City of Cambridge
Executive Department

YI-AN HUANG
City Manager

CMA 2026-314
IN CITY COUNCIL
November 9, 2026

To the Honorable, the City Council:

Please see attached a memo from John F. Nardone, Commissioner of Public Works, transmitting a response to Awaiting Report 26-52, which asked for an accessible public accounting system for tree removal data.

Very truly yours,

Yi-An Huang
City Manager

City of Cambridge
Department of Public Works

John F. Nardone, Commissioner

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November 3, 2026

To the City Manager:

The Department of Public Works (DPW), in collaboration with the Information Technology Department (ITD) and the Inspectional Services Department (ISD), has prepared this response to Awaiting Report 26-52, which requests the development of a more complete and accessible public accounting system for tree removal data. Specifically, a system that allows for neighborhood-level searchability and detailed reporting of tree removals, project associations, significant (6-29 inches diameter at breast height) and exceptional (30+ inch diameter at breast height) tree counts, and Critical Root Zone (CRZ) impacts.

Overview

The City of Cambridge has long recognized the urban forest canopy as critical public infrastructure that provides environmental, ecological, public health, and climate resilience benefits. To protect this resource, the City enforces a Tree Protection Ordinance (TPO) that regulates the removal of significant private trees, and DPW's Urban Forestry Division oversees the planting, maintenance, and protection of public street trees and park trees.

In 2019, the City published its Urban Forest Master Plan (UFMP), establishing a long-term, data-driven strategy to strengthen canopy health, improve resilience to climate stressors, and expand canopy cover equitably across neighborhoods. UFMP implementation emphasizes transparency, public access to data, and improved coordination among departments involved in tree protection and development oversight.

Tree removals on private property subject to the TPO require a Tree Removal Permit, administered by DPW. Public tree work is also regulated under state law and City policy. While these systems collectively support tree protection activity, current public reporting is permit-level only. This response outlines steps to expand reportable tree data.

Current Tree Removal Permit Dataset

The Tree Removal Permit dataset currently published on the City's Open Data Portal provides permit-level information. This includes addresses and geographic coordinates, permit dates, removal reasons, total number of trees affiliated with the permit, tree height and diameter, mitigation plans, and associated fees. It is important to note that while the Tree Removal Permit includes a field for reasons for removal, that is primarily to identify if the removal must be fully mitigated, consistent with the ordinance. Or alternatively, if the reasons for the removal are such that a permit and documentation are required, but mitigation is not required such as emergency circumstances, the tree poses

significant negative impact to an adjacent structure, or the tree is dead or dangerous. These available fields support neighborhood-level queries, categorization by removal reason, identification of significant and exceptional trees based on diameter, and monthly summaries dating back to 2023. This current dataset can also be visualized and filtered by date range and certain existing permit fields on the City's Open Data Portal at Tree Removal Permits Map | Open Data Portal | City of Cambridge.

However, all information on the Open Data Portal is currently captured at the permit level, meaning each record represents a permit rather than an individual tree. A Tree Removal Permit may include multiple trees. Therefore, counts of significant and exceptional trees cannot be directly tallied, and fields such as species or diameter may be incomplete or aggregated.

Proposed Changes using Existing Data

OpenGov, the City's permitting platform used across departments, captures detailed tree-level information for each Tree Removal Permit application. ITD will add that level of detail to a new dataset that builds off individual tree-level records (rather than permit-level records) and create a companion map. Similar to the existing map, this will allow the public to navigate tree removal information within a specific timeframe, filtering for available removal data.

The new dataset and map will include all available tree-specific and permit-level attributes available to date including:

- Tree-specific data: species and scientific name, diameter at breast height, approximate height, and specific location on a parcel; and
- Permit-level data: address, reason for removal, description of work, applicant and contractor information, and permit dates.

While creating the new dataset is relatively straightforward, it will require design, new data integrations and vetting before publishing. We anticipate this will be available before the end of the year.

Current Data Limitations

Building Permits & Project Type Categorization

The policy order requests categorization of tree removals by linking existing Tree Removal Permits with Building Permits back to 2023, including a Building Permit "project type" (for example, new construction, additions, renovations, or demolitions). This is currently not feasible due to the considerations below.

- Tree Removal Permits are issued for many different reasons and are not limited to properties with Building Permits.
- Building Permits do not include tree removal data, link to Tree Removal Permits, or contain shared/overlapping fields with Tree Removal Permits that would allow for automated reporting.

- Simply connecting existing Tree Removal Permits and Building Permits by address would be both inconsistent and incomplete. It would also create "false positives". For example, linking a 2022 Building Permit to a 2025 Tree Removal Permit at the same address without further context would inaccurately suggest that the renovation caused the tree removal. The renovation permit could be for an interior kitchen or bathroom remodel, or other work with no potential impact to the applicable tree(s).
- Manual linking of Building Permits and Tree Removal Permits (for example by using address as well as additional descriptive permit fields) would require an exceptional amount of staff time, would still be inconsistent and incomplete, and would not be scalable for consistent future reporting.

Linkage of Tree Removal Permits with future Building Permits might be possible, but would require, at a minimum, adding new questions, documentation requirements, and review steps to all ISD Building Permit applications (e.g., certified plot plans) to trigger or validate tree removal reviews. This would introduce additional administrative requirements for applicants, slow processing times and conflict with the City's ongoing residential permit streamlining efforts. It would also not limit tree removals from being permitted in advance of the Building Permit, as there is no way to require building permits with tree removal permits, as most tree removals are not associated with building permits. The City would also need a clear local policy directive – potentially an ordinance or regulation – to add such a review step to Building Permits. Otherwise, procedures could be interpreted as conflicting with the state building code by adding undue restrictions or new building requirements.

Critical Root Zone (CRZ) Impact Reporting

The City does not currently collect CRZ impact data as part of Tree Removal Permits or building-related reviews. Projects requiring a Tree Protection Plan may also have to establish a "tree save area" under the Tree Protection Ordinance. But those are indicated on plan documents rather than in specific permit fields. Therefore, similar to Building Permit project types, CRZ reporting cannot be done retroactively or automatically.

DPW anticipates future changes to tree save areas and/or CRZ impact reporting will be evaluated through Tree Protection Ordinance amendments and related policies recommended through the UFMP update. That update and related recommendations will be published this year.

Conclusion

The City will improve transparency in tree removal tracking by creating a new tree-level dataset and map to enhance reporting/filtering by date and tree-specific data. DPW will also be making recommendations for modifications to the Tree Protection Ordinance for City Council consideration.

Sincerely,



John Nardone
Commissioner