



CITY OF CAMBRIDGE

Community Development Department

To: Planning Board

From: Community Development Department (CDD) Staff

Date: December 13, 2022

Re: **Callender, et al., Zoning Petition**

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Overview

Petitioner: Duane Callender, et al. (group of at least 10 registered voters)

Zoning Articles: 2.000 (Definitions), 4.000 (Use Regulations)

Petition Summary: Amends Article 2 of the Zoning Ordinance by creating a new definition for “Technical office for research and development, laboratory & research facility (4.34(f) in the Table of Permitted Uses)”, and amends the Table of Permitted Uses in Article 4 by prohibiting technical office uses in all office and business districts, subject to two new footnotes.

Planning Board Action: Recommendation to City Council

Memo Contents: Summary of the proposed zoning, background information on the topic of the Petition, and considerations and comments from staff.

Summary of Petition Effects

The stated intent of the Petition is to prevent an unfettered expansion of biotech laboratories in Cambridge, in order to minimize competition with other land uses such as housing and retail.

The Petition creates a new definition for the existing use category *Technical office for research and development, laboratory & research facility*. The proposed definition focuses on a range of potential lab-related activities, while also specifically excluding educational institutions, medical/dental offices, innovation/maker spaces and pure software-based activities.

The Petition amends the current use table for technical office uses such that they would no longer be permitted in any Business or Office district, with modifications contained in two proposed footnotes:

- The first footnote states that any pre-existing technical office use in existence or permitted prior to January 1, 2023 in a Business or Office district shall be considered a conforming use under auspices of modifying an existing building or relocating the use within an existing building.
- The second footnote states that technical office uses will be permitted in any Planned Unit Development (PUD), Alewife Overlay District (AOD), Special District (SD), Mixed-Use Development: Kendall Center (MXD) district, or other “special zoning district” that already permitted the use prior to January 1, 2023. The footnote continues that technical offices are no longer permitted in Special Districts 2, 9, and 10, or any Overlay Districts with a base zoning of Residential, Business or Office.

Background

Defining Lab Uses in Cambridge Zoning

Cambridge’s current system of zoning puts all commercial research and development (R&D) uses under the umbrella of the *Technical office for research and development, laboratory & research facility* definition in the Table of Permitted Uses. These commercial lab uses can range from software development and engineering to life science research and development, medical research, chemical testing, and robotics. One feature that differentiates “technical office” from “general office” is that the former can include limited manufacturing of products, such as prototyping. There is currently a separate land use category for academic and non-commercial research (Noncommercial Research Facility) in the use table.

Commercial Labs in Cambridge

Commercial R&D activities exist within a wide variety of built contexts throughout the City, from sprawling, low-scale developments (e.g., in the Alewife Quadrangle), to more mid-rise mixed-use developments along the City’s commercial corridors, and in new high-rise developments in the densest parts of the City. Companies engaging in R&D in the City can be smaller, start-up operations all the way to major, international technology corporations. Because the range of lab types and entities can widely vary, so too do the building needs and physical space requirements. Certain types of facilities, such as biosafety labs, have specific needs for larger mechanical arrays to accommodate requirements for specialized piped utilities and air handling. Conversely, a computer-based research facility may not have

building requirements that differ much from general office uses. Lab facilities are found in newer buildings that are specifically built to accommodate them, as well as in older commercial buildings that might be retrofitted to support different R&D activities.

Cambridge has one of the largest and densest clusters of commercial R&D activity in the country and is regarded as a worldwide leader in fields such as commercial life science. “Spin-off” commercialization of research from MIT, Harvard, and affiliated institutions is often cited as an explanation for Cambridge’s status. Cambridge’s regulatory environment is also regarded as a factor. Cambridge has allowed “technical office” in all commercial districts since the 1970s. Also in the 1970s, Cambridge established public health regulations for biosafety that became a model for other cities.

Where Lab Uses are Generally Permitted

Technical office uses are generally permitted in all office, business and industrial districts in the City as well as some overlay districts and PUD’s (see Figure 1 below). These uses are primarily concentrated in the East Cambridge and Alewife areas, as well as along some of the City’s commercial corridors (Mass Ave, Cambridge Street, Alewife Brook Pkwy) and the City’s major squares (Kendall Square, Porter Square, Central and Harvard Square), subject to additional requirements and review (detailed below).

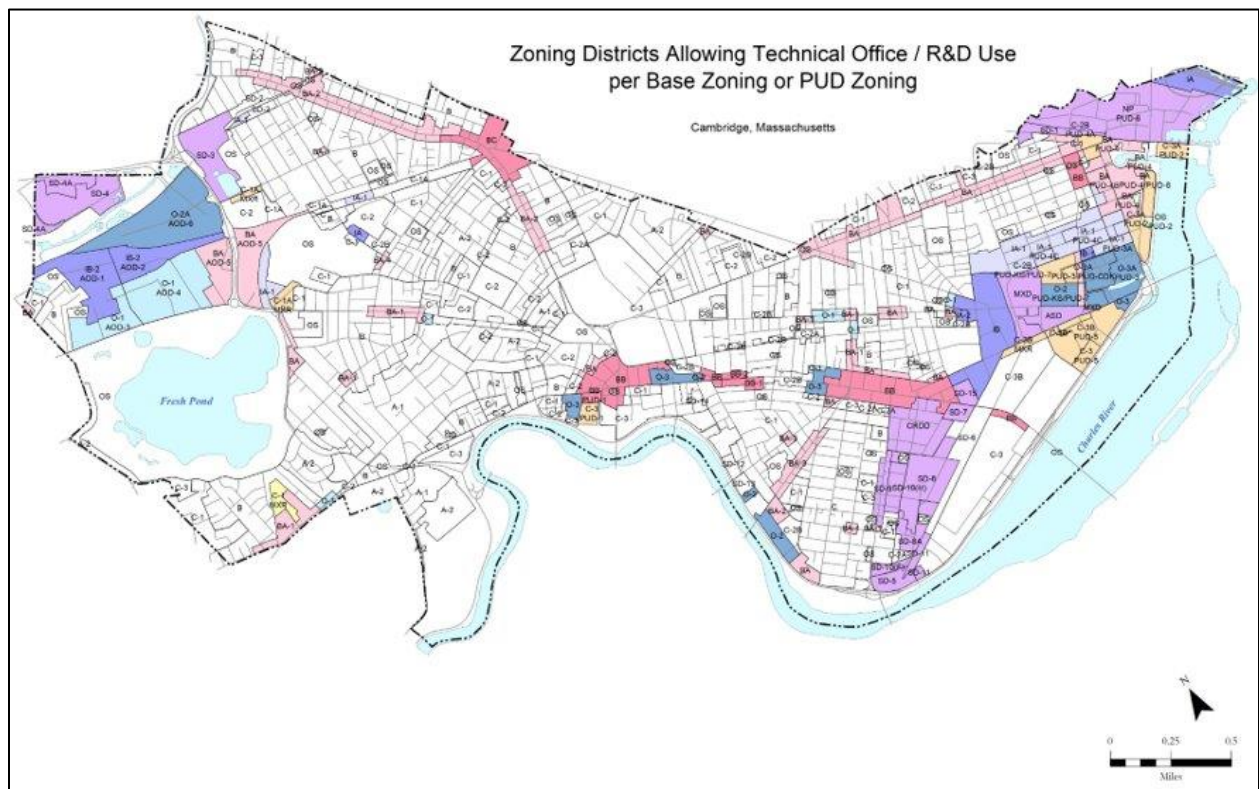


Figure 1: Existing zoning districts which permit lab use. Source: City of Cambridge, 2022.

Current Regulatory Framework

Lab development in Cambridge generally follows the review thresholds for other types of development in the City. Development of at least 50,000 square feet requires a Project Review Special Permit (or

20,000 square feet in Business A, A-1 and A-2 districts). The Planning Board must make findings of approval based on environmental impacts, including potential visual and noise effects from mechanical equipment, loading and deliveries, and lighting. Development of at least 25,000 square feet requires compliance with the City’s Building & Site Plan requirements in Article 19.50, which includes prescriptive design requirements for the location and screening of mechanical equipment and solid waste, as well as noise regulations supported by acoustical studies from a professional engineer. Additional requirements may need to be met depending on the specific zoning requirements for a district.

There are also applicable non-zoning regulations for lab uses, such as laboratory safety requirements (administered by the Cambridge Public Health Department), state environmental compliance (Massachusetts Department of Environmental Protection), building codes, and noise requirements (License Commission or the Inspectional Services Department (ISD)).

Current Lab Locations in Cambridge

There is no definitive list of all “technical office” uses in Cambridge. Figure 2 maps locations based on data available from ISD, the Public Health Department, the Assessing Department, and the Special Permits Database. Labs are generally clustered in higher-density office and industrial districts. There are rare instances of labs being located in higher-density Business districts such as Harvard or Central Square. Labs are even more rare in lower-density office and business districts. Although they are allowed by zoning, they are more difficult to establish due to smaller building and lot sizes, limits on allowable height and density, and physical constraints on activities like loading and deliveries.

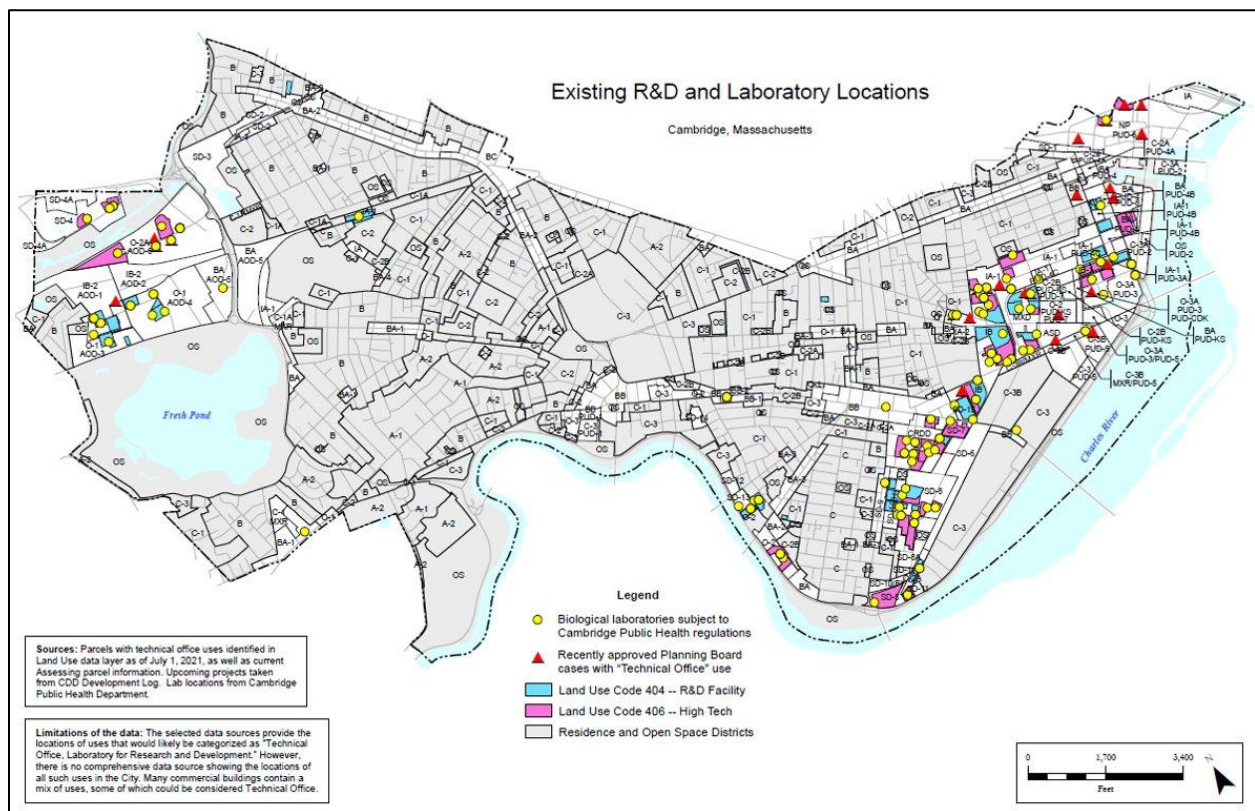


Figure 2: Existing lab locations from available data. Source: City of Cambridge, 2022.

Considerations

Policy Discussions

The Petition would effectively prohibit technical office uses in most commercial districts of the City, including areas that have strong R&D clusters and are outside the squares and neighborhood-scale commercial corridors that are cited in the Petition’s stated intent. Figure 3 (below) illustrates the net effect the Petition would have on where new lab uses are permitted. In addition to Central and Harvard Squares, Cambridge Street, and the Mass Ave corridor, new lab uses would be restricted along some parts of Memorial Drive, First and Second Streets in East Cambridge, many parts of Cambridgeport, parts of Kendall Square, and other areas. As explained below, the regulations in some areas would be ambiguous.

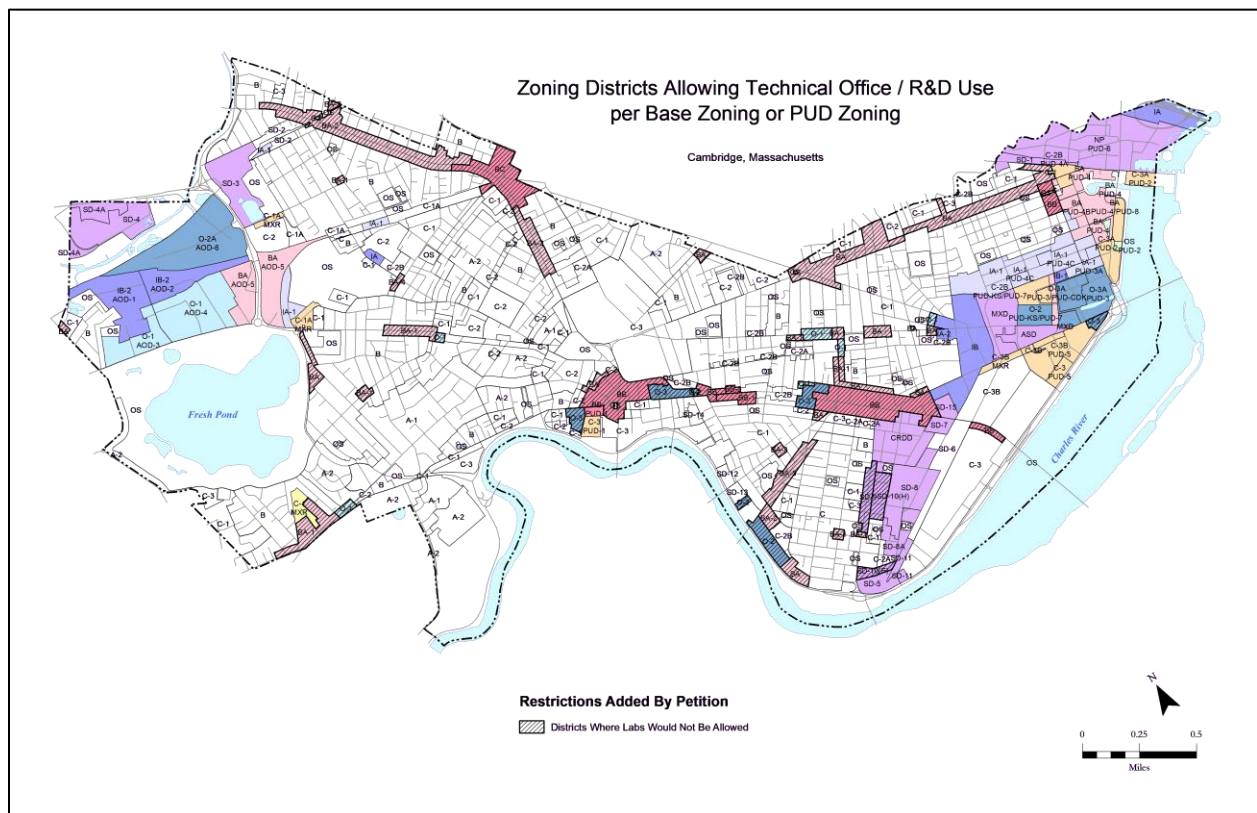


Figure 3: Illustration of effects of Petition on permitted lab locations. Source: City of Cambridge, 2022.

In addition to the substantive planning issues raised by the Petition, there are issues with the form of the Petition that are described below.

Definitions

The proposed definition for technical office uses specifically excludes labs primarily used for educational purposes, medical and dental offices that provide accessory lab services, innovation spaces, maker spaces and similar uses, and software-based laboratories. Some of these are uses already listed elsewhere in the Table of Use Regulations in Article 4.

However, “innovation space,” “maker space,” and “purely software based” (for instance) are undefined terms, which could create confusion in determining what uses would fit those terms and how they would be classified in the Table of Use Regulations. If a use is not expressly permitted in Article 4, then it is prohibited, pursuant to Section 4.13 of the Zoning Ordinance. The effect of the Petition could be that many types of facilities which are currently permitted throughout the City would not be permitted anywhere in the City.

The Zoning Ordinance should define uses comprehensively, so that any use that is intended to be allowed in any zoning district is listed in the Table of Use Regulations. The proposed definition attempts to describe what is included or excluded in this one definition, but as a stand-alone definition, it does not provide clear guidance on how to classify and regulate the various uses that might exist now or in the future.

Proposed Footnotes

The first proposed footnote attempts to create an exception for lab uses in existing buildings to be considered “conforming uses” in districts where the Petition would prohibit them. This is a confusing usage of the term “conforming,” which normally means “meeting current zoning standards.” This footnote applies the term “conforming” to uses that would be considered “legally preexisting nonconforming.”

Legally preexisting nonconforming uses can be maintained but cannot be enlarged or replaced by another nonconforming use. The City’s provisions for nonconforming uses are in Article 8 of the Zoning Ordinance. If the intent of the Petition is to create additional protections for legally preexisting nonconforming technical office uses that are not otherwise applied to all legally nonconforming uses, then a better approach would be to propose including those protections in Article 8.

Additionally, the first proposed footnote may create confusion as there is a distinction between a legally preexisting nonconforming use and a legally preexisting nonconforming structure. A legally preexisting nonconforming use does not provide protections for dimensional alterations of structures. If the intent here is to do so, those additional protections would need to be included in Article 8. Also, the first proposed footnote seems to provide protections for technical offices uses that are in existence or permitted prior to January 1, 2023, but under the state Zoning Act, a use that is in existence or has a building or special permit issued before the first publication of notice of the public hearing is protected from amendments to the zoning. There may be confusion caused by the discrepancy in these dates.

The second footnote attempts to maintain the permissibility of lab uses in the City’s overlay and PUD districts. Again, the effects of this footnote are somewhat unclear because the footnote contradicts itself. For example, the footnote expressly permits technical office uses in PUD and AOD districts, but goes on to say that technical office uses in overlay districts with base office or business districts are not permitted. Many PUD and AOD districts contain base office and business districts, in some cases containing multiple underlying zoning districts that may or may not permit lab uses.

The purpose of overlay districts (which include PUD and AOD districts) is to modify the provisions of the base district. Many base “special districts” use a similar approach of referencing another base district and listing specific modifications. Attempting to modify overlay district requirements through a footnote

in the base zoning creates a circular logic that will likely cause problems in application. The base zoning should be as clear and simple as possible, and any desired modifications to an overlay district or special district should be made within the provisions of that overlay district or special district.