

January 6, 2021

Newbury Planning Board Town Hall, 12 Kent Way Byfield, MA. 01922

Attn: Martha Taylor, Town Planner

Re: Response to Comments prepared by Joseph Serwatka December 16, 2020

Members of Board,

The following provides our response to review comments provided by the Joe Serwatka date 12/16/20. We have included the review comment and our response to facilitate the Board's review.

No.		Comment / Response
Sheet	2 of 8, Existing	conditions
1.	Comment:	The plan should state whether the wetland delineations have been reviewed and approved by the Newbury Conservation Commission, as would be typical.
	Response:	The plan has been reviewed by the Conservation Commission and no comments regarding the wetland delineation have been received.
	Comment:	The response states that the plan has been reviewed by the conservation commission.
	Response:	No response required.
2.	Comment:	A headwall is depicted at the southwest corner of the lot, but no pipes or flow lines are provided. The engineer should address the function of this headwall.
	Response:	Based on field conditions and record plans, there do not appear to be any pipes connecting the headwall.
	Comment:	The response states that there do not appear to be any pipes.
	Response:	No response Required.
3.	Comment:	Any existing pavement on the lots should be identified, as would be typical.
	Response:	The existing pavement has been labeled.



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	Comment:	The response states that existing pavement has been labeled, but the plan does not appear to be labeled.
	Response:	The edge of pavement was labeled on Sheets 2 and 5.
Sheet	3 of 8, Site Plan	
1.	Comment:	The entire site design appears to be dependent upon the applicant being able to grade, install light poles, and install landscaping on land which does not belong to them, that is, the Newburyport Turnpike layout. The proposed site curbing and pavement begin at the front property line, forcing all grading, lighting and landscaping to be depicted offsite, within the Newburyport Turnpike layout. The board may want the applicant/engineer to obtain a grading/landscaping/utility easement from the appropriate owners of the Turnpike prior to rendering a decision.
	Response:	The site layout has been revised to allows for the majority of the grading to be located on-site. The lighting and landscape have also been relocated on-site.
	Comment:	The plan has been revised to address these issues.
	Response:	No response required.
2.	Comment:	The engineer should provide the angle, width and length of the angled parking spaces, as would be typical.
≪ 8.50 5	Response:	The angled parking has been removed.
6	Comment:	The angled parking has been removed.
	Response:	No response required.
3.	Comment:	Parallel parking spaces are typically 22 feet long, whereas the plan shows 20 foot parking spaces. The board may want the parallel spaces revised to be 22 feet long.
	Response:	Parallel parking has been removed.
	Comment:	The parallel parking spaces have been removed.
	Response:	No Response Required.
4.	Comment:	The building plans show two doors on the rear of the retail building. The board may
		want a sidewalk, or other access way, shown on the plan to the doors.
	Response:	
	Comment:	No response has been provided.
	Response:	The two doors at the rear of the retail spaces are for emergency egress only.
5.	Comment	Twenty four of the thirty three proposed parking spaces are for residential use. The board may want the engineer to address whether each use will be designated specific parking spaces. The spaces along the front of the building may be designated for retail customer use only, for instance. The board may also want to know how the 5 covered parking spaces (under the building) will be allocated to the 12 residential units.
	Response:	We are not proposing to reserve parking spaces for each use. The parking under the building has been removed.
	Comment:	The response states that reserve parking is not proposed, and the under-building parking spaces have been removed.

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	Response:	No response required.
6.	Comment:	The proposed stairway location should be depicted under the proposed building.
	Response:	Parking is no longer proposed below the building. The stairway will be located within the building footprint.
	Comment:	Under-building parking has been removed.
	Response:	No response required.
7.	Comment:	A stabilized construction entrance should be depicted on the plan, as would be typical.
	Response:	A stabilized construction entrance has been added to the plan.
	Comment:	Construction entrances have been added to the plans.
	Response:	No response required.
New	comments base	d on completely revised site parking plan
8.	Comment:	The parking space requirements have been revised, along with an increase in residential units, from 12 to 14. The plan now depicts 31 total parking spaces versus 33 spaces on the previous plans.
2 2	Response:	Upon further review of the parking requirements, the regulations for multifamily residential buildings require 2 spaces per unit for the first two units and 1.5 spaces for each additional unit. The proposed use requires 9 parking spaces for the retail space and 22 for 14 Residential units (4 for the first two units, and 18 for the remaining 12.)
9.	Comment:	Typical parking space dimensions are 9'by18', with a 24' maneuvering aisle, as depicted on the previous plans. The current plan version has maneuvering aisles from 20-24 feet. Maneuvering aisles less than 24 feet are not recommended for standard passenger vehicles and 9' wide parking spaces. The engineer should revise the plan to show 24-foot maneuvering aisles throughout the project.
	Response:	All maneuvering aisles have been revised to provide 24'.
10.	Comment:	The proposed curb offset to the front property line should be labeled on the plan. It appears to be 5 feet.
	Response:	The offset has been labeled on Sheet 3. The curb is 2.5' from the front property line.
11.	Comment:	Vehicles backing out of the front parking spaces, with only a 22' maneuvering aisle, are too close to the handicap parking space and the outside space on the north side of the building. Curbed islands should be provided to protect these spaces.
	Response:	The aisle has been revised to 24'. It is our opinion that 24' provides adequate space and a curbed island is not required.
Shee	t 4 of 8, Grading	g Plan

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1.	Comment:	The two proposed Contech CDS units, with rim elevations of 21.1 feet, are located in areas with grades of approximately 19.5-20.0 feet. Unless the proposed grading is revised, the units will be sticking out of the ground by a foot or more. The engineer should address this.
	Response:	The grades at the two Contech CDS units have been revised to show grades above 21.
	Comment:	The grading has been revised, but the proposed grading has gotten closer to the southerly property line. For instance, the top of curb is 20.2 feet (assuming a 6" reveal), yet there is an existing 18 foot contour at the property line only 3 feet away. A section of wall may be required. The engineer should address grading in this area.
	Response:	A section of retaining wall has been added to the area in question. A detail has been added to sheet 8.
2.	Comment:	The type of drainpipe (i.e. plastic, concrete) should be specified on the plan, as would be typical.
	Response:	The drainage pipes have been shown on the plans as ADS HDPE pipes.
	Comment:	The plan has been revised.
	Response:	No response required.
3.	Comment:	A detail should be provided for the slotted drain, as would be typical.
	Response:	A detail is provided on Sheet 6 of 8.
	Comment:	The type of pipe noted in the response letter and on the plans is HDPE, but the slotted drain detail appears to apply to corrugated metal pipe. Also, the detail does not provide any installation details for concrete, gravel, pavement, etc. Finally, the engineer should provide data showing that the slotted rain specified can adequately intercept the design flows.
	Response:	The slotted drain includes CMP. All other drain pipes for the project are HDPE. A detail has been added to Sheet 6 to show installation in pavement. Calculations are attached showing the sizing of the slotted drains.
4.	Comment:	A gutter down spout detail with underground pipe is provided on sheet 7, but no down spouts or pipes are shown on the plan. The engineer should address this.
	Response:	Downspouts and roof drain locations have been added to the plans.
	Comment:	Downspout and roof drain locations are shown on the north and south ends of the proposed building. Based on the previous architectural plans (new plans were not submitted) the roof is pitched to the front and rear. The engineer should verify that this is still the case.
	Response:	The pitch of the roof is remaining the same.



5.	Comment:	Proposed grading to construct the site is shown within Newburyport Turnpike. As this is not customary, the board may want the applicant to obtain the necessary easements to accomplish this work.
	Response:	The grading in the Newburyport Turnpike layout has been revised. Minor grading is proposed. This will be submitted to MassDOT for approval.
	Comment:	The response states that minor grading in the Newburyport Turnpike layout will be submitted to MassDOT for approval.
	Response:	No response required.
6.	Comment:	Five test pits are depicted on the plan, and the logs indicate fill overlying medium/coarse sand. The temporary solution statement indicates that there was substantial soil removal on the site, and that "deeper clay" was present in the monitoring wells. The concern is that the soils encountered in the test pits could be fill material, not naturally occurring soils. The engineer should provide data indicating where the soil removal occurred, and to what depth(s), in order to verify the correct parent material. It would also be helpful to review monitoring well data relative to groundwater observations.
	Response:	It is our opinion that since the soil logs show fill over a "Bw" layer, the sand material found in the "c" layer is naturally occurring. Figure 2 in the Temporary Solution Statement shows groundwater contours based on the Monitoring Well data. A copy of this plan is included with this letter.
	Comment:	The response states that since a "Bw" layer was encountered, the "C" layer below is naturally occurring. A "Bw" layer was not encountered in every test pit however. The Temporary Solution Statement indicates that much of the soil removal occurred in the central and southern portion of the site, essentially where the new "exfiltrating bioretention area" will be located. The 10-12" fill indicated in test pits 3 and 4 may not agree with the "substantial" soil removal indicated in the report. The report also indicates that wells were installed "into the clay", which apparently was not encountered in the test pits. As the remediation work was conducted a relatively short time ago (i.e. 2014) it may be a simple matter of someone from Arcadis commenting on the depth of soil removal and the parent materials encountered. The board may want the engineer to look into this.
	Response:	All but one test pit shows a Bw layer. Attached is a plan showing the location of the soil excavations. Over 2/3 of the removal of soil was conducted within the wetland. Test pit 5 is close to an area that shows excavation occurred. While we do not know how much soil was removed in that location, it is reasonable to assume the C layer depicted in the soil log is in fact parent material. Test pit 4 is 22' away and shows the same parent material and roughly the same depth. As you mentioned in the original comment, the clays were noted as "deeper clays" which was not encountered in our testing.

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Sheet	5 of 8, Utilities	Plan
1.	Comment:	The plan appears to show an existing 6" watermain, but 8" tapping sleeves are proposed. The engineer should correct this.
	Response:	Based on a new plan provided by Newburyport DPS, It appears the existing water main is 12" DI. The plan has been revised to show the correct water main size.
	Comment:	The plan now shows a connection to an existing 12" main on the west side of Newburyport Turnpike, crossing the highway and connecting to the existing watermain on the east side of the highway. The engineer should address whether there is, in fact, an existing 8" main.
	Response:	As based on our previous response, it appears that the water mains on both side of the road are 12".
2.	Comment:	The E-One sewer pump, by itself, does not support being installed in a sidewalk, as shown. The engineer should revise the detail to show how it will be installed in a sidewalk.
	Response:	The pump has been relocated to within the pavement outside of the sidewalk.
	Comment:	The engineer misunderstood my comment and relocated the E-One pump to the pavement. The E-One is designed to be installed in a landscaped/turf area, as it is mainly a plastic tank. In order to install it in a paved/sidewalk area, some type of manhole access cover has to be fitted over the unit. This is what I was advising the engineer to provide more detail on.
	Response:	A detail has been provided on sheet 8 showing the installation in pavement.
3.	Comment:	A proposed sewer connection is depicted in Newburyport. The rim/invert information provided show that the sewer will have only a foot of cover. I realize the sewer connection may be in Newburyport, but any problems associated with the shallow depth will affect a site in Newbury. The board may want the engineer to discuss this issue.
	Response:	The invert out of the proposed sewer manhole is the existing invert of the sewer main in Newburyport. We cannot provide any additional cover or lower the invert into the manhole.
	Comment:	The response simply states that no additional cover can be provided.
	Response:	No response required.
4.	Comment:	The architectural and site plans do not address where the mechanicals (air condensers, etc) will be located for the various uses. The board may want these shown on the plans.
	Response:	A mechanical room is shown on the Architectural plans.



	Comment:	The response states that a mechanical room is shown on the architectural plans.
_	Response:	No response required.
5.	Comment:	The plan labels "tapping sleeve" for the water connections and hydrant, but inline gate valves are drawn. The engineer should address this.
	Response:	The tapping sleeve has been removed and the water connections have been revised based on comments received from Newburyport DPS.
	Comment:	The plan has been revised.
	Response:	No response required.
6.	Comment:	The board may want the issue of mailbox locations addressed or shown on the plans.
	Response:	No response required.
	Comment:	The response states that "no response required".
<u></u>	Response:	No response required
Site Lig	shting Layout	
1.	Comment:	Site lighting for this project is depicted on abutting land (i.e. Newburyport Turnpike),
		which is not customary. As noted previously, the board may want the applicant to
		procure any necessary easements for work on land of others.
	Response:	All lighting has been removed from the Right of Way.
	Comment:	Site lighting is now shown within the property.
	Response:	No response required.
Landso	ape Plan	•
1.	Comment:	One-third of the site landscaping is depicted on land not owned by the applicant (i.e. Newburyport Turnpike), which is not customary. As noted previously, the board may want the applicant to procure any necessary easements for the proposed work.
	Response:	A revised Landscape plan has been submitted showing the landscaping shown on the project property.
	Comment:	The plan has been revised to show landscaping within the property.
	Response:	No response required.
2.	Comment:	The plan shows 15 Dwarf Fothergilla shrubs under the proposed building, in the parking area. The board may want the applicant to address these shrubs will receive water, sunlight, etc.
	Response:	The plantings have been removed from under the building.
	Comment:	Plantings have been removed from under the building.



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	Response:	No response required.
3.	Comment:	Proposed shrubs and a tree are depicted on the mechanical separator on the south side
		of the building. The engineer should address this.
	Response:	The plantings have been removed from the area around the CDS unit.
	Comment:	The plan has been revised.
	Response:	No response required.
4.	Comment:	The board may want areas of proposed lawn to be shown on the plan.
	Response:	No response required.
	Comment:	The response states that "no response required".
	Response:	No response required.
Storm	water Manage	ment Report
1.	Comment:	Post development subcatchment area 1S assumes the underbuilding parking area produces runoff, rather than the roof above it. The engineer should address how this assumption was made.
	Response:	The underbuilding parking has been removed and the calculations have been revised.
	Comment:	The underbuilding parking has been removed.
	Response:	No response required.
2.	Comment:	Test pits 03-05, located in the proposed infiltration basin, also appear to be located where the previous industrial building stood, or very close to it. As noted in the temporary Solution Statement, substantial soil removal occurred on the site, and deeper clay was noted in the monitoring wells. As all the test pits were not advanced much past four feet, and exhibited 1-2+ feet of fill, the concern is whether the soils encountered in the C layer were natural, or part of the site remediation. As noted above, the engineer should provide data as to where, and how much, soil removal/fill occurred. It would also be prudent to conduct additional test pits and advance them to 8-10 feet, as would be typical.
	Response:	It is our opinion that since the soil logs show fill over a "Bw" layer, the sand material found in the "c" layer is naturally occurring. The Temporary Solution statement also states that approximately 1-2' of soil was removed which would be consistent with the fill shown on the soil logs.
	Comment:	See comment above relative to soil tests. Also, the response states that the Temporary Solution Statement refers to 1-2' of soil removed from the site. The engineer should provide a page number for this reference.



	Response:	All but one test pit shows a Bw layer. Attached is a plan showing the location of the soil excavations. Over 2/3 of the removal of soil was conducted within the wetland. Test pit 5 is close to an area that shows excavation occurred. While we do not know how much soil was removed in that location, it is reasonable to assume the C layer depicted in the soil log is in fact parent material. Test pit 4 is 22' away and shows the same parent material and roughly the same depth. As you mentioned in the original comment, the clays were noted as "deeper clays" which was not
		encountered in our testing.
New co	omments relati	ve to new BMP design.
	F	
3.	Comment:	The plans label an emergency spillway elevation of 19.0 feet, but the calculations use
		a weir elevation of 19.5 feet. This should be corrected.
	Response:	The label on Sheet 4 has been revised to show the correct elevation of the spillway as 19.5.
4.	Comment:	The exfiltrating bioretention area plant list has a combination of trees, shrubs and grasses. The profile view specifies 24" of soil, but the Policy requires at least 3 feet of soil media for trees and shrubs. The engineer should revise the design accordingly.
	Response:	The detail has been revised to provide 36" of soil media.
5.	Comment:	Based on the Policy guidelines, it appears that the 6" perforated pipe should be in gravel beneath the soil media, not within the soil media. The engineer should review this. Also, the plan/detail does not show the limits of the perforated pipe.
	Response:	The details have been revised to show the perforated pipe in stone and shown on the plan view detail.

Additional comments:

• The stormwater calculations were revised to account for the minimal increase in pavement, however there were no increases to the peak runoff rates.

We trust this response letter provides the necessary information for the Board's consideration of the request for completeness. If you have any questions or comments, please feel free to contact our office at your convenience.

Sincerely,

Millennium Engineering, Inc.

or CE

James Melvin, P.E. Project Manager

w/ Attachments Cc: J. Bavaro M. Griffin

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