# of GAINE OF THE OF FLORIDA

#### CITY OF GAINESVILLE

#### Public Works Department

## **Engineering Design & Construction Manual Memorandum 23-01**

To: Development Review Team and Community Partners

From: Brian M. Singleton, P.E., City Engineer/Acting Public Works Director

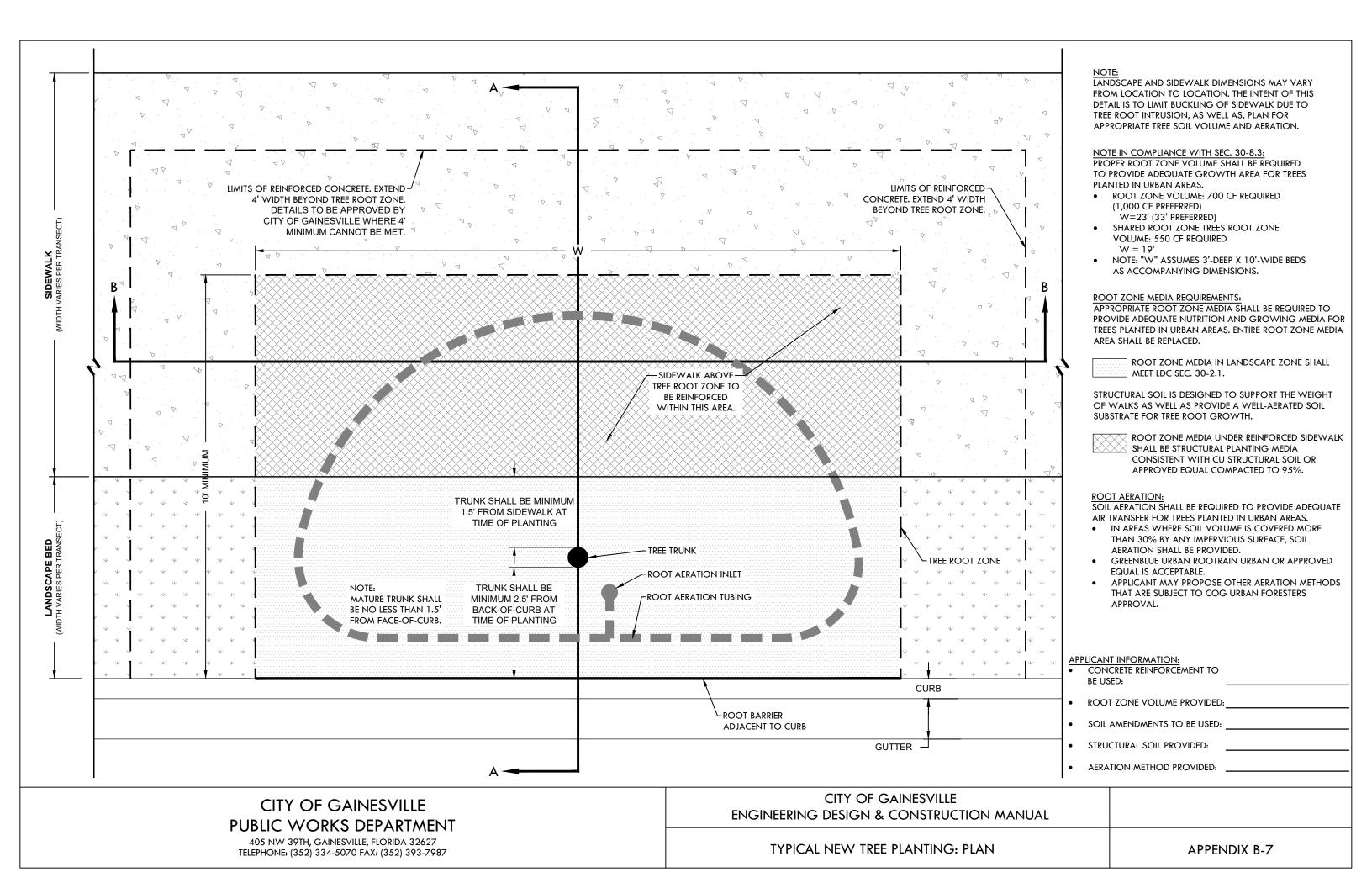
Date: August 1, 2023

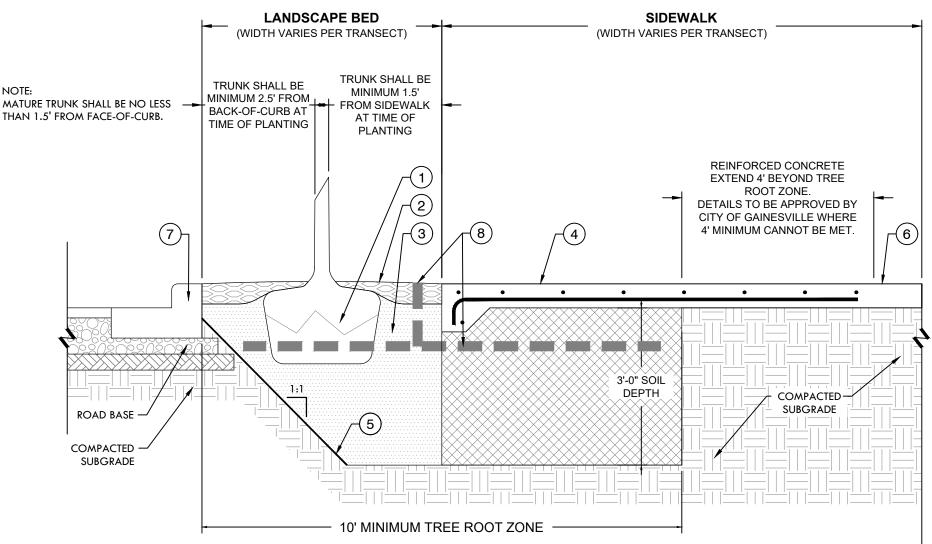
Re: EDCM 2022 Edition Revisions – Tree Planting Detail, Signing of Stub Roadway/Driveway

Connection and Underground/Exfiltration System Materials

- 1. The attached tree pit detail shall be utilized for all tree planting. The costs associated with implementing this detail will be eligible for Tree Mitigation Payment offset, with the exception of the minimum Root Zone Media requirement established in Land Development Code Sec. 30-8.3.
- 2. All roadway and cross connection stubs shall be signed with "FUTURE THRU STREET" or "FUTURE ACCESS" on a 24" X 36" white sign blank with black lettering.
- 3. Underground stormwater storage systems shall be non-metallic (aluminized, galvanized and coated metal prohibited).

This memo shall remain in effect until the EDCM is revised with an updated edition.





- TREE ROOTBALL
- MULCH PER LDC SECTION 30 & ANSI STANDARDS
- PLANTING SOIL MIX BACKFILL (AS SPECIFIED)
- 6" REINFORCED CONCRETE WALK WITH #4 REBAR AT 12" EA. WAY
- ROOT BARRIER CENTURY PRODUCTS DUAL ROOT AND WATER BARRIER
- **CURB & GUTTER**
- AERATION INLET AND TUBING

OR APPROVED EQUAL

STANDARD SIDEWALK

### APPLICANT INFORMATION: CONCRETE REINFORCEMENT TO

ROOT ZONE VOLUME PROVIDED:

LANDSCAPE AND SIDEWALK DIMENSIONS MAY VARY FROM LOCATION TO LOCATION. THE INTENT OF THIS DETAIL IS TO LIMIT BUCKLING OF SIDEWALK DUE TO

TREE ROOT INTRUSION, AS WELL AS, PLAN FOR

NOTE IN COMPLIANCE WITH SEC. 30-8.3:

ROOT ZONE VOLUME: 700 CF REQUIRED

AS ACCOMPANYING DIMENSIONS.

PLANTED IN URBAN AREAS.

W = 19'

AREA SHALL BE REPLACED.

(1,000 CF PREFERRED)

W=23' (33' PREFERRED)

VOLUME: 550 CF REQUIRED

**ROOT ZONE MEDIA REQUIREMENTS:** 

MEET LDC SEC. 30-2.1.

SUBSTRATE FOR TREE ROOT GROWTH.

AERATION SHALL BE PROVIDED.

EQUAL IS ACCEPTABLE.

APPROVAL.

APPROPRIATE TREE SOIL VOLUME AND AERATION.

PROPER ROOT ZONE VOLUME SHALL BE REQUIRED TO PROVIDE ADEQUATE GROWTH AREA FOR TREES

SHARED ROOT ZONE TREES ROOT ZONE

NOTE: "W" ASSUMES 3'-DEEP X 10'-WIDE BEDS

APPROPRIATE ROOT ZONE MEDIA SHALL BE REQUIRED TO PROVIDE ADEQUATE NUTRITION AND GROWING MEDIA FOR TREES PLANTED IN URBAN AREAS. ENTIRE ROOT ZONE MEDIA

STRUCTURAL SOIL IS DESIGNED TO SUPPORT THE WEIGHT OF WALKS AS WELL AS PROVIDE A WELL-AERATED SOIL

> SHALL BE STRUCTURAL PLANTING MEDIA CONSISTENT WITH CU STRUCTURAL SOIL OR APPROVED EQUAL COMPACTED TO 95%.

SOIL AERATION SHALL BE REQUIRED TO PROVIDE ADEQUATE AIR TRANSFER FOR TREES PLANTED IN URBAN AREAS. • IN AREAS WHERE SOIL VOLUME IS COVERED MORE

GREENBLUE URBAN ROOTRAIN URBAN OR APPROVED

APPLICANT MAY PROPOSE OTHER AERATION METHODS

THAN 30% BY ANY IMPERVIOUS SURFACE, SOIL

THAT ARE SUBJECT TO COG URBAN FORESTERS

ROOT ZONE MEDIA IN LANDSCAPE ZONE SHALL

ROOT ZONE MEDIA UNDER REINFORCED SIDEWALK

SOIL AMENDMENTS TO BE USED:

STRUCTURAL SOIL PROVIDED:

AERATION METHOD PROVIDED:

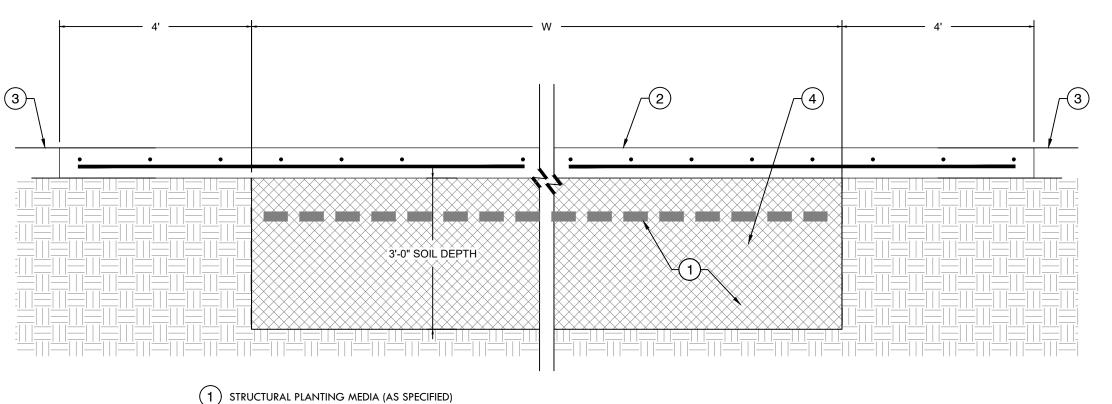
CITY OF GAINESVILLE	
PUBLIC WORKS DEPARTMENT	

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CITY OF GAINESVILLE
ENGINEERING DESIGN & CONSTRUCTION MANUAL

TYPICAL NEW TREE PLANTING: SECTION A

APPENDIX B-8



- 6" REINFORCED CONCRETE WALK WITH #4 REBAR AT 12" EA. WAY
- STANDARD SIDEWALK
- **AERATION TUBING**

#### TREE ROOT INTRUSION, AS WELL AS, PLAN FOR APPROPRIATE TREE SOIL VOLUME AND AERATION. NOTE IN COMPLIANCE WITH SEC. 30-8.3:

PROPER ROOT ZONE VOLUME SHALL BE REQUIRED TO PROVIDE ADEQUATE GROWTH AREA FOR TREES PLANTED IN URBAN AREAS.

LANDSCAPE AND SIDEWALK DIMENSIONS MAY VARY FROM LOCATION TO LOCATION. THE INTENT OF THIS DETAIL IS TO LIMIT BUCKLING OF SIDEWALK DUE TO

- ROOT ZONE VOLUME: 700 CF REQUIRED (1,000 CF PREFERRED) W=23' (33' PREFERRED)
- SHARED ROOT ZONE TREES ROOT ZONE VOLUME: 550 CF REQUIRED W = 19'
- NOTE: "W" ASSUMES 3'-DEEP X 10'-WIDE BEDS AS ACCOMPANYING DIMENSIONS.

#### **ROOT ZONE MEDIA REQUIREMENTS:**

APPROPRIATE ROOT ZONE MEDIA SHALL BE REQUIRED TO PROVIDE ADEQUATE NUTRITION AND GROWING MEDIA FOR TREES PLANTED IN URBAN AREAS. ENTIRE ROOT ZONE MEDIA AREA SHALL BE REPLACED.

ROOT ZONE MEDIA IN LANDSCAPE ZONE SHALL MEET LDC SEC. 30-2.1.

STRUCTURAL SOIL IS DESIGNED TO SUPPORT THE WEIGHT OF WALKS AS WELL AS PROVIDE A WELL-AERATED SOIL SUBSTRATE FOR TREE ROOT GROWTH.

ROOT ZONE MEDIA UNDER REINFORCED SIDEWALK SHALL BE STRUCTURAL PLANTING MEDIA CONSISTENT WITH CU STRUCTURAL SOIL OR APPROVED EQUAL COMPACTED TO 95%.

SOIL AERATION SHALL BE REQUIRED TO PROVIDE ADEQUATE AIR TRANSFER FOR TREES PLANTED IN URBAN AREAS.

- IN AREAS WHERE SOIL VOLUME IS COVERED MORE THAN 30% BY ANY IMPERVIOUS SURFACE, SOIL AERATION SHALL BE PROVIDED.
- GREENBLUE URBAN ROOTRAIN URBAN OR APPROVED EQUAL IS ACCEPTABLE.
- APPLICANT MAY PROPOSE OTHER AERATION METHODS THAT ARE SUBJECT TO COG URBAN FORESTERS APPROVAL.

#### APPLICANT INFORMATION:

- CONCRETE REINFORCEMENT TO
- ROOT ZONE VOLUME PROVIDED:
- SOIL AMENDMENTS TO BE USED:
- STRUCTURAL SOIL PROVIDED:
- AERATION METHOD PROVIDED:

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TYPICAL NEW TREE PLANTING: SECTION B

APPENDIX B-9