



July 18th, 2023
 Stallings Town Hall
 321 Stallings Road
 Stallings, NC 28104
 704-821-8557
www.stallingsnc.org

Planning Board Meeting Agenda

	Time	Item	Presenter	Action Requested/Next Step
	7:00 pm	Invocation Call Meeting to Order	Chair	N/A
1.		Approval of Agenda	Chair	Approve Agenda <i>Motion: I make the motion to:</i> <ol style="list-style-type: none"> 1) Approve the Agenda as presented; or 2) Approve the Agenda with the following changes: -----.
2.		Approval of Minutes A. May 16th, 2023	Chair	Approve Minutes <i>Motion: I make the motion to:</i> <ol style="list-style-type: none"> 1) Approve the Minutes as presented; or 2) Approve the Minutes with the following changes: -----.
3.		RZ23.06.01 A. To rezone 14721 Lawyers Road from Union County Zoning, Residential 20 (R-20) to Stallings Zoning, Mixed Use 2 (MU-2). B. Statement of Consistency and Reasonableness.	Max Hsiang	Approval/Denial of RZ23.06.01 <i>Motion: I make the motion to recommend:</i> <ol style="list-style-type: none"> 1) Approval of the request as presented. 2) Defer the request to -----. 3) Denial of the request as submitted.
4.		Downtown Streetscape Revisit A. To revisit the Downtown Streetscape Plan with the Planning Board in July and the Town Council on August 14th.	Max Hsiang	
5.		Adjournment	Chair	1) <i>Motion: I make the motion to adjourn.</i>



General Rezoning Application RZ23.06.01

07-18-2023

Staff Report | Planning Board



Request

□ Zoning Request

Coby A. Honeycutt submitted a general rezoning request for **Union County Residential 20 (R-20)** to **Mixed-Use 2 (MU-2)** at the location at parcel ID #08324001, a property 1.23 acres in size at 14721 Lawyers Rd.

**Planning Board:
07/18/23**



**Town Council
Hearing:
08/14/2023**



History

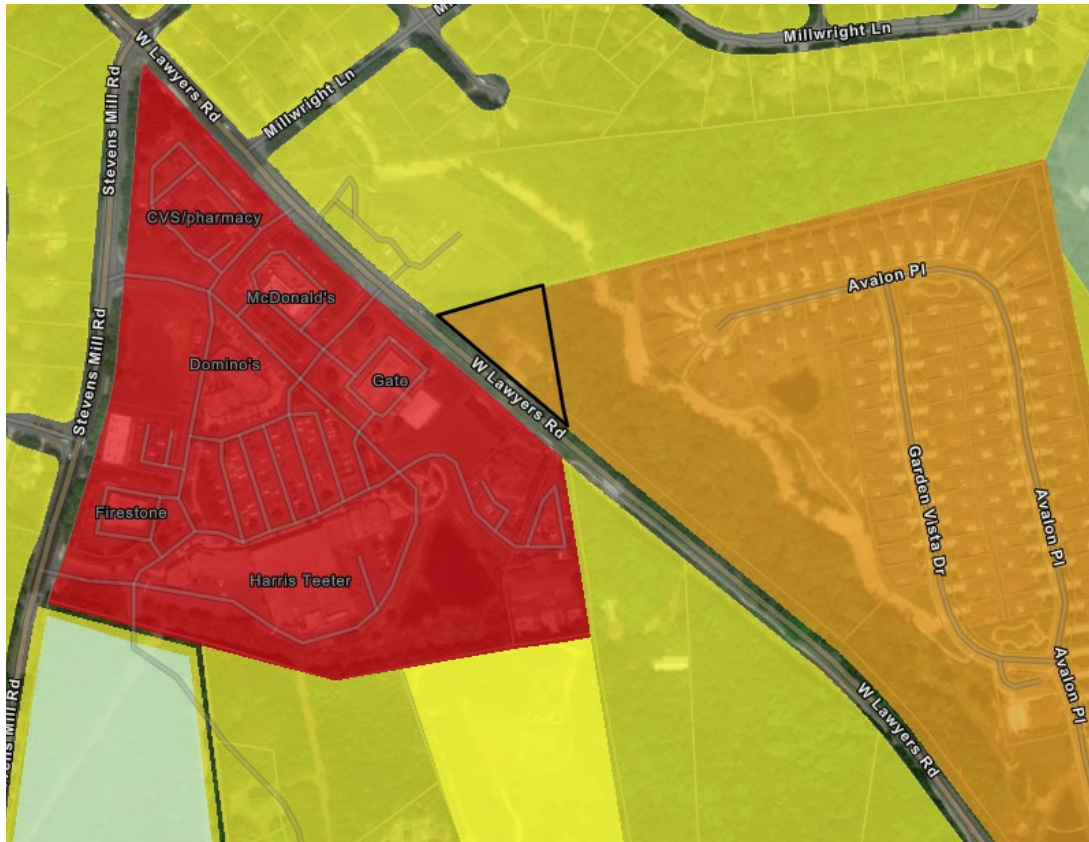
- ▣ Currently, the property is in Union County and is a “donut hole” within Stallings boundary.
- ▣ This rezoning is running concurrent with the annexation and the Town Council will hear the annexation on August 14, 2023.



Aerial



Future Land Use



- The Land Use Plan shows this area as **Multi-Family Neighborhood**.
 - Primary Land Uses:
Apartments, Condominium, Senior Housing
 - Secondary Land Uses:
Community Center, pool, natural areas
- Consistency with request:
Inconsistent but reasonable due to surrounding uses



Staff Recommendation

- Staff recommends approval of RZ23.06.01. MU-2 is consistent with the shopping center/ commercial across the street. MU-2 zoning will also help increase the number of commercial business opportunities in the Town per the Town of Stallings Economic Development Plan.

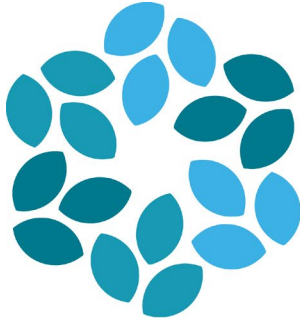
Vote and Statement of Consistency & Reasonableness



- **Step 1.**
 - Motion to recommend [Approval/Denial](#) for RZ23.06.01.

- **Step 2.**
 - With a statement of consistency that the proposal is [Consistent/Inconsistent](#) and [Reasonable/Not Reasonable](#) with the Comprehensive Land Use Plan.

- **Step 3.**
 - Staff suggested reasoning:
 - The rezoning promotes the area's health, safety, and welfare.



**PLANNING
& ZONING**
TOWN of STALLINGS

Questions?



Statement of Consistency and Reasonableness

ZONING AMENDMENT: RZ23.06.01

REQUEST: Coby A. Honeycutt submitted a general rezoning request for Union County Residential 20 (R-20) to Mixed-Use 2 (MU-2) at the location at parcel ID #08324001, a property 1.23 acres in size at 14721 Lawyers Rd.

WHEREAS, The Town of Stallings Town Council, hereafter referred to as the “Town Council”, adopted the Stallings Comprehensive Land Use Plan on November 27, 2017; and

WHEREAS, the Town Council finds it necessary to adopt a new land development ordinance to maintain consistency with the Comprehensive Land Use Plan; and

WHEREAS, the Town Council finds it necessary to revise the Unified Development Ordinance to comply with state law found in NCGS § 160D.

WHEREAS, the Town Council finds it necessary to consider the Planning Board’s recommendations.

THEREFORE, The Planning Board hereby recommends that the proposed zoning amendment is consistent and reasonable with the Comprehensive Land Use Plan adopted on November 27, 2017, based on the goals and objectives outlined in the document of promoting quality development and consistency with all state-mandated land use regulations established through NCGS § 160D. The Planning Board recommends to approve the proposed amendment and stated that the Planning Board finds and determines that the zoning/text amendment is consistent and reasonable with the key guiding principles, goals, and objectives of the Comprehensive Land Use Plan for the following reasons:

1. This rezoning is consistent with adjacent properties' shopping center/ commercial.
2. This rezoning zoning will also help increase the number of commercial business opportunities in the Town per the Town of Stallings Economic Development Plan.

Recommended this the __ day of _____, 2022.

Planning Board Chair

Attest:

Planning Staff



Town of
Stallings

PAID JUN 15 2023

315 Stallings Road • Stallings, North Carolina 28104

Zoning Map Amendment/Rezoning Application

Application # (Staff): _____

Date Filed: 6/15/23

Community Meeting Date (If Applicable): N/A

Planning Board Date: July 18

Town Council/Hearing Date:

August 14

Zoning Map Amendment - Conventional	
Less than 2 acres	\$200.00
2-10 acres	\$400.00
Greater than 10 acres	\$1000.00
Zoning Map Amendment - Conditional Zoning	
Less than 2 acres	\$400.00
2-10 acres	\$800.00
Greater than 10 acres	\$1600.00
Conditional Use Permit Request	\$300.00
Zoning Text Amendment - UDO	\$500.00

To the Planning Board and Town Council of Stallings, NC:

I (we) the undersigned do hereby respectfully make application and request the Planning Board and Town Council to amend the zoning map of the Town of Stallings: In support of this application, the following facts are shown:

Conditional District Zoning?	Yes <u>(No)</u>
Current Zoning (Circle One)	SFR-1 SFR-2 SFR-3 SFR-MH SRF-MH MU-1 MU-2 MFT AG TC CIV C-74 CP-485 VSR IND R-20 Union County
Proposed Zoning (Circle One)	SFR-1 SFR-2 SFR-3 SFR-MH MU-1 <u>MU-2</u> MFT AG TC CIV C-74 CP-485 VSR IND
Overlay Districts (If Applicable): (Circle One)	TNDO SCO HIO

Physical Property Address: 14721 Lawyers Rd. Matthews NC 28104

Description of Rezoning:

Tax Parcel Number(s) (PID Number): 08324001		Total Acreage: 1.23	
Property Owner(s): Coby A. Honeycutt			
Owner's Address: 518 Dovefield Drive			
City: Indian Trail		State: NC	Zip: 28079
Contact Phone Number :		Property Owner Email Address: Coby.Honeycutt@aol.com	
Applicant Name if different than owner:		Applicant's Address:	
Applicant Email Address :		Applicant's Phone Number: 704-345-8389	

MAP REQUIREMENTS

This application shall be accompanied by two (2) maps drawn to scale. Such maps shall be produced at a minimum of 18' x 24". An electronic version of the map shall also be submitted. The maps shall contain the following information:

- The subject property plus such property as to show the location of the subject property with reference to the nearest street intersection, railroad, stream or other feature identifiable on the ground.
- All properties which abut the property.
- If the property is in a subdivision of record, a map of such portion of the subdivision that would relate to the subject property to the closest street intersection.
- A written metes and bounds description of the property or properties.
- The present and proposed zoning classification of the lot(s) in question.
- The property identification number(s) of the lot(s) in question as issued by the Union County Tax Department.
- Full schematic design/site plan as described in Article 7.7 of the Stallings Development Ordinance (*only if the application is for a conditional district*).

MAP AMENDMENT REQUIRMENTS

If a straight rezoning (not a CD) is requested, then please leave the space below blank.

If a Conditional District (CD) is requested, you must list the specific sections of the Unified Development Ordinance from which you seek changes. You may list these on a separate sheet of paper.

- As described in Article 5.4 of the Stallings Development Ordinance, whenever there is a zoning map amendment, the Town of Stallings is required to notify the owner of said parcel of land as shown on the county tax listing, and the owner of all parcels of land abutting that parcel of land as shown on the county tax listing. The required notice shall be mailed by first class mail at least 10 days but not more than 25 days prior to the date of the public meeting.

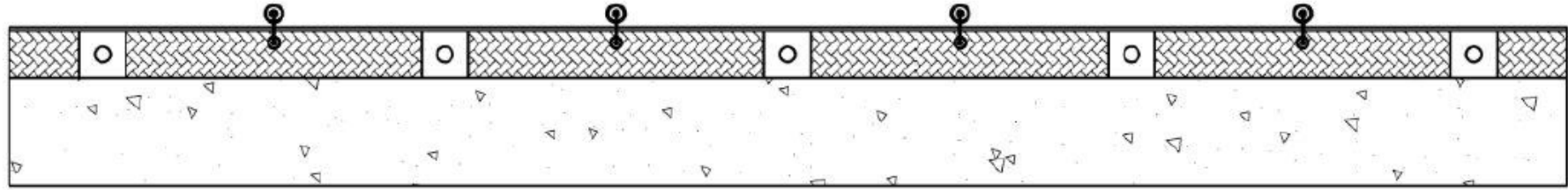
Streetscape Plan Design Recap



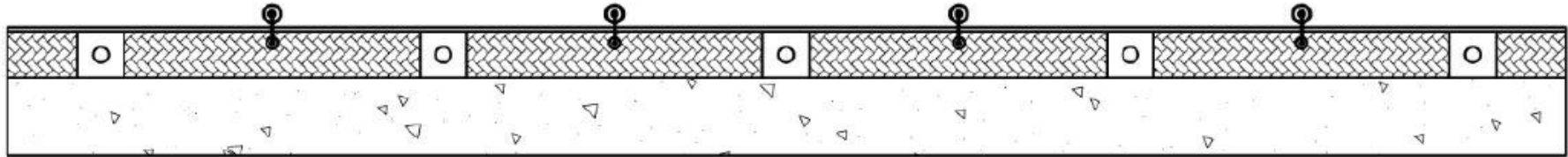
PLAN TYPE OVERVIEW

Section Bases

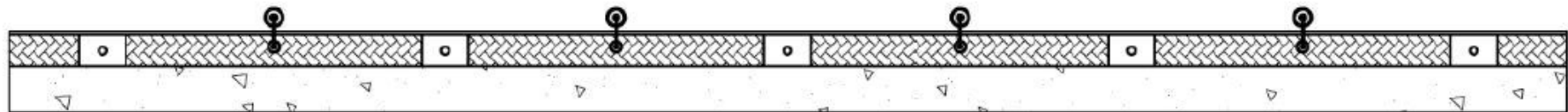
Plan Type 1 - "Greenway"



Plan Type 2 - "Typical"



Plan Type 3 - "Narrow Side Street"



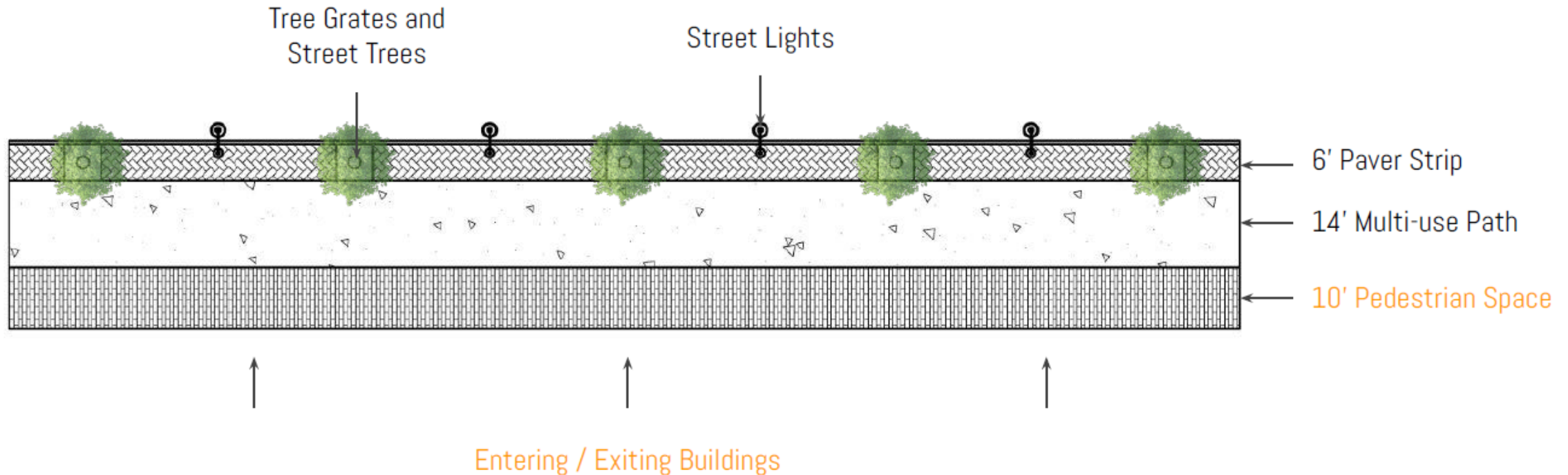
PLAN TYPE 1A

Downtown Stallings Primary Corridor with Pedestrian and Greenway "Spine" Facilities

"Greenway Against Building"

- Bike and Pedestrian
- 14' wide multi-use path
- 6' wide paver strip
- 10' wide pedestrian space adjacent to commercial space

- If the area is identified as a Greenway on the adopted Greenway Master Plan, it is intended to be adjacent to a commercial space.
- *Estimated* Cost for 200' 1A Base Section: \$60,786.50



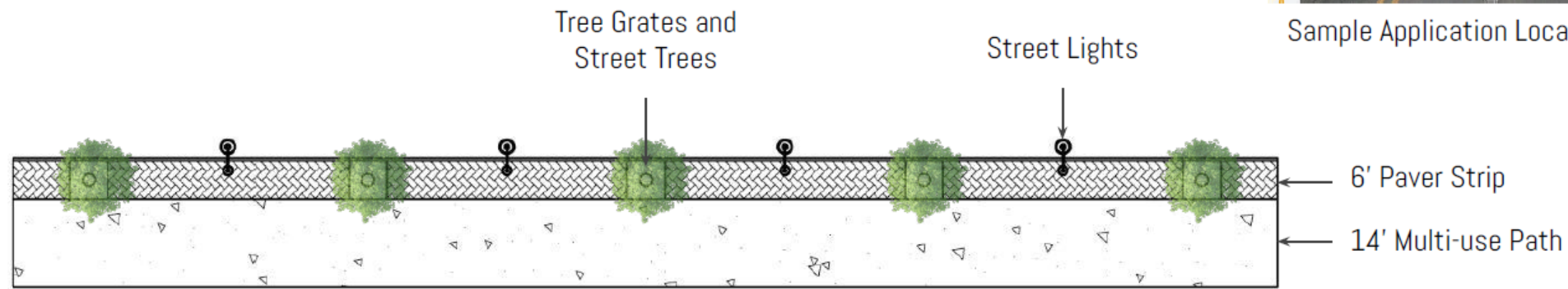
PLAN TYPE 1B

Downtown Stallings Primary Corridor with Pedestrian and Greenway "Spine" Facilities

- Bike and Pedestrian
- 14' wide multi-use path
- 6' wide paver strip
- If the area is identified as a Greenway on the adopted Greenway Master Plan and it is NOT adjacent to a commercial space.
- *Estimated* Cost for 200' 1B Base Section: \$53,486.50



Sample Application Location

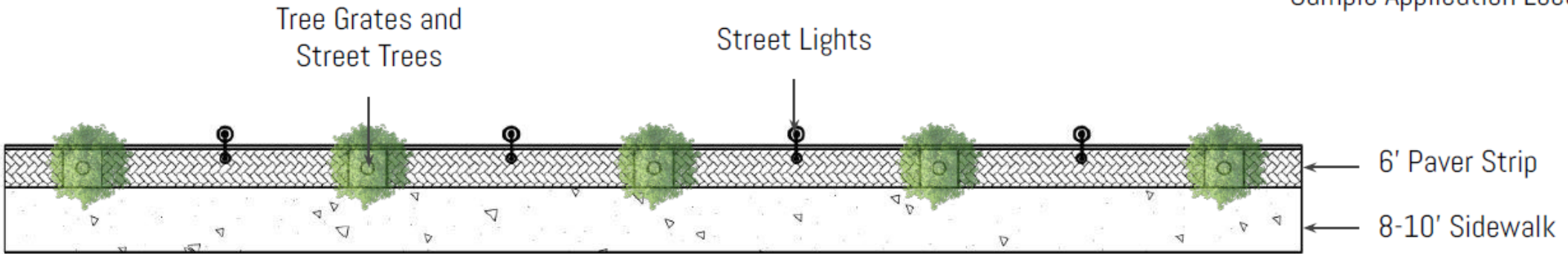


PLAN TYPE 2

Downtown Stallings Primary Corridor with Pedestrian-only Facilities

- Pedestrian-only
- 8-10' wide sidewalk
- 6' wide paver strip

• *Estimated* Cost for 200' Type 2 Base Section: \$50,686.50



Sample Application Location

PLAN TYPE 3

Secondary Road with Pedestrian-only Facilities

- Pedestrian-only
- 6-8' wide sidewalk
- 4-6' wide paver strip

● *Estimated* Cost for 200' Type 3 Base Section: \$46,663.75

“Narrow Side Street”



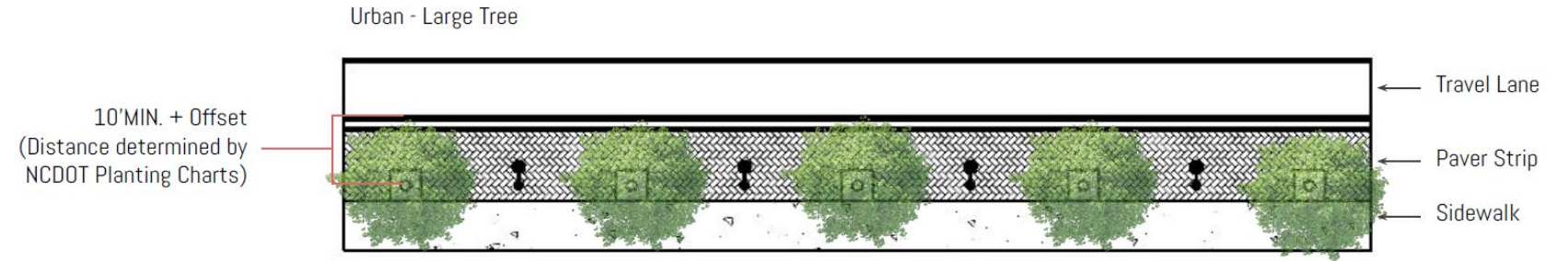
Sample Application Location



Subtypes

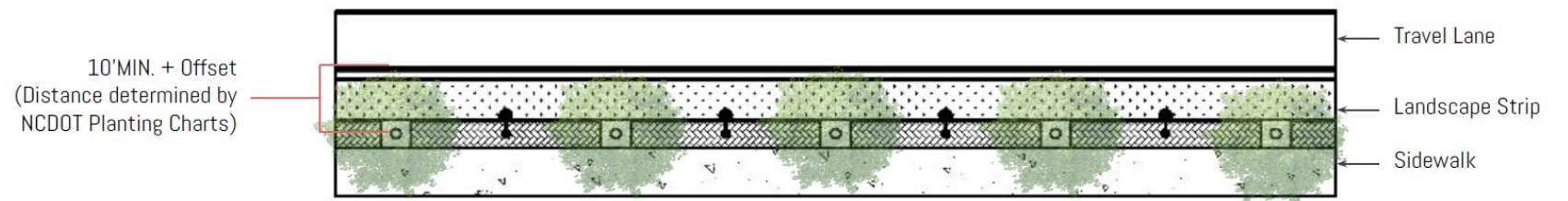
DOWNTOWN CORE FORM

Road Offset Solution



LANDSCAPE FORM

Road Offset Solutions



TYPE

1A: Greenway Against Building	1B: Greenway	2: Typical	3: Narrow side street
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Is this section of streetscape part of the greenway? If yes, use Type 1. If not, use Type 2 or 3.

If it is a greenway section, does the greenway run in front of commercial space? If yes, use Type 1A. If no, then use Type 1B.

If not a greenway section, how much space from edge of curb to edge of construction buffer? If 14' or greater use Type 2. If less than 14', use Type 3.

SUBTYPE

Downtown Core	Landscape	On-Street Parking
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Is on-street parking feasible? If yes, use On-street Parking Form. If not, see next question.

Is this section of streetscape located in the "Downtown Core"? If yes, use Downtown Core Form. If not, use Landscape Form. (Exact amount of offset determined by road speed and location.)

STREET TREES

Utility Lines	No Overhead Obstructions
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Are there power/utility lines in the streetscape section? If yes, only use trees approved for under power lines. (See Tree Type Section.)

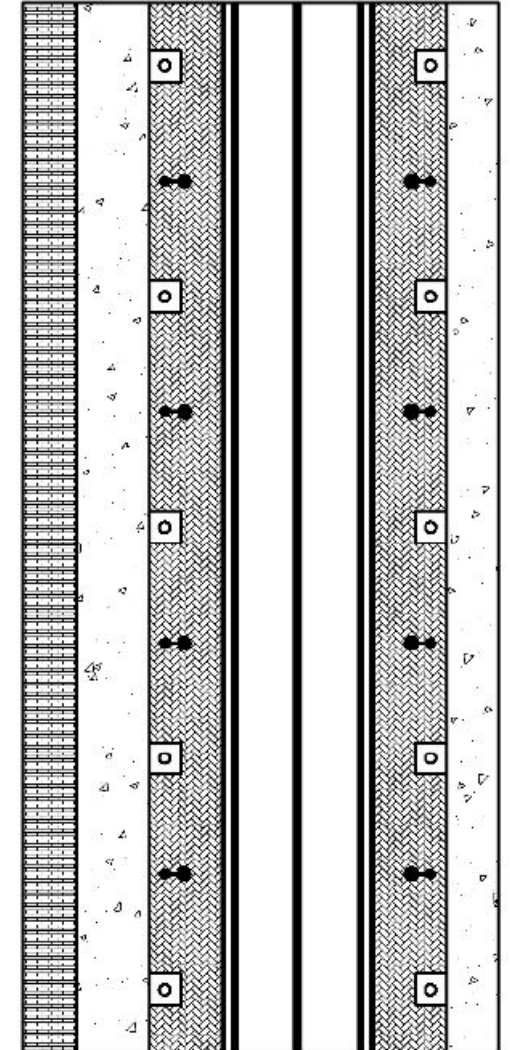
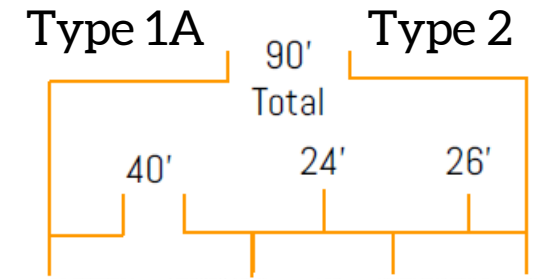
RENDERING 1

Stallings Road Existing Conditions



RENDERING 1

Downtown Core Along Stallings Rd



RENDERING 2

Extension Road Existing Conditions



RENDERING 2

Extension Road with Streetscape

Type 3



Materials





STALLINGS STREETSCAPE

DESIGN STANDARDS AND DETAILS PLAN

CONTACT



TOWN OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557

DESTINATION BY DESIGN

PLANNING | ENGINEERING | COMMUNICATIONS

LANDSCAPE ARCHITECT / PROJECT MANAGER: ALEX GOTHERMAN, PLA
DESTINATION BY DESIGN PLANNING
136 FURMAN ROAD, SUITE 6
BOONE, NC 28607
(828)386-1866

CONTENTS

A1-A2	PROJECT OVERVIEW
B1-B8	STREETSCAPE PLAN TYPES
C1-C2	STREETSCAPES IN ACTION
D1-D8	HARDSCAPE MATERIAL + SITE FURNISHINGS
E1-E10	STREET TREES

Minimum Large Tree Setbacks – Municipal and Local Roads:

URBAN / SUBURBAN			RURAL		
Posted Speed	Urban Street Type	Clear Zone (setback)	Posted Speed	Rural Street Type	Clear Zone (setback)
≤ 25 mph	Main Street, Avenue, Boulevard	8'	≤ 25 mph	Village Main Street	8'
>25 - 35 mph	Avenue, Boulevard	10'	>25 - 35 mph	Avenue, Boulevard, Rural Road	14'
>35 - 45 mph	Boulevard, Parkway	12'	>35 - 45 mph	Boulevard Parkway, Rural Road	20'
> 45 mph	Parkway	30'	> 45 mph	Parkway, Rural Road	30'

Distances measured to the center line of the tree.

Minimum Small Trees and Shrub Setbacks – All Routes:

Posted Speed	Section	Description	Distance Clear Zone (setback)
≤ 35 mph	Curb & Gutter	to foliage line of shrub	1'
		to center of small tree	5'
	Shoulder	to foliage line of shrub	2'
		to center of small tree	8'
>35 - 45	Curb & Gutter	to foliage line of shrub	6'
		to center of small tree	8'
	Shoulder	to foliage line of shrub	8'
		to center of small tree	10'
Greater than 45 mph	Curb & Gutter	to foliage line of shrub	10'
		to center of small tree	20'
	Shoulder	to foliage line of shrub	15'
		to center of small tree	20'

NOTE:

- SETBACK DISTANCES ARE MEASURED FROM THE EDGE OF TRAVEL WAY - IF NO LANE MARKING, THEN 11' LANE
- BIKE LANES AND ON STREET PARKING MAY BE INCLUDED IN BUFFER SETBACK MEASUREMENTS
- VERTICAL CLEARANCE IS 16' ABOVE STREETS AND 7' ABOVE SIDEWALKS
- 4" DIAMETER OR LARGER IS CONSIDERED A LARGE TREE
- 40' RECOMMENDED SPACING BETWEEN LARGE TREES
- PLANTS IN SETBACK ZONE CANNOT EXCEED 2' IN HEIGHT

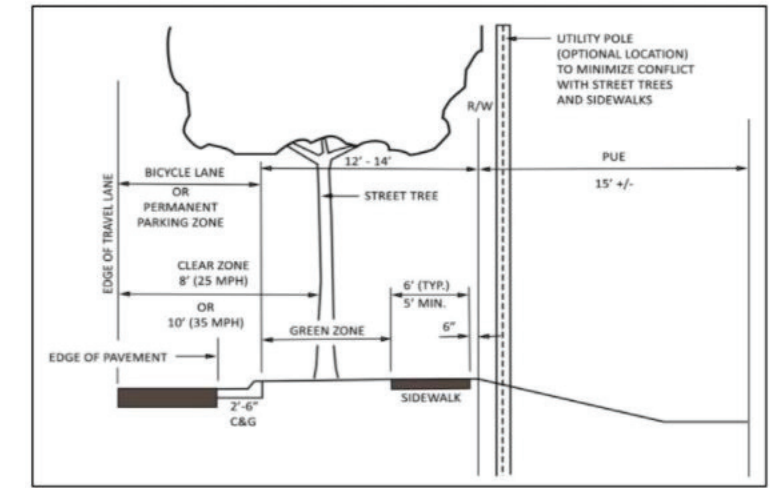


Figure 1 Recommended Green Zone and Sidewalk Zone (Complete Streets Planning and Design Guide)



STREETSCAPE DESIGN STANDARDS

Client: CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557	 <p>DESTINATION BY DESIGN PLANNING ENGINEERING COMMUNICATIONS</p> <p>136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866</p>	Project #: Drawn By: Checked By: Scale: Varies Issue _____ Date _____ 1 _____ JULY 2022
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NCDOT PLANTING GUIDELINES



A-1

STREETSCAPE TYPE:

Is this section of streetscape part of existing or proposed greenway?

If yes, use type...	
1A: GREENWAY AGAINST BUILDING	1B: GREENWAY

If no, use type...	
2: TYPICAL STREET	3: NARROW SIDE STREET

If it is a greenway section, does the greenway run in front of existing or proposed commercial space?

If yes, use type...	If no, use type...
1A: GREENWAY AGAINST BUILDING	1B: GREENWAY

If not a greenway section, how much space from edge of curb to edge of construction buffer?

If 14' or greater, use type...	If less than 14', use type...
2: TYPICAL STREET	3: NARROW SIDE STREET

STREETSCAPE SUB-TYPE:

Is on-street parking feasible?

If yes, use sub-type...
ON-STREET PARKING FORM

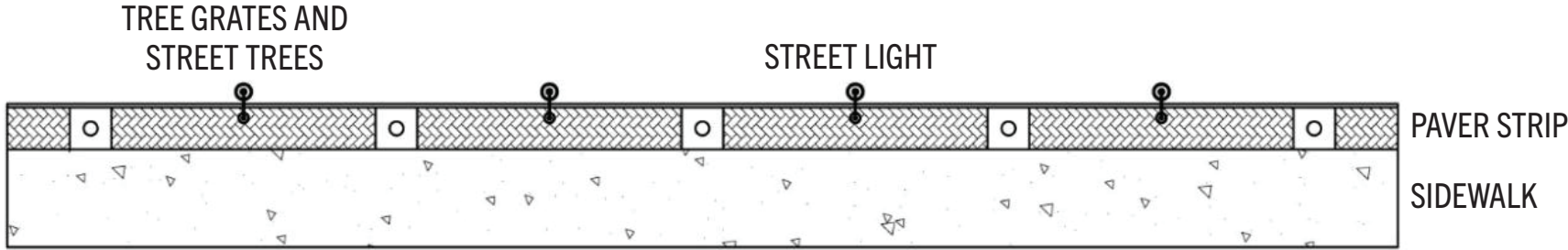
If no, is this section of streetscape located in the "Downtown Core"?	
If yes, use sub-type...	If no, use sub-type...
DOWNTOWN CORE FORM	LANDSCAPE FORM

NOTES:

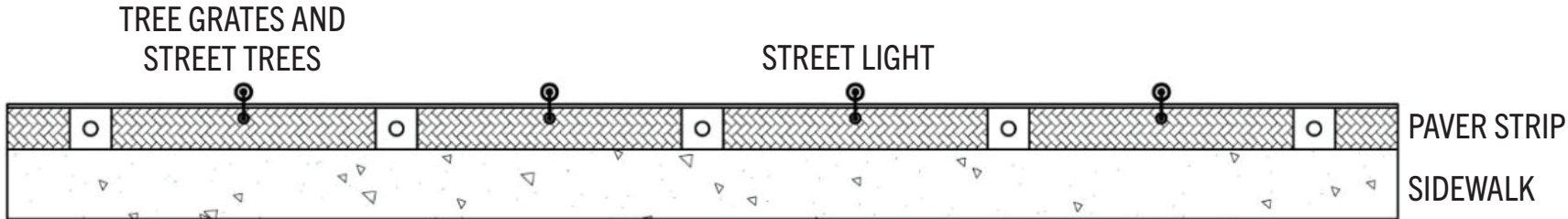
- WHEN DETERMINING TREE TYPE, OVERHEAD UTILITY LINES ARE THE MAIN FACTOR TO CONSIDER. IF THERE IS AN OVERHEAD POWER LINE ONLY USE THE APPROVED TREES PERMITTED UNDER OVERHEAD UTILITIES, SEE APPROVED TREE LIST IN SECTION E FOR MORE DETAILS.

		<h1>STREETSCAPE DESIGN STANDARDS</h1>	
<p>Client:</p> <p>CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557</p>	 <p>DESTINATION BY DESIGN PLANNING ENGINEERING COMMUNICATIONS</p> <p>136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866</p>	<p>Project #: Drawn By: Checked By: Scale: Varies</p> <p>Issue _____ Date _____ 1 _____ JULY 2022</p>	<h1>A-2</h1>
<p>PROJECT OVERVIEW</p>			

SECTIONS



PLAN TYPE 1 - GREENWAY



PLAN TYPE 2 - TYPICAL



PLAN TYPE 3 - NARROW

OVERVIEW:

- GREENWAY + GREENWAY AGAINST BUILDING
 - DOWNTOWN STALLINGS PRIMARY CORRIDOR WITH PEDESTRIAN AND GREENWAY SPINE FACILITIES
- TYPICAL
 - DOWNTOWN STALLINGS PRIMARY CORRIDOR WITH PEDESTRIAN-ONLY FACILITIES
- NARROW SIDE-STREET
 - SECONDARY ROAD WITH PEDESTRIAN-ONLY FACILITIES



Client: CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557	DESTINATION BY DESIGN PLANNING ENGINEERING COMMUNICATIONS 136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866	Project #: Drawn By: Checked By: Scale: Varies
		Issue: 1 Date: JULY 2022

STREETSCAPE PLAN TYPES	B-1
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SAMPLE LOCATION



STREETSCAPE DESIGN STANDARDS

Client:

CITY OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557

 **DESTINATION BY DESIGN**
PLANNING | ENGINEERING | COMMUNICATIONS

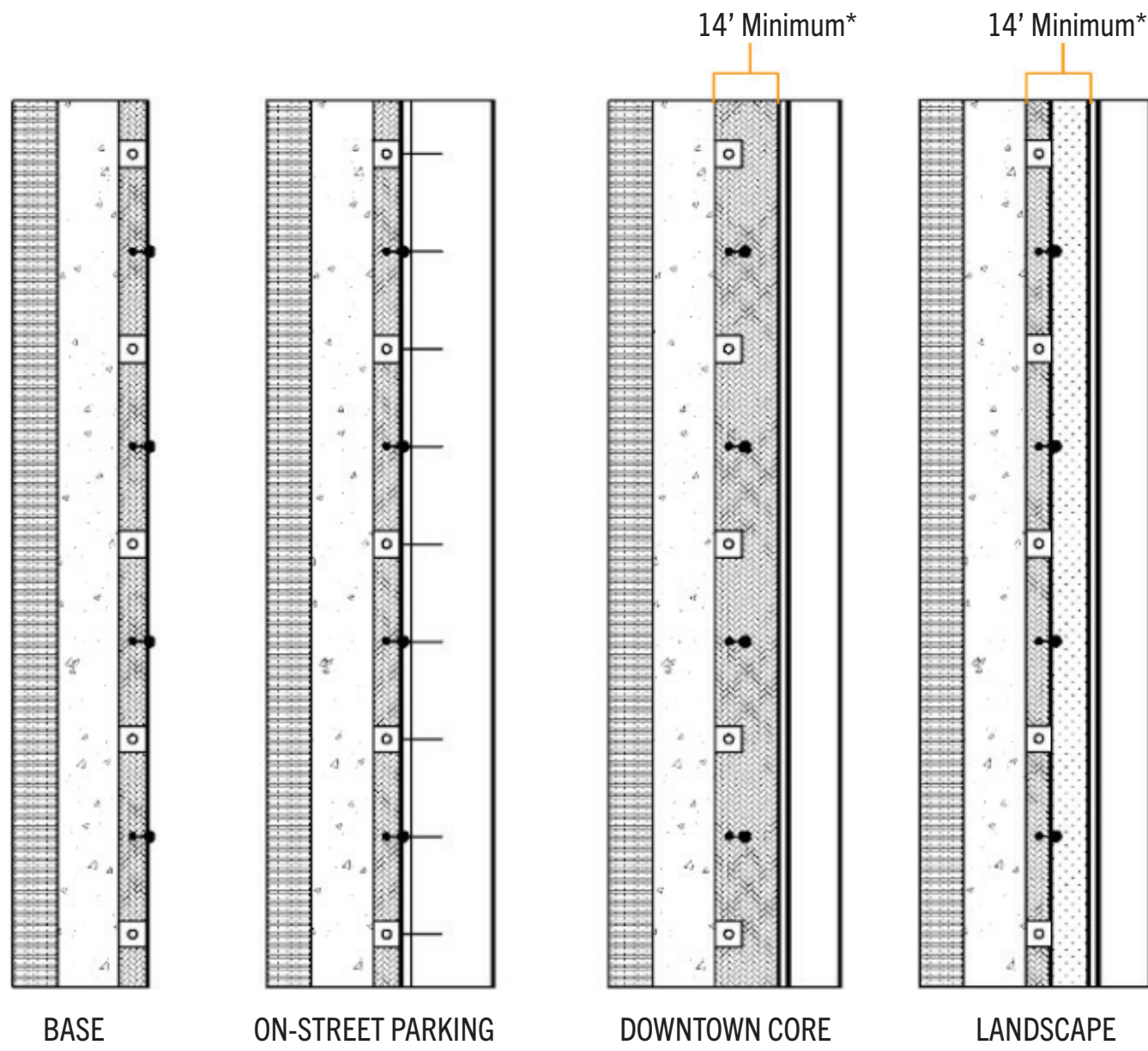
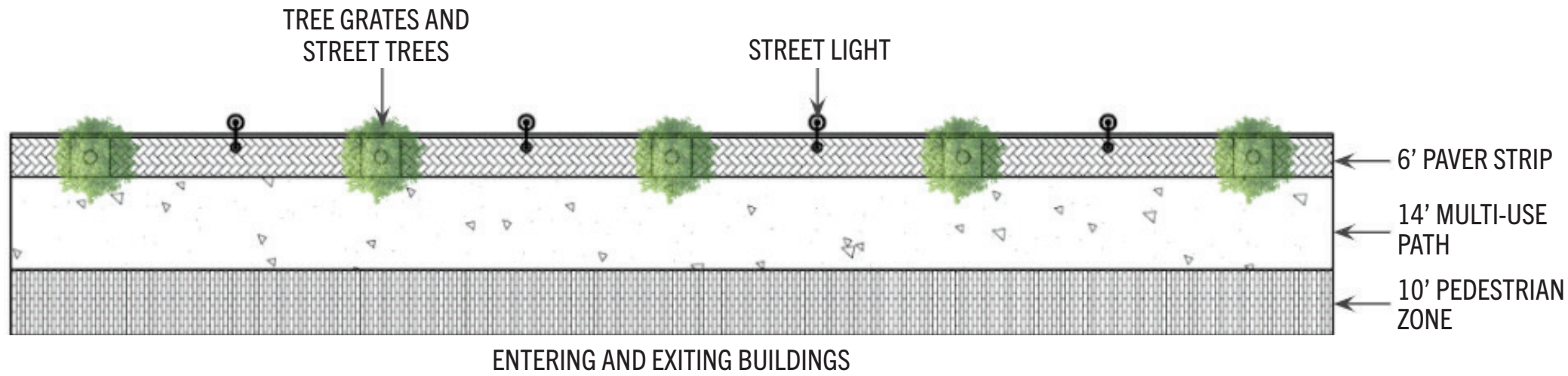
136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

Project #:
Drawn By:
Checked By:
Scale: Varies

Issue _____ Date _____
1 _____ JULY 2022

STREETSCAPE PLAN
TYPES

B-2



TOTAL WIDTH BUILDING FACE TO CURB = 30'

TOTAL WIDTH BUILDING FACE TO CURB = 38'

GREENWAY AGAINST BUILDING

- BIKE AND PEDESTRIAN
- 14' WIDE MULTI-USE PATH
- 6' WIDE PAVER STRIP
- 10' WIDE PEDESTRIAN SPACE ADJACENT TO COMMERCIAL SPACE



NOTE:

* TOTAL PAVER OR LANDSCAPE STRIP WIDTH MAY INCREASE PER ROAD SPEED LIMIT AND REQUIRED BUFFER DISTANCES OUTLINED IN THE NCDOT PLANTING GUIDELINES. SEE SHEETS A-1 AND B-8 FOR MORE DETAILS.



STREETSCAPE DESIGN STANDARDS

Client:
CITY OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
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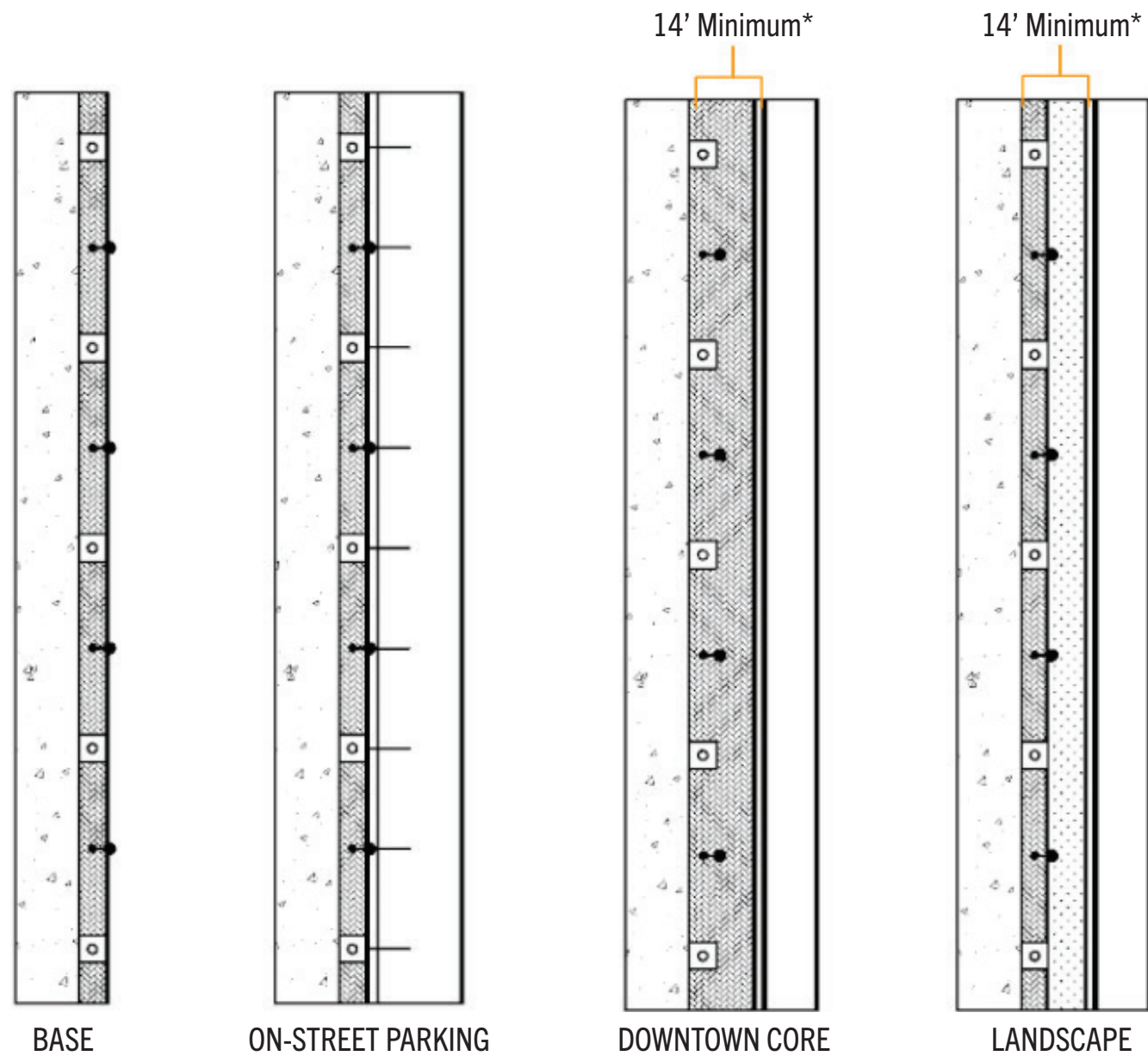
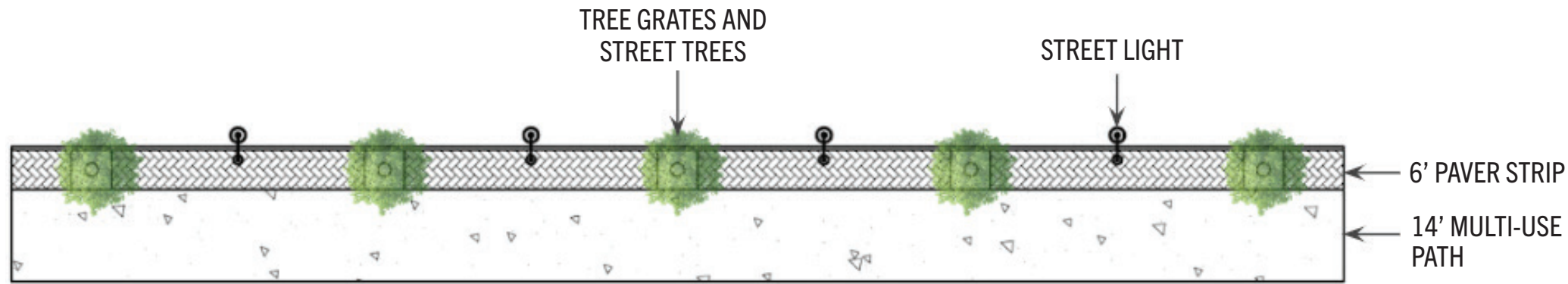
DESTINATION BY DESIGN
PLANNING | ENGINEERING | COMMUNICATIONS

136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

Project #:
Drawn By:
Checked By:
Scale: Varies
Issue _____ Date _____
1 _____ JULY 2022

STREETSCAPE PLAN
TYPE 1A

B-3



TOTAL WIDTH BUILDING FACE TO CURB = 20'

TOTAL WIDTH BUILDING FACE TO CURB = 28'

GREENWAY

- BIKE AND PEDESTRIAN
- 14' WIDE MULTI-USE PATH
- 6' WIDE PAVER STRIP



NOTE:

* TOTAL PAVER OR LANDSCAPE STRIP WIDTH MAY INCREASE PER ROAD SPEED LIMIT AND REQUIRED BUFFER DISTANCES OUTLINED IN THE NCDOT PLANTING GUIDELINES. SEE SHEETS A-1 AND B-8 FOR MORE DETAILS.



STREETSCAPE DESIGN STANDARDS

Client:

CITY OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557

DESTINATION BY DESIGN
PLANNING | ENGINEERING | COMMUNICATIONS

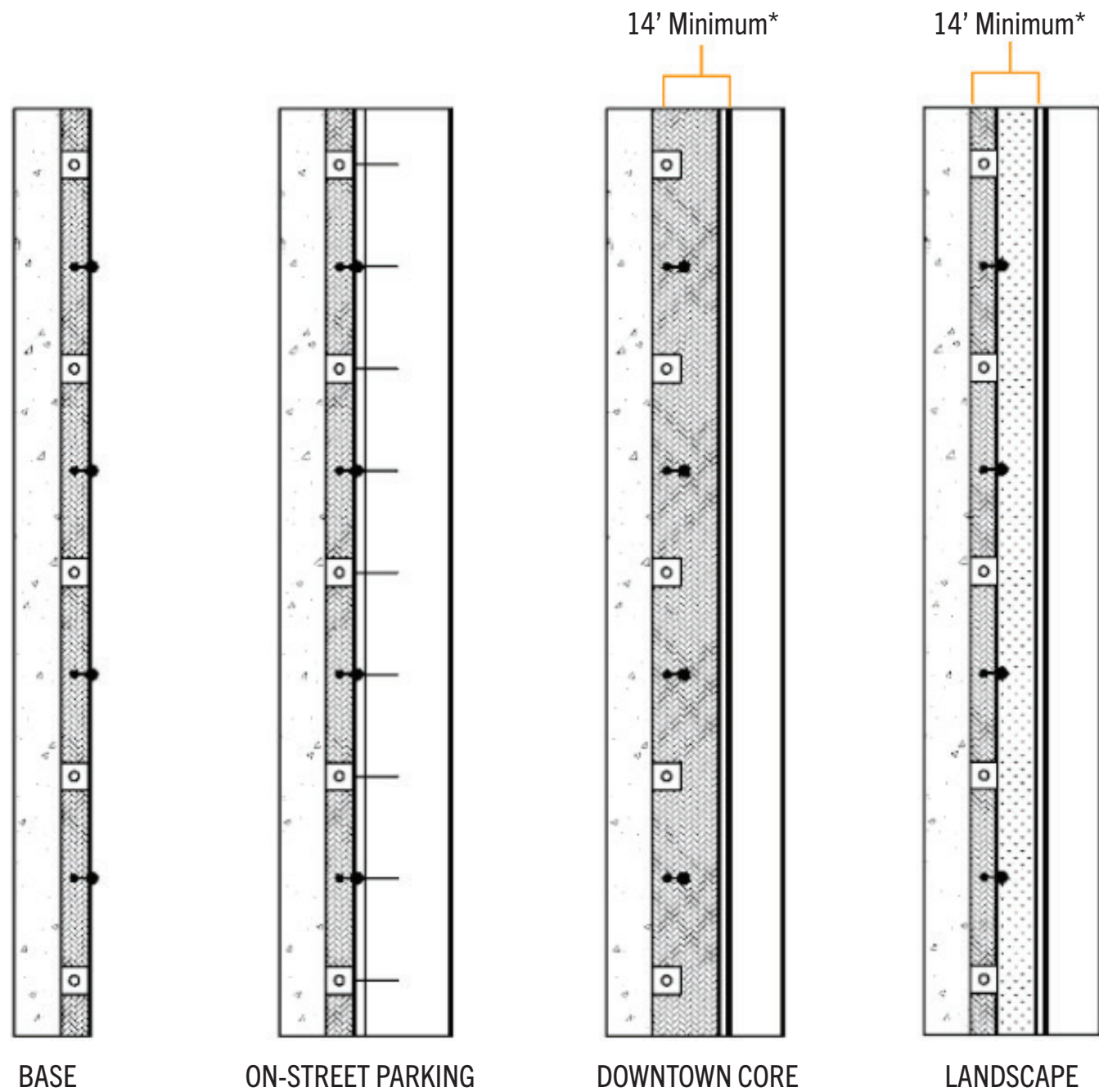
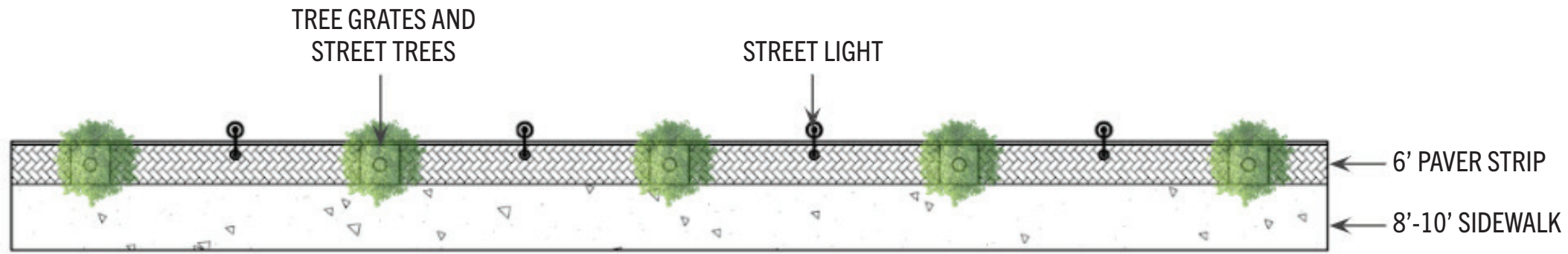
136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

Project #:
Drawn By:
Checked By:
Scale: Varies

Issue _____ Date _____
1 _____ JULY 2022

STREETSCAPE PLAN
TYPE 1B

B-4



TOTAL WIDTH BUILDING FACE TO CURB = 16'

TOTAL WIDTH BUILDING FACE TO CURB = 24'

TYPICAL

- PEDESTRIAN-ONLY
- 8'-10' WIDE SIDEWALK
- 6' WIDE PAVER STRIP



NOTE:

* TOTAL PAVER OR LANDSCAPE STRIP WIDTH MAY INCREASE PER ROAD SPEED LIMIT AND REQUIRED BUFFER DISTANCES OUTLINED IN THE NCDOT PLANTING GUIDELINES. SEE SHEETS A-1 AND B-8 FOR MORE DETAILS.



STREETSCAPE DESIGN STANDARDS

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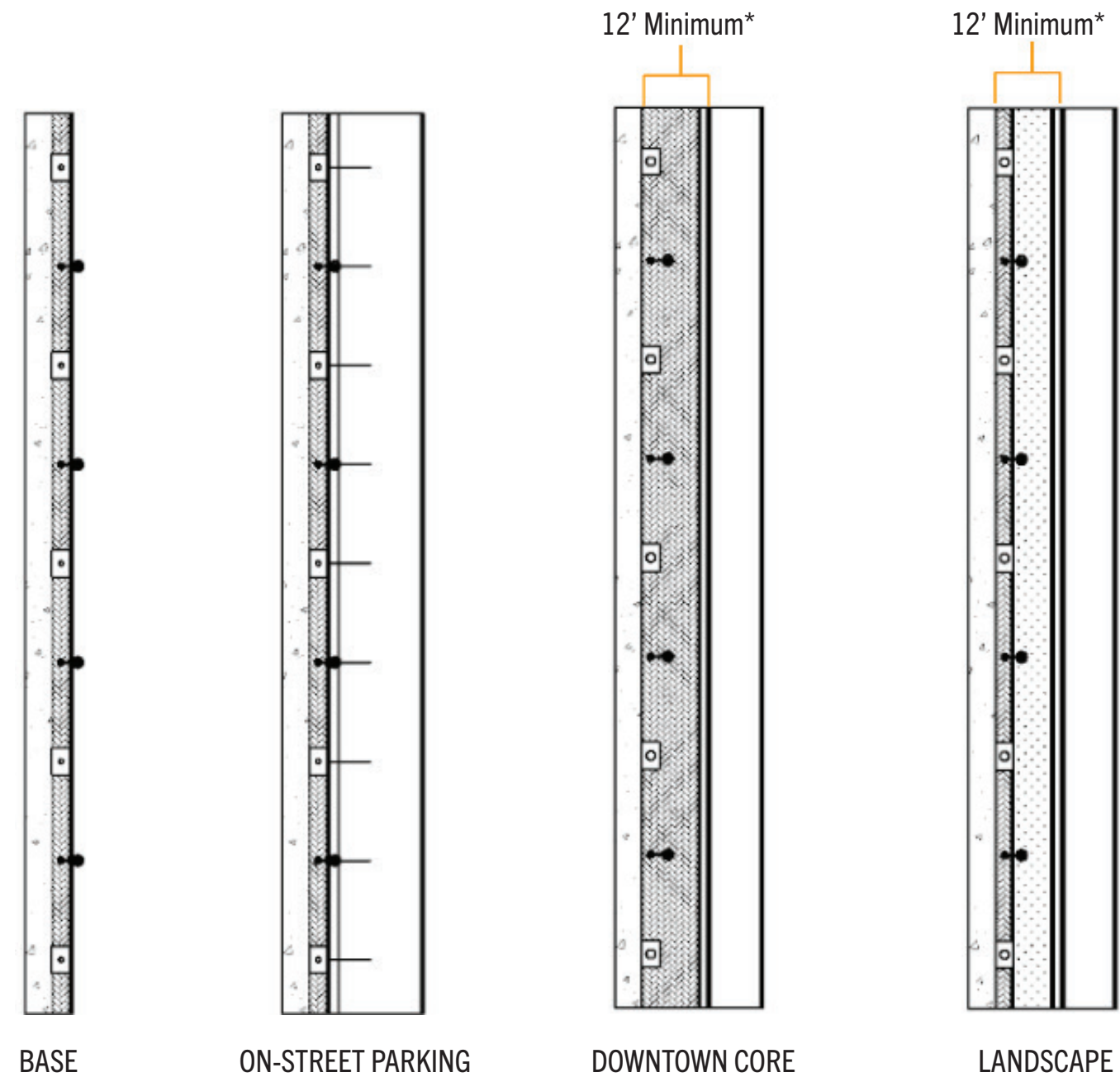
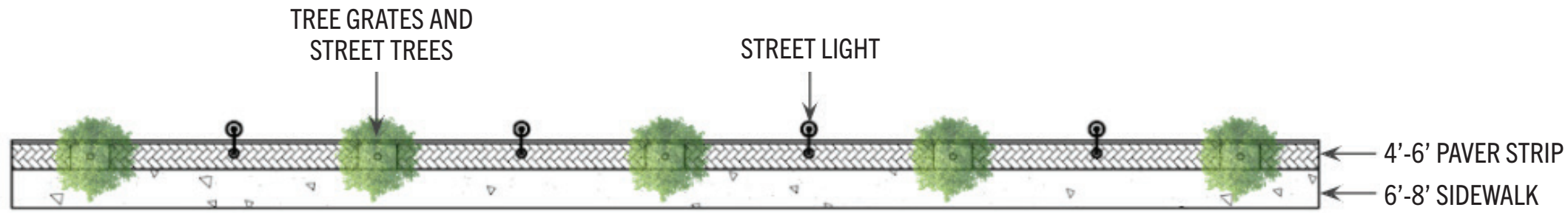
136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

Project #:
Drawn By:
Checked By:
Scale: Varies

Issue _____ Date _____
1 _____ JULY 2022

STREETSCAPE PLAN TYPE 2

B-5



BASE
ON-STREET PARKING
DOWNTOWN CORE
LANDSCAPE

TOTAL WIDTH BUILDING FACE TO CURB = 16' TOTAL WIDTH BUILDING FACE TO CURB = 24'

NARROW

- PEDESTRIAN-ONLY
- 6'-8' WIDE SIDEWALK
- 4'-6' WIDE PAVER STRIP



NOTE:

* TOTAL PAVER OR LANDSCAPE STRIP WIDTH MAY INCREASE PER ROAD SPEED LIMIT AND REQUIRED BUFFER DISTANCES OUTLINED IN THE NCDOT PLANTING GUIDELINES. SEE SHEETS A-1 AND B-8 FOR MORE DETAILS.



STREETSCAPE DESIGN STANDARDS

Client:

CITY OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557

DESTINATION BY DESIGN
PLANNING | ENGINEERING | COMMUNICATIONS

136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

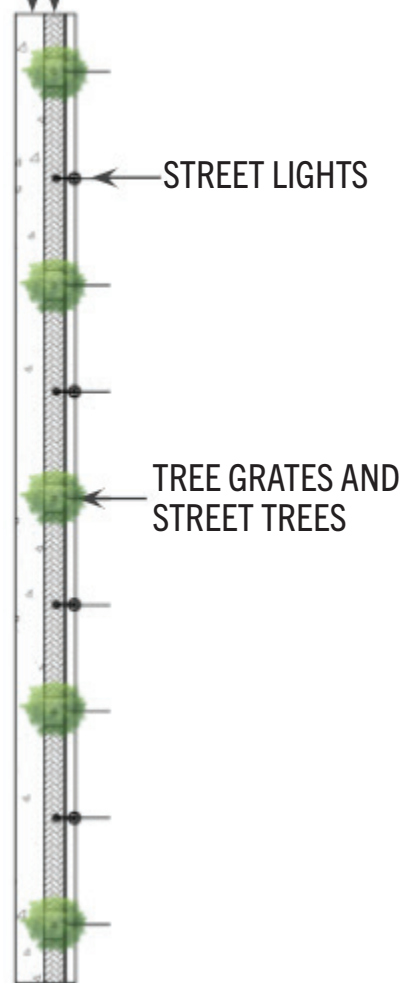
Project #:
Drawn By:
Checked By:

Issue _____ Date _____
1 _____ JULY 2022

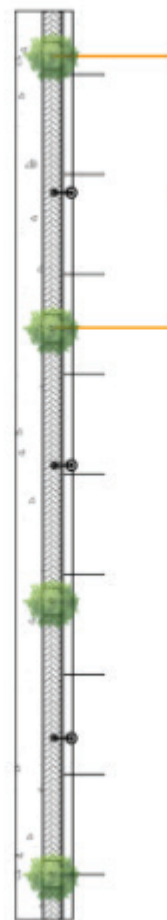
**STREETSCAPE PLAN
TYPE 3**

B-6

SIDEWALK
PAVER STRIP



SPACED 60'
ON-CENTER



SPACED 44'
ON-CENTER



NOTE:

- 44' ON-CENTER SPACING FOR TREES AND LIGHTS IS BEST USED WHEN ADJACENT TO ON-STREET PARKING BECAUSE THE SPACING WILL LINE UP WITH PARKING SPACES TO AVOID HITTING CAR DOORS INTO LIGHT POSTS AND TREE TRUNKS.
- IF THERE IS NO ON-STREET PARKING, THE 60' ON-CENTER SPACING IS RECOMMENDED TO PROVIDE APPROPRIATE LIGHT COVERAGE AND ALLOW FOR FEWER TREES AND LIGHTS PER 200' SECTION OF STREETScape.



STREETSCAPE DESIGN STANDARDS

Client:

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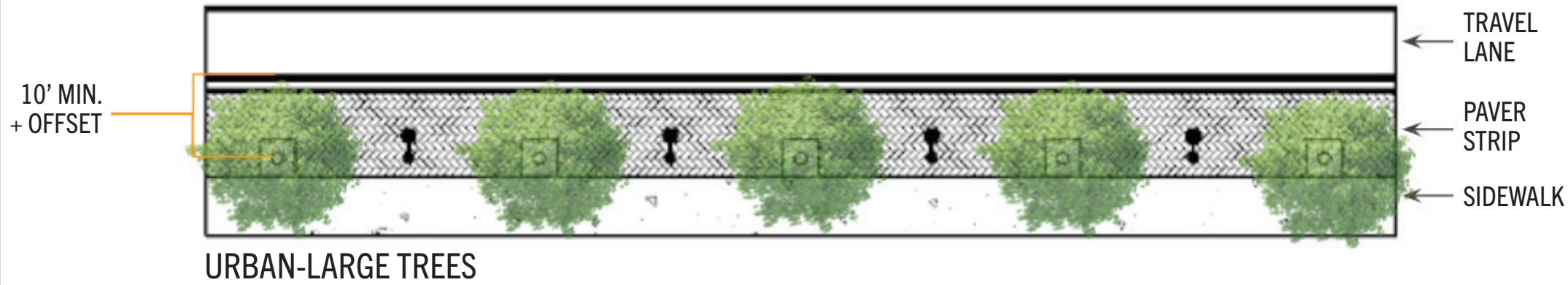
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Drawn By:
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Scale: Varies

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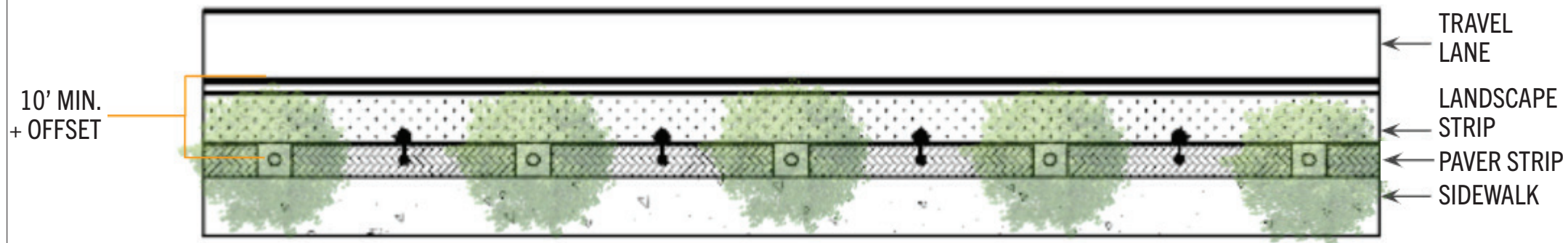
**ON-STREET PARKING
SPACING COMPARISON**

B-7

DOWNTOWN CORE FORM



LANDSCAPE FORM



NOTE:

- SETBACK DISTANCE MAY INCREASE PER ROAD SPEED LIMIT, SEE SHEET A-1 FOR MORE DETAILS. SETBACK DISTANCES ARE MEASURED FROM THE EDGE OF TRAVEL WAY TO THE CENTER OF TREE TRUNK.



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1 _____ JULY 2022

ROAD EDGE
OFF-SET SOLUTIONS

B-8



EXISTING CONDITIONS



STREETScape DESIGN STANDARDS

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1 _____ JULY 2022

DOWNTOWN CORE
ALONG STALLINGS ROAD

C-1



EXISTING CONDITIONS



STREETSCAPE DESIGN STANDARDS

Client:

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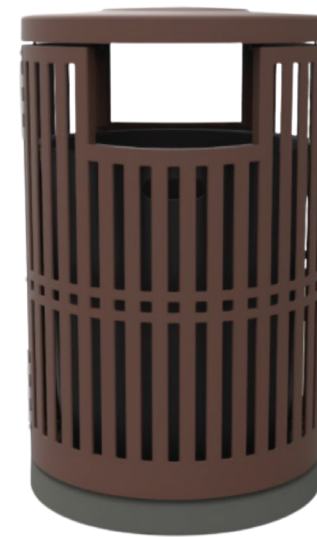
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Checked By:
Scale: Varies

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1 _____ JULY 2022

EXTENSION ROAD
WITH STREETSCAPE

C-2



STREETSCAPE DESIGN STANDARDS

Client:

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315 STALLINGS ROAD
STALLINGS, NC 28104
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PLANNING | ENGINEERING | COMMUNICATIONS

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Project #:
Drawn By:
Checked By:
Scale: Varies

Issue _____ Date _____
1 _____ May 2022

**MATERIALS
OVERVIEW**

D-1



BREAKWATER BENCH WITH BACK
 The Breakwater flat bench is covered by Patent No. Des. D465,936. All other Breakwater pieces are Exclusive By Design™.

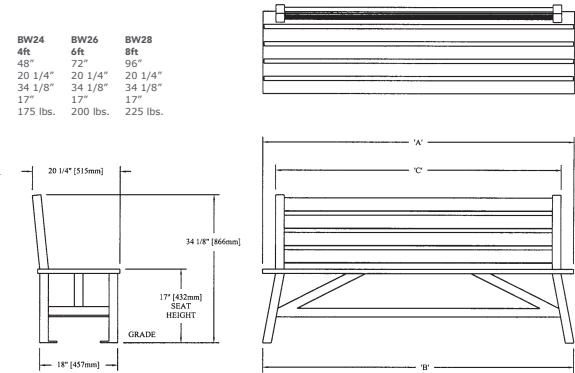
KEYSHIELD® METAL FINISH
 The trademarked KEYSHIELD® finish protects each piece of furniture from chipping, cracking, and UV damage while providing unparalleled corrosion resistance. Steel products are finished with a two-coat powder coating process applied to a 7-15 mil thickness. Substrate preparation includes sandblasting to a white finish to remove all surface contaminants. The raw product then receives a corrosion-inhibiting phosphate coating prior to the application of the powder coating. The first coat applied to the substrate is zinc rich epoxy powder primer used

exclusively on sandblasted parts. The second coat is a colored polyester powder coating. Both coats are electrostatically applied and oven cured according to powder coating manufacturing specifications to create a smooth, satin-like finish and a low-emitting non-porous armor.

FULLY ASSEMBLED UNIT
 The Breakwater bench with back is manufactured in the USA as a fully assembled unit to provide ultimate stability and avoid damage during transit to the site, saving time and money.

MATERIALS
 Fully-welded commercial-grade steel construction.

	BW24 4ft	BW26 6ft	BW28 8ft
LENGTH (A)	48"	72"	96"
WIDTH	20 1/4"	20 1/4"	20 1/4"
HEIGHT	34 1/8"	34 1/8"	34 1/8"
SEAT HEIGHT	17"	17"	17"
WEIGHT	175 lbs.	200 lbs.	225 lbs.



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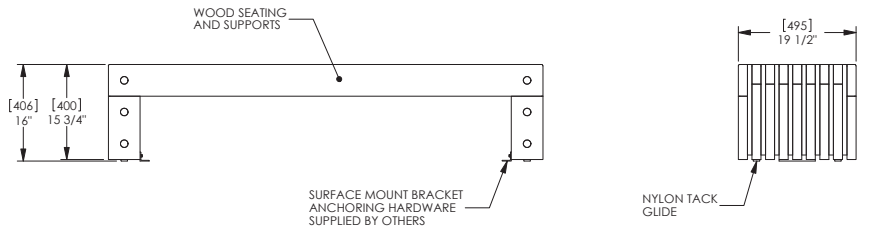
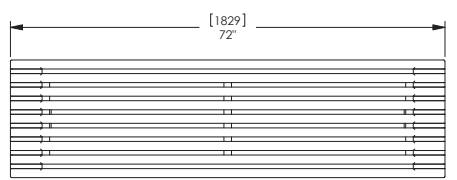


670 Mercer Road | Butler, PA 16001-1840
 Toll-free: 1-800-284-8208 | Phone: 724-284-1213 | Fax: 724-284-1253
 www.keystoneridgedesigns.com

PRODUCT	BREAKWATER
MANUFACTURER	KEYSTONE RIDGE DESIGNS KEYSTONERIDGEDESIGNS.COM 724.284.1213
LENGTH	6'
FINISH	CHOCOLATE
COST ESTIMATE	\$1455



Palisade Bench, 72", Surface Mount, Backless
 Product Drawing Date: 5/5/2010
 www.landscapeforms.com Ph: 800.521.2546



PRODUCT	PALISADE
MANUFACTURER	LANDSCAPE FORMS LANDSCAPEFORMS.COM 800.430.6209
LENGTH	6' AND 8'
FINISH	THERMALLY MODIFIED ASH
COST ESTIMATE	\$2810 AND \$3270

Stallings STREETScape DESIGN STANDARDS

Client: CITY OF STALLINGS
 315 STALLINGS ROAD
 STALLINGS, NC 28104
 (704)821-8557

DESTINATION BY DESIGN
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 Checked By: _____
 Issue: 1 Date: JULY 2022

landscapeforms Drawing: PS375-02 Dimensions are in inches (mm)
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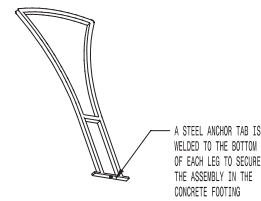
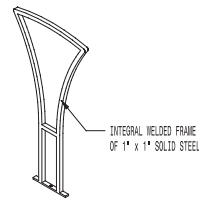
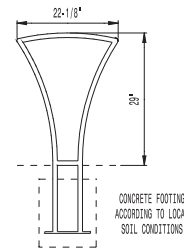


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TEL: (501) 855-8000 • FAX: (410) 257-7579
WEB SITE: HTTP://WWW.VICTORSTANLEY.COM

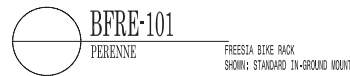
THIS PRODUCT IS COVERED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS 0722,921_S



AVAILABLE OPTIONS:
POWDER COATING
10 STANDARD COLORS, 2 OPTIONAL METALLIC COLORS,
CUSTOM COLORS (INCLUDING THE RAL RANGE)

NOTES:

- DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
- ALL FABRICATED METAL COMPONENTS ARE STEEL. SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
- THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED IN THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
- FOR HIGH SALT AMBIENT CLIMATES, HOT-DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-DIP GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN EXPERIENCED QUALIFIED FIRM TO WHICH PRODUCTS ARE SHIPPED FOR GALVANIZING. HOT-DIP GALVANIZING INCLUDES AN AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK OF CHARGED LIQUID ZINC AT OR AROUND 860°F (460°C). THE RESULTING SURFACE IS RESISTANT TO RUST BUT HAS SOME UNEVENNESS RESULTING FROM THE BONDING OF THE ZINC TO THE STEEL SURFACE. AS A RESULT, THE POWDER-COATING SURFACE FINISH OVER THAT GALVANIZED SURFACE MAY EXHIBIT BUMPS, UNEVENNESS, AND MAY NOT BE AS SMOOTH AS THE STANDARD FINISH; THIS UNEVEN AND INCONSISTENT FINISH IS NORMAL FOR GALVANIZING. CONTACT MANUFACTURER FOR DETAILS.
- ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
- THIS PRODUCT IS SHIPPED FULLY ASSEMBLED.



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REV. 7/21/15 DRAWN R.G.O., 2015-733

PRODUCT	FREESIA BIKE RACK
MANUFACTURER	VICTOR STANLEY VICTORSTANLEY.COM 800.368.2573
CAPACITY	2 BIKES
FINISH	BRONZE
COST ESTIMATE	\$347 \$427 WITH CROSS BAR



STREETSCAPE DESIGN STANDARDS

Client:

CITY OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557

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BIKE RACK
DETAILS

D-3

PRODUCT	MFRN-RS1-N5 5" FIXED ROUND STYLE BOLLARD
MANUFACTURER	MAXIFORCE MAXIFORCEBOLLARDS.COM 410.552.9888
FINISH	ROMAN BRONZE MATTE
COST ESTIMATE	\$860-\$925 BASE MOUNT DEPENDENT




**STREETSCAPE
DESIGN STANDARDS**

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(704)821-8557


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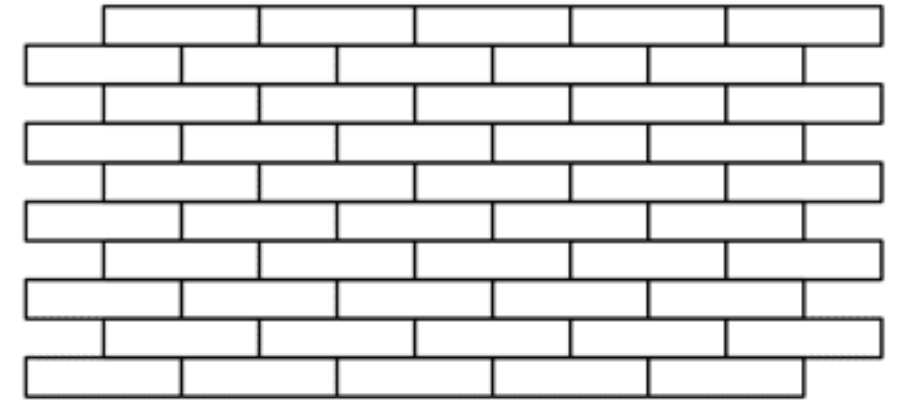
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**BOLLARD
DETAILS**

D-4



RUNNING BOND PATTERN:



PRODUCT	MODULINE
MANUFACTURER	BELGARD BELGARD.COM 888.868.0204
SIZE	4"x18"
FINISH	LINEN
PATTERN	RUNNING BOND (RUNNING LONG DOWN THE PAVER STRIP)
COST ESTIMATE	\$3.65 FROM MANUFACTURER



Client:

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315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557

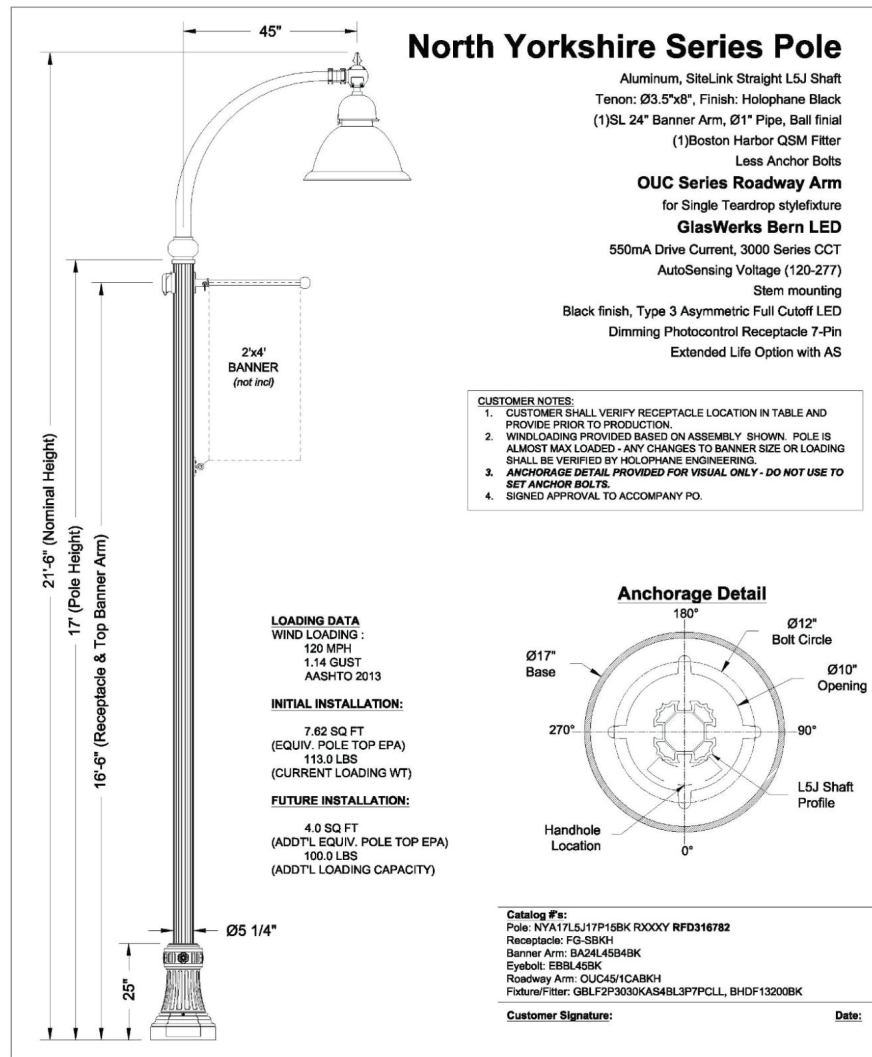
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**PAVER
DETAILS**

D-5



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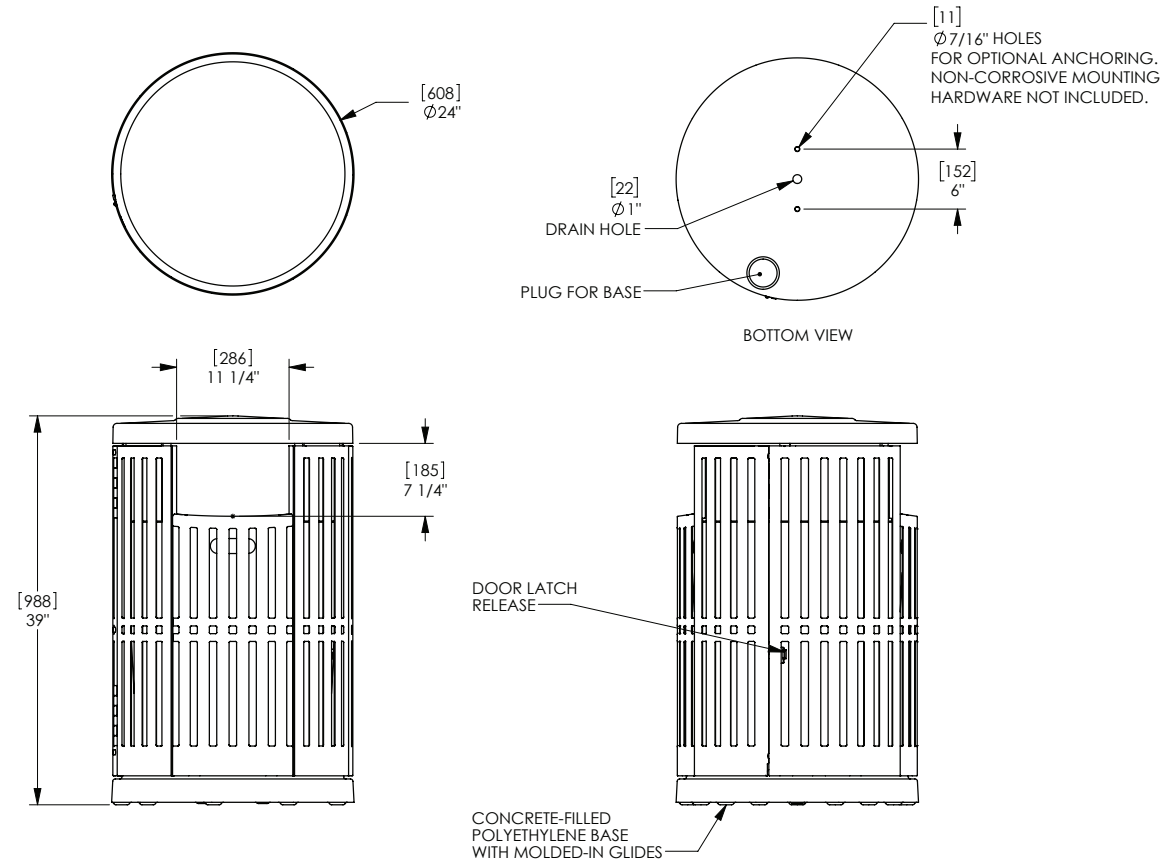
NOTES:

- STALLINGS ELECTRICAL UTILITIES ARE DIVIDED BETWEEN DUKE ENERGY AND UNION POWER. ALL LIGHTING WILL NEED FINAL APPROVE THROUGH THE RESPECTIVE PROVIDER.
- ALL LIGHT POLES TO BE ON BREAKAWAY BASES PER NCDOT REGULATIONS.

PRODUCT	NORTH YORKSHIRE SERIES POLE WITH GLASWERKS BERN LED LIGHT
MANUFACTURER	HOLOPHANE HOLOPHANE.ACUIITYBRANDS.COM 855.898.8038
PROVIDER	DUKE ENERGY DUKE-ENERGY.COM 800.653.5307
FINISH	BLACK

STREETSCAPE
DESIGN STANDARDS

Client: CITY OF STALLINGS 315 STALLINGS ROAD STALLINGS, NC 28104 (704)821-8557	<p style="font-weight: bold; margin: 0;">DESTINATION BY DESIGN</p> <p style="font-size: 10px; margin: 0;">PLANNING ENGINEERING COMMUNICATIONS</p> <p style="font-size: 8px; margin: 0;">136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866</p>	Project #: Drawn By: Checked By: Scale: Varies Issue _____ Date _____ 1 _____ JULY 2022 _____ _____ _____
<p style="font-weight: bold; font-size: 18px; margin: 0;">STREET LIGHT DETAILS</p>		<p style="font-size: 36px; font-weight: bold; margin: 0;">D-6</p>



Drawing: CP362-01
Dimensions are in inches [mm]

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PRODUCT	CHASE PARK LITTER
MANUFACTURER	LANDSCAPE FORMS LANDSCAPEFORMS.COM 800.430.6209
CAPACITY	36-GALLON
FINISH	NUTMEG
COST ESTIMATE	\$1820



STREETSCAPE DESIGN STANDARDS

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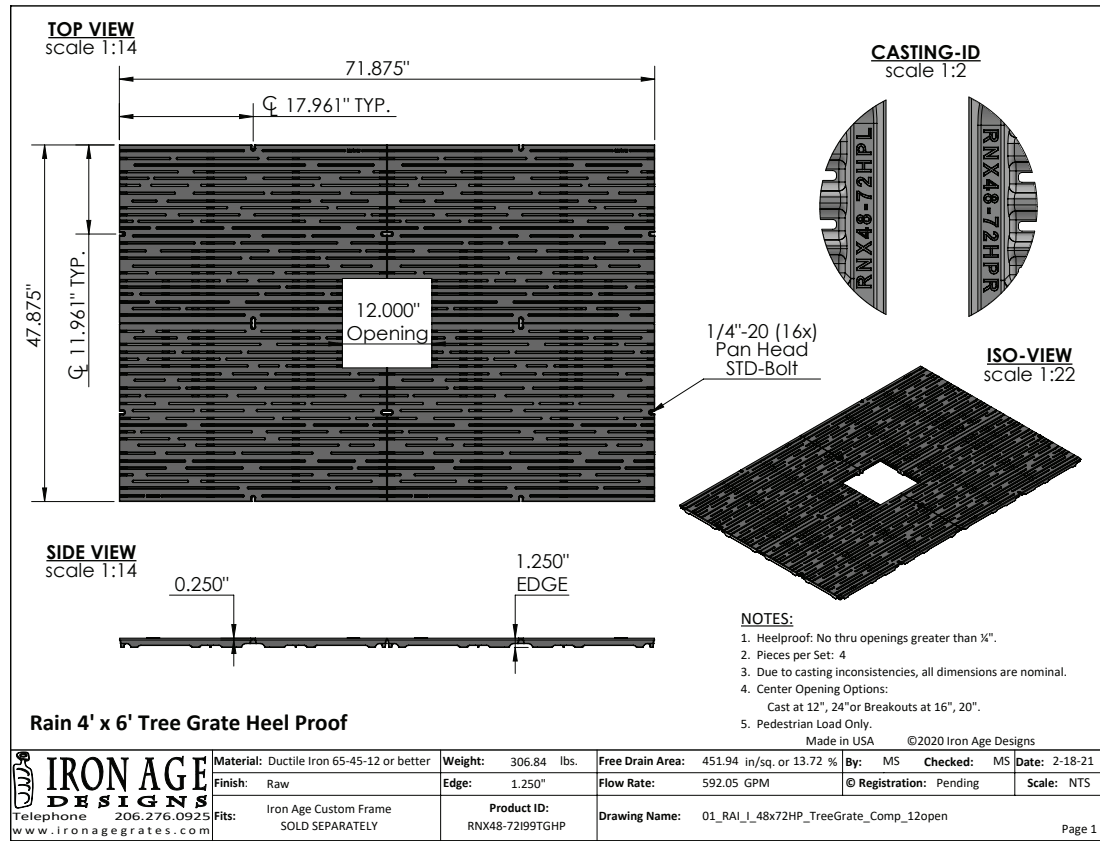
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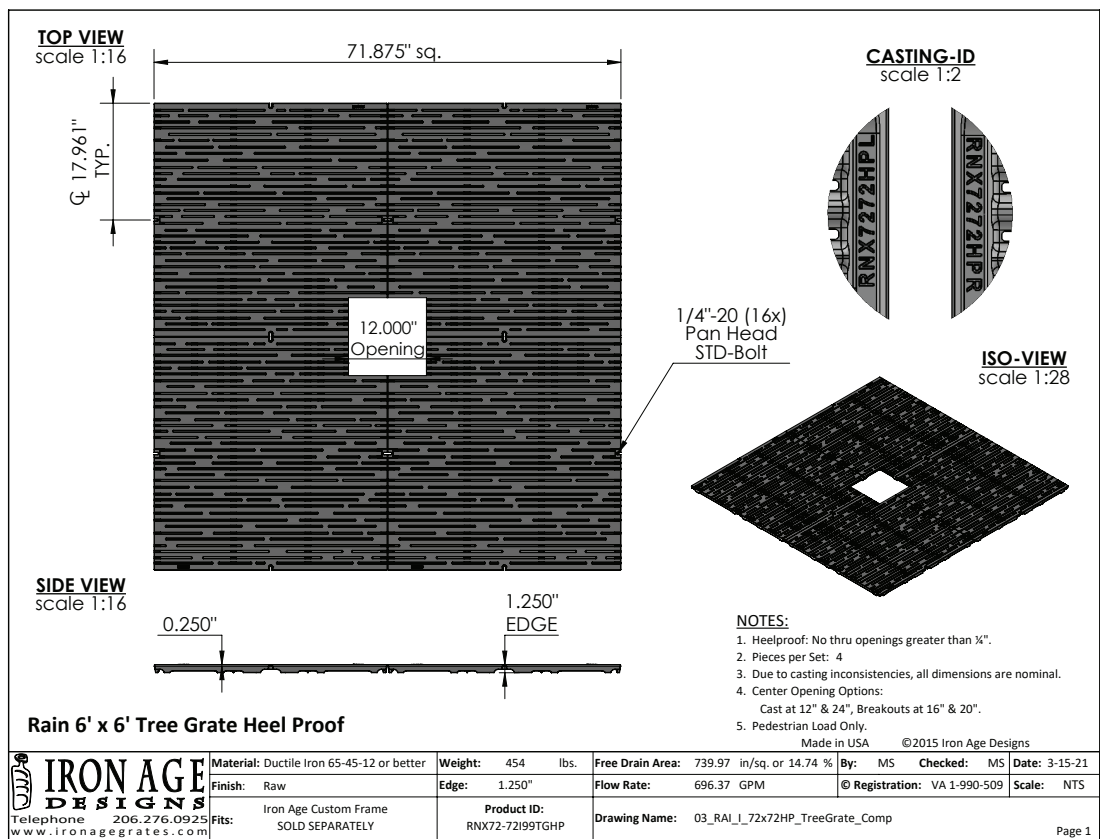
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1 _____ JULY 2022

TRASH RECEPTACLE
DETAILS

D-7



PRODUCT	RAIN
MANUFACTURER	IRON AGE DESIGNS IRONAGEGRATES.COM 877.418.3568
SIZE	4'X6'
FINISH	CAST IRON WITH BAKED-ON OIL
COST ESTIMATE	\$1000-2000 + \$300-400 FOR FRAMES



PRODUCT	RAIN
MANUFACTURER	IRON AGE DESIGNS IRONAGEGRATES.COM 877.418.3568
SIZE	6'X6'
FINISH	CAST IRON WITH BAKED-ON OIL
COST ESTIMATE	\$1000-2000 + \$300-400 FOR FRAMES



Stallings STREETScape DESIGN STANDARDS

Client: CITY OF STALLINGS
315 STALLINGS ROAD
STALLINGS, NC 28104
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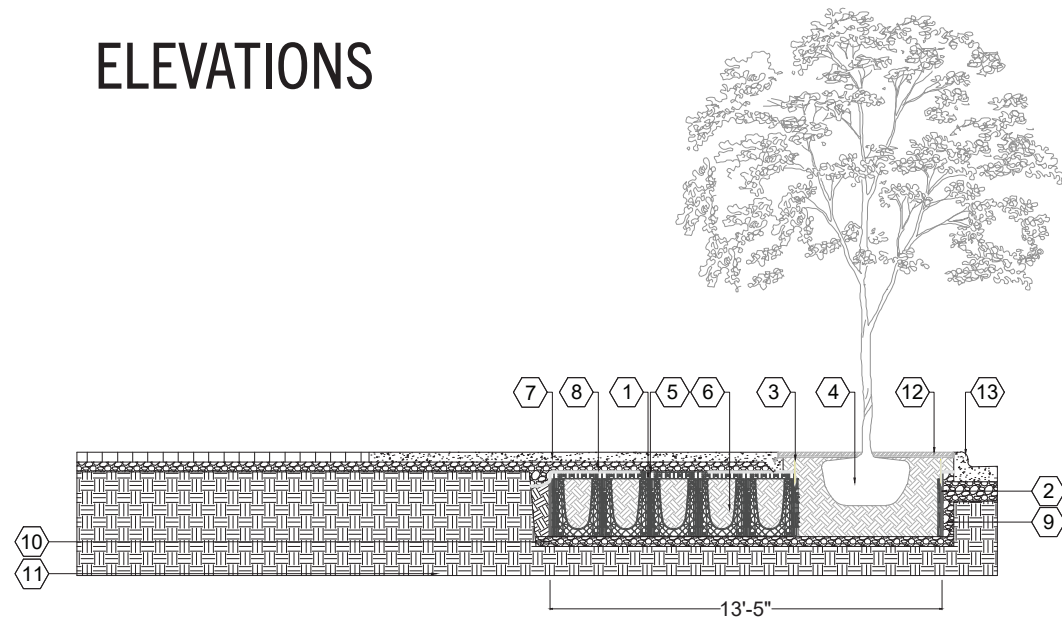
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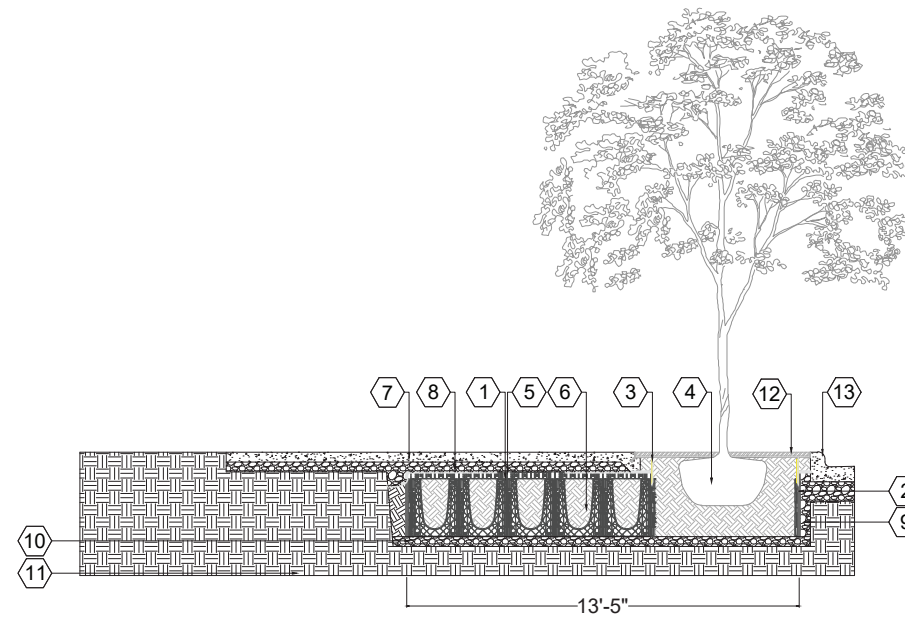
TREE GRATE DETAILS

D-8

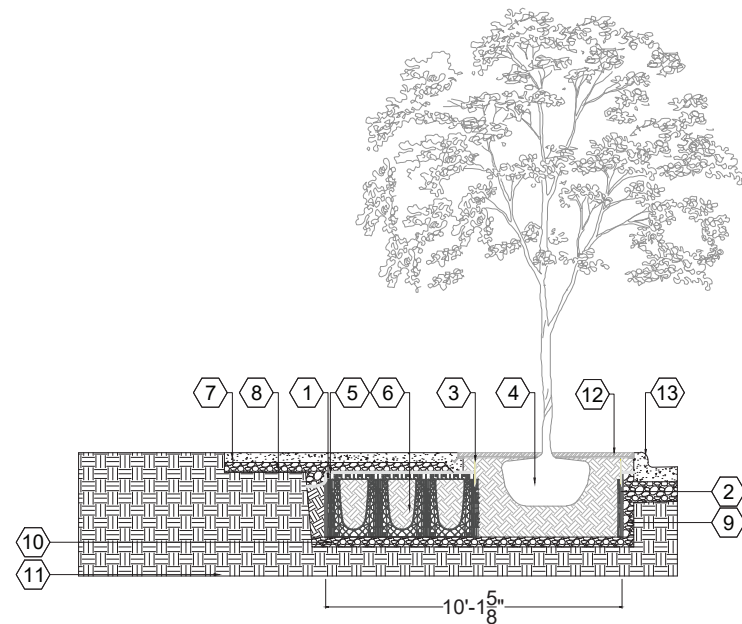
ELEVATIONS



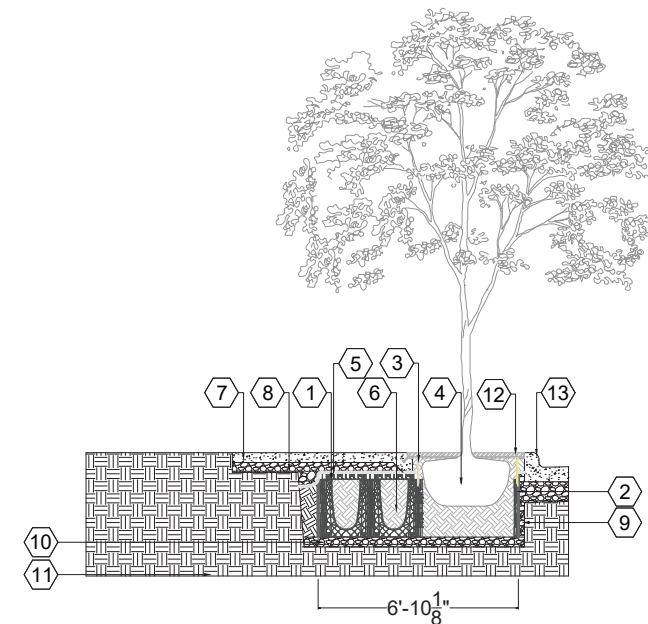
PLAN TYPE 1A



PLAN TYPE 1B



PLAN TYPE 2



PLAN TYPE 3

ARBORSYSTEM[®] URBAN TREE PLANTING SYSTEM

1. RootSpace[®] 600 Series Soil Cell System (24" depth)
2. RootStop[™] 600 Root & Moisture Barrier (24" depth)
3. ReRoot[™] Ribbed Root Barrier (12" depth)
4. Tree / Rootball
5. CombiGrid[®] Geocomposite Fabric/Grid
6. Planting Soil
7. Pavement

8. Aggregate Base
9. Compacted Backfill Material
10. Aggregate Sub-base
11. Compacted Native Subgrade
12. Tree Grate (optional)
13. Curb and Gutter

NOTES:

- SOIL CELLS CAN BE CONFIGURED IN VARIETY OF WAYS DEPENDING ON CONDITIONS AS LONG AS TOTAL ROOT CELL SPACE EQUALS SOIL AMOUNTS OF WITH 400, 600, OR 800 CUBIC FEET.
- SOIL CAPACITY IS DETERMINED PER TREE, SEE FOLLOWING CHARTS FOR MORE DETAILS.
- FOR DESIGN ASSISTANCE CALL 1-865-951-7290 OR EMAIL MATTHEW.WERLE@GREENBLUE.COM.



STREETSCAPE DESIGN STANDARDS

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315 STALLINGS ROAD
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(704)821-8557



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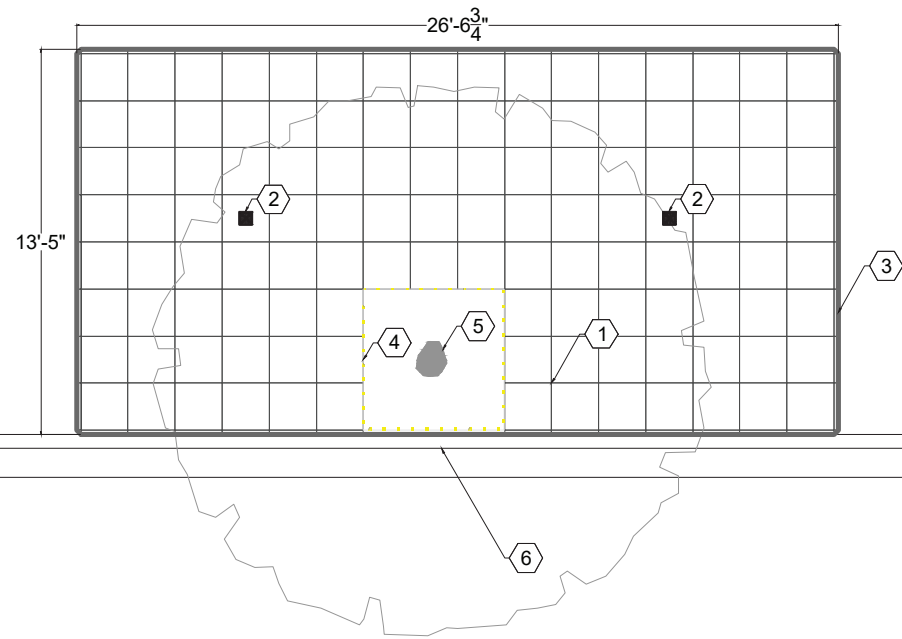
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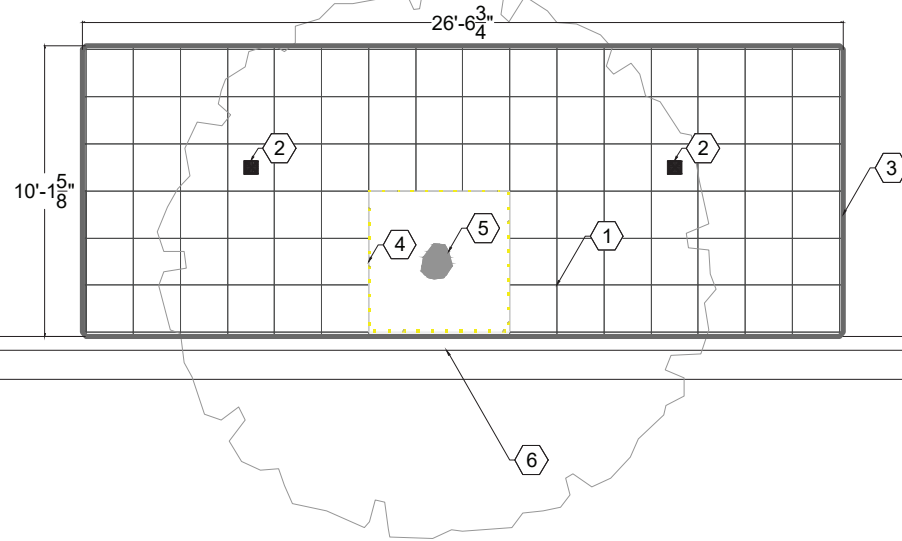
SOIL CELL DETAILS

E-1

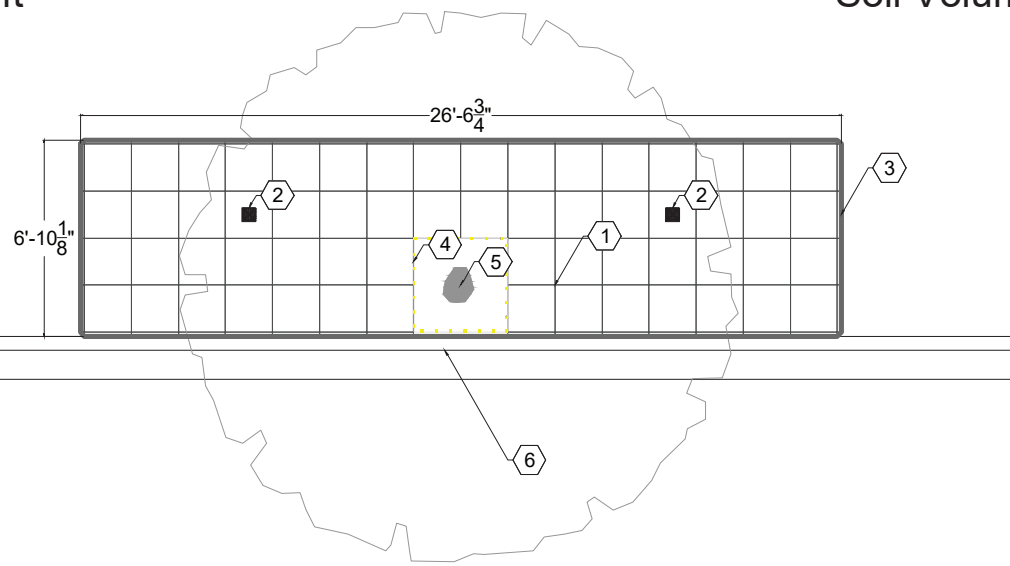
TREE PIT LAYOUTS



TREE PIT LAYOUT
Soil Volume: 800 ft³



TREE PIT LAYOUT
Soil Volume: 600 ft³



TREE PIT LAYOUT
Soil Volume: 400 ft³

ARBORSYSTEM[®] URBAN TREE PLANTING SYSTEM

1. RootSpace[®] 600 Series Soil Cell System (24" depth)
2. ArborVent[™] Aeration/Irrigation Inlet
3. RootStop[™] 600 Root & Moisture Barrier (24" depth)
4. ReRoot[™] Ribbed Root Barrier (12" depth)
5. Tree
6. Curb and Gutter

NOTES:

- SOIL CELLS CAN BE CONFIGURED IN VARIETY OF WAYS DEPENDING ON CONDITIONS AS LONG AS TOTAL ROOT CELL SPACE EQUALS SOIL AMOUNTS OF WITH 400, 600, OR 800 CUBIC FEET.
- SOIL CAPACITY IS DETERMINED PER TREE, SEE FOLLOWING CHARTS FOR MORE DETAILS.
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STREETSCAPE DESIGN STANDARDS

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STALLINGS, NC 28104
(704)821-8557

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Drawn By:

Checked By:

Scale: Varies

Issue

1

Date

JULY 2022

SOIL CELL DETAILS

E-2

1. SUMMARY

TREES IN URBAN ENVIRONMENTS OFTEN DO NOT REACH FULL SPECIES MATURITY DUE TO THE LACK OF SUITABLE SOIL VOLUME. THE ARBORSYSTEM® IS SPECIFICALLY DESIGNED TO PROVIDE THE NECESSARY ELEMENTS FOR GROWING TREES TO THEIR FULL POTENTIAL IN DENSE URBAN ENVIRONMENTS. THE MAIN COMPONENT OF THE ARBORSYSTEM® IS THE ROOTSPACE® SOIL CELL, WHICH IS A LOAD-BEARING, ENGINEERED PLASTIC, STRUCTURAL CELLULAR SYSTEM COMPRISED OF INTERLOCKING VERTICAL UPRIGHTS AND HORIZONTAL DECKS DESIGNED TO ASSEMBLE TO CREATE A MATRIX UNDER PAVEMENTS. THE INTERCONNECTED SKELETAL MATRIX SHALL PROVIDE VOID SPACES TO ACCOMMODATE FILLING WITH PLANTING SOIL FOR TREE ROOTING AND/OR STORING STORMWATER WHILE SUPPORTING VEHICLE LOADED PAVEMENTS AT THE SURFACE. OTHER MATERIALS USED IN CONJUNCTION WITH THE ROOTSPACE® SOIL CELLS INCLUDE, BUT ARE NOT LIMITED TO, GEOTEXTILE FABRIC, GEOGRID, AGGREGATE, SUB-BASE MATERIAL, BACKFILL, ROOT BARRIERS, AND PLANTING SOIL.

2. MATERIALS

ROOTSPACE® SOIL CELLS: SOIL CELLS SHALL BE CAPABLE OF BEING FILLED WITH A VARIETY OF SOIL TYPES CREATED FOR THE PURPOSE OF GROWING HEALTHY TREES AND PROVIDING STORMWATER MANAGEMENT. THEY SHALL BE MODULAR, STRUCTURAL SYSTEMS. EACH CELL SHALL BE CAPABLE OF BEING INSTALLED INDEPENDENTLY AND/OR INTERCONNECTED TO THE ADJOINING CELLS, SHALL ACCOMMODATE UTILITIES, STORMWATER, AND OTHER SITE FEATURES AT A NEW TREE PLANTING SITE. THE CELLS SHALL BE CAPABLE OF SUPPORTING LOADS UP TO AND INCLUDING AASHTO H-20/HS-20, H-25/HS-25 (UNITED STATES), OR CSA-S6 87.5 KN (CANADA) WHEN USED IN CONJUNCTION WITH APPROVED PAVEMENT PROFILES. THE CELLS SHALL BE CAPABLE OF PROVIDING A LARGE VOLUME OF PLANTING SOIL THAT DOES NOT INHIBIT OR PREVENT THE PLACEMENT AND COMPACTION OF PLANTING SOIL, NOR THE MOVEMENT AND GROWTH OF ROOTS. THE CELLS WILL ALLOW THE MOVEMENT OF WATER WITHIN THE PROVIDED SOIL VOLUME, INCLUDING LATERAL CAPILLARY MOVEMENT.

ROOTBALL AERATION/IRRIGATION PIPING SYSTEM: A PERFORATED PIPING SYSTEM SHALL BE USED FOR THE CIRCULATION OF AIR AND DISTRIBUTION OF WATER AND NUTRIENTS AROUND THE TREE ROOTBALL. IT IS CONNECTED TO A SURFACE INLET AT GRADE, TYPICALLY WITHIN THE TREE PIT OPENING.

SOIL AERATION/IRRIGATION SYSTEM: A PIPE AND INLET SYSTEM SHALL BE USED TO PROVIDE A MEANS OF GETTING AIR AND WATER INTO THE SOIL, AND A MEANS OF ALLOWING ORGANIC GASES, FROM THE DECAY OF ORGANIC MATTER WITHIN THE SOIL, TO ESCAPE. IT IS CONNECTED TO A SURFACE INLET AT THE STREET LEVEL.

SUB-DRAINAGE PIPING SYSTEM: AS REQUIRED FOR DRAINAGE OF THE TREE PIT, A PERFORATED UNDER-DRAIN MAY BE CONNECTED TO THE CITY'S STORMWATER SEWER SYSTEM.

SOIL INSPECTION SYSTEM: A VERTICAL PIPING SYSTEM MAY BE INSTALLED TO ALLOW FOR THE SAMPLING AND INSPECTION OF THE SOIL AND/OR WATER LEVELS WITHIN THE SOIL CELL SYSTEM. THIS SYSTEM MAY ALSO BE USED AS A MEANS OF ADDING NUTRIENTS TO THE SOIL.

ROOT AND MOISTURE BARRIER: A LINEAR MEMBRANE MAY BE INSTALLED TO PREVENT ROOT AND MOISTURE PENETRATION AT CERTAIN SPECIFIED LOCATIONS.

ROOT BARRIER: LINEAR ROOT BARRIERS SHALL BE INSTALLED WITH VERTICAL INTEGRAL ROOT TRAINING RIBS AT SPECIFIED LOCATIONS, USUALLY NEAR THE TREE TRUNK AND AT THE SOIL SURFACE.

PLANTING SOIL: A CORRECTLY BALANCED UNSCREENED SOIL MIX SHALL PROVIDE OPTIMUM GROWTH CONDITIONS FOR TREE ROOTS WITHIN THE SOIL CELL-MATRIX AND STORMWATER MANAGEMENT AREA AS NEEDED.

TREE PIT OPENING: A PAVEMENT OPENING SHALL BE PROVIDED WITHIN WHICH A TREE IS PLANTED.

TREE PIT: THE EXCAVATED SPACE SHALL BE FILLED WITH APPROPRIATE SOIL MEDIA FOR TREE PLANTING.



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Client:

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315 STALLINGS ROAD
STALLINGS, NC 28104
(704)821-8557

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136 Furman Rd. Boone, NC 28607 Ph: 828.386.1866

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SOIL CELL DETAILS

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3. INSTALLATION

PRE-INSTALLATION MEETING: PRIOR TO THE INSTALLATION OF THE SOIL CELL SYSTEM, A MEETING SHALL BE HELD WITH THE GENERAL CONTRACTOR, SOIL CELL SYSTEM INSTALLER, SOIL CELL MANUFACTURER'S TECHNICAL REPRESENTATIVE, THE CITY OR CLIENT REPRESENTATIVE, AND OTHER ENTITIES CONCERNED WITH THE SOIL CELL PERFORMANCE. THE MEETING AGENDA WILL INCLUDE ALL REQUIRED SUBMITTALS, THE SEQUENCE OF INSTALLATION AND THE CONSTRUCTION SCHEDULE, THE COORDINATION WITH OTHERS, AND THE PROCEDURES, DETAILS, AND METHODS OF INSTALLATION.

PRODUCT DATA: FOR EACH TYPE OF PRODUCT, THE MANUFACTURER'S PRODUCT LITERATURE SHALL BE SUBMITTED WITH TECHNICAL DATA SUFFICIENT TO DEMONSTRATE THAT THE PRODUCT MEETS THESE SPECIFICATIONS.

TEST AND EVALUATION REPORTS: THE RESULTS OF COMPACTION TESTING SHALL BE SUBMITTED TO ALL PARTIES INVOLVED WITH THIS PROJECT.

MANUFACTURER'S REPORT: SUBMIT THE MANUFACTURER'S LETTER OF REVIEW AND APPROVAL OF THE PROJECT, INCLUDING SHOP DRAWINGS AND SPECIFICATIONS.

INSTALLER: THE WORK SHALL BE PERFORMED BY AN EXPERIENCED INSTALLER WITH A SUCCESSFUL TRACK RECORD IN PERFORMING WORK OF THE SAME SCOPE AND QUALITY AS REQUIRED BY THESE SPECIFICATIONS.

BULK MATERIALS: DO NOT DELIVER OR PLACE BACKFILL, SOILS, OR SOIL AMENDMENTS IN FROZEN, WET, OR MUDDY CONDITIONS. BEFORE PROCEEDING WITH FULL-SCALE EXCAVATION WORK, CONFIRM THE EXISTING SOIL QUALITY AND CONDITION. ALSO, DETERMINE THE DRAINAGE CHARACTERISTICS OF THE EXISTING SOIL.

SOIL CELL INSTALLATION: THE SOIL CELL SYSTEM COMPONENTS SHALL BE PROTECTED FROM DAMAGE DURING DELIVERY, STORAGE, AND HANDLING. THEY SHALL BE INSTALLED BY THE APPROPRIATE INSTALLER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND INSTALLATION DIAGRAMS, THE MANUFACTURER'S REPRESENTATIVE, AND PROCEDURES REQUIRED BY THE MANUFACTURER. THE INSTALLER SHALL ENSURE THAT THE MODULES IN CONTACT WITH THE GRANULAR BASE COURSE ARE FIRMLY SEATED, WITH NO ROCKING. THE INSTALLER SHALL ENSURE THAT THE MODULE COMPONENTS ARE MECHANICALLY INTERCONNECTED. ALL DIMENSIONS, QUANTITIES, AND GRADE ELEVATIONS SHALL BE CHECKED AND VERIFIED. IF REQUIRED, INSTALL ROOT BARRIERS AS SHOWN ON THE DRAWINGS. VERIFY THE LOCATION OF ABOVE AND BELOW GROUND UTILITY LINES, INFRASTRUCTURE, OTHER IMPROVEMENTS, AND EXISTING TREES, SHRUBS, AND PLANTS TO REMAIN INCLUDING THEIR ROOT SYSTEMS. IN ADDITION, REFER TO THE MANUFACTURER'S INSTALLATION MATERIALS TO ENSURE THE SAFE AND PROPER INSTALLATION OF THE SYSTEM. IN NO CASE SHALL THE SOIL BE COMPACTED AFTER INSTALLATION WITHIN THE SOIL CELLS.

CONFLICTS: IF CONFLICTS ARISE DURING INSTALLATION, STOP WORK, AND NOTIFY ALL THE ENTITIES INVOLVED IN THE PROJECT, IN WRITING, OF THE PROBLEM, AND MAKE RECOMMENDATIONS FOR ACTION. PROCEED WITH WORK ONLY WHEN ACTION IS APPROVED IN WRITING.

4. CLEAN UP

THE CONTRACTOR SHALL PERFORM CLEAN UP DURING INSTALLATION AND UPON COMPLETION OF EACH PHASE OF THE WORK. MAINTAIN THE SITE FREE OF SOIL, SEDIMENT, TRASH, AND DEBRIS. REMOVE EXCESS SOIL MATERIALS, DEBRIS, AND EQUIPMENT FROM THE SITE FOLLOWING COMPLETION OF EACH PHASE OF THE WORK. REPAIR DAMAGE TO ADJACENT MATERIALS AND SURFACES RESULTING FROM THE INSTALLATION OF THIS WORK USING MECHANICS SKILLED IN REMEDIAL WORK OF THE CONSTRUCTION TYPE AND TRADES AFFECTED.



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SOIL CELL DETAILS

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NOTE:

- ALL ARE CONSIDERED A "LARGE TREE" BY NCDOT BECAUSE TRUNK CALIPER EXCEEDS 4" DIAMETER
- NOT SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT

COMMON NAME	BLACK OAK	SOUTHERN RED OAK	WHITE OAK
SCIENTIFIC NAME	QUERCUS COCCINEA	QUERCUS FALCATA	QUERCUS ALBA
HEIGHT	50'-80'	70'-80'	50'-135'
WIDTH	45'-78'	60'-70'	50'-80'
WHY THIS TREE?	<ul style="list-style-type: none"> • YELLOW FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE 	<ul style="list-style-type: none"> • RED FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE 	<ul style="list-style-type: none"> • BURGUNDY FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE
SOIL CELL CAPACITY	800 CF	800 CF	800 CF



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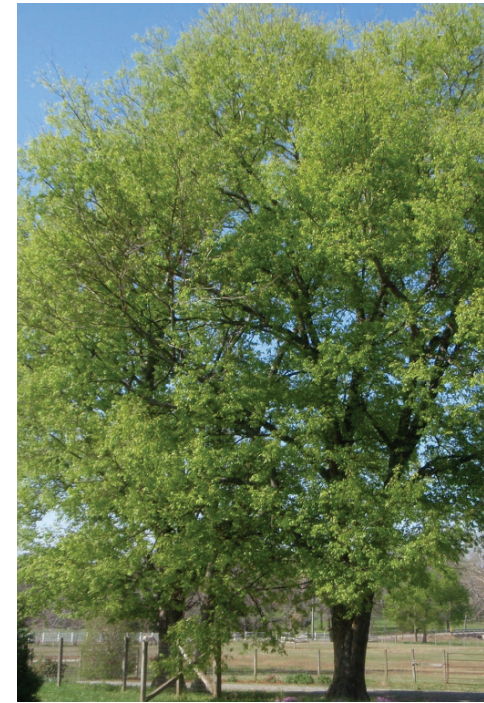
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APPROVED TREES

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NOTE:

- ALL ARE CONSIDERED A "LARGE TREE" BY NCDOT BECAUSE TRUNK CALIPER EXCEEDS 4" DIAMETER
- NOT SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT

COMMON NAME	TULIP POPLAR	AMERICAN HACKBERRY	SUGARBERRY
SCIENTIFIC NAME	LIRIODENDRON TULIPIFERA	CELTIS OCCIDENTALIS	CELTIS LAEVIGATA
HEIGHT	65'-90'	40'-100'	50'-70'
WIDTH	45'-60'	40'-60'	30'-60'
WHY THIS TREE?	<ul style="list-style-type: none"> • YELLOW FALL COLOR • SUITED FOR MOIST CONDITIONS • HIGH WILDLIFE VALUE • NATIVE 	<ul style="list-style-type: none"> • PERFORMS WELL UNDER ADVERSE CONDITIONS • NATIVE • FLOWERS > SMALL FRUIT 	<ul style="list-style-type: none"> • WIDE SOIL TOLERANCE • NATIVE • TOLERANT OF SOIL COMPACTION + URBAN CONDITIONS • FLOWERS > SMALL FRUIT
SOIL CELL CAPACITY	800 CF	800 CF	600 CF



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APPROVED TREES		E-6

NOTE:

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- NOT SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT



COMMON NAME	ZELKOVA	YELLOWWOOD	EUROPEAN HORNBEAM	KENTUCKY COFFEE
SCIENTIFIC NAME	ZELKOVA SERRATA 'GREEN VASE'	CLADRASTIS KENTUKEA	CARPINUS BETULUS	GYMNOCLADUS DIOICUS
HEIGHT	60'-80'	30'-50'	40'-60'	60'-75'
WIDTH	40'-50'	30'-50'	30'-40'	40'-50'
WHY THIS TREE?	<ul style="list-style-type: none"> • RESISTANCE TO DUTCH ELM DISEASE • DROUGHT TOLERANT • EASY LEAF CLEANUP IN FALL 	<ul style="list-style-type: none"> • WHITE FLOWERS > DRY SEED PODS • HIGH WILDLIFE VALUE • NATIVE 	<ul style="list-style-type: none"> • SUITED FOR NARROW PLANTING STRIPS 	<ul style="list-style-type: none"> • WIDE SOIL TOLERANCE • DROUGHT TOLERANT • WHITE FLOWER > DRY SEED PODS • NATIVE
SOIL CELL CAPACITY	800 CF	600 CF	800 CF	800 CF



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APPROVED TREES

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NOTE:

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- NOT SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT

COMMON NAME	WILLOW OAK	RED MAPLE	SHUMARD OAK
SCIENTIFIC NAME	QUERCUS PHELLOS	ACER RUBRUM	QUERCUS SHUMARDII
HEIGHT	50'-80'	40'-120'	50'-70'
WIDTH	30'-40'	30'-50'	30'-40'
WHY THIS TREE?	<ul style="list-style-type: none"> • THE "MYERS PARK TREE" • YELLOW FALL COLOR • HIGH WILDLIFE VALUE • NATIVE 	<ul style="list-style-type: none"> • RED FALL COLOR • WIDE SOIL TOLERANCE • NATIVE 	<ul style="list-style-type: none"> • RED FALL COLOR • DROUGHT TOLERANT • HIGH WILDLIFE VALUE • NATIVE
SOIL CELL CAPACITY	600 CF	600 CF	800 CF



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APPROVED TREES

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NOTE:

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- SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT

COMMON NAME	EASTERN REDBUD	JAPANESE FLOWERING CHERRY	AMERICAN HORNBEAM
SCIENTIFIC NAME	CERCIS CANADENSIS	PRUNUS X YEDOENSIS	CARPINUS CAROLINIANA
HEIGHT	20'-30'	25'-30'	20'-30'
WIDTH	25'-35'	20'-35'	20'-35'
WHY THIS TREE?	<ul style="list-style-type: none"> • PINK FLOWERS > DRY SEED PODS • NATIVE • HIGH WILDLIFE VALUE • SUITED TO MOIST SOILS 	<ul style="list-style-type: none"> • PINK FLOWERS > SMALL FRUIT 	<ul style="list-style-type: none"> • NATIVE • TOLERATES FLOODING AND SHADE • WHITE FLOWERS > DRY SEED PODS
SOIL CELL CAPACITY	400 CF	600 CF	600 CF



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APPROVED TREES		E-9



NOTE:

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- SUITABLE FOR PLANTING BENEATH POWER LINES DUE TO HEIGHT

COMMON NAME	FRINGE TREE	GREEN HAWTHORNE
SCIENTIFIC NAME	CHIONANTHUS RETUSUS	CRATAEGUS VIRIDIS 'WINTER KING'
HEIGHT	15'-25'	20'-35'
WIDTH	10'-20'	20'-35'
WHY THIS TREE?	<ul style="list-style-type: none"> • WIDE SOIL TOLERANCE • WHITE FLOWERS > SMALL FRUIT 	<ul style="list-style-type: none"> • "BALLANTYNE TREE" • LARGELY SPINELESS • WIDE SOIL TOLERANCE • WHITE FLOWERS > SMALL ATTRACTIVE FRUIT
SOIL CELL CAPACITY	600 CF	600 CF



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APPROVED TREES

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