

SMALL CLEAN ENERGY PERMITTING AND ARTICLE 88 ZONING INFO SESSION

July 29, 2026



Planning Department

CITY of BOSTON

INTERPRETATION INFORMATION



English: For interpretation in [_ _ _ _],

1. Go to the horizontal control bar at the bottom of your screen. Click on “Interpretation.”
2. Then click on the language that you would like to hear.
3. You are now accessing this meeting in [_ _ _ _]

Spanish: Para traducción en Español,

1. Vaya a la parte baja de la pantalla, en la barra horizontal, y presione la tecla “Interpretation”.
2. Luego seleccione el idioma que desea escuchar.
3. Después de seleccionar, usted entrará a la reunión en el idioma “Español”.

Haitian Creole: Pou entèpretasyon Kreyòl ayisyen,

1. Ale nan kontwòl ba nan pati anba ekran an epi Klike sou "Interpretation"
2. Apre sa, klike sou lang ke ou ta renmen tande a.
3. Kounye a ou gen aksè a reyinyon an Kreyòl ayisyen

Vietnamese: Cho thông dịch Tiếng Việt

1. Tìm thanh điều khiển ngang phía dưới màn hình của bạn. Bấm vô từ: "Interpretation"
2. Sau đó chọn lựa ngôn ngữ mà bạn cần lắng nghe.
3. Hiện tại bạn đang tham gia buổi họp bằng Tiếng Việt



INTERPRETATION INFORMATION



Cabo Verdean Creole: Gossim bu ta entra na reuniao na kriolu,

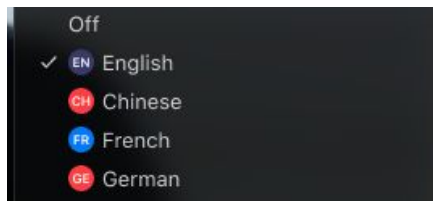
1. Bai na barra de controlo horizontal na parte inferior di computador bu kalka na "Interpretation".
2. Depos kalka na idioma qui bu kre ovi.
3. Agora djabu sta ta entra na reuniaun em creole.

Cantonese: 若需粵語口譯服務:

1. 與屏幕下方之長方形控制欄中, 煩請點擊 "Intepretation."
2. 煩請點擊您所需收聽的語言。
3. 您即可聽到粵語的會議口譯。

Mandarin: 若需普通話口譯服務:

1. 在屏幕下方的長方形控制欄中, 請點擊 "Intepretation."
2. 請點擊您所需收聽的語言。
3. 您即可收听普通話的會議口譯。



ZOOM TIPS AND MEETING INFO

- We will be recording this meeting and posting it on the Planning Department's website
- Use raise hand function (dial *9 if joining by phone) to be invited to unmute (dial *6 if joining by phone) to ask your question or provide comment
- You can also add your questions or comments in the chat.



MEETING INFO AND EXPECTATIONS

- This meeting is in a webinar format as it is intended for City of Boston residents to learn more about upcoming Clean Energy Infrastructure initiatives
- This meeting will open up for question and answer upon completion of the presentation
- Visit the Planning Department's website for more information about the initiative:
<https://www.bostonplans.org/planning-zoning/zoning-initiatives/energy-infrastructure-zoning-and-permitting>

Once the meeting is open for question and answer....



Raise hand to ask questions



Use the Q&A icon to ask a question

MEETING INFORMATION

- The presentation for this evening will be available to view on the project webpage on the Planning Department website
- Meeting recording will be uploaded to the website within 48 hours
- Requests for translated materials may be sent to any of the contact emails provided at the end of this presentation
- Further comments or questions may be directed to:
travis.anderson@boston.gov or
christopher.maskas@boston.gov

Planning & Zoning > Zoning Initiatives > Energy Infrastructure **Zoning** and Permitting

ZONING INITIATIVES

SMALL CLEAN ENERGY INFRASTRUCTURE PERMITTING AND ZONING

[Overview](#)
[Timeline](#)
[Engagement](#)

Latest Update

- The draft zoning is out now! Read the draft zoning amendment [here](#).
- See the full 225 CMR 29.00 [here](#)

Comments on the draft zoning can be submitted to: christopher.maskas@boston.gov

Overview

The City of Boston is currently drafting a new permitting process and zoning amendments for [Small Clean Energy Infrastructure](#). This initiative aligns with the City's and the Commonwealth's broader climate goals to achieve net zero carbon emissions by 2050, increase resilience, and modernize the electrical grid.

Contact

- [Travis Anderson](#), Sr Infrastructure and Energy Planner
- [Chris Maskas](#)
- [Eldin Villafane](#)



MEETING CODE OF CONDUCT



Respect one Another

All attendees are expected to respect one another and any differences of opinion

Welcome Difference in Opinion



We welcome differences of opinion, including opinions that differ from the Planning Dept



Constructive Feedback

Constructive comments and opinions should be aimed at topics, not people

Allow All to Speak



To allow your fellow attendees a chance to ask their questions or comments, speaking time will be limited to 2 minutes

Code of Conduct

TONIGHT'S AGENDA

Part 1: Overview Consolidated Local Permit Process

- CMR 29.00 and Article 88
- Types Clean Energy Infrastructure
- Consolidated Local Permit Process in Article 88

Questions

Part 2: Technical Criteria for Battery Energy Storage

- Article 88 BESS Zoning
- Other reforms underway for Solar

Questions and Next steps

End

Overview: Clean Energy Infrastructure

NEW CONSOLIDATED LOCAL PERMITTING AND ARTICLE 88

We are here to talk about a new state mandated consolidated local permit **CMR 29.00** for **Small Clean Energy Infrastructure Facilities** that goes into effect **October 1, 2026**.

And

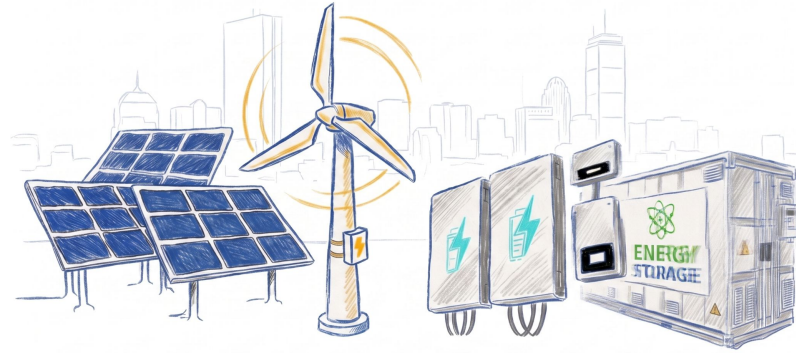
Changes that are being made to Article 88 to comply with CMR 29.00

Article 88 updates include; new definitions, review procedures, and requirements.

WHY 225 CMR 29.00 AND ARTICLE 88?

Boston's energy and the State's needs are growing rapidly

- **It's the Law!** the State is required to drastically reduce carbon emissions to by 2050.
- **Electricity use** is becoming more abundant across the City to meet Boston's climate goals. Boston's 2030 Climate Action Plan, BERDO, and Net Zero Carbon zoning prioritize electricity
- **Permitting Reform is underway**, CMR 29.00 reduces obstacles to clean, affordable, and reliable energy. Article 88 provides clarity for zoning and reviews



Small Clean Energy Infrastructure

WHAT IS COVERED UNDER 225 CMR 29.00?

What is a Small Clean Energy Infrastructure Facility under CMR 29?

As defined by the State of Massachusetts:

- Solar panels, wind turbines, or anaerobic digestion:
generation less than 25 MW
- Battery energy storage systems (BESS):
capacity less than 100 MWh
- Transmission and distribution infrastructure:
new corridor less than 1 mile long
existing corridor less than 10 miles

Facilities larger than these sizes go straight to the state for review, skipping local permitting processes



~575 kW BESS - Boston, MA



~1 MW Solar Canopy - Roxbury, MA

WHAT IS **NOT** COVERED UNDER 225 CMR 29.00?

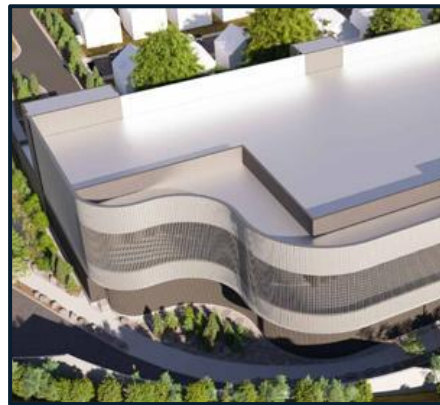
Large Clean Energy Infrastructure Facility

As defined by the State of Massachusetts:

- Substations
any size or scale
- Solar, wind, or anaerobic digestion:
greater than 25 MW
- Battery energy storage systems (BESS):
greater than 100 MWh
- Energy transmission and distribution infrastructure:
new corridor greater than 1 mile long
existing corridor greater than 10 miles

Large Facilities go straight to the
Commonwealth's Energy Facilities
Siting Board (EFSB) for review.

**Note: Data Centers are NOT part
of either effort**



180 MWh "35 Electric Avenue"
proposed in Brighton, MA



K Street Substation in South Boston,
MA

TYPES OF SMALL CLEAN ENERGY INFRASTRUCTURE

Battery Energy Storage Systems

A **Battery Energy Storage System (BESS)** is a technology that captures electrical energy from a power source, stores it in rechargeable batteries, and releases it later when electricity is needed most.

This technology plays a critical role in modernizing electrical grids and enabling the transition to renewable energy.



250 kWh BESS - Westchester, NY



45.6 MWh BESS - Buffalo, NY

WHAT CAN BATTERY ENERGY STORAGE LOOK LIKE?



Battery Energy Storage Systems – typical sizes

50 kWh

4 MWh



Residential Heat Pump

Transformer

U-Haul Trailer

Full Size Dumpster

Standard Shipping Container

WHY BATTERY ENERGY STORAGE SYSTEMS?

Stability, Resilience and Affordability:

- **Extra energy can be used when demand in the city** is high to prevent brownouts and blackouts.
- Using stored **energy can keep electricity costs lower by avoiding the expensive energy sources** typically used on the grid when demand is high.
- **Renewable sources, such as wind and solar, do not produce energy continuously.** We need to store the extra energy they produce to use it later, when they are not productive



45.6 MWh BESS - Buffalo, NY

TYPES OF SMALL CLEAN ENERGY INFRASTRUCTURE

*Solar Photovoltaic Systems (Solar PV):
Canopy and Rooftop-Mounted*

A **Solar Energy System** is a renewable energy generating system that employs solar photovoltaic or solar thermal energy, and associated mounting systems.

This technology plays a critical role in generating clean affordable energy for the electrical grid and for buildings to use on-site



537 kW Roof-Mounted Solar - Jamaica Plain, MA



~1 MW Solar Canopy - Roxbury, MA

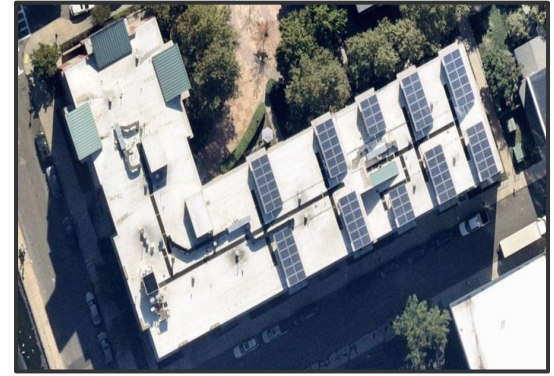
WHAT CAN SOLAR ARRAYS LOOK LIKE?



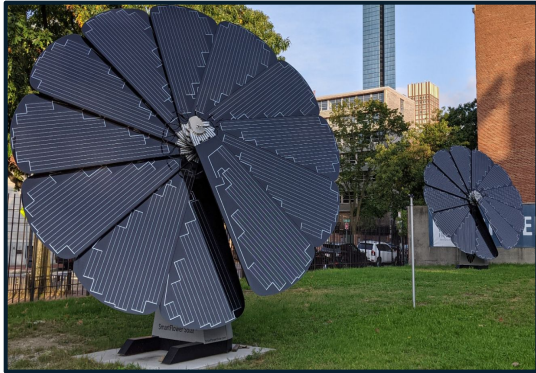
537 kW Roof-Mounted Solar - Jamaica Plain, MA



3.8 kW Roof-Mounted Solar - East Boston, MA



35 kW Roof-Mounted Solar - East Boston, MA



2.5 kW (per) Ground-Mounted Solar - South End, Boston, MA



2.4 MW Ground-Mounted Solar - Sterling, MA



250 kW Solar Canopy - Roxbury, MA

TYPES OF SMALL CLEAN ENERGY INFRASTRUCTURE

Less common types of Small Clean Energy Facilities

We anticipate seeing **less onshore wind and anaerobic digestion** within the City of Boston.

Similar to ground-mounted solar, onshore wind and anaerobic digestion are more often sited in rural communities.



100 kW Wind Turbine - Dorchester



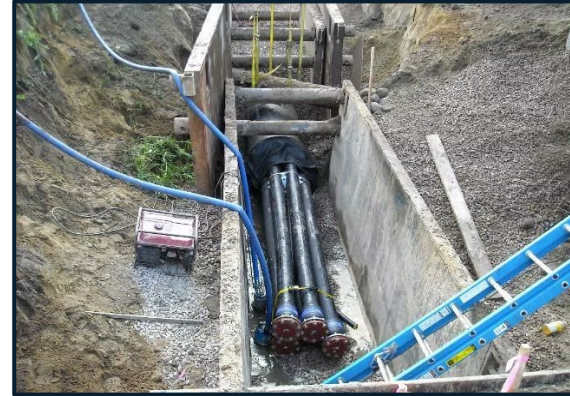
300 kW Anaerobic Digester -
So. Burlington, VT

TYPES OF SMALL CLEAN ENERGY INFRASTRUCTURE

Less common types of Small Clean Energy Facilities

We anticipate seeing less **Transmission and Distribution lines** part of a Small Clean Energy Infrastructure Facility projects for new corridors or roadways less than 1 mile.

Transmission and Distribution lines are often part of Large Clean Energy Infrastructure Facilities



Underground Electric Transmission Lines

New corridor less than 1 mile long



What is the new Consolidated Local Permit process in Article 88?

A NEW CONSOLIDATED LOCAL PERMIT PROCESS IN ARTICLE 88



The Planning Department will intake all Consolidated Local Permits as the Local Government representative per CMR 29.00

**Article 88 creates the Consolidated
Local Permit Process to comply
with CMR 29.00**

New zoning changes outline clear,
predictable criteria for the
appropriate siting, permitting,
and review of Small Clean Energy
Infrastructure Facilities
throughout the City of Boston.

- **The Planning Department will coordinate the Consolidated Local Permit Process**
- The permit will be issued by the Director of the Boston Redevelopment Authority, in conjunction with the **Boston Planning and Development Agency Board and all necessary local permits, approvals.**

WHAT DEPARTMENTS PARTICIPATE IN THIS PROCESS?



City of Boston Departments and partner agencies will provide coordinated reviews and feedback

Consolidated Local Permit Department approvals:

- Boston Water Sewer Commission
- Conservation Commission
- Boston Public Health Commission
- Parks Department
- Landmarks Commission
- Planning Department

Other city departments will provide feedback

**BFD and ISD will officially review
projects after a Consolidate Local
Permit has been issued**

- Inspectional Services
Department
- Boston Fire Department
- Public Improvement
Commission

WHAT IS THE CONSOLIDATED LOCAL PERMIT PROCESS?



WHAT DO DEPARTMENTS REVIEW FOR?

Departments review for compliance with:

CMR 29.00 requires that all projects reviewed comply with the [DOER's Guidelines for Public Health, Safety, and Environmental Standards](#) in addition to the standards within [CMR 29.00](#)

- **State and Federal Requirements:** Guidelines for Public Health, Safety, and Environmental Standards incorporate State and Federal regulations that all projects must comply with.
- **Local Requirements:** Section 88-8 of the draft zoning lists each approval that can be included in the Consolidated Local Permit review
- **Application Content:** The Consolidated Local Permit Application must satisfy the submission criteria for all applicable local permits.

WHAT IF DEPARTMENTS DON'T MEET THE 12-MONTH DEADLINE?

Each Department submits
a decision within 12
months:

Approve / Approve with
Conditions / Deny

- **If the Local Government Fails** to meet 12-month review period
Application shall result in Constructive Approval and will be subject to the conditions of CMR 29.00 and the Common conditions and requirements in case of constructive approval
- **If the Local Government Denies**
Must be based on merits related to local zoning bylaws or ordinance, risk mitigation, fire and life safety, environmental protection or the DOER's Guidelines on Public Health, Safety, and Environmental Standards

Applicants have the right to appeal denials directly to the State and apply for De Novo review with the Energy Facilities Siting Board

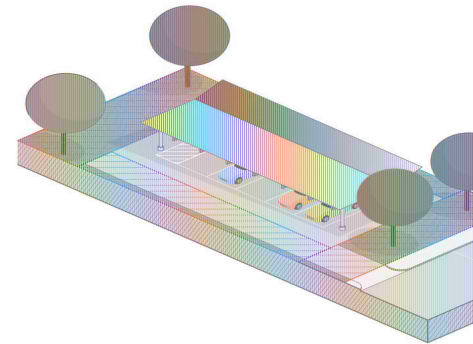
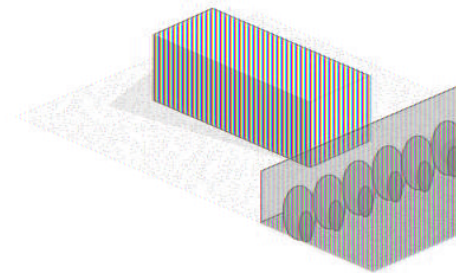
WHO CAN APPLY FOR A CONSOLIDATED LOCAL PERMIT?

Under Article 88 The
Consolidated Local Permit
is an **opt-in** pathway

for

All Small Clean Energy
Infrastructure

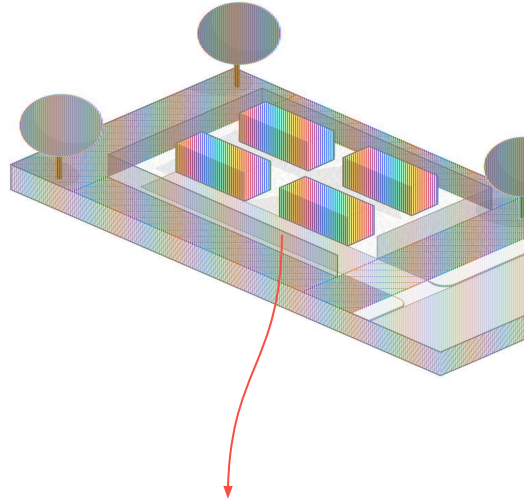
- BESS Facility up to 100 MWh
- Solar or Wind Facility up to 25 MW
- Existing transmission corridor less than 10 miles long or new corridor less than 1 mile



WHEN IS A CONSOLIDATED LOCAL PERMIT REQUIRED?

Battery Energy Storage Systems with the following criteria:

- **Main Use** (up to 100 MWh)
- Site footprint **greater than 400 sf**
- Fence height **greater than 7 feet**



Site Footprint = 401 sf
Fence height = 7+ ft

Why required?

- **Allowed use** upon approval (otherwise conditional use)
- **Coordinated review** and feedback
- **Clear conditions** for approval
- **12 month** timeframe
- Aligns with Article 80 if applicable



Questions?

Zoning for Battery Energy Storage

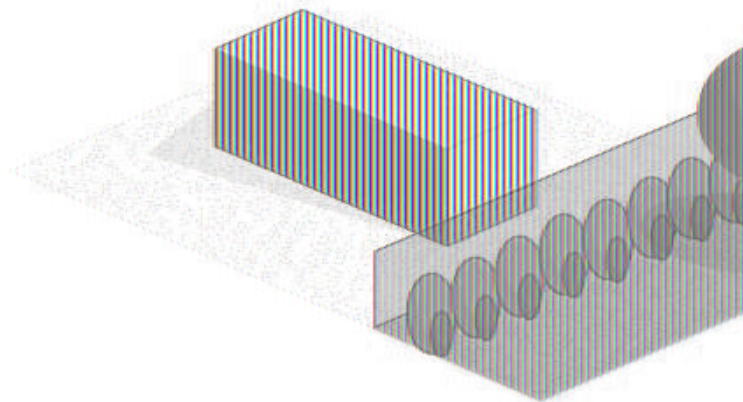
Part 2

BATTERY ENERGY STORAGE: DEFINITION

New use definition

Battery Energy Storage System (BESS)

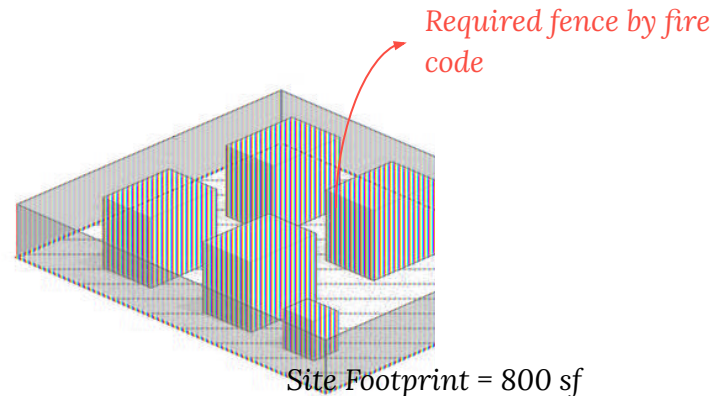
- A system consisting of at least one battery module for storing electrical energy, including any equipment needed to support the safe and proper function or usage of the battery modules, and at least one physical container providing secondary containment to any of the above.



BATTERY ENERGY STORAGE: SITE FOOTPRINT

Site footprint

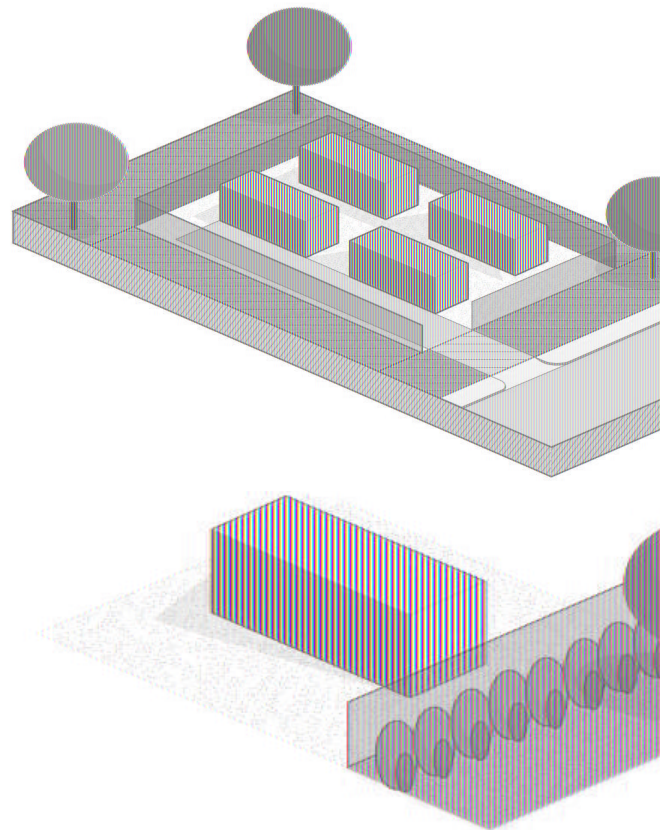
- BESS shall be measured as the total area enclosed by the outermost fence or structure required for fire and electric code compliance, inclusive of that fence or structure.
- Where there is no fenced perimeter, site footprint shall be measured as the total area encompassing the equipment and all dedicated safety, maintenance, and clearance zones required by fire code



BATTERY ENERGY STORAGE: HEIGHT, FENCES, AND SCREENING

Requirements when BESS is not integrated into a building

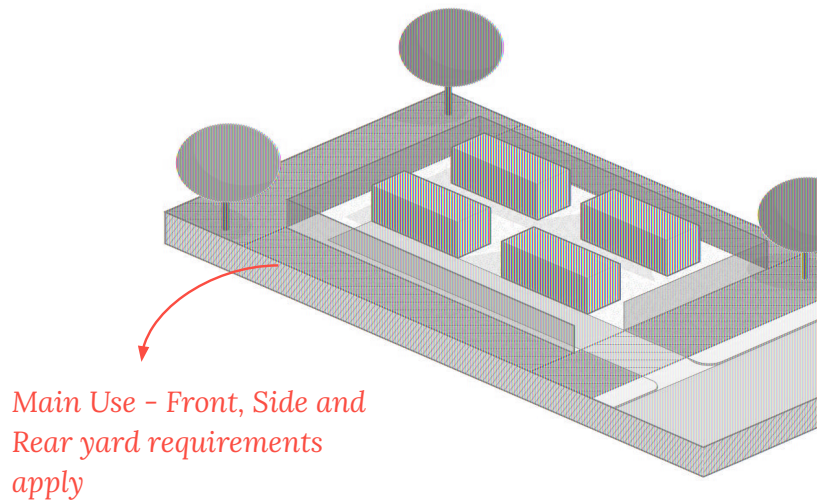
- **Maximum system height:** 12' / 24' in Newmarket Industrial
- **Fence Height:** Fences 7' tall and under are allowed, fences over 7' are required to go through the Consolidated Local Permit Process
- **Screening Requirements:** Additional screening requirements will be part of design guidelines that are being drafted



BATTERY ENERGY STORAGE: MAIN USE

Main Use

- **The site footprint of a Main Use BESS is not allowed** within a required front, side, or rear yard of any zoning district or subdistrict
- **BESS have a maximum height of 12ft** (if located in a Gateway Industrial Subdistrict and Core Industrial Subdistrict, 24 feet maximum height)
- **If maximum Building Lot Coverage is required for a Lot, the site footprint of a BESS is included** in the total lot coverage
- **If minimum Usable Open Space (%) is required for a Lot, the site footprint of a BESS does not count toward minimum Usable Open Space requirements**



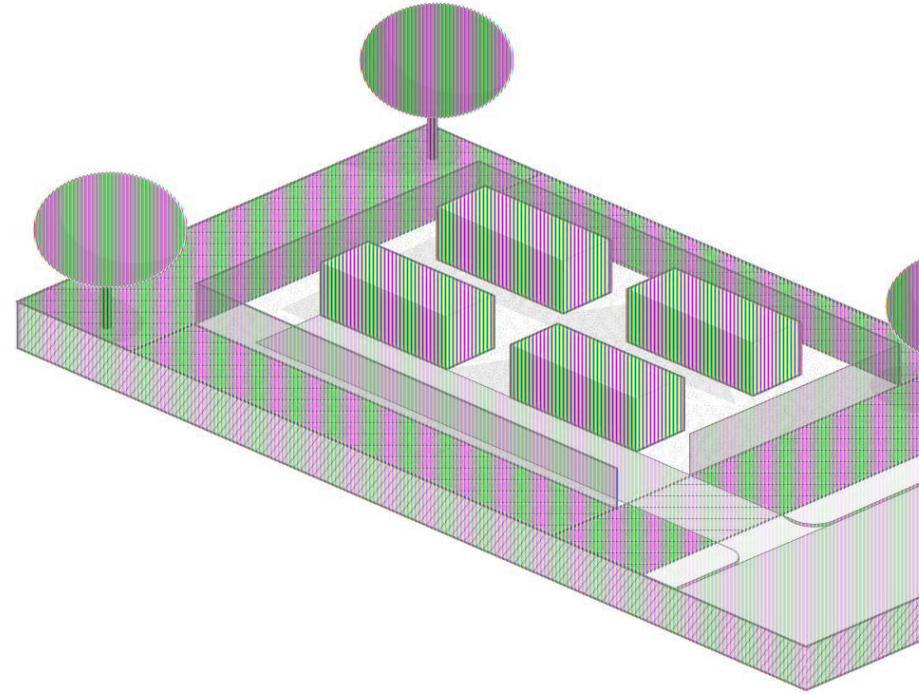
BATTERY ENERGY STORAGE: MAIN USE

Consolidated Local Permit Review required

Main Use - EXAMPLE - Residential District

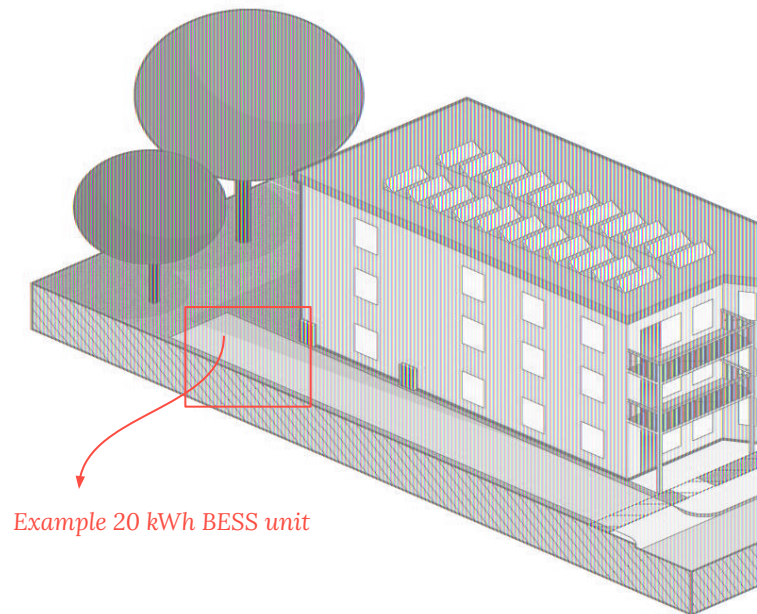
- Footprint = 800 sf
- BESS Height = 9.6 ft
- Lot Coverage = 70%
- Usable Open Space = 30%
- Front yard setback = 12 ft
- Side yard = 15 ft (cumulative)
- Rear yard = 20 ft
- Fence height = 8 ft

Additionally, the site plan will be reviewed using guidance from State's Electrical Code (527 CMR. 12.00), the State's Fire Code (527 CMR 1.00), and National Fire Protection Association (NFPA) 855 or subsequent standards.



BATTERY ENERGY STORAGE: ACCESSORY USE

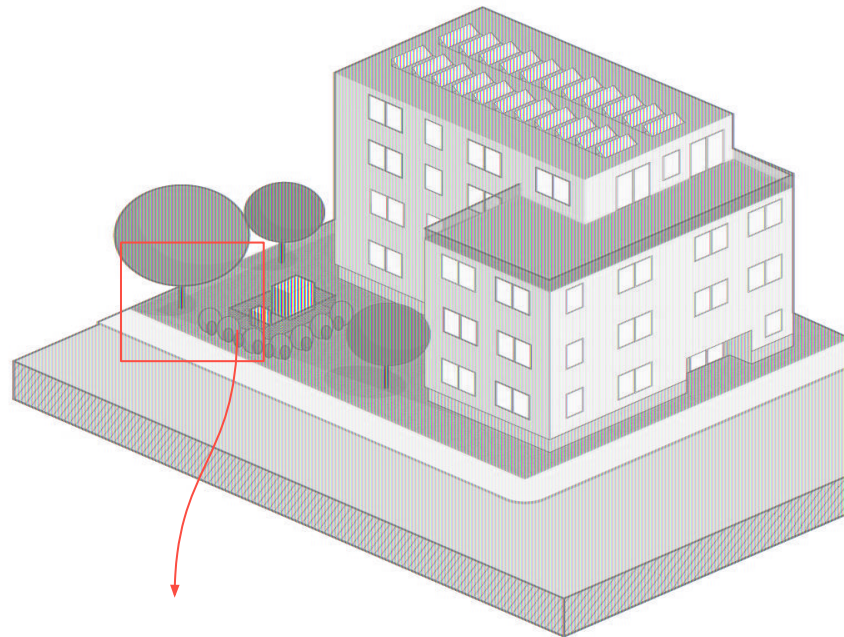
- **Accessory BESS** is often **designed to provide backup power and demand response** capabilities to facilities such as multifamily buildings, hospitals, schools, and industrial sites
- Capacity typically is **~20 kWh - 0.5 MWh**.
- **Average Accessory BESS footprint** for multifamily or municipal buildings **(100-300) sf**, including Battery Storage and all supporting equipment.
- **Accessory BESS with a site footprint greater than 400 sf** is required to go through the Consolidated Permit Process



BATTERY ENERGY STORAGE: ACCESSORY USE

Accessory BESS

- **Allowed use** in any zoning district or sub district if it is **less than 400 sf** (site footprint).
- **Allowed** in a required Side Yard and/or Rear Yard. **Must meet separation distances** required by Code.
- **Not allowed** in the front yard.



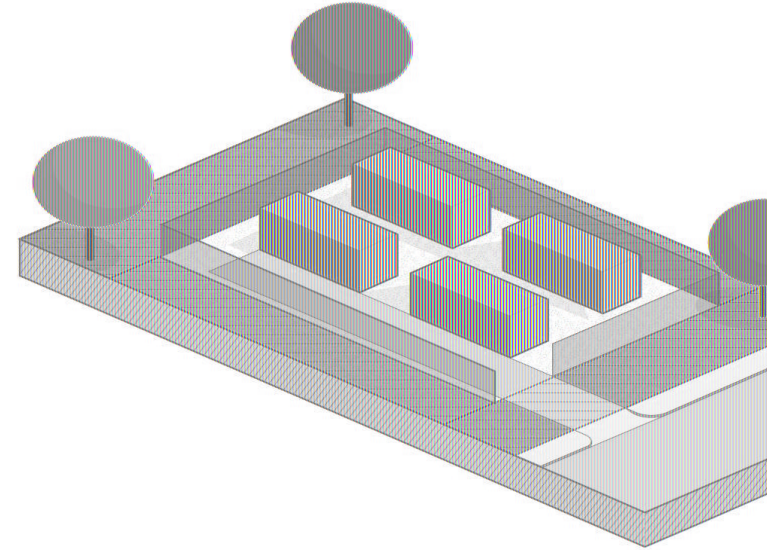
Example 250 kWh BESS unit

BATTERY ENERGY STORAGE: DECOMMISSIONING FUND



125% Surety is required for decommissioning

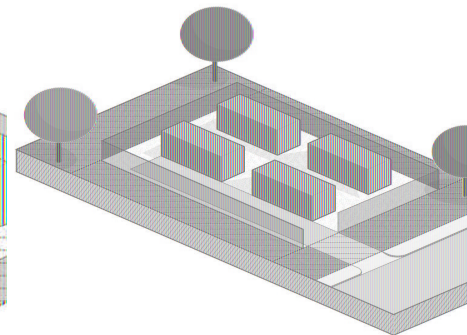
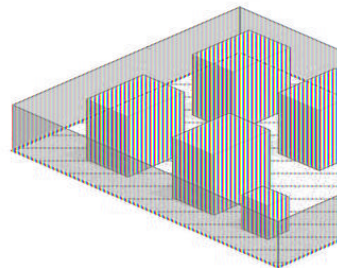
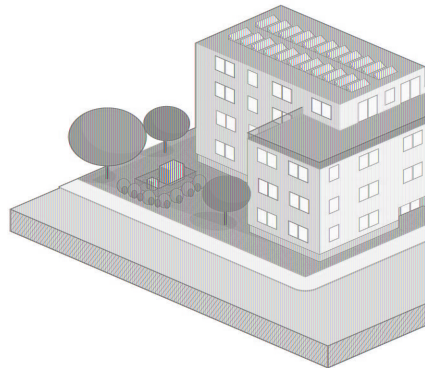
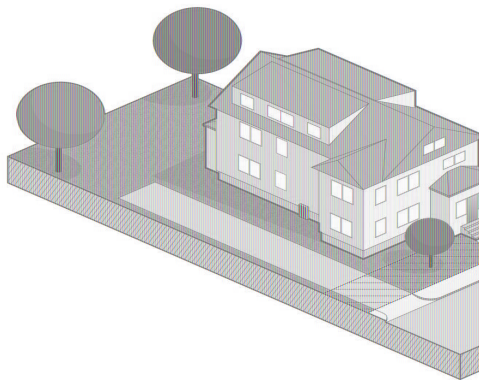
- **Covers the cost of removal** in the event the City of Boston must remove the BESS or Accessory BESS and remediate the site.
- Applies to BESS **greater than 400 sf or 500 kWh.**
- BESS greater than a **1,000 sf footprint or 1 MWh** shall contribute an additional 10% for the decommissioning fund.



Does not apply to any BESS facilities owned by the City of Boston or the Commonwealth of Massachusetts or operated as a public facility or utility.

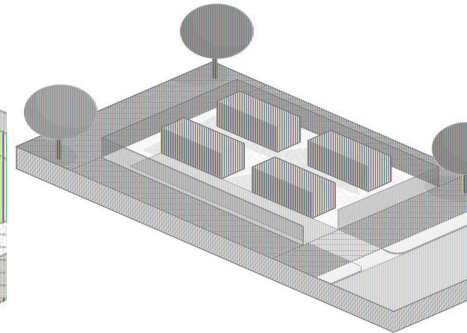
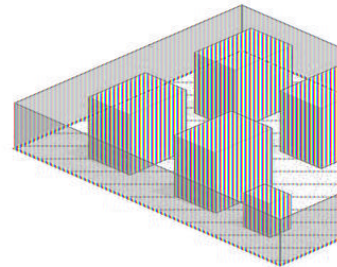
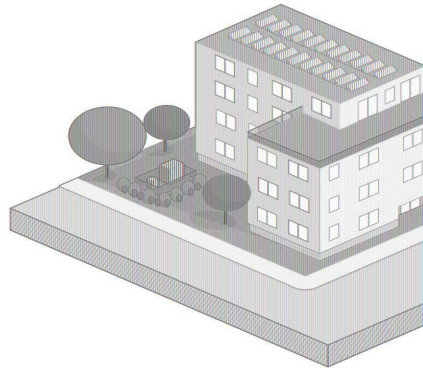
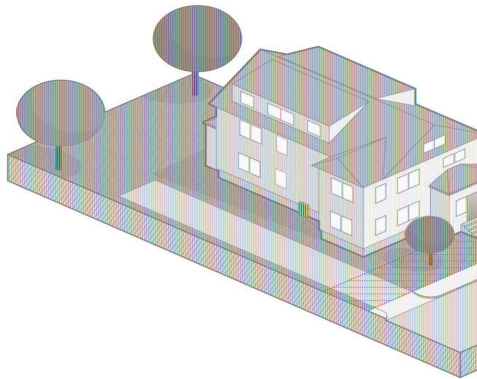
All Comments will be taking into consideration to help inform forthcoming Review Guidelines

- August 13, 2026 - BPDA Board
- September 9, 2026 - Zoning Commission
- October 1, 2026 - Consolidated Local Permit takes effect



For questions regarding CMR 29.00 and energy permitting reforms please contact: energypermitting@mass.gov
More information: <https://www.mass.gov/info-details/energy-infrastructure-siting-and-permitting-reforms>

Questions?





Thank you!

Contact: travis.anderson@boston.gov
christopher.maskas@boston.gov
andrew.plumb@boston.gov

Appendix

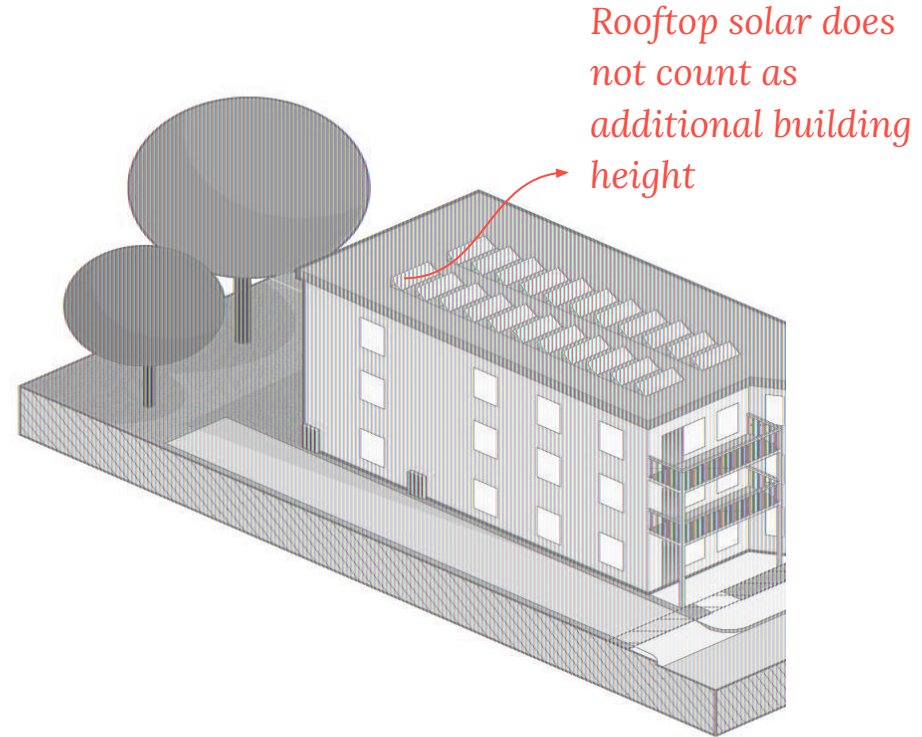
Upcoming reform for Solar PV

We are also updating Solar PV dimensions in Article 2

New dimension definitions, Article 2 and code structure updates

New Updates

- **Solar Energy Generation:** Newly proposed Dimensional Definitions zoning reform makes clear that rooftop solar does not count as a part of building height
- **Proposed Solar PV applications on a building within 100 ft of a park** previously approved by the Parks Commission will not need additional Parks review

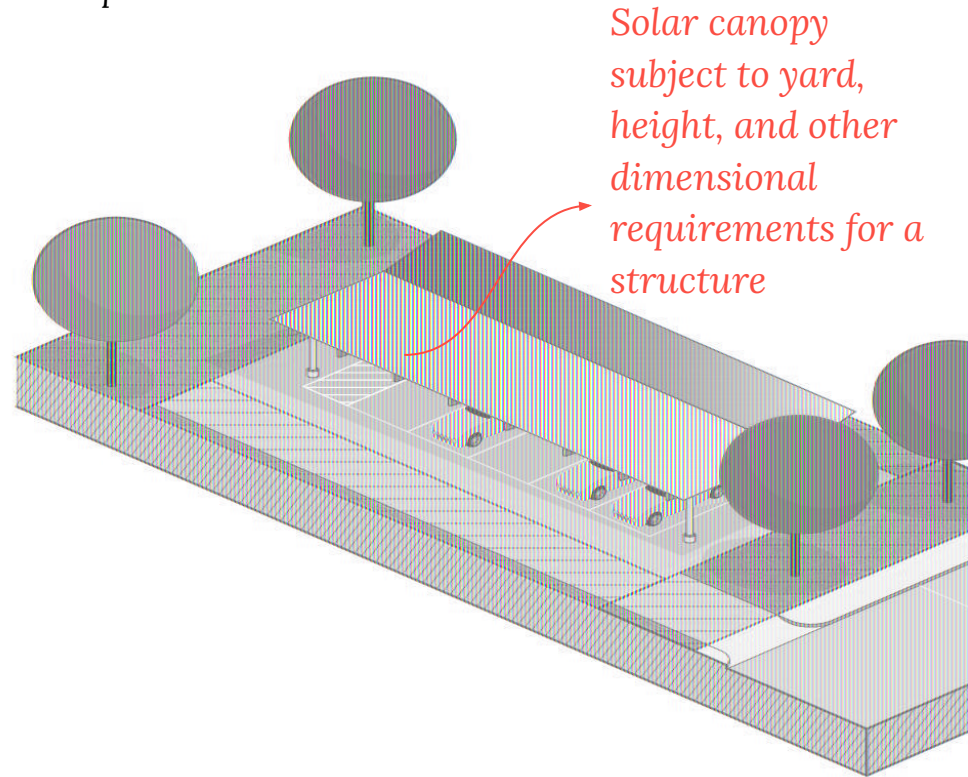


Solar PV Structures

New dimension definitions, Article 2 and code structure updates

Solar PV canopies or ground mount solar PV

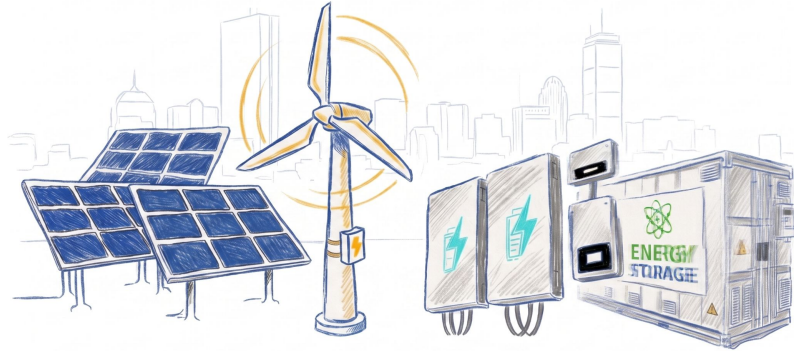
- Subject to all dimensional requirements of underlying zoning for Main and Accessory Uses



Article 88: Applicability and Goals

Updates zoning to include definitions for energy infrastructure, review procedures and siting requirements

- **Clear, predictable procedures and criteria** for Small Clean Energy Infrastructure.
- **Zoning regulations and standards** for Battery Energy Storage Systems (BESS) and Wind Energy Facilities
- **Enhances Public safety, and minimizes impacts** on the City of Boston.
- **Provides financial assurance** for decommissioning Battery Energy Storage Systems



Small Clean Energy Infrastructure

Wind Energy Facilities

Wind Facilities sections of Article 88 remain unchanged

- The City has existing regulations for wind facilities.
- **Minimal changes** have been made to onshore wind requirements in Article 88 to align with CMR 29.00



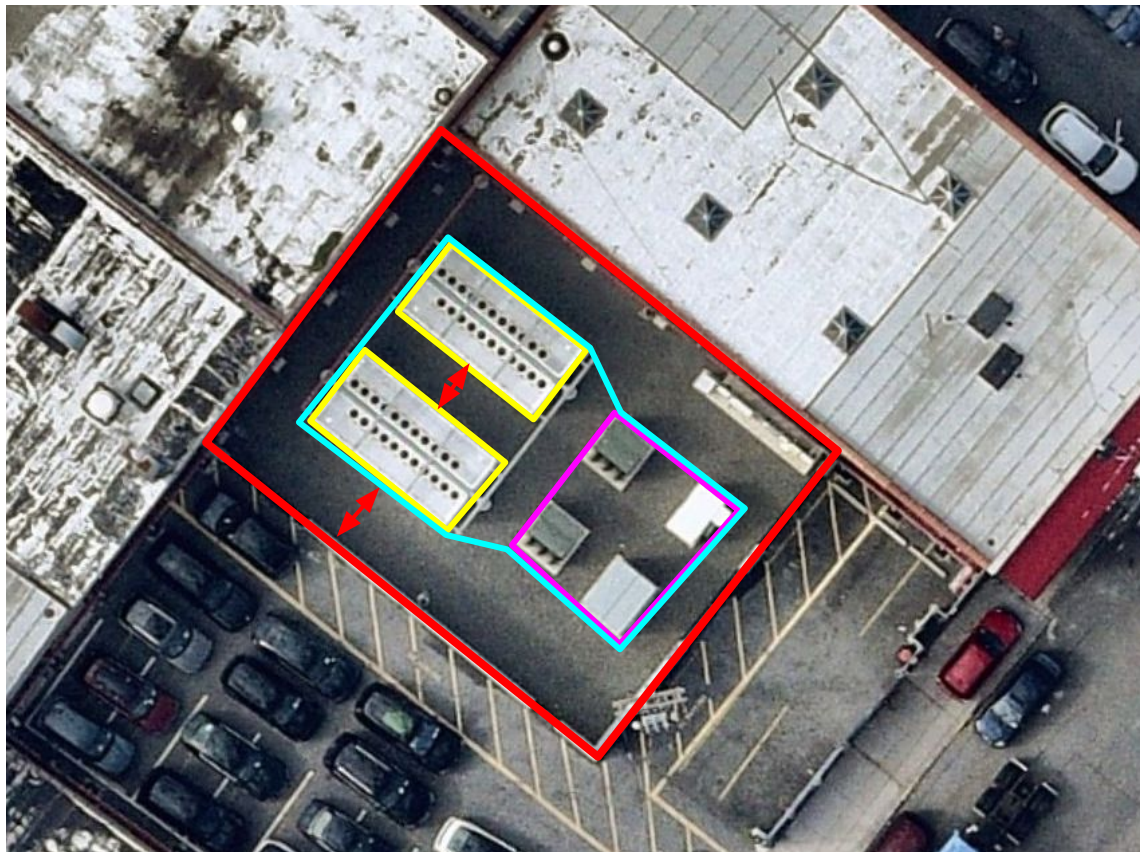
100 kW Wind Turbine - Dorchester

BESS: Proposed Review

Level of review required will be based on the footprint of the BESS Project

Example of a BESS Project Footprint:

-  Battery Containers
-  Transformers & Control
-  Exterior Wall: Encloses all equipment and separation distances required by Fire Code
-  BESS Footprint



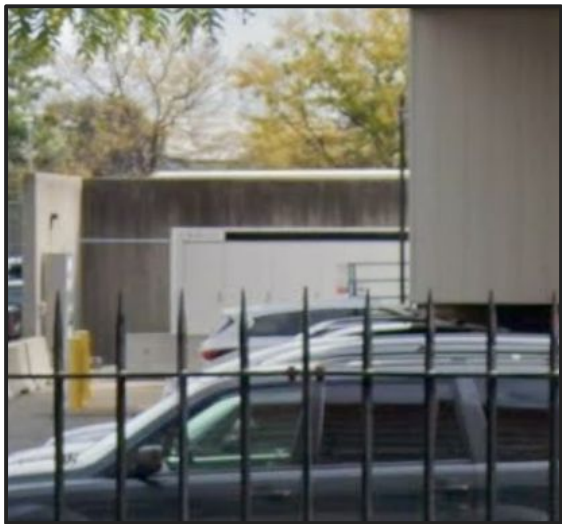
BESS Facility in The Bronx, NY
Approx footprint: 3,500 sf

Fenced Perimeter Measurements under 400 sf

Subject to standard building and safety codes. Includes Building-Integrated BESS.

BESS Footprint:

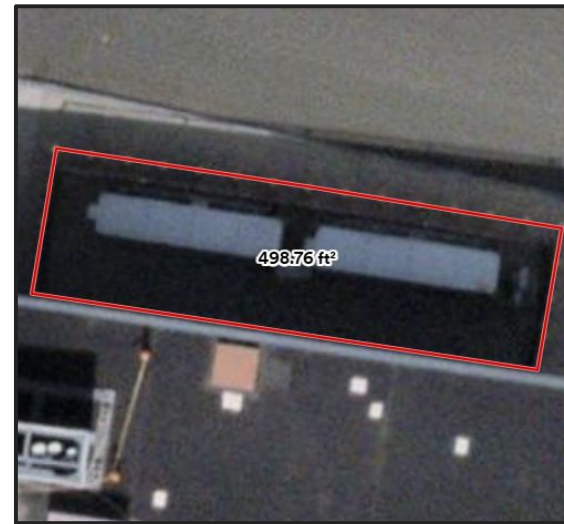
- No Consolidated Local Permit required: <400 sq ft



Boston Medical Center BESS -
Surrounded by concrete wall on $\frac{3}{4}$
sides - no official fenced perimeter



Mamaroneck Avenue School BESS -
No fenced perimeter at all



New Balance Track BESS - No official
fence; surrounded by bollards on $\frac{3}{4}$
sides

Foot Print - No Fence

Subject to clear requirements for buffering, screening, setbacks, height, and footprint based on zoning district.

BESS Footprint:

- Consolidated Local Permit **required:** >400 sq ft
- Main Use



Mt. Pleasant Community Center - Mt. Pleasant, NY



Gedney Way Recycling Facility - White Plains, NY



UMass Amherst Central Heating Plant - Amherst, MA

Fenced Perimeter Measurements

Subject to clear requirements for buffering, screening, setbacks, height, and footprint based on zoning district.

BESS Footprint:

- Consolidated Local Permit **required:** >400 sq ft
- Main USe



Mt. Pleasant Community Center - Mt. Pleasant, NY



Gedney Way Recycling Facility - White Plains, NY



UMass Amherst Central Heating Plant - Amherst, MA

Larger Main Use Example - minor Screening

Subject to clear requirements for buffering, screening, setbacks, height, and footprint based on zoning district.

BESS Footprint:

- Consolidated Local Permit **required**: >400 sq ft
- Main Use



Con Edison Ozone Park BESS -
Queens, NY



55th Drive BESS - Maspeth, NY



Holden MA BESS 1 - Holden, MA