

BARRINGTON  
BROOKFIELD  
DOVER  
DURHAM  
FARMINGTON  
LEE  
MADBURY  
MIDDLETON  
MILTON



NEW DURHAM  
NEWMARKET  
NORTHWOOD  
NOTTINGHAM  
ROCHESTER  
ROLLINSFORD  
SOMERSWORTH  
STRAFFORD  
WAKEFIELD

October 24, 2017

Dear Committee Members:

Re: **Preliminary Review** - Development of Regional Impact – The River Woods Group,  
Construction Related to Proposed Continuing Care Facility

Per NH RSA 36:55, a Development of Regional Impact means any proposal before a local land use board which in the determination of such local land use board could reasonably be expected to impact on a neighboring municipality, because of factors such as, but not limited to, the following:

- I. Relative size or number of dwelling units as compared with existing stock.
- II. Proximity to the borders of a neighboring community.
- III. Transportation networks.
- IV. Anticipated emissions such as light, noise, smoke, odors, or particles.
- V. Proximity to aquifers or surface waters, which transcend municipal boundaries.
- VI. Shared facilities such as schools and solid waste disposal facilities.

Per the Town of Durham, on September 27, 2017 a declaration of potential regional impact was approved by the Planning Board for The River Woods Group site plan application related to the construction and site work for a proposed continuing care facility (Tax Map #11, Lots 8-1– 8-15) located on Stone Quarry Drive in the “Office and Research District – Route 108” zoning district.

The Strafford Regional Planning Commission (SRPC) received formal notice from the Town of Durham of said **Development of Regional Impact** on October 11, 2017. Per the Town of Durham, notices were also sent to the Town of Madbury, the Town of Lee, the Town of Newmarket, the Town of Newington, and the City of Dover. Subsequent to that date, SRPC received one (1) full sized Planning Board Submission plan set (27 sheets) on October 13, 2017 and has communicated with the Applicant’s agents and the Town of Durham for access to all application materials via the Town of Durham website.

**Note:** This referral for a Development of Regional Impact is limited to the potential regional impacts of construction activities related to building the facility. Potential regional impacts of the completed project are outside of the scope of this referral and were not considered. SRPC staff has prepared the following comments on behalf of the Regional Impact Committee to guide the regional discussion for this proposed project.

*This review has been amended from its original format at the request of the Regional Impact Committee to contain additional discussion of issues raised by the Committee at the October 24, 2017 public meeting. Added comments appear in italics below.*

#### Transportation – Access – Parking

- 1) **Will the proposed development cause an increase in motor vehicle traffic or other traffic that will impact the safety of the transportation system?**

As outlined below, site work is expected to generate an average of 46 trips per day to import and export necessary materials. For calculation purposes, these trips are assumed to be dump trucks capable of carrying 16 cubic yards (CY) of material. These trucks are expected to use Route 108 and Route 4, which are already frequently travelled by trucks of this size and the increase in truck traffic is not expected to significantly impact the safety of the transportation system. However, accidents involving trucks of this size do have a higher rate of injuries and fatalities. The Applicant and Town of Durham may wish to provide outreach materials on road safety protocols (blind spots, safe passing, backing, safe following, etc.) that can be shared with residents of Durham and neighboring municipalities. The number of trucks accessing Stone Quarry Drive or construction activity related to extending water and sewer service may warrant coordination between the applicant, the Town of Durham, the Public Works Department, and NH DOT to ensure that adequate signs are provided during the period of construction and may warrant notice to residents of Durham and neighboring municipalities online and in Durham's "Friday Updates" emails.

**2) Will the proposed development cause an increase in motor vehicle traffic or other traffic that will increase congestion on the transportation system in the adjacent town?**

The applicant has indicated that excavation and earthwork related to site preparation will be the largest drivers of traffic to and from the site. Preparing the site will require onsite cut of approximately 51,000 cubic yards of earth. 22,000 CY of fill can be reused onsite, leaving 29,000 CY of spoil to be removed. The applicant anticipates 2,800 CY of loam spoil, so that a total of approximately 31,800 CY of earth will be exported from the site.

Earthwork import and export will be conducted via trucks with a capacity of 16 CY. Assuming two "trip ends" per load (one entering and one leaving the site), the applicant calculates a need for roughly 3,975 trip ends to export the necessary earth.

Approximately 24,000 CY of select materials will be imported to the site. It is anticipated that all trucks importing materials on inbound trips will be able to pick up a load of export materials for the outbound trip, meaning importation of materials is not expected to result in additional trip ends. The applicant has suggested a five percent contingency to account for variation in amounts of materials needed, resulting in a total estimated trip generation of 4,200 during the construction period. The applicant will also need to remove mature timber and other vegetation from the site, but the number of trips anticipated will be "orders of magnitude" lower, and logging activities should be complete prior to beginning earth removal. Using the applicant's proposed timeline for site work of June 1, 2018 – August 31, 2018 (92 days), site work will generate an average of 46 trips per day.

The applicant has indicated that 75 percent of trucks accessing this site will travel to or from the contractor's excavation operation on Mast Road in Dover. This would mean an additional 35 construction vehicle trips per day on Route 108 through Dover and Madbury. The remaining 25 percent of trucks would come from the south, either via Route 4 or Route 108, resulting in 12 new construction vehicle trips per day.

SRPC has prepared a map of "Traffic Volumes", using 2015 traffic counts submitted to NH DOT that shows Annual Average Daily Traffic (AADT) of 11,000 trips at a count location on Route

108 just south of Stone Quarry Drive. The 46 total trips generated by this site would account for 0.4 percent of the daily traffic at that location.

A map of “Regional Traffic Volumes” using 2014 data indicates a total of 9,100 AADT at the Dover/Madbury municipal boundary. The 35 trips headed north to Mast Road would be an increase of just under 0.4 percent. This map also shows AADT of 20,000 trips on Route 4 heading towards Dover and Newington, 13,228 trips on Route 4 heading towards Lee, and 12,024 on Route 108 approaching downtown Newmarket. The 12 trips leaving this site to the south would account for 0.06 percent of traffic on Route 4 to Dover and Newington, 0.09 percent of traffic on Route 4 towards Lee, and 0.1 percent of traffic approaching downtown Newmarket. These increases in traffic volume are not statistically significant on any of the roads analyzed.

*The Applicant has indicated no need for construction or earthwork vehicles to use small local roads, and expects that all construction and earthwork traffic is expected to travel on state roads or local roads specifically designed to accommodate vehicles of that size and weight.*

**3) Will the proposed development create the need for infrastructure improvements?**

This project includes the proposed extension of water and sewer service north along Route 108 to this site. The applicant has prepared a “Conceptual Off-Site Utility Extension Plan” identifying the proposed location of off-site infrastructure along the east side of Route 108. Any work in the right-of-way for either Route 108 or Route 4 would likely require coordination between the Applicant, the Town of Durham, and NH DOT.

The “Site Preparation Plan” submitted by the applicant includes proposals for construction facilities, including construction security fencing, stabilized construction exits, and silt barriers.

**4) Will the development result in inadequate emergency access?**

Stone Quarry Drive is currently maintained at a sufficient standard to provide access to the Town of Durham Department of Public Works. Construction at this site is not expected to result in insufficient access to the interior of the site or to other facilities on Stone Quarry Drive.

**5) Does the development meet minimum local parking standards or are there provisions for other modes that reduce the need for parking?**

Parking requirements for the completed facility are outside the scope of this review.

**6) Does the plan provide for safe access within the development for all modes (ADA compliance, sidewalks, crosswalks, lighting)?**

Construction notes contained in the “General Notes and Legend” indicate that site construction shall comply with the rules and regulations of the Americans with Disabilities Act. Access provided in the final site design falls outside the scope of this review.

## Conflicts with Policies, Plans, and Programs – Noise

- 7) Will the development expose persons to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?**

The Town of Durham has a noise ordinance that restricts the use of construction vehicles between the hours of 10:00 p.m. and 7:00 a.m. Construction notes contained in the “General Notes and Legend” indicate that construction hours will be agreed upon between Riverwoods and the Town of Durham and that standard work hours shall be 7 a.m. to 6 p.m., which are consistent with the terms of the noise ordinance.

- 8) Will the development expose persons to or generate excessive ground borne vibration or ground borne noise levels?**

Construction of the proposed facility is expected to require blasting and crushing of rock to prepare the site for development. The Planning Board may wish to seek additional information about outreach, proper notification, and mitigation practices used to protect abutters impacted by noise and vibration as a result of these activities.

- 9) Will the development substantially and permanently increase ambient noise levels in the project vicinity above existing levels?**

Construction activities related to the proposed facility will not permanently alter ambient noise levels.

- 10) Will the development substantially increase temporary or periodic ambient noise levels in the project vicinity above existing levels?**

Construction of the proposed facility is expected to require blasting and crushing of rock to prepare the site for development. These blasting events are highly likely to result in substantial temporary increases in noise levels. The Planning Board may wish to seek additional information about outreach and mitigation practices used to protect abutters impacted by noise and vibration as a result of these activities. Vehicle motion alarms activated by dump trucks backing up onto the site can also be expected to result in temporary increases in ambient noise levels.

- 11) Is the development located within an airport zone or within two miles of an airport or airfield, where the project would expose residents or employees in the project area to excessive noise levels?**

The proposed site is located roughly five miles from Portsmouth International Airport.

## Hazardous Materials or Substances

- 12) Will the development create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Information provided by the applicant does not indicate that routine transport, use, or disposal of hazardous materials will be necessary.

**13) Will the development create a significant hazard to the public or the environment through the reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

The “Site Preparation Plan” identifies an existing septic leach field that will be abandoned and removed per NH DES standards upon extension of municipal water and sewer. NH DES standards should prevent any reasonably foreseeable upset or accident.

**14) Will the development produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?**

The proposed site is located approximately 0.3 miles from Oyster River High School and 0.7 miles from Oyster River Middle School. The Little Tree Education School (infants, toddlers, and preschoolers) is roughly 1.4 miles from the site on Route 108 in Madbury. Information provided by the applicant does not indicate that routine transport, use, or disposal of hazardous materials will be necessary.

**15) Will the development be located on a site that is included on a list of hazardous materials sites compiled by the NH Department of Environmental Services and, as a result, would it create a significant hazard to the public or the environment?**

Research conducted by SRPC staff found a prior environmental hazard on parcel 8-0 as depicted on the “Environmental Hazards” map. This was the result of a minor heating oil spill in 2001. Contaminated soils were removed within six months of the incident, and no lasting impacts are anticipated.

Ecology and Resources

**16) Will the development have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the U.S. Fish and Wildlife Service?**

Any potential impacts on wildlife species would relate to the overall development of this site rather than specific construction practices and would fall outside the scope of this review.

**17) Will the development have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the New Hampshire Department of Fish and Game or U.S. Fish and Wildlife Service?**

See above.

**18) Will the development have substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

The “Site Preparation Plan” submitted by the applicant indicates that site work will not occur in areas identified as wetlands, and that a double silt barrier will be installed at the perimeter of the site to prevent impacts on identified wetlands.

**19) Will the development interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Any potential impacts on wildlife species would relate to the overall development of this site rather than specific construction practices and would fall outside the scope of this review.

**20) Will the development conflict with any local policies or ordinances protecting biological resources, such as a conservation easement, tree preservation policy or ordinance?**

Any such ordinances would apply to the development as a whole and not to specific construction practices, and therefore fall outside the scope of this review.

**21) Will the development conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?**

Any such habitat conservation plans would apply to the development as a whole and not to specific construction practices, and therefore fall outside the scope of this review.

**22) Will the development have a substantial adverse effect on Groundwater Quality?**

Construction would be most likely to impact groundwater quality as a result of sedimentation and erosion. The applicant has provided detailed illustrations of proposed sediment and erosion control measures on “Detail Sheet C – 6.1”. Other potential impacts may be associated with rock blasting, including the release of a regulated or unregulated substance to the groundwater, and agitation of the subsurface that causes turbidity in groundwater to increase. Recommend the applicant follow Best Management Practices to prevent contamination of groundwater including, preparing, reviewing, and following an approved blasting plan; proper drilling, explosive handling and loading procedures; observing the entire blasting procedures; evaluating blasting performance; and handling and storage of blasted rock.

**23) Will the development have a substantial adverse effect on Air Quality?**

The greatest threats to air quality would come from construction vehicle emissions and dust as a result of site work. The estimated number of construction trips is not expected to have a substantial impact on vehicle emissions along Route 108, and the applicant intends to limit vehicle trips by using all trucks that import materials to also export materials on outbound trips. Durham may wish to discuss dust control measures during excavation and site work as this project proceeds towards the construction phase. In both cases, any impacts to air quality would be temporary.

## Hazards – Public Health and Safety

**24) Will the development expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides or flooding?**

The applicant will require an Alteration of Terrain permit from NH DES, which would consider possible impacts as a result of landslides or flooding and would require the applicant to mitigate expected negative impacts.

**25) Will the development result in substantial soil erosion or loss of topsoil?**

Information submitted by the applicant indicates that approximately 51,000 CY of earth will be removed. The applicant estimates that roughly 22,000 CY will be recycled as fill onsite, while remaining cut materials and loam spoil will be removed from the site. The applicant expects to remove roughly 31,800 CY of spoil. Construction notes submitted by the applicant make provisions for erosion control during construction. The applicant will require an Alteration of Terrain permit from NH DES, which would require the applicant to mitigate offsite impacts long before they impacted neighboring municipalities.

**26) Will the development be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

The applicant will require an Alteration of Terrain permit from NH DES, which would consider the stability of soils onsite.

**27) Will the development be located on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for disposal of wastewater?**

Not applicable. Plans submitted by the applicant propose extending municipal water and sewer to this site.

## Facilities

**28) Will the development require new or expanded Fire protection facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?**

Construction activities related to site work or the extension of utilities are not expected to have an impact upon facilities in neighboring municipalities. Potential impacts of the completed facility are outside the scope of this review.

**29) Will the development require new or expanded Law Enforcement facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?**

Construction activities related to site work or the extension of utilities are not expected to impact facilities in neighboring municipalities. Potential impacts of the completed facility are outside the scope of this review.

**30) Will the development require new or expanded School facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?**

Construction activities related to site work or the extension of utilities are not expected to impact facilities in neighboring municipalities. Potential impacts of the completed facility are outside the scope of this review.

**31) Will the development require new or expanded Parks facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?**

Construction activities related to site work or the extension of utilities are not expected to impact facilities in neighboring municipalities. Potential impacts of the completed facility are outside the scope of this review.

**32) Will the development require new or expanded Solid Waste facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards?**

The applicant has indicated that approximately 75 percent of trucks entering and leaving the site will import select materials from, or export spoils to, a private facility located on Mast Road in Dover. This activity is not expected to impact public facilities in Dover or other neighboring municipalities. Potential impacts of the completed facility are outside the scope of this review.

**33) Will the development cause an increase in new or expanded utilities, treatment facilities, storm water, water supplies, etc., that would result in a negative financial or environmental impact to the adjacent municipality?**

This project includes a proposal to extend municipal water and sewer to this site. Construction activities related to site work or the extension of utilities are not expected to have an impact upon facilities in neighboring municipalities. Potential impacts of the completed facility are outside the scope of this review.

Scenic and Visual Character

**34) Will the development convert Prime Farmland to non-agricultural use?**

Construction activity is not expected to have independent impacts upon agricultural activity. Impacts of the developed site are outside the scope of this review.

**35) Will the development conflict with existing zoning for agricultural use?**

Construction activity is not expected to have independent impacts upon agricultural activity. Impacts of the developed site are outside the scope of this review.



**36) Will the development involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?**

Construction activity is not expected to have independent impacts upon agricultural activity. Impacts of the developed site are outside the scope of this review.

**37) Will the development have a substantial adverse effect on a scenic vista?**

Construction of this facility will require removal of mature trees and other vegetation as well as excavation of approximately 51,000 CY of earth. While an active construction or excavation site may be aesthetically unappealing, any detrimental impacts as a result of construction will be temporary. Aesthetics of the completed development are outside the scope of this review.

**38) Will the development substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

This portion of Route 108 was designated as part of the Mills Scenic Byway by the New Hampshire Scenic & Cultural Byways Council on May 10, 2014. As noted above, construction and excavation may result in detrimental visual impacts, but such impacts will be temporary. Aesthetics of the completed development are outside the scope of this review.

**39) Will the development substantially degrade the existing visual character or quality of the site and its surroundings?**

As mentioned above, construction of this facility may temporarily impair the aesthetics of the site. However, there is nothing to indicate that construction of this project would differ substantially from any other construction project. Aesthetics of the completed development are outside the scope of this review.

**40) Will the development create a new source of substantial light or glare which would adversely impact day or nighttime views in the area?**

The applicant has indicated that peak site work activity will take place from June 1 — August 31, 2018. This will allow the applicant to take advantage of daylight to reduce the need for artificial light sources onsite. Information submitted by the applicant indicates standard work hours of 7AM — 6PM or as agreed between Riverwoods and the Town of Durham.

**41) Will the development conflict with any applicable land use plan, policy, or regulation including, but not limited to the Master Plan or Zoning Ordinance?**

The scope of this review is limited to potential regional impacts related to the construction of the facility. Construction of this facility appears to require an Alteration of Terrain permit from NH DES, and installation of utilities impacting Route 108 and Route 4 will require coordination with NH DOT and utility providers. Construction may be subject to requirements imposed by those organizations or by the Durham Planning Board as conditions of approval.

## Housing and Population Growth

**42) Will the development induce substantial growth in an area, either directly (for example, by proposing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

This project includes the proposed extension of water and sewer service north along Route 108 to this site. The applicant has prepared a “Conceptual Off-Site Utility Extension Plan” identifying the proposed location of off-site infrastructure along the east side of Route 108. The scope of this review is limited to installation of utility infrastructure, which is likely to cause temporary inconveniences to motorists along this section of Route 108, particularly at the Route 4 interchange. Construction impacting either of these roads will require coordination with NH DOT.

**43) Will the development displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

Not applicable. The scope of this review is limited to potential regional impacts related to the construction of the facility.

**44) Will the development displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

Not applicable. The scope of this review is limited to potential regional impacts related to the construction of the facility.

**45) Is the development compatible with existing or planned cross border development?**

It should be noted that this facility will result in a larger construction project than existing development along Route 108 in Madbury. However, the site is far enough from the border that the most significant impacts upon Madbury will be traffic-related as described above. The compatibility of the completed facility is outside the scope of this review.

Please contact me should you have any questions at 994-3500 or [jburdin@strafford.org](mailto:jburdin@strafford.org).

Sincerely,

James Burdin  
Regional Economic Development Planner  
Strafford Regional Planning Commission

cc: Town of Durham – Town Planner  
Town of Madbury – Planning Board  
Town of Lee – Planning Board  
Town of Newington – Planning Board  
Town of Newmarket – Town Planner  
City of Dover – Director of Planning and Strategic Initiatives  
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