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September 19, 2023

Mr. Michael McKnight, Chairman Wrentham Planning Board 79 South Street Wrentham, MA 02093

## RE: 10 Commerce Boulevard

Dear Mr. McKnight:

Enclosed please find a revised site plan for the project at 10 Commerce Boulevard. The modifications are based on the discussion at the August 16, 2023 public hearing and the comments received from the Town's peer reviewer, Beals & Thomas, Inc. (BTI). For ease of review, I have included the comment and our response with reference to the appropriate documentation.

#### **Board Comments:**

- 1. The Board would like to see the design of the free-standing and on-building signs. A tenant has not been identified, but generic sign plans have been added to Sheets A-2 thru A-8 showing the size and location of the proposed signs.
- 2. The Board is concerned about lighting under the canopy and wants it to match the Wampum Corner Cumberland Farms. The intensity has been reduced from an average of 34.9 ft-candles (high of 49.1 to a low of 16.0) to 16.5 ft-candles (high of 22.2 to a low of 9.5). The plan has been revised to reflect the new illumination values (Sheet L1.2).
- 3. Calculate the number of trees that would be required without shading waiver and add to other places on lot. The plan depicts 6,281 sf of shade tree, leaving the plan 4,946 sf short of the 50% requirement. We propose to plant 6 additional 35' canopy Northern Red Oak shade trees (6 x 962 sf = 5,772 sf of shade) on the property in the landscaping area to the northeast of the proposed building (Sheet L2.0).
- 4. What is the difference between this design and the Wampum Corner Cumberland Farms site? The Wampum Corner Cumberland Farms building is 5,784 sf with 3 fuel pumps and 28 parking spaces. The proposed design includes a 4,500 sf building with 6 fuel pumps and 25 parking spaces.

## **BTI General Comments:**

- Chapter 390-6.1 of the By-Law stipulates dimensional requirements. For the C-2 zoning district the front setback is 100-ft and the side/rear setbacks are 50-ft. Chapter 6.1.9 of the By-Law further stipulates that sites within the C-2 zoning district that adjoin to Rt. 1 can reduce the referenced setbacks to 50-ft and 25-ft, respectively by means of a Special Permit. The Applicant is requesting a waiver from the setback requirements and proposes to use the reduced setbacks referenced herein to accommodate the proposed parking layout. B+T does not take any exception to the waiver being requested; however, defers to the Board on the appropriateness of the waiver being requested. No response required.
- 2. Chapter 390-6.4.B(9) of the By-Law stipulates requirements for parking area landscaping and shading requirements. Though a formal Form R Waiver Request Form has not been provided, the Applicant is requesting a waiver from the referenced sections of the By-Law. The Applicant is proposing a shading percentage of 26% versus the 50% required. Though the Applicant has proposed tress around the permitter of the paved surface, there does appear to be more opportunities to provide additional shading though it does appear the 50% requirement is likely not achievable. We request that the Applicant submit a formal waiver request to document the need for relief for consideration by the Board. A hard copy Form R Waiver Request was submitted with the application and a PDF has been added to this submittal.
- 3. Chapter 390-7.4.g.2 of the By-Law requires the location of size or proposed utilities. The development is proposed with a single 2-in water service. We request that the Applicant confirm this infrastructure is adequate to serve both domestic and fire service requirements. The MEP systems have not been designed at this stage of the design, but the building will not require sprinklers due to its size and a 2" domestic water service is a reasonable estimate for that size and use. The design will be refined in the construction drawings and will include the appropriately sized water and electric utilities.
- 4. Chapter 390-7.4.h of the By-Law requires the submission of plans prepared by a registered Architect including building elevations, etc. The Applicant has provided architectural information; however, the plans are not stamped by an Architect. We request that the Applicant submit compliant plans. The architectural drawings have been stamped and signed by the Architect (Sheets A-1 thru A-8).
- 5. Chapter 390-18.5.d of the By-Law stipulates the dimensional requirements for signage. Though a formal Form R Waiver Request Form has not been provided, the Applicant has indicated they would like to request a waiver from this requirement. A proposed signage package has not been provided. We request that the Applicant submit a formal waiver request to document the need for relief for consideration by the Board. A tenant has not been identified, but generic sign plans have been added to Sheets A-2 thru A-8 showing the size and location of the proposed signs. The free-standing sign is 54 sf where no more than 40 sf is allowed and the building sign is 60 sf where 10 sf is allowed. A hard copy Form R Waiver Request was submitted with the application and a PDF

has been added to this submittal.

- 6. The Applicant has not provided a swept path analysis for emergency response vehicles. We request that the Applicant provide a swept path analysis for the Project and defer to Wrentham Fire Department personnel on the adequacy of the emergency access provided. A swept path analysis modeling the town fire apparatus and a tanker truck is included with this submittal.
- 7. A site preparation plan has not been provided. As noted herein, the site is currently largely paved with some existing vegetation along the southern property line. The limits of existing pavement removal or tree clearing have not been depicted. The landscape renderings appear to depict that all proposed non-impervious surfaces will be maintained as lawn. Considering the proximity to the building on the abutting property, it appears all the natural screening is proposed to be removed. We request that the Applicant clarify the intended site preparation proposed and if the addition of landscape screening may be applicable. A new sheet (L0.0) has been added that depicts the limits of tree clearing versus preservation and the proposed plantings are on Sheet L 2.0..
- 8. As observed on August 2<sup>nd</sup>, existing electrical infrastructure including conduit at existing grade encumber the northwest portion of the Site. We request that the Applicant address how this infrastructure will either be removed and abandoned or maintained and modified in the proposed condition. A note has been added to the plan noting that the infrastructure needs to be either removed or abandoned (Sheet 4.0).
- 9. The existing curb cut to the Site appears to be abandoned in the proposed condition. It is unclear if it will be closed with curb and the sidewalk extended to the abutting lot. We request that the Applicant clarify the design intent for the existing curb cut in the final condition. If curb is to be installed, an accessible sidewalk ramp should be incorporated to terminate the sidewalk to roadway grades. The existing access is through the Supercharged Racing lot to the east. That access will be abandoned, and the pavement removed and replaced with landscaping (Sheet L2.0). Two curb cuts will be added along Commerce Blvd with appropriate ramps (Sheet 3.0)
- 10. The lighting design proposed exhibits minimal trespass of light over the property line to the south. Considering the de minimis nature of the trespass and the non-residential classification of the abutting property, we consider the lighting design to be adequate. The lighting design has been modified to decrease the amount of illumination under the canopy in accordance with the Planning Board's comments (Sheet L1.2).
- 11. We acknowledge the *SWPPP & Snow Storage Plan* provided by the Applicant. The plan references Project phasing. Given its relatively limited size, we presume the Project will be executed in a single phase. We request that the Applicant clarify the intended phasing of the Project and revise the referenced plan accordingly. It is the Owner's intent to complete the project in a single phase, but within that time period there will be separate phases of construction, which is what is shown on the plan. This template is similar to the last 2 projects on Commerce Blvd.

12. The Project includes a proposed on-site sanitary waste disposal soil absorption system. Details of the system have not been provided within the Applicant's submission. We defer review and approval of the proposed system to the Wrentham Board of Heath review process. Soil evaluations were conducted on the site that were witnessed by the Wrentham Board of Health and a preliminary layout of the system is shown on the site plan (Sheet 4.0). Once the site plan is approved by the Wrentham Planning Board a septic system design will be prepared and filed with the Wrentham Board of Health.

### **BTI Stormwater Comments:**

- 13. Section 6.B(1) of the Stormwater By-Law requires a signed Stormwater Permit application form from the Applicant. The referenced application does not appear to be included with the Applicant's documentation provided to B+T and we understand the Applicant is coordinating with Town staff to provide this information. A hard copy of the application was filed with the Town and a PDF is included in this filing.
- 14. Section 7.D(1) of the Stormwater By-Law requires the contact information that is typically incorporated into the SWPPP be provided. A draft SWPPP (in accordance with Section 8 of the Stormwater By-Law) for this Project has been submitted; however, the Applicant indicates a final iteration will be provided prior to construction with all the required information once the contract has been awarded. As a potential condition of approval, we recommend that a compliant SWPPP be provided prior to construction. No response required.
- 15. Section 7.D(2)(d)v of the Stormwater By-Law requires calculations for all temporary stormwater management best management practices (BMPs). We request that the Applicant provide the referenced calculations. Calculations for the sediment basin have been added to the SWPPP Details on Sheet 6.2.
- 16. Section 7.D(2)(e) of the Stormwater By-Law requires schedules for construction and earth movement. The referenced documentation does not appear to be provided. We request that the Applicant provide the documentation in compliance with the noted section of the Stormwater By-Law. Sheet 6.1 contains the project phasing which includes the different phases that include earth movement, site construction and building construction. Once a contractor has been identified the dates will be included on the plan. This item is constantly changing based on weather, material availability and construction means and methods.
- 17. Section 7.D(3)(c)ii of the Stormwater By-Law stipulates that design plans include profiles of drainage trunk lines. We request that the Applicant provide documentation in compliance with the noted section of the Stormwater By-Law. A profile for the parking lot drain system is included on Sheet 5.2.
- 18. Section 7.D(4)(a) of the Stormwater By-Law stipulates that hydrologic calculations be provided for 2, 10, 25 and 100-year 24-hour storm events. The Applicant has

provided analysis for a 50-year storm event and not a 25-year storm event. We request that the Applicant provide the hydrologic calculations for the required 25-year storm event. This project has been under town review since 2000 and the current design was started in 2017 under the previous regulations, which required the 50-yr event and not the 25-yr event. The 25-yr event has been added to the existing conditions and the proposed conditions (Appendix A – Storm Water Report (SWR)).

- 19. Section 7.4(D)(4)(c) of the Stormwater By-Law requires water quality calculations including total suspended solids (TSS) and Total Phosphorus (TP). TP removal calculations have not been provided. We request that the Applicant provide calculations for the TP removals as proposed. Appendix A of the SWR contains the TSS and TP removal worksheet.
- 20. Section 7.4(G)(7) of the Stormwater By-Law stipulates that all groundcover types shall be assumed to be in "good" condition. Within the pre- and post- development analysis, curve numbers (CN) associated with "fair" ground cover types are utilized. We request that the Applicant revise the modeling analysis accordingly. We have modified the model to "good" conditions with no change in the overall conclusions that the design meets the Town and State standards for rates and volumes of runoff (Appendix A and Tables 2 & 3 of SWR)
- 21. Section 7.4(G)(10) of the Stormwater By-Law requires that BMPs and stormwater management system components be evaluated and designed in accordance with Resilient Massachusetts Action Team (RMAT) Climate Resilience Design Standards and Guidelines. We request that the Applicant document compliance with the referenced section of the Stormwater By-Law. A Climate Resilience Design Standards Report is included in Appendix G and a discussion as it relates to storm water is included in Section 5.0 of the SWR.
- 22. Section 7.4(G)(12) of the Stormwater By-Law limits Rawls rates to be as described in the Handbook. Understanding that previous off-site components of the overall stormwater management system were previously reviewed and approved under the Board of Health review process, design assumptions for Basin C3 and infiltration systems A and B utilize Rawls rates well in excess of the prescribed infiltration rates in the current modeling. Stormwater runoff flows from the Project are proposed to enter Basin C3. We request that the Applicant clarify the Rawls rate used in the analysis of off-site stormwater management elements. Professional Services Corp (PSC) reviewed the storm water design for the Naskart facility and subdivision roadway that included Basin C3 which was constructed in 2004 using the measured infiltration rate. It was agreed that ½ of the measured infiltration rate would be used for the 2017 design and that infiltration would not start until 2' above estimated high ground water at elevation 186.0'. The 10.31.2017 PSC letter is included in the filing and the referenced comment is items #6 & #7.
- 23. Section 7.4(G)(13) of the Stormwater By-Law requires that the stormwater management system be designed to accommodate a 25-year storm event. We acknowledge the calculations provided but is unclear what storm event was used in

the analysis, and as noted herein, a 25-year storm event analysis has not been provided. Velocities are observed in some pipes above 10 ft/s and could introduce scour concerns. We request that the Applicant revise the referenced calculations accordingly. The 25-yr event has been modeled for the site (see Comment 18 response) and in pipes where velocity is greater than 10 ft/sec the slope has been modified (SWR Appendix D).

- 24. Section 7.4(G)(16) of the Stormwater By-Law requires stormwater basins accommodate the 100-yr storm event with 1-ft of freeboard. Understanding that previous off-site components of the overall stormwater management system were previously reviewed and approved under the Board of Health review process, Basin C3 does not exhibit the 1-ft of freeboard within the current modeling. We request that the Applicant clarify the freeboard provided for the off-site stormwater management elements. The basin has a top of berm elevation of 190.2', which is 1.6' above the 100-yr peak elevation of 188.6' (Sheet 3 of 10.19.2017 Naskart Site Plan). The design approved in the 2017 iteration showed a peak elevation of 188.7' using the "fair" condition (p.112, Appendix A of September 2017 Flood Impact Analysis).
- 25. Section 7.4(G)(18) of the Stormwater By-Law requires all drainage infrastructure has a minimum diameter of 12-in. The outlet from the subsurface infiltration system is proposed as 8-in. We request that the Applicant revise the design accordingly. The pipe size has been modified as requested (Sheet 4.0).
- 26. Standard 3 of the Handbook requires a 2-ft vertical separation from the bottom of infiltrative best management practices to estimate seasonal high groundwater elevation. Understanding that previous off-site components of the overall stormwater management system were previously reviewed and approved under the Board of Health review process, Basin C3 does not exhibit the required separation to groundwater in the current modeling. We request that the Applicant clarify the design of this infrastructure. Basin C3 was designed as a hybrid wet basin and infiltration basin see response to Comment 22.
- 27. Standard 10 of the Handbook requires an illicit discharge statement from the Applicant. The DEP Stormwater Report Checklist provided indicates the intent to provide an executed statement prior to construction. We request that a fully executed illicit discharge statement be provided by the Applicant prior to construction. We agree with this comment.
- 28. It does not appear that the existing stormwater management system in being operated and maintained in accordance with standard practice. Basin C3 was observed to be overgrown and the inlets/outlets were not visible. Catch basins within the roadway were observed without standard outlet protection hoods. With the stormwater runoff from the proposed Project being tributary to this infrastructure, as potential condition of approval, we recommend that the existing on-site system be inspected and cleaned prior to construction to ensure it is in compliant with previous approvals and the assumed design intent. The Proponent will be conducting maintenance on Basin C3 after

leaf fall this year.

- 29. The modeling of the on-site subsurface infiltration system is inconsistent with the plans. The diameter, slope, length, and inverts of the outlet pipe modeled do not appear to correlate with the plans. We request that the Applicant revise the documentation accordingly. The outflow device has been modified and now shows a 12" culvert at invert 213.0' (Sheet 4.0).
- 30. The plans include an area drain detail. It does not appear any are included in the design. We request the Applicant clarify the design intent for the referenced detail. The Nyoplast detail (Sheet 5.3) is for the roof drain collection system and is shown as RDMH on the plans (Sheet 4.0) and the description is noted in the legend (Sheet 1.0).

I believe that this addresses the comments received to date. McMahon Associates will review and respond to the traffic comments once they are received.

Thank you for your consideration.

Very truly yours,

**BAY COLONY GROUP, INC.** 

William R. Buckley, Jr., P.E. Project Manager

Encl.