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March 21, 2022

Sue Brown, Town Planner
TOWN OF MANCHESTER BY THE SEA
10 Central Street
Manchester by the Sea, MA 01944

Re: Preliminary Architectural Peer Review of Sanctuary Development

Dear Sue:

I am writing to provide you with a preliminary architectural peer review of the proposed 40B development on School Street in Manchester by the Sea. As is typical at this stage of a development of this type, the architectural and engineering drawings are at a very schematic level, so for the purpose of this letter, I will restrict most of my comments to the "project fundamentals", mainly discussing the site strategy, mitigation options, overall scale and massing, etc. (as opposed to detailed analysis of floor plans, building elevations, etc.).

This letter follows the form of the sample review letter that I provided along with my proposal for services that I sent you on February 7, 2022. While this format deviates a little from the order of services in your RFP, I believe that all that you have requested is included in this letter. I am looking forward to presenting these thoughts and answering any questions you or the Board may have at your virtual ZBA hearing that is scheduled for the evening of April 5, 2022.

1. ***Review the developer's application, plans and drawings, reports from other peer reviewers and Town officials, letters from neighboring residents, etc.*** For the proposed project on School Street, I have reviewed the following materials (*in addition to materials related to the past LIP application that are currently posted on the Town website*):

From the Development Team:

- The Sanctuary July 16th, 2021 Comprehensive Permit Plan Submission prepared by Embarc.
- Site Development Plans for The Sanctuary prepared by Allen & Major dated July 16, 2021.
- Landscape Plans and Notes & Details prepared by Bohler dated 9/24/2020.
- Letter to Sue Brown from Vanasse & Associates dated March 7, 2022.
- Memo to Sue Brown from Allen & Major dated March 3, 2022.
- Memo to ZBA from Mead, Talerman & Costa dated March 2, 2022.
- Project Eligibility Letter from MassHousing dated September 16, 2021.
- Letter to ZBA from Strategic Land Ventures dated February 28, 2022.
- Email to ZBA from Geoff Engler dated February 16, 2022.
- Memo Re: MBTS EP Letter Peer Review from Embarc dated January 25, 2022.
- Letter to the Conservation Commission from Goddard Consulting dated February 19, 2021.
- Letter to Geoff Engler from Miller Engineering and Testing dated July 29, 2020.

Town, Peer Review, and other Consultant Reports:

- Letter to Sue Brown from Beals & Thomas dated March 7, 2022.
- Letter to ZBA from McGregor Legere & Stevens dated March 1, 2022.
- Letter to Geoff Engler from the ZBA dated February 18, 2022.
- Letter to ZBA from Hill Law dated February 13, 2021.
- Letter to Citizen's Initiative for Affordable Housing from Beals Associates dated February 8, 2022.
- Letter to ZBA from Massachusetts Division of Fisheries & Wildlife dated February 3, 2022.
- Letter to ZBA from Manchester by the Sea Police Department dated January 31, 2022.
- Letter to Sue Brown from the Manchester by the Sea Fire Department dated January 21, 2022.
- Letter to ZBA from Massachusetts DHCD dated December 8, 2021.

- Letter to ZBA from Scott Horsley dated October 25, 2021.
- Letter to Dan Hill from Chessia Consulting Services dated October 25, 2021.
- Letter to ZBA from Hill Law dated October 25, 2021.
- Letter to Town Administrator from the Massachusetts Architectural Access Board dated July 15, 2021.

Communications from citizenry:

- Letter to ZBA from Manchester Athletic Club (undated).
- Letter to ZBA from Karin Gertsch dated November 7, 2021.
- Letter to ZBA from Denison Hall dated December 22, 2021.

(REFERENCE MATERIALS)

- Chapter 40B Handbook for Zoning Boards of Appeal published by MHP in cooperation with DHCD, MassHousing, and MassDevelopment dated March 2017.
 - Handbook: Approach to Chapter 40B Design Reviews, prepared by The Cecil Group, Inc. for DHCD, MassDevelopment, MassHousing, and MHP, January, 2011
2. *Participate in an initial meeting at the site with the developer's design team and a representative of the Town.* This reviewer made an unaccompanied visit to the site and neighboring areas on March 1, 2022. There has been no site visit with any member of the development team.
 3. *Conduct site visit and reconnaissance assessment of surrounding residential and nonresidential areas within 1/2 mile of the project site.* This letter is based on the site visit of March 1, 2022 as well as Google Earth review.

Brief Comments on site reconnaissance: The site is on the west side of School Street, approximately 1/2 mile north of the interchange of School Street with Route 128. The center of Manchester is approximately 1.7 south of the site. Immediately to the north is the Town line with Essex. Old School Street is to the west. Surrounding the site on all sides within 1/2 mile are large areas of undeveloped, heavily vegetated properties, with a few commercial uses along School Street and closer to 128.

There are no sidewalks or bike lanes on School Street along the site frontage. The sidewalk to the center of Town terminates at the southbound entry to 128 on the east side of School Street. There are paved shoulders at that point that cross south over 128 that are of a width to serve as a bike lane. Closer to town the shoulder is less broad, but traffic moves slowly enough that biking is a viable option.

4. *Consult with the Applicant's design team, as appropriate.* The only contact with a development team member was a phone call to the project architect on March 18, 2022. At that time, this reviewer asked if there were any street level views available that would allow analysis of the impact the project would have on the public realm. The project architect committed to conferring with the rest of his team to determine what could be shared.
5. *Provide an initial oral presentation to the ZBA. Said presentation typically includes comments and preliminary recommendations on the following* (presentation is scheduled for April 5, 2022):

a. *Orientation of building in relation to parking areas, open space and on-site amenities.*

Comments: Crucial to understanding the enormity of this project from a site planning perspective is the fact that the entire building footprint sits on a "man-made" plinth, 62 feet above the School Street entry point, created by massive removal of natural rock formations and some amount of soils on top of the rock. There is no cut-and-fill analysis included in the materials, so it's not known how much excavated material will remain on site, and how much will have to be removed.

Whatever the final case may be re: cut and fill, the submitted materials indicate that the slab level of the parking garage is 39 feet below the highest existing point on the site that will be excavated (the MECT estimates that the hilltop excavation will displace approximately 270,000 cubic yards of material). There are significant retaining walls proposed on all sides of the plinth to provide a broad enough space for the structure, the entry drive, infiltration areas, and a wastewater leaching field. It is clear that the area of the plinth is at its maximum, given existing environmental site constraints that include extreme grade changes, vernal pools, wetland setbacks, and a river setback...and, of course, the need to ring the buildable area with a ramped access drive. From the civil engineering drawings, it

appears that in order to create the platform for the building, access to it, and area for infiltration, approximately 7.3 acres will need to be completely cleared of all existing vegetation, and virtually all of the existing grades within that area will be modified. Note that additional clearing and grading will have to happen on the southern extension of the site to provide additional leaching fields. This reviewer has made no assumptions as to other potential outdoor programming that may be slated for the southern site (as none are stated in the application materials).

The proposed building on top of the plinth is a large, H-shaped, 136-unit, three to four-story structure, at its highest, 46 feet above the adjacent grade. At its outside dimensions, the building spans 475 feet north-to-south, 264 feet east-to-west. The building residential footprint is approximately 57,000 GSF, with a building total of approximately 262,000 GSF that includes 92,000 SF of parking at the bottom level (the parking footprint is larger than the residential footprint). The garage encloses 220 parking spaces. There are an additional 16 spaces provided outside of the garage. 214 of the spaces are "standard", 6 are compact. The unit mix is 55@1-bedroom, 66@2-bedroom, and 15@3-bedroom. That makes a total of 232 bedrooms.

Included at the first residential level is access to an amenity courtyard atop the parking garage, as well as a non-habitable garage roof area. It is not clear from the drawings whether the non-habitable roof area is vegetated or finished with a pattern of decorative stone ballast (landscape drawings say stone, architectural say "extensive green roof"). Amenities in the north courtyard are not detailed in the landscape drawings, but a note indicates that they will include a 4-foot-deep pool, cabanas, site furnishings, synthetic turf activity area, planters, outdoor bar and kitchen, fire pit, and areas of green roof. It does not appear from the architectural plans that the units surrounding the courtyard will have direct access to it. Drawings note amenity courtyard is a total of 14,944 SF. Unspecified indoor amenities occupy 9,643 SF.

In addition to the north courtyard, there is a 3,350 SF, elevator-fed common roof deck indicated on the roof plan. There does not appear to be any additional information provided regarding the programming of that space.

There is an exterior at-grade open space at the southwest corner of the building that would be accessible from the parking garage and from the southwest stairwell, potentially also from the driveway at the proposed fire access road. It appears to include about 8400 SF of "flat" space. That area is rendered on the Landscape Plan as a gridded pattern. Its potential function...other than snow storage...is not indicated on any of the drawings (civil, architectural, landscape).

The civil engineering drawings indicate an accessory building at the southern most part of the built site, outside of the ring road. It is labeled Wastewater Treatment Facility. No additional information is included in the architectural series of drawings.

Applicant Response:

Since the Peer Review's issued this comment letter, the Applicant has since submitted a revised engineering plan set including requested details. The first floor architectural plan, A100, has been updated to remove the reference to a green roof on the South courtyard. For details of 1st floor roof areas, please refer to landscape plans.

A nature themed play area will be located in the southwest corner of the building as outdoor recreation space and is currently shown on the revised Landscape plan L200.

The wastewater treatment facility has been removed from the project and in areas where WWTP infrastructure previously existed, a large lawn multi-use open space area is now provided as additional exterior amenity space and reflected on sheet L200.

b. Function, use and adequacy of open space and landscaped areas.

Comments: Given the unit count and mix (232 bedrooms, which provides 96 bedrooms outside of the primary bedrooms), combined with the relative isolation of the site, this reviewer believes that the outdoor usable space is not sufficient. The residents of the proposed development will largely rely on on-site amenities for day-to-day recreation, which at a minimum, would suggest adding active play areas for children of varying ages to recreate with their families. This includes all children who are too young to walk or bike independently to the outdoor spaces nearby

that could potentially be accessed by School Street and beyond. Importantly, current plans do not include a sidewalk or bike lane that connects the building to the public way, which beyond further isolating the residents, is likely a violation of requirements of the Massachusetts Architectural Access Board.

While no detail drawings are provided, it appears that the function of the northern courtyard will accommodate a variety of uses. Care should be taken to ensure that there are suitable buffers that protect the privacy of the 7 units that surround and are at the level of the courtyard.

Applicant Response:

While MAAB has not provided any formal consultation or opinions about the requirement for a sidewalk connection, during preliminary conversations MAAB representatives have expressed little concern about the connection to the ROW due to the lack of existing sidewalk or bicycle infrastructure. With that said, we have submitted plans showing an internal sidewalk connecting to the School Street. The Applicant would be comfortable with a condition requiring the construction of this internal sidewalk providing the Town designs and constructs sidewalks in School Street. Otherwise, the internal sidewalk would be a sidewalk to nowhere.

As part of the exploration into open space planning at the southwest corner of the building, the design team has included programming of an active children's play area. The elimination of the wastewater treatment facility, in conjunction with the leveling of an area to accommodate subsurface infiltration, has unlocked a large area of the site which is now programmed as a multi-use open space amenity and part of the open space network on site.

There is currently a landscape buffer separating the units adjacent to the north courtyard from the common areas of the rooftop, as shown on landscape plan L200. This will be further defined as the project evolves.

c. *Use and treatment of natural resources.*

Comments: Most natural resource issues associated with this project are outside of this reviewer's expertise, and much has been written and submitted for record. Included are concerns for wildlife, well water contamination, wetland and vernal pool disturbances, etc. However, while it is outside of my expertise, it is clear that this proposal has no "slack" built into the site plan for accommodating unforeseen conditions that may be encountered during construction, or environmentally-related consequences that may emerge over the life of the project after it is occupied. All aspects of the project that make it arguably credible are pushed to the limit, ranging from driveway slope to available area for storm and wastewater management. In this reviewer's opinion, this absence of "slack", combined with the shortage of usable outdoor space creates a strong argument for cutting down on the scale of the development.

Applicant Response:

Ground level perspectives have been provided by the design team showing the experience along the public way. The exhibits reflect perspectives from the entry drive and show the extent of existing foliage to remain, as well as revisions to site contours and new planting and screening.

The elimination of the wastewater treatment facility, along with adding potential open space, also creates a generous amount of "slack" in the site plan in the event any unforeseen circumstances are encountered during construction.

d. *Building design, setbacks, massing and scale in relationship to the surrounding context and topography.*

Comments: As noted above, the surrounding context within a half mile in all directions is dominated by undeveloped, wooded areas, with a minimal amount of nearby commercial uses. The site falls within the Limited Commercial District established by the Town. While it is clear that the proposed housing type is not typical for the Town (or anything nearby, whether in Manchester by the Sea or Essex) the application materials that have been submitted for review are not sufficient to understand how visible the project may be from the public realm.

The most important missing documentation are ground-level perspectives that accurately coordinate the proposed site contours, the Landscape Plan, the building, the entry drive, and the screening landscape materials that will be left in

place on the periphery of the site. Critical to understanding the views at night and during winter months is cataloging the types of vegetation left in place (specifically, deciduous or evergreen, and well as height). Of primary concern are views from both directions on School Street, as well as from the trail along Old School Street.

If the building is visible from School Street, the north and east elevations would be the most prominent. Along the east, the building is virtually all 3-stories in height, and features the main drop off and resident entry. The north elevation is four stories, and includes the vehicular entry with the driveway turn-around. The most notable aspect of the building is the length of the facades, versus their height (the north elevation is 402 feet long). Efforts have been made in the buildings' design to break up the length of the elevation with two-story bays/balconies separated by periodic full-height, monochromatic breaks, along with variation in color between the ground level and upper two stories. Clapboard exposures are also varied to create articulation and visual interest. The moderate height of the building is accentuated with a heavy, projected cornice and layered fascia.

The four-story areas of the building introduce a base of field stone that surrounds the garage space. From the rendered elevations, it would appear that a fully mechanically-ventilated garage is anticipated, as there are no large areas of louvers indicated that would accommodate a naturally ventilated system. This assumption should be confirmed by the design team, or alternative facades submitted that include façade areas dedicated to garage ventilation.

In summary, this reviewer's opinion is that beyond the use of clapboard and stone, this structure will be perceived as unique, unlike anything else in Manchester or Essex. The answer as to whether it is "contextually appropriate" (as stated in the application materials), may be based on how visible it is from the public realm. Given that the base zoning of the site is commercial, an argument could be made that the structure would not necessarily have to resemble typical residential housing types in order to "fit in."

Applicant Response:

Ground level perspectives from public way have been provided as part of this submittal.

While the full garage mechanical system will be designed as part of the Applicant's preparation of construction documents, the anticipated and potential garage louver locations will be dashed on the architectural elevations, sheets A200 and A201, to show design intent.

Additional evergreen screening is proposed along Old School St. to buffer views between the conservation trail and the developed area of the site. This is depicted on landscape plan L100.

e. Viewsheds of the project visible from the public street, public areas and from the vantage point of nearby residential neighborhoods.

Comments: Most importantly, as noted above, more information is required from the development team to accurately assess the visual impact of the project from the public realm.

Shadow studies have been included in the submitted materials. Not surprisingly, given the isolation of the site, there is little concern generated by these studies (other than perhaps shadows cast within the northern courtyard). These studies would be more useful if they included "pre-construction" along with the postconstruction diagrams (primarily to understand if there is any change on sunlight exposure on surrounding wetlands, vernal pools, streams, and trails, which is a "non-architectural" concern that has been voiced by other reviewers).

Applicant Response:

A Shadow impact study of the project has been provided to show the shadow impacts from the proposed development in comparison to the existing condition.

f. Pedestrian and vehicular access and circulation; adequacy of accessibility provisions. Of particular interest are the implications of access and egress in terms of pedestrians, bicyclists and motorists. Adequacy of parking facilities.

Comments: The location of the site is currently not pedestrian friendly, although it appears that the Town will expand the sidewalk along School Street if this project proceeds. As important, as noted above, there is no walkway or bike path that brings the residents down 62 feet from the garage level to public street level. Even if there were a sidewalk and bike path, as has been discussed by numerous reviewers, the slope and length of the driveway are of serious concern. Particularly in poor weather conditions, it could be daunting for children and parents to reach School Street for School bus drop-off and pick-up. If parents are forced to drive down, where will they park while waiting?

While this reviewer will not opine on the adequacy of vehicular parking, the board should request more detail regarding the number and type of bike spaces that can be accommodated in the area designated “flexible bike and tenant storage” on the garage plan. Given the location of the development, one would expect a generous ratio of bike spaces per unit.

As far as other “circulation issues”/questions:

- What is the Applicant’s proposal for a school bus (and perhaps future MBTA shuttle bus) waiting area/shelter?
- Given the “motor-dependence” of the site, a significant number of EV parking stations should be provided. At a minimum, infrastructure for expansion of the number of spaces should be built into the project, including the capacity of the project’s transformer(s).
- Bicycle parking should be provided at appropriate locations within the site for visitors.

Applicant Response:

We have submitted an updated garage plan, drawing 1/A100, showing bicycle count within the garage space. Visitor spaces on-site have also been included near the main building entry, as shown on landscape plan L200.. Bicycle parking will be accommodated in a variety of places within the garage and will include a generous number of bicycle spaces as well as a flexible tenant storage location that can be used for personal items or bicycles. This storage area will be open and covered by the building’s sprinkler system.

A roof overhang has been added to the pump house structure at the entrance to the site. Benches have been provided under the roof for students waiting for the bus. This structure is depicted in the School Street Entry context perspective as well as sheet L100.

The landscape plan, L200, has been updated to include additional exterior bike storage at the main building entrance.

g. Integration of building and site, including but not limited to preservation of existing tree cover, if any.

Comments: The building is not integrated into the existing site, and only marginally fits into the site that is created through large scale excavation and creation of retaining walls. No tree cover is preserved within the primary built area, and more information is required to fully understand the proposal for retaining existing trees outside of the modified site (see comments above).

Applicant Response:

A significant amount of the existing forested vegetation is preserved at the edges of the site as shown on landscape drawing L-200, marked as “PROP. EDGE OF EXISTING VEGETATION (TYP.)”. The impact of this existing foliage to screen the project has been shown on the ground level perspective views.

h. Exterior materials.

Comments: Building elevations have been annotated to indicate material selections. This reviewer has no issues with what is proposed.

i. Energy efficiency.

Comments: Materials are not adequately developed at this point to determine the degree to which the developer may commit to sustainable features that exceed what the Massachusetts Building Code requires. Current plans do not indicate areas of PV or solar hot water panels.

j. Exterior lighting.

Comments: The latest application materials include a site lighting plan, with reference to both building-mounted and pole-mounted fixtures. It is not clear whether they are Dark Sky compliant. Depending upon the project's visibility from School Street, and given the project's significant elevation off of the public way, consideration could be given to substituting bollard-mounted fixtures for pole-mounted to limit visibility from below.

k. Proposed landscape elements, planting materials, and planting design.

Comments: Landscape plans are included in the submission, and this reviewer has no issue related to how the landscaping functions within the project site. However, it is not clear how the landscaping design, including the preservation of areas of existing growth, will serve to buffer the views of the project from the public realm.

Applicant Response: Refer to response to g. above

l. Feasibility of incorporating environmental and energy performance standards in the design, construction and operation of the buildings.

Comments: There are a multitude of third party environmental and energy performance standards that are more rigorous than the building code minimum, including LEED, Energy Star, Passive House, and Enterprise Green. Because Manchester by the Sea is a Stretch Code community, as that code continues to evolve, the base line for energy efficiency will be higher than non-adopting communities.

m. Any other design-related considerations identified by this peer reviewer, ZBA, town staff, or the citizenry of Manchester by the Sea or their advisors.

- Car sharing spaces (ZIP Car, etc.) should be included within the parking garage.
- Create a detailed Transportation Demand Management program for the site. This may include an Applicant-provided shuttle service to the MBTA, build sidewalks along School Street frontage, etc.
- Given the scale and intensity of site coverage, provide a preliminary construction management plan that ensures constructability and minimizes impact to the community. Of particular interest is development of cut and fill quantities. Recognizing that there is a need for fill in some parts of the site, note that if the cut required to take down the hill is actually on the order of 270,000 cubic yards as noted in the MECT letter, there could be a truly significant number of truckloads of material taken off the site (270,000 cubic yards represents between 17,000 and 27,000 truckloads).
- Integrate Universal Design features in the development.
- Developer should provide an evacuation plan for all vehicles on the property.
- Provide additional details for retaining walls, particularly in areas where they may be retaining storm or wastewater.
- Applicant should provide more details for the wastewater treatment plant.

Applicant Response:

The Applicant will not be featuring any zip car spaces as this will not be a desirable location for those companies due to the anticipated low utilization rates.

While a full cut and fill analysis has not been performed, the Applicant anticipates that much of the excavated material can be used on site as part of the construction process and as such, most of that excavated material will never leave the site. The Applicant is anticipating providing a preliminary cut and fill analysis prior to the close of the public hearing.

The Applicant has met on multiple occasions with the Fire Department, who has opined on the public record his level of comfort with the proposed design. Additional fire safety details will be provided as a condition of the building permit issuance.

The wastewater treatment plan has been eliminated from the utility program. We will endeavor to provide some representative samples of what the project's retaining walls may look like.

n. Techniques to mitigate visual and other impacts.

Comments: This reviewer believes that the proposed development poses some very challenging problems, in no small part because of its aggressive approach to “making” the site, combined with its relative isolation from public amenities. At the end of the day, the built development has a need for “self-sufficiency” that can be very difficult to achieve, particularly because the manufactured site is so thoroughly filled with building, vehicular circulation, and other critical infrastructure.

So, while mitigation of visual and other impacts must be considered in order to determine if the project is adequately adapting to, or screened from the existing pattern of development with respect to physical form and associated impacts (which is why more descriptive materials should be required from the Applicant by the ZBA), as important is the need to assess the quality of life for the future residents, particularly with respect to the project’s capacity for “self-sufficiency.”

Expanding on the issue of integration into the community...and connected to the isolation that may be experienced by residents due to the minimal on-site useable outdoor space and the difficulty, other than by car, of accessing “downtown” Manchester...consideration should be given to studying mechanisms that will foster better integration of the development with the Town at large. Other than to visit residents, the site offers little that would be inviting to anyone who doesn’t live there.

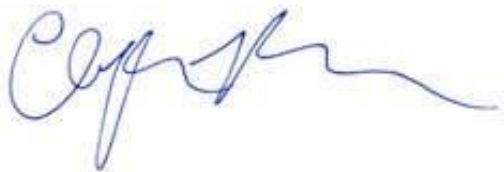
The construction of a walkway and bike path along the entry drive would help make the connection. Another possibility could be to develop a trail system (and parking) so that the community could utilize the significant unbuilt site area. In that way the development would become familiar to a broader population.

6. *Participate in meeting(s) with municipal staff and the developer team (“working sessions”), to address to the ZBA’s charge(s) to the developer.* No working session has occurred at this point, nor has one been scheduled.

In the briefest of summaries, this reviewer believes that while this site could be well suited in some aspects for a 40B development, the multitude of problems created by the sitework necessary to support a project of this scale are daunting. Typical strategies for cutting back on scale of the project to provide “slack” to make things work better still face significant issues given the topography and adjacency to resource areas.

Of critical importance at this stage is getting better depictions of the proposal from nearby context that will make it possible to assess its impact on the public realm and abutting properties, and as importantly, to facilitate consideration of alternative approaches to a very tough site.

Sincerely,
DAVIS SQUARE ARCHITECTS, INC

A handwritten signature in blue ink, appearing to read 'C. Boehmer', with a long, sweeping horizontal line extending to the right.

Clifford Boehmer AIA
Principal