

MEMORANDUM

TO: Mr. Marc Resnick
Director of Land Management
Town of Manchester-by-the-Sea
10 Central Street
Manchester-by-the-Sea, MA 01944

FROM: Daron Kurkjian, PE, LSP, Team Leader
M. James Riordan, LEED AP, Team Leader
Weston & Sampson Engineers, Inc.

DATE: June 6, 2024

SUBJECT: Supplemental Peer Review No. 1: Cell Signaling Technology
Traffic Engineering
Proposed Phase I Office Building and Garage

Introduction

Weston & Sampson Engineers, Inc. (Weston & Sampson) was requested by the Town of Manchester-By-The-Sea (the Town) to provide a peer review of the Site Plan and Special Permit for the Cell Signaling Technology development by Old Quarry LLC, the Applicant. Weston & Sampson understands that the Town is reviewing a Site Plan Approval for the Development for of the Old Quarry parcel. The land includes Town Lots 7 and 8 on Assessor's Map 37. Additional details are copied below from the Applicant's description of the project:

"Phase I will include the construction of a five-story building containing 127,000 square feet of floor area, a lobby/atrium containing 6,972 square feet of floor area, a loading dock containing 1,629 square feet of floor area, and a portion of the attached five-story parking garage with 227 parking spaces, 45 surface parking spaces (including 16 at the trailhead of the Trustees' property), and 2,855 feet of a looped driveway. Phase II will include the construction of a five-story building containing 133,000 square feet of floor area connected to the westerly side of the lobby/atrium, an addition to the easterly side of the parking garage with 252 parking spaces, and 16 surface parking spaces. The improvements will be connected to and served by municipal sewer and water lines which are to be extended to the Property under Route 128 from Mill Street." (Source: Applicant submission to Town Planning Board, January 18, 2024)

On April 12, 2024, Weston & Sampson issued an initial memorandum to summarize the results of our peer review of initial application documents. On May 21, 2024, the applicant provided a response to the initial peer review comments. Requirements of specific Town Bylaws are discussed further under the

Peer Review section of this letter report. Initial materials that we reviewed to prepare this letter report include those submitted with the Site Plan Review as summarized below:

1. Special Permit/Site Plan Review Application;
2. "Permit Site Plan — Cell Signaling Technology at the Old Quarry," dated January 12, 2024, prepared by Hancock Associates (21 sheets);
3. Architectural Plans entitled, "Cell Signaling Technology at the Old Quarry," dated January 10, 2024, prepared by HGA (9 sheets);
4. Drainage Report entitled, "Stormwater Report in Support of Special Permit Application for Atwater Avenue (Map 37, Lots 7 and 8), Manchester By the Sea, MA," dated January 2024, prepared by Hancock Associates,
5. Ecological Assessment Memorandum, dated November 13, 2023, prepared by Biohabitats;
6. Signage Plan and Design Details, dated January 11, 2024, prepared by HGA (7 sheets);
7. Geotechnical Report, dated February 25, 2022, prepared by GZA;
8. Landscape Plans entitled, "Cell Signaling Technology at the Old Quarry," dated January 12, 2024, prepared by HGA (22 sheets);
9. Site Lighting Plan entitled, "Cell Signaling Technology at the Old Quarry," dated January 12, 2024, prepared by HGA (2 sheets);
10. "Site Lighting Fixture Cutsheets," dated January 12, 2024, prepared by HGA;
11. "Traffic Impact, Access and Parking Study," dated January 13, 2023, prepared by TEC, Inc;
12. "Fiscal Impact Analysis," dated October 23, 2023, prepared by Fougere Planning & Development;
13. "Parking Structure Parking Geometrics," dated April 17, 2023, prepared by Walker Consultants;
14. Certificate from the Commonwealth of Massachusetts, dated July 24, 2023, in response to Environmental Notification Form, dated May 22, 2023; and
15. Decision of the Manchester Zoning Board of Appeals filed with the Town Clerk on December 13, 2023.

Supplemental Applicant Files provided on May 21, 2024, include the following:

- A. "Response to Peer Review Cell Signaling Technology", dated May 17, 2024, prepared by Hancock Associates;

Traffic Items:

- B. "Cell Signaling Technologies at the Old Quarry – Manchester-by-the-Sea, Massachusetts Traffic Management Component," letter dated May 8, 2024, prepared by TEC, Inc.;
- C. "Traffic Impact, Access, and Parking Study," June 13, 2023 revised May 8, 2024, prepared by TEC, Inc.

Site Civil/Stormwater:

- D. "Permit Site Plan — Cell Signaling Technology at the Old Quarry," dated January 12, 2024, revised May 20, 2024, prepared by Hancock Associates (24 sheets); and
- E. "Stormwater Report in Support of Special Permit Application for Atwater Avenue, (Map 37, Lots 7 and 8), Manchester By the Sea, MA" dated May 2024, prepared by Hancock Associates.

Weston & Sampson attended the Planning Board hearing on March 11, 2024, during which the Applicant presented a summary of the proposed development. In April 2024, we were saddened to learn of the untimely death of Planning Board Chair, Ronald Mastrogiacono. Additional details of the are included in the Town's announcement, "Town of Manchester-by-the-Sea Mourns the Loss of Elected Official": <https://manchester.ma.us/DocumentCenter/View/6915/Ron-Mastrogiacono-Announcement-2024>).

In May 2024, the Planning Board voted new members and the current Planning Board Chair, Sarah Creighton. On May 28, 2024, Weston & Sampson attended the Planning Board hearing during which the applicant presented the project and technical comments were continued to the June 10, 2024, hearing.

Peer Review

This memorandum serves as a supplemental peer review document following the Town Zoning Bylaws § 6.3 Performance Standards for Special Permits and Site Plan Review and the Town General Bylaws Article XXIII Stormwater Management Special Permit. Specifically, this review covers the following **bolded standards** and non-bolded items will be reviewed in future reviews:

1. (§ 6.3.4) Outdoor Lighting Standards.
2. (§ 6.3.5) Noise Standards.
3. (§ 6.3.6) Topographical Changes and Clearing.
4. (§ 6.3.7) Site Development Standards.
5. (§ 6.3.8) **Pedestrian and Vehicular Access; Traffic Management, Parking.**
6. (§ 6.3.9) Aesthetic Standards.
7. (§ 6.3.10) Landscaping, Walls, and Fences.
8. (§ 6.3.11) Utilities; Security; Emergency System Standards.
9. (§ 6.3.12) **Fiscal Analysis Standards.**
10. (Article XXIII §7-§8) Stormwater Management Plan & Operation and Maintenance Plans

The format of each reviewed items is the *italicized applicable standard and enforceable policy*, our evaluation and analysis, and an underlined initial recommendation or action for the applicant. For further clarification gray comments are those previously made, green text indicates comments that require no further action; orange text indicates open comments or questions.

Weston & Sampson reviewed the application based on the following bylaws and policies as well as engineering industry standards:

- Town Zoning Bylaws § 6.3 Performance Standards for Special Permits and Site Plan Review
- Town General Bylaws Article XXIII Stormwater Management Special Permit

1.0 OUTDOOR LIGHTING STANDARDS (Excluded from this memo)

2.0 NOISE STANDARDS (Excluded from this memo)

3.0 TOPOGRAPHICAL CHANGES AND CLEARING (Excluded from this memo)

4.0 SITE DEVELOPMENT STANDARDS (Excluded from this memo)

5.0 PEDESTRIAN AND VEHICULAR ACCESS; TRAFFIC MANAGEMENT, PARKING

Weston & Sampson reviewed the Applicant's documentation related to the Town's 5.0 Pedestrian and Vehicular Access; Traffic Management, Parking Standards. The following items include a review of the submitted materials that follows from the Town Zoning Bylaws requirements of § 6.3.8 Pedestrian and Vehicular Access; Traffic Management Standards:

The proposed development and/or redevelopment shall be designed with a forecast for the next five (5) years from the time of application to (i) minimize hazards to public health and safety as a result of traffic; (ii) provide safe access and circulation on the site for expected vehicles, bicyclists, pedestrians, and emergency vehicles; (iii) provide off-site traffic mitigation, where required, to offset the impact of the development; (iv) reduce the traffic impacts of the proposed development on the area and the Town by incorporating traffic management devices; and (v) minimize the impact on scenic roads, historic districts, natural resources, and community character. The development shall not degrade safety for pedestrians, bicyclists, motor vehicle occupants, or property.

5.1 Access:

§ 6.3.8.1: *To the extent feasible, access to nonresidential uses and structures shall be provided via one of the following: (i) Access via a common driveway serving adjacent lots or premises; (ii) Access via an existing side street; (iii) Access via a cul-de-sac or loop road shared by adjacent lots or premises. Access via roadways abutting residential districts shall be avoided where possible. Access and egress to a development with frontage on more than one street shall be in a manner that causes the least impact to the surrounding neighborhoods as determined by the Planning Board or SPGA.*

The site has two existing driveways that are proposed to remain. **No action needed.**

5.2 Driveways:

§ 6.3.8.2: *Each development shall be served by an adequate driveway. The Planning Board or SPGA may, in certain circumstances, allow additional driveways as a condition of approval where the access is shared or the project has frontage on two separate streets. All driveways shall be designed to afford adequate sight distance to pedestrians, bicyclists, and motorists exiting to public ways. Improvements may be required on the public way for vehicular turning movements in or out of the site and safe pedestrian access to adjoining sidewalks, paths, walking trails or bikeways.*

The site has two existing driveways that are proposed to remain. **No action needed.**

5.3 Curb Cuts:

§ 6.3.8.3: *Curb cuts shall be limited to the minimum width for safe entering and exiting as determined by the Planning Board in consultation with Town public safety departments. The location of driveway openings in relation to traffic and to adjacent streets shall provide for the convenience and safety of vehicular and pedestrian movement within the site. The number of curb cuts on state and local roads shall be minimized.*

The site has two existing driveways that are proposed to remain. **No action needed.**

5.4 Interior Circulation:

§ 6.3.8.4: *The proposed development shall assure safe interior circulation within its site by separating pedestrian, bikeways, and vehicular traffic.*

Sidewalks are proposed internal to the site with a sidewalk adjacent to most internal roadways and connecting the building, parking garage and pedestrian amenities. Please see Part 5.12 discussion of § 6.3.8.12a and § 6.3.8.12b for recommendations about internal connections to external road.

Based on applicant information provided, supplemental information is not required. **No action needed.**

5.5 Transportation Plan Approval.

§ 6.3.8.5: *The proposed development shall be subject to Transportation Plan approval by the Planning Board or SPGA. The Transportation Plan shall consist of the following information:*

§ 6.3.8.5a: *A plan showing the proposed parking, loading, and traffic circulation within the site; access and egress points; and other features related to traffic generated by the proposed use.*

Sheet C7.1 of the Permit Site Plan is labeled "TRAFFIC AND SIGNAGE PLAN" and depicts the required elements per § 6.3.8.5a but is not a separate document. See part below discussion of § 6.3.8.5d for action needed.

The Applicant submitted a letter entitled "Cell Signaling Technologies at the Old Quarry – Manchester-by-the-Sea, Massachusetts Traffic Management Component" dated May 8, 2024. **No action needed.**

§ 6.3.8.5b: *A traffic study, prepared by a qualified traffic engineer licensed by the Commonwealth of Massachusetts, detailing the expected traffic impacts. For proposed development in excess of twenty-five thousand (25,000) gross square feet, the required traffic study shall substantially conform to the Institute of Transportation Engineers "Traffic Access and Impact Studies for Site Development: A Recommended Practice," latest edition (TIAS). The SPGA shall approve the geographic scope and content of the TIAS. In addition, the Applicant shall submit a Transportation Demand Management (TDM) plan tailored to the specific uses and the geographic location of the site.*

The requirement above specifies requirement of a traffic study and a transportation demand management (TDM) plan. The Applicant submitted a traffic study within which includes a chapter entitled "TRANSPORATION DEMAND MANAGEMENT" but did not submit a Transportation Demand Management plan. Weston & Sampson recommends that the Applicant provide a separate document to include the content of the indicated chapter and summary of other transportation elements from the traffic study

The Applicant submitted a letter entitled "Cell Signaling Technologies at the Old Quarry – Manchester-by-the-Sea, Massachusetts Traffic Management Component" dated May 8, 2024. **No action needed.**

§ 6.3.8.5c: *Proposed mitigation measures, if any, such as left-turn lanes, roadway widening, signage, signalization of intersections.*

The Applicant proposed the following two off-site improvements to roadway infrastructure:

1. Restripe and sign for a 5-foot buffered bike lane on School Road from the terminus of recently striped buffered bike lanes north of Route 128 to Atwood Avenue.

Weston & Sampson expects this potential improvement may be infeasible; the traffic study indicates that the roadway is 28' wide. Even without buffers, adding 5-foot bike lanes would leave

9' travel lanes where the roadway is 28' wide. If buffers are present, the travel lanes would be narrower than 9'. Furthermore, School Street does not have a sidewalk along this segment so marking a potential shoulder as a bike only space may not be preferable to the Town/State. Weston & Sampson recommends reevaluation of restriping benefits and the Town/State consider the corridor for potential complete streets improvements base with respect to presence of trailheads and conservation areas.

This improvement will require roadway widening. **Weston & Sampson notes that School Street does not have a sidewalk along this segment and recommends future design plans for the improvement consider pedestrian activity.**

2. Following opening of Phase 1, Perform a signal warrant analysis at the intersection of School Street & Route 128 NB Ramps to reevaluate if signalization would be warranted at full buildout. If so, construct a traffic signal at the intersection.

Weston & Sampson notes that the Phase 1 analysis within the traffic study indicates that the volume-to-capacity ratio is 1.03 during the AM peak hour and 0.93 during the PM peak hour for the eastbound left-turn movement. Weston & Sampson recommends that the Applicant discuss with the Town if installing traffic signal equipment is appropriate with Phase 1 as signalization may still be appropriate or if it is allowable to be delayed until after Phase 1.

Page 37 includes a reference to *MassDOT TIA Guidelines* Section 3.I.C as part of reasoning that a potential improvement may be delayed to Phase 2. The referenced thresholds are for traffic study requirements regardless of phasing and is not a requirement related to mitigation. Page 37 also provides an abbreviated analysis of Phase 1 conditions. Weston & Sampson recommends removing this reference if a revised traffic study is produced. Weston & Sampson recommends the Applicant be able to produce Phase 1 trip generation, peak hour traffic volumes and warrant analysis that were not included within the traffic study's narrative or attachments. The Synchro reports for 2033 Build conditions (without mitigation) were also not included in Attachment L.

The applicant indicates that the intersection is under the jurisdiction of MassDOT. The Applicant proposed installing a traffic signal at the intersection if requested and approved by MassDOT. **No action needed.**

The Applicant noted that "the width and extent of the buffer will be coordinated with MassDOT as part of the Permit to Access State Highway process following MEPA review" and will require roadway widening "north of the #195 School Street Driveway." **Weston & Sampson notes that School Street does not have a sidewalk along this segment and recommends considering restriping to add a shoulder that can be converted to buffered bike lanes if a sidewalk is constructed in the future.**

§ 6.3.8.5d: For proposed development in excess of twenty-five thousand (25,000) square feet of gross floor area, the Applicant shall submit a Traffic Management Component (TMC) as part of the Transportation Plan. The TMC shall provide information on the number of expected person trips to and from the site, broken down by various travel modes (e.g., single occupancy vehicle, carpool, walk, bicycle, commuter rail, shuttle bus, etc.). The TMC may also incorporate one or more of the following techniques to reduce the number of single occupancy vehicle trips by employees coming to and departing from the proposed use:

- 1) of or contribution to a Traffic Management Association (TMA) within the region, which provides shuttle services for employees and other services as may be appropriate.
- 2) Employee carpools or vanpools sponsored by the employer or the TMA.
- 3) Subsidized commuter rail passes, provided by the employer, and sold on the site or offered through payroll deduction.
- 4) Monetary incentives to employees who do not use a parking space.
- 5) On-site shower facilities and bicycle racks for employees who do not drive to work.
- 6) Other techniques as may be deemed appropriate by the SPGA or Planning Board or its traffic consultant.

Though the information is provided within the traffic study and Sheet C7.1 of the Permit Site Plan, there is not a separate document found within the Applicant's submittal documents. The Applicant indicates it will provide preferential carpool parking, develop an employee rideshare/vanpool/carpool program, electric vehicle charging stations, indoor bicycle parking, shower facilities, transit and rideshare subsidies, provide public transportation maps, guaranteed ride home program via an employee transportation coordinator.

Weston & Sampson recommends the Applicant submit a Transportation Plan including a Traffic Management Component.

The Applicant submitted a Traffic Management Component (TMC). **No action needed.**

5.6 Reduction in Parking:

§ 6.3.8.6: In consideration of the Applicant providing one or more of the above measures to reduce vehicular traffic to and from the site, the Planning Board or SPGA may reduce the number of required parking spaces below what would ordinarily be required by Section 6.1 of this By-law. To be considered for such a reduction, the Applicant's traffic engineer shall determine and justify the parking demand for the project, as well as reduction in needed parking spaces attributable to each traffic management measure.

The Applicant notes that Section 6.1 does not provide a parking ratio for research and development land use and refers to text within Section 6.1.2, "for accessory uses not listed...the required number of parking spaces to accommodate expected demand will be determined by the Inspector of Buildings, with the advice of the Planning Board." The traffic study references the Institute of Transportation Engineers' Parking Generation Manual, which rates would indicate an 85th percentile maximum parking demand of 539 spaces. The site proposes 535 spaces. **No action needed.**

5.7 Level of Service Maintenance or Improvement:

§ 6.3.8.7a: If the proposed project will result in an intersection level of service below a rating of LOS D, the Applicant may be required to provide detailed plans with a cost estimate (including reconstruction concepts), that when implemented would result in an intersection level of service rating of D or better.

Several of the study intersections are evaluated to operate at LOS E or F without the proposed development. No cost estimate is included. See also part 5.5 discussion of § 6.3.8.5c, and part 5.7 discussion of § 6.3.8.7b.

§ 6.3.8.7b: If the proposed project will result in a reduction in level-of-service of one letter grade or an increase of ten (10) seconds of delay to a signalized or unsignalized intersection, the Applicant may be

required to provide detailed plans with a cost estimate that when implemented would result in a return to existing conditions.

Weston & Sampson reviewed the traffic study and noted the following locations are projected to have a level-of-service reduction and/or increase in delay per vehicle by at least ten seconds:

1. School Street and Atwater Avenue
 -Westbound approach (single approach lane)
 AM peak hour LOS C to D (17 to 28 seconds); PM peak hour LOS C to E (15 to 49 seconds)
 No intersection specific changes are proposed, noting that the volume-to-capacity ratio is projected to be 0.86 with a queue length of approximately eight vehicles.
2. School Street and Route 128 SB Ramps
 -Westbound left-turn lane
 AM peak hour LOS D to F (30 to 59 seconds); PM peak hour LOS D to F (29 to 86 seconds)
 No intersection improvements are proposed, noting that the volume-to-capacity ratio is projected to be 0.76 with a queue length of approximately four vehicles.
3. School Street and Route 128 NB Ramps
 -Eastbound left-turn movement
 AM peak hour LOS F to F (53 to 233 seconds); PM peak hour LOS F to F (60 to 94 seconds)
 An additional signal warrant analysis is proposed after occupancy of Phase 1 and signalization proposed contingent on the results of the analysis.
4. School Street and Pleasant Street
 -Eastbound approach (single lane approach)
 AM peak hour LOS D to E (31.9 to 41.3 seconds)
 -Westbound right-turn lane
 AM peak hour LOS F (62 sec) to LOS F (87 sec)
 -Southbound approach (single approach lane)
 AM peak hour LOS F (104 sec) to LOS F (124 sec)
 No intersection improvements are proposed, noting existing intersection conditions and little change in vehicle queues.

The bylaw does not state that mitigation is required at every location meeting the specified threshold. Weston & Sampson provided the information above to assist with potential discussion regarding mitigation needs. Weston & Sampson recommends the Applicant clarify the statement on page 29 – “Project-specific mitigation at this location is not expected to change the results of the traffic operational analysis.”

The traffic study indicates that the Applicant may be required by MassDOT to install a traffic signal at School Street and Route 128 Northbound Ramps and may widen a segment of School Street to add bike lanes. Weston & Sampson provided the information above to assist with potential discussion regarding potential mitigation needs, if any.

5.8 Dangerous Intersections:

§ 6.3.8.8: The Planning Board or SPGA may require mitigation for any net increase in traffic volumes of ten (10%) percent or more at an intersection that has an accident history of more than five (5) accidents in the last three (3) years for which data is available.

The intersection of School Street and Route 128 NB Ramps is the study intersection. An additional signal warrant analysis is proposed after occupancy of Phase 1 and signalization proposed contingent on the

results of the analysis. Weston & Sampson recommends the Applicant discuss with the Town if signalization is appropriate with Phase 1 of the development.

No action needed.

5.9 Sight Distance:

§ 6.3.8.9: Acceptable sight distance shall be provided and maintained at all access locations, egress locations, and all intersections affected by the Development. At a minimum, these site distances shall meet the stricter of the Massachusetts Highway Department and American Association of State Highway Transportation Officials standards for safe-stopping sight distances.

Sight distance is adequate at the existing driveways. No action needed.

5.10 Maximum Parking:

§ 6.3.8.10: The maximum parking allowed for a development shall be the minimum number of spaces required under this Zoning By-law. The SPGA may allow a greater number of parking spaces provided the need is supported by a transportation study completed by a qualified transportation planner. 11. Mitigation. The Planning Board or SPGA may require as a condition of any special permit off-site improvements to mitigate the impact of the proposed development. Such improvements include intersection widening and traffic signals or the Traffic Management Component of the Transportation Plan, referenced above.

See Part 5.6 discussion of § 6.3.8.6. No action needed.

5.11 No Town Standard:

§ 6.3.8.11: No Town Standard

5.12 Pedestrian and Bicycle Safety:

§ 6.3.8.11: Pedestrian and bicycle circulation, and the amenities required thereof, on and off site, shall be in accordance with the following requirements:

§ 6.3.8.12a: All development and redevelopment shall provide for pedestrian and bicyclist connections on the property, and allow for possible future connections with adjoining properties, where deemed appropriate by the Planning Board or SPGA.

Sidewalk connections do not exist and are not proposed at either existing driveway. Weston & Sampson recommends sidewalks to the following locations:

- Along secondary entry/Beaver Dam Road that connects Atwater Avenue to sidewalk around Rain Garden (approximately 350'). This will allow a continuous sidewalk from Atwater Avenue to the trailhead.
- Along main entry to connect Atwater Avenue and proposed internal sidewalk (approximately 300 feet). Also add crosswalk across main entry at Atwater Avenue to improve the connection towards the Manchester Athletic Club for employees on break or after hours.

The applicant has noted that Atwater Avenue and Beaver Dam Road are outside the project limits. Drawing sheets indicate that a western portion of Beaver Dam Road is within the property limits. Atwater Avenue abuts the western portion of the property. **For the Planning Board's consideration, Weston & Sampson suggests placement of sidewalks in the following locations:**

- Along the secondary entry/Beaver Dam Road that connects Atwater Avenue to sidewalk around Rain Garden. This will allow a continuous sidewalk from Atwater Avenue to the trailhead.
- Along main entry to connect Atwater Avenue and proposed internal sidewalk.

§ 6.3.8.12b: Pedestrian access shall connect to all building entrances with further connections to local sidewalks.

Internal sidewalks connect all building, parking garage and pedestrian amenities. Weston & Sampson recommends the following:

- Add an additional sidewalk between the NW corner of the parking garage north to the proposed sidewalk/crosswalk for the adjacent to the service ramp (approximately 80'). This will separate pedestrian traffic from the service ramp along the shortest path from the garage to the Quarry Garden/north side of the proposed buildings.
- Crosswalk on NE corner of Rain Garden near Phase 2 building access is far from intersection corner. We recommend shifting the crosswalk to intersection. If a crosswalk is desirable from the building to the mid-southern portion of the Rain Garden, consider adding a separate crosswalk at south side of service ramp.

Internal sidewalks connect all building, parking garage and pedestrian amenities. *Weston & Sampson notes that the crosswalk on NE corner of the Rain Garden near Phase 2 building access is near but not at an adjacent intersection. We recommend shifting the crosswalk to intersection.*

§ 6.3.8.12c: All road and intersection widening, and new traffic signals or modification of existing traffic signals required as part of a Development or Redevelopment shall include appropriate bicycle and pedestrian accommodation.

The traffic study recommended improved pedestrian facilities with the traffic signal that may be installed at the intersection of School Street and Route 128 NB Ramps. *No action needed.*

§ 6.3.8.12d: The Planning Board or SPGA may require proposed development and redevelopment to provide sufficient rights-of-way on their properties to accommodate expected needs for bicycle and pedestrian use.

Sidewalks are proposed along most roadways. See Part 5.12 discussion of § 6.3.8.12a.

Atwater Ave appears to have sufficient ROW for a potential future sidewalk. *No action needed.*

§ 6.3.8.12e: Sidewalks, crosswalks, walkways, bike racks or other pedestrian access shall be provided to allow access to adjacent properties and between individual businesses within a development.

Not applicable as Phase I site contains a single building. *No action needed.*

§ 6.3.8.12f: If the property abuts a public bikeway/right-of-way, a paved access route to the bikeway may be required.

Not applicable. No action needed.

5.13 Location of Parking Areas:

§ 6.3.8.13: *Where feasible, the Planning Board or SPGA may require parking areas to be located to the side or behind buildings so as to provide an appropriate setting for the building within the context of the site and neighborhood and allow parking areas to be shared with adjacent businesses. The Planning Board or SPGA may require alternative studies of parking area layouts. Except where physical constraints, site configuration, or safety considerations preclude strict compliance, all parking must be accessible by driveways to the parking areas of adjacent nonresidential uses and land zoned for nonresidential uses.*

Parking is provided adjacent to trailhead on the northeast corner of the site. **No action needed.**

5.14 Parking in Required Front Setback:

§ 6.3.8.14: *The Planning Board or SPGA may prohibit parking within the required front setback.*

No parking is proposed within the front setback. **No action needed.**

5.15 Traffic Calming Features:

§ 6.3.8.15: *Traffic calming measures such as crosswalks, bike lanes, rumble strips and landscaped islands may be required.*

No internal traffic calming is discussed. Weston & Sampson does not foresee a need for adding traffic calming based roadway lengths, curvature, and provided crosswalks. **No action needed.**

6.0 AESTHETICS STANDARDS

(Excluded from this memo)

7.0 LANDSCAPING, WALLS, AND FENCES

(Excluded from this memo)

8.0 UTILITIES; SECURITY; EMERGENCY SYSTEMS STANDARDS

(Excluded from this memo)

9.0 FISCAL ANALYSIS STANDARDS

Weston & Sampson reviewed the Applicant's documentation related to the Town's Fiscal Analysis Standards. The following items include a review of the submitted materials that follows from the Town Zoning Bylaws requirements of § 6.3.11 Fiscal Analysis Standards: *The SPGA or Planning Board shall require a fiscal analysis of the proposed development to determine the long-term benefit and cost to maintain a positive net fiscal position, giving consideration to revenue estimates and actual growth in municipal service costs induced by the proposed development. The long-term social benefit to the Town shall also be taken into consideration in this analysis.*

9.1 Fiscal Impact 1:

§ 6.3.12.1: *The Applicant shall provide an analysis of fiscal costs from the development, including increases in marginal costs, assessment of the capacity of existing municipal facilities to serve the new development, and, by order of magnitude, share of capital costs if improvements are needed.*

The Applicant has provided a "Fiscal Impact Analysis" report prepared by Fougere Planning and Development which references a Net Positive Fiscal Impact Range of \$562,286.00. **No action needed.**

9.2 Fiscal Impact 2:

§ 6.3.12.2: The Applicant shall identify an order of magnitude estimate as to the extent to which this development would generate the additional need for Town services including responses from police, fire, EMS, schools and affordable housing.

The Applicant has provided this information via a "Fiscal Impact Analysis" report prepared by Fougere Planning and Development. The projected increase in utilization of the mentioned services was found to be minimal, approximating a total cost of \$35,000. **No action needed.**

9.3 Fiscal Impact 3:

§ 6.3.12.3: The Applicant shall provide an estimate of future real estate tax revenue to be generated by the project based on reasonable estimates of assessed value and current tax rates.

The Applicant has provided this information via a "Fiscal Impact Analysis" report prepared by Fougere Planning and Development. The document noted that the proposed lab/office complex will generate approximately \$597,000 in gross revenues per year. **No action needed.**

10.0 STORMWATER MANAGEMENT STANDARDS (Excluded from this memo)