

# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands

**Boston** City/Town

# WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

#### A. General Information

important:
When filling out
forms on the
computer, use
only the tab key
to move your
cursor - do not
use the return





1.	Applicant:					
	Jennifer Mugar	jenniferemu	jenniferemugar@gmail.com			
	Name		E-Mail Address			
	15 Cambridge St,					
	Mailing Address					
	Winchester	MA	01890			
	City/Town	State	Zip Code			
	(781) 704-9866					
	Phone Number	Fax Number (i	f applicable)			
2.	Representative (if any):					
	Skylight Studios					
	Firm					
	Robert Shure	services@s	services@skylightstudiosinc.com			
	Contact Name	E-Mail Addres	s			
	105 Salem St.					
	Mailing Address					
	Woburn	MA	01801			
	City/Town	State	Zip Code			
	(781) 933-3822	(781) 937-3				
	Phone Number	Fax Number (i	f applicable)			
В.	. Determinations					
1.	I request the Boston make the following	a determination(s	s). Check any that apply:			
١.	Conservation Commission	g determination(s	s). Check any that apply.			
	Conscivation Commission					
a. whether the area depicted on plan(s) and/or map(s) referenced below is an area jurisdiction of the Wetlands Protection Act.						
	or map(s) referenced					
	□ c. whether the work depicted on plan(s) referenced below is subject to the Wetlands Protection Act.					
	☑ d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any municipal wetlands ordinance or bylaw of:					
	City of Boston Name of Municipality					
	<ul> <li>e. whether the following scope of alternatives is adequed depicted on referenced plan(s).</li> </ul>	ate for work in th	ne Riverfront Area as			



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands

**Boston** City/Town

# WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

### C. Project Description

a. Project Location (use maps and plans to identify the location of the area subject to this request		
47 D	Pavid Mugar Way	Boston
Street	t Address	City/Town
Asses	ssors Map/Plat Number	Parcel/Lot Number
b. <i>A</i>	Area Description (use additional paper, if n	ecessary):
0 [	Dian and/or Man Poforance(s):	
c. F	Plan and/or Map Reference(s):	
C. F	Plan and/or Map Reference(s):	Date
	Plan and/or Map Reference(s):	
Title	Plan and/or Map Reference(s):	



# Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 1- Request for Determination of Applicability Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**Boston** City/Town

	ecessary).
a. Ri	If this application is a Request for Determination of Scope of Alternatives for work in the verfront Area, indicate the one classification below that best describes the project.
	Single family house on a lot recorded on or before 8/1/96
	Single family house on a lot recorded after 8/1/96
	Expansion of an existing structure on a lot recorded after 8/1/96
	Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
	New agriculture or aquaculture project
	Public project where funds were appropriated prior to 8/7/96
	Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deer restriction limiting total alteration of the Riverfront Area for the entire subdivision
	Residential subdivision; institutional, industrial, or commercial project
	Municipal project
$\boxtimes$	District, county, state, or federal government project
	Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.
	Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification bove (use additional paper and/or attach appropriate documents, if necessary.)



## **Massachusetts Department of Environmental Protection**

Bureau of Resource Protection - Wetlands

Name and address of the property owner:

Boston City/Town

## WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

#### D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Massachusetts Department of Conservation and Recreation					
Name					
251 Causeway Street, Suite 600					
Mailing Address					
Boston					
City/Town					
MA	02114				
State	Zip Code				
Signatures: I also understand that notification of this Request wi in accordance with Section 10.05(3)(b)(1) of the Wet					
Nicholas Gove	10/19/22				
Signature of Applicant	Date				
Signature of Representative (if any)	Date				

#### Name and address of the property owner:

Massachusetts Department of Conservation ar	nd Recreation	
Name 251 Causeway Street, Suite 600		
Mailing Address Boston		
City/Town MA	02114	
State	Zip Code	

#### Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signature of Applicant

10-5-22

Signature of Representative (if any)

Date



## SKYLIGHT STUDIOS INC.

custom sculpture and design | architectural restoration | mold and casting services | ornament

David Mugar Sculpture

Sculpture Description

This monument in tribute to David Mugar is proposed to be installed on the west side of the Music Oval at the Esplanade. The monument will feature an 8-foot-high statue of Mr. Mugar standing on a 2-foot-high granite base. The front of the base will be inscribed with his name and a quotation by him. An upright block of granite with an inset bronze plaque on the front face will be set atop the granite base and beside the statue. The narrative plaque will describe Mr. Mugar's life and his contributions to the traditional July 4<sup>th</sup> festivities on the Esplanade. A sketch of the sculpture design is also included in this application. The scale and dimensions of the sculpture and granite will be comparable to the other monuments near the Hatch Shell. The entire substructure, the bronze, and the granite will be fabricated of the highest-quality materials and require minimal maintenance. The bronze will have protective coatings of Incralac and wax. Incralac is recommended by the International Copper Association to offer the maximum protection on the surface of outdoor bronze statuary. The granite will have a honed finish which can be cleaned easily in the event of graffitiing. The projected schedule anticipates completing some preliminary site work in 2022 and dedicating the sculpture sometime in 2023.



## SKYLIGHT STUDIOS INC.

custom sculpture and design | architectural restoration | mold and casting services | ornament

David Mugar Sculpture

C. Work Description

The following is an outline of the projected site work to be completed for the foundation and the sculpture installation.

- 1. <u>Location</u>: The sculpture will be located on the west side of the Music Oval and set back 2.5 to 3 feet from the existing sidewalk. It will be installed in between two existing linden trees that are about 30 feet apart.
- 2. Trees: On September 21, 2022, Bartlett Tree Experts of Waltham, MA, employed by Skylight Studios, completed an exploratory root excavation. It involved using an air-spade to create a trench around the proposed excavation site to determine the location of roots and to determine if root pruning will be feasible. An ISA Board Certified Master Arborist was present, and her report is included with this application. The arborist did determine that the work can be done without impacting the health of the trees. Some smaller roots were pruned by the arborist at that time. The arborist will be present for the excavation to oversee and observe and to provide recommendations for protecting the trees. In addition, Bartlett Tree Experts will complete their Root Invigoration™ process. It involves cultivating the soil beneath the crown of the two linden trees located at the left side of the Hatch Shell lawn using an air-spade to improve soil health and promote root development and function. A radius of approximately 6 feet from the trunks will be cultivated to a depth of 6 to 8 inches.
- 3. Excavation: The concrete foundation will be 6.5 feet x 2.5 feet x 4 feet deep. The hole will be manually hand dug with the Certified Master Arborist present to ensure the safety of the existing roots. No excavation equipment, such as a backhoe, will be used, as the use of such equipment could damage existing roots. The vehicle on site will be a small (7.5 foot high) Isuzu dump truck. During excavation and any other site work, straw wattles or natural fiber socks will be used down hill of the site to control sediment and potential erosion. The site work will have a minimal impact on the buffer zone area.
- 4. <u>Form and Foundation</u>: The wood form will be prefabricated and placed within the excavated hole. The pre-mixed concrete will be brought to the site in a tow-along U-Kart. The foundation will require approximately 2.5 cubic yards of concrete. Since each U-Kart contains a cubic yard, 3 U-Karts will be employed. This method will have minimal impact to



## SKYLIGHT STUDIOS INC.

custom sculpture and design | architectural restoration | mold and casting services | ornament

the site as opposed to using a large ready-mix concrete truck. The U-Karts can be towed by pickup trucks or small dump trucks. Once the concrete is poured, this area will be fenced off. When the concrete has cured, the ground surface will be leveled with mulch since the top of the foundation will be a few inches below grade. This will conclude the proposed site work to be completed in 2022.

5. <u>Sculpture Installation</u>: The sculpture installation is proposed for an undetermined time in 2023. The bronze sculpture, granite base, and upright granite stone with the pre-installed bronze plaque will be transported to the site on a small flatbed truck. The component stone and bronze parts will be offloaded and installed with the use of a small crane, forklift, or lull. It will be determined further prior to installation what type of equipment can safely install the stone and bronze but have minimal impact on or disruption to the site.



October 18, 2022

Mr. Peter Brown Skylight Studios, Inc. 105 Salem Street Woburn. MA 01801

services@skylightstudiosinc.com

**VIA EMAIL ONLY** 

Re: Wetland Resource Site Evaluation
Proposed David Mugar Statue Location
David Mugar Way, Boston

Dear Mr. Brown:

In response to your request, Oxbow Associates, Inc. (OA: specifically, B. Butler) reviewed the above referenced site with specific regard to wetland resource areas on October 13, 2022. This evaluation was conducted in accordance with standard methodology for delineating vegetated wetland under the Massachusetts Wetlands Protection Act (MGL Ch. 131, §40; the "Act") and the City of Boston Wetlands Protection Ordinance and their respective *Regulations*.

The proposed statue placement locus is under fee ownership of the Massachusetts Division of Conservation and Recreation (DCR) and is in the vicinity of the Hatch Shell in an area that has been historically maintained in a parkland condition, adjacent the Charles River, a perennial river. The site was evaluated for the presence and horizontal extent of regulated resource areas potentially of significance to the installation of the statue and base structure at a locus formerly occupied by a sitting bench, between two mature hardwood specimen trees and also between two, paved walking paths paralleling the River bank.

#### **Existing Conditions and Wetland Resource Areas**

The proposed statue location is greater than forty (40) horizontal feet from the Mean Annual High Water (MAHW; 310 CMR 10.58) extent of the Charles River. The inland Bank resource (310 CMR 10.54) is essentially co-terminous with the MAHW; the Bank consists of large (+/-1'), cobble rip-rap armorment. The cobble material extends upslope beneath portions of the vegetated area adjacent to the River resulting in shallow topsoil and limited interstitial soil between buried cobbles that support herbaceous and small woody vegetation in the narrow, unmowed zone adjacent to surface water.

Two lines of delineation were placed in the field using winter-weight, blue plastic flagging with alpha-numeric numbering schemes. Flag numbers R-1 through R-8 demarcate the MAHW elevation based upon indicators of persistent annual inundation of the bank. The River elevation was approximately twelve to eighteen inches below the R series flag line at the time of the delineation.

A second series of boundary flags, A-1 through A-5 was placed immediately east of the MAHW boundary; this series represents the extent of Bordering Vegetated Wetland (BVW; 310 CMR 10.55) located above the MAHW boundary. The BVW is a narrow lens, only two to three feet horizontally upgradient of MAHW. The two resource areas (BVW & MAHW) have different applicable performance standards and associated terrestrial jurisdictional areas (buffer zone and Riverfront Area, respectively) making the delineation of marginally divergent resource areas justified in this application.

#### **Riverfront Area**

Riverfront Area (RFA) resource is normally a 200-foot zone projected horizontally from the MAHW boundary. In the City of Boston, and other specified areas the extent of the RFA is twenty-five horizontal feet (310 CMR 10.58(2)(a) 2.a). The Boston Conservation Commission has the regulatory authority, under the current Ordinance to extend the RFA resource (under the Ordinance only) out to 200 horizontal feet. We are unaware of any such application at the project locus and presume the regulated RFA to be twenty-five feet under both the Act and the Ordinance.

The MAHW boundary was field delineated using nine flags over a linear extent of approximately 150 feet of bank. Flag points were placed based on the visually estimated extent of mean annual high water, an elevation largely coterminous with the extent of exposed rip-rap. The elevation of the river is regulated by the Charles River lock system approximately three quarters of a mile north of the project site.

Whereas the proposed extent of work for the statue installation is well in excess of twenty-five horizontal feet from the MAHW boundary the performance standards for the RFA resource area are not applicable to the proposed project.

#### **Bordering Vegetated Wetland**

Above the MAHW boundary, along portions of the Bank is a narrow strip of hydrophytic vegetation that qualifies as BVW owing to a plant community composition predominated by hydrophytes and exhibiting other indicators of hydric conditions. The soils in this zone were unextractable to any significant extent owing to the pervasive large cobbles belying the thin veneer of topsoil. In this instance the *prima facie* evidence of a nearly exclusively hydrophilic plant community was deemed sufficient to establish the presence of the BVW resource area in the absence of intact soil profiles.

Species of significant occurrence within the narrow zone of BVW include: Reed canary grass (Phalaris arundinacea), yellow flag iris (Iris pseudacorus), beggars ticks (Bidens cornuta), purple loosestrife (Lythrum salicaria), swamp mallow (Hibiscus moscheutos), purplestem aster (Symphyotrichum puniceum) and curly dock (Rumex crispis). The majority of these hydrophytes are non-native. Patches of a shrubby locust species (Robinia sp.) were also observed along the bank within, and predominantly beyond the BVW.

#### **Regulatory Implications and Recommendations**

Whereas the proposed statue locus is beyond the twenty-five foot jurisdictional RFA resource area the performance standards for that resource area are not applicable to the proposed activity.

There is no alteration of BVW proposed. Therefore the applicable standards at 310 CMR 10.02 (2)(b), as well as those for BVW specifically are applicable. Whereas the disturbance required for statue installation is discrete and erosion control is provided the statue installation will not alter or adversely impact the resource area(s). The proposed activity is compliant with the applicable performance standards of the Act and the Ordinance.

If you have any questions, please do not hesitate to contact me at 978-929-9058.

Respectfully submitted,

Oxbow Associates, Inc.

in a Butto

Brian Butler, M.S.

President





Top: View to the west across proposed statue site. Bottom: View the east of statue location; right of vehicle between two deciduous trees.





Top: Northward view along Charles River Bank. Bottom: Southward view along armored River bank.

#### **Additional Resource Areas**

#### Bank

#### **Existing Condition**

The banks of the Charles River adjacent to the Charles River Esplanade and the project site are characterized by the first observable break in slope and indicators of mean annual flood level. The entire length of the bank adjacent to the work site is reinforced by riprap (see Oxbow Wetland Report).

#### Proposed Work

Portions of the project site is located within the 100-foot buffer zone of the bank. However, no work will occur within the bank itself, and only the portion of the buffer zone which is previously degraded and between two paved pathways will be impacted in the course of the project. No material staging nor vehicle storage will occur within the buffer zone, and BMPs will be implemented as described above to prevent sediment from entering the resource area. As such, no portion of the bank will be altered as a result of this project and will not limit the Bank's ability to protect the interests specified in 310 CMR 10.54(1). Nevertheless, each performance standard for work in the Bank is provided below in *italics* followed by an explanation of how the Project meets each performance standard:

- (a) Where the presumption set forth in 310 CMR 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:
  - 1. The physical ability of the Bank;

No work will occur within the bank itself and no portion of the bank will be altered as a result of the project and will therefore have no impact on the physical ability of the bank.

2. The water carrying capacity of the existing channel within the Bank;

The proposed work is located only within the buffer zone of the bank and will have no effect on the carrying capacity of the channel within the Bank.

3. *Ground water and surface water quality;* 

The work will have no impact on ground water and surface water quality. All vehicles and trailers used for this project will access the site along the DCR paved paths and will remain on these pathways.

We will enlist the aid of Bartlett Tree to provide a spill prevention kit to be readily available during the work. We will also have contact information for DCR staff to be notified in the event of a spill and will be prepared to contact the DEP spill response office in the case of a major spill. All equipment will be inspected before accessing the park to ensure it is in safe and functioning condition.

4. The capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;

The proposed work is located only within the buffer zone of the bank and will have no effect on breeding habitat and/or fisheries within the Bank. The proposed project is within a previously degraded area and between two paved walkways which do not serve as breeding habitat.

5. The capacity of the Bank to provide important wildlife habitat functions. (no adverse effects on wildlife habitat)

The proposed work is located only within the buffer zone of the bank and will have no adverse effects on the wildlife habitat functions of the Bank. The proposed project is within previously degraded area and between two paved walkways which serve no habitat function.

6. Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.54(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing Standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and the structure spans the channel width by a minimum of 1.2 times the bankfull width.

Not applicable to this project. DCR is not proposing to install a stream crossing.

(b) Notwithstanding the provisions of 310 CMR 10.54(4)(a), structures may be permitted in or on a Bank when required to prevent flood damage to facilities...

Not applicable to this project. No structures are proposed in or on the bank.

(c) Notwithstanding the provisions of 310 CMR 10.54(4)(a) or (b), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.59.

Based on the 2021 Priority and Estimated Habitat Maps there are no MESA listed habitats present in the Project area.

#### **Waterfront Area**

The proposed project lies within the Waterfront Area, which has been identified by the City of Boston Wetlands Ordinance as extending 25 ft upland from the outer boundary of the Riverfront Area. The Ordinance states that applicants must "...restore or maintain a strip of continuous, undisturbed or restored vegetative cover or waterfront public access throughout the Waterfront Area, unless the Commission determines, based on adequate evidence, that the area or part of it may be altered without harm to the values of the resource areas protected by the Ordinance."

#### Proposed Work

The work for this project as described previously will involve hand digging with shovels of a hole 6.5' x 2.5' x 4' in a currently mulched spot between 2 Linden trees. Other than the two trees, there is no vegetation at this location that will be disturbed. The location is between 2 DCR paved pathways that receive extensive pedestrian and bicycle traffic and serve as access ways for DCR and other service vehicles that conduct work throughout the park. This location was also the site of a concrete, at grade pad and a bench that DCR has removed to permit this project to occur. The bench and concrete pad placement led to an expected level of compaction of this site over the years that the bench was in place.

As described in the work description section of this filing, we have engaged Bartlett Tree Experts to oversee the installation of the concrete foundation for the statue to ensure that the trees are not damaged. Further, Bartlett will air spade the mulched area around the trees to loosen the soil and improve aeration to the root systems of the trees. We believe this work and the minimal impact caused by the digging for and pouring of the foundation will leave the site in a better condition from a resource perspective because of our efforts to invigorate the trees and will not harm the values of the Waterfront Area or any other resource areas.

#### Climate Change Impacts & Resilience

The work activities associated with this project will be focused within an area that is previously degraded and between two paved walkways. There will be a very small change in impervious surface between the two walkways, outside of the 100-year flood zone. This change and the proposed work should present no impact on resiliency related to sea level rise nor increasing storm frequency.

#### **Resource Areas and Impact Minimization and Abutter Notification**

The resources areas involved in this project are the 100' buffer to the bank of the Charles River, the 25' river front area and the Boston 25' water front area which is added in this case to the riverfront zone (see accompanying map).

Work in these resource areas and minimal impacts: The work for this project as described previously will involve hand digging with shovels of a hole 6.5′ x 2.5′ x 4′ in a currently mulched spot between 2 Linden trees. Other than the two trees, there is no vegetation at this location that will need to be disturbed. The location is between 2 DCR paved pathways that receive extensive pedestrian and bicycle traffic and also serve as access ways for DCR and other service vehicles that conduct work throughout the park. This location was also the site of a concrete, at grade pad and a bench that DCR has removed to permit this project to occur. The bench and concrete pad placement led to an expected level of compaction of this site over the years that the bench was in place. As described in the work description section of this filing, we have engaged Bartlett Tree Experts to oversee the installation of the concrete foundation for the statue to ensure that the trees are not damaged. Further, Bartlett will air spade the mulched area around the trees to loosen the soil and improve aeration to the root systems of the trees. We believe this work and the minimal impact caused by the digging for and pouring of the foundation will actually leave the site in a better condition from a resource perspective because of our efforts to invigorate the trees.

#### Work restrictions and impact prevention:

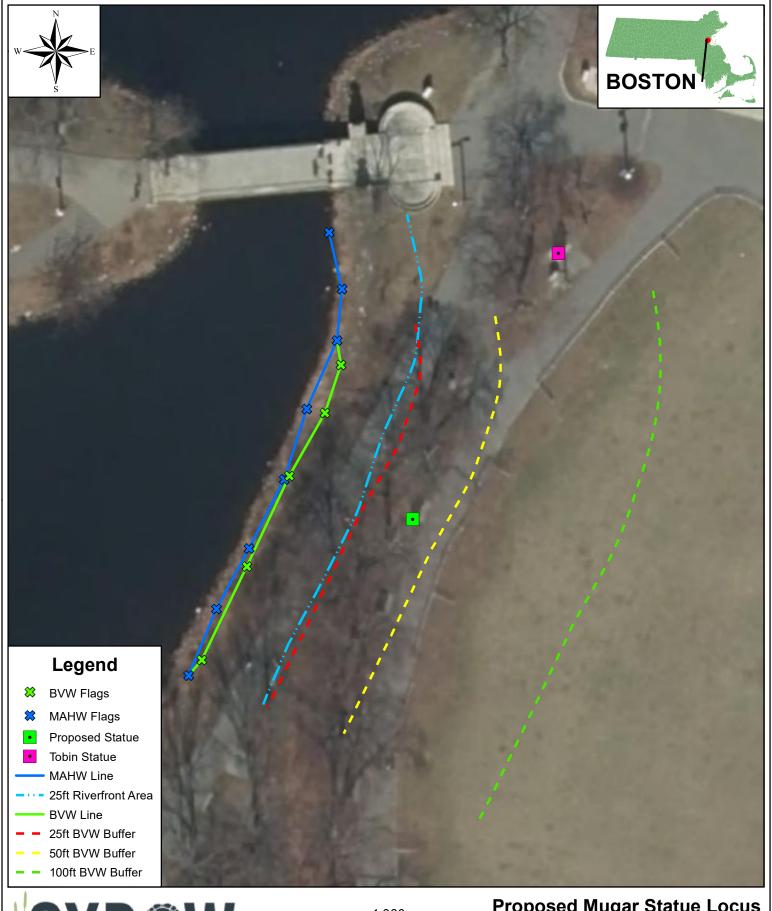
Vehicles - All vehicles and trailers used for this project will access the site along the DCR paved paths and will remain on these pathways. Safety cones and other work zone protection devices will be in place during the work.

Soil and materials – All excess soil and material from the digging and associate work will be removed from the site and from the Park. We do not plan to stage or stockpile any materials for this project.

Sediment control: As described in the work description section of this filing, sediment controls will be placed on the down slope side of the work area (closest to the river) during the entire duration of the work. Sediment control will consist of a silt sock or similar device that will be removed after work is complete. The entire work zone will be cleaned and restored to pre-work conditions after the work is complete including sweeping and removal of any debris and material that has spread from the work site.

Spill prevention: We will enlist the aid of Bartlett Tree to provide a spill prevention kit to be readily available during the work. We will also have contact information for DCR staff to be notified in the event of a spill and will be prepared to contact the DEP spill response office in the case of a major spill. All equipment will be inspected before accessing the park to ensure it is in safe and functioning condition.

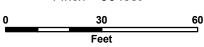
Abutter notification: In accordance with the WPA and Boston Wetland By-Law the Charles River Park is considered one large property and therefore abutter notification is required within 300' of the work site within the property. There are no abutters within 300' of the work site for this project.



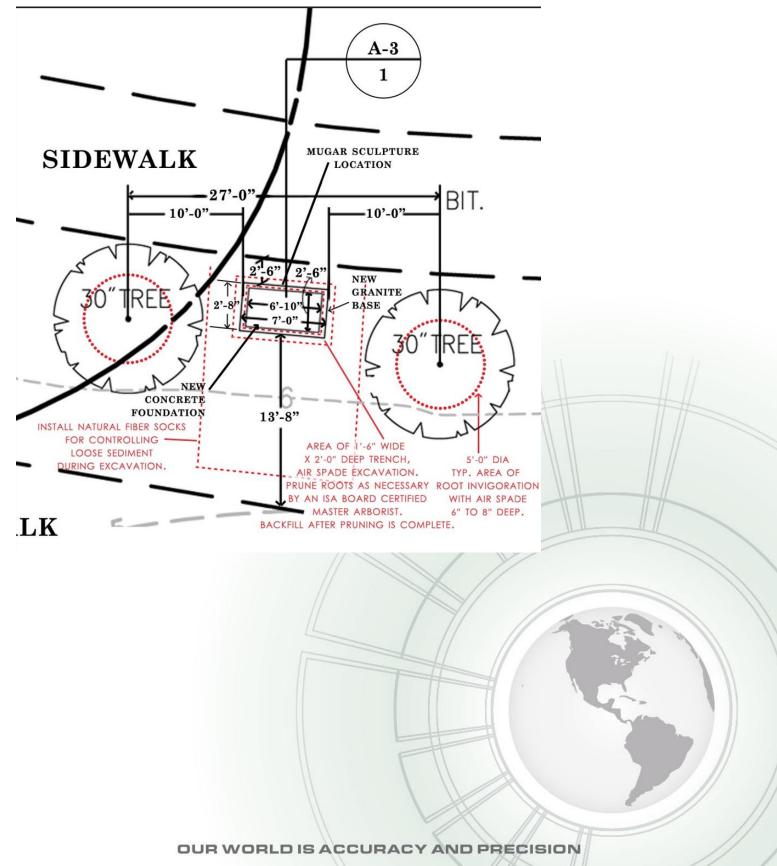


1:360

1 inch = 30 feet



Proposed Mugar Statue Locus 2021 Orthophotograph Boston Esplanade Boston, MA October 14, 2022 **A WBE Certified Company** 



# Brennan Consulting

A WBE Certified Company

