

May 20, 2016

Nathaniel N. Strosberg
Town Planner/Director of Community Development
Town of Ashland
101 Main Street
Ashland, Massachusetts 01721

Re: 0 Megunko Road – Site Plan Review Peer Review Update

Dear Mr. Strosberg and Members of the Board:

Professional Services Corporation, PC (PSC) reviewed supplemental/revised documents submitted for the proposed *O Megunko Road Site Plan Review Application*. This letter is provided to update PSC's findings, comments and recommendations.

BASIS OF REVIEW

PSC received the following documents which serve as the basis of the review:

- Megunko Cover Letter dated May 11, 2016 to Town of Ashland Planning Board from Connorstone Engineering, Inc. including Turning Template Exhibit and Stormwater Report and Documentation.
- Site Development Plans (5 Sheets) entitled *Proposed Site Plan of 0 Megunko Road in Ashland Massachusetts* dated January 27, 2016 and revised through May 10, 2016 as prepared by Connorstone Engineering, Inc.

COMMENT KEY

PSC's comments are in italics, followed by Connorstone Engineering, Inc., (CEI) responses in standard font, *followed by PSC's comment status in bold italics*.

SITE AND PROJECT OVERVIEW

The 1.69± acre project parcel is located at the northwest corner of the intersection of Megunko Road and Cherry Street and south of the MBTA tracks. The existing lot is predominately wooded with gravel open area adjacent to Cherry Street and wetlands along the west property line. The proposed plan indicates clearing and re-grading the site to construct a 11,126 sq. ft. storage/garage building with associated access parking, sewer service and stormwater management system. A sidewalk is also proposed along Cherry Street. Stormwater management facilities include catchbasins, manholes, pipes, sediment forebays and a constructed wetland.

Topography is generally slopes down toward Cherry Street. The site contains flagged wetlands but there is no riverfront area, FEMA mapped 100-year flood zone, approved wellhead protection area (Zone 2) or NHESP mapped area of estimated habitat of rare wildlife and priority habitats of rare species within immediate proximity of the site. NRCS maps indicate the soils in the center of the site consist of Freetown muck with a hydrologic group rating of B/D.

CHAPTER 282 - ZONING

District and Use Regulations (§2.0 & 3.0)

The project site is located within the Industrial (I) zoning district and Photovoltaic Installation Overlay District (PIOD). The project is not located within the Groundwater Protection Overlay District (GPOD). Across Cherry Street is zoned Ashland Downtown District B (ADD-B) and across the MBTA tracts is Ashland Downtown District B (ADD-C).

The construction yard or landscaping business is allowed use by right.

Dimensional Requirements (§4.0)

The project lot meets the minimum lot area, frontage, front and rear yard and maximum height requirements.

General Regulations (§5.0)

The project proposes to create a 48 space parking lot including 2 required handicap accessible spaces.

- Z1. Correct plan to indicate 27 parking spaces along Megunko Road. CEI1: The plans have been revised to label 27 spaces along Megunko Road. PSC2: The Proposed Site Plan (Sheet 2 of 5) label indicates 28 spaces along Megunko Road. There are only 27 spaces in this location. The plan should be corrected. CEI2: The plans have been revised to label 27 spaces along Megunko Road. PSC3: Plan revised Issue resolved.
- Z2. Provide information on proposed parking demand and utilization. CEI: A parking summary has been added to the Site Plans (sheet 2). **PSC2: The parking summary is corrected (48 spaces for the site) issue resolved.**
- Z3. The lot which contains a proposed nonresidential use faces residential uses across Cherry Street and across the railroad, landscaped buffers should be provided to screen parking and vehicular service areas (§5.4.2 1.). CEI: The Landscaping Plan will be updated based upon the previous Design Review meeting. PSC2: Landscape screening has not been updated – issue remains open. CEI2: Site landscaping to be reviewed by the Board. PSC3: A copy of the Landscape Plan, revised May 16, 2016 was provided with supplemental plantings along the Cherry Street property line. The plan is prepared by a qualified professional and will present an attractive appearance. However, the proposed plantings do not provide screening to a height of 6 ft. along Cherry St. In reviewing the landscaping, the Board may wish to consider that the small flowering trees (Prunus serrulata 'Kwanzan') provided along Cherry St. are attractive but provide minimal screening. We recommend that the fence proposed along the railroad tracks, be extended along the Cherry Street frontage. Plantings should be located between the fence and the street line. The fence should be an opaque wood board fence with a height of 6 ft. To provide screening at greater height, PSC recommends inclusion of fir, hemlock, or other evergreen trees.
- Z4. While a buffer is provided along Cherry Street, small ornamental trees are provided. Large evergreen trees and shrubs should be provided. CEI: See comment Z3. PSC2: Issue remains open. CEI2: Site landscaping to be reviewed by the Board. PSC3: Refer to Comment Z3.



- Z5. To avoid mono planting and associated risk of tree disease, PSC recommends fir (Abies spp.), spruce (Picea Spp.), or other evergreen trees which hold their lower branches at maturity should be included with comparable spacing. CEI: See comment Z3. PSC2: Issue remains open. CEI2: Site landscaping to be reviewed by the Board. PSC3: The board may wish to consider that while evergreen trees are provided, they only extend for a distance of 160 ft. along the property line.
- 26. The area in front of the building will be used for loading and maneuvering of commercial landscaping vehicles and equipment. Although not as effective as a noise barrier, an opaque fence along Cherry Street and along 100 ft. of Megunko Rd. nearest to Cherry Street would help to abate noise and headlights from the commercial vehicles and equipment. CEI: See comment 23. PSC2: The plan has not been updated issue remains open. CEI2: Site landscaping to be reviewed by the Board. PSC3: Neither a noise barrier or fence has been proposed to mitigate headlight wash and abate noise from vehicle operations upon the abutters. Open Item.
- 27. Provide documentation for required Site Alteration Special Permit (§5.8). CEI: A Site Alteration Permit Application has been attached. PSC2: The Application was not attached issue remains open. CEI2: A Site Alteration Permit Application was previously submitted. PSC3: A copy was not provided in the submission open Item.
- 28. As a Condition of Approval of the Site Alteration Special Permit, the Board may wish to consider requiring that any motor vehicle repair operations be conducted within the building and that all building doors remain closed during these operations. CEI: Conditions to be discussed with the Board. PSC2: Recommended condition. CEI2: Conditions to be discussed with the Board. PSC3: Restricting vehicle repairs to occur only inside the buildings with the doors closed is recommended as a Condition of Approval.

Photovoltaic Installation Overlay District (§8.3)

The project is proposing roof mounted solar panels not a ground mounted photovoltaic installation – not applicable.

Site Plan Review (§9.4)

- P1. Provide AutoTURN plan to show adequate access for all vehicles to use the site including emergency vehicles in an out of site and dumpster service vehicle (§6.3.1) & (§9.4.4.4). CEI: An turning analysis has been attached to verify access for all vehicles within the site. PSC2: A Turning Analysis sketch and/or plan was not provided issue remains open. CEI2: An turning analysis was previously submitted. A copy has been included with this letter. PSC3: The provided turning diagram analyzed a SU vehicle which works throughout the site. However, to adequately represent the largest emergency vehicle used by the town, a WB-40 should be analyzed open Item.
- P2. Provide proposed landscape features, including the location and description of screening, fencing and plantings (§9.4.4.6). CEI: See comment Z3. PSC2: A Landscape Plan was not provided.

 Landscape features have not been updated on the site plan issue remains open. CEI2: Site Landscaping to be reviewed by the Board. PSC3: Issue resolved.
- P3. Include the location, dimensions, height and characteristics of proposed signs (§9.4.4.7). CEI: The sign location was previously shown, and the dimensions have been added to the detail on site



- plan sheet 3. *PSC2:* A detail has been provided on Sheet 3 indicating a width of between 3 to 4 feet and a height of between 10 to 12 feet. The detail does not indicate color, proposed materials, lettering height, font, etc. Additional detail should be provided. CEI2: The color, lettering, etc. of the sign would be reviewed by the Building Inspector. *PSC3:* Provide required information for review open Item.
- **P4.** Include the location and details of all outdoor lighting, on the plans (§9.4.4.8). CEI: Lighting has been reviewed and approved by the Design Review Board. *PSC2: The plan should be updated accordingly issue remains open.* CEI2: Lighting has been reviewed and approved by the Design Review Board. **PSC3: Provide required information for review open Item.**
- *P5.* A construction timetable indicating estimated startup and completion dates (§9.4.4.11). CEI: A construction timetable indicating estimated startup and completion dates have been added to the site plans (sheet 2). *PSC2: Information provided issue resolved.*
- P6. An architectural rendering and/or cross-section of the development shall be submitted (§9.4.4.12). CEI: Architectural plans have been reviewed and approved by the Design Review Board. PSC2: The Architectural Plans presented in the February, 2016 Site Plan Review Application differ significantly from the site plan in dimensions and layout. Updated plans were not provided issue remains open. CEI2: Updated Architectural Plans to be provided to the Board by the Owner. **PSC3: Provide required information for review open Item.**

Site Plan Review Criteria (§9.4.6)

Site Plan Review Criteria and Design Plan Review; General Criteria. The following criteria shall be considered by the aforementioned Boards in the review and evaluation of a site plan, consistent with a reasonable use of the site for the purposes permitted or permissible by the regulations of the district in which it is located. If the proposal also requires a special permit, it must conform to the special permit requirements set forth herein. The development shall be integrated into the existing terrain and surrounding landscape and shall be designed to protect abutting properties and community amenities. Before approval of a site plan, the Planning Board may request the applicant to make modifications in the proposed design of the project to ensure that these criteria are met. Site plans shall, to the extent feasible: PSC's evaluation of the Site Plan Review Criteria (in italics) were set forth in bold type in our March 18, 2016 memorandum as PSC1 comments PR1 through PR12, and are reprinted herein.

- PR1. Minimize use of wetlands, steep slopes, floodplains and hilltops; PSC1: Proposed work is located outside wetland areas. Project does not contain steep slopes, floodplains and hilltops.
- PR2. Minimize obstruction of scenic views; PSC1: Site is not located in an area with scenic views not applicable.
- PR3. Preserve unique natural or historical features; **PSC1**: **Site does not contain any obvious natural or historic features not applicable.**
- PR4. Minimize tree, vegetation and soil removal and grade changes; **PSC1:** The project proposes to clear the lot. Grading is required to provide a level pad for the building.
- PR5. Maximize open space retention; **PSC1**: The entire parcel is to be developed with no open space preserved.



- PR6. Screen objectionable features from neighboring properties and roadways. **PSC1: See comments on landscaping and lighting.**
- PR7. Consideration shall be given to the impacts of the project on town services and infrastructure.

 PSC1: Project does not include new residences and should have minimal impacts to town services and infrastructure.
- PR8. Electric, telephone, cable television, gas, water, sewer, drainage and other such utilities shall be underground except in cases of extreme physical and environmental constraints. PSC1: See comments in Buildings and Stormwater Management sections.
- PR9. Exposed storage areas, machinery, service areas, truck loading areas, utility buildings and structures and other unsightly uses shall be set back or screened to protect the neighbors and those using public ways from objectionable features. Such areas shall not impede the flow of traffic on public ways. PSC1: The area in front of the building will be used as a loading area. Refer to Comment Z6.
- PR10. When applicable, the site plan shall show measures to reduce and abate noise generated from the site that will impact surrounding properties. PSC1: Other than noise from vehicles and landscaping equipment. See Comments Z6 and Z8.
- PR11. The site plan shall comply with all zoning requirements for parking, loading, signage, dimensions and environmental performance standards and all other provisions of this By-law. **PSC1: See comments in Zoning section.**
- PR12. The site plan shall be consistent with the objectives of the Comprehensive Plan and other applicable specific plans adopted by the Planning Board. **PSC1: PSC defers to Planning Board.**

Building Design (§9.4.7)

- BD1. Provide building elevations to show architectural characteristics of proposed building. CEI: Architectural plans have been reviewed and approved by the Design Review Board. PSC2: Representative building elevations were provided in the February, 2016 Site Plan Review Application that did not bear the seal of a Registered Architect as required under Section 9.4. It is not clear that the structure for this site has yet been designed. CEI2: Updated Architectural Plans to be provided to the Board by the Owner. **PSC3: Open Item.**
- BD2. Show electric services including transformer if required. CEI: The proposed electric service will be an overhead drop from the existing street. The specific pole and/or location will be determined by the Utility Company. **PSC2 Information provided issue resolved**

Traffic (§9.4.8)

Traffic impact analysis was not submitted for review.

T1. Board should determine is a traffic impact analysis should be provided for this project. CEI: The proposed traffic generation from the site will be minimal, having no impact to the level of service of surrounding intersections or the capacity of abutting roadways. PSC2 The Board should determine whether an impact analysis should be provided. CEI2: To be determined by the Board. PSC3: PSC defers to the Board.



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Water (§9.4.9)

For comments on drainage and stormwater management see stormwater management section.

Landscaping (§9.4.10)

See comments in Zoning above related to buffers, screening and landscaping requirements.

Buildings (§9.4.11)

PSC defers to the Board on the applicability of this section.

Stormwater Management (Chapter 343)

The project proposes to install impervious surfaces (roofs and pavement) over two-thirds of the site. Proposed stormwater management system includes catchbasins, manholes, pipes roof drains, a trench drain, sediment forebays and a constructed wetland. Due to the size of the project a Stormwater Management Permit from the Conservation Commission is required.

- SW1. Provide test pits sufficient to determine groundwater elevations (§7.6.10.7). CEI: Additional test pits have been performed on-site to determine groundwater elevations and suitability for the proposed stormwater management design. The results are shown on the site plans (sheet 2). PSC2: One test pit has been provided within the footprint of the detention basin. Two additional tests were provided within the footprint of the building slab, but not beneath either of the two infiltration systems. DEP requires at least two test pits within the footprint of each system. For systems longer than 100 feet, an additional test is required for each additional 50 feet of system length. Five tests are required in the actual location of each system. Currently none are provided. CEI2: Additional test pits have been performed on-site to determine groundwater elevations and suitability for the proposed stormwater management design. As requested, at least Five test have been performed in each of the infiltration locations. The results are shown on the site plans (sheet 2). PSC3: The northerly system appears to provide 2 feet separation to groundwater and has suitable soils beneath. The southerly system also appears to provide two feet separation to groundwater, However, Test Holes DTH-8 and DTH-9, which were advanced to a depth of 189.5, (2 feet below the system), hit refusal at this elevation. The concern with this portion of this southerly system is that there may not be suitable soils to a sufficient depth to allow the chambers to empty in 72 hours as calculated. Revise mounding analysis to provide correct initial saturated thickness to verify.
- SW2. Provide drainage calculations (§7.6.12) CEI: Drainage calculations had been submitted with the application. Revised calculations are attached with this letter for the updated design. PSC2 Drainage calculations were not provided issue remains open. CEI2: Drainage calculations had been previously submitted. An updated copy has been attached with this letter. PSC3: Calculations have been provided Issue resolved.
- SW3. Provide earth removal/fill calculations (§7.6.13). CEI: Earth removal/fill calculations had been provided on the site plans (sheet 5). **PSC2: The site will require a net 2,355 cu-yds of fill.**Information provided issue resolved.



- SW4. Provide Stormwater Management Plan (SMP) all required documentation (§7.6.16). CEI: The content required under §7.6.16 are provided on the plans and within the Stormwater Report. PSC2: The submission content of §7.6.16.(b).(11), §7.6.16.(b).(13)(c), and §7.6.16.(c).(11) have not been addressed. CEI: The actual content required under §7.6.16 had been provided on the plans and within the Stormwater Report. 7.6.16(b)(11) Seasonal high groundwater elevations have been provided in the locations of the stormwater systems. 7.6.16(b)(13)(c) A description of the drywells has been provided in the Stormwater report and timing was provided in the sequencing notes. 7.6.16(c)(11) The stormwater report and analysis have verified that there will be a net decrease in both the peak rate of runoff and volume of runoff leaving the site for all storms including the 8.15 inch 100-year storm. PSC3: Information provided Issue resolved.
- SW5. Provide Operation and Maintenance (O&M) plan all required documentation (§7.6.16). It should include documentation as to who is responsible for maintaining the drainage swale. If the Town is responsible PSC recommends the applicant grant an easement to access and maintain the swale. CEI: An O&M had been provided in the previous Stormwater Report. A copy has been attached with this letter. The drainage swale is regulated and maintained by EPA. The applicant cannot touch, disturb, or maintain this swale. PSC2: PSC notes that the culvert is partially blocked with debris on trash rack/safety bars. CEI2: Item Addressed. The applicant does not have the right to work within the drainage swale and the inlet is off-site. PSC3: Information provided Issue resolved.
- SW6. Provide documentation to show compliance with General Criteria (§8.1.1-8) CEI: Documentation to show compliance with General Criteria was provided in the Stormwater Report (see attached). PSC2: Evaluate the project's increase to off-site flooding (§8.1.1.4). Upon submission of additional soils testing, evaluate the annual recharge requirement of (§8.1.1.5). CEI2: Documentation to show compliance with general criteria was provided in the previously submitted Stormwater Report. —8.1.1.4: As noted above, the stormwater report and analysis have verified there will be a net decrease in both the peak rate of runoff and the volume of runoff leaving the site for all storms including the 8.15 inch 100-year storm. -8.1.1.5: An analysis of the recharge requirements was previously provided in the Stormwater Report. The analysis has been updated to the new limit of pavement. The recharge provided far exceeds the minimum required values (approximately 8 times the minimum required value). PSC3: Information provided Issue resolved.
- SW7. Show snow storage areas. CEI: Snow storage areas have been added to the plans. PSC2: Snow storage has been provided on the drawings. Although the windrow along the Megunko frontage is appropriate, the snow storage area within the 100-foot buffer to Trolley Brook should be removed. CEI2: The snow storage area was removed from the buffer area. PSC3: Plan revised Issue resolved.
- SW8. Provide details for constructed wetland including cross sections, planting plan and details and species list. CEI: The constructed wetland has been replaced with a traditional detention basin. The details previously shown on sheet 5 have been replaced with updated details. **PSC2**Information provided issue resolved, subject to approval of the Conservation Commission.



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If there are questions or you need additional information regarding this review do not hesitate in calling the undersigned.

Very Truly Yours,

Professional Services Corporation, PC

Philip Paradis, PE, LEED AP, CPSWQ

President

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