any new traffic signal installation. All Traffic signal poles shall be designed in accordance with the AASHTO Standards for Structural Supports for Highway Signs, Luminaires, and Traffic Signals as appropriate for a 90MPH wind zone. **Details 2.3 and 2.4** specify the traffic signal poles and pedestrian signals.

All signalized intersections with crosswalks shall have an integrated pedestrian head with full audio-tactile capabilities. Accessible pedestrian signals (APS) with counters and push buttons shall be used at each end of signalized crosswalks. Pedestrian push buttons may be located on a separate post, on a street light, or on a traffic signal pole and must be accessible to wheelchair users per ADA standards for placement though cannot obstruct in any way accessibility and mobility around the sidewalk and curb ramp. Leading interval signal timing that given pedestrian a head start in the crosswalk shall be utilized to the greatest extent possible.

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



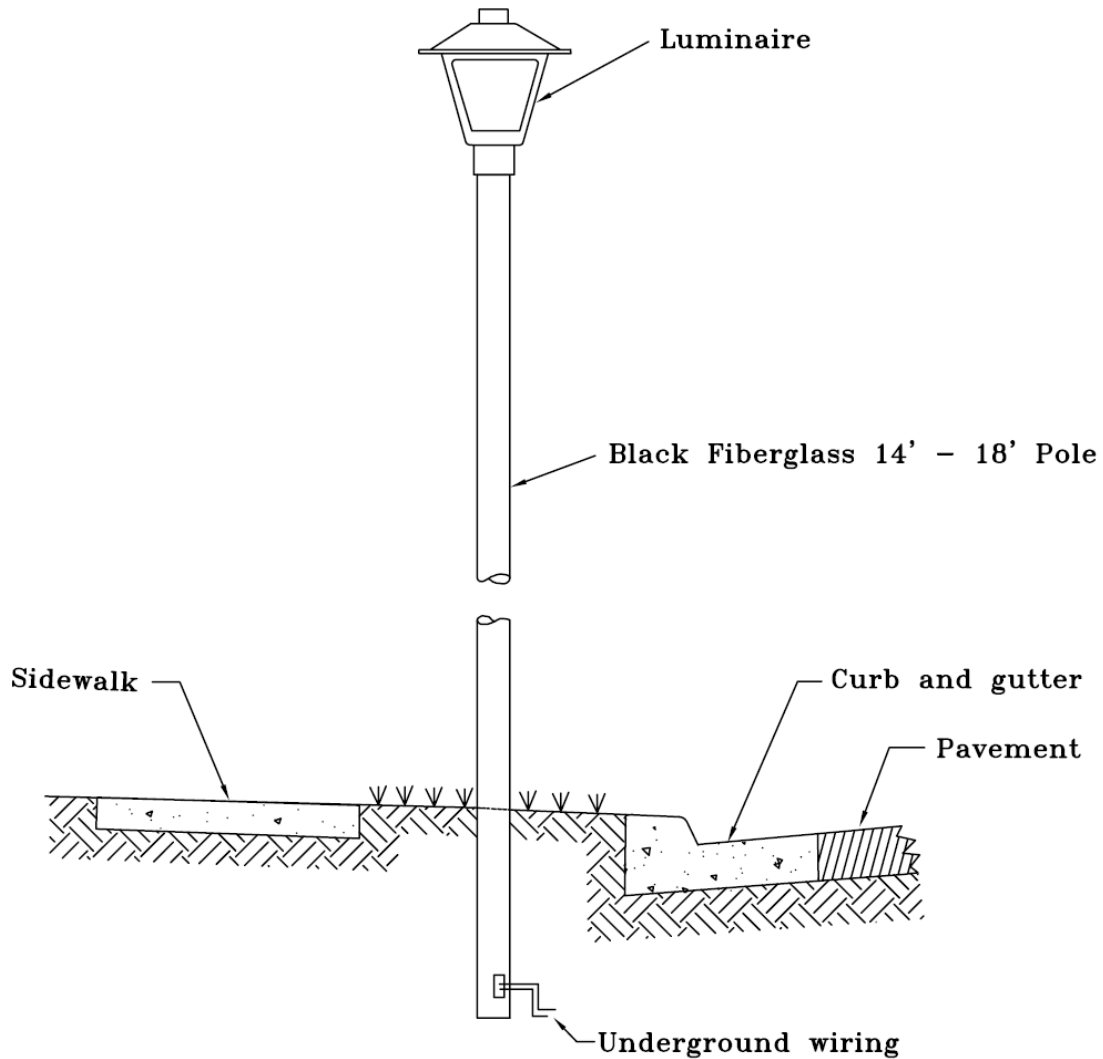
Ref. Sec. 7-1004.6B, 7-1004.7B, 7-1006.3 Rev. 1-00, 12-03, 2011 Reprint, 2-12	STANDARD ROADWAY FIXTURE COBRA HEAD STYLE FOR CURB AND GUTTER ROADS	PLATE NO. 31-7	STD. NO. RF-2
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FAIRFAX COUNTY PUBLIC FACILITIES MANUAL

STANDARD SYMBOL  (RF-3)

RF-3-[Lumen]-[Bracket Length] (Mounting Height)

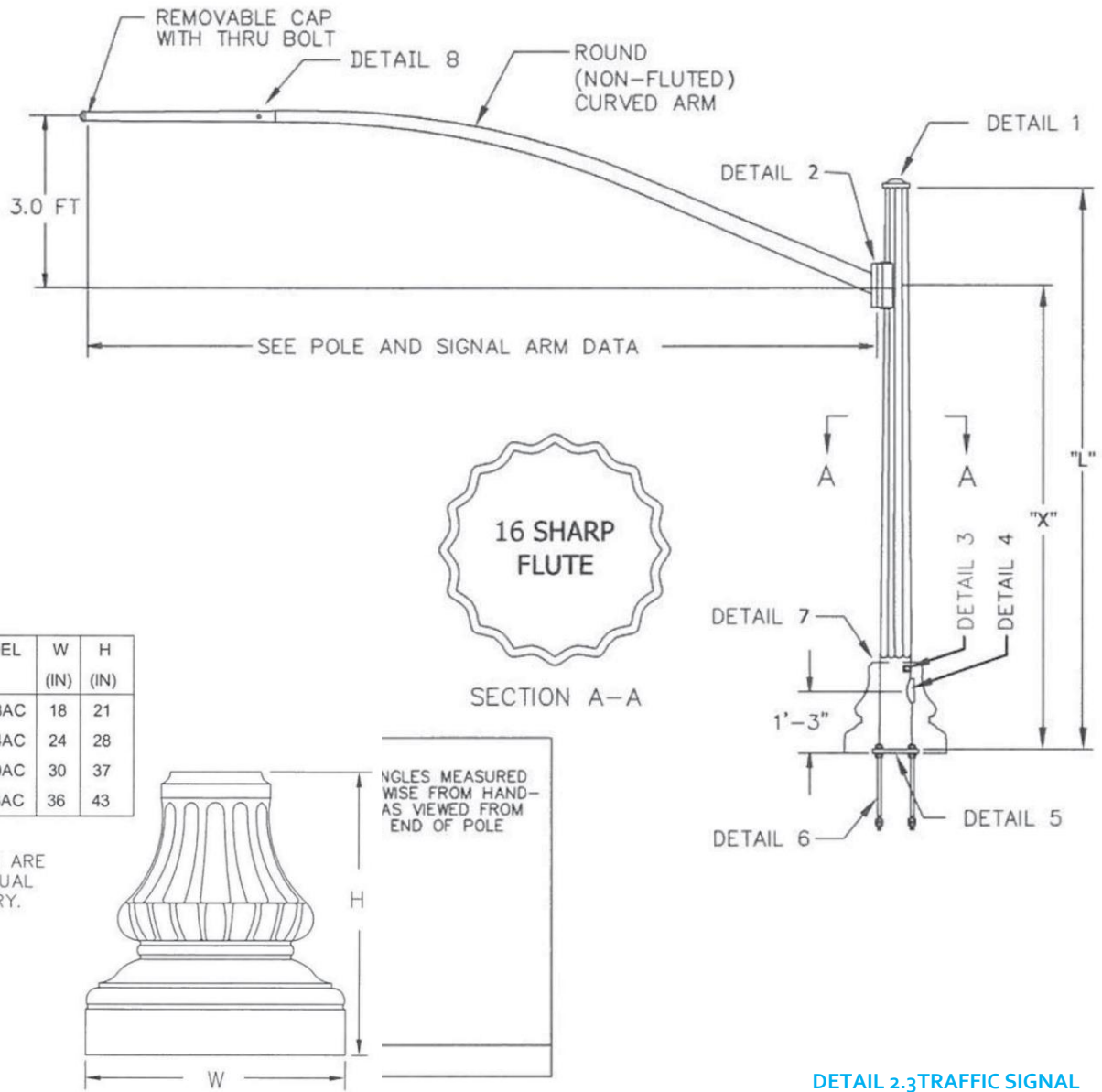
Symbol/label to be shown on the plans at each streetlight location.
 The pole is to be set in the utility strip
 in accordance with VDOT clear zone requirements.
 The luminaire size and mounting height are to be in accordance
 to Table 7.11.



Ref. Sec. 7-1004.1A(2), 7-1004.6C, 7-1006.1B	COLONIAL STYLE FIXTURE FOR SUBDIVISION ROADWAYS WITH CURB AND GUTTER	PLATE NO. 32-7	STD. NO. RF-3
Rev. 1-00, 11-05, 7-06, 2011 Reprint, 2-12			

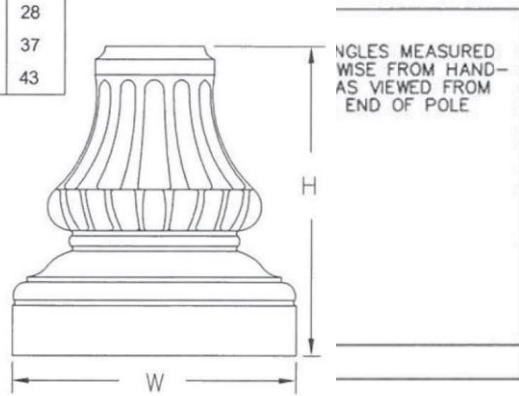
Signal Poles

Manufacturer: Valmont, Inc. or equal as approved by TOH
 Post: Tapered, fluted post; 19' tall; 17" – 14.43" diameter; 16 sharp flute
 Arm: Round smooth curved mast arm; 17' attach height; 75' span
 Color: Ebony black powdercoat



SHAFT DIA RANGE (IN)	MODEL	W (IN)	H (IN)
4.0 TO 6.0	WA18AC	18	21
5.9 TO 9.0	WA24AC	24	28
9.0 TO 13.5	WA30AC	30	37
12.5 TO 18.5	WA36AC	36	43

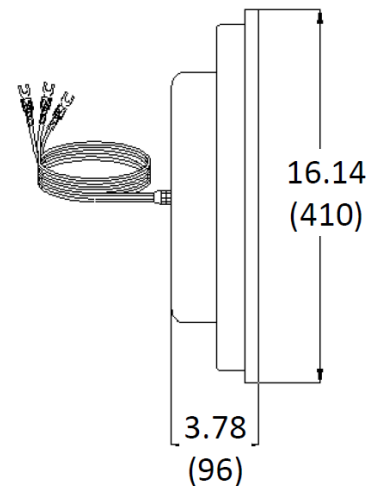
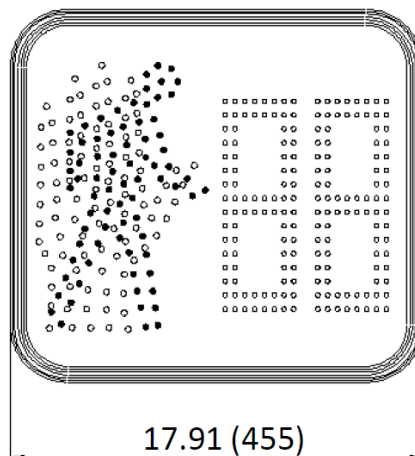
ABOVE DIMENSIONS ARE APPROXIMATE, ACTUAL CASTINGS WILL VARY.



DETAIL 2.3 TRAFFIC SIGNAL

Pedestrian Signals

Manufacturer: Campbell Company or equal as approved by TOH
 Type: Advisor Guide Accessible Pedestrian Station; AGPS 915; 9" x 15"; with MUTCD R10-3E Sign
 Colors: Black
 Volumn/Audio: To be determined after install
 Use: At all approaches to a signalized intersection and whenever a pedestrian only signal is utilized.
 Placement: To meet ADA
 Counter: Leotek CD Series Pedestrian Counter or equal as approved by TOH

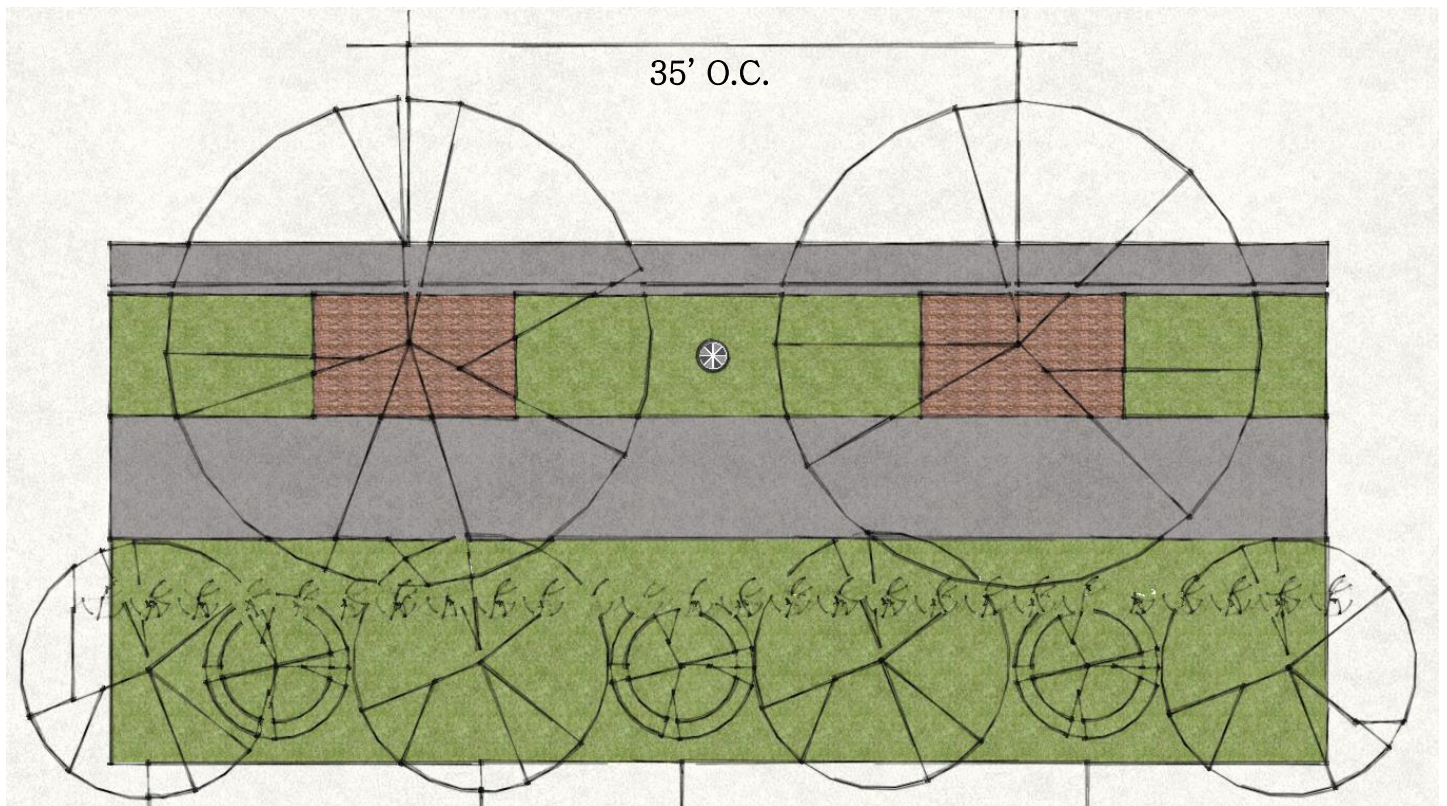


DETAIL 2.4 PEDESTRIAN SIGNAL

LANDSCAPING standard

Standard Streetscape Landscaping Standards

- Within the tree zone; deciduous canopy trees are located 35' on-center. No trees shall be planted within 20' of a public intersection curb return.
- Within the buffer area; deciduous canopy trees are located 35' on-center. This area may also contain the landscaping required for vehicular use areas per Section 78-110.5 of the Zoning Ordinance.
- Tree zone shall be comprised of turf, planting beds, or a combination of the two, with the exception of areas which have bus stops, bicycle racks, or litter receptacles, which would may also have a brushed concrete surface treatment.
- Diverse planting beds with a variety of low shrubs, grasses, and other perennials should be considered at major intersections and other focal points in consultation with the Community Forester.
- In some cases, where a different aesthetic is preferred by the town or physical constraints such as overhead lines would not allow large street trees, ornamental trees may be considered in consultation with the Community Forester.
- All plant material used must be native.
- The same species of street tree shall be used on both sides of the street for street segment.
- All plant material must be maintained to ensure a safe and secure passage for all users.
- Minor adjustments to these standards may be considered in consultation with the Community Forester



DETAIL 2.5 STANDARD STREETScape PLAN VIEW

SITE FURNISHINGS standard

Litter Receptacles

Manufacturer: Victor Stanley or approved equal

Type: Model #RB-36, 36 gallon, with a Tapered Former lid

Color/Finish: Black texture powdercoat

Use: Should be used at bus stops and at on-street and off-street public and semi-public parks, plazas, and other similar focal and respite areas, at intersections with high pedestrian traffic, on streets nearby pedestrian generators.

Placement: Paired with recycling receptacles, at least 10' from any seating; abutting a sidewalk but not obstructing the sidewalk in any way.

Recycling Receptacles

Manufacturer: Victor Stanley or approved equal

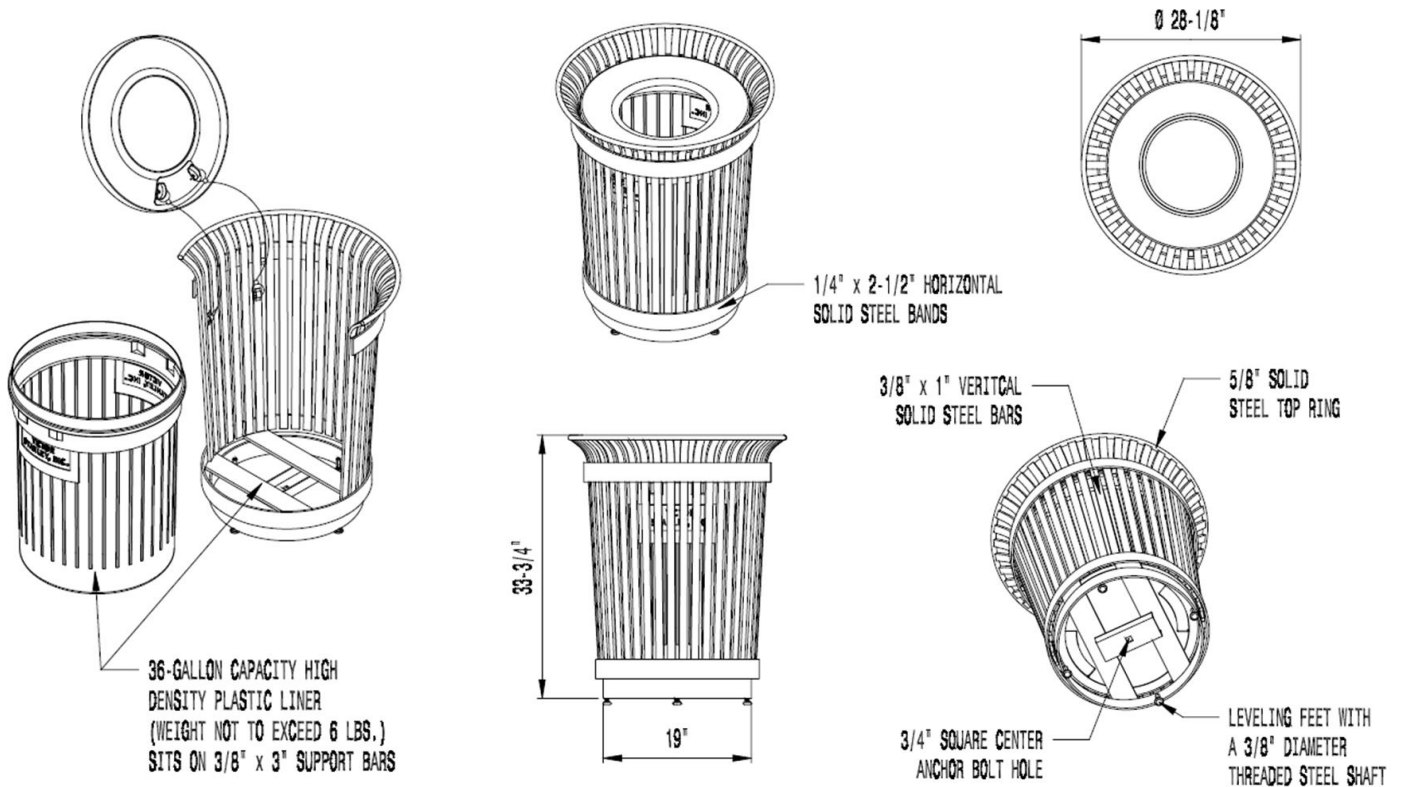
Type: Model #RB-36, 36 gallon, recycling lid, recycling lid decal, recycling sign side panel.

Color/Finish: Blue texture powdercoat

Use: Should be used at bus stops and at on-street and off-street public and semi-public parks, plazas, and other similar focal and respite areas, at intersections with high pedestrian traffic, on streets nearby pedestrian generators.

Placement: Paired with litter receptacles, at least 10' from any seating; abutting a sidewalk but not obstructing the sidewalk in any way.

SPONSORSHIP PROGRAM – Business owners are encouraged to participate in the Recycling Receptacle Sponsorship Program, whereby the business and town partner in the procurement, installation, and maintenance of a recycling receptacle designed to include the name of the business. The side panels that would be installed on receptacles installed through this program are shown below.



graphics



are subject to change at manufacturer's discretion to ensure proper fit and/or optimum output.



DETAIL 2.6 STANDRAD STREETSCAPE LITTER/RECYCLING

Bench

Manufacturer: Victor Stanley, Inc. or approved equal

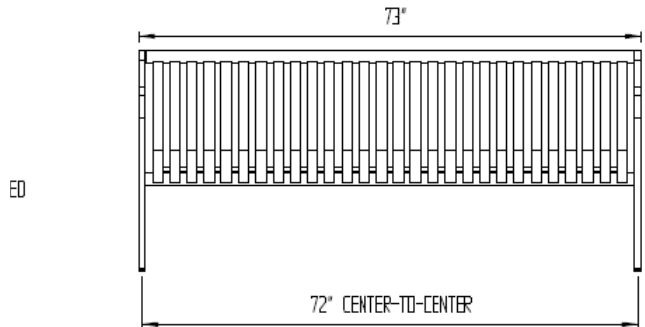
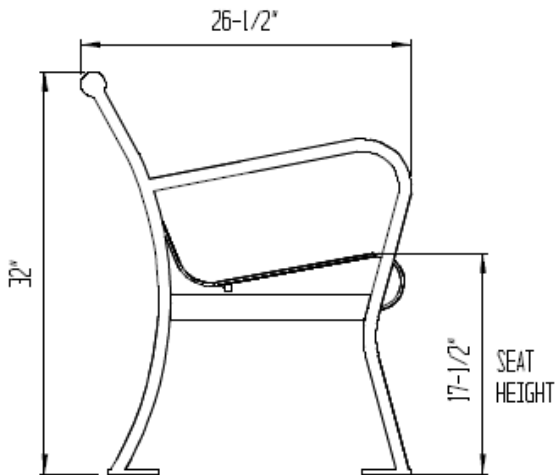
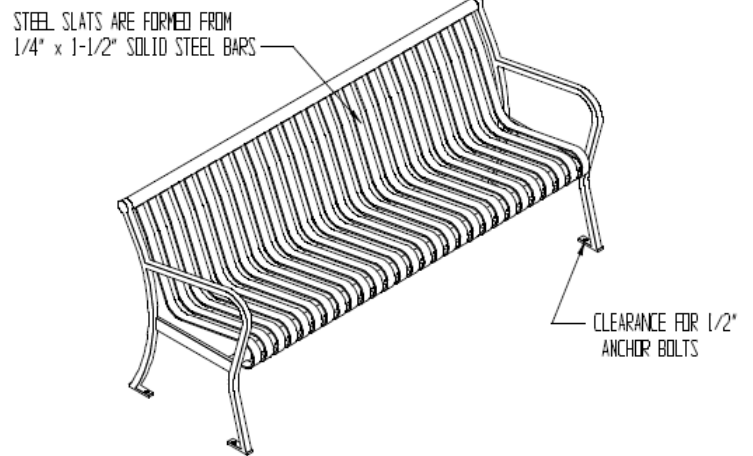
Type: Model #PRS-127, Production Collection, anchored to concrete

Options: 6' long with no intermediate armrests or 8' long with one intermediate armrest

Color/Finish: Black powdercoat

Use: Should be used at bus stops and at on-street and off-street public and semi-public parks, plazas, and other similar focal and respite areas, at intersections with high pedestrian traffic, on streets nearby pedestrian generators.

Placement: Minimum 10' from any receptacle, under canopy trees where possible, abutting a sidewalk but not obstructing the sidewalk in any way



DETAIL 2.7 STANDARD STREETScape BENCH

Bicycle Rack

Manufacturer: American Bicycle Security Company or approved equal

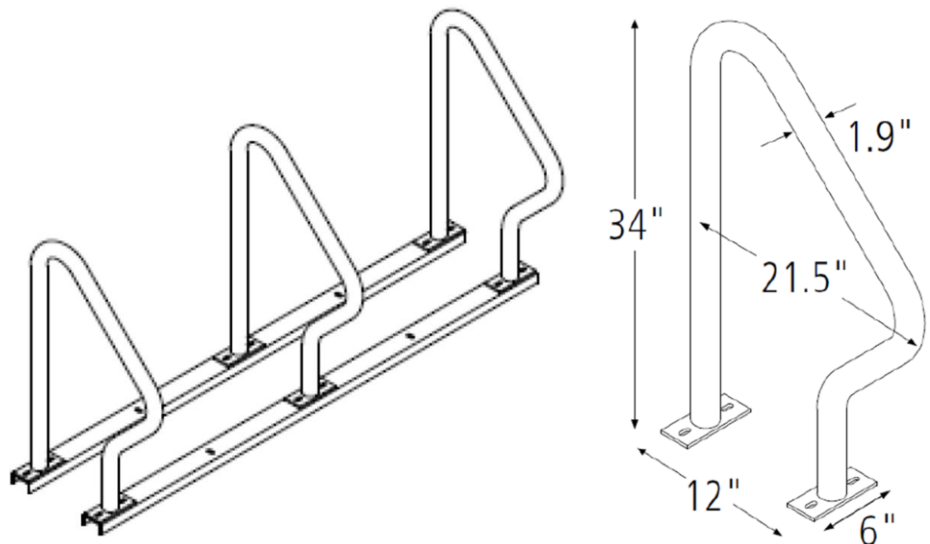
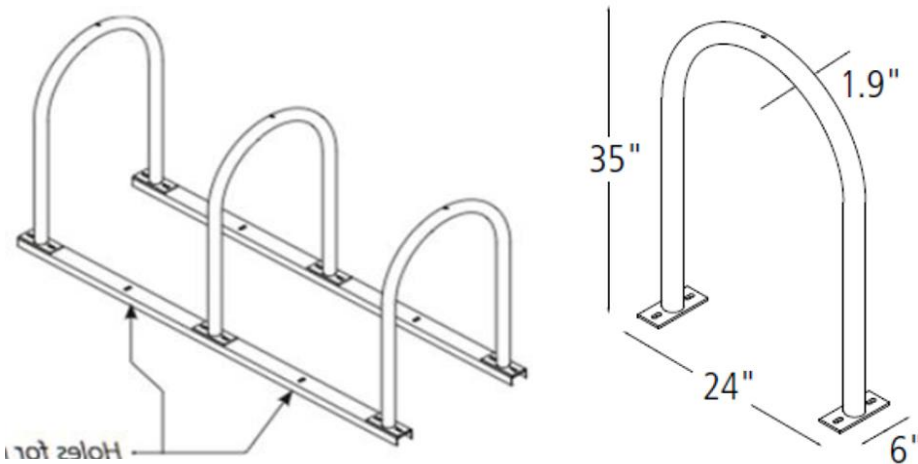
Type: Models – the Hoop (inverted "U") and the Swerve

Color/Finish: The Hoop shall have a black powdercoating (RAL9005); the Swerve shall have a black powdercoating (RAL9005) or stainless steel finish.

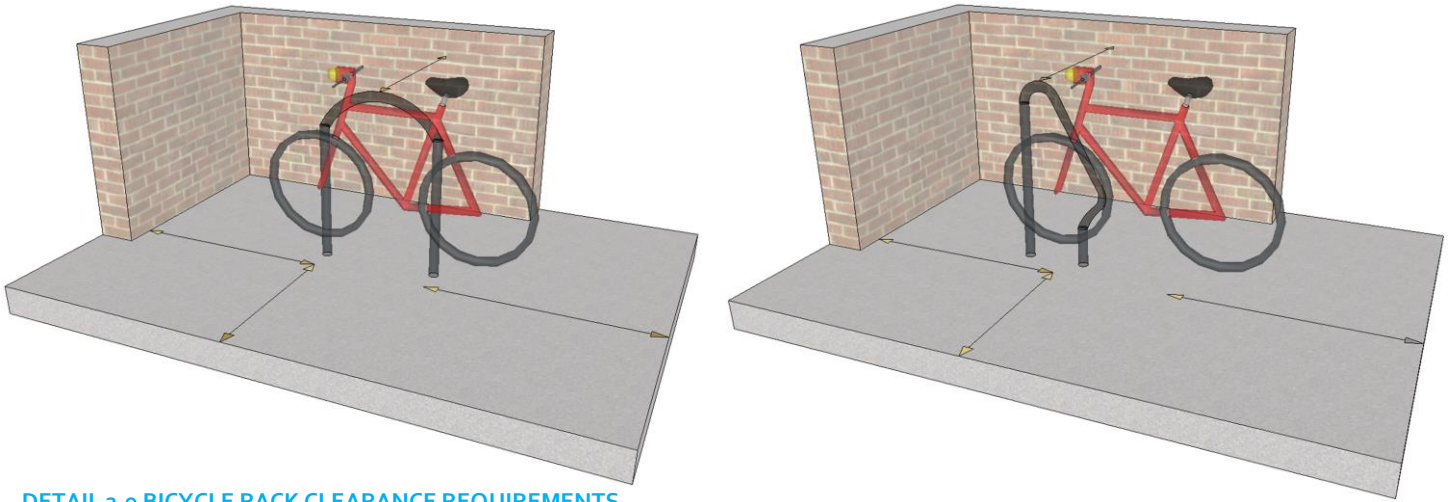
Use: Should be installed near bus stops, at public facilities, at neighborhood service and retail centers, adjoining dedicated bicycle facilities, employment centers. May be used singly or in a series using individual mounts or rail mounts.

Placement: If on-street, aligned parallel to curb, coordinated with building entrances, within the tree zone; parked bicycles must not obstruct any pedestrian and bicycle facilities. Further guidance within the Criteria for Locating and Using Bicycle Racks listed below.

Spacing: Must meet manufacturer spacing requirements. Further guidance within the Criteria for Locating and Using Bicycle Racks listed below.



DETAIL 2.8 STANDARD STREETSCAPE BICYCLE RACK



DETAIL 2.9 BICYCLE RACK CLEARANCE REQUIREMENTS

Criteria for Locating and Using Bicycle Parking Racks

1.	Bicycle parking racks should be located in a clearly designated safe and convenient location.
2.	The design and location shall be harmonious with the surrounding environment.
3.	The racks must be durable and should be securely anchored to the ground or building structure.
4.	The surface of the racks should be designed and maintained to be mud and dust free.
5.	Bicycle parking spaces should be clearly at least 2 feet wide (2 feet from center of one space to center of adjacent spaces.)
6.	The rack allows the frame and wheel(s) to be locked directly to the rack with a U-shaped lock without bending the wheel or otherwise damaging the bicycle.
7.	The rack must support the bicycle frame in at least 2 places.
8.	The rack must prevent the wheel of the bicycle from tipping over.
9.	The rack has a simple design that needs no explanation as to how the rack works.
10.	If the rack is intended to park more than one bicycle at the same time, the handlebars must not overlap.
11.	The rack has spaces that are clearly designated for each bicycle (it is obvious to the user where each space is) whether the rack is designed for single or double sided loading.
12.	When bicycles are parked at the rack, there must be at least a six-foot clear walkway, to comply with the Americans with Disabilities Act. This does not include frontage occupied by street furniture.
13.	The bicycle rack cannot be located directly in front of a store/building entrance nor in a driveway.
14.	Any street utilities, such as light poles, signs, manhole covers, and overhead utility poles must have a two foot clearance from a bicycle parked at a rack, not the rack itself.
15.	The bicycle rack cannot be located adjacent to handicap parking.
16.	The rack cannot be located closer to the curb than two feet.

BUS SHELTERS standard

Bus shelters should be used at bus stops to the greatest extent practical where environmental conditions allow. These standards and specifications apply to all bus shelters in town outside the downtown and transit-oriented core.

Design Specifications:

Manufacturer: Columbia Equipment Company or equal as approved by TOH.

Type: Model # 6X13-HRsp. Modified Southampton, *without decorative bracket*. See Detail 2.10.

Color/Finish: Black Powdercoat (RAL #9005 Tiger Drylac for framing; ATAS Black for roof).

Use: At bus stops where space allows, as determined by Town staff.

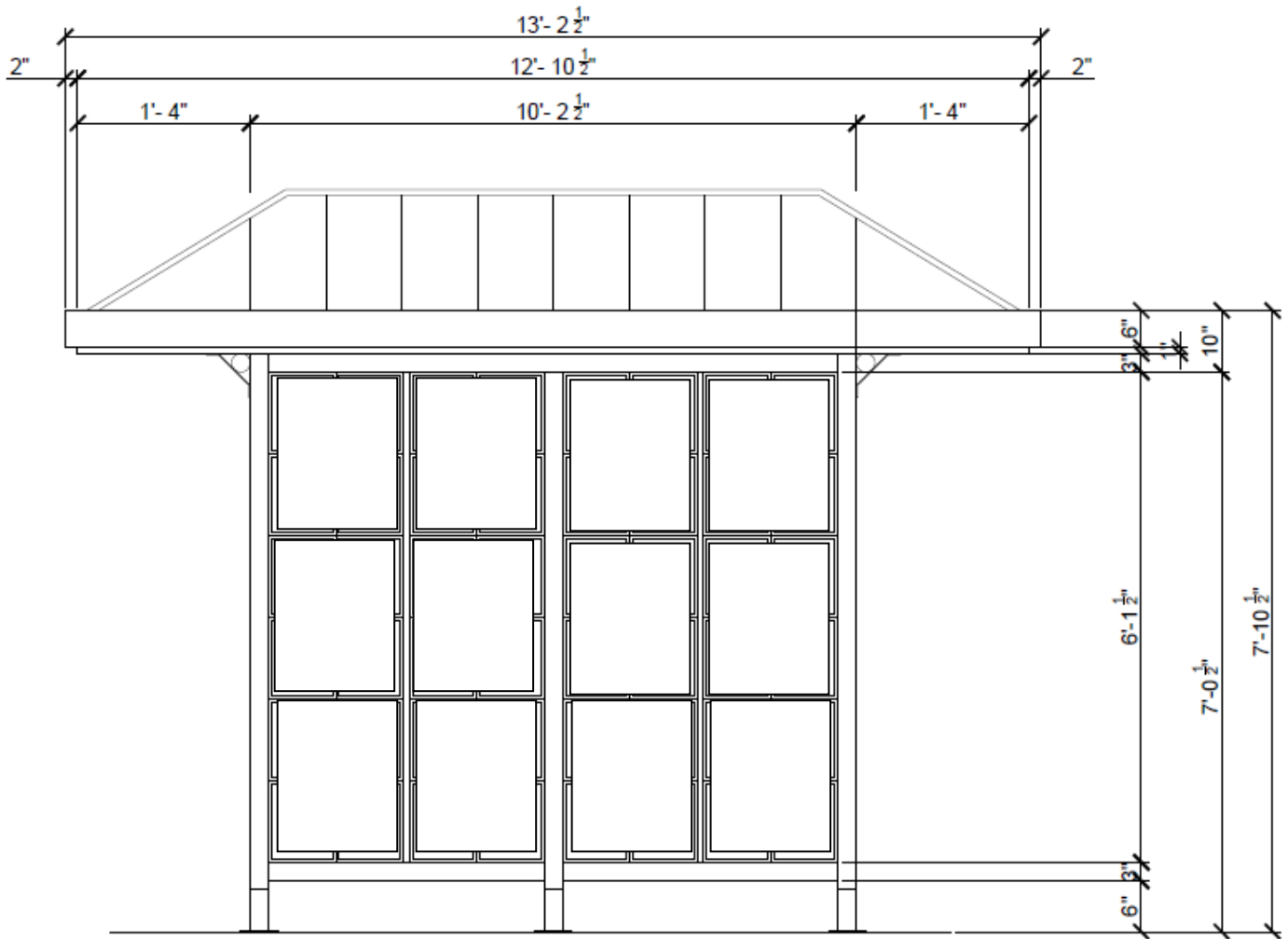
Placement: Dependent on site specific conditions; backside of sidewalk where possible.

Size: 4 panel standard (13'-2½" wide); up to 6 panel option permissible were needed.

Extras: Partial width wood benches attached to back wall, justified to one side to ensure wheelchair accessibility on the other side.

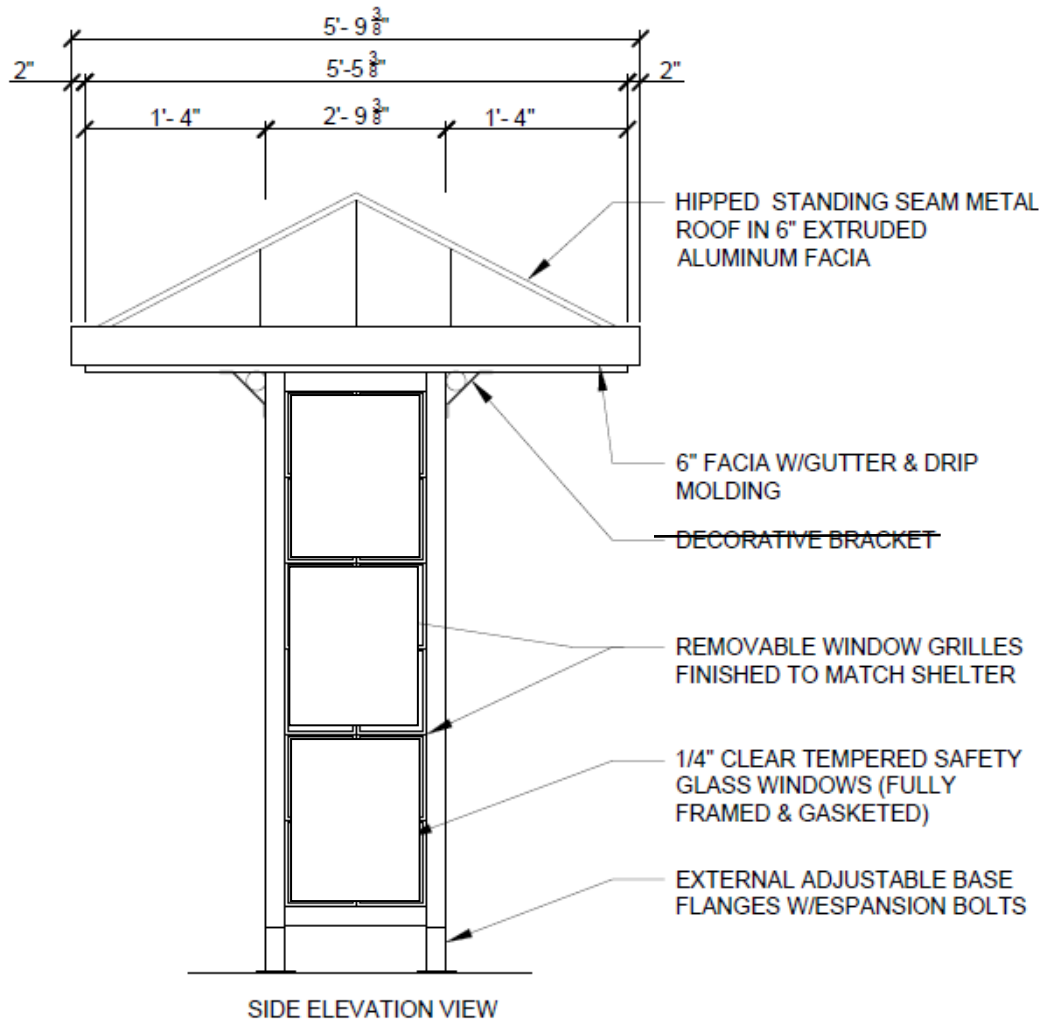
Illumination: Paired with at an acorn (post-top) street light; no lighting within shelter.

Other: Paired with litter and recycling receptacles, placed at least 15' away from shelter. Paired with bicycle racks placed in a manner that provides enough space for the locked bicycle and continued pedestrian accessibility.



FRONT ELEVATION VIEW

DETAIL 2.10 STANDARD STREETScape BUS SHELTER DESIGN



DETAIL 2.10 STANDARD STREETScape BUS SHELTER DESIGN

OTHER STREETScape FEATURES standard

SIGNAGE

The amount of public/traffic sign poles should be limited to the greatest extent practical. Traffic signs shall be consolidated onto single poles where possible and signage may be affixed to street light poles in certain circumstances. All public traffic signs shall comply with MUTCD design and placement standards. Generally, private signage is not permitted within the streetscape.

NON-STANDARD FEATURES

The standard streetscape may include features or amenities not specifically regulated by the guidelines and standard in this chapter. In those instances, the Zoning Administrator in conjunction with the Public Works Director shall review such variations and decide the most appropriate specifications.

CHAPTER III: DOWNTOWN STREETScape

Standards, Specifications, & *Guidelines for the Planning and Design of
Town Streetscape Projects*



III. DOWNTOWN STREETScape

DOWNTOWN STREETScape DESIGN CONCEPT

The purpose of the Downtown Streetscape policy as described in the 2030 Comprehensive Plan is to maintain, reinforce, and enhance Herndon’s walkable and inviting small town character. The standards and guidelines contained within advance this policy by directing the design and development of streetscapes that are comfortable and convenient for pedestrians, that have high material and aesthetic integrity that link the past with the present, and that presents a coordinated and identifiable townscape.

In the downtown, three streetscape types are used. The commercial downtown streetscape is the standard for streets within the mixed use core of the downtown. The residential downtown streetscape is mainly applied to the neighborhood streets within the Herndon Heritage Preservation District surrounding the downtown center. The transitional downtown streetscape occurs in those residential areas that are immediately adjacent to the mixed use portions of the downtown core.

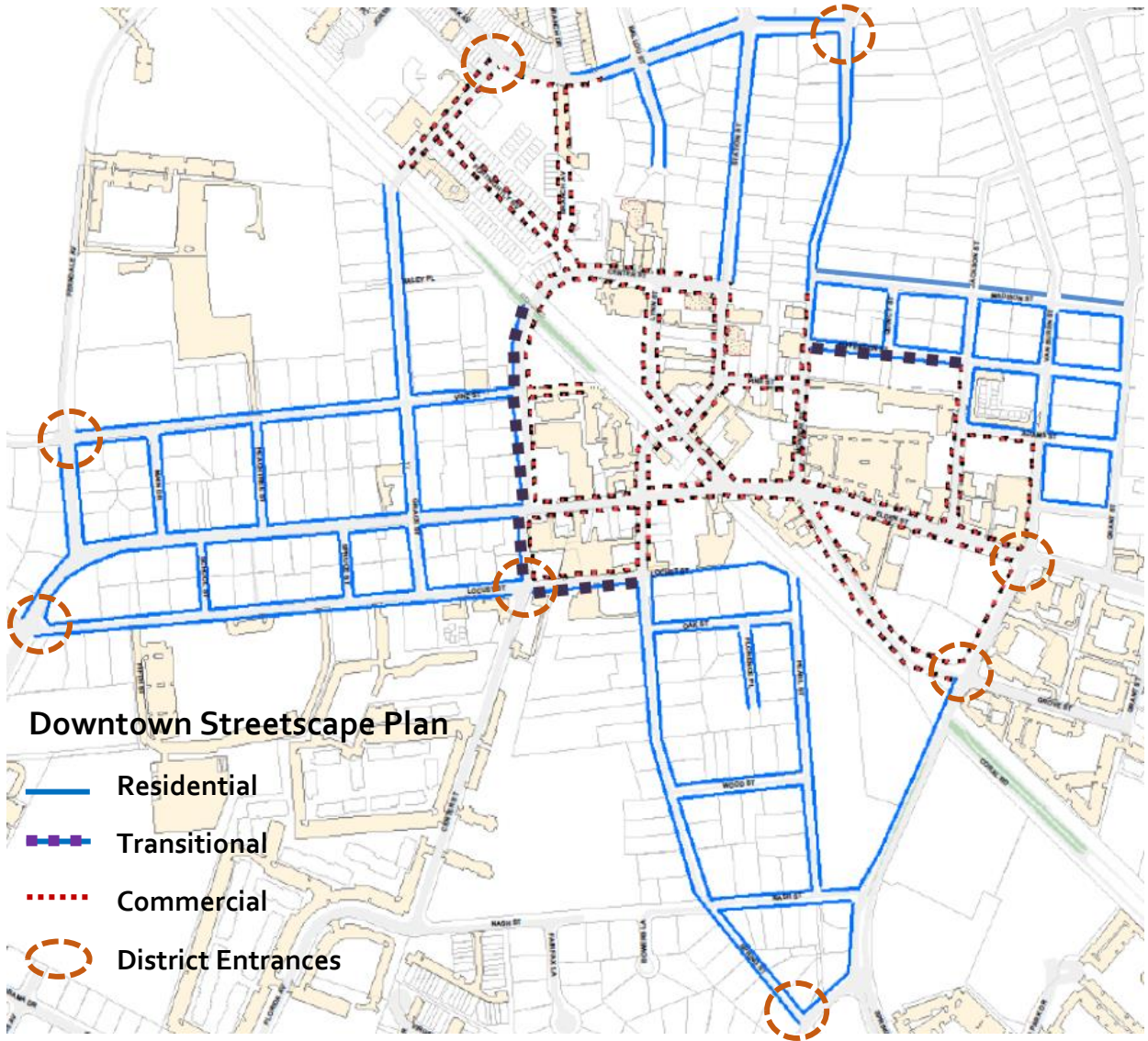
The Town of Herndon **Downtown Streetscape Plan**, on the following page, specifies the locations of the three streetscape types. In some situations, opposite sides of the street may be treated differently or only portions of a street may be designated for downtown streetscape improvements.

These guidelines are meant to advance the objectives of the Downtown Master Plan and Pattern Book, which urge the development of a well-connected open space and public right-of-way system thoughtfully designed with an emphasis on walkability. The Downtown Master Plan pedestrian realm exhibit, on the following page, shows the pedestrian connections as envisioned in the Pattern Book.

This standards are intended for use by Herndon staff, their consultants, and developers and their agents in order to ensure a unified approach to Downtown streetscapes. The following table lists the various Downtown streetscape elements included in this chapter. Many of the streetscape features that are not regularly used are included in the *Other Streetscape Features* section.

The following table lists the subsections of this chapter.

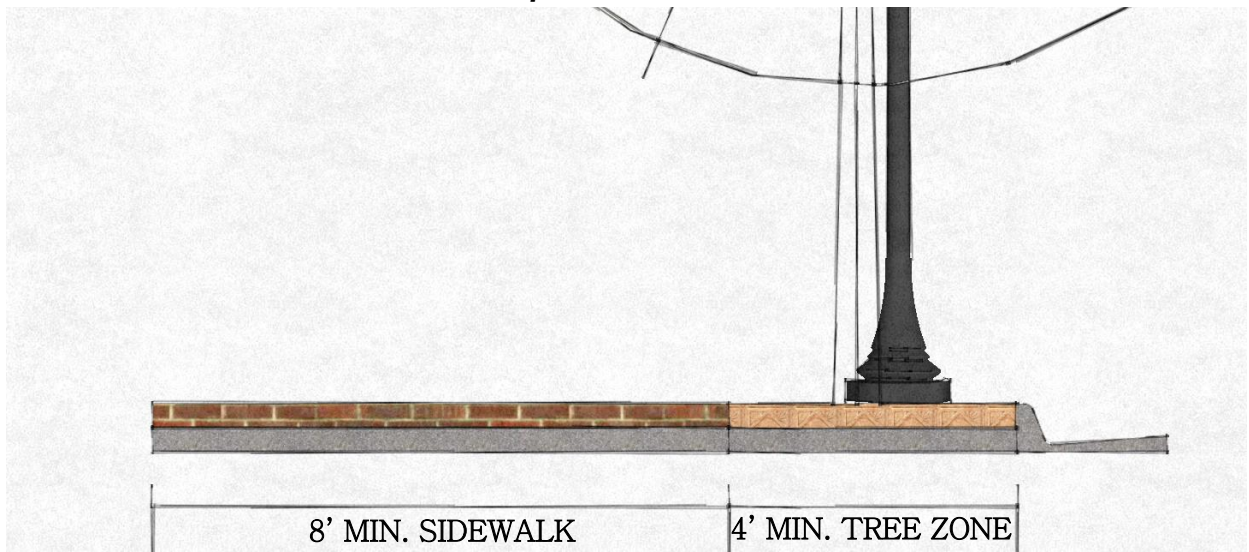
Downtown Streetscape Component	Page #
Design & Dimensions.....	Page 37
Surface Treatments.....	Page 39
Crosswalks & Curb Ramps.....	Page 42
Site Furnishings.....	Page 46
Lighting & Signals.....	Page 51
Landscaping.....	Page 53
Other Streetscape Features.....	Page 59
Signage.....	Page 66



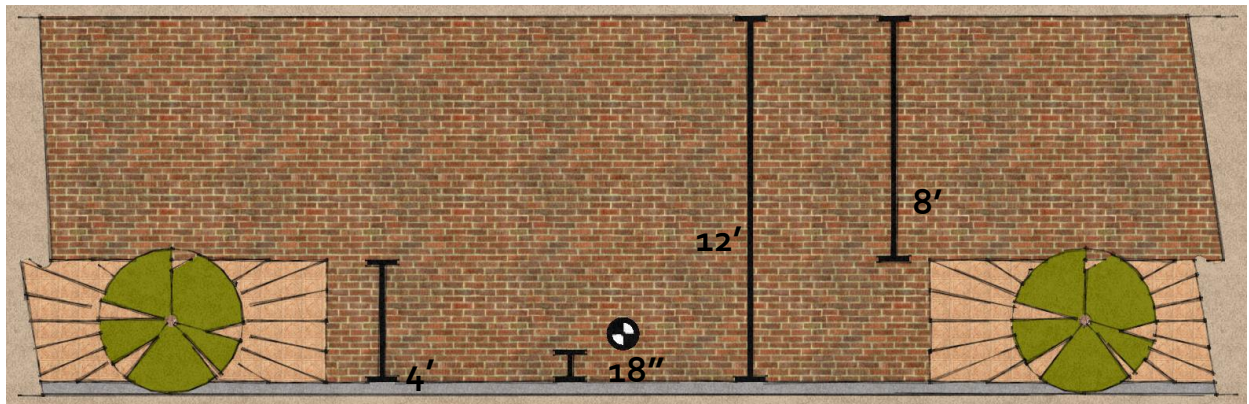
Downtown Master Plan Pedestrian Realm

- 1 Improve connections between the Town Green and blocks south of the trail
- 2 Proposed bike pavilion along the W&OD trail
- 3 New public space along Lynn Street and Station Street
- 4 Extend Pine Street pedestrian connection to the trail and treat as shared space
- 5 Establish paseo connection between Elden Street and the W&OD Trail
- 6 Establish connections from the potential Arts/Associated Uses Building over to the trail and Town Green

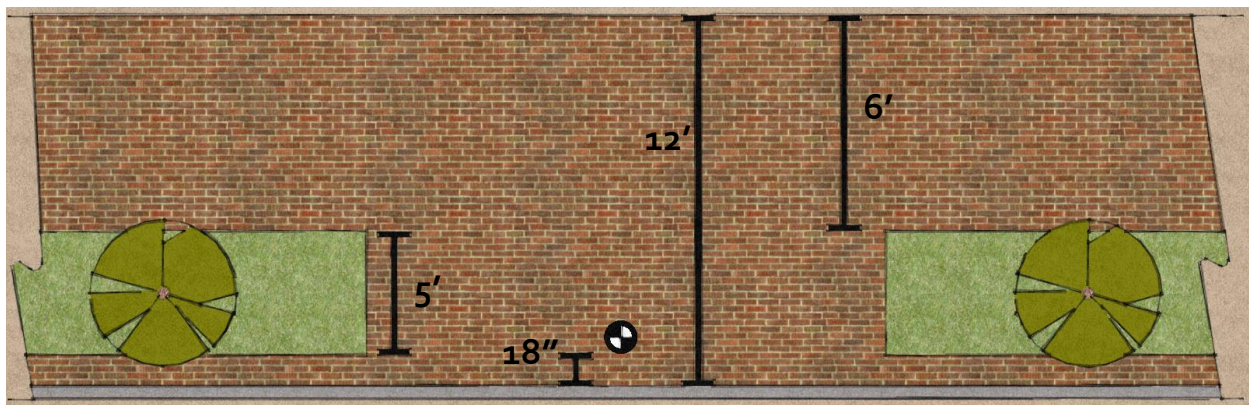
Commercial Downtown Streetscape



DETAIL 3.1 Commercial Downtown Streetscape Section



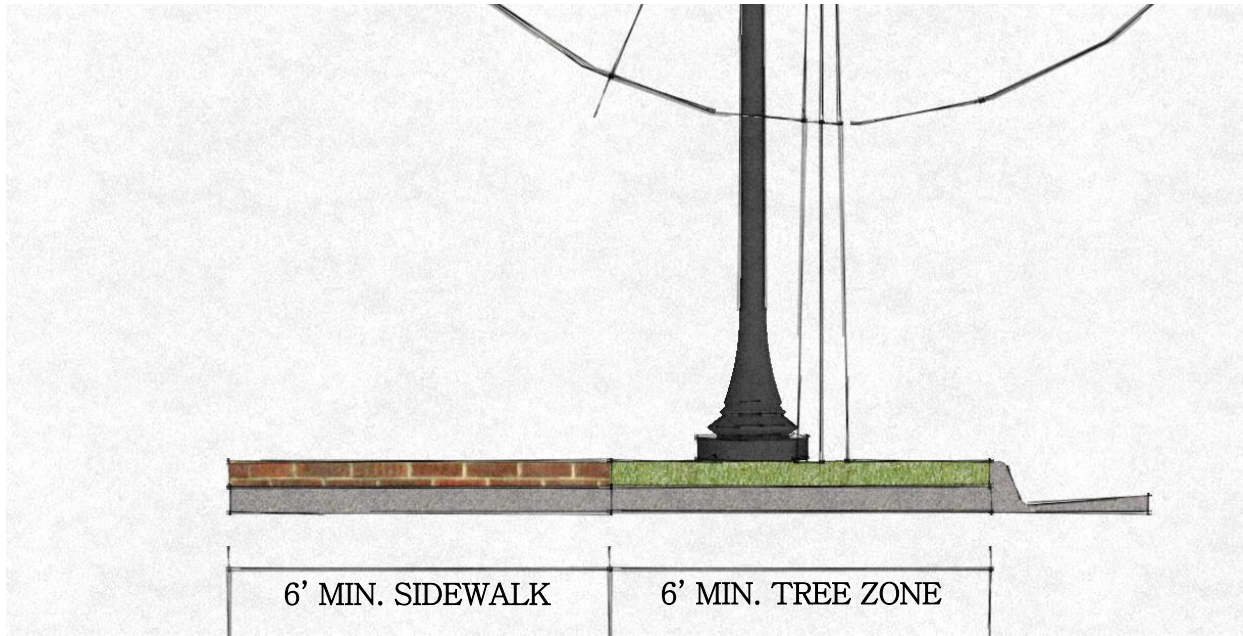
DETAIL 3.2 Commercial Downtown Streetscape Plan – Tree Grate Design



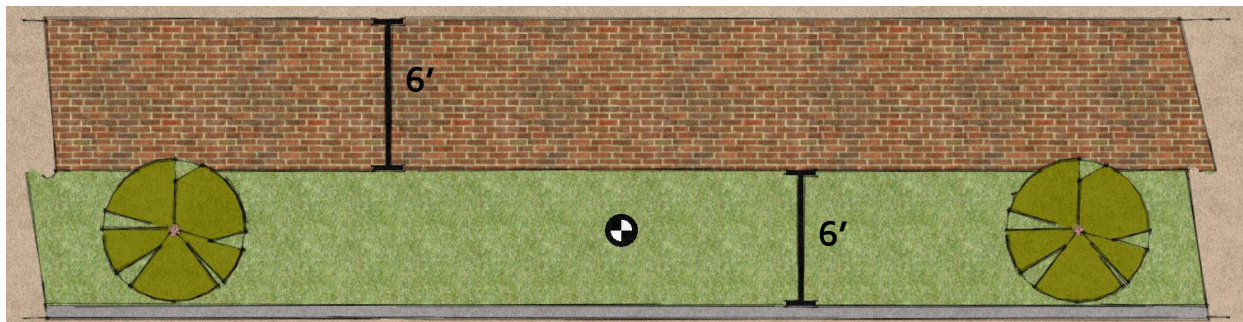
DETAIL 3.3 Commercial Downtown Streetscape Plan – At-grade Planting Bed Design*

*Allowed only with retrofits; shall comply with planting schemes (see Page 53)

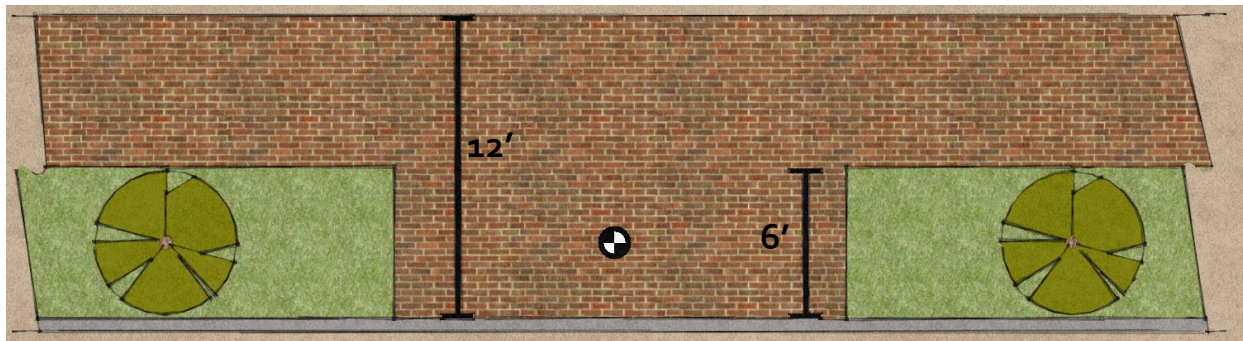
Transitional Downtown Streetscape



DETAIL 3.4 Transitional Downtown Streetscape Section



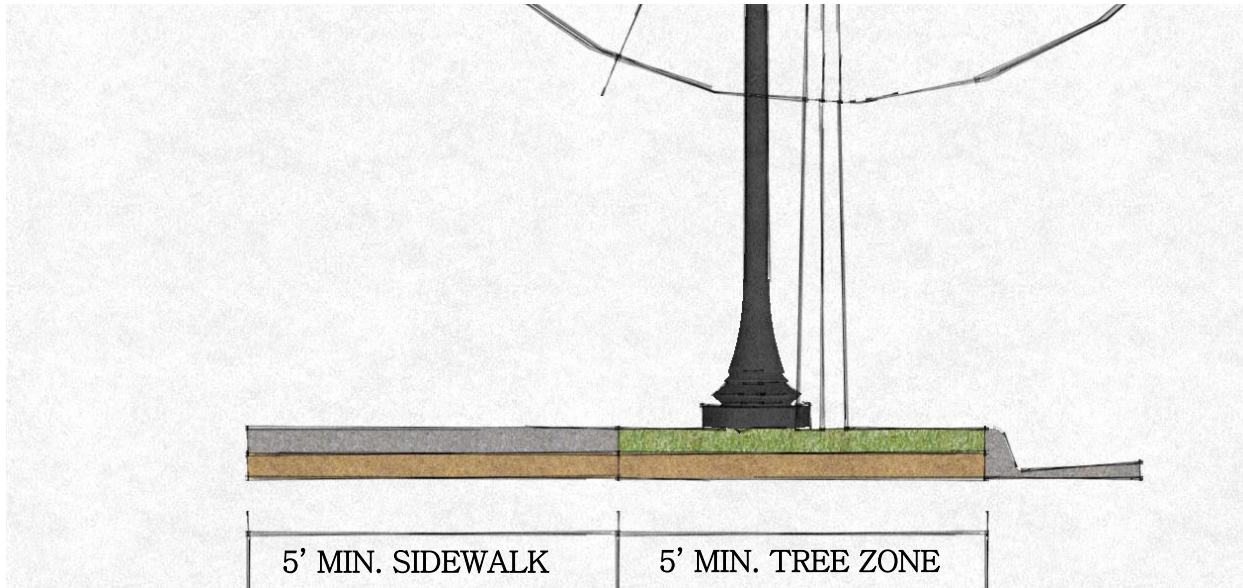
DETAIL 3.5 Transitional Downtown Streetscape Plan – Continuous Grass Verge Design



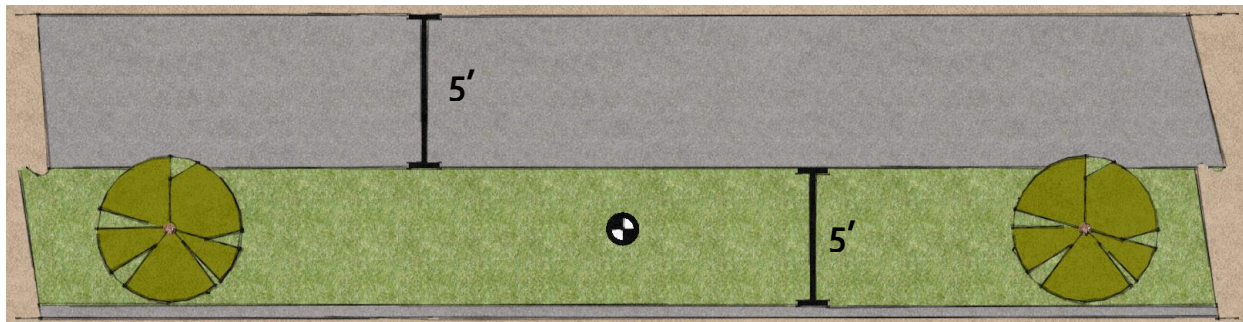
DETAIL 3.6 Transitional Downtown Streetscape Plan – Intermittent Grass Verge Design*

*15' long paver sections centered between grass verges for benches, receptacles, bike racks

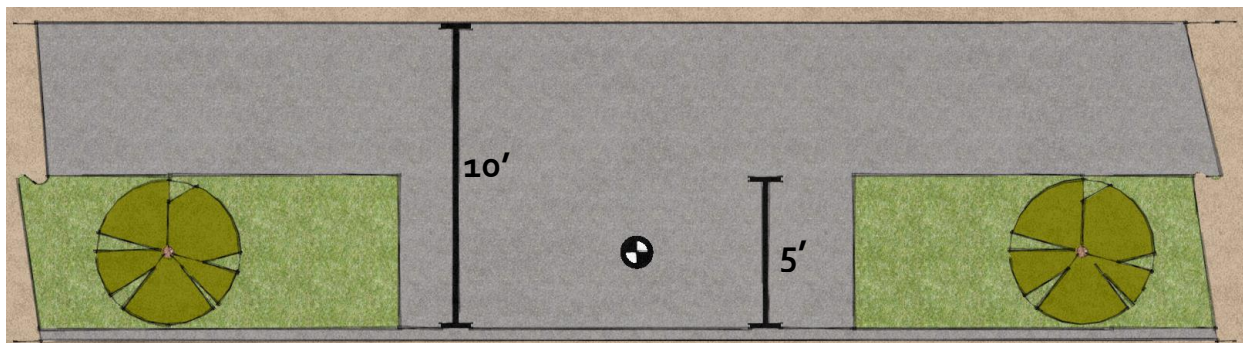
Residential Downtown Streetscape



DETAIL 3.7 Residential Downtown Streetscape Section



DETAIL 3.8 Residential Downtown Streetscape Plan – Continuous Grass Verge Design



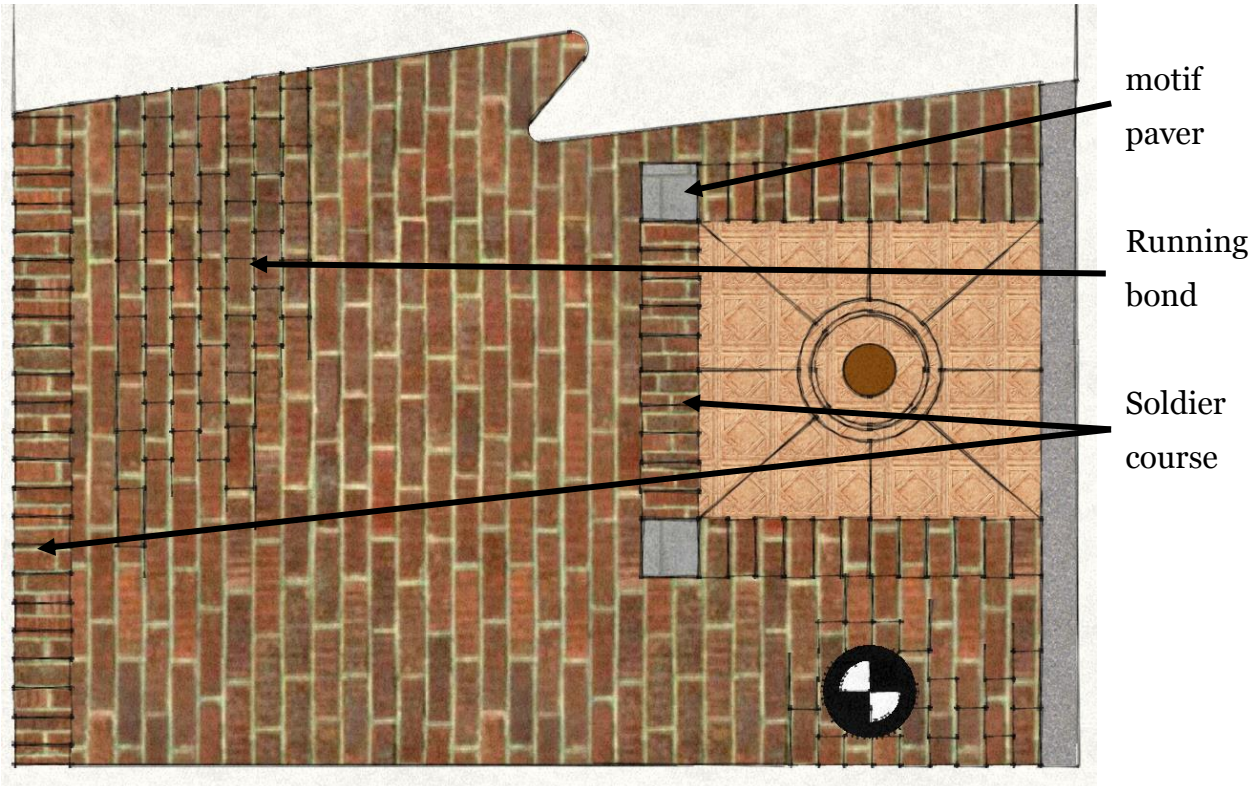
DETAIL 3.9 Residential Downtown Streetscape Plan – Intermittent Grass Verge Design*

*15' long concrete sections centered between grass verge for benches, receptacles, bike racks

SURFACE TREATMENTS downtown streetscape

Sidewalk Pavers

- Manufacturer: Pine Hall Brick Company or equal as approved by TOH
- Type: Clay paver to conform to ASTM C902. Pedestrian and light traffic paving brick. Type R; standard size: 2¼" x 4" x 8"
- 10,000 psi minimum compression strength, below 6% cold water absorption
- Color/Finish: 20% flashed Full Range Pathway Paver with straight edge and no spacer nibs
- Pattern: Running Bond parallel to curb with soldier course around tree grates, planter beds, and inside edge of sidewalk
- Use: For sidewalks in the Commercial and Transitional Downtown Streetscapes



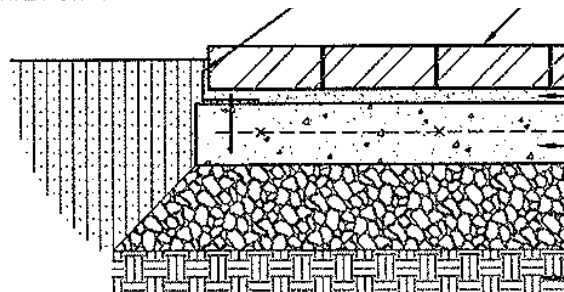
DETAIL 3.10 SIDEWALK PLAN

NOTES:

1. ANCHOR EDGE RESTRAINT W/ 3/8"x3 1/2" SLEEVE ANCHORS W/ WASHERS & NUTS. INSTALL 24" O.C. & MIN. (1) PER CUT SEGMENT.
2. ADJACENT CONDITIONS VARY. PROVIDE 1/2" EXPANSION JOINT & SEALANT PER 6/L2.1 WHERE PAVERS ABUT STRUCTURES.
3. TYPICAL PAVERS (PEDESTRIAN) ARE 6cm DEPTH. PAVERS INSTALLED IN DRIVEWAY ENTRANCES (VEHICULAR) ARE 8cm LOAD BEARING UNITS.
4. CUT EACH PAVER SYMMETRICALLY FOR RADIAL COURSES.

2"x4"x1/8" GALVANIZED STEEL ANGEL EDGE RESTRAINT. AFFIX TO SLAB W/ 3/8"x3" EXPANSION ANCHORS @ 24" O.C. KERF AS NECESSARY TO PROVIDE UNIFORM CURVES, MIN. (1) ANCHOR PER SEGMENT.

4"x8" (NOM.) CONCRETE UNIT PAVERS. SEE SPECIFICATIONS. HAND TIGHT V, SWEEP JOINTS



1" SAND SETTING BED

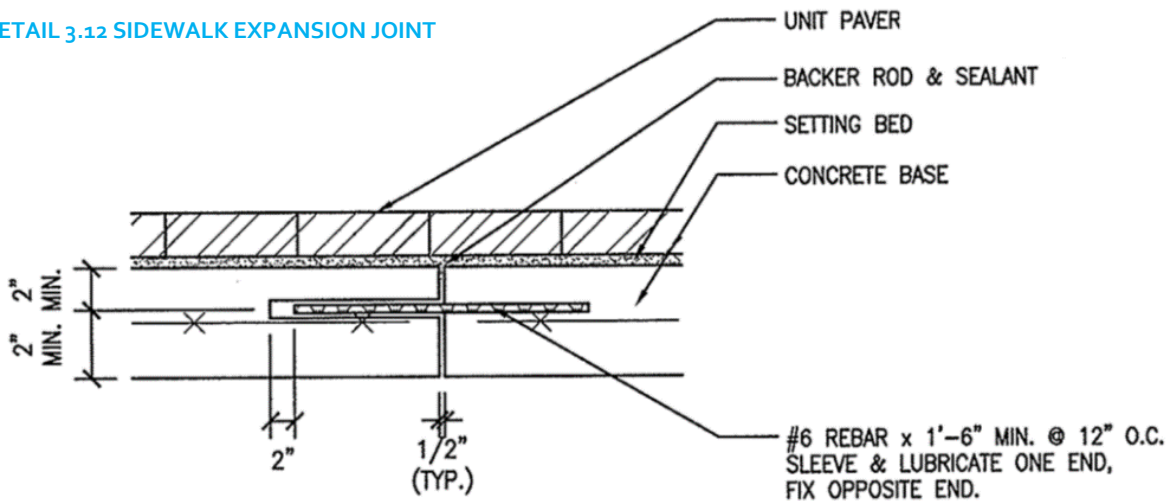
4" CONCRETE CLASS A3 SLAB W/ 6x6 -10/10 WWM

6" COMPACTED AGGREGATE

95% COMPACTED SUBGRADE

DETAIL 3.11 SIDEWALK SECTION

DETAIL 3.12 SIDEWALK EXPANSION JOINT



NOTES:

1. INSTALL EXPANSION JOINTS IN PEDESTRIAN PAVEMENTS PARALLEL AND/OR PERPENDICULAR TO ADJACENT CURB & GUTTER. ISOLATE CONCRETE IN MAXIMUM 400 SF SLABS.
2. PROVIDE REBAR DOWEL AS ABOVE BETWEEN ADJACENT CONCRETE BASE SLABS. DELETE DOWEL WHERE CONCRETE BASE ABUTS OTHER STRUCTURES.
3. HOLD JOINTS IN CONCRETE BELOW DRY-SET PAVERS. EXTEND TO SURFACE OF MORTAR-SET PAVERS.

Sidewalk Concrete

Type: Standard brushed concrete, heritage dimpled pattern
 Use: For sidewalks in the Residential Downtown Streetscape

Motif Paver

Manufacturer: Giftbrick.com or equal as approved by TOH
 Type: 8" x 8" etched granite paver
 Graphic: Two options (see below)
 Color/Finish: Sierra White Granite, black infill, flamed finish
 Placement: In brick clay paver sidewalks at both corners of soldier course surrounding the tree grates and planter beds (see Detail 2.4 on page 7)
 Use: One of each paired at every other tree grate/planter bed

DETAIL 3.13 GRANITE MOTIF



Alternative Pavements

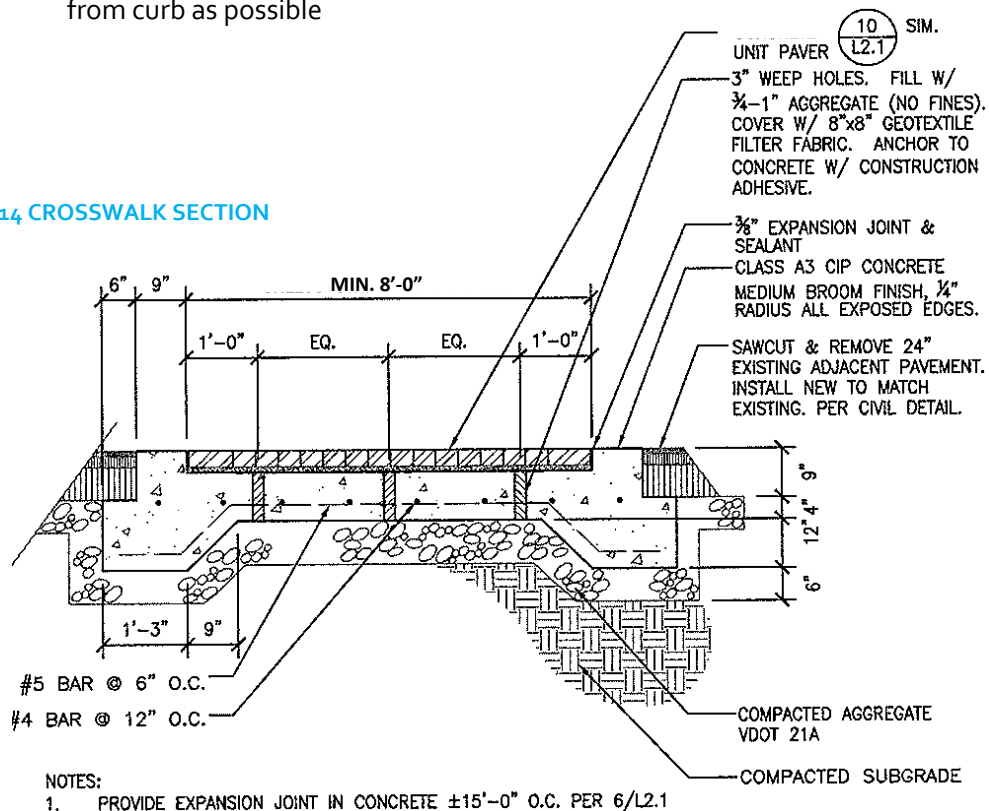
- Design: Clay pavers over 1" course concrete sand and 4" concrete pan
 Paver: Pine Hall Brick Company or equal as approved by TOH
 Type: Clay paver to conform to ASTM C1272. Heavy vehicular paving brick Type F; standard size: 2¾" x 4" x 8"
 10,000 psi minimum compression strength, below 6% cold water absorption
 Color/Finish: 20% flashed Full Range Pathway Paver with English Edge (chamfered) with spacer nibs
 Field Pattern: Herringbone with soldier course at edges
 Edging: Raised sides of concrete, 1' wide, brushed concrete finish
 Use: For all medians, at-grade traffic circles, and any other specialty accent areas between curb as assigned by staff
- Elden Street
 Option: West of Center Street & East of Monroe Street; use Bomanite stamped concrete or equal to match the existing median on Elden Street in the Downtown

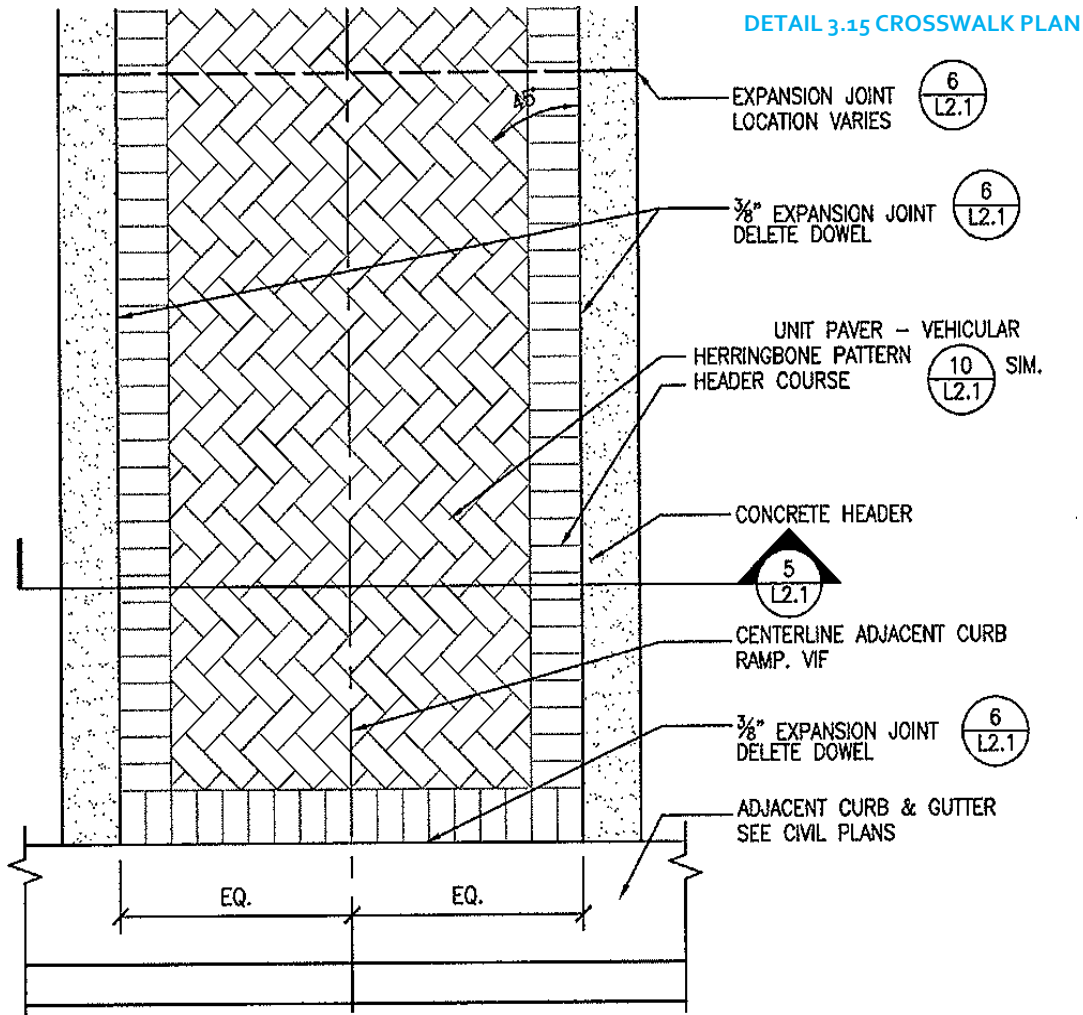
CROSSWALKS & CURB RAMPS downtown streetscape

Commercial & Transitional Crosswalks

- Design: Clay pavers over 1" course concrete sand and 4" concrete pan
 Paver: Pine Hall Brick Company or equal as approved by TOH
 Type: Clay paver to conform to ASTM C1272. Heavy vehicular paving brick Type F; standard size: 2¾" x 4" x 8"
 10,000 psi minimum compression strength, below 6% cold water absorption
 Color/Finish: 20% flashed Full Range Pathway Paver with English Edge (chamfered) with spacer nibs
 Field Pattern: Herringbone with soldier course at edges
 Width: 9.5' total; 8' wide brick paver area with 9" wide concrete trays on either side
 Edging: Raised sides of concrete, 1' wide, brushed concrete finish
 Use: At all approaches to a public right-of-way where the Commercial & Transitional Downtown Streetscapes are used
 Orientation: Where possible crosswalks shall squared-up to the intersection, as close to 90 degrees from curb as possible

DETAIL 3.14 CROSSWALK SECTION





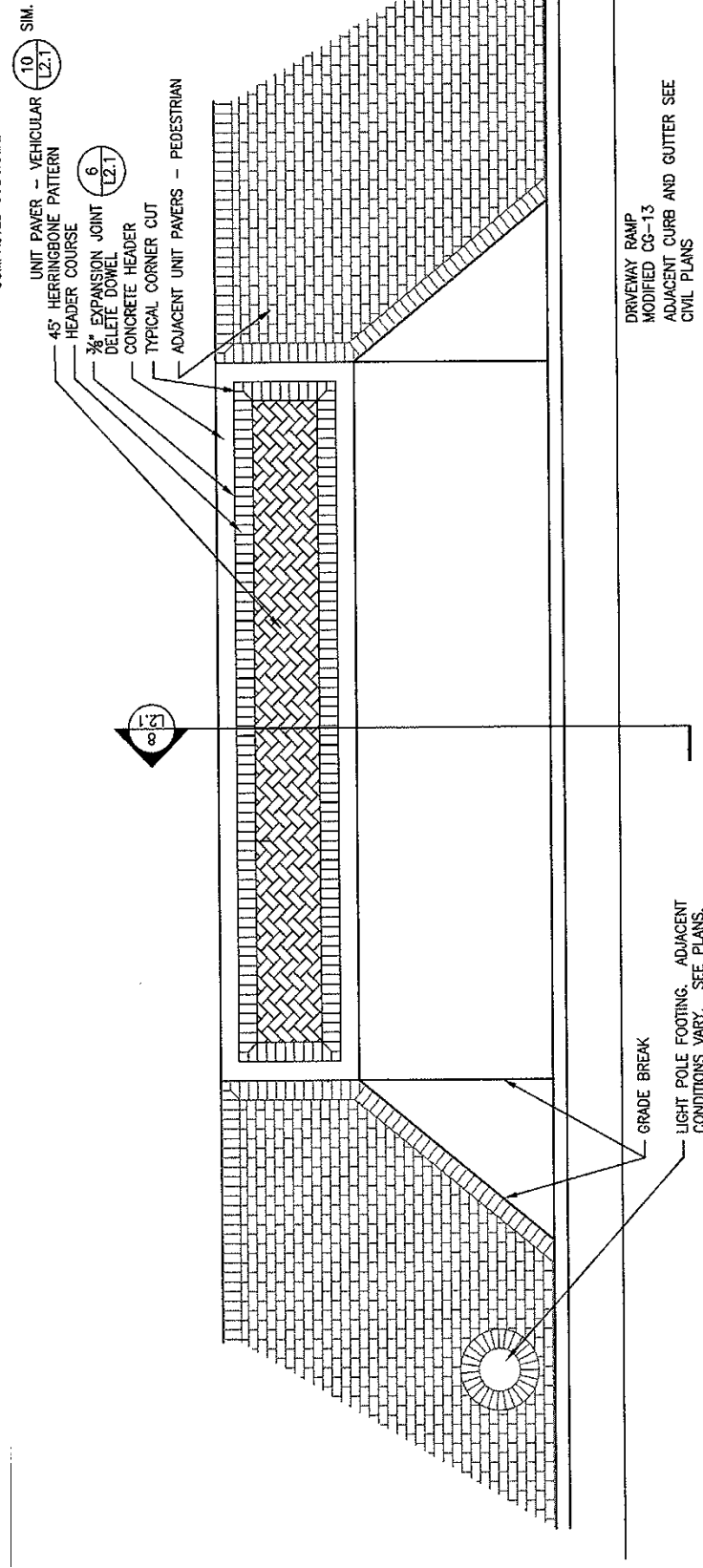
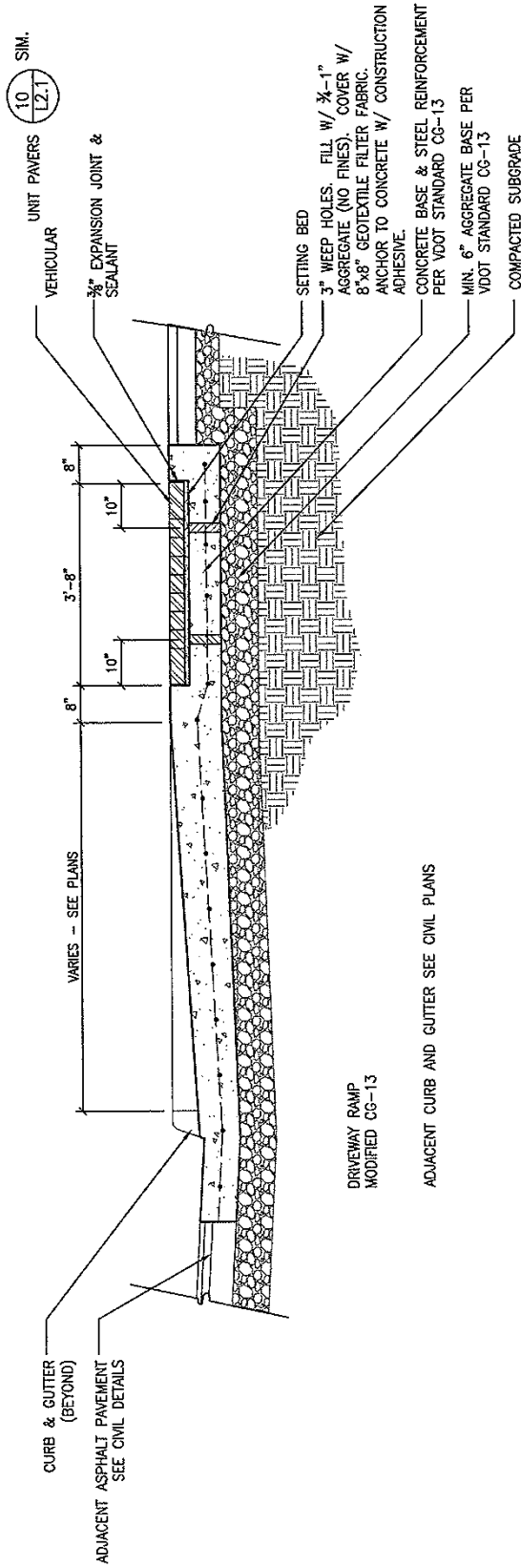
Residential Crosswalks

Design: MUTCD Standard; two thermoplastic lines at crosswalk edges; 8' wide
 Use: At all approaches to a public right-of-way where the Residential Downtown Streetscapes are used

Private Drive Crosswalks

Design: Clay pavers over 1" course concrete sand and 4" concrete pan
 Paver: Pine Hall Brick Company or equal as approved by TOH
 Type: Clay paver to conform to ASTM C1272. Heavy vehicular paving brick Type F; standard size: 2³/₄" x 4" x 8"
 10,000 psi minimum compression strength, below 6% cold water absorption
 Color/Finish: 20% flashed Full Range Pathway Paver with English Edge (chamfered) with spacer nibs
 Field Pattern: Herringbone with soldier course at edges
 Width: 5' wide for Transitional; 8' wide for Commercial
 Edging: Raised sides of concrete, 1' wide, brushed concrete finish
 Use: At all curb cuts into private drives where the Commercial & Transitional Downtown Streetscapes are used

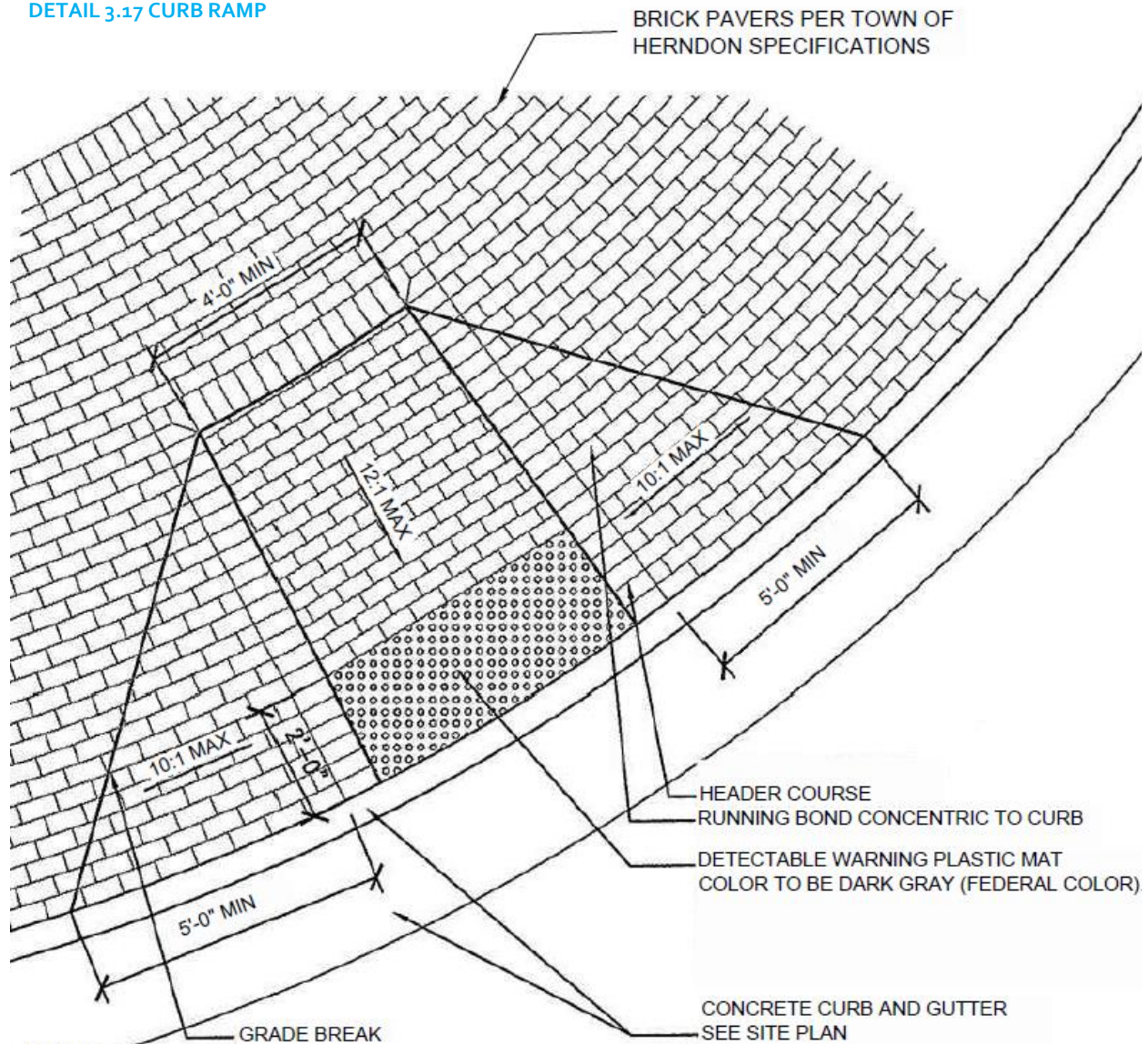
DETAIL 3.16 DRIVEWAY RAMP & CROSSWALKS



Curb Ramps

- Type: Modified CG-12, Type A, with brick pavers within Commercial and Transitional Downtown Streetscapes; Standard CG-12, Type A with bushed concrete within Residential Downtown Streetscape
- Alternative: Modified or standard CG-12, Type B, depending on streetscape type when space is constrained, as determined by staff
- Use: At all approaches to a public right-of-way and any other situations where crosswalks are present; each corner of an intersection shall have separate ramps for each crossing, unless space is constrained
- Orientation: Ramps should be oriented in the direction of the crosswalk, away from the curb return; ramps shall not be oriented diagonally across an intersection
- Private Drive Ramps: Modified CG-13 Concrete ramp (see DETAIL 2.16)

DETAIL 3.17 CURB RAMP



NOTES:

1. MODIFIED CG-12A AS NOTED
2. CG-12B RAMPS, EXCLUDING (3) ON W&OD TRAIL, ARE MODIFIED AS ABOVE WITH CLAY UNIT PAVER SECTION.

Detectable Warning Surface

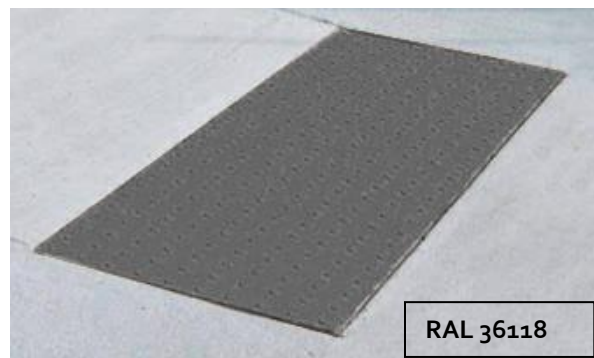
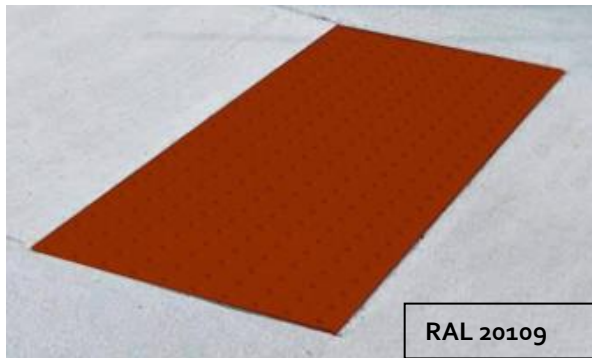
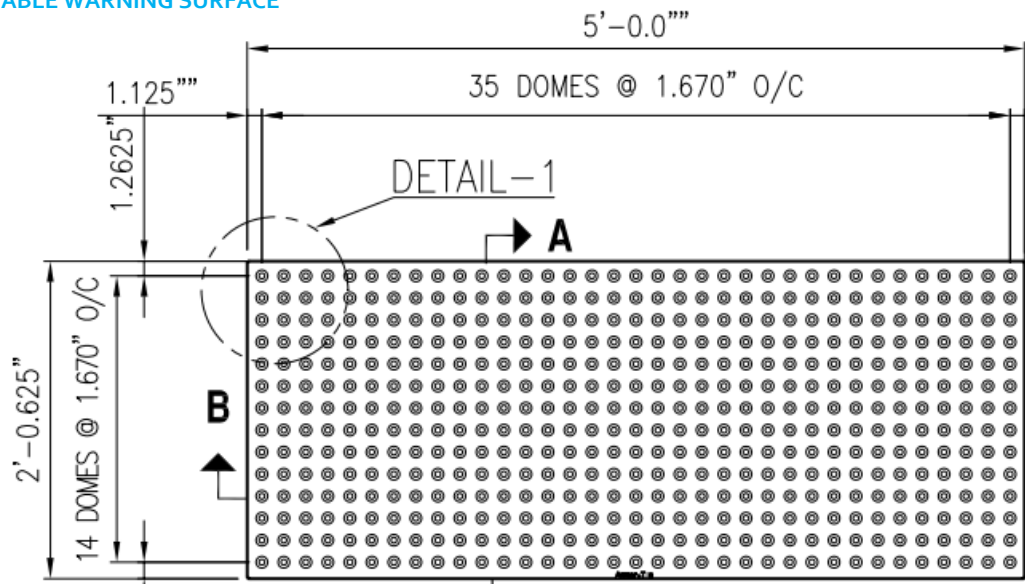
Manufacturer: ADA Solutions Inc. or equal as approved by TOH

Type: New construction- Cast in Place Truncated Domes; 24" x 60"; 1.67" dome spacing
Retrofit- Surface Applied Truncated Domes; 24" x 60"; 1.67" dome spacing

Color/Finish: For Commercial and Transitional Downtown Streetscapes-
Dark Grey (Federal Color No. 36118)

For Residential Downtown Streetscape- Brick Red (Federal Color No. 20109)

DETAIL 3.18 DETECTABLE WARNING SURFACE



SITE FURNISHINGS downtown streetscape

Litter Receptacle

Manufacturer: Forms & Surfaces

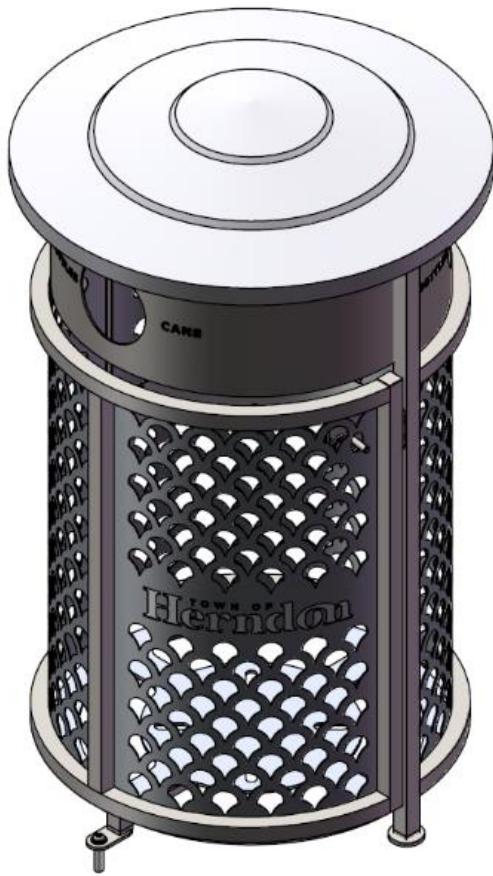
Type: 36g Urban Renaissance, side opening, updrop pattern, dome lid

Color/Finish: Black texture powdercoat

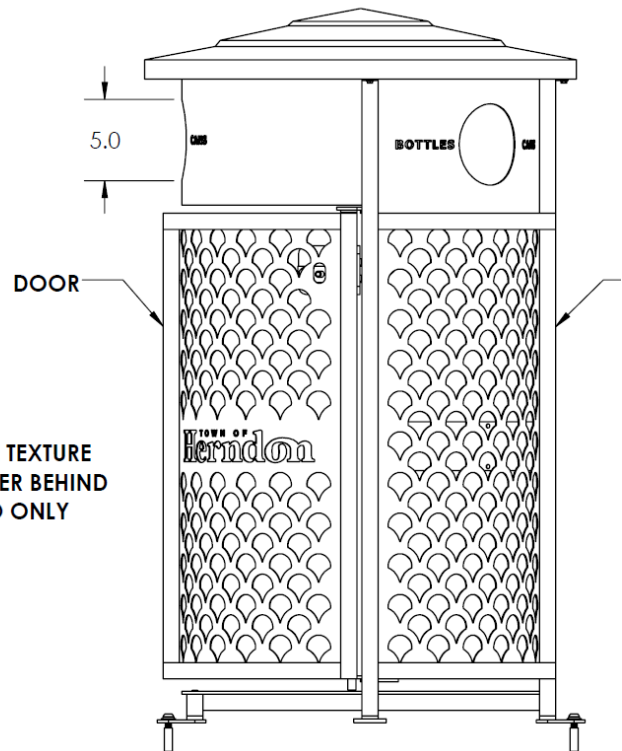
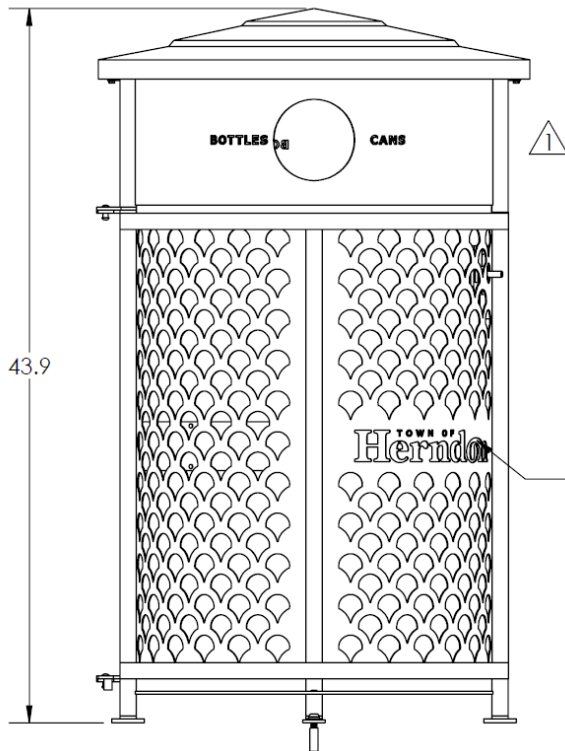
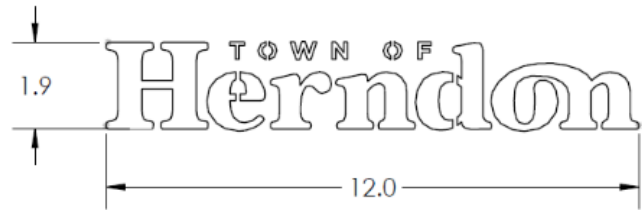
Graphics: Custom Herndon graphics backer

Use: At least one per block frontage, additional units may be placed at bus stops and at on-street and off-street public and semi-public parks, plazas, and other similar focal and respite areas

Placement: Paired with litter receptacles, at least 10' from any seating; placement of on-street receptacles based on site furniture location plan on page 16



DETAIL 2.19 LITTER RECEPTACLE



DETAIL 2.20 RECYCLING RECEPTACLE

Recycling Receptacle

Manufacturer: Forms & Surfaces

Type: 36g Urban Renaissance, custom recycling side opening, updrop pattern, dome lid

Color/Finish: Azure texture powdercoat

Graphics: Custom recycling graphics backer

Use: At least one per block frontage, additional units may be placed at bus stops and at on-street and off-street public and semi-public parks, plazas, and other similar focal and respite areas

Placement: Paired with recycling receptacles, at least 10' from any seating; placement of on-street receptacles based on site furniture location plan on page 16

Bench

Manufacturer: Victor Stanley, Inc.

Type: CBF-10, Classic Collection, anchored to concrete

Options: 6' long with no intermediate armrests or 8' long with one intermediate armrest

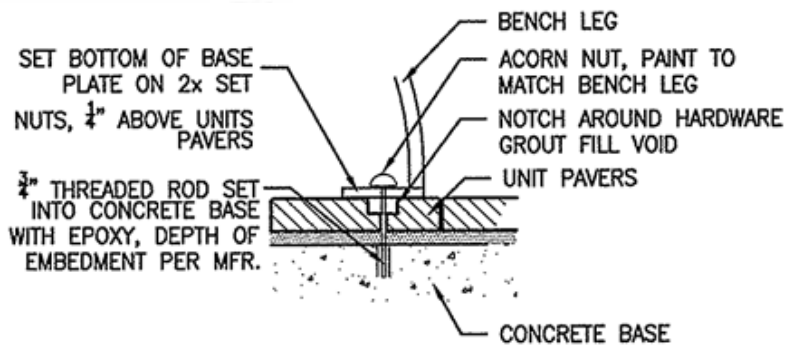
Color/Finish: Black powdercoat

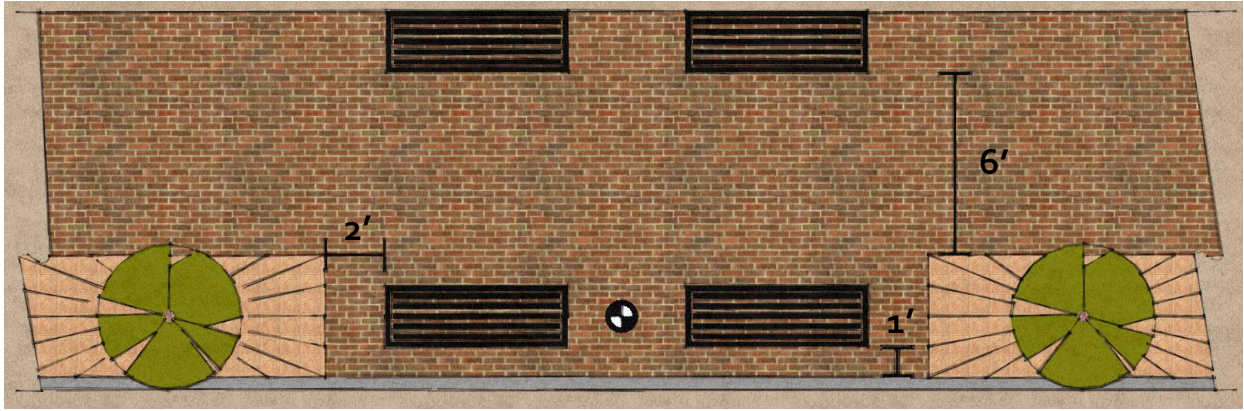
Use: At least two per block frontage, additional units may be placed at bus stops and at on-street and off-street public and semi-public parks, plazas, and other similar focal and respite areas

Placement: Minimum 10' from any receptacle, under canopy trees where possible; placement of on-street receptacles based on site furniture location plan on page 16

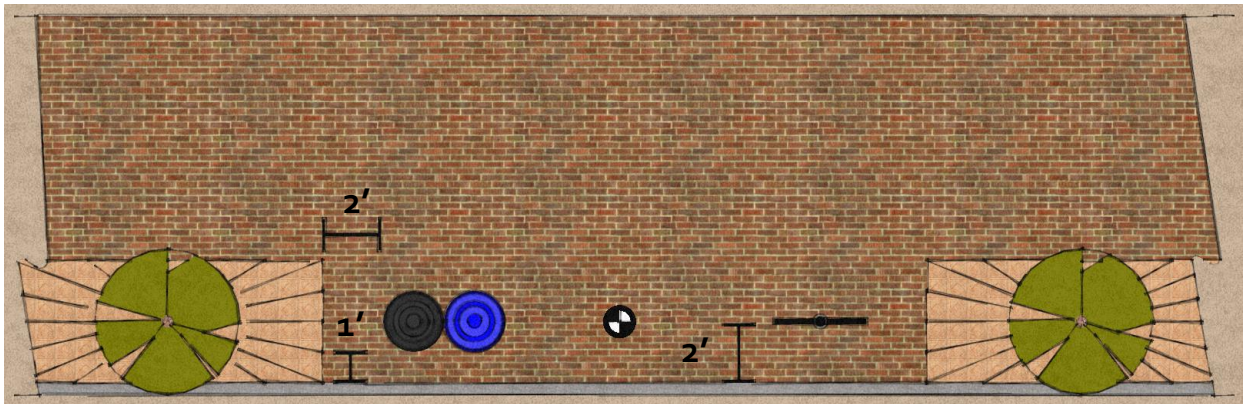


DETAIL 2.21 BENCH DESIGN & INSTALL

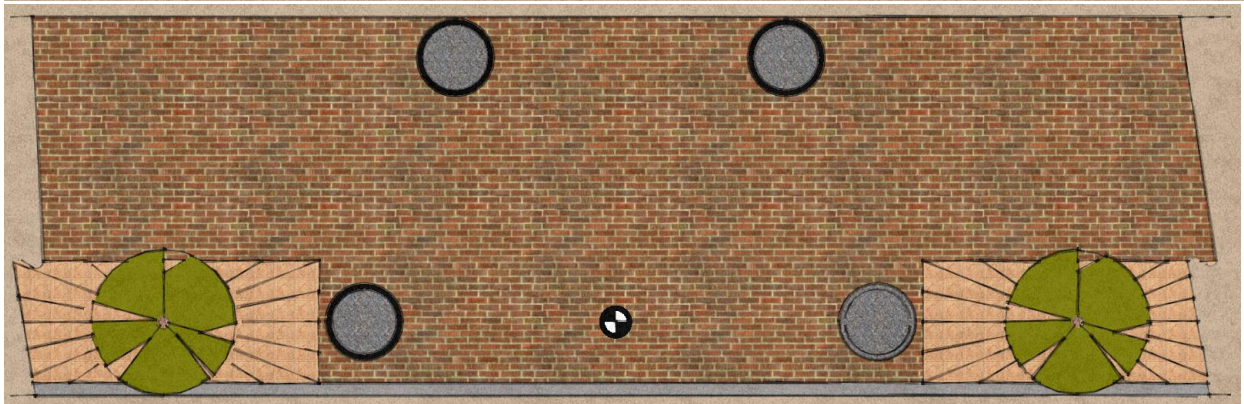
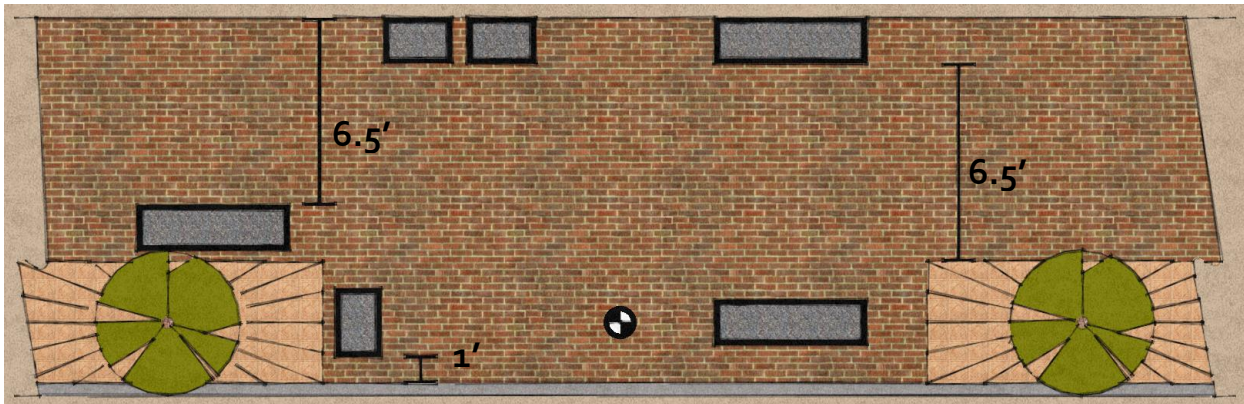




DETAIL 3.22 Bench Location Plan



DETAIL 3.23 Receptacle & Single Bicycle Rack Location Plan



DETAIL 3.24 Movable Planter Location Plans

Bicycle Rack

Manufacturer: Creative Pipe, Inc. or equal as approved by TOH

Type: Bike Post – Model BP

Color/Finish: Three color options. For single rack installations, use primary. For two or more rack installations, use accent for one rack. For three use each accent color at least once.

- Black powdercoat (primary)
- Yellow (RAL1032) powdercoat (accent)
- Green (RAL 6001) powdercoat (accent)

Use: At least two per block frontage, additional units placed at all bus stops

Placement: If on-street, aligned parallel to curb, coordinated with building entrances

Spacing: 2' minimum from back or curb, 4' on-center for multiple installations;

Clearance: 2' from edge of hoop; 2' from face of hoop

Install: Flanged surface mount with concrete anchors



DETAIL 3.25 BICYCLE RACK DESIGN

Alternative High-Capacity Bicycle Rack

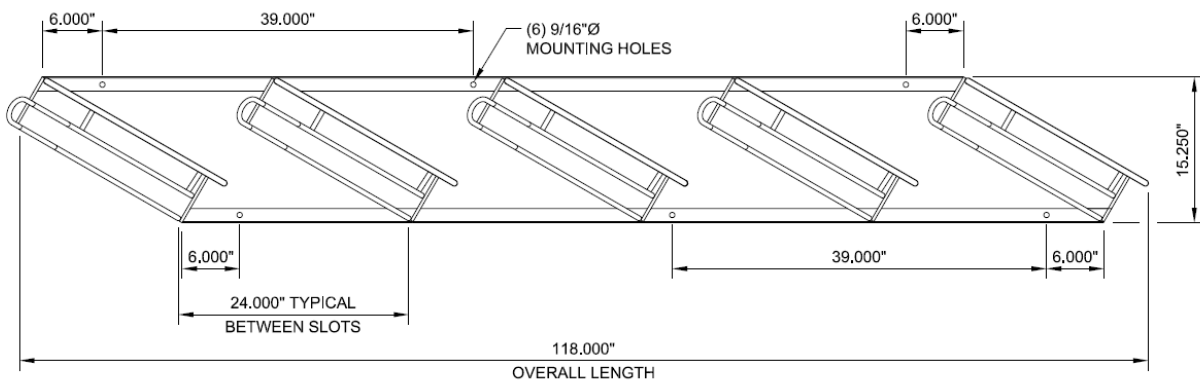
Manufacturer: Peak Racks, Inc. or equal as approved by TOH

Type: Campus Rack, Angled 5-slot, Model RH-AS

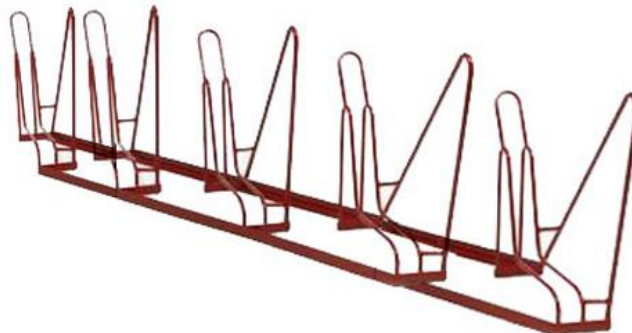
Color/Finish: Black powdercoat (primary)

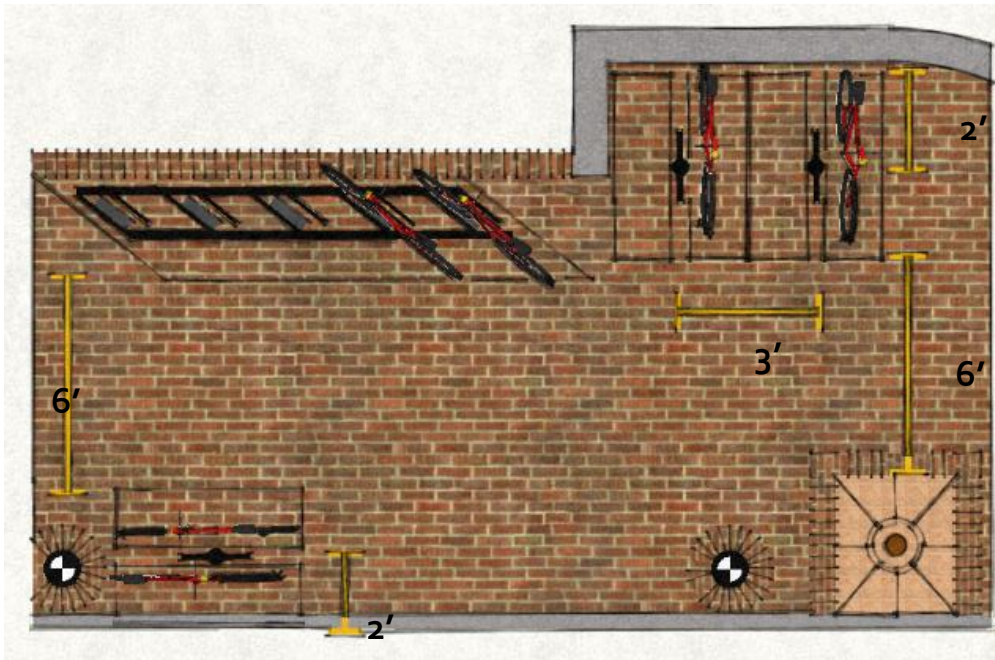
Use: Allowed on a case-by-case basis where need is shown and space is not constrained

Placement: Preferred for off-street, coordinated with building entrances, may be along building frontage where space allows



DETAIL 3.26 ALTERNATIVE HIGH-CAPACITY BICYCLE RACK





DETAIL 3.27
BICYCLE RACK
LOCATION &
CLEARANCE

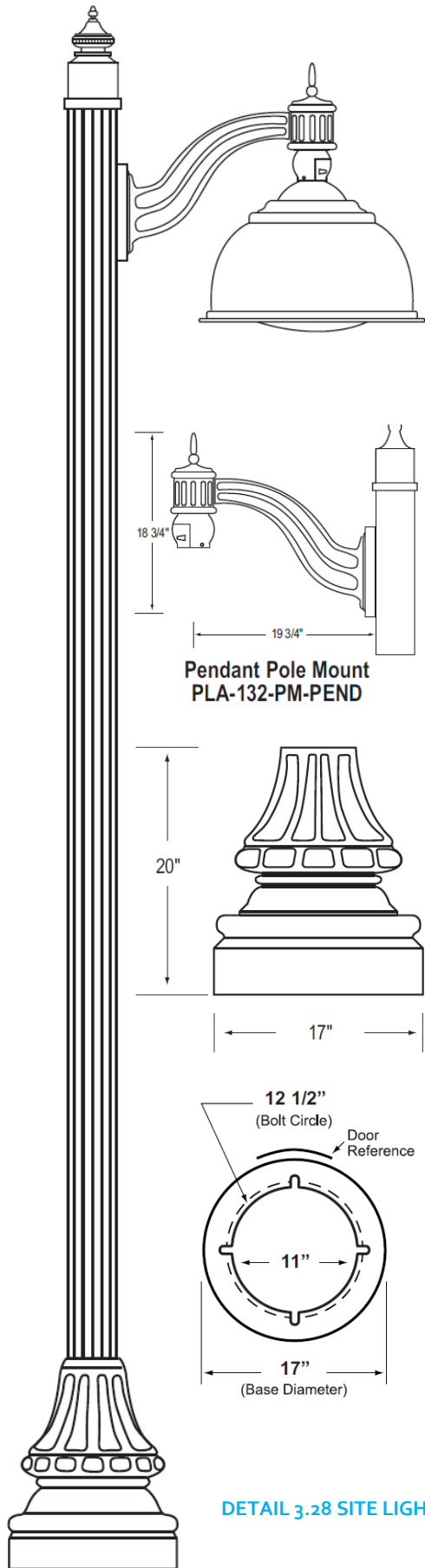
LIGHTING & SIGNALS downtown streetscape

Street Lights

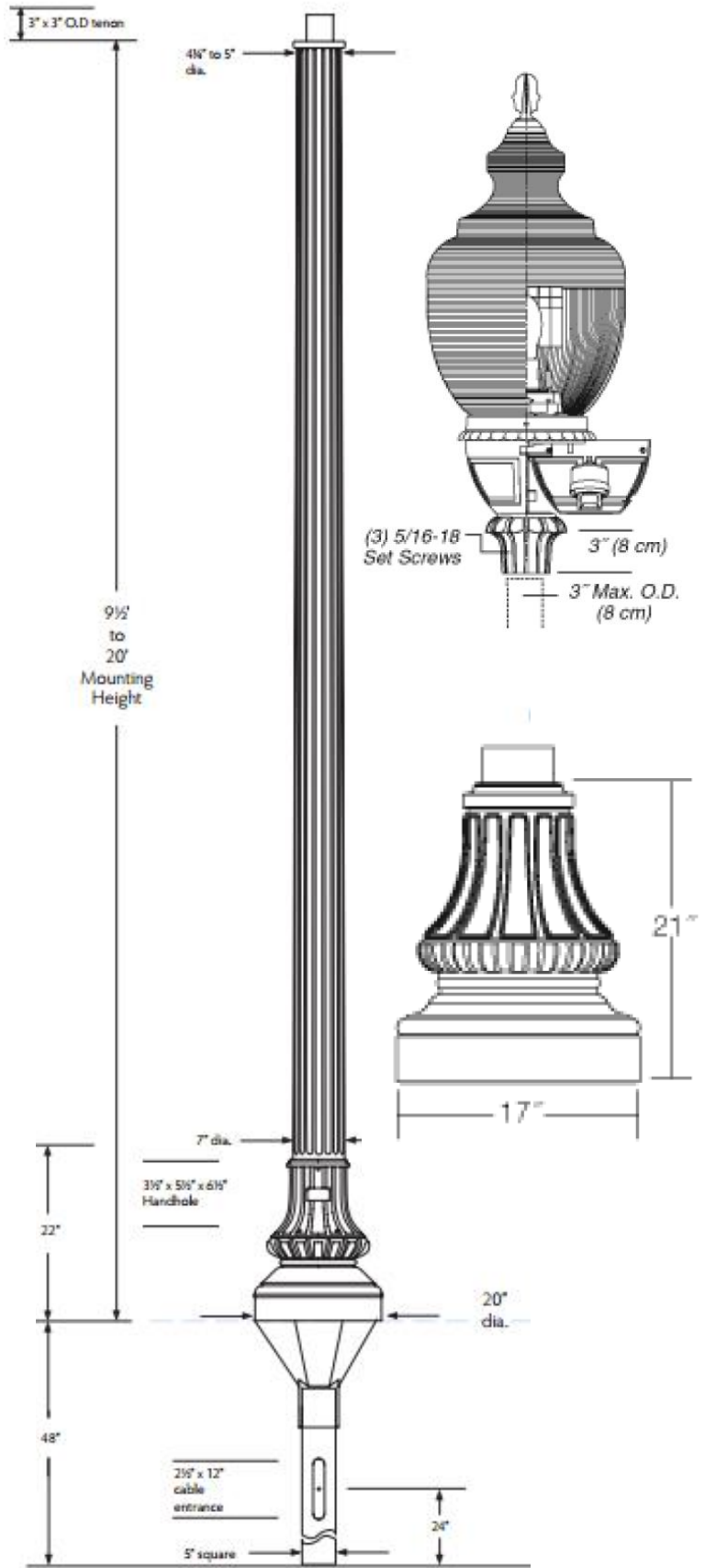
Manufacturer:	Philips HADCO
Type:	Refractive Post Top (R34) or equal as approved by TOH
Fitter/Pod:	Tapered Fluted with Scalloped Petals, black powdercoat
Roof:	Victorian
Reflection:	Full Top Reflector
Pole Type:	14' mounting height, tapered, fluted, 3" tenon, black powdercoat
Pole Options:	Cast Aluminum- HADCO P5092 or equal Fiberglass- Shakespeare Composite Structures AP20 Washington Pole or equal
Base Options:	Cast aluminum- integrated into pole Fiberglass- Architectural Area Lighting Washington shroud
Light Source:	HPS
Extras:	No finials, cases, or bands
Install:	Direct embed into concrete footer
Use:	Use as streetlights for all public right of ways and private drives

Site Lights

Manufacturer:	PEMCO, Inc.
Type:	Greenville Tear Drop Luminaire or equal as approved by TOH
Lens:	Flat Glass R3 full cut off
Finish:	Black powdercoat
Pole:	12' mounting height, 5" diameter straight, fluted, black powdercoat; Model #PLB-112-5-20-FLUTED
Base:	Model # A356 cast aluminum
Arm:	Pendant Pole Mount; Model #PLA-132-PM-PEND
Light Source:	HPS
Install:	Direct embed into concrete footer
Use:	Use in parking lots and as an option for pedestrian only passages, and other public and semi-public parks, plazas, and similar focal and respite areas



DETAIL 3.28 SITE LIGHT



DETAIL 3.29 STREET LIGHT

Alternative Street Lights

- Types: Philips HADCO Refractive Post Top (R34) luminaire to match street light
Use: Mounted on traffic signals where space is constrained for an additional pole and in an effort to minimize poles in the streetscape
Arms: Philips HADCO Models #PTH2410 (single arm) or #PTH2420 (twin arm)
-

VEHICLE & PEDESTRIAN SIGNALS:

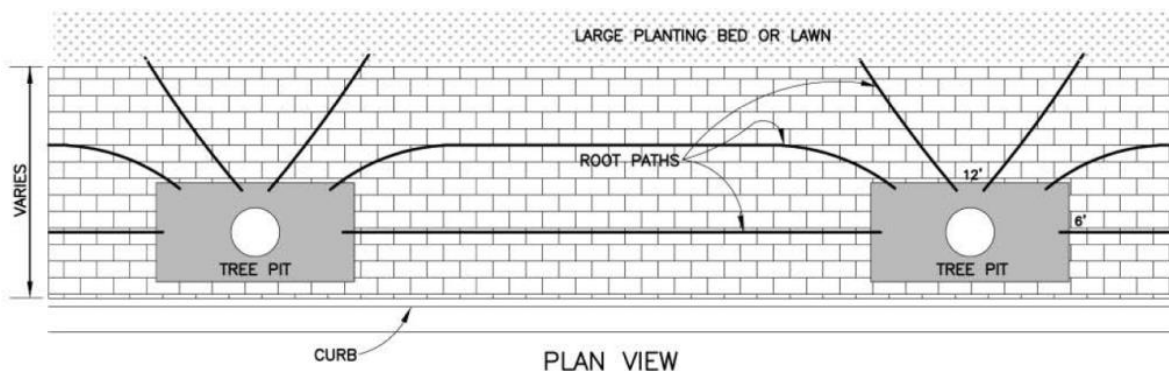
The areas regulated by the Downtown Streetscapes chapter follow the guidelines and specifications for the Standard Streetscape traffic signals and pedestrian signals found in Chapter II on Page 20.

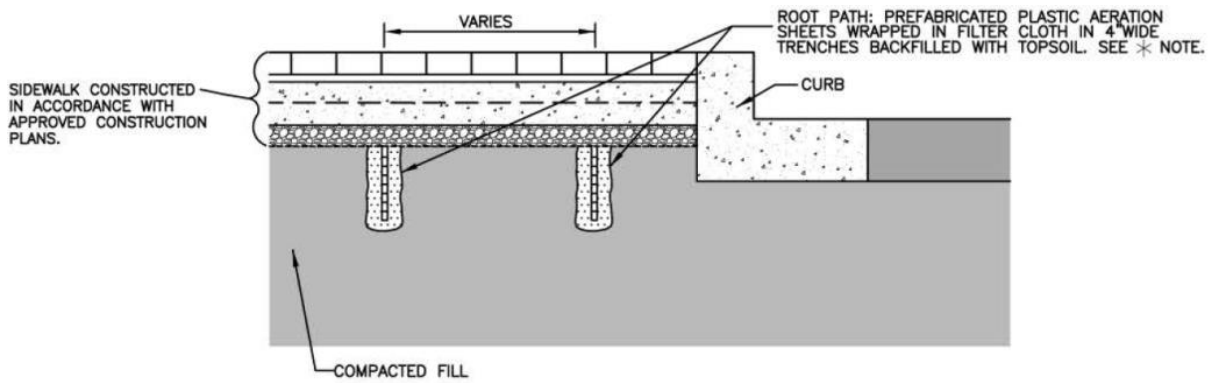
LANDSCAPING downtown streetscape

Street Trees

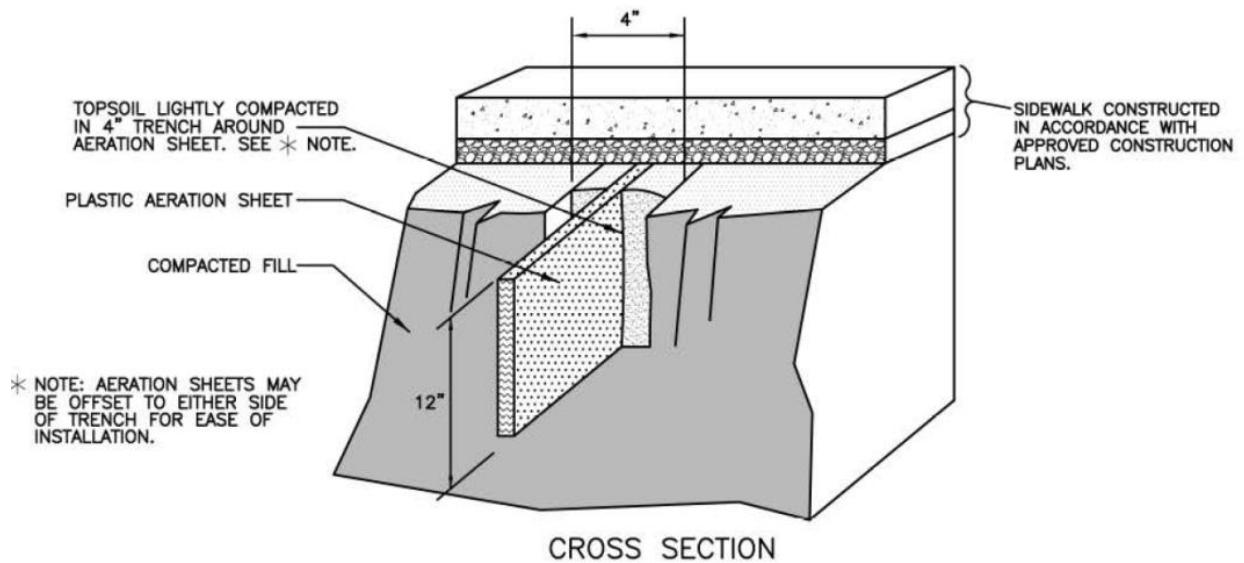
- Species: Deciduous Canopy- Shumard Oak or Willow Oak or equal as approved by the Community Forester; tree species shall not differ within either side of the same block
Ornamental- determined by Community Forester on a case-by-case basis when space is constrained; tree species shall not differ within either side of the same block
Use: At all streetscapes in the Downtown; one canopy tree per grate; one canopy tree per at-grade planting bed; canopy trees at 25'-35' on-center in continuous tree zones
Size: 3.0 caliper when planted
Placement: Placed in consistent pattern with reasonable variation to accommodate environmental constraints
Root Growth: Root tunnels or paths shall be installed between grates and planters and to any nearby impervious surfaces for canopy trees planted in grates or at-grade planting beds
Irrigation: Irrigation shall be installed for trees planted in tree grates and at-grade planting beds when water service is available
Grates: Neenah Foundry Model # R8817 for canopy trees; Model # R8809 for ornamental trees; placed at back of curb

DETAIL 2.30 TREE ROOT PATHS





SECTION PERPENDICULAR TO CURB BETWEEN TREES

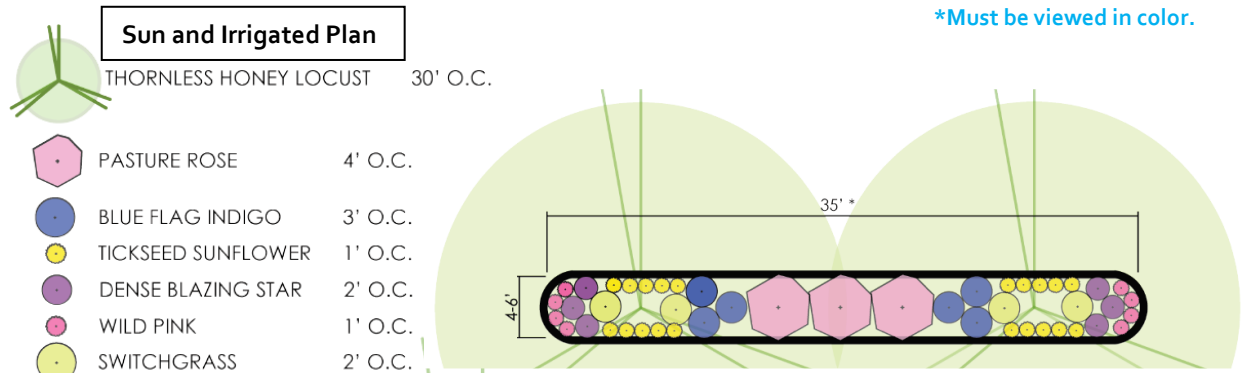


At-grade Planting Beds

- Use: In areas indicated on the Downtown Landscape Improvement Typology Plan, Detail 3.32
- Plan Options: Specific Plan, Irrigated Sun, Irrigated Shade, Non-irrigated Sun, Non-irrigated Shade
- Plant Species: Per Downtown Landscape Improvement Plant Palette, or approved equals
- Schemes: Per DETAIL 3.31 and Downtown Landscape Improvement Typical & Specific Plans

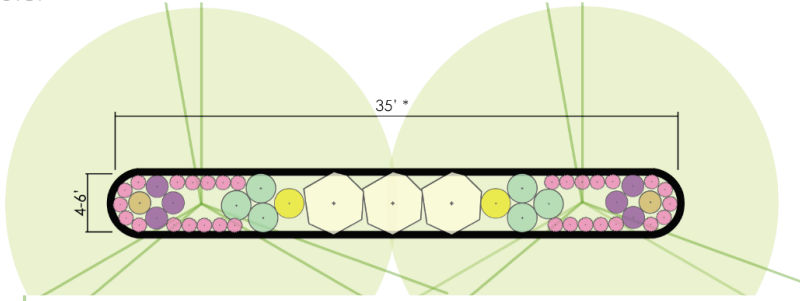
DETAIL 3.31 PLANTING BED TYPICAL PLANS*

*Must be viewed in color.



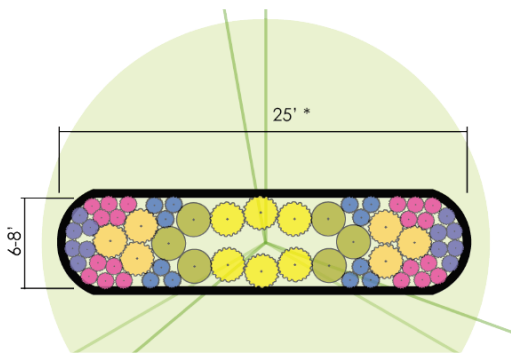
Sun and Non-irrigated Plan

- THORNLESS HONEY LOCUST 30' O.C.
- NEW JERSEY TEA 4' O.C.
- YELLOW WILD INDIGO 3' O.C.
- MOSS PHLOX 1' O.C.
- SCALY BLAZING STAR 2' O.C.
- PURPLE LOVE GRASS 2' O.C.
- LITTLE BLUESTEM 2' O.C.



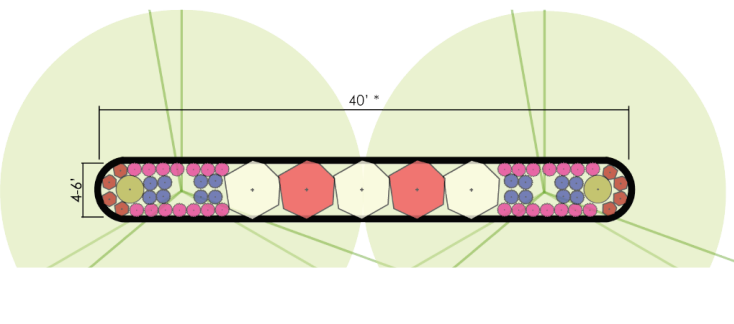
Shade and Irrigated

- EXISTING TREE
- WOODLAND SUNFLOWER 2' O.C.
- DWARF CRESTED IRIS 1' O.C.
- WILD BLUE PHLOX 1' O.C.
- WILD PINK 1' O.C.
- ZIGZAG GOLDENROD 2' O.C.
- SWITCHGRASS 2' O.C.



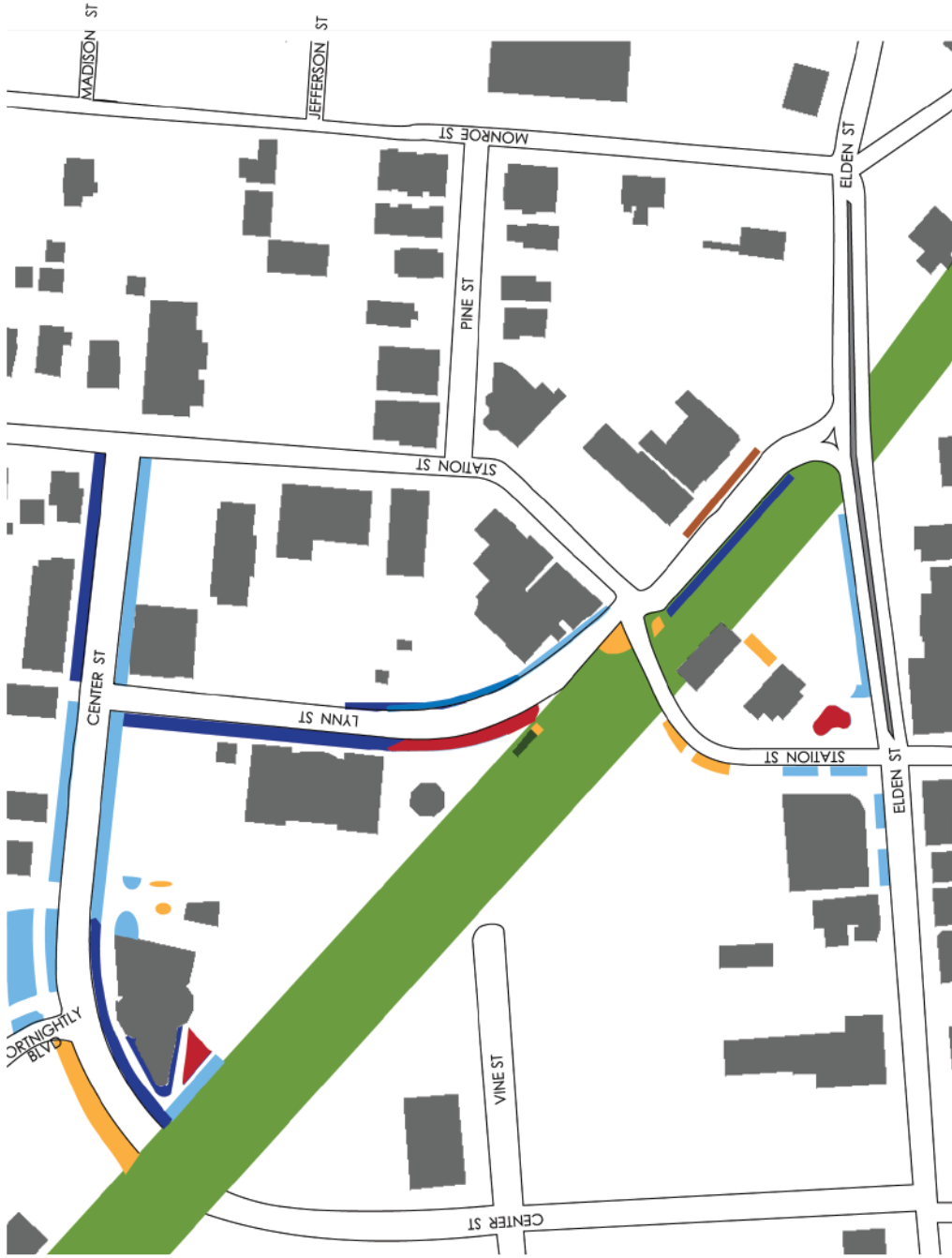
Shade and Non-irrigated Plan

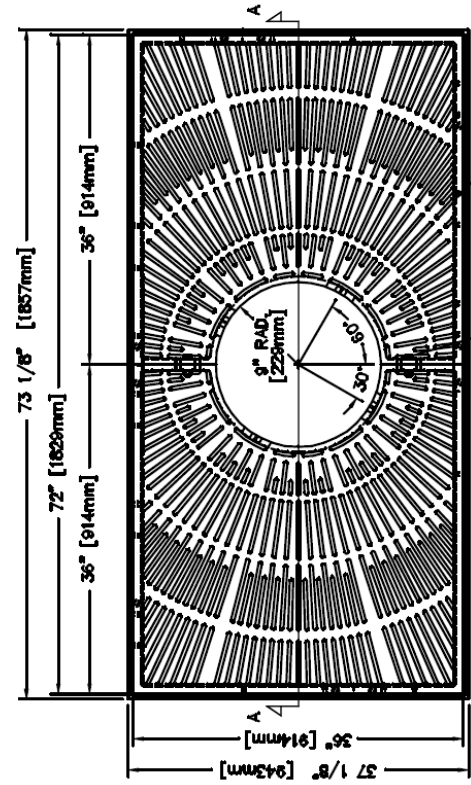
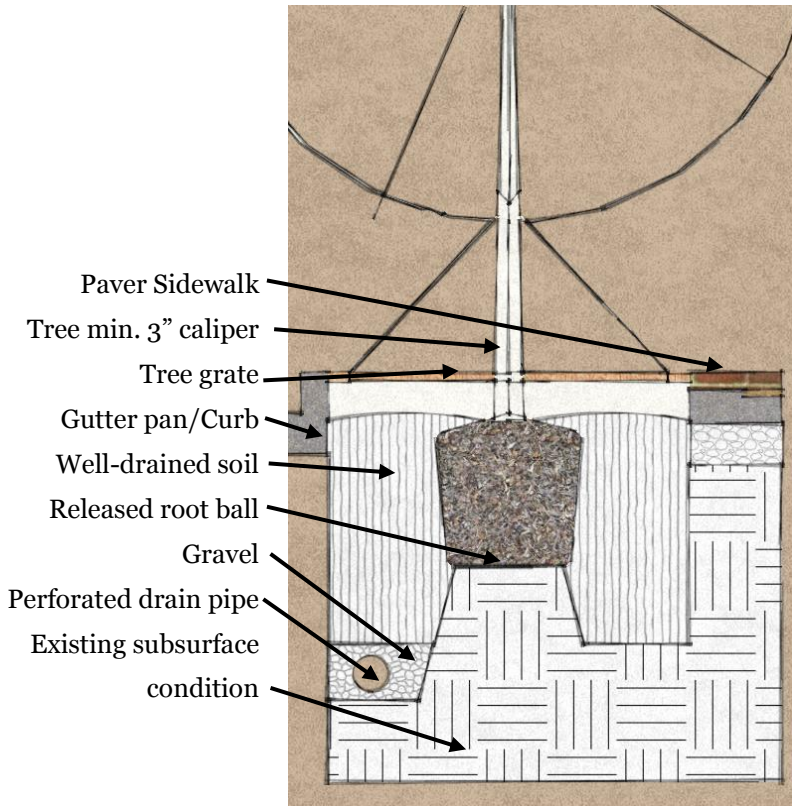
- EXISTING TREE
- STRAWBERRY BUSH** 4' O.C.
- SMOOTH HYDRANGEA 'INCREDIBALL' 4' O.C.
- WINTERGREEN 1' O.C.
- VIRGINIA BLUEBELL 1' O.C.
- WILD PINK 1' O.C.
- SWITCHGRASS 2' O.C.



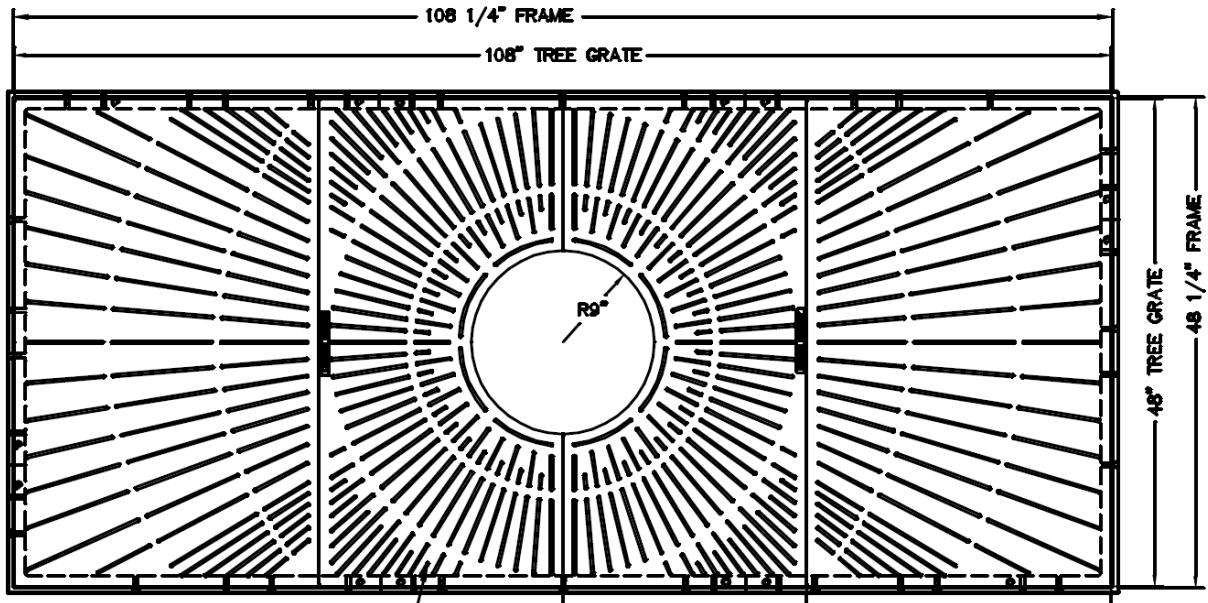
DETAIL 3.32 PLANTING BED TYPE LOCATIONS*
 *Must be viewed in color.

- SPECIFIC PLAN
- IRRIGATED BED IN SUN
- IRRIGATED BED IN SHADE
- NON-IRRIGATED BED IN SUN
- NON-IRRIGATED BED IN SHADE





DETAIL 3-33 TREE PIT & GRATE

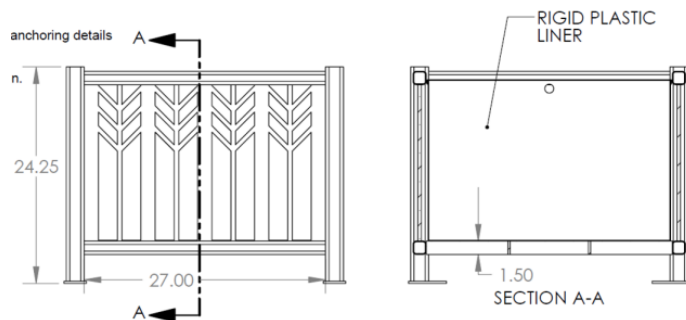
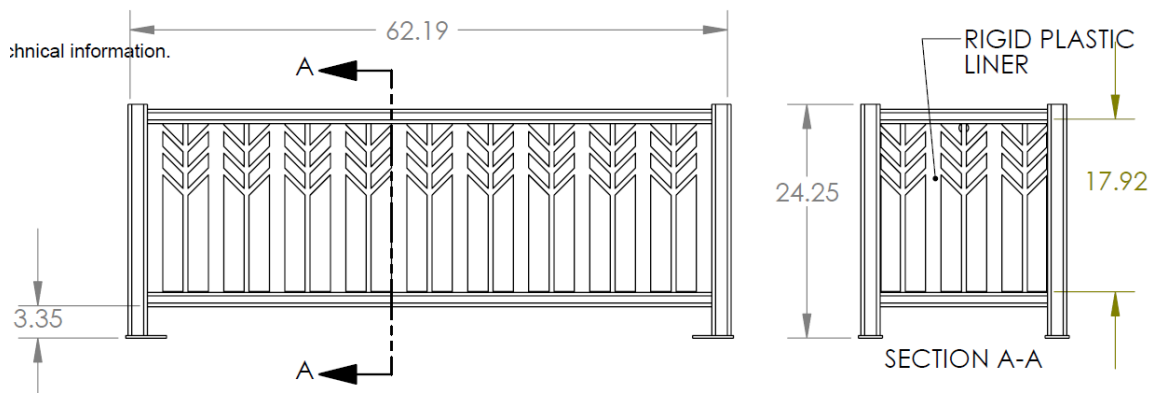


Planters

- Standard A: Petersen Manufacturing Company, Inc.; Spencer Series Models # SPCP31 and #SPCP63
- Standard B: Victor Stanley, Inc.; Terrace Series; Round Fiberglass; Models # 3526R and # 3025R
- Color/Finish: Standard A- Bike Black powdercoat
Standard B- Matte finish in Mushroom
- Use: On all public right-of-ways, private drives, and other public and semi-public parks/plazas, and other focal and respite areas

- Placement: May be placed along a building or within the tree zone between grates and at-grade planter beds or to outline outdoor café seating areas or other public and semi-public focal and respite areas, *see site furniture detail on Page 44*
- Plant Material: Annual, perennials, decorative grasses, and other plants as approved by TOH
- Maintenance: If installed or requested by a developer, property owner, or business, that private entity is responsible for the upkeep of the plants

DETAIL 3.34 PLANTER OPTIONS



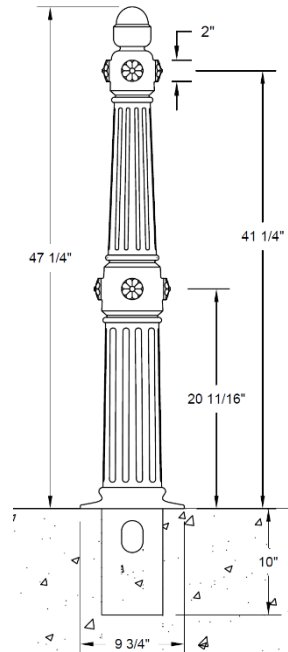
Light Pole Hanging Flower Baskets

Manufacturer: Kinsman Company, Inc. or equal as approved by TOH
Type: Model # KCLP25; 25" Lamppost Hayrack-Euro Classic
Color/Finish: Black Powdercoat
Use: May be used on any street lights and site lights owned by the TOH or private entity
Weight: Cannot exceed 100lbs on fiberglass poles

OTHER STREETSCAPE FEATURES downtown

Bollards

Manufacturer: Ironsmith, Inc. or equal as approved by TOH
Type: Model Victorian # Mgo22; 48" tall; cast aluminum
Color/Finish: Black polyurethane
Use: May be used to block vehicular traffic or demarcate defined spaces
Extra: May be cast with rings to hold chains connecting bollards
Install: Direct embed or equipped with lock tab for removable applications

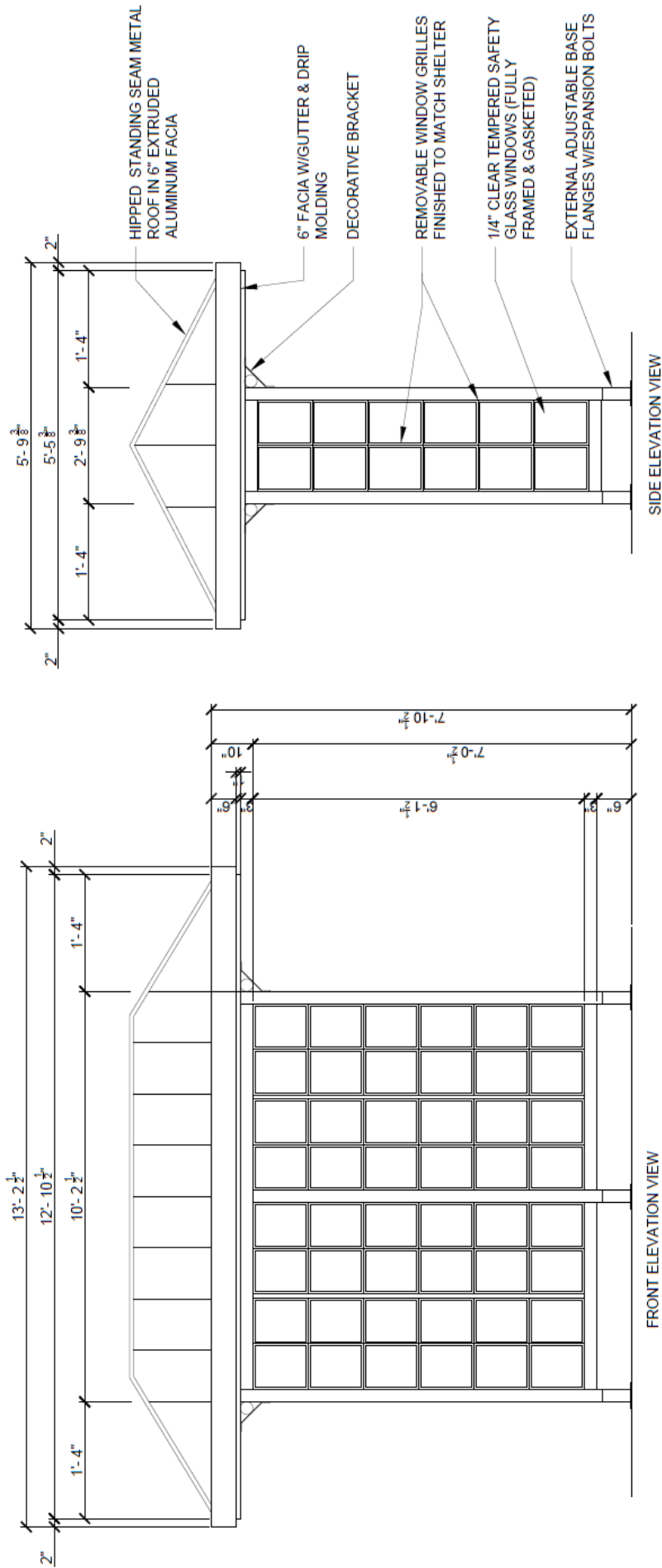


DETAIL 3.35 BOLLARD

Bus Shelters

Manufacturer: Columbia Equipment Company or equal as approved by TOH
Type: Model # 6X13-HRsp. Modified Southampton
Color/Finish: Black Powdercoat (RAL #9005 Tiger Drylac for framing; ATAS Black for roof)
Use: To be used within streetscape where space allows as needed (determined by TOH)
Placement: Minimum 4' from back of curb, minimum 2' from edge of sidewalk
Size: 4 panel standard (13'-2 1/2" wide); up to 6 panel option permissible were needed
Extras: Full width and partial width wood benches attached to back wall
Illumination: Shelters paired with one acorn street light; no lighting within shelter

DETAIL 3.36 BUS SHELTER



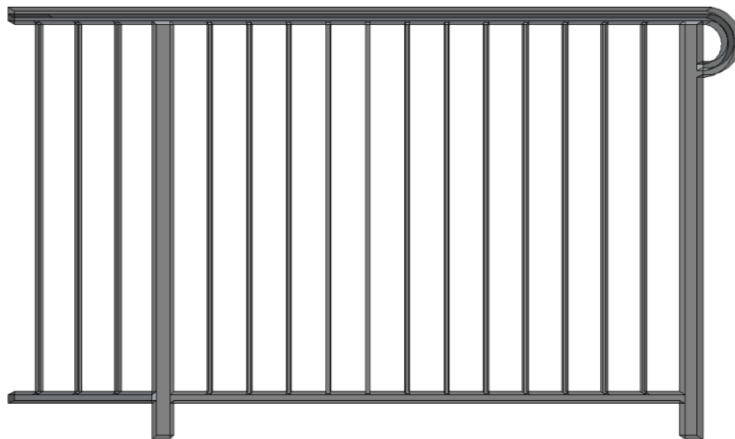
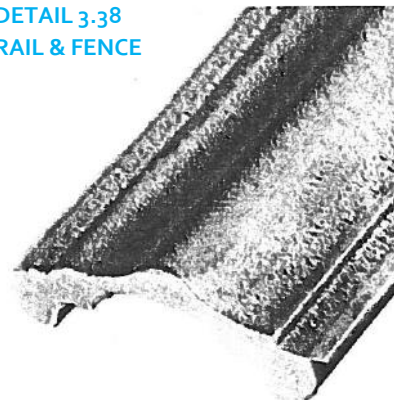
Clock

- Manufacturer: Canterbury Design, Inc. or equal as approved by TOH.
- Type: Danbury Post Clock with Solid Top Ornament; double-sided.
- Color/Finish: Black Powdercoat.
- Extras: Heritage Style Dial, backlit; Renaissance style bezel; *Town of Herndon* relief on top.
- Use: No more than 2 in the Downtown are necessary.
- Size: 12' high; 24" diameter dial.
- Placement: If on-street, oriented perpendicular to curb; if off-street, centrally located in open area.

**DETAIL 3.37 CLOCK**

Railings & Fences

- Design: Steel; decorative top rail, channel bottom rail, square posts, square pickets; posts 5' on-center, pickets 4.5" on-center; bottom rail 4" above surface
- Color/Finish: Black Satin
- Sizes: 1.75" wide top rail, 1.25" wide bottom rail, 1.25" wide posts, .5" pickets; height varies
- Use: May be used for railings and fences on-street and off-street
- Install: Direct embed minimum 8" concrete

**DETAIL 3.38
RAIL & FENCE**

Drinking Fountain

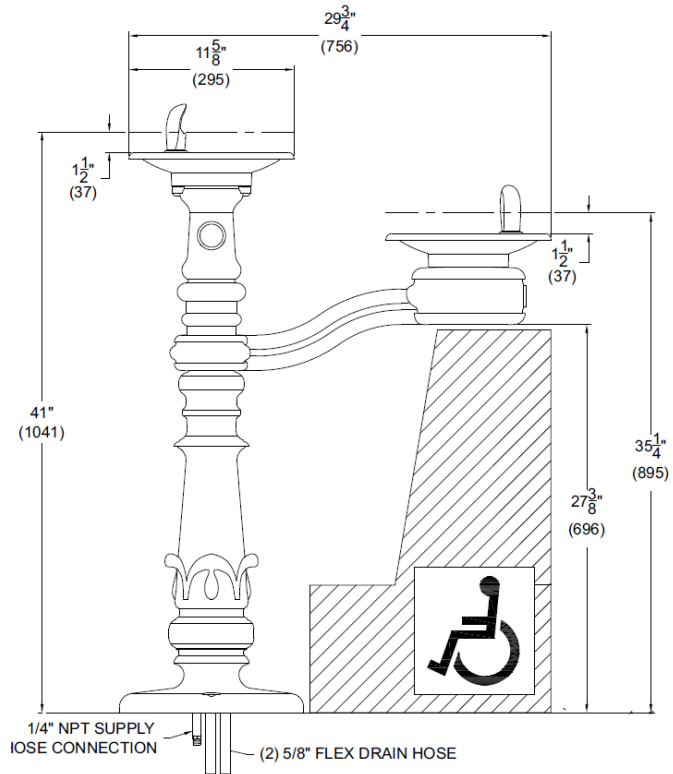
Manufacturer: Murdock Manufacturing, Inc. or equal as approved by TOH

Type: Model # M-C76B Bi-level Bowl Classic Style; cast iron with cast brass bowls

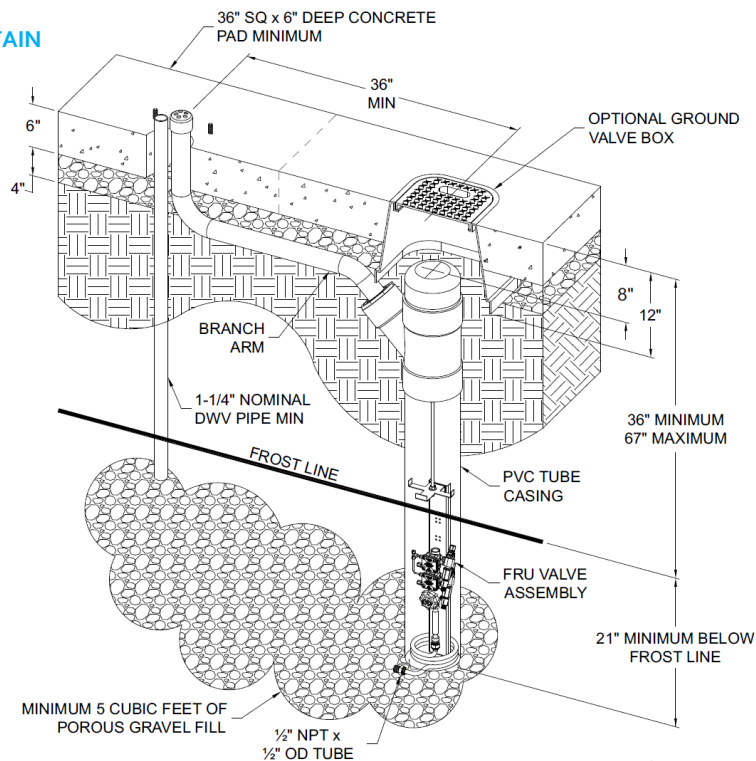
Color/Finish: Gloss black enamel

Extras: self-closing pushbutton activation; freeze-resistant valve (FRU2); Pet fountain (PF)

Placement: In any hardscaped area with high visibility with preferred access from the W&OD



DETAIL 3:39 DRINKING FOUNTAIN

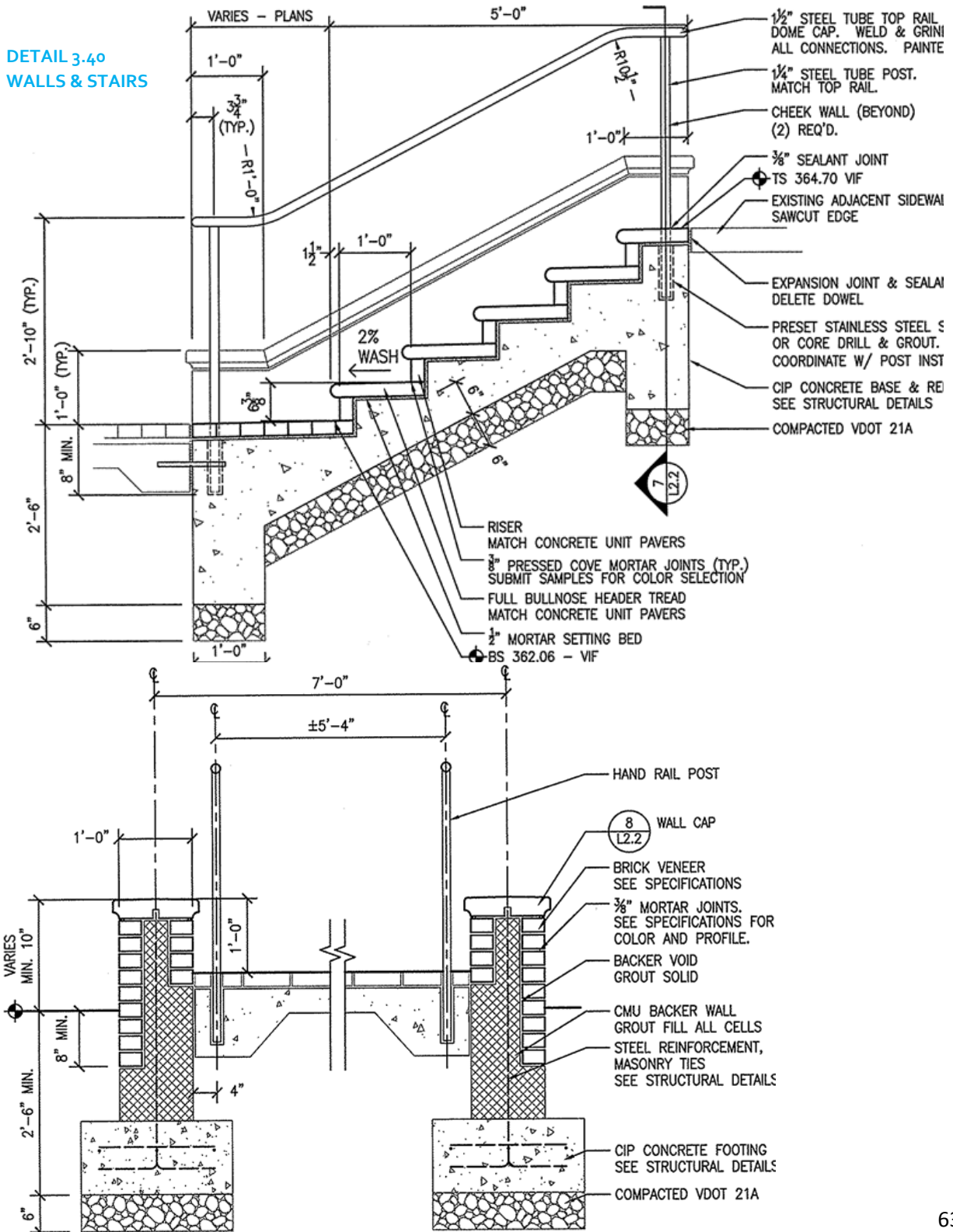


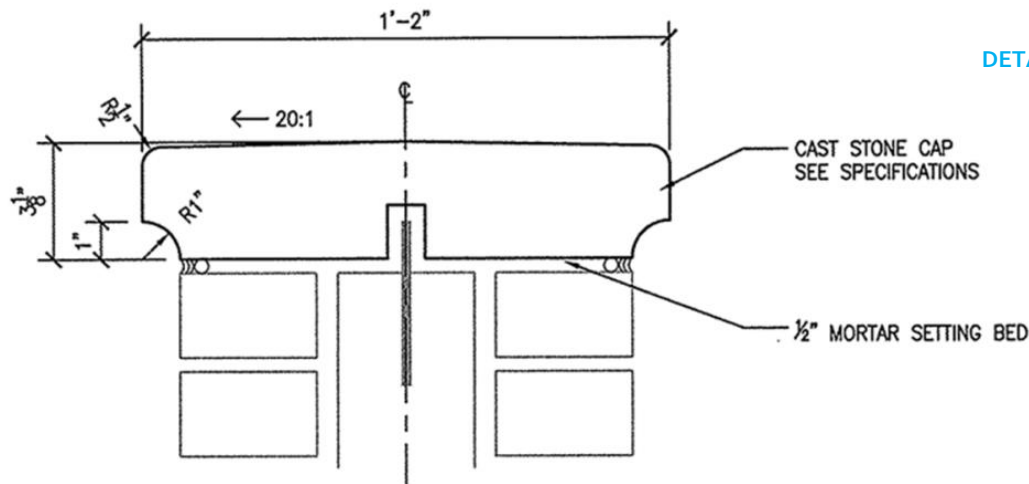
Valve Specifications:
Minimum/Maximum Pressure:
30/100 PSI

Walls & Stairs

- Design: Vertical surfaces- Pine Hall clay brick veneer, Full Range with 20% flashed to match or equal as approved by TOH
 Horizontal surfaces- Precast concrete
- Variation: Other surface materials may be used for the vertical surfaces to add visual interest; to be approved by TOH on a case-case basis

DETAIL 3.40
WALLS & STAIRS





DETAIL 3.41 WALL CAP

Outdoor Seating

Picnic Table: Ultrasite, Inc.; Models #P358-OP and #P358h-OP or equal as approved by the TOH; 46" wide perforated Octagonal Table; 4 seat option or 3 seat option with wheelchair access; black powdercoat;

Umbrella: Umbrella Source, Inc.; Model #USYG6S3; 7.5' wide Commercial Logo Market Umbrella; Single canopy fabric, Sunbrella color- Red (4666-0000); White *Town of Herndon* branding applied on two sides; Umbrella pole- aluminum, black finish; Umbrella stand- Model #US-PGENF; 50lb Concrete Umbrella Stand, black finish

Portable Chair: Landscape Forms, Inc.; Parc Centre Chair; armed & armless; 30% accent colors Primary powdercoat color - Cosmic blue; Accent powdercoat color - parrot green, flambe orange, bumblebee yellow

Use: Picnic tables and portable chairs are allowed off-street in both public and private areas

Café Seating: May be used along building frontages by ground floor retail and restaurants; chair and table types allowed by TOH on a case-by-case basis



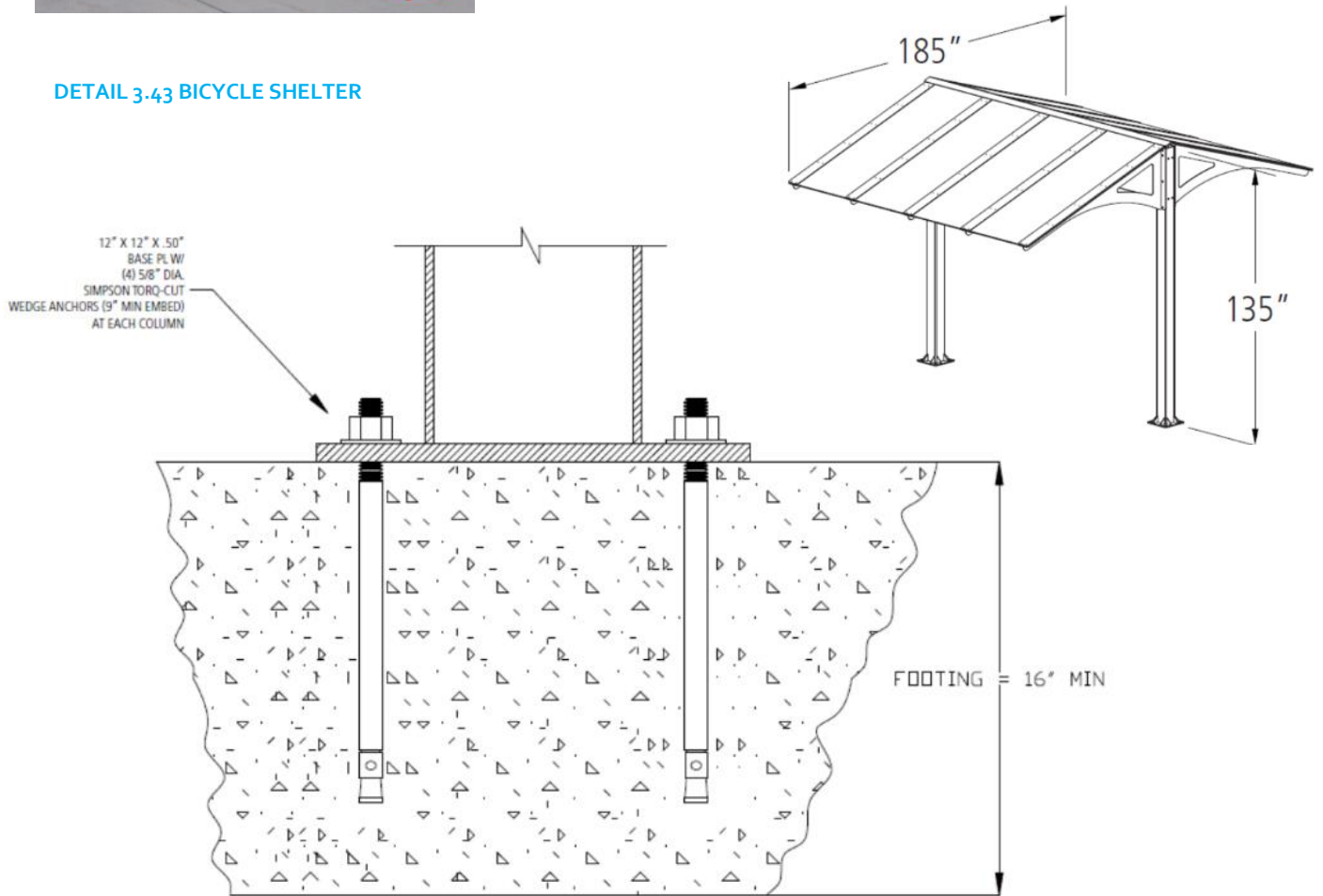
DETAIL 3.42 PICNIC TABLE, UMBRELLA, & PORTABLE CHAIR

Bicycle Shelter

- Model: KOLO Shelter, American Bicycle Security Company; or approved equal
- Design: Black (RAL#9005) Powercoat finish
- Rack: Campus Rack or Ultra Space Saver Rack depending on space availability
- Location: Intended to use along the W&OD Regional Trail; Dependent on space availability



DETAIL 3.43 BICYCLE SHELTER



SIGNAGE downtown streetscape

Traffic Signs: To meet MUTCD; install on street light posts where possible and consolidate multiple signs on single sign posts where possible to minimize sign clutter and limit posts within the streetscape

Posts- Steel 2" x 2" solid 12-gauge square tube; baked-on black finish; black square post pyramid rain cap; breakaway anchor

Seasonal Light

Post Banners: Design- Vinyl, single piece, printed on both sides, minimum weight 220z; Digitally printed, minimum 72dpi, UV printer ink; Brass grommets at each corner, 1½" from edges; 2½" pockets for bracket pole at top and bottom, double lock stitched hem; Size- 18" x 36" for DVP poles; 30" x 60" for Town poles

Clearance- 11'

Install- bands; drilling into pole not permitted

Banner

Bracket: Bannerflex D3 Airow or equal as approved by TOH, two-piece adjustable system; Cast aluminum with channels for banding, 1" adjustment at top/bottom with set screws, Eyelet included in base casting; ¾" round fiberglass arms, top canted up, bottom canted down

Optional

Bracket: Banner Saver Spring Loaded or equal as approved by TOH, two-piece cast aluminum; Spring tensioned assembly; Base attaches with stainless bands, eyelet included in base; ¾" round fiberglass removable arms with cotter pins

Street Signs: Brown street signs in lieu of standard green; with street sign toppers

Street Sign

Toppers: Traffic Safety Supply Company, Inc. or equal as approved by TOH; Black with white copy



DETAIL 3.44 HISTORIC DISTRICT STREET SIGN TOPPER

Private Signs: A-frame, awning signs, canopy signs, and wall-mounted projecting private signage is permitted within the public streetscape; these sign types requires sign licenses and shall comply with the Town of Herndon Sign Ordinance (Chapter 78, Article IX); Projecting signs must have 11' clearance and cannot project more than 4'; A-frame signs shall be constructed of wood and cannot exceed 3' in width and 12SF in total size; A-frame signs shall not obstruct sidewalks.

CHAPTER IV: GATEWAY & PARKWAY STREETSAPES

*Standards, Specifications, & Guidelines for the Planning and Design of
Town Streetscape Projects*



IV. GATEWAY & PARKWAY STREETSCAPES

GATEWAY & PARKWAY STREETSCAPE CONCEPT

In the original streetscape guidelines, Gateway and Parkway streetscapes were collectively considered Green Streets. Green Streets required a 25' landscape buffer on the edges of the right-of-way. As the Town reconciles its continued growth, a more traditional urban streetscape focused on pedestrian service levels with more design detail and less space requirements has become the optimal design. The Parkway Streetscape standards retain the Green Streets design however the Gateway Streetscape standards introduces a new design to be employed on most of the right-of-ways previously governed by Green Street policy.

The Parkway Streetscape Standards provide for two designs; one for the Herndon Parkway outside the Herndon Transit-Oriented Core (HTOC) and Transit-Related Growth Area (TRG), and the W&OD Regional Trail outside downtown Herndon, and the other for the Herndon Parkway within the HTOC and TRG. For the former, streetscape type PS-1, the design concept focuses on developing and ensuring a strong green space buffer along the roadway to function as a screen for adjacent mostly residential properties and to reinforce the parkway character for motorists. The latter Parkway Streetscape, streetscape type PS-2, applies from the Van Buren Street intersection east then north to the W&OD crossing. This design is meant to accommodate heavier pedestrian volumes, a two-way cycle track, and enhanced amenities and finishes for improved multi-modal service levels given its proximity to the Herndon Metro Station and the potential for higher densities with redevelopment.

The Gateway Streetscape Standards apply to the gateways into Herndon including:

- Van Buren Street (from the southern town boundary to new Spring Street)
- Dranesville Road (northern town boundary to Park Avenue)
- S. Elden Street (southern town boundary to Sterling Road)
- E. Elden Street (eastern town boundary to Van Buren Street)
- Sterling Road (western town boundary to Elden Street)
- Spring Street (eastern town boundary to Van Buren Street)

On streets serving as gateways, the streetscape design philosophy focuses on demarcating entrances into the town and advancing an image and experience of walkability and community. The gateway streets are some of the most heavily traveled roads in town and as such are significantly impactful on the physical townscape and overall character of the town. Adding specialized treatments and decorative features functions to both enhance town character and to better accommodate pedestrian activity and access to transit.

Unless specifically included within this chapter, the Standard Streetscape, covered in Chapter II, shall apply for both Gateway and Parkway Streetscapes. For example, Gateway or Parkway site furnishings are not specified because Gateway and Parkway Streetscapes use the same site furnishings specifications as used in the Standard Streetscape.

The table on the following page lists the subsections of this chapter.

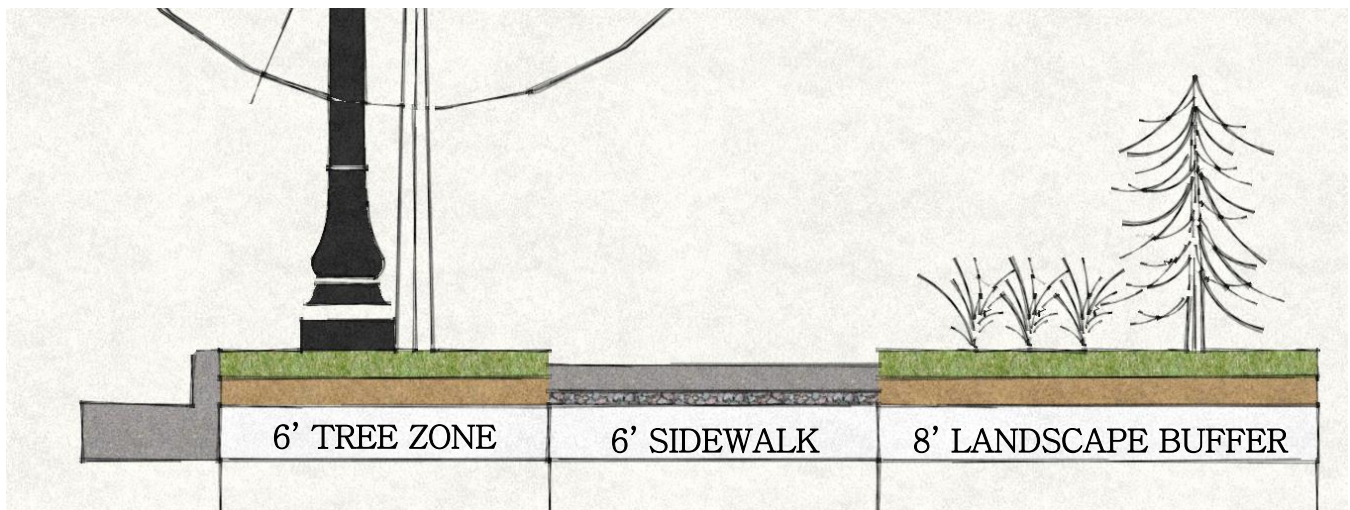
Gateway & Parkway Streetscapes Components	Page #
Design Concept.....	Page 69
Design & Dimensions.....	Page 70
Crosswalks & Curb Ramps.....	Page 72
Specialized Surface Treatments.....	Page 74
Lighting & Signals.....	Page 75
Landscaping.....	Page 76
Site Furnishings.....	Page 79
Other Streetscape Features.....	Page 79

STREETSCAPE DESIGN & DIMENSIONS gateway/parkway

Gateway Streetscape

The Gateway Streetscape designs shall be designed in accordance with the section drawing below and the plan view drawings on Page 75. In addition, the Gateway Streetscape design shall meet the following guidelines.

- The Gateway Streetscape shall include a minimum 6' wide tree zone, minimum 6' wide brushed concrete sidewalk, and minimum 8' wide landscape buffer with plant material.
- In certain instances of constrained space due to physical obstructions that cannot be feasibly relocated or removed, a reduced landscape buffer to 5', reduced sidewalk to 5', or reduced tree zone to 5' may be considered. This allowance should only be considered for minimal stretches of the streetscape.
- The Gateway Streetscape is primarily meant to provide a continuous safe and comfortable environment for pedestrians along Herndon's major commercial corridors with improved access to transit and enhanced design quality.
- The effectiveness of the Gateway Streetscape hinges on the accessibility to well-maintained and highly visible marked crosswalks. Many of the Gateway Streets have long blocks that encourage unsafe crossings at unmarked and uncontrolled locations. Crosswalks shall be considered mid-block, at T-intersections, and at private access drives, with or without traffic control devices. See Page 69 for crosswalk criteria and design.

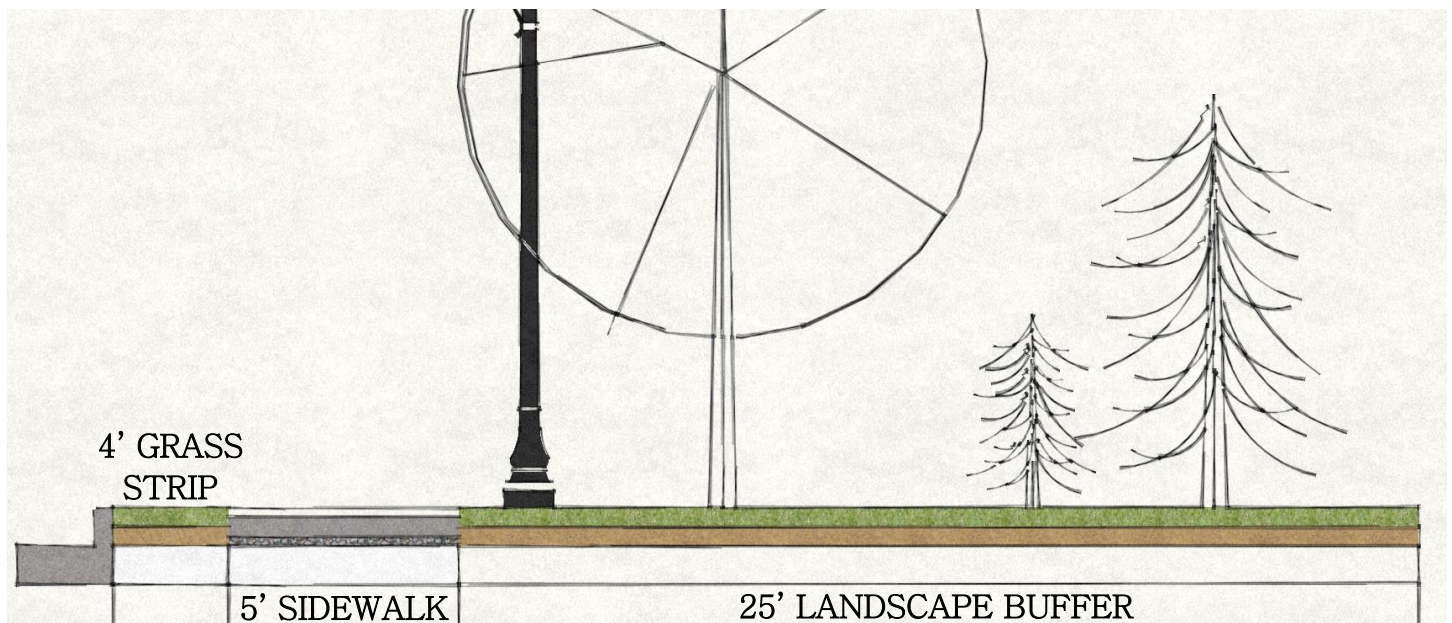


DETAIL 4.1 Gateway Streetscape Section

Parkway Streetscape

The Parkway Streetscape, PS-1 designs shall be designed in accordance with the section drawing below and the plan view drawings on Page 76. In addition, the Parkway Streetscape, PS-1 design shall meet the following guidelines.

- The Parkway Streetscape shall include a minimum 4' wide grass strip, minimum 5' wide brushed concrete sidewalk, and minimum 25' wide landscape buffer with plant material.
- In certain instances of constrained space due to physical obstructions that cannot be feasibly relocated or removed, a reduced landscape buffer to 15' and reduced grass strip to 2' may be considered. This allowance should only be considered for minimal stretches of the streetscape.
- The Parkway Streetscape is primarily meant to provide natural screening, augment the sense of urban forest, provide vital green space, enhance the interface of private development with public recreational land and right-of-ways, and as with all other streetscapes, provide a safe and comfortable environment for pedestrians.

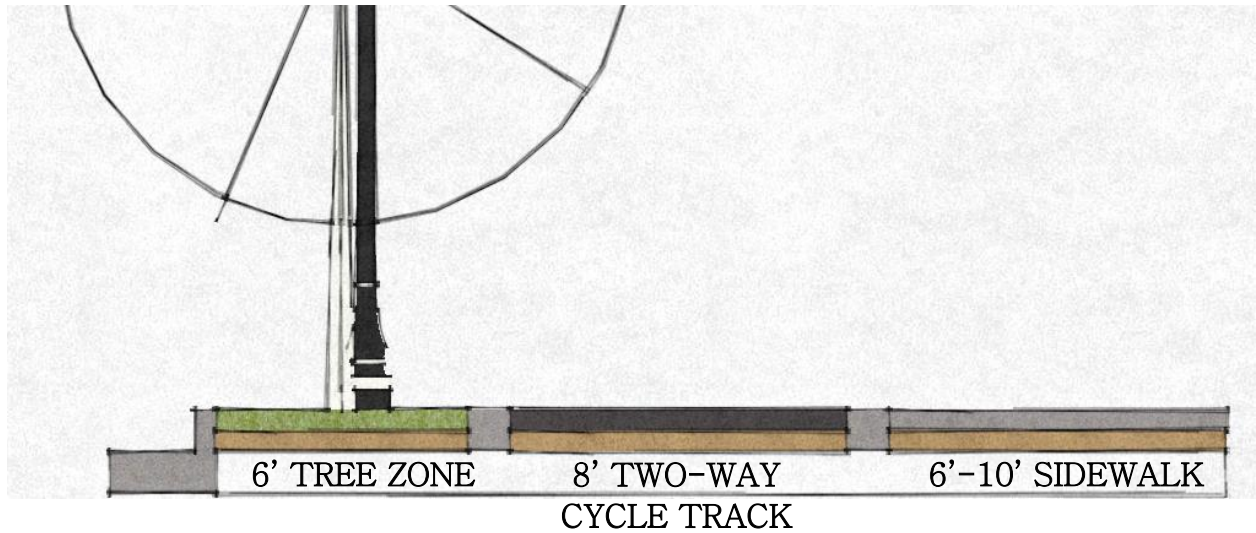


DETAIL 4.2 Parkway Streetscape Section – PS-1

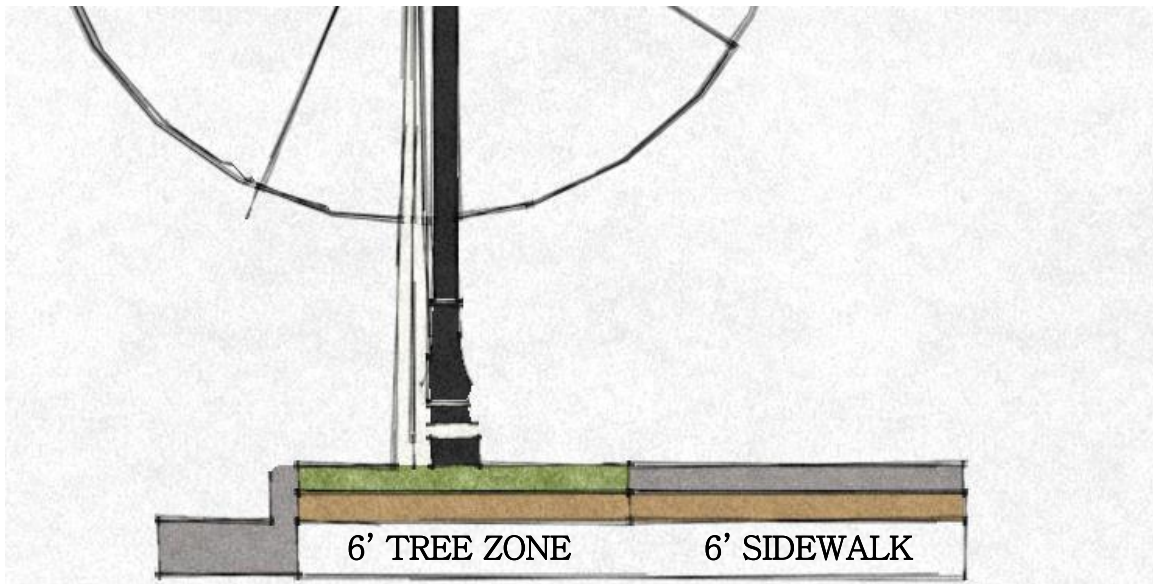
The Parkway Streetscape, PS-2 designs shall be designed in accordance with the section drawing below and the plan view drawings on Page 76. In addition, the Parkway Streetscape, PS-2 design shall meet the following guidelines.

- This streetscape design applied to the Herndon Parkway from Van Buren Street to Spring Street.
- Along the northern and western sides of the street, the Parkway Streetscape shall include a minimum 6' wide street tree zone and minimum 6' wide brushed concrete sidewalk. The minimum sidewalk width is increased to 8' sidewalk with redevelopment of adjacent parcels.
- Along the southern and eastern sides of the street, the Parkway Streetscape shall include a minimum 6' wide street tree zone, minimum 8' wide asphalt two-way cycle track, and minimum 6' wide brushed concrete sidewalk. The minimum sidewalk width is increased to 10' with redevelopment of adjacent parcels.
- The cycle track and sidewalk shall be at a minimum separated by a 9" flush buffer that provides a visual and textural demarcation between facilities.

- Specialized surface treatments and streetscape furnishings shall be used for streetscapes within and along the edge of the HTOC as specified in the Urban Design and Architectural Guidelines for the Herndon Transit-Oriented Core.



DETAIL 4.3 Parkway Streetscape PS-2 Southern and Eastern Side Section



DETAIL 4.4 Parkway Streetscape PS-2 Northern and Western Side Section

CROSSWALKS & CURB RAMPS gateway/parkway

Crosswalks abutting the PS-1 Parkway Streetscape design shall meet the crosswalk standards and specifications for the Standard Streetscape as expressed in Chapter II. Curb ramps for all Gateway and Parkway Streetscapes shall also meet the curb ramp standards and specifications for the Standard Streetscape.

Marked crosswalks shall be used at all public right-of-way approaches and at private access drive curb cuts along Gateway Streets as specified below. The specified crosswalks function to improve the safety and comfort of pedestrians and also enhance the character of the street. Marked crosswalks across Gateway Streets shall be

considered mid-block, at T-intersections, and at private access drives, with or without traffic control devices, if any one of the following criteria apply:

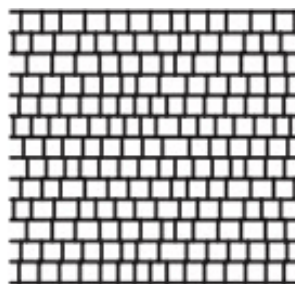
1. Pedestrians are frequently witnessed crossing.
2. The closest marked crosswalk is more than 200' away.
3. One of both sides of the street have a bus stop.
4. Land uses on one or both sides include pedestrian generators.
5. Incidents involving pedestrians have occurred as reported to HPD.

At Public Right-of-Way Approaches*

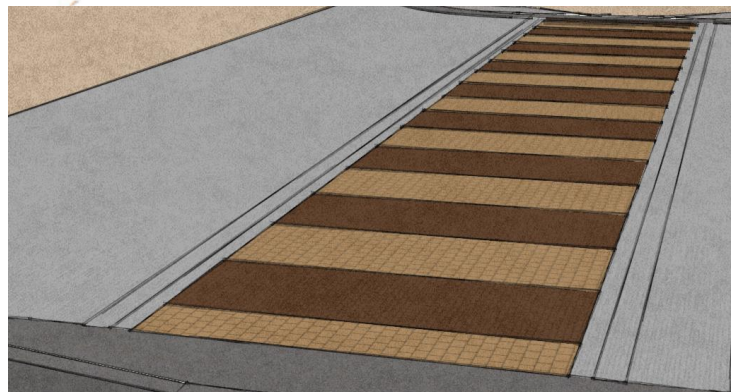
Type: TrafficPatternXD stamped thermoplastic by Ennis Flint (or equal as approved by TOH)
Colors: Cocoa, Sand (manufacturer specific colors)
Pattern: 2' wide bands alternating between two colors, British cobble stamp (**Detail 4.5 & Detail 4.6**)
Reflection: White reflective thermoplastic stripes on either side; 1' wide, separated from stamped surface by 4"
Size: Minimum 8' width not including thermoplastic white stripes on either side; may be greater at trail crossings, large intersections, or crossings with close access to Metrorail, as determined by town staff
*Additional Use: At any mid-block or T-intersection crossing



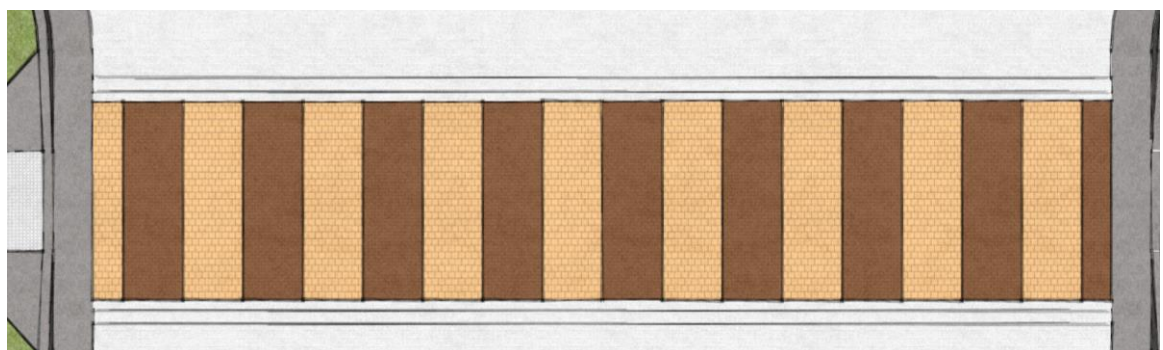
Precedent Image. TrafficPatternsXD Crosswalk with showing alternating colors and thermoplastic line edges



Detail 4.5 TrafficPatternsXD
British Cobble Pattern



Detail 4.6
Gateway Streetscape Crosswalk
Standard Design



At Private Curb Cuts for Commercial and Multi-Family Properties

Type: Standard Continental Pattern with white reflective thermoplastic markings
Size: Minimum 8' width

Coordination with Bicycle Facilities

* If the Gateway or Parkway streetscape or street includes dedicated bicycle facilities, a specialized and possibly separate crossing for cyclists may be necessary. Staff will develop a design for crosswalks in these instances on a project basis. The design may be informed by the *Herndon Parkway Cycle Track Design Guidelines*.

SPECIALIZED SURFACE TREATMENTS gateway/parkway

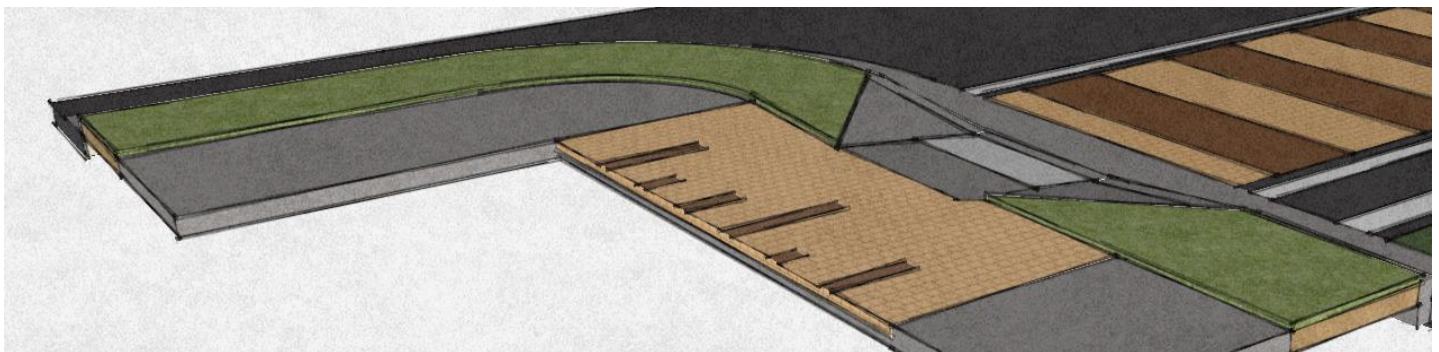
Median Treatments

Raised medians more than 5' in width shall entirely consist of landscaping including turf, planting beds, shrubs and trees where space allows. Diverse planting beds with a variety of low shrubs, grasses, and other perennials should be considered at major intersections and other focal points in consultation with the Community Forester. Raised medians less than 5' in width may instead contain concrete with a stamped thermoplastic finish to match the product, pattern and lighter color of the stamped crosswalks. Flush medians shall also have a surface treatment to match the product, pattern and lighter color of the stamped crosswalks.

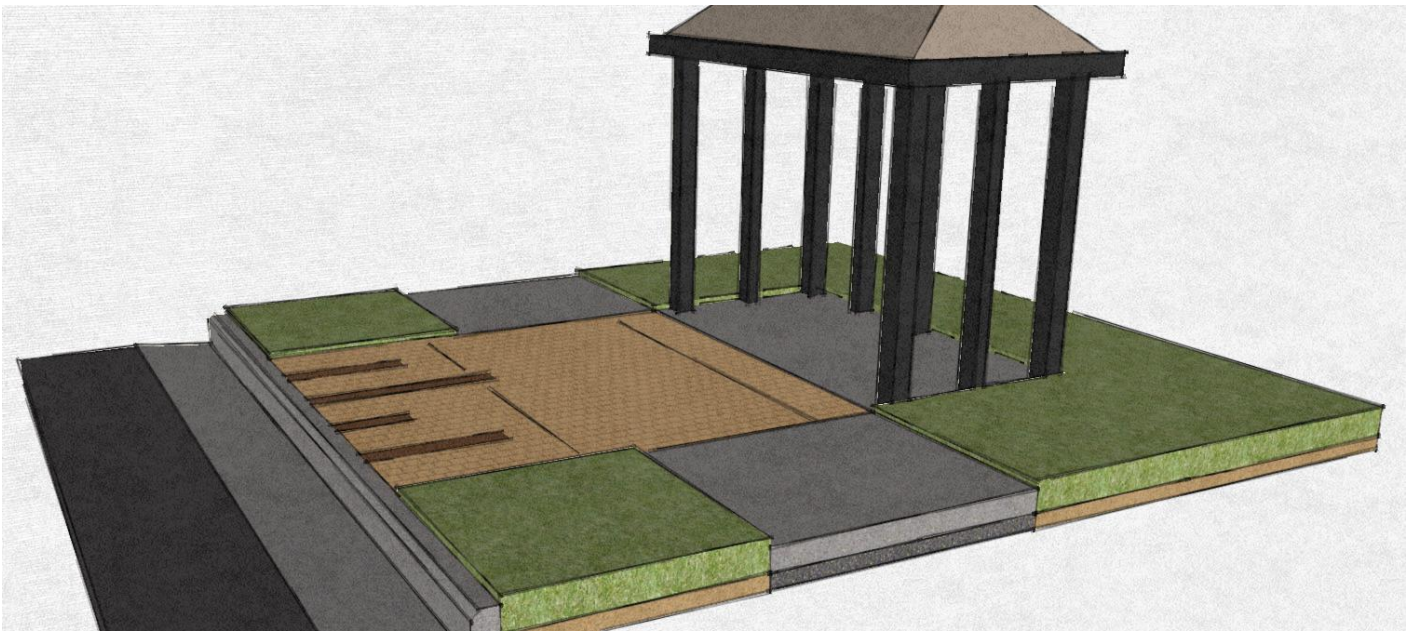
Other Specialized Treatment Options

Pavers or a stamped product should be used to further enhance Gateway Streets elsewhere. This specialized surface treatment shall be coordinated with the color and design of the stamped crosswalks. Locations where this treatment may be used include the sidewalk at public right-of-way intersection curb returns, the sidewalk and tree zone immediately in front of bus stops, the tree zone where bicycle racks or litter receptacles are placed, and other focal areas along Gateway Streets which may contain other streetscape amenities such as benches or wayfinding signs.

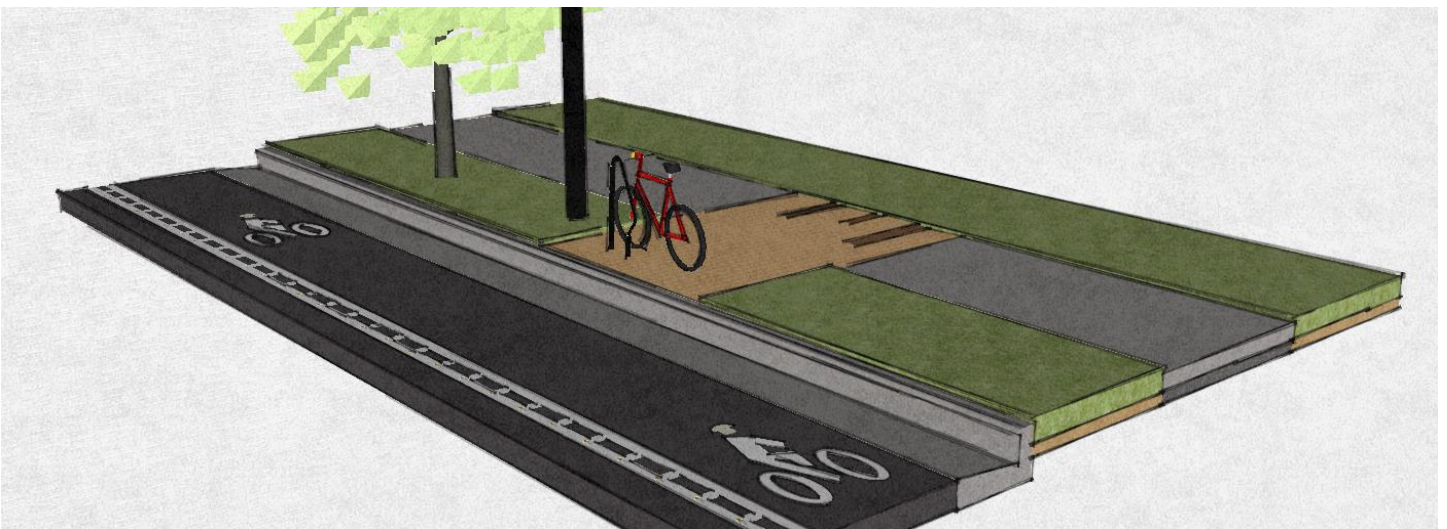
For the Parkway, PS-2, Streetscape type, specialized surface treatments shall be coordinated with the Urban Design and Architectural Guidelines for the Herndon Transit-Oriented Core. When adjacent properties are redeveloped, those treatments include decorative concrete pavers within the sidewalk.



DETAIL 4.7 Gateway Streetscape Special Surface Treatments Option – curb ramp area



DETAIL 4.8 Gateway Streetscape Special Surface Treatments Option – bus stop area



DETAIL 4.9 Gateway Streetscape Special Surface Treatments Option – bike rack area

LIGHTING & SIGNALS gateway

Where street lighting is identified as necessary along Gateway Streets, the luminaires specified below shall be used.

POST-TOP LIGHTS SPECIFICATIONS:

- Manufacturer: TBD (in consultation with Dominion Energy)
- Luminaire: Carlyle Acorn (Dominion Energy Basic Option), Black finish
- Pole: Cast aluminum, Smooth round, Tapered, Black finish, 14' height limit
- Base: TBD (in consultation with Dominion Energy)

Options: Internal glass refractor for light control
Lights Source: LED 3500K Color Temperature
Placement: Centered within the tree zone between curb and sidewalk
Use: On street segments between public right-of-way intersections. Provides moderate and consistent levels of illumination to the streetscape and partial roadway lighting. In residential areas, frequency of use and light levels may be further managed. The street light objectives lists in Chapter 2 on page 24 should be met.

COBRA LIGHT SPECIFICATIONS:

Manufacturer:
Luminaire: Cobra (Dominion Energy Basic Option), Black finish
Pole: Cast aluminum, Smooth round, Tapered, Black finish
Arm(Mast): Black finish
Base: TBD
Options:
Lights Source: LED 3500K Color Temperature
Placement: Varies depending on site specific conditions
Use: Limited to public right-of-way intersections and mid-block pedestrian crosswalks. Provides moderate and consistent levels of illumination to the streetscape and roadways. In residential areas, frequency of use and light levels may be further managed. The street light objectives lists in Chapter 2 on page 24 should be met.



[DETAIL 4.10 Luminaire Images](#)

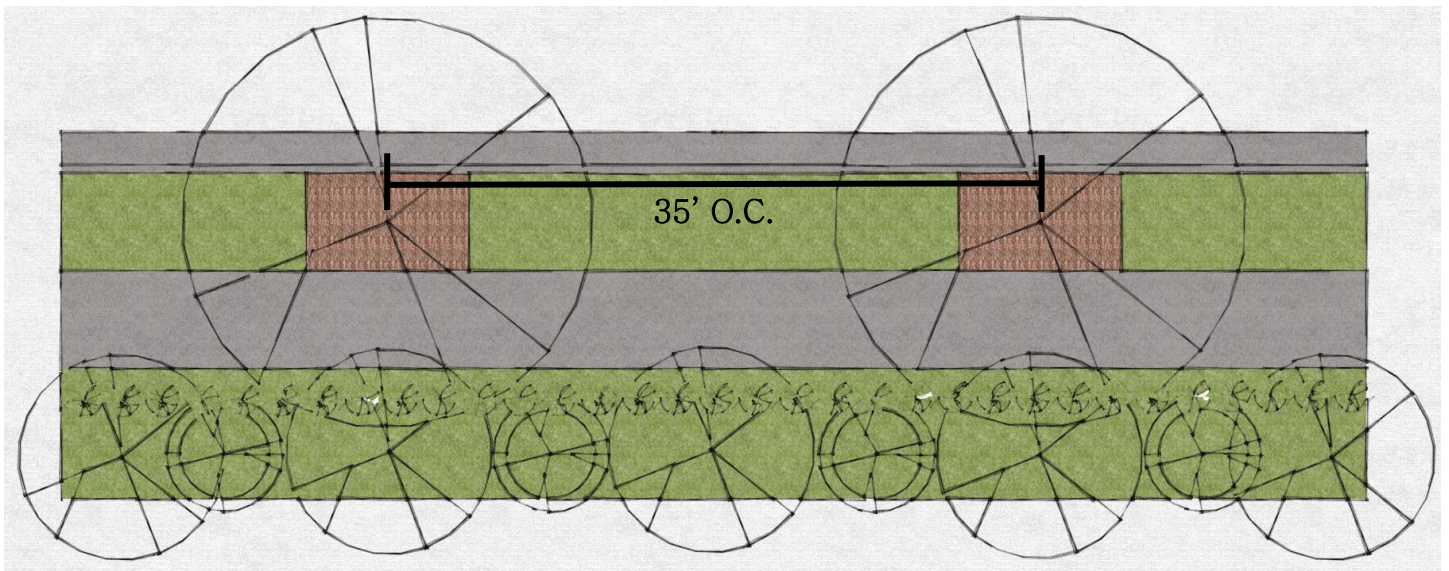


VEHICLE & PEDESTRIAN SIGNALS:

The areas regulated by the Gateway & Parkway Streetscapes chapter follow the guidelines and specifications for the Standard Streetscape traffic signals and pedestrian signals found in Chapter II on Page 20.

Gateway Streetscape landscaping shall include:

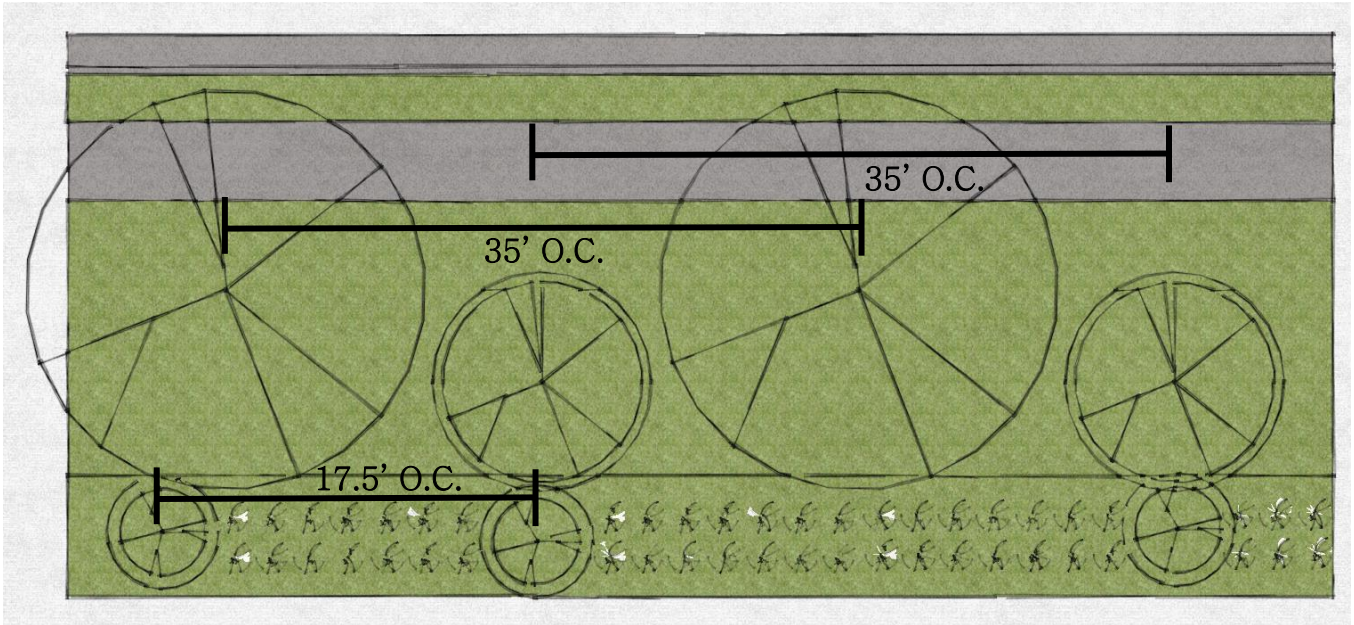
- Deciduous canopy tree every 35' centered within tree zone. No trees within 20' of public intersection curb return.
- Tree zone shall be comprised of turf, planting beds, or a combination of the two, with the exception of areas which have bus stops, bicycle racks, or litter receptacles, which would have paved or paver surface treatments.
- Diverse planting beds with a variety of low shrubs, grasses, and other perennials should be considered at major intersections and other focal points in consultation with the Community Forester.
- Minor adjustments to these standards may be considered in consultation with the Community Forester



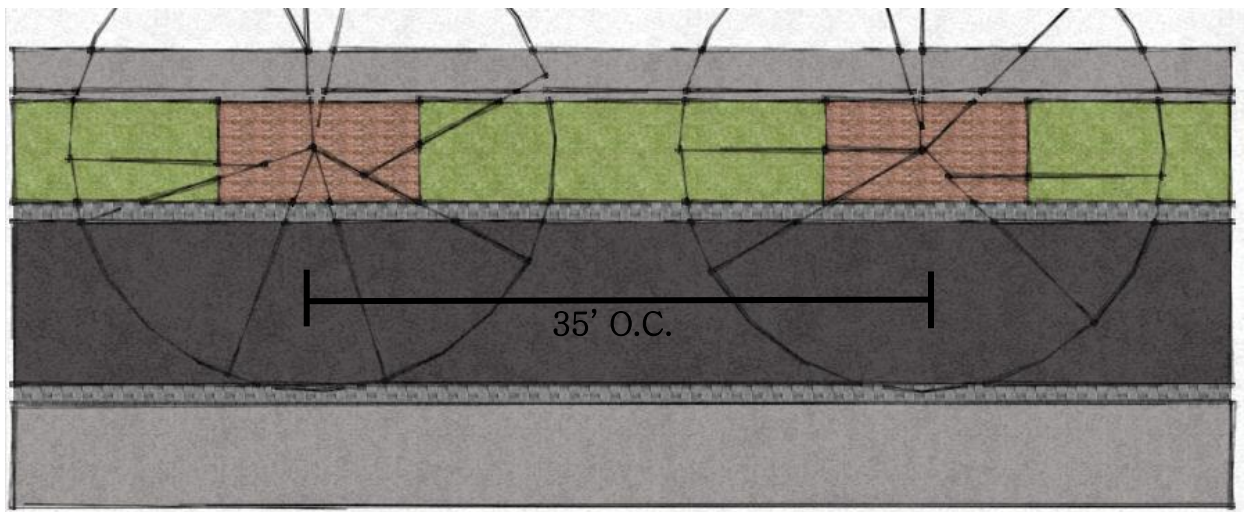
DETAIL 4.11 Gateway Streetscape Plan View

Parkway Streetscape landscaping shall include:

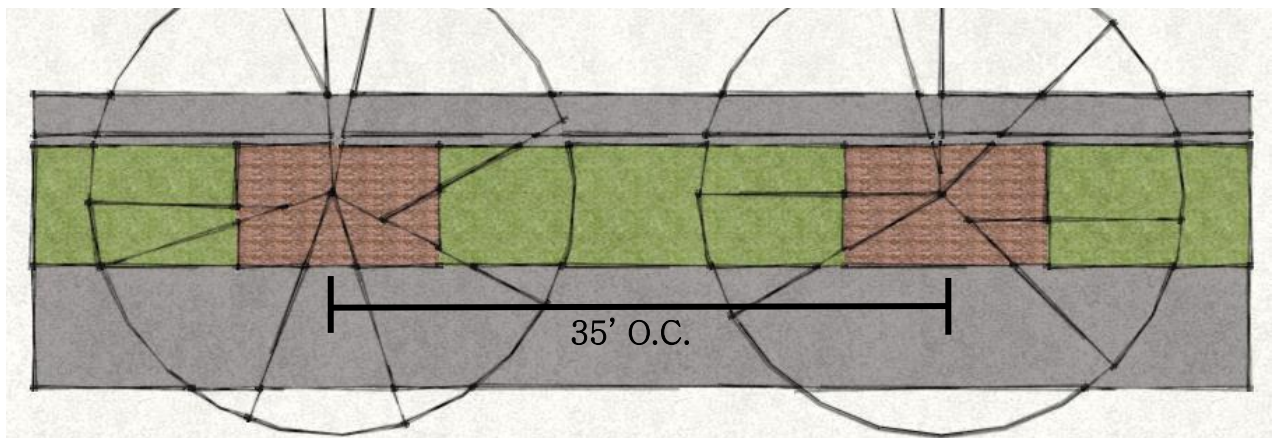
- Deciduous canopy tree every 35' minimum within landscape buffer.
- Evergreen tree every 35' minimum within landscape buffer.
- Groups of at least 3 shrubs every 17.5' minimum within landscape buffer
- Continuous shrub and tree screen if adjacent to parking lots of drive aisles.
- Tree may be placed in clusters as long as the total number equals or is greater than the total number of trees required if placed every 35' apart. Tree types (deciduous canopy and evergreen) may be planted in groups up to three.
- Ground treatment of turf or mulched beds and which may be maintained to allow natural undergrowth.
- The arrangement of all plant material within the landscape buffer can be irregular and random though must be placed to ensure the provision of adequate space for safe access on either side of the buffer and continued screening along the entirety of the frontage.
- Minor adjustments to these standards may be considered in consultation with the Community Forester



DETAIL 4.12 Parkway Streetscape PS-1 Plan View



DETAIL 4.13 Parkway Streetscape PS-2 Southern and Eastern side Plan View



DETAIL 4.14 Parkway Streetscape PS-2 Northern and Western side Plan View

SITE FURNISHINGS gateway/parkway

See Chapter II, Standard Streetscapes.

BUS SHELTER gateway/parkway

See Chapter II, Standard Streetscapes.

OTHER STREETSCAPE FEATURES gateway

Wall Treatments

Along Gateway Streets fabricated stone veneer wall treatments, especially close to the town entrances, are encouraged. In conjunction with the Gateway Signs, which is intended to coordinate with the veneer specified below, the added quality in design and detail can become character defining components of the Town and an important identifier for town boundaries. When this option is used, the following standards shall apply.

Type:	Dutch Quality Stone Veneer, Drystack, Ashen
Use:	Veneer for retaining wall, landscape walls, and other vertical surfaces
Placement:	At Town entrances and other important intersections within the public right-of-way

Signage and Other Features

As with the decorative wall treatments, additional design considerations should be given along Gateway Streets near town entrances. Though specific standards have not been detailed within this document, certain public signage and other features such as fencing or railings when used within the public right-of-way should be designed to coordinate with each other and with the Gateway signs. The highway memorial signs on Sterling Road offer a good example of design coordination with their black posts and pyramid post caps to mimic the caps on the Gateway Signs. Using a more decorative post for traffic signs at town entrances is an additional option to be considered for future standards to further bolster the image and demarcation of the Town.

CHAPTER V: HTOC STREETScape

Standards, Specifications, & *Guidelines for the Planning and Design of
Town Streetscape Projects*



HTOC STREETScape STANDARDS/SPECIFICATIONS TO BE ADDED IN CONJUNCTION WITH THE ADOPTION OF THE HTOC LANDSCAPING DESIGN GUIDELINES CURRENTLY IN DEVELOPMENT.