



August 23, 2023

Town of Franklin Planning Board
Mr. Gregory Rondeau, Chairman
C/O Amy Love, Planner
355 East Central Street
Franklin, MA 02038

**Re: Factory Square Property Redevelopment
1, 3, 5, & 7 Fisher Street
Site Plan Modification
LDG Proj. No.: 1899.00**

Dear Mr. Rondeau and Members of the Board:

Level Design Group, LLC (LDG) on behalf of KCRES, LLC does hereby submit a Modification of the approved plans for the referenced property. With a changing business landscape, the property owner is proposing to maintain the existing entirety of the building at 3 Fisher, with minor adjustments between building 3 and Building 5. This building will be renovated and rehabilitated for tenant use, with the addition of a sunken loading dock at the rear and a renovation of the main entrance in this area.

At the Rear of 3 Fisher today the ground is elevated to allow a loading dock to come in high along Fisher Street. As proposed the loading dock will be 3-5 ft below grade at Fisher, which will, in conjunction with extensive landscaping provide screening which doesn't exist today.

The remainder of the site has been reconfigured slightly from the approved plans, following the same proposed drainage pathways and limited impervious areas from the original approval. The rear parking lot will not be constructed at this time as the tenants have changed from the proposed uses previously approved.

The drainage report has been modified to detail the minor changes and increased green space in the summary section. The overall intention of the property is to maintain the approved system inclusive of the new system at the proposed future pavement. The modification included detailed on the drainage itself with an associated mapping.

Drainage Summary, Excerpt:

There are slight internal site development modifications with capture and discharge of water from the approved plan to the currently proposed modified plan set. The water flow path and discharge point remain the stone swale and associated overflow for the site drainage. The development includes treatment of previously installed site and Town drainage prior to discharge and treatment of the new drainage areas prior to discharge to the existing Town drain line. This modification will however minimize pavement over the approved plan and thus will provide increased water quality. A heat map based upon the new development and the approved proposed watershed map has been provided, whereas:

1. *Green hatch is new green space*
2. *Orange hatch is former green space that is now impervious*
3. *Grey hatch is a swap of pavement and building from the approved plan*
4. *Clouded green is a small swap of pavement and green space creating a small net increase in green space in this area.*



5. *Purple is a change is flow path for stormwater*

To address purple in the post condition there is a change of 7,812 s.f. of area which under the approved design was to be captured in the new parking lot drainage system. This flow area will now be captured in the new catch basin at the rear of the building. This flow previously was captured in the same drain line by a catch basin further down.

There is a small portion of existing pavement which drained to the field at the southern end of the property, this portion has been reduced but will continue to flow along this path until such time as the parking is constructed.

Due to the proposed development retaining the future parking area as was fully designed and approved there is no modification to the drainage system. It was felt by the design team and applicant that the increase in green space will be a positive effect on the system, thus allowing the system to maintain the impervious as designed will be a conservative design approach.

While it is understood that the site has been determined to be a major modification due to the portion of the building previously slated for demolition now proposed to remain creating a modification of greater than 5,000 s.f. of impervious over the approved plan there is a decrease in impervious areas on the proposed plans, even after the construction of the approved rear lot.

The site plan incorporates photometric plans for the portion of the site being modified, this will supersede the approved plan. LDG is working with the electrical engineer to incorporate the comments of the Design Review Board from August 22, 2023 into a modified plan. This will modify wall pack fixtures with a more period specific fixture matching the style of the parking lot fixtures.

The site plan incorporates landscape plans for the portion of the site being modified, this will supersede the approved plan. The approved landscape plans are intended to be acted upon as part of the development unless otherwise shown on the modified plan submission.

We look forward to working with the Board on this project to allow this property to maintain its historic character in the redevelopment as proposed.

Previously Submitted:

- 2 Full Size sets of plans
- 6 reduced (11x17) size sets of plans
- 7 copies of associated documentation
- 1 Copy of Previously Endorsed Set
- Filing Fee + Additional for Major Modification
- BETA Deposit

Enclosed please find:


- 4 Full Size sets of approved/endorsed plans
- This letter with attached stormwater design summary and colored map of modified areas.

I look forward to meeting with the Board at the next meeting. If there are any questions prior to the hearing please do not hesitate to ask.

Truly yours,



LEVEL DESIGN GROUP, LLC


Daniel Campbell, P.E.
Principal

Attachments

Cc: KCRS
File



STORMWATER REPORT
FOR
FACTORY SQUARE
1, 3, 5 & 7 FISHER STREET
FRANKLIN, MASSACHUSETTS



REVISED AUGUST 23, 2023

Prepared By:
Level Design Group, L.L.C.
249 South Street, Unit 1
Plainville, MA 02762

Prepared For:
K Fisher Street LLC
1 Fisher Street
Franklin, MA 02052

LDG Project No.:
1899.00



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HYDROLOGIC SUMMARY

METHODOLOGY

The HydroCAD computer program (HydroCAD) was used to model the existing and proposed hydrology of the site and design a stormwater management system. HydroCAD generates flood hydrographs dependent upon the type of land use, vegetation, soil types, land slope, watershed areas and rainfall data. HydroCAD also takes into account the antecedent moisture condition of the soil. The peak rate of runoff and volume of runoff are projected for the input storm frequency events (design storms).

Rainfall data was obtained from the Northeast Regional Climate Center and are based on Extreme Precipitation Events for the 2" Storm Event and the 2-, 10-, 25- and 100-year return periods Plainville, Massachusetts. A 24-hour type III rainfall distribution was used in the HydroCAD analysis as prescribed for New England by the Northeast Regional Climate Center. A copy of the precipitation table is included herein.

FULL DEVELOPMENT PRE-DEVELOPMENT CONDITIONS

The existing site is located at 1, 3, 5 & 7 Fisher Street in Franklin, MA. The majority of the site is developed with old factory and mixed use buildings. A small area of the site to the south east is undeveloped but is landscaped with grass and existing mature trees. The Site is bounded by West Central Street to the north, Fisher Street to the east, Hayward Street to the south and an existing BVW to the west. The adjacent properties to the roadways are residential with exception toward the southwest are more commercial facilities. The development site is approximately 14.7 ± Acres with approximately 85% of the existing property being developed with various sized and use buildings, pavement and utilities. Existing ground cover of the site includes the asphalt pavement and building footprint. The existing site does contain a formal stormwater management system which ultimately drains to the Bordering Vegetated Wetlands to the West.

The majority of the site is defined as redevelopment. The existing stormwater system serves the existing building and pavement and will be utilized to the maximum extent feasible for the redevelopment project. Approximately 10,000 s.f. of pavement and roof area will be removed and replaced with green space. This reduction in impervious area will cause runoff to be reduced for the redevelopment portion of the site. Due to the complexity of the existing utility systems the applicant is proposing to re-use the current configuration where feasible. Modified piping and drainage where necessary in the redevelopment area is shown on the site plans. The redevelopment area has not been modeled for pre- and post- runoff due to the reduction of impervious area and the implied reduction of runoff to the same drainage point (the westerly BVW system).

The on-site soils as classified by the Soil Survey for Norfolk County Massachusetts, the redevelopment portion of the site area is classified as Urban Land. The new construction area of new parking is located



in an area of Udorthents sandy, Hydrologic Soil Group A which are soils having a high infiltration rate (low runoff potential) when thoroughly wet. These soils consist mainly of deep, well drained to excessively drained sands or gravelly sands. Based on test pits done by Level Design Group, LLC parent material of the area for new construction is a Medium Gravelly Sand with a classification of HSG A. Please see the SCS soils documentation attached herein.

FULL DEVELOPMENT POST-DEVELOPMENT CONDITIONS

The Applicant is proposing to redevelop the site and renovate and rehab the existing buildings for a mixed-use development. A portion of the existing buildings will be demolished and replaced with parking, patios and green space. The existing catch basins and drainage in those area will be re-used to capture the runoff from the reconfigured impervious areas. Impervious areas will be reduced for the redevelopment areas and due to the complexity of the site the existing drainage will stay in place to the maximum extent feasible and no additional calculations will be provided for the existing system. During construction, if it is determined that a portion of the existing system is failing or inadequate, the engineer shall be consulted and a replacement or redesign of those components will be considered.

A new fully compliant stormwater management system has been designed to support the area of new construction in the southeast corner of the property. The newly designed parking lot will collect the runoff, treat it, and infiltrated the runoff into a subsurface infiltration system. Deep sump catch basins will capture the runoff, then it will be routed through proprietary treatment structures, then infiltrated after pretreatment has been achieved. Runoff from the impervious areas and building rooftops will be directed to two infiltrating BMPs.

A fully compliant stormwater management system for the new construction portion of the site addressing compliance with the 10 MADEP Stormwater Standards will be part of the site redevelopment. Site improvement have been made to the maximum extent practicable in accordance with MADEP Stormwater Regulations.

MODIFIED DEVELOPMENT POST-DEVELOPMENT CONDITIONS

The Applicant is proposing to redevelop the site and renovate and rehab the existing buildings for a mixed-use development. A portion of the existing buildings will be or have been demolished under the current site plan approval and will be replaced with green space, parking or access. The existing catch basins and drainage in those area will be re-used to capture the runoff from the reconfigured impervious areas. Impervious areas will be reduced for the redevelopment areas and due to the complexity of the site the existing drainage will stay in place to the maximum extent feasible and no additional calculations will be provided for the existing system. During construction, if it is determined that a portion of the existing system is failing or inadequate, the engineer shall be consulted and a replacement or redesign of those components will be considered.

A new fully compliant stormwater management system has been designed to support the area of new construction parking in the southeast corner of the property, though this parking has been designed and permitted it will be constructed as the building occupancy changes requiring additional parking. The building inspector shall evaluate each occupancy request based upon parking requirements and



once parking needs exceed the site provided parking the rear parking shall be constructed in accordance with the approved plan. The newly designed parking lot will collect the runoff, treat it, and infiltrated the runoff into a subsurface infiltration system. Deep sump catch basins will capture the runoff, then it will be routed through proprietary treatment structures, then infiltrated after pretreatment has been achieved. Runoff from the impervious areas and building rooftops will be directed to two infiltrating BMPs.

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There is a small portion of existing pavement which drained to the field at the southern end of the property, this portion has been reduced but will continue to flow along this path until such time as the parking is constructed.

Due to the proposed development retaining the future parking area as was fully designed and approved there is no modification to the drainage system. It was felt by the design team and applicant that the increase in green space will be a positive effect on the system, thus allowing the system to maintain the impervious as designed will be a conservative design approach.

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STANDARD 1: Untreated Discharges



Stormwater Management Standard 1 requires that, “No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth”.

This standard is met by the proposed redevelopment not creating any new non-treated stormwater discharges. All surface runoff from the proposed impervious areas is collected and treated for suspended solids removal and directed to the existing on-site drainage line. The treatment of the site drainage prior to discharge mimic existing drainage flow patterns while maintaining a cleaner site flow.

STANDARD 2: Peak Rate Control and Flood Prevention

Stormwater Management Standard 2 requires that, “Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This Standard may be waived for land subject to coastal storm flowage.”

This standard is met by the proposed development mitigating the post-development peak discharge rates at the designated control point for all design storm events. This is accomplished by directing stormwater flow from the proposed building roof area to multiple infiltration systems located on the site. Below is a description of the control point used in the hydrologic analysis and a summary of pre- and post- development discharge rates. The proposed development will reduce the peak rate of runoff at all the design control points and provide ample groundwater recharge.

SUMMARY OF PEAK STORMWATER RUNOFF (CFS)

One singular control point was used in the analysis. This point was chosen as it is the outfall at the terminus of the on-site channel. There is an accumulation along the short path of the channel as depicted in the HydroCAD.

| Control Point – R1 | | | | |
|--------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Storm | Pre-Dev. Flow (CFS) | Post-Dev. Flow (CFS) | Pre-Dev. Volume (af) | Post-Dev. Volume (af) |
| 2-yr | 30.12 | 26.74 | 0.041 | 0.038 |
| 10-yr | 55.51 | 51.32 | 0.064 | 0.060 |
| 100-yr | 126.84 | 119.71 | 0.117 | 0.112 |

The roadway included in the calculations is a constant, but the roadway area (estimated) contributes approximately ¼ of the flow to each the pre and post development scenarios. The net peak discharge is controlled and does not increase at the control points for any of the evaluated design storms.

STANDARD 3: Recharge to Groundwater

Stormwater Management Standard 3 requires that, “Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures, including environmentally sensitive site design, low impact development techniques, best management practices, and good operation and



maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from the pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.”

This standard is fulfilled through the infiltration of the proposed building roof area. This 12,230 s.f. is controlled through proposed Stormtech infiltration field, which overflow to each other until the final basin which has a catch basin grate, which will flow to the low point double catch basin, flow through the on-site CDS prior to discharge. There is very little infiltration which occurs through the on-site 4,000 s.f. of pervious area. All stormwater discharged to the proposed infiltration practices is roof drainage and is considered “clean” by stormwater standards and the remainder of the site discharge is treated in excess of 44% TSS removal prior to discharge to the municipal system. Below is a detailed calculation demonstrating full compliance with the recharge to groundwater requirements.

GROUND WATER RECHARGE

The on-site soils as classified by the Soil Survey for Bristol County Massachusetts, Northern Part are Hinckley loamy sand, 8 to 15 percent slopes, Hydrologic Soil Group (HSG) B. Based on test pits by Level Design Group, LLC, on-site parent soils are identified as sand and/or gravelly sand within the area of the proposed infiltration basins and an infiltration rate of 2.41 inches per hour was used based on the Rawls Rates and the material observed. The required infiltration for a HSG B soil is 0.35 inches of runoff times the total impervious area.

The post-development increase in impervious area must be utilized for the recharge calculations as a redevelopment project. However, there is an overall decrease in impervious area on-site through the development. As such the evaluation which took place incorporates the final site impervious area for the analysis. The required recharge volume is calculated as follows:

Required Recharge Volume for the New Development area = (70,278± sf of impervious area) x (0.35 in of runoff for HSG B) x (1 ft./12 in.) = 1,317± cu. ft.

Franklin Stormwater By-Law Required Recharge Volume for the Development = (237,961± sf of impervious area) x (0.80 in of runoff for Franklin Standards) x (1 ft./12 in.) = 15,864± cu. ft.

Water used to satisfy the recharge to groundwater standard is from pretreated surface runoff from the parking area and driveway and from the proposed building rooftops. The Simple Dynamic Method of Recharge Volume was utilized to calculate recharged groundwater.

Simple Dynamic Method Calculations for all proposed infiltration practices:

Required Recharge Volume:

$R_v = F \times \text{impervious area created}$

$R_v = (\text{HSG "B"}) \times (\text{impervious area created})$

Recharge Volume Provided:

$A = Rv \div (d + Kt)$, where d = depth below outlet, Kt = Rawls Rate = 2.41 inches per hour
 t = time (2 hours – Stormwater Handbook Recommendation)

Minimum Required Volume of Infiltration Practice = V (cf) = $A \times d$ (or $n \times d$ where n is the void space % of the system) where n = Overall Storage Efficiency of the Infiltration pits, d = depth below lowest outlet

The calculations for each of the infiltration systems are detailed in the table below.

| System | Impervious Area (sf.) | Rv (cf) | $*n \times d$ (ft) | Kt in/hr | t (hr) | Min Req. Area (sf.) | Minimum Volume Required (cf) | Volume Provided Below Outlet (cf.) |
|------------------------|-----------------------|-----------|---------------------------------|------------|----------|---------------------|------------------------------|------------------------------------|
| Stormtech Infiltration | 45,146 | 0 | $*n=0.72$ $d=6$ $nd=4.32$ | 2.41 | 2 | 0 | 15,864 | 16,300 |

*overall storage system efficiency values (n) for the Infiltration Pits is taken from HydroCAD Chamber Wizard for each basin.

The total minimum recharge volume requirement 15,864± cu. ft. for the entire site is exceeded with a total provided recharge volume of 16,300± cu.ft. of storage provided below the lowest outlet of each subsurface infiltration system. All proposed systems far exceed the required design volumes as detailed in the above table.

STANDARD 4: 80% TSS Removal

Stormwater Management Standard 4 requires that, “Stormwater management systems must be designed to remove 80% of the average annual post-construction of Total Suspended Solids (TSS). This standard is met when:

- Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan and thereafter are implemented and maintained;
- Stormwater BMPs are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook and;
- Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook”



This standard is met by collecting all surface runoff from all paved areas with deep sump and hooded catch basins. This flow is then treated by a CDS or VortSentry Stormwater Treatment Unit prior to discharge to an infiltration basin providing greater than the required 80% TSS removal as detailed in the attached MADEP TSS Removal Calculation Sheets.

Water Quality Calculations:

The volume of stormwater runoff to be treated for water quality is calculated as one-half inches times the total post-development impervious area of the site based on current MADEP Stormwater Management Standards. With the understanding that the proposed development sensitive resources downstream from the development water quality calculations detail compliance with a water quality volume equal to one inch times the total post-development impervious. The water quality volume calculation is detailed below.

Total Site Impervious Area= 70,278± s.f.
1.0 inch x 1 foot/12 inches= 0.0833 feet
0.0833 feet x 70,278± s.f.= 5,854± cu.ft.

Total Volume to be treated for Water Quality= 5,854± cu.ft.

As detailed above, the proposed infiltration system provides 16,300± cu.ft. of volume below their lowest outlets. This volume satisfies the required 5,854± cu.ft. of water quality volume to be treated for the proposed development. To achieve the required 44% TSS removal prior to flow being infiltrated a variety of structural practices are utilized. All impervious areas, not including roof top runoff directly piped to an infiltration practice, will be collected in deep sump and hooded catch basins and treated by a CDS Stormwater Treatment Unit to achieve the minimum 44% TSS removal required for each system prior to flows being infiltrated. Sizing calculation for the two Stormwater Treatment Units is detailed below.

The overall water quality onsite is improved through the installation of treatment units at two main locations, other than the new development area. The two areas of installation are the reconfigured parking area to the south of 5 Fisher Street. This parking area previously travelled under the existing structure and connected into the existing line which traverses the site from Fisher Street. This it being reconfigured with a new main drain line outside of the building footprint and a CDS treatment units prior to discharge into the main drain. The second area is in the location of building removal and replacement with parking area. The replacement will decrease the on-site impervious however will still pick up the overall from the CB's on West Central Street as it does today. This flow will be treated through a new CDS unit as well prior to discharge, onsite. The treatment exceeds the requirements for discharge on property.

CDS Stormwater Treatment Unit Sizing

The CDS Units are sized using the *Massachusetts Department of Environmental Protection Wetlands Program – Standard Method to Convert Required Water Quality Volume to a Discharge Rate for Sizing Flow Based Manufactured Proprietary Stormwater Treatment Practices.*

Flow to DBLE CB

$Q_{1.0} = (qu)(A)(WQV)$
 $qu = 774 \text{ csm/in}$ for a T_c of 0.1 hours (taken from Figure 2 of the Massachusetts Department of Environmental Protection Wetlands program - Standard Method to Convert Required Water Quality Volume to a Discharge Rate)
 $A = 0.587 \text{ Acres}$
 $WQV = 1.0 \text{ inches}$

$Q_{1.0} = (774 \text{ csm/in}) (0.587 \text{ acres - impervious coverage}) (0.0015625 \text{ sq. mi / acre}) (1.0 \text{ inch})$

$Q_{1.0} = 0.059 \text{ cfs} < \text{CDS Model 2015 with a Treatment Capacity} = 1.4 \text{ cfs}$

Flow to CB

$Q_{1.0} = (qu)(A)(WQV)$
 $qu = 774 \text{ csm/in}$ for a T_c of 0.1 hours (taken from Figure 2 of the Massachusetts Department of Environmental Protection Wetlands program - Standard Method to Convert Required Water Quality Volume to a Discharge Rate)
 $A = 0.179 \text{ acres}$
 $WQV = 1.0 \text{ inches}$
 $Q_{1.0} = (774 \text{ csm/in}) (0.179 \text{ acres}) (0.0015625 \text{ sq. mi / acre}) (1.0 \text{ inch})$

$Q_{1.0} = 0.018 \text{ cfs} < \text{VortSentry with a Treatment Capacity} = 1.2 \text{ cfs}$

STANDARD 5: Higher Potential Pollutant Loads

Stormwater Management Standard 5 requires that, "For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention, all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt and stormwater runoff, the proponent shall use the specific stormwater BMPs determined by the Department to be suitable for such use as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 2, §26-53, and the regulations promulgated thereunder at 314 CMF 3.00, 314 CMR 4.00 and 314 CMR 5.00."

The proposed use is not considered a use that would generate Higher Potential Pollutant Loads.

STANDARD 6: Critical Areas

Stormwater Management Standard 6 requires that Stormwater discharge to a Zone II Interim Wellhead Protection Area of a public water supply and stormwater discharges near any other critical area require



the use of specific source control and pollution prevention measures and the specific stormwater best management practices determined by the Department to be suitable for managing discharges to such area, as provided in the Massachusetts Stormwater Handbook. A discharge near a critical area, if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters or Special Resource Waters shall be set back from the receiving water and receive the highest and best practical method of treatment. A "stormwater discharge," as defined in 314 CMR 3.04(2)(a)1. or (b), to an Outstanding Resource Waters or Special Resource Waters shall comply with 314 CMF 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A area prohibited unless essential to the operation of the public water supply."

The development site is not located within a Critical Area as defined by the Massachusetts Stormwater Handbook.

STANDARD 7: Redevelopment and Other Projects Subject to the Standards only to the Maximum Extent Practicable

The definition of a Redevelopment Project under the definition provided in the MADEP Stormwater Handbook for Standard 7 is listed below:

"Development rehabilitation, expansion and phased projected on previously developed sites, provided that redevelopment results in no net increase in impervious area."

The proposed development is considered a Redevelopment Project however, it fully complies with the requirements of the MADEP Stormwater Management Standards.

STANDARD 8: Erosion and Sediment Control

Stormwater Management Standard 8 requires that, "A plan to control construction-related impacts, including erosion sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan), must be developed and implemented."

This standard is met by including erosion and sediment controls within the design plans. A gravel construction entrance is proposed at the access point to the site once the pavement is removed from that area of the site. A 9" diameter Filtrexx Silt Sox is proposed at the limits of all site related construction activities. Silt sacks are also proposed to be installed in all of the existing catch basins within the area of the proposed site disturbance and within proposed structures until the site has been stabilized and the stormwater management system is brought on-line. A draft Stormwater Pollution Prevention Plan (SWPPP) has been prepared and is included as part of the Stormwater Report. The SWPPP will be finalized prior to construction as required when a NPDES General Construction Permit is applied for.

STANDARD 9: Operation and Maintenance



Stormwater Management Standard 9 requires that, "A long-term operation and maintenance plan must be developed and implemented to ensure that stormwater management systems function as designed".

This standard is fully met with development and implementation of an Operation and Maintenance Plan, which is included in Stormwater Management Report.

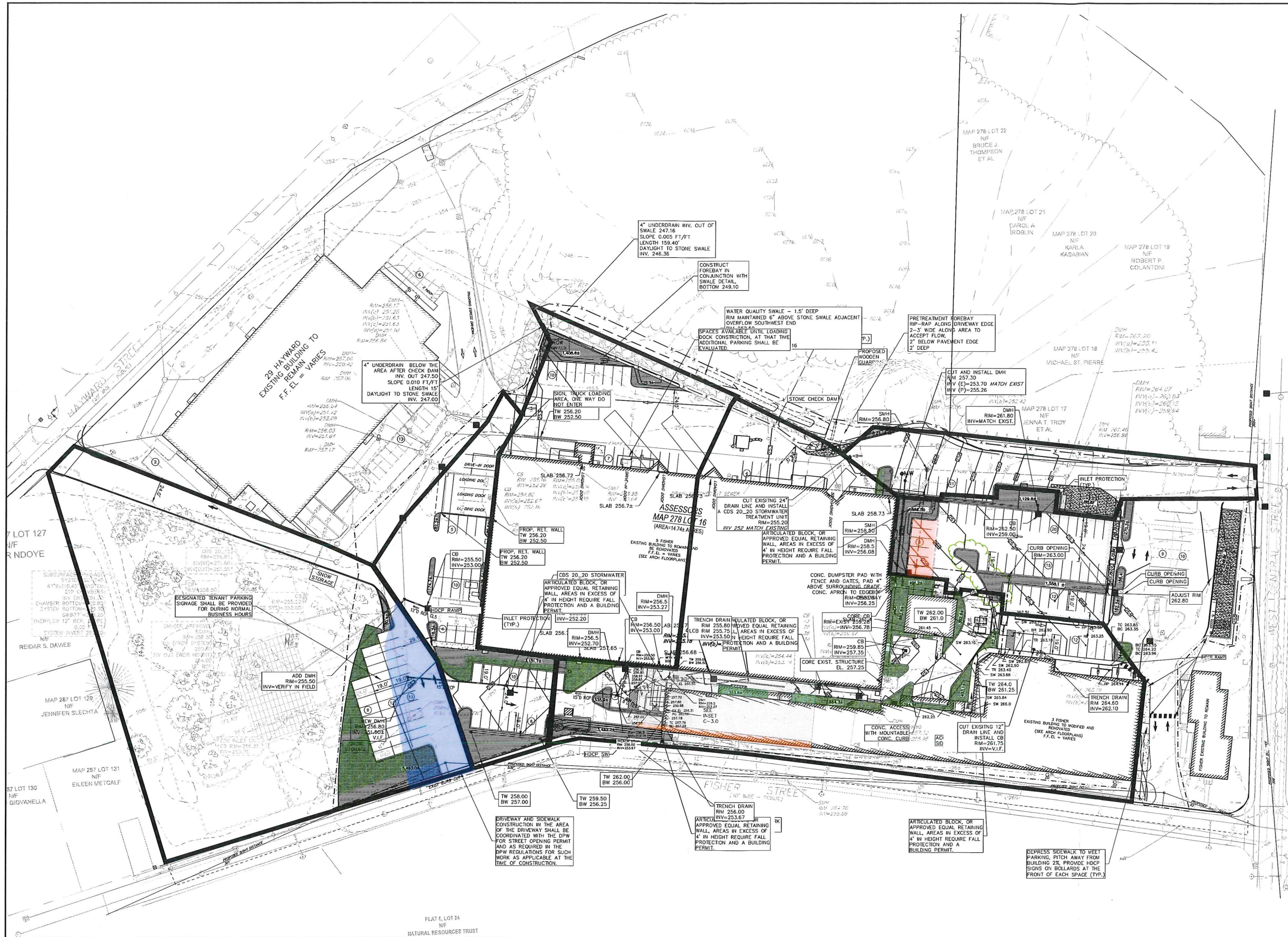
STANDARD 10: Illicit Discharges

Stormwater Management Standard 10 requires that, "All illicit discharges to the stormwater management system are prohibited".

This standard is fully met with development and implementation of a Long Term Pollution Prevention which is included in the Stormwater Management Report. An Illicit Discharge statement has been prepared and is included herein.

22CONCLUSION

The proposed development of this parcel will be a significant improvement to the area and to the on-site resource areas. The proposed development meets or exceeds the current MADEP Stormwater Management Standards and Guidelines and provides a stormwater management system that will maintain water quality while attenuating peak rates of runoff at the control points which providing maximum on-site groundwater recharge. This was achieved by using pretreatment BMPs and directing the stormwater runoff to multiple infiltration basins which attenuate peak flows while maximizing groundwater recharge and providing high a level of TSS removal. An Operation and Maintenance Plan for post-construction maintenance of the Stormwater Management System has been developed and is included with this report.



| NO | DATE | REVISIONS |
|----|------------|------------------|
| 1 | 07/07/2023 | ISSUE FOR PERMIT |

DATE: 07/07/2023
DRAWN: DRC
SCALE: DRC

FACTORY SQUARE

SITE REDEVELOPMENT - PERMIT MODIFICATION
PARCEL ID 278-016-000-000
1, 3, 5 & 7 FISHER STREET
FRANKLIN, MASSACHUSETTS



249 SOUTH STREET, UNIT 1
PLAINVILLE, MA 02762
TEL: (508) 695-2221 FAX: (508) 695-2219

PROPOSED DRAINAGE

D-1.0

SHEET X OF 16



1899.00