



**TOWN OF MAYNARD**  
**Town Planner**  
**Office of Municipal Services**

**The Maynard Advantage**  
New England Living for Everyone

195 Main Street  
Maynard, MA 01754

Tel 978-897-1302 Fax: 978-897-8489

BNemser@TownofMaynard.net www.townofmaynard-ma.gov

***Plan Distribution Memo***

**TO:** Planning Board  
Town Administrator  
Department of Public Works  
Town Planner \*  
Town Engineer \*  
Building Commissioner \*  
Chief of the Fire Department  
Assessor's Office  
Chief of the Police Department  
Conservation Commission  
Town Clerk  
Health Department  
Board of Selectmen  
Town Counsel Lisa Mead and Kate Feodoroff

\* = Full size plans; all other addressees get 11X17. E-copies of application package to all addressees.

**FROM:** Bill Nemser, Town Planner

**DATE:** April 1, 2019

**SUBJECT:** Request for review and comments for plans

**PETITION #:** PB 19-03

**LOCATION:** 24 Main Street (Greenstar)

**ATTACHED:** Project application, plans and relevant supporting materials. [Click here to enter text.](#)

**PETITION DESCRIPTION:**

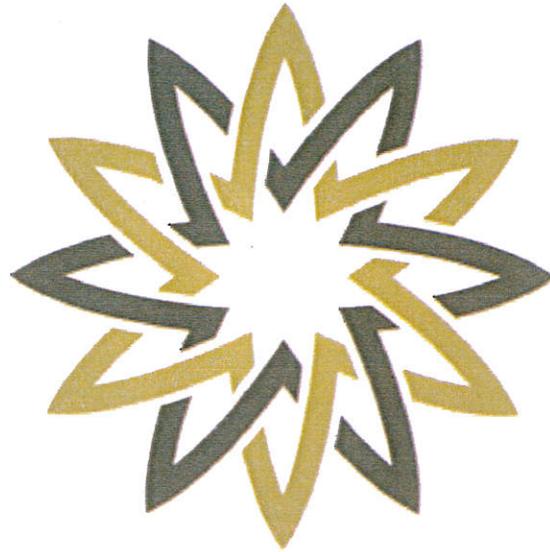
Special Permit request for a Retail Marijuana establishment.

This item is scheduled for the **Planning Board** meeting of May 14, 2019. The meeting will be held at Town Hall 195 Main Street at 7PM.

- It is requested you provide comment(s) on or before April 29, 2019. Please note whether the item should be corrected or addressed prior to approval, prior to building permit, prior to c/o, etc.
- If you have no comment, please provide a "no comment" letter for the record.
- If you or a representative will be attending, please contact me at (978) 897-1302.

Thank you for your assistance.

Bill Nemser  
Town Planner



MAYNARD

# GreenStar HERBALS

Proposed Location: 22-24 Main Street Maynard, MA  
Presentation to the Town of Maynard



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**Cover Letter**





# Places Associates, Inc.

Planning, Landscape Architecture, Civil Engineering and Surveying  
Certified WBE

April 1, 2019

*via hand delivery*

Maynard Planning Board  
Maynard Town Hall  
195 Main Street  
Maynard, MA 01754

Re: Greenstar Herbals, Inc.  
Application for Special Permit  
& Marijuana Establishment License  
22-24 Main Street, Maynard, MA  
Assessor's Map 62, Lot 20, aka "Navy Yard Mills"

Dear Members of the Board;

On behalf of our client, Greenstar Herbals, Inc., this office herewith submits application materials for a The a Retail Marijuana Dispensary as allowed by Special Permit, Planning Board pursuant to Section (§) 3 Use Regulations, 3.1.2, Table A, 4. Business Uses Item 18, where a "Marijuana Retailer" is allowed in the CB district as "PB". PB is described as "Use available by Special Permit from the Planning Board." Zoning § 7.9 Marijuana Retailers, describes some of the site-specific requirements for this particular use. Zoning § 10.4 Special Permits describe the requirements that apply for the approval for a Special Permit. Also enclosed herewith is a list of waivers being requested.

The southerly border of this site is the Assabet River. The site and building are currently in use containing a mix of office, commercial kitchen and warehouse space. This proposal seeks to minimize the changes to the site, as many of the site's neighbors rely on existing paved areas to gain access to their properties. The building and site are currently served by existing utilities (sewer, water, electric, gas, etc.), the only utility modification proposed is the addition of a fire protection water line, as the existing building is not sprinkled currently. 3,950 square feet of the 16,000 square foot building are proposed to be renovated and used for the retail facility. The remaining area of the building will be unused and have not been accommodated in the traffic or parking calculations.

Enclosed and attached are the following materials:

Originals of:

- Cover letter
- Application Form
- Filing Fee Checks ( \$ 200 for application fee; \$ 5,000 for Peer Review Fee)

256 Great Road, Suite 4, Littleton, MA 01460  
(978) 486-0334 & (508) 829-0333  
[www.placesassociates.com](http://www.placesassociates.com)

Fifteen (15) copies of an Application Book which contains the following:

1. Cover letter
2. Application Form Special Permit
3. Special Permit Justification Statement
4. List of Requested Waivers
5. Abutter's List & Surrounding Communities Notification List
6. Host Community Agreement
7. Project Narrative
8. Invasive Species Removal Narrative
9. Landscape Management Plan
10. Site Lighting Fixture Cuts
  
11. Traffic Impact Assessment – 7 bound sets provided under separate cover
  
12. Plans – 4 full sized sets and 11 reduced scale
  - a. Civil Site Plans:
    - i. Cover Sheet
    - ii. Existing Conditions & Demolitions Plan
    - iii. Site & Layout Plan
    - iv. Landscape Plan
    - v. Construction Details
    - vi. Site Photometric Plans (to be provided under separate cover).
  - b. Architectural Plans (all Architectural Plans are 11" x 17", 16 sheets each set)
    - i. Cover Sheet
    - ii. EX 1 & EX 2 Existing Conditions Plans
    - iii. D1 Demolition Plan
    - iv. A1 to A5 Proposed Architectural Plans)

As of the date of submission, the site photometric plan is being developed. We propose to provide this plan to the Planning Board prior to the date of the Public Hearing.

As noted in the project narrative, there are multiple other local and state permits that need to be obtained prior to renovating the site and building and then opening the facility. Included in these are filings with the Maynard Conservation Commission for work within 200' of the Assabet River. Also required is a Marijuana Dispensing License from the Board of Selectmen which will be requested after receipt of the Special Permit and Order of Conditions.

*Places Associates, Inc.*

256 Great Road, Suite 4, Littleton, MA 01460

(978) 486-0334 & (508) 829-0333

[www.placesassociates.com](http://www.placesassociates.com)

Should the Board, a Town of Maynard review agent or any concerned citizen have and questions or need additional information, we ask that you contact us.

Thank you and we look forward to working with you on this project.

Very truly yours,  
Places Associates, Inc.

BY:



William E. Murray, RLA  
Project Manager

Enc: as noted

Cc: Greenstar Herbals, Inc., Applicant  
CAC Architects  
Blaine J. DeFreitas, Esquire

*Places Associates, Inc.*  
256 Great Road, Suite 4, Littleton, MA 01460  
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**Application Form Special Permit**



To be completed by Planning Office

Application No.:

Fee Paid:

Date Completed and Filed:

Town Clerk's Stamp



Planning Board  
Town of Maynard  
195 Main Street, Maynard, MA 01754  
Tel: 978-897-1302 [www.townofmaynard.net](http://www.townofmaynard.net)

## Application for Special Permit

This is an application for Special Permit approval as provided for in Section 10 of the Zoning Bylaws of the Town of Maynard

Please file completed form with the Office of Municipal Services. The following materials are also required:

- Fees as determined in Appendix "A" (current Planning Board Fee Schedule).
- An abutter list and map from the Property Assessor's Office.
- Six copies of all Site Plan materials. Four sets shall include full size plans (approx 2' x 3'). All other plans may be 11 x 17. Additional copies may be requested.
- An electronic copy of all plans and materials.
- All plans, surveys and other materials must be prepared consistent with requirements as listed in the Planning Board Rules and Regulations. Failure to provide materials may result in delay of application processing.

Date: March 28, 2019

Applicant (print): Thomas Morey, President/CEO: Greenstar Herbals, Inc.

Applicant address: 310 Flagg Hill Road, Boxborough, MA 01719

Applicant phone and e-mail: (978) 857-9732 tommorey7305@gmail.com

Property Owner (print): Robert Watson, Managing Partner : Greenley Place LLC.

Property Owner address: 24 Main Street, Maynard, MA 01754

Property Owner phone/e-mail: (978) 897-0660

Plan prepared by (Engineer/Architect/ Property Surveyor): Places Associates, Inc. Wm. Murray, RLA, Susan Carter, PE. Date March 28, 2019

Address: 256 Great Road, Suite 4, Littleton, MA 01460 License #: RLA = 1107, PE = 41270

Phone: (978) 486-0334

Email: wmmurray@placesassociates.com - Wm. Murray, Project Manager

Location of Site: 22-24 Main Street, Maynard, MA  
014 0199

Assessor's Map # 015 Parcel # 0079.0 Zoning District DOD CB & Size of Existing Buildings, if applicable ~16,117 sf.

Present use of site: Mixed -use, office, food prep (caterer) and warehouse

**Application for Special Permit (continued)**

**Justification Statement:** please attach a complete explanation of the request on a separate sheet. Please note: Special Permits may only be granted if the issuing authority determines the adverse effects of the proposed use will not outweigh the beneficial impacts to the town or neighborhood. Specifically Section 10.4.2 of the Maynard Zoning Bylaws "Special Permit Criteria" requires the determination must address:

1. Social, economic, or community needs which are served by the proposal;
2. Traffic flow and safety, including parking and loading;
3. Adequacy of utilities and other public services;
4. Neighborhood character and social structures;
5. Impacts on the natural environment; and
6. Potential fiscal impact, including impact on town services, tax base, and employment.

Additionally, the following points, based on Massachusetts General Laws, Chapter 40A, Section 9, should be identified and factually supported within the Justification Statement and verbally at the hearing:

1. The particular type of Use proposed for the Property or Structure, if any;  
The conditions and character of operations of the proposed Use which show that it will be in harmony
2. with the general purpose and intent of the District and the By-Laws; and
3. The nature of the proposed Use in relation to both the general and specific provisions of the Bylaws governing that Use and the District it is located.

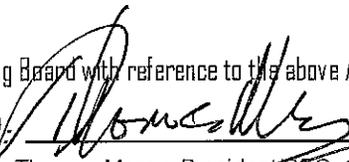
The Justification Statement should clearly address how the request affects these factors.

**Supplementary Information:** It is encouraged for the Applicant to provide any letters of support, photos, drawings or other materials that may assist the Board in making a determination.

Failure to present evidence in one or more of the foregoing areas may result in the petition being denied by the Planning Board. The Planning Board cannot draw from the petitioner the necessary evidence to grant the petition if improperly presented.

I hereby request a hearing before the Planning Board with reference to the above Application.

**Signature of Applicant (or Representative):**



**Date:** 3-19-19

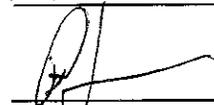
Address (if not Applicant):

Thomas Morey, President/CEO ; Greenstar Herbs, Inc.  
310 Flagg Hill Road, Boxborough, MA 01719

Phone/e-mail:

(978) 857-9732      tommorey7305@gmail.com

**Signature of Owner (if not Applicant):**



**Date:** 3-19-19

Address (if not Applicant):

Robert Watson, Managing Partner ; Greenley Place LLC.  
24 Main Street, Maynard, MA 01754

Phone/e-mail:

(978) 897-0660

**Special Permit Justification Statement**



The following is submitted as part of the Application for Special Permit Approval for an adult-use cannabis dispensary as permitted by the Maynard Zoning Bylaws pursuant to Section 3, Use Regulations, 3.1.2 Table A, 4. Business Uses, Item 18, where "Marijuana Retailer is allowed in the Central Business District (CB) as "PB". PB is described as, "Use available by Special Permit from the Planning Board."

The proposal is the development of 3,950 square feet of an existing 16, 000± square-foot building to house a marijuana dispensary serving adult use and medicinal uses as allowed by 935 CMR 500 and 502. Changes to the site are being minimized, except as is necessary to ensure sufficient parking, traffic flow, pedestrian access and remediation of invasive species on open land adjacent to the river.

The interior of the facility will be fully renovated in a code-compliant manner. A variety of spaces within the building will be created to suit various aspects of the operation. The foyer will be the point-of-entry and screening location for purchasers. If there are more visitors to the building at one time, they will be able to safely collect in this area out of the weather until space in the sales area becomes available. The sales area is created to allow for point-of-sales, consultation and casual gathering. Clients will enter the building through the front door, travel into the sales area and leave out the side door. This "flow" will make monitoring entering and exiting customers easier. Secure spaces exist in the building as well. These include the enclosed loading and unloading area (garage), secure product storage and inventory processing area. A staff-only room is provided for breaks and related operations meetings.

The exterior will be upgraded to comply with the Central Business District criteria and to make the building more aesthetically pleasing, see architectural review of changes further on in this document.

**Social, Economic or Community Needs which are served by the proposal:**

**1.0 Social Needs:**

The project seeks to provide adult-use (recreational) marijuana to the public. The sale and use of marijuana is legal in the Commonwealth, and the provision of it for recreational use is allowed subject to regulations and controls, as being made herewith.

1.1 The sale of marijuana-containing products is in keeping with the will of the voters of the Town of Maynard. The Town of Maynard has determined via the ballot in 2016 that marijuana sale and use is socially acceptable to the residents of the Town via a 59% to 40% vote.

1.2 As with other adult-use products, the sale of these products for recreational use is restricted to persons 21 years of age and older. Definitive proof of age is required to gain entry into the sales facility. The strict identification protocols and the educational materials being provided will aid in keeping marijuana away from under-aged persons.

1.3 The Host Community Agreement (HCA) with the Town provides that, *“if requested by the Town, Greenstar shall assist the Town with, participate in, or contribute to community educational programs on public health and drug use prevention and prevention programs that address youth marijuana use.”*

1.4 It is the Applicant’s belief that the availability of a quality, tested and certified product from a legally established retail facility will reduce the sale of illicit and illegal marijuana in the area.

## 2.0 Economic Needs:

This project will benefit the Town in multiple ways as noted below:

2.1 The Town of Maynard, through its Board of Selectmen, has signed a Host Community Agreement. This agreement provides for Community Impact Payments to be made by Greenstar. The agreement states [in pertinent part], *“...the Company acknowledges that the payment due under this Agreement are reasonably related to Town Costs and waives any claims to the contrary.”*

2.2 The Host Community Agreement also provides that Greenstar will , *“...give priority to qualified local businesses and vendors in the provision of goods and services...”* Additionally it further requires, *“Greenstar shall ... give priority to hire local qualified residents at the Greenstar Maynard Marijuana Establishment...”*

2.3 The HCA also requires that all local taxes, fees and related costs for services and utilities are paid and are current. Unlike other business in town, the payment of such costs on-time and as required is linked to the conduct of business and the license to sell adult-use marijuana products.

## 3.0 Community Needs:

3.1 As noted above, it is the Applicant’s belief that the availability of a quality, tested and certified product from a legally established retail facility will reduce the sale of illicit and illegal marijuana in the area.

3.2 Re-development of the Central Business District. The proposed facility will assist in the re-development of the Downtown as addressed in the 2014 making Maynard a FOOD,CULTURE AND ENTERTAINMENT DESTINATION report by Fein Point Associates, Inc. Unlike the businesses that occupy the site today, this is a retail operation. The goal is to attract a wide variety and number of customers to the site and to the area as a whole. We anticipate that many of the customers visiting this facility will visit other businesses and restaurants, thereby enhancing the overall economic health of the area.

3.3 The re-development of the site includes creating a new, raised, curbed sidewalk from Main Street to the facility. The goal is to connect the site to Main Street's pedestrian corridor. Also included is the placement of a bike rack on the site. It is the Applicant's goal to encourage bicycle commuting and shopping by employees and visitors alike.

#### **Traffic Flow:**

Greenstar has retained a Professional Traffic Operations Engineering firm (Green International Associates, Inc of Westford) to perform a traffic impact and access assessment. Working with the Town's consulting engineer for traffic analyses, they conducted traffic counts in the area, researched accident data and performed traffic counts of a similar- sized operating retail marijuana facility in Fall River for comparative purposes. The resulting report also describes the likely number of visitors to the site which can then be translated into a parking demand analysis. The 230 page report entitled, "*Traffic Impact and Access Study – Proposed Recreational Marijuana Facility, 22-24 Main Street, Maynard, Massachusetts; Prepared for Green Star Herbals, dated March 2019, Prepared by Green International Associates, Inc.*", is provided as a separate book to this application and summarizes the following:

1. Traffic impacts to the surrounding roadway network... are not expected to cause any new operational issues on the adjacent roadways.
2. The roadways within the study area are able to accommodate the proposed development.
3. The parking analysis estimated 10 parking spaces would be needed to meet peak traffic demand at the facility.
4. Along with the above assessments the following recommendations are made:
  - a. Provide pavement markings and a stop bar and stop sign at the end of the driveway connecting to Main Street
  - b. Parking should be prohibited 50' to the west of the driveway to enhance site distance. [Note: no painted parking spaces exist in the above area, but no restrictive signing is present in this area].

See Project Narrative for summary of parking assessments and compliance to zoning.

A variety of waivers to parking area requirements are needed as this is a re-use of an existing paved parking area that is confined by existing buildings, uses and rights of way. It is the applicant's intent to re-use the existing paved areas in place. Some pavement will be removed to create landscaped islands. As noted previously, a portion of the existing driveway will be converted to a raised, curbed sidewalk to connect the site to Main Street's sidewalk allowing for both pedestrian and bicycle traffic into and out of the site.

**Adequacy of Utilities and other Public Services:**

The site is currently served by municipal utilities (water and sewer). Other utilities existing on the site include natural gas, electrical and wired communications (cable, phone, etc.). None of these utilities are expected to be significantly modified, except for water. Currently the building does not have a fire suppression system (sprinklers and alarm). A new fire service water connection will need to be made from the water main in Main Street to the building. The Fire Protection Engineer is requiring a new 6" line.

Except as noted above, all utilities will remain as they exist today and any changes will be made internal to the building.

The impact on public services is expected to be minimal. During the initial opening, Greenstar may need to hire police details similar to the need of other business' for opening days. Routine operations should have no different effect on the delivery of public services than other retail operations. As noted, a private security staff will be on-site when the facility is open; electronic monitoring will cover other hours.

The Host Community Agreement provides for proposed Community Impact Payments. These payments are noted to accommodate the municipalities costs as note in the document: *"community impact fee shall be reasonably related to the costs imposed on the municipality by the operation of the marijuana establishment..."*.

**Neighborhood Character and Social Structures:**

The neighborhood into which Greenstar is moving is eclectic. To the north and east is a new retail/housing-above project. To the north-west is the backside of a commercial laundry and residences along Main Street. To the immediate west is a vacant multifamily house slated for demolition and potential re-development. To the south is the Assabet River and parking on the top of slope on the south side (opposite side) of the river. On the whole, the majority of the abutting properties are overgrown with scrub growth (overhanging trees and undergrowth), and that which is not scrub is pavement.

No school is located within 300' of the existing site.

The proposed development will enhance the façade of the facility by updating the exterior and providing a new, clean appearance. See also the Architect's narrative on the appearance and modifications to the building façade in relation to the Special Permit Regulations.

The dumpster will be hidden behind an enclosure and existing, rotten wooden landings and ramps will be replaced with new code compliant structures. Invasive species will be remediated along the open area adjacent to the river and this area will be re-used/planted as a rain garden.

Site lighting will be directed inward from the parking lot to the building, all with energy-saving LEED fixtures that are full cut-off (do not shine upward). Doorways and egress points will have down-lit wall packs that illuminate from the wall face principally downward and not outward.

No use of any marijuana containing product is allowed on site by state law and regulation. On-site security staff will enforce this policy during all hours of operation. In addition, we do not anticipate that any odors will emanate from the proposed retail operations. As required by State Laws, all product must be sold in sealable containers or in pre-packaged, sealed containers.

The goal of the project is to accommodate and enhance the Downtown Food, Culture and Entertainment District with a new retail operation that is likely to increase overall visitation to the District with an increased number of customers. We anticipate that the diversity of customer types will also increase, benefitting the overall area. The hours of operation are planned as 8 am to 11pm Monday to Sunday. After a period of time after opening, hours may be adjusted to accommodate customer visits and retail criteria.

This project meets the Draft Land Use Goals and Recommendations posted as the latest iteration of the Master Plan by meeting the following goals of :

- Land development continues to be deliberate, balanced and proactive to community needs and service capabilities (LU1).
- Further enhance the Downtown as a hub of Maynard's cultural identify and economic viability (LU3).
- Foster diverse business development throughout the Town, in synergy with Downtown revitalization. (LU4).

We are not able to directly meet Draft LU 2 which asks for improved public access to the Assabet River within the Downtown area. Loitering outside of the facility is not allowed by regulation and to meet security needs. As such, visitors to the site are encouraged to visit the facility, take sufficient time to make purchase decisions while inside the building, but once they have left the building ,they will be encouraged and asked to leave the premises as soon as is reasonably possible. Use of the property by non-customers will not be encouraged as it is not reasonably possible to segregate customers and non-customers. However, a view of the river will be available through the site, especially with the removal of the invasive Japanese Bamboo and re-planting of this area for a rain garden.

**Impacts on the Natural Environment:**

The project is located immediately adjacent to the Assabet River. In fact a portion of the building exists on the river's edge at certain times of the year. A significant portion of the site is located within the 100' and 200' riverfront areas, as defined in the Wetlands Protection Act. A portion of the site is below the 100 year flood plain, which is established by a Detailed Study by FEMA, which set the flood elevation at 151.

Much of the site is paved or occupied by the existing building. It is the goal of the Applicant to minimize exterior site alterations, except as is needed to comply with zoning and related requirements. No new impervious areas will be created as part of the development of the site. A minor decrease in impervious area is proposed by the planting strip and planted island at the front (northerly side) of the site. The building is currently served by municipal sewer and water, limiting environmental impacts.

As noted above, the area closest to the river (south-west corner of the site) is vegetated and predominantly occupied by the invasive species, Japanese knotweed (*Polygonum cuspidatum*). Included as part of this project is the removal of the invasive species and replacing it with a rain garden to assist in treating the runoff leaving the parking area. A Notice of Intent will be filed with the Maynard Conservation Commission to permit all the work within their jurisdictional areas.

The landscaping that is proposed is comprised of native or low water, low maintenance requirement plant stock. Minimal landscaping is proposed per state regulation (935 CMR 500.100 (5) (f), which states, "(f) Trees, bushes and other foliage outside of the Marijuana Establishment shall be maintained so as to prevent a person or persons from concealing themselves from sight."

**Potential Fiscal Impact, Including Impact on Town Services, Tax Base and Employment:**

It is the Applicant's belief that the development proposed will benefit the Town of Maynard Economically as follows:

1. The Host Community Agreement acknowledges that the Community Impact Payment of 3% of gross sales is intended to offset any fiscal and other community impacts by the facility.
2. The Town will receive 3% of the sales tax revenue as increased revenue.
3. The license to operate as issued by the Board of Selectmen requires that all municipal debts for services, utilities, taxes and other costs are paid in a timely fashion and are up-to-date.
4. Supplemental Services for police details and related costs will be paid for on an as needed basis and will not incur any additional costs to the Town.
5. Preference for employment for Maynard residents/businesses during construction and for the operations of the facility is included in the Host Community Agreement.

6. The amount of foot traffic along Main Street is likely to increase as will visits by Greenstar's customers to other retailers and restaurants in the area, providing a cross benefit. Because adjacent towns have decided not to allow the sale of Adult-Use Marijuana, it is also very likely that customers from adjacent towns will be visiting Greenstar's facility in Maynard. It is very likely that a new and more diverse type of customer will be visiting the down-town area as a result of this facility's opening.
7. Greenstar Herbals, Inc. is making a long-term investment in the Town of Maynard by purchasing a facility that is currently underutilized. Significant expense will be incurred to renovate the building for the proposed use. As a corporate citizen of the Town, Greenstar is investing in the future of Maynard and particularly the down-town area.

**Impact on Maynard Police:**

Greenstar does not expect that any additional burden for police support will be required by the development and operation of this facility. During the initial opening of the facility, Greenstar will hire police details to support operations and make sure that opening days are coordinated and controlled. The costs of these details will be borne by Greenstar directly. As the facility operates on a regular basis, on-site security will be present at all times that the facility is open. The facility is protected by fire, burglar and video monitoring 365 days per year, 24 hours a day. When closed, all marijuana-containing products are removed from retail shelves and stored in a safe located in a secure room inside the facility. We anticipate that calls for police assistance will be similar (in both nature of call and number) to those made by other local retail stores/restaurants in the down-town area.

**The Use of the Property or Structure must be in Harmony with the General Purpose and Intent of the District and Bylaws:**

This application is submitted as part of the Application for Special Permit Approval for an adult-use cannabis dispensary as permitted by the Maynard Zoning Bylaws pursuant to Section 3, Use Regulations, 3.1.2 Table A, 4. Business Uses, Item 18, where "Marijuana Retailer is allowed in the Central Business District (CB) as "PB". PB is described as, "Use available by Special Permit from the Planning Board."

The use is allowed in the underlying district subject to a showing by the Applicant that it is in harmony with the Bylaws and District. It is the applicant's position that the above narratives address the specific requirements for the granting of a Special Permit, as being in harmony and with the general purpose of the Bylaws, with use and regulatory requirements and neighborhood character and social systems.

**Architectural Design Review – by Caveney Architects (CAC Architects):**

Guidelines for the renovation of existing building elements are met by this project, as no major alterations to the building exterior will occur. The primary pedestrian entry and exit points are located at existing exterior doors. One new overhead door will be installed in an existing opening which is currently patched with corrugated metal siding.

All exterior finish materials - including, but not limited to, brick; corrugated metal siding; metal roof edge, etc. - will be installed to seamlessly patch and match with adjacent materials. The existing building will be thoroughly cleaned and weather-sealed, and will be painted as needed to restore the building to a clean and consistent finish. Color is to be a mid-tone tan or grey color consistent with existing stone work on Main Street.

None of the facade work will deviate from the character-defining features of the building, and because the design integrated the existing openings instead of creating new ones, there is no concern about changing the nature of the building. From the exterior, the building will appear nearly unchanged, but for a cleaner and more presentable set of materials.

This design conforms with all standards set forth by the Maynard Planning Board, including sensitivity to human scale, proportion, style in relation to adjacent buildings and nearby Main Street, and building materials consistent with the history and use of the property. No exterior materials will change, and the facade's existing architectural style will be maintained.

All windows, doors, and entryways are to be consistent with the current locations, sizes, and types. It is intended for all existing windows and doors to remain in their current locations. As mentioned above, the primary entry point will be the existing entry vestibule, and the existing doors are to remain or be replaced with like makes and models.

All clear glazing on the building exterior will be modified using security film to create translucent glazing. This means that the windows will still appear as tinted in daylight, and lit from behind during the night, but there will be no clear view into the building interior. This is due to security regulations set forth by the Cannabis Control Commission in 935 CM. Windows will not be operable.

Any exterior doors to be replaced will receive new hollow metal doors and frames factory-painted to match the adjacent materials. A new overhead coiling door will be installed at the new receiving area; door and frame will be factory-primed and painted to match the adjacent materials."





**List of Requested Waivers**





This proposal assumes the re-use of the existing paved parking lot. Along the northerly portion of the site, the paved area is used by the abutters to the site to gain access to their properties and for parking. To the west of the site, the pavement crosses the property line. In all cases, this proposal assumes a re-use of the parking areas as they exist today. Due, in part, to the configuration of the existing parking and lot, we are not able to meet some of the requirements of §6.1.10 as noted below. As allowed by § 6.1.3 we respectfully request waivers to the following:

1. Section 6.1.10, 1) Requires parking in the Central Business District to locate parking behind buildings to preserve storefront character of the district.

*Due to the configuration of the lot and the fact that the building is 165' back from Main Street, we do not believe that parking in front of the building will impact the streetscape or character of the Central Business District. Further, we are connecting to the sidewalk on Main Street with an on-site sidewalk to enhance the pedestrian connectivity to our building. We cannot reasonably comply with this regulation without losing parking spaces that are needed for the project and for zoning compliance.*

2. Section 6.1.10, 3) Does not allow parking or paved surfaces within 20' of the front lot line or within 10' of any other lot line and shall not be located within the limits of the landscape buffer.

*We are utilizing the existing paved areas of the site, portions of which are within the three restricted areas noted above (20' front offset, 10' to side lot lines and within proscribed landscape buffers).*

3. Section 6.1.10, 5) This regulation restricts the grade of a parking area to 0.75% to a maximum of 5%.

*The cross slope of the existing parking area on the south-easterly portion of the lot is ~ 10%, exceeding the criteria. No site grading is proposed, except in landscaped and open areas. We ask that the existing parking lot be able to be utilized even with the steeper than recommended slopes.*

4. Section 6.1.10, 9) This regulation requires raised landscape islands at the ends of parking rows.

*The existing site does not provide for the development of these islands, along the right-of-way an existing guard rail defines the northerly parking row. This guard rail defines the adjacent right-of-way and provides for protection of the grade break that occurs between the right of way and the parking lot which is lower. Both areas are fully paved.*

5. Section 6.1.13: Loading Areas:

*We depict a loading area, but it is not 50' long as the delivery vehicles to this site/building will typically be vans or standard UPS/FedEx delivery sized vehicles. We do not anticipate semi-trucks, except during construction.*

6. Section 6.1.15: Landscaping:

1. The entire front setback shall be landscaped (there is no required front setback in this district [0']) and this section also requires a landscape strip of 5' from others.

*The easterly property line is landscaped (in part by the existing residential building), we are honoring the stone wall as the edge of a new sidewalk, making this criteria hard to meet. On the westerly side of the access strip and the westerly side of the lower lot are currently paved up to and over the property line allowing access to the abutting property. We are proposing to keep the paving in place and utilize the portions on our property as snow storage.*

2. Interior landscaping shall be a minimum of 10' width.

*We are providing a planted island along the front of the site, however, the existing planting strip at the building is 6' wide and does not comply. This area will be planted as depicted on the landscape plan. We request the Board accept the plantings as depicted on the Landscape Plan as being sufficient. The periphery of the site on the western side (both on the access lane and along the "lower" parking) has existing trees that overhang the lot. Adding trees will obstruct the abutters to the west of the access strip. There is not room to plant trees along the western edge of the lower parking lot. Even if we did plant trees, they would be under the canopy of the existing trees.*

3. A minimum of two (2) trees shall be provided within the landscape areas for each ten spaces.

*The periphery of the lower lot has existing trees along the entire westerly side. There is no landscape area to the north of the lower lot to plant trees. We are proposing a single tree in the newly created landscape island at the front of the building.*

*Some trees exist on the access strip, however planting of trees in this area would affect the neighbors' use of their land (north-westerly side of access strip).*

*This regulation states, "Existing trees and natural vegetation shall be retained wherever possible in addition to the addition of new trees, shrubs, wall or fences in order to effectively screen the parking lot."*

*In this case, the parking is screened from Main Street from the access strip that is partially vegetated with existing trees. We are not allowed by regulation to install plantings that create screens or other areas where person(s) can hide in proximity to the entrance to the facility.*

*It is the applicant's belief that the retention of existing trees on the periphery of the parking and the proposed landscaping will meet the objectives of this regulation.*

*One new tree is proposed in the planted island at the front of the building, we are also planting an ornamental tree at the building's northeast corner. We request the Planning Board determine these to be sufficient to meet the intent of the bylaw.*



**Abutters List & Surrounding Communities Notification List**





## BOARD OF ASSESSORS

195 MAIN STREET  
MAYNARD, MA 01754  
978-897-1304 ~ FAX 978-897-1013

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**RECEIVED**

TO: Permit Granting Authority  
FROM: Board of Assessors  
RE: Parties in Interest to:  
Parcel IDs:  
014.0-0000-0199.0 & 015.0-0000-0079.0

JAN 16 2019

PLACES ASSOCIATES, INC.  
256 GREAT RD., #4 LITTLETON, MA 01460

ADDRESS: 0 River Street, Maynard  
22-24 Main Street, Maynard

USE of LIST: ZBA

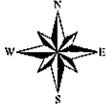
DATE: JANUARY 7, 2019

We hereby certify that the attached list, taken from our Real Estate Property Lists, includes the names and addresses of all parties in interest under Massachusetts General Laws Chapter 40A, Section 11, as amended in 1979, to the best of our knowledge and belief.

*Stephen T. Pankratz*

*William J. Clark*

Board of Assessors



14/199,15/79 ZBA

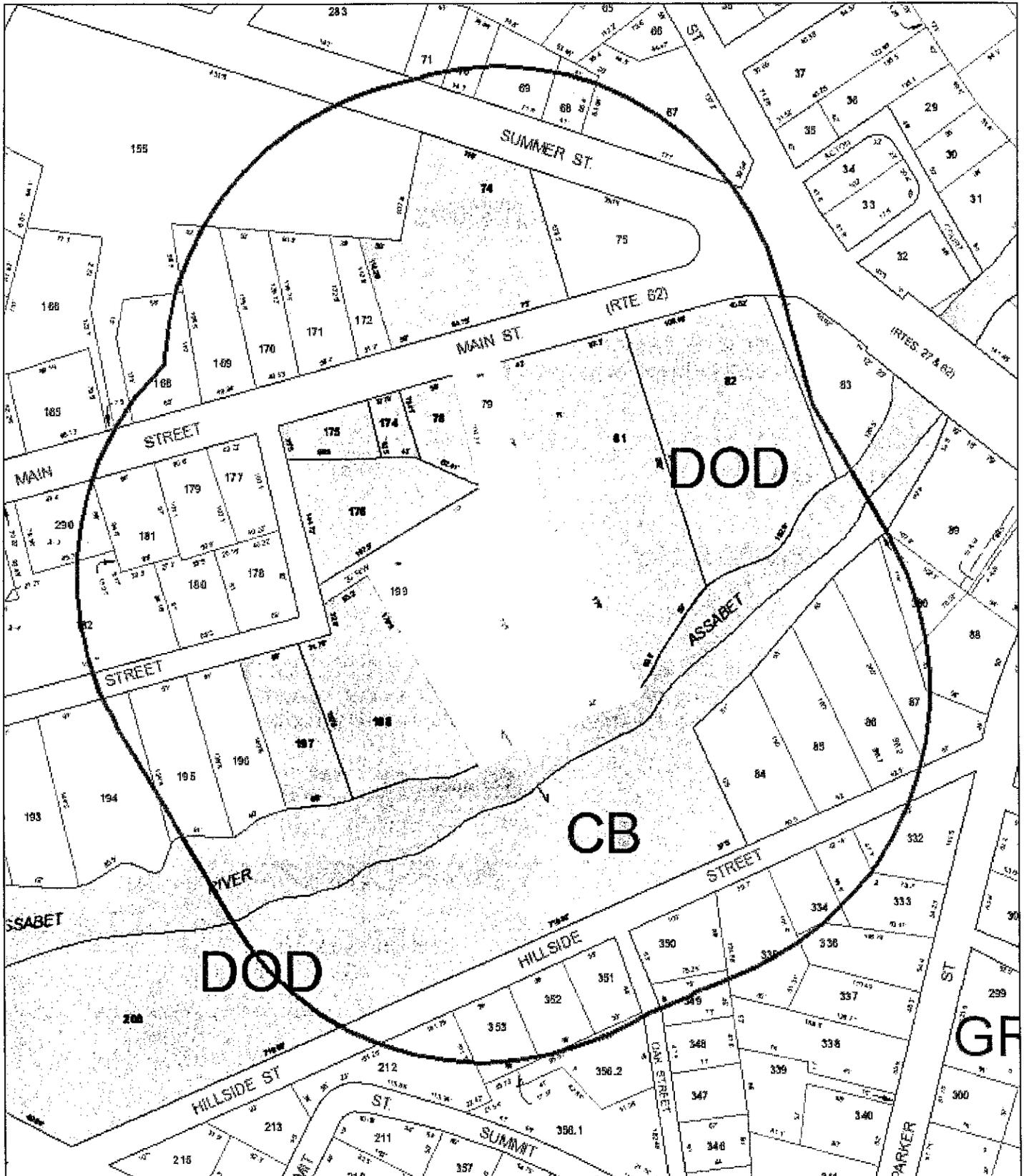
Maynard, MA



January 7, 2019

1 inch = 134 Feet

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# 300 foot Abutters List Report

Maynard, MA  
January 07, 2019

## Subject Properties:

Parcel Number: 014.0-0000-0199.0  
CAMA Number: 014.0-0000-0199.0  
Property Address: RIVER ST

Mailing Address: GREENLEY PLACE LLC  
24 MAIN ST  
MAYNARD, MA 01754

Parcel Number: 015.0-0000-0079.0  
CAMA Number: 015.0-0000-0079.0  
Property Address: 22 MAIN ST

Mailing Address: GREENLEY PLACE LLC  
24 MAIN ST  
MAYNARD, MA 01754

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## Abutters:

Parcel Number: 014.0-0000-0174.0  
CAMA Number: 014.0-0000-0174.0  
Property Address: 30 MAIN ST

Mailing Address: HAVER WILLIAM J & JOHANNA  
30 MAIN ST  
MAYNARD, MA 01754

Parcel Number: 014.0-0000-0175.0  
CAMA Number: 014.0-0000-0175.0  
Property Address: 32 MAIN ST

Mailing Address: PC MAIN LLC  
68 SUMMER HILL RD  
MAYNARD, MA 01754

Parcel Number: 014.0-0000-0176.0  
CAMA Number: 014.0-0000-0176.0  
Property Address: 49 RIVER ST

Mailing Address: WILBUR J TOLMAN REV TR C/O  
KATHLEEN TOLMAN  
6872 WALNUT HILLS DR  
BRENTWOOD, TN 37027

Parcel Number: 014.0-0000-0197.0  
CAMA Number: 014.0-0000-0197.0  
Property Address: 31 RIVER ST

Mailing Address: 31-33 RIVER ST RLTY TR STEPHEN M  
HEBERT  
179 MAIN ST  
MAYNARD, MA 01754

Parcel Number: 014.0-0000-0198.0  
CAMA Number: 014.0-0000-0198.0  
Property Address: 35 RIVER ST

Mailing Address: COCCO MARGUERITE N & THOMAS A  
COCCO TR  
71 CHANTICLEER RD  
SUDBURY, MA 01776

Parcel Number: 014.0-0000-0200.0  
CAMA Number: 014.0-0000-0200.0  
Property Address: WALNUT ST

Mailing Address: AS CLOCK TOWER OUTPARCEL LLC  
C/O LINCOLN PROPERTY COMPANY  
2 MILL & MAIN PL STE 200  
MAYNARD, MA 01754

Parcel Number: 015.0-0000-0074.0  
CAMA Number: 015.0-0000-0074.0  
Property Address: 11 MAIN ST

Mailing Address: MAYNARD FINANCIAL ASSOC LLC C/O  
WALGREEN CO RE TAX DEPT  
PO BOX 1159  
DEERFIELD, IL 60015

Parcel Number: 015.0-0000-0078.0  
CAMA Number: 015.0-0000-0078.0  
Property Address: 26 MAIN ST

Mailing Address: COLOMBO DOMINIC W  
26 MAIN ST  
MAYNARD, MA 01754

Parcel Number: 015.0-0000-0081.0  
CAMA Number: 015.0-0000-0081.0  
Property Address: 10 MAIN ST

Mailing Address: MAYNARD MARKET RLTY TR  
MACDONALD JAMES G  
10 MAIN ST  
MAYNARD, MA 01754



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# 300 foot Abutters List Report

Maynard, MA  
January 07, 2019

Parcel Number: 015.0-0000-0082.0  
CAMA Number: 015.0-0000-0082.0  
Property Address: 4 MAIN ST

Mailing Address: TWO TO SIX MAIN LLC  
51 POWDER MILL RD  
MAYNARD, MA 01754



[www.cai-tech.com](http://www.cai-tech.com)

1/7/2019

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Page 2 of 2

**Maynard, Massachusetts**

**Surrounding Communities Notification List**

Town of Acton – 472 Main St, Acton, MA 01720

Town of Concord – 22 Monument Square, Concord, MA 01742

Town of Stow – 380 Great Rd, Stow, MA 01775

Town of Sudbury – 322 Concord Rd, Sudbury, MA 01776



## Host Community Agreement



**Host Community Agreement  
Between  
Town of Maynard, Massachusetts  
and  
GreenStar Herbals, Inc.**

This Host Community Agreement (this “HCA”) is made as of December 18, 2018 (the “Effective Date”) by and between the Town of Maynard, a Massachusetts municipal corporation, acting by and through its Town Administrator, (the “Town”), and GreenStar Herbals, Inc., a Massachusetts corporation with a principal place of business located at 310 Flagg Hill Road, Boxborough, MA 01719 (“Greenstar” or the “Company”). The Town and Greenstar are collectively referred to as the “Parties” and each as a “Party”.

**RECITALS**

WHEREAS, pursuant to 935 CMR 500.000 et seq. (the “Adult Use Regulations”) promulgated by the Massachusetts Cannabis Control Commission (the “Commission”), Greenstar intends to submit an application to the Commission for a license or licenses to operate a Marijuana Retailer, as defined by M.G.L. c. 94G, § 1 to be located in Maynard (the “Greenstar Adult Use Application.”)

WHEREAS, the Adult Use Regulations require that Greenstar include in the Greenstar Adult Use Application “[d]ocumentation in the form of a single-page certification signed by the contracting authorities for the municipality and applicant evidencing that the applicant for licensure and host municipality in which the address of the adult-use Marijuana Establishment is located have executed a host-community agreement specific to the adult-use Marijuana Establishment” (a “Town HCA Certification”). This HCA is intended to constitute the host-community agreement specific to Greenstar’s proposed adult-use Marijuana Establishment in Maynard, pursuant to 935 CMR 500.101(2)(b)(6).

WHEREAS, this HCA shall also constitute the stipulations of responsibilities between the Town, as host community, and Greenstar, pursuant to M.G.L. c. 94G, § 3(d).

**AGREEMENT**

NOW THEREFORE, in consideration of the mutual covenants set forth in this HCA and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by each Party, the Parties agree as follows:

1. **Community Impact Payments - Greenstar’s Marijuana Establishment.**

(a) **Commitment to Make Community Impact Payments.** Greenstar agrees to pay the community impact payments (the “CI Payments”) specified in this Section 1 to the Town pursuant to M.G.L. c. 94G, §3(d) if Greenstar obtains one or more final licenses from the Commission to operate as a Marijuana Retailer (as defined in the Adult Use Regulations) within

the Town of Maynard, Massachusetts (a “**Maynard Adult Use License**”). No CI Payments will be due or payable unless Greenstar obtains a Maynard Adult Use License.

(b) **CI Payment Amount.** The CI Payments, if due and payable pursuant to Section 1(a) above, shall be in the amount of three percent (3%) of the Gross Receipts received by Greenstar from retail sales made by Greenstar at Greenstar retail locations in the Town of Maynard, Massachusetts of Marijuana, Marijuana Accessories and Marijuana Products, as those terms are defined by M.G.L. c. 94G, § 1, under a Maynard Adult Use License (“**Covered Sales**”) during a period of five consecutive 12 month periods commencing with the date of the first Covered Sale at the Greenstar Marijuana Retailer in the Town of Maynard (the “**Greenstar Maynard Marijuana Establishment**”) (such period of five consecutive 12 month periods, the “**CI Period**”). “**Gross Receipts**” means the aggregate retail purchase price paid to Greenstar by retail customers for Covered Sales, but before sales, excise and other taxes and before amounts collected for the CI Payments.

(c) **Schedule of Payments.** Within ninety days of the close of each of the first five calendar years ending after the start of the CI Period, Greenstar shall pay the CI Payment to the Town annually for Covered Sales that were made during the portion (which may be all) of such calendar year that is included in the CI Period. For clarity and by way of example only, if the CI Period starts on November 1, 2018, the first CI Payment is due March 31, 2019 for Covered Sales made from November 1, 2018 through December 31, 2018, the second CI Payment is due March 31, 2020 for Covered Sales made from January 1, 2019 through December 31, 2019 and the fifth and final CI Payment is due January 31, 2024 for Covered Sales made from January 1, 2023 through October 31, 2023. After payment of the fifth payment, the parties shall meet and negotiate in good faith further payments to the extent allowable by law.

(d) **Greenstar Documentation.** Greenstar shall maintain financial records on its Covered Sales made during the CI Period and, upon written request, Greenstar shall make such documentation available for review by the Town on a confidential basis at the end of each fiscal quarter.

(e) **CI Payments Relative to Town Costs.** Pursuant to M.G.L. c. 94G, §3(d), a “community impact fee shall be reasonably related to the costs imposed upon the municipality by the operation of the marijuana establishment...” (“**Town Costs**”). Notwithstanding the foregoing, the Parties acknowledge the difficulty in computing actual Town Costs and agree that three percent (3%) of Gross Receipts is a reasonable approximation of actual Town Costs incurred. The Company acknowledges that the impacts of its operation may be impracticable to ascertain and assess as impacts may result in budgetary increases though not separately identified, and consequently, the Company acknowledges that the payments due under this Agreement are reasonably related to Town Costs and waives an claims to the contrary. The Company acknowledges and agrees that the Town is under no obligation to use the CI Payment in any particular manner.

(f) **No Contest of Local Taxes.** At all times during the CI Period, the real and personal property and automobiles, if any, located in the Town of Maynard, Massachusetts, owned or operated by Greenstar, shall be treated as taxable by the Town in accordance with the

Town's applicable real and personal property and automobile tax laws and regulations. All applicable real estate, personal and excise taxes due to the Town for that property shall be paid either directly by Greenstar or by its landlord for such locations within the Town of Maynard, Massachusetts, and Greenstar for such locations within the Town of Maynard, Massachusetts may not object or otherwise challenge the taxability of such real or personal property and automobiles in accordance with this Section. In the event, Greenstar's landlord objects, Greenstar agrees to remit the full amount of tax. Further, Greenstar will remit payment of the local Marijuana Sales tax for all sales in Maynard in accordance with G.L. c. 64N, § 3.

(g) **Other Payments.** Greenstar anticipates that it will make annual purchases of water, and sewer from all local government agencies. Greenstar will pay any and all fees associated with the local permitting of the Greenstar Maynard Marijuana Establishment.

2. **Term and Termination.**

(a) **Term.** The Term of this Agreement shall be five (5) years from the Effective Date (the "Term"), provided however, the provisions for payment under Section 1 herein, shall survive until the fifth payment has been remitted to the Town.

(b) **Termination.** In the event Company ceases all Marijuana Retailer operations in the Town of Maynard for a period in excess of six (6) consecutive months, this Agreement shall terminate on such six month date and thereafter be null and void. In the event Greenstar loses or has its Marijuana Retailer license(s), approvals, and/or permits to operate in the Town of Maynard revoked by the Commission or the Town for a period longer than six (6) consecutive months, this Agreement shall terminate on such six month date and thereafter be null and void. If this Agreement is terminated due to Greenstar's noncompliance with the terms hereof or the obligations contained herein, including compliance with local law or compliance with state law as determined by the Commission or another applicable state authority, the Company shall be required to cease operations as a Marijuana Retailer in the Town of Maynard following the termination of this Agreement.

(c) **Renewal.** The Parties agree to renegotiate or renew this Agreement prior to the end of the Term. Upon payment of the fifth and final CI Payment due pursuant to paragraph 1 herein, the Parties further agree to renegotiate the terms and payments due under Paragraph 1 to the extent permissible by law.

3. **Community Support - Greenstar's Marijuana Establishment.**

(a) to the extent such practice and its implementation are consistent with federal, state, and local laws and regulations and Greenstar's quality and cost control and security requirements, Greenstar shall use good faith efforts in a legal and non-discriminatory manner to give priority to qualified local businesses and vendors in the provision of goods (other than Marijuana and Marijuana Products) and services for in the construction, maintenance and operation of Greenstar's business at the Greenstar Maynard Marijuana Establishment;

(b) except for senior management, to the extent such practice and its implementation are consistent with federal, state, and local laws and regulations and Greenstar's quality and cost control and security requirements, Greenstar shall use good faith efforts in a legal and non-

discriminatory manner to give priority to hire local qualified residents at the Greenstar Maynard Marijuana Establishment; and

(c) if requested by the Town, Greenstar shall assist the Town with, participate in, or contribute to community educational programs on public health and drug abuse prevention, and prevention programs that address youth marijuana use.

3. **Town Obligations.** The Town agrees: to provide to Greenstar (or directly to the Commission or other applicable governmental authority (the "**Licensing Authority**"), if so requested by the Licensing Authority) all documentation and information required or requested by the Licensing Authority from the Town in connection with the Greenstar Adult Use Application and any licenses requested or issued thereunder and to participate and cooperate (to the extent reasonably requested by Greenstar or the Licensing Authority) in the Licensing Authority's licensing process as it relates to the Greenstar Adult Use Application and such licenses, such documentation, information, participation and cooperation to be provided by the Town on a timely basis and so as not to adversely affect the Commission's evaluation and decision on the Greenstar Adult Use Application. The Town agrees to support the Greenstar Adult Use Application but the Town makes no representation or promise that it will act on any other license or permit request from Greenstar in any particular way other than by the Town's normal and regular course of conduct and in accordance with its codes, rules, and regulations and any statutory guidelines governing them. Without limiting this Section, within two business days after the Effective Date, the Town will execute a Town HCA Certification as prepared by Greenstar according to the applicable requirements of the Commission.

4. **Limits on Marijuana Establishments.** If the Town duly adopts a bylaw in accordance with applicable Massachusetts and Municipal law and regulations and such bylaw imposes limits on the permitted number of Marijuana Establishments (as defined in the Adult Use Regulations) to operate in Maynard, the permitted number of Marijuana Establishments shall be allocated first to Greenstar's proposed or operating Marijuana Establishments but this Section 4 will terminate if the CI Period has not started by the one year anniversary of the Effective Date.

5. **Notices.** All notices or other communications under this HCA shall be in writing and addressed as follows and will be deemed delivered upon actual receipt if actual receipt is on a business day and otherwise on the first business day after such receipt:

Town: Town of Maynard  
195 Main Street  
Maynard, MA 01754  
Attention: Town Administrator

Greenstar: GreenStar Herbals, Inc.  
310 Flagg Hill Road  
Boxborough, MA 01719  
Attention: President

6. **Severability.** If under applicable Massachusetts law any term of this HCA is to any extent illegal, otherwise invalid, or incapable of being enforced, such term will be excluded to the extent of such illegality, invalidity or unenforceability; all other terms of this HCA will remain in full force and effect; and, to the extent permitted and possible, the illegal, invalid or unenforceable term will be deemed replaced by a term that is legal, valid and enforceable and that comes closest to expressing the intention of such illegal, invalid or unenforceable term. If application of the preceding sentence should materially and adversely affect the economic substance of the transactions contemplated by this HCA, the Parties shall negotiate in good faith amendments to this HCA so as to result in neutral economic impact to either Party.

7. **Nonpayment of taxes.** CI Payments are expressly included as “other municipal charges” pursuant to M.G.L. c. 40, § 57. A Town of Maynard licensing authority may deny, revoke or suspend any license or permit, including renewals and transfers, of Greenstar or agent thereof if Greenstar’s name appears on a list furnished to the licensing authority from the Town Collector of individuals delinquent on their taxes and/or water bills. Written notice must be given to Greenstar by the Tax Collector, as required by applicable provision of law, and Greenstar must be given the opportunity for a hearing not earlier than 14 days after said notice.

8. **Security, Reporting and Emergency Contact.**

(a) **Security.** Greenstar shall maintain security at the Greenstar Maynard Marijuana Establishment at least in accordance with the security plan which will be submitted by Greenstar to the Town’s Police Department for approval. Approval of such security plan by the Town’s Police Department is a requirement for the opening of the Greenstar Maynard Marijuana Establishment. In addition, Greenstar shall at all times comply with all local applicable laws and regulations regarding the operations of the Greenstar Maynard Marijuana Establishment. Such compliance shall include, but will not be limited to this conditions imposed by the Board of Selectmen of the Town as the local licensing authority and by the Planning Board of the Town as part of the Special Permit.

(b) **Reporting.** Greenstar will report any and all incidents to local law enforcement authorities as required pursuant to 935 CMR 500.000 and permit local law enforcement authorities access to the Greenstar Maynard Marijuana Establishment as required pursuant to 935 CMR 500.000.

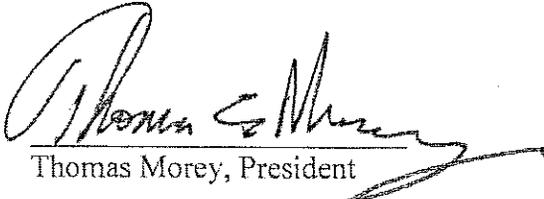
(c) **Emergency Contact.** Greenstar shall provide to local law enforcement authorities the name, phone number and address for a person responsible for operations who may be contacted after hours; said contact person shall have been registered successfully by the Commission pursuant to 935 CMR 500.030. Said contact information shall be updated as necessary pursuant to 935 CMR 500.105(1)(c).

9. **Miscellaneous.** Amendments to this HCA may be made only by written agreement of the Parties. Waivers of any provision of this HCA may only be given by the Party that is the intended beneficiary of this HCA. This HCA is binding upon the Parties and their respective successors and permitted assigns. Neither Party may assign this HCA without the written consent of the other Party, such consent not to be unreasonably withheld, delayed or conditioned. There

are no intended third party beneficiaries of this HCA and only the Parties hereto have the right to enforce this HCA. The headings in this HCA are for reference only and shall not affect the interpretation of this HCA. This HCA will be governed by, construed and enforced in accordance with the laws of the Commonwealth of Massachusetts, other than choice of law principles, and the Parties submit to the jurisdiction of any of the appropriate courts of the Commonwealth of Massachusetts for the adjudication of disputes arising out of this HCA. This HCA will be construed without regard to any presumption or rule requiring construction or interpretation against the Party drafting an instrument or causing any instrument to be drafted.

.The Parties have executed and delivered this HCA as of the Effective Date.

GREENSTAR HERBALS, INC.

By:   
Thomas Morey, President

TOWN OF MAYNARD

By:   
Chris DiSilva, Chair  
Board of Selectmen

Attest: A True Copy

  
Town Clerk

## Project Narrative



## **Overview Narrative for a Special Permit**

### Project and Site Overview:

The proposed project is a retail marijuana dispensary to be located at 22-24 Main Street, Maynard, Massachusetts. Currently on-site is a single-story, historic structure which has housed a variety of uses and has been converted to a mixed-use complex, that supports a variety of uses which are all being replaced by the development of a Co-located Adult Use and Medical Use Marijuana Operation pursuant to the provisions of 935 CMR 502 and the Town of Maynard's Zoning Bylaws.

The proposed Retail Marijuana Dispensary consists of the retail use of 3,900 sf. for retail space of the total 16,000± sf area of the existing building. The remaining building space will be unoccupied. Because this is mostly a renovation of a portion of the existing space, site changes are minor, principally accommodating universal access, pedestrian access improvements and modification of parking spaces.

Attached herewith is a line by line Site response, essentially a checklist, which identifies where in the project submittal required information can be found.

### Site Narrative:

The building located at 22-24 Main Street is a single story, wood-framed building that has seen many historic uses including as a dance hall and other uses. Currently it is being used for office space, a catering and a warehouse use. The lot is identified as Assessor's Map 15, Lot 0079.0 (portion of the site that houses the building) and Map 14, Lot 0199 (westerly portion of the site which includes the majority of the paved parking). A 20' wide right of way easement exists on the northerly side of the Map 14, parcel 0199 property. This right-of-way grants benefits to abutters to pass and re-pass including Quality Dry Cleaners (laundry) to the north and the abandoned property to the west. The right of way provides a connection to the adjacent River Street.

The site is located on the northerly side of the Assabet River. The river forms the site's southerly property line. The existing building actually projects into the flow of the river. Portions of the site are located within the 100-year flood plain which is set by elevation (151 ft). This site formerly housed and was used by a trucking company who reportedly parked trailers in the un-paved areas adjacent to the river.

The lot is fully located in the Central Business District (CB) and inside the Downtown Overlay District (DOD). The lot area is 0.90± ac (39,200± sf).

It is currently serviced by municipal water and sewer. Natural gas, electric and communications utilities also serve the lot. We anticipate that a fire service line will need to be extended into the site to support the proposed sprinkler and fire alarm system.

Currently the parking area is lit by a combination of wall-mounted fixtures (at the front door) and high pressure sodium wall pack lights, mounted on the northerly and westerly eaves of the building. These lights shine down and outward toward abutting properties. A "gooseneck" fixture is mounted to the pole at the front of the site and illuminates the rear of the adjacent laundry and accessway.

The entirety of the parking area is paved with asphalt, it does not have any painted parking lines or delineated public accessible spaces. A paved access drive extends from the front of the building to Main Street, as depicted on the existing conditions plan.

No sidewalks or pedestrian accommodations exist on the site currently. A sidewalk with vertical granite curb exists on the site's side of Main Street along the project's frontage.

Proposed:

Proposed is the renovation of the front portion (northerly) of the existing building. See architectural plans, which are part of this application. The interior of the building will undergo extensive renovations to re-purpose it as a Retail Dispensary.

Once the build-out is completed, this site will be outfitted with state-of-the-art patient access and security functions. All security measures will comply with 905 CMR 110 and 140. The building will be outfitted with surveillance cameras, silent and audible alarms, motion detectors and real-time remote monitors. The entry doors will be steel-faced, heavy duty with electronic control access systems and akeycard lock that creates a recordable record. The exterior of the building will be monitored by surveillance cameras that can pan, tilt, zoom and visualize during both day and night without supplemental lighting. If requested, the Maynard Police will have access to the surveillance footage in real time or to the recordings of site operations.

All exterior areas of the property will be under video surveillance twenty four hours a day, seven days a week, 365 days/ year. Live monitoring by remote security staff will occur during operational hours.

The interior retail dispensing areas will include the following:

1. A Secure Entry/Reception where customers will provide proof of identification and will be entered into the on-site tracking system. Medical patients will provide proof that they are current registrants with the Department of Public Health's tracking program. This area is capable of containing 54 people, by code. It is not likely that this number of people will ever occupy the entry to the facility, but it does provide a covered, weather-proof area for customers to wait for service.
2. Sales Floor: This is a large area where sales of product occur. Located off of the sales floor are two offices, one for the on-duty manager and a separate office for patient/customer consultation by trained staff. The overall sales area will provide for point of sales at designated customer location and for a waiting area which provides seating and a general non-sales area for customers.
3. Secure exit. This exit is separate from the entrance and allows for the flow of customers from entering the building and leaving a separate area.
4. Interior spaces include:
  - a. An accessible and standard toilet room
  - b. staff room with kitchette
  - c. A secure storage area that is only accessible by key code, attached to an inventory room also with limited access.

- d. A secure receiving area that allows the delivery van to enter the building, close the door and transfer product with no outside exposure.

Other Building and Site related modifications include:

1. Construction of a new sidewalk and curb from Main Street to the front of the building.
2. Installation of a six (6) bicycle rack.
3. Construction of two accessible parking spaces with a van unloading area at the front door in a location that meets slope and access requirements.
4. The delineation and creation of a total of 39 parking spaces. This will be achieved by new painted striping as depicted on the site plans.
5. Construction of an egress ramp and new stairway which will provide a delineated exit to the facility.
6. The construction of a secure, closed transportation area aligned with the existing loading dock serving this facility.
7. The removal of some pavement to create a more defined front parking area and the addition of landscaping in this area.
8. The erection of post lights for security and visibility to the front (north) of the entry and directing light to the west and south.
9. The planting of five (5) ornamental trees along the border with the easterly neighboring property to provide shade to some of the parking areas and some visual amenity. An additional tree will be added to the landscaped area adjacent to the entry of the proposed RetailMD.
10. The removal of some pavement and planting of the front planting beds. The plantings are required to comply with 500.110 (5),(f), which states, "Trees, bushes and other foliage outside of the Marijuana Establishment shall be maintained so as to prevent a person or persons from concealing themselves from sight. As such, plantings on the front beds are to be low, ground cover and perennial plants which will provide greenery, amenity and will not violate the regulatory criteria.
11. A new sign will be added to the existing sign facility sign located at the junction of Main Street and the access driveway.
12. Remediation and eradication of existing Japanese Knotweed (*Polygonum cuspidatum*) in the vegetated area adjacent to the river. Replacing the invasive species will be a raingarden to assist in the pre-treatment of the runoff leaving the existing parking lot and leaving open this area which provides view-shed access to the riverfront.

**Operations:**

Hours: The facility will be operated 7 days a week within the time-span allowed by the Planning Board in their grant of Special Permit. Current plans anticipate hours of operation from 8 am to 11 pm, Monday to Sunday.

Staff: The facility will hire eight (8) to twelve (12) staff, both full and part-time. Greenstar Herbals, Inc., has committed that many of these new hires will be from the general Maynard area. All staff at the facility will be trained in a variety of ways to support the operation and ensure knowledge of the

products, their specific attributes and characteristics. Staff will be trained to recognize customers who appear to be impaired or under the influence of intoxicants. Such people will be denied service, referred to the on-site security staff and will be required to leave the premises.

**Security:**

Greenstar Herbals, Inc. has submitted to the Maynard Police Department a security narrative as developed by their own security consultant, a retired police chief. The facility will have private security staff on-site at all times during the initial phases of operations to set a precedent for compliant operation to all customers and ensure compliance with company policies, Special Permit Criteria and State Laws. All transactions interior to the facility will be video- taped and saved for the period defined in the security plan provided to the Maynard Police Department. The building will be fully alarmed and monitored 24hrs a day / 365 days a year by a private security service.

**Product:** The products that will be sold will all be as allowed under state law. They will likely include products that have been manufactured and contain marijuana or an extract from marijuana, including concentrated forms of marijuana and products composed of marijuana and other ingredients that are intended for use or consumption, including edible products, beverages, topical products, ointments, oils and tinctures. No products will be grown or manufactured at this site. All will be sold in sealable containers and in quantities or measurements as allowed by state law.

**Transportation:** The products and any waste product containing any marijuana product will be transported in un-marked vehicles that will have two transport specialists on board. One specialist will remain with the vehicle if it contains any marijuana- containing product or waste product. All products and waste are transported in locked, security-specific, sealed containers with manifests to accompany them, so nothing is un-accounted for. Products containing any marijuana or concentrate are not disposed of on-site, but are transported back to Greenstar’s grow/distribution facility, where it is disposed of in a manner where it is rendered un-useable and in a manner allowed by State Law.

We currently anticipate that four deliveries will occur each week. The vans will deliver on a varying schedule timed to avoid peak traffic hours and operational hours. Deliveries will arrive to the site and immediately enter the enclosed loading/unloading area which is at the site of the previous loading dock. Deliveries will be made using sealed boxes similar to those used by pharmacies (plastic bins with sealed security tabs). Interior to the delivery boxes will be standard product boxes and plastic sealed containers. These boxes will also be used to return marijuana containing products to the grow/production facility, where they will be rendered un-useable and disposed of as required by law and regulation.

**Other Site Features:**

**On-site Dumpster:** The only waste to be disposed of inside the dumpster are recyclables (paper, packaging, etc.) and standard waste from retail operations (lunch containers, etc). As noted above, no marijuana containing products will be disposed of in the dumpster or local trash receptacles.

**Overhead Wires:** No changes to the existing wired utilities are proposed as part of the building’s renovation. A new fire suppression water line for the sprinkler and fire alarm system will be installed for the benefit of the proposed facility.

**Sight Lighting:** Site lighting will be replaced along the periphery of the building. Full cut-off down lighting in the form of wall packs will be building-mounted above or adjacent to all entry and egress routes. New site lighting will be provided on the westerly side of the parking lot in the form of 15' tall, full cut-off parking lot lights, which will direct the lighting toward the building and not toward adjacent properties. Similar post mounted lights will be provided along the side walk to ensure a well-lit walkway exists from the Main Street access. See Landscape and Site Lighting plans.

### **Permitting /Zoning Compliance:**

**Zoning law:** The proposed use is a Retail Marijuana Dispensary as allowed by Special Permit, Planning Board pursuant to Section (§) 3 Use Regulations, 3.1.2, Table A, 4. Business Uses Item 18, where a "Marijuana Retailer" is allowed in the CB district as "PB". PB is described as "Use available by Special Permit from the Planning Board."

Zoning § 7.9 Marijuana Retailers, describes some of the site-specific requirements for this particular use. Zoning § 10.4 Special Permits describe the requirements that apply for the approval for a Special Permit.

### **Maynard Bylaws:**

1. Chapter 27, Alarm Systems: regulates the use and connectivity of alarm systems to the Police or Fire Dept.
2. Chapter 28, Fire Alarm Systems: regulates the use and connectivity of fire alarm systems to the Police or Fire Dept. and provides for annual fees for fire alarm systems connected to the Maynard Communications Center.
3. Chapter 32 Wetland Protection: regulates wetlands, related water resources and adjoining land areas in a manner separate from the criteria of the Massachusetts Wetlands Protection Act (310 CMR 10.00)..
4. Chapter 33 Stormwater Management Bylaw: This regulation applies to on-site storm water flows and storm water systems. This site qualifies for "redevelopment" under the referenced standard as only a reduction in runoff and impervious area will result from the exterior changes proposed. A permit under this local bylaw is required and will be submitted as part of the overall filings with the Conservation Commission, the permitting agency.
5. Chapter 39 requires that a "Marijuana Establishment" shall obtain a license for the sale of marijuana products from the Board of Selectmen, Sections 1 to 7. This will be a separate filing made directly to the Board of Selectmen.
6. Chapter 40 Fire Prevention/Safety: This requires that all fire protection systems obtain local approval prior to the installation of Fire Alarm Systems, Sprinkler System, Boilers, Burners, Propane Tanks and similar construction or additions. This project will require local permits under this bylaw for the renovation and re-use of the building.

**State Permitting:** The sale of marijuana is regulated state-wide by the Cannabis Control Commission under the provisions of 935 CMR 500 - Adult Use of Marijuana and 935 CMR 502 – Co-located Adult-Use and Medical-Use Marijuana Operations. Integral to any operation of a retail marijuana facility is obtaining all local and state permits, which is proposed as part of this application. The applicant will obtain all state required permits and will coordinate for all required inspections.

**Traffic:**

Greenstar Herbals, Inc., has contracted with Greene International of Westford, Massachusetts who are traffic engineers. They have conducted traffic counts, accident studies, sight distance studies and prepared a traffic report after consulting with the Town’s consulting Traffic Engineer. Attached as part of this application document is the first 25 pages from the traffic study and the parking study (page 169), as Attachment 1. The overall document is some 258 pages and most of the pages beyond the first 25 are traffic count compilations, traffic plots, etc. which are valuable for review professionals but generally not useful to lay persons. An electronic copy of the entire report will be provided to the Town and its consultants for reference.

**Parking:**

**Parking per Traffic Analysis:**

As part of the overall assessment for the traffic impacts, Greene International Affiliates, Inc. developed a Parking Space Demand Analysis. During the weekday peak demand period (2:00 pm), it is anticipated that approximately 10 clients per hour will arrive at the site via private vehicle. According to client provided information, the average service time within the facility is expected to be about 10 minutes and could vary up to 20 minutes for newer clients. Therefore, assuming the longer service time, client parking demand is projected to be about 10 spaces per hour for arrival and departing patterns. Customers are not allowed to loiter in the area of the dispensary by law. Dedicated security staff and/or retained police details will be utilized to maintain compliance with this law.

It can be reasonably anticipated that clients will leave the site shortly after making purchases, freeing up parking spaces on a regular basis. Utilizing the above numbers we can expect 8-12<sup>1</sup> employees and 20 parking spaces being occupied per hour (using the overly conservative assumption that 10 are arriving and 10 are departing simultaneously during the peak hour.). The resulting full occupancy of parking is therefore estimated to require (at peak times) 20 customers and 12 employees = 32 required spaces. A total of 39 spaces are proposed.

**Parking per Zoning:**

Section 6.1 of the Maynard Zoning Bylaws requires that adequate parking must be supplied for changes in use. No category for the use for Retail Marijuana is contained in the Zoning Bylaws. § 6.1.1.3 requires, “ *In the case where the use of a building ... has not been determined at the time of application for permit or special permit, the parking requirements applicable to the most intensive use allowed in the zoning district where such undetermined use is to be located shall apply.*”

§ 6.1.5, Table C Parking Space Requirements states,

| <u>Use</u>   | <u>Number of Spaces</u> |
|--------------|-------------------------|
| Business use | 1 space/ 225 sq. ft.    |

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<sup>1</sup> A shift for employees will be ½ of total number of employees (4-6 at one time). Employees will be encouraged to take public transit, bike to work, or carpool if possible. A bicycle rack is being provided at the entrance to the facility to encourage bike to work and bicycle visits by customers.

The application is being made for the square footage of the proposed Business, 3,900 sf. The remaining square footage of the facility being some 12,200± sf will remain un-occupied and will not generate traffic or parking demand.

$(3,900 \text{ sf} / 1 \text{ space per } 225 \text{ sf}) = 17.3$  (rounded up to 18 new spaces).

The proposed re-configured parking area provides 38 spaces (including 2 accessible spaces). This exceeds the parking required under the above-listed zoning requirements.

The proposed plan re-configures the parking in a manner that meets many of the criteria of §6.1.10 Design Requirements for Parking Facilities for parking locations, dimensions and access ways. The proposed parking is created by re-striping the lot. Pavement that extends beyond the property line limits to the west will remain, as will the excess pavement at the heads of these spaces as a location for snow storage.

As noted, the proposal assumes a re-use of the parking areas as they exist today. Due, in part, to the configuration of the existing parking and lot, we are not able to meet some of the requirements of §6.1.10 as noted below. We respectfully request waivers to the following:

1. Section 6.1.10, 1) Requires parking in the Central Business District to locate parking behind buildings to preserve storefront character of the district.

*Due to the configuration of the lot and the fact that the building is 165' back from Main Street, we do not believe that parking in front of the building will impact the streetscape or character of the Central Business District. Further, we are connecting to the sidewalk on Main Street with an on-site sidewalk to enhance the pedestrian connectivity to our building. We cannot reasonably comply with this regulation.*

2. Section 6.1.10, 3) Does not allow parking or paved surfaces within 20' of the front lot line or within 10' of any other lot line and shall not be located within the limits of the landscape buffer.

*We are utilizing the existing paved areas of the site, portions of which are within the three restricted areas noted above (20' front offset, 10' to side lot lines and within proscribed landscape buffers).*

3. Section 6.1.10, 5) This regulation restricts the grade of a parking area to 0.75% to a maximum of 5%.

*The cross slope of the existing parking area on the south-easterly portion of the lot is ~ 10%, exceeding the criteria. No site grading is proposed, except in landscaped and open areas.*

4. Section 6.1.10, 9) This regulation requires raised landscape islands at the ends of parking rows.

*The existing site does not provide for the development of these islands, along the right-of-way an existing guard rail defines the northerly parking row.*

5. Section 6.1.13: Loading Areas:

*We depict a loading area, but it is not 50' long as the delivery vehicles to this site/building will typically be vans or standard UPS/FedEx delivery sized vehicles. We do not anticipate semi-trucks, except during construction.*

6. Section 6.1.13: Landscaping:

- a. The entire front setback shall be landscaped (there is no required front setback in this district [0']) and this section also requires a landscape strip of 5' from others.  
*The easterly property line is landscaped (in part by the existing residential building), we are honoring the stone wall as the edge of a new sidewalk, making this criteria hard to meet. On the westerly side of the access strip and the westerly side of the lower lot are currently paved up to and over the property line. We are proposing to keep the paving in place and utilize the portions on our property as snow storage.*
- b. Interior landscaping shall be a minimum of 10' width.  
*We are providing a planted island along the front of the site, however, the existing planting strip at the building is 6' wide and does not comply. This area will be planted as depicted on the landscape plan. We request the Board accept the plantings as depicted on the Landscape Plan as being sufficient. The periphery of the site on the western side (both on the access lane and along the "lower" parking) has existing trees that overhang the lot. Adding trees will obstruct the abutters to the west of the access strip. There is not room to plant trees along the western edge of the lower parking lot. Even if we did plant trees, they would be under the canopy of the existing trees.*
- c. A minimum of two (2) trees shall be provided within the landscape areas for each ten spaces.  
*The periphery of the lower lot has existing trees along the entire westerly side. There is no landscape area to the north of the lower lot to plant trees.*  
  
*Some trees exist on the access strip, however planting of trees in this area would affect the neighbors' use of their land (westerly side of access strip).*
- d. Does not allow parking or paved surfaces within 20' of the front lot line or within 10' of any other lot line and shall not be located within the limits of the landscape buffer.  
*The existing conditions already violate this criteria. We are not proposing to remove existing paved areas, except for the addition of landscaping at the front of the building. In some cases the pavement extends over the property line (to the west). In other cases, the pavement serves abutting uses (laundry and restaurant/upstairs apartments to the north).*

**Landscaping:**

Attention is directed to the requirements of Massachusetts Regulation, 500.110, (f), which states, “(f) *Trees, bushes and other foliage outside of the Marijuana Establishment shall be maintained so as to prevent a person or persons from concealing themselves from sight.*”

Pursuant to these requirements, the landscaping proposed at the entrance island will be low growing, ground cover evergreens. Trees to be planted will be typical of street trees and will have all lower branches trimmed to ensure compliance with the above regulation.

A bicycle rack is proposed at the entrance to the facility to encourage the use of non-vehicular access to the site by employees and patrons.

Lighting: multiple, new pole-mounted, parking lot fixture lights will be installed on the periphery of the parking areas, shining inward toward the building. These lights will have full cut-off LED fixtures to provide area lighting (mounted at 15’ height) to the side parking area of the facility. One of these lights will be directed to the new nine parking spaces located to the south of the building’s entrance. Wall - pack area lights will light up the entrance doorway and westerly side of the building and the egress ramp.

Light fixture cut information is provided as part of this submittal. A photometric plan will be provided prior to the date of the public meeting.



**Invasive Species Identification, Remediation, Reporting and Project Close-out  
criteria for the  
Greenstar Herbals, Inc. Site, 22-24 Main Street,  
Maynard, Massachusetts**

**1.0 Overview:**

This plan is part of a set of documents that describes the phased: assessment, identification, mitigation and removal, maintenance, monitoring and close out activities for the removal of invasive plant species on the locus property. This property is located off of Main Street, Maynard, MA and is proposed for the re-development of the site to support a retail facility for the Greenstar Herbals, Inc..

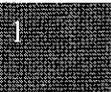
Portions of the site, principally to the south-west of the site border the Assabet River which regulatory is a vegetated wetlands, containing a mix of disturbed areas and wooded areas, with the southern-most border of the site being the actual river. Prior to any action described herein, the wetlands areas must be delineated and the delineation accepted by the Maynard Conservation Commission under the provisions of the Massachusetts Wetlands Protection Act and Town of Maynard's Wetlands Bylaw. Portions of the upland areas have been previously disturbed which has allowed an invasive plant species to populate the area. As part of the overall site development plan, the Greenstar Herbals, Inc., has agreed to mitigate and remove from the uplands these invasive plant species and to monitor and maintain these areas as required.

Invasive plant species are described in a publication produced by the Massachusetts Department of Agricultural Resources (MDAR) at the following website:

<http://www.mass.gov/agr/farmproducts/prohibitedplantlist.htm>

The identified invasive plant species is Japanese Knotweed (*Polygonum cuspidatum*)

This proposal seeks to eliminate all of this species from the uplands area of the site.



## 2.0 Area of Identification, Monitoring and Removals

- 2.1.1 Area: The area of infestation of the invasive species to be removed is depicted on Sheet C-2 Demolition and Invasive Remediation Plan. This area, depicted by the cross-hatch pattern is intended to depict the overall area which requires remediation ( $\pm 2,400$  s.f.). Actual identification and remediation areas will be based on field observations and related plant identification and may include some marginal areas outside of the area depicted. Some remediation of invasive species may be required within the limits of the wetlands. Such activities shall be timed to minimize the impact on the wetlands and shall not be conducted when flowing water passes through the wetlands areas.
- 2.1.2 Identification: The invasive plants to be removed shall be field identified by a qualified botanist or persons familiar with plant identification and in particular invasive species. Plants and plant groups to be removed shall be marked using paint, tape or other method to clearly identify the subject plant or area. The markings shall be of a uniform type: color coded by species or methodology or removal type. The identification and delineation of the plants shall be reviewed by the Owner's representative (and if required by any permit or Orders of Conditions – an agent of the Maynard Conservation Commission) for accuracy and completeness prior to any remediation activities being undertaken.
- 2.1.3 Removal: Removal activities are listed below, based on the specific plant to be removed. Contractors shall plan on a three-phased removal process; where each phase has distinct activities required that do not overlap in terms of action or timeframe.
- 2.1.3.1 Removal in areas of construction:
- In the areas proposed to be disturbed by the construction of the new infrastructure areas (drainage systems, rain gardens, etc.), the removal shall include the selective removal of the invasive species prior to initiating earth-disturbing activities or earthwork to minimize the presence of invasive species in topsoil or relocated top soils. This invasive species spread via root suckers or rhizomes and the breaking-up or division of such plant structures can lead to an increase in the number of plants. It is for this reason that pre-disturbance removals are required.
- The on-plan specifications note that the removal of Japanese Knotweed (*Polygonum cuspidatum*) shall be removed by the digging up and disposal of the groups of plant and its soils for this plant. The area on the site where this plant group occurs is in an open meadow which will be replaced by a rain-garden.. The rhizome-containing earth shall be disposed of and shall not be re-used on the property. It shall be contained and sent to

a landfill or incinerator. If the Contractor proposes to use this soil elsewhere, it shall be completely sterilized prior to its re-use. The volume of earth to be removed shall be estimated to be the horizontal area defined on-site and to a minimum depth of two (2'-0") feet. If additional volumes or depths of removal are required, additional costs will be incurred at the unit prices noted in the project construction specifications. No additional costs will be permitted without the Owner's pre-approval of the area and depth to be removed.

### **3.0 Removal Techniques and Timing by Species:**

#### **3.1 Removal Techniques Overview:**

3.1.1 Mechanical: Mechanical methods include digging, grubbing, cutting and other methodologies that require either power tools, man power or a combination of both to physically remove or alter the plant species.

3.1.2. Herbicides: These are chemical based control alternatives, which in some cases are the most effective methods for some plant species. Sometimes a combination of mechanical and herbicidal controls works best. Naturally the use of herbicides and the potential for undesirable results makes the use of herbicides potentially problematic.

3.1.3. Flame: There are two basic applications for flame: Area burning and spot treatment burning. In some cases the burning of areas to reduce or eliminate invasive species is appropriate. The spot burning treatment is usually applied by a landscape torch to burn off the cuticle of the plant, exposing it to dehydration and other deleterious environmental actions. Timing and environmental conditions (e.g. burning during a red-flag fire situation, drought or dry, windy conditions) is not advised.

3.1.4. Girdling and strapping: Girdling consists of removing the bark and pithium (under bark) layers along the outside of the plant stem, around its entire perimeter. These layers are responsible for the transfer of water and nutrients to the branches and leaves and food supplies from those areas to the roots in the fall. Girdling is used for tree and large shrub removal.

3.1.5. Barrier: The use of barriers is effective at certain time periods and, depending on the species, for extended time periods. There are three principal barrier uses:

- a. **Solar Sterilization:** The use of a clear, plastic barrier allows the heat of the sun to accumulate under the barrier and effectively “cooks” the soil. This system works best when soils are sandwiched between a lower plastic barrier and a clear plastic upper barrier. The soils must have some moisture in them, or some seeds and target plant parts will remain or go dormant, not resulting in the kill of the organism. The timeline needed to achieve sterilization of the soils is dependent on the plant species, the depth of the soils and its exposure to sunlight.
- b. **Black Plastic or Opaque Barrier:** This barrier technique attempts to starve the root by removing the green vegetation, requiring the plant to use its reserves to survive. The use of a barrier is dependent on multiple factors: Does it cover all areas of the root for the invasive plant? Is it firmly anchored to prevent wind or other removal of the barrier? Is the barrier strong enough to resist plant growth and puncture? Can the barrier remain in place for more than one year to assure the deprivation of food for the roots? Is the barrier opaque enough to block all of the sun’s rays?

Commercially available “weed fabrics” provide many of the characteristics of a opaque barrier; with the benefit of allowing water to pass through them and allowing desirable plants to be maintained. These fabrics typically require mulch or other materials to supplement the sun-blocking characteristics and to assist in holding them down.

In most cases, the use of barriers requires at least one full year, in place. Like other control technologies, maintenance and monitoring are still needed to ensure that the barrier is working as desired.

- c. **Root Barriers:** Root barriers are typically a pre-manufactured, impregnated material with growth inhibitors that prevent roots from spreading beyond the barrier. These types of barriers are commercially available and are used extensively by landscapers to prevent root growth under sidewalks or other areas. They can be used to confine un-desirable species growth where the principal means of expansion is not by seed, but by root, sucker or rhizome expansion below grade. Root barriers must be installed vertically to a sufficient depth and height to prevent the control species from migrating under or over them. They have a limited life span of 3-5 years of effective prevention.

### **3.2 Timing: See recommendations below for each species.**

The proposed timing for remediation for the construction of the Greenstar Herbals, Inc. is to initiate as an initial single, pre-construction activity. The monitoring and maintenance of the remediation will be on-going throughout the construction of the building and site and will extend

at least one year from its initiation. It is encouraged that emphasis on the maintenance and monitoring address the specific control recommendations listed below for each species.

### 3.3 Invasive Species: Japanese Knotweed

#### Japanese Knotweed, Mexican Bamboo (*Polygonumcuspidatum*)

Japanese knotweed is an herbaceous perennial which forms dense clumps 1-3 meters (3-10 feet) high. Its broad leaves are somewhat triangular and pointed at the tip. Clusters of tiny greenish-white flowers are borne in leaf axils during August and September. The fruit is a small, brown triangular achene. Knotweed reproduces via seed and by vegetative growth through stout, aggressive rhizomes. It spreads rapidly to form dense thickets that can alter natural ecosystems or interfere with landscaping. Japanese knotweed can tolerate a variety of adverse conditions including full shade, high temperatures, high salinity, and drought. It is found near water sources, in low-lying areas, waste places, and utility rights of way. It poses a significant threat to riparian areas, where it can survive severe floods.

#### Management Options

The below listed management options are for generalized management. **On the GREENSTAR HERBALS, INC. site, Japanese Knotweed shall be managed by the removal of all soils containing the plant roots and rhizomes, as the stands of this plant are fully located within the area of site disturbance for the construction of the rain garden.**

#### A. Grubbing:

This method is appropriate for very small populations or in environmentally sensitive areas where herbicides cannot be used. Using a digging tool, remove the entire plant including all roots and runners. Care must be taken not to spread rhizome fragments. Juvenile plants can be hand-pulled depending on soil conditions and root development. Any portions of the root system not removed will potentially re-sprout. All plant parts, including mature fruit, should be bagged and disposed of in the trash to prevent reestablishment.

#### B. Cutting:

Repeated cutting may be effective in eliminating Japanese knotweed, but this strategy must be carried out for several years to obtain success. Cut the knotweed close to the ground at least 3 times a year. Cutting stems over time results in a significant reduction of rhizomatous reserves. Manual control is labor intensive, but where populations are small and isolated or in environmentally sensitive areas, it may be a good option.

Both mechanical and herbicidal control methods require continued treatment to prevent reestablishment of knotweed. Reintroducing native plants as competitors may be an alternative to

continued treatment. However, more research needs to be done on which native species might be effective competitors and how they should be reintroduced.

### C. Herbicides: (not to be used on the Greenstar site for information only)

Triclopyr will kill the top growth within a few days, but Japanese knotweed may re-sprout following treatment. Residual effects on emergence and growth the following year are variable.

Glyphosate applied in spring or early summer may stunt or yellow growth, but knotweed will generally recover and continue growing. Glyphosate treatments in late summer or early fall are much more effective in preventing regrowth of Japanese knotweed the following year.

Strategy:

1. Late June – Cut or mow down stalks.
2. Allow knotweed to regrow.
3. After August 1, spray knotweed with ROUNDUP [glyphosate (41%)] @ 2.5 fl. oz./gal.

Established stands of Japanese knotweed are difficult to eradicate even with repeated glyphosate treatments. Adequate control is usually not possible unless the entire stand of knotweed is treated (otherwise, it will re-invade via creeping rootstocks from untreated areas). However, glyphosate treatments will greatly weaken the plant and prevent it from dominating a site.

## 4.0 Proper Disposal

### PROPER DISPOSAL

Invasive plant disposal poses a tricky problem. If not properly done, some invasive plants will continue to grow and set seed despite being pulled out of the ground. It is important to know how tenacious your plant is in order to figure out how to make sure you do not spread the infestation through your disposal method. There are a few rules of thumb that will ensure this won't happen.



- Be sure the plant is dead before placing in a mulch or compost pile. Either dry it out in the sun (on a tarp or some impervious surface) so that there is no green whatsoever left on the plant, or bag it in a heavy duty black plastic bag (and be sure to seal it up) for a while until the plants inside have turned to mush. Clip the roots from the stem before drying it out to further limit the plants resources for survival.

- Pull the plant before it has flowered or gone to seed. On some plants, flowers can mature and set seed even after the plant has been pulled.
- If you have flowers and/or seeds on the plant, bring your disposal bag to the weeding site and put the flowers and seed heads into the bag head first so that there is minimal risk in dispersing seed as you transport the weed to its final resting spot.
- Burning is a good method for disposal, especially with the woody stemmed invasives, but should only be done with a burn permit from the fire department within the burning season.
- Pile all of the invasive plants in one pile and cover with a tarp fastening it to the ground using rocks, wood or steaks. Monitor the perimeter of the tarp for any escapees. This can be added to over time like a mulch pile or burned during the burning season

## **5.0 Monitoring, Timelines & Reporting Program**

**The above described species specific control techniques are provided as a resource for control methodologies and potential alternative control systems. The principal control program presented as part of this application is the physical removal of all apparent species by digging. This invasive weed shall be removed by digging, with backhoe or other equipment and removal of the entire plant grouping and its associated soils.**

As noted on the plans, and herein, prior to removal of any invasive species a botanist or person familiar with the species listed ( as approved by the Owner and/or the Conservation Commission, subject to the provisions of 2.1.2, above) shall field flag those plants or plant groupings to be removed in the areas noted on the plans. The plants and areas so flagged shall be reviewed and approved by the Owner and, if so required, by the Conservation Commission for completeness. The Contractor shall notify the Owner and/or the Conservation Commission a minimum of two weeks in advance of the date anticipated for a field inspection. Accompanying this notification shall be a written summary of the control techniques to be used – if they are to vary from those specified on the plans and herein. Such notification shall also provide an anticipated timeline for the remediation effort, including bi-weekly (2 week intervals) and monthly follow-up inspections and remediation efforts.

Starting with the initial remediation and removal effort, the contractor shall develop a written report summarizing the results of the remediation effort and actions taken. Identification of the disposal site or methodology for the removed vegetation and/or soils shall be provided as part of all reports, as applicable. The report shall be authored by the approved botanist or “reporter” (per section 2.1.2. above) who shall be the author of all reports until the end of the project. Should the Contractor elect to modify the “reporter” they shall obtain the approval of the Owner

prior to making such a change. Each report shall be accompanied by digital photographs. All reports shall be submitted to the Owner, in writing, on a monthly basis at a minimum. Reports shall accompany or precede any requests for payment for invasive plant remediation line items. If required, the Owner shall forward reports to the Conservation Commission. Reports are not required during the winter season, Dec 15 – March 1.

The monitoring and remediation activities shall continue from the initiation date to one the completion of one full growing season (spring to fall in the same year) or until substantial completion is issued for the site construction, whichever is longer.

#### **6.0 Substantial Completion:**

Substantial completion shall be achieved, when at the end of the second growing season, no upland invasive species (as noted during the initial site inspection required per 2.1.1 & 2.1.2, above) exist on the subject site. As noted above, the botanist or “reporter” shall submit to the Owner a report identifying that no invasive species exist on the site and it shall be dated and contain photographs of the site as supporting documentation.

#### **7.0 Responsible Individuals and entities:**

The responsible party shall be the Greenstar Herbals, Inc. General Manager, who shall be the point of contact between the Contractor and local permitting authorities.

#### **8.0 Project Close-out.**

The project close-out shall consist of a summary report identifying the actions taken throughout the project and identifying the time lines, and the substantial completion documentation, per Section 6.0. A summary of the success of the remediation activity shall be provided which shall include a listing and identification of any invasive species remaining in the area of alteration and mitigation. The report shall provide recommendations as to continued maintenance and mitigation measures. The report shall be submitted as part of any application for substantial completion. Substantial site completion shall not be issued without receipt and approval of the final report by the Owner.

## WHY ARE WE CONCERNED?

There are a myriad of reasons for taking the time to summarize what scientific studies and various conservation organizations have discovered and written about quite well already.

Plant Conservation Alliance: <http://www.nps.gov/plants/alien/bkgd.htm#problem>  
Cornell University: [http://www.news.cornell.edu/releases/Jan99/species\\_costs.html](http://www.news.cornell.edu/releases/Jan99/species_costs.html)  
Pennsylvania State Department of Conservation and Recreation:  
<http://www.dcnr.state.pa.us/forestry/invasivetutorial/problem.htm>  
Maryland Native Plant Society <http://mdflora.org/publications/invasives.htm>  
New England Wildflower Society <http://www.newfs.org/protect/invasive-plants>

## INVASIVE PLANT IDENTIFICATION

USDA plants database: <http://plants.usda.gov/>  
Plant Conservation Alliance: <http://www.nps.gov/plants/alien/factmain.htm>  
IPANE catalog of Species: <http://nbii-nin.ciesin.columbia.edu/ipane/index.htm>  
Wisconsin Department of Natural Resources: <http://dnr.wi.gov/invasives/plants.asp>

## CONTROL METHODS FOR INVASIVE

Invasive Plant Atlas of New England (IPANE) Management links page:  
[http://nbii-nin.ciesin.columbia.edu/ipane/management/management\\_links.htm](http://nbii-nin.ciesin.columbia.edu/ipane/management/management_links.htm)  
The Nature Conservancy: <http://tncweeds.ucdavis.edu/control.html>  
Plant Conservation Alliance: <http://www.nps.gov/plants/alien/factmain.htm>

## STATE PROHIBITED PLANT LIST

[http://www.mass.gov/agr/farmproducts/proposed\\_prohibited\\_plant\\_list\\_v12-12-05.htm](http://www.mass.gov/agr/farmproducts/proposed_prohibited_plant_list_v12-12-05.htm)

**Nature Conservancy –Weed Control Methods Handbook: Tools & Techniques for Use in Natural Areas, April 2001.**

<http://www.wilderness.net/toolboxes/documents/invasive/Weed%20Control%20Methods%20Handbook.pdf>

**Mid-Atlantic Invasive Plant Council (MAIPC)**

[http://www.dcnr.state.pa.us/forestry/invasivetutorial/bush\\_honeysuckles\\_M\\_C.htm](http://www.dcnr.state.pa.us/forestry/invasivetutorial/bush_honeysuckles_M_C.htm)

Invasive Plant Atlas of New England: University of Connecticut

<http://nbii-nin.ciesin.columbia.edu/ipane/icat/catalogOfSpecies.do;jsessionid=N8yGPYvXJ1kxyys5zFCJn7WKGMCv9wNbW9tlyv6nMcdh98wNLJ2R!480336224>



# Landscape Maintenance Plan

*Greenstar Herbals*  
24 Main Street, Maynard, MA

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## **A. LANDSCAPE MANAGEMENT APPROACH**

In addition to meeting the requirements of a Site Plan Review and Special Permit criteria, the landscape plan for this retail marijuana project is designed to:

- Provide an enjoyable outdoor environment for patrons and an aesthetic amenity for passers-by. At-grade plantings and a rain garden adjacent to the Assabet River compliment the building and private outdoor areas.
- Ensure public safety for commercial tenants, and customers. Sight lines are maintained on all sides of the site, with low shrubs, groundcovers and open, limbed-up trees.
- Protect the health of residents, workers, and customers, as well as the environment, by minimizing use of pesticides (herbicides, insecticides, fungicides, and rodenticides). Plant selection emphasizes native plants and hardy ornamental cultivars to prevent pests and the use of harmful chemicals, especially where they may contact people or wash off in surface water. Pest, weed, and disease problems that arise are managed through “Integrated Pest Management” (IPM) methods described below.

## **B. LANDSCAPE MANAGEMENT SCHEDULE**

*See Sections C through F for definitions and specific practices required by this landscape management plan.*

### **January:**

- Maintain all parking areas to be free from snow and ice. Avoid using salt in areas proximal to or tributary to planted areas or the Assabet River.
- Do not plow snow into the rain garden.
- Prune any tree branches that break, remove dead branches or yard debris on a regular schedule.

### **February:**

- Maintain all parking areas to be free from snow and ice. Avoid using salt in areas proximal to or tributary to planted areas or the Assabet River.
- Do not plow snow into the rain garden.
- Prune any tree branches that break, remove dead branches or yard debris on a regular schedule.
- If specified in contract, apply granular fertilizer around trees or shrubs in late February. Make application prior to a moderate rainfall so the rain will wash the fertilizer in. Do not fertilize swale plantings. (See “Fertilization” section for recommended products.)



- Mulch mow all turf areas once per month.
- Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

**March:**

- Prune all trees that interfere with public safety or sight lines. Prune all street trees yearly to encourage strong upward growth. Do not top trees.
- Initiate spring cleaning as allowed by weather conditions. Do not disturb turf or planted areas if frozen or saturated.
- Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view

**April:**

- Mulch mow all turf areas weekly or as needed. Do not allow grass to grow such that more than ½ of blade length is cut. Optimum grass blade length is 1-1/2 to 2 inches..
- Fertilize all landscape areas except for raingarden, note criteria of Order of Conditions with regard to fertilization. The fertilization of shrubs/groundcover areas may be eliminated when the plants reach maturity or completely fill the planters, without space between them. Written authorization from the owner's representative is required before the fertilization may be eliminated from the required work.
- Initiate weed control program. Initiate invasive species monitoring and removal.

**May:**

- Mulch mow all turf areas weekly.
- Prune spring & winter-flowering shrubs as needed to maintain proper shape (natural, touching, not hedged or topiary except where specified by owner).

**June:**

- Mulch mow all turf areas weekly.
- Prune perennial bulbs back to ground level as soon as leaf blades yellow and wilt (June-Oct. depending on bulb type).
- Prune spring & winter-flowering shrubs as needed to maintain proper shape (natural, touching, not hedged or topiary except where specified by owner).



### **July:**

- Mulch mow all turf areas weekly.
- Provide supplemental watering for newly planted plant material and turf areas as needed. Note that once plants have wintered over two season, supplemental watering is not needed except in times of drought.

### **August:**

- Mulch mow all turf areas weekly.
- Provide supplemental watering for newly planted plant material and turf areas as needed. Note that once plants have wintered over two season, supplemental watering is not needed except in times of drought.

### **September:**

- Mulch mow all turf areas weekly.
- Provide supplemental watering for newly planted plant material and turf areas as needed. Note that once plants have wintered over two season, supplemental watering is not needed except in times of drought.
- Inventory all plant materials. Inventory shall include a count of all shrubs and trees, itemized by planter. Replace any dead or missing plants subject to the terms of these specifications.
- Prune perennial bulbs back to ground level as soon as leaf blades yellow and wilt (from June through October, depending on bulb type). Maintain 2 inches of mulch on ground surface over bulbs to insulate from cold and prevent winter weed growth.
- In the last half of the month, fertilize all landscape areas except for raingarden, note criteria of Order of Conditions with regard to fertilization. The fertilization of shrubs/groundcover areas may be eliminated when the plants reach maturity or completely fill the planters, without space between them. Written authorization from the owner's representative is required before the fertilization may be eliminated from the required work.

### **October:**

- Mulch mow all turf areas twice per month.
- Maintain and water-in all new and replacement plants, planted in previous month until end of the month or second hard freeze.
- Prune perennial bulbs back to ground level as soon as leaf blades yellow and wilt (from June through October, depending on bulb type). Maintain 2 inches of mulch on ground surface over bulbs to insulate from cold and prevent winter weed growth. Have backflow preventer (on irrigation water supply) tested annually by approved plumbing technician.



- Prune summer and fall-blooming shrubs as needed to maintain proper shape.
- Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly as needed to remove dead and crossing branches and to encourage spreading and upward growth that fits the available space. Do not top trees.

**November:**

- Mulch mow all turf areas once per month.
- Once the ground has frozen, add new mulch to planters and swale where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch additions are not required where shrubs or groundcover completely hide the soil surface from view. Ensure that mulch does not touch the base of the plant.

**December:**

- Clean up site and prepare for winter.
- Maintain all parking areas to be free from snow and ice. Avoid using salt in areas proximal to or tributary to planted areas or the Assabet River.
- Do not plow snow into the rain garden.

**C. LANDSCAPE MANAGEMENT AREAS**

**C.1. Grounds maintenance - all outdoor areas**

**Clean-up:**

- Remove biodegradable landscape debris to a yard waste recycling facility, including turf clippings (limited to only those times when mulch mowing is not possible), leaves, branches, annuals, dead plant material, potting soil, etc.. Acceptable facilities include composting facilities, topsoil producing facilities or other facilities which utilize yard waste for landscape purposes. No biodegradable material should be disposed of in garbage to land fill sites.
- All trash and sticks are to be picked up from lawn strips and bed areas prior to mowing.
- A weekly general clean-up program will be performed. The clean-up program shall include a policing of all maintained areas for the removal of trash (paper, cans, bottles etc.) and landscape waste such as fallen sticks and limbs.
- All trash and landscape debris shall be removed and disposed of off site.
- Mulch is to be maintained clear of building foundations and paved areas, and off utility covers.



- Debris shall not be carried into entryways or doorways.
- Debris deposited by typical weather occurrences will be cleaned up.
- Sweep patios and sidewalks at least weekly.

### **Fall leaf removal - September through December**

- On a weekly basis remove leaves from lawn areas to prevent heavy build-up and damage to turf by smothering. A single layer of leaves may be mulch-mowed into the turf. Thicker accumulations should be removed.
- Leaves may be raked or shredded by mower and blown into shrub beds for mulch as directed by Owner, or accumulated leaves will be raked and/or blown from lawn, plants, high maintenance bed areas and collected and removed from property and disposed of off-site.
- Sweep leaves from walks, entries and exit areas at least weekly, to prevent accumulations.

### **C.2. Pruning - Trees, Shrubs, Vines and Groundcovers**

#### **Trees**

- Trees shall be maintained in a healthy, vigorous growing condition, free from disease and large concentrations of pests.
- Prune trees only to remove dead, diseased, broken, dangerous, or crossing branches, and as required below.
- Prune in accordance with generally accepted standards for proper pruning. Use of a certified arborist, particularly with significant trees, is recommended.
- Discard all tree trimmings off-site using a legal method.
- Any tree found to be dead or missing shall be replaced with plant material of identical species at the landscape maintenance contractor's expense, unless the loss was due to excluded damage. Replacement trees shall be approved for size and appearance by the owner's authorized representative prior to planting.
- Remove tree stakes from trees after two growing seasons. Check tree ties to adjust and loosen as needed after the first growing season. Remove stakes from site and dispose of by a legal method. Recycle used stakes if possible.
  - Once a year, prune all trees to encourage a high-branching structure. Remove all non-structural branches between the ground and a point half the tree's total height (for tall trees don't remove branches higher than 20' [6 m])



above the ground).

- All sucker growth from trunk and base of trees shall be removed monthly or as required up to twelve feet (12') from the ground to maintain a clean appearance.
- The cutting blades on pruning shears, clippers, blades, saws, etc. shall be sterilized after pruning each tree to minimize the possibility of spreading disease. When pruning trees known or suspected to be diseased, cutting blades shall be sterilized (with 10% bleach solution or other approved) after each cut.
- A vertical clearance of 114 inches is required above all parking spaces. A vertical clearance of 80 inches is required above all walkways. Trim trees to remove all limbs within these areas.

### Shrubs

- Shrubs shall be kept in a healthy, vigorous condition, free from disease and large concentrations of pests.
- Shrubs shall be pruned monthly only as needed to remove branches that are dead, broken, extending beyond the face of curbs or sidewalks, or are climbing building walls (not applicable to specified vines). No plant materials shall be pruned to form hedges and topiary; they shall be regularly pruned to maintain a natural shape, height and width. Allow the shrubs to grow in their natural form to their mature sizes.
- Shrubs uniformly planted around the perimeter of tree pits shall be pruned so as to encourage a continuous planting where individual plants are not identifiable. Prune to encourage a dense, continuous planting, with natural shape and branches reaching fully to the ground.
- All other shrubs shall be pruned only as required for safety, visibility, and plant health, and allowed to develop into the natural shapes expected of the plant variety. Do not shear shrubs into topiary (shapes) unless specifically instructed.
- Allow shrubs two (2) months to rejuvenate following a hard frost prior to pruning or replacing.
- Any shrub found to be dead or missing shall be replaced with plant material of identical species at the landscape maintenance contractor's expense, unless the loss was due to excluded damage.
- When pruning shrubs known or suspected to be diseased, the cutting blades shall be sterilized after each cut.

### Vines

- No vines are proposed for this site. Any vines encountered should be considered as invasive and removed from the site.



## Groundcovers

- Groundcover shall be maintained in a healthy, vigorous growing condition.
- Any groundcover found to be dead or missing shall be replaced with plant material of identical species at the landscape maintenance contractor's expense, unless the loss was due to excluded damage.
- Keep groundcover trimmed to edge of sidewalks, curbs, and paved areas on a monthly basis. Do not create vertical edges when pruning groundcover. Cut the edges at an angle for a more natural appearance and healthier plants. Prune so groundcover just overlaps adjoining paving; an open mulch strip here allows weeds to take hold and trash to accumulate.
- If regular foot traffic through a planter is preventing the groundcover from reaching full coverage of the soil, contact the owner's authorized representative to discuss options for redirecting the foot traffic. Consider installing pavers, stepping stones, a concrete walk, a gravel path, and/or barriers to redirect pedestrians:

### C.3. Fertilizer - Trees, Shrubs, Vines and Groundcovers

- Do not fertilize plantings in the rain garden.
- Fertilizers shall be either organically derived or slow-release synthetic products, to minimize water pollution and feed plants over a longer period of time, only as allowed by the Orders of Conditions.
- At the time of initial planting, a soil sample shall be sent to the UMass Agricultural Testing Station for analysis.
  - The analysis shall be conducted for the types of plantings proposed. If more than one type of planting is proposed, submit more than one soil sample.
  - For initial plantings, provide supplemental fertilization to meet recommendations of soils test results.
- For routine fertilization, granular slow release or organic fertilizer shall be 5-5-5 formulation or similar, applied per label rate for plant type. Water immediately after applying to move the fertilizer into the soil and wash the fertilizer off of plant surfaces. Fertilizer that collects on pavement shall be swept up it shall not be rinsed and allowed to drain to the river.

### C.4. Mulch layer - Trees, Shrubs, Vines and Groundcovers



Maintaining a deep layer of mulch greatly reduces the labor and materials needed to control weeds, reduces water use, and helps the plants stay healthy.

- Add additional mulch regularly to maintain a layer no less than 2 inches (5 cm) deep at all times in shrub planters, tree wells, and beds where plants have not yet closed in over soil surface. Decomposition of organic mulch is considered normal wear and tear, and replacement of decomposed mulch is required seasonally. Mulch is not required in areas where plant foliage completely covers the soil surface, such that the soil is not visible through the foliage. Any mulch found outside planter areas shall be returned to the planter on a weekly basis.
- Mulch shall be uniform in color and appearance, and free of sticks or trash. Mulch may be compost, shredded fall leaves (with Owner's permission), or shredded wood, such as arborist chips, hog fuel, or play chips. Bark is less preferable, because it does not feed the soil as readily, may seal the surface preventing water entry, and may inhibit some plants' growth. When replacing existing mulch, use a mulch product that is similar in appearance to that already at the site.

## C.5. Turf care

### C.5.1. Mowing - Turf

- Mowing schedule: Mow weekly during active growth periods (April-October). Keep mower blades sharp.
- Clippings should always be left on lawn areas ("mulch-mowing" or "grasscycling"), except if this will create a large surface buildup, for instance if saturated soft soils have prevented mowing for several weeks in spring and the grass is very tall. Grasscycling returns about 2 lb. nitrogen per 1000 sq. ft. per year, and improves resistance to drought damage and weed invasion.
- Modern "mulching" mowers are preferred because they chop clippings finely and blow the resulting mulch down to ground level, leaving a clean surface which is preferable, especially around building entrances where track-in can be a problem. Effective mulching requires about 20% more engine power, and it may be necessary to slow down in heavy areas or wet weather to get the best mulching results. For these reasons, equipment that converts easily from mulching to side-throw (leaving clippings on surface) is the most adaptable to varying conditions and mowing schedules.
- Mowing height: 1.5 to 2.0 inches high.
  - Mowing frequency: to cause the least stress on the grass plant, mow often enough to remove only one-third of the blade length (e.g., when the grass is 3" high mow it down to 2"). Also, mow un-irrigated summer-dormant turf regularly



enough to remove weed seed heads before they mature. Start mowing in early spring as soon as grass begins to grow. On most lawn areas these rules will result in mowing every 5-7 days through the height of the spring growth spurt, tapering to weekly on irrigated summer lawn or 10 days to 2 weeks on dormant lawn, weekly through the fall growth spurt. Avoiding over fertilization and soluble “quick release” fertilizers is key to reducing mowing frequency.

### **C.5.2. Fertilization - Turf**

- Natural organic fertilizers or “bridge” (organic plus slow-release synthetic) fertilizers shall be used. Soluble fertilizers, though less expensive, wash off site, volatilize, require more frequent application, and are toxic to beneficial soil life, so tend to be more expensive over time.
- Mid to late fall applications are the key to building carbohydrate reserves in the grass root system over the winter. Early spring applications should be avoided because they promote rapid top growth (requiring more mowing) and can exhaust stored nutrient reserves. If spring applications are desired, they should be in late spring.

### **C.5.3. Aeration and De-thatching - Turf**

- While aeration is most important on high-use areas (such as playfields) any lawn area should be considered for annual or more frequent aeration if it shows signs of thin turf, weed invasion, poor irrigation penetration, or soil compaction.
- Thatch buildup (beyond the 1/2 inch that is healthy) is usually a sign of over-fertilization, over use of broadcast pesticides, over-watering, soil compaction, or other causes of diminished soil biota to break down thatch. Excess thatch prevents water penetration and promotes shallow rooting. Good maintenance practices will generally prevent thatch buildup, but where present it should be reduced by regular aeration or a vertical mowing (de-thatching), followed by adjusting cultural practices to prevent recurrence.

### **C.5.4. Overseeding - Turf**

- In addition to aeration, spring or fall lawn renovations should include overseeding of thin or weed infested areas, or entire areas subject to heavy wear. This is a key weed control practice.
- Select certified seed appropriate for the site (perennial rye for sport lawn, rye and fescue blends for general lawn: contact the Cooperative Extension Service for site-adapted varieties, or buy from a reputable local supplier).
- Generally overseeding is practiced after aeration and before topdressing. A slice-seeding machine allows seed to be placed in the ground at the end of the dry



season to await fall rains, and greatly improves seed germination and survival.

#### **C.5.5. Topdressing - Turf**

- After aeration and overseeding, high-use or worn lawn areas should be topdressed in spring or fall for greatest improvement.
- General lawn should be topdressed with pure compost or a compost-sand mixture, 1/4 to 1/2 inch thick, to improve both drainage and soil fertility. Use a weed-free mature compost from a reputable supplier, screened to 3/8 inch minus particle size. Dragging or raking after application can help get compost down into the aeration holes and break up aeration cores and compost clumps.
- Take soil plugs annually to verify that the compost is being incorporated into the soil profile below the aeration depth by earthworms and other soil biota, rather than accumulating on the surface where it could limit water infiltration. (This is a possible problem in cases of low soil biota due to overuse of fertilizers or pesticides, poor drainage, or conditions of acidic or compacted soils. Correct these problems to improve compost incorporation.)

### **D. INTEGRATED PEST (WEED, INSECT, AND DISEASE) MANAGEMENT**

Definition: "Integrated Pest Management, or IPM, is an approach to pest control [weeds, insects, and diseases] that uses regular monitoring to determine if and when treatments are needed, and employs physical, mechanical, cultural, and biological tactics to keep pest numbers low enough to prevent intolerable damage or annoyance. Least-toxic chemical controls are used as a last resort."

*Daar, Olkowski & Olkowski: IPM Training Manual for Landscape Gardeners, 1992*

#### **D.1. Weed Control for Trees, Shrubs, Vines, and Groundcovers**

- Weeds in planted areas, sidewalks, curbs, gutters, or pavement shall be removed or killed weekly as the weeds emerge. Weeds shall be removed (not just killed) if they are larger than 2 inches (5 cm) in height or diameter. Dispose of weeds off-site. The cost of all weed control work shall be included in the contract price for landscape maintenance. Regular maintenance of the mulch layer will help minimize weeds in shrub and groundcover areas.
- Contractor is strongly encouraged to use Integrated Pest Management techniques for controlling weeds. Techniques include mulching, pulling, allowing plantings to grow densely and shade ground, heat and hot water controls. If herbicides may not be used, except with written permission of the Owner and if allowed by the Orders of Conditions issued by the Conservation Commission. If herbicides must be used, choose the least toxic available and spot apply on weeds. Pre-emergent herbicides are not allowed - maintaining a thick mulch layer combined with



mechanical weeding is as effective.

- Herbicides that are noted to be “toxic to wetlands and aquatic areas” shall not be used anywhere on this site.

#### **D.2. Weed, Insect, and Disease Control for Turf**

- Weed invasion can be effectively prevented or reversed by growing dense lawn, through the above recommended practices. Tolerate some broad-leaved plants in lawn areas. Identify problem (invasive) weeds and target only those species.
- Control weeds in turf by removal where practical (long-handled weed-pullers do this quickly), and remove them regularly before they go to seed. If weeds have over-run an area, spot-application of the least-toxic herbicide is permitted.
- No broadcast herbicide or “weed-and-feed” products may be applied.
- Moderately fertilized turf on well drained organic-rich soils rarely has serious disease problems. Correcting poor soil conditions or cultural practices (like over-watering or overfertilization) will prevent diseases.
- Control of grubs or other soil insects shall be performed using Bt or other organic, non-toxic methods that will not affect wetlands or aquatic environments.

#### **D.3. General IPM Steps and Methods**

##### **IPM Steps Include:**

- 1) Prevention first: plant vigorous, pest-resistant, site-adapted varieties. Plan cultural practices to minimize pests (watering, mulching, pruning, etc.).
- 2) Identify/know the pest (weed, etc.) life cycle.
- 3) Set action thresholds - tolerate some damage.
- 4) Monitor regularly (keep records of monitoring).
- 5) When pests exceed threshold, use control method with the least non-target impact. (Try cultural, physical, or biological methods first. As a last resort, use spot applications of least toxic chemical.) Only treat when the pest is most vulnerable and its natural enemies are in their least susceptible life stage.
- 6) Herbicides/Insecticides that are noted to be “toxic to wetlands and aquatic areas” shall not be used anywhere on this site.
- 7) Keep records of control methods and results, evaluate, and adapt cultural practices.
- 8) Replace problem plants/designs with more pest, disease, and weed-resistant varieties.



### Weed Control Methods - General Guidelines:

- Crowd out weeds with dense healthy plantings, ground covers and shade canopies.
- Accept a few weeds - target the problem ones.
- Mulch beds in fall, winter, or early spring.
- Control weeds before they go to seed.
- Hoe, pull, mow, or till (mulch makes hoeing easier).
- Use flame or radiant heat weeders over pavement, cracks, fence lines, and building edges, or over mulch on rainy days (use fire precautions as per equipment labeling).
- Use barriers: newspaper or cardboard covered with mulch, root barriers for spreading plants. Landscape fabric can create problems as weeds grow through it - paper or cardboard is better.
- Don't over-fertilize - it promotes weeds and pests.
- Spot apply the least-toxic chemical (e.g. soap and vinegar-based weed killers, or cut-and-paint stems with systemic herbicides) to minimize non-weed impacts.
- If a pesticide must be used, post signs for at least 24 hours stating: area affected; date/time applied; specific pesticide used; re-entry cautions (from label); and phone number to call with questions. Always follow label for application and protection. Professional applicators (including users of "weed & feed," or even low-risk herbicides like vinegar) must be licensed by State law, see <http://agr.wa.gov/PestFert/Pesticides/>.

## E. IRRIGATION

### All Areas

- Monitor the moisture levels around all ornamental plants including, but not limited to trees, lawn, shrubs, perennials, groundcovers and annuals. Report problems (including brown spots or saturated areas) to on-site management during normal maintenance visits.
- No mechanical irrigation system is proposed for this site. If irrigation is required, utilize man-placed sprinkler systems using a timer and water sufficiently to soak ground.
- Hand watering general does not supply sufficient water and tends to encourage shallow roots, which are contradictory to overall purpose.
- Do not water if a moratorium or prohibition exists limiting or restricting the use of outside water. (If in the first year of planting, check with authorities having



jurisdiction for an exemption for newly planted materials).

## **F. SPECIAL LANDSCAPE AREAS**

### **Street trees and R.O.W. plantings**

- These areas have additional stress of vehicular, pedestrian (and dog) traffic, and in this plan are not included in the irrigation system. To avoid compaction and prolong tree life, it is necessary to keep underplantings full and healthy. If low shrubs or groundcovers are damaged, replace them immediately to prevent further damage.

### **Bioretention areas**

- Swales and rain gardens, designed to capture and hold roof runoff, will not maintain optimal drainage rates if soils become compacted. Minimize foot traffic in this area, although occasional walking for maintenance is fine.
- In addition to preventing weeds, regular applications of mulch will maximize the swale's ability to capture and break down contaminants. In order to prevent runoff of excess nutrients, rain garden plantings should not be fertilized. Plant selection, a rich soil mix at time of installation, and regular mulching should provide sufficient nutrients to plantings in these areas.

### **Permeable pavers (if applicable).**

- The permeable paving areas (sidewalk and patios) need periodic maintenance to avoid getting clogged with debris over time. Regular sweeping and low-pressure washing 3-4 times a year will keep the area free of organic material and fine particles, maintaining permeability.
- Similarly, avoid using salt and sand on this area in the winter (in any case, permeable paving does not tend to accumulate ice since it does not hold puddles).
- Additional gravel may occasionally be necessary to refill the pores between pavers. Gravel supplements are needed if the gravel channels drop more than 1.5" below the paver surface.



## Site Lighting Fixture Cuts



## DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

|             |  |      |
|-------------|--|------|
| Catalog #   |  | Type |
| Project     |  |      |
| Comments    |  | Date |
| Prepared by |  |      |

## SPECIFICATION FEATURES

### Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

### Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

### Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

### Mounting

**STANDARD ARM MOUNT:** Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

### Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

### Warranty

Five-year warranty.

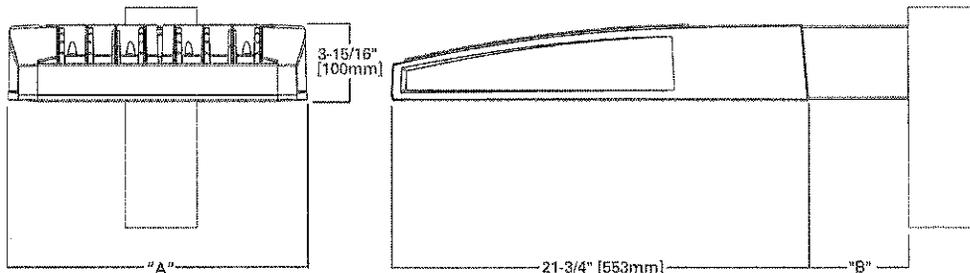


## GLEON GALLEON LED

1-10 Light Squares  
Solid State LED

AREA/SITE LUMINAIRE

## DIMENSIONS



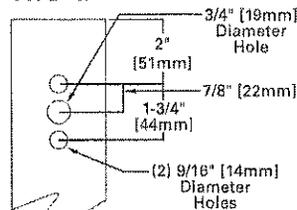
## DIMENSION DATA

| Number of Light Squares | "A" Width       | "B" Standard Arm Length | "B" Optional Arm Length <sup>1</sup> | Weight with Arm (lbs.) | EPA with Arm <sup>2</sup> (Sq. Ft.) |
|-------------------------|-----------------|-------------------------|--------------------------------------|------------------------|-------------------------------------|
| 1-4                     | 15-1/2" (394mm) | 7" (178mm)              | 10" (254mm)                          | 33 (15.0 kgs.)         | 0.96                                |
| 5-6                     | 21-5/8" (549mm) | 7" (178mm)              | 10" (254mm)                          | 44 (20.0 kgs.)         | 1.00                                |
| 7-8                     | 27-5/8" (702mm) | 7" (178mm)              | 13" (330mm)                          | 54 (24.5 kgs.)         | 1.07                                |
| 9-10                    | 33-3/4" (857mm) | 7" (178mm)              | 16" (406mm)                          | 63 (28.6 kgs.)         | 1.12                                |

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

## DRILLING PATTERN

### TYPE "N"



## CERTIFICATION DATA

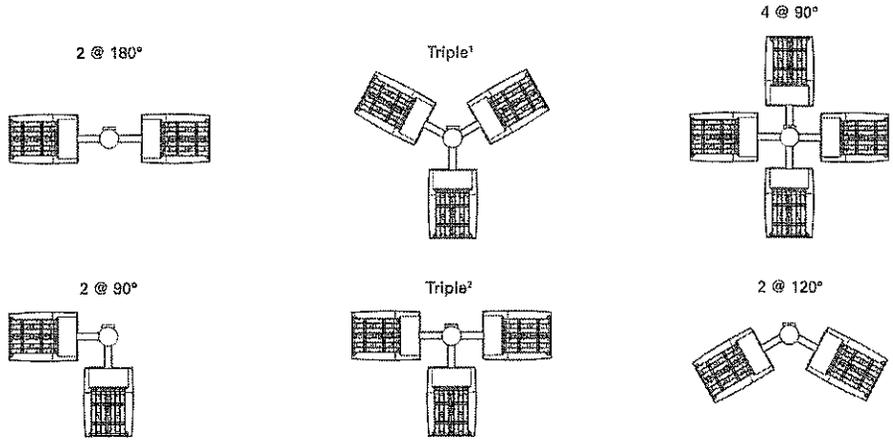
UL/cUL Wet Location Listed  
ISO 9001  
LM79 / LM80 Compliant  
3G Vibration Rated  
IP66 Rated  
DesignLights Consortium® Qualified\*

## ENERGY DATA

Electronic LED Driver  
>0.9 Power Factor  
<20% Total Harmonic Distortion  
120V-277V 50/60Hz  
347V & 480V 60Hz  
-40°C Min. Temperature  
40°C Max. Temperature  
50°C Max. Temperature (HA Option)

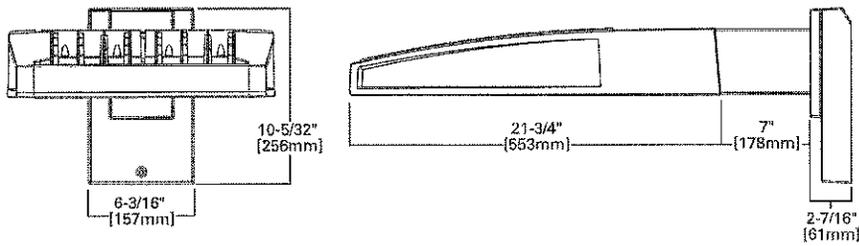
**ARM MOUNTING REQUIREMENTS**

| Configuration | 90° Apart                   | 120° Apart                  |
|---------------|-----------------------------|-----------------------------|
| GLEON-AF-01   | 7" Arm (Standard)           | 7" Arm (Standard)           |
| GLEON-AF-02   | 7" Arm (Standard)           | 7" Arm (Standard)           |
| GLEON-AF-03   | 7" Arm (Standard)           | 7" Arm (Standard)           |
| GLEON-AF-04   | 7" Arm (Standard)           | 7" Arm (Standard)           |
| GLEON-AF-05   | 10" Extended Arm (Required) | 7" Arm (Standard)           |
| GLEON-AF-06   | 10" Extended Arm (Required) | 7" Arm (Standard)           |
| GLEON-AF-07   | 13" Extended Arm (Required) | 13" Extended Arm (Required) |
| GLEON-AF-08   | 13" Extended Arm (Required) | 13" Extended Arm (Required) |
| GLEON-AF-09   | 16" Extended Arm (Required) | 16" Extended Arm (Required) |
| GLEON-AF-10   | 16" Extended Arm (Required) | 16" Extended Arm (Required) |

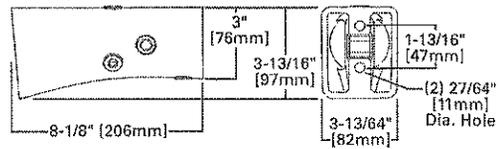


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

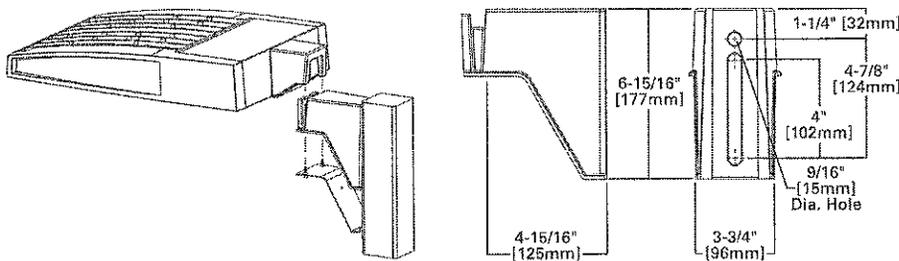
**STANDARD WALL MOUNT**



**MAST ARM MOUNT**

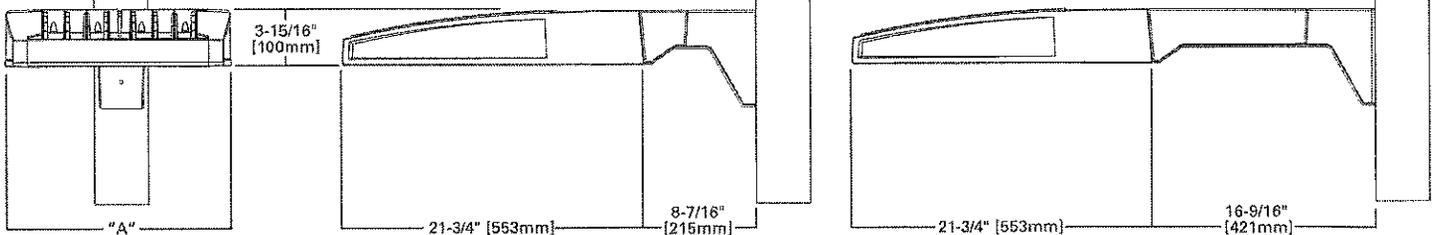


**QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)**



QM Quick Mount Arm (Standard)

QMEA Quick Mount Arm (Extended)

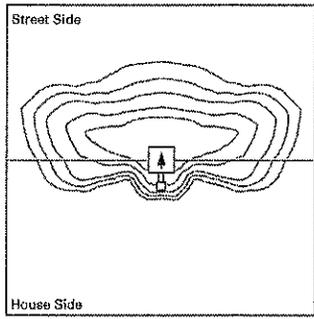


**QUICK MOUNT ARM DATA**

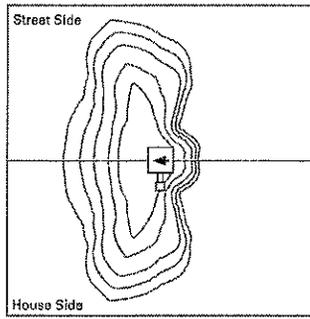
| Number of Light Squares 1,2 | "A" Width       | Weight with QM Arm (lbs.) | Weight with QMEA Arm (lbs.) | EPA (Sq. Ft.) |
|-----------------------------|-----------------|---------------------------|-----------------------------|---------------|
| 1-4                         | 15-1/2" (394mm) | 35 (15.91 kgs.)           | 38 (17.27 kgs.)             | 1.11          |
| 5-6 3                       | 21-5/8" (549mm) | 46 (20.91 kgs.)           | 49 (22.27 kgs.)             |               |
| 7-8                         | 27-5/8" (702mm) | 56 (25.45 kgs.)           | 59 (26.82 kgs.)             |               |

NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

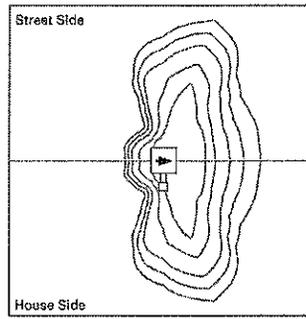
**OPTIC ORIENTATION**



Standard



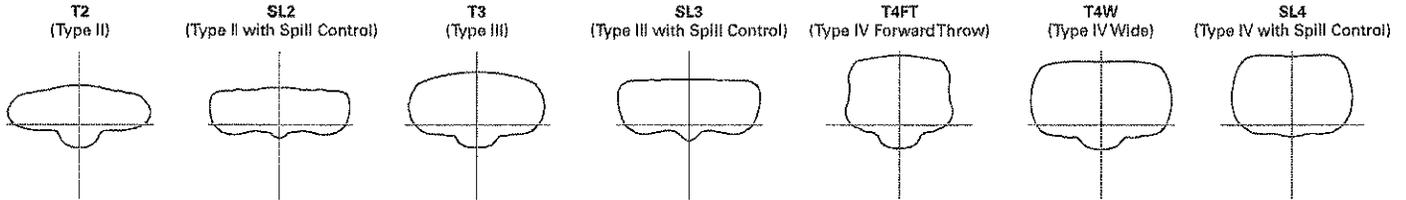
Optics Rotated Left @ 90° [L90]



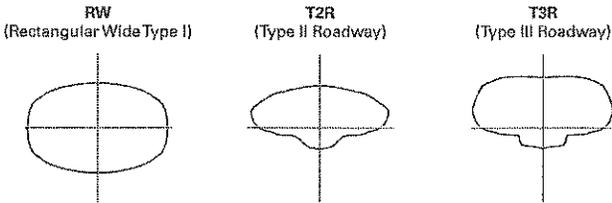
Optics Rotated Right @ 90° [R90]

**OPTICAL DISTRIBUTIONS**

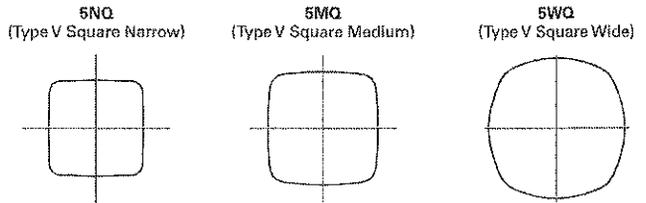
**Asymmetric Area Distributions**



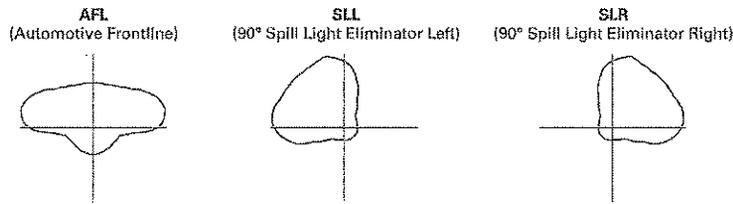
**Asymmetric Roadway Distributions**



**Symmetric Distributions**



**Specialized Distributions**

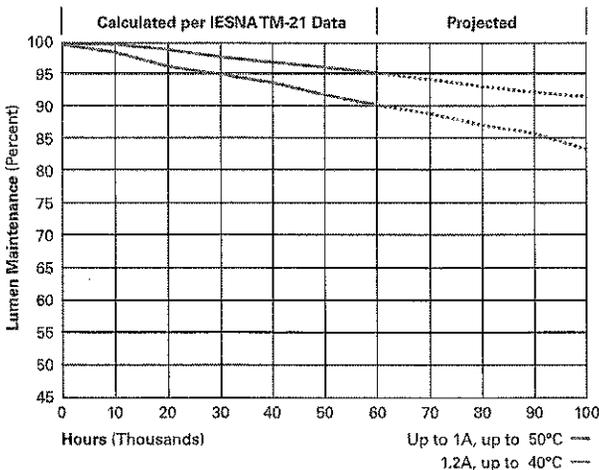


**LUMEN MAINTENANCE**

| Drive Current | Ambient Temperature | TM-21 Lumen Maintenance (60,000 Hours) | Projected L70 (Hours) |
|---------------|---------------------|--|-----------------------|
| Up to 1A      | Up to 50°C          | > 95%                                  | 416,000               |
| 1.2A          | Up to 40°C          | > 90%                                  | 205,000               |

**LUMEN MULTIPLIER**

| Ambient Temperature | Lumen Multiplier |
|---------------------|------------------|
| 0°C                 | 1.02             |
| 10°C                | 1.01             |
| 25°C                | 1.00             |
| 40°C                | 0.99             |
| 50°C                | 0.97             |





## DESCRIPTION

The patented Lumark Crosstour™ LED Wall Pack Series of luminaires provides an architectural style with super bright, energy efficient LEDs. The low-profile, rugged die-cast aluminum construction, universal back box, stainless steel hardware along with a sealed and gasketed optical compartment make the Crosstour impervious to contaminants. The Crosstour wall luminaire is ideal for wall/surface, inverted mount for façade/canopy illumination, post/bollard, site lighting, floodlight and low level pathway illumination including stairs. Typical applications include building entrances, multi-use facilities, apartment buildings, institutions, schools, stairways and loading docks test.

## SPECIFICATION FEATURES

### Construction

Slim, low-profile LED design with rugged one-piece, die-cast aluminum hinged removable door and back box. Matching housing styles incorporate both a small and medium design. The small housing is available in 12W, 18W and 26W. The medium housing is available in the 38W model. Patented secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes three half-inch, NPT threaded conduit entry points. The universal back box supports both the small and medium forms and mounts to standard 3-1/2" to 4" round and octagonal, 4" square, single gang and masonry junction boxes. Key hole gasket allows for adaptation to junction box or wall. External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Minimum 5" wide pole for site lighting application. Not recommended for car wash applications.

### Optical

Silicone sealed optical LED chamber incorporates a custom engineered mirrored anodized reflector providing high-efficiency illumination. Optical assembly includes impact-resistant tempered glass and meets IESNA requirements for full cutoff compliance. Available in seven lumen packages; 5000K, 4000K and 3000K CCT.

### Electrical

LED driver is mounted to the die-cast housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 12W, 18W, 26W and 38W series operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C models available. Crosstour luminaires maintain greater than 89% of initial light output after 72,000 hours of operation. Three half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized

|             |  |      |
|-------------|--|------|
| Catalog #   |  | Type |
| Project     |  |      |
| Comments    |  | Date |
| Prepared by |  |      |

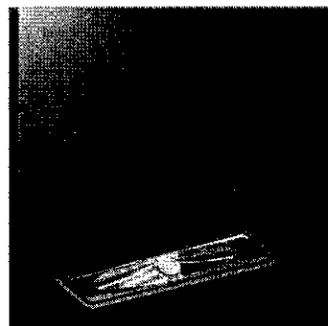
electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz or 347V 60Hz models.

### Finish

Crosstour is protected with a Super durable TGIC carbon bronze or summit white polyester powder coat paint. Super durable TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

### Warranty

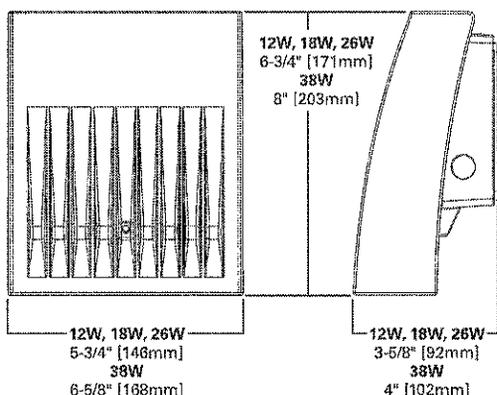
Five-year warranty.



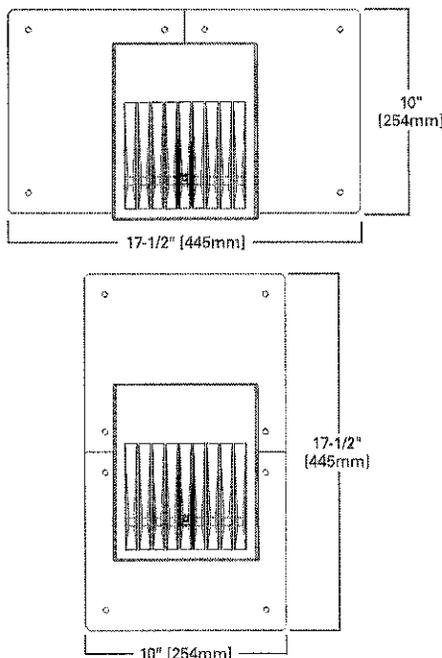
## XTOR CROSSTOUR LED

**APPLICATIONS:**  
WALL / SURFACE  
POST / BOLLARD  
LOW LEVEL  
FLOODLIGHT  
INVERTED  
SITE LIGHTING

## DIMENSIONS



## ESCUTCHEON PLATES



**CERTIFICATION DATA**  
UL/cUL Wet Location Listed  
LM79 / LM80 Compliant  
ROHS Compliant  
ADA Compliant  
NOM Compliant Models  
IP66 Ingressed Protection Rated  
Title 24 Compliant  
DesignLights Consortium® Qualified\*

**TECHNICAL DATA**  
40°C Maximum Ambient Temperature  
External Supply Wiring 90°C Minimum

**EPA**  
Effective Projected Area (Sq. Ft.):  
XTOR1B, XTOR2B, XTOR3B=0.34  
XTOR4B=0.45

**SHIPPING DATA:**  
Approximate Net Weight:  
3.7 - 5.25 lbs. [1.7 - 2.4 kgs.]

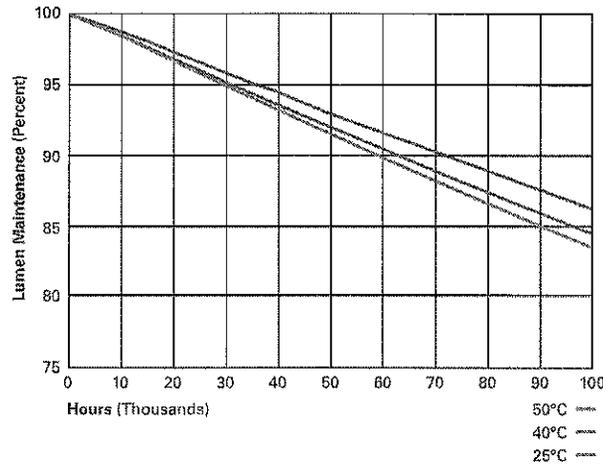
POWER AND LUMENS BY FIXTURE MODEL

| LED Information  | XTOR1B   | XTOR1B-W | XTOR1B-Y | XTOR2B   | XTOR2B-W | XTOR2B-Y | XTOR3B   | XTOR3B-W | XTOR3B-Y | XTOR4B   | XTOR4B-W | XTOR4B-Y |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Delivered Lumens (Wall Mount)                            | 1,418    | 1,396    | 1,327    | 2,135    | 2,103    | 1,997    | 2,761    | 2,710    | 2,575    | 4,269    | 4,205    | 3,995    |
| Delivered Lumens (With Flood Accessory Kit) <sup>1</sup> | 1,005    | 990      | 940      | 1,495    | 1,472    | 1,399    | 2,099    | 2,068    | 1,965    | 3,168    | 3,121    | 2,965    |
| B.U.G. Rating <sup>2</sup>                               | B1-U0-G0 | B2-U0-G0 | B2-U0-G0 | B2-U0-G0 |
| CCT (Kelvin)   | 5,000    | 4,000    | 3,000    | 5,000    | 4,000    | 3,000    | 5,000    | 4,000    | 3,000    | 5,000    | 4,000    | 3,000    |
| CRI (Color Rendering Index)                              | 70       | 70       | 70       | 70       | 70       | 70       | 70       | 70       | 70       | 70       | 70       | 70       |
| Power Consumption (Watts)                                | 12W      | 12W      | 12W      | 18W      | 18W      | 18W      | 26W      | 26W      | 26W      | 38W      | 38W      | 38W      |

NOTES: 1 Includes shield and visor. 2 B.U.G. Rating does not apply to floodlighting.

LUMEN MAINTENANCE

| Ambient Temperature | TM-21 Lumen Maintenance (72,000 Hours) | Theoretical L70 (Hours) |
|---------------------|--|-------------------------|
| <b>XTOR1B Model</b> |  |                         |
| 25°C                | > 90%                                  | 255,000                 |
| 40°C                | > 89%                                  | 234,000                 |
| 50°C                | > 88%                                  | 215,000                 |
| <b>XTOR2B Model</b> |  |                         |
| 25°C                | > 89%                                  | 240,000                 |
| 40°C                | > 88%                                  | 212,000                 |
| 50°C                | > 87%                                  | 196,000                 |
| <b>XTOR3B Model</b> |  |                         |
| 25°C                | > 89%                                  | 240,000                 |
| 40°C                | > 88%                                  | 212,000                 |
| 50°C                | > 87%                                  | 196,000                 |
| <b>XTOR4B Model</b> |  |                         |
| 25°C                | > 89%                                  | 222,000                 |
| 40°C                | > 87%                                  | 198,000                 |
| 50°C                | > 87%                                  | 184,000                 |



CURRENT DRAW

| Voltage | Model Series |        |        |        |
|---------|--------------|--------|--------|--------|
|         | XTOR1B       | XTOR2B | XTOR3B | XTOR4B |
| 120V    | 0.103A       | 0.15A  | 0.22A  | 0.34A  |
| 208V    | 0.060A       | 0.09A  | 0.13A  | 0.17A  |
| 240V    | 0.053A       | 0.08A  | 0.11A  | 0.17A  |
| 277V    | 0.048A       | 0.07A  | 0.10A  | 0.15A  |
| 347V    | 0.039A       | 0.06A  | 0.082A | 0.12A  |

**ORDERING INFORMATION**

Sample Number: XTOR2B-W-WT-PC1

| Series 1  | LED Kelvin Color  | Housing Color   | Options (Add as Suffix)  | Accessories (Order Separately)   |
|---|---|---|--|--|
| XTOR1B=Small Door, 12W<br>XTOR2B=Small Door, 18W<br>XTOR3B=Small Door, 26W<br>XTOR4B=Medium Door, 38W | [Blank]=Bright White (Standard), 5000K<br>W=Neutral White, 4000K<br>Y=Warm White, 3000K | [Blank]=Carbon Bronze (Standard)<br>WT=Summit White<br>BK=Black<br>BZ=Bronze<br>AP=Grey<br>GM=Graphite Metallic<br>DP=Dark Platinum | PC1=Photocontrol 120V 2<br>PC2=Photocontrol 208-277V 2,3<br>347V=347V4<br>HA=50 C High Ambient 4 | WG/XTOR=Wire Guard 5<br>XTORFLD-KNC=Knuckle Floodlight Kit 6<br>XTORFLD-TRN=Trunnion Floodlight Kit 6<br>XTORFLD-KNC-WT=Knuckle Floodlight Kit, Summit White 6<br>XTORFLD-TRN-WT=Trunnion Floodlight Kit, Summit White 6<br>EWP/XTOR=Escutcheon Wall Plate, Carbon Bronze<br>EWP/XTOR-WT=Escutcheon Wall Plate, Summit White |

**NOTES:**

- DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to [www.designlights.org](http://www.designlights.org) for details.
- Photocontrols are factory installed.
- Order PC2 for 347V models.
- Thru-branch wiring not available with HA option or with 347V, XTOR3B not available with HA and 347V or 120V combination.
- Wire guard for wall/surface mount. Not for use with floodlight kit accessory.
- Floodlight kit accessory supplied with knuckle (KNC) or trunnion (TRN) base, small and large top visors and small and large impact shields.

**STOCK ORDERING INFORMATION**

| 12W Series                                      | 18W Series                                      | 26W Series                                    | 38W Series                                      |
|---|---|---|---|
| XTOR1B=12W, 5000K, Carbon Bronze                | XTOR2B=18W, 5000K, Carbon Bronze                | XTOR3B=26W, 5000K, Carbon Bronze              | XTOR4B=38W, 5000K, Carbon Bronze                |
| XTOR1B-WT=12W, 5000K, Summit White              | XTOR2B-W=18W, 4000K, Carbon Bronze              | XTOR3B-W=26W, 4000K, Carbon Bronze            | XTOR4B-W=38W, 4000K, Carbon Bronze              |
| XTOR1B-PC1=12W, 5000K, 120V PC, Carbon Bronze   | XTOR2B-WT=18W, 5000K, Summit White              | XTOR3B-WT=26W, 5000K, Summit White            | XTOR4B-WT=38W, 5000K, Summit White              |
| XTOR1B-W=12W, 4000K, Carbon Bronze              | XTOR2B-PC1=18W, 5000K, 120V PC, Carbon Bronze   | XTOR3B-PC1=26W, 5000K, 120V PC, Carbon Bronze | XTOR4B-PC1=38W, 5000K, 120V PC, Carbon Bronze   |
| XTOR1B-W-PC1=12W, 4000K, 120V PC, Carbon Bronze | XTOR2B-W-PC1=18W, 4000K, 120V PC, Carbon Bronze |   | XTOR4B-W-PC1=38W, 4000K, 120V PC, Carbon Bronze |



# SPECIAL PERMIT APPLICATION

# 22-24 MAIN STREET

## MAYNARD, MASSACHUSETTS

### Prepared for GreenStar Herbals

MAYNARD PLANNING BOARD

\_\_\_\_\_  
GREG TUZZOLO, CHAIR

\_\_\_\_\_  
ANDREW D'AMOUR, VICE CHAIR

\_\_\_\_\_  
JIM COLEMAN

\_\_\_\_\_  
CHRIS ARSENAULT

\_\_\_\_\_  
BILL GRANSHAW

\_\_\_\_\_  
APPROVAL DATE

\_\_\_\_\_  
ENDORSEMENT DATE

I, TOWN CLERK OF MAYNARD, MASSACHUSETTS HEREBY CERTIFY THE NOTICE OF APPROVAL OF THIS PLAN BY THE MAYNARD PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
TOWN CLERK

**APPLICANT:**  
GreenStar Herbals, Inc.  
310 Flagg Hill Road  
Boxborough, MA 01719

**OWNERS:**  
Greenley Place Realty Trust  
Robert J. Watson, Trustee  
24 Main Street  
Maynard, MA 01754

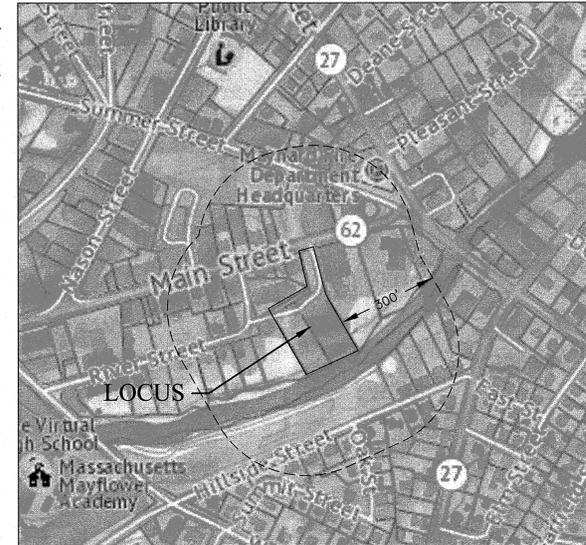
**PLANNER, LANDSCAPE ARCHITECT,  
CIVIL ENGINEER & SURVEYOR:**  
Places Associates, Inc.  
256 Great Road, Suite 4  
Littleton, MA 01460

**ARCHITECT**  
Caveney Architectural Collaborative, Inc.  
128 Warren Street  
Lowell, MA 01852



FROM MASSGIS

**LOCUS**  
SCALE: 1" = 250'



FROM MAYNARD GIS

**LOCUS**  
SCALE: 1" = 250'

### SHEET INDEX

- C-1 EXISTING CONDITIONS PLAN
- C-2 DEMO/REMEDATION PLAN
- C-3 SITE AND LAYOUT PLAN
- C-4 LANDSCAPE PLAN
- C-5 CONSTRUCTION DETAILS
- ES-1 LIGHTING PLAN (Under Separate Cover)

**ZONING COMPLIANCE** CB, CENTRAL BUSINESS DISTRICT  
DOWNTOWN OVERLAY DISTRICT

|                       | REQUIRED | EXISTING  | PROPOSED  |
|-----------------------|----------|-----------|-----------|
| LOT AREA              | 0 SF     | ± AC      | Unchanged |
| FRONTAGE (MIN)        | 0'       | 46'±      | Unchanged |
| LOT WIDTH (MIN)       | 0'       | 173'±     | Unchanged |
| FRONT YARD (MIN)      | 0'       | 166'±     | Unchanged |
| SIDE YARD (MIN)       | 0'       | 0'        | Unchanged |
| REAR YARD (MIN)       | 0'       | 0'        | Unchanged |
| LOT COVERAGE          |          |           |           |
| BUILDING/STRUCTURES   | N/A      | 15,580 SF | Unchanged |
| IMPERVIOUS            | N/A      | 23,200 SF | Unchanged |
| FLOOR TO AREA         | N/A      | 35%±      | Unchanged |
| BUILDING HEIGHT (MAX) | 40'      | <40'      | Unchanged |

**PERMIT SET**  
**4-1-2019**

**COVER**

LOCATION: 22-24 MAIN STREET  
TOWN: MAYNARD, MASSACHUSETTS  
PREPARED FOR:  
**GreenStar HERBALS**



SCALE: AS NOTED      DATE: MARCH 28, 2019

**Places Associates, Inc.**  
Planning, Landscape Architecture,  
Civil Engineering, Surveying



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PROJECT No.: 5390      PLAN No. 5390-COVER



MAYNARD ASSESSORS DATA  
 Map 14, Parcel 199, Property ID:1655  
 Map 15, Parcel 79, Property ID:1839

REFERENCES  
 Middlesex South Registry of Deeds  
 Book: 27730 Page: 578  
 Book: 34522 Page: 240  
 Plan 1006 of 1963

ZONING  
 Central Business District  
 Downtown Overlay District

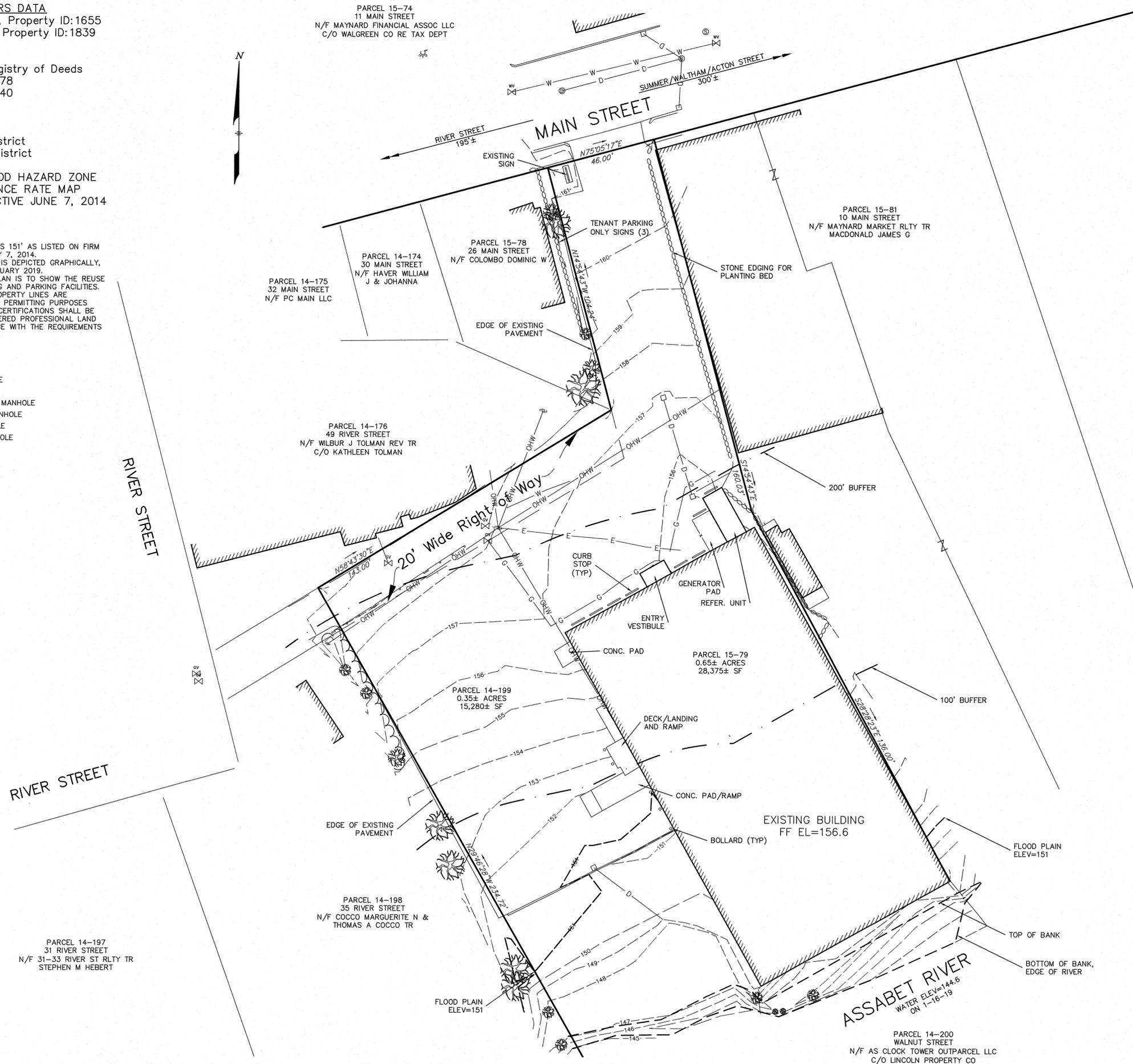
SITE CONTAINS FLOOD HAZARD ZONE  
 PER FLOOD INSURANCE RATE MAP  
 25017C0362F EFFECTIVE JUNE 7, 2014

NOTES  
 1. FLOOD PLAIN ELEVATION IS 151' AS LISTED ON FIRM 25017C0362F DATED JULY 7, 2014.  
 2. EDGE OF ASSABET RIVER IS DEPICTED GRAPHICALLY, AS SURVEY LOCATED JANUARY 2019.  
 3. THE PURPOSE OF THIS PLAN IS TO SHOW THE REUSE OF THE EXISTING BUILDING AND PARKING FACILITIES.  
 4. OFFSETS TO EXISTING PROPERTY LINES ARE GRAPHICALLY SHOWN FOR PERMITTING PURPOSES ONLY. ANY LAYOUT OR CERTIFICATIONS SHALL BE PERFORMED BY A REGISTERED PROFESSIONAL LAND SURVEYOR IN ACCORDANCE WITH THE REQUIREMENTS OF CMR 250.

- LEGEND
- x— CHAIN LINK FENCE
  - o— GUARD RAIL
  - ⊙ SANITARY SEWER MANHOLE
  - ⊙ STORM DRAIN MANHOLE
  - ⊙ ELECTRIC MANHOLE
  - ⊙ TELEPHONE MANHOLE
  - CATCH BASIN
  - ☆ LIGHT POLE
  - UTILITY POLE
  - ⊙ FIRE HYDRANT
  - ⊙ WATER GATE
  - ⊙ WATER SHUTOFF
  - |— SIGN

MAYNARD PLANNING BOARD

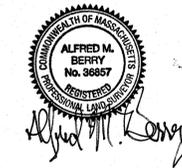
GREG TUZZOLO, CHAIR  
 ANDREW D'AMOUR, VICE CHAIR  
 JIM COLEMAN  
 CHRIS ARSENAULT  
 BILL CRANSHAW  
 APPROVAL DATE  
 ENDORSEMENT DATE



PERMIT SET  
 3-28-2019

EXISTING CONDITIONS

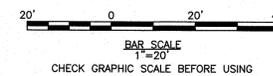
LOCATION: 22-24 MAIN STREET  
 TOWN: MAYNARD, MASSACHUSETTS  
 PREPARED FOR:  
**GreenStar HERBALS**  
 SCALE: 1"=20' DATE: MARCH 28, 2019



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PROJECT No.: 5390 PLAN No. C-1



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 JIM COLEMAN  
 CHRIS ARSENAULT  
 BILL GRANSHAW  
 APPROVAL DATE  
 ENDORSEMENT DATE

**1.0 Overview:**

This plan is part of a set of documents that describes the phased: assessment, identification, mitigation and removal, maintenance, monitoring and close out activities for the removal of invasive plant species on the locus property. This property is located off of Main Street, Maynard, MA and is proposed for the re-development of the site to support a retail facility for the Greenstar Herbs, Inc..

Portions of the site, principally to the south-west of the site border the Assabet River which regulatory is a vegetated wetlands, containing a mix of disturbed areas and wooded areas, with the southern-most border of the site being the actual river. Prior to any action described herein, the wetlands areas must be delineated and the delineation accepted by the Maynard Conservation Commission under the provisions of the Massachusetts Wetlands Protection Act and Town of Maynard's Wetlands Bylaw. Portions of the upland areas have been previously disturbed which has allowed an invasive plant species to populate the area. As part of the overall site development plan, the Greenstar Herbs, Inc., has agreed to mitigate and remove from the uplands these invasive plant species and to monitor and maintain these areas as required.

Invasive plant species are described in a publication produced by the Massachusetts Department of Agricultural Resources (MDAR) at the following website: <http://www.mass.gov/agr/farmproducts/prohibitedplantlist.htm>

The identified invasive plant species is Japanese Knotweed (*Polygonum cuspidatum*)

This proposal seeks to eliminate all of this species from the uplands area of the site.

**2.0 Area of Identification, Monitoring and Removals**

2.1.1 Area: The area of infestation of the invasive species to be removed is depicted on Sheet C-2 Demolition and Invasive Remediation Plan. This area, depicted by the cross-hatch pattern is intended to depict the overall area which requires remediation (±2,400 s.f.). Actual identification and remediation areas will be based on field observations and related plant identification and may include some marginal areas outside of the area depicted. Some remediation of invasive species may be required within the limits of the wetlands. Such activities shall be timed to minimize the impact on the wetlands and shall not be conducted when flowing water passes through the wetlands areas.

2.1.2 Identification: The invasive plants to be removed shall be field identified by a qualified botanist or persons familiar with plant identification and in particular invasive species. Plants and plant groups to be removed shall be marked using paint, tape or other method to clearly identify the subject plant or area. The markings shall be of a uniform type: color coded by species or methodology or removal type. The identification and delineation of the plants shall be reviewed by the Owner's representative (and if required by any permit or Orders of Conditions - an agent of the Maynard Conservation Commission) for accuracy and completeness prior to any remediation activities being undertaken.

2.1.3 Removal in areas of construction:

In the areas proposed to be disturbed by the construction of the new infrastructure areas (drainage systems, rain gardens, etc.), the removal shall include the selective removal of the invasive species prior to initiating earth-disturbing activities or earthwork to minimize the presence of invasive species in topsoil or relocated top soils. This invasive species spread via root suckers or rhizomes and the breaking-up or division of such plant structures can lead to an increase in the number of plants. It is for this reason that pre-disturbance removals are required.

The on-plan specifications note that the removal of Japanese Knotweed (*Polygonum cuspidatum*) shall be removed by the digging up and disposal of the groups of plant and its soils for this plant. The area on the site where this plant group occurs is in an open meadow which will be replaced by a rain-garden. The rhizome-containing earth shall be disposed of and shall not be re-used on the property. It shall be contained and sent to a landfill or incinerator. If the Contractor proposes to use this soil elsewhere, it shall be completely sterilized prior to its re-use. The volume of earth to be removed shall be estimated to be the horizontal area defined on-site and to a minimum depth of two (2'-0") feet. If additional volumes or depths of removal are required, additional costs will be incurred at the unit prices noted in the project construction specifications. No additional costs will be permitted without the Owner's pre-approval of the area and depth to be removed.

**3.0 Invasive Species: Japanese Knotweed**

Japanese Knotweed, Mexican Bamboo (*Polygonumcuspidatum*)

Japanese knotweed is an herbaceous perennial which forms dense clumps 1-3 meters (3-10 feet) high. Its broad leaves are somewhat triangular and pointed at the tip. Clusters of tiny greenish-white flowers are borne in leaf axils during August and September. The fruit is a small, brown triangular achene. Knotweed reproduces via seed and by vegetative growth through stout, aggressive rhizomes. It spreads rapidly to form dense thickets that can alter natural ecosystems or interfere with landscaping. Japanese knotweed can tolerate a variety of adverse conditions including full shade, high temperatures, high salinity, and drought. It is found near water sources, in low-lying areas, waste places, and utility rights of way. It poses a significant threat to riparian areas, where it can survive severe floods.

On the GREENSTAR HERBALS, INC. site, Japanese Knotweed shall be managed by the removal of all soils containing the plant roots and rhizomes, as the stands of this plant are fully located within the area of site disturbance for the construction of the rain garden.

**4.0 Proper Disposal**

Invasive plant disposal poses a tricky problem. If not properly done, some invasive plants will continue to grow and set seed despite being pulled out of the ground. It is important to know how tenacious your plant is in order to figure out how to make sure you do not spread the infestation through your disposal method. There are a few rules of thumb that will ensure this won't happen. Be sure the plant is dead before placing in a mulch or compost pile. Either dry it out in the sun (on a tarp or some impervious surface) so that there is no green whatsoever left on the plant, or bag it in a heavy duty black plastic bag (and be sure to seal it up) for a while until the plants inside have turned to mush. Clip the roots from the stem before drying it out to further limit the plants resources for survival.

Pull the plant before it has flowered or gone to seed. On some plants, flowers can mature and set seed even after the plant has been pulled.

If you have flowers and/or seeds on the plant, bring your disposal bag to the weeding site and put the flowers and seed heads into the bag head first so that there is minimal risk in dispersing seed as you transport the weed to its final resting spot.

Burning is a good method for disposal, especially with the woody stemmed invasives, but should only be done with a burn permit from the fire department within the burning season.

**5.0 Monitoring, Timelines & Reporting Program**

The above described species specific control techniques are provided as a resource for control methodologies and potential alternative control systems. The principal control program presented as part of this application is the physical removal of all apparent species by digging. This invasive weed shall be removed by digging, with backhoe or other equipment and removal of the entire plant grouping and its associated soils.

As noted on the plans, and herein, prior to removal of any invasive species a botanist or person familiar with the species listed (as approved by the Owner and/or the Conservation Commission, subject to the provisions of 2.1.2, above) shall field flag those plants or plant groupings to be removed in the areas noted on the plans. The plants and areas so flagged shall be reviewed and approved by the Owner and, if so required, by the Conservation Commission for completeness. The Contractor shall notify the Owner and/or the Conservation Commission a minimum of two weeks in advance of the date anticipated for a field inspection. Accompanying this notification shall be a written summary of the control techniques to be used - if they are to vary from those specified on the plans and herein. Such notification shall also provide an anticipated timeline for the remediation effort, including bi-weekly (2 week intervals) and monthly follow-up inspections and remediation efforts.

Starting with the initial remediation and removal effort, the contractor shall develop a written report summarizing the results of the remediation effort and actions taken. Identification of the disposal site or methodology for the removed vegetation and/or soils shall be provided as part of all reports, as applicable. The report shall be authored by the approved botanist or "reporter" (per section 2.1.2, above) who shall be the author of all reports until the end of the project. Should the Contractor elect to modify the "reporter" they shall obtain the approval of the Owner prior to making such a change. Each report shall be accompanied by digital photographs. All reports shall be submitted to the Owner, in writing, on a monthly basis at a minimum. Reports shall accompany or precede any requests for payment for invasive plant remediation line items. If required, the Owner shall forward reports to the Conservation Commission. Reports are not required during the winter season, Dec 15 - March 1.

The monitoring and remediation activities shall continue from the initiation date to one the completion of one full growing season (spring to fall in the same year) or until substantial completion is issued for the site construction, whichever is longer.

**6.0 Substantial Completion:**

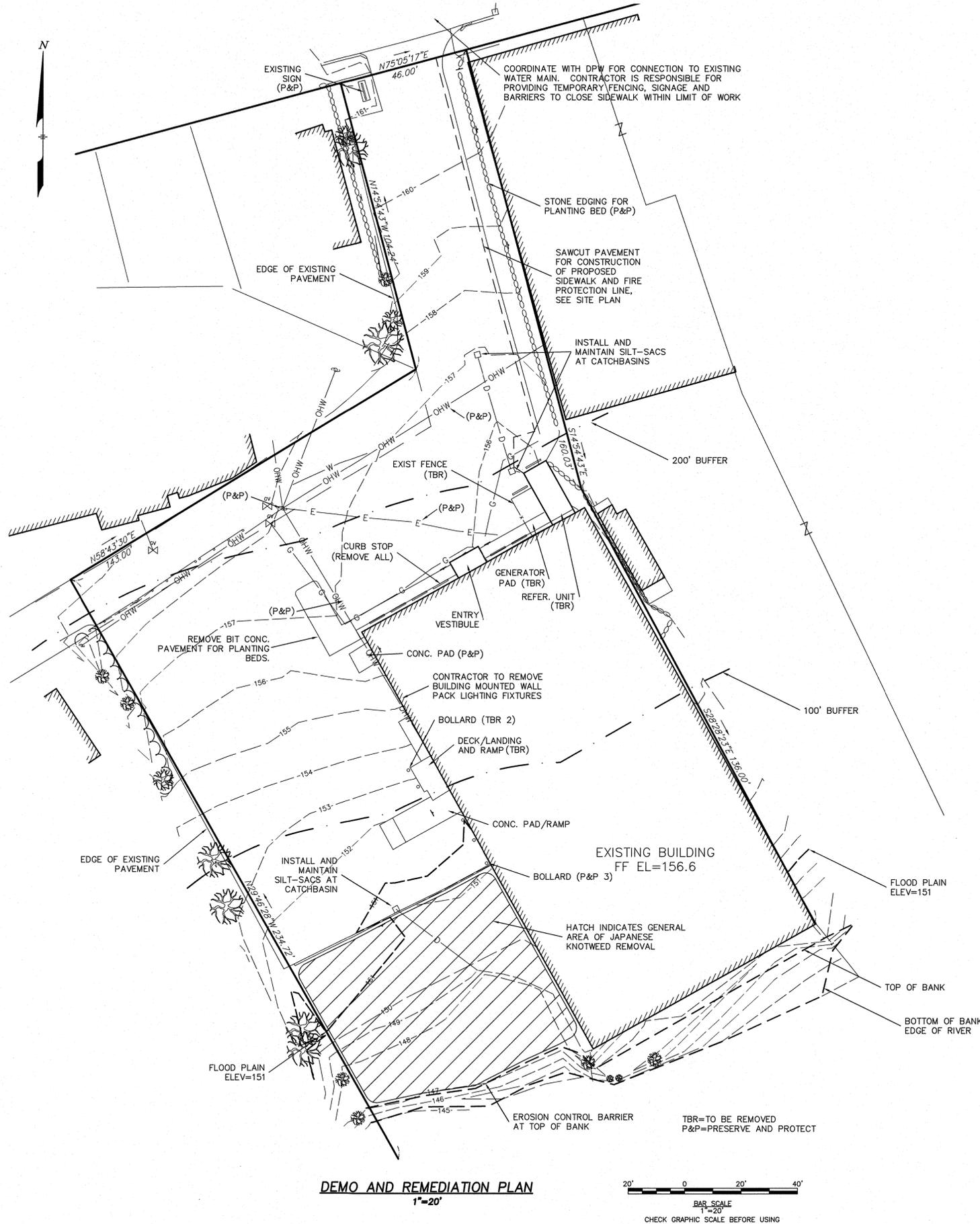
Substantial completion shall be achieved, when at the end of the second growing season, no upland invasive species (as noted during the initial site inspection required per 2.1.1 & 2.1.2, above) exist on the subject site. As noted above, the botanist or "reporter" shall submit to the Owner a report identifying that no invasive species exist on the site and it shall be dated and contain photographs of the site as supporting documentation.

**7.0 Responsible Individuals and entities:**

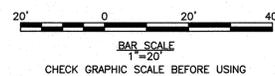
The responsible party shall be the Greenstar Herbs, Inc. General Manager, who shall be the point of contact between the Contractor and local permitting authorities.

**8.0 Project Close-out.**

The project close-out shall consist of a summary report identifying the actions taken throughout the project and identifying the time lines, and the substantial completion documentation, per Section 6.0. A summary of the success of the remediation activity shall be provided which shall include a listing and identification of any invasive species remaining in the area of alteration and mitigation. The report shall provide recommendations as to continued maintenance and mitigation measures. The report shall be submitted as part of any application for substantial completion. Substantial site completion shall not be issued without receipt and approval of the final report by the Owner.



**DEMO AND REMEDIATION PLAN**  
 1"=20'



**SITE NOTES**

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS INCLUDING TRENCH PERMITS AND BUILDING PERMITS.
2. PRIOR TO ANY SUBSURFACE ALTERATIONS (DIGGING, TRENCHING, PROBES, ETC.) THE CONTRACTOR SHALL OBTAIN A DIG-SAFE NUMBER AND COMPLY WITH APPLICABLE REGULATIONS.
3. EXISTING UTILITY INFORMATION AND LOCATIONS ARE BASED ON A COMBINATION OF FIELD SURVEY OBSERVATIONS AND RECORD LOCATIONS. NOT ALL UTILITIES WERE ABLE TO BE LOCATED. ALL LOCATIONS DEPICTED SHOULD BE CONSIDERED APPROXIMATE.
4. IF A UTILITY IS TO BE DISCONNECTED OR ABANDONED, SUCH ACTION SHALL BE IN ACCORDANCE WITH THE UTILITIES REQUIREMENTS.
5. ALL PRODUCTS OF SITE DEMOLITION SHALL BE REMOVED FROM THE SITE.
6. ALL DUMPSTERS SHALL BE COVERED AT THE END OF THE WORK DAY AND DURING ALL PRECIPITATION EVENTS.
7. INVASIVE REMEDIATION SHALL ONLY BE INITIATED DURING LOW FLOW PERIODS FOR THE ASSABET RIVER. COORDINATE WITH LOCAL CONSERVATION COMMISSION AGENT.

**PERMIT SET**  
 4-1-2019

**DEMOLITION AND REMEDIATION PLAN**

LOCATION: 22-24 MAIN STREET  
 TOWN: MAYNARD, MASSACHUSETTS

PREPARED FOR:  
**GreenStar HERBALS**



SCALE: AS NOTED DATE: MARCH 28, 2019

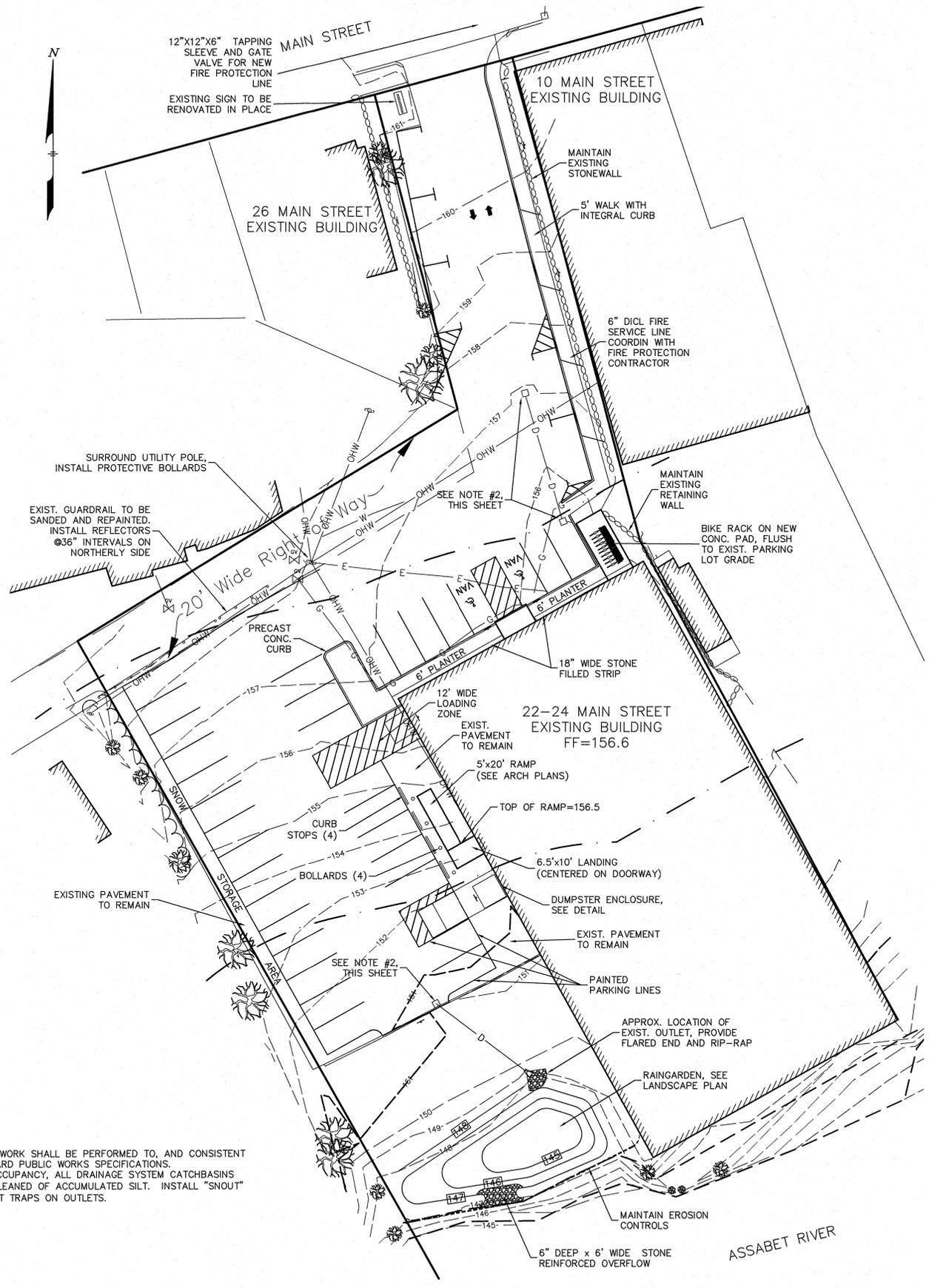
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PROJECT No.: 5390 PLAN No. C-2

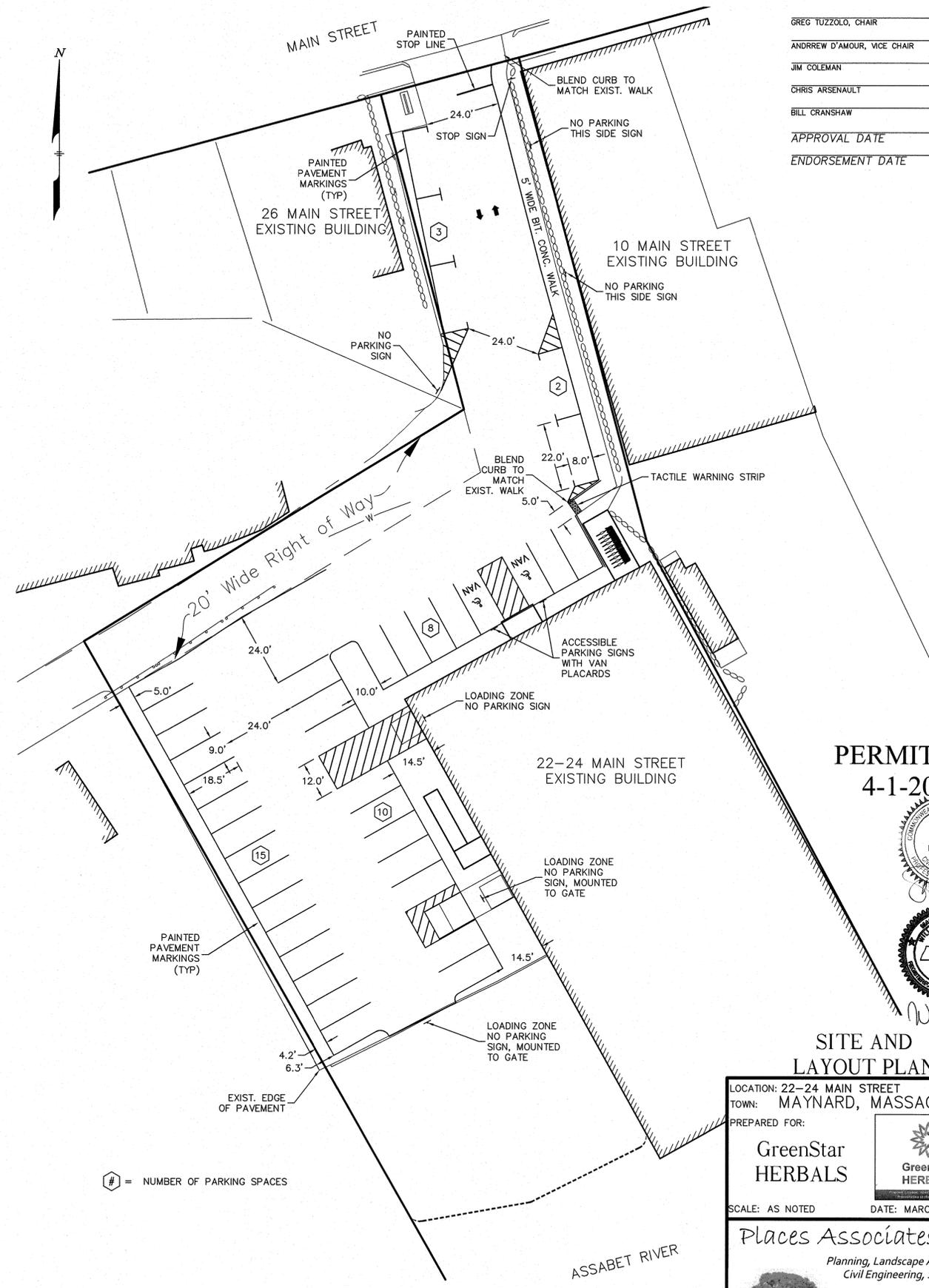
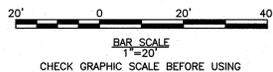


GREG TUZZOLO, CHAIR  
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 CHRIS ARSENAULT  
 BILL GRANSHAW  
 APPROVAL DATE  
 ENDORSEMENT DATE



1. ALL UTILITY WORK SHALL BE PERFORMED TO, AND CONSISTENT WITH, MAYNARD PUBLIC WORKS SPECIFICATIONS.
2. PRIOR TO OCCUPANCY, ALL DRAINAGE SYSTEM CATCHBASINS SHALL BE CLEANED OF ACCUMULATED SILT. INSTALL "SNOUT" OIL/SEDIMENT TRAPS ON OUTLETS.

**SITE PLAN**  
1"=20'



**LAYOUT PLAN**  
1"=20'

**PERMIT SET**  
4-1-2019



**SITE AND LAYOUT PLAN**

LOCATION: 22-24 MAIN STREET  
 TOWN: MAYNARD, MASSACHUSETTS  
 PREPARED FOR:  
**GreenStar HERBALS**  
 SCALE: AS NOTED DATE: MARCH 28, 2019

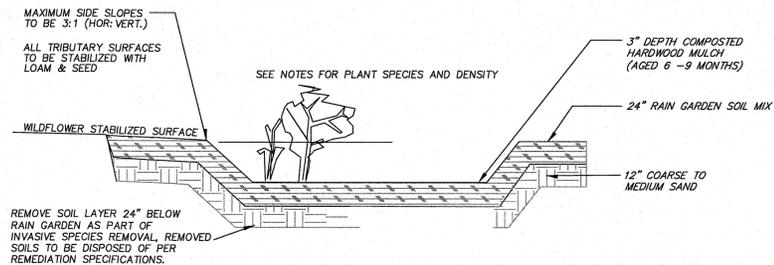
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 PROJECT No.: 5390 PLAN No. C-3

**LANDSCAPE:**

- THE SPECIES AND VARIETIES LISTED SHALL BE ADHERED TO IN ALL CASES. WHERE A SUBSTITUTION IS PROPOSED, THE CONTRACTOR SHALL PROVIDE THE OWNER A LISTING OF COST DIFFERENTIALS AND ALL SUBSTITUTIONS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
- SEE SITE PLANS AND PLANS WHICH DEPICT WORK OF OTHER TRADES FOR THE LOCATIONS OF BURIED UTILITIES, UNDERGROUND STRUCTURES AND OTHER OBSTACLES THAT MAY IMPACT THE PLANTING SHOWN HEREON.
- PLANTING PLAN IS DIAGRAMMATIC IN NATURE. FINAL PLACEMENT OF PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD. CONTRACTOR SHALL ACCOMMODATE THIS IN BASE BID.
- IN CASE OF CONFLICT BETWEEN LANDSCAPE PLAN AND PLANTING SCHEDULE, THE GREATER NUMBER OR LARGER QUANTITY SHALL BE PROVIDED.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. ANY TREES NOTED AS "SEAL OR SELECTED SPECIMEN" SHALL BE TAGGED AND SEALED BY THE LANDSCAPE ARCHITECT.
- ALL TREES SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE NOTED OR APPROVED BY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- ALL PLANTS AND PLANTING METHODS SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF "RECOMMENDED STANDARD SPECIFICATION FOR PLANTINGS" AS COMPILED AND ISSUED BY THE ASSOCIATED LANDSCAPE CONTRACTORS OF MASSACHUSETTS. ALL PLANT BEDS AND TREE SAUCERS TO RECEIVE 4" OF FINE BARK MULCH. GROUND COVER AREAS SHALL RECEIVE 1" OF FINE BARK MULCH.
- ANY FALL TRANSPLANTING HAZARD PLANTS SHALL BE DUG IN THE SPRING AND STORED FOR FALL PLANTING, UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.
- TREES SHALL HAVE A MINIMUM CALIPER AS INDICATED ON THE PLANTING SCHEDULE TAKEN ONE FOOT ABOVE THE ROOT CROWN.
- ALL PLANTS SHALL BE WARRANTED FOR A MINIMUM OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SHOULD ANY PLANTS DIE EXHIBIT UNDESIRABLE DIE-BACK OR DISEASE DAMAGE, THEY SHALL BE REPLACED, AT NO ADDITIONAL COST TO THE OWNER WITH PLANTS MEETING THE ORIGINAL SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION OF ADEQUATE WATER SUPPLIES TO THE PLANT MATERIALS UNTIL ACCEPTANCE OF THE LANDSCAPE BY THE LANDSCAPE ARCHITECT HAS OCCURRED.
- ALL DECIDUOUS TREES ADJACENT TO WALKWAYS AND ROADWAYS SHALL HAVE A BRANCHING PATTERN TO ALLOW FOR A MINIMUM OF 7' OF CLEARANCE BETWEEN THE GROUND AND THE LOWEST BRANCH.
- ALL PARKING ISLANDS PLANTED WITH SHRUBS SHALL HAVE 18" OF TOP SOIL. FINISH GRADE SHALL BE EQUAL TO THE TOP OF CURB.
- PLANTING SEASONS:  
 SPRING SEASON:  
 FOR ALL PLANTING IS FROM APRIL 1ST TO JULY 15TH  
 FALL SEASON:  
 FOR ALL EVERGREEN MATERIALS IS FROM AUGUST 15TH TO NOVEMBER 15TH  
 FOR ALL DECIDUOUS TREES, SHRUBS AND GROUND COVERS IS FROM AUGUST 15TH TO NOVEMBER 15TH
- FERTILIZER USE & APPLICATION SHALL CONFORM TO 330 CMR 31.00 FOR NON-AGRICULTURAL APPLICATION OF NITROGEN FERTILIZERS. SOIL SAMPLES, TESTS, AND SHOP DRAWINGS SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT OR THE OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- CONTRACTOR RESPONSIBLE FOR ALL LAWN AND PLANTED GROUND COVER AREAS AND WATERING, AND RESEEDING OF BARE SPOTS UNTIL A UNIFORM STAND OF VEGETATION IS ESTABLISHED AND ACCEPTED.
- ALL SLOPES IN EXCESS OF 3:1 (HORIZONTAL TO VERTICAL) SHALL BE STABILIZED. SEE THE PROVISIONS OF SPECIFICATION SECTION-EROSION AND SEDIMENTATION CONTROL AND RELATED SECTIONS.
- A MINIMUM 18" WIDE BARRIER OF 1" GRAY OR TAN PEASTONE SHALL BE INSTALLED IN ALL PLANT BED WHICH ADJUT THE BUILDINGS. NO MULCH IS ALLOWED WITHIN 18" OF ALL BUILDINGS PER THE LATEST EXECUTIVE OFFICE OF PUBLIC SAFETY AND SECURITY DEPARTMENT OF FIRE SERVICES REGULATION (827 CMR 17.00). INSTALL 6" DEEP OF PEASTONE WITH MIRAFT WEED FABRIC BENEATH AND STEEL EDGING BETWEEN THE PEASTONE AND ADJACENT MULCH BED.  
 EXCEPTION: ANY BUILDING, REGARDLESS OF THE EXISTENCE OF FIRE SEPARATIONS, CONTAINING SIX DWELLING UNITS OR LESS.

**PLANT SCHEDULE**

| TREES         | BOTANICAL NAME / COMMON NAME   | CONT.  | CAL.                      | FIELD#      | QTY. |
|---------------|--|--------|---------------------------|-------------|------|
|               | Acer x freemontii 'Jeffrey' / Autumn Blaze Maple                           | B & B  | 2.5" Cal                  | Street Tree | 1    |
|               | Ametanther canadensis 'Autumn Brilliance' / Autumn Brilliance Serviceberry | 15 gal |                           |             | 1    |
| SHRUBS        | BOTANICAL NAME / COMMON NAME   | SIZE   | FIELD#                    | QTY.        |      |
|               | Azalea Exbury Hybrid 'Red Sunset' / Red Sunset Exbury Azalea               | 5 gal  |                           | 5           |      |
|               | Rosa x 'Knockout' TM / Rose  | 5 gal  |                           | 15          |      |
|               | Spiraea salicifolia / Willowleaf Meadowsweet                               | 5 gal  | Low Evergreen Specimen    | 10          |      |
| GROUND COVERS | BOTANICAL NAME / COMMON NAME   | CONT.  | FIELD#                    | SPACING     | QTY. |
|               | Hemerocallis x 'Ed Murray' / Daylily                                       | 1 gal  | Perennial Flowering Plant | 24" o.c.    | 50   |
|               | Juniperus horizontalis 'Prince of Wales' / Prince Of Wales Juniper         | 2 gal  |                           | 24" o.c.    | 38   |



**PLANTINGS**

NOTES: RAIN GARDEN PLANTING PROPOSE IS BASED ON A VARIETY OF SPECIES BEING AVAILABLE ON THE PLANTING DATE. THE SPECIES LIST PROVIDED PRESENTS A VARIETY OF PLANTS THAT MAY BE SUBSTITUTED FOR ONE ANOTHER BASED ON AVAILABILITY AND SEASON.

PERENNIAL PLANTS SHALL BE 1 PER 10 SQ.FT. A MINIMUM OF FOUR SPECIES MIXTURE AS LISTED BELOW SHALL BE USED:

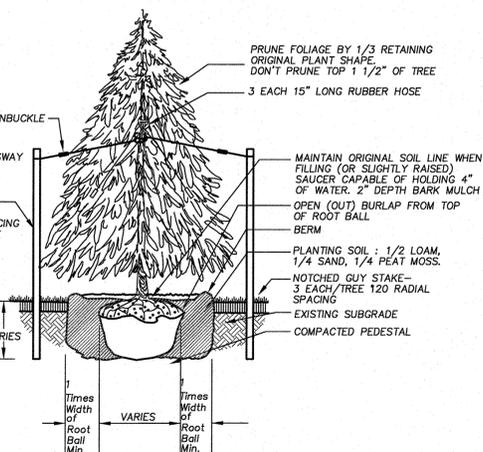
- BEE BALM (MONARDA DIDYMA)
- SMOOTH ASTER (ASTER LAEVIS)
- NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE)
- SWAMP SUNFLOWER (HELENIUM AUTUMNALE)
- MEADOW BLAZING STAR (LATRIS LIGULISTYLIS)
- BLUE LOBELIA (LOBELIA SIPHILIFICA)
- YELLOW CONEFLOWER (RATIBIDA DINNATA)
- BROWN-EYED SUSAN (RUBRICKIA SUBTOMENTOSA)
- PURPLE CONEFLOWER (ECHINACEA PURPUREA)

SHRUBS SHALL BE 1 PER 40 SQ.FT. PLANT IN GROUPS OF THREE, MAX 24" HT.

- RED-TWIGGED DOGWOOD (CORNUS SERICEA)
- WINTERBERRY (ILEX VERTICILLATA)
- BLACK CHOKEBERRY (ARONIA MELANOCARPA)
- EASTERN NINEBARK (PHYSCOCARPUS OPUFOLIOLUS)
- RED ELDERBERRY (SAMBUCUS PUBENS)
- NANNYBERRY (VIBURNUM LENTAGO)
- HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM)
- CRANBERRY BUSH (VIBURNUM TRILOBUM)
- PUSSY WILLOW (SALIX CAPREA)
- ARROW-WOOD VIBURNUM (VIBURNUM DENTATUM)
- DWARF FOTHERGILLA (FOTHERGILLA GARENII)

**RAIN GARDEN CROSS-SECTION**

NOT TO SCALE



**DECIDUOUS TREE PLANTING**

NOT TO SCALE

**SHRUB PLANTING**

NOT TO SCALE

**EVERGREEN TREE PLANTING**

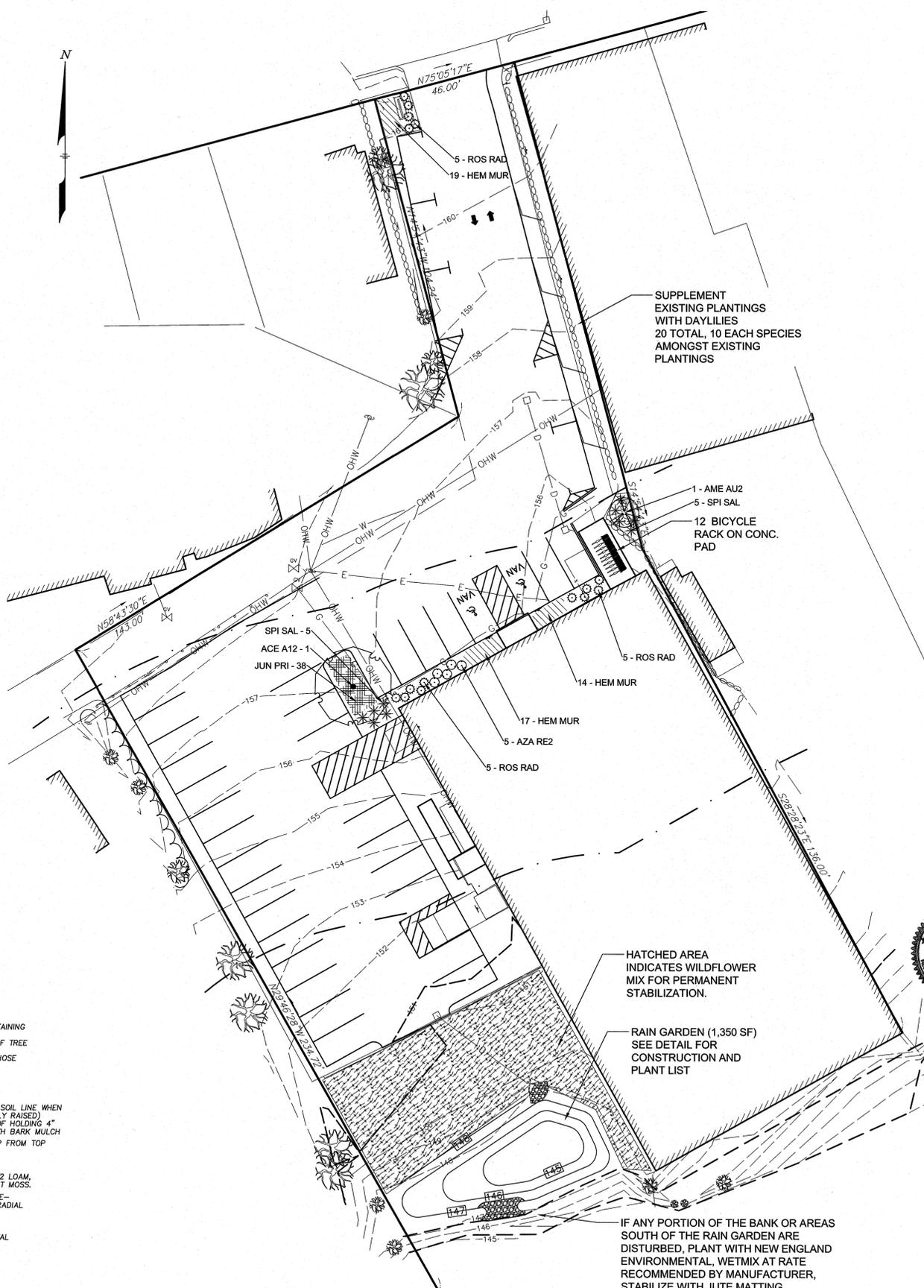
NOT TO SCALE

**OPERATION AND MAINTENANCE**

- INSPECT FOR SEDIMENT BUILD-UP, STRUCTURAL DAMAGE, AND STANDING WATER IN THE SPRING AND FALL. SEDIMENT SHALL BE REMOVED AND ANY DAMAGE REPAIRED.
- INSPECT SOIL AND REPAIR ERODED AREAS MONTHLY. RE-MULCH VOID AREAS WITH TRIPLE SHREDED HARDWOOD MULCH(N/D DYE) AS NEEDED. REMOVE LITTER AND DEBRIS MONTHLY.
- TREAT DISEASED VEGETATION AS NEEDED.
- REMOVE AND REPLACE DEAD VEGETATION TWICE PER YEAR (SPRING AND FALL).
- VEGETATION SHALL BE TRIMMED BIENNIALY AS APPROPRIATE.
- WHEN REPLACING MULCH, REMOVE EXISTING MULCH AND 1-2" OF BIORETENTION MIX (SEE DESIGN PLANS FOR DETAILS) AND REPLACE.

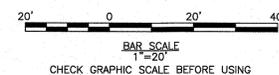
**SOILS**

- THE SOIL MIX FOR BIORETENTION AREAS SHOULD BE A MIXTURE OF SAND COMPOST AND SOIL. 50% COARSE SAND, 25% TOPSOIL, AND 25% COMPOST (MINIMUM INFILTRATION RATE OF 2 INCHES/HOUR)
  - THE SOIL MIX MUST BE UNIFORM, FREE OF STONES, STUMPS, ROOTS OR SIMILAR OBJECTS LARGER THAN 2" CLAY CONTENT SHOULD NOT EXCEED 5% SOIL PH SHOULD GENERALLY BE BETWEEN 5.5-6.5. A RANGE THAT IS OPTIMAL FOR MICROBIAL ACTIVITY AND ADSORPTION OF NITROGEN, PHOSPHORUS, AND OTHER POLLUTANTS
  - USE SOILS WITH 1.5% TO 3% ORGANIC CONTENT AND MAXIMUM 500-PPM SOLUBLE SALTS.
  - THE SAND COMPONENT SHOULD BE GRAVELLY SAND THAT MEETS ASTM D 422
- | SIZE SIZE  | PERCENT PASSING |
|------------|-----------------|
| 2-INCH     | 100             |
| 3/4-INCH   | 70-100          |
| 1/2-INCH   | 50-80           |
| 3/8-INCH   | 15-40           |
| US NO. 40  | 0-3             |
| US NO. 200 | 0-3             |
- THE TOPSOIL COMPONENT SHALL BE A SANDY LOAM, LOAMY SAND OR LOAM TEXTURE.
  - THE COMPOST COMPONENT MUST BE PROCESSED FROM YARD WASTE IN ACCORDANCE WITH WASSBER, SEE WASSBER/SP/RECICLE/RECYCLE/REUSE/REPAIR
  - THE COMPOST SHALL NOT CONTAIN BIOSOLIDS



**LANDSCAPE PLAN**

1"=20'



**MAYNARD PLANNING BOARD**

- GREG TUZZOLO, CHAIR
- ANDREW D'AMOUR, VICE CHAIR
- JIM COLEMAN
- CHRIS ARSENAULT
- BILL CRANSHAW
- APPROVAL DATE
- ENDORSEMENT DATE



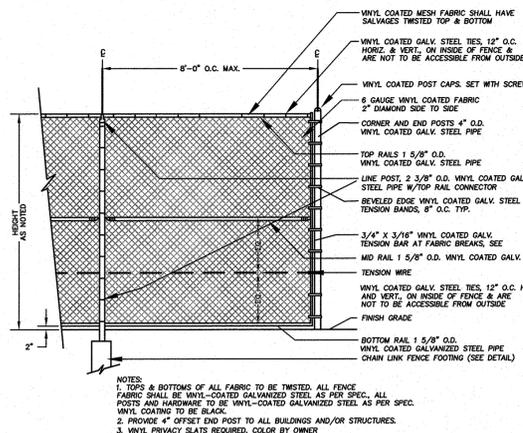
**PERMIT SET**  
4-1-2019

**LANDSCAPE PLAN**

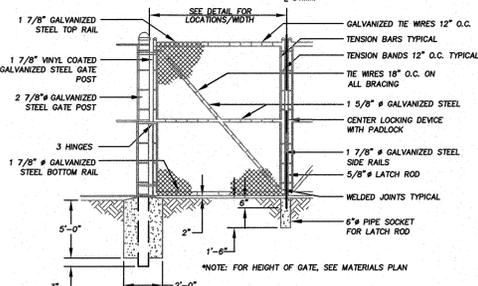
LOCATION: 22-24 MAIN STREET  
 TOWN: MAYNARD, MASSACHUSETTS  
 PREPARED FOR: GreenStar HERBALS  
 SCALE: AS NOTED DATE: MARCH 28, 2019

Places Associates, Inc.  
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 Civil Engineering, Surveying  
 256 GREAT ROAD, SUITE 4  
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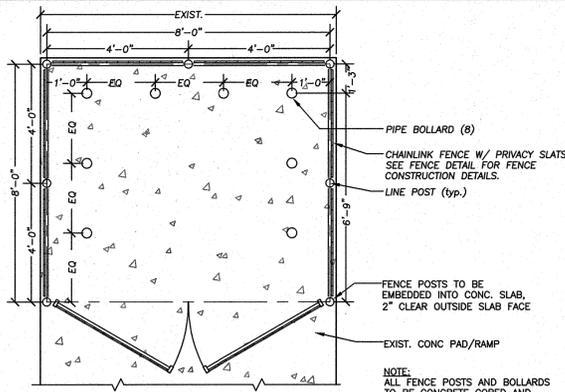
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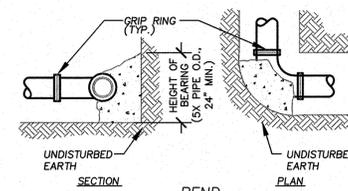
**CHAIN LINK FENCE**  
NOT TO SCALE



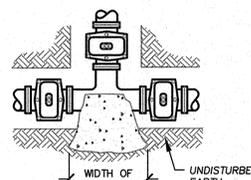
**CHAIN LINK GATE**  
NOT TO SCALE



**DUMPSTER ENCLOSURE**  
NOT TO SCALE



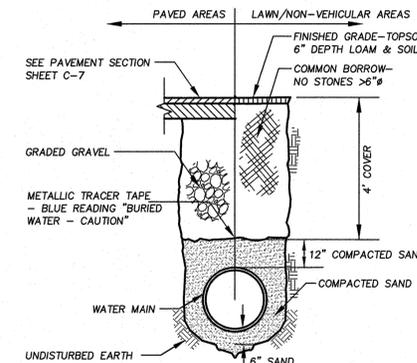
**BEND**



**3-WAY GATED INTERSECTION WITH FOSTER ADAPTOR OR FLEX T-3**

- NOTES:  
 1. THRUST BLOCKS ARE TO BE MADE OF CAST-IN-PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI @ f=28 DAYS.  
 2. THRUST BLOCKS ARE TO BEAR DIRECTLY ON PIPE OR FITTING AND EXISTING UNDISTURBED EARTH AT EXCAVATION SIDEWALL.  
 3. BAGS OF CONCRETE OR OTHER UNFORMED CONCRETE OR MATERIALS MAY NOT BE USED AS THRUST BLOCKS.

**THRUST BLOCK DETAILS**

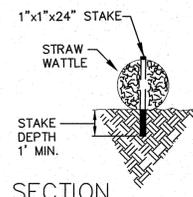


**WATER MAIN INSTALLATION**  
NOT TO SCALE

1. Erosion control devices to be inspected weekly, after storm events greater than 0.25" of rainfall and before a severe weather event is predicted.  
 2. Sediment shall be removed when sediment has accumulated to half the height of the barrier or before a severe weather event is predicted.  
 NOTE: LINES OF WATTLES TO BE PERPENDICULAR TO RUNOFF FLOW DIRECTION

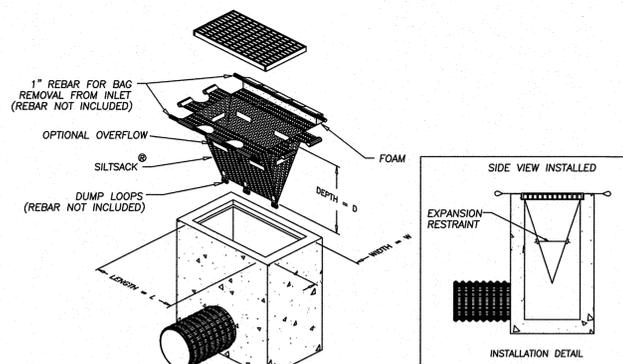


**PLAN**

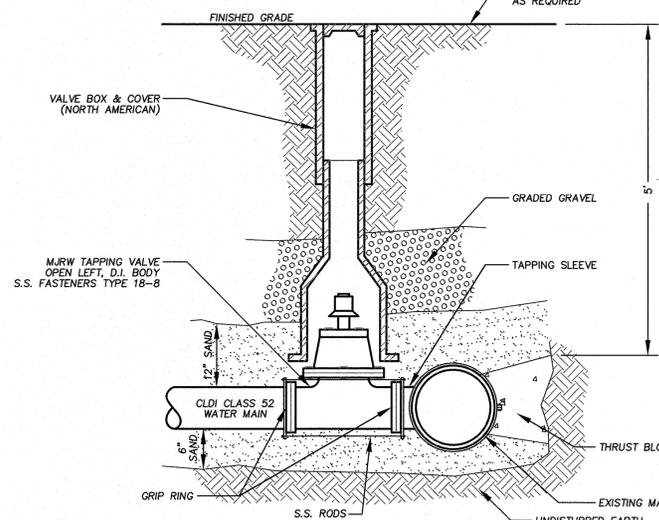


**SECTION**

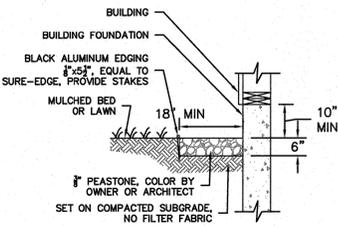
**STRAW WATTLES**  
NOT TO SCALE



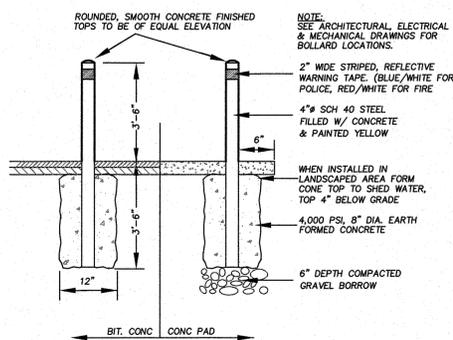
**INLET SEDIMENT CONTROL DEVICE**  
NOT TO SCALE



**TAPPING SLEEVE & VALVE ASSEMBLY**  
NOT TO SCALE



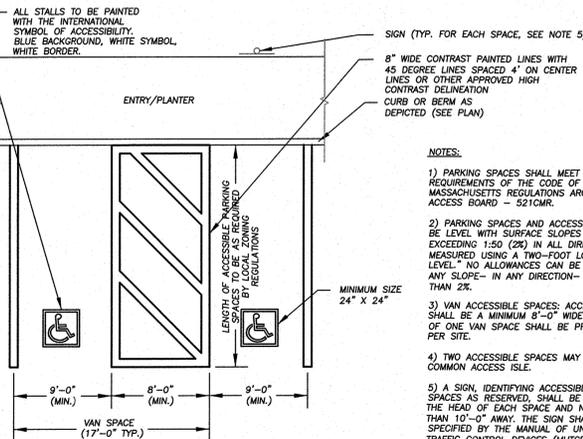
**STONE BUILDING EDGING**  
NOT TO SCALE



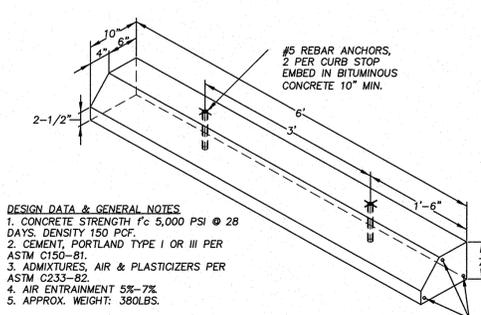
**BOLLARD**  
NOT TO SCALE

| SIGN | LEGEND | DIMENSIONS    | SPECIFICATIONS |
|------|--------|---------------|----------------|
|      | R1-1   | 24" OCTAGONAL | MUTCD          |
|      | R5-1   | 24"           | MUTCD          |
|      | R7-1   | 12" X 18"     | MUTCD          |
|      | R7-8   | 12" X 18"     | MUTCD          |
|      | R7-BB  | 12" X 6"      | MUTCD          |

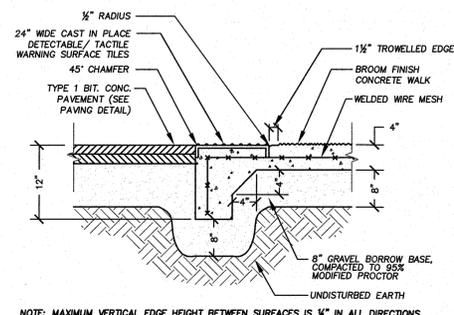
**SIGN LEGEND**  
NOT TO SCALE



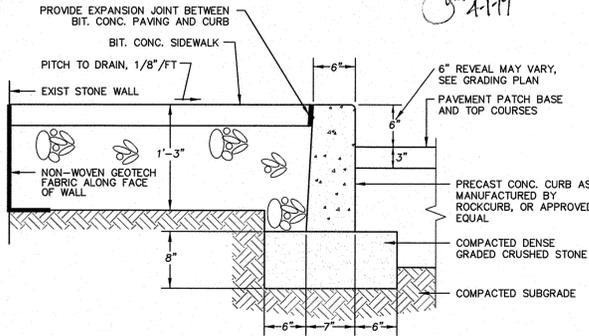
**ACCESSIBLE PARKING SPACES**  
NOT TO SCALE



**PARKING WHEEL STOP**  
NOT TO SCALE



**FLUSH WALK/PAVEMENT INTERFACE**  
NOT TO SCALE



**PRECAST CONCRETE CURB & WALK**  
NOT TO SCALE



**PERMIT SET**  
4-1-2019

**CONSTRUCTION DETAILS**

LOCATION: 22-24 MAIN STREET  
 TOWN: MAYNARD, MASSACHUSETTS

PREPARED FOR:  
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SCALE: AS NOTED DATE: MARCH 28, 2019

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PROJECT No.: 5390 PLAN No. C-5