

# ***TOWN OF NATICK***

## **Meeting Notice**

POSTED IN ACCORDANCE WITH THE PROVISIONS OF M.G.L. CHAPTER 30A, Sections 18-25

### **Natick Finance Committee**

School Committee Room, 3rd Flr, Natick Town Hall

September 28, 2017 7:00 PM

#### **Agenda**

1. Public Concerns/ Comments
  - a. Meeting Agenda (as posted with Town Clerk)
2. Meeting Minutes
3. Old Business
  - b. Finance Committee Working Session
  - c. FTM Article 35: Reconsideration of: Amend Charter Article 7: General Provisions
4. New Business
  - d. FTM Article 26 – Amend Zoning By-Law to Implement a Temporary Moratorium Regarding Recreational Marijuana Establishments
  - e. FTM Article 56 – Registered Marijuana Dispensaries Bylaw
  - f. Article 30 - Amend Zoning By-Law: Solar Energy Systems
  - g. Article 31 - Amend Zoning By-Laws: Sky Exposure Plane
5. Adjourn

*The Finance Committee will make every reasonable effort to update this agenda if additional information is provided subsequent to the initial posting. The Finance Committee reserves the right to consider items on the agenda out of order. Any times that may be listed on the agenda are estimates provided for informational purposes only. Agenda items may occur earlier or later than the stated time.*

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**ITEM TITLE:** Meeting Agenda (as posted with Town Clerk)

**ITEM SUMMARY:**

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**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
Revised Meeting Agenda	9/28/2017	Exhibit



# TOWN OF NATICK

## Meeting Notice

POSTED IN ACCORDANCE WITH THE PROVISIONS OF M.G.L. CHAPTER 30A, §§ 18-25

### Finance Committee

#### PLACE OF MEETING

School Committee Meeting Room  
3rd Floor, Town Hall  
13 East Central Street  
Natick, Mass. 01760

#### DAY, DATE AND TIME

Thursday, September 28, 2017  
7:00 P.M. to 11:00 P.M

#### MEETING AGENDA-REVISED

<b>1. Citizens Concerns/Comments – For topics not on the evening’s agenda</b>
<b>2. 2017 Fall Town Meeting Warrant Public Hearing</b> <ul style="list-style-type: none"> <li>a) Article 35: Reconsideration of: Amend Charter Article 7: General Provisions</li> <li>b) Article 26 – Amend Zoning By-Law to Implement a Temporary Moratorium Regarding Recreational Marijuana Establishments</li> <li>c) Article 56 – Registered Marijuana Dispensaries Bylaw</li> <li>d) Article 30 – Amend Zoning By-Law: Solar Energy Systems (continuation)</li> <li>e) Article 31 - Amend Zoning By-Laws: Sky Exposure Plane (continuation)</li> </ul>
<b>2. Finance Committee Working Session</b> <ul style="list-style-type: none"> <li>a) Review upcoming meeting schedule, dates for question, requests for additional information</li> <li>b) Discuss scheduling of Focus Group for Town Meeting Recommendation Book</li> <li>c) Review Draft of Guide to Finance Committee Meeting Mechanics and Procedures</li> <li>d) FinCom Survey - Discussion on Steps to Prepare Survey Results/Action Steps for Public Release</li> </ul>
<b>5. Adjourn</b>
<i>Please note that the Chairmen reserves the right to reschedule or reorder agenda items without advance notice.</i>

Patrick Hayes, Chairman

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SUBMITTED BY

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**ITEM TITLE:** Finance Committee Working Session

- ITEM SUMMARY:**
1. **Review upcoming meeting schedule, dates for question, requests for additional information**
  2. **Discuss scheduling of Focus Group for Town Meeting Recommendation Book**
  3. **Review Draft of Guide to Finance Committee Meeting Mechanics and Procedures**
  4. **FinCom Survey - Discussion on Steps to Prepare Survey Results/Action Steps for Public Release**

Please note that there will be no materials posted at this time for the public on these topic areas

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**ITEM TITLE:** FTM Article 35: Reconsideration of: Amend Charter Article 7: General Provisions

**ITEM SUMMARY:**

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**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
Proposed New Wording Compared to Prior Draft	9/28/2017	Exhibit
Revised Motion A	9/28/2017	Exhibit

**REVISED MOTION A – September 28, 2017**

**This is the current wording of Charter Article 7, Section 7-9 (a)**

**Section 7-9 Procedure Governing Multiple Member Bodies**

- (a) **Meetings** - All multiple member bodies, whether elected, appointed or otherwise constituted, shall meet regularly at such times and places within the town as they may, by vote, prescribe. Special meetings of any multiple member body shall be held upon the call of its chairman, or by one-third of the members thereof, by notice to each member, except in the case of emergency, at least forty-eight hours in advance of the time set, which indicates the subject to be acted upon and the time and place of such special meeting, whether within or without the town. A copy of the same notice shall be posted on the town bulletin board. Regular meetings of all multiple member bodies shall be held in public buildings of the town of Natick.

**The following paragraph shows the revised wording for Charter Article 7, Section 7-9 (a) proposed by the CBRC in the Fall Town Meeting Warrant (Warrant Article 35)**

**Section 7-9 Procedure Governing Multiple Member Bodies**

- (a) **Meetings** - All multiple member bodies, whether elected, appointed, or otherwise constituted, shall meet regularly. All meetings shall be held in a public building, unless it is a site visit, and shall be scheduled and posted in accordance with the applicable law and the Open Meeting Law under Mass. Gen. Law. A copy of the same notice shall be posted on the town bulletin board.

**The following is proposed revised wording for Section 7-9 (a) of Charter Article 7, based upon input from John Flynn, Martha White, Diane Packer and CAG.**

**Section 7-9 Procedure Governing Multiple Member Bodies**

- (a) **Meetings** - All multiple member bodies, whether elected, appointed or otherwise constituted, shall meet regularly. All meetings of a multiple member body shall be held in a building that allows the public to enter and meets all Federal, state and local accessibility requirements, unless it is a site visit, and shall be scheduled and posted in accordance with all applicable laws, including but not limited to the Massachusetts Open Meeting Law. A copy of the same notice shall be posted on the town bulletin board.

## Motion A:

Move to replace Section 7-9 of Article 7 of the Town of Natick Home Rule Charter with:

### **“Section 7-9 Procedure Governing Multiple Member Bodies**

#### **Meetings - Section 7-9 Procedure Governing Multiple Member Bodies**

- (a) **Meetings** - All multiple member bodies, whether elected, appointed or otherwise constituted, shall meet regularly. All meetings of a multiple member body shall be held in a building that allows the public to enter and meets all Federal, state and local accessibility requirements, unless it is a site visit, and shall be scheduled and posted in accordance with all applicable laws, including but not limited to the Massachusetts Open Meeting Law. A copy of the same notice shall be posted on the town bulletin board.
  
- (a) **Rules and Minutes** - Each multiple member body shall determine its own rules and order of business, unless otherwise provided by the charter or by law, provided, however, that each multiple member body shall provide some period of time at each of its meetings for members of the public who are present to ask questions, state opinions and otherwise exchange information with the members of the multiple member body. Each multiple member body shall also provide for the keeping of minutes of its proceedings. These rules and the minutes shall be a public record.
  
- (b) **Voting** - If requested by any member, any vote of a multiple member body shall be taken by a roll call vote and the vote of each member shall be recorded in the minutes, provided, however, if any vote is unanimous only that fact need be recorded.
  
- (c) **Quorum** - A majority of the full membership of a multiple member body shall constitute a quorum. A quorum is required for a meeting to be held. If a quorum is not present at a scheduled meeting, the meeting may only be adjourned. While a quorum is present, unless another provision is made by law or by its own rules, all business shall be determined by a majority of those present and voting.
  
- (d) **Filling of Vacancies** - Whenever a vacancy shall occur in the membership of an appointed multiple member body, the remaining members shall forthwith give written notice of such vacancy to the appointing authority. If, at the expiration of ninety days following delivery of such written notice to the appointing authority, said appointing authority has not appointed some person to fill the vacancy, the remaining members of the multiple member body shall fill such vacancy for the remainder of the unexpired term by a majority vote of the remaining members.”

## Amend Charter Article 7: Motion(s)

### Motion B:

Move to remove the phrase “on the town bulletin board” from section 7-10 of Article 7 of the Town of Natick Home Rule Charter.

### Motion C:

Move to replace the first paragraph of section 7-11 of Article 7 of the Town of Natick Home Rule Charter with:

“Any appointed officer or employee of the town, whether appointed for a fixed or an indefinite term, may be suspended or removed from his duties by the appointing authority in accordance with the procedure set forth below. Provided, however, that said procedure shall not apply to those officers and employees for whom general law or the terms of a collective bargaining agreement supersede these provisions, and further provided that this section shall not apply to employees on probationary status.”



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**ITEM TITLE:** FTM Article 26 – Amend Zoning By-Law to Implement a Temporary  
Moratorium Regarding Recreational Marijuana Establishments

**ITEM SUMMARY:**

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**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
Questionnaire Response	9/28/2017	Exhibit
MOTION	9/28/2017	Exhibit

Warrant Article Questionnaire  
Non Standard Town Agency Articles

**Section III – Questions with Response Boxes – To Be Completed By Petition Sponsor**

Article # 26	Date Form Completed:9/26/17
Article Title: Amend Zoning By-Law to Implement a Temporary Moratorium Regarding Recreational Marijuana Establishments	
Sponsor Name: Board of Selectmen	Email: mwhite@natickma.org

Question	Question
1	Provide the article motion exactly as it will appear in the Finance Committee Recommendation Book and presented to Town Meeting for action.
Response	See attached – Motion language was provided to staff from MHTL (legal counsel)
2	At a summary level and very clearly, what is the proposed purpose and objective of this Warrant Article and the accompanying Motion?
Response	This moratorium would allow the Town adequate time to consider whether and/or how to allow, prohibit and/or regulate recreational marijuana establishments and related used, and to undertake an appropriate planning process.
3	Has this article or one of a very similar scope and substance been on a previous Warrant Article and what has been the actions taken by Finance Committee, other Boards or Committees and Town Meeting?
Response	Not with respect to recreational marijuana.  However, at the 2013 Spring Annual Town Meeting under 39 a temporary moratorium on medical marijuana treatment centers was enacted; at the 2014 Spring Annual Town Meeting under Article 11 this moratorium was extended until 12/31/14 or the date of approval of a local by-law, whichever was earlier. Under Article 12 of the 2014 Spring Annual Town Meeting a local Zoning By-Law was approved to allow and regulate Registered Medical Marijuana Dispensaries
4	Why is it required for the Town of Natick and for the Town Agency sponsor(s)?
Response	See response to Question 2, above.

Warrant Article Questionnaire  
Non Standard Town Agency Articles

5	Does this article require funding, how much, from what source of funds and under whose authority will the appropriation be managed and spent?
Response	No funding required
6	Does this article act in any way in concert with, in support of, or to extend any prior action of Natick Town Meeting, Massachusetts General Laws or CMR's or other such legislation or actions?  Does this article seek to amend, rescind or otherwise change any prior action of Natick Town Meeting?
Response	As outlined in the motion, this article seeks to provide time for the Town of Natick to consider whether and how to address recently approved state laws approved by voters in 2016 as part of "The Regulation and Taxation of Marijuana Act".
7	How does the proposed motion (and implementation) fit with the relevant Town Bylaws, financial and capital plan, comprehensive Master Plan, and community values as well as relevant state laws and regulations?
Response	The proposed motion would amend the Town of Natick Zoning Bylaws and provide adequate time to consider whether and/or how to allow, prohibit and/or regulate recreational marijuana establishments and related used, and to undertake an appropriate planning process.
8	Who are the critical participants in executing the effort envisioned by the article motion?
Response	Town Meeting, Board of Selectmen, Planning Board, and Town Administration.
9	What steps and communication has the sponsor attempted to assure that: <ul style="list-style-type: none"> <li>• Interested parties were notified in a timely way and had a chance to participate in the process</li> <li>• Appropriate Town Boards &amp; Committees were consulted</li> <li>• Required public hearings were held</li> </ul>
Response	The Planning Board reviewed and unanimously endorsed the proposed motion at their September 13, 2017 meeting (at a required public hearing).

Warrant Article Questionnaire  
Non Standard Town Agency Articles

<b>10</b>	Since submitting the article have you identified issues that weren't initially considered in the development of the proposal?
Response	No
<b>11</b>	If this Warrant Article is not approved by Town Meeting what are the consequences to the Town and to the sponsor(s)? Please be specific on both financial and other consequences?
Response	The state's Cannabis Control Commission (recently formed) is charged with creating regulations for recreational marijuana in the Commonwealth. These are due to be enacted no later than June 30, 2018 (but could be sooner). If the warrant article is not approved by Town Meeting, the Town may be subject to state regulations governing the citing and permitting of recreational marijuana facilities within the Town of Natick.

**2017 Fall Annual Town Meeting**  
**Article 26**  
**Amend Zoning By-Law to Implement a Temporary Moratorium Regarding Recreational**  
**Marijuana Establishments**  
**(Board of Selectmen)**

**Motion:**

Move that the Zoning Bylaws be amended as follows:

Add New Section III-K: Marijuana Establishments, that reads:

Section III-K: Marijuana Establishments

A. Purpose.

This moratorium is intended to provide restrictions that will allow the Town of Natick (“Town”) adequate time to consider whether and/or how to allow or prohibit marijuana establishments and related uses, in accordance with applicable state laws and regulations, and to undertake a planning process as described herein. By vote at the Massachusetts state election on November 8, 2016, the voters of the Commonwealth approved “The Regulation and Taxation of Marijuana Act,” which was subsequently codified as Chapter 334 of the Acts of 2016, and subsequently amended, in part, by Chapter 351 of the Acts of 2016, entitled “An Act Further Regulating the Cultivation of Marijuana and Marihuana,” and by Chapter 55 of the Acts of 2017, entitled “An Act to Ensure Safe Access to Marijuana” (collectively, the “Acts”). Among other requirements, pursuant to the Acts, the Cannabis Control Commission is charged with promulgating future regulations regarding administration and implementation of the Acts. Regulations to be promulgated by the Cannabis Control Commission are expected to provide guidance in the licensing and regulation of marijuana establishments.

The regulation of marijuana establishments raises novel and complex legal, planning, and public safety issues, among others. In turn, the Town needs time to study and consider the regulation of marijuana establishments and other related uses, so that it will have the opportunity: to address such novel and complex issues; to study and consider the potential impacts of such establishments and other related uses on adjacent uses and on the general public health, safety and welfare; to consider and address the potential impact of the Acts, and any future regulations on local zoning; and to undertake a planning process to appropriately address these considerations through zoning bylaws and other applicable bylaws and regulations, consistent with state laws and future regulations. A temporary moratorium on the use of land and structures in the Town for marijuana establishments and related uses will allow the Town sufficient time to engage in a planning process to address zoning issues and the effects of such establishments and uses in the Town, and to enact bylaws in a manner consistent with sound land use planning goals and objectives, the Acts, and future regulations.

B. Temporary Moratorium

The use of land and/or structures for marijuana establishments as defined in Massachusetts General Laws Chapter 94G, Section 1 and as may otherwise be defined by Massachusetts law or regulation, to include, without limitation, all marijuana cultivators, marijuana testing facilities, marijuana product manufacturers, marijuana retailers, on-site consumption of marijuana at a marijuana retailer location, any other types of licensed marijuana-related businesses, and the conducting of any such activity for commercial purposes by whichever name used, and any related use, shall not be permitted in any zoning district in the Town so long as this moratorium is effective, as set forth in Section C below. Use variances shall be strictly prohibited. During this moratorium, the Town shall undertake a planning process consistent with the purposes set forth herein.

C. Expiration

For the reasons set forth above and notwithstanding any other provision of the Natick Zoning Bylaws to the contrary, the temporary moratorium set forth in Section B above shall be in effect through December 31, 2018 or six (6) months from the adoption of regulations to implement the Acts by the Cannabis Control Commission, whichever is later, unless extended, modified or rescinded by a subsequent action of Town Meeting.

D. Conflict of Laws

In the event of any conflict between the provisions of this Bylaw and any other applicable state or local law, regulation, by-law, or approval by the voters, the stricter provisions shall control.

E. Severability.

The provisions of this Bylaw are severable. If any provision, paragraph, sentence, or clause of this Bylaw is found to be invalid, such invalidity shall not affect the other provisions or application of this Bylaw, to the extent permitted by law.

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**ITEM TITLE:** FTM Article 56 – Registered Marijuana Dispensaries Bylaw  
**ITEM SUMMARY:**

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**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
Questionnaire & MOTION	9/25/2017	Exhibit
Article 56 Motion Language incorporated into Zoning By-Law	9/25/2017	Exhibit
Natick By Laws Article 56	9/25/2017	Exhibit

**Warrant Article Questionnaire  
Citizen Petitions Articles**

**Section III – Questions with Response Boxes – To Be Completed By Petition Sponsor**

Article # 56	Date Form Completed: 9/22/2017
Article Title: Registered Marijuana Dispensaries Bylaw	
Sponsor Name: Tara Hopper Zeltner	Email: thopperzeltner@gmail.com

Question	Question
1	Provide the article motion exactly as it is intended to be voted on by the Finance Committee.
Response	<p>To see if the Town will vote to amend the Natick Zoning Bylaws as follows:</p> <p>Add the following language to Section 323.8.4.1 after the words “RC District” and before the words “by special permit”: “or on a parcel of land located at 2-6 Worcester Street, Assessors Map 21, Lot 1”</p> <p>And to delete the following language in Section 323.8.4.8: “a Town of Natick boundary line, or” or otherwise act thereon.</p>
2	At a summary level and very clearly, what is proposed purpose and objective of this Warrant Article and the required Motion?
Response	To ensure residents of the Commonwealth of Massachusetts better health care access by allowing medical marijuana in a more accessible and safe location in Natick.
3	What does the sponsor gain from a positive action by Town Meeting on the motion?
Response	The sponsor is a health lawyer, civil rights advocate, social worker, and co-owner of CannaShare Consulting and Development. The sponsor focuses on cannabis law and advocacy, and may benefit indirectly through an increased business reputation for successful advocacy efforts that may lead to future monetary business benefits if a positive action is taken by Town Meeting on this motion. The sponsor is currently receiving some monetary compensation to advocate for this change in the Natick Zoning ByLaws.
4	Describe with some specificity how the sponsor envisions how: the benefits will be realized; the problem will be solved; the community at large will gain value in the outcome through the accompanied motion?



## Warrant Article Questionnaire Citizen Petitions Articles

Response	The Town of Natick’s residents will benefit by having an accessible medical marijuana dispensary on a heavily trafficked road in Natick as it gains an even more inclusive and progressive reputation within Massachusetts. Natick’s reputation will continue to flourish and grow as it sets an example for providing accessible health care by being one of the first towns to embrace the importance of providing a better quality of life for individuals who require medical marijuana for various medical symptoms. Medical marijuana acts as a pain medication to substitute for opioids that have become an epidemic throughout the country. Studies show that medical marijuana has allowed individuals to stop using opioids and have a better quality of life and build better relationships with their family and community at large. The benefits that these families within the Town of Natick may receive in this regard are priceless. By having an accessible medical marijuana dispensary in Natick, this will likely deter individuals from having this legal product delivered from outside the town parameters, and may keep a more inclusive community.
5	How does the proposed motion (and implementation) fit with the relevant Town Bylaws, financial and capital plan, comprehensive plan, and community values as well as relevant state laws and regulations
Response	Currently, medical marijuana dispensaries are only zoned in Natick within the RC District which is within the same zoning overlay as adult entertainment. Many residents have expressed negative feelings that the placement of a medical marijuana in a more “hidden” and less accessible area for medical patients, continues to stigmatize people who are medical marijuana patients as people who do not get the same respect as those who may visit one of the many urgent care medical centers that are allowed on route 9 in Natick. See ‘Registered Marijuana Dispensaries Bylaw 323.8.’ This location is currently a liquor store that has been in operation for over 18 years. I am not aware of any cost implications for the Town of Natick by changing the liquor store to a medical marijuana dispensary. This project would benefit Natick by eliminating a liquor store at this location, and instead, using this building to provide medicine to medical marijuana patients.
6	Have you considered and assessed, qualified and quantified the various impacts to the community such as: <ul style="list-style-type: none"> <li>• Town infrastructure (traffic, parking, etc.)</li> <li>• Neighbors (noise, traffic, etc.);</li> <li>• Environment and green issues (energy conservation, pollution, trash, encouraging walking and biking, etc.);</li> </ul>
Response	<b>Yes, we have thought about the impact to the community. In fact, the proposal will impact the community in a positive way. As a liquor store, the current hours of operation are longer than</b>

Warrant Article Questionnaire  
Citizen Petitions Articles

	<p>they will be within the medical marijuana dispensary. Thus, there will be reduced traffic in the area during these times. This proposed action also has a neutral effect in regard to parking. parking is currently abundant, with 37 spaces, and this will not change under the new proposal. The trash will also be greatly reduced within this proposal, as the Department of Public Health (DPH) has previously been very strict in regard to proper waste disposal for medical marijuana. However, the Cannabis Control Commission is currently changing and refining the medical marijuana regulations which are expected to continue to be similar to those that were previously within DPH. Thus, waste disposal will likely continue to be heavily regulated by the state in a much more stringent manner than has been required for alcohol. The proposed property is abutted next to a conservation area, therefore there is no expectation or plan to expand the additional building. The owner and operator of the current business property has been there for the past 18 and a half years and has never received any complaints from neighbors or from the town. The current liquor store business at this property has outside cameras that the police have found helpful and have used footage in the past for any needed investigations within the community. As a medical marijuana dispensary the outside security would actually be expanded and increased to comply with medical marijuana regulations that are being developed by the Cannabis Control Commission to somewhat mirror those that were previously provided for within DPH.</p>
7	<p>Who are the critical participants in executing the effort envisioned by the article motion?</p> <p>To this point what efforts have been made to involve those participants who may be accountable, responsible, consulted or just advised/informed on the impacts of executing the motion?</p>
Response	<p>The owner of the building and business, Natick Town Officials, and anyone who wishes to work with the Commonwealth of Massachusetts to ensure that all project developments are within compliance with the Town of Natick and Massachusetts laws and regulations.</p>
8	<p>What steps and communication has the sponsor attempted to assure that:</p> <ul style="list-style-type: none"> <li>• Interested parties were notified in a timely way and had a chance to participate in the process, that</li> <li>• Appropriate town Boards &amp; Committees were consulted</li> <li>• Required public hearings were held</li> </ul>
Response	<p>The Board of Selectmen and Town Administrator were met with on September 5, 2017, and an additional meeting will be set in the near future for follow-up. The Planning Board has been notified and a meetings has been set to discuss this matter on October 11, 2017.</p>

**Warrant Article Questionnaire  
Citizen Petitions Articles**

9	Why is it required for the Town of Natick AND for the sponsor(s)?
Response	Natick is a trend-setter for both strong community values and creating an inclusive and welcoming community. As Massachusetts has already seen strong community success within the dispensary within Brookline, there is no reason why Natick should not be next in line within the Commonwealth to set a precedent for accessible health care.
10	Since submitting the article petition have you identified issues that weren't initially considered in the development of the proposal?
Response	Yes. It has been mentioned to me by some members of the community that perhaps the boundary line exception should only apply to the Town of Wellesley and not to the City of Framingham. The Planning Board is aware of this variable and it will be addressed within the Planning Board Meeting on October 11, 2017 if it is found to be an issue that requires an amendment in the proposed motion language.
11	What are other towns and communities in the Metro West area, or the Commonwealth of MA doing similar to what your motion seeks to accomplish
Response	The Town of Brookline has placed a medical marijuana dispensary on a main road at 160 Washington Street, Brookline, MA 02445, and this dispensary has been very successful. Other towns are moving quickly to make progress for medical marijuana, but there are only a limited amount of licenses available within the state, and allowing this proposal will put Natick ahead of other towns and cities within the Commonwealth of Massachusetts.
12	If this Warrant Article is not approved by Town Meeting what are the consequences to the Town and to the sponsor(s)? Please be specific on both financial and other consequences.
Response	The consequence of this Warrant Article not being approved by Town Meeting is that a liquor store would remain in a location that could be providing medicine to individuals within a very accessible and heavily trafficked area (a five year old study by the Massachusetts Department of Transportation shows approximately 58,000 cars pass this location every day, and these numbers have likely greatly increased since the road has been expanded through construction since this study was recorded).

Warrant Article Questionnaire  
Citizen Petitions Articles

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**ARTICLE 12**  
**Amend Zoning By-Laws: Medical Marijuana Treatment Centers**  
**(Town Administrator)**

To see if the Town will vote to amend the Zoning By-Laws by adding a new Section 323.8, Registered Marijuana Dispensaries, as follows.

“323.8 Registered Marijuana Dispensaries.

**323.8.1 Purposes**

To provide for the establishment of registered marijuana dispensaries in appropriate places and under conditions in accordance with the passage of Chapter 369 of the Acts of 2012, an Act for the Humanitarian Medical Use of Marijuana. See also Appendix Sections 1-1, et seq., to Chapter 94C of the Massachusetts General Laws.

To minimize the adverse impacts of registered marijuana dispensaries on adjacent properties, residential neighborhoods, schools and other places where children congregate, local historic districts, and other land uses potentially incompatible with said dispensaries.

To regulate the siting, design, placement, security, safety, monitoring, modification, and removal of registered marijuana dispensaries.

**323.8.2 Applicability**

The commercial cultivation (unless it meets the requirements for an agricultural exemption under Chapter 40A, Section 3 of the Massachusetts General Laws), production, processing, assembly, packaging, retail or wholesale sale, trade, distribution or dispensing of marijuana for medical use is prohibited unless allowed by special permit as a registered marijuana dispensary under Chapter 40A, Section 9 of the Massachusetts General Laws and this Section 323.8.

No registered marijuana dispensary shall be established except in compliance with the provisions of this Section 323.8.

Nothing in this By-Law shall be construed to supersede federal and state laws governing the sale and distribution of narcotic drugs.

**323.8.3 Definitions**

“Debilitating medical condition” shall mean cancer, glaucoma, positive status for human immunodeficiency virus, acquired immune deficiency syndrome (AIDS), hepatitis C, amyotrophic lateral sclerosis (ALS), Crohn’s disease, Parkinson’s disease, multiple sclerosis and other conditions as determined in writing by a qualifying patient’s physician.

“Marijuana” shall have the same meaning given as “marihuana” in Chapter 94C of the Massachusetts General Laws.

“Marijuana for medical use” shall mean marijuana that is designated and restricted for use by, and for the benefit of, qualifying patients in the treatment of debilitating medical conditions.

Registered marijuana dispensary” shall mean a not-for-profit entity, as defined by Massachusetts law only, registered under Chapter 369 of the Acts of 2012, that acquires, cultivates, possesses, processes (including development of related products such as food, tinctures, aerosols, oils, or ointments), transfers, transports, sells, distributes, dispenses, or administers marijuana, products containing marijuana, related supplies, or educational materials to qualifying patients or their personal caregivers.

#### 323.8.4 General Requirements and Conditions

323.8.4.1 Registered marijuana dispensaries, other than agricultural operations meeting the requirements for an exemption under Chapter 40A, Section 3 of the Massachusetts General Laws, may be allowed in the RC District or on a parcel of land located at 2-6 Worcester Street, Assessors Map 21, Lot 1 by special permit issued by the Planning Board provided that the registered marijuana dispensary meets the requirements of this Section 323.8.

323.8.4.2 No registered marijuana dispensary shall be located on land in the RC District in which the underlying zoning is Highway Mixed Use III (HM III).

323.8.4.3 No registered marijuana dispensary shall be located within five hundred (500) feet of any other premises containing a registered marijuana dispensary.

323.8.4.4 No registered marijuana dispensary shall be located in any premises for which an alcoholic beverages license has been issued.

323.8.4.5 No registered marijuana dispensary shall be located inside a building containing residential units, including single family housing, multi-family housing, and transient housing such as motels and dormitories, or inside a movable or mobile structure such as a van or truck.

323.8.4.6 No registered marijuana dispensary shall be located in a building that contains the office of any medical doctor or the office of any other professional practitioner authorized to prescribe the medical use of marijuana.

323.8.4.7 All registered marijuana dispensaries shall be contained within a building or structure.

323.8.4.8 No registered marijuana dispensary shall be located on a lot which is located within three hundred (300) feet of a Town of a residential zoning district boundary line, or a house of worship, or a school, playground or day care facility.

323.8.4.9 No registered marijuana dispensary shall have a gross floor area of less than two thousand five hundred (2,500) square feet or in excess of twenty thousand (20,000) square feet.

323.8.4.10 The hours of operation of registered marijuana dispensaries shall be set by the Planning Board, but in any event no registered marijuana dispensary shall be open and/or operating between the hours of 8:00 PM and 8:00 AM.

323.8.4.11 No smoking, burning or consumption of any product containing marijuana or marijuana-related products shall be permitted on the premises of a registered marijuana dispensary.

323.8.4.12 Signage for the registered marijuana dispensary shall include the following language: "Registration card issued by the MA Department of Public Health required". The required text shall be a minimum of two (2) inches in height.

323.8.4.13 Registered marijuana dispensaries shall provide the Natick Police Department, Natick Board of Health, Natick Building Commissioner, and Natick Planning Board with the names, phone numbers and email addresses of all management staff and keyholders to whom the Town of Natick can provide notice if there are emergencies or operating problems associated with the registered marijuana dispensary.

### 323.8.5 Special Permit Requirements

323.8.5.1 A special permit for a registered marijuana dispensary shall be limited to one (1) or more of the following uses:

- a) cultivation of marijuana for medical use;
- b) processing and packaging of marijuana for medical use, including marijuana that is in the form of smoking materials, food products, oils, aerosols, ointments, and other products; or
- c) retail sale or distribution of marijuana for medical use to qualifying patients.

323.8.5.2 An application for a special permit for a registered marijuana dispensary shall include the following:

- a) the location of the proposed registered marijuana dispensary, including the street address, and the floors(s) and unit number(s) to be occupied;
- b) the proposed use of the subject registered marijuana dispensary;
- c) the name and address of each owner of the registered marijuana dispensary;
- d) copies of all required licenses and permits issued to the applicant by the Commonwealth of Massachusetts and any of its agencies for the registered marijuana dispensary;
- e) evidence of the applicant's right to use the proposed site for the registered marijuana dispensary, such as a lease or consent of the property owner;
- f) if the applicant is a business organization, a statement under oath

disclosing all of its owners, shareholders, partners, members, managers, directors, and officers, and their addresses. If any of the above are entities rather than persons, the applicant must disclose the identity of the owners of such entities;

- g) a certified list of all parties in interest entitled to notice of the hearing for the special permit application, taken from the most recent Town of Natick tax list and certified by the Town of Natick Assessor; and
- h) Proposed security measures for the registered marijuana dispensary, including lighting, fencing, gates, surveillance equipment, alarms, etc., to ensure the safety of persons and to protect the premises from theft.

#### 323.8.5.3 Mandatory Findings

In addition to the findings otherwise required by law for issuance of a special permit, the Planning Board shall not issue a special permit for a registered marijuana dispensary unless it finds that:

- a) the registered marijuana dispensary demonstrates that it shall meet all the permitting requirements of all applicable agencies within the Commonwealth of Massachusetts and shall be in compliance with all applicable state laws and regulations; and
- b) the applicant has satisfied all of the conditions and requirements of this Section 323.8.

#### 323.8.5.4 Term

A special permit granted under this Section 323.8 shall have a term limited to the duration of the applicant's ownership of, or leasehold interest in, the premises as a registered marijuana dispensary. A special permit may be transferred only with the approval of the Planning Board in the form of an amendment to the special permit with all information required in this Section

323.8.5.5 Annual Reporting. Each registered marijuana dispensary permitted under this By-Law shall as a condition of its special permit file an annual report with the Natick Board of Health, the Natick Community Development Department, and the Natick Town Clerk no later than January 31st, providing a copy of all current applicable state licenses for the registered marijuana dispensary and/or its owners and demonstrating continued compliance with the conditions of the special permit.

#### 323.8.5.6 Abandonment or Discontinuance of Use

323.8.5.6.1 A special permit issued under this Section 323.8 shall lapse if not exercised within one (1) year of issuance.

323.8.5.6.2 A registered marijuana dispensary shall be required to remove all plants, equipment, supplies and materials related to the registered marijuana dispensary:

- a) prior to surrendering its state issued licenses or permits; or
- b) within three (3) months of ceasing operations; whichever comes first.

#### 323.8.6 Invalidity



If any provision of this Section 323.8 or the application of any such provision to any person or circumstance shall be determined to be invalid or enforceable by final judgment or order of a court of competent jurisdiction, the remainder of this Section 323.8 shall continue in effect, to the extent permitted by law.”; or otherwise act thereon.

**ARTICLE 56**  
**Amend Natick Zoning By-Laws: Registered Marijuana Dispensaries Bylaw**  
**(Tara Hopper Zeltner, et al.)**

To see if the Town will vote to amend the Natick Zoning Bylaws as follows:

Add the following language to Section 323.8.4.1 after the words “RC District” and before the words “by special permit”: “or on a parcel of land located at 2-6 Worcester Street, Assessors Map 21, Lot 1”

And to delete the following language in Section 323.8.4.8: “a Town of Natick boundary line, or”  
or otherwise act thereon.

**ARTICLE 12**  
**Amend Zoning By-Laws: Medical Marijuana Treatment Centers**  
**(Town Administrator)**

To see if the Town will vote to amend the Zoning By-Laws by adding a new Section 323.8, Registered Marijuana Dispensaries, as follows.

“323.8 Registered Marijuana Dispensaries.

**323.8.1 Purposes**

To provide for the establishment of registered marijuana dispensaries in appropriate places and under conditions in accordance with the passage of Chapter 369 of the Acts of 2012, an Act for the Humanitarian Medical Use of Marijuana. See also Appendix Sections 1-1, et seq., to Chapter 94C of the Massachusetts General Laws.

To minimize the adverse impacts of registered marijuana dispensaries on adjacent properties, residential neighborhoods, schools and other places where children congregate, local historic districts, and other land uses potentially incompatible with said dispensaries.

To regulate the siting, design, placement, security, safety, monitoring, modification, and removal of registered marijuana dispensaries.

**323.8.2 Applicability**

The commercial cultivation (unless it meets the requirements for an agricultural exemption under Chapter 40A, Section 3 of the Massachusetts General Laws), production, processing, assembly, packaging, retail or wholesale sale, trade, distribution or dispensing of marijuana for medical use is prohibited unless allowed by special permit as a registered marijuana dispensary under Chapter 40A, Section 9 of the Massachusetts General Laws and this Section 323.8.

No registered marijuana dispensary shall be established except in compliance with the provisions of this Section 323.8.

Nothing in this By-Law shall be construed to supersede federal and state laws governing the sale and distribution of narcotic drugs.

**323.8.3 Definitions**

“Debilitating medical condition” shall mean cancer, glaucoma, positive status for human immunodeficiency virus, acquired immune deficiency syndrome (AIDS), hepatitis C, amyotrophic lateral sclerosis (ALS), Crohn’s disease, Parkinson’s disease, multiple sclerosis and other conditions as determined in writing by a qualifying patient’s physician.

“Marijuana” shall have the same meaning given as “marihuana” in Chapter 94C of the Massachusetts General Laws.

“Marijuana for medical use” shall mean marijuana that is designated and restricted for use by, and for the benefit of, qualifying patients in the treatment of debilitating medical conditions.

Registered marijuana dispensary” shall mean a not-for-profit entity, as defined by Massachusetts law only, registered under Chapter 369 of the Acts of 2012, that acquires, cultivates, possesses, processes (including development of related products such as food, tinctures, aerosols, oils, or ointments), transfers, transports, sells, distributes, dispenses, or administers marijuana, products containing marijuana, related supplies, or educational materials to qualifying patients or their personal caregivers.

#### 323.8.4 General Requirements and Conditions

323.8.4.1 Registered marijuana dispensaries, other than agricultural operations meeting the requirements for an exemption under Chapter 40A, Section 3 of the Massachusetts General Laws, may be allowed in the RC District by special permit issued by the Planning Board provided that the registered marijuana dispensary meets the requirements of this Section 323.8.

323.8.4.2 No registered marijuana dispensary shall be located on land in the RC District in which the underlying zoning is Highway Mixed Use III (HM III).

323.8.4.3 No registered marijuana dispensary shall be located within five hundred (500) feet of any other premises containing a registered marijuana dispensary.

323.8.4.4 No registered marijuana dispensary shall be located in any premises for which an alcoholic beverages license has been issued.

323.8.4.5 No registered marijuana dispensary shall be located inside a building containing residential units, including single family housing, multi-family housing, and transient housing such as motels and dormitories, or inside a movable or mobile structure such as a van or truck.

323.8.4.6 No registered marijuana dispensary shall be located in a building that contains the office of any medical doctor or the office of any other professional practitioner authorized to prescribe the medical use of marijuana.

323.8.4.7 All registered marijuana dispensaries shall be contained within a building or structure.

323.8.4.8 No registered marijuana dispensary shall be located on a lot which is located within three hundred (300) feet of a Town of Natick boundary line, or a residential zoning district boundary line, or a house of worship, or a school, playground or day care facility.

323.8.4.9 No registered marijuana dispensary shall have a gross floor area of less than two thousand five hundred (2,500) square feet or in excess of twenty thousand (20,000) square feet.

323.8.4.10 The hours of operation of registered marijuana dispensaries shall be set by the Planning Board, but in any event no registered marijuana dispensary shall be open and/or operating between the hours of 8:00 PM and 8:00 AM.

323.8.4.11 No smoking, burning or consumption of any product containing marijuana or marijuana-related products shall be permitted on the premises of a registered marijuana dispensary.

323.8.4.12 Signage for the registered marijuana dispensary shall include the following language: "Registration card issued by the MA Department of Public Health required". The required text shall be a minimum of two (2) inches in height.

323.8.4.13 Registered marijuana dispensaries shall provide the Natick Police Department, Natick Board of Health, Natick Building Commissioner, and Natick Planning Board with the names, phone numbers and email addresses of all management staff and keyholders to whom the Town of Natick can provide notice if there are emergencies or operating problems associated with the registered marijuana dispensary.

#### 323.8.5 Special Permit Requirements

323.8.5.1 A special permit for a registered marijuana dispensary shall be limited to one (1) or more of the following uses:

- a) cultivation of marijuana for medical use;
- b) processing and packaging of marijuana for medical use, including marijuana that is in the form of smoking materials, food products, oils, aerosols, ointments, and other products; or
- c) retail sale or distribution of marijuana for medical use to qualifying patients.

323.8.5.2 An application for a special permit for a registered marijuana dispensary shall include the following:

- a) the location of the proposed registered marijuana dispensary, including the street address, and the floors(s) and unit number(s) to be occupied;
- b) the proposed use of the subject registered marijuana dispensary;
- c) the name and address of each owner of the registered marijuana dispensary;
- d) copies of all required licenses and permits issued to the applicant by the Commonwealth of Massachusetts and any of its agencies for the registered marijuana dispensary;
- e) evidence of the applicant's right to use the proposed site for the registered marijuana dispensary, such as a lease or consent of the property owner;
- f) if the applicant is a business organization, a statement under oath

disclosing all of its owners, shareholders, partners, members, managers, directors, and officers, and their addresses. If any of the above are entities rather than persons, the applicant must disclose the identity of the owners of such entities;

- g) a certified list of all parties in interest entitled to notice of the hearing for the special permit application, taken from the most recent Town of Natick tax list and certified by the Town of Natick Assessor; and
- h) Proposed security measures for the registered marijuana dispensary, including lighting, fencing, gates, surveillance equipment, alarms, etc., to ensure the safety of persons and to protect the premises from theft.

#### 323.8.5.3 Mandatory Findings

In addition to the findings otherwise required by law for issuance of a special permit, the Planning Board shall not issue a special permit for a registered marijuana dispensary unless it finds that:

- a) the registered marijuana dispensary demonstrates that it shall meet all the permitting requirements of all applicable agencies within the Commonwealth of Massachusetts and shall be in compliance with all applicable state laws and regulations; and
- b) the applicant has satisfied all of the conditions and requirements of this Section 323.8.

#### 323.8.5.4 Term

A special permit granted under this Section 323.8 shall have a term limited to the duration of the applicant's ownership of, or leasehold interest in, the premises as a registered marijuana dispensary. A special permit may be transferred only with the approval of the Planning Board in the form of an amendment to the special permit with all information required in this Section

323.8.5.5 Annual Reporting. Each registered marijuana dispensary permitted under this By-Law shall as a condition of its special permit file an annual report with the Natick Board of Health, the Natick Community Development Department, and the Natick Town Clerk no later than January 31st, providing a copy of all current applicable state licenses for the registered marijuana dispensary and/or its owners and demonstrating continued compliance with the conditions of the special permit.

#### 323.8.5.6 Abandonment or Discontinuance of Use

323.8.5.6.1 A special permit issued under this Section 323.8 shall lapse if not exercised within one (1) year of issuance.

323.8.5.6.2 A registered marijuana dispensary shall be required to remove all plants, equipment, supplies and materials related to the registered marijuana dispensary:

- a) prior to surrendering its state issued licenses or permits; or
- b) within three (3) months of ceasing operations; whichever comes first.

#### 323.8.6 Invalidity

If any provision of this Section 323.8 or the application of any such provision to any person or circumstance shall be determined to be invalid or enforceable by final judgment or order of a court of competent jurisdiction, the remainder of this Section 323.8 shall continue in effect, to the extent permitted by law.”; or otherwise act thereon.

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**ITEM TITLE:** Article 30 - Amend Zoning By-Law: Solar Energy Systems  
**ITEM SUMMARY:**

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**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
Questionnaire Only	9/11/2017	Exhibit
Old Article 30 - Motion (No longer valid)	9/11/2017	Exhibit
Article 30 - Zoning By-Laws Briefing for Finance Committee	9/11/2017	Exhibit
New MOTION 9-28-17	9/28/2017	Exhibit

## Article 30 - Finance Committee Questionnaire

Draft responses submitted on: September 3, 2017

Responses submitted by: Jillian Wilson Martin, Sustainability Coordinator, Town of Natick

### 1. Provide the article motion exactly as it will appear in the Finance Committee Recommendation Book and presented to Town Meeting for action.

*It is moved that the Zoning By-laws be amended as follows:*

- ***In Section 200 – Definitions insert:***

*“Solar Energy System: A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water heating. Solar Energy Systems include the following system types:*

- a) *Solar Energy System, Active: A solar energy system whose primary purpose is to harvest solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means. Active Solar Energy Systems can include, but are not limited to, the following installation types:*
  - i) *Solar Energy System, Building-mounted: An Active Solar Energy System that is structurally mounted to a building or structure.*
    - 1) *Solar Energy System, Roof-mounted: A special application of a Building-mounted Solar Energy System that is structurally mounted to the roof of a building or structure.*
  - ii) *Solar Energy System, Ground-mounted: An Active Solar Energy System that is structurally mounted to the ground.*
    - 1) *Solar Energy System, Small-Scale Ground-mounted: A Ground-mounted Solar Energy System that occupies 1,750 square feet of surface area or less.*
    - 2) *Solar Energy System, Medium-Scale Ground-mounted: A Ground-mounted Solar Energy System that occupies more than 1,750 square feet, but less than 40,000 square feet of surface area.*
    - 3) *Solar Parking Canopy: A special application of a Ground-mounted Solar Energy System that is installed on top of a parking surface or paved surface that maintains the function of the area beneath the canopy.*
  - iii) *Solar Energy System, Building-integrated Photovoltaic (BIPV): An Active Solar Energy System that consists of integrating solar photovoltaic (PV) modules into the surface of a building or structure, where the solar panels themselves function as, or are integrated into, a building material (i.e., roof shingles, siding, windows, skylights) or structural element (i.e., façade). The generation of solar energy is secondary to the function of the building material or structural element.*



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iv) Solar Energy System, Surface-integrated: An Active Solar Energy System that is not building-mounted and is integrated into a ground-level surface, such as a driveway, walkway, patio surface, path, or parking area, where the solar panels themselves function as, or are integrated into, the surface material. The generation of solar energy is secondary to the function of the surface element.

b) Solar Energy System, Passive: A Solar Energy System that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.”

- **In Section V A.2 – Special Requirements, Nonconforming Uses, Extension; insert the following sentence at the end of the paragraph:**

“Roof-mounted Solar Energy Systems shall not be considered an extension that requires a finding by the Board of Appeals.”

- **In Section V – Special Requirements B. Accessory Uses; insert a new section V-B.3 Accessory Uses – Solar Energy Systems:**

“V-B.3 Accessory Uses – Solar Energy Systems:

- 1) Roof-mounted Solar Energy Systems shall be permitted in all use districts.
- 2) In residential districts: Small-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems are permitted subject to site-plan review by the Special Permit Granting Authority.
- 3) In nonresidential districts or with exempted uses as defined by M.G.L. c.40A s.3 or other state and federal statutes regarding exempted uses in residential districts: Small-scale Ground-mounted Solar Energy Systems shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies are permitted subject to site plan review by the Special Permit Granting Authority.
- 4) Where Solar Energy Systems would be installed in a Historic District, the system shall require approval by the Historic District Commission.
- 5) Maximum Percentage (%) Building Coverage
  - a) Active Solar Energy Systems are not buildings as defined in Natick’s zoning bylaws and should not be treated as such. However, for the purpose of regulating lot coverage, the area of Active Solar Energy Systems shall count toward the Maximum Percentage (%) Building Coverage as defined in the Intensity Regulations provided in this By-Law.
  - b) An Active Solar Energy System’s contribution toward Maximum Percentage (%) Building Coverage shall be calculated as the total area of the system’s panels. For example, if a system includes ten (10) panels that are each three (3) feet by five (5) feet, the system’s contribution to Maximum Percentage (%) Building Coverage would equal to 150 square feet.

## Article 30 - Finance Committee Questionnaire

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- c) *Such part of a Building-mounted Solar Energy System or Solar Parking Canopy that extends beyond the impervious area over which it is placed shall count toward Maximum Percentage (%) Building Coverage.*
- d) *For Ground-mounted Solar Energy Systems, the total surface area of the Solar Energy System shall count toward Maximum Percentage (%) Building Coverage.*
- e) *To avoid double counting, the surface area of any Active Solar Energy System that is above an existing impervious surface shall not be included in the calculation of Maximum Percentage (%) Building Coverage (i.e. the addition of a Roof-mounted Solar Energy System shall not increase the calculated Maximum Percentage Building Coverage on a lot because it will be located within a surface area - the building's footprint - that is already counted).*
- 6) *Height*
- a) *Building-mounted Solar Energy Systems:*

<i>System Type</i>	<i>Roof Pitch</i>	<i>Siting</i>	<i>Maximum Height</i>
<i>Roof-mounted Solar Energy System</i>	<i>Pitch is greater than or equal to 3.2:12 (a fifteen (15) degree angle)</i>	<i>All districts</i>	<i>Roof-mounted Solar Energy Systems may extend up to one (1) foot above the roof surface on which the system is installed beyond applicable building height limits. Systems shall be surface-mounted and installed parallel to the roof surface.</i>
<i>Roof-mounted Solar Energy System</i>	<i>Pitch is less than 3.2:12 (a fifteen (15) degree angle)</i>	<i>All districts</i>	<i>Roof-mounted Solar Energy Systems may extend upto three (3) feet above the roof surface on which the system is installed beyond applicable building height limits.  If the surface on which the system is to be mounted is below maximum building height, the Roof-mounted Solar Energy System may extend up to six (6) feet above the roof surface on which the system is installed, provided it does not exceed building height limits by more than three (3) feet. Any six (6) foot high Roof-mounted Solar Energy System must also be installed at least three (3) feet from the roof's edge.</i>
<i>Other Building-mounted Solar Energy System (e.g., awnings)</i>	<i>Not Applicable</i>	<i>All districts</i>	<i>No greater than the highest point of the roof.</i>

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Draft responses submitted on: September 3, 2017

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b) *Ground-mounted Solar Energy Systems:*

<i>System Type</i>	<i>Siting</i>	<i>Maximum Height</i>
<i>Small-Scale Ground-mounted Solar Energy System</i>	<i>All districts</i>	<i>Twelve (12) vertical feet from grade.</i>
<i>Medium-Scale Ground-mounted Solar Energy System</i>	<i>All districts</i>	<i>Subject to site plan review by Special Permit Granting Authority.</i>
<i>Solar Parking Canopy</i>	<i>Residential</i>	<i>The maximum height allowed on the lot or the height of the principal structure, whatever is less.</i>
<i>Solar Parking Canopy</i>	<i>Non-residential</i>	<i>Subject to site plan review by Special Permit Granting Authority.</i>

7) *Setbacks*

- a) *Ground-mounted Solar Energy Systems that move along an axis, unfold, or open shall be located so that the furthest reach of the equipment falls within the setback requirements.*
  - b) *Solar Parking Canopies in residential districts shall meet setback requirements for Accessory Structures.*
  - c) *Solar Parking Canopies and Surface-integrated Solar Energy Systems in non-residential zones shall be allowed where parking is permitted in accordance with requirements defined in Section V-D, Off-street Parking and Loading Requirements. The requirements for the planting of trees in landscaped strips as defined in Section V-D, Subsection 16, Landscaping Adjacent to Right-of-Way should be met elsewhere on the lot.*
  - d) *All other Ground-mounted Solar Energy Systems shall meet requirements for District-level setbacks as defined in this By-Law.*
- 8) *BIPV Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in this By-Law that relate to the material or structural element the system functions as. For example, solar roofing would be subject to regulations for roofing; solar pavement would be subject to regulations for pavement.*
- 9) *The impervious portion of Ground-mounted Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in this By-Law that relate to paving, including impervious lot coverage requirements within the Aquifer Protection District. The systems shall also comply with regulations identified in the Town of Natick's Stormwater Management and Erosion Control Bylaw, Article 79A.*

## Article 30 - Finance Committee Questionnaire

Draft responses submitted on: September 3, 2017

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- 10) *Site Plan Review: Medium-scale Ground-mounted Solar Energy Systems in all districts and Solar Parking Canopies in non-residential districts are subject to Site Plan Review prior to construction, installation or modification as provided in this section and in accordance with Section VI-DD - Special Permit Procedures and Site Plan Review.*
- a) *Site Plan Document Requirements: The project proponent shall provide a Final Site Plan to the Special Permit Granting Authority as dictated Section VI-DD 3b - Special Permit Procedures and Site Plan Review, General Requirements, Content of Final Site Plan and Other Submittals. In addition, applicants should submit the following:*
- i) *Name, address, and contact information for proposed system installer.*
  - ii) *Name, address, phone number and signature of the project proponent, as well as all co-proponents or property owners, if any.*
  - iii) *The name, contact information and signature of any agents representing the project proponent.*
  - iv) *Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures.*
  - v) *Blueprints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the Solar Energy System.*
  - vi) *Documentation of the major system components to be used, including the panels, mounting system, and inverter.*
  - vii) *Operation and Maintenance Plan including measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.*
  - viii) *Locations of active farmland, permanently protected open space, Priority Habitat Areas and BioMap 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage & Endangered Species Program (NHESP) and "Important Wildlife Habitat" mapped by the Massachusetts Department of Environmental Protection (MassDEP) in relation to the site.*
  - ix) *Locations of local or National Historic Districts in relation to the site.*
- b) *Site Plan Review Design Standards: The Special Permit Granting Authority shall consider the following criteria and standards, in addition to those listed in Section VI-DD 5 and 6 - Special Permit Procedures and Site Plan Review, General Requirements, Criteria for Approval and Standards for Site Plan Review when reviewing site plan submittals made under this section:*

## Article 30 - Finance Committee Questionnaire

Draft responses submitted on: September 3, 2017

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- (i) *Utility Notification: No solar photovoltaic system shall be installed until evidence has been given to the Special Permit Granting Authority that the owner has submitted notification to the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.*
- (ii) *Utility Connections: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.*
- (iii) *Safety: The owner or operator shall provide a copy of the Site Plan Review application to the Natick Fire Department and shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.*
- (iv) *Height and Layout: The Special Permit Granting Authority shall also review the height and physical layout of the Solar Energy Systems, utility connections, and appurtenant infrastructure as it relates to the convenience and safety of emergency vehicles, private vehicles and pedestrian movement on the site.*
- (v) *Visual Impact: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to minimize visual impacts by preserving natural vegetation, screening abutting properties, or other appropriate measures.*
- (vi) *Land Clearing, Soil Erosion and Habitat Impacts: Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or as otherwise prescribed by applicable laws, regulations, and bylaws/ordinances.*
- (vii) *Lighting: The Special Permit Granting Authority shall review the physical lighting of the site, including the methods of exterior lighting for convenience, safety and security within the site, and in consideration of impacts of neighboring properties and excessive light pollution to the standards of Section V-I. Where feasible, lighting of the Solar Energy System shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution.”*

### **2. At a summary level and very clearly, what is the proposed purpose and objective of this Warrant Article and the accompanying Motion?**

*Nearly 600 active solar energy systems are currently installed in Natick. At present, “solar” is not defined in Natick’s Zoning By-Law, and these systems were all permitted by Natick’s Building*

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Draft responses submitted on: September 3, 2017

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*Department, with several requiring review by the Special Permit Granting Authority. The proposed zoning changes seek to reasonably regulate future solar installations in our community.*

**3. Has this article or one of a very similar scope and substance been on a previous Warrant Article and what has been the actions taken by Finance Committee, other Boards or Committees and Town Meeting?**

*No, this article has not been on a previous Town Meeting Warrant and no action has been taken by Town Meeting on this topic. The proposed zoning changes have been the focus of a public hearing with the Natick Planning Board. The public hearing opened on June 21, 2017 and closed on August 30, 2017. A new public hearing for the proposed zoning, in accordance with Town Meeting procedure, is scheduled for September 13, 2017.*

**4. Why is it required for the Town of Natick and for the Town Agency sponsor(s)?**

*Solar has consistently proven itself to be a credible return on investment for our municipality, local business owners, and homeowners.*

*For example, the Town of Natick is expected to receive \$300,000 in savings and solar revenue in Fiscal 2018 from its on-site solar projects, and agreements for off-site projects are expected to result in an additional \$250,000 in annual revenue upon completion. Local large companies and institutions, including MathWorks, the Natick Mall, Walnut Hill School for the Arts and others have also adopted solar and have expressed the financial benefits of doing so.*

*Solar is also a great benefit for homeowners. For the average residential solar installation, the payback period on a solar array is 4 to 6 years, and a recent study that included six different regions of the country showed that, on average, solar increases a home's value by 3.7%.*

*Adding clear regulations and guidelines for solar development in Natick will allow more residents and property owners to take advantage of solar's positive return on investment by providing a transparent and consistent review process for solar energy systems in Natick. This will reduce soft (non-hardware) costs related to solar installs in our community (thereby lowering the price per kilowatt of solar installed), limit the Town's potential liability by providing a clear process that is in line with state statute, and pave the way for future planning or zoning regulations that emerging technology might necessitate.*

*The proposed zoning follows guidance from the Massachusetts Department of Energy Resources (see attached memo for a comparison of the language proposed for Article 30 and the State's model zoning). It has also been reviewed by commercial and residential solar PV and solar thermal installers, including Ameresco, Boston Solar, Solar Flair and New England Solar Hot Water.*

## Article 30 - Finance Committee Questionnaire

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- 5. Does this article require funding, how much, from what source of funds and under whose authority will the appropriation be managed and spent?**

*No funding is required to support Article 30.*

- 6. Does this article act in any way in concert with, in support of, or to extend any prior action of Natick Town Meeting, Massachusetts General Laws or CMR's or other such legislation or actions? Does this article seek to amend, rescind or otherwise change any prior action of Natick Town Meeting?**

*Article 30 does not extend any prior action of Town Meeting nor does it seek to amend, rescind or otherwise change any prior action of Natick Town Meeting.*

*However, because solar is a "Dover-protected use" as defined by M.G.L. 40A s3, the zoning changes that were approved by Town Meeting in Spring 2017 (Section III – A.7) were reviewed by Town Counsel and Town staff. Article 30 does not seek to change Section III – A.7; instead, the proposed solar zoning outlines different requirements for solar projects requiring site plan review. These requirements are specific to solar and based on Massachusetts' model zoning.*

*Per Town Counsel's review, Article 30 complies with M.G.L. 40A s3, which states, "No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare"*

*(<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section3>).*

- 7. How does the proposed motion (and implementation) fit with the relevant Town Bylaws, financial and capital plan, comprehensive Master Plan, and community values as well as relevant state laws and regulations?**

*Adopting reasonable solar regulations ties closely to the Town's community values and financial priorities.*

*Natick is a Green Community, a designation provided by the Massachusetts Department of Energy Resources, and is a leader in solar development. Our municipality was one of the first in Massachusetts to install solar on public buildings, and we expect to meet 20% of municipal electricity needs with solar by the end of 2018. In spring 2017, the Town was also awarded SolSmart Bronze, a national designation for adopting programs and practices that make it faster, easier, and cheaper to go solar.*

*The Town's on-site solar arrays are expected to result in \$300,000 in savings and solar revenue in Fiscal 2018, and agreements for off-site projects are expected to result in an additional \$250,000 in annual revenue upon completion.*

## Article 30 - Finance Committee Questionnaire

Draft responses submitted on: September 3, 2017

Responses submitted by: Jillian Wilson Martin, Sustainability Coordinator, Town of Natick

*An enthusiasm for solar also exists in the broader community. With more than 11 megawatts of installed solar, Natick is home to nearly 600 solar arrays and is in the top 20% of states for solar capacity per person. In 2016, Natick ran the state's most successful Solarize Mass campaign in which 155 residents and one small business signed contracts to install a total of 1.2 megawatts of solar capacity.*

*While exact figures are not currently available, it is also worth noting that the installation of private solar arrays generates revenue for the Town via building and electrical permit fees.*

### **8. Who are the critical participants in executing the effort envisioned by the article motion?**

*The Building Department and its inspectors, as well as the Natick Planning Board, will be critical to ensuring the proposed regulations are enforced. The proposed zoning language has been reviewed and vetted by members of both groups.*

### **9. What steps and communication has the sponsor attempted to assure that:**

- a. Interested parties were notified in a timely way and had a chance to participate in the process**
- b. Appropriate Town Boards & Committees were consulted**
- c. Required public hearings were held?**

*The Planning Board is the sponsor of Article 30 and has worked with Town staff and a technical adviser from the U.S. Department of Energy's SolSmart initiative to evaluate the proposed zoning language. We have also held public hearings, conducted outreach to homeowners with solar, engaged Town Counsel, and reviewed the proposed zoning with area solar developers, including Ameresco, the Town's municipal installer and Boston Solar, the Solarize Mass-approved installer that has installed more than 150 residential arrays in Natick (nearly 30% of all installs in the community).*

*A public hearing for this zoning opened on June 21, 2017 and closed August 30, 2017. Several members of the public spoke in favor of the zoning language and one member of the public provided guidance that was used to further refine and improve the proposal. The zoning language will be heard again at a new public hearing on September 13, during which a recommendation from the Planning Board is expected to be made.*

### **10. Since submitting the article have you identified issues that weren't initially considered in the development of the proposal?**

*No. Article 30 and the zoning language behind it was extensively reviewed by stakeholders prior to the Warrant's closure.*



## **Article 30 - Finance Committee Questionnaire**

Draft responses submitted on: September 3, 2017

Responses submitted by: Jillian Wilson Martin, Sustainability Coordinator, Town of Natick

**11. If this Warrant Article is not approved by Town Meeting what are the consequences to the Town and to the sponsor(s)? Please be specific on both financial and other consequences?**

*Solar will continue to be installed as it is today, with no dimensional restrictions beyond those defined in building and electrical codes. The site plan review process for solar projects will be subject to the Zoning By-Law's existing site plan review requirements, which do not reflect the state's model zoning suggestions.*

**MOTION**  
**Article 30**

~~It is moved that the Zoning By-laws be amended~~Move that the Town vote to amend the Zoning By-Laws as follows:

- **In Section 200 – Definitions insert:**

*“Solar Energy System: A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water heating. Solar Energy Systems include the following system types:*

- a) Solar Energy System, Active: A solar energy system whose primary purpose is to harvest solar energy into another form of energy or ~~transferring to transfer~~ heat from a collector to another medium using mechanical, electrical, or chemical means. Active Solar Energy Systems ~~can~~ include, but are not limited to, the following installation types:
  - i) Solar Energy System, Building-mounted: An Active Solar Energy System that is structurally mounted to a building or structure.
    - 1) Solar Energy System, Roof-mounted: A special application of a Building-mounted Solar Energy System that is structurally mounted to the roof of a building or structure.
  - ii) Solar Energy System, Ground-mounted: An Active Solar Energy System that is structurally mounted to the ground.
    - 1) Solar Energy System, Small-Scale Ground-mounted: A Ground-mounted Solar Energy System that occupies 1,750 square feet of surface area or less.
    - 2) Solar Energy System, Medium-Scale Ground-mounted: A Ground-mounted Solar Energy System that occupies more than 1,750 square feet, but less than 40,000 square feet of surface area.
    - 3) Solar Parking Canopy: A special application of a Ground-mounted Solar Energy System that is installed on top of a parking surface or paved surface that maintains the function of the area beneath the canopy.
  - iii) Solar Energy System, Building-integrated Photovoltaic (BIPV): An Active Solar Energy System that consists of integrating solar photovoltaic (PV) modules into the surface of a building or structure, where the solar panels themselves function as, or are integrated into, a building material (i.e., roof shingles, siding, windows, skylights) or structural element (i.e., façade). The generation of solar energy is secondary to the function of the building material or structural element.
  - iv) Solar Energy System, Surface-integrated: An Active Solar Energy System that is not building-mounted and is integrated into a ground-level surface, such as a driveway, walkway, patio surface, path, or parking area, where the solar panels themselves function as, or are integrated

into, the surface material. The generation of solar energy is secondary to the function of the surface element.

- b) *Solar Energy System, Passive: A Solar Energy System that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.*”

- **In Section V A.2 – Special Requirements, Nonconforming Uses, Extension; insert the following sentence at the end of the paragraph:**

“Roof-mounted Solar Energy Systems shall not be considered ~~as a change,~~ extension or alteration that requires a finding by the Board of Appeals.”

- **In Section V – Special Requirements ~~B. Accessory Uses~~; insert a new section V-B.3 Accessory Uses – Solar Energy Systems:**

“V-B.3 Accessory Uses – Solar Energy Systems:

- 1) Roof-mounted Solar Energy Systems shall be permitted in all use districts.
- 2) In residential districts: Small-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems ~~are~~ shall be permitted subject to site-plan review by the Special Permit Granting Authority.
- 3) In nonresidential districts or with exempted uses as defined by M.G.L. c.40A s.3 or other state and federal statutes regarding exempted uses in residential districts: Small-scale Ground-mounted Solar Energy Systems shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies are permitted subject to site plan review by the Special Permit Granting Authority.
- 4) Where Solar Energy Systems would be installed in ~~a~~ an Historic District, the system shall require approval by the Historic District Commission.
- 5) Maximum Percentage (%) Building Coverage
  - a) Active Solar Energy Systems are not buildings as defined in Natick’s zoning bylaws and should not be treated as such. However, for the purpose of regulating lot coverage, the area of Active Solar Energy Systems shall count toward the Maximum Percentage (%) Building Coverage as defined in the Intensity Regulations provided in this By-Law.
  - b) An Active Solar Energy System’s contribution toward Maximum Percentage (%) Building Coverage shall be calculated as the total area of the system’s panels. For example, if a system includes ten (10) panels that are each three (3) feet by five (5) feet, the system’s contribution to Maximum Percentage (%) Building Coverage would equal to 150 square feet.
  - c) Such part of a Building-mounted Solar Energy System or Solar Parking Canopy that extends beyond the impervious area over which it is placed shall count toward Maximum Percentage (%) Building Coverage.

- d) For Ground-mounted Solar Energy Systems, the total surface area of the Solar Energy System shall count toward Maximum Percentage (%) Building Coverage.
- e) To avoid double counting, the surface area of any Active Solar Energy System that is above an existing impervious surface shall not be included in the calculation of Maximum Percentage (%) Building Coverage (i.e. the addition of a Roof-mounted Solar Energy System shall not increase the calculated Maximum Percentage Building Coverage on a lot because it will be located within a surface area - the building's footprint - that is already counted).

6) Height

a) Building-mounted Solar Energy Systems:

<b>System Type</b>	<b>Roof Pitch</b>	<b>Siting</b>	<b>Maximum Height</b>
<i>Roof-mounted Solar Energy System</i>	<i>Pitch is greater than or equal to 3.2:12 (a fifteen (15) degree angle)</i>	<i>All districts</i>	<i>Roof-mounted Solar Energy Systems may extend up to one (1) foot above the roof surface on which the system is installed beyond applicable building height limits. Systems shall be surface-mounted and installed parallel to the roof surface.</i>
<i>Roof-mounted Solar Energy System</i>	<i>Pitch is less than 3.2:12 (a fifteen (15) degree angle)</i>	<i>All districts</i>	<i>Roof-mounted Solar Energy Systems may extend up to three (3) feet above the roof surface on which the system is installed beyond applicable building height limits.  If the surface on which the system is to be mounted is below maximum building height, the Roof-mounted Solar Energy System may extend up to six (6) feet above the roof surface on which the system is installed, provided it does not exceed building height limits by more than three (3) feet. Any six (6) foot high Roof-mounted Solar Energy System must also be installed at least three (3) feet from the roof's edge.</i>
<i>Other Building-mounted Solar Energy System (e.g., awnings)</i>	<i>Not Applicable</i>	<i>All districts</i>	<i>No greater than the highest point of the roof.</i>

b) Ground-mounted Solar Energy Systems:

<b>System Type</b>	<b>Siting</b>	<b>Maximum Height</b>
<i>Small-Scale Ground-mounted Solar Energy System</i>	<i>All districts</i>	<i>Twelve (12) vertical feet from grade.</i>

Medium-Scale Ground-mounted Solar Energy System	All districts	Subject to site plan review by Special Permit Granting Authority.
Solar Parking Canopy	Residential	The maximum height allowed on the lot or the height of the principal structure, whatever is less.
Solar Parking Canopy	Non-residential	Subject to site plan review by Special Permit Granting Authority.

7) *Setbacks*

- a) *Ground-mounted Solar Energy Systems that move along an axis, unfold, or open shall be located so that the furthest reach of the equipment falls within the setback requirements.*
- b) *Solar Parking Canopies in residential districts shall meet setback requirements for Accessory Structures.*
- c) *Solar Parking Canopies and Surface-integrated Solar Energy Systems in non-residential zones shall be allowed where parking is permitted in accordance with requirements defined in Section V-D, Off-street Parking and Loading Requirements. The requirements for the planting of trees in landscaped strips as defined in Section V-D, Subsection 16, Landscaping Adjacent to Right-of-Way should be met elsewhere on the lot.*
- d) *All other Ground-mounted Solar Energy Systems shall meet requirements for District-level setbacks as defined in this By-Law.*

~~e)~~ *Any Reach of a Building-Mounted Solar Energy System shall comply with the setback requirements for that building.*

- 8) *BIPV Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in this By-Law that relate to the material or structural element ~~the system functions as into~~ which the system is integrated. For example, solar roofing would be subject to regulations for roofing; solar pavement would be subject to regulations for pavement.*
- 9) *The impervious portion of Ground-mounted Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in this By-Law that relate to paving, including impervious lot coverage requirements within the Aquifer Protection District. The systems shall also comply with regulations identified in the Town of Natick’s Stormwater Management and Erosion Control ~~Bylaw~~By-Law, Article 79A ~~of the By-Laws.~~*
- 10) *Site Plan Review: Medium-scale Ground-mounted Solar Energy Systems in all districts and Solar Parking Canopies in non-residential districts are subject to Site Plan Review prior to construction, installation or modification as provided in this section and in accordance with Section VI-DD - Special Permit Procedures and Site Plan Review.*
  - a) *Site Plan Document Requirements: The project proponent shall provide a Final Site Plan to the Special Permit Granting Authority ~~as dictated in compliance with~~ Section VI-DD 3b ~~-Special~~*

~~Permit Procedures and Site Plan Review, General Requirements~~, Content of Final Site Plan and Other Submittals. In addition, applicants should submit the following:

- i) Name, address, and contact information for proposed system installer.
  - ii) Name, address, ~~phone number~~contact information and signature of the project proponent, as well as all co-proponents or property owners, if any.
  - iii) The name, contact information and signature of any agents representing the project proponent.
  - iv) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures.
  - v) Blueprints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the Solar Energy System.
  - vi) Documentation of the major system components to be used, including the panels, mounting system, and inverter.
  - vii) Operation and Maintenance Plan including measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.
  - viii) Locations of active farmland, permanently protected open space, Priority Habitat Areas and BioMap 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage & Endangered Species Program (NHESP) and "Important Wildlife Habitat" mapped by the Massachusetts Department of Environmental Protection (MassDEP) in relation to the site.
  - ix) Locations of local or National Historic Districts in relation to the site.
- b) *Site Plan Review Design Standards: The Special Permit Granting Authority shall consider the following criteria and standards, in addition to those listed in Section VI-DD 5 and 6 - ~~Special Permit Procedures and Site Plan Review, General Requirements~~, Criteria for Approval and Standards for Site Plan Review when reviewing site plan submittals made under this section:*
- (i) *Utility Notification: No solar photovoltaic system shall be installed until evidence has been given to the Special Permit Granting Authority that the owner has submitted notification to the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.*
  - (ii) *Utility Connections: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical*

*transformers for utility interconnections may be above ground if required by the utility provider.*

- (iii) Safety: The owner or operator shall provide a copy of the Site Plan Review application to the Natick Fire Department and shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.*
- (iv) Height and Layout: The Special Permit Granting Authority shall also review the height and physical layout of the Solar Energy Systems, utility connections, and appurtenant infrastructure as it relates to the convenience and safety of emergency vehicles, private vehicles and pedestrian movement on the site.*
- (v) Visual Impact: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to minimize visual impacts by preserving natural vegetation, screening abutting properties, or other appropriate measures.*
- (vi) Land Clearing, Soil Erosion and Habitat Impacts: Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or as otherwise prescribed by applicable laws, regulations, and bylaws/ordinances.*
- (vii) Lighting: The Special Permit Granting Authority shall review the physical lighting of the site, including the methods of exterior lighting for convenience, safety and security within the site, and in consideration of impacts of neighboring properties and excessive light pollution to the standards of Section V-I. Where feasible, lighting of the Solar Energy System shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution.”*

To: Natick Finance Committee  
CC: Natick Planning Board  
Martha White, Town Administrator  
Andy Meyer, Natick Planning Board  
James Errickson, Director, Community and Economic Development  
Ted Fields, Senior Planner  
From: Jillian Wilson Martin, Sustainability Coordinator  
Date: September 3, 2017  
Subject: Solar Zoning Bylaws – Briefing for Finance Committee

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Dear Natick Finance Committee:

As preparation for your upcoming deliberations regarding Article 30, Amend Zoning By-Law: Solar Energy Systems, the following memo provides:

- Information on the purpose of the proposed zoning language,
- A summary of the process followed to develop the proposed zoning,
- The proposed modifications to Natick’s Zoning By-Law, and
- A review of solar’s protections under state law and an analysis of the differences between the proposed zoning proposal and the MA Department of Energy Resources’ Model Zoning for the Regulation of Solar Energy Systems.

Purpose

Nearly 600 active solar energy systems are currently installed on residential and commercial properties in Natick. At present, “solar” is not defined in Natick’s Zoning By-Law, and these systems were all permitted by Natick’s Building Department, with several requiring review by the Special Permit Granting Authority. This proposal seeks to reasonably regulate solar installations in our community.

Process

In January 2017, the Town of Natick began working with a federal technical adviser representing the U.S. Department of Energy and its SolSmart initiative. The adviser, which also worked with the cities of Boston, Cambridge, Chelsea, Melrose, Somerville and Winthrop, recommended Natick develop zoning regulations and helped Town staff draft a set of proposed amendments to Natick’s Zoning By-Law.

Town staff have since worked with Planning Board Member Julian Munnich, Town Meeting Member Paul Greismer, Town Counsel, and area solar developers, including Ameresco, Solar Flair, Boston Solar and New England Solar Hot Water, to further refine and tailor the proposed zoning language to address Natick’s specific needs. As part of this process, the Natick Fire Chief and Building Commissioner were also engaged and their feedback was incorporated. A public hearing was initially opened to engage the public and further engage the Planning Board regarding the specifics of the proposed language on June 21, 2017. This public hearing was closed on August 31, 2017 after three open sessions, during which four Natick residents spoke in favor of the proposal. A new public hearing is expected to open on September 13, 2017 in tandem with the other zoning proposals being considered at the 2017 Natick Fall Town Meeting.



### Proposed Zoning Language

See Appendix A.

### State Guidance for Solar Zoning

In Massachusetts, solar is considered “as-of-right” and is protected under MGL c.40A s.3, which states, “No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.”

In 2014, the Massachusetts Department of Energy Resources published model zoning to assist Massachusetts cities and towns in establishing reasonable standards to facilitate the development of solar energy systems (see Appendix B). As noted in the state’s document, the model zoning is “not intended for adoption precisely as it is written” and communities are directed to modify language to suit local conditions and to review proposed language with municipal counsel, which Natick has done.

To this end, a summary of the differences by section between the proposal before the Finance Committee and the state’s model zoning is provided below. In many instances, Natick’s proposed zoning language includes regulations that exceed the state’s recommendations and Town Council has cautioned against further restrictions, especially with regard to dimensional regulations, due to solar’s statutory protections.

### Definitions

- Natick’s proposed zoning includes the following definitions which are either identical or slightly modified when compared to those proposed by the state:
  - Solar Energy System
  - Solar Energy System, Active
  - Solar Energy System, Roof-mounted
  - Solar Energy System, Ground-mounted
  - Solar Energy System, Medium-Scale
  - Solar Energy System, Small-Scale
  - Solar Energy System, Passive
- As noted in the state’s guidance, the expectation is that the majority of installed solar energy systems will be photovoltaic (solar panels that convert energy into electricity), however Natick and the state propose using the statutory definition of a solar energy system which includes solar thermal (solar panels that convert energy into heat for hot water) are. This means the regulations proposed will apply to both types of panels.
- Natick includes additional definitions for Building-mounted Solar Energy Systems, Solar Canopies, Building-integrated Photovoltaic (BIPV) Solar Energy Systems, and Surface-integrated Solar Energy Systems which were not defined in the state’s model zoning, but are anticipated to become more common as emerging technology becomes market-ready. Natick’s definitions are derived from language used in the electrical code and the new Solar Massachusetts Renewable Target (SMART) Program regulations.

### Use Regulations

- The model zoning provides a significant amount of guidance regarding solar as a principal use, but Natick’s proposed zoning is specific to solar as an accessory use and does not seek to amend the Zoning By-Law’s Use Table.
- Natick follows guidance from the state’s model zoning to allow/permit roof-mounted and small-scale ground-mounted solar energy systems as-of-right in side and rear yards in all districts.

- The state recommends allowing medium-scale ground-mounted solar energy systems as-of-right in commercial, industrial and public districts. Natick’s proposal would require site plan review for these systems regardless of district.
- Natick also requires site plan review for Solar Canopies in non-residential districts.

#### Dimensional Regulations

- The state’s model zoning reminds communities of solar’s strong statutory protections and strongly recommends against regulating aesthetics and attempting to place restrictions on dimensional standards, such as setbacks or height, as they can create roadblocks to actual installation.
- For height, the model zoning recommends solar energy systems be considered similar to chimneys, television antennae, roof-top mechanical equipment and other appurtenances that are usually either allowed a much higher maximum height or exempted altogether from building height requirements. Natick’s proposal does not follow this guidance and restricts the maximum height of a solar energy system by system type.
- For setbacks, the state’s model zoning recommends small- and medium-scale ground-mounted solar energy systems that are accessory to a primary building or structure on a lot be provided with more flexible setback requirements than those that would typically apply to a primary structure, and suggests treating such systems in the same manner a community treats “accessory structures” like sheds. Natick’s proposed zoning does not follow this recommendation and applies existing setbacks as defined by district in the Natick Zoning By-Law Intensity Table.
- The model zoning also recognizes that the placement of solar energy systems in front yards should be avoided if at all possible, but notes that DOER’s view of the statutory protections for solar energy systems create a situation where a ground-mounted array could not be prohibited outright in a front yard. Town Counsel believes Natick’s proposal, which does not explicitly say solar ground-mounts are prohibited in front yards, but says small-scale ground-mounts are permitted in rear and side yards is reasonable, given the existing Zoning By-Law does not allow for accessory structures of any kind in front yards.
- The state’s model zoning recommends solar energy systems with grass or another pervious surface under them be exempt from lot coverage. Natick’s proposed zoning is not following this recommendation and is instead including the surface area of a solar array in the calculation of “Maximum Percentage (%) Building Coverage” - which is the Town’s closest equivalent definition to “lot coverage”.
- Natick’s proposed zoning echoes the state’s model zoning in that it requires the impervious portion of a solar energy system be subject to impervious lot coverage requirements within the Aquifer Protection District and municipal stormwater management regulations.

#### Site Plan Review Requirements

- Natick’s proposed zoning includes recommendations regarding document requirements and design standards/criteria. It follows the state’s guidance as stated in Example 1 (starting on page 11 of the model zoning) and applies these requirements to site plan review for medium-scale ground-mounted solar energy systems in all districts and solar canopies in non-residential districts, in addition to the site plan review process and requirements outlined in the Section VI-DD - Special Permit Procedures and Site Plan Review of the Zoning By-Law. Except in cases where language is repetitive with existing requirements, the language from the state’s model zoning is directly incorporated into Natick’s proposal.
- In some instances, Natick’s proposed site plan review requirements include additional requirements such as those the state suggests for large-scale systems. For example, Natick’s proposal references Operation & Maintenance Plan, Lighting and additional requirements for Safety.

#### Special Permits

- The state's model zoning provides recommendations for special permit requirements as they relate to large-scale ground-mounted solar energy systems. These are not addressed in Natick's proposed zoning and this section therefore does not apply to the Town's proposal.

Pre-Existing Non-Conforming Uses and Structures

- The state recommends roof-mounted and small-scale ground-mounted solar energy systems associated with pre-existing non-conforming uses or structures be exempt from a Section 6 finding. Natick's proposed language only exempts roof-mounted systems from a finding from the Board of Appeals.

Thank you for your review of this warrant article and for your consideration of the proposed zoning language which was developed by the Town's federal technical adviser based on guidance from the Massachusetts Department of Energy Resources, in collaboration with Town Counsel, relevant Town staff, area solar developers and the Planning Board.

We look forward to your feedback.

Sincerely,

Jillian Wilson Martin  
Sustainability Coordinator  
Town of Natick

## APPENDIX A

**Proposed Zoning Language for Solar in Natick****2017 FALL ANNUAL TOWN MEETING****Article \_\_\_\_****Amend Zoning By-Law: Solar Energy Systems**

( \_\_\_\_\_ )

To see if the Town will take action to amend the Natick Zoning By-Law, in a manner which shall include, without limitation, the enabling of and permitting for the construction and/or installation of Solar Energy Systems in any and/or all zoning districts; as provided in MGL c. 40A s.3 and c.40A s.9B, by means which shall include, but which shall not be limited to, creating, correcting, amending or modifying definitions, intensity, dimensions, special requirements, and/or other sections related thereto of the Natick Zoning By-Law; or to take any other action relative thereto.

**DRAFT Motion:**

**It is moved that the Zoning By-laws be amended as follows:**

**- In Section 200 – Definitions insert:**

**“Solar Energy System:** A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water heating. Solar Energy Systems include the following system types:

- a) **Solar Energy System, Active:** A solar energy system whose primary purpose is to harvest solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means. Active Solar Energy Systems can include, but are not limited to, the following installation types:
  - i) **Solar Energy System, Building-mounted:** An Active Solar Energy System that is structurally mounted to a building or structure.
    - 1) **Solar Energy System, Roof-mounted:** A special application of a Building-mounted Solar Energy System that is structurally mounted to the roof of a building or structure.
  - ii) **Solar Energy System, Ground-mounted:** An Active Solar Energy System that is structurally mounted to the ground.
    - 1) **Solar Energy System, Small-Scale Ground-mounted:** A Ground-mounted Solar Energy System that occupies 1,750 square feet of surface area or less.
    - 2) **Solar Energy System, Medium-Scale Ground-mounted:** A Ground-mounted Solar Energy System that occupies more than 1,750 square feet, but less than 40,000 square feet of surface area.

- 3) Solar Parking Canopy: A special application of a Ground-mounted Solar Energy System that is installed on top of a parking surface or paved surface that maintains the function of the area beneath the canopy.
- iii) Solar Energy System, Building-integrated Photovoltaic (BIPV): An Active Solar Energy System that consists of integrating solar photovoltaic (PV) modules into the surface of a building or structure, where the solar panels themselves function as, or are integrated into, a building material (i.e., roof shingles, siding, windows, skylights) or structural element (i.e., façade). The generation of solar energy is secondary to the function of the building material or structural element.
- iv) Solar Energy System, Surface-integrated: An Active Solar Energy System that is not building-mounted and is integrated into a ground-level surface, such as a driveway, walkway, patio surface, path, or parking area, where the solar panels themselves function as, or are integrated into, the surface material. The generation of solar energy is secondary to the function of the surface element.
- b) Solar Energy System, Passive: A Solar Energy System that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.”
- **In Section V A.2 – Special Requirements, Nonconforming Uses, Extension; insert the following sentence at the end of the paragraph:**

“Roof-mounted Solar Energy Systems shall not be considered an extension that requires a finding by the Board of Appeals.”

- **In Section V – Special Requirements B. Accessory Uses; insert a new section V-B.3 Accessory Uses – Solar Energy Systems:**

“V-B.3 Accessory Uses – Solar Energy Systems:

- 1) Roof-mounted Solar Energy Systems shall be permitted in all use districts.
- 2) In residential districts: Small-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems are permitted subject to site-plan review by the Special Permit Granting Authority.
- 3) In nonresidential districts or with exempted uses as defined by M.G.L. c.40A s.3 or other state and federal statutes regarding exempted uses in residential districts: Small-scale Ground-mounted Solar Energy Systems shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies are permitted subject to site plan review by the Special Permit Granting Authority.
- 4) Where Solar Energy Systems would be installed in a Historic District, the system shall require approval by the Historic District Commission.
- 5) Maximum Percentage (%) Building Coverage

- a) Active Solar Energy Systems are not buildings as defined in Natick’s zoning bylaws and should not be treated as such. However, for the purpose of regulating lot coverage, the area of Active Solar Energy Systems shall count toward the Maximum Percentage (%) Building Coverage as defined in the Intensity Regulations provided in this By-Law.
- b) An Active Solar Energy System’s contribution toward Maximum Percentage (%) Building Coverage shall be calculated as the total area of the system’s panels. For example, if a system includes ten (10) panels that are each three (3) feet by five (5) feet, the system’s contribution to Maximum Percentage (%) Building Coverage would equal to 150 square feet.
- c) Such part of a Building-mounted Solar Energy System or Solar Parking Canopy that extends beyond the impervious area over which it is placed shall count toward Maximum Percentage (%) Building Coverage.
- d) For Ground-mounted Solar Energy Systems, the total surface area of the Solar Energy System shall count toward Maximum Percentage (%) Building Coverage.
- e) To avoid double counting, the surface area of any Active Solar Energy System that is above an existing impervious surface shall not be included in the calculation of Maximum Percentage (%) Building Coverage (i.e. the addition of a Roof-mounted Solar Energy System shall not increase the calculated Maximum Percentage Building Coverage on a lot because it will be located within a surface area - the building’s footprint - that is already counted).
- 6) Height
- a) Building-mounted Solar Energy Systems:

<b>System Type</b>	<b>Roof Pitch</b>	<b>Siting</b>	<b>Maximum Height</b>
Roof-mounted Solar Energy System	Pitch is greater than or equal to 3.2:12 (a fifteen (15) degree angle)	All districts	Roof-mounted Solar Energy Systems may extend up to one (1) foot above the roof surface on which the system is installed beyond applicable building height limits. Systems shall be surface-mounted and installed parallel to the roof surface.
Roof-mounted Solar Energy System	Pitch is less than 3.2:12 (a fifteen (15) degree angle)	All districts	Roof-mounted Solar Energy Systems may extend upto three (3) feet above the roof surface on which the system is installed beyond applicable building height limits.  If the surface on which the system is to be mounted is below maximum building height, the Roof-mounted Solar Energy System may extend up to six (6) feet above the roof surface on which the system is installed, provided it does not exceed building height limits by more than three (3) feet. Any six (6) foot high

			Roof-mounted Solar Energy System must also be installed at least three (3) feet from the roof's edge.
Other Building-mounted Solar Energy System (e.g., awnings)	Not Applicable	All districts	No greater than the highest point of the roof.

b) Ground-mounted Solar Energy Systems:

<b>System Type</b>	<b>Siting</b>	<b>Maximum Height</b>
Small-Scale Ground-mounted Solar Energy System	All districts	Twelve (12) vertical feet from grade.
Medium-Scale Ground-mounted Solar Energy System	All districts	Subject to site plan review by Special Permit Granting Authority.
Solar Parking Canopy	Residential	The maximum height allowed on the lot or the height of the principal structure, whatever is less.
Solar Parking Canopy	Non-residential	Subject to site plan review by Special Permit Granting Authority.

7) Setbacks

- a) Ground-mounted Solar Energy Systems that move along an axis, unfold, or open shall be located so that the furthest reach of the equipment falls within the setback requirements.
  - b) Solar Parking Canopies in residential districts shall meet setback requirements for Accessory Structures.
  - c) Solar Parking Canopies and Surface-integrated Solar Energy Systems in non-residential zones shall be allowed where parking is permitted in accordance with requirements defined in Section V-D, Off-street Parking and Loading Requirements. The requirements for the planting of trees in landscaped strips as defined in Section V-D, Subsection 16, Landscaping Adjacent to Right-of-Way should be met elsewhere on the lot.
  - d) All other Ground-mounted Solar Energy Systems shall meet requirements for District-level setbacks as defined in this By-Law.
- 8) BIPV Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in this By-Law that relate to the material or structural element the system functions as. For

example, solar roofing would be subject to regulations for roofing; solar pavement would be subject to regulations for pavement.

- 9) The impervious portion of Ground-mounted Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in this By-Law that relate to paving, including impervious lot coverage requirements within the Aquifer Protection District. The systems shall also comply with regulations identified in the Town of Natick's Stormwater Management and Erosion Control Bylaw, Article 79A.
- 10) Site Plan Review: Medium-scale Ground-mounted Solar Energy Systems in all districts and Solar Parking Canopies in non-residential districts are subject to Site Plan Review prior to construction, installation or modification as provided in this section and in accordance with Section VI-DD - Special Permit Procedures and Site Plan Review.
  - a) Site Plan Document Requirements: The project proponent shall provide a Final Site Plan to the Special Permit Granting Authority as dictated Section VI-DD 3b - Special Permit Procedures and Site Plan Review, General Requirements, Content of Final Site Plan and Other Submittals. In addition, applicants should submit the following:
    - i) Name, address, and contact information for proposed system installer.
    - ii) Name, address, phone number and signature of the project proponent, as well as all co-proponents or property owners, if any.
    - iii) The name, contact information and signature of any agents representing the project proponent.
    - iv) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures.
    - v) Blueprints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the Solar Energy System.
    - vi) Documentation of the major system components to be used, including the panels, mounting system, and inverter.
    - vii) Operation and Maintenance Plan including measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.
    - viii) Locations of active farmland, permanently protected open space, Priority Habitat Areas and BioMap 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage & Endangered Species Program (NHESP) and "Important Wildlife Habitat" mapped by the Massachusetts Department of Environmental Protection (MassDEP) in relation to the site.



- ix) Locations of local or National Historic Districts in relation to the site.
- b) Site Plan Review Design Standards: The Special Permit Granting Authority shall consider the following criteria and standards, in addition to those listed in Section VI-DD 5 and 6 - Special Permit Procedures and Site Plan Review, General Requirements, Criteria for Approval and Standards for Site Plan Review when reviewing site plan submittals made under this section:
- (i) Utility Notification: No solar photovoltaic system shall be installed until evidence has been given to the Special Permit Granting Authority that the owner has submitted notification to the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.
  - (ii) Utility Connections: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
  - (iii) Safety: The owner or operator shall provide a copy of the Site Plan Review application to the Natick Fire Department and shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
  - (iv) Height and Layout: The Special Permit Granting Authority shall also review the height and physical layout of the Solar Energy Systems, utility connections, and appurtenant infrastructure as it relates to the convenience and safety of emergency vehicles, private vehicles and pedestrian movement on the site.
  - (v) Visual Impact: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to minimize visual impacts by preserving natural vegetation, screening abutting properties, or other appropriate measures.
  - (vi) Land Clearing, Soil Erosion and Habitat Impacts: Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or as otherwise prescribed by applicable laws, regulations, and bylaws/ordinances.
  - (vii) Lighting: The Special Permit Granting Authority shall review the physical lighting of the site, including the methods of exterior lighting for convenience, safety and security within the site, and in consideration of impacts of neighboring properties and excessive light pollution to the standards of Section V-I. Where feasible, lighting of the Solar Energy System shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution."

## References

**MGL c.40A s.3**

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section3>

“No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.”

**MGL c.40A s.9B:** <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section9B>

“Zoning ordinances or by-laws may also provide for special permits to protect access to direct sunlight for solar energy systems.”

**Massachusetts Department of Energy Resource, “Model Zoning for the Regulation of Solar Energy Systems”, December 2014.**

**APPENDIX B**

**State Model Zoning**

**Massachusetts Department of Energy Resource, “Model Zoning for the Regulation of Solar Energy Systems”, December 2014.**

<http://www.mass.gov/eea/docs/doer/green-communities/grant-program/model-solar-zoning.pdf>

**REVISED**  
**MOTION**  
**Article 30**

**Move that the Town vote to amend the Zoning By-Laws as follows:**

**- In Section 200 – Definitions insert:**

“Solar Energy System: A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water heating. Solar Energy Systems include the following system types:

- a) Solar Energy System, Active: A solar energy system whose primary purpose is to harvest solar energy into another form of energy or to transfer heat from a collector to another medium using mechanical, electrical, or chemical means. Active Solar Energy Systems include, but are not limited to, the following installation types:
  - i) Solar Energy System, Building-mounted: An Active Solar Energy System that is structurally mounted to a building or structure.
    - 1) Solar Energy System, Roof-mounted: A special application of a Building-mounted Solar Energy System that is structurally mounted to the roof of a building or structure.
  - ii) Solar Energy System, Ground-mounted: An Active Solar Energy System that is structurally mounted to the ground.
    - 1) Solar Energy System, Small-Scale Ground-mounted: A Ground-mounted Solar Energy System that occupies 1,750 square feet of surface area or less.
    - 2) Solar Energy System, Medium-Scale Ground-mounted: A Ground-mounted Solar Energy System that occupies more than 1,750 square feet, but less than 40,000 square feet of surface area.
    - 3) Solar Parking Canopy: A special application of a Ground-mounted Solar Energy System that is installed on top of a parking surface or paved surface that maintains the function of the area beneath the canopy.
  - iii) Solar Energy System, Building-integrated Photovoltaic (BIPV): An Active Solar Energy System that consists of integrating solar photovoltaic (PV) modules into the surface of a building or structure, where the solar panels themselves function as, or are integrated into, a building material (i.e., roof shingles, siding, windows, skylights) or structural element (i.e., façade). The generation of solar energy is secondary to the function of the building material or structural element.
  - iv) Solar Energy System, Surface-integrated: An Active Solar Energy System that is not building-mounted and is integrated into a ground-level surface, such as a driveway, walkway, patio surface, path, or parking area, where the solar panels themselves function as, or are integrated into, the surface material. The generation of solar energy is secondary to the function of the surface element.

- b) Solar Energy System, Passive: A Solar Energy System that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.”

- **In Section V – Special Requirements; insert a new section V-B.3 Accessory Uses – Solar Energy Systems:**

“V-B.3 Accessory Uses – Solar Energy Systems:

- 1) Roof-mounted Solar Energy Systems shall be permitted in all use districts.
- 2) The installation of Roof-mounted Solar Energy Systems that:
  - a) comply with the regulations provided in this section; and
  - b) are located on properties with non-conforming uses or structures; and
  - c) do not increase the nonconformity of such non-conforming uses or structures except with respect to the dimensions of the Roof-mounted Solar Energy System in question
 shall not be considered a change, extension or alteration that requires a finding by the Zoning Board of Appeals per M.G.L. c.40A s.6.
- 3) In residential districts: Small-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems shall be permitted subject to site plan review by the Special Permit Granting Authority.
- 4) In nonresidential districts: Small-scale Ground-mounted Solar Energy Systems shall be permitted in rear and side yards. Medium-scale Ground-mounted Solar Energy Systems and Solar Parking Canopies are permitted subject to site plan review by the Special Permit Granting Authority. **The same regulations shall apply in residential districts for exempted uses as defined by M.G.L. c.40A s.3, or other state and federal statutes, and by the Natick Zoning By-Laws.**
- 5) Where Solar Energy Systems would be installed in a Historic District, the system shall require approval by the Historic District Commission.
- 6) Maximum Percentage (%) Building Coverage
  - a) Active Solar Energy Systems are not buildings as defined in **the Natick Zoning By-Laws** and should not be treated as such. However, for the purpose of regulating lot coverage, the area of Active Solar Energy Systems shall count toward the Maximum Percentage (%) Building Coverage as defined in the Intensity Regulations provided in **the Natick Zoning By-Laws**.
  - b) An Active Solar Energy System’s contribution toward Maximum Percentage (%) Building Coverage shall be calculated as the total area of the system’s panels. For example, if a system includes ten (10) panels that are each three (3) feet by five (5) feet, the system’s contribution to Maximum Percentage (%) Building Coverage would equal 150 square feet.
  - c) Such part of a Building-mounted Solar Energy System or Solar Parking Canopy that extends beyond the impervious area over which it is placed shall count toward Maximum Percentage (%) Building Coverage.

- d) For Ground-mounted Solar Energy Systems, the total surface area of the Solar Energy System shall count toward Maximum Percentage (%) Building Coverage.
- e) To avoid double counting, the surface area of any Active Solar Energy System that is above an existing impervious surface shall not be included in the calculation of Maximum Percentage (%) Building Coverage (i.e. the addition of a Roof-mounted Solar Energy System shall not increase the calculated Maximum Percentage Building Coverage on a lot because it will be located within a surface area - the building's footprint - that is already counted).
- 7) Height
- a) Building-mounted Solar Energy Systems:

System Type	Roof Pitch	Siting	Maximum Height
Roof-mounted Solar Energy System	Pitch is greater than or equal to 3.2:12 (a fifteen (15) degree angle)	All districts	Roof-mounted Solar Energy Systems may extend up to one (1) foot above the roof surface on which the system is installed beyond applicable building height limits. Systems shall be surface-mounted and installed parallel to the roof surface.
Roof-mounted Solar Energy System	Pitch is less than 3.2:12 (a fifteen (15) degree angle)	All districts	Roof-mounted Solar Energy Systems may extend up to three (3) feet above the roof surface on which the system is installed beyond applicable building height limits.  If the surface on which the system is to be mounted is below maximum building height, the Roof-mounted Solar Energy System may extend up to six (6) feet above the roof surface on which the system is installed, provided it does not exceed building height limits by more than three (3) feet; <b>and provided further that any Roof-mounted Solar Energy System that extends more than three (3) feet above the roof surface on which the system is installed must be installed at least three (3) feet from the roof's edge.</b>
Other Building-mounted Solar Energy System (e.g., awnings)	Not Applicable	All districts	No greater than the highest point of the roof.

- b) Ground-mounted Solar Energy Systems:

System Type	Siting	Maximum Height
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Small-Scale Ground-mounted Solar Energy System	All districts	Twelve (12) vertical feet from grade.
Medium-Scale Ground-mounted Solar Energy System	All districts	Twelve (12) vertical feet from grade.
Solar Parking Canopy	Residential	The maximum height allowed on the lot or the height of the principal structure, whatever is less.
Solar Parking Canopy	Non-residential	Subject to site plan review by Special Permit Granting Authority.

8) Setbacks

- a) Ground-mounted Solar Energy Systems that move along an axis, unfold, or open shall be located so that the entirety of the equipment's reach at all angles falls within the setback requirements.
  - b) Solar Parking Canopies in residential districts shall meet setback requirements for Accessory Structures.
  - c) Solar Parking Canopies and Surface-integrated Solar Energy Systems in non-residential zones shall be allowed where parking is permitted in accordance with requirements defined in Section V-D, Off-street Parking and Loading Requirements. The requirements for the planting of trees in landscaped strips as defined in Section V-D, Subsection 16, Landscaping Adjacent to Right-of-Way should be met elsewhere on the lot.
  - d) All other Ground-mounted Solar Energy Systems shall meet requirements for District-level setbacks as defined in the Natick Zoning By-Laws.
  - e) Any reach of a Building-Mounted Solar Energy System shall comply with the setback requirements for that building.
- 9) BIPV Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in the Natick Zoning By-Laws that relate to the material or structural element into which the system is integrated or functions as. For example, solar roofing would be subject to regulations for roofing; solar pavement would be subject to regulations for pavement.
- 10) The impervious portion of Ground-mounted Solar Energy Systems and Surface-integrated Solar Energy Systems shall be subject to any requirements in the Natick Zoning By-Laws that relate to paving, including impervious lot coverage requirements within the Aquifer Protection District. The systems shall also comply with regulations identified in the Town of Natick's Stormwater Management and Erosion Control By-Law, Article 79A of the By-Laws.
- 11) Site Plan Review: Medium-scale Ground-mounted Solar Energy Systems in all districts and Solar Parking Canopies in non-residential districts are subject to site plan review by the Special Permit Granting Authority prior to construction, installation or modification as provided in this section and in accordance

with Section VI-DD - Special Permit Procedures and Site Plan Review. **The Planning Board will serve as the Special Permit Granting Authority for these systems.**

- a) Site Plan Document Requirements: The project proponent shall provide a Final Site Plan to the Special Permit Granting Authority in compliance with Section VI-DD 3b - Content of Final Site Plan and Other Submittals. In addition, applicants should submit the following:
  - i) Name, address, and contact information for proposed system installer.
  - ii) Name, address, contact information and signature of the project proponent, as well as all co-proponents or property owners, if any.
  - iii) The name, contact information and signature of any agents representing the project proponent.
  - iv) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures.
  - v) Blueprints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the Solar Energy System.
  - vi) Documentation of the major system components to be used, including the panels, mounting system, and inverter.
  - vii) Operation and Maintenance Plan including measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.
  - viii) Locations of active farmland, permanently protected open space, Priority Habitat Areas and BioMap 2 Critical Natural Landscape Core Habitat mapped by the Natural Heritage & Endangered Species Program (NHESP) and "Important Wildlife Habitat" mapped by the Massachusetts Department of Environmental Protection (MassDEP) in relation to the site.
  - ix) Locations of local or National Historic Districts in relation to the site.
  
- b) Site Plan Review Design Standards: The Special Permit Granting Authority shall consider the following criteria and standards, in addition to those listed in Section VI-DD 5 and 6 - Criteria for Approval and Standards for Site Plan Review when reviewing site plan submittals made under this section:
  - (i) Utility Notification: No solar photovoltaic system shall be installed until evidence has been given to the Special Permit Granting Authority that the owner has submitted notification to the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.

- (ii) Utility Connections: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
- (iii) Safety: The owner or operator shall provide a copy of the Site Plan Review application to the Natick Fire Department and shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
- (iv) Height and Layout: The Special Permit Granting Authority shall also review the height and physical layout of the Solar Energy Systems, utility connections, and appurtenant infrastructure as it relates to the convenience and safety of emergency vehicles, private vehicles and pedestrian movement on the site.
- (v) Visual Impact: Reasonable efforts, as determined by the Special Permit Granting Authority, shall be made to minimize visual impacts by preserving natural vegetation, screening abutting properties, or other appropriate measures.
- (vi) Land Clearing, Soil Erosion and Habitat Impacts: Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or as otherwise prescribed by applicable laws, regulations, and **By-Laws**.
- (vii) Lighting: The Special Permit Granting Authority shall review the physical lighting of the site, including the methods of exterior lighting for convenience, safety and security within the site, and in consideration of impacts of neighboring properties and excessive light pollution to the standards of Section V-I. Where feasible, lighting of the Solar Energy System shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution.”

### References

#### **MGL c.40A s.3**

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section3>

“No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.”

**MGL c.40A s.9B:** <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section9B>

“Zoning ordinances or by-laws may also provide for special permits to protect access to direct sunlight for solar energy systems.”

**Massachusetts Department of Energy Resource, “Model Zoning for the Regulation of Solar Energy Systems”, December 2014.**



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**ITEM TITLE:** Article 31 - Amend Zoning By-Laws: Sky Exposure Plane

**ITEM SUMMARY:**

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**ATTACHMENTS:**

<b>Description</b>	<b>Upload Date</b>	<b>Type</b>
Questionnaire Response	9/13/2017	Exhibit
OLD Article 31 Proposed Motion (no longer valid)	9/13/2017	Exhibit
Technical Analysis - SolSmart Review of Article 31	9/13/2017	Exhibit
CED Staff Memo on Sky Exposure Plan	9/14/2017	Exhibit
Bulk Plane explained	9/14/2017	Exhibit
Neighborhood Compatability Study	9/14/2017	Exhibit
New MOTION as of 9-25-17	9/28/2017	Exhibit

## Warrant Article Questionnaire Non Standard Town Agency Articles

### Section III – Questions with Response Boxes – To Be Completed By Petition Sponsor

Article # 31	Date Form Completed: 2017-09-03 (10)
Article Title: Amend Zoning By-Laws: Sky Exposure Plane	
Sponsor Name: Natick Planning Board	Email: julian.munnich@rcn.com

Question	Question																								
1	Provide the article motion exactly as it will appear in the Finance Committee Recommendation Book and presented to Town Meeting for action.																								
Response	Current Draft Attached																								
2	At a summary level and very clearly, what is the proposed purpose and objective of this Warrant Article and the accompanying Motion?																								
Response	As the Town experiences development pressures, the demands for the Zoning Bylaws to both protect property owners from abutters’ building projects, and to also acknowledge other property owners rights to develop their own properties, creates the need for zoning mechanisms that accommodate these two divergent interests. There are currently in the ZBL several sections that utilize the mechanism of Sky Exposure Planes to clearly describe the dimensional volume in which development can occur while not forcing abutters to suffer the detriments of bulk looming above their properties. Further, as use of this current mechanism expands, the Town’s inspectoral staff has experienced questions as to how this mechanism is to be applied in different projects and situations.																								
3	Has this article or one of a very similar scope and substance been on a previous Warrant Article and what has been the actions taken by Finance Committee, other Boards or Committees and Town Meeting?																								
Response	<p>Type response here)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 25%;">Warrant Period</th> <th style="width: 25%;">Other Committees</th> <th style="width: 25%;">FinCom Action</th> <th style="width: 25%;">Town Meeting</th> </tr> </thead> <tbody> <tr> <td>FTM 2016</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SATM 2016</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FTM 2015</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SATM 2015</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Prior</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Comments: Several recent ZBL amendments have included the mechanism of “Sky Exposure Plane” to control imposing bulk on abutters. [2017 SpTM1 Art 3; “Dover Uses”; 2010 SATM Art 46 “Hospital District”; 2017 SATM Art 41 “ISLOOP”;</p>	Warrant Period	Other Committees	FinCom Action	Town Meeting	FTM 2016				SATM 2016				FTM 2015				SATM 2015				Prior			
Warrant Period	Other Committees	FinCom Action	Town Meeting																						
FTM 2016																									
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Prior																									

## Warrant Article Questionnaire Non Standard Town Agency Articles

4	Why is it required for the Town of Natick and for the Town Agency sponsor(s)?
Response	-The current ZBL sections that utilize “Sky Exposure Planes” have raised questions for the Building Inspectoral Staff as to methods of interpretation. -For the Planning Board “Sky Exposure Planes” represent a useful tool in reasonably regulating new development while protecting the property right interests of abutters.
5	Does this article require funding, how much, from what source of funds and under whose authority will the appropriation be managed and spent?
Response	No. N/A
6	Does this article act in any way in concert with, in support of, or to extend any prior action of Natick Town Meeting, Massachusetts General Laws or CMR’s or other such legislation or actions?  Does this article seek to amend, rescind, or otherwise change any prior action of Natick Town Meeting?
Response	-This Article better defines and applies ‘Sky Exposure Planes ‘ which are already integral in several parts of the existing ZBL. - MGL c. 40A s. 9B enables Zoning Bylaws to “reach” diagonally above abutting properties to protect property owners’ access to “skyscape”. <a href="https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section9B">https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section9B</a>
7	How does the proposed motion (and implementation) fit with the relevant Town Bylaws, financial and capital plan, comprehensive Master Plan, and community values as well as relevant state laws and regulations?
Response	-The Current ZBL already uses the mechanism of Sky Exposure Planes to reasonably regulate intensity. -The nascent Master Plan is grappling with the diverging interests of property owners wishing to develop their properties, and other property owners wishing to protect their properties from the detriments of over-development by abutters.
8	Who are the critical participants in executing the effort envisioned by the article motion?
Response	-The Building Commissioner and inspectoral staff. -The Special Permit Granting Authorities (SPGAs) [Planning Board and ZBA]

## Warrant Article Questionnaire Non Standard Town Agency Articles

9	<p>What steps and communication has the sponsor attempted to assure that:</p> <ul style="list-style-type: none"> <li>• Interested parties were notified in a timely way and had a chance to participate in the process</li> <li>• Appropriate Town Boards &amp; Committees were consulted</li> <li>• Required public hearings were held</li> </ul>
Response	<p>-There have been multiple meetings with the Building Commissioner and inspectoral staff to establish compatibility with the state building code and with ease of interpretation and implementation.</p> <p>-The Planning Board will hold the required public hearing on this Article</p> <p>-Specific questions as to the inclusion of illustrations with the Warrant Article have been put to Town Counsel. The responses are pending research.</p>
10	<p>Since submitting the article have you identified issues that weren't initially considered in the development of the proposal?</p>
Response	<p>-The clear presentation of Sky Exposure Planes is deemed to be easier and less subject to misinterpretation if there is included an illustration or graphic representation of the mechanism. Although illustrations are common in ZBLs across Massachusetts, Natick has not yet used this method of presentation. Town Counsel is clarifying how the motion and recordation of vote are to be executed.</p> <p>-The Planning Board has yet to determine its preference as to locating definitions in Section 200 or in this section of intensity regulations.</p>
11	<p>If this Warrant Article is not approved by Town Meeting what are the consequences to the Town and to the sponsor(s)? Please be specific on both financial and other consequences?</p>
Response	<p>-The current sections of the ZBL that rely on the "Sky Exposure Plane" mechanism may be subject to confusion and difficulty in interpretation by the inspectoral staff.</p> <p>-An important compromise between the property rights of developers and abutters will be challenging to implement.</p>

**2017 FALL ANNUAL TOWN MEETING**  
**Article 31**  
**Amend Zoning By-Laws: Sky Exposure Plane**  
**(Planning Board)**

**DRAFT Motion:**

It is moved that the Zoning Bylaws be amended as follows:

- In Section IV – Intensity Regulations; insert a new section IV – C as follows.

**SECTION IV - INTENSITY REGULATIONS**

**IV – C. SKY EXPOSURE PLANE**

1. Purpose and intent. This Section is to accommodate new construction and additions in all districts while protecting the health, safety and general welfare of the community and further:

- a. Encourage the use of solar energy systems and protect solar access;
- b. Protect the right of neighboring property owners to the use of their property within other zoning restrictions;
- c. Preserve views;
- d. Promote privacy.

**Commented [JM1]:** a & b. utilize wording from MGL c. 40A s. 9B

2. Applicability. The bulk plane standards in this section shall apply to principal and accessory buildings or structures, or as may otherwise be specified in these Bylaws.

3. **Definitions.**

- a. Sky Exposure Plane: A plane that begins on a lot line of a parcel at or above Grade, then extends vertically and horizontally at a slope perpendicular to that lot line until it reaches the maximum permitted height in the district or intersects with a Sky Exposure Plane from another of the parcel's lot lines. The Slope and the Starting Elevation for the Sky Exposure Plane may vary for the front, side, and rear areas of a lot.
- b. Slope: The vertical rise of a Sky Exposure Plane above the horizontal, expressed as a ratio of **Rise** (Vertical distance) to **Run** (Horizontal distance).
  - i. A Sky Exposure Plane with a slope of 2:1 rises two (2) feet vertically for every one (1) foot of horizontal distance away from its starting point.
  - ii. A Sky Exposure Plane with a slope of 1:1 rises one (1) foot vertically for every one (1) foot of horizontal distance away from its starting point.
  - iii. A Sky Exposure Plane with a slope of 1:2 rises one (1) foot in vertically for every two (2) feet of horizontal distance away from its starting point.
- c. Starting Elevation: The specified vertical distance at or above the mean finished grade on a lot line which marks the starting point of a Sky Exposure Plane.

**Commented [JM2]:** The Planning Board has yet to determine its preference as to locating definitions in Section 200 or in this section of intensity regulations.

4. Standards by district.

- a. No building or structure; or portion thereof; shall be constructed or maintained beyond the bulk plane set forth in Table IV – C. 5, except as provided for in Section IV - A. 5.
- b. Where a building or structure is subject to a Sky Exposure Plane elsewhere listed in these Bylaws, or if a Sky Exposure Plane begins at a lot line bordering or within a different district, the stricter limitation shall apply.

**Commented [JM3]:** These are the height exceptions for chimneys, vents, etc.

5. TABLE

IV – C. 5. SKY EXPOSURE PLANE						
District Designation	Front Slope	Front Starting Elevation	Side Slope	Side Starting Elevation	Rear Slope	Rear Starting Elevation
PCD	1 : 1	0	1 : 1	10	1 : 1	0
RM	3 : 2	0	3 : 1	0	2 : 1	0
RSA	1 : 1	0	1 : 1	12	1 : 1	0
RSB	1 : 1	0	1 : 1	4	1 : 1	0
RSC	1 : 1	0	1 : 1	12	1 : 1	0
RG	3 : 2	0	3 : 1	0	2 : 1	0
AP	1 : 1	5	3 : 1	0	3 : 2	0
DM	3 : 1	30	3 : 1	30	3 : 1	20
CH	1 : 1	0	1 : 1	0	1 : 1	0
HPU	1 : 1	0	1 : 1	0	1 : 1	0
IN-I	1 : 1	0	3 : 2	0	3 : 2	0
IN-II	1 : 1	0	1 : 1	0	1 : 1	0
HM-I	1 : 1	0	1 : 1	0	1 : 1	0
HM-II	1 : 1	0	1 : 1	0	1 : 1	0
HM-III	1 : 1	0	1 : 1	0	1 : 1	0
SH	3 : 2	0	3 : 2	10	3 : 2	0
H	1 : 1	0	1 : 1	0	1 : 1	0
LC	2 : 3	0	1 : 1	0	1 : 1	0

6. Figure IV-C, 6

**Commented [JM4]:** The clear presentation of Sky Exposure Planes is deemed to be easier and less subject to misinterpretation if there is included an illustration or graphic representation of the mechanism. Although illustrations are common in ZBLs across Massachusetts, Natick has not yet used this method of presentation. Town Counsel is clarifying how the motion and recordation of vote are to be executed.

# Memorandum

To: Natick Board of Selectmen, Planning Board and Finance Committee

CC: Martha White, Town Administrator  
William Chenard, Deputy Town Administrator  
James Errickson, Director, Community and Economic Development  
Ted Fields, Senior Planner, Community and Economic Development

From: Jillian Wilson Martin, Sustainability Coordinator  
Nicole Sanches, SolSmart

Date: September 12, 2017

Subject: SolSmart Review of Article 31

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Dear Natick Board of Selectmen, Planning Board and Finance Committee:

In 2017, Natick became a participant in SolSmart, a national designation and technical assistance program run by the U.S. Department of Energy that recognizes leading solar communities and empowers additional communities to expand their local solar markets. As part of our participation, we are fortunate enough to receive the support of a technical advisor to review and provide feedback on solar zoning requirements, analyze the solar permitting process for solar PV systems, and create and implement solar training programs for municipal staff.

In this capacity, Natick's solar technical advisor, Nicole Sanches, has completed a review of Article 31, which seeks to "encourage the use of solar energy systems and protect solar access." Her review is attached here for your Board or Committee's consideration as you evaluate the benefits of the Article 31 ahead of Town Meeting.

Thank you,

Jillian Wilson Martin  
Sustainability Coordinator  
Town of Natick

## Review of Article 31: Impact of Proposed Sky Exposure Planes on Solar Access:

Submitted by Nicole Sanches, SolSmart Technical Advisor  
September 12, 2017

One of the goals of the language proposed in Article 31 is to “encourage the use of solar energy systems and protect solar access”. This is a worthy goal and aligns with measures in the U.S. Department of Energy’s SolSmart program.

Article 31 proposes to limit construction outside of a set of sky exposure planes that raise at an angle from the lot line to accomplish this goal. This is a slightly different approach from those that other communities have taken to protect solar access, where the focus has been on where shading will occur.

The idea of applying 1:1 sky exposure planes to lot lines was first discussed with our team as a potential means of regulating the height of solar energy systems as part of the Town’s separately proposed solar zoning regulations (Article 30). At that time, we were curious to see what these proposed sky exposure planes would look like in practice in Natick, and what impact they could have on solar energy systems, so we conducted an analysis based on the 1:1 sky exposure plane.

### *Analysis of existing Natick homes with solar installations:*

To assess the impact of the sky exposure planes on solar energy systems, we chose ten homes with roof-mounted solar installations throughout Natick and measured their lot lines, elevations and roof heights. This information was used to create models of the sky exposure planes and buildings to see whether the existing solar systems would have been allowed under the proposed sky exposure planes.

We found that:

- Of the 10 houses studied, 9 buildings were found to be non-conforming with the 1:1 sky exposure planes from the lot line.
- Of the 10 properties, 7 of the 10 solar energy systems are in violation of the proposed sky exposure planes.
- 5 of the 10 homes studied were built or significantly remodeled in the past 15 years; each of these 5 were found to be non-conforming with the 1:1 sky exposure plane.
- The impact of the proposed 1:1 sky exposure plane is more significant when structures are not centered inside their lot lines.

The models for the ten houses and proposed sky exposure planes can be found in Appendix A.

### *How other communities have protected solar access:*

The proposed sky exposure planes are similar to language in New York City’s zoning, where the main concern is preventing sky scrapers from shading adjacent streets. New York’s zoning allows for a 60 foot tall front wall before the sky exposure planes take effect.

The City of Brookline has taken a similar approach to NYC in their Davis Path Special District. After 20 feet of height, structures must be set back according to a sky exposure plane.

Other communities focus on where a structure will cast shade on the winter solstice, and regulate construction based on how much shade is permitted on abutting lots. This is a way to directly protect

abutting neighbors from living in the shadow of their neighbors and provides different options for determining whether a proposed structure will be conforming. Malden takes this approach for structures more than six stories tall.

A significant difference between Natick's proposed sky exposure planes and these measures in practice in other communities, is the starting height of the setbacks. In Article 31, most of the zones do not have starting elevations for the sky exposure planes. Without these starting heights, the sky exposure planes may have the unintended consequence of incentivizing shorter and wider construction to fit under the pyramid of the intersecting sky exposure planes. This may also have the consequence of many existing structures in Natick suddenly being out of compliance.

Boulder, CO does not include a minimum height, but instead uses a "solar fence" to regulate shading between properties and protect solar energy systems.

The language and illustrations referenced in this section can be found in Appendix B.

#### *Suggestions for Article 31:*

In light of our analysis, I would make the following suggestions to bring the language of Article 31 closer to its stated goals in practice:

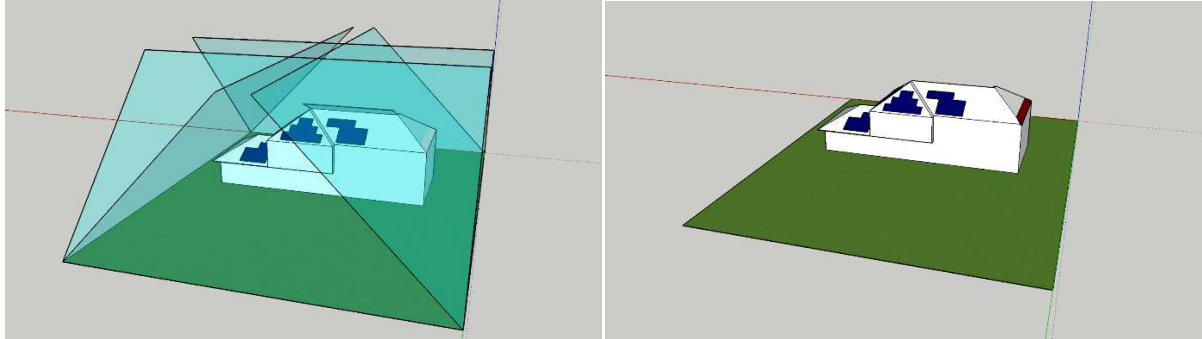
- Consider exempting existing non-conforming buildings from the sky exposure planes.
- Consider a higher base height to protect existing buildings' ability to adopt solar energy and to promote building shapes that complement existing structures in Natick.
- Consider exempting solar energy systems from the sky exposure planes, since typical roof-mounted systems add minimal height to a building.
- Consider higher base heights for zones with smaller lot sizes to protect the interests of low-income families in Natick. Smaller, more affordable lots would have a smaller space to build in with the sky exposure planes than larger ones. Raising the base height can address this imbalance.
- Consider adopting solar ready requirements for new construction as a way to further this goal.



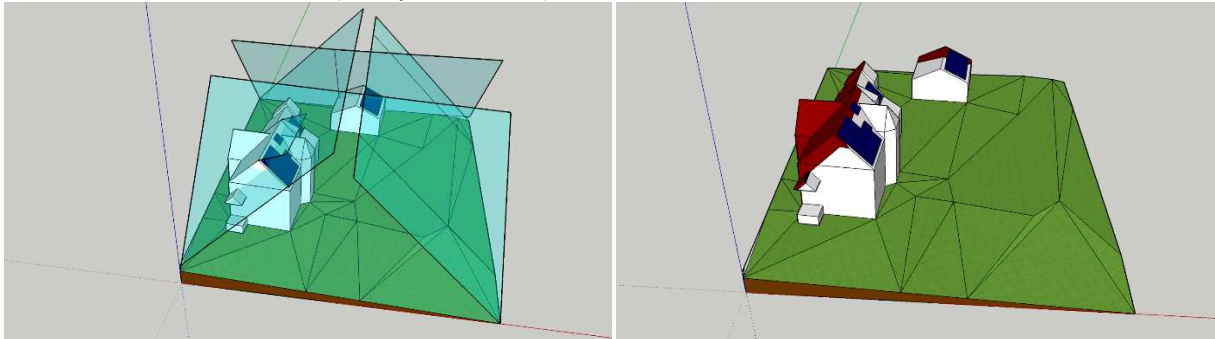
Appendix A: Models of Existing Natick Homes with Solar

Two pictures are provided for each address studied. The first depicts 1:1 Sky Exposure Planes from each lot line and their relation to existing buildings. The second picture shows the same lot and structure(s); the portion that is shaded red is in violation of one or more of the 1:1 Sky Exposure Planes.

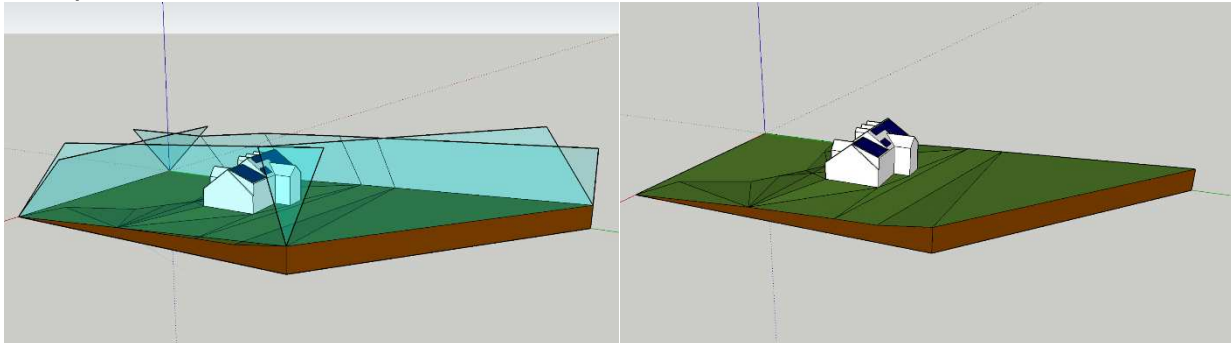
*36 Hemlock Drive, Built 1954, Second Floor Added 2013 (est. based off permit data)*



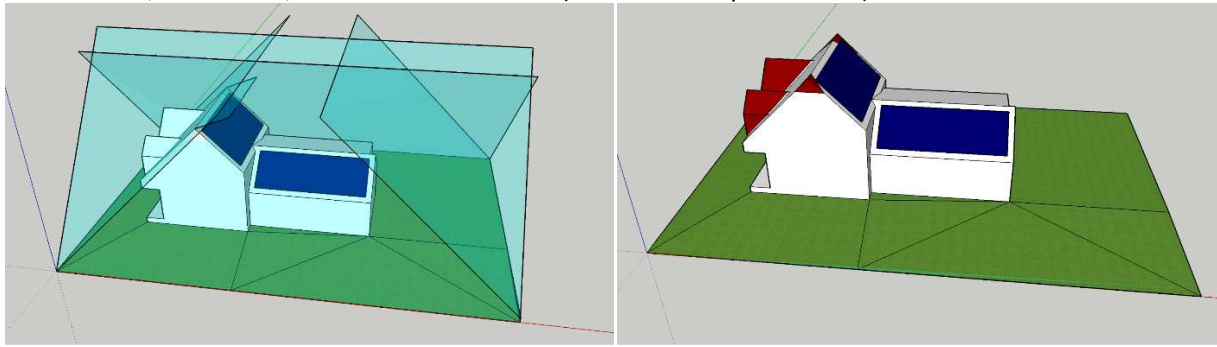
*9 Kinsman Place, Built 1913 (Multiple additions)*



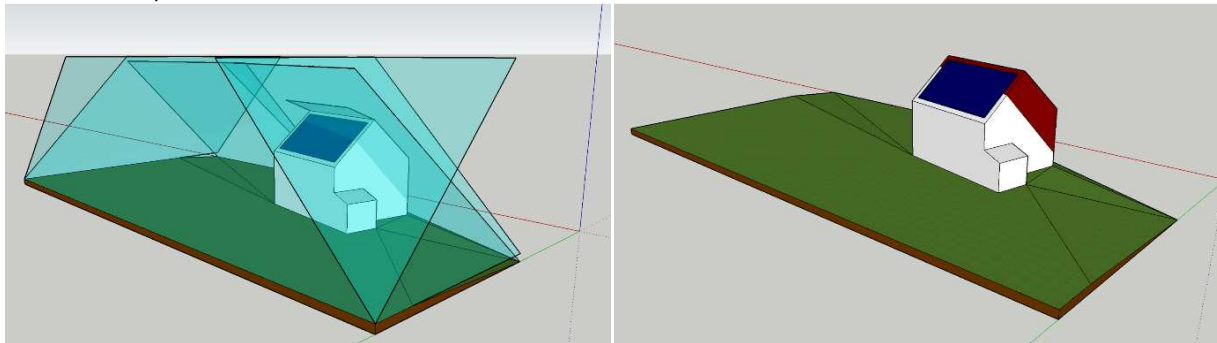
*5 Libby Road, Built 2000*



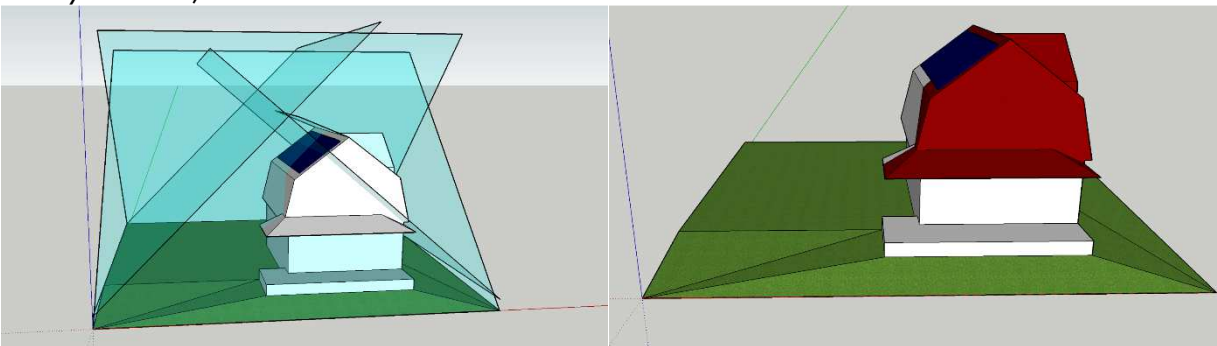
*18 Lincoln St, Built 1880, Addition Added 1998 (est. based off permit data)*



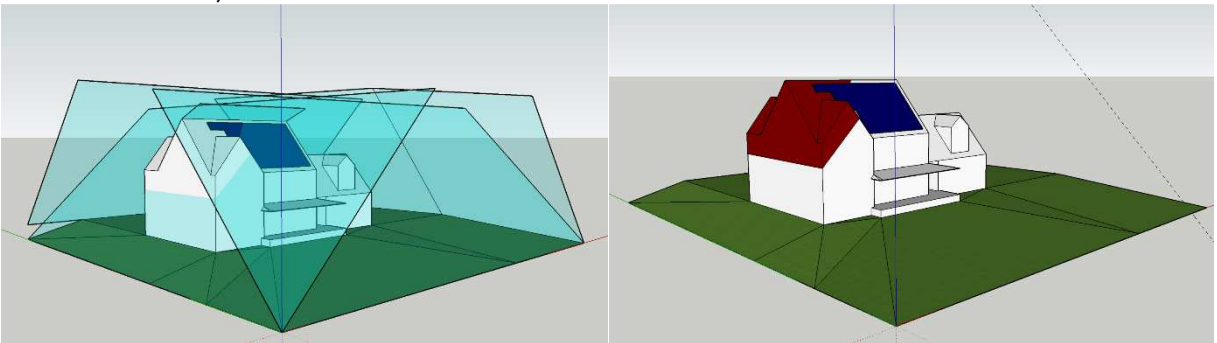
*7 Morse Lane, Built 1901*



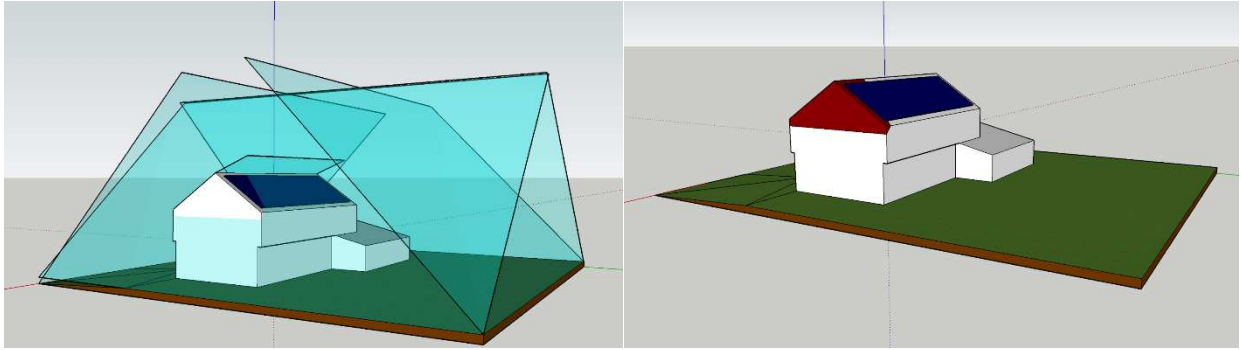
*25 Reynolds Ave, Built 1900*



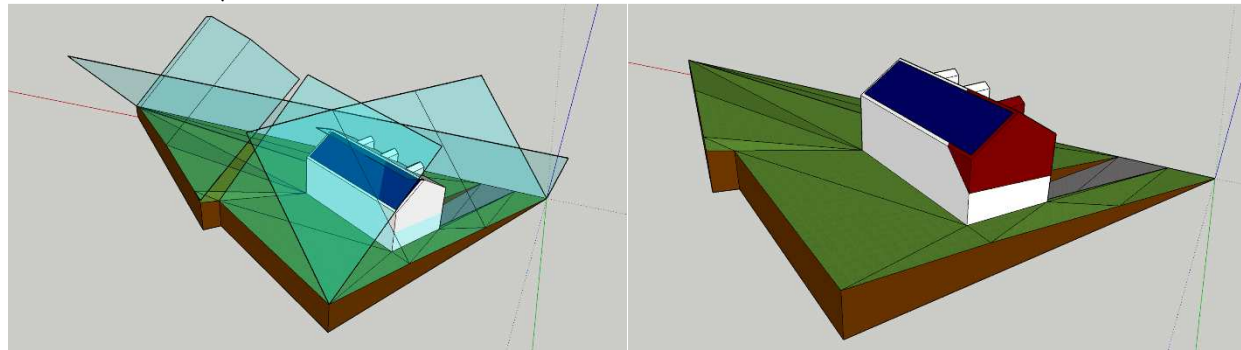
*215 South Main St, Built 2016*



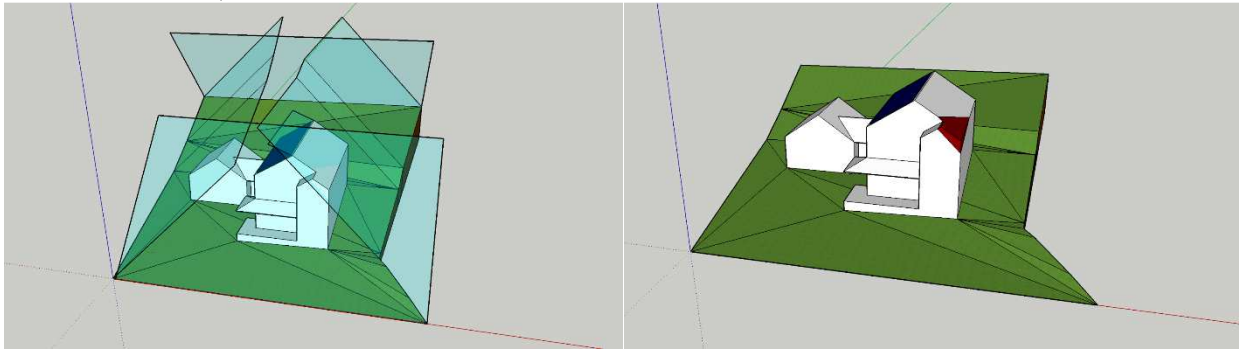
12 Spring Valley Rd, Built 1952, Second Floor Added 2008 (est. based off permit data)



107 North Main St, Built 2006



155 South Main St, Built 2014



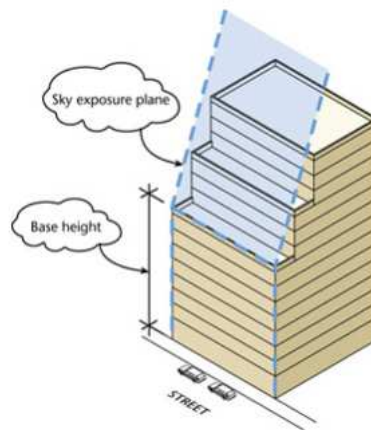
## Appendix B: Examples of Zoning Language on Solar Access

### **New York, NY:**

From the Zoning Glossary: <https://www1.nyc.gov/site/planning/zoning/glossary.page>

#### ***Sky Exposure Plane***

A sky exposure plane is a virtual sloping plane that begins at a specified height above the street line and rises inward over the zoning lot at a ratio of vertical distance to horizontal distance set forth in district regulations. A building may not penetrate the sky exposure plane which is designed to provide light and air at street level, primarily in medium- and higher-density districts.



### **Brookline, MA:**

From the Zoning By-Law: <http://www.brooklinema.gov/DocumentCenter/Home/View/10761> (p.5-19 to 5-22)

#### ***g. Davis Path Special District G-(DP)***

c) Height of Building shall be measured from the District Record Grade rather than as prescribed in Section 5.30. The District Record Grade shall be the record grade of Boylston Street at the edge of pavement opposite the midpoint of the southern boundary of the G-(DP) district. The Height of Building shall be in no case taller than 65'. Additionally, any elevator penthouse, mechanical equipment enclosure, water tanks and water towers, or cooling towers may in no case be taller than 80' from the District Record Grade. Notwithstanding the foregoing, in no case may any Building Construction exceed the Building Envelope set forth in Section 5.06.4.g.3.d below, except as expressly provided in Section 5.06.4.g.3.e below.



d) The Building Envelope shall be further restricted by an Angled Plane beginning at an elevation 20 feet above the District Record Grade and aligned with the MBTA property line, with such plane rising toward Boylston Street at an angle of one foot of vertical height for every 2.25 horizontal feet from the MBTA property line in a direction perpendicular to the MBTA property line.



**Malden, MA:**

From the Zoning By-Law: [http://www.cityofmalden.org/sites/default/files/code2016chap\\_1-12.pdf](http://www.cityofmalden.org/sites/default/files/code2016chap_1-12.pdf)

Section, 300.10 – All Structures More than Six Stories (p.1215)

300.10. 2 The City Council must find that **the proposed structure will create no significant new shadow** for any properties in Residence A and B zoning districts. **To [e]nsure the protection of solar access for adjacent neighborhoods**, the developer must provide shadow analysis, drawn by a registered architect, for 9:00 A.M., 12:00 Noon, and 3:00 P.M. based upon standard time, for the winter solstice (December 21), spring and fall equinoxes (March 21 and September 21) and summer solstice (June 21).

(p.1243)

400.11 Height Requirements:

400.11.2 Parapets less than five (5) feet high, chimneys, flag poles, ventilators, water tanks, antennas, penthouses, **solar panels**, wind generators and associated towers, or other protections used for or intended to be used exclusively for utility services or access to the roof may exceed the height limitations of this ordinance by not more than twenty (20) feet.

### **Boulder, CO:**

From their Solar Access Guide: <https://bouldercolorado.gov/plan-develop/solar-access-guide>  
[https://www-static.bouldercolorado.gov/docs/PDS/forms/815\\_Solar\\_Access\\_Brochure.pdf](https://www-static.bouldercolorado.gov/docs/PDS/forms/815_Solar_Access_Brochure.pdf)

In response to the diminishing supply and increasing cost of conventional energy resources, the City of Boulder enacted an ordinance to protect the use of solar energy. The ordinance guarantees access to sunlight for homeowners and renters in the city. This is done by setting limits on the amount of permitted shading by new construction and requiring that new buildings be sited to provide good solar access.

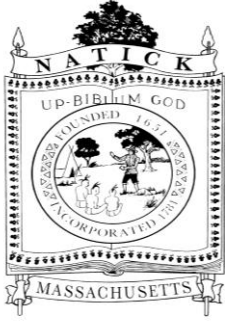
The degree of solar access protection is defined by either a 12 foot or 25 foot hypothetical "solar fence" on the property lines of the protected buildings. The ordinance is designed to protect access for a four hour period on December 21st. Under most circumstances, new structures will not be allowed to shade adjacent lots to a greater extent than the applicable solar fence.

There are three Solar Access Areas in the City of Boulder. Following is a list of zoning districts and which solar access area they fall into:

Solar Access Area I Lots are protected by a 12 foot "solar fence" as mentioned above. These lots are in RR-1, RR-2, RE, RL-1 and MH zoning districts.

Solar Access Area II Lots are protected by a 25 foot "solar fence". These lots are in RL-2, RM, MU-1, MU-3, RMX, RH, and I zoning districts.

Solar Access Area III All other zoning districts are in Solar Access Area III and are protected through the solar permit process



# COMMUNITY AND ECONOMIC DEVELOPMENT

BUILDING  
PLANNING  
ZONING  
CONSERVATION

## MEMORANDUM

**TO:** Andrew Meyer, Chair & Members of the Natick Planning Board

**FROM:** Jamie Errickson, Director  
David Gusmini, Building Commissioner

**CC:** Martha White, Town Administrator  
Patrick Hayes, Chair, Natick Finance Committee

**DATE:** September 13, 2017

**RE:** **Proposed Sky Exposure Plane (SEP) Zoning Bylaw – 2017 FATM Article 31**

---

This memo is provided on behalf of the staff in the Community and Economic Development (CED) (including the Building Department) with regards to the Proposed Sky Exposure Plane (SEP) Zoning Bylaw – 2017 FATM Article 31.

Over the past several months, CED staff worked closely and productively with the proponent of the article in reviewing and making various changes, tweaks, and adjustments to the proposed zoning bylaw, all of which are viewed as positive changes to the overall regulation, and which will assist with the eventual enforcement of the regulation (should they be approved by Town Meeting). The proposed zoning amendment provides some clear benefits to the land use regulations of the Town, including ensuring access to the sun for property owners and/or limiting the construction of buildings that may be out of scale from the rest of the neighborhood, to name a few.

However, through reviewing the proposed zoning bylaw, CED staff also raised some potential impacts and issues to be considered. These considerations are outlined below and are provided for reference purposes to ensure decision making board and committees are aware of these items.

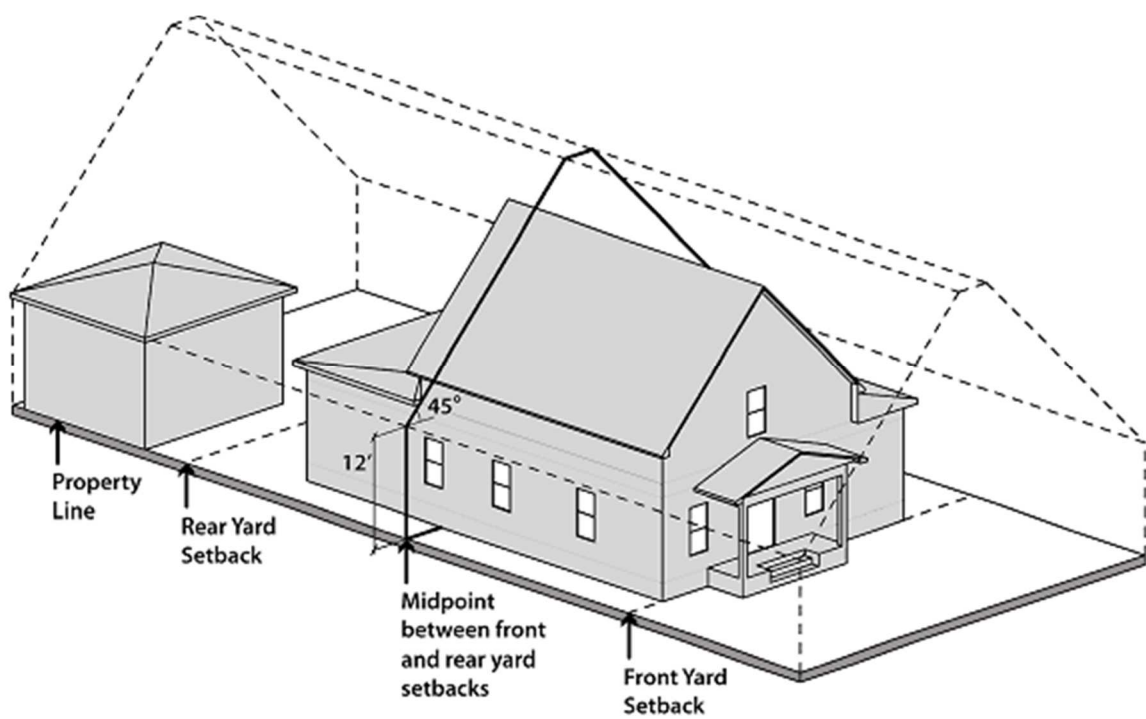
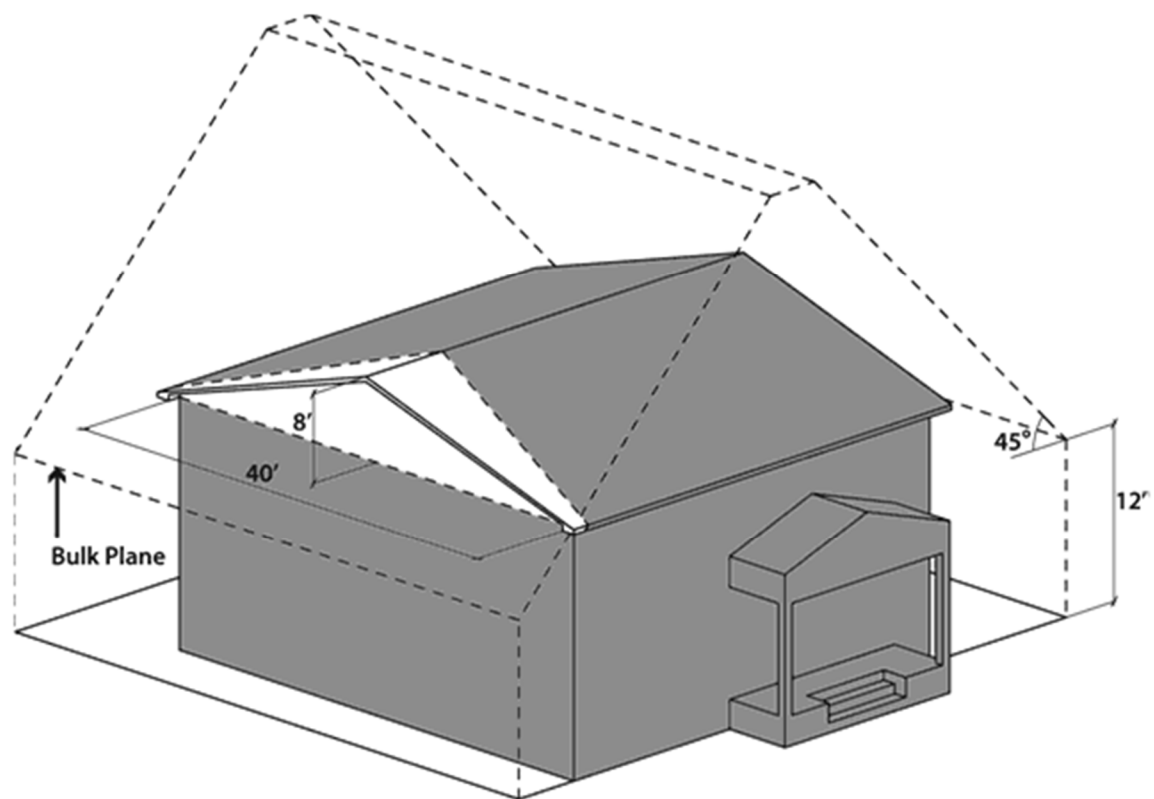
- In order to enforce the Proposed Sky Exposure Plane (SEP) regulations, property owners will be required to engage engineers and surveyors to certify parcel boundaries, topography, setbacks and building heights before securing Building Permits to construct residential additions, modifications, or new homes. These outlays, potentially totaling thousands of dollars, are a risk to the property owner if permits are denied for non-conformance with SEP regulations. This has the potential to accelerate price inflation in Natick's heated housing market, increasing affordability problems.

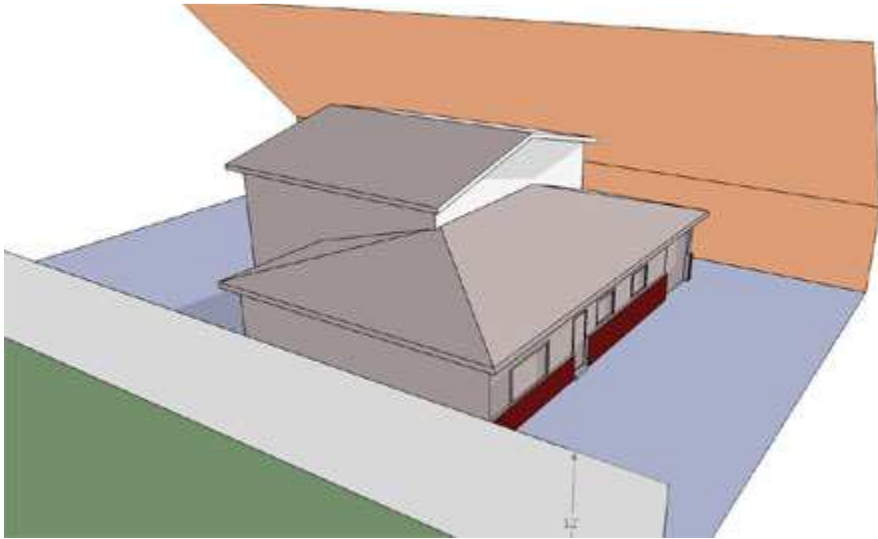
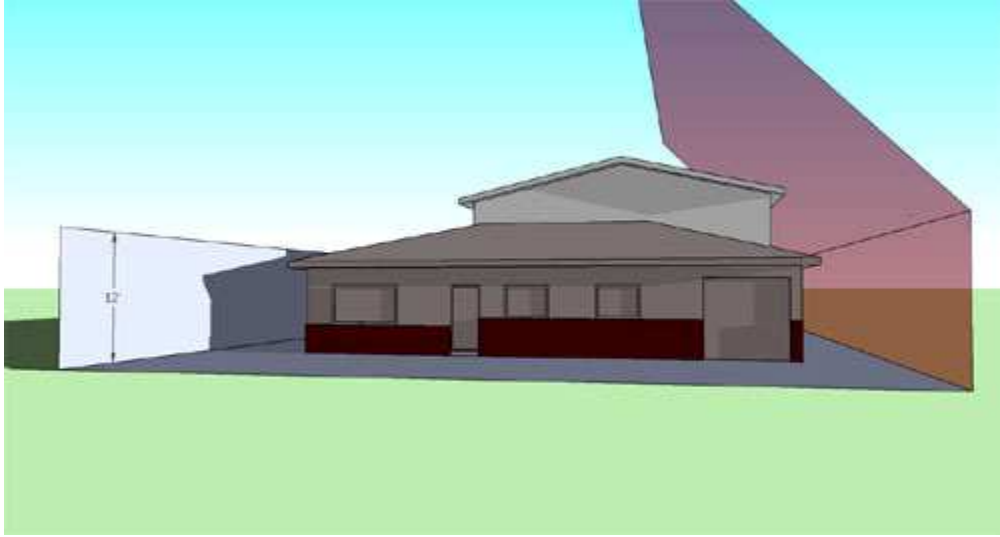
- Design and engineering costs associated with the proposed SEP regulations could discourage some property owners from expanding and/or improving homes and businesses. Instead, these changes could induce property owners to sell to developers, which could lead to an increase in the tearing down of existing structures in order to build new (and potentially larger) homes within the space allowed by SEP regulations. While this could be beneficial in some areas, it could have dramatic impacts on established residential neighborhoods.
- The proposed SEP regulations are complex by nature and are not easily digestible to non-professionals. This could further dampen the desire of average property owners to improve and/or expand their properties and restrict property development to professional builders. The SEP language and graphics do attempt to simplify the regulations, but the concept of SEP will still require significant education on the part of the Town to ensure a complete understanding of the implementation and proper enforcement of this regulations.
- Incorporating additional SEP regulations into Natick's zoning bylaw has the potential to increase the number of non-conforming properties in residential and commercial zones. Currently over three-fifths (63%) of properties do not conform to zoning requirements, and over two-thirds (70%) of lots in older districts such as the Residential General (RG), Downtown Mixed Use (DM) and Commercial II (CII) zones are dimensionally non-compliant with Natick's zoning requirements. Adding SEP regulations, which is an additional dimensional requirement, could exacerbate this situation by making currently complaint parcels non-conforming. This has been demonstrated by a recent design analysis of a sample of lots completed by the town's Sustainability Coordinator (see attached).
- The proposed SEP regulations as currently proposed lack explicit exemptions for common architectural features found in Natick's varied neighborhoods, such as dormers or gable ends. The text is unclear about whether the features exempted from Building Height standards outlined in Section IV-A (5) apply to the proposed SEP requirements. This lack of clarity may inadvertently limit the development rights of some homeowners to two (2) stories instead of the two and one half (2.5) stories currently permitted in Article IV of the zoning bylaw.
- The building inspectors anticipate that the proposed SEP regulations will be complicated to administer. The regulations has the potential to induce more applications to the Zoning Board of Appeals (ZBA) for relief, either for a variance from these dimensional standards or through the MGL c40A s 6 ("Section 6") finding process.
- The proposed SEP regulations may adversely impact properties in areas with high water tables, where basements are impractical and upper stories are required for storage space (attics).
- It is recommended that legal counsel review the bylaw to ensure compliance with MGL c40A.

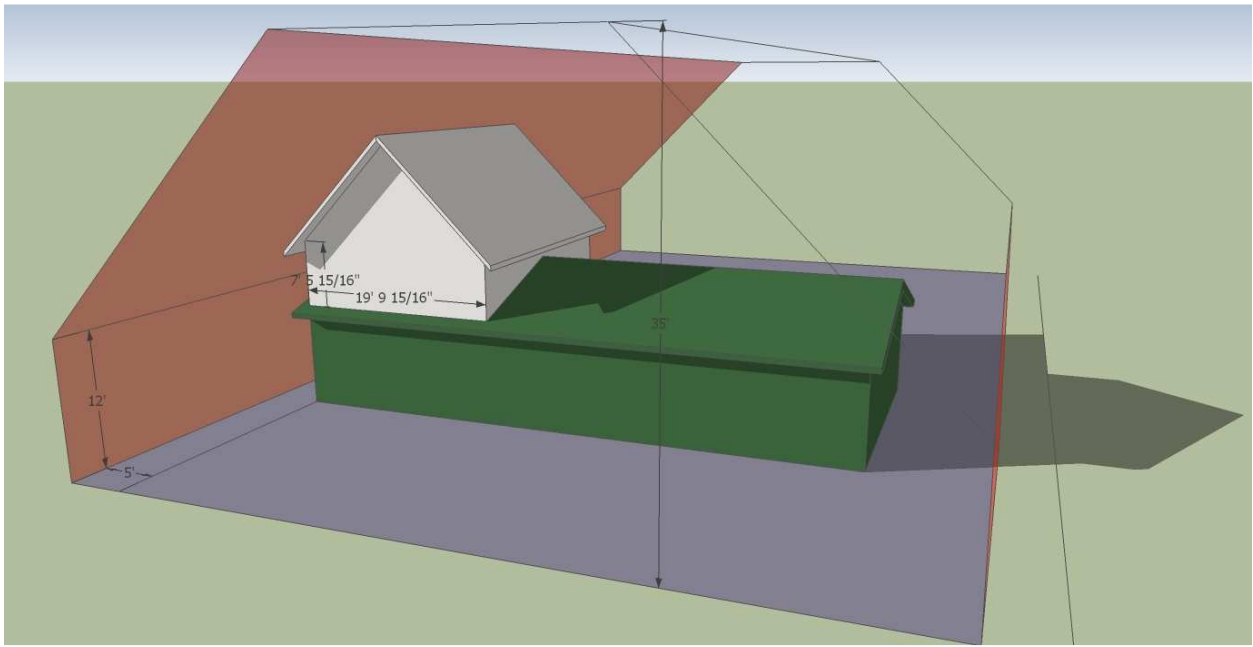
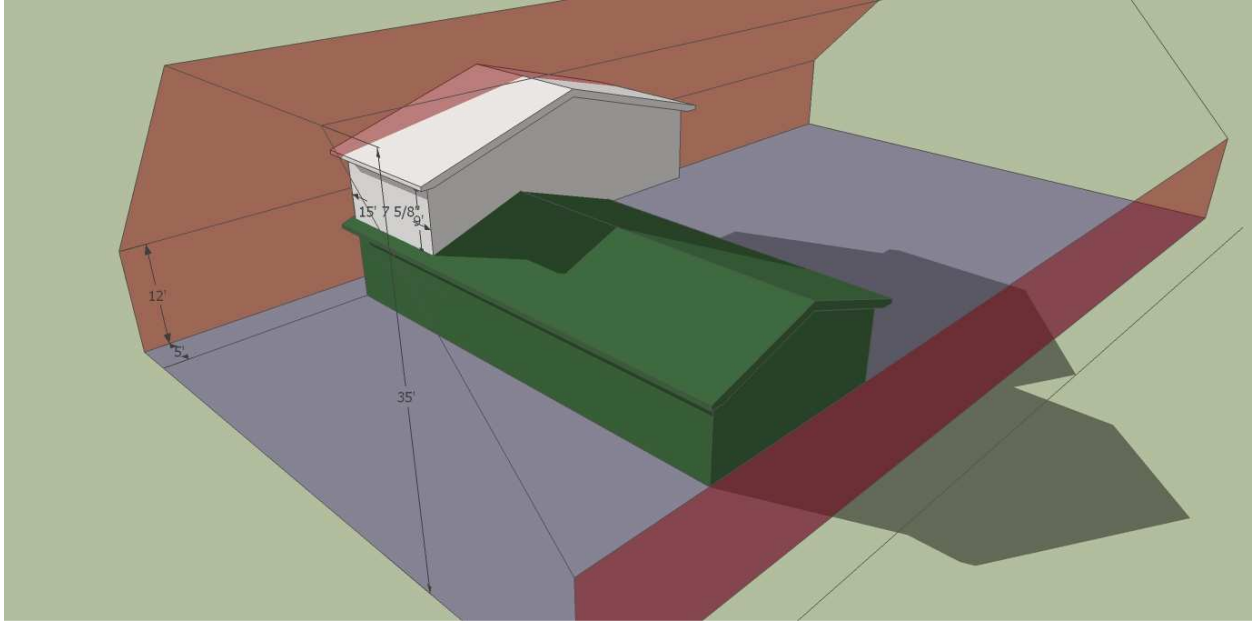
Please note that this memorandum should not be construed as providing support or opposition to the proposed SEP regulations, but more as a list of items to consider when reviewing the proposed regulations.

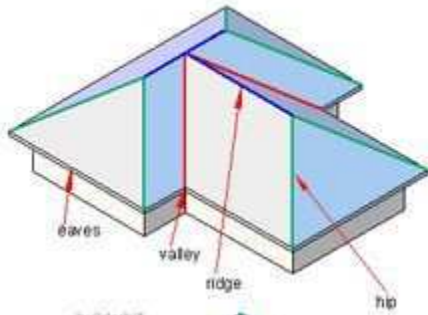
As always, please feel free to contact me with any questions or clarifications.



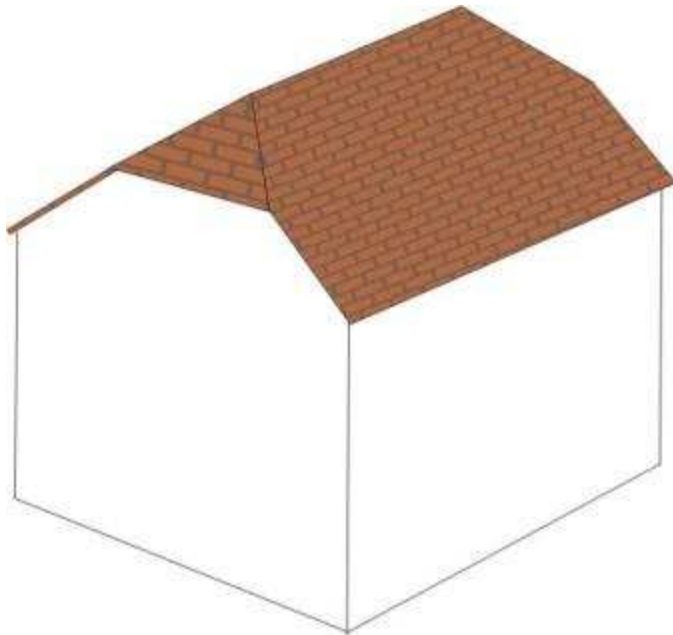
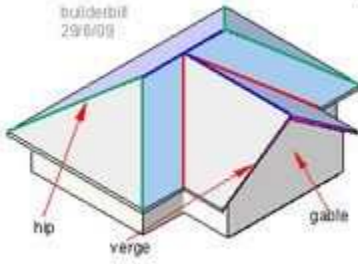




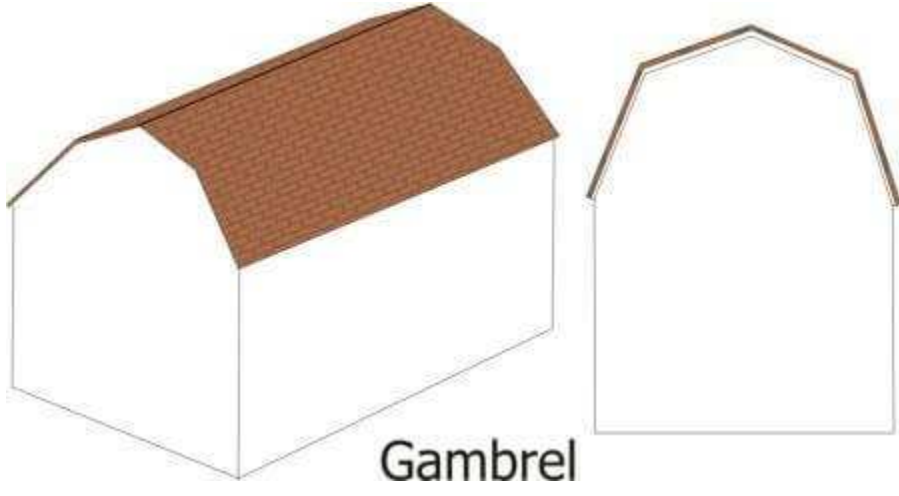




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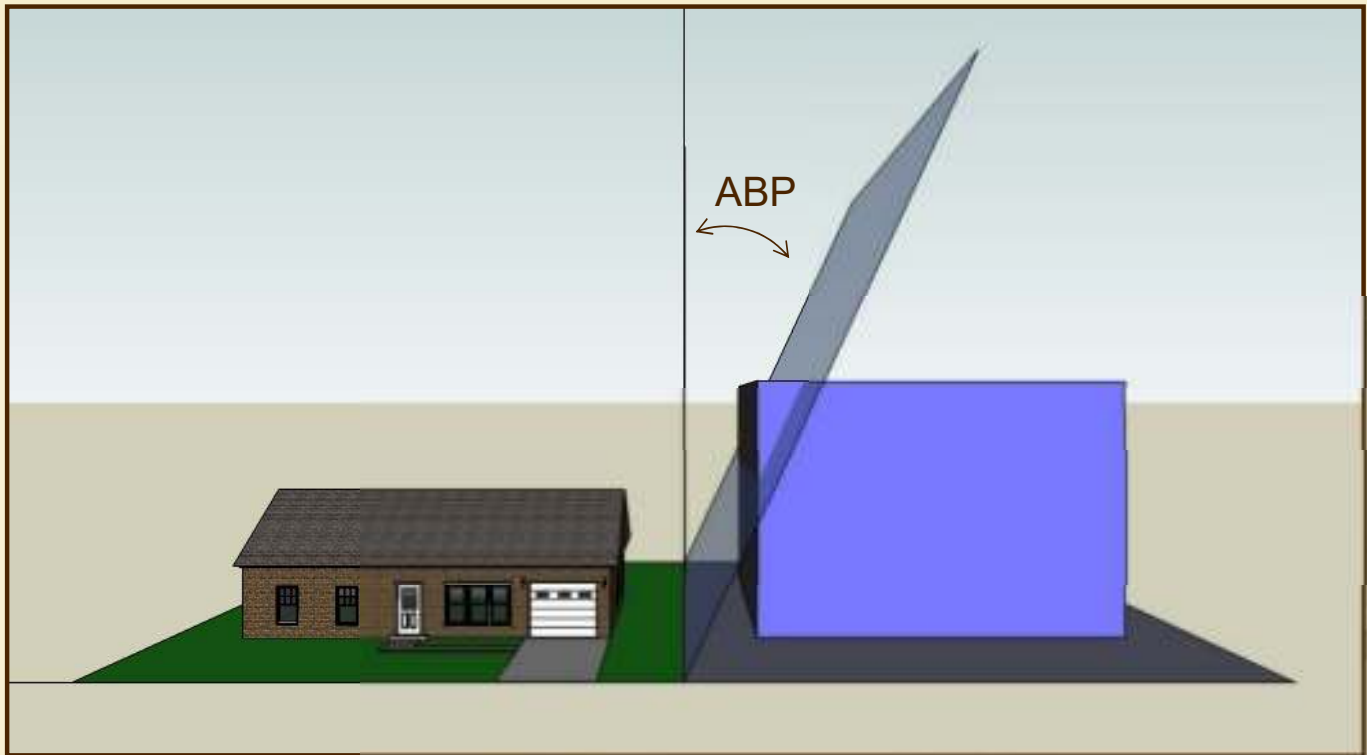
Half Hip



Gambrel

## What is an Angle of Bulk Plane and what does it do?

**Angle of Bulk Plane:** an inclined plane drawn at a specific angle from vertical that contributes to the delineation of maximum permitted bulk that can be constructed on a lot



**2017 FALL ANNUAL TOWN MEETING**  
**Article 31**  
**Amend Zoning By-Laws: Sky Exposure Plane**  
**(Planning Board)**

**DRAFT Motion: Work product; meeting 2017.09.25**

**It is moved that the Zoning Bylaws be amended as follows:**

- In Section 200 - Definitions; delete the current definition: “Sky Exposure Plane” and insert new definitions “Sky Exposure Plane”, “Sky Exposure Plane Slope”, and “Sky Exposure Plane Starting Elevation” as follows:

“Sky Exposure Plane: A plane that begins on a lot line of a parcel at or above Grade, then extends vertically and horizontally at a slope perpendicular to that lot line until it reaches the maximum permitted height in the district or intersects with a Sky Exposure Plane from another of the parcel’s lot lines. The Slope and the Starting Elevation for the Sky Exposure Plane may vary for the front, side, and rear areas of a lot. “

“Sky Exposure Plane Slope: The vertical rise of a Sky Exposure Plane above the horizontal, expressed as a ratio of **Rise** (Vertical distance) to **Run** (Horizontal distance). As per the following examples or by other slope provided in these bylaws.

- i. A Sky Exposure Plane with a slope of 2:1 rises two (2) feet vertically for every one (1) foot of horizontal distance away from its starting point.
- ii. A Sky Exposure Plane with a slope of 1:1 rises one (1) foot vertically for every one (1) foot of horizontal distance away from its starting point.
- iii. A Sky Exposure Plane with a slope of 1:2 rises one (1) foot in vertically for every two (2) feet of horizontal distance away from its starting point.”

“Sky Exposure Plane Starting Elevation: The specified vertical distance at or above the mean finished grade, of a building or structure, imputed to a lot line which marks the starting point of a Sky Exposure Plane.”

- In Section IV – Intensity Regulations; insert a new section IV – C as follows.

**“SECTION IV - INTENSITY REGULATIONS**

**IV – C. SKY EXPOSURE PLANE**

1. Purpose and intent. This Section is to accommodate the issuance of new construction building permits while protecting the health, safety and general welfare of the community and further:
  - a) Encourage the use of solar energy systems and protect solar access;
  - b) Protect the right of neighboring property owners to the use of their property within other zoning restrictions;
  - c) Preserve views;
  - d) Promote privacy.
2. Applicability. The bulk plane standards in this section shall apply to the issuance of new construction building permits for principal and accessory buildings or structures; but excludes the issuance of alteration building permits for buildings and structures built prior to July 1, 2018; or as may otherwise be specified in these Bylaws.
3. Standards by district.
  - a) No building or structure; or portion thereof; shall be constructed beyond the bulk plane set forth in Table IV – C. 4, except as provided for in Section IV - A. 5.
  - b) Where a building or structure is subject to a Sky Exposure Plane elsewhere listed in these Bylaws, or if a Sky Exposure Plane begins at a lot line bordering or within a different district, the stricter limitation shall apply.

4. TABLE

IV – C. 5. SKY EXPOSURE PLANE						
District Designation	Front Slope	Front Starting Elevation	Side Slope	Side Starting Elevation	Rear Slope	Rear Starting Elevation
RM	3 : 2	0	3 : 1	0	2 : 1	0
RSA	1 : 1	0	1 : 1	12	1 : 1	0
RSB	1 : 1	0	1 : 1	4	1 : 1	0
RSC	1 : 1	0	1 : 1	12	1 : 1	0
RG	3 : 2	0	3 : 1	0	2 : 1	0

5. (Guidelines) (Standards)  
 Refer to the: Sky Exposure Plane (Guidelines) (Standards), as established by the Planning Board.”