Jacksonville Tree Commission

TASK FORCE ON URBAN TREE PLANTING BEST PRACTICES
October 29, 2025
Ed Ball Building, 10th Floor, Conference Room 5 and Zoom Webinar

Task Force Members:

Susan Fraser, Tree Commission Member, Chair
Nina Sickler, Tree Commission Member, Vice-Chair
William Burke, Tree Commission Member
Curtis Hart, Tree Commission Member

Non-Member Attendees:

Jeff Lucovsky, Public Works
Jonathan Johnston, Parks

Advisors:

Jonathan Colburn, Urban Forestry Manager
Justin Gearhart, City Arborist
Shannon MacGillis, Office of General Council

Staff:

Joe Rainey, Executive Assistant

AGENDA

1. **Call to Order –** Chair

2. **Roll Call and Verification of Quorum -**Chair

3. **Public Comment : (up to 3 minutes, allotted at discretion of Chair)**

4. **Submittal of Speaker's Cards** – Chair
   - **i.** A raised hand icon will be acknowledged by the Chair.
   - **ii.** For those attending in person, paper speaker's cards will be available.

5. **Approval of Minutes of September 24, 2025 Task Force Meeting**

6. **Review of Standards, Procedures and Policies of the Tree Commission for Planting in an Urban Environment**
   - i. Continuing Discussion
     - a. Soil Replacement Standards for a Median Location
     - b. Variance Criteria
     - c. Fast(er) Canopy Tree Recommendations
     - d. Level 3 Applicant Effort
   - ii. Review of Draft Document
   - iii. Recommendations to Tree Commission

7. **Amendments to Other Sections of the City's Code**
8. **Meetings with Stakeholders**
9. **Schedule for Presentation to Tree Commission**
10. **ADJOURNMENT**

Task Force on Urban Tree Planting Best Practices

Minutes
Monday September 24, 2025,1:05pm – 2:52pm
Via Zoom Platform & In Person
[Recording of Meeting can be obtained by sending request to Joe Rainey JRainey@coj.net]

Commissioners:

Susan Fraser, Chair, Tree Commission Member
Curtis Hart, Tree Commission Member
William Burke, Tree Commission Member
Nina Sickler, Director of Public Works

Non-Member attendees:

Joe Andreson JEA
Nancy Powell, Scenic Jax
Susan Grandin, Scenic Jax

Advisors:

Justin Gearhart - City Arborist
Laura Hartung - Office of General Counsel
Jon Colburn – Urban Forestry Manager

Staff: Joe Rainey - Executive Assistant Mowing and Landscape

1. Call to Order

Conducted by Chair

2. Roll Call and Verification of Quorum

Conducted by Chair
Commissioners present:
Susan Fraser - present
William Burke - present
Nina Sickler – present until 3:55 due to other commitments

Quorum present (3, in person)

3. Call for Public Speakers (online & card):

Submittal of speaker cards:

4. Issue: Approval of Minutes of August 6, 2025 Task Force Meeting

Motion: Approve, as Amended.
Moved by: William Burke
Second: Nina Sickler

Vote: August 6, 2025 minutes approved as amended, unanimous.

5. Overview of Approach:

a. Conformation of qualified Taskforce goals in preparation for upcoming Vote:

There was consensus, the Task Force will first complete its recommendations to the Tree Commission on the Standards, Policies and Procedures document. On the basis of that recommended document from the Task Force, the next steps, almost all in parallel, would be for the staff to develop a checklist it finds appropriate to facilitate an effective review of a project subject to the standards and then, almost concurrently, prepare the application forms necessary to support a complete application for projects subject to the standards.

b. Verifying, and resolving Taskforce findings aligning with City ordinance 656 standards:

It was acknowledged that the proposed standards were inconsistent with at least one section of 656 (likely multiple) and the LDPM, likely to require an amendment to each. Because of the time involved in amending 656 and the deadline for amending the LDPM for its next update in January, it was the consensus that, to the extent possible, inconsistencies be identified by the end of August, allowing for the preparation of legislation and application for LDPM amendment in a timely manner.

Detailed notes provided as a supplemental document by Chair

6. Discussion ended on the following items

a. Review of Review of application document.

b. Discussion regarding maintenance agreements, services included, and responsibilities and canopy.

c. Formatting and verbiage focused until the meeting

adjourned.

d. Schedule of November taskforce for final review for presentation to Tree Commission.

ADJOURNMENT

END OF MEETING 2:52pm

Soil Replacement Cost

Compacted Environment in an Existing Median

	OSCO Standard Table 1	Depth	Volume OSCO x Depth		**Cost ($200 / CY)**	COMPARE RSV Table 2
small	6' x 6	3'	108 CF	4 CY	**$800**	300 CF
medium	10' x 10'	3'	300 CF	11 CY	**$2,200**	600 CF
large	12' x 12'	3'	432 CF	16 CY	**$3,200**	1000 CF

I was asked the following by Susan Frazer: "[…] Jonathan, you wanted to offer your opinion about the 'Fast Tree' (maybe this can be called the "Fast Shade" Table) list. Please do that, and if you disagree with the growth rate on the Approved Tree List , please note that for us (the Approved Tree List would have to be changed, so please note your sources!)." My response, edited to include full citations, below:

Regarding the fast tree concept, respectfully:

1.) I am concerned that this is a bit fictional and hopeful with respect to urban planting – that a tree can be planted at a small size and rapidly attain the size desired – a size that provides a lot of shade and also clearance with respect to vehicles and/or unmoving urban infrastructure. The request to have a fast tree may be based on:
    a. The need to have immediate clearance, but that clearance is not actually immediate. Rather, it takes a few years for a fast-growing tree to grow appreciably, during which time it is very similar to a tree that grows slowly. "Fast" is relative, not immediate, and not defined as proposed. The speed from one canopy spread to a subsequent larger canopy spread should be well defined to label a tree as fast.
    b. The desire to have an appreciable crown size before a hardscape is redone in the near future and the associated tree removed in the course of that redo. In my experience, the timeline for the redo is not usually clearly established – it is a subjective impression that may or may not come to pass, and therefore appears to be an excuse for shoddy planting and an expectation for many urban trees to easily be labelled as low-value. Also, I sense that the desired crown size will not be attained in practice as it is attained in the mind.
    c. There may be other underlying reasons for the desire to have "fast" trees, and these should be described and understood thoroughly before initiating a fast tree program. Upon description, these reasons should then be assessed for which other techniques can achieve the equivalent or better goal.

2.) The alternative that I have put forth to the fast tree concept is the tree that is initially large. Although more expensive, trees that are initially large are used in other municipalities such as Pompano Beach to deal with compact above-ground clearance issues where the distance from the store front to the curb is limited and clearance (for vehicles, site lines, etc.) has to be immediately present rather than quickly attained by a fast-growing tree. There is this great precedent for their use. While more expensive, the trees are more functional, immediately. Professionally, one of the corollaries of right tree <-> right place is that the best size tree be installed in each hole, regardless of whether that is a large, small, or medium-sized tree. Our standard 3-4" caliper trees are an arbitrary legacy, and likely tied to their size being similar to the size of a person rather than the size that the tree needs to be where it is planted. The senior forester for Chicago had this problem where they had a successful field-grown bare root tree planting nursery program that was shut down because the mayor explicitly wanted more visibility for the planted trees rather than superior plantings. So for an urban forester,

we want to have more options and use those options responsively to each planting site. Just as planting small bare root trees is the correct thing to do in many (but not all) circumstances, normalizing the planting of trees that are initially large is part of the broad base of solutions that urban foresters want for planting in these very difficult but rewarding urban core environments. When trees are initially large, they can be out of the way and allowed to grow as they need to over subsequent years. They also look presentable at both the initial and subsequent sizes, over the duration of their life that is anticipated to be short, and also beyond that time in the event that the tree ends up being left alone. The options are immediately present, and left open.

3.) Respectfully, it is on the person who proposes that the tree grows fast to provide evidence of the pace of growth; it is not my obligation to figure out the growth rate. I suspect that such a person will have <u>some</u> difficulty either due to lack of documentation or facts in opposition. Some reasons in support for why I feel this way and am reticent to characterize trees as growing at a certain speed:

    a. Making a (UF IFAS) table of fast-growing trees and providing no citations to the underlying research does not constitute sufficient evidence of growth rates. Incidentally, UF IFAS also says this (with source uncited) about fast-growing trees: "Fast growing trees provide their benefits quickly, but their wood is often (but not always) more brittle than slow growing trees. In urban areas, safety should be a primary concern in tree selection. Avoid choosing trees that are more susceptible to limb breakage, although they may be fast growers in the landscape." UF IFAS does a lot of great work, but there is sometimes context behind that work – age of the evidence and subsequent advancements, the actual person who wrote it, whether the information was peer-reviewed before being posted, etc. I pay fairly close attention to those details and access primary source material when it is important.
    b. Interestingly, Maiiloux et al. 2024 noted that the London plane tree - relative of the American sycamore - had the slowest growth rate in New York City while the Silver Linden - a Tilia genus from Europe related to our American basswood (which is also listed as one of the faster growing tree species) - was the fastest growing species. See below:

Common Name	Growth Database				2015 Data
	Abundance Rank	Number of Trees	Mean DBH 2005 (in)	Mean Growth Rate (in/yr)	Abundance Rank
London Planetree (*Platanus x acerifolia*)	1	32,058	22.5	0.163	1
Honeylocust (*Gleditsia thriacanthos*)	2	15,974	9.1	0.356	2
Callery Pear (*Pyrus calleryana*)	3	15,903	6.6	0.334	3
Norway Maple (*Acer platanoides*)	4	13,149	13.4	0.174	5
Pin Oak (*Quercus palustris*)	5	11,563	16.8	0.352	4
Littleleaf Linden (*Tilia cordata*)	6	6,343	9.7	0.318	6
Ginkgo (*Ginkgo biloba*)	7	5,518	9.0	0.257	9
Green Ash (*Fraxinus pennsylvanica*)	8	4,893	10.9	0.366	12
Red Maple (*Acer rubrum*)	9	4,116	10.1	0.273	11
Silver Maple (*Acer saccharinum*)	10	3,948	20.4	0.265	14
Japanese Zelkova (*Zelkova serrata*)	11	3,643	8.2	0.425	8
Sweetgum (*Liquidambar styraciflua*)	12	2,620	11.0	0.308	15
Silver Linden (*Tilia tomentosa*)	13	1,149	6.7	0.510	17
Northern Red Oak (*Quercus rubra*)	14	1,026	12.7	0.375	16
American Linden (*Tilia americana*)	15	868	10.8	0.399	13

https://doi.org/10.1371/journal.pone.0304447.t002

This table also includes maples with very different growth rates, but maples (excepting Japanese maples) are usually characterized as fast growers across the board. If this can happen in New York, the unexpected likely happens in this region as well.

c. An interesting case from personal observation and conversations with tree professionals is the laurel oak and live oak, which can often be found growing adjacent to each other on lots that were cleared and then reforested by adventitious trees over several decades. The diameters of the "fast growing" laurel oaks and the "slow growing" live oaks appear very similar, yet many professionals and non-professionals believe that laurel oaks grow a lot faster than live oaks.

To summarize, my observations and experience point to trees that are perceived as fast growing sometimes/often growing at a similar or slower pace compared to those that are perceived as slower growing. Because of this, I am reticent to characterize the speed at which I anticipate the tree growing at. If the City wants to base its policies on evidence, a substantial literature search may shed light on the subject (I would support the result of that), but I suspect that some research will also need to be carried out, and that that research will show what it shows rather than what I expect it to show. I have not seen clear evidence that would rank the trees in our region in terms of speed of growth. For me, the exception I would be willing to make is the American sycamore which seems to grow faster than most or all other species. If someone does not concur with the pace of American sycamore growth, I am open to the discussion due to the precedent of tree growth rates being guessed at and my desire to not guess.

4.) Lastly, the main determinant of how fast a tree grows is how much water it receives (e.g. in maples, Dale and Frank 2022), so we could just plant whatever we want and keep the

water at field capacity with a new and extended watering contract if we really need it to grow fast.

Literature Cited:

Dale, A.G. and S.D. Frank 2022. Water availability determines tree growth and physiological response to biotic and abiotic stress in a temperate North American urban forest. Forests 13(7):1012-1027.

Mailloux, B.J., C. McGillis, T. Maenza-Gmelch, P.J. Culligan, M.Z. He, G. Kaspi, M. Miley, E. Komita-Moussa, T.R. Sanchez, E. Steiger, H. Zhao, and E.M. Cook 2024. Large-scale determinants of street tree growth rates across an urban environment. PLoS ONE 19(7): e0304447. https://doi.org/10.1371/journal.pone.0304447

Standards, Procedures and Policies of the Tree Commission for Planting in an Urban Environment

Scope and Purpose

The Chair of the Tree Commission established the Task Force on Jacksonville Urban Tree Planting Best Practices for the purpose stated in the Amended Charge Memorandum dated November 20, 2024 (***Exhibit A***).

1. *Definition of Urban Planting Environment*

The Task Force is empowered to review and provide recommendations on initiatives and strategies related to the planting of trees on urban public land in the City for the purpose of maximizing the long term health and vitality of trees planted with Tree Mitigation Funds on urban public land pursuant to the Tree Commission Programs. As defined by the Charge Memorandum , the term "urban" refers to *planting or replanting trees anywhere in the geographic City of Jacksonville that is constrained, horizontally or vertically, or both by, including but not limited to, development (such as buildings, utilities, etc.), grey infrastructure, hardscape, concrete, asphalt, pavement or brick, etc. above or below ground ("Urban Planting Environment")*

The Task Force has recommended the following standards, procedures and policies to the Tree Commission, and at its DATE meeting, the Tree Commission has determined that trees planted with Tree Mitigation Funds in an Urban Planting Environment pursuant to the Tree Commission Programs listed below shall be subject to the standards, procedures and policies herein to achieve a Suitable Tree Planting Environment for each proposed tree planting location.

- 630- CITY
- Remove and Replace
- Level 2
- Level 3

Each Application shall establish a Suitable Planting Environment (SPE) for each tree planting location as prescribed herein to mitigate each otherwise Unsuitable Planting Environment to be eligible for funding from the Tree Mitigation Funds unless the Tree Commission approves an alternative mitigation strategy to achieve a Suitable Planting Environment. Recognizing the additional impacts posed by the larger urban environment on tree planting, Applications shall also mitigate or eliminate Urban Impacts to Tree Planting determined to impact proposed tree planting locations. Evidence of establishment of an (SPE) for each tree planting location and a summary of any alternative standards proposed for Tree Commission approval shall be documented in the Staff Report for the Application to considered by the Tree Commission when Tree Commission approval is required and shall be documented in Program records when Tree Commission approval is not required under the Procedures of the Tree Commission.

The establishment of these standards and procedures is intended to inform project applicants and designers of the minimum requirements determined to be applicable to tree planting in an Urban Planting Environment to achieve a healthy and sustainable tree canopy within the City. The standards and procedures address Existing Conditions Projects in a manner that recognizes the conditions likely to be encountered when planting trees in existing Urban Planting Environments and provide guidance to direct applicants to alternative planting locations and tree selections when the minimum standards cannot be met. The standards and procedures for New Construction Projects are intended to challenge applicants and project designers to apply the minimum standards applicable to this category of project in initial design decisions in a manner that avoids and minimizes the need for supporting infrastructure such as soil replacement, structure support for surface improvements and compaction mitigation to address Urban Planting Environments within the project. Consideration of New Construction projects by the Tree Commission include an assessment of the extent to which the need for supporting infrastructure is minimized or eliminated; based on site conditions and design decisions represented in the Application, Applicants may be required to pay for the supporting infrastructure necessary to achieve Suitable Planting Environments within the project.

The Tree Commission is committed to a partnership with all Applicants to meet its goal to maximize the future health and vitality of any tree planted under its programs; in support of the Tree Commission's duty to provide the best outcome for the future tree canopy of the City, project review and approval is intended to be an interactive collaboration in pursuit of this goal.

2. ***Applicability of Standards and Procedures***

These standards shall apply to all locations within a project determined to be Urban Planting Locations. These procedures and standards established by the Tree Commission are the minimum required to provide a Suitable Planting Environment at the time of tree planting. Subject to approval by the Tree Commission, an Applicant may propose alternative standards that provide an equal or superior tree planting environment than that created by application of the established standards or address unique site conditions. Approval of alternative standards by the Tree Commission shall be required under the Schematic and Conceptual Plan procedures established herein.

For the purposes of these Standards, Procedures and Policies, the term "Application" shall include:

- projects prepared by staff or an Applicant other than staff for Tree Commission approval (Level 2 and Level 3 Programs); and,
- projects managed by staff under the 630-City and Remove & Replace Programs that do not require Tree Commission approval.

The term "Applicant" shall include the City when applications are prepared by City staff and any other party seeking approval of a project by the Tree Commission. Compliance with the applicable Standards, Procedures and Policies for projects not subject to Tree Commission approval shall be documented in the Program records of the City.

3. *Suitable Planting Environment Definition*

A Suitable Planting Environment is defined as a proposed tree planting location in which, at the time of planting:

1) sufficient area is provided to accommodate mature trunk volume, flare and surface roots (Table 1. OSCO Requirements) ; and,
2) sufficient Soil Quantity (volume) is provided to support the tree mass (spread) proposed (Table 2. Required Soil Volumes); and,
3) a classification of Not Compacted is achieved within the Required Soil Volume at each tree planting location (Table 3. Suitable Planting Environment Standards).

Within each project an Unsuitable Planting Location is assumed to exist for a particular tree planting location if, without changes to the conditions that will exist at the time of tree planting, a Suitable Planting Environment would not be provided in that location at the time of tree planting. A project may include both tree planting locations that are determined to be Urban Planting Locations and locations that are not.

4. *Responsibility for Determination of Suitable Planting Environment.*

Determination that a Suitable Tree Planting Environment exists for each tree planting location shall be determined by the entity listed. When approval by the Tree Commission is otherwise required for the project funding, the determining entity shall make a recommendation to the Tree Commission as to the provision of Suitable Planting Environment(s) within the project. The Tree Commission shall consider the staff recommendation and public comment in its review of the application. If compliance with the Standards cannot be achieved, approval of an alternative standard or variance to the adopted standard may be considered by the Tree Commission. The Tree Commission shall be solely responsible for approving alternative standards after consideration of the Staff Report, Applicant and public comment.

Program	Entity
630-CITY	City Arborist
Remove and Replace	City Arborist
Level 2	City Arborist recommendation; Tree Commission approval
Level 3	City Arborist recommendation; Tree Commission approval

5. *Other Urban Impacts on Tree Planting*

In addition to a suitable tree planting environment, the surrounding urban environment can pose other challenges to the long term health and vitality of planted trees (Urban Impacts).

a. vertical obstructions may limit the desired tree canopy and impose additional maintenance requirements (Urban Impacts Section 1); and,
~~b. drainage patterns over paved surfaces can direct excessive water toward or away from a planting location (Section 5); and,~~

c. imported soils can include contaminants or be of a quality not supportive of tree health (Urban Impact Section 2); and,
d. maintenance beyond initial warranty periods may be ~~is~~ required to address the stress the urban environment places on the tree (Urban Impacts Section 3); and,
e. constrained planting areas can affect the ultimate canopy spread and growth rate of a tree located in such an environment, reducing the shade benefit of the tree selected such that a fast growing tree species may achieve shade goals more effectively (Urban Impacts Section 4).

In addition to a recommendation as to the compliance with applicable standards to provide a Suitable Planting Environment at each planting location, each project application shall identify the presence or absence of each Urban Impact on the tree planting locations within the project limits and confirm compliance with the applicable standards established in Urban Impacts Sections 1-3. When a project goal of the tree planting location is to quickly provide shade, utilization of the tree species recommended in Uban Impacts Section 4 is encouraged.

Suitable Planting Environment is Provided at Each Tree Planting Location

The Application shall demonstrate for each planting area:

1. Sufficient area is provided to accommodate mature trunk volume, flare and surface roots.

To provide sufficient area to accommodate mature trunk volume, flare and surface roots, an open space without surface improvements shall be provided around the trunk of the tree; this area, when located within an area of surface improvement, shall be provided in the form of a cut out within the surface improvement.

The Tree Commission's Approved Tree List classifies each Approved Tree as small, medium or large (Tree Size). **Table 1.** identifies the minimum Open Space / Cut Out (OSCO) required for each tree planting location based on the Tree Size.

The specified Minimum Open Space / Cut Out (OSCO) based on the Tree Size of the proposed tree to be planted shall be provided for each tree location.

For an Existing Conditions Project, if the standards in Table 1 cannot be met, the Tree Commission may approve the following alternative standard:

i. The reduction of one dimension of the required OSCO Requirement is permitted provided the area of the applicable OSCO is not reduced and the minimum distance of the trunk to an impervious surface is maintained.

Tree Grates. If installed within an OSCO, tree grates must have an opening (symmetrical around the truck) that is a minimum of 12" from the trunk at the time of planting and the long term maintenance agreement with the City must provide for annual tree grate inspection and

modification or replacement as required to maintain an opening that is a minimum of 6 inches from the truck, measured at the time of inspection.

Tree Grates specified in an Existing Conditions Project for installation within an OSCO in order to provide the minimum sidewalk width for the adjacent sidewalk as defined in Section 654, Ordinance Code and the LDPM Volume 2. Design Standards (***Exhibit A***) shall be eligible for funding from the Tree Mitigation Funds.

2. Sufficient Soil Quantity (volume) is provided to support the tree mass (spread) proposed.

The Tree Commission's Approved Tree List classifies each Approved Tree as small, medium or large (Tree Size). Based on this classification, the planting area for each proposed tree shall meet the standards in **Table 2**.

Table 2. identifies the Required Soil Volume (RSV) for each tree planting location. The area claimed as Required Soil Volume is calculated as the total depth x width x height minus the area of utilities or other encroachments (measured as the volume within the Required Soil Volume).

Unless otherwise approved by the Tree Commission, each Required Soil Volume must be provided within land controlled by the Applicant. If the approved RSV is located outside land controlled by the Applicant, an As-Built Survey of the location of each Required Soil Volume shall be provided to the Tree Commission for preservation in the project documents. Future construction, above or below ground, ~~projects~~ within the limits of a Required Soil Volume shall avoid or mitigate impacts to the Required Soil Volume.

In the absence of hydric soils or vegetative indicators of a higher water table, the application of a depth of $\leq$ 3 feet to the calculation of the RSV is assumed to provide adequate drainage to obtain root growth in the soil. The application of a depth of > 3 feet to the calculation of the RSV requires additional testing to confirm the depth of the water table is lower than the depth applied in the calculation. Test results that indicate a water table at or above 3 feet will require the calculation of the RSV for those locations to utilize a depth above the identified water table.

New Construction project designs are encouraged to combine, and for Existing Conditions Projects, to relocate as practical, proposed tree planting locations so as to combine Required Soil Volumes in a manner that reduces the need for subsurface infrastructure to provide an UNCOMPACTED planting environment and maximizes the OSCO available to the planted trees. As an incentive, combined planting areas are eligible for a 25% reduction in the Required Soil Volume otherwise required for an individual tree, provided however that the minimum distance to an impervious surface established for the tree trunk cannot be reduced.

The Tree Commission may grant a variance reducing the Required Soil Volume applicable to a planting location based on the Tree Size of the tree proposed (Proposed Tree Size) to be planted provided:

~~i. The reduction does not exceed 10 percent of the Required Soil Volume applicable to the Proposed Tree Size; or~~

i. Relocation of the planting area or combination of Required Soil Volumes does not provide the Required Soil Volume applicable to the Proposed Tree Size; and

ii. Reduction of the Proposed Tree Size, substituting a small or medium tree for proposed large tree or a small tree for proposed medium tree, does not provide the Required Soil Volume applicable to the substituted tree size.

3. A classification of Not Compacted is achieved within the Required Soil Volume at each planting location.

A Suitable Planting Environment requires the classification of NOT COMPACTED within each Required Soil Volume. **Table 3.** and the sections below identify the standards and procedures for the determination of "NOT COMPACTED" by Project Type. ~~; applicable to each Project Type, subject to the process and requirements below.~~

Applications that include a planting location classified as "COMPACTED" ~~an Unsuitable Planting Environment~~ shall meet the standards established in Table 3 to establish a Suitable Planting Environment within the Required Soil Volume.

A. Existing Conditions Project. Defined as a project authorized under the 630-CITY and Remove & Replace Programs, a proposed Level 2 Project without associated development/construction, including Level 2 Projects within an existing Public Right of Way and a proposed Level 3 Project without associated development/construction.

i. **630-CITY and Remove & Replace Programs not within a Public Right of Way Median**

Staff shall inspect the proposed tree planting locations and identify, based on the Tree Size of the proposed tree to be planted, the Required Soil Volume associated with each. Each RSV shall be classified as "COMPACTED", "NOT COMPACTED" or "POTENTIALLY COMPACTED". Each RSV must ultimately be classified as "COMPACTED" or "NOT COMPACTED". Staff may rely on history of the site, health of adjacent tree plantings, on-site testing results (penetrometer) or order a bulk density test (BDT) to make a final determination of "COMPACTED" or "NOT COMPACTED" for each RSV. If a BDT is performed, a Bulk Density Score of 109 lb /cubic foot or above shall be classified as COMPACTED. Compacted of 85% or greater shall be classified as COMPACTED.

For Remove & Replace Plantings located within an existing Public Right of Way outside the median, staff shall apply the following assumption for a determination of COMPACTED or NOT COMPACTED. This assumption may be rebutted by staff based on health of adjacent tree plantings, on-site testing or BDT:

a. Planting locations located between the travel lane(s) and the right of way that are 8 feet in width or greater (exclusive of surface improvements including sidewalks)

are assumed "NOT COMPACTED"; width less than 8 feet are assumed to be "COMPACTED".

If an RSV is classified as "COMPACTED" and tree planting is desired, the Staff ~~Applicant~~ shall submit a mitigation plan and cost estimate to establish a Suitable Planting Environment to the Tree Commission for approval.

ii. **Remove & Replace Programs within a Public Right of Way Median**

Staff shall inspect the proposed tree planting locations and identify, based on the Tree Size of the proposed tree to be planted, the Required Soil Volume associated with each. The Required Soil Volume for planting in an existing public right of way median is identified in Table 4. Each RSV shall be classified as "COMPACTED", "NOT COMPACTED" or "POTENTIALLY COMPACTED". Each RSV must ultimately be classified as "COMPACTED" or "NOT COMPACTED". Staff may rely on history of the site, health of adjacent tree plantings, on-site testing results (penetrometer) or order a bulk density test (BDT) to make a final determination of "COMPACTED" or "NOT COMPACTED" for each RSV. If a BDT is performed, a Bulk Density Score of 109 lb /cubic foot or above shall be classified as COMPACTED. Compacted of 85% or greater shall be classified as COMPACTED.

For Remove & Replace Plantings located within an existing Public Right of Way median, staff shall apply the following assumptions for a determination of COMPACTED or NOT COMPACTED. This assumption may be rebutted by staff based on health of adjacent tree plantings, on-site testing or BDT.

Required Soil Volume located within an existing median 12 feet in width or less (measured BOC to BOC) are assumed to be "COMPACTED".

If an RSV is classified as "COMPACTED" and tree planting in that location is desired, mitigation in the form of Soil Replacement shall be authorized, up to the Volume to be Replaced and Cost identified in Table 4 for the Tree Size to be planted without additional review and approval by the Tree Commission. Mitigation in excess of the Cost identified in Table 4 for the Tree Size to be planted shall require approval by the Tree Commission.

iii. **Level 2 Project without associated development/construction.**

Staff shall inspect the proposed tree planting locations and identify the Required Soil Volume associated with each. Each RSV shall be classified as "COMPACTED", "NOT COMPACTED" or "POTENTIALLY COMPACTED". Each RSV must ultimately be classified as "COMPACTED" or "NOT COMPACTED". Staff may rely on history of the site, health of adjacent tree plantings, on-site testing results (penetrometer) or order a bulk density test (BDT) to make a final determination of "COMPACTED" or "NOT COMPACTED" for each RSV. If a BDT is performed, a Bulk Density Score of 109 lb /cubic foot or above shall be classified as COMPACTED. Compacted of 85% or greater shall be classified as COMPACTED.

Staff shall apply the assigned classifications for each RSV in its development of the Level 2 project application. The Planting Plan and Cost Estimate shall be based on the classification assigned each planting location and include mitigation measures required to establish a Suitable Planting Environment in each.

For Level 2 Projects located within an existing Public Right of Way without associated development/construction, staff shall apply the following assumptions for a determination of COMPACTED or NOT COMPACTED. These assumptions may be rebutted by staff based on health of adjacent tree plantings, on-site testing or BDT.

a. Required Soil Volume located within an existing median 12 feet in width or less (measured BOC to BOC) are assumed to be "COMPACTED".
b. Planting locations located between the travel lane(s) and the right of way that are 8 feet in width or greater (exclusive of surface improvements including sidewalks) are assumed "NOT COMPACTED"; width less than 8 feet are assumed to be "COMPACTED".

iv. **Level 3 Project without associated development/construction.** The Applicant shall prepare and submit a Schematic Planting Plan prior to the Project Scoping Meeting. The Schematic Planting plan shall, at a minimum, identify proposed planting locations, proposed Tree Size for each planting location and the OSCO and RSV proposed for each proposed planting location. Each proposed planting location shall be numbered and a tabular summary provided that identifies the extent to which each proposed planting location meets the applicable standards established herein. Upon receipt of a Level 3 Project Scope Submittal, staff shall perform an initial site visit prior to the Project Scope Review Meeting to identify /confirm the Required Soil Volume associated with each potential planting area as "COMPACTED", "NOT COMPACTED" or "POTENTIALLY COMPACTED" under existing site conditions . Staff may rely on health of adjacent tree plantings, history of the site, on-site testing results (penetrometer) or order a bulk density test (BDT) to make a final determination of "COMPACTED" or "NOT COMPACTED" for each proposed planting location. If a BDT is performed, a Bulk Density Score of 109 lb /cubic foot or above shall be classified as COMPACTED. Compacted of 85% or greater shall be classified as COMPACTED.

Staff shall provide its classification for each planting location to the Applicant. The Applicant shall apply the classifications in its development of the Conceptual Level 3 project application. The Level 3 Conceptual Planting Plan and Cost Estimate shall be based on the assigned classification and include mitigation measures required to establish a Suitable Planting Environment.

The Level 3 Conceptual Planting Plan and Cost Estimate shall be approved, approved with conditions/modification or denied by the Tree Commission. A Level 3 Concept Plan approved by the Tree Commission with conditions/modification shall be revised

by the Applicant to incorporate the conditions/modifications; the revised Concept Plan shall be reviewed by staff and re-approved by the Tree Commission as the Project Planting Plan; a Level 3 Concept Plan approved by the Tree Commission without conditions/modification shall, upon approval, be the Project Planting Plan. shall become the approved project plan.

B. **Proposed Development Project.** Defined as tree planting proposed in conjunction with any development/construction. When determined to be applicable to any Tree Commission Program other than a Level 3 Project, the Application shall be subject to the Level 3 Application requirements.

Within a Proposed Development Project, the Tree Commission seeks to limit the creation of Unsuitable Planting Environments through partnership with the project Applicant. A successful urban planting design balances the project goals with the impacts created by an urban environment on the health and long term viability of the desired urban tree canopy. A vibrant urban tree canopy can be best achieved by mitigating the constraints the urban environment places on trees through informed design decisions and management of construction practices. The standards established below represent the minimum requirements for mitigation of an Unsuitable Planting Environment.

i. **Identify Unsuitable Planting Environments**
To increase the quality of urban tree planting within a Proposed Development Project, an Applicant must first demonstrate that the design avoids the creation of Unsuitable Planting Environments to the maximum extent possible.

The initial Project Scope meeting with Staff shall identify proposed planting locations and tree species proposed for each location. The plan shall apply the Suitable Planting Environment standards for a Proposed Development Project to each proposed planting location and summarize in table form the mitigation required by these standards and policies to provide a Suitable Planting Environment at each planting location.

ii. **Mitigate Unsuitable Planting Environments**
In determining the mitigation required for a planting location, each planting location located within the limits of construction shall be classified as COMPACTED.

The Applicant shall demonstrate that the Proposed Development Plan employs the following design strategies to limit designation of COMPACTED to a Required Soil Volume:

a. For Required Soil Volumes located within an SPA.In addition to the proposed planting plan, the Level 3 Project Scope submittal shall include a plan depicting the limits of construction within the Proposed Development Project (Limits of Construction Plan). Limits of construction include areas for storage of equipment,

laydown of materials or supplies, limits of work, construction access, construction parking and all areas that are or will be impervious. Areas within the project limits that have been previously developed or disturbed shall be included in the area identified as the limits of construction. Areas that are outside the limits of construction shall be delineated on the Limits of Construction Plan and protected as Soil Preservation Areas (SPAs).

b. For Required Soil Volumes located outside an SPA. If Tree Mitigation Funding is requested for the installation of a Surface Support System (silvacell, etc.), Staff will work with the Applicant and Public Agency in the development of the Conceptual Plan to meet the project goals, maximize the investment in future tree canopy and minimize the need for Surface Support System investment from the Tree Mitigation Fund. To effectuate coordination, the following design review is required to minimize planting within a Compacted Planting Environment that requires an SSS:

i. Tree locations have been evaluated to minimize or eliminate the need for installation of an SSS. *Staff may recommend the relocation of trees to achieve minimum need for* an SSS.
ii. Tree sizes (small, medium or large) have been evaluated to minimize the need for installation of an SSS. *Staff may recommend changes to tree size to reduce the volume of* SSS.
iii. Paved areas have been located so as to minimize the need for installation of an SSS.- *Staff may recommend reduction or relocation of proposed paved areas to reduce the area of* SSS.

An Applicant may decline to accept the recommendations of Staff and seek approval by the Tree Commission. The Staff Report will document its recommendations and the consistency of the Project Planting Plan for which the Applicant seeks approval in its report to the Tree Commission. Tree Commission approval may assign costs associated with mitigation of a Compacted Planting Environment to the Applicant.

iii. **Concept Plan Review**

a. Submittal Requirements. To facilitate the design review, in addition to the required Level 3 Application materials, the Application shall include, with the Conceptual Planting Plan, a Compacted Environment Assessment Plan that overlays the location of each RSV on the Limits of Construction Plan. Each Required Soil Volume located within the Limits of Construction shall be classified as COMPACTED; Required Soil Volume(s) located outside the Limits of Construction, within an SPA, shall be classified as UNCOMPACTED unless site history or on site testing supports a finding of COMPACTED. Planting areas outside the Limits of Construction may be classified as COMPACTED if the creation of an Unsuitable Planting Environment is anticipated to be created by future ~~other~~ development activities/ factors. The

Staff shall work with the Applicant to minimize the extent ~~creation~~ of COMPACTED classification(s) within the project limits. ~~Unsuitable Planting Environments and shall document its recommendations.~~ The Applicant shall incorporate Staff recommendations to the maximum extent possible into the Conceptual Plan to be considered by the Tree Commission.

The Application ~~Submittal~~ for Concept Plan approval to the Tree Commission shall include a Rough Estimate of Improvements based on the Compacted Environment Assessment Plan (CEAP). Based on the CEAP, the Concept Plan shall reflect mitigation required to provide a Suitable Planting Environment for each Required Soil Volume. The Rough Estimate of Improvements shall include the cost associated with the provision of mitigation proposed to achieve Suitable Planting Environments to the extent the mitigation is requested to be funded by Tree Mitigation Funds and, for each planting location for a tree funded by the Tree Mitigation Fund for which mitigation is not requested to be funded by the Tree Mitigation Fund, shall identify the alternative source of funding for required mitigation.

b. Approval of the Concept Plan. Tree Commission approval is required prior to submittal of the Project Planting Plan to the Tree Commission. Project Planting Plans must clearly identify the limits of construction and SPAs consistent with the limits depicted on the Schematic and Concept Plans. SPAs depicted on the Project Planting Plan shall be maintained by the Applicant as UNCOMPACTED throughout construction and final acceptance utilizing protection from all encroachment in the same manner as required for tree protection areas in Section 656.1207, Ordinance Code. Location of fencing shall be depicted on approved plans and maintained by the Applicant /Public Agency as depicted through final acceptance.
c. The Staff Report to the Tree Commission for the Concept Plan for the Level 3 Project shall identify actions taken to reduce the creation of Unsuitable Planting Environments and the need for Pavement Support Systems within the Level 3 Project.
d. Compliance Inspections. In addition to inspections related to tree installation, to ensure compliance with SPA protection requirements, Tree Commission Staff may perform inspections at any time after approval of a Level 3 project by the Tree Commission and enforce the maintenance of SPA protective fencing through final acceptance. If a CEI is retained for the project, inspections shall be assigned to the CEI professional retained for the project. Failure to maintain required fencing and encroachments within the SPA shall cause the project to be subject to additional review by the Tree Commission.

Urban Impacts on Tree Planting are Addressed

1. Vertical and Overhead Obstructions are Recognized in Tree Selection.

Within the urban environment, vertical obstructions can limit the extent (spread) of the tree canopy in one or more directions. Vertical obstructions are typically adjacent buildings and traffic clearance requirements. Failure to recognize these obstructions when selecting a tree species for a particular location can limit the natural mature spread of the tree species and require additional inspection, maintenance and pruning.

When selecting a tree species for an urban location, the following standards apply to vertical clearance to adjacent structures. Additional limitations in tree selection may be applied by Staff to recognize overhead and other vertical obstructions applicable to the planting location. The following distance requirements shall apply when ***the planting location is*** adjacent to a vertical structure of two stories or greater (measured to the center of the trunk of the tree):

A. **Large ~~Shade~~ Ttrees ~~other than Live Oaks.~~** Minimum of 12 feet from the vertical constraint (building façade) unless the Tree Commission approves a Proactive Maintenance Plan for the Project that, at a minimum, specifies the frequency of maintenance, maintenance entity and funding source. If maintenance is provided by other than the City, an enforceable Proactive Maintenance plan shall be executed by the maintenance entity.

~~B. **Live Oaks**. Minimum of 20 feet from the vertical constraint (building façade).~~

Small and Medium

B. Trees ~~other than shade trees.~~ The minimum sidewalk width for downtown sidewalks must be maintained and the required OSCO for the Tree Size provided. ~~Minimum of 0.75 times the radius of the mature canopy of the tree as such is identified on the Tree Commission Approved Tree Planting List.~~

~~*C.* ***Positive Drainage from the Planting Location is provided.***~~

~~The project plans and specifications require and specify positive site drainage away from planting areas.~~

2. Soil Quality within the Required Soil Volume is of sufficient quality to support tree growth and long term health.

A. Proposed Soil Replacement meets the adopted specifications for Soil Replacement. See ***Exhibit B***. Land Development Procedures Manual, Volume 4. Specifications Section 601. LANDSCAPING (*Effective January 2025)*
B. If required, Proposed Soil Profile Rebuilding and specifications are consistent with adopted standards. See ***Exhibit C***. Soil Profile Rebuilding Standards
C. If imported soil/topsoil is proposed, soil analysis for imported soil/topsoil within each Required Soil Volume meets the adopted specifications for Soil Replacement. See ***Exhibit B***.
D. Site History will be reviewed by Staff utilizing the City's GIS Ash Site and Brownfields Site Inventory. Based on historic sire use, Staff may require additional soil testing or environmental assessment to address potential contamination that would adversely affect tree health.

3. Short and Long Term Maintenance is Provided.

The long-term health and viability of a tree planted in an urban environment requires both short-term and long-term maintenance. All tree planting funded from Tree Mitigation Funds are supported with short term maintenance for a period of one or two years under the applicable contract warranty period; without additional proactive maintenance, tree planting in urban environments have reduced long-term health, early decline/death and reduced contribution to the tree canopy.

To maximize the long term health and vitality of tree planting in the City, additional long term maintenance is required beyond the short term maintenance period; within an urban environment this includes regular inspections and scheduled pruning and may include implementation of an integrated pest management plan. ~~insect and pest control.~~

The Tree Commission may ~~will~~ ~~include in~~ its approval of an Urban Planting Project a requirement for ~~a binding~~ an enforceable post warranty period maintenance plan that addresses long-term maintenance, including but not limited to regular inspections, scheduled pruning and as required, an integrated pest management plan. ~~a plan for insect and disease control when required.~~ If tree grates are installed, the long term maintenance plan shall provide for tree grate replacement or modification at the Applicant or Public Agency's expense. ~~The Long Term Maintenance Plan will include the requirement for submittal of a report to the Tree Commission upon each 5 year anniversary of the approval of the Urban Planting Project certifying compliance with the Long Term Maintenance Plan.~~

4. Canopy Goals are Considered

When a goal of the tree planting installation is to quickly provide shade / cooling environment through the use of tree canopy to address existing or future urban conditions that affect human health and comfort, the following trees are recommended. Locations include but are not limited to transit stops, adjacent to sidewalks, parking areas, civic locations such as plazas and other urban gathering spaces.

Medium Trees		**Growth Rate**
Althena Elm	*Ulmus parvifolia* "Emer I'	moderate
Bosque Elm	*Ulmus parvifolia* ' Bosque'	moderate
Drake Elm	*Ulmus parvifolia* ' Drake'	moderate
River Birch	*Betula nigra*	rapid
Large Trees		
Allee Elm	*Ulmus parvifolia* "Emer II'	moderate
Red Maple	*Acer rubrum*	moderate
Shumard Oak	*Quercus shumardii*	rapid
Sycamore	*Platanus occidentalis*	rapid
Tulip Poplar	*Liriodendrum tulipfera*	rapid

Source: Tree Commission Approved Tree List, June 2025

Task Force on Urban Tree Planting Best Practices

Minutes
Monday October 29, 2025,1:13pm – 3:16pm
Via Zoom Platform & In Person
[Recording of Meeting can be obtained by sending request to Joe Rainey JRainey@coj.net]

Commissioners:

Susan Fraser, Chair, Tree Commission Member
Curtis Hart, Tree Commission Member
William Burke, Tree Commission Member
Nina Sickler, Director of Public Works

Non-Member attendees:

Joe Andreson JEA
Nancy Powell, Scenic Jax
Susan Grandin, Scenic Jax

Advisors:

Justin Gearhart - City Arborist
Shannon MacGillis - Office of General Counsel Jon Colburn – Urban Forestry Manager

Staff: Joe Rainey - Executive Assistant Mowing and Landscape

1. Call to Order

Conducted by Chair

2. Roll Call and Verification of Quorum

Conducted by Chair
Commissioners present:
Susan Fraser - present
William Burke - present
Nina Sickler – present

Quorum present (3, in person)

3. Call for Public Speakers (online & card):

Submittal of speaker cards:

4. Issue: Approval of Minutes of Sept 24th 2025 Task Force Meeting

Motion: Approve, as Amended.
Moved by: Nina Sickler
Second: William Burke

Vote: Sept. 24, 2025 minutes approved as amended, unanimous.

5. Overview of Approach:

a. Conformation of qualified Taskforce goals in preparation for upcoming Vote:

There was consensus, the Task Force will first complete its recommendations to the Tree Commission on the Standards, Policies and Procedures document. On the basis of that recommended document from the Task Force, the next steps, almost all in parallel, would be for the staff to develop a checklist it finds appropriate to facilitate an effective review of a project subject to the standards and then, almost concurrently, prepare the application forms necessary to support a complete application for projects subject to the standards.

b. Verifying, and resolving Taskforce findings aligning with City ordinance 656 standards:

It was acknowledged that the proposed standards were inconsistent with at least one section of 656 (likely multiple) and the LDPM, likely to require an amendment to each. Because of the time involved in amending 656 and the deadline for amending the LDPM for its next update in January, it was the consensus that, to the extent possible, inconsistencies be identified by staff identified by Ms. Sickler. Chair to provide the final document to Mr. Rainey who would be responsible for coordination with Ms. Sickler to identify a distribution list. Chair to draft an "invite" to the staff performing the review to provide some context to the request This coordination was to be completed as soon as possible to allow for the preparation of legislation and application for LDPM amendment in a timely manner.

6. Discussion ended on the following item

a. Schedule of November taskforce for review meeting with Prosser to discuss findings.

ADJOURNMENT