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ZBA 2014-60
 Petition of Permanent Building Committee
 45 Hastings Street

Pursuant to due notice, the Special Permit Granting Authority held a Public Hearing on Thursday, July 24, 2014, at 7:30 p.m. in the Juliani Meeting Room, 525 Washington Street, Wellesley, on the petition of PERMANENT BUILDING COMMITTEE requesting a Special Permit pursuant to the provisions of Section XIVE, Section XVIA and Section XXV of the Zoning Bylaw for a Major Construction Project in a Water Supply Protection District, to comply with the Design and Operation Standards of the Town's Water Supply Protection Overlay District and is not otherwise prohibited under Use Regulations, to pre-treat and recharge stormwater runoff from paved areas and the existing building to the maximum extent possible. There are no existing groundwater recharge measures in place. The property is located at 45 HASTINGS STREET, in a Single Residence & a Water Supply Protection District.

On June 17, 2014, the Petitioner filed a request for a hearing before this Authority, and thereafter, due notice of the hearing was given by mailing and publication.

Presenting the case at the hearing were Matt King, Chairman, Permanent Building Committee (PBC), Joel Seeley, Architect, SMMA, Mike Burton, Dore & Whittier, Steven Agostini, Construction Manager, Agostini Construction Co. Inc., Christopher Racine, Civil Engineer, SMMA, Jennifer Soucy, Project Architect, SMMA and Peter Lukacic, Landscape Architect, SMMA.

Mr. Racine discussed proposed improvements in the lower parking lot. He said that they will be providing a bioretention area related to stormwater improvements. He said that they shifted the edge of the pavement and provided a larger green space. He said that it is an aesthetic to improve the stormwater quality while enhancing the green space.

Mr. Racine said that the existing site has no stormwater treatment. He said that there is one catch basin at the front, one catch basin at the lower corner and a couple of other catch basins around the building. He said that there is no existing recharge provided. He said that the proposed design incorporates four subsurface infiltration systems, one of which will be at the rear of building behind the modular to collect stormwater from the adjacent bituminous play area. He said that they will provide a new roof drain system to connect it to recharge runoff from the modular. He said that at the front there will be new grading as well as deep sump catch basins and water quality units to provide pre-treatment, as well as sub-surface infiltration system that is designed to recharge up to the 25-year storm event. He said that they provided sub-surface infiltration systems in the lower lot to collect runoff from the entire building and another to collect runoff from the parking lot.

Mr. Racine said that the design mitigates all peak runoff rates for all storm events. He said that they will be reducing the amount of flow entering the Hastings Street drainage system through these improvements.

The Board asked about the existing and proposed drainage plans. The Board asked where the water comes from and where the water goes to. The Board said that in looking at pre and post-construction, everything is captured through the 10-year storm but above that, some gets captured and some gets through. The Board said that the bylaw says that the system must meet the requirements to capture a 100-year storm event. Mr. Racine said that the existing building has a series of collection points. He said that there is only one roof discharge location that ties into an existing manhole which then ties into the Hastings Street drainage system. He said that the front portion of the lot that includes the landscaping drains toward the parking lot where there is one single catch basin. He said that the water from the catch basin is then routed down a steep slope and into the same manhole that collects the roof drain conveyed to the Hastings Street drainage system. He said that the remaining northern portion of the site is primarily grass play areas as well as semi natural wooded areas. He said that a large portion of this area flows directly overland with no collection points. He said that it simply makes it way over the site and then off-site. He said that the runoff at the rear courtyard area as well as a small portion of the walkway and a small piece of the bituminous play area makes it way overland to catch basins and is conveyed to the manhole that connects to the Hastings Street drainage system. He said that the remaining portion of the parking lot flows overland with the grades and is captured in a single catch basin with a small six inch outlet pipe that discharges to Hastings Street. He said that they are aware of some ponding and flooding in that area due to insufficient capacity of the discharge pipe to Hastings Street. He said that there is no other treatment or infiltration in the existing conditions. He said that the area directly behind the building collects in a catch basin just off of the pavement which has no discharge location. He said that they are not sure if it is a leaching catch basin. He said that it is currently filled with a lot of debris and sticks.

Mr. Racine said that with the proposed conditions they are trying to maintain the same drainage areas but will provide improvement as to how it is captured and recharged. He said that the drainage system through the school will remain the same. He said that it will outlet at the same locations and be routed to a subsurface infiltration system. He said that the front landscape and parking area will be routed through a series of new catch basins with water quality units which are designed to provide adequate TSS removal required by Mass Stormwater Regulations. He said that it is then routed through a subsurface infiltration system. He said that the overflow outlet is connected to the existing pipe which is connected to the original catch basin to the lower lot. He said that pipe will be maintained. He said that they will connect the roof of the modular and add two catch basins to collect from the bituminous play area. He said that they will provide water quality as well as subsurface infiltration systems. He said that there is no outlet for this area. He said that if and when it fills up, it will make its path to the least resistance. He said that a large portion of play area will not be disturbed. He said that they will provide bioretention areas. He said that there are three openings in the curb. He said that as the water flows across the pavement it will enter the openings and collect in a small forebay for pre-treatment and then pass into the bioretention areas which will have various plantings, seed mix and shrubs that will help to provide additional treatment. He said that there is a soil section designed to allow the stormwater to infiltrate into the ground. He said that it is a terraced design where as once it overtops it flows to the next one down to the bottom. He said that there is an overflow catch basin so that that once the system reaches capacity it will enter the catch basin and be conveyed to a subsurface infiltration system which is also collecting any additional water from the parking lot that bypasses any of the openings. He said that they tried to provide a safety net in that area. He said that it will discharge to a new pipe in the Hastings Street drainage system. He said that capacity

of the systems was designed to capture and completely infiltrate 25-year storm events. The Board said that on Table 3 the two-year storm posts zero discharge and the 10-year storm is materially zero. The Board said that once you get into the 25-year storm, you start seeing differences between DP1, DP2 and DP3 in terms of what the flow is pre and post. The Board said that a reasonable reading of the bylaw says that, because it is a Water Supply Protection District, all of the flow must be captured. Mr. Racine said that there is a catch basin that captures a small area of the parking lot, due to its location, they are unable to re-route it to a subsurface infiltration system. He said that he would look into that further.

The Board said that the Operation & Maintenance Plan (O & M) relates to drainage. The Board said that the first thing that it does is to assign the Department of Public Works (DPW) some role. The Board asked if there was any evidence that the DPW accepts that responsibility. Mr. King said that DPW is currently responsible for the system and they can get a document to show that.

The Board said that the O & M Plan is very generic. The Board said that it is written in the passive voice, so it is difficult to tell who is acting and who is responsible for, in particular, inspections and identifying malfunctions. The Board said that the plan does not state what will be done to address those issues and because this is a Water Supply Protection District (WSPD), it is important to address those issues.

The Board said that in the O & M Plan there are interactions between the school and DPW. The Board said that the Plan says that the maintenance log will be kept on-site but it does not say where. The Board said that should be included in the Plan. Mr. King said that maintenance issues will be between the Facilities Maintenance Department (FMD) and DPW on a contract basis.

The Board asked what chemical and fuels will be stored and where. The Board asked that whatever chemicals are used for snow and ice management during the wintertime also be included in the O & M Plan.

The Board asked about using alternate stormwater systems such as permeable pavers or concrete. The Board said that at the area at the back far right there is not a lot of vehicular traffic. Mr. Racine said that they do not typically use porous pavement in high traffic areas. He said that they did not look specifically at the rear area. He said that potentially could be porous pavement. He said that they have not provided a cost analysis but they can look into that. Mr. Seeley said that there is a balance between that being a hardtop play area and the not exactly level surface of a porous pavement. The Board said that permeable pavers might be appropriate at gathering areas and would possibly be a more attractive way to do it. Mr. Racine said that they looked into other areas where they could incorporate low impact development but given the current grading and layout of the site, there were no locations to do that.

David Kenny, 79 Sheridan Road, said that he lives at the corner of Sheridan Road and Hastings Street. He said that people park on both sides of his house. He said that he had concerns about stormwater. He said that three to four years ago there was a storm when a lot of basements in the neighborhood got flooded. He said that all of the water drains to Hastings Street. He said that the proposal is to capture it on-site. He said that there is an underground stream that runs under there. He said that the water will be captured uphill. He questioned where it will go since it will not be going to Hastings Street. He questioned if houses will be flooded there. He questioned whether the water will go down Hastings Street and what impact that will have elsewhere. He said that they will be adding to the groundwater. He said that his house did flood three years ago. He said that the proposal is to add roof drains. He said that his

primary concern is where the water that will drain on-site will eventually go. He said that 40 to 50 years ago there used to be a stream between Madison and Sheridan Roads. He said that the Lighting Plan was not a detailed plan. He said that he agreed with the comments that were made. He said that there is not much evening activity at the school and there is no real need for it. He said that with regard to the car line, he had a number of alternatives that were not presented but could help the situation. He said that there are two to three classrooms and the cafeteria in the basement. He said that it was his understanding that they were put there on a temporary basis in reaction to school population changes. He said that putting the elevator in to accommodate that is putting a bandaid on it. He said that the problem should be fixed right. He suggested that rooms be built in the courtyard area. The Board said that the ZBA has no power over what is done on the inside of the building. Mr. Kenny said that the proposal is for an addition for the elevator. The Board said that the ZBA can only approve or deny the elevator addition. Mr. Kenny said that if the Board denies the request, the Applicant will have to go back and fix the problem the right way. He said that every other developer in the neighborhood has come to him personally and shown him their plans well before they submitted them. He said that he was surprised that the first public notice was at the time of the meeting.

Lynn Youngen, 50 Hastings Street, said that she has a completely dry basement. She said that the water does come rushing down Hastings Street. She said that she and her husband clean the storm drain in the snow and keep it free of leaves. She said that she would like to be reassured that new water problems will not occur as a result of the project.

August 19, 2014

Presenting the case at the hearing were Matt King, Joel Seeley, Mike Burton, Christopher Racine, Jennifer Soucy, John Hart, Senior Civil Engineer, SMMA and Samantha Farrell, Landscape Architect, SMMA.

Mr. Racine discussed the O & M Plan. He said that there had been some comments about the clarity and designation of responsibilities. He said that SMMA set up a meeting with DPW and the FMD to sort out who would be responsible for each procedure. He said that they provided the list of responsibilities at the end of the O & M Plan. He said that the maintenance log will be shared between the FMD and DPW. He said that there will be a maintenance log handled by the head custodian from FMD and a designated member will have it in the DPW facility. He said that any tasks that FMD or DPW are not capable performing, DPW has taken responsibility to contact the appropriate party and will contract out that work. He said that DPW will be inspecting the water quality units but does not have the capability to clean them. He said that DPW would contract out to a private company to do that work.

Mr. Racine said that chemical storage within the building includes cleaning supplies and temporary paint supplies. He said that outside of the building there is a shed that stores lawn mowers, snow blowers and gas powered equipment of that nature. He said that any gasoline is stored in appropriate containers or brought on site by DPW when they are filling the machines.

Mr. Racine said that the elevator addition is hydraulic and uses biodegradable non toxic oil that is stored in a waterproof pit that transmits the fluid to the pistons for the elevator.

Mr. Racine said that there had been concern about how new and existing plants will be cared for. He said that SMMA submitted a sample plan from Wellesley High School. He said that the specifications require

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that the awarded site contractor will provide a proposed plan that SMMA will review and ensure that it takes into account all of the needs of the new and existing plant materials. He said that once they have reviewed that and made recommendations, they can share the plan with ZBA. He said that they have specific plantings for the bioretention already designed. He said that the contractor will provide a document that says how those plantings will be maintained.

Mr. Racine said that there had been a comment about recharging the entire impervious area up to the 100-year storm event. He said that SMMA assembled data from Hanscom AF Base in Bedford from NOAA and the National Climate Data Center. He said that the data represents what percentage of the average annual rainfall occurs within the different storm events. He said that a 25-year storm event is a 5.5 inch event which accounts for 98 percent of average annual rainfall. He said that if they were to present a 100-year design, they would gain 1.5 percent additional rainfall in an average year. He said that the data was compiled between 1999 and 2008. He said that they also compiled data from 1979 to 2008 to get a more accurate representation of historic rainfall data. He said that for the 1979 to 2008 period, the 25-year storm accounts for 99 percent of annual rainfall.

Mr. Racine said that SMMA analyzed the costs to upsize the system to the 100-year event level. The Board said that the ZBL does not talk about cost increases. Mr. Seeley said that SMMA did not see that there was a 100-year event requirement in the ZBL. The Board said that the bylaw talks about all stormwater runoff from impervious surfaces being recharged on-site unless in conducting site plan review it is determined that either recharge is not feasible because of site conditions or is undesirable because of uncontrollable risks to water quality from such recharge.

Mr. Hart said that the bylaw did not specify a storm. He said that Mr. Racine spoke with DPW and they recommended recharge for the 25-year storm. He said that the system designed for 100 percent recharge for the 25-year event will deal with 98 percent of yearly rainfall. He said that DEP, in their regulations, looks at treating either the first half inch of the storm for water quality or on some sites treating one inch. He said that oftentimes that is what they look at to recharge. He said that they are well beyond that. He said that the stormwater that will come after a 25-year storm will be the tail end of the storm which will not carry the amount of contaminants as the first half to one inch that will be treated. He said that not increasing the system to handle the 100-year storm would not be detrimental to runoff at the site.

Mr. Racine said that there was a comment about the peak rate tables that were provided in the original narrative. He said that although they had discussed complete recharge for the 25-year storm, there were some numbers that were greater than zero. He said that the requirement is for impervious areas, not grass, landscaped or other pervious surfaces. He said that the areas that are showing the non-zero numbers for the 10 and 25-year storms are an existing vegetated slope on the edge of the parking lot and a couple hundred square feet of pavement due to topography constraints. He said that they checked their analysis to see that each system (pond) that shows up in the report that was submitted to the Board does completely infiltrate a 25-year storm. He said that there is no flow out. He said that on the revised table DP1, which is 0.04 for the 10 and 0.09 for the 25-year storm takes into account that area.

Mr. Burton said that there will be crushed stone at the entrances to get mud off of tires. He said that, in addition to that, there will be a street sweeper there every day to take care of the streets and the sidewalks. He said that there will be a water truck on the site to knock down dirt and dust. He said that any stockpiles that will be there for any length of time will be seeded or covered. He said that the stockpiles

would be on-site only during the 8 week window. The Board confirmed that the construction lay down during Phase 1 will be inside of the fence.

Mr. Burton said that if contaminated soil is encountered, they will have a Licensed Site Professional (LSP) on-site. He said that they believe that it is clean soil and it should not be an issue.

The Board said that, with respect to the issue of the WSPD, the O & M Plan and the Plant Maintenance Plan talk about de-icing, pest management for exterior work and poison ivy control. The Board asked what materials and quantities will be used, how will they be used, where will they be stored, and what measures will be taken to protect the WSPD. Mr. Racine said that said that those activities will be performed by DPW. He said that the materials are brought on-site at the time of need and are not stored on-site.

Laura Fragasso, 166 Oakland Street, said that there was discussion about stockpiling of materials and soils and seeding them in the summer of 2015. She said that the site is located in a WSPD. She asked if there will be any buffers needed around materials to prevent leaching. She asked if the guidelines for pesticide free will be followed by the contractors.

The Board said that materials storage in 2015 is for materials that go into the building. The Board said that in 2016 the contractors will take up the existing pavement and take soil out to put in stormceptors. The Board said that they have to keep that soil someplace. The Board said that part of the construction is to come up with a plan that does that in accordance with all of the Rules and Regulations and in accordance with the requirements for the WSPD.

Statement of Facts

The subject property is located at The subject property is located at 45 Hastings Street, on an 8.50 acre lot in a 15,000 square foot Single Residence District and a Water Supply Protection District.

The Petitioner is requesting a Special Permit pursuant to the provisions of Section XIVE, Section XVIA and Section XXV of the Zoning Bylaw for a Major Construction Project in a Water Supply Protection District, to comply with the Design and Operation Standards of the Town's Water Supply Protection Overlay District and is not otherwise prohibited under Use Regulations, to pre-treat and recharge stormwater runoff from paved areas and the existing building to the maximum extent possible. There are no existing groundwater recharge measures in place.

Submittals from the Applicant

- Application, dated 6/13/14
- Site Plan Approval Review Plans and Submittal Checklist, dated 6/13/14
- Development Prospectus, dated 6/13/14
- Project Overview
- Stormwater Management
- Site Utilities
- Figures
 - Fig.1 Locus Map

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- Fig. 2 Aerial Map
- Custom Soil Resource Report Soil Map
- Flood Insurance Rate Map, Panel 36 of 430, Map Number 25021C0036E, Effective Date, July 16, 2012
- Flood Insurance Rate Map, Panel 28 of 430, Map Number 25021C0028E, Effective Date, July 16, 2012
- Fig 5 Existing Circulation
- Fig 6 Proposed Circulation

Appendix 1 – Geotechnical Information

- Letter to Christopher Racine, PE, dated 2/24/14, from James Handanyan, P.E., Principal Engineer, Northeast Geotechnical, Inc., re: Geotechnical Engineering Report
- Geotechnical Engineering Report, dated 2/24/14, prepared by Northeast Geotechnical, Inc.

Appendix 2 – Construction Phasing & Traffic Management

- Traffic Management Plan Narrative, dated 6/13/14, from Agostini Construction
 - Site Utilization Plan PH-1, dated 3/24/14
 - Site Utilization Plan PH-2, dated 3/24/14

Appendix 3 – Plumbing Memo

- Memorandum to Town of Wellesley, dated 6/9/14, from Marski, PE, Senior Plumbing & Fire Protection Engineer, SMMA, re: Fire Flow

Appendix 4 – Hydrology Calculations

- Existing Conditions Hydrology
- Proposed Conditions Hydrology

Appendix 5 – Pipe Sizing Calculations

- Closed Drainage System Calculations – 10-Year Frequency, dated 6/13/14

Appendix 6 – Other Stormwater Calculations

- TSS Removal Calculation Worksheets
- Stormceptor Design Summary

Appendix 7 – Stormwater Operation & Maintenance Plan & Long Term Pollution Prevention Plan
 Stormwater Operation & Maintenance Plan – Long-Term Pollution Prevention Plan, dated 6/12/14, prepared by SMMA

Fig. 7 Existing Conditions Hydrology Plan, dated 6/13/14, prepared by SMMA

Fig. 8 Proposed Conditions Hydrology Plan, dated 6/13/14, prepared by SMMA

Letter to Zoning Board of Appeals, dated 8/7/14, re: Response to ZBA Comments, from Christopher Racine, with attachments:

- Attachment 3 – Revised O&M Plan with Appended FMD & DPW Responsibilities

Construction Management Plan, dated 7/30/14, revised 8/18/14, prepared by Agostini Construction Company

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Plan Number	Drawing Title	Date of Issue	Prepared By	Date of Revision
Title Page	Fiske Elementary School - Renovations	6/13/14	SMMA	
C-101	Existing Conditions	2/28/14	Darren J. Hardy, P.L.S.	

C-102	Existing Conditions	6/13/14	John C. Hart, PE	
C-111	Site Plan Development	6/13/14	John C. Hart, PE	
C-112	Plot Plan	6/13/14	John C. Hart, PE	
C-113	Site Preparation Plan	6/13/14	John C. Hart, PE	8/7/14, prepared by Michael F. Holland P.E.
C-121	Grading & Drainage Plan	6/13/14	John C. Hart, PE	8/7/14, prepared by Michael F. Holland P.E.
C-122	Utilities Site Plan	6/13/14	John C. Hart, PE	8/7/14, prepared by Michael F. Holland P.E.
C-141	Planting Plan	6/13/14	Peter Lukacic, R.L.A	
C-151	Subsurface Conditions Plan	6/13/14	John C. Hart, PE	8/7/14, prepared by Michael F. Holland P.E.
C-501	Details	6/13/14	John C. Hart, PE	8/7/14, prepared by Michael F. Holland P.E.
C-502	Details II	6/13/14	John C. Hart, PE	8/7/14, prepared by Michael F. Holland P.E.
C-503	Details III	6/13/14	John C. Hart, PE	8/7/14, prepared by Michael F. Holland P.E.

On July 23, 2014, the Planning Board reviewed the petition and recommended deferral of the decision.

Decision

This Authority has made a careful study of the materials submitted and the information presented at the hearing.

It is the opinion of this Authority that the Major Construction Project will comply with Section XIVE WATER SUPPLY PROTECTION DISTRICTS F. DESIGN AND OPERATION STANDARDS 1-7 and is not otherwise prohibited in Section XIVE WATER SUPPLY PROTECTION DISTRICTS D. USE REGULATIONS 1. a-g, to pre-treat and recharge stormwater runoff from paved areas and the existing building to the maximum extent possible.

Therefore, a Special Permit is granted, as voted unanimously by this Authority at the Public Hearing, for a Major Construction Project that will comply with Section XIVE WATER SUPPLY PROTECTION DISTRICTS F. DESIGN AND OPERATION STANDARDS 1-7 and is not otherwise prohibited in Section XIVE WATER SUPPLY PROTECTION DISTRICTS D. USE REGULATIONS 1. a-g, to pre-treat and recharge stormwater runoff from paved areas and the existing building to the maximum extent possible.

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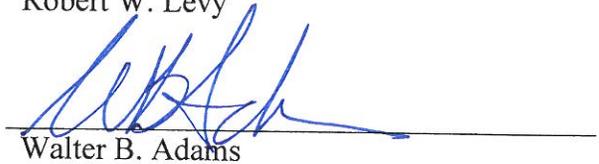
APPEALS FROM THIS DECISION,
IF ANY, SHALL BE MADE PURSUANT
TO GENERAL LAWS, CHAPTER 40A,
SECTION 17, AND SHALL BE FILED
WITHIN 20 DAYS AFTER THE DATE
OF FILING OF THIS DECISION IN THE
OFFICE OF THE TOWN CLERK.



J. Randolph Becker, Acting Chairman



Robert W. Levy



Walter B. Adams

cc: Planning Board
Inspector of Buildings
lrm

