



Alternative Sites for the Remaining Services on the Shattuck Hospital Campus

Prepared for The Emerald Necklace Conservancy
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By Randall Gilbert, John Lovett, and Alexandra Sullivan-Muniz

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Executive Summary

The Lemuel Shattuck Hospital is one of four Department of Public Health (DPH) teaching hospitals in the Commonwealth of Massachusetts, currently located in Franklin Park in Jamaica Plain. It is a state-operated hospital, consisting of 260 beds. The hospital provides medical and psychiatric treatment to the state's most vulnerable and underserved patient populations. The Massachusetts Department of Health and Human Services (HHS) has decided that the hospital will relocate its psychiatric inpatient and outpatient services, in 2021, to the Newton Pavilion in the South End. The commonwealth considers the cost of renovating the existing Shattuck Hospital building to be excessively high, and has determined that it would be more economically feasible to demolish it. There are currently multiple proposals on the table for the future use of the Shattuck Hospital campus. However, non-profit providers that currently work in conjunction with the Shattuck Hospital are expected to remain on site.

Our client, the Emerald Necklace Conservancy (ENC), is interested in restoring the site to its original use as parkland. Prior to moving forward with this proposal, the remaining non-profit providers would need to be relocated within the neighborhood. The non-profit providers' services include residential mental and behavioral health treatment programs, a methadone clinic, and the Pine Street Inn shelter, among other housing and health services for the homeless. Our team researched and assessed best practices in terms of delivering the aforementioned services. We also conducted a search for alternative sites within a mile radius of the Shattuck Hospital site to house such services, of which we found many.

By connecting with relevant state and local agencies and using a site selection process, we were able to identify alternative sites and evaluate their efficacy. Our report features a Key Findings section, organized in a chart that focuses on our recommended sites. Our Recommendations section further analyzes each of these sites and the Shattuck Hospital site. Our recommended alternative sites are the Arborway Yard (split up into three recommended subsites) and a parcel located on 271 South Street in Jamaica Plain, next to the State Laboratory. Our appendices discuss all the sites we considered, including ones we ultimately decided not to recommend. Comparing our recommended sites to the Shattuck Hospital site highlights why they are superior options for the remaining housing and health services for the homeless. Our report requests HHS to consider these locations instead of the Shattuck Hospital site.

Introduction

The Lemuel Shattuck Hospital is a public health hospital, in Jamaica Plain, located on a 13-acre parcel, adjacent to Franklin Park.¹ Before the hospital was built, the 13 acres were part of Franklin Park and the Emerald Necklace, an historic and world-renowned park system designed by the famed landscape architect Frederick Law Olmsted in the 19th century.² In 1949, the City of Boston transferred a portion of Franklin Park to the Commonwealth of Massachusetts and the land was deeded for public health purposes.³ In 1954, the state built the Shattuck Hospital.⁴

The hospital originally focused on polio and cancer treatment. Today, the hospital primarily focuses on serving the mentally ill and the homeless, and the treatment of HIV, Tuberculosis, and substance abuse disorders.⁵ There are also five non-profit organizations that provide services on site, in partnership with the Shattuck Hospital. The five non-profit organizations include Victory Programs, the Pine Street Inn, Bay Cove Human Services, Health Care Resource Centers, and High Point Detox. Their services include shelter for the homeless, a methadone clinic, substance use treatment, and behavioral and mental health services.⁶

In February 2018, the Massachusetts Department of Health and Human Services (HHS) announced that the Shattuck Hospital in Jamaica Plain would be demolished, due to prohibitive renovation costs.⁷ In 2021, the Shattuck Hospital's inpatient and outpatient services will be relocated to the Newton Pavilion in the South End.⁸ The non-profit providers, however, are expected to stay, and the site will be retained by HHS.⁹

The Emerald Necklace Conservancy (ENC) sees the demolition of the Shattuck Hospital as a once-in-a-generation opportunity to restore this section of Franklin Park and the Emerald Necklace. The ENC understands the urgent need for services for the homeless and mentally ill, especially in light of the opioid epidemic. However, the ENC does not see the goals of restoring historic parkland and providing these health services as mutually-exclusive.¹⁰

To get a fresh set of eyes on this project, the ENC asked Northeastern University for a group of graduate students to evaluate the situation and provide potential alternative sites, where the remaining services on the Shattuck Hospital site could be relocated. The ENC asked us to restrict our search for alternative sites to a one-mile radius of the Shattuck Hospital, to keep these services in the Jamaica Plain/Forest Hills neighborhood.

We began working on this project in January 2020 and have spent the past three months developing site parameters, identifying potential alternative sites, and evaluating these sites. **We believe that appropriate alternative sites exist within a one-mile radius of the Shattuck Hospital. We also believe that according to our site parameters, these sites are superior to the Shattuck Hospital site, and that the remaining non-profit organizations would be better served by relocating to one of these sites.**

Land and Building Size Requirements

We should note that the commonwealth's plan for the future of the Shattuck Hospital site has been amorphous. For the past two years, there has been an ongoing planning and redevelopment process run by HHS and the Massachusetts Division of Capital Asset Management and Maintenance (DCAMM). Over the course of this project, we heard different numbers for what land and building sizes the remaining services would require.

A community meeting presentation by HHS and DCAMM from January 2019 stated a supportive housing complex of 75-100 units would require a 120,000 square foot building and that the remaining health

services would require a 70,000 square foot building, for a total of 190,000 square feet. The presentation also noted that a reimagined Shattuck campus with additional services could require a total of 600,000 square feet.¹¹

In April 2019, HHS posted a request for information (RFI) seeking proposals for the future of the Shattuck Hospital site from housing and health care providers for the homeless. The RFI did not list any land or building size requirements, but stated that the Shattuck Hospital site should include a supportive housing complex of 75-100 units and mental health, substance use, and wraparound services.¹²

The Shattuck Vision Plan from February 2020 noted that HHS had originally sought 2 acres for a supportive housing complex of 75-100 units, but that the future of the Shattuck Hospital site has been expanded to new possibilities.¹³

In March 2020, we had a conversation with a City of Boston official familiar with the Shattuck relocation process. The official confirmed that the details of the future of the Shattuck Hospital campus are vague, but that it was reasonable to assume that the remaining housing units and health services would require 2 to 3 acres of land.

To guide our research and report, we needed to settle on requirements for land and building size. Based on the information available to us, we decided to assume a relocated site would require a minimum of 2 acres of land and 200,000 square feet of building space. A 200,000 square foot building could fit on 2 acres of land, assuming the building was 6 stories, with each story 30,000 to 35,000 square feet.¹⁴ A six-story building would reflect the height size of nearby buildings in the neighborhood, including new residential development.¹⁵

Outline

We have structured our report as follows:

Section I: Vision, Goals, and Objectives describes the vision that guided our research and report.

Section II: Research Methodology details our site parameters for supportive housing and health services for the homeless, based on academic and professional sources. This section describes the importance of each parameter and why each was included in our site selection process.

Section III: Data Collection will describe how we identified sites and collected information on each one.

Section IV: Key Findings lists our proposed alternative sites and displays a site selection matrix, which grades the Shattuck Hospital site and our proposed alternatives sites, according to our site parameters. The matrix will show that our proposed alternative sites score higher on our site parameters than the Shattuck Hospital site. A map of all our recommended sites and the Shattuck Hospital is also included in this section.

Section V: Recommendations will further detail our proposed alternative sites and the Shattuck Hospital site. It will explain our reasoning behind each grade on the site selection matrix.

We have also included two appendices. Appendix A is a list of our Tier 2 sites, with brief descriptions for each one. These are sites that we discovered during our research process, but that ultimately were not included in our recommendations, for a variety of reasons. Some of these sites did not score highly on one or more of our site parameters. For other sites, we were unable to collect sufficient data, due to time constraints and/or inaccessibility of necessary information. We hope this appendix serves as a starting point for anyone who would like to further our work and continue the search for sites for

housing and health services for the homeless. Appendix B is our full site selection matrix, including both our recommended and Tier 2 sites, as well as the Shattuck Hospital.

Limitations

Given the fluid nature of the Shattuck Hospital site planning and redevelopment process, we should note that our report can only speak to the process as it currently stands. Our alternative sites provide enough space for the housing and health services remaining on the Shattuck Hospital site, but not necessarily for an expanded complex, with additional services, which has been discussed by HHS and DCAMM at certain points.¹⁶ The COVID-19 pandemic, which reached Massachusetts in the final weeks of our project, may also have an impact on the future of the Shattuck Hospital site.

We acknowledge these limitations on our work, but we believe our report shows that alternative sites for housing and health services for the homeless do exist in the Jamaica Plain/Forest Hills neighborhood and that these sites are superior to the Shattuck Hospital site for these purposes. We also share the belief of our client that the goals of more open space and of providing shelter and health care for the homeless do not conflict. Housing and health services for the homeless can continue to be offered in this neighborhood under better conditions, while restoring the Shattuck Hospital site to its original land-use as parkland.

Section I: Vision, Goals, and Objectives

Vision Statement

We support our client's vision of returning the Shattuck Hospital site to parkland and restoring this portion of the historic Emerald Necklace, while keeping housing and health services for the homeless within the Jamaica Plain/Forest Hills neighborhood.

We believe that the Emerald Necklace, designed by the famed landscape architect Frederick Law Olmsted,¹⁷ is a unique and historic achievement in urban parks in the history of the United States. We should be seeking to preserve and restore as much of this park system as possible. With Boston experiencing a boom in population and development, the demand for open space in an urban setting will only grow.

We also believe that the debate over the future of the Shattuck Hospital campus is not an either-or proposition. The demand for both open space and housing and health services for the homeless do not conflict. We believe superior locations with better access to public transit and other amenities exist in this very neighborhood for these services. Moving these services to one of these locations would free up the Shattuck Hospital site for open space, while better serving the needs of the homeless.

Goals

1. Return ownership of the Shattuck Hospital campus from the Commonwealth of Massachusetts to the City of Boston, for the purpose of returning the campus to its historic land-use as parkland
2. Identify alternative sites within a mile of the Shattuck Hospital campus that could be used for housing and health services for the homeless
3. Select at least three alternative sites that could be proposed to HHS that are superior to the Shattuck Hospital site, based on professionally-accepted site parameters

Objectives

1. Develop site selection parameters for housing and health services for the homeless based on research of professionally-accepted standards in the medical field
2. Identify all publicly-owned land within a mile of the Shattuck Hospital campus
3. Rule out publicly-owned land that is currently in-use and unavailable
4. Evaluate the remaining sites, according to our site selection parameters
5. Evaluate the Shattuck Hospital campus, according to our site selection parameters
6. Select our highest-scoring sites as our recommended alternative sites
7. Submit a report to our client with our findings and recommendations

Section II: Research Methodology

Prior to initiating our site search, it was imperative to carefully delineate the appropriate criteria for the proposed project. Our research consisted of site selection criteria and search strategies based on current psychiatric hospital models. In terms of identifying appropriate alternative sites, the team has developed a site grading matrix to determine the parameters of defining an ideal location to administer support services based upon our group's research. This matrix grades each site along the following parameters:

1. Public Ownership
2. Parcel Size
3. Public Transportation
4. Commercial Space & Surrounding Businesses
5. Neighborhood Access

Establishing site parameters and researching best practices for delivering support services played an integral role in the site selection process. We gathered information from various sources such as articles, academic journals, and local and state agencies' websites and records. We also examined the guidelines in the RFI that HHS posted in April 2019 for the Shattuck Hospital site.¹⁸ As described later in Section III: Data Collection, we also spoke with experts with relevant experience in siting housing and health services for the homeless.

Below, we indicate why each Community Grading attribute is essential in evaluating the Shattuck Hospital site and alternate locations for supportive housing units.

Public Ownership

We determined our alternatives sites must all be publicly-owned land, for multiple reasons. First, the housing and health services for the homeless that would be relocated onto these alternative sites serve a public health purpose. It is therefore appropriate to site these services on land owned either by the Commonwealth of Massachusetts or the City of Boston. Second, publicly-owned land is generally not subject to zoning regulations, which allows far more flexibility in designing and building a complex for these services than privately-owned land.¹⁹ Third, to acquire privately-owned land for these services, the commonwealth would likely have to invoke eminent domain, which is a long, arduous, litigious, and expensive process. For a site to score well on our matrix in this category, it must be publicly-owned. Given the infeasibility of using private land for these services, any privately-owned land would receive a poor score.

Parcel Size

The size of the project should reflect the level of need when identifying an appropriate housing site.²⁰ Additionally, the project should be congruous as it relates to the height and density of surrounding buildings.²¹ As discussed in our introduction, we decided an alternative site should be at least 2 acres and able to support a 200,000 square foot building. A 200,000 square foot building could fit on 2 acres of land, assuming the building was 6 stories, with each story 30,000 to 35,000 square feet, which reflects nearby development.

Public Transportation

Sites should have ample access to public transportation options. Tenants must have the ability to travel to and from important destinations, such as health care offices, places of employment, health care

facilities, shopping centers, and parks/recreation. Access to adequate transportation is crucial as it has a direct impact on health care utilization.²² Public transportation is an absolute necessity being that several tenants may not have access to a personal vehicle or be able to afford private transportation. Moreover, proximity to public transportation may not only be required, it may offer a competitive advantage for funding applications.²³

Commercial Space and Surrounding Businesses

Sites should be developed in neighborhoods that offer residential amenities, such as affordable shopping at grocery stores, restaurants, bars, cafes, pharmacies, banks, etc.²⁴ Sites should be situated in traditional residential neighborhoods and avoid development in manufacturing or warehousing districts as they have the propensity to lack such amenities.²⁵

Sites should provide access to employment opportunities and job training. When individuals with multiple barriers to employment, such as homelessness, are equipped with the necessary training and rehabilitation support services, they are more likely to sustain gainful employment.²⁶ If these opportunities are not readily available in the immediate neighborhood, tenants should at least have access to these resources through public transportation within a reasonable commuting distance.

Neighborhood Access

Mixed income neighborhoods promote diversity.²⁷ Studies demonstrate that residents who move from areas with high concentrations of poverty to more affluent areas, experience more economic opportunities.²⁸ Locating supportive housing units in a higher income community has positive effects.

Robert Rosenheck, MD, a senior investigator at the Mental Illness Research Education and Clinical Center (MIRECC) of the VA in New England and professor at Yale University notes that a key component of recovery is community integration.²⁹ Providing individuals with opportunities to foster their participation in community life, like any other citizen, is crucial to their emotional and mental well-being. Rosenheck states that there needs to be more emphasis placed on socialization.³⁰ Many of those occupying housing meant for homeless individuals suffer from mental illness. This fuels their inability to escape homelessness, further highlighting the importance of Dr. Rosenheck's assertion.

In their response to HHS's RFI on the Shattuck site, the St. Francis House and the Planning Office for Urban Affairs reached a similar conclusion. They wrote that a mixed income area, "will allow for interaction among a broader range of people that can promote... stronger and more varied social capital, networking that can lead to job opportunities... and encourage and normalize relationships across various socioeconomic lines."³¹ Our site parameters emphasize diverse housing data for this reason. Moreover, several studies have examined the effects of subsidized housing on local property values and have concluded those concerns to be unfounded.³²

Surrounding population density plays a significant role in evaluating appropriate sites for supportive housing. It also dictates where the site will be located within the surrounding community. Research shows that individuals living in isolated areas tend to have less social support and fewer resources in comparison to more socially integrated people, when faced with challenges.³³ Social isolation precludes individuals from being able to meet their social and economic needs, which can have an adverse impact on their psychological health.³⁴ Sites that possess a greater surrounding population density have a higher propensity of being integrated within a community that provides access to all of the attributes we discussed above.

Section III: Data Collection

This section highlights the various sources we consulted in collecting data for our report.

Creating the Site Selection Matrix

As detailed in the Research Methodology section, academic and professional sources were relied upon in choosing which parameters to include in our matrix. We also consulted professionals at Northeastern University, Boston Children’s Hospital, and the City of Boston who have experience in siting services for the homeless.

Identifying Sites

As previously discussed, we limited our search to publicly-owned land within a mile radius of the Shattuck Hospital. To identify state-owned land, we submitted a public records request to the Massachusetts Division of Capital Asset Management and Maintenance (DCAMM). DCAMM provided us with two Excel spreadsheets, in response to our request. The first spreadsheet included a list of state-owned buildings within a mile of the Shattuck Hospital. The second spreadsheet included a list of state-owned land within a mile of the Shattuck Hospital. For city-owned land, we contacted the City of Boston’s Department of Neighborhood Development. Their staff kindly created a map for us with all public property within a mile of the Shattuck Hospital.

We also submitted public records requests to DCAMM for property records and land surveys of the Shattuck Hospital and the Arborway Yard. We provided these records to the ENC, but did not end up relying on them for our report.

Finally, we contacted various state agencies to discuss specific sites, including DCAMM, HHS, the Massachusetts Department of Public Health (DPH), the Massachusetts Department of Conservation and Recreation (DCR), and the Massachusetts Bay Transportation Authority (MBTA). Not every agency responded to our inquiries.

Analyzing Sites on the Site Selection Matrix

Multiple sources were consulted in the analysis of our sites.

1. The Boston Assessing Database and MassGIS were consulted for basic information, such as the size of the parcel, the parcel identification number, the address, and the owner.
2. Social Explorer was used for a demographic analysis of the surrounding area/neighborhoods of our sites. We analyzed data points such as population density, the number of nearby housing units, and median household income. Within Social Explorer, we relied on American Community Survey Data from 2018. We used the census tract of each site as our unit of measure for the surrounding area/neighborhood.
3. The “Nearby” feature on Google Maps was used to identify commercial amenities close to our sites, such as restaurants, cafes, salons, fitness centers, etc.
4. The JP Centre/South Main Streets’ Business Directory was also used to identify commercial amenities in the vicinity of our sites. JP Centre/South Main Streets is a non-profit organization that advocates for businesses and economic growth in the JP Centre/South Street business district in Jamaica Plain.

Mapping

We used Google Earth to create maps for our report. We also used ArcGIS to create maps during our research process to help analyze our sites, but none of them were ultimately included in this report. The data sets used in ArcGIS were primarily taken from MassGIS and Analyze Boston.

Section IV: Key Findings

Introductory Note

The Key Findings portion of the report includes our site selection matrix, which informed the grading of each site. The matrix is formatted into a table that lists our recommended sites and the Shattuck Hospital site. The table is split into three sections. The left section provides basic information like site owner and site address.

The middle section includes the parameters we felt were the most important in grading the efficacy of each site. We used a simple color-coding method to express how the sites performed under each parameter. The color green indicates that a site performs well under that specific parameter; it meets our criteria. The color yellow means it only partly meets our criteria for a given parameter. If a site is coded red, it did not meet our criteria for that specific parameter.

The third section records the overall grade for each site. Each letter grade stands for:

- A: Highly Acceptable
- B: Somewhat Acceptable
- C: Marginally Acceptable
- D: Problematic

The color-coding feeds into the overall grading. Sites that are coded green for each parameter received an A grading. Sites coded with two yellow parameters or less, and no red, received a B grading. Any site that had only one red parameter was given a C. The D grading means a site had multiple red parameters.

The table below only includes our recommended sites, along with the Shattuck site. We expand upon the reasoning behind our grading for each recommended site in Section V: Recommendations. We explain the grading for the Shattuck site, highlighting why it is inferior to our recommended sites. There is a larger version of the site selection matrix in Appendix B, which includes all of the Tier 2 sites we looked at, but did not end up recommending.

Site Map and Matrix with Shattuck Hospital & Recommended Sites



Site Grading								
Site Information			Grading Criteria					Grade
Sites	Owner	Site Address	Public Ownership	Parcel Size	Public Transportation	Commercial Space/ Surrounding Businesses	Neighborhood Access	
Shattuck Hospital	Commonwealth of Massachusetts (Mass DPH)	170 Morton St. Jamaica Plain, MA 02130						C
Recommended Sites (Tier 1)								
Site 1: Arborway Yard Subsite 1—Corner of Washington St. and the Arborway	MBTA	3600-3592 Washington St. Boston, MA 02130						A
Site 2: Arborway Yard Subsite 2—500 Arborway	MBTA	500 Arborway Street, Jamaica Plain, MA						A
Site 3: Arborway Yard Subsite 3—Corner of Washington St. and Brookley Rd.	MBTA	3600-3592 Washington St. Boston, MA 02130						A
Site 4: 271 South Street	Mass DPH	271 South st, Jamaica Plain, MA						A

Section V: Recommendations

This section breaks down our recommended sites and explains the scores we gave for each site parameter, as presented in Section IV: Key Findings.

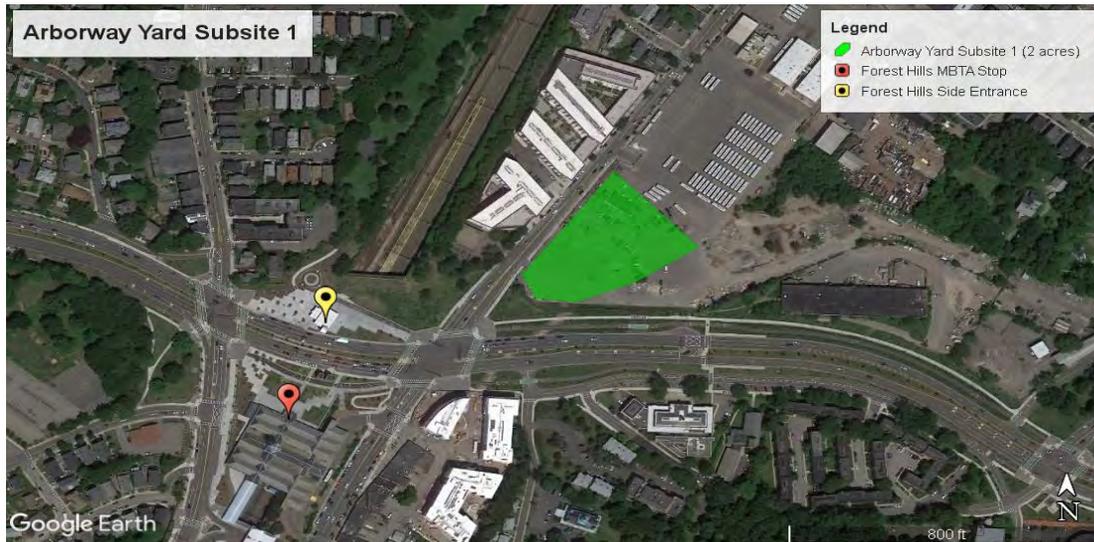
The Arborway Yard



The Arborway Yard is located in Jamaica Plain, adjacent to the Forest Hills T stop. Split over three parcels, the entire site is approximately 18 acres. The first parcel is about 8 acres and runs along Washington St. (the left parcel on the above map). This parcel is owned by the MBTA and includes a bus maintenance facility and a very large parking lot for bus storage. The second parcel is about 9 acres and runs along the Arborway (the center parcel on the above map). This parcel is also owned by the MBTA and is mostly taken up by 500 Arborway (an unused office building) and additional parking space. The third parcel is about 1 acre and runs along Forest Hills St. (the right parcel on the above map). This parcel is owned by the City of Boston and is mostly taken up by the pole yard, where street lights for the city were once made.

The Arborway Yard is underutilized. In the late 1990s and 2000s, there was an Arborway Yard planning process to redevelop the site, but the plan was never implemented.³⁵ Of this 18-acre site, there are multiple locations where a building for housing and health services for the homeless could be located. We have selected four as subsites.³⁶ The first three of those subsites are on the MBTA parcels and are presented here in our recommendations. The fourth subsite is on the City of Boston Parcel and can be found in our appendices as a Tier 2 site.

Recommend Site #1: Arborway Yard Subsite 1—Corner of Washington St. and the Arborway



This site is located on the southwest corner of the Arborway Yard. It encompasses a portion of the MBTA parking lot used for bus storage. We believe this site is our strongest alternative site and far superior to the Shattuck Hospital campus for housing and health services for the homeless. It is adjacent to the Forest Hills T station and near a number of amenities and housing developments.

The following breaks down each attribute on the site selection matrix and explains why this site scores so well and received an A grading.

Public Ownership

This site scores highly on our site parameter criteria for publicly-owned land because it is owned by the MBTA. It is located on the MBTA parcel of the Arborway Yard along Washington St. (the left parcel on the full map of the Arborway Yard). The address for this site is 3600-3592 Washington St. Boston, MA 02130.³⁷

Parcel Size

This site scores highly on our site parameter criteria for parcel size because it meets our minimum of two acres. In theory, the site could be expanded even further. We selected a 2-acre portion of the Arborway Yard. The entire left parcel of the Arborway Yard, which this site sits on, is about 8 acres.³⁸

Public Transportation

This site scores highly on our site parameter criteria for public transportation. It is located 0.1 mile (a 2-minute walk) from the Forest Hills T stop.³⁹ Residents of the site could easily access both the station's main entrance (diagonally across the street) and the new Arborway side entrance (directly across the street facing west).

The Forest Hills MBTA station is a major public transportation hub and provides access to the Orange Line, the Needham Line of the commuter rail, and bus routes 16, 21, 30, 31, 32, 33, 34, 34E, 35, 36, 37,

38, 39, 40, 42, 50, and 51.⁴⁰ Individuals seeking access to the site, by public transportation, would have multiple means of getting there.

Commercial Space and Surrounding Businesses

This site scores highly on our site parameter criteria for commercial space and surrounding businesses. There are a number of amenities within the area. For restaurants, Forest Hills Diner, Forest Hills Pizza, the Dogwood, Bukhara Indian Bistro, Oriental House, Tikki Masala, and Achilito's Taqueria, among others are located nearby on Washington St. For convenience stores, Forest Hills Convenience and Abreu Market are located within walking-distance on Washington St. For salons, Klassy Kuts Barber Shop, Polish Nails Salon, and We Are Hair are also within walking distance on Washington St. For banks, Commonwealth Bank and a Bank of America ATM are located near the site. There is also a nearby fitness center on Washington St. called JP Fitness.⁴¹

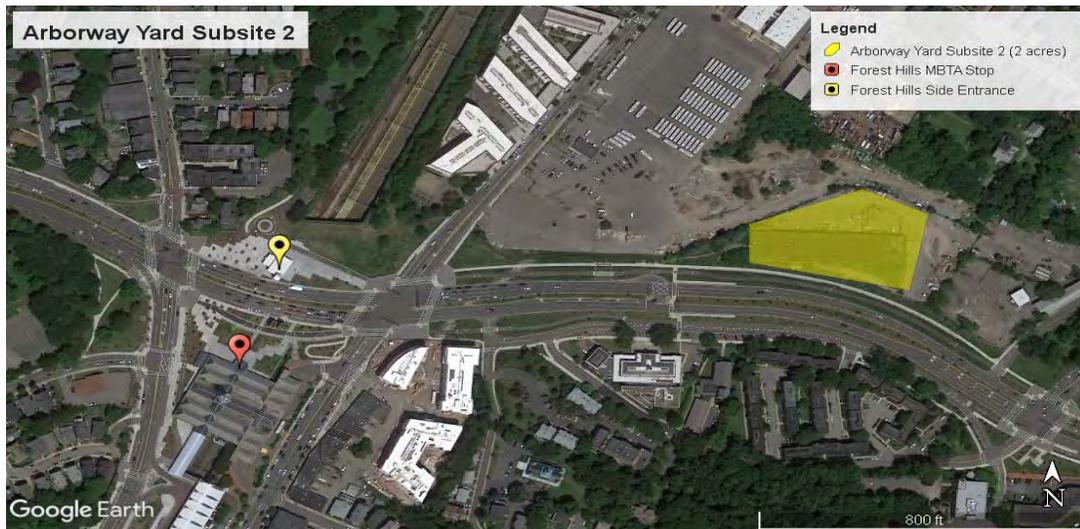
Neighborhood Access

This site scores highly on neighborhood access because it is located in a heavily populated and diverse neighborhood. This site is located within census tract 1202.1. This census tract has a population density per square mile of 14,107.9. As of 2018, within the census tract there are 1,938 housing units, with 1,839 of these units (or 94.1%) currently occupied. Of the occupied units, 69.1% are renter occupied and 30.9% are owner occupied. The median household income (in 2018 dollars) is \$71,743.⁴²

The area is also currently under rapid development, with some recent housing developments including MetroMark Apartments and Velo Apartments.

Overall Grade: A

Recommend Site #2: Arborway Yard Subsite 2—500 Arborway St.



This site is located toward the center of the Arborway Yard. The abandoned 500 Arborway MBTA office building takes up most of the site. We believe this site is another strong alternative and far superior to the Shattuck Hospital campus for housing and health services for the homeless. It is close to the Forest Hills T station and near a number of amenities. There is also a bus stop directly in front of the building.

The following breaks down each attribute on the site selection matrix and explains why this site scores so well and received an A grading.

Public Ownership

This site scores highly on our site parameter criteria for publicly-owned land because it is owned by the MBTA. It is located on the MBTA parcel along the Arborway (the center parcel on the full map of the Arborway Yard). The address for this site is 500 Arborway St. Boston, MA 02130.

Parcel Size

This site scores highly on our site parameter criteria for parcel size because it meets our minimum of two acres. In theory, the site could be expanded even further. We selected a 2-acre portion of the Arborway Yard. The entire center parcel of the Arborway Yard, which this site sits on, is about 9 acres.

Public Transportation

This site scores highly on public transportation. It is located directly in front of the 500 Arborway bus stop, which serves bus routes 16, 21, 31, 32, 34, 36, and 38.⁴³ It is also located 0.2 mile (a 4-minute walk) from the Forest Hills T stop.⁴⁴

Commercial Space and Surrounding Businesses

This site scores highly on commercial space and surrounding businesses. Given its close proximity to Arborway Subsite #1, the nearby amenities are essentially the same. For restaurants, Forest Hills Diner, Forest Hills Pizza, the Dogwood, Bukhara Indian Bistro, Oriental House, Tikki Masala, and Achilito's Taqueria, among others are located nearby on Washington St. For convenience stores, Forest Hills

Convenience is located within walking-distance on Washington St. For salons, Klassy Kuts Barber Shop, Polish Nails Salon, and We Are Hair are also within walking distance on Washington St. For banks, Commonwealth Bank and a Bank of America ATM are located near the site. There is also a nearby fitness center on Washington St. called JP Fitness.⁴⁵

Neighborhood Access

This site scores highly on neighborhood access. This site is in a heavily populated neighborhood. Like the first Arborway Yard subsite, this site is located within census tract 1202.1. This census tract has a population density per square mile of 14,107.9. As of 2018, there were 1,938 housing units, with 1,839 of these units (or 94.1%) currently occupied. Of the occupied units, 69.1% are renter occupied and 30.9% are owner occupied. The median household income (in 2018 dollars) is \$71,743.⁴⁶

The area is also currently under rapid development, with some recent developments including MetroMark Apartments and Velo Apartments.

Finally, replacing the 500 Arborway MBTA office building would be a benefit for the neighborhood. The building is currently unused and boarded up. There have been discussions, since at least the early 2010s, about demolishing this blighted building.⁴⁷

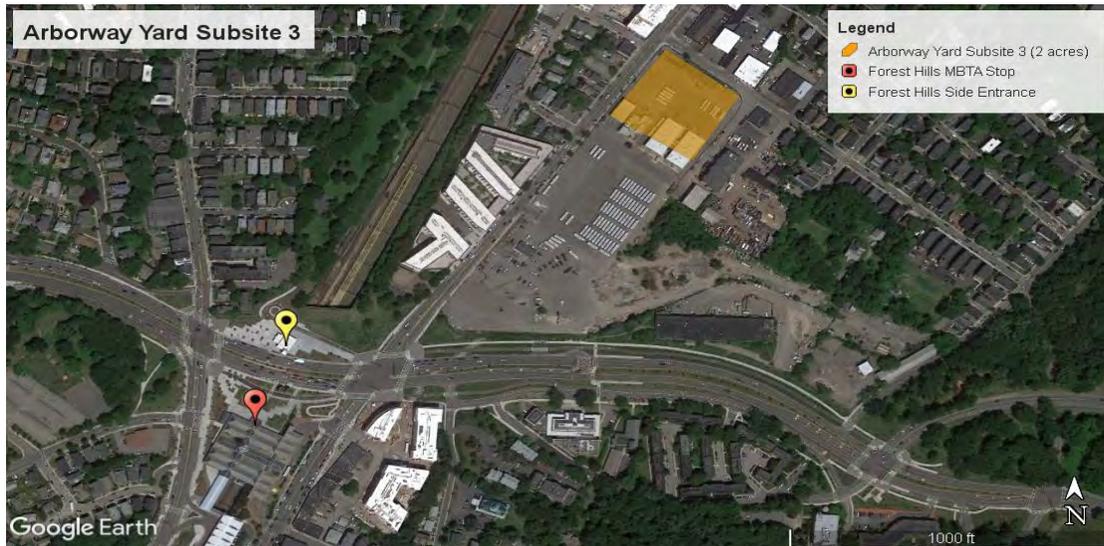
We believe a complex for housing and health services for the homeless would be a far superior use of the site.



The 500 Arborway MBTA office building. The building is boarded up and currently not in-use and a blight on the neighborhood. This photo was taken by Jack Lovett during a site visit on January 20, 2020.

Overall Grade: A

Recommend Site #3: Arborway Yard Subsite 3—Corner of Washington St. and Brookley Rd.



This site is located on the northern corner of the Arborway Yard. Most of this site is currently used for parking and maintenance of MBTA buses. The Arborway Garage is located on this part of the parcel. We believe this site is another strong alternative and far superior to the Shattuck Hospital campus for housing and health services for the homeless. It is close to the Forest Hills T station and near a number of amenities.

The following breaks down each attribute on the site selection matrix and why this site scores so well and received an A grading.

Public Ownership

This site scores highly on our site parameter criteria for public ownership because it is owned by the MBTA. Like Subsite 1, it is located on the MBTA parcel of the Arborway Yard along Washington St. (the left parcel on the full map of the Arborway Yard). The address for this site is 3600-3592 Washington St. Boston, MA 02130.⁴⁸

Parcel Size

This site scores highly on our site parameter criteria for parcel size because it meets our minimum of two acres. In theory, the site could be expanded even further. We selected a 2-acre portion of the Arborway Yard. The entire left parcel of the Arborway Yard, which this site sits on, is about 8 acres.⁴⁹

Public Transportation

This site scores highly on our site parameter criteria for public transportation. It is located 0.3 mile (a 6-minute walk) from the Forest Hills T stop.⁵⁰

Commercial Space and Surrounding Businesses

This site scores highly on our site parameter criteria for commercial space and surrounding businesses. There are a number of amenities within the area. For restaurants, Midway Café, Third Cliff Bakery, and JP Kitchen are located in the immediate vicinity. There is a laundromat adjacent to the site named

Rossmore Maytag Laundromat. A Planet Fitness is expected to be located in the new mixed-used development directly across the street.⁵¹ Finally, there are a number of other businesses within walking distance, including Jamaica Plain Florist, Jamaica Plain Car Wash, and Robert's Barber Shop, among others.

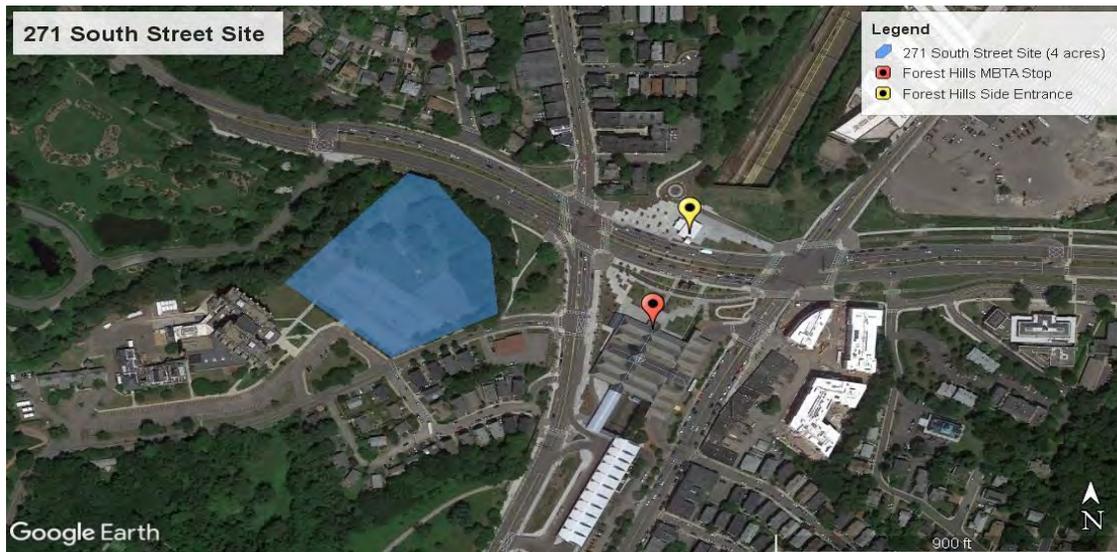
Neighborhood Access

This site scores highly on neighborhood access. This site is in a heavily populated neighborhood. Like the other Arborway Yard subsites, this site is located within census tract 1202.1. This census tract has a population density per square mile of 14,107.9. There are 1,938 housing units, with 1,839 of these units (or 94.1%) currently occupied. Of the occupied units, 69.1% are renter occupied and 30.9% are owner occupied. The median household income (in 2018 dollars) is \$71,743.⁵²

The area is also currently under rapid development. Directly across the street from this site is VITA-JP, a mixed-used development with 82 new housing units.

Overall Grade: A

Recommend Site #4: 271 South Street



The 271 South Street parcel, next to the State Laboratory, is a significantly better location for the development of permanent supportive housing, an emergency shelter, and wrap-around supportive services than the Shattuck Hospital campus. In contrast to the Shattuck site, the south street parcel performs well throughout our site selection grading matrix.

HHS should seriously consider this parcel to replace the services they were hoping to construct at the Shattuck campus. Below, we describe why this site received an A grading and break down how it performed in each attribute.

Public Ownership

The South Street parcel ranks favorably here because the Massachusetts Department of Health (DPH) owns it. The DPH, a department within HHS, also owns and operates the Shattuck Hospital site. The DPH will not have to communicate with any other state or local organization, it can be an intra-department project. The DPH also owns and operates the State Laboratory, the parcel directly adjacent to this site. Therefore, 271 South Street has the least impediments to access of any of our proposed sites.

The address for this parcel is 271 South Street, Jamaica Plain, Jamaica Plain, MA, 02130.⁵³ It matches our criteria because it is close to the Shattuck site.

Parcel Size

The 271 South Street parcel is roughly 4.1 acres. HHS originally indicated they are looking to utilize 2 acres for this project. Given the site is twice that size, it performed extremely well in this category.

There is a slight complication relating to acreage availability. The South Street Community Garden, owned by the Department of Conservation and Recreation, sits on the parcel's left border. However, it takes up a small portion and will not impede HHS's ability to construct the services they have planned. In fact, it adds to the attraction of the site as HHS has stressed the importance of including access to green space for the new development.⁵⁴ Still, community garden advocates will likely push back initially and may need to be convinced that locating health and housing services here will not be intrusive.

Public Transportation

As discussed in our research methods, access to public transportation is a vital component in evaluating sites for supportive housing development. The homeless population does not have access to private means of transportation.

This parcel scores highly when considering its proximity to public transportation. It is 0.1 mile from the Forest Hills T Station, about a 2-minute walk.⁵⁵ The station gives individuals access to the Orange Line, the Needham Line on the Commuter Rail, and bus routes 16, 21, 30, 31, 32, 33, 34, 34E, 35, 36, 37, 38, 39, 40, 42, 50, and 51.⁵⁶

Commercial Space & Surrounding Businesses

We discussed the significance of locating health and supportive housing services near affordable shopping like grocery stores, restaurants, bars, cafes, and pharmacies in the research methods section. The 271 South Street parcel offers potential occupants, such as homeless individuals, health patients, and the health staff to have access to these businesses.

The JP Centre/South Main Streets is a non-profit organization that aims to grow Jamaica Plain's Centre and South Streets' business district. Centre Street runs parallel to South Street. The group provides a directory for businesses along the Centre and South Street corridor. It lists over 200 businesses within the corridor alone.⁵⁷ There are roughly 39 businesses designated as Food & Drink, and 30 retail stores. There is also a Stop and Shop roughly 2 miles away, accessible by a 15-minute bus ride from Forest Hills.

The South Street parcel is also close to many businesses outside the Centre and South Street Corridor. Washington Street runs along the Forest Hill T Station. It is home to business like Forest Hills Diner, Grenier Print Shop, Brassica Kitchen and Cafe, Forest Hills, Pizza, H&R Block, and more.⁵⁸ All of these businesses are in the immediate vicinity of the South Street parcel.

Neighborhood Access and Diversity

The 271 South Street parcel is far superior to the Shattuck site when it comes to neighborhood proximity. It is located in census tract 1101.03. It has a surrounding population density of 18,466. The site's dense population indicates that it has a preferable juxtaposition within the community. Locating supportive housing services within a neighborhood is extremely important.

The housing statistics for the surrounding community reveals a diverse population. There are fifteen affordable housing units within 2 square miles. One of which is just 0.3 miles down the road. The number of family households make up 65% of all housing, and non-family households account for roughly 35%. Most housing units are renter-occupied at 53%, while 47% are owner-occupied.⁵⁹

Moving health patients and supportive housing occupants from low income areas to higher income neighborhoods offers more economic opportunities, which is essential for the transition to self-sufficiency. Tract 1101.03 is a rather affluent area; the median household income is \$83,080. To offer context, the median household income for Suffolk County as a whole is \$64,582.⁶⁰

Overall Grade: A

Shattuck Hospital Site



The Shattuck Hospital site is not a good location to develop housing and health services for the homeless. We ran it through our site selection process to see how it performs compared to our recommended sites. Below, we explain why the Shattuck site performed so poorly.

Public Ownership

The Shattuck Hospital is owned by HHS and operated by DPH. For that reason, this is one of two attributes in which the site performs well.

The Shattuck is located on 171 Morton Street, Jamaica Plain, MA 02130.⁶¹

Parcel Size

This is the second of two attributes the site performs well in, since the Shattuck Hospital site is 13 acres.⁶² However, what it actually highlights is the opportunity to return significant acreage to green space.

Public Transportation

The issue with the Shattuck site, as we see in this section and the next two, is its isolation. Its location within Franklin park provides a barrier to the surrounding community. The homeless population can only access it through one small bus stop on Morton Street, or a bus stop on Circuit Drive that consists of a small dirt patch with a bus sign. Individuals would then have to cross a busy street to get to the sidewalk that leads to the Shattuck.

The Forest Hills T Station is 0.9 miles away (or a 15 to 18-minute walk).⁶³ The Shattuck site does not perform well here due to the problematic distance from public transit.

Commercial Space & Surrounding Businesses

The Shattuck site's isolation presents an issue here as well. It is not nearly as close to surrounding businesses as our recommended sites are. The closest business is the Wentworth Service Station, an auto repair shop about 0.7 mile away. The Shattuck's distance from any commercial space is the reason it scores low on our site parameter criteria for commercial space and surrounding businesses.

Neighborhood Access and Diversity

The Shattuck site scores very poorly on this parameter. The site is located within census tract 9803, which has a population density of only 472.9. The population density is so low, there is not even much data available on the demographics and housing of the surrounding neighborhood.⁶⁴ This is significant because it illustrates how remote the site is. There is no opportunity for community integration on the Shattuck Hospital campus at all.

Overall Grade: C

Conclusion

The demolition of the Lemuel Shattuck Hospital presents an opportunity to return 13 acres of land back to Franklin Park and the Emerald Necklace. Although we agree with HHS's goal of constructing a supportive housing complex of 75-100 units, we believe the Shattuck Hospital site is not a suitable location. In fact, our group found numerous sites within a mile of the Shattuck Hospital that would be more appropriate.

Finding alternative sites was an involved process. First, we had to conduct research to obtain a better understanding of what constitutes a preferable location for supportive housing and wrap around services. Our research guided the creation of the site selection matrix. After that, we connected with state and local officials to access publicly-owned land within a mile of the Shattuck Hospital. We then ran sites, including the Shattuck Hospital, through the site selection matrix, allowing us to grade each parcel and compare them. Our report focused on just four sites that performed the best, but the appendices list all the sites we considered. The Key Findings Section offers an organized view of how each of our recommended sites fared under our grading system. It also includes the Shattuck site so readers can easily identify why these sites are superior.

According to our site parameters, sites 1-4 in our Recommendations section are superior locations for supportive housing and wrap around services. Each site is publicly owned, a preferable trait since converting private land would be a much more belabored process. The sites offer more than enough space to construct a 75-100-unit complex, and they are all within walking distance from public transportation. Most importantly, our recommended sites are integrated within the community. Each site location has a dense population and numerous surrounding businesses. This offers economic opportunities that are essential for homeless individuals, as well as amenities for the complex's staff.

In contrast, the Shattuck Hospital site performs poorly under most of our site parameters. It is publicly owned, and offers plenty of acreage, but HHS's control of the site appears to be the only factor in choosing it. This is unfortunate because it masks the fact that the Shattuck site is not a suitable location for 75-100 supportive housing units. It does not offer easy access to public transportation, and is isolated from the community and surrounding businesses. If the site is redeveloped, residents will not have the economic opportunities or access to neighborhood amenities that our recommended locations offer.

When HHS issued an RFI seeking to partner with an organization capable of investing in a supportive housing complex, the responses called for community integration opportunities to be on site. Submitted RFIs suggested things like "a grocery store, child care center, café and other business that meet community needs and also offer supervised job training opportunities for patients".⁶⁵ Clearly, the prospective partnering organizations recognize the importance of economic opportunity, access to neighborhood amenities, and creating a sense of community for patients. The question becomes why keep these services on land that historically was part of Franklin Park, when there is available publicly-owned land located nearby in Jamaica Plain that already has all these amenities? Our recommended alternative sites offer community integration opportunities for residents that the Shattuck site cannot. It is simply too isolated and should not be considered for the construction of supportive housing units.

Appendix A: Tier 2 Sites

The following are our Tier 2 sites.⁶⁶ These are sites that were considered during our research process, but ultimately did not make it into our recommendations, for various reasons described below. We found all of these sites through the lists of publicly-owned land provided to us by DCAMM and the City of Boston, with the exception of the Roslindale Municipal Parking Lot, which we discovered independently.

Arborway Yard Subsite 4

Parcel ID#: 1102702003

Brief Description: This subsite is located on Forest Hills Street, the east side of the Arborway Yard. Unlike the rest of the Arborway Yard, which is owned by the MBTA, this parcel is owned by the City of Boston. Most of the site is taken up by the former pole yard, where the City of Boston used to make street lamps. We included this subsite in Tier 2 because it is only about 1.3 acres, which is not sufficient for our parameters.

Forest Hill Preserve (Two Parcels)

Parcel ID#: 1103764000 & 1103765000

Brief Description: This site is a small forest owned by the City of Boston on Morton St. It is located parallel to the Arborway Yard and behind the West Roxbury District Court. We included this site in Tier 2 because we did not feel it was appropriate to tear down a forest.

Roslindale Municipal Parking Lot

Parcel ID#: 2000026000

Brief Description: This site is a city-owned parking lot located in Roslindale. We included this site in Tier 2 because it is somewhat outside of the Jamaica Plain/Forest Hills neighborhood and not connected to the MBTA subway system (it is serviced by the commuter rail). Also, city plans to redevelop the site have already sparked resistance within the neighborhood.⁶⁷

Former Boston State Hospital Site on Harvard St.

Parcel ID#: 1405198410

Brief Description: This site is a state-owned parcel that was formerly part of the Boston State Hospital. It is located on Harvard Street, next to the Olmsted Green condominiums. We included this site in Tier 2 because it is not well-served by public transportation. Also, the site has already been targeted for private development.⁶⁸

Call Street Site along the Southwest Corridor Park

Parcel ID#: N/A

Brief Description: This site is located along the Southwest Corridor Park in Jamaica Plain. It is included in Tier 2 because it would require impeding parkland to develop supportive housing, and we believe the relocation of the Shattuck Hospital offers an opportunity to increase parkland. We identified DCR as the site owner and contacted them. DCR informed us that they could not allocate owned land along the Southwest Corridor for anything but parkland. DCAMM did not provide us with detailed information, so we were unable to find a parcel ID#.

Lamartine Street Site along the Southwest Corridor Park

Parcel ID#: N/A

Brief Description: Information regarding the Lamartine Street Site is identical to the above Call Street Site. It is in Tier 2 because it will impede parkland and because DCR informed us that all land along the

Southwest Corridor Park, owned by them, must be for parkland use. DCAMM did not provide us with detailed information, so we were not able to find a parcel ID #.

Former Boston State Hospital North Campus DCR Compost Site

Parcel ID#: 1405199002

Brief Description: This site is located on a state-owned parcel that was formerly part of the Boston State Hospital. It is located at 450 Canterbury Street, near American Legion Highway. Part of the parcel includes the Judge John J. Connelly Youth Center. Another part of the parcel is the compost site managed by DCR. We included this site in Tier 2 because it is not well-served by public transportation. We also were unable to get sufficient information on the portion of the parcel occupied by the compost site. We contacted DCAMM, but they did not respond to our inquiry.

Former BSH North Campus - DCR Parking Lot

Parcel ID#: 1405200000

Brief Description: This site is located on a state-owned parcel that was formerly part of the Boston State Hospital. It is located at 430 Canterbury Street, near American Legion Highway. Part of the parcel includes the Boston Pre-Release Center. Another part of the parcel appears to be occupied by a company named Landscape Express. A small forest also appears to be on the parcel. As the title indicates, part of the site is a parking lot owned by DCR. We included this site in Tier 2 because it is not well-served by public transportation. We also were unable to find sufficient information on the availability of the parcel.

Appendix B: Site Grading Matrix with All Sites

Site Grading								
Site Information			Grading Criteria					Grade
Sites	Owner	Site Address	Public Ownership	Parcel Size	Public Transportation	Commercial Space/ Surrounding Businesses	Neighborhood Access	
Shattuck Hospital	Commonwealth of Massachusetts (Mass DPH)	170 Morton St. Jamaica Plain, MA 02130						C
Recommended Sites (Tier 1)								
Site 1: Arborway Yard Subsite 1—Corner of Washington St. and the Arborway	MBTA	3600-3592 Washington St. Boston, MA 02130						A
Site 2: Arborway Yard Subsite 2—500 Arborway	MBTA	500 Arborway Street, Jamaica Plain, MA						A
Site 3: Arborway Yard Subsite 3—Corner of Washington St. and Brookley Rd.	MBTA	3600-3592 Washington St. Boston, MA 02130						A
Site 4: 271 South Street	Mass DPH	271 South st., Jamaica Plain, MA						A
Tier 2 Sites								
Site 5: Arborway Yard Subsite 4—City of Boston Parcel	City of Boston							B
Site 6: Forest Hill Preserves	City of Boston	75 Morton St., Boston MA 02130						B
Site 7 - Former Boston State Hospital Site on Harvard St.	Commonwealth of Massachusetts	Harvard St Boston, MA 02124						C
Site 8 - Roslindale Municipal Parking Lot	City of Boston (Department of Neighborhood Development)	Taft Hill Pk, Roslindale, MA 02131						C
Site 9 - Former Boston State Hospital North Campus DCR Compost Site	Commonwealth of Massachusetts	450 Canterbury St. Roslindale, 02131						D
Site 10 - Former BSH North Campus - DCR Parking Lot	Commonwealth of Massachusetts	430 Canterbury St. Roslindale, MA 02131						D
Site 11 - Call Street (Southwest Corridor)	DCR	Call Street, Jamaica Plain, MA						D
Site 12 - Lamartine Street	DCR	Lamartine Street, Jamaica Plain, MA						D

Endnotes

Note: Both the cover image of the Shattuck Hospital and the image of 500 Arborway on page 18 were taken by capstone group member Jack Lovett on January 20, 2020 during a site visit.

¹ Mass.gov. “Get the Facts: Shattuck Hospital Relocation.” <https://www.mass.gov/info-details/get-the-facts-shattuck-hospital-relocation>; Mass.gov. “Shattuck Hospital: FAQ.” <https://www.mass.gov/info-details/shattuck-hospital-relocation-faq>.

² Mauney-Brodek, Karen. “Franklin Park Open Space Restoration (Shattuck Hospital Site) to Rep. Malia” Letter. April 24, 2019. <https://www.emeraldnecklace.org/wp-content/uploads/2019/05/Shattuck-Hospital-Site-Letter.pdf>.

³ Ibid; Mass.gov. “Get the Facts: Shattuck Hospital Relocation.”

⁴ Mass.gov. “Get the Facts: Shattuck Hospital Relocation.”

⁵ Mass.gov. “Lemuel Shattuck Hospital mission and history.” <https://www.mass.gov/location-details/lemuel-shattuck-hospital-mission-and-history>

⁶ Massachusetts Executive Office of Health and Human Services, “Shattuck Campus Redevelopment Request for Information (RFI).” April 18, 2019. <https://www.mass.gov/service-details/shattuck-campus-redevelopment-request-for-information>.

⁷ Daniel, Seth. “State to close Shattuck Hospital, move operations to South End.” *Jamaica Plain Gazette*, March 9, 2018. <http://jamaicaplaingazette.com/2018/03/09/state-to-close-shattuck-hospital-move-operations-to-south-end/>; Mass.gov. “Get the Facts: Shattuck Hospital Relocation.”

⁸ Ibid; Mass.gov. “Shattuck Hospital: FAQ.” <https://www.mass.gov/info-details/shattuck-hospital-relocation-faq>

⁹ EOHHS, “Shattuck Campus Redevelopment RFI.” April 18, 2019; Mass.gov. “Get the Facts: Shattuck Hospital Relocation.”; Mass.gov. “Shattuck Hospital: FAQ.” <https://www.mass.gov/info-details/shattuck-hospital-relocation-faq>.

¹⁰ This is our understanding of the client’s position, based on our discussions with the client.

¹¹ Massachusetts Executive Office of Health and Human Services & Massachusetts Division of Capital Asset Management and Maintenance. “Shattuck Campus Planning: Community Meeting 2.” January 16, 2019. Presentation. <https://www.mass.gov/doc/community-meeting-2-presentation-english/download>

¹² EOHHS, “Shattuck Campus Redevelopment RFI.” April 18, 2019.

¹³ Shattuck Campus Planning (HHS, DCAMM, et. al.). “Vision Plan: Redevelopment of the Shattuck Campus at Morton St.” February 2020. Report. <https://www.mass.gov/doc/vision-plan-redevelopment-of-the-shattuck-campus-at-morton-street/download>

¹⁴ This calculation was made by Mary Hickie, Special Projects Coordinator at the Emerald Necklace Conservancy. She is a registered architect in Massachusetts.

¹⁵ For example, Metromark Apartments and Velo Apartments, which are both new developments in this neighborhood, are both 6 stories. We confirmed the number of stories, using street view on Google Maps.

¹⁶ See EOHHS & DCAMM. "Shattuck Campus Planning: Community Meeting 2. Presentation." and Shattuck Campus Planning. "Vision Plan." Report.

¹⁷ Mauney-Brodek, K. "Franklin Park Open Space Restoration (Shattuck Hospital Site) to Rep. Malia."

¹⁸ EOHHS, "Shattuck Campus Redevelopment RFI." April 18, 2019.

¹⁹ EOHHS & DCAMM. "Shattuck Campus Planning: Community Meeting 2. Presentation."

²⁰ "Site Selection Criteria and Search Strategies," Corporation for Supportive Housing (CSH), July 2013, https://www.csh.org/wp-content/uploads/2013/09/SiteSelectionandSearchStrategies_F.pdf.

²¹ Ibid

²² Haley, Danielle, Sabriya Linton, Ruiyan Luo, Josalin Hunter-Jones, Adaora Adimora, Gina Wingood, Loida Bonney, Zev Ross, and Hannah Cooper. "Public Housing Relocations and Relationships of Changes in Neighborhood Disadvantage and Transportation Access to Unmet Need for Medical Care." *Journal of Health Care for the Poor and Underserved* 28.1 (2017): 329-49. Web. https://onsearch.library.northeastern.edu/permalink/f/t09un1/TN_proquest1874616097

²³ "Site Selection Criteria and Search Strategies," Corporation for Supportive Housing (CSH), July 2013, https://www.csh.org/wp-content/uploads/2013/09/SiteSelectionandSearchStrategies_F.pdf.

²⁴ Duke, Joanna, "Mixed Income Housing Policy and Public Housing Residents' 'Right to the City'". *Critical Social Policy*, 29(1), (February 2009): 100–120. <https://doi.org/10.1177/0261018308098396>.

²⁵ U.S. Department of Veterans Affairs: Office of Construction & Facilities Management. "Mental Health Facilities Design Guide." December 2010. Report. <https://www.cfm.va.gov/til/dGuide/dgMH.pdf>.

²⁶ Rio, John, Deborah Russell, Steve Dudasik, and Leslie Gravino. "Supportive Housing-based Employment Services." *American Rehabilitation* 25.1 (1999): 26-31. Web. https://onsearch.library.northeastern.edu/permalink/f/t09un1/TN_proquest222454242

²⁷ Duke, "Mixed Income."

²⁸ Ibid

²⁹ Kuehn, Bridget M. "Supportive Housing Cuts Costs of Caring for the Chronically Homeless." *JAMA* 308.1 (2012): 17-9. Web. https://onsearch.library.northeastern.edu/permalink/f/t09un1/TN_medline22760270

³⁰ Ibid

³¹ St. Francis House, Inc. & Planning Office for Urban Affairs. "Shattuck Campus Redevelopment RFI Response." May 17, 2019. <https://www.mass.gov/doc/shattuck-rfi-st-francis/download>

³² Duke, "Mixed Income."

³³ Adams, Richard. "Is Happiness a Home in the Suburbs?: The Influence of Urban versus Suburban Neighborhoods on Psychological Health." *Journal of Community Psychology* 20.4 (1992): 353-72. Web. https://onsearch.library.northeastern.edu/permalink/f/t09un1/TN_wjAID-JCOP2290200409>3.0.CO;2-Z

³⁴ Ibid

³⁵ “Memorandum of Understanding Between the City of Boston and the Massachusetts Bay Transportation Authority (Arborway MOU).” April 24, 2001. Office of Mayor Thomas M. Menino; Oliveira, Rebecca. “T to demolish 500 Arborway building.” *Jamaica Plain Gazette*, March 28, 2014. <http://jamaicaplaingazette.com/2014/03/28/t-to-demolish-500-arborway-building/>

³⁶ We selected the Arborway Yard subsites with the assistance of Karen Mauney-Brodek and Mary Hickie of the ENC. We had planned to use the Arborway Yard in our report, but needed professionals with a background in urban planning and architecture to appropriately split up the site.

³⁷ Property data was taken from the Boston Assessing Database and MassGIS (Massachusetts Interactive Property map).

³⁸ Parcel size information was taken from the Boston Assessing Database.

³⁹ This measurement was calculated with Google Maps.

⁴⁰ Massachusetts Bay Transportation Authority (MBTA). “Forest Hills Station Information.” <https://www.mbtta.com/stops/place-forhl>.

⁴¹ These amenities were discovered using the Nearby feature and Street View on Google Maps.

⁴² This data was collected using Social Explorer. We relied on American Community Survey data from 2018.

⁴³ Massachusetts Bay Transportation Authority (MBTA). “500 Arborway.” <https://www.mbtta.com/stops/547>

⁴⁴ This measurement was calculated with Google Maps.

⁴⁵ These amenities were identified using the Nearby feature and Street View on Google Maps.

⁴⁶ This data was collected using Social Explorer. We relied on American Community Survey data from 2018.

⁴⁷ Oliveira, R. “T to demolish 500 Arborway building.” *Jamaica Plain Gazette*.

⁴⁸ Property data was taken from the Boston Assessing Database and MassGIS (Massachusetts Interactive Property map).

⁴⁹ Parcel size information was taken from the Boston Assessing Database.

⁵⁰ This measurement was calculated with Google Maps.

⁵¹ The website for VITA-JP advertises Planet Fitness as a key amenity on their home page: <https://www.vitajp.com/>.

⁵² This data was collected using Social Explorer. We relied on American Community Survey data from 2018.

⁵³ Address was taken from the Boston Assessing Database.

⁵⁴ EOHHHS, “Shattuck Campus Redevelopment RFI.” April 18, 2019.

⁵⁵ This measurement was calculated with Google Maps.

⁵⁶ Massachusetts Bay Transportation Authority (MBTA). “Forest Hills Station Information.” <https://www.mbta.com/stops/place-forhl>.

⁵⁷ “Directory of Centre and South Street Businesses.” JP Centre/South Main Streets. Accessed March 29, 2020. <https://jpcentresouth.com/business-directory/>.

⁵⁸ These amenities were identified using the Nearby feature on Google Maps.

⁵⁹ This data was collected using Social Explorer. We relied on American Community Survey data from 2018.

⁶⁰ Ibid

⁶¹ Property data was taken from the Boston Assessing Database and MassGIS (Massachusetts Interactive Property map).

⁶² Parcel size information was taken from the Boston Assessing Database.

⁶³ This measurement was calculated with Google Maps.

⁶⁴ This data was collected using Social Explorer. We relied on American Community Survey data from 2018.

⁶⁵ EOHS, “Shattuck Campus Redevelopment RFI.” April 18, 2019.

⁶⁶ All Parcel ID#s in Appendix A came from the Boston Assessing Database, MassGIS (Massachusetts Interactive Property map), or the lists of state-owned buildings and land provided to us by DCAMM, as discussed in Section III: Data Collection.

⁶⁷ For examples of neighborhood resistance, see public comments on the Boston Neighborhood Development page on the Roslindale Municipal Parking Lot site, <https://buildinghousing.boston.gov/project/roslindale-municipal-parking-lot-19d0c>

⁶⁸ Murray, Hubert. “A chance for a real Green New Deal.” *Commonwealth Magazine*, February 22, 2020. <https://commonwealthmagazine.org/opinion/a-chance-for-a-real-green-new-deal/>; Mass.gov. “Former Boston State Hospital Parcel – Redevelopment Opportunity.” <https://www.mass.gov/service-details/former-boston-state-hospital-parcel-redevelopment-opportunity>; Capstone group member Randall Gilbert also attended a community meeting hosted by DCAMM on this site on February 4th 2020.