

Joint Comments of Participants in the Zero-Emission Vehicles Coalition

October 13, 2020

Via Online Comment and E-mail

The Honorable Kathleen Theoharides
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
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<https://eeaonline.eea.state.ma.us/EEA/PublicComment/Landing/>

Subject: MBTA Quincy Bus Maintenance Facility Environmental Notification Form, EEA No. 16267

Dear Secretary Theoharides:

The nine undersigned organizations and individuals are participants of the Zero-Emission Vehicles Coalition and we enthusiastically submit the following comments on the Environmental Notification Form (“ENF”) for the proposed Quincy Bus Maintenance Facility (“Quincy Garage BMF” or “the Project”). The Project, submitted by Massachusetts Bay Transportation Authority (“MBTA” or the “Proponent”), would replace the existing 90-year-old bus maintenance facility in the same municipality and has the potential to support public transit electrification in Greater Quincy. We submit the following comments to inform the scope of the ENF review and any future environmental impact report that the Proponent is required to complete pursuant to the Massachusetts Environmental Policy Act (“MEPA”).

- I. The Project Should Spur the Conversion of the MBTA Bus Fleet From Fossil-Fuel Powered Buses to Zero-Emission Buses to Meet Rider Needs.
 - a. *The Project Will Provide New and Necessary Bus Maintenance Capacity.*

The Quincy Garage BMF will provide much-needed capacity for the MBTA by increasing the number of buses serviced in Quincy from 86¹ to 135.² The additional capacity will increase the MBTA’s ability to offer reliable and frequent bus service. The MBTA’s service standards are hamstrung by the size of its vehicle fleet; without addressing the bedrock issue of the MBTA’s bus fleet size and garage facilities, all riders will continue to be underserved.³ The MBTA has a pressing need to upgrade or replace its eight bus maintenance and storage facilities.⁴ Of the

¹ ENF Attachment A, Project Narrative, at 1, PDF page 32.

² ENF at 3.

³ Livable Streets Alliance, “64 Hours: Closing the Bus Equity Gap,” at 9, (September 2019), <https://d3n8a8pro7vhm.cloudfront.net/livablestreetsalliance/pages/6582/attachments/original/1569205099/lisa-better-buses-2019-v9-20sep19.pdf>.

⁴ MBTA Integrated Fleet and Facilities Plan, Part Three: Bus, (December 4, 2017), <https://cdn.mbta.com/sites/default/files/fmcb-meeting-docs/2017/december/2017-12-04-fmcb->

eleven MBTA bus maintenance facilities, the existing Quincy facility is one of the oldest at 90 years old.⁵ In addition to being one of the oldest maintenance facilities at the MBTA, the existing Quincy garage is also in marginal condition, at best.⁶ Using the Federal Transit Administration's 1-5 Asset Condition Rating Scale (5 = Excellent, 1 = Poor), the existing Quincy garage rated 2.4, which is not in good repair.⁷ The existing Quincy garage has a low roof and door size limiting the size of buses that can be serviced at the facility to the current size of 10 feet, 3 inches and cannot physically accommodate new buses, which are 10 feet, 8 inches or taller.⁸ The existing Quincy facility is not only becoming obsolete, but it also contains poor working conditions.⁹ Consequently, the existing facility is in need of replacement especially for the purpose of accommodating zero-emission buses.

b. The Project Should Be Designed to Serve A Complete Fleet of Zero-Emission Buses in 2024.

[iffp-part3-bus.pdf](#). See Focus40: The 2040 Investment Plan for the MBTA. State of the System Report: Bus. (Massachusetts Department of Transportation [MassDOT]/MBTA, 2018) (Key findings include: (1) "Four of the MBTA's maintenance facilities are over 70 years old, with the oldest built in 1930."; (2) "Most [facilities] are near, at, or above practical storage capacity."; (3) "Many bus maintenance facilities are outmoded in key ways."; (4) "Most [facilities] in need of replacement...[or] major upgrades;" and (5) "Inadequate maintenance facilities are a barrier to providing more bus service for riders.") See also MBTA Bus Maintenance Efficiency Study, CH2M HILL, Inc., 2016) (Key findings include that the "MBTA maintenance facilities are old and over capacity. The MBTA's aging facilities with widely varying conditions and capacities, are not in line with peer agencies. In most cases, the facilities are over capacity with no room for expansion.")

⁵ MBTA Integrated Fleet and Facilities Plan, Part Three: Bus, at 8 (December 4, 2017), <https://cdn.mbta.com/sites/default/files/fmcb-meeting-docs/2017/december/2017-12-04-fmcb-iffp-part3-bus.pdf>.

⁶ *Id.*

⁷ A Better City, "New MBTA Bus Maintenance Facilities & Evolving Battery Electric Bus Technology, Case Study: Albany Street Garage," at 2, March 2019, <https://www.abettercity.org/assets/images/ABC%20--%20New%20MBTA%20Bus%20Maintenance%20Facilities%20&%20Evolving%20Battery%20Electric%20Bus%20Technology%20-%20Final%20Report%20March%2031%202019-compressed.pdf#:~:text=The%20Massachusetts%20Bay%20Transportation%20Authority%20%28MBTA%29%20has%20a,conducted%20by%20the%20Commonwealth%20and%20MBTA%20since%202003.>

⁸ MBTA Integrated Fleet and Facilities Plan, Part Three: Bus, at 9, 13 (December 4, 2017), <https://cdn.mbta.com/sites/default/files/fmcb-meeting-docs/2017/december/2017-12-04-fmcb-iffp-part3-bus.pdf>.

⁹ Adam Vaccaro, Boston Globe, "MBTA Workers Protest Maintenance Staffing Levels," (March 9, 2020), <https://www.bostonglobe.com/2020/03/09/metro/mbta-workers-protest-maintenance-staffing-shortfalls/>.

The MBTA plans to design the Quincy Garage BMF to accommodate diesel-hybrid buses and allow for future conversion to a battery electric bus fleet.¹⁰ We strongly recommend that the MBTA plan to accommodate zero-emission buses as soon as the Project becomes operational in 2024 to achieve improved air quality, get closer to the Commonwealth's greenhouse gas ("GHG") emissions reduction target, and provide clean, safe, and reliable public transit.

The Intergovernmental Panel on Climate Change Special Report predicts that global warming will "reach 1.5°C between 2030 and 2052 if warming continues at the current rate."¹¹ Combating this change requires reaching net zero emissions by 2050.¹² This gives us a short window to ratchet down emissions and the MBTA's fleet is a key opportunity for transitioning to zero-emission technology.

Recognizing the long-term threat of climate change, Massachusetts passed the Global Warming Solutions Act ("GWSA") in 2008.¹³ The Massachusetts GWSA requires an 80 percent reduction in GHG emissions by 2050.¹⁴ It further requires coordinated state agency actions to achieve these limits.¹⁵ In January 2020, Governor Baker during his State of the Commonwealth address announced a commitment for Massachusetts to achieve net-zero GHG emissions by 2050.¹⁶ Further, you issued, on April 22, 2020, a determination to achieve net zero emissions by 2050 defined as "a level of statewide greenhouse gas emissions that is equal in quantity to the amount of carbon dioxide or its equivalent that is removed from the atmosphere and stored annually by, or attributable to, the Commonwealth; provided, however, that in no event shall the level of emissions be greater than a level that is 85 percent below the 1990 level."¹⁷

The transportation sector is the largest contributor of GHG emissions in Massachusetts. In 2017, transportation accounted for 42 percent of GHG emissions in the state.¹⁸ Per Governor Baker's Commission on the Future of Transportation, "[w]ithout further action, transportation sector

¹⁰ ENF at 3.

¹¹ The Intergovernmental Panel on Climate Change, *Summary for Policymakers*, at 4 (2018), https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf.

¹² *Id.* at 12.

¹³ St. 2008, c. 298, <https://malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter298>.

¹⁴ M.G.L. c. 21N, § 3(b).

¹⁵ M.G.L. c. 21N, § 2-3.

¹⁶ Governor Charles Baker, State of the Commonwealth Address (January 21, 2020). Available at: <https://www.mass.gov/news/governor-baker-delivers-2020-state-of-the-commonwealth-address>.

¹⁷ Secretary Theoharides Determination of Statewide Emissions Limit for 2050, April 22, 2020, <https://www.mass.gov/doc/final-signed-letter-of-determination-for-2050-emissions-limit/download>.

¹⁸ Mass.gov, MA GHG Emission Trends: MA and US GHG by Sector, <https://www.mass.gov/doc/appendix-c-massachusetts-annual-greenhouse-gas-emissions-inventory-1990-2017-with-partial-2018/download>.

GHG emissions are projected to increase.”¹⁹ The Commission on the Future of Transportation recommended that “bus service, in particular, needs to be reinvented.”²⁰ The Commission on the Future of Transportation also concluded that all buses purchased with state resources should be zero emissions by 2030.²¹ The Commonwealth is not the only entity focused on improving the transportation system as the Quincy City Council issued a resolution earlier this month calling for the Project to be all-electric in 2024 when the Project opens.²²

The Quincy Garage BMF has the opportunity to be the first MBTA bus maintenance facility that can support a zero-emission bus fleet. MBTA buses have an average service life of 12-15 years.²³ The existing MBTA fleet of buses served by the Quincy facility will reach the end of its serviceable life by 2023.²⁴ As the MBTA plans its future procurements to replace the fleet that will cease operations at the existing Quincy garage in 2023, 100 percent of the procurements should be for zero-emission buses and the Project should be designed to fully accommodate a zero-emission fleet.

- c. If the Project Cannot Serve A Complete Fleet of Zero-Emission Buses in 2024, then the MBTA Should Design A Plan for When It Can Support An Entire Fleet of Zero-Emission Buses No Later Than 2030.*

During the virtual MEPA site visit, MBTA representatives acknowledged an interest in working towards bus electrification but stated the performance limitations of battery electric buses would make it challenging to commit to an all-electric fleet at the Project in 2024. There are multiple battery electric buses that perform well in cold temperatures and we think that the MBTA’s concerns about performance of the existing Silver Line battery electric bus pilot should not prohibit the plan for an all-electric fleet at Quincy in 2024. We note that the Silver Line pilot involved storing the battery electric buses outside, which likely exacerbated cold weather impacts and would not be the case with the new Quincy fleet at the Project. Further, most of the range loss that did occur with the Silver Line pilot was due to heating; auxiliary heating can mitigate this concern. We anticipate that the electric bus technology will continue to improve by the time the MBTA procures the new Quincy fleet for service and storage at the Quincy Garage BMF.

¹⁹ Commission on the Future of Transportation, *Choices for Stewardship: Recommendations to Meet the Transportation Future: Executive Summary*, 3 (December 2018), <https://www.mass.gov/files/documents/2018/12/14/FOTC-ExecutiveSummary.pdf>.

²⁰ Commission on the Future of Transportation, *Choices for Stewardship: Recommendations to Meet the Transportation Future: Volume 1*, at 36 (December 2018), <https://www.mass.gov/doc/choices-for-stewardship-recommendations-to-meet-the-transportation-future-volume-1/download>.

²¹ *Id.* at 54.

²² Quincy City Council Order No. 2020-134, Resolution of the Quincy City Council to the MBTA to replace its Quincy bus fleet with Battery Electric Buses when it opens the facility, October 5, 2020, <https://www.quincyma.gov/civicax/filebank/blobdload.aspx?BlobID=37109> (PDF page 67).

²³ ENF Attachment A, Project Narrative, at 1, PDF page 32.

²⁴ *Id.*

At a minimum, we urge the MEPA Office to require that the MBTA develop a plan with detailed timelines for when it plans to support 135 zero-emission buses at the Project. We urge that the MBTA commit to installing a sufficient number of charging stations and electrical capacity by the Project's operation date in 2024 to allow for future charging of all 135 buses. We call on the MBTA to commit that it will commence operation of the Project with a minimum of 25 zero-emission buses and achieve 135 zero-emission buses by 2030. The MBTA should also commit to an analysis of in-route charging and in-motion charging opportunities. The 2030 timeline is at the recommendation of the Commission on the Future of Transportation.²⁵

As of today, there are numerous zero-emission buses manufactured and in operation throughout the United States, with numerous options for battery electric buses.²⁶ The lifecycle costs of an electric bus are lower than that of diesel buses due to reduced fuel costs, fewer maintenance costs, and avoided healthcare expenses.²⁷ Not only are electric bus lifecycle costs lower, they also are quieter and produce zero tailpipe emissions. The Zero-Emission Vehicles Coalition advocates that the Proponent does not limit the future Project operation to a particular technology, such as a battery electric bus. Instead of rejecting the notion of a full transition to zero-emission buses by 2024, we recommend that the MBTA consider additional alternatives such as in-motion charging, in-route charging, electric trolleybuses, and auxiliary heating. In-motion charging technology lets buses charge on electric lines like existing trolley buses. Additionally, in-route charging, where buses quick charge using an overhead charger during short breaks, is already being tested in Worcester. The MBTA should consider which technologies will work with operations and service needs both to ensure a reliable and frequent schedule for bus riders and maximize opportunities for emissions reductions.²⁸

²⁵ Commission on the Future of Transportation, *Choices for Stewardship: Recommendations to Meet the Transportation Future: Volume 1*, at 54 (December 2018),

<https://www.mass.gov/doc/choices-for-stewardship-recommendations-to-meet-the-transportation-future-volume-1/download>.

²⁶ A Better City, "New MBTA Bus Maintenance Facilities & Evolving Battery Electric Bus Technology, Case Study: Albany Street Garage," at 5-9, March 2019, <https://www.abettercity.org/assets/images/ABC%20--%20New%20MBTA%20Bus%20Maintenance%20Facilities%20&%20Evolving%20Battery%20Electric%20Bus%20Technology%20-%20Final%20Report%20March%2031%202019-compressed.pdf#:~:text=The%20Massachusetts%20Bay%20Transportation%20Authority%20%28MBTA%29%20has%20a,conducted%20by%20the%20Commonwealth%20and%20MBTA%20since%202003>

²⁷ U.S. PIRG, "Paying for Electric Buses: Financing Tools for Cities and Agencies to Ditch Diesel," at 7-8 (2018), <https://uspig.org/sites/pirg/files/reports/National%20-%20Paying%20for%20Electric%20Buses.pdf>. See Environmental and Energy Study Institute, "Battery Electric Buses Fact Sheets: Benefits Outweigh Costs," (October 2018), [https://www.eesi.org/files/FactSheet Electric Bus Benefits Outweigh Costs 1018.pdf](https://www.eesi.org/files/FactSheet%20Electric%20Bus%20Benefits%20Outweigh%20Costs%201018.pdf).

²⁸ Burns McDonnell, "Electrifying the Nation's Mass Transit Bus Fleets," <https://info.burnsmcd.com/electrification/electrifying-the-nations-mass-transit-bus-fleets?hsCtaTracking=69fccf59-ee8e-4343-bb8a-b81351ea7ec8%7C474d453c-88c4-4451-b524-37ad64cf785>.

II. The MBTA Should Operate Zero-Emission Buses With A Priority On Routes That Serve Environmental Justice Populations.

Environmental justice (EJ) populations disproportionately suffer the negative impacts of transportation emissions. Environmental justice populations are, at present, defined as neighborhoods that meet a specific threshold for low-income residents, people of color, or limited English proficient residents.²⁹ The Project is located in close proximity to EJ populations in North Quincy, South Quincy, Quincy Point, and Germantown.³⁰

On average, residents of color in Massachusetts are exposed to PM_{2.5} concentrations from vehicle emissions that are 26 to 36 percent higher than the exposure of white residents.³¹ More than 372,000 Latino, 283,000 African Americans, and 231,000 Asian Americans in Massachusetts are residents of communities where pollution is above the state average.³² In the United States, while communities of color bear the impact of air pollution, that same pollution is predominately caused by the consumption of goods and services by white residents.³³ As temperatures rise, so will rates of asthma and respiratory disease in neighborhoods through the Commonwealth as increased heat exacerbates the impacts of air pollution.³⁴

In addition to reducing climate-warming emissions, the elimination of fossil fuels from public transit buses can have enormous co-benefits for air quality and public health. Diesel fuel, in particular, – the fuel that will be used in the majority of MBTA buses at the Project when it opens in 2024 – is a recognized hazard to human health.³⁵ Pollution control technologies, such as those that could be deployed on diesel-hybrid buses, do not entirely eliminate diesel exhaust, and leave behind ultrafine particles containing soot and heavy metals that are a serious threat to

²⁹ Massachusetts Executive Office of Energy and Environmental Affairs Environmental Justice Policy at 3, 2017, https://www.mass.gov/files/documents/2017/11/29/2017-environmental-justice-policy_0.pdf (issued pursuant to Executive Order 552 (2014), M.G.L. c. 21A, § 2). Note that the Massachusetts House unanimously approved H.4933 on July 31, 2020, which would establish statutory definition of “environmental justice population” that differs from the version in the EEA Environmental Justice Policy.

³⁰ ENF, Attachment A, Project Narrative, at 12, PDF page 43.

³¹ Union of Concerned Scientists: *Inequitable Exposure to Air Pollution from Vehicles in Massachusetts: Fact Sheet*, 1 (June 2019), <https://www.ucsusa.org/sites/default/files/attach/2019/06/Inequitable-Exposure-to-Vehicle-Pollution-MA.pdf>.

³² *Id.* at 2.

³³ See generally Christopher W. Tessum et al., *Inequity in Consumption of Goods and Services Adds To Racial–Ethnic Disparities in Air Pollution Exposure*, 116 Proceedings of the Nat’l Acad. of Sci. of the U.S. 6001 (2019).

³⁴ See H. Orru et al., *The Interplay of Climate Change and Air Pollution on Health*, 4 Current Env’tl. Health Report 504, 504 (2017) (“In general, climate change is expected to worsen air quality in several densely populated regions by changing atmospheric ventilation and dilution, precipitation and other removal processes and atmospheric chemistry.”)

³⁵ California Office for Environmental Health Hazard Assessment (2001). Health Effects of Diesel Exhaust, <https://oehha.ca.gov/air/health-effects-diesel-exhaust>.

human health.³⁶ Diesel fuel is also a documented occupational hazard for fuelers, garage and maintenance workers subjected to routine exposure.³⁷ The complete removal of diesel exhaust from the air we breathe is of paramount importance. Massachusetts' communities, especially those most impacted by pollution, should benefit from electric buses. Thus, we strongly recommend that the MBTA include in its Project plan a goal to begin operating at least 25 zero-emission buses in 2024 on routes that serve EJ populations.

III. The Quincy Bus Garage Should Use Solar Power and Energy Storage to Support Electric Buses.

The Proponent claims that the Project location is well suited for sustainability components, such as rooftop solar arrays or a green roof.³⁸ The former Lowe's building that will serve as the location of the Project has existing rooftop solar panels. We recommend that the Proponent commit to operating rooftop solar panels, regardless of whether the existing solar panels are functional, and construct a solar canopy in the parking area to maximize the opportunity for renewable electricity generated at the Project. The Fiscal and Management Control Board recently authorized a new MBTA contract to procure 70 percent of its electricity needs from renewable sources.³⁹ The MBTA should continue this trend toward relying on renewable resources by committing to operate the Project using renewable resources.

In addition to operating solar panels, we urge the Proponent to plan to install an energy storage system on site to maximize the gains for solar power. Energy storage systems can transport electricity over time and distance; it can act as a generator or a load and can integrate renewables into the grid.⁴⁰ An energy storage system at the project would allow for peak demand reduction or peak shifting, which benefits the electric grid. Additionally, there are non-energy benefits of storage, such as resiliency, reduced outages, job creation, and reduced land use.⁴¹

³⁶ DPF Solution Sheffield, UK. (2016). New DPF Filter Effectiveness Queried by Scientists. <https://www.dpfsolutionsheffield.co.uk/uncategorized/new-dpf-filter-effectiveness-queried-by-scientists/>; Lane, K.J., et al. (2016). Association of modeled long-term personal exposure to ultrafine particles with inflammatory and coagulation biomarkers. *Enviro. Int.* <https://www.researchgate.net/publication/301611510>.

³⁷ National Council for Occupational Safety and Health (n.d.). Diesel Hazards. <https://www.coshnetwork.org/node/358>.

³⁸ ENF Attachment A, Project Narrative, at 2, PDF page 33.

³⁹ <https://commonwealthmagazine.org/transportation/mbta-embracing-renewable-energy/>; "Electricity Procurement" Presentation to the Fiscal and Management Control Board, (Oct. 5, 2020), <https://cdn.mbta.com/sites/default/files/2020-10/2020-10-05-fmcb-M-electricity-procurement-accessible.pdf>.

⁴⁰ Todd Olinsky-Paul, Clean Energy Group, "Energy Storage: The New Efficiency, How States Can Use Energy Efficiency Funds to Support Battery Storage and Flatten Costly Demand Peaks," at 5, (April 2019), <https://www.cleangroup.org/wp-content/uploads/energy-storage-the-new-efficiency.pdf>.

⁴¹ *Id.* at 6.

IV. Mitigation Measures Should Prioritize Air Monitoring, Noise Reduction, and Early Tree Planting.

The Project will require demolition and construction that will impact air quality and noise. Since the facility is located near multiple EJ populations, it is critical to monitor air quality before, during, and after construction. We urge the MBTA to install air monitors prior to construction to get baseline measurements and maintain those air monitors during and after construction. The Secretary's determination should require specific noise mitigation procedures that will limit the construction activities to daytime hours and require operation of all zero-emission buses by 2030 to ensure noise minimization during Project operation. We encourage the Proponent to commit to using construction equipment with diesel particulate filters or other pollution reduction technology to limit the impacts of construction activities on air quality.

The Proponent intends to plant 100 trees around the perimeter of the site including maple, birch, cedar, pine, and oak species, plus additional shrub plantings. The Proponent should analyze the long-term viability of these tree species in light of climate change impacts including extreme climate change impacts including extreme precipitation, extreme heat, and higher wind speeds. We further request that the Secretary's determination require tree planting at the start of construction to help with noise mitigation as early in the Project timeline as possible. Locations for tree plantings shall avoid locations with gas leaks so as to limit the potential for newly-planted trees to be harmed or killed by gas leaks. Finally, the Proponent should post a two-year landscape establishment bond prior to the issuance of a Certificate of Occupancy to be released upon determination that new trees and landscaping are healthy and have a reasonable chance of surviving to maturity.

V. The Project Should Maximize Climate Resiliency Options.

The Project is located within the inland flood zone area.⁴² The ENF indicates the Proponent's plan to work with the City of Quincy to address potential flooding concerns related to the Upper Town Brook to ensure that the Project does not exacerbate flooding in the community.⁴³ The MBTA and the City of Quincy have the opportunity to not only preclude additional flooding, but to also work collaboratively to reduce flooding in the community. The Proponent claims it will construct a retaining wall on Penn Street and add 410 square feet of fill below the 100-year floodplain elevation, which will result in a loss of flood storage.⁴⁴ As a result, the MBTA will create an equal amount of compensatory flood storage in compliance with the Massachusetts Wetlands Protection Act.⁴⁵

The ENF suggests that the Proponent is focused on flood impacts from climate change for 2030.⁴⁶ The Quincy BMF will be around well beyond 2030. The Proponent should be planning for approximately 40 inches of sea level rise, which is a reasonably conservative estimate for

⁴² ENF, Attachment A, Project Narrative at 17, PDF page 48.

⁴³ ENF, Attachment A, Project Narrative at 18, PDF page 49.

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ ENF, Attachment A, Project Narrative at 16-18, PDF pages 47- 49.

2070. The Proponent should take climate projections into account for the proposed elevation. The Proponent should consider raising the site to an elevation above the FEMA base flood elevation that incorporates sea level rise estimates. We encourage the Proponent to not rely on FEMA base flood elevations for project design knowing that it does not consider climate projections for sea level rise or more extreme precipitation. Trying to reduce the required elevation is extremely short-sighted and the climate analyses falls short of what is required for a facility of this type. The Quincy Garage BMF will be viable for longer than 10 years and the Proponent should be incorporating climate risks out to 2070 in the design. The consideration of impacts in 2030, without looking further into the future, is inconsistent with best practice.

The Project's design must be adaptive and flexible to accommodate rising sea levels and storm surge. We request that the Secretary's determination include detail about proposed elevations at the site, including a map depicting current elevation contours, a discussion of how flood inundation and depths are expected to change over the next 30-50 years, and a description of how the open space will function to absorb and buffer flood waters and maximize use of pervious surfaces. In addition, the Proponent should provide an analysis of how the elevation at this site will affect flood risk at neighboring sites, including any diversion of flood waters. We support the MBTA's plan to make the facility LEED certified, to elevate critical infrastructure, increase structural loading capacity of the roof and outdoor project elements to support extreme snowfall, and ensure subsurface stormwater retention and preservation of natural habitat to absorb extreme rainfall. A green roof and rain gardens will further support flood storage capacity and reduce the heat island effect.

VI. The Proponent Should Request Funding for the Project in the next Capital Investment Plan.

The MBTA has not yet identified a funding source.⁴⁷ Though the Proponent notes the possibility of Federal Transit Administration funding,⁴⁸ such funding is not a guarantee. The most recent MBTA Capital Investment Plan does not include funding for the Project. To make this Project a reality along with the ability to operate 135 zero-emission buses, the MBTA needs a dedicated source of funds.

⁴⁷ ENF, Attachment A, Project Narrative at 20, PDF page 51.

⁴⁸ *Id.*

In conclusion, we appreciate the opportunity to submit these comments and participate in a virtual site visit. You may direct any questions about these comments to Staci Rubin at SRubin@clf.org and (617) 850-1781.

Sincerely,

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Veena Dharmaraj, Director of Transportation, Massachusetts Sierra Club

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