



February 12, 2024

Franklin Zoning Board of Appeals
Bruce Hunchard, Chair
355 East Central Street
Franklin, MA 02038

Subject: 121 Grove Street – Comprehensive Permit – 2nd Peer Review

Dear Mr. Chairman:

Hancock Associates has been retained by your Board to perform a civil engineering technical review of the 121 Grove Street Comprehensive Permit. Hancock Associates has reviewed the revised Comprehensive Permit submission and offer the following as initial guidance to the Board.

Initial Documents Reviewed

1. Application dated October 31, 2023
2. Site Plan prepared by RJ O’Connell dated 12/18/23 containing 21 sheets. The site plans are not signed. The Existing Conditions Plan within the set is signed and stamped by Robert E. Constantine, II P.L.S.
3. Architectural floor plans, elevations and renderings prepared by CNK Architects.
4. Narrative Description prepared by Attorney Richard R. Cornetta, Jr.
5. Project Eligibility Letter from Massachusetts EOHLC dated October 2, 2023.
6. Requested Waiver List
7. Traffic Assessment dated October 2023 prepared by Vanasse & Associates
8. Certified Abutters List
9. Cover Letter for Revisions from RJ O’Connell dated January 2, 2024.
10. Franklin Zoning By-Law Chapter 185
11. Franklin Housing Production Plan April 2022.
12. Franklin Zoning Board of Appeals Comprehensive Permit Rules March 31, 2005.
13. Franklin Subdivision Regulations Chapter 300
14. Franklin Public Way Access Permit Regulation Chapter 131
15. Franklin Stormwater Regulations Chapter 153
16. Franklin Sidewalk and Street Regulations Chapter 155
17. Franklin Water Regulations (Town Council) Chapter 179
18. Franklin Water Regulations (Board of Health) Chapter 263

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Revised Documents Reviewed

1. Site Plan prepared by RJ O'Connell dated 12/18/23 and revised 2/2/24 containing 26 sheets.
2. Stormwater Management Report prepared by RJ O'Connell dated 2/2/24.
3. Response Letter prepared by RJ O'Connell dated 2/5/24.
4. Landscape and Lighting Plans prepared by MDLA dated 2/5/24 containing 15 sheets.
5. Letter dated December 12, 2023 to the ZBA from Michael Maglio, P.E., Town Engineer

Initial Review of Submission

760 CMR 56.05 contains the required elements of a submission of a Comprehensive Permit to the Zoning Board of Appeals. The following is a review of the submission with regard to my civil review of these requirements:

- Preliminary site development plans with the locations and outlines of proposed buildings; the proposed locations, general dimensions, and materials for streets, drives, parking areas, walks and other paved areas; and proposed landscaping improvements. Any project of five or more units must have a site plan stamped by a registered professional architect or engineer.
The applicant has satisfied this requirement. A Plan set has been submitted. The plans have been developed to a very high level far beyond the preliminary regulatory threshold.
No further comment required.
- An existing condition report on the proposed site and the surrounding areas.
The applicant has complied with this requirement. An existing condition plan is part of the site plan set.
No further comment required.
- Tabulation of proposed buildings by type, size, and footprint, impervious coverage, and open space, including percentage of tract to be occupied by buildings, parking and paved vehicular areas.
The applicant has submitted tabulations for the buildings within the application.
No further comment required.
- A preliminary subdivision plan if the project involves a subdivision.
A subdivision is not proposed here.
No further comment required.
- A preliminary utilities plan (water, wastewater, drainage, and storm water management facilities).
The applicant has satisfied this requirement within the site plan set referenced above. The plans have been developed to a very high level far beyond the preliminary regulatory threshold.

No further comment required.

Technical Review

Hancock has reviewed the **revised** plans and supporting documentation for soundness of methodology and calculations and conformity to standard engineering practice. We have also reviewed conformity to or deviation from by-laws, regulations and bylaws as they apply to issues of on-site engineering including grading, stormwater management, sewage and site traffic circulation. Lastly, we looked at off-site impacts. The review is all done within the context of the regulation's call for only the submission of preliminary plans. Our goal is to give the Board comfort that ultimately the project can be built in a manner that will protect the general public and future residents and visitors to the site through review, requests for additional information and suggestion of certain conditions of approval that will aid in meeting that goal.

Zoning Compliance

Comment Z1: The site is located in the Industrial Zoning District with Rural Residential I District abutting the property to the north and west. A small portion of the site in the northeast is located within a Zone II Water Resource District. Section 185-13, Schedule of Lot, Area, Frontage, Yard and Height Regulations limit building to 60 feet in height. The proposal has buildings as tall as 68 feet with 5-story buildings. There are also four story building an done split buildings with four stories in the back and five in the front to assist with overcoming topographic challenges. The architectural elevation calls for the buildings to be 57 feet in height. The Applicant should clarify the discrepancy between the 68 feet called for in the list of requested waivers and the plans.

RJO Response: The proposed buildings are 57 feet tall measured from the finished floor to the parapet of the main roof structure. An architectural element adds an additional 5 feet as shown on the architectural drawings (i.e. maximum height of 62 feet).

The definition of Building Height in the zoning bylaw is:

“The vertical distance, in feet, from the average finished exterior grade on the street side of a building to the highest point of the roof or parapet for flat or shed roofs.

As the average exterior grade varies, we conservatively suggested a waiver to 68 feet. A waiver to allow the height of 57 feet and 62 feet as defined above may be appropriate.

HA Comment: Hancock is satisfied with this response.

Comment Z2: The proposal requests a waiver from Section 185-21.B.(3) Parking Loading and Driveway Requirements for two spaces per unit, proposing 1.6 per unit. Given the project is 1.8 miles from the Forge Park MBTA Commuter Rail Station, we feel this parking ratio is a bit low. Suburban multi-family projects should provide 1.75 spaces per unit. There are an additional 17 spaces provided at the clubhouse and Buildings 1, 2, and 4 are close to or above the 1.75 mark. The Applicant should look to add spaces at Buildings 3 and 4.

RJO Response: This comment aligns with Fairfield’s position that approximately 1.74 spaces per unit is an appropriate ratio. As such, a total of 574 spaces are proposed. The parking distribution provides for access to the clubhouse, appropriate ADA compliance and some covered parking. Convenient pedestrian connections are provided in order to accommodate access to parking in other areas of the Site as needed.

HA Comment: Hancock still believes Building 3 and 4 may still have insufficient parking. Given the distances between the additional parking and the entry points for Buildings 3 and 4 it may be unreasonable to think people are going to park and walk. Hancock defers to the Board in its deliberation of the parking waiver on this item.

Comment Z3: The proposal calls for 32 three-bedroom units, which is one less than the required 10%. Additionally, the dispersion of the three-bedroom units is not 10% in each building. Buildings 1, 4, and 5 are short of the 10% while Buildings 2 and 3 are over 10%.

Response: Acknowledged. The applicant will increase the three-bedroom count and otherwise comply with the applicable MassHousing requirements.

HA Comment: Hancock is satisfied with this response.

Comment Z4: The proposal requests waivers from setback from accessory structures (retaining walls) to front and side lot lines. The plans and waiver list do not identify the setbacks provided. These should be enumerated in both the plans and waiver list. The retaining walls to the south of Building 1 abut the NGRID substation parcel and therefore the waiver is appropriate. The retaining wall between Building 3 and Grove Street may be of concern to the Board when also considering the waiver from Section 185-30 Tree Planting, where additional trees are required when buildings are proposed less than 150 feet from the right of way. Building 3 is proposed at 67.9 feet. The Bylaw calls for trees every 30 feet, the Landscape Plan depicts trees every 54 feet. It does not seem unreasonable to request the frequency of trees be increased in this area. The waiver for the retaining wall to the north of Building 5 seems appropriate given the neighboring property is the state forest.

RJO Response: The setbacks for the proposed retaining walls to each of the property lines have been added to the Overall Site Plan, Sheet OS-1.

Section 185-30 states “Any lot abutting a right-of-way of 75 feet or more in which a building is constructed within 150 feet of the right-of-way must have trees planted at least every 30 feet in a row between 30 and 50 feet back from the right-of-way, unless a sufficient number of trees already exists.” It is not clear if this means width of the right-of-way or length along the right-of-way. If it is width this requirement does not apply as the Grove Street right of way is only 50 feet.

We believe the proposed landscaping and tree planting provided appropriate for the size and scale along Grove Street.

HA Comment: We differ to the Board on deliberating on this waiver. We repeat that compliance with the requirement for 30-foot tree spacing instead of 54 feet proposed is not unreasonable and would help offset the impact of the waiver.

Erosion Control

Comment EC1: The site development involves a significant amount of earthwork on a very large hillside with marginal soils. The erosion control plan notes the use of proposed infiltration basins for temporary sediment basins. The number and location of the basins will not suffice to control sediment from disturbed areas. Sediment basin sizing calculations should be performed for each pre-development subcatchment area and a suitably sized temporary sediment basin provided at the lower end of the area with appropriate outlet control.

RJO Response: The Demolition and Erosion Control plans (C-1A & C-1B) have been revised to provide the sufficient number and size of temporary sediment basins. An exhibit plan depicting the contributing subcatchment area for each temporary sediment basin and the associated basin sizing calculations is enclosed with this letter. Lastly, of course, the SWPPP required to accommodate the NPDES permit will include construction-level design provisions.

HA Comment: We are satisfied with the revised Erosion Control Plans. We suggest modifying the direction on the infiltration basin to be used as a temporary sediment basin to call for excavation to one foot higher than final grade to ensure the underlying soil is not adversely impacted. The stone for the final bottom should also not be installed until after final stabilization.

Comment EC2: A construction sequencing schedule should be added to the Erosion and Sedimentation Control Plan.

RJO Response: A construction sequencing schedule has been provided on Sheet C-1A of the plan set.

HA Comment: Hancock is satisfied with this response.

Site Layout

Comment L1: The project proposes five distinct building areas accessed from a single main entrance configured as an island divided boulevard. A secondary gated emergency entrance is provided north of Building 3. The National Fire Protection Association recommends two points of access for housing projects exceeding 100 units. The Board should seek input from Franklin Fire Department as to the acceptability of the gated entrance in meeting this recommendation.

RJO Response: Fairfield met with the Fire Department and received a comment letter dated 10/13/22 acknowledging that the plan provided adequate access and turning and recommended an emergency access. The applicant will address any additional comments or concerns from the Franklin Fire Department.

HA Comment: We defer to the Franklin Fire Department on this issue. Revised plans should be cycled through the FD to confirm they remain satisfied with access, especially at the entry to Building 3 noted in Comment L4 below.

Comment L2: The plans do not depict snow storage areas. Many of the parking lots are directly abutted by proposed retaining walls in close proximity to the parking. Many of the retaining walls abut wetland resource areas. The Applicant should demonstrate that

adequate area for snow storage is provided with consultation with the Conservation Commission.

RJO Response: Proposed Snow Storage locations have been added to Sheets C-4A & C-4B. Additionally, a Snow Management and Disposal section (Section 4) has been added to the narrative of the Operation and Maintenance Plan.

HA Comment: Snow storage proximate to Building 1 appear to be insufficient, three area of snow storage for Building 2 are located such that snow melt will be directed to the neighboring wetlands, snow storage at the intersection of the main entry and the drive to Buildings 3, 4 and 5 could obstruct vehicle sight distances at that intersection. The snow management section of the revised Operation and Maintenance Plan calls for snow to be removed from the site when piles reach 7 feet tall. This area should have piles controlled to lower levels to avoid conflict. Snow storage areas between Buildings 4 and 5 are located in an area designated for limited to no tree removal. The Civil Engineer and Landscape Architect should coordinate plantings to avoid conflicts between plantings and snow storage areas.

Comment L3: The project shows a 10-foot multi-use path along Grove Street partially on the property and within the right of way. The plan notes implementation to be determined. The Applicant should further explain implementation and discuss with the Board committing to construction of the path across the site's frontage and providing the necessary public easements for those portions crossing onto the lot.

RJO Response: Comment acknowledged. Fairfield has designed the program to accommodate granting an easement to the Town for a future 10-foot-wide multiuse path if needed.

HA Comment: Hancock defers to the Board with regard to finalizing the overall mitigation for the project.

Comment L4: The configuration of the entry drive into the Building 3 development area seems awkward with wider than required drive aisles to accommodate emergency vehicle turning that may be confusing for drivers. The Applicant should explore a reconfiguration of this intersection to avoid conflicts with vehicle movement through the area.

RJO Response: The Parking and Traffic Control Plans have been revised to include painted traffic markings and stop signs to provide safe traffic control for vehicle movement through the area while maintaining sufficient access for emergency vehicles.

HA Comment: Hancock is satisfied with this response.

Comment L5: The project proposes two pedestrian boardwalks through wetland areas. The Applicant should provide preliminary details of the boardwalks and how wetland impact and ADA accessibility will be addressed.

RJO Response: Typical details of the boardwalks have been provided on sheet L-301 of the Landscape Plans, prepared by MDLA. The boardwalks will be constructed so that the slope in the direction of travel will not exceed 5% and the cross slope will not exceed 2%. Notes stating this have been added to sheets C-2A,

C-2B, C-4A & C-4B. The boardwalks will be only 5 feet wide and will be kept a minimum of 3.5 feet above the wetlands to minimize resource area impacts.

HA Comment: Hancock is satisfied with this response.

Site Grading

Comment G1: The project includes a great deal of earthwork. The Applicant should provide the Board with an estimated quantity of total earthwork as well as import and/or export anticipated. Soil test results indicate the presence of ledge. The Applicant should also provide information regarding the anticipated extent of blasting required.

RJO Response: A preliminary earthwork analysis was completed and estimates anticipate an import of approximately 10,000 cubic yards. Updated estimates can be provided as the design develops.

As noted, blasting is expected to be necessary throughout portions of the site. Specifically, in the areas to the west of Building #4, around Building #5, to the west of Building #1, and to the northwest portion of Building #2. Blasting will comply with all local, state and federal regulations and all the required safety procedures will be followed. All required permits will be obtained prior to the commencement of any ledge removal.

HA Comment: Hancock is satisfied with this response. Hancock can work with the Board crafting appropriate conditions to address material trucking and blasting.

Comment G2: Retaining walls are proposed throughout the site range in height from a few feet to 20 feet. In many areas the walls will be visible from the public right of way. The Applicant should provide preliminary details or the type of wall and general aesthetic appearance.

Response: The detail depicted on Sheet C-11 has been revised for the block retaining wall to be “Redi-Rock or Approved Equal”.

HA Comment: We defer to the Board on this item for consideration in deliberating the proposed waiver for the wall within the front setbacks.

Comment G3: At the rear of Building 1, the grading calls for upwards of a 20-foot cut within 25 feet of a wetland. The Applicant should comment on the impact of this cut may have on the wetland’s hydrology. There does not appear to have been any soil testing in this area to understand depth to groundwater or ledge. Further investigation is warranted. A similar situation is proposed at the rear of Building 3 with a 10-foot cut as close as 10 feet from a wetland.

Response: The grading at the rear of Building 1 has been revised to raise the parking area and reduce the cut in that area to be approximately 5 feet below the wetland elevation at the southeast portion of the parking area. The nearest location of this cut is approximately 25 feet from the wetlands at one point. However, the distance increases to greater than 40’ immediately north and south of that point. The cut reduces to 0 feet just north of that area. The ground surface of the wetland area slopes northerly and the intermittent stream in the wetland flows northerly parallel to the earth cut line and drops below the elevation of the parking area. The cut will be supported by a varying height retaining wall extending from the top of

the cut. The excavation for the installation of the wall will include a geosynthetic clay liner on the face of the cut slope prior to backfilling with the existing soil. The clay liner will extend below proposed finish grade a nominal distance as a means to mitigate groundwater flow. Cross sections of the cut in that area have been added to the enclosed plans. See Sheet C-15.

HA Comment: We agree that the revisions to the Building 1 site will aid in minimizing impact to the wetlands. We believe the Board can defer to the Conservation Commission at this point for any further study they may need as part of the Notice of Intent filing.

Utilities

The project proposes connection to the municipal sewer and water systems in Grove Street via gravity lines.

Comment U1: The Applicant should provide sewer design flow and water demand and comment on the capacities of the municipal systems to service the project.

RJO Response: The number of bedrooms for the 330 units is approximately 536. Based on MassDEP Title 5 sewer design flow of 110 gallons per day (gpd) per bedroom the flow will be 58,960 gpd. The clubhouse is anticipated to use approximately 5,000 gpd. The project total sewer flow will be approximately 63,960 gpd. The water demand is anticipated to be 110% of the sewer flow which is 70,356 gpd. See response to Comment U2 regarding sewer capacity. The Town Engineer has submitted comments to the Zoning Board of Appeals (ZBA). In his comments to the ZBA the Town Engineer noted that the two existing fire hydrants along the site frontage on Grove Street should be replaced. In a previous response to our request for comments on the water system in a letter dated April 25, 2022, the Town Engineer noted the water system has sufficient capacity. Lastly, a hydrant flow test performed in the vicinity in May of 2022 indicated ample flow and pressure, very likely without the need for any domestic or fire protection pumps.

HA Comment: Correspondence from Michael Maglio, P.E., Town Engineer referenced above states there is ample water for the project. The Board should condition the Comprehensive Permit requiring the Applicant replace the two hydrants in front of the site on Grove Street. Final construction plans and building design will dictate the need for fire and/or domestic pumps based on Massachusetts State Building Code.

Comment U2: The municipal sewer in Grove Street travels north via a 15-inch gravity line to a municipal sewer pump station located at 100 Grove Street. The Applicant should consult with the Franklin Sewer Department to determine the status of this pump station including any need for upgrade or modernization to handle the additional flows.

RJO Response: We acknowledge a comment letter provided by the Town Engineer dated December 12, 2023, and will work with the town to address their comments.

HA Comment: Per the Town Engineer, town sewer is available along this section of Grove St, however, the applicant will need to have the downstream sewer main, pump station, and force main reviewed by the Town's on-call sewer consultant to

evaluate impacts from the proposed development. Depending on the findings of this evaluation, additional provisions may need to be provided in order to address deficiencies. This may include on site storage with off-peak pumping, or possible upgrades to the downstream infrastructure. Hancock recommends the Board get further clarification from Mr. Maglio as to the timing of this additional study and if it would be appropriate to condition the study be performed after issuance of the Comprehensive Permit and prior to construction.

Comment U3: The proposed development features elevation changes from 283 at the intersection of the site drive with Grove Street and the elevation of the fifth floor of Building 5 at 360.0 (77 feet). The Applicant should perform flow testing proximate to the site and determine the sufficiency of the existing municipal system to supply adequate volume and pressure for fire suppression systems. The Applicant should consult with the Franklin Water Department in this preliminary review.

RJO Response: A hydrant flow test was completed at the hydrants located along the frontage of 121 Grove Street by John Hoadley and Sons, Inc. on May 31, 2022 at 9:00 am. The test was witnessed by a representative of RJOC and the Franklin Water Department. The results indicate ample flow and pressure, very likely without the need for any domestic or fire protection pumps. A copy of the Flow Test Report has been provided with this response letter.

HA Comment: See response to Comment U2 above.

Stormwater

The proposed stormwater system includes fourteen separate BMPs throughout the site, including underground detention systems, underground infiltration systems and stormwater basins. Treatment is provided through these BMPs and hydrodynamic separators.

Comment SW1: The Applicant has requested several waivers from the Franklin Stormwater Bylaws and Regulations. The stormwater report Section 4.1 states the project will meet or exceed the Franklin Stormwater Bylaw requirements for retention of the volume of runoff equivalent to, or greater than, 1.0 inch multiplied by the total postconstruction impervious surface area on the site, 90% TSS removal and 60% phosphorus removal. The calculations for retention of one inch of rainfall are calculated for the overall volume of the system. This should be calculated for each treatment chain. The TSS removals for each treatment chain are calculated as 97% and 85%. A weighted average is calculated using the number of treatment chains rather than the impervious area going to each treatment chain. These calculations should be corrected. The Table of Contents lists phosphorus removal calculations. We could not find this calculation in the report sent to us. There is also no supporting data offered regarding the treatment removal claimed for the Contech CDS hydrodynamic separators or sizing calculations. None of the CDS units on the plan have model numbers.

RJO Response: The calculations have been revised as requested. The total phosphorus removal calculations have now been included in the report. Contech has provided treatment removal calculations for each of the proposed CDS units and

model numbers with associated details. The supporting data for the CDS units have been included in the revised stormwater report and the CDS details have been added to the plans.

HA Comment: Hancock is satisfied with this response.

Comment SW2: The outlet for system PSDS-1 is occurring at the system edge, apparently at the system manifold. The invert would put the pipe over the top of the chambers. The configuration should be checked and corrected.

RJO Response: The outlet elevation has been revised to 292.75, which is within the limits of the proposed chambers.

HA Comment: Hancock is satisfied with this response.

Comment SW3: The outlet from system PSIS-1 on the plan does not match the model. The plan should be updated.

Response: A label has been added to the outlet of PSIS-1 noting the 295.0 elevation.

HA Comment: Hancock is satisfied with this response.

Comment SW4: Stormwater Infiltration Basin 1 does not have the recommended freeboard of 1 foot above the 100-year stage. The basin lacks a maintenance access 15-foot access around basin, drawdown device, a monitoring well and an emergency overflow above the 100-year storm level. The current design has a single stone broad crested weir outlet. The basin bottom material is not specified. If it is to be loam and seeded, the exfiltration rate should be reduced from 8.27 inches per hour. As an infiltration basin, the design must comply with MassDEP Stormwater Handbook Volume 2 Chapter 2.

RJO Response: The infiltration basin has been redesigned accordingly, including a drawdown device and a note for a monitoring well. The recommended 1 foot of freeboard is provided between the 100-year storm elevation and the top of berm/emergency overflow elevation. A 15 foot access has been provided along the basin, with an access road graded down from the proposed parking area. The basin detail has been revised to depict the bottom of the basin to be lined with crushed stone to allow for the 8.27 inches per hour exfiltration rate.

HA Comment: Hancock is satisfied with this response.

Comment SW5: The outlet from System PSIS-2 in the HydroCAD model has eight 6-inch orifices at elevation 308.83. The configuration and elevation are not depicted on the plan. The plans should be updated.

RJO Response: The requested information has been added to the site plan label on Sheet C-2B and to the PSIS-2 detail on Sheet C-8.

HA Comment: Hancock is satisfied with this response.

Comment SW6: Stormwater Basin 2 does not have the recommended freeboard of 1 foot above the 100-year stage. The HydroCAD model does not include exfiltration. Soil test data has good depth of loam sand material and depth to groundwater more than 4 feet from the bottom. Exfiltration is the only way to drain the basin. The model should be adjusted. If this is an infiltration basin, it lacks a maintenance drawdown device, 15-foot

access around basin for maintenance, a monitoring well and an emergency overflow above the 100-year storm level. The current design has a single stone broad crested weir outlet. The basin bottom material is not specified. If it is to be loam and seeded, the exfiltration rate should be reduced from 2.41 inches per hour Rawl's rate for loamy sand. As an infiltration basin, the design must comply with MassDEP Stormwater Handbook Volume 2 Chapter 2.

RJO Response: Upon further review of the stormwater analysis, it was determined that Stormwater Basin-2 is not needed for detention or infiltration and therefore has been eliminated as a stormwater mitigation basin. However, the area will be graded into an outlet level spreader to dissipate flows discharged from the subsurface drainage systems.

HA Comment: Hancock is satisfied with this response. The Operation and Maintenance Plan should include provisions for the long term maintenance of the level spreader area.

Comment SW7: Stormwater Basin 3 does not have the recommended freeboard of 1 foot above the 100-year stage. The HydroCAD model does not include exfiltration. Soil test data has good depth of loam sand material and depth to groundwater more than 4 feet from the bottom. Exfiltration is the only way to drain the basin. The model should be adjusted. If this is an infiltration basin, it lacks a maintenance drawdown device, 15-foot access around basin for maintenance, a monitoring well and an emergency overflow above the 100-year storm level. The current design has a single stone broad crested weir outlet. The basin bottom material is not specified. If it is to be loam and seed, the exfiltration rate should be reduced from 8.27 inches per hour Rawl's rate for sand. As an infiltration basin, the design must comply with MassDEP Stormwater Handbook Volume 2 Chapter 2.

RJO Response: Upon further review of the stormwater analysis, it was determined that Stormwater Basin-2 is not needed for detention or infiltration and therefore has been eliminated as a stormwater mitigation basin. However, the area will be graded into an outlet level spreader to dissipate flows discharged from the subsurface drainage systems.

HA Comment: Hancock is satisfied with this response. The Operation and Maintenance Plan should include provisions for the long term maintenance of the level spreader area.

Comment SW8: The HydroCAD model for PSIS-3 has an outlet with two 12-inch orifices. The plan does not show how this will be configured between the system and the 18-inch pipe out. There is a potential pipe conflict between this 18-inch pipe and the pipe between DMH 38 and CDS 4. We also have a concern with this very large system 60-inch perforated pipes 144 feet long in very close proximity to the retaining wall along Grove Street. A detail of the system and the wall should be developed with a ploy liner between the system and the wall.

RJO Response: The outlet label on Sheet C-2A has been revised to depict the outlet pipe sizes and elevations. The PSIS-3 detail on Sheet C-9 has been revised to depict the 12" outlet pipes and 18" discharge pipe. The slope and location of the 18" outlet

pipe has been revised to eliminate the conflict with the pipe between DMH 38 and CDS 4. A cross-section of the system and wall, depicting an impervious liner, has been included on Sheet C-14 in the plan set.

HA Comment: Hancock is satisfied with this response.

Comment SW9: The outlet from System PSIS-8 in the HydroCAD model has two 6-inch orifices at elevation 276.0. The configuration and elevation are not depicted on the plan. There is a similar concern with the proximity of this system to the proposed 10-foot high retaining wall.

RJO Response: The outlet label on Sheet C-2A has been revised to depict the outlet pipe sizes and elevations; the PSIS-8 detail on Sheet C-9 has been revised to depict the 6" outlet pipes and 12" discharge pipe. A cross-section of the system and wall, depicting an impervious liner, has been included on Sheet C-14 in the plan set.

HA Comment: Hancock is satisfied with this response.

Comment SW10: We have a concern with the proximity of System PSIS-4 which is a very large system 120-inch perforated pipes 118 feet long in very close proximity to a 13 feet high retaining wall. A detail of the system and the wall should be developed with a ploy liner between the system and the wall.

RJO Response: A cross-section of the system and wall, depicting an impervious liner, has been included on Sheet C-14 in the plan set.

HA Comment: Hancock remains concerned given the size of the proposed system proximate to the wall. While the plans have been revised to include an impervious liner, the system and weight of water may impart a large hydrostatic load. The Board should condition the Comprehensive Permit requiring a structural engineer provide a structural analysis for all proposed over four feet high that considers the global stability of the wall and backfill and the hydrostatic load imparted on the wall from infiltration systems proximate to the walls.

Comment SW11: The HydroCAD model for PSIS-5 has an outlet with five 24-inch orifices. The plan does not show how this will be configured between the system and the 30-inch pipe out. We also have a concern with this very large system 60-inch perforated pipes 118 feet long in very close proximity to the retaining wall. A detail of the system and the wall should be developed with a ploy liner between the system and the wall.

RJO Response: The outlet label on Sheet C-2B has been revised to depict the outlet pipe sizes and elevations. The PSIS-5 detail on Sheet C-8 has been revised to depict the 24" outlet pipes and 30" discharge pipe. A cross-section of the system and wall, depicting an impervious liner, has been included on Sheet C-14 in the plan set.

Hancock Comment: See response to Comment SW11 above.

Comment SW12: System PSDS-3 is modeled in HydroCAD with a 12-inch orifice and a 2-inch low level drain. The plans do not depict this configuration.

Response: The outlet label on Sheet C-2B has been revised to depict the outlet pipe sizes and elevations; the PSDS-3 detail on Sheet C-9 has been revised to depict the 12" outlet pipe and 2" drawdown outlet pipe.

HA Response: Hancock is satisfied with this comment.

Traffic Assessment and Fire Access

The Applicant has provided a Traffic Impact Assessment in accordance with the Massachusetts Department of Transportation (MassDOT) Guidelines for traffic impact assessments and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports. The report presents information regarding anticipated trip generation, historic crash data and some evaluation of intersection safety with regard to safe sight distances. It could be argued that the trip generated by the project are low enough as to not impact the existing roadway and intersections on the area, however, no data is provided as to the existing daily and peak traffic in the area.

Comment T1: We recommend that a Professional Traffic Operations Engineer be engaged to review the report. We have obtained a proposal from Howard Stein Hudson who is supremely qualified in these matters.

HA Comment: **Howard Stein Hudson has prepared a Traffic Peer Review Memorandum dated January 23, 2024.**

Comment T2: A swept path analysis has been provided showing the movements of an emergency vehicle through the site. The Board should seek input from the Franklin Fire Department regarding this analysis.

RJO Response: **Fairfield met with the Fire Department and received a comment letter dated 10/13/22 acknowledging that the plan provided adequate access and turning and recommended an emergency access. The applicant will address any additional comments or concerns from the Franklin Fire Department.**

HA Comment: **We defer to the Franklin Fire Department. FFD should be given full size copies of the revised site plan for review.**

Wetlands

The Applicant is requesting extensive waivers from the Franklin Wetlands Bylaws and Regulations. The Board should seek comprehensive input from the Conservation Commission regarding the waiver requests and any input they may have on the design of the wetlands crossing.

Comment W1: There is an isolated vegetated wetland in the area of Proposed Building 4. The wetland will be eliminated. This wetland may be jurisdictional under the Franklin Wetlands Bylaw. The Applicant should comment on the status of this wetland area and any plans to mitigate its elimination.

RJO Response: **A Notice of Intent has been submitted to the Town of Franklin Conservation Commission pursuant to the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.). The isolated vegetated wetland is not jurisdictional under the Wetlands Protection Act. However, the applicant has proposed to provide mitigation for the filling of this isolated wetland in the proposed wetland replication area at the western side of the proposed crossing of wetland series-A.**

HA Comment: The filling of a local jurisdictional wetlands is under the prevue of the Franklin ZBA as part of the review of the Comprehensive Permit application. The ZBA should seek input from the Conservation Commission as to the adequacy of the proposed mitigation.

Hancock suggests the Applicant's team compile a point-by-point response letter to this report to assist the Board with their review.

We look forward to assisting the Board in this complex and dynamic process. Please do not hesitate to contact me should you have any questions or comments.

Sincerely,
Hancock Associates,



Joseph D. Peznola, PE
Director of Engineering