August 29, 2022

Mr. Gregory Rondeau, Chairman
Franklin Planning Board
355 East Central Street
Franklin, MA 02038

Re: 175 East Central Street (Franklin Ford)
Site Plan and Special Permit Review

Dear Mr. Rondeau:

BETA Group, Inc. (BETA) has reviewed the documents prepared in response to the 1st review for the project entitled: ***Franklin Ford*** located at 175 East Central Street in Franklin, MA. This letter is provided to present BETA's findings, comments, and recommendations.

BASIS OF REVIEW

The following documents were received by BETA and will form the basis of the review:

- Plans (8 sheets) entitled: ***Site Plan, 175 East Central Street, Franklin, Massachusetts*** dated April 14, 2022, revised 08/04/2022, prepared by United Consultants, Inc. of Wrentham, MA.
- Drainage Analysis, dated April 14, 2022, revised August 04,2022, prepared by United Consultants, Inc.
- Plan entitled ***"Franklin Ford Dealership-Franklin, MA, Site Lighting Plan, Schedules & Specifications"*** , prepared by SK& Associates, Canton, Mass. No date or revision date.
- Plan entitled: ***Stormwater Facilities Plan, 175 East Central Street, Franklin, Massachusetts*** dated April 14, 2022, revised 08/04/2022, prepared by United Consultants, Inc. of Wrentham, MA.
- ***Existing & Proposed Watershed Plans,*** dated April 14, 2022, revised 08/04/2022, prepared by United Consultants, Inc. of Wrentham, MA.
- ***Response letter*** from United Consultants, Inc. to the Planning Board dated august 04,2022.

Review by BETA included the above items along with the following, as applicable:

- Site Visit
- ***Zoning Chapter 185 From the Code of the Town of Franklin,*** current through July 2021
- ***Zoning Map of the Town of Franklin, Massachusetts,*** attested to October 7, 2020
- ***Stormwater Management Chapter 153 From the Code of the Town of Franklin,*** Adopted May 2, 2007
- ***Subdivision Regulations Chapter 300 From the Code of the Town of Franklin,*** current through March 8, 2021
- ***Wetlands Protection Chapter 181 From the Code of the Town of Franklin,*** dated August 20, 1997
- ***Town of Franklin Best Development Practices Guidebook***, dated September 2016

INTRODUCTION

The project site includes two parcels, (#285-090 & 092) with a total area of 5.20 acres located at 175 East Central Street and 9 Chestnut Street in the Town of Franklin (the "Site"). The Site is located within the Commercial II zoning district. Lots to the east of the Site are within the Commercial I district, lots to the north and west of the Site are within the Single Family-IV district. The site has frontage on both East Central Street and Chestnut Street. The Site in its entirety is also located within the Water Resource District.

The existing Site at Parcel 090 is the current location of the automobile dealership, Franklin Ford. The existing dealership building is a single story 19,100± sq. ft. structure. Associated site features include a paved parking lot which can be accessed from driveway openings on both East Central Street and Chestnut Street. There is a gravel parking area (19,600± sq. ft.) also behind the paved parking area. Approximately 1.0 acre of wetlands are located at the rear of the parcel. There is also a ledge outcrop along the southerly property line behind the single-family dwelling at the intersection of East Central and Chestnut Streets. The existing site at 9 Chestnut Street (parcel 92) is a single-family dwelling with 2 driveway openings on Chestnut Street and associated landscaping. There is a 20' wide water line easement that runs from Chestnut Street to the rear of the parcel at the edge of the flagged wetlands. Existing utility services (water, sewer, gas) are provided via connections to the mains beneath East Central Street. A sidewalk is present along both East Central Street and Chestnut Street, and a fire hydrant is in the far western corner of the parcel on Chestnut Street.

Topography at the Site is generally directed north towards the wetlands at the rear of the parcel. The current limits of the development are flat with grades that range from 2-5%. The wetlands at the rear of the site are 8' lower than the far edge of the gravel parking area. The Site is not located within a FEMA mapped 100-year floodplain, an NHESP-mapped estimated habitat of rare or endangered species, or any other critical area. NRCS soil maps indicate the presence of Merrimac-Urban land complex with a Hydrologic Soil Group (HSG) rating of A, Freetown muck with an HSG of B/D, and Urban Land with no assigned HSG rating.

The project proposes to construct a 7,600± sq. ft. addition to the existing building which will run parallel with Chestnut Street. The addition will have 10 garage access doorways, 6 at the front and 4 in the rear of the building. All the proposed improvements to the site will occur east of the existing dealership building. The existing single-family dwelling at Chestnut Street and all the infrastructure associated with the dwelling will be removed to allow for expansion of the paved parking area on this portion of the lot. The existing driveway openings along Chestnut Street will all be closed. A new opening will be provided at the east edge of the parcel. The existing gravel area at the rear of the parcel will be loamed and seeded. The parking lot will be regraded to drain towards 5 proposed catch basins. Runoff from these basins will be directed towards a subsurface infiltration structure located at the back right corner of the parking lot. The outfall from the infiltration structure will be directed east towards a swale on the abutting parcel associated with an 18" outfall from drainage on Chestnut Street. Based upon the drawings, the parking lot will be set up as a vehicle display area with the far easterly edge set just inside the existing edge of pavement. Vertical concrete curbing is proposed around the outside edge of the pavement. A 6' high stockade fence is proposed along the west property line along Chestnut Street. No interior landscaped space will be provided, and no additional landscaping is proposed along the east edge of the site. Lighting will also be added to the new parking area.

SITE VISIT

BETA conducted a site visit on 6/7/2022 to assess existing conditions. Field conditions were found to be generally in accordance with the existing conditions plan. Comments associated with this site visit are as noted throughout this report.

FINDINGS, COMMENTS AND RECOMMENDATIONS

GENERAL

Z1. Revise planset to distinguish between existing and proposed linework more clearly.

UCI-The existing conditions line work has been screened and the proposed line work is generally a darker and wider line type.

BETA: The PDF drawings are easier to read although a 1"=20' scale drawing of the proposed redevelopment area could fit on a single sheet and would be much easier to see the detail required.

Z2. Include measures for removal/abandonment of utilities servicing the existing house.

UCI-Utility removal notes have been added to sheet 4.

BETA: Notes added no further comments

ZONING

The Site is located within the Commercial II (CII) Zoning District. The proposed Site will retain the existing use as an Automobile Dealership.

SCHEDULE OF LOT, AREA, FRONTAGE, YARD AND HEIGHT REQUIREMENTS (§185 ATTACHMENT 9)

The Site meets the requirements for lot area, depth, frontage, width; front and rear yards; impervious coverage and building height.

The project does not meet requirements for required side yard. However, this is an existing nonconformity and the proposed building addition will meet side yard requirements.

DRAWING REQUIREMENTS (§185-31)

Drawings must be prepared in accordance with the Zoning Bylaw (§185-31).

Z3. Indicate proposed snow storage areas (§185-31.C.(3).(h)). The planset notes that parking spaces above the required number of spaces shall be used for additional snow storage. This approach, however, may be impractical if these spaces are used for the display of vehicles.

***UCI:** A snow storage area has been provided at the north end of the parking lot expansion area.*

BETA: Proposed storage area is outside the pavement. Snow storage must be in an area where the runoff will be collected and treated by the proposed stormwater system

Z4. Provide sight line information at proposed entrance/exit ways (§185-31.C.(3).(t))

***UCI:** Sight distance information has been added to sheet 4.*

BETA: Notes are fine. BETA recommends that you add the triangle to the plan view and reference the notes.

SIGNS (§185-20)

The project proposes the following signs:

Sign Designation	Location
Stop	East Site Entrance
Accessible Parking Signs	Accessible Parking Spaces

Z5. Provide alternate accessible parking sign detail with "van accessible" designation.

***UCI:** A van accessible parking sign detail has been added to sheet 7.*

BETA: Detail added no further comments

PARKING, LOADING AND DRIVEWAY REQUIREMENTS (§185-21)

The Project proposes an expansion to the existing building. The site planset indicates that the building will be separated into retail, office, and warehouse uses. The required parking for these uses is as follows:

Use	Area (SF)	Rate (Space / SF)	Required Parking
Retail	3,081	1 / 200 SF	16
Office	2,548	1/250 SF	11

Warehouse	23,702	1/1000 SF	24
Total:			51

Parking is proposed to the south and east of the existing/proposed building. A total of 195 parking spaces are provided. 64 of these spaces are proposed in the southwestern lot near the main building entrance, while the remaining 131 spaces are in the eastern lot.

Parking spaces are shown as nine (9) feet by 19 feet with a min. 24-foot access aisle. Americans With Disabilities Act (ADA) regulations require a minimum of three (3) ADA-accessible spaces for lots ranging from 51 to 75 spaces. One (1) shall be van accessible with a 96-inch-wide access aisle and the remaining 3 parking spaces are to be served by a 60-inch-wide access aisle. The six (6) accessible spaces provided meet these requirements.

Access to the Site is proposed via two curb cuts: an existing curb cut at East Central Street and a new curb cut at Chestnut Street. Three existing curb cuts along Chestnut Street will be removed and the concrete sidewalk reconstructed.

The project will include repaving and expanding the eastern parking lot and restriping the western parking lot. Vertical Granite curbing will be provided around the perimeter of the eastern parking lot. Some landscaped areas are proposed around the west and eastern sides of the eastern parking lot.

Refer to the Screening and Landscaping section of this report for comments relating to parking lot screening requirements.

BETA provides the following comments relative to the parking, loading access and landscaping:

Z6. BETA notes that the project includes parking spaces within 10 feet of the East Central Street Right-Of-Way, which is not permitted (§185-21.C(1)). As this is an existing nonconformity, BETA defers to the Planning Board.

***UCI:** Parking spaces 1 - 20 are located within 10 feet of the East Central Street ROW. The proposed parking spaces (62 - 82) have been located 10 feet from the Chestnut Street ROW.*

BETA: spaces moved no further comments

Z7. Revise design of the accessible parking spaces proposed in the center of the southern lot (Space 58) and along the southern building wall (Spaces 59, 60, and 61). Accessible parking spaces should be positioned as near as possible to the building entrance and must include an accessible route to the building they are intended to serve (521 CMR 20).

***UCI:** Spaces 59 - 61 have been relocated. Spaces 58 - 61 have an accessible route to the various building entrances which include the employee entrance and service bay entrance for the public as well as the entrance on the east side of the showroom for public access.*

BETA: accessible spaces have been moved and are now close to an entrance. No further comments

Z8. Indicate which percentage of proposed parking spaces are anticipated to be occupied by vehicles to be sold, and which percentage are to be reserved for employees and visitors.

***UCI:** Proposed parking spaces designated for vehicle display and employees and visitors have been listed on sheet 3.*

BETA: 52 spaces have been designated as vehicle display areas. The remaining 142 spaces are designated as employee & visitor spaces. BETA will defer this issue to the board.

Z9. Review design of the southernmost parking spaces (Spaces 9 through 20). No access aisle is depicted to provide vehicular access to these spaces.

***UCI:** Spaces 9 through 20 are for vehicle display. The employees will be able to move the cars located in spaces 21 through 31 to allow for the cars to be removed from the spaces.*

BETA: Since there is no direct access to these spaces and they are listed as a vehicle display area then in BETA's opinion they should not be counted in the total of spaces provided. The summary should be modified accordingly.

Z10. Review design of parking spaces proposed along southern building wall (Spaces 59 through 64). Based on field visit, a garage door is present in this area which will be blocked by the proposed spaces.

***UCI:** The parking spaces in this area have been revised. The total parking space count has been reduced from 195 to 192.*

BETA: The spaces have been eliminated no further comments

Z11. Provide detail for vertical granite curb and sidewalk.

***UCI:** A vertical granite curb details and the sidewalk details have been added to sheet 9.*

BETA: Detail added no further comments

SCREENING (§185-35) AND LANDSCAPING

The project proposed twenty (20) tree plantings along the perimeter of the southeastern parking lot. Proposed trees include American Elm, Red Maple, and White Birch. The provided planting quantity is in accordance with those required for the proposed number of parking spaces.

§185-35(2) and (7) require that outdoor sales displays and outdoor parking for 10 or more cars be screened from adjacent residential district or uses. The residential Single Family IV district abuts the Site to the northwest, north, and east, and residential uses abut the Site to the south, west, and southeast. Existing vegetation is proposed to be retained to provide screening along the north and eastern perimeters of the Site. Existing vegetation along the southern property line will be removed to allow the proposed parking lot expansion. No additional screening is proposed beyond the 20 aforementioned tree plantings.

Z12. Provide required screening along the southern property line to screen the property from the abutting 183 E Central Street property. BETA notes that existing vegetation is present in this area but its extent is not depicted on the Site plans.

***UCI:** The six-foot-high stockade fence has been extended along the south side of the properly where it abuts the 183 East Central Street property. The area where the fence is proposed is approximately three feet higher than the Franklin Ford parking area. This will result in an approximately nine foot high from the parking area to the top of the fence.*

BETA: In the past the Board has accepted the use of fencing as a visual screen. BETA will defer this issue to the Board

Z13. Indicate limit of existing treeline and any proposed tree clearing along the perimeter of the property. BETA noters that trees along the eastern property line, which screen the property from an abutting residence, are primarily deciduous and may not form an effective buffer during winter.

***UCI:** The existing tree line has been added to the plans. The proposed tree clearing will be limited to the 9 East Central Street boundaries.*

BETA: We are assuming that you are referring to the 9 Chestnut Street address. The proposed tree clearing is along the common property line. The fencing provided along the property line with 183 east central street is proposed to provide a visual screen and replace the vegetation that will be removed along the common property line between the former residence and the dealership site. No further comments.

LIGHTING (§185-31.C(4)(E))

Project Lighting Plans (SL1) indicate that a total of 23 pole-mounted and 14 wall-mounted luminaires are proposed on the eastern portion of the Site. A photometric plan was provided.

The Illuminating Engineers Society of North America (IESNA) recommends the following for parking lots:

Level	Horizontal Illuminance (min)	Vertical Illuminance (min)	Uniformity (max/min)	Ratio
Basic Maintained Illuminance	0.2	0.1	20/1	
Enhanced Security Illuminance	0.5	0.25	15/1	

Z14. BETA defers to the Town regarding approval of the waiver to allow light spillage onto Chestnut Street. This waiver must also be revised to include light spillage onto the abutting properties. (§185-31.C.(4).(e))

***UCI:** The site lighting has been revised and a waiver is requested to allow light spillage onto Chestnut Street.*

***BETA:** BETA will defer this issue to the Board.*

Z15. BETA recommends revising lighting design to reduce areas of high illuminance proposed throughout the eastern parking lot.

***UCI:** The site lighting has been revised.*

BETA: The spillage beyond the property line has been eliminated except for Chestnut Street. BETA will defer this to the Board.

WATER RESOURCE DISTRICT (§185-40)

The project is located within a Water Resources District and a Zone II Wellhead Protection Area. Refer to the Stormwater Management section of this report for the project's compliance with groundwater recharge requirements.

Z16. Indicate if motor vehicle service or repair will occur within the proposed building extension, which is a prohibited use (§185-40.D.(1).(c)). BETA notes that the existing building includes a service area, though this is an existing nonconformity.

***UCI;** The applicant's Attorney has addressed this issue.*

BETA: BETA will defer this issue to Town Council and the Board

STORMWATER MANAGEMENT

The stormwater management design proposes a subsurface infiltration system to capture, store, and infiltrate stormwater runoff from the redesigned eastern parking lot. Stormwater runoff will be conveyed to this system via a new closed drainage system consisting of catch basins, drainage manholes, and a water quality unit. Overflow from the subsurface system will be conveyed to a new outfall which discharges to a low-lying area to the east upgradient of an existing wetland. Stormwater runoff from the proposed building extension roof will bypass the subsurface system and be conveyed via roof drains to a new outfall which discharges to a grassed area upgradient of the wetlands.

No modifications are proposed to the stormwater management design of the western parking lot.

STORMWATER MANAGEMENT REGULATIONS (CHAPTER 153)

The project proposes to disturb land in excess of once acre within the Town of Franklin. It is therefore subject to the Stormwater Management Regulations. The project is also required to comply with the Town of Franklin Best Development Practices Guidebook (BDPG) Compliance with these regulations is outlined below and throughout the following sections.

SW1. *Provide clear and definite delineation of any areas of vegetation or tree disturbance (§153-12.J).*

SUBDIVISION REGULATIONS - STORMWATER MANAGEMENT REGULATIONS (§300-11)

Additional requirements for stormwater management are outlined in §300-11 of the Town of Franklin Subdivision Regulations. The Applicant has requested a waiver to allow for the use of HPDE pipe and Class V RCP.

SW2. *Provide required headwall at outfalls (§300-11.B(2.b)).*

***UCI:** The revised infiltration pond outlet will result in vegetation removal which has been labeled on sheet 4. The proposed area Q/ vegetation removal has been labeled on the proposed watershed plan.*

BETA: See response below

SW3. *The proposed discharge from the infiltration system is directly towards the abutting parcel. There is an easement in this area, however, the applicant should document that they have rights to discharge into this easement area. Otherwise, the discharge should be moved to discharge into the wetland buffer zone at the rear of the parcel.*

***UCI:** The discharge has been relocated on sheet 4.*

BETA: As noted, the discharge from the Infiltration Pond has been moved away from the easement on the abutting parcel. BETA recommends that the headwall should be moved back into the gravel area outside the 50' setback from the wetlands.

The outlet invert is Elevation 82.75. The rip rap as shown extends down to the Elevation 78 contour, 5' lower. In addition, the pad as shown scales 16' long and the detail shows a 10' long pad. Correct the pad dimensions in the plan view and identify the proposed grades. Based upon these revisions, the overall vegetation removal could be limited to the top 5' of the slope down from the gravel rather than the 10' as shown. The vegetation removal area could be reduced from the 500 square feet shown to 60 square feet on the steep slope down from the gravel surface.

MASSDEP STORMWATER STANDARDS

The project is subject to the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

NO UNTREATED STORMWATER (STANDARD NUMBER 1): *No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.* The project proposes two new outfalls. One of these outfalls, FES-2, is located within the 100-foor wetland buffer zone. Stormwater runoff will be treated by water quality units and a subsurface infiltration system prior to discharge. Riprap aprons are proposed at each outfall for erosion control.

SW4. *Provide calculations for sizing of riprap aprons. (Length, width, riprap depth, and riprap D50).*

***UCI:** Rip rap sizing information can be found on sheet 8.*

BETA: The proposed stone size is indicated on the sheet however there are no calculations indicating that the size is adequate. Comment remains

SW5. *The roof runoff must be treated and cannot be directly discharged towards the wetlands. BETA recommends that this flow be routed through the subsurface system to meet standard 4 or an infiltration basin be constructed downgradient of FES-1 to provide treatment. If the Applicant intends to instead direct rooftop runoff to a qualifying pervious area, the applicant must demonstrate that the design meets the minimum criteria set forth on Volume 3, Chapter 1, Page 47 of the MA Stormwater Handbook.*

***UCI:** The roof runoff, from the proposed addition, has been routed to the infiltration pond.*

BETA: Comment addressed

SW6. *Based upon the site location within the limits of the water resource district, BETA recommends that the applicant review the site to determine if any minor revisions to the pavement behind the existing building could be made to collect and treat the runoff from this area.*

UCI: *Watershed CB 5 has been revised to include the area behind the existing building.*

BETA: There is not enough information provided on the plans to show that the runoff from this area will flow to CB 5 without any pavement changes along the perimeter. BETA recommends that a 20-scale plan of this area with spot grades be provided to verify the flow direction.

POST-DEVELOPMENT PEAK DISCHARGE RATES (STANDARD NUMBER 2): *Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.* The project proposes a net increase in impervious area and minor changes to site hydrology. Stormwater runoff will be mitigated via a new subsurface infiltration system. Calculations indicate a decrease in peak discharge rate and runoff volume to all watersheds.

SW7. *Revise limit of analysis to include the entire limit of alterations. The southern portion of the eastern parking lot has been excluded from the model.*

UCI: *Watersheds areas for CB 1, CB 2, CB 3 and CB 4 have been revised on the proposed watershed plan and within the analysis.*

BETA: Comment addressed

SW8. *Review cover types used for pre-development hydroCAD model. A portion of the area modelled as "Paved parking & roofs" should be modelled as "Grass" and "Woods."*

UCI: *The cover types have been revised in the model.*

BETA: Comment addressed

SW9. *Review roof area used for subcatchment RS. Revise TC to be 6 minutes.*

UCI: *The time of concentration was revised to a total of 6 minutes*

BETA: Comment addressed

SW10. *Indicate source of rainfall data used in HydroCAD model. Revise 100-year storm event to use a 7" rainfall depth to comply with the Wetlands protection Act. To ensure the infiltration BMP is adequately sized, BETA recommends the use of NOAA Atlas-14 rainfall rates or NRCC Extreme Precipitation Estimates.*

UCI: *As requested we have revised the rainfall for the 100-year storm event.*

BETA: 100-year rainfall increased to 7.0" in accordance with current regulations. NOAA Atlas 14 rates have not been adopted to date; however, BETA continues to recommend that the 100-year rainfall from this publication be run through the system to check on the results.

SW11. *Indicate location of existing water lines which may be present within the water line easement and confirm existing utilities will not conflict with proposed drainage pipes.*

UCI: *The approximate location of the water line has been added to the site plans.*

BETA: Water line shown, no further comments

Additional comments:

1. ***There is nothing indicated on the site plans what type of curbing will be used along the outside edge of the pavement to direct runoff towards the catch basins. This is especially true along the northerly and easterly edge of the pavement. The site lighting plans do show the curbing along the outside edge of the pavement, but it is not labeled.***
2. ***BETA recommends that CB 5 be moved closer to the corner of the pavement for 3 reasons. First the slope of the parking lot could be reduced from the current 6-7% to a more reasonable 3-4% which is typical maximum design slope for a parking lot; 2nd, it would help with the inlet pipe angles into DMH 3: and 3rd, it does not appear that the site grading at the northeast corner of the lot can be implemented without impacting the existing slope down towards the abutters to the east.***

RECHARGE TO GROUNDWATER (STANDARD NUMBER 3): *Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to maximum extent practicable.* NRCS soil maps indicate that soil in the area of proposed modifications is predominantly Merrimac-Urban Land complex with HSG A (high infiltration) and Urban Land with no assigned HSG.

The Applicant has conducted permeability testing in the area of the proposed infiltration BMP indicating an infiltration rate 11.16 in/hr. In accordance with standard engineering practices, the rate used in the HydroCAD model is one-half this measured rate or 5.58 in/hr. Test Pits conducted at the Site indicate that subsurface soil in the area of the infiltration BMP is medium sand. Groundwater was not observed in these test pits to an approximate excavation depth of 10' b.g. (Elevation 82' ±)

Recharge is proposed via a new subsurface infiltration system which will capture runoff from the eastern parking lot area. The project will provide groundwater recharge in excess of what is required.

SW12. *Revise model for Pond P1 to use an accurate groundwater elevation, rather than elevation 0.*

UCI: *The invert for infiltration of Pond was set at 0. 0l' below the pond bottom. This is due to an issue with the Hydro cad model (f the actual pond bottom elevation is used.*

BETA: Program results remain the same. No further comments

SW13. *BETA Recommends including an outlet control structure / drainage manhole at the subsurface infiltration system outlet similar to the inlet configuration. This would facilitate system maintenance, simplify transition to 18" RCP, and avoid the need for a pipe bend.*

UCI: *The pipe has been revised and the bend is not longer proposed. Inspection ports are provided at the corners of the infiltration pond 1.*

BETA: The revised location does eliminate the bend issue. However, system maintenance remains an issue and BETA recommends that an outlet control structure be added at the final pipe outfall from the pond to provide maintenance access to the system.

Additional comments:

1A. The dynamic sizing analysis is incorrect. In accordance with the standards, the storm to be routed is a 2-hour event not 24 hours.

2A. In accordance with the standards, Infiltration is across the bottom of the pond only not the wetted perimeter.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): *For new development, stormwater management systems must be designed to remove 80% (90% per Town Bylaw) of the annual load of Total Suspended Solids (TSS)*. The project includes

treatment of the eastern parking lot via deep sump catch basins, a proprietary water quality unit, and a subsurface infiltration system. The resulting TSS removal rate are listed as 98.1%

The project is required to treat the 1.0-inch water quality volume (See Standard 6). Water quality volume is provided via the proposed proprietary unit and the subsurface infiltration system in excess of what is required. At least 44% TSS removal is achieved prior to discharge to the infiltration BMP. A Long-Term Pollution Prevention Plan has been provided as part of the Operation and Maintenance Plan.

SW14. *Provide calculations for provided total phosphorus (TP) removal (§153-16.B(1.b)) and total nitrogen removal (TN) (BDPG).*

> ***UCI:*** *Impervious area directed to infiltration pond I = 91,215 sq. ft. x 0.0833 = 7,601 cubic feet*
> *Pond Volume below invert 7,275 cubic feet or 95% Reference MA MS4 General Permit Appendix F Attachment 3.*
>
> ***BETA: In accordance with Massachusetts MS4 guidelines, nutrient removal rates are dependent upon overall storage within the infiltration pond. Once the design is verified and actual static storage capacity is confirmed, show removal rate. Regardless based upon the current design, phosphorous and nitrogen removal should be from 95-100% based upon the current storage volume.***

SW15. *Roof runoff is exempt from pretreatment but still requires treatment prior to discharge. See SW 4 above.*

> ***UCI:*** *The proposed addition roof runoff has been routed to the infiltration pond*
>
> ***BETA: Comment addressed.***

Additional Comments:

1. ***Impervious area tributary to the catch basins is greater than 0.25 acres. Accordingly, they are not in accordance with the design guidelines from Volume 2 Chapter 2 of the standards and do not provide the 25% TSS Removal rate associated with the BMP.***

HIGHER POTENTIAL POLLUTANT LOADS (STANDARD NUMBER 5): *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads (LUHPPLs) require the use of specific stormwater management BMPs.* The project is considered a LUHPPL under the definition of a motor vehicle repair operation (310 CMR 22.20C(2)(i)). and is required to comply with this section. The project narrative notes that automobile maintenance will be completed within the building. Subsurface structures are considered recommended uses for a LUHPPL and the proposed hydrodynamic separator will provide adequate pretreatment.

SW16. *Revise narrative to identify the Site as a LUHPPL.*

> ***UCI:*** *Standard 5 has been revised in the report narrative.*
>
> ***BETA: Comment addressed.***

SW17. *Provide Source Control and Pollution Prevention Plan, accounting for the contingency that leaks and spills occurring within the building may migrate into the parking lot.*

> ***UCI:*** *An automobile repair operational BMP's' have been added to sheet 6.*
>
> ***BETA: BETA recommends that this be a continuing condition of approval based upon the location within the Water Resource District***

SW18. *Show current floor drain connection and discharge and show proposed connection for floor drains for proposed expansion.*

UCI: *The existing oil water separator (OWS) has been labeled and the connection to the building is shown. The connection of the floor drains in the proposed addition will be located within the building and is noted as such on sheet 4.*

BETA: The floor drain design should eliminate any possibility for spills to exit the building. BETA will defer this to the Building Inspector's office.

CRITICAL AREAS (STANDARD NUMBER 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.* The project is located within a Zone II Wellhead Protection Area which is a critical area. Subsurface structures are considered recommended uses for a Zone II and the proposed hydrodynamic separator will provide adequate pretreatment.

REDEVELOPMENT (STANDARD NUMBER 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.* The project is a mix of new development and redevelopment with a net increase in impervious area.

EROSION AND SEDIMENT CONTROLS (STANDARD NUMBER 8): *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.* As the project proposes to disturb greater than one acre of land, it will be required to file a Notice of Intent with EPA and develop a Stormwater Pollution Prevention Plan (SWPPP). Erosion control measures are depicted on the plans including compost sock for perimeter control.

SW19. *Provide Stormwater Pollution Prevention Plan (SWPPP) and revise project narrative to indicate a NPDES Construction General Permit is required.*

UCI: *A Storm-water Pollution Prevention Plan will be completed prior to commencement of construction.*

BETA: BETA will defer this issue to the DPW.

SW20. *Provide stabilized construction entrance with measures to ensure that all construction period traffic will be over this entrance.*

UCI: *The project consist of the construction of a building addition as well as a storm water system both of which will be mainly accessed from the existing paved parking lot. As such the construction vehicles will be traveling over existing paved surfaces prior to entering the public ways. Refer to O&M schedule for the Construction Phase note 2 located on sheet 6.*

BETA: BETA agrees that the existing paved entrances off Chestnut Street will meet the requirements for construction access. However, based upon scheduling, will one remain intact as a construction access point? That will need to be addressed in the sequencing.

SW21. *Provide location and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures.*

UCI: *Refer to O&M schedule for the Construction Phase note 6 located on sheet 6.*

BETA: comment addressed

SW22. *Provide measures to prevent sedimentation into open excavations for subsurface infiltration systems during construction*

UCI: *A compost sock was added at the infiltration pond area on sheet 6.*

BETA: comment addressed

SW23. *Provide approximate location of proposed stockpile and staging locations including measures to minimize exposure to the materials and mitigate sedimentation (§153-12.L). Include stockpile location for materials generated during demolition.*

UCI: *A staging area and material stockpile area have been added to sheet 6. Refer to O&M schedule for the Construction Phase note 7 located on sheet 6. Due to the site bring operated at the time of construction we anticipate most of the construction demolition materials will be removed from the site and site materials will be delivered as needed. This should minimize the stockpiling of materials.*

BETA: Comment addressed

SW24. *Provide approximate construction sequencing including all required information outlined in §153-12.M.*

UCI: A construction sequence has been added to sheet 6.

BETA: Comment Addressed.

SW25. *Include requirement that erosion control barriers must be installed, inspected, and approved by a professional engineer or licensed wetlands scientist and that no sedimentation barrier may be removed without prior approval of the commission or its staff (BDPG).*

UCI: *The notes were added to sheet 6.*

BETA: Comment addressed

OPERATIONS/MAINTENANCE PLAN (STANDARD NUMBER 9): *A Long-Term Operation and Maintenance Plan shall be developed and implemented to ensure that stormwater management systems function as designed.* A Stormwater Operation and Maintenance Manual was provided with the Stormwater Management Report.

SW26. *Include maintenance of the outfalls and riprap aprons.*

UCI: *The headwall and riprap area maintenance have been added to the yearly inspection and maintenance log.*

BETA: Comment addressed

SW27. *Provide owner signature (§153-18.B(5)).*

UCI: *The O&M has been signed.*

BETA: Comment addressed

SW28. *Include provision requiring a documentation submittal to the DPW confirming when maintenance has been satisfactorily completed (§153-18.B(6)).*

UCI: *A note has been added to the O&M.*

BETA: Comment addressed

SW29. *Obtain Stormwater Management easement with eastern abutter to ensure that stormwater runoff conveyance route is preserved between FES-2 and the nearby wetlands (§153-18.C(1.b)).*

UCI: *The headwall and pipe outfall have been relocated. This does not appear to be necessary any longer.*

BETA: Agreed, the comment is no longer applicable.

SW30. *Include note that the owner of the stormwater management system must notify the Director of changes in ownership or assignment of financial responsibility (§153-18.D(1)).*

UCI: *A note has been added to the O&M*

BETA: Comment addressed

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.* An Illicit Discharge Compliance Statement was provided with the submission

SW31. *Provide signature of owner on the illicit discharge compliance statement.*

UCI: *The illicit discharge compliance statement has been signed.*

BETA: Comment addressed

WETLANDS PROTECTION

The Project proposes work within Areas Subject to Protection and Jurisdiction of the Franklin Conservation Commission, including the 100-foot Buffer Zone to a vegetated wetland. Work within his area includes a small portion of the proposed parking lot, the removal of an existing gravel parking area, and the construction of a new drainage system outfall. Therefore, the Applicant is required to submit an NOI to the Town of Franklin Conservation Commission and must obtain an Order of Conditions to complete the proposed work.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.

Gary D. James, P.E.
Senior Project Manager

cc: Amy Love, Town Planner

Job No: 4830 - 84

TOWN OF FRANKLIN

DEPARTMENT OF PUBLIC WORKS
Franklin Municipal Building
257 Fisher Street
Franklin, MA 02038-3026

September 8, 2022

Mr. Greg Rondeau, Chairman
Members of the Franklin Planning Board
355 East Central Street
Franklin, MA 02038

RE: Site Plan and Special Permit – 175 East Central St, Franklin Ford

Dear Mr. Chairman and Members:

We have reviewed the revised materials for the subject project and our previous comments have been addressed.

Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Michael Maglio, P.E.
Town Engineer

Town of Franklin

355 East Central Street
Franklin, Massachusetts 02038-1352

Phone: (508) 520-4907
www.franklinma.gov

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

MEMORANDUM

DATE: **September 6, 2022**

TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **175 East Central St**
Special Permit & Site Plan Modification

The DPCD has reviewed the above referenced Site Plan Modification application for the Monday, September 12, 2022 Planning Board meeting and offers the following commentary:

General:

1. The site is located at 175 East Central St in the Commercial II Zoning District.
2. The applicant is proposing to construct additional parking and add additional bays for motor vehicle repair. A Special Permit is required in the Commercial II Zoning District, under 185 Attachment 3, Part II.2.6.a – Motor Vehicle Service, Repair.
3. The applicant has received approval from the Conservation Commission.

Waivers Requested:

1. To allow less than 42” of cover over the RCP drain pipe proposed class V RCP
2. To the use of HDPE pipe for the rood drain manifolds and pond 1.
3. To allow minimal light spillage onto Chestnut Street right of way.

Planning Board Comments:

- The Planning Board expressed concern with the light spillage. A revised plan has been submitted. The Board consider if the lighting is excessive for the site.
- There was discussion for visual screening along the street front.
- Both driveway accesses are labeled “Emergency vehicle access”. There should be one main access off of East Central Street shown on the plans.
- DPCD defers to the Town Engineer and BETA for drainage comments.

United
Consultants, Inc.
850 Franklin Street Suite 1 ID
Wrentham, MA 02093
508-384-6560 FAX 508-384-6566

August 4, 2022

Mr. Gregory Rondeau, Chairman
Members of the Franklin Planning Board
355 East Central Street
Franklin, MA 02038

RE: 175 East Central Street Site Plan and Special Permit

Dear Mr. Chairman and Board Members,

On behalf of the applicant Franklin Ford, LLC, we have provided a summary of the following review comments from the Town Engineer and BETA Group, Inc. We have also provided comments received from the Town of Franklin Planning Board at the public hearing. Our responses are immediately following each comment and they have been italicized.

Town Engineer

1. Application that will need to be filed with the Franklin Department of Public Works may include, but are not necessarily limited to a Public Way Access Permit, Right of Way Excavation Permit, and a Soil Erosion and Sediment Control Permit. Any modifications to the existing water and/or sewer services will also require the appropriate permits.
   Upon obtaining site plan approval the owner or his contractor will file for and obtain any additional permits that are required.

2. The site is located within a Water Resource District.
   Agreed. No comment.

3. The plans call for a proposed 12" RCP drain line to cross the existing 16" AC water line within the Town's easement. The contractor will be required to coordinate with the Franklin DPW at the time this line is installed to verify adequate separation between the proposed drain and the existing 16" AC water main. A test pit may be required prior to installation.
   A note has been added to sheet 4.

4. The proposed infiltration system outfall is shown discharging towards an existing town drainage outfall and drainage swale on the adjacent property. This proposed alignment will need to be investigated to ensure it complies with any existing easements on the adjacent property.

The pipe outfall location has been revised on sheet 4.

5. All modifications to the existing sidewalk and the proposed driveway opening shall conform to the ADA and the Massachusetts AAB accessibility requirements.

   A note has been added to sheet 4.

General Comments

Zl. Revise plan set to distinguish between existing and proposed line work more clearly.

The existing conditions line work has been screened and the proposed line work is generally a darker and wider line type.

Z2. Include measures for removal/abandonment of utilities servicing the existing house.

Utility removal notes have been added to sheet 4.

Zoning

The Site is located within the Commercial Il (CII) Zoning District. The proposed Site will retain the existing use as an Automobile Dealership.

Schedule of Lot, Area, Frontage, Yard and Height Requirements (S 185 Attachment 9)

The Site meets the requirements for lot area, depth, frontage, width; front and rear yards; impervious coverage and building height.

The project does not meet requirements for required side yard. However, this is an existing nonconformity and the proposed building addition will meet side yard requirements.

Drawing Requirements (S 185-31)

Drawings must be prepared in accordance with the Zoning Bylaw (S 185-31).

Z3. Indicate proposed snow storage areas (S 85-31.C.(3).(h)). The plan set notes that parking spaces above the required number of spaces shall be used for additional snow storage. This approach, however, may be impractical if these spaces are used for the display of vehicles.

A snow storage area has been provided at the north end of the parking lot expansion area.

Z4. Provide sight line information at proposed entrance/exit ways (Sl85-31.C

Sight distance information has been added to sheet 4.

Signs (5185-20)

The project proposes the following signs:

Sign Designation	Location
Stop	East Site Entrance
Accessible Parking Signs	Accessible Parking Spaces

Z5. Provide alternate accessible parking sign detail with "van accessible " designation.

A van accessible parking sign detail has been added to sheet 7.

Parking, Loading and Driveway Requirements (5185-21)

The Project proposes an expansion to the existing building. The site plan set indicates that the building will be separated into retail, office, and warehouse uses. The required parking for these uses is as follows:

Use	Area (SF)	Rate (Space / SF)	Required Parking
Retail	3,081	1 / 200 SF	16
Office	2,548	1/250 SF	11
Warehouse	23, 702	1/1000 SF	24
Total:			51

Parking is proposed to the south and east of the existing/proposed building. A total of 195 parking spaces are provided 64 of these spaces are proposed in the southwestern lot near the main building entrance, while the remaining 131 spaces are in the eastern lot.

Parking spaces are shown as nine (9) feet by 19 feet with a min. 24- foot access aisle. Americans With Disabilities Act (ADA) regulations require a minimum of three (3) ADA-accessible spaces for lots ranging from 51 to 75 spaces. One (l) shall be van accessible with a 96-inch-wide access aisle and the remaining 3 parking spaces are to be served by a 60-inch-wide access aisle. The six (6) accessible spaces provided meet these requirements.

Access to the Site is proposed via two curb cuts: an existing curb cut at East Central Street and a new curb cut at Chestnut Street. Three existing curb cuts along Chestnut Street will be removed and the concrete sidewalk reconstructed.

The project will include repaving and expanding the eastern parking lot and restriping the western parking lot. Vertical Granite curbing will be provided around the perimeter of the eastern parking lot. Some landscaped areas are proposed around the west and eastern sides of the eastern parking lot.

Refer to the Screening and Landscaping section of this report for comments relating to parking lot screening requirements.

BETA provides the following comments relative to the parking, loading access and landscaping:

Z6. BETA notes that the project includes parking spaces within 10 feet of the East Central Street Right-Of-Way, which is not permitted (S 185-21 .C(I)). As this is an existing nonconformity, BETA defers to the Planning Board.

Parking spaces 1 - 20 are located within 10 feet of the East Central Street ROW. The proposed parking spaces (62 - 82) have been located 10 feet from the Chestnut Street ROW.

Z7. Revise design of the accessible parking spaces proposed in the center of the southern lot (Space 58) and along the southern building wall (Spaces 59, 60, and 61). Accessible parking spaces should be positioned as near as possible to the building entrance and must include an accessible route to the building they are intended to serve (521 CMR 20).

Spaces 59 - 61 have been relocated. Spaces 58 - 61 have an accessible route to the various building entrances which include the employee entrance and service bay entrance for the public as well as the entrance on the east side of the showroom for public access.

Z8. Indicate which percentage of proposed parking spaces are anticipated to be occupied by vehicles to be sold, and which percentage are to be reserved for employees and visitors.

Proposed parking spaces designated for vehicle display and employees and visitors have been listed on sheet 3.

Z9. Review design of the southernmost parking spaces (Spaces 9 through 20). No access aisle is depicted to provide vehicular access to these spaces.

Spaces 9 through 20 are for vehicle display. The employees will be able to move the cars located in spaces 21 through 31 to allow for the cars to be removed from the spaces.

Z10. Review design of parking spaces proposed along southern building wall (Spaces 59 through 64). Based on field visit, a garage door is present in this area which will be blocked by the proposed spaces.

The parking spaces in this area have been revised. The total parking space count has been reduced from 195 to 192.

Z11. Provide detail for vertical granite curb and sidewalk.

A vertical granite curb details and the sidewalk details have been added to sheet 9.

Screening (S 185-35) and _Landscaping

The project proposed twenty (20) tree plantings along the perimeter of the southeastern parking lot. Proposed trees include American Elm, Red Maple, and White Birch. The provided planting quantity is in accordance with those required for the proposed number of parking spaces.

5185-35(2) and (7) require that outdoor sales displays and outdoor parking for 10 or more cars be screened from adjacent residential district or uses. The residential Single Family IV district abuts the Site to the northwest north, and east, and residential uses abut the Site to the south, west, and southeast Existing vegetation is proposed to be retained to provide screening along the north and eastern perimeters of the Site. Existing vegetation along the southern property line will be removed to allow the proposed parking lot expansion. No additional screening is proposed beyond the 20 aforementioned tree plantings.

Z12. Provide required screening along the southern property line to screen the property from the abutting 183 E Central Street property. BETA notes that existing vegetation is present in this area but its extent is not depicted on the Site plans.

The six foot high stockade fence has been extended along the south side of the properly where it abuts the 183 East Central Street property. The area where the fence is proposed is approximately three feet higher than the Franklin Ford parking area. Tis will result in an approximately nine foot high from the parking area to the top of the fence.

Z13. Indicate limit of existing tree line and any proposed tree clearing along the perimeter of the property. BETA noters that trees along the eastern property line, which screen the property from an abutting residence, are primarily deciduous and may not form an effective buffer during winter.

The existing tree line has been added to the plans. The proposed tree clearing will be limited to the 9 East Central street boundaries.

Lighting *(§185-31.*

Project Lighting Plans (SLI) indicate that a total of 23 pole-mounted and 14 wall-mounted luminaires are proposed on the eastern portion of the Site. A photometric plan was provided

The Illuminating Engineers Society of North America (IESNA) recommends the following for parking lots:

Level	Horizontal Illuminance (min)	Vertical Illuminance (min)	Uniformity Ratio (max/min)
Basic Maintained Illuminance	0.2	0.1	20/1
Enhanced Security Illuminance	0.5	0.25	15/1

Z14, BETA defers to the Town regarding approval of the waiver to allow light spillage onto Chestnut Street. This waiver must also be revised to include light spillage onto the abutting properties. *(§185-31.C.(4).(e))*

The site lighting has been revised and a waiver is requested to allow light spillage onto Chestnut Street.

Z15. BETA recommends revising lighting design to reduce areas of high illuminance proposed throughout the eastern parking lot.

The site lighting has been revised.

Water Resource District (S 18540)

The project is located within a Water Resources District and a Zone II Wellhead Protection Area. Refer to the Stormwater Management section of this report for the project's compliance with groundwater recharge requirements.

Z16. Indicate if motor vehicle service or repair will occur within the proposed building extension, which is a prohibited use (S 85-40.D.(1).(c)). BETA notes that the existing building includes a service area, though this is an existing nonconformity.

The applicant's Attorney has addressed this issue.

Stormwater Management

The stormwater management design proposes a subsurface infiltration system to capture, store, and infiltrate stormwater runoff from the redesigned eastern parking lot. Stormwater runoff will be conveyed to this system via a new closed drainage system consisting of catch basins, drainage manholes, and a water quality unit. Overflow from the subsurface system will be conveyed to a new outfall which discharges to a low-lying area to the east upgradient of an existing wetland. Stormwater runoff from the proposed building extension roof will bypass the subsurface system and be conveyed via roof drains to a new outfall which discharges to a grassed area upgradient of the wetlands.

No modifications are proposed to the stormwater management design of the western parking lot.

STORMWATER MANAGEMENT REGULATIONS (CHAPTER 153)

The project proposes to disturb land in excess of once acre within the Town of Franklin. It is therefore subject to the Stormwater Management Regulations. The project is also required to comply with the Town of Franklin Best Development Practices Guidebook (BDPG) Compliance with these regulations is outlined below and throughout the following sections.

SW1. Provide clear and definite delineation of any areas of vegetation or tree disturbance (S153-12.J).

The revised infiltration pond outlet will result in vegetation removal which has been labeled on sheet 4. The proposed area Q/ vegetation removal has been labeled on the proposed watershed plan.

SUBDIVISION REGULATIONS STORMWATER MANAGEMENT REGULATIONS (5300-11)

Additional requirements for stormwater management are outlined in S300-11 of the Town of Franklin Subdivision Regulations. The Applicant has requested a waiver to allow for the use of HPDE pipe and Class V RCP.

SW2. Provide required headwall at outfalls (5300-11.B(2.b)).

A headwall has been added to sheet 4 and a detail has been added to sheet 9.

SW3. The proposed discharge from the infiltration system is directly towards the abutting parcel. There is an easement in this area, however, the applicant should document that they have rights to discharge into this easement area. Otherwise, the discharge should be moved to discharge into the wetland buffer zone at the rear of the parcel.

The discharge has been relocated on sheet 4.

MASSDEP STORMWATER STANDARDS

The project is subject to the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below.'

NO UNTREATED STORMWATER (STANDARD NUMBER 1): No new stormwater conveyances, (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth. The project proposes two new outfalls. One of these outfalls, FES-2, is located within the 100-foor wetland buffer zone. Stormwater runoff will be treated by water quality units and a subsurface infiltration system prior to discharge. Riprap aprons are proposed at each outfall for erosion control.

SW4. Provide calculations for sizing of riprap aprons. (Length, width, riprap depth, and riprap D50).

Rip rap sizing information can be found on sheet 8.

SW5. The roof runoff must be treated and cannot be directly discharged towards the wetlands. BETA recommends that this flow be routed through the subsurface system to meet standard 4 or an infiltration basin be constructed downgradient of FES-I to provide treatment. If the Applicant intends to instead direct rooftop runoff to a qualifying pervious area, the applicant must demonstrate that the design meets the minimum criteria set forth on Volume 3, Chapter l, Page 47 of the MA Stormwater Handbook.

The roof runoff, from the proposed addition, has been routed to the infiltration pond.

SW6. Based upon the site location within the limits of the water resource district, BETA recommends that the applicant review the site to determine if any minor revisions to the pavement behind the existing building could be made to collect and treat the runoff from this area.

Watershed CB 5 has been revised to include the area behind the existing building.

POST-DEVELOPMENT PEAK DISCHARGE RATES (STANDARD NUMBER 2): Stormwater management systems must be designed so that post-development peak discharge rates do not exceed predevelopment peak discharge rates. The project proposes a net increase in impervious area and minor changes to site hydrology. Stormwater runoff will be mitigated via a new subsurface infiltration system, Calculations indicate a decrease in peak discharge rate and runoff volume to all watersheds.

SW7. Revise limit of analysis to include the entire limit of alterations. The southern portion of the eastern parking lot has been excluded from the model.

Watersheds areas for CB 1, CB 2, CB 3 and CB 4 have been revised on the proposed watershed plan and within the analysis.

SW8. Review cover types used for pre-development hydro CAD model. A portion of the area modelled as "Paved parking & roofs" should be modelled as "Grass" and "Woods."

The cover types have been revised in the model.

SW9. Review roof area used for subcatchment RS. Revise TC to be 6 minutes.

The time of concentration was revised to a total of6 minutes.

SW10. Indicate source of rainfall data used in HydroCAD model. Revise 100-year storm event to use a 7" rainfall depth to comply with the Wetlands protection Act. To ensure the infiltration BMP is adequately sized, BETA recommends the use of NOAA Atlas-14 rainfall rates or NRCC Extreme Precipitation Estimates.

As requested we have revised the rainfall for the 100-year storm event.

SW11 . Indicate location of existing water lines which may be present within the water line easement and confirm existing utilities will not conflict with proposed drainage pipes.

The approximate location of the water line has been added to the site plans.

RECHARGE TO GROUNDWATER (STANDARD NUMBER 3): Loss of annual recharge to groundwater should be minimized through the use of infiltration measures 10 maximum extent practicable. NRCS soil maps indicate that soil in the area of proposed modifications is predominantly Merrimac-Urban Land complex with HSGR A (high infiltration) and Urban Land with no assigned HSGR.

The Applicant has conducted permeability testing in the area Q/ the proposed infiltration BMP indicating an infiltration rate 11.16 in/hr. In accordance with standard engineering practices, the rate used in the HydroCAD model is one-half this measured rate or 5.58 in/hr. Test Pits conducted at the Site indicate that subface soil in the area of the infiltration BMP is medium sand Groundwater was not observed in these test pits to an approximate excavation depth of10 ' b.g. (Elevation 82' +/-)

Recharge is proposed via a new subsurface infiltration system which will capture runoff the eastern parking lot area. The project will provide groundwater recharge in excess of what is required

SW12. Revise model for Pond PI to use an accurate groundwater elevation, rather than elevation 0.

The invert for infiltration of Pond was set at 0. 0l' below the pond bottom. This is due to an issue with the Hydro cad model (f the actual pond bottom elevation is used.

SW13. BETA Recommends including an outlet control structure / drainage manhole at the subsurface infiltration system outlet similar to the inlet configuration. This would facilitate system maintenance, simplify transition to 18" RCP, and avoid the need for a pipe bend.

The pipe has been revised and the bend is not longer proposed. Inspection ports are provided at the corners of the infiltration pond 1.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): For new development, stomanagement systems must be designed to remove 80% (90% per Town Bylaw) of the annual load of Total Suspended Solids (TSS). The project includes treatment of the eastern parking lot via deep sump catch basins, a proprietary water quality unit, and a subsurface infiltration system. The resulting TSS removal rate are listed as 98.1%

The project is required to treat the 1.0-inch water quality volume (See Standard 6). Water quality volume is provided via the proposed proprietary unit and the subsurface infiltration system in excess of what is required. At least 44% TSS removal is achieved prior to discharge to the infiltration BMP. A Long-Term Pollution Prevention Plan has been provided as part of the Operation and Maintenance Plan.

SW14. Provide calculations for provided total phosphorus (TP) removal (S153-16.B(1.b)) and total nitrogen removal (TN) (BDPG).

Impervious area directed to infiltration pond I = 91,215 sq. ft. x 0.0833 = 7,601 cubic feet

Pond Volume below invert 7,275 cubic feet or 95% Reference MA MS4 General Permit Appendix F Attachment 3.

SW15. Roof runoff is exempt from pretreatment but still requires treatment prior to discharge. See SW 4 above.

The proposed addition roof runoff has been routed to the infiltration pond.

HIGHER POTENTIAL POLLUTANT LOADS (STANDARD NUMBER 5): Stormwater discharges from Land Uses with Higher Potential Pollutant Loads (LUHPPLs) require the use of specific stormwater management BMPs. The project is considered a LUHPPL under the definition of a motor vehicle repair operation (310 CMR 22.20C(2)(i)). and is required to comply with this section. The project narrative notes that automobile maintenance will be completed within the building. Subsurface structures are considered recommended uses for a LUHPPL and the proposed hydrodynamic separator will provide adequate pretreatment.

SW16. Revise narrative to identify the Site as a LUHPPL.

Standard 5 has been revised in the report narrative.

SW17. Provide Source Control and Pollution Prevention Plan, accounting for the contingency that leaks and spills occurring within the building may migrate into the parking lot.

An automobile repair operational BMP's' have been added to sheet 6.

SW18. Show current floor drain connection and discharge and show proposed connection for floor drains for proposed expansion.

The existing oil water separator (OWS) has been labeled and the connection to the building is shown. The connection of the floor drains in the proposed addition will be located within the building and is noted as such on sheet 4.

CRITICAL AREAS (STANDARD NUMBER 6): Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas. The project is located within a Zone II Wellhead Protection Area which is a critical area. Subsurface structures are considered recommended uses for a Zone II and the proposed hydrodynamic separator will provide adequate pretreatment.

REDEVELOPMENT (STANDARD NUMBER 7): Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable. The project is a mix of new development and redevelopment with a net increase in impervious area.

EROSION AND SEDIMENT CONTROLS (STANDARD NUMBER 8): Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities. As the project proposes to disturb greater than one acre of land, it will be required to file a Notice of Intent with EPA and develop a Stormwater Pollution Prevention Plan (SWPPP). Erosion control measures are depicted on the plans including compost sock for perimeter control.

SW19. Provide Stormwater Pollution Prevention Plan (SWPPP) and revise project narrative to indicate a NPDES Construction General Permit is required.

A Storm-water Pollution Prevention Plan will be completed prior to commencement of construction.

SW20. Provide stabilized construction entrance with measures to ensure that all construction period traffic will be over this entrance.

The project consist of the construction of a building addition as well as a storm water system both of which will be mainly accessed from the existing paved parking lot. As such the construction vehicles will be traveling over existing paved surfaces prior to entering the public ways. Refer to O&M schedule for the Construction Phase note 2 located on sheet 6.

SW21. Provide location and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures.

Refer to O&M schedule for the Construction Phase note 6 located on sheet 6.

SW22. Provide measures to prevent sedimentation into open excavations for subsurface infiltration systems during construction

A compost sock was added at the infiltration pond area on sheet 6.

SW23. Provide approximate location of proposed stockpile and staging locations including measures to minimize exposure to the materials and mitigate sedimentation (S 153-12.L). Include stockpile location for materials generated during demolition.

A staging area and material stockpile area have been added to sheet 6. Refer to O&M schedule for the Construction Phase note 7 located on sheet 6. Due to the site bring operated at the time of construction we anticipate most of the construction demolition materials will be removed from the

site and site materials will be delivered as needed. This should minimize the stockpiling of materials.

SW24. Provide approximate construction sequencing including all required information outlined in S153-12.M.

A construction sequence has been added to sheet 6.

SW25. Include requirement that erosion control barriers must be installed, inspected, and approved by a professional engineer or licensed wetlands scientist and that no sedimentation barrier may be removed without prior approval of the commission or its staff (BDPG).

The notes were added to sheet 6.

OPERATIONS/MAINTENANCE PLAN (STANDARD NUMBER 9): A Long-Term Operation and Maintenance Plan shall be developed and implemented to ensure that storm water management systems function as designed. A Stormwater Operation and Maintenance Manual was provided with the Storm water Management Report.

SW26. Include maintenance of the outfalls and riprap aprons.

The headwall and riprap area maintenance have been added to the yearly inspection and maintenance log.

SW27. Provide owner signature S153-18.B(5)).

The O&M has been signed.

SW28. Include provision requiring a documentation submittal to the DPW confirming when maintenance has been satisfactorily completed (S 153-18.B(6)).

A note has been added to the O&M.

SW29. Obtain Stormwater Management easement with eastern abutter to ensure that stormwater runoff conveyance route is preserved between FES-2 and the nearby wetlands (S 153-18.C(l .b)).

The headwall and pipe outfall have been relocated. This does not appear to be necessary any longer.

SW30. Include note that the owner the stormwater management system must notify the Director of changes in ownership or assignment of financial responsibility (S 53-18. D(l)).

A note has been added to the O&M

ILLICIT DISCHARGES (STANDARD NUMBER 10): All illicit discharges to the stormwater management system are prohibited An Illicit Discharge Compliance Statement was provided with the submission

SW31. Provide signature of owner on the illicit discharge compliance statement.

The illicit discharge compliance statement has been signed.

Planning Board

1. Add abutting houses to the site plans.
   Abutting houses have been added to the site plans.

2. Add car carrier offloading area,
   The car carrier offloading area has been added to sheet 3.

Abutters

3. When the site drainage is installed will there be and disturbance to the exiting drainage pipe on the Keefe property?
   The pond outlet pipe has been relocated and is now directed to the wetland on the Franklin Ford property.

4. Site lighting.
   The S&K associates site lighting plan has been revised and light spillage has been eliminated on the abutting properties.

5. Provide a fence along the Keefe property.
   A six foot high wood stockade fence has been added to the site plans. Refer to BETA Comment Z12.

6. Add a sign to discourage the use of car horns and car alarms.
   A sign has been proposed in the island south of the proposed addition.

We look forward to meeting with the Planning Board to discuss this project further.

Sincerely,

Richard Goodreau
Project Manger