

# Engineering Services Consultant Forum

JUNE 5, 2024

# Welcome!

## □ Meeting Purpose

- Introductions
- Make connections
- Provide timely updates and lessons learned
- Support each other to complete great projects...on time and on budget!

## □ House Keeping

- Exits, restrooms, and refreshments
- Please hold your questions until Q&A (at the end)
- Current and upcoming opportunities

## □ Agenda Overview

# Agenda

- |  |            |
|--|------------|
| <input type="checkbox"/> Welcome & Purpose                                 | 10 minutes |
| <input type="checkbox"/> Engineering Services Division Updates             | 45 minutes |
| <input type="checkbox"/> Project Controls Division Updates                 | 15 minutes |
| <input type="checkbox"/> Break/Networking Session                          | 30 minutes |
| <input type="checkbox"/> Landscape Management Updates                      | 15 Minutes |
| <input type="checkbox"/> PROWAG Updates                                    | 25 Minutes |
| <input type="checkbox"/> Construction, Survey and Utility Division Updates | 15 Minutes |
| <input type="checkbox"/> Questions/Discussion                              | 15 Minutes |
| <input type="checkbox"/> Closing   |            |

# Title Sheet / Project Team Sign-Off Changes

## ➤ Out with the Old

City Project Team Signature Block on plan cover sheet

RECOMMENDED FOR CONSTRUCTION	
Contract Administration	
Construction Administration	
Landscape Mana	Final plans are ready for construction for Alleghany Sidewalk (1609-1335)
Engineering Serv	100% plans, including all known corrections and revisions, were completed on 3/7/2024
Utility Coordinat	Your signature below is requested to confirm that you agree that all of your comments have been addressed and that you have participated in the development and review of Alleghany Sidewalk (1609-1335)
CDOT - Design	
CDOT - Impleme	CDOT Design
CLTWater	
Planning	CDOT Implementation
Storm Water Ser	CLT Water

Back and forth pdfs of the final plans


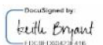
Waiting for all team signatures to obtain permits

## ☐ In with the New

City Project Team Signatures occur in separate document implemented by City PM

Construction Administration	<u><i>Tim Jennings</i></u> Tim Jennings (Mar 19, 2024 10:55 EDT)
Engineering Services	<u><i>Allison Brickey</i></u> Allison Brickey (Mar 19, 2024 10:29 EDT)
Landscape Management	<u><i>Zack Lester III</i></u> Zack Lester III (Mar 22, 2024 13:39 EDT)
Planning, Design, & Development	<u><i>Erin Chantry</i></u> Erin Chantry (Mar 22, 2024 16:52 EDT)
Storm Water	<u><i>Harold Smith</i></u> Harold Smith (Mar 25, 2024 09:59 EDT)
Utility Coordination	<u><i>Kenneth Parlier</i></u> Kenneth Parlier (Mar 25, 2024 12:48 EDT)
ADA	<u><i>Kaher Ahmad</i></u> Kaher Ahmad (Mar 28, 2024 10:19 EDT)

Project Engineer (consultant) to include Keith Bryant in workflow for final plan signoff on cover sheet

 <b>CHARLOTTE</b> GENERAL SERVICES	Bid Set No.
	_____
APPROVED	03/31/2024
 FOR CITY ENGINEER	DATE

# Updated Consultant Scope Template

## □ ES Scope Document

- Evolution of scopes in the division
- Why it was updated

## □ Scope Changes

- Pretty much EVERY section
  - Added space for assumptions
  - Added quantity and calculations required for all submittals
  - Moved 30% plans to the Planning phase & added storm drainage
  - Preliminary Design clean up
  - Signal design to be by consultant
  - Final Design – clean up of scope
- Revisions may still happen

## □ When will this go into effect?



# Updated ES Checklist

## □ ES Checklist

- Mirror scope
- Add notes/comments

## □ Changes/Revisions

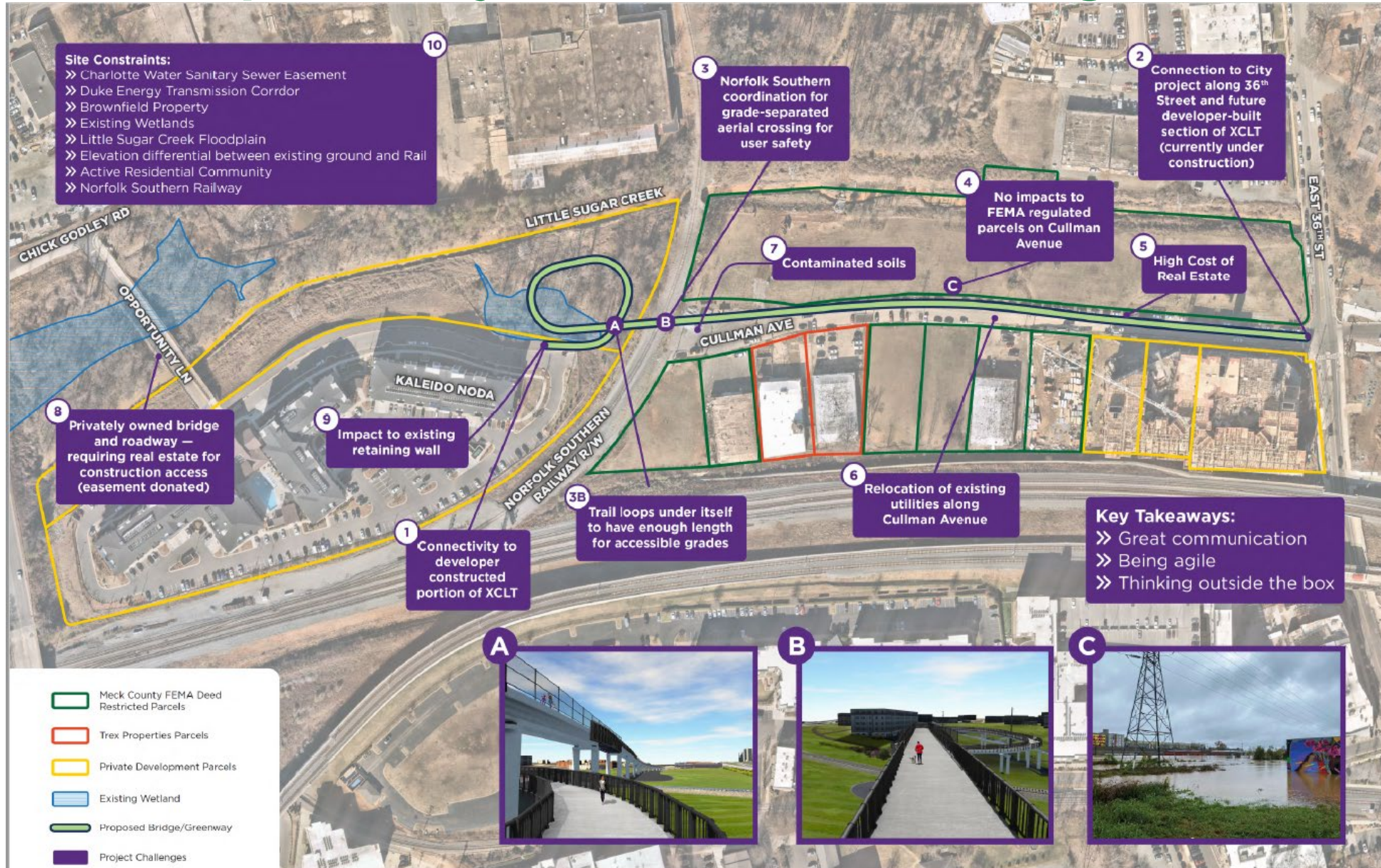
- Added storm drainage to 30% plans
- Added check for environmental documentation (if needed)
- Signal Plans – starting at 50% submittal
- Project special provisions at 90% for ICE
- Sidewalk & Bike mileage and ADA Summary table

## □ Will be uploaded to website soon





# Complex Projects in a Fast Moving World



CROSS CHARLOTTE TRAIL — MATHESON TO CRAIGHEAD (XCLT-M2C)

# Sidewalk and Bicycle Facility Mileage & Curb Ramp Summary

## □ Why do we need this data?

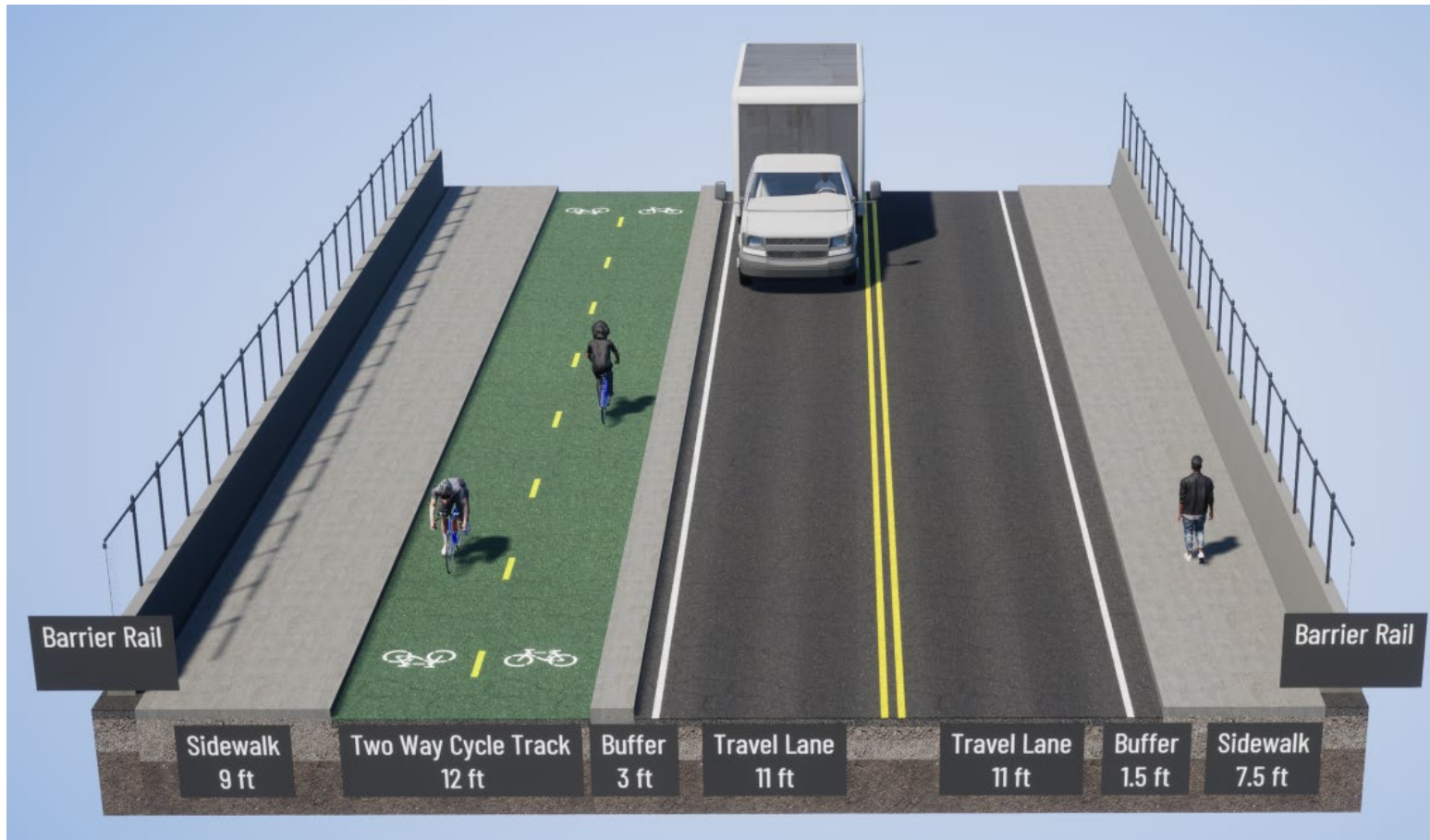
- City has established goals for how many miles of sidewalks and bike facilities are installed per year (10-miles/year of each).
  - *CIP plays a large role in achieving these goals.*
- ADA Transition Plan
  - *Currently ±32K noncompliant curb ramps throughout the city. Obligation to the federal government for remediation.*

## □ When do we need this data?

- Sidewalk and Bicycle Facility Mileage
  - *30% plans: Initial draft*
  - *Final plans: Final draft*
  - *Closeout: Any revisions due to changes during construction*
- ADA Curb Ramp Data
  - *90% Plan Submittal OR whenever you are beginning the Real Estate Phase*
  - *Closeout: Any revisions due to changes during construction*



# Sidewalk and Bicycle Facility Mileage Calculation Example



**Case Study for 1.5 miles of road being reviewed for proposed improvements**

**Existing Cross Section:**

- 7.5 ft sidewalk on one side
  - Four 11 ft travel lanes
  - 3.5 ft buffer on other side between road and barrier rail (no sidewalk)
- = 55 ft wide cross section

**Existing SUP Mileage: 0 miles**

**Existing Sidewalk Mileage: 1.5 miles**

**Existing Bike Lane Mileage: 0 miles**

**Existing Cycle Track Mileage: 0 miles**

# Sidewalk and Bicycle Facility Mileage Calculation Example



Case Study for 1.5 miles of road being reviewed for proposed improvements

Using the proposed cross section to the left:

**New SUP Mileage: 0 miles**

**New Sidewalk Mileage: 1.5 miles**

**New Bike Lane Mileage: 0 miles**

**New Cycle Track Mileage: 3 miles**

Best practice note:

please round to the nearest tenth

# Sidewalk and Bicycle Facility Mileage & Curb Ramp Summary

	A	B	C	D	E	F	G	H	I
1	CIP Project Name:								
2	CIP Project Number:								
3	CDOT PM:								
4	Ramps								
5									
6									
7	Ramp Number <sup>1</sup>	RP_AssetID <sup>2</sup>	X Coordinate <sup>3</sup>	Y Coordinate <sup>3</sup>	Ramp Type <sup>4</sup>	Remediated	Remediated Comments	Remediated By	Remediated Date
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

**Curb Ramp Summary Table**

# Project Controls Division Updates

## □ Independent Cost Estimate (ICE) Reconciliation

- Background info
- Goal
  - Prepare best/most accurate cost estimate for project
- Formal reconciliation meeting
- Additional follow-up

## □ Inflation Trends

- Inflation increases overall not as significant as prior years
- Bid price changes lag behind material price changes
- Some input material prices still very high (per PPI)
  - Concrete – particularly pipe (up 10.3% since July 2023)
  - Asphalt (was up 9.8% since July 2023 but came down some in April)
  - Construction wages and salaries (up 3.2% over last 3 quarters)
- Review most recent bid price recommendations
  - [Details & Consultant Resources - City of Charlotte \(charlottenc.gov\)](#)
    - February 2024 construction cost update

# Break / Networking





# Landscape Management Updates

## CIP Inhouse Landscape Design & Tree Preservation

Kourtnie Vincent, PLA

Program Manager

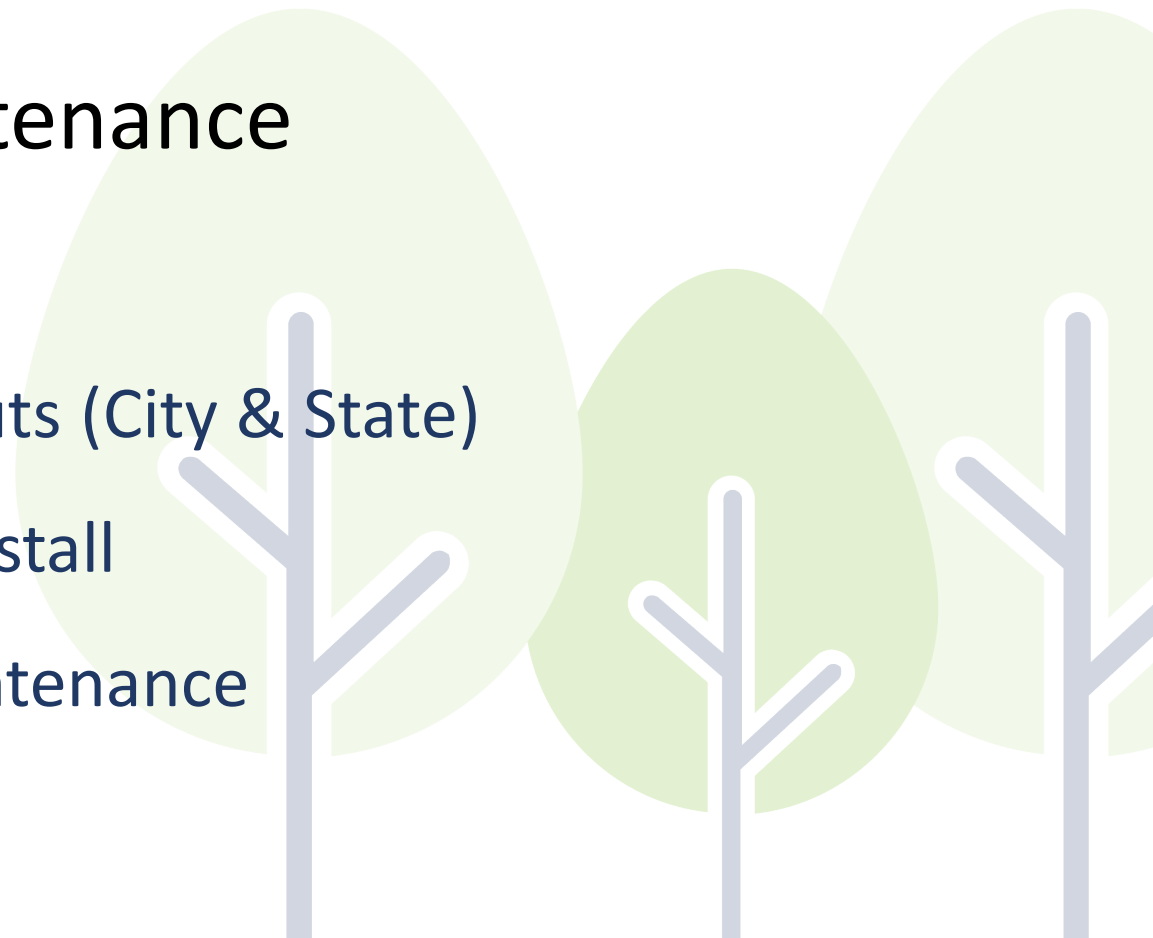
Landscape Management Division



# Discussion Topics

## Design Elements & Maintenance

- Trees
- Medians & Roundabouts (City & State)
- Landscape Design & Install
- Property Types & Maintenance



# Trees

## Project Design & Construction – Existing Canopy

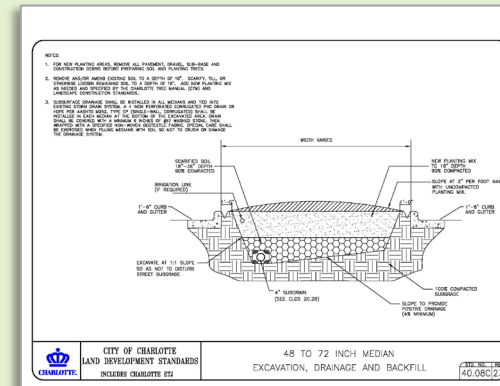
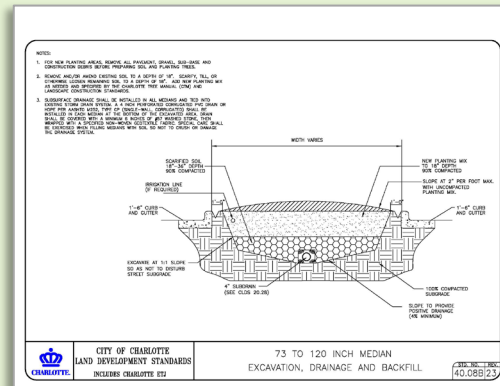
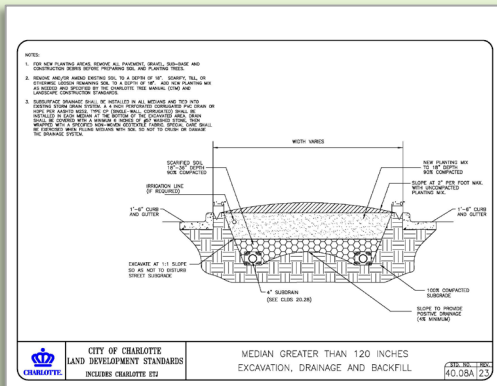
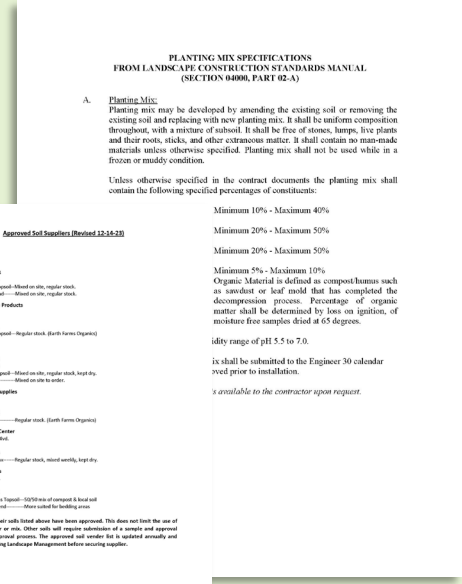
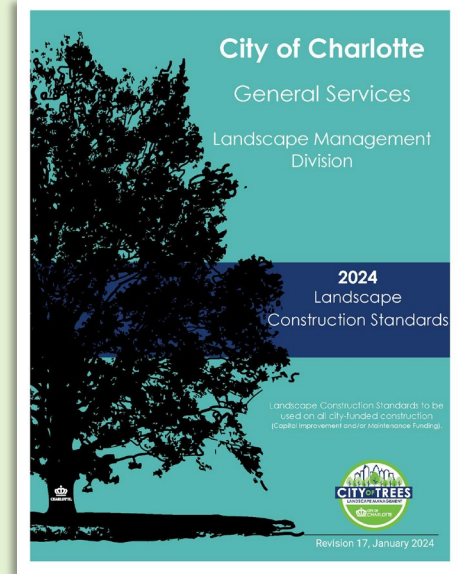
- Tree Surveys – need trees located outside easement. Critical root zones
- Cut and Fill lines, utility locates, proximity of infrastructure, design changes
- Identify Heritage Trees and Private Tree Saves early on (UDO impacts)
- CIP Arborist must be involved at beginning of project & throughout
- CIP Arborist reviews for Tree Risk (TRAQ). Our role to preserve, protect, & determine removal. Assist in alternative design & construction techniques



# Medians & Roundabouts

## Project Design & Construction – City Standard Landscaped Medians CLDS 40.08 A-C

- Call out detail on all landscape medians & City maintained roundabouts
- Required subdrainage and approved planting mix soils
- CIP Landscape maintains an approved soil vendors list
- Tips of all medians and median less than 4' wide need concrete caps
- All State maintained roads with Roundabouts shall receive turf to remain under the State's maintenance. Permanent seeding in hardscape contract

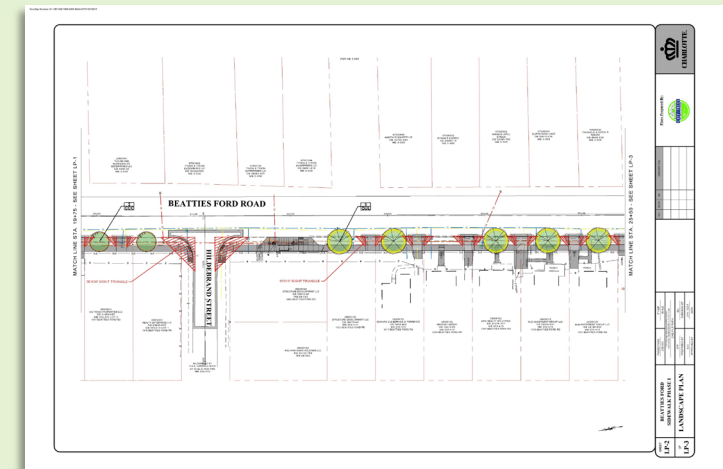




# Landscape Design & Install

## Project Design & Construction

- 90% and 100% landscape plans – Preliminary design by PM request.
- Consultant to provide LM final project AutoCAD files in City Standards.
- Planting Season – October 15<sup>th</sup>-April 15<sup>th</sup> LM manages landscape construction process.
- Min. 8' planting strip – large maturing trees. Min. 4' planting strip for small maturing trees
- Medians – same as planting strip requirements. If smaller than 4' wide, it needs to be capped with concrete
- NCDOT maintained roads require State planting permit. Restrictive planting clear zone requirements.

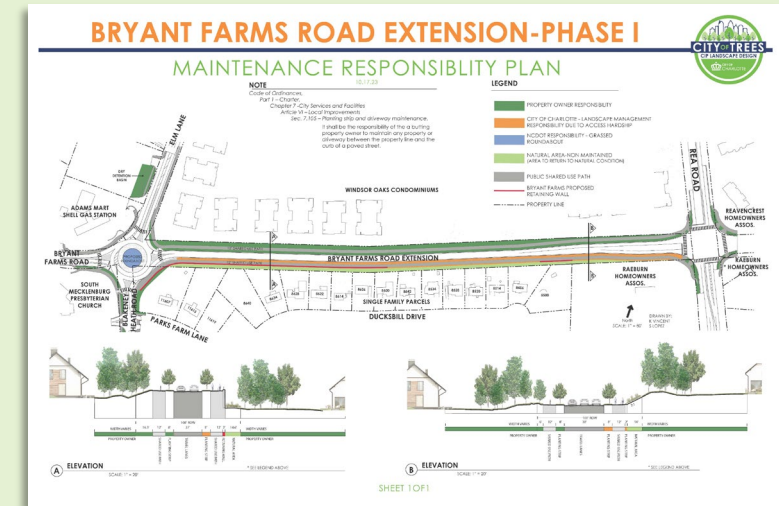




# Property & Maintenance

## Project Design & Construction

- City owned property
- Dead end streets
- ROW remnants
- New reverse frontage and changed private lots
- Hardships created – access, guardrails, handrails, slopes, walls
- Storm Water control measures
- Code requirements of maintain to the curb
- LM maintenance to begin at final acceptance with or without landscape installed (SCMs, medians, hardships, city property)



**MAINTAIN IT TO THE STREET**

Did you know you're supposed to maintain grass and vegetation all the way to the street?

City ordinance states that property owners are responsible to maintain grass and vegetation on rights of way. That includes planting strips (the strip of grass between the sidewalk and the street). Grass needs to be less than 12 inches tall, and vegetation can't block pedestrians, cyclists or motorists.

See reverse for additional information on maintenance responsibilities in your area.

[charlottenc.gov/maintainit](http://charlottenc.gov/maintainit)



# PROWAG Updates

## Ramp Camp Slides



# Construction, Survey and Utilities Division Updates

CSU Slides

# Q & A