#### **Town House**

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Approved 10/9/19

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Joanne Fiore, Adm. Assistant

# TOWN OF HAMPDEN MASSACHUSETTS



## **Planning Board**

625 Main Street Hampden, MA 01036 Tel: (413) 566-2151 Ext. 109

Robert Howarth, Chair Richard R. Green, Co-Chair John Matthews Edward Loiko Jason Barroso

## MINUTES OF THE HAMPDEN PLANNING BOARD

Regular Board Meeting September 25, 2019

Board Members: Judge Robert Howarth

Richard Green Jason Barroso

Adm. Assistant: Joanne Fiore, Adm. Assistant

#### **General:**

Call to Order – Judge Howarth called the meeting to order at 6:02 PM.

Mail –

Bills – Payroll Signed

Minutes –

- 1) 111 Thresher Road Application for a Home Occupation Section 7.12 of the Zoning Bylaws RAM Home Services

  Mark Chamberlain of 111 Thresher Road presented to the board site plans for a home office for his home occupation, RAM Home Services. He will provide high quality home repair and maintenance for homeowners and property managers. Mr. Chamberlain indicated there will be no employees, no additional vehicles, no parking required, no deliveries and no sign. He will store is equipment in the garage and workshop. Richard Green made a motion to approve the home occupation site plans as presented. Jason Barroso seconded the motion. All in favor so approved (3-0).
- 2) 45 Mill Road Application for a Home Occupation under Section 7.12 of the Zoning Bylaws Carpentry Business Izaina Clint Adoptante presented to the board site plans for a home office for his home occupation, Creative Concepts Carpentry. Mr. Adoptante will provide carpentry work off-site. He will not have a showroom on his property. Noise will be minimal. He indicated he will not have a business sign. Richard Green made a motion to approve the home occupation site plans as presented. Jason Barroso seconded the motion. All in favor so approved (3-0).
- 3) ANR 24-28 East Longmeadow Road FRS McNamara Wilbraham, LLC

Steve McNamara presented to the board ANR plans for 24-28 East Longmeadow Road. This ANR combines the two parcels in a new Parcel A (1.38 Acres). Richard Green made a motion to approve the ANR as presented. Jason Barroso seconded the motion. All in favor so approved (3-0).

4) Highland Drive Subdivision - Discussion Regarding 2<sup>nd</sup> Engineering Peer Review Comments

David Partridge of Tighe & Bond, Ron Huot of Anderson Associates Surveying, Robert Cafarelli of Civil Engineering

Associates, and Alston Graham of Graham Construction met with the Board to discuss Tighe & Bond's second engineering peer review comments. Each item was addressed below:

## **Components of the Definitive Plan**

1.Per Section 4.3.2.b of the Subdivision Regulations, the drawings shall be prepared and stamped by a registered engineer and registered land surveyor. Of the resubmitted drawings, only the title sheet is stamped and signed by a registered land surveyor. It is at the **Planning Board's discretion** whether having only the title sheet signed and stamped sufficiently meets this requirement.

ISSUE: ALL PAGES SHOULD BE STAMPED ACTION: ADDRESSED

- Addressed The drawings have been revised to depict lot numbers shown enclosed in a circle in accordance with Section 4.3.2.i of the Subdivision Regulations. The Applicant's Response states that house numbers will be assigned later, at the building permit application stage.
- 3. The drawings have been revised to include proposed topography contours for the road grading on Sheet 3A (Grading Plan) in accordance with Section 4.3.2.1 of the Subdivision Regulations. Based on the updated information, there are new comments with the proposed grading as follows:
- a. The proposed grade contours shown within the right-of-way are not consistent with the Typical Street Section on Sheet 9 which reflects II-foot wide shoulders on each side of the proposed road. Either the Typical Street Section or grading plan should be revised to be consistent with each other. If the Typical Street Section will be revised to differ from the design requirements of the Subdivision Regulations, it is at the **Planning Board's discretion** to grant a waiver.

ISSUE: The drawings must be consistent to eliminate ambiguity

ACTION: To eliminate ambiguity, the plans should be redrawn. Also, the grade is 2:1 on plans.

The Zoning Bylaws state 3:1 slope. Plans should be drawn to conform to Zoning Bylaws.

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b. As shown on Sheet 3A, the proposed downslope grade between Station 5+00 and 12+50 is shown at an approximate 2.5 to 1 slope (horizontal to vertical). Per Section 6.2.7 of the Subdivision Regulations, a guardrail may be required on slopes greater than 3 to 1. Either a guardrail should be provided along the road at this location, or the grading plan should be revised to show a slope of 3 to 1 or less.

ISSUE: Plans reflect 2.5 to 1 slope
ACTION: Plans to be redrawn with a 3 to 1 slope and remove guardrail.
Sheet 3A

c. Sheet 3A does not show the proposed fill needed to provide cover over the cross country drainpipe to the stormwater retention basin (between Lots 9 and 10). As shown on profile on revised Sheet 6, approximately 3 to 6 feet of fill will be placed over the pipe and within the easement. Sheet 3A should be revised to show these proposed grade contours.

ISSUE: Sheet 3A does not reflect grade contours. ACTION: Sheet 3A to be revised.

4. **Addressed** - Sheets 4 and 5 have been revised such that the existing profiles along the right and left sides of the road alignment are provided in accordance with Section 4.3.3.b of the Subdivision Regulations.

the existing cul-de-sac, which is consistent with Section 4.3.3.c of the Subdivision Regulations. However, the proposed vertical curve for the new road profile changes the existing grade 50 feet into the existing cul-de-sac. Sheets 3A and 6 should be revised to show the grading impacts and limits of work resulting from the road grade change at the existing cul-de-sac.

ISSUE: Sheets 3A and 6 do not show grading impacts and limits of work resulting from the road grade change at the existing cul-de-sac.

ACTION: Redraw Sheets 3A and 6 to reflect grading into cul-de-sac.

6.**Addressed** - Sheet 6 has been revised to show the profile of the cross-country drain pipe to the retention basin (between Lots 9 and 10) which is consistent with 4.3.3.d of the Subdivision Regulations.

7.The Applicant's Response states a waiver will be requested from the sidewalk requirements of Section 4.3.3.e of the Subdivision Regulations. It is at the **Planning Board's discretion** to waive the sidewalk requirement.

ISSUE: No waiver. Require minimal sidewalk construction estimate with \$ to be put into a sidewalk fund. ACTION: Mr. Graham to provide cost of sidewalk to be put in escrow.

- 8.**Addressed** The Applicant's Response states that "water for homes will be wells and septic deigns will be due prior to application of building permits" regarding Section 4.4.b of the Subdivision Regulations.
- 9.**Addressed** An environmental impact study was provided in the resubmission as required per Section 4.5 of the Subdivision Regulations.

#### Roads

10. The Applicant's Response provides a narrative regarding the applicant's consideration for streets that are proposed in areas having a slope of more than 15. It is at the Planning Board's discretion whether that response and revised grading plan provides the warranted "due consideration" as required by Section S.1.b.2 of the Subdivision Regulations.

ISSUE: Street having a slope of more than 15. ACTION: Per David Partridge, on this property, you can't avoid the 15% steep slope. This becomes a Building Dept. issue.

11. Per Section 5.1.4 of the Subdivision Regulations, dead-end streets shall not exceed a length of fifteen hundred feet (1500'). The proposed 1,500-foot road extension onto the existing 2,200-foot long Highland Drive creates a dead-end street totaling approximately 3,700 feet. The Applicant's Response states that the applicant has already received approval to extend this street without providing an additional access to South Monson Road. This approval was not included in the resubmitted documents for our verification. It is at the Planning Board's discretion as to whether a waiver or some similar approval was already provided on this matter.

ISSUE: There is no fire road reflected on plans.

ACTION: Confirm Fire Chief reviewed the latest set of plans and provide comments regarding having no fire road.

12. Per Section 5.1.6 of the Subdivision Regulations, each subdivision shall be provided with more than one street for access and exit. Similar to above, the Applicant's Response states that the applicant has already received approval to extend this street and not provide an alternate exist to South Monson Road. Such approval was not documented in the resubmitted documents for our verification. It is at the **Planning Board's discretion** as to whether a waiver or some similar approval was already provided on this matter.

ISSUE: Plans do not reflect an alternate exit to South Monson Road.

ACTION: Fire Chief to provide comments as to this issue. Also, where should they should be located If they went with (2) 15,000-gallon tanks; provide tank configuration/flotation device

13. Addressed - Sheet 6 has been revised to include a transitional 100-foot long vertical curve to remove the abrupt grade transition that was shown in the original design. However, as noted in Comment No.5 above, Sheets 3A and 6 should be revised to show the grading impacts and limits of work resulting from the road grade change at the existing cul-de-sac.

### **Drainage and Erosion/Sediment Control**

- 14.**Addressed** Provision of Sheet 3A shows that sediment controls will be provided along the downgradient side of the proposed road, and Sheet 6 shows that sediment controls will be provided along the downgradient side of the storm water basin. Along with the details and notes provided on Sheet 9, these drawings essentially constitute a sediment control plan consistent with Section 5.4 of the Subdivision Regulations.
  - 15. Most of the drainpipe velocity calculations were provided in the Applicant's Response which generally comply with Section 5.5.9 of the Subdivision Regulations. However, a statement regarding the steep cross-country pipe to the stormwater basin indicates that the manhole will dissipate the anticipated excessive velocities generated by the steep slope. The manhole shown on Sheet 6 appears to be of standard design without any velocity dissipation attributes. Additional information or calculations should be provided to demonstrate how this manhole will dissipate the anticipated velocities.
- 16. **Addressed** Sheet 4 has been revised to include catch basins at Station 0+50 such that basins will be installed at intervals not exceeding 300 feet on continuous grades, which is consistent with Section 5.5.10 of the Subdivision Regulations.
- 17. **Addressed** The hydrologic/hydraulic model in the Drainage Calculations has been revised to reflect both existing wooded areas and proposed areas to remain wooded, to be in "Good" hydrologic condition.

18.As commented in our October 17, 2018 letter, sediment indicator posts should be provided at various locations in the retention basin and forebay and the Long-Term Operation and Maintenance Plan should reference the markings to determine when sediment removal should occur. The Applicant's Response states that posts will be provided, but the revised drawings do not show the posts on any plan view or on the detail sheet, and no reference was provided regarding their use within the Long-Term Operation and Maintenance Plan. This information should be provided.

ISSUE: Plans do not reflect sediment indicator posts at various locations in the retention basin and forebay. Operations and Maintenance Plan referencing the markings to determine when sediment removal should occur.

ACTION: Plans to reflect the sediment indicator posts and O&M Plan to be provided.

19.Sheet 6 has been revised to show that the bottom of the proposed retention has been raised 3 feet (to elevation 511) but will still require excavation up to 5 feet below existing grade at its northern end. The deep hole test results submitted with the original Drainage Calculations revealed soil mottling at 1.5 to 2 feet below existing grade in the proposed basin area. Soil mottling is indicative of seasonal high groundwater. Since the retention basin is intended for infiltration, the proposed bottom elevation should be raised to provide a minimum of 2 feet above the seasonal high groundwater level per the Massachusetts Storm water Management Standards. Otherwise, infiltration rates should not be used for the basin in the hydrologic/hydraulic model.

ISSUE: The Retention Base should be a minimum of 2 ft. above the seasonal high groundwater level. They should follow the MA Stormwater Management Standards.

ACTION: Engineer to provide new ground water design raising the system (revised plan) and include missing elevation. To be reviewed by Tighe & Bond.

20. As commented in our October 17, 2018 letter, if the proposed basin is classified as something other than an infiltration basin per the Massachusetts Storm water Management Standards, other stormwater best management practices may need to be implemented to achieve the TSS removal requirements.

ACTION: This will be resolved if Item #19 is done per MA Stormwater Management Standards. Per Tighe & Bond Soil evaluation is done by looking at the soil and determine design; perc test is not used for soil evaluation.

21. The Applicant's Response describes that the infiltration rate used for the proposed stormwater basin has been revised to 1.0 inch per hour based on performed percolation tests. Per Massachusetts Stormwater Management Standards, percolation tests are not an acceptable test for determining infiltration rates. Acceptable saturated hydraulic conductivity analysis methods are described in the "Massachusetts Stormwater Handbook, Volume 3, documenting Compliance". If those methods are not used, the Rawls Rate for the observed should be used instead. The rates used for the drawdown calculations should be revised accordingly, to verify whether the basin will empty within 72 hours of a rain event.

ACTION: This rolls into previous discussion. Robert Cafarelli, Civil Engineer, to resubmit revised drawdown calculations to be reviewed by Tighe & Bond. (Revised Plan)

22.As commented in our October 17, 2018 letter, the hydrologic/hydraulic model used for the proposed retention basin is based on a "dry-start" condition that assumes that the basin will be empty at the start of the design storm. The deep hole test results submitted with the original Drainage Calculations indicated the seasonal high groundwater elevation within the footprint at 1. 5 to 2 feet deep which, would be at or above the basin bottom elevation. As a result, the retention basin may be partially filled during periods of seasonal high groundwater. Since there is no outlet pipe from the basin, the hydrologic/hydraulic model should not use a "dry-start" condition unless the bottom of the basin raised higher. If it's intended to be an infiltration basin the bottom elevation must be 2 feet above the seasonal high groundwater, but it's intended to be a retention basin only, the bottom can be located just above the seasonal high groundwater

ACTION: Rolls into previous discussion. Revised Retention Basin.

23.As commented in our October 17, 2018 letter, the original site plan design allowed runoff from Lots 6, 7 and 8 to flow into the proposed retention basin. The Applicant's Response states that the revised grading plans include a berm that will deflect these flows away from the basin. However, the proposed contours on Sheet 7 are not defined enough to show where and how the runoff will be directed. Of note, the revised proposed grading should not result in a new stormwater point discharge location onto adjacent property unless permission is received from the corresponding owner.

ISSUE: Runoff from Lots 6, 7 and 8 to flow into the proposed retention basin. Developer states revised grading plans include a berm. Sheet 7 should reflect clearly the contour and swale on plans. If there is a concentrated swale, this is should be reflected. Per Ted Zebert of the Conservation Commission, there are wetlands there already. Will this affect the wetlands? Conservation will require Mr. Graham to a Wetlands Specialist.

ACTION: Per Tighe & Bond, if there are wetlands, identify it on the plans because they cannot be disturbed. Stormwater report was given to Gary Weiner, Stormwater Committee Chair, for review.

- 24. **Addressed** The Developed Conditions hydrologic/hydraulic model have been revised to include the existing developed lots at the end of Hillside Lane within the tributary area of the proposed retention basin.
- 25. As commented in our October 17, 2018 letter, the drawings do not show any wetland resource areas including wetlands buffers. The Applicant's Response state that no

wetlands were identified on site. It is recommended that a Massachusetts-licensed wetlands scientist or the Hampden Conservation Commission confirm that there are no wetlands on site.

ACTION: Sign-off required by Conservation Commission.

- 26.**Addressed** The Developed Conditions hydrologic/hydraulic model was revised to evaluate the basin bottom as an impervious surface, since the model already accounts for stormwater being infiltrated through the bottom.
- 27.**Addressed** Sheet 6 and 7 have been revised to raise the grade of the retention basin bottom to elevation 511' which is consistent with the value used in Developed Conditions hydrologic/hydraulic model.
- 28.As commented in our October 17, 2018 letter, the Developed Conditions hydrologic/hydraulic model did not include runoff from the proposed houses, since it anticipated that runoff from each house will be directed into on-site leaching chambers. It is at the **Planning Board's discretion** to include a condition of approval that each house will be required to install on-site leaching basins to accommodate runoff from the 2-and 10-year storms. Otherwise, the drainage system including the retention basin should be re-designed to accommodate the corresponding increase in runoff.

ISSUE: Include condition of approval that each house will be required to install on-site leaching basins ACTION: A note to the Building Inspector will be sent concerning this condition of approval for each house.

29. As commented in our October 17, 2018 letter, a detail is titled "Sediment Forebay Berm" on Sheet 10. If this detail is intended to be berm within the basin to separate the forebay area, the detail should be re-titled. If instead, the detail is intended to be for the retention basin's outer berm, the 7-foot wide crest width shown on the detail does not match the proposed contours shown on Sheet 7, which now shows a 4-foot wide crest. The recommended crest width is typically dependent on the height of the berm and the volume of water the basin will retain.

ACTION: Mislabeled. Plans to be corrected.

- 30.**Addressed** The Developed Conditions hydrologic/hydraulic model was revised to increase the proposed driveway length for each future house from 70 feet to 140 feet.
- 31.As commented in our October 17, 2018 letter, a 30-foot wide storm drain easement is shown between Lots 9 and 10 to provide access to the retention basin. Sheet 6 has been revised to show the proposed grade along the easement, but the grading plans (Sheet 3 and 7) still do not show the proposed grade contours. As previously commented, the relative steep slope (20-25) is likely to sustain damage from traversing vehicles and subsequent degradation and erosion, unless a vehicle-bearing surface can be provided. The Applicant's Response suggested a possible remedy would be to have an agreement (between the property owners and the entity responsible for maintenance) to repair the lawn damage. Additional information should be provided to describe the conditions of such an agreement, as well as the penalties if the conditions are violated. It is at the **Planning Board's discretion** to incorporate an access agreement in lieu of providing a vehicle-bearing surface for the basin access.

ISSUE: Lawns will be destroyed when maintaining basins.
ACTION: Applicant's Response is to include this in the Homeowner's Association Agreement.

32. As previously commented, the proposed retention basin will likely retain stormwater for multiple days at a time and become a nuisance and a safety hazard. It is at the **Planning Board's discretion** that the design includes a perimeter fence around the basin to deter unauthorized access including children.

ACTION: No perimeter fence required. With a 100-year storm, 3-4 inches of water will stay in basin for about 20 hours. In most cases, it will drain within a day.

- 33. The following comments address this submittal's compliance with the ten standards of the Massachusetts Storm water Policy. These comments, however, do not reflect additional standards or requirements that may be required by the EPA Phase 2 Stormwater Program.
  - 1. Addressed Untreated Storm water
- 2.Post-Development Peak Discharge Rates Several of the previous comments still affect the peak discharge rates as presented in the submitted drainage calculations.
- 3.Recharge to Groundwater Several of the previous comments still affect the groundwater discharge rates as presented in the submitted drainage calculations.
- 4.80 TSS Removal Several of the previous comments still affect the groundwater discharge rates as presented in the submitted drainage calculations.
  - 5. Addressed Higher Potential Pollution Loads
  - 6. Addressed Protection of Critical Areas
- 7.**Addressed** Redevelopment Projects This project principally involves new impervious areas and would not be considered as redevelopment, therefore this standard does not apply.
  - 8. Addressed Erosion/Sediment Control
- 9. Operation/Maintenance Plan Several of the previous comments still affect the operation / maintenance plan as presented.
  - 10. Addressed Illicit Connections

#### Miscellaneous

34. The "30,000 Gallon Precast Concrete Underground Water Tank" provided on Sheet 8 has been revised to include some of the tank dimensions. However, the height of the tank is not labelled. To provide the required 30,000-gallon volume, the tank would require an inside height of approximately 20 feet, which would result in the bottom of the tank set at an elevation 25 feet below proposed grade (approximately 35 feet below existing grade). The Fire Department should be consulted to verify their equipment is capable of pumping volumes from this depth. Also, due to the likelihood of encountering rock at these depths, additional information should be provided to describe how the tank and appurtenances will be installed when rock is encountered. The tank design should also incorporate anti-flotation measures to resist buoyancy that would result by a combination of high groundwater and pumping out of the tank.

ISSUE: Can Fire Dept. pump up 25 ft. of water from cistern. Can (2) 15,000-gallon tanks be used. Concrete Structure - Do they need cables to stop it from floating.

ACTION: Ask Fire Chief for his comments.

**35**. As previously commented, per Section 6.3.4.a of the Subdivision Regulations, street lines shall have bounds placed at all angle points, at the beginning and end of all curves, and every 1000' feet on straight lines. Such bounds shall be of sound granite or concrete, not less than three (3) feet long and not less than five (5) inches square, with a dressed top and 1/2" drill hole. The submitted drawing still do not specify that bounds will be placed.

## APPLICANT NEEDS TO MEET WITH CONSERVATION BEFORE WE GO ANY FURTHER OR BEFORE THEY REVISE PAGES OF THE SUBDIVISION PLANS.

## 5) 227 Mill Road - Discussion Regarding Decommissioning Plan and Surety.

Steve Weih of Weston & Sampson, Bill Benson of Eversource and Abigail Bowersox of Burns & McDonnell presented to the Board the Decommissioning Cost Estimate for the proposed 4.76 MW Ground Mounted Solar Array located at 227 Mill Road. Steve Weih discussed the decommissioning plan and how they arrived at the total cost estimate. Bill Benson stated that Eversource intends to keep this facility for 20 years. Richard Green stated that the maintenance of trees is the applicant's responsibility. Abigail Bowersox stated the dead trees that are there now are being replaced. She stated the best time to replace them is in the fall. Bill Benson stated from April through November, they will cut the grass twice a month. After much discussion, the Board agreed on Bond in the amount of \$335,525. This amount takes into consideration an inflation rate of 2.5% per year over 20 years. Eversource will provide the Bond to the Board as soon as possible. Once this is received, a letter will be sent to the Building Inspector that all requirements from the Planning Board have been met.

Other Business: Having no further business, Judge Howarth made a motion to adjourn. Richard Green seconded the motion. All in favor so adjourned at 8:20 PM.

cc: Assessor's Office
Building Dept.
Conservation Commission
Highway Dept.
Moderator
Selectmen
Zoning Board of Appeals
Office Files

Submitted by Joanne Fiore, Adm. Assistant