



December 19, 2017

Norfolk Zoning Board of Appeals
Michael J. Kulesza, Chairman
1 Liberty Lane
Norfolk, MA 02056

**Re: 40B - Peer Review (Status Update)
Abbyville Commons/Preserve at Abbyville
Lawrence Street
Norfolk, Massachusetts**

Dear Chairman Kulesza:

The following summarizes current status of our review related to the above-referenced project. The applicant has revised the development program to address several issues discussed at the last public hearing and has provided a Construction Management Plan detailing Project execution strategies and related mitigation commitments during the various construction phases. We have reviewed the documents provided and have been coordinating with the applicant, their engineer and town staff to address outstanding issues related to minimizing construction impacts.

[Earthwork Update/Opinion](#)

As discussed at the public hearing, the applicant has revised the proposed site grading to reduce off-site export of excavated material and has provided electronic files of the proposed grading plan for our review and verification of quantities. We have conducted an independent cut/fill analysis which generally confirms quantities represented by the applicant. A comparison of earthwork volumes for the original and revised proposals is provided in Table 1.

Table 1 – Earthwork Comparison

Development Option	Area of Disturbance (Acres)	Cut (CY)	Fill (CY)	Earthwork Total (CY)	Net (CY)
Original Proposal	63.3	1,611,000	129,000	1,740,000	1,482,000
Revised Proposal	60.7	1,205,000	211,000	1,416,000	994,000
Net Change	-2.6	-406,000	82,000	-324,000	-488,000

We understand community concern regarding the proposed earthwork, and specifically the off-site export of material, and have worked with the applicant to reduce total earthwork volumes and related impacts. As expressed at the meeting, it is our opinion that the proposed reductions are significant and present a grading plan that is significantly more responsive to community concerns than the original proposal. The revised grading plan, although still a substantial net export, now falls within the range of reasonable approaches given site conditions and the nature of the development.

The revised plan better balances development goals, long-term public infrastructure obligations and construction concerns. Specifically, it maintains a reasonable proportion (70/30) of roadways proposed in cut vs. fill. Constructing roadways and gravity utilities in cuts reduces risks and costs associated with future settlement and is consistent with Norfolk Department Public Works preference for subdivision roadways constructed on naturally compact native material.

Most importantly, the applicant has committed to daily limits on export volumes, hours/days of operation and trucking routes in the Project Construction Management Plan that will minimize off site impacts and ensure soils exported from the site will be removed at a measured rate and at appropriate times.

We have included the cut/fill gradation graphic of the revised grading plan as a means to compare with prior analysis. As with prior graphics, cuts are shown in red and fills are shown in blue and depth is represented graphically by color density with darker shades representing deeper cuts/fills.

Construction Management Plan Review

The applicant has provided a “Consolidated Construction & Operation Management Plan” dated December 8, 2017 (CMP) which provides details on how construction activities will be managed and most importantly commits to specific controls for material handling and off-site removal of excess soil.

We have completed an initial review of the document and find it addresses many of the key issues identified during our working sessions and that quantities and conversion factors used in the CMP represent reasonable unit rates.

The following are key stipulations included in the CMP that we consider critical to minimizing earth removal construction related impacts.

1. Construction Access – The CMP proposes using the existing commercial (Buckley and Mann) site driveway as its main construction access point. The proposed location is well suited given its location proximate to Park Street and its eventual abandonment and removal which will reduce potential construction damage to permanent access points at Buckley and Elliot Boulevard. We recommend the construction access and material staging area be maintained throughout all phases of construction and removal of any vegetation near the entrance that reduces site lines for exiting or approaching traffic.
2. Construction Phasing/Schedule – The CMP describes a multi-phase approach to construction with a projected 8-year timeline for full build out with the largest earth removal occurring in the final phase. The phasing plan provides a detailed breakdown of activities and durations that appear reasonable and are consistent with agreed-upon production and material removal rates.
3. Max. Daily Export – The CMP limits daily earthwork export to a maximum of 60 loads (120 trips) and bases calculations for required schedule on an expected average of 45 loads (90 trips) per day.
4. Hours of Trucking – The CMP limits earth removal trucking to specific hours (8:30 am - 2:15 pm) intended to avoid key morning and afternoon peak commuting times as well as avoid typical times for school bus activity. It also limits removal to weekdays only. We recommend weekday holidays also be excluded from allowable trucking days.
5. Trucking Routes – The CMP agrees to defer earth removal trucking until improvements to the Lawrence Street causeway section have been completed and suggests appropriate measures should the reconstruction of Lawrence Street be delayed.
6. Trucking Verification – Logs will be maintained on a daily basis to track removal activities and supplied to the Town upon request. It is our understanding that material exported from the site will be transported to a nearby gravel processing facility for processing, classification and distribution. We suggest all material exported from the site be documented on a per load transport slip noting contents,

load weight, destination, date and time and truck identification. We also suggest the applicant outfit earthwork trucks with project specific placards to assist the Town and the community in distinguishing project trucks from other background or non-earthwork related trucking.

In general we found the CMP responsive to the Town's concerns and that it defines key project commitments that will minimize off-site impacts. We recommend the CMP include a provision for periodic compliance reviews with the Town and its applicable representatives.

As with previous reviews, we will continue working with the applicant to more narrowly define project expectations in the hopes of addressing the full range of abutter and town concerns. We are happy to discuss our comments at your request. Please don't hesitate to contact us with any questions, or if you require additional information.

Very truly yours,



Sean P. Reardon, P.E.,
Vice President

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Cut/Fill Report

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Volume Summary							
Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
CutFill 11-20- 17	full	1.000	1.000	2643251.51	1204755.70	210940.87	993814.83<Cut>

Totals				
	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	2643251.51	1204755.70	210940.87	993814.83<Cut>

* Value adjusted by cut or fill factor other than 1.0

