

Peer review of Comprehensive Permit Plan for
The Residences at West Union

133 West Union Street

Ashland, Massachusetts

September 5, 2014

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Engineer/Surveyor

Guerriere and Halnon, Inc.
333 West Street
Milford, MA 01757

Owner/Applicant

Capital Group Properties
259 Turnpike Road, Suite 100
Southboro, MA 01772

Zoning Districts

Residential (A)

Plans Dated

May 23, 2014

Assessors' Reference

Map 10, Lots 101, 103 and 104

Content

Comprehensive Permit
Application

Location

Off Route 135 between
Edgewood Drive and Indian
Spring Road



Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 2

SECTION I: INTRODUCTION

PLANS, DOCUMENTS, AND EXHIBITS

In undertaking the engineering peer review of this project, Professional Services Corporation (PSC) conducted a field reconnaissance of the project site and reviewed the plans, calculations, documentation and exhibits provided by the Project Development Team which included the following materials:

1. *“133 West Union Street”* consisting of ten (10) drawing sheets prepared by Guerriere and Halnon, Inc., dated May 23, 2014.
2. *Plan of Land, Ashland, Mass.*, prepared by GLM Engineering Consultants, Inc. dated January 21, 1997.
3. *“Landscape Plan of 133 West Union Street in Ashland, MA”* consisting of two (2) drawings prepared by William Fleming Associates, Inc., Stoneham, MA, dated December 23, 2013 and revised May 20, 2014.
4. *“Hydraulic and Hydrologic Report 133 West Union Street in Ashland, Massachusetts”* prepared by Guerriere and Halnon and dated May 26, 2014.
5. *“Stormwater Report “133 West Union Street” in Ashland, Massachusetts”* prepared by Guerriere and Halnon and dated May 26, 2014.
6. *“The Residences at West Union Comprehensive Permit Application 133 West Union Street Ashland, MA”* developed by Capital Group Properties dated June 2, 2014, including *“Attachment 1 – Evidence of Site Control, Attachment – 2 Market Analysis & Community Information, Attachment -3 Site Development Plans, and Attachment – 4 Architectural Information & Home Features.”*
7. *Traffic Impact and Access Study – Proposed Residential Development 133 West Union Street, Ashland, Massachusetts*, prepared by Green International Affiliates, Inc., dated June, 2014.

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Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 3

In conducting this peer review, additional information was obtained from the following:

1. 760 CMR 31.00: Housing Appeals Committee: Criteria For Decisions Under MGL c.40B, §§20-23.
2. *Massachusetts Department of Housing & Community Development Guidelines G.L.c40B Comprehensive Permit Projects, updated May, 2013.*
3. Review of Flood Insurance Rate Map (FIRM), Map Number 25017C0626F, Middlesex County Massachusetts, Panel 626 of 656, effective date July 7th, 2014.
4. *Town of Ashland Official Zoning Map* as updated June 6, 2009.
5. *Town of Ashland Zoning Bylaw* as amended February 22, 2013. (draft)
6. *Town of Ashland Chapter 344 of the Code – Planning Board Rules and Regulations* amended October, 2010 (for certain drainage, design, and construction details/ standards only).
7. *United States Department of Agriculture; Natural Resources Conservation Service Soil Survey of Middlesex County, Massachusetts*
8. *Massachusetts Natural Heritage Atlas, 13th Edition*
9. *Massachusetts Environmental Policy Act Office, 301 CMR 11.00 MEPA Regulations*
10. A site reconnaissance performed by PSC.

PROJECT DESCRIPTION

The Project is based upon the Comprehensive Permit Application Submitted by Capital Group Properties to construct a residential development off West Union Street in Ashland, Massachusetts to provide one-hundred forty (140) rental apartments on a total land area of approximately 7.67 acres. The units will be housed in a multi-unit apartment complex consisting

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Ten Lincoln Road, Suite 201
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Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 4

of two forty-unit buildings, two twenty-nine unit buildings and one two-unit building. A community building is proposed in the front of the side adjacent to the entrance.

The site is located on four parcels within the Residential A – RA district. The locus has been utilized for residential (multi-family) use. An interior Bordering Vegetated Wetland system transects the locus. The project occupies both remaining upland areas and is to be connected via an interior wetland crossing.

The project will be served by a main driveway that provides access to West Union Street, whereupon it divides into several interior driveways that serve the five apartment buildings. Approximately 2,200 LF of proposed total roadway will be constructed to serve the 140 units. The roadway construction will include vertical granite edging and a 5-foot sidewalk on one side. The project is to be served by a looped water service that connects the project to the existing 12-inch water main within West Union Street in two locations. Septic flows, calculated as 25,820 GPD from the six buildings will be collected via gravity system and will discharge to an existing manhole within West Union Street. Gas service will connect to the existing 3-inch service in West Union Street and will be brought into the site beneath the entrance drive. Telephone, electric and cable utilities will utilize two existing utility poles that extend into the site through the front wetland, then will be extended underground within the upland area and into the development.

Parking consists of 201 exterior perpendicular spaces adjacent to the access driveways in the vicinity of the each of the units, including twelve handicap spaces interspersed throughout the project. Surface stormwater is to be collected within closed stormdrain systems and directed to four on-site stormwater subsurface basins.

The remaining sections of this report identify revised and supplemental information necessary to accurately compute Statutory Minima and satisfactorily complete the minimum Contents of the Application.

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Ten Lincoln Road, Suite 201
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Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 5

SECTION II – STATUTORY THRESHOLDS

The application includes calculations of statutory minima as they relate to consistency with local needs. Issues relating to the computation of statutory thresholds are summarized as follows:

COMPUTATION OF STATUTORY MINIMA

1. The application should provide a computation of the existing 40B Housing Inventory. The Housing Inventory based upon DHCD counts as of April 30, 2013 and should reflect the applicant's contribution. The project increase toward the 10% standard should then be reassessed.
2. A computation for General Land Area Minimum should be provided to indicate acreage added by the project to the existing Town Low and Moderate Income Housing areas. The Statutory Standard requires that 1.5% of the total Town land area be held for affordable Chapter 40B housing. The application should document existing Chapter 40B land areas toward the statutory minimum.
3. It is recommended that the applicant provide calculations that reflect both the current project configuration as well as any existing permitted Comprehensive Permit projects. The revised figures should represent conditions found during the date of the most recent 2014 submission.

SECTION III – CONTENTS OF THE APPLICATION

PROJECT ELIGIBILITY LETTER

4. The project Comprehensive Permit application contains correspondence from Massachusetts Housing Finance Agency dated May 16, 2014 regarding the *The Residences at West Union – Ashland, MA (SA-13-007) Project Eligibility (Site Approval) Application*. The description of the project in the letter appears consistent with the Residences at West Union plans.

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Ten Lincoln Road, Suite 201
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Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 6

5. The project eligibility letter indicates that the proposed purchase price (\$4,200,000) exceeds the As Is Market Value determined by MassHousing's independent appraisal of \$700,000. A full pro-forma review, if not already in process, would be warranted for the project.
6. The project eligibility letter requires the number and location of handicap accessible rental units within the project.
7. The narrative should demonstrate compatibility of the project with the Commonwealth's Sustainable Development Principles, including:
 - a. How the project increases the quality, quantity and accessibility of open spaces and recreational opportunities.
 - b. How the project increases access to transportation options, including public transit, bicycling and walking, above and beyond extending the sidewalk from the site to Indian Hill Road.
 - c. Parking should be located where it does not visually dominate the development from the street and allows easy and safe pedestrian access to buildings.
 - d. The project contributes to the public streetscape with pedestrian-friendly amenities such as benches, lighting, street trees, trash cans, and windows at street level.
 - e. The project creates or enhances community spaces such as public plazas, squares, parks, etc.
 - f. The project proponent strives to use mechanisms that will permanently protect open space.
8. The applicant is encouraged to address the Town's concern about the lack of usable common open space and playground facilities for the residents of the project.
9. The applicant should discuss energy saving features for the project such as Energy Star appliances, LED lighting and incorporation of solar panels.

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Ten Lincoln Road, Suite 201
Foxboro, Massachusetts 02035



Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 7

10. The timing and counts of the preliminary traffic study were discussed by the Town. Also, the generalized 0.5% background growth rate utilized in the future conditions should be re-assessed, given specific on-going and pipeline projects in the area.
11. Off-site mitigation has been requested by the Town for realignment of an offsite intersection (West Union Street/Olive Street/Frankland Road). The applicant should discuss the status of this request.
12. The applicant should discuss the Town's specific off-site requests for a MWRTA bus stop on West Union Street to serve the project. The Town also requested that a crosswalk be designed across West Union Street between the community center and Ashland State Park. The plan does not indicate either improvement.
13. The project eligibility letter requests that the plan incorporates bike paths within the project and bike racks. The Landscape Plan should be expanded to include both amenities.
14. The project eligibility letter notes that the Town requested that Low Impact Development Best Management Practices be incorporated into the stormwater management system, including roof rainwater harvesting for use in irrigation. The plan is primarily reliant upon conventional closed-conveyance stormwater management design and does not include LID stormwater design features.

EVIDENCE OF SITE CONTROL

15. Evidence of Site Control – The applicant has provided a copy of the Massachusetts Foreclosure Deed for 125 and 139 West Union Street conveying those properties to an LLC having its principal place of business at 259 Turnpike Street, Southborough. A second Foreclosure Deed for 133 West Union Street conveys that property to same.
16. Any easement rights held by others (if any) should be added to the plan.

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Ten Lincoln Road, Suite 201
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EXISTING SITE CONDITIONS

17. As set forth in the Department of Housing and Community Development's Guidelines for Local Review of Comprehensive Permits, the Applicant is required to submit a narrative detailing "alternative site uses under existing zoning." This document was not incorporated into the project narrative. Additionally, we regard a scaled site plan as necessary backup to document the required narrative. The site plan can be a working document as long as it is sufficient to substantiate the narrative. Please submit an Alternative Site Plan showing development of the project in conformance with existing Zoning dimensional requirements for RA including use, setbacks, and height.
18. Existing specimen trees over 8-inch caliper along the limits of construction should be added to an Existing Site Conditions Plan to facilitate preservation.
19. Identify the pipe material, diameter, and condition of the watermain in West Union Street.
20. Inspection of the Flood Insurance Rate Map (FIRM), Map Number 25017C0626F, Middlesex County Massachusetts, Panel 626 of 656, effective date July 7th, 2014, indicates that the entirety of the site falls outside the 100-year jurisdictional floodplain.
21. Although proposed treelines are provided on the drawings, the extents of all adjacent treelines and any interior clearings should be shown on the existing conditions plan.
22. Any abutting registered Land Court parcels should be clearly designated on the drawings.

EXISTING SITE CONDITIONS REPORT

23. The narrative should be supplemented to summarize conditions in surrounding areas. Included in the narrative should be a discussion existing traffic patterns and character of open areas in the neighborhood.
24. A first level Environmental Assessment in accordance with MGL Ch. 21E should be furnished if available.
25. Fire flow test data should be submitted for the existing watermain in West Union Street.



26. The narrative should address methods and extent of investigation for any features of historic or archeological significance.

PROPOSED SITE DEVELOPMENT PLANS

Site Planning

27. The Town has emphasized the historical and cultural significance of the existing house and barn. The main portion of the existing house is to be rehabilitated for use as a clubhouse facility and the barn is to be razed. Further consideration should be given to remediation and reuse of the existing barn was considered in development of the site, particularly given the historic character of the structure.
28. Certain of the architectural drawings indicate a den space that could be construed as an additional bedroom for each of the unit types. Unit types B2, B1B, and B2A each have 'den' spaces that appear to be easily convertible to bedroom spaces. The sewer generation flows would underrepresented for each such unit. The expected number of school aged children generated by the additional-bedroom units would not be accurate.
29. Although lighting is provided adjacent to the clubhouse parking spaces, a streetlight should be provided at the intersection of the project driveway and West Union Street.
30. Sight distance information should be provided at the entrance.
31. The Landscape Plan indicates passive recreational facilities adjacent to the two-unit building which can be accessed also by the rear 40-unit building. The front 40-unit building and the rear 29-unit building should each be provided with outdoor recreational features such as a gazebo or picnic area.
32. Several dumpsters are sited on the plans to serve each building. All dumpsters should have permanent, attractive enclosures that should be detailed on the drawings.
33. Multifamily developments typically are required to have common mailbox locations. This could present a significant site circulation issue. The location for a common mailbox facility with associated parking should be shown.



34. The applicant should confer with the Ashland Fire Department and provide documentation from the Department indicating their concurrence with fire access to the front of Building C, emergency response times, water pressure and volume, alarms, and other fire protection related matters.
35. The applicant should confer with Police Officials and provide documentation indicating that they are satisfied with access and safety issues during construction and operation of the project.
36. Any temporary construction signage should be shown and details provided on the size, illumination, style, and legend.
37. A permanent entrance sign has been shown on the Landscape Plan. Details on the illumination should be provided.
38. The site should be fenced and secured during construction.
39. Given the density of this project, snow storage is a significant concern. The single snow storage area that has been provided in the northerly corner of the project is likely insufficient for the entirety of the project. Additional Snow storage areas should be designated outside paved or on adjacent grassed areas that maximize recharge. The interior wetlands should be prohibited from snow storage.
40. The narrative indicates that certain of the apartments will be designed as accessible units. The walkway and parking area grades should adhere to all current Architectural Access Board regulations. Additional spot grades should be provided between the accessible spaces and the building entrances. Additional accessible ramps should be provided throughout the project where sidewalks transition to pavement.

Access, Circulation, and Parking

41. Building B is generally under-served by exterior parking spaces. As designed, only 20 exterior spaces (plus two accessible spaces) will likely be available for use exclusively by residents of this 29-unit building.
42. The thirty-nine (39) parking spaces on either side of the main entrance drive to the project are cumbersome and create congestion in the main entrance to the project. The accessible spaces in



Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 11

front of the clubhouse are immediately adjacent to the exiting queue. Vehicles maneuvering into and out of all of these spaces will effectively block the entirety of the project access. It is recommended that both 16-space fields of parking be eliminated and the spaces redistributed throughout the site.

43. In lieu of eliminating the parking spaces on either side of the main entrance drive, it is recommended that the spaces be increased to 20 feet to ease congestion in this heavily trafficked portion of the site.
44. The dumpster north of Building B near the wetland crossing cannot be directly accessed by garbage trucks and should be moved.
45. The dumpster south of Building B will require a garbage truck to back out approximately 100 feet before turning to exit. Similarly the dumpster adjacent to the 2-unit building will require a truck to back out 70-80 feet before exiting.
46. Although the dead-end length is not excessive, a total of eighty-two units are provided with just one means of access, the wetland crossing. Despite the site constraints, a secondary means of access would be strongly recommended to support this number of residences.
47. Fire officials should verify that they are satisfied with exterior access to the rear of the duplex units.
48. Fire officials should verify that they are satisfied with vehicular access to the front of Building C without the strengthened turf (grass crete) fire lane as used around the perimeter of the other three larger buildings.
49. The geometry of the fire road and all on-site driveways should accommodate the largest Fire Department's design vehicle. Documentation should be provided indicating that the Fire Department approves the layout and methods of construction of the on-site access and circulation system.
50. It appears that the project is going to be designed with vertical granite curb along all pavement edges which is appropriate for a project of this density.

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Grading

51. Construction of the proposed site improvements will likely include reuse of onsite materials. General information on the structural reuse of onsite soil types should be provided.
52. Total cuts and fills should be identified and the net volume of cut/fill brought on or off site should be estimated. The anticipated number of off-site truck trips necessary to transport the net cut/fill volume should be provided.
53. Walkway and parking area grades for the accessible routes must adhere to all current regulations of the Architectural Access Board (AAB). Spot grades should be provided for the parking and sidewalk areas to verify conformance.
54. Verify that the fence design on top of the retaining walls conforms with State Building Code with respect to restricting access to exposed drops, and that the fence is designed with non-climbable pickets.

Landscaping

55. The applicant should be encouraged to limit turf areas due to water demand and requirements for lawn chemicals and fertilizer. Due to the intensive development of the site that includes large grassed areas, a Turf Management plan should be provided that adequately protects the adjacent wetland areas from nitrate and phosphate loadings.
56. The landscape plantings should be coordinated with the lighting plan in a few locations. Pole locations may conflict with acer rubrum (red maple) and liquidamber styraciflua (American Sweetgum) plantings in four or five locations between Buildings B and C.
57. It does not appear that the wetland replication is included in the landscape plan. The bio-retention soil mix that was provided appears to be an extraneous note.
58. A proposed irrigation well is indicated in the vicinity of the clubhouse. Detail should be provided for the expected on-site demand for supplemental irrigation. Drought tolerant, indigenous species should be included in the design.



PROJECT IMPACTS

59. Massing of facility is out of character with the residential nature of the neighborhood. The building contains high rooflines of 60 feet in locations. It should also be noted that since portions of the site will be raised and north side of the forty-unit Building A will be constructed in fill areas of 15 feet or more, that the effective building height over existing ground will be on the order of 75 feet or more.
60. The narrative should include the project's impact to schools with the number of school-aged children expected from the 140 units.
61. The Applicant should prepare and submit for review, a detailed management plan indicating the organization and funding mechanism for the organization that will be responsible for maintaining the on-site parking, access, utilities, and landscaping.
62. Any impacts to abutters from construction noise, vibration, or required blasting should be identified.
63. The West Union Street residence opposite the site drive will be directly impacted from exiting vehicle headlights during nighttime hours. This residence should be plotted on the drawings in relation to the driveway. Offsite mitigation including vegetative screening or berming should be coordinated with this homeowner.
64. Impacts on open space should be identified and evaluated. The project narrative should discuss the project's impact upon open space resources.
65. The extent of construction traffic including truck trips should be identified. Proposed truck routes and scheduling should be shown. The analysis should include a distribution breakdown.
66. A dedicated location should be provided on the site for equipment fueling operations that is sited outside the wetland and buffers and minimizes the potential for contamination from spills.



67. The development team should provide a rough construction schedule with anticipated milestone dates for major components of the project. Verify whether the project will be constructed as a single phase.
68. A Traffic Management Plan should be submitted that has the approval of the Ashland Chief of Police. As a minimum the Traffic Management Plan should identify the number of truck trips, proposed truck routes, and an overall construction schedule. It is not clear whether the Police Department has reviewed the current design.
69. Calculations and a narrative identifying and evaluating soil erosion and sedimentation impacts during construction were not submitted. The impact analysis should quantify the effects of dust and sediment developed from the project site. A construction stage Operation and Maintenance Plan should be incorporated into the submission documents.

PRELIMINARY ARCHITECTURAL DESIGN

70. Preliminary architectural drawings were provided for review. In addition to bedroom counts, the building floor plans should be evaluated to include dens, and similar rooms that should be counted as “bedrooms” for the purposes of determining sewage generation, traffic generation and calculation of children.
71. Information on exterior finishes and colors should be provided.
72. The height of each building should be definitively provided, as set forth in the Zoning Bylaw.
73. The affordable units should be designated on the plans and should be uniformly distributed throughout all buildings. Verify the proposed distribution of the affordable units.

UTILITIES PLAN

74. Verify pipe materials, depth of cover and minimum separation between services for water and sewer services.



75. Determine whether the Ashland Water Department will require a master meter with backflow devices. The location of the meter pit should be indicated on the drawings and coordinated to minimize tree clearance.
76. The applicant should confer with the Fire Department and provide documentation from the Department indicating their concurrence that the building access, water pressure and volume, alarms, and other fire protection related matters are deemed safe and acceptable.

UTILITIES PLAN – STORMDRAINS

77. The stormwater recharge systems are designed with recharge rates that are too rapid. Based upon the NRCS soils mapping, the site soils are characterized as Narragansett soils. The published DEP Rawls recharge rate for this B-type soil is 1.02 inches/hour. Each system should be designed, based upon these B-type soils. This contrasts with the 8.27 inches/hour used for each system. The standard percolation tests that were provided within the soils beneath each system are not permissible by DEP as a substitute for Rawls Rates. (Volume 3-Massachusetts Stormwater Handbook).
78. As designed, seasonal high groundwater is within 4 feet of the bottom of each of the four systems. A groundwater mounding analysis will be required beneath each system. The groundwater mound cannot break out above the land or water surface of the wetland.
79. The surface basin in front of Building C has not been modeled in the HydroCAD calculations.
80. Verify that subsurface recharge galleys are sited in locations that can facilitate discharge of all stormwater within 72 hours following cessation of inflow.
81. An Operation and Maintenance Plan should be provided. Details of the management entity and responsibility to fulfill the terms of the Operation and Maintenance Plan should be submitted that includes a BMP maintenance schedule.

REQUIRED EXEMPTIONS

82. The application does not adequately document the nature of exemptions requested from applicable Town regulations, precluding the ability of the Board of Appeals to determine



Town of Ashland Board of Appeals
Peer Review of Comprehensive Permit Plan
The Residences at West Union

September 5, 2014
Page 16

whether there is a public interest in granting the requested exemptions. Although the design plans are fairly detailed, it is not possible for the Board to adequately determine and provide to the applicant which relief is required for the applicant's project. Provide specific waivers, exceptions, exemptions and variances needed from each set of regulations, bylaws, and standards.

83. Submit a tabulation of the variances requested from applicable intensity requirements of the Zoning Bylaws. Include a tabulation of the dimension or parameter required by the Zoning Bylaws versus that proposed to be provided by the applicant.
84. Submit a tabulation of departures from the Planning Board's Rules & Regulations, which serve as Town construction standards. Describe why there is a public interest in allowing various downgrades.

FEDERAL AND STATE PERMITS AND MEPA COMPLIANCE

85. The project will require one or more "State Actions" and as such, the project would be subject to environmental documentation requirements under provisions of regulations implementing the *Massachusetts Environmental Policy Act* (MEPA).
86. An Access Permit will be required from MassDOT for the driveway connection to West Union Street Road.
87. An NPDES General Construction Permit is required for sites involving disturbance greater than or equal to 1 acre.

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