



TOWN OF DIGHTON
PLANNING BOARD
979 SOMERSET AVENUE
DIGHTON, MA 02715
Tel: (508) 669-6431, Ext. 114
Fax: (508) 669-4509

Jeff Carvalho, Chairman
Daniel Higgins, Vice Chairman
Christopher Cunha, Clerk
Joseph Figueiredo, Member
Robert J. Woods, Member

RECEIVED

Town Clerk-Dighton, MA

AUG 24 2023

Time: 11:49 AM
By: S.C.

LEGAL NOTICE
DIGHTON PLANNING BOARD
September 20, 2023 at 7:00 PM
Old Town Hall
1111 Somerset Avenue
Dighton, MA 02715

Notice is hereby given the Dighton Planning Board will conduct a Public Hearing on the Modification of a Special Permit & Site Plan Review by GHTJA03, LLC (Grasshopper Energy) to cut a total of ninety-seven (97) trees outside of the approved limit of work and proposes a 30' buffer around the entire facility, for property located at 0 Brook Street being shown as Assessors Map 16, Lot 28, pursuant to Sections 4600, 5300 and 5400 of the Town of Dighton Zoning Bylaws.

Copies of the application and plan may be viewed in the Planning Board office during normal business hours or requested by email at keasterday@dighton-ma.gov. Any person wishing to be heard on the above application should appear at the time and place designated for the public hearing.

DIGHTON PLANNING BOARD
Jeff Carvalho, Chairman

10-23



TOWN OF DIGHTON
PLANNING BOARD
979 SOMERSET AVENUE
DIGHTON, MA 02715

PETITIONER: Grasshopper Energy Corporation

NAME: Ahmed Hafez

ADDRESS: 345 Highway 9 South, Suite 341 Manalapan New Jersey, 07726

LOCATION (from Assessors' Office)

**PLAT AND
LOT NOS.** Map 16 Lot 28

PRESENT ZONING	Residence & Agriculture	First Record Date Planning Board Use Only
DATE OF THIS DOCUMENT	August 21, 2023	FILE: TITLE:

APPLICATION FOR SPECIAL PERMIT

File two (2) completed copies of this application. One (1) copy with the Planning Board and one (1) copy with the Town Clerk in accordance with the Zoning Bylaws. The filing fee as calculated by Appendix A, made payable to the Town of Dighton.

To the Dighton Planning Board:

PROJECT NAME: Major Modification for Brook Street Solar
SUBJECT PROPERTY ADDRESS: 0 Brook Street
ASSESSOR'S MAP/LOT(s): Map 16 Lot 28
ALL APPLICABLE ZONING DISTRICT: Residence & Agriculture
TITLE OF PLAN: Major Modification Plan for Brook Street Solar
PLAN DATED: August 21, 2023

DESCRIBE WHAT IS PROPOSED FOR THIS PROPERTY:

This request is specific to a Major Modification of a Special Permit that was approved by the Dighton Planning Board on January 16, 2019 that would allow additional trees outside of the approved limit of work be cleared in order to decrease shading impacts

STATE THE EXACT NATURE OF ACTION OR RELIEF REQUESTED BY THIS APPLICATION AND CITE THE APPLICABLE BYLAW(s) AND/OR BYLAW SECTION(s):

A Major Modification to a previously Approved Special Permit (Dated January 16, 2019 per Sections 4600 and 5300 of the Town of Dighton Zoning Bylaw

DESCRIBE HOW THIS APPLICATION MEETS THE CRITERIA FOR A SPECIAL PERMIT AS DESCRIBED IN THE APPLICABLE SECTION(s) OF THE DIGHTON ZONING BYLAWS:

The proposed project conforms with the general requirements laid out in Section 4600 of the Town of Dighton Zoning Bylaws

THE UNDERSIGNED HEREBY CERTIFIES THAT THE INFORMATION ON THIS APPLICATION AND PLANS SUBMITTED HEREWITH IS CORRECT, AND THAT THE APPLICATION COMPLIES WITH ALL APPLICABLE PROVISIONS OF STATUTES, REGULATIONS AND BYLAWS TO THE BEST OF HIS/HER KNOWLEDGE.

THE ABOVE IS SUBSCRIBED TO AN EXECUTED BY THE UNDERSIGNED UNDER THE PENALTIES OF PERJURY IN ACCORDANCE WITH M.G.L. Ch. 268, §1-A.

Received by the **RECEIVED** Board:

Date: _____

Time: _____

Signature: AUG 22 2023

By: Dighton Planning Board

Received by the Town Clerk:

Date: _____

Time: _____

Signature: _____

Applicant's Name

Applicant's Address

Applicant's Phone #

Signature: AHMED HAFEZ

Ahmed Hafez

345 Highway 9 South, Suite 341

Manalapan, NJ, 07726

416.830.1570

Owner's name, address and signature for authorization
(if other than applicant)

Owner's Name

Owner's Address

Mike Andrews

Marie Louise Trust

Owner's Phone#

Signature: 734 501 7899

997

Checklist of items to be submitted with application.

1. Application Form (x2)
2. Application Fee (please refer to Fee Schedule)
3. Project Review Fee (please refer to Fee Schedule) & Completed W-9
4. Tax Status Application Form
5. Plans (See applicable Zoning Bylaws for Specific Requirements)
6. Certified Abutters List
7. Completed Receipt for Special Permit Application/Site Plan Review (within 3 working days of the submittal date)



10-23

TOWN OF DIGHTON
PLANNING BOARD
979 SOMERSET AVENUE
DIGHTON, MA 02715

PETITIONER: Grasshopper Energy Corporation

NAME: Ahmed Hafez

ADDRESS: 345 Highway 9 South, Suite 341 Manalapan New Jersey, 07726

LOCATION (from Assessors' Office)

**PLAT AND
LOT NOS.** Map 16 Lot 28

**PRESENT
ZONING** Residence & Agriculture

First Record Date
Planning Board Use Only

**DATE OF THIS
DOCUMENT** August 21, 2023

FILE:
TITLE:

APPLICATION FOR SITE PLAN REVIEW

File two (2) completed copies of this application with the Planning Board and within three (3) days thereafter submit a copy to the Board of Health, Board of Appeals, Building Commissioner, Town Engineer and Conservation Commission in accordance with the Zoning Bylaws. The filing fee as calculated by the Fee Schedule, made payable to the Town of Dighton.

To the Dighton Planning Board:

TITLE OF PLAN: Major Modification Plan for Brook Street Solar Project

PLAN DATED: August 21 2023

SUBJECT PROPERTY ADDRESS: 0 Brook Street

ASSESSOR'S MAP/LOT(s): Map 16 Lot 28

ALL APPLICABLE ZONING DISTRICTS: Residence & Agriculture

PROPOSED USES FOR THIS PROPERTY:

This request is specific to a major modification of the Site Plan Review that was previously approved by
The Dighton Planning board on January 16, 2019 that would allow additional trees outside of
the approved limit of work to be cleared in order to decrease shading impacts.

TOTAL LOT AREA:	<u>19.6 Acres</u>	TOTAL FRONTAGE:	<u>547.14'</u>
EXISTING STRUCTURE(s)	<u>N/A</u>	S.F.	
PROPOSED STRUCTURE(s)	<u>N/A</u>	S.F.	
TOTAL # OF PARKING SPACES REQUIRED:	<u>N/A</u>		
TOTAL # OF PARKING SPACES PROPOSED:	<u>N/A</u>		

ATTACH A LIST OF VARIANCES REQUESTED, IF ANY. (Variances may require relief from the Zoning Board of Appeals)

SPECIAL PERMIT APPLICATION/FEES PURSUANT TO THE FEE SCHEDULE, IF APPLICABLE, SHALL BE SUBMITTED IN CONJUNCTION WITH THIS SITE PLAN REVIEW APPLICATION.

I HAVE READ SECTION 5400, SITE PLAN REVIEW OF THE DIGHTON ZONING BYLAWS, AND I AM SUBMITTING THIS APPLICATION WITH ACCOMPANYING PLANS AS REQUIRED. EXCEPT FOR THE ATTACHED LIST OF VARIANCES (IF ANY), IT IS MY BELIEF THAT THE PLANS COMPLY WITH SECTION 5400. I HAVE NOTIFIED TENANTS AND PARTIES (IF ANY) WHO HAVE AN INTEREST IN OR ARE AFFECTED BY THE PROPOSED PLAN.

RECEIVED

Received by the Planning Board:
Date: AUG 22 2023
Time: _____
Signature: By: Dighton Planning Board

Applicant's Name Ahmed Hafez
Applicant's Address 345 Highway 9 South, suite 341
Manalapan NJ, 07726
Applicant's Phone # 416.830.1570
Signature: [Signature]

Received by the Town Clerk:
Date: _____
Time: _____
Signature: _____

Owner's name, address and signature for authorization
(if other than applicant)
Owner's Name MANUEL + LOUISE ANDREWS TRUST / MARY ANDREWS
Owner's Address 1985 NEW STATE HIGHWAY
RAYNHAM, MA 02767
Owner's Phone# 774-501-7899
Signature: Michael J. Andrews

Checklist of items to be submitted with application.

1. Application Form (x2)
2. Application Fee (please refer to Fee Schedule)
3. Project Review Fee (please refer to Fee Schedule) & Completed W-9
4. Tax Status Application Form
5. Plans (See applicable Zoning Bylaws for Specific Requirements)
6. Completed Receipt for Special Permit Application/Site Plan Review (within 3 working days of the submittal date)



August 22, 2023

Town of Dighton
Planning Board
979 Somerset Avenue
Dighton, MA 02715

RE: Grasshopper Energy Corporation ('Grasshopper') - Request for Major Modification of Special Permit/Site Plan Review
Brook Street Solar Project

Dear Board Members,

On behalf of the Applicant, we respectfully submit this request for a major modification to a previously approved Special Permit/Site Plan Review for the above referenced project. The Planning Board voted to approve a Special Permit with Site Plan Review for a proposed solar project at 0 Brook Street (Map 16, Lot 28) on December 19, 2018. This request is specific to major modification that would allow the applicant to cut additional trees outside of the approved limit of work to decrease shading impacts.

The original limit of work shown on drawings approved by the Planning Board in January of 2019 **has been found to be inadequate at allow for effective production by the solar system due to excessive shading of solar panels.** Effects observed from even partial shading of solar systems results in an exponential loss in potential production of electricity. For example, panels in solar arrays are strung together in large groups called '*Strings*', typically consisting of between 15 and 30 panels, before terminating at the inverters. Shading a portion of one panel can cause a large reduction in output for every panel in the entire '*string*' directly associated with that panel. In other words, the chain of panels is only as strong as its weakest link.

A LIDAR drone survey has recently been completed to identify locations of trees outside of the limit of work but within the property itself. A total of 97 trees have been identified as contributing to substantial shading to the solar array where approximately 28 are located within the jurisdiction of the Conservation Commission (within 100 feet of wetlands. It should also be noted that there are currently no trees proposed to be cut within the 25 foot no-touch zone to the wetland buffer).

Please refer to the attached **Exhibit A** showing a recent photograph showing shading impacts at the Site in addition to existing screening that will remain in place at the northeast area of the property. At this time the trees shown on the Major Modification Plan are flagged in blue. However, at the request of Lisa Caledonia of the Conservation Commission, the Applicant will be reflagging the trees in using a new color due to the wetland delineation flags also being a blue color. It should be noted that only larger trees that significantly impact shading have been selected for clearing.

It is proposed that the trees be cut entirely while allowing the roots/trunks to remain in place. As per the requirements of Section 4600 *Solar Electric Generating Facilities* of the Town of Dighton Zoning Bylaws, the applicant is proposing a 30' buffer around the entire facility, except for the access road area.

In the applicant's opinion, the visual screening trees that were planted as part of the original plan, are currently providing the required visual screening, as shown in the attached **Exhibit B**. Nonetheless, the applicant will be planting a tree for every tree that is cut within the 30' buffer (approximately 50 trees), and the replanted trees will be in accordance with the bylaw requirement, which will grow to at least ten (10) feet within five (5) years of the completion of construction of the Large-Scale Ground Mounted Solar Electric Installation. The trees that will be planted by the applicant will be a combination of native trees as recommended by a local arborist Bruce Duffy where at least 75% of such planted vegetation will be evergreen species.

Per recommendations of Bruce Duffy, Certified Arborist, these plantings will consist of a combination of native understory shrubs (*Winterberry holly, Ninebark, Grey dogwood, Silky dogwood, Witch hazel*) and native understory trees that have a height of less than 35' (*Serviceberries, Eastern redbud, Pagoda dogwood, Pussywillow, Chokecherry, Wild plum*). A copy of Bruce Duffy's letter can be found attached to this application.

Considering the nature of this request is detrimental to the project and that native understory shrubs and trees less than 35' in total height will be replacing the cleared trees it is anticipated this will not adversely affect visual screening from the closest residential home. Additionally, tree clearing on the western side of the property will increase the buffer to battery storage units, which helps alleviate concerns from the Planning Board during previous meetings. For this reason, we feel this change is **consistent with the findings outlined within the Special Permit/Site Plan Review approval**.

We look forward to meeting with you to discuss the request and answer any questions you may have. Thank you for your consideration and please do not hesitate to contact me directly if additional information is required.

Sincerely,

ATLANTIC DESIGN ENGINEERS, INC.



Richard J. Tabaczynski, P.E.
Vice President

cc: Town of Dighton Building Inspector
A. Hafez (Grasshopper)

Exhibit A – Existing Shading Impacts

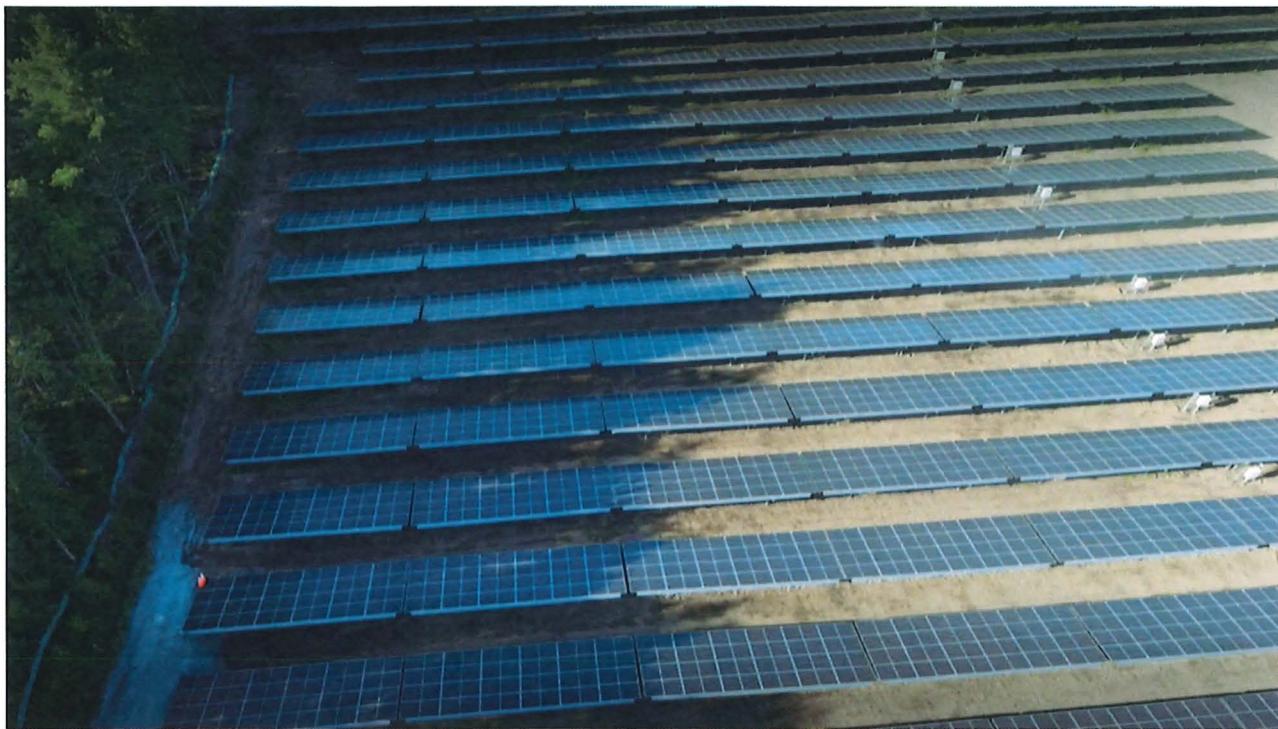


Exhibit B – Typical Arborvitae Screening Tree Along Eastern Fence Line



Bruce Duffy

DRA Arboricultural Services

Bruce Duffy
49 Woody Island Rd
Hopkinton Ma, 01748
Massachusetts Certified Arborist 1919
ISA Certified NE 0808
Rhode Island Certified Arborist

August 7, 2023
Ahmed Hafez
Sr Director, EPC Management.
Solar Farm Project
0 Brook St Dighton, Ma

Prepared for Grasshopper Energy
345 Highway 9 South Suite 341
Manalapan, New Jersey, 07726

On August 3rd, 2023, per your request I walked the property to identify any rare trees that are present around the solar farm which are identified on the plan prepared by Atlantic Design Engineers titled "Special Permit Modification Plan"

The tree's that I looked at are all native to the area, and are composed of the following species:

- White pine "Pinus strobes"
- Red oak "Quercus rubra"
- White oak "Quercus alba"
- Black birch "Betula lenta"
- Witch hazel "Hamamelis mollis"
- Pignut Hickory "Carya glabra"
- Black Tupelo "Nyssa sylvatica"

These trees vary in trunk diameter from six inches to forty inches with White pine being the largest of all.

The only trees that I noticed that should stay are the Pignut hickory and Black Tupelo. These trees are located in the back left corner of the solar field. I only found one of each of these species on the property and have been marked in a different color.

List of native understory shrubs suitable for the area.

- Winterberry holly "Ilex verticillata"
- Ninebark "Physocarpus opulifolius"
- Grey dogwood "Cornus ramosa"
- Silky dogwood "Cornus amomum"
- Downey Arrowwood viburnum spp. "Viburnum rafinesquianum"
- Currant/Gooseberry "Ribes" spp.
- Witch hazel "Hamamelis mollis"

There are many more plants to choose from as well.

Native understory trees less than 35' in height.

- Serviceberries spp.

- Eastern Redbud "Cercis canadensis"
- Pagoda dogwood "Cornus alternifolia"
- Pussywillow "Salix discolor"
- Chokecherry "Prunus virginiana"
- Wild plum "Prunus americana"

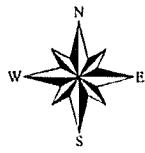
Again, this is a short list of many plants to choose from.

If you have any concerns or questions regarding the trees, I identified on site, I am happy to answer them for you and the conservation committee.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bruce Duffy". The signature is fluid and cursive, with a large, stylized 'B' and 'D'.

Bruce Duffy
Certified Arborist.



893 BROOK ST

Town of Dighton, MA

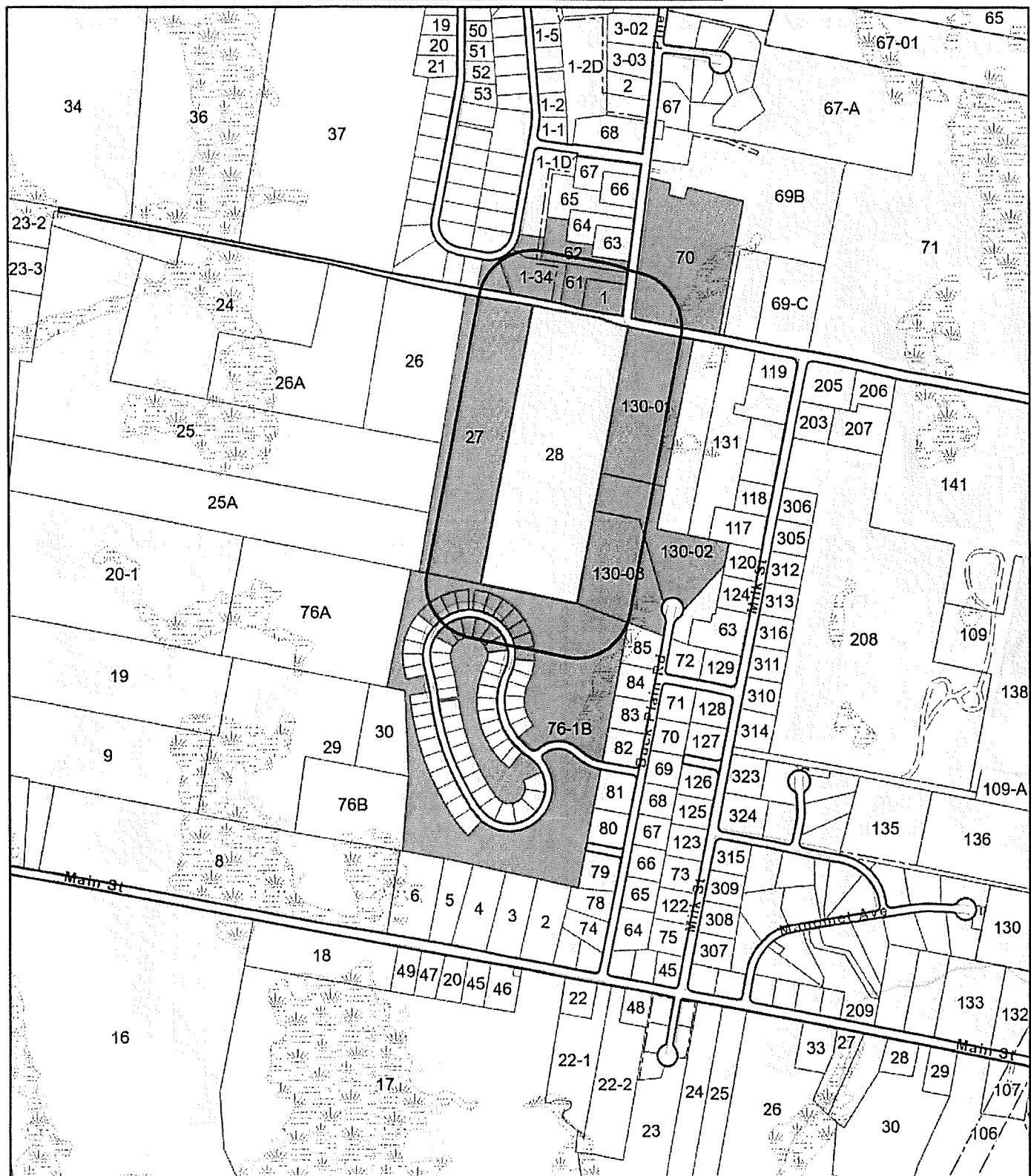
1 inch = 752 Feet

CAI Technologies
Precision Mapping. Geospatial Solutions

www.cai-tech.com

August 8, 2023

0 752 1504 2256



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

