Jacksonville Tree Commission

TASK FORCE ON URBAN TREE PLANTING BEST PRACTICES
September 24, 2025 1:00 pm to 3:00 pm
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, PDDS
Jonathan Johnston, Parks
Susan Grandin, Scenic Jax

Advisors:

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

Staff:

Joe Rainey, Executive Assistant

AGENDA

Order of Agenda is Subject to Change

1. **Call to Order –** Chair

2. **Roll Call and Verification of Quorum** – Chair Submittal of Speaker's cards

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

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

5. **Approval of Minutes of July 15, 2025 Task Force Meeting**

6. **Overview of Approach- 2025 Updates to Mitigation by Degree of Urbanization**

    i. Filing an Application for Planting in an Urban Environment
        a. Establish minimum standards for Open Space/Cut Outs
            i. Proposed Development Project
            ii. Existing Conditions Project
            iii. Existing ROW Median
        b. Establish minimum standards for Minimum Planting Area
            i. Proposed Development Project
            ii. Existing Conditions Project
            iii. Existing ROW Median
        c. Requirement for Suitable Planting Environment within Planting Area
        d. Fast Tree Recommendations

7. **Amendments to the Approved Tree Planting List**
    a. Updates to reflect Canopy /Spread, Suitability as Street Trees and Notes

OLD BUSINESS:

8. **Meeting Dates for 2025**

9. **ADJOURNMENT**

Task Force on Urban Tree Planting Best Practices

Minutes
Monday August 6, 2025, – 2:33pm – 4:31pm
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 until 3:55 due to other commitments

Quorum present (3, in person): Yes until 3:55

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

Submittal of speaker cards:

4. Issue: Approval of Minutes of May 14, 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 Section 3 A classification of Not Compacted is achieved within the Required Soil Volume at each planting location. Proposed Development Project is deferred until October.
b. Discussion continues Section 4. Vertical and Overhead Obstructions are Recognized in Tree Selection. under Urban Impacts on Tree Planting until the meeting adjourned.

ADJOURNMENT

END OF MEETING 4:31pm

TASK FORCE ON URBAN TREE PLANTING BEST PRACTICES

August 6, 2025
Meeting Discussion

Discussion of the Standards, Procedures and Policies of the Tree Commission for Planting in an Urban Environment, revised July 17, 2025

Introduction paragraphs (pages 1-2)

- There was consensus that the standards, procedures and policies would be applicable to all 4 programs managed by the Tree Commission.

Urban Impacts on Tree Planting

Question is raised as to whether any one of the three standards (OSCO, soil volume, classification of Uncompacted) is superior to the others.

- Consensus is reached after discussion that each one is its own fatal flaw; if the OSCO is too small that is a constraint (surface roots and truck accommodation); if the soil volume is too small but the best soil is provided, it doesn't matter, the tree isn't getting any bigger; and in the largest soil volume but the soil is poor…..
- The standards are "and" and not "or".
- Not only when the soil volume is small does the tree die out, but it (the roots) will escape to somewhere you don't want them.

There was consensus that the document should be clear that the standards intend to establish policy obligating New Construction projects to minimize creation of constraints in the design phase and who pays when constraints reman and have to be mitigated.

Recommendation 1: It was recommended that a clear statement be placed in the introduction that the failure to avoid/minimize/eliminate Unsuitable Planting Environments in the design (hardship) by an Applicant (in a New Construction Project) meant the Applicant paid for the solution.

Suitable Planting Environment is Provided at Each Tree Planting Location

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

As currently written, the standards do not provide for a reduction of the soil volume, even with Tree Commission approval; Table 2 identifies the stated volumes as the "minimum". Should there be an opportunity to request a smaller volume?

- The Applicant can plant a smaller tree in the location, one that matches the soil volume to be provided, rather than reduce the required volume for the larger tree.
- By allowing discretion by the Tree Commission, review will require back and forth with an Applicant: time, staff, Tree Commission participation, Are we committed to that process?
- When this might arise was discussed and an example given: when soil volume is adjacent

to the actual planting area, outside the ROW.

- The instances might be few and far between, but if we don't have the ability at all, a planting opportunity might be lost.
- There would have to be standards for approval of a variance….can't be a self-imposed hardship.
- Do we accept a med/large tree that achieves half of its maximum size over a small tree?
- Some oaks planted downtown are doing fine, growing away from the buildings. If asked, people would want that over a crape myrtle…..more shade.
- Planting more crape myrtles, closer together, would produce the same effect. It is not just "big tree or no shade". We often rule out these small trees.

Consensus was reached that yes, there should be a variance process to consider reductions in soil volume by the Tree Commission.

Recommendation 2: Allow for a reduction and establish standards for approving or denying a variance to the minimums established in Table 2. Identify potential standards for discussion in September.

Question raised as to how we encourage the connection of planters, clearly identify our goals?

- The top of page 6, under the New Development section, provides for staff review and assessment of the proposed design for minimization of the need for mitigation of an Unsuitable Planting Environment – changes that can be applied to an initial design are identified , such as combining planters, relocation of trees, etc.

Recommendation 3: Add a policy level statement to clearly articulate that these approaches are encouraged and clearly discourage the creation of Unsuitable Planting Environments that require mitigation by assigning the cost to the Applicant.

Discussion expanded to consider the geometry of the Required Soil Volume claimed: It seems the soil volume can gerrymander….

Can the area be 1 foot x 300 feet? The roots will find a path. There should be some guardrails.

Questions were raised: Is it 4:1? Can it include land not in the control of the City?

- Concern expressed over claiming land not in a ROW- would future development/ compaction change the area from suitable to unsuitable? Too difficult to map, monitor and enforce in the future.

Recommendation 4: What does it look like if the area of the claimed Required Soil Volume has to be in the control of the City or the Applicant?

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

How does this apply to 630-CITY? For 630-CITY and Remove & Replace, the test for compaction doesn't apply.

The assumption of "COMPACTED" within a median in a Level 2 project will greatly increase the cost and time to complete those projects; fewer trees may be planted.

- The cost for soil (remove old, install new) is $109 a (cubic) yard. Another bid price known is $150 a CY.
- To replace 1000 CF would be $5600 per tree. With MOT, the add'l cost would be $7000. So a new planting would be $10,000 per tree versus $2500.
- Discussion continued as to the potential for soil amendment versus replacement.
- An option is to make the (Table 2) RSV in a median smaller…..better than nothing, but cost conscious.
- Are we planting large trees in medians?
- Some large medians support it. In the past, yes, without standards large trees have been panted, not recognizing the constraints overall. Under these standards, only some medians will support large trees.
- Even with a reduced soil volume, Table 2 requires 6000 CF for a medium tree, so still additional investment.
- At 600 CF then about $3000 for new soil; double the price of the tree itself. Is that investment worth making?
- Experience has found that the poor soil may only be in the top foot, so you don't have to replace to 3 feet. And clustering trees in the median would reduce the area of soil replacement. But in the end, if you don't have good soil, you are wasting your money. Lime rock contamination is the issue.

What's the compromise? Replace the top 12- 18 inches, uncompact the soil underneath to 3 feet? Best effort?

Can we look ahead and change the City standards for building a road with medians don't get compacted or unsuitable soil in the first place? FDOT did this on the Herschel Street roundabouts.

- Could new road projects be considered "New Construction" and if there were medians, the design plans would be reviewed under these standards? Under SB 180, the City could adopt that approach for its CIP roads, but not require it of developers who ultimately dedicate their roads to the City.

Recommendation 5: Chair to calculate the cost to replace the Required Soil Volume for a planting in a compacted median, both at the established RSV in Table 2 and a reduced volume

based on a 12' or 18" depth, for consideration in October.

The biggest issue isn't the application of compaction to a Level 2 project, but to a Remove & Replace project. If a tree is lost, is greater damage created by replacing the soil? Is it possible to use the health of surrounding trees as evidence that the site is suitable without soil replacement?

Yes, the list of rebuttals of compaction that staff can use includes, history of the site….should it be revised to specifically include surrounding plant conditions?

Would we apply compaction standards to 630-City?

If the planting is in front of a residential lot, you can count the adjacent front yard…..

Even if the volume is available, the standard for planting in a ROW (distance from travel lane to sidewalk less than 8 feet) is assumed to be compacted and has to be replaced.

Should we assume that between the sidewalk and travel lane with adjacent residential use is Not Compacted?

630-CITY trees have a 3 month warranty and so cost about $1200-$1500 per tree. Should 630-CITY be exempted entirely? Should the assumption of Compacted apply only if the distance between sidewalk and travel lane is 6 feet or less?

If the standard is 6 feet or smaller, the heat maps are identifying the need for shade in areas with small rights of way. If the verge is less than 6 feet, then trees might not get planted at all.

630-CITY is one tree at a time, one tree fails if the conditions are Unsuitable. If all the trees in the area are in reasonable health, use the rebuttal option?

For consideration at October meeting. Recommendation 6: Make 630-CITY and R&R subject to the standards and use rebuttals to address Compaction assumption.

Review of Section 3 ***A classification of Not Compacted is achieved within the Required Soil Volume at each planting location., B.*** **Proposed Development Project** is deferred until October. Discussion continues on Section 4. ***Vertical and Overhead Obstructions are Recognized in Tree Selection.*** under Urban Impacts on Tree Planting are Addressed.

Nina Sickler leaves at 3:55 PM. Discussion continues without action.

The vertical obstruction standards seek to reduce the future maintenance associated with trimming when trees are too close to a building face.

Staff observes that once there is any maintenance pruning required, the trimming for 4' is the same as for 7 feet.

Acknowledges this standard is going to apply to large trees downtown. Existing large trees grow away from the vertical constraint.

A question is asked: Does the minimum sidewalk width downtown and the OSCO requirements establish adequate setback from the vertical constraint without additional standards?

Using the setbacks in this section, if a tree is proposed to be planted closer, the requirement is that a maintenance plan has to be provided with the project (and responsibility assigned).

Such a plan would include proactive as well as the already reactive maintenance? A maintenance plan would have to ID both and the cost as they are funded differently.

What is the penalty if maintenance doesn't happen?

The maintenance we are talking about is regular prescriptive maintenance.

Meeting adjourns at 4:30 PM

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

The Tree Commission has determined that all tree planting projects funded by the Tree Mitigation Funds managed by the Tree Commission ~~and all planting projects required as part of the Downtown Overlay~~ shall be subject to the standards, procedures and policies herein to achieve a Suitable Tree Planting Environment ~~and, as defined,~~ for each tree planting location.

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

Each Application must establish a Suitable Planting Environment 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. Applications for projects shall also mitigate or eliminate those ~~determined to be subject to~~ Urban Impacts to Tree Planting ~~as defined herein~~ determined to impact proposed planting locations, ~~shall also~~ recognizing the additional impacts posed by the larger urban environment. ~~and mitigate or eliminate applicable challenges.~~ Evidence of compliance and all alternative standards proposed for Tree Commission approval shall be documented in the Staff Report to the Tree Commission.

The establishment of these standards and procedures is intended to inform project applicants and designers of the minimum requirements applicable to tree planting in an urban environment. While 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 areas, minimum standards are established 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 recognize the minimum standard applicable to this category of project in initial design decisions and minimize the need for supporting infrastructure such as soil replacement, structure support for surface improvements and compaction mitigation. Consideration of New Construction projects by the Tree Commission will include an assessment of the extent to which the need for supporting infrastructure is minimized or eliminated; based on site conditions and design decisions made by the applicant, applicants will 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 maximize the future health and vitality of any tree planted under one of its programs; approval of projects is intended to be interactive in the Tree Commission's search for the best outcome for the future tree canopy of the City.

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 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 Conceptual Plan procedures established for a Level 3 Project.

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.

Suitable Planting Environment

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 tree planting locations that are determined to be Urban Planting Locations and locations that are not.

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 ~~which~~ shall consider the staff recommendation and public comment in its review of the application. ~~determination of compliance.~~ 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

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

a. vertical obstructions may limit the desired tree canopy and impose additional maintenance requirements (Section 4); 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 (Section 6); and,
d. maintenance beyond initial warranty periods is required to address the stress the urban environment places on the tree (Section 7); 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 (Section 8).

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 Sections 4 -7. When a project goal of the tree planting location is to quickly provide shade, utilization of the tree species recommended in Section 8 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 said classification.

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: ~~s, in order of application:~~

i. The reduction of one dimension of the required OSCO Requirement is permitted provided the ~~horizontal~~ area of the applicable OSCO ~~Requirement established by the required dimensions~~ 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 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. 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. 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 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 ≤ 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. ~~may be combined to accommodate multiple 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 ~~OSCO~~ 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
ii. 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
iii. 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., ~~or a Level 2 Project located within a Public Right of Way.~~

1. **630-CITY and Remove & Replace Programs not within a Public Right of Way.** 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.

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

2. 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 ~~assigned~~ 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. ~~for planting locations within an existing ROW median.~~ These assumptions may be rebutted by staff based on health of adjacent tree plantings, ~~with~~ 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".

   a. 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". Staff may rely on **the health of adjacent tree plantings,** ~~visual inspection,~~ 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. Level 3 Concept Plans approved by the Tree Commission shall be the approved project plan; The Tree Commission may require Concept Plans approved with modifications/conditions to be revised to incorporate the conditions/modifications.

2. **Proposed Development Project.** Defined as tree planting proposed in conjunction with any development/construction. ~~within the proposed Level 2 or Level 3 Project.~~ When determined to be applicable to any Tree Commission Program other than a Level 3 Project, the application ~~project~~ 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 only be 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.

Design

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 include the 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 ~~for each~~ to provide a Suitable Planting Environment at each planting location.

Construction Practices

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).

Mitigation

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 outside an SPA.** If Tree Mitigation Funding is requested for the installation of a Surface ~~Pavement~~ Support System (silvacell, etc.) the following design review is required to minimize planting within a Compacted Planting Environment that requires an SSS. ~~PSS~~:

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

   To facilitate the design review, the Application shall include, with the Conceptual 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. Planting areas outside the Limits of Construction may be classified as COMPACTED if the creation of an Unsuitable ~~Urban~~ Planting Environment is anticipated to be created by other development activities/ factors. The Staff shall work with the Applicant to minimize the creation of Unsuitable ~~Urban~~ 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 Submittal for Concept Plan approval to the Tree Commission shall include a Compacted Environment Assessment Plan (CEAP) that supports the Rough Estimate of Improvements for the Concept Plan. 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.

Approval of the Concept Plan by the Tree Commission is required prior to submittal of a Planting Plan to the Tree Commission. Planting Plans must clearly identify the limits of construction and SPAs. SPAs depicted on the Planting Plan shall be maintained as UNCOMPACTED throughout construction and final acceptance utilizing protection ~~ed~~ 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 ~~inspection~~.

To ensure compliance with SPA protection requirements, Staff may perform inspections at any time after approval of the project by the Tree Commission and enforce the maintenance of 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.

Staff will work with the Applicant and Public Agency to develop a Conceptual Plan that meets the project goals and minimizes the need for Pavement Support System investment from the Tree Mitigation Fund.

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 Urban Planting Environments and the need for Pavement Support Systems.

Urban Impacts on Tree Planting are Addressed

4. 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. **Shade trees other than Live Oaks.** Minimum of 12 feet from the vertical constraint (building façade).
B. **Live Oaks**. Minimum of 20 feet from the vertical constraint (building façade).

C. **Trees other than shade trees.** 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.

5. ***Positive Drainage from the Planting Location is provided.***

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

6. ***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***.
B. If required, Proposed Soil Profile Rebuilding and specifications are consistent with adopted standards. See ***Exhibit C***.
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.

7. ***Short and Long Term Maintenance is Provided.***

The long-term health and viability of a tree after planting can only be achieved with both short-term and long-term maintenance. Plantings 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.

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 insect and pest control.

The Tree Commission will include in its approval of an Urban Planting Project a requirement for a binding post warranty period maintenance plan that addresses long-term maintenance, including but not limited to regular inspections, scheduled pruning and 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 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.

8. 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

Urban Planting Standards

Minimum Planting Area is Provided for each Proposed Tree

Table 1 *Sept 24, 2025 Task Force*

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

Tree Size [1]	min. distance from trunk to impervious surface (656.1211)	***Minimum Open Space Cut Out (OSCO)Requirements*** [2]		
		Proposed Development Project	**Existing Conditions Project incl Existing ROW (other than median)**	**Existing Right of Way Median**
Small Tree	2 feet	6' x 6' / 36 SF area	6' x 6' / 36 SF area	8' x 8' / 64 SF area
Medium Tree	3 feet	8' x 8' / 64 SF area	8' x 8' / 64 SF area	10' x 10' / 100 SF area
Large Tree				
Other Than Live Oak	4 feet	10' x 10' / 100 SF area	8' x 8' / 64 SF area	12' x 12' / 144 SF area
Live Oak	6 feet	12' x 12 '/ 144 SF area	12' x 12' / 144 SF area	12' x 12' / 144 SF area

[1] *As classified by the Tree Commission Approved Planting List*

[2] *Reduction of one dimension of the OSCO dimension ~~shall be permitted~~ ~~may be approved by the Tree Commission~~ provided the area of the OSCO is not reduced and the minimum distance from the trunk to impervious surface is maintained.*

Urban Planting Standards

Minimum Planting Area / Required Soil Volume is Provided for each Proposed Tree

Table 2 *July 15, 2025 Task Force*

- Provide sufficient soil quantity to support the tree mass proposed.

		Required Soil Volume (depth x height x width) [3]		
	Permitted Depth [1]	**Proposed Development Project** [2]	**Existing Conditions Project incl Existing ROW (other than median)**	**Existing Right of Way Median**
Small Tree	2' - 3'	*300 CF*	*300 CF*	*300 CF*
Medium Tree	2.5' - 4'	*800 CF*	*600 CF*	*600 CF*
Large Tree				
Other Than Live Oak	3' - 4'	*1,000 CF*	*750 CF*	*750 CF*
Live Oak	3' - 4'	*1,000 CF*	*1,000 CF*	*1,000 CF*

[1] *Calculations based on depth over 3 feet requires water table depth confirmation*

[2] *Required Soil Volume ~~Planting Area~~ may be reduced by up to 25% if planting area is shared between multiple trees.*

[3] *Aspect ratio of area claimed as Required Soil Volume shall not exceed 4:1; no dimension of the RSV shall be less than the applicable OSCO smallest dimension in Table 1 (as may be reduced by shared RSV, without add'l reduction).*

Urban Planting Standards

Suitable Planting Environment is Provided

Table 3 *Sept 24, 2025 Task Force*

- A classification of NOT Compacted is Achieved within the Required Soil Volume

The Required Soil Volume is provided without encroachment by surface improvements.

Test Required Soil Volume for compaction if site history indicates. If Required Soil Volume is:

NOT COMPACTED	Meet the standards of LDPM Section 601
COMPACTED	Mitigate compacted environment with Soil Replacement. Soil Profile Rebuilding may be appropriate.
Existing ROW Median	Replace Required Soil Volume if median is less than 12 ' in width (BOC) or testing confirms compacted environment within Required Soil Volume.

The Required Soil Volume includes existing or proposed surface improvements.

Existing Conditions Project	Assume Required Soil Volume is Compacted. Apply Existing Project standards. Mitigate compacted environment within Required Soil Volumw with Soil Replacement.
Proposed Development Project	Design the surface improvements to limit compaction within Required Soil Volumes. Group tree planting areas, combine Required Soil Volumes, utilize tree grates, raised planters and locate trees strategically to maximize area of OSCO (bump outs, planting within adjacent parallel parking) and minimize requirement for support of surface improvements. When compaction within the Required Soil Volume is not avoided, mitigate compacted environment created through Soil Replacement and as required, structural support of. surface improvements. After approval of Conceptual Plan that minimizes the requirement for structural support for necessary surface improvements, where required install minimum support necessary for surface improvement integrity to create and maintain an uncompacted environment within the Required Soil Volume. Protect Required Soil Volume from compaction during construction activities.

Urban Planting Standards

Ultimate Tree Size Calculator Based on Volume of Suitable Planting Environment Available

Suitable Planting Environment Provided (volume)	Ultimate Tree Size	
200 CF	4" DBH	14 foot spread (150 SF canopy)
400 CF	8" DBH	21 foot spread (350 SF canopy)
600 CF	9.6" DBH	21.2 foot spread (440 SF canopy)
750 CF	12" DBH	26.5 foot spread (550 SF canopy)
1,000 CF	16" DBH	32 foot spread (800 SF canopy)
1,280 CF	20" DBH	36 foot spread (1,000 SF canopy)
1,525 CF	24" DBH	39 foot spread (1,200 SF canopy)

source: J. Urban, Aternatives to Structural Soil for Urban Trees and Rainwater

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