Amended Site Plan &
Site Location of Development Act Permit

To the City of Saco, Maine

Gravel Laydown Lot Expansion

71 Industrial Park Road
Saco, Maine

Applicant:
Vic-Sam Holdings, LLC
102 Industrial Park Road
Saco, Maine 04072

Prepared By:
DM Roma Consulting Engineers
PO Box 1116
Windham, ME 04062

DM ROMA

CONSULTING ENGINEERS

DM ROMA
CONSULTING ENGINEERS

August 18, 2023

Emily Cole-Prescott, City Planner
300 Main Street
Saco, Maine 04072

Re: Amended Site Plan Application
71 Industrial Park Road, Saco
Vic-Sam Holdings, LLC - Applicant

Dear Emily:

On behalf of Vic-Sam Holdings, LLC we have prepared the enclosed application submission for the proposed Site Plan Amendment for the expansion of the supply yard lot at 71 Industrial Park Road. This submission is for both the existing expansion that was completed outside of the original Site Plan approval and for the further expansion of the laydown space on the property. As discussed during our on-site meeting in July, the property is at its capacity and the applicant would like to expand laydown space to provide for more materials but to also allow for a more maneuverable site. The proposed amendments are further described in the application submission.

Please find the enclosed three (3) copies of the Site Plan Review application, updated design plans, other supporting documents and the application fee of $2,500.00 as the project will need to be reviewed as both a Site Plan and a Site Location of Development Act project since the proposed total impervious area will exceed 3 acres. Also enclosed is a copy of the preliminary Natural Resources Protection Act (NRPA) Tier 2 Wetland Alteration permit to be submitted to the Maine Department of Environmental Protection. This is also further described within the application submission.

Upon your review of this information, please let us know if you have any questions or require any additional information. We look forward to working with City staff through the planning process.

Sincerely,

DM ROMA CONSULTING ENGINEERS

Jayson R. Haskell, P.E.
Southern Maine Regional Manager

cc: Patrick Bryan, Applicant
enc.

PO Box 1116, Windham, Maine 04062 ○ (207) 591-5055 ○ jayson@dmroma.com

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AMENDED SITE PLAN & SITE LOCATION OF DEVELOPMENT ACT PERMIT SUBMISSION

GRAVEL LAYDOWN LOT EXPANSION

71 INDUSTRIAL PARK ROAD, SACO, MAINE

SECTION 1

APPLICATION FORM & CHECKLIST

Application #_____

Site Plan Review Application

Saco Planning Board Review

Street Address of Proposed Project: 71 INDUSTRIAL PARK RD Tax Map & Lot: M-71 L-1-2

Registry of Deeds Book & Page Number: 17683/318 Zoning District: I

Applicant: VIC-SAM HOLDINGS, LLC

Applicant's Address: 102 INDUSTRIAL PARK RD, SACO, ME 04072

Applicant's Email & Phone #: Rick@cascobaytransportation.com 207-710-2323

Architect/Engineer's Name: DM ROMA ENGINEERS - JAYSON HASKELL, PE

Architect/Engineer's Email & Phone #: jayson@dmroma.com

Architect/Engineer's Address: P.O. BOX 1116, WINDHAM, ME 04062

Property Owner: SAME AS APPLICANT

Property Owner's Email & Phone #: _____

Property Owner's Address: _____

Area of Parcel: 6.40 AC Proposed Developed Area: 5.7 AC Proposed Height: N/A

Sq. Ft. of Each Proposed Structure: N/A Proposed # of Parking Spaces: N/A

Amendment to Previously Approved Plan: ■ Yes ☐ No

Description of Proposal: The expansion of the existing laydown yard

with associated site grading and stormwater infrastructure improvements.

Signature & Application Requirements: Applications are due at least three weeks in advance of Planning Board meetings, but the Department encourages applicants to plan for five weeks before a Planning Board meeting. Staff will schedule your application for a Planning Board meeting once all reviews are complete and comments have been sufficiently addressed.

Signature of Owner/Applicant

8-16-2023
Date

Site Plan Review Checklist

Section 230-1104: Submission Requirements

Applicant	City staff	Submission Requirement
☑	☐	A fully executed and signed copy of the application for site plan review
☑	☐	Three copies of a site plan on paper not larger than 24 by 36 inches nor smaller than 11 by 17 inches, drawn at a scale sufficient to allow review of the items listed under the approval criteria herein, but at not more than 50 feet to the inch for that portion of the total tract of land being proposed for development. One electronic PDF copy of all applications materials shall be submitted via email: Planning@sacomaine.org. The site plan shall show the following:
☑	☐	owner's and applicant's name and address, names and addresses of consultants who aided in preparing the plan, if any, and the name and address of the person or company leasing the property, if applicable, and, in order to establish right, title and interest, a deed, an executed lease, option, or purchase and sale agreement;
☑	☐	names and addresses of all abutting property owners;
☑	☐	sketch map showing general location of the site within the city and north arrow;
☑	☐	boundaries of the property and of all contiguous property under the control of the owner or applicant regardless of whether all or part is being developed at this time;
☑	☐	zoning classification(s) of the property and the location of zoning district boundaries if the property is located in two or more zoning districts or abuts a different zone
☑	☐	the location and width of all building setbacks required by the Zoning Ordinance;
☑	☐	the location and delineation of site elements, including: all existing and proposed buildings (including dimensions where appropriate), driveways, sidewalks, parking spaces, loading areas, open spaces, large trees, wetlands preservation measures and protection measures, stormwater control facilities, dumpsters and recycling facilities, etc.
☑	☐	the location and widths of nearby streets.
☑	☐	The location and delineation of natural resource areas, historic features and archaeological features of the site including, but not limited to floodplains, wetlands, open drainage courses, sand and gravel aquifers, scenic areas, significant wildlife habitats, habitat areas for rare and endangered plants and animals, deer wintering areas, stands of trees, stone walls, graveyards, fences, unique natural areas, historically

		significant structures or features, archaeologically significant features, or other important Unusual Natural Areas and site features
☑	☐	Copies of existing and proposed easements, covenants, or deed restrictions
☐ Pending	☐	Copies of applicable local and state approvals and permits, provided however, that the Planning Board or in the case of minor site plans the City Planner, may approve site plans subject to the issuance of specified state licenses and permits in cases where it determines that it is not feasible for the applicant to obtain them at the time of site plan review
☑	☐	Names and addresses and tax map and lot numbers of all property owners within six hundred (600) feet of the applicant's property if it is located in the Conservation District, any industrial district, the Resource Protection District or the R-1, R-2, and R-4 districts, or within two hundred (200) feet when the applicant's property is located in the R-3 District or any business district
☑	☐	For site plans in which ten thousand (10,000) square feet of impervious surface will be created, a storm water drainage plan, prepared by a registered Maine Professional Engineer, showing:
☑	☐	the existing and proposed method of handling storm water run-off;
☑	☐	the direction of flow of the run-off through the use of arrows;
☑	☐	the location, elevation, and size of all catch basins, dry wells, drainage ditches, swales, retention basins, and storm sewer engineering calculations used to determine drainage requirements based upon the 2, 10, 25 and 50 year 24 hour storm event that show the predevelopment and post-development runoff rates. If the post-development runoff rate exceeds the predevelopment runoff rate on-site mitigation measures, such as detention basins or flow restrictors, shall be required unless a drainage plan prepared by a Maine registered engineer demonstrated that the increase has no adverse impact to the downstream conditions
☑	☐	Existing and proposed topography of the site at two (2) foot contour intervals, or such other interval as the Board may determine
☐ N/A	☐	A utility plan showing provisions for water supply and wastewater disposal including the size and location of all piping, holding tanks, leach fields, and showing the location and nature of all electrical, telephone and any other utility services to be installed on the site
☑	☐	A landscape plan, with a planting schedule keyed to the site plan and indicating the varieties and sizes of trees, shrubs and other plants to be planted on the site
☑	☐	A standard boundary survey by a registered land surveyor showing the location of all property lines. The Board may waive the requirement of a boundary survey when sufficient information is available to establish, on the ground, all property boundaries

☑	☐	The location, size and character of all signs
☑	☐	A waste disposal plan describing how all solid waste will be handled on site, how it will be removed from the site, the disposal facilities to which it will be transported, and, if the waste is of an unusual nature, information indicating that a suitable disposal facility will accept the waste. For businesses which use industrial chemicals and produce hazardous waste, the name, amount, and nature of all chemicals used, and the manner of disposal of all chemical, hazardous and industrial wastes
☑	☐	A medium intensity soils map of the site. The Board may require a high intensity soils map if issues of water quality, wetlands, or other natural constraints are noted
☑	☐	For projects which will create over ten thousand (10,000) square feet of impervious surface, a plan showing the methods of controlling erosion and sedimentation both during and after construction, including a written description of these methods and a schedule for implementing them in accordance with the requirements of the York County Soil and Water Conservation District
☑	☐	An estimate of the amount and type of traffic generated daily and at peak hours. For sites that generate more than four hundred (400) vehicle trips per day, a traffic impact analysis, prepared by a registered professional engineer with experience in traffic engineering and transportation, shall be submitted. The analysis shall show, at a minimum, existing traffic volumes, proposed traffic generation, proposed access, types of vehicles expected, effect on level of service within the study area, sight lines, and accident history in the study area. The report will recommend improvements both on site and off site to meet the requirements of this ordinance.
☐ N/A	☐	A hydrogeologic assessment may be required by the Board for projects in which groundwater quality is a concern. Such instances include, but are not limited to, sites: A. Over a sand and gravel aquifer; B. Not served by public water or sewer; C. Where the depth to groundwater is less than 48 inches; D. In soils rated by the SCS Soil Survey as poor or very poor for subsurface septic systems; E. In coarse soils categorized as having "severe" limitations for septic systems; F. Where a septic system of over 2000 gallons per day is proposed
☐ N/A	☐	When a hydrogeologic assessment is submitted, the assessment shall contain at least the following information: A. A map showing the basic soil types; B. The depth to the water table at representative points throughout the lot; C. Drainage conditions throughout the project;

		D. Data on the existing ground water quality, from test wells in the project or from existing wells on neighboring properties; E. A map showing the location of any subsurface wastewater disposal systems and drinking water wells within the project and within 200 feet of the project boundaries; F. An analysis and evaluation of the effect of the project on ground water resources. In the case of residential developments, the evaluation shall, at a minimum, include a projection of post development nitrate – nitrogen concentrations at any wells within the project, at the project boundaries, and at a distance of one thousand (1,000) feet from potential contamination sources, whichever is a shorter distance. Projections of ground water quality shall be based on the assumption of drought conditions (assuming 60% of annual average precipitation).
☑	☐	If the project is subject to the stormwater quality standards of Section 805-2, a stormwater quality management plan that includes the following: A narrative describing how the site is oriented within the watershed, identifying downstream waterbodies including wetlands, and addressing the potential effects of site runoff. The narrative shall identify and discuss the stormwater treatment methods proposed to be used on the site. A plan showing relevant existing contours, proposed contours, existing and proposed sub-watersheds, proposed topographic features, and existing and proposed site features including buildings and other facilities, natural and manmade drainageways, streams, channels, culverts, catch basins, and stormwater treatment facilities. The plan shall include detail drawings of the stormwater Best Management Practices proposed to be used and the location of both structural and non-structural BMPs. Calculations demonstrating that the proposed stormwater treatment facilities will meet the standards of Section 805-2. A stormwater facilities management plan which sets forth the types and frequencies of proposed maintenance activities needed to maintain the efficiency of the stormwater treatment facilities and which identifies the party that will be responsible for carrying out each maintenance activity and for submitting the Annual Maintenance Report and the proposed institutional arrangements that will assure that all maintenance occurs as proposed.

☐ N/A	☐	A lighting plan, prepared by a qualified lighting professional, showing at least the following at the same scale as the Site Plan:
☐ N/A	☐	The location of all buildings, landscaping, parking areas, and proposed exterior lighting fixtures; Specifications for all proposed lighting fixtures including photometric data, designation as "cut-off" fixtures, Color Rendering Index (CRI) of all lamps (bulbs), and other descriptive information on the fixtures; The proposed mounting height of all exterior lighting fixtures; Analyses and illuminance level diagrams or photometric point by point diagrams on a twenty foot grid showing that the proposed installation conforms to the lighting level standards of this ordinance together with statistical summaries documenting the average illuminance, maximum illuminance, minimum illuminance, average to minimum uniformity ratio, and maximum to minimum uniformity ratio for each parking area, drive, canopy, and vehicle sales or storage area; and Drawings of all relevant building elevations showing the fixtures, the portions of the walls to be illuminated, the illuminance levels of the walls, and the aiming points for any remote light fixtures.
☑	☐	Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or known by the City to be eligible to be listed on the National Register of Historic Places shall be submitted by the applicant to the Maine Historic Preservation Commission and the Saco Historical Preservation Commission (as appropriate) for review and comment prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Commissions prior to rendering a decision on the application
☑	☐	A design analysis demonstrating how the project conforms to the design standards of §230-729, including any district-specific additional requirements. This analysis must address each of the applicable design standards and allow the Planning Board to determine if each standard has been met. The analysis must provide information about the proposed development and the characteristics of neighboring properties and the adjacent neighborhood and an analysis demonstrating how the proposed development meets the standards. This analysis should include plans, building elevations, visual simulations, and a narrative as appropriate to document conformance with the standards.

Design Review Submission Requirements
Section 230-729

Applicant	City staff	Submission Requirement
☐ N/A	☐	The plans shall include line drawings of all sides of the building or buildings

☐ N/A	☐	The proposed exterior construction materials shall be indicated, including but not limited to siding materials and roofing materials
☐ N/A	☐	Line drawings that demonstrate the style and design of windows and doors proposed for the building or buildings shall be submitted
☐ N/A	☐	The plans shall include line drawings of all proposed accessory structures, including but not limited to canopies, storage buildings, fenced enclosures, and maintenance buildings
☐ N/A	☐	If the applicant is or represents a corporate entity that operates businesses of a similar nature in locations beyond Saco, representative color photographs of existing structures identical or similar to that proposed in Saco shall be submitted

If property is located on sewer, please complete the IWS Form.

Waiver Requests

If you are asking for a waiver, please indicate the type of waiver and the reason for the waiver request. The Board reviews the application and waiver requests uniquely to each project, so the request should clearly demonstrate the unique aspect of the project.

Waiver Request #1: Section 230-_____: _____

Waiver Request #2: Section 230-_____: _____

Waiver Request #3: Section 230-_____: _____

Waiver Request #4: Section 230-_____: _____

Waiver Request #5: Section 230-_____: _____

VIC – SAM, Holdings LLC

Date 2-28-2019

To Whom It May Concern,

I, Patrick Bryan, member of VIC-SAM Holdings, LLC, owner of the property at 71 Industrial Park Road in Saco, Maine, name Jayson Haskell, of DM Roma Consulting Engineers, as my representative in matters concerning this property.

Thank you

Notary Public:
Laurie J. Parke
6/21/21

102 Industrial Park Rd., Saco, Maine 04072 Ph: 207-710-2323 Fax: 207-710-2324

SECTION 2

PROJECT NARRATIVE & SITE LOCATION MAP

Section 2 – Project Narrative

Zoning:	Industrial Zoning District (I)
Acreage:	6.40 Acres
Tax Map/Lot:	Map 71 Lot 1-2
Existing Use:	Supply Yard
Proposed Use:	Supply Yard

Vic-Sam Holdings, LLC is proposing to expand their existing laydown yard at 71 Industrial Park Road in Saco. This will be an expansion of their existing Supply Yard facility.

Permitting History

The original site development design was permitted by the land owner at the time, LAW Property Management, LLC, as a multi-tenant facility containing a 25,000 square foot building, a 10,000 square foot building, associated paved parking and driveways, utilities and stormwater infrastructure. That project received Site Plan approval from the City of Saco Planning Board in January 2017, including a Stormwater Permit approval under the City's municipal capacity agreement with the Maine Department of Environmental Protection (MDEP). The project also received a Tier 1 Wetland Alteration permit from the MDEP (MDEP# L-27281-TC-A-N) for the impact of approximately 12,920 square feet of wetlands as a result of the development. LAW Property Management, LLC did not complete the project and in April 2018 sold the property to Vic-Sam Holdings, LLC, the current land owner and applicant.

In March 2019, Vic-Sam Holdings, LLC requested the transfer of the MDEP permit and coordinated with the City of Saco to construct a gravel laydown area to be utilized by Casco Bay Transportation, a transportation company located north of the property at 102 Industrial Park Road, for temporary and long-term storage of materials (primarily steel) that is offloaded from the railroad tracks that run through their other Industrial Park Road location and transported to this site. The laydown area was designed within the limits of the originally approved impervious surface, but without the construction of the buildings, the pavement and the utility services. The supply yard development included the construction of the previously designed and approved stormwater infrastructure, including a wet pond in the rear of the site. This was all coordinated and approved with the City of Saco Planning Office and received Amended Site Plan approval in September 2019. The facility was then built in the Spring/Summer 2020.

Existing Site Conditions and Supply Yard Expansion

Since the completion of construction in 2020, the site has been utilized for water tank trailer storage, steel and drilling equipment storage from a geotechnical specialty construction company and railroad tie timber storage for the railroad company. Based on conversations with the owner of Casco Bay Transportation, the company has lost several opportunities to grow the business due to the limited laydown space on the site.

Based on aerial imagery, in 2022, a portion of the site that was previously approved to remain wooded was cleared of trees and gravel placed to provide additional storage for the railroad

company to store additional railroad tie timbers during a track replacement project. That expansion cleared approximately 42,395 square feet of woodland and created an additional gravel laydown area totaling approximately 18,745 square feet.

As a result of that expansion of the gravel space, approximately 5,500 square feet of additional forested wetlands were also impacted. This was in addition to the previously permitted wetlands, increasing the total existing wetland impact to approximately 18,420 square feet.

Proposed Development

As indicated previously, the Supply Yard facility is undersized for the current needs of Casco Bay Transportation and their clients, but the applicant also understands that an expansion should be properly proposed and permitted through the City and MDEP. In addition to the previously constructed gravel laydown area and as part of the Site Plan amendment, the applicant is proposing to further expand the gravel laydown area to accommodate the current and future needs of the company. The unpermitted gravel laydown area will be re-graded to drain to properly designed stormwater infrastructure. In addition, a portion of the gravel laydown area will be removed as it located within the building setback. This will be removed and revegetated with loam and seed.

The existing gravel laydown area will be expanded in the center of the site along with extending it to the southeast along the southern property boundary. The proposed expansion will create an additional 1.03 acres of usable laydown space which will allow for the storage of more material in addition to increasing the mobility within the site as it is at capacity in the existing conditions. The expansion will also include upgrades to the existing stormwater infrastructure, including the existing wet pond. This is further explained in *Section 7 Stormwater Management Report*.

As a result of the proposed expansion, approximately 17,095 square feet of additional forested wetlands will be impacted. The resultant 35,515 square feet of total proposed wetland impact will require amendments to the existing MDEP and ACOE wetland alteration permits, further described in *Section 12 Other Regulatory Approvals*.

Utilities and Lighting

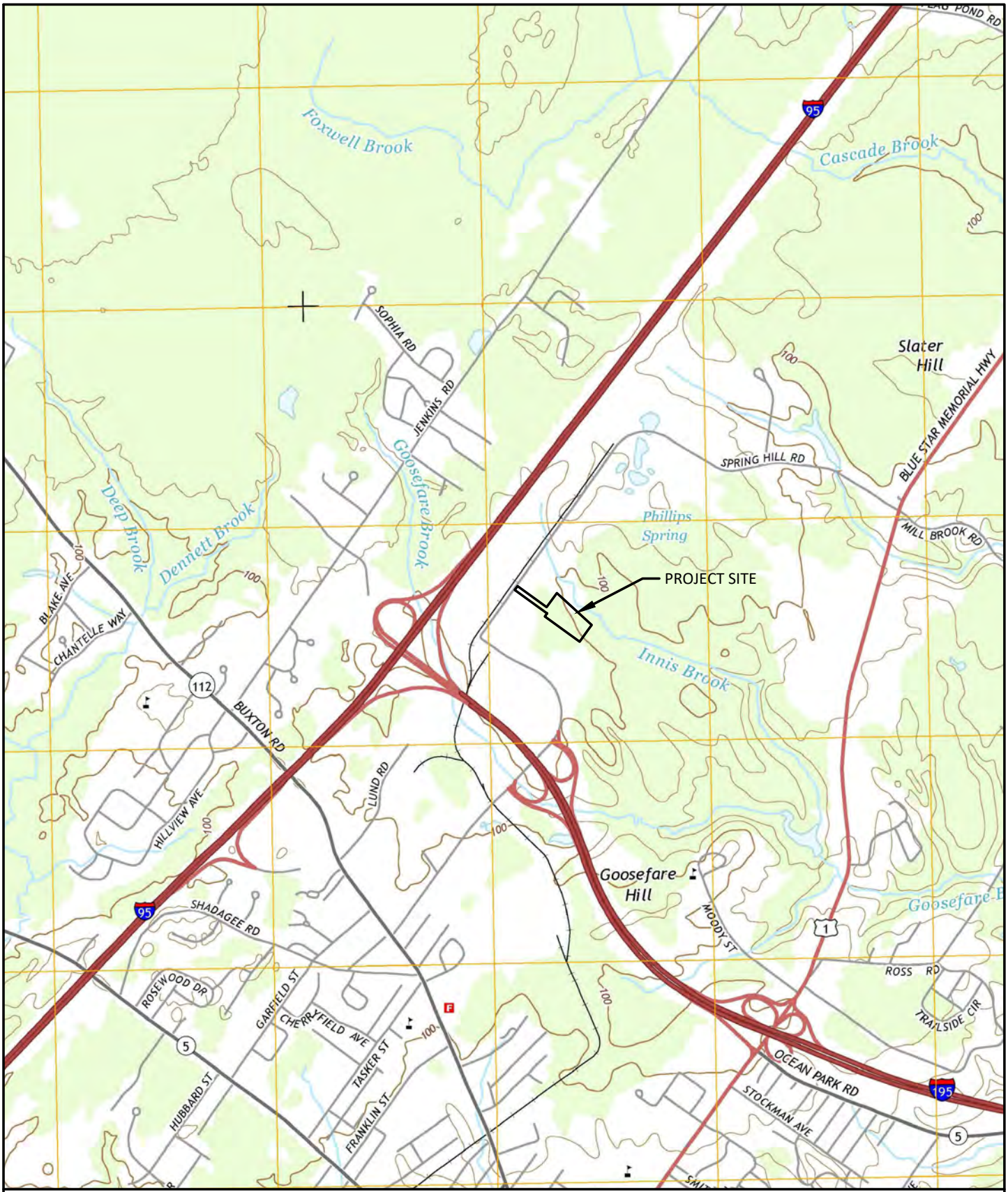
There are currently no public or private utilities on the property. There is no intent to extend utilities onto the property or to install site lighting.

Landscaping and Buffers

The site is currently surrounded to the north, south and west by industrial uses. Wooded buffers have been preserved along the relatively long access road along with proposed landscaping at the entrance of the site. The other undeveloped or pervious areas of the site will remain primarily grassed, meadow or brush vegetation which provides screening, but due to the setting of the property within an industrially zoned area of the City, it generally conforms with the surrounding areas. The property located to the east is currently undeveloped woodland and a row of trees have been preserved generally along the property boundary to provide a level of screening if the site is ever developed.

Solid Waste and Fuel Storage

Since the project site is utilized as an unmanned supply yard for moderate to long term storage of materials including water tank trailers and steel materials, the site doesn't generate solid waste. In addition, the site currently does not allow the storage of large quantities of fuel and don't anticipate the need to in the future.



SITE LOCATION MAP

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

SCALE: 1"=2,000'
DATE: 2-28-2019
JOB NUMBER: 19011

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506

SECTION 3

DESIGN STANDARDS

Section 3 – Design Standards

Since the project is being reviewed under *Chapter 179 Site Plan Review*, the project design will be required to meet the standards in *Section 179-5 Design Standards*.

Section 179-5.03B Landscaping

The site is currently surrounded to the north, south and west by industrial uses. Wooded buffers have been preserved along the relatively long access road along with proposed landscaping at the entrance of the site. The other undeveloped or pervious areas of the site will remain primarily grassed, meadow or brush vegetation which provides screening, but due to the setting of the property within an industrially zoned area of the City, it generally conforms with the surrounding areas. The property located to the east is currently undeveloped woodland and a row of trees have been preserved generally along the property boundary to provide a level of screening if the site is ever developed.

Section 179-5.03C Reflective Building Materials

There are no proposed buildings proposed as part of this project.

Section 179-5.03D Commercial, multifamily residential and mixed-use development

The project is an industrial use and does not meet the definitions of each of these uses. These standards don't apply to the proposal.

Section 179-5.03E Industrial development

The design guidelines identified in (1), (2), (3) and (5) do not apply to this project as there are no proposed buildings associated with the land development.

(4) Screening

See *Section 179-5.03B* Landscaping for vegetated buffering between properties. There are no proposed dumpsters on the property that would require screening.

(6) Pedestrian safety and experience

Since the project is a supply yard without a permanent presence of employees or patrons, there aren't many pedestrians walking the property. Users of the site consist primarily of the trucks from Casco Bay Transportation delivering, picking up or organizing material on site, typically without leaving the vehicles.

(7) Loading and circulation

The project site is primarily utilized by the trucks from Casco Bay Transportation. The site is currently laid out with the majority of the material on the outer edges of the laydown area providing adequate maneuverability for the large trucks utilized by the transportation company. No vehicles are allowed to be parked on the entrance driveway. We anticipate the drive aisles to be adequate for emergency vehicles to access the project site as necessary.

SECTION 4

CONDITIONAL USE NARRATIVE

Section 4 – Conditional Use Narrative

Based on the current Industrial Zoning District regulations, the "Supply Yard" use is considered a Conditional Use requiring Planning Board approval. In addition, the project site is now considered non-conforming due to the 2021 revisions to *Chapter 230 Zoning*. The original I-1 Industrial Park Zoning District required a minimum road frontage of 50 feet, which was conformed to with the parcel's provided road frontage of 70 feet. In the revisions to the Zoning portion of the ordinance, the required road frontage was extended to 150 feet, making the existing lot nonconforming. We are proposing that the Planning Board allow the expansion of the project site and have provided the below narratives on the standards for a Conditional Use permit as identified in *Section 230-1406 Standards*:

1. Proposed use will meet the definition and specific requirements set forth in this chapter and will comply with applicable state or federal laws.

   The project is being reviewed by not only the City of Saco but by the Maine Department of Environmental Protection and US Army Corps of Engineers to ensure the project will meet all applicable standards.

2. The proposed use will not impede vehicular and pedestrian circulation, or access for emergency responders, nor create hazards on site and on adjacent streets. The proposed exterior lighting will not create hazards to motorists traveling on adjacent public streets, is adequate for the safety of occupants or users of the site and will not damage the value and diminish the usability of adjacent properties.

   The project site is located approximately 600 feet away from the Industrial Park Road right of way and do not allow any vehicles to park on the access drive into the site. Once in the site, there is adequate space for the large vehicles utilized by Casco Bay Transportation to maneuver around the site, moving materials and/or trailers as necessary. With the site being so far from Industrial Park Road, no trailers are parked in or around the public right of way that would impede on vehicular traffic. The site does not currently have site lighting and are not proposing any new exterior lighting as part of the laydown area expansion.

3. The provisions for buffers and on-site landscaping will provide adequate protection to neighboring properties from detrimental features of the proposal.

   The site is currently surrounded to the north, south and west by industrial uses. Wooded buffers have been preserved along the relatively long access road along with proposed landscaping at the entrance of the site. The remaining site will remain primarily grassed, meadow or brush vegetation which provides screening, and due to the setting of the property within an industrially zoned area of the City, it generally conforms with the surrounding areas. There are several properties within the industrial park that have supply yards, including the property to the north owned by YC Real Estate, LLC. The

property located to the east is currently undeveloped woodland and a row of trees have been preserved generally along the property boundary to provide a level of screening if the site is ever developed.

4. The proposed use will not have a significant detrimental effect on the use and peaceful enjoyment of abutting properties as a result of noise, vibrations, fumes, odor, dust, glare, fire hazard, hours of operation, nor unreasonably restrict access to light and air, or other cause.

   Due to the low frequency of use in this facility and the current use of the neighboring properties, we don't anticipate the proposed laydown storage expansion to cause any additional unreasonable noise, vibrations, fumes, odor, dust, glare, fire hazard, hours of operation, nor unreasonably restrict access to light and air than the existing conditions.

5. The proposed use will not have a significant detrimental effect on the value of adjacent properties that could be avoided by reasonable modification of the plan.

   The facility is currently utilized as a Supply Yard, a common use in the industrial park. The proposed area of gravel laydown expansion is away from the existing industrial facilities and because of that, we do not anticipate any detrimental effects on the value of the surrounding properties.

6. The design of the project will not result in significant flood hazards or flood damage and will be in conformance with applicable flood hazard protection requirements.

   The project is required by the City of Saco to maintain existing peak rates of runoff leaving the property, up to the 50-year storm event. The development includes the use of a wet pond and a detention pond to maintain these rates. We don't anticipate the project will create any additional flood hazard or damage downstream of the property. In addition, the project site is not located within a Flood Hazard Area as determined by the Federal Emergency Management Agency (FEMA). A copy of the Flood Insurance Rate Map (FIRM) has been included in this section.

7. Adequate provision has been made for disposal of wastewater and solid waste and for the prevention of ground or surface water contamination.

   The project site does not have any restrooms or other wastewater generating facilities. Since the project site is utilized as an unmanned supply yard for moderate to long term storage of materials including water tank trailers and steel materials, the site doesn't generate solid waste.

8. The proposed use will not have an adverse impact on significant scenic vistas or on significant wildlife habitats that could be avoided by a reasonable modification of the plan.

Currently the project site is being utilized as a laydown area for material storage and is surrounded on the north, south and west by industrial sites. We don't anticipate that any scenic vistas will be affected by this proposal. As part of the expansion, there will be additional wetland impact on the property site. These wetlands are forested wetlands are not considered Wetlands of Special Significance as defined by the Maine DEP. To determine if any significant wildlife habitats exist on the property, we investigated the Beginning with Habitat mapping database maintained by the Maine Inland Fisheries and Wildlife. As indicated on the map, there are no known significant wildlife habitats mapped on the property. A copy of this map has been included in this section.

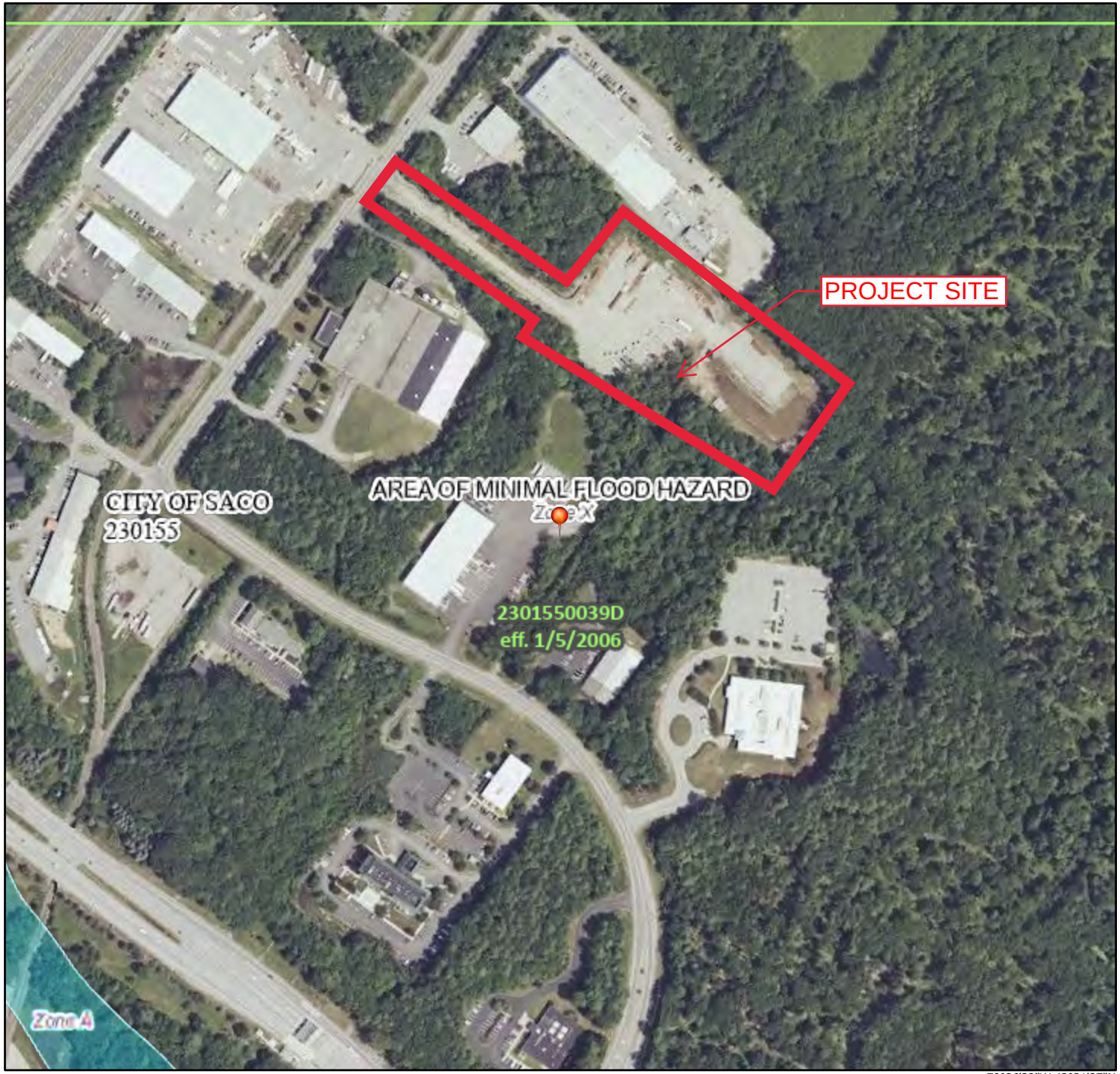
9. <u>The use will not cause safety hazards for pedestrians, cyclists, and operators of motor vehicles, and will not result in a decrease in the Level of Service (LOS)D at nearby intersections or at the project driveway during the peak hour.</u>

   The supply yard use doesn't generate a large number of vehicular trips, much fewer than the surrounding industrial uses. Due to the industrial park use and zoning in the area, we don't anticipate a significant pedestrian or cyclist use on the public roadway and don't foresee the proposed expansion to provide a significant increase in vehicular traffic that it would cause congestion on the public way for motorists. As indicated in *Section 10 – Traffic Analysis* of this submission, the increase in laydown space will have little affect on the surrounding road network.

National Flood Hazard Layer FIRMette

FEMA

70°26'59"W 43°31'53"N



70°26'22"W 43°31'27"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

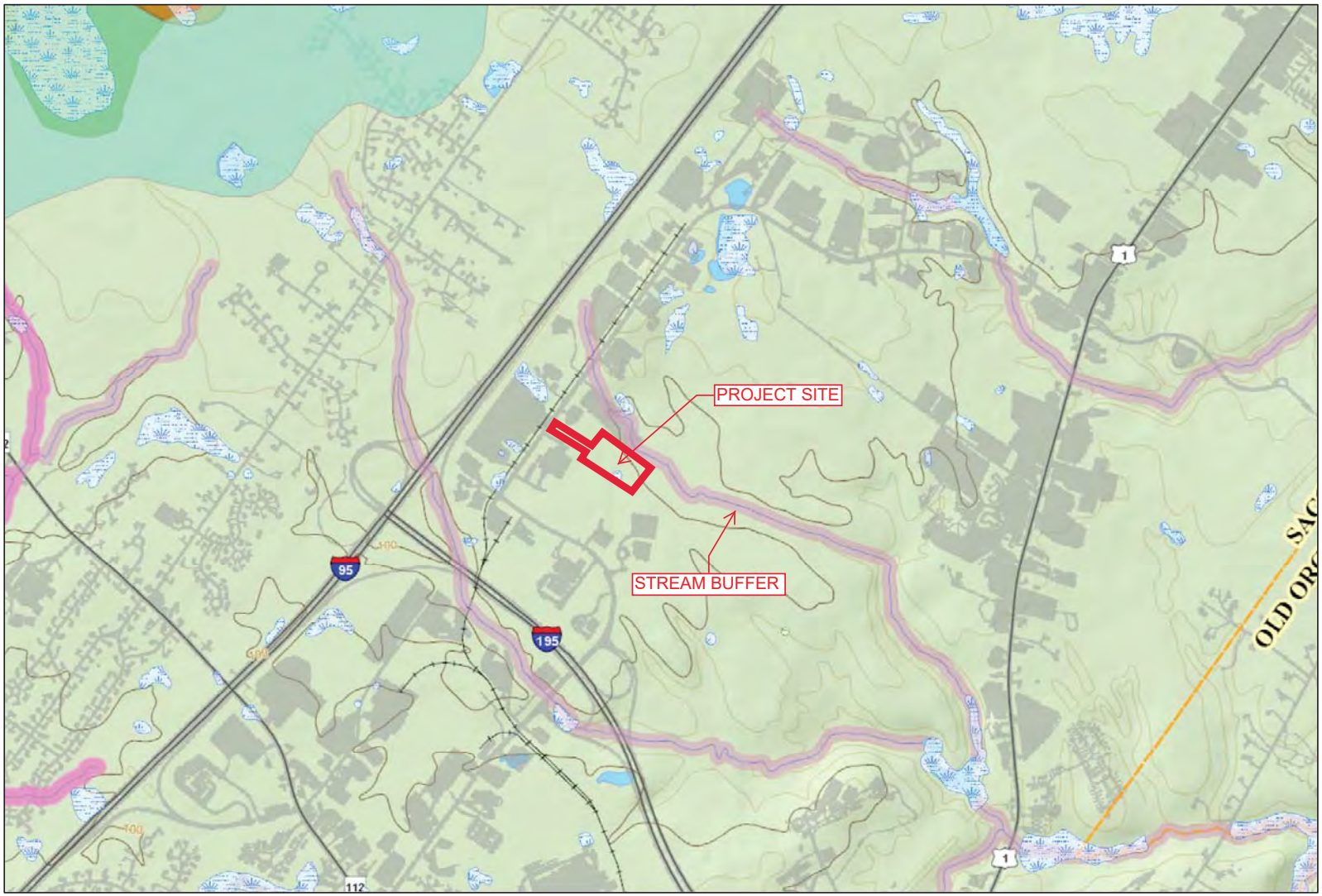
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/16/2023 at 11:33 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



BEGINNING WITH HABITAT

Legend

City/Township
1
2
Watershed Divide (HUC 12)
Watershed Divide (HUC 10)
Watershed Divide (HUC 8)
Watershed Divide (HUC 6)
Wetlands
Great Ponds
Stream_Buffers_75ft
Shellfish Beds
Public Water Supply Wells
Source Protection
Aquifers
ETSC Animal Habitat Buffers
Rare Plants and Natural Communities
Natural Communities
Wild Brook Trout Habitat
Atlantic Salmon Rearing Habitat
Atlantic Salmon Spawning Habitat
Roseate Tern, Piping Plover or Least Tern Nesting Areas
Deer Wintering
Inland Wading Bird and Waterfowl Habitat
Wildlife Wetlands
Seabird Nesting Island
Shorebird Habitat
Tidal Wading Bird and Waterfowl Habitat
Significant Vernal Pools
Less than 2000 Vehicles/Day
More than 2000 Vehicles/Day
Less than 2000 Vehicles/Day
More than 2000 Vehicles/Day
Undeveloped Habitat Blocks
Highway Bridge Connectors
Maine Conserved Lands
Federal
Municipal
Water Dist., etc.
Private
State
Conserved Lands Easements
Focus

State of Maine

0 0.225 0.45 0.9 1.35 mi

N W E S

Supported in part by Maine Outdoor Heritage Fund lottery ticket sales

Map Prepared by Maine Department of Inland Fisheries & Wildlife
August 2023

Supported in part by Loon Conservation Plate funds

SECTION 5

RIGHT, TITLE OR INTEREST DOCUMENTS

Section 5 – Right, Title or Interest Documents

The project site is owned by Vic-Sam Holdings, LLC by deed from LAW Property Management, LLC recorded in the York County Registry of Deeds Book 17683 Page 318 on March 19, 2018. Included in this section is a copy of the recorded deed.

DEBRA L. ANDERSON, REGISTER OF DEEDS
Bk 17683 PG 318
Instr # 2018011243
03/26/2018 03:57:37 PM
Pages 2 YORK CO

After recording please return to:

Maine R.E. Transfer Tax Paid

QUITCLAIM DEED
Maine Statutory Short Form

KNOW ALL PERSONS BY THESE PRESENTS that **LAW PROPERTY MANAGEMENT, LLC**, a Maine limited liability company with a place of business at 2 Main Street, Suite 15-107, Biddeford, ME 04005, FOR CONSIDERATION PAID, hereby GRANTS to **VIC-SAM HOLDINGS, LLC**, a Maine limited liability company with a place of business at 102 Industrial Park Road, Saco, ME 04072, with QUITCLAIM COVENANT, that certain lot or parcel of land, with any buildings thereon, located in the City of Saco, County of York and State of Maine and more fully described as follows:

PLEASE SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Being the same premises described in a Quit Claim Deed from Dan L. Hutchens and Kathleen Hutchens to Law Property Management, LLC dated October 18, 2016 and recorded in the York County Registry of Deeds in Book 17343, Page 776.

IN WITNESS WHEREOF, the said LAW Property Management, LLC by Louis A. Waterhouse, III, its Sole Member, thereunto duly authorized this 19th day of March, 2018.

Witness

LAW Property Management, LLC

By: _____
Louis A. Waterhouse, III
Its: Sole Member

STATE OF MAINE
York, ss

March 19, 2018

Personally appeared the above named Louis A. Waterhouse, III, Sole Member of LAW Property Management, LLC and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said LAW Property Management, LLC.

Before me,

~~Notary Public~~/Attorney at Law
Print Name RALPH W. AUSTIN
~~Commission Expires~~ Bar #1156

EXHIBIT A

A certain lot or parcel of land located on the southeasterly side of Industrial Park Road in the City of Saco, County of York and State of Maine as shown and depicted as "Lot 2, 278,971 sq. ft., 6.40 acres" on site plan entitled "Division of Land Plan of M.T.D., Inc., 73 Industrial Park Road, Saco, Maine, for Record Owners Dan and Kathleen Hutchens, 73 Industrial Park Road, Saco, Maine 04072" dated November 16, 2005, prepared by Sebago Technics and recorded in York Registry of Deeds in Plan Book 306, Page 12, to which Plan and the record thereof reference is made for a more particular description of the within conveyed premises.

Said parcel is conveyed subject to the terms of a Drainage Easement to the City of Saco as recorded at the York County Registry of Deeds in Book 3083, Page 288, to the extent it affects the same.

The above described premises are conveyed subject to the terms of a Standard Easement Deed from Dan Hutchens and Kathy Hutchens to Central Maine Power Company dated February 2, 1998 and recorded in the York County Registry of Deeds in Book 8767, Page 252.

The above described premises are conveyed subject to those matters shown on said Plan recorded in Plan Book 306, Page 12 and as set forth on said Plan as "General Notes" or otherwise.

WOODMAN EDMANDS DANYLIK AUSTIN
SMITH & JACQUES, P.A.
P.O. BOX 468
BIDDEFORD, ME 04005-0468
(207) 284-4581

2pg

RWA

SECTION 6

EASEMENTS, COVENANTS OR DEED RESTRICTIONS

Section 6 – Easements, Covenants and Deed Restrictions

The project site is encumbered by a drainage easement to the City of Saco for the construction and maintenance of drainage along Industrial Park Road. Enclosed in this section is a copy of the easement recorded in the York County Registry of Deeds Book 3083 Page 288.

During the initial approval of the project site, the surveyors who prepared the Boundary Survey, Dow and Coulombe, researched the history of the property and concluded that the parcel was not part of a previous subdivision within the Industrial Park. No park covenants or restrictions effect the use of this property.

The project is also subject to the previous Site Plan approval from the City of Saco and the wetland alteration permits from the Maine Department of Environmental Protection and the US Army Corps of Engineers.

11139

BOOK 3083 PAGE 268

QUITCLAIM DEED
With Covenant

Know all Men by these Presents,

That I, Linda Valentino of Saco, County of York and State of Maine

in consideration of One Dollar and other Valuable consideration

paid by the City of Saco, a Municipal Corporation

whose mailing address is 300 Main Street
Saco, Maine 04072

the receipt whereof I do hereby acknowledge, do hereby remise, release, bargain, sell and convey, and forever quitclaim unto the said City of Saco, its successors

~~and~~ and assigns forever,

an easement giving the right to enter upon a strip of land hereinafter described, for the purpose of locating, establishing, constructing and maintainting over and across said strip of land a certain surface water drainage system, related to Industrial Park Drive, including the right to cut trees, brush or growth and to excavate by removing and replacing soils, as the condition may require, for the construction and maintainance.

Said easement being over a certain strip or parcel of land described on the document marked Exhibit 'A' and attached hereto, entitled "Saco Industrial Park Valentino Easement Description."

All timber cut by grantee on the right of way granted herein shall be trimmed and piled on the side of the right of way for the use of grantor. Grantee shall burn or otherwise remove from the premises all cleared brush and trimmings from trees.

As part of the consideration hereof, the Grantee, City of Saco, agrees and covenants that, the said City of Saco, will provide and install culverts, pipes or any other structures over the said drainage area, to accommodate such drainage, at all drives, roads or driveways that may be constructed by the Grantor, her heirs or assigns for road access that may become necessary for the development of the remainder of the Grantors land.

To have and to hold the same, together with all the privileges and appurtenances thereunto belonging, to the said City of Saco, its successors

~~his~~ and assigns forever.

And I do ~~covenant~~ with the said Grantee, its successors ~~his~~ and assigns, that shall and will ~~warrant and defend~~ the premises to the said Grantee, heirs and assigns forever, against the lawful claims and demands of all persons claiming by, through, or under

In Witness Whereof, I, the said Linda Valentino

~~XXX~~

~~[illegible]~~

~~[illegible]~~, relinquishing and conveying all rights by descent and all other rights in the above described premises, have hereunto set my hand and seal this first day of the month of November, A.D. 1982.

Signed, Sealed and Delivered
in presence of

Linda M. Valentino

State of Maine, County of York **ss.** November 1, 1982.

Then personally appeared the above named Linda Valentino

and acknowledged the foregoing instrument to be her free act and deed.

Before me,

~~Justice of the Peace~~
Notary Public
Attorney at Law

SACO INDUSTRIAL PARK
VALENTINO EASEMENT DESCRIPTION

A certain strip or parcel of land situated on the northwesterly side of the parcel of land described in the conveyance to Linda Valentino recorded book 2378 page 337 York County Registry of Deeds, bounded and described as follows:

Beginning at the northerly corner of the parcel of land shown as Lot No. 3 on plan of Saco Industrial Park dated November 13, 1978, prepared by Dow & Coulombe, Inc., Saco Me.;

Thence north thirty five degrees fifty-one minutes fifty seconds east (N 35° 51' 50"E) two thousand seven hundred forty eight and forty-seven hundredths (2748.47) feet along the northwesterly line of the parcel of land described in Book 2378 Page 337 York County Registry of Deeds to a non-tangent curve concave to the northwest having a radius of one thousand four and ninety-three hundredths (1004.93) feet at a point fifty and zero hundredths (50.00) feet southeasterly of and normal to center line station 137+39.84 of Industrial Park drive as shown on design plans by Wright-Pierce, 99 Main Street, Topsham, Me.;

Thence Southwesterly along said curve and other land of grantor one hundred ninety-nine and seventy-nine hundredths (199.79) feet through a central angle of eleven degrees twenty three minutes twenty seven seconds (11° 23' 27") to the point of curvature of said curve at a point fifty and zero hundredths (50.00) feet southeasterly of and normal to center line station 135+50.00 of Industrial Park Drive;

Thence south thirty five degrees fifty one minutes fifty seconds west (S 35° 51' 50"W) one thousand six hundred thirty and zero hundredths (1630.00) feet along other land of grantor to a point fifty and zero hundredths (50.00) feet southeasterly of and normal to center line Station 119+20 of Industrial Park Drive;

Exhibit 'A'

Thence south ten degrees thirteen minutes ten seconds west (S 10° 13' 10"W) one hundred ninety-four and twelve hundredths (194.12) feet along other land of grantor to a point one hundred thirty-four and zero hundredths (134.00) feet southeasterly of and normal to center line Station 117+45 of Industrial Park Drive;

Thence north eighty-two degrees nineteen minutes ten seconds west (N 82° 19' 10"W) ninety-five and twenty-nine hundredths (95.29) feet along other land of grantor to a point fifty and zero hundredths (50.00) feet southeasterly of and normal to center line Station 117+00 of Industrial Park Drive;

Thence south thirty five degrees fifty-one minutes fifty seconds west (S 35° 51' 50"W) seven hundred and two hundredths (700.02) feet along other land of grantor to the northeasterly line of Lot No. 3 on Plan of Saco Industrial Park by Dow & Coulombe, Inc. Saco, Maine dated November 13, 1978 at a point fifty and zero hundredths (50.00) feet southeasterly of and normal to center line Station 110+00 of Industrial Park Drive;

Thence north fifty four degrees four minutes fifty seconds west (N 54° 04' 50"W) twenty and zero hundreths (20.00) feet along the northeasterly line of Lot No. 3 on plan of Saco Industrial Park by Dow & Coulombe, Inc. Saco, Maine dated November 13, 1978 to the point of beginning.

Said described parcel of land contains one and forty-four hundredths (1.44) acres and is a portion of the parcel of land described in the conveyance to Linda Valentino Recorded Book 2378 Page 337 York County Registry of Deeds.

Bearings are referenced to Maine Plane Co-ordinate System West Zone 1927 Datum as derived from a survey by Wright-Pierce, 99 Main Street, Topsham, Maine. Further reference is made to Plan of Easement Across Valentino Parcel for City of Saco by Wright-Pierce dated September 1982, recorded Plan Book 121 Page 25 York County Registry of Deeds.

RECEIVED YORK, SS.
1983 MAY 16 PM 12: 58
RECORDED REGISTRY OF DEEDS

SECTION 7

ABUTTERS LIST (600 FEET)

Abutters List - 71 Industrial Park Road Saco (600 feet)

Map-Lot	Grantee	Co-Grantee	Mailing	City	State	Zip
42001000000	SWEETSER HOME	ATTN: ACCOUNTS PAYABLE	50 MOODY ST	SACO	ME	04072
70013000000	GARLAND MFG CO		PO BOX 538	SACO	ME	04072-0538
70015000000	BEAR'S HOLDINGS LLC		900 CENTER ST	AUBURN	ME	04210
70016000000	SWEETSER HOME		50 MOODY ST	SACO	ME	04072
71001000000	3 DAUGHTERS LLC		151 VAUGHN STREET	PORTLAND	ME	04101
71001001000	YC REAL ESTATE LLC		77 INDUSTRIAL PARK RD	SACO	ME	04072
71002000000	47 IPR, LLC		33 TURNER ST	PORTLAND	ME	04101
71002001000	SACO INDUSTRIAL LLC		555 CONSTITUTION DR	TAUNTON	MA	02780
71006000000	BOISE CASCADE BUILDING MATERIALS DISTRIBUTORS		PO BOX 50	BOISE	ID	83728-0050
71008000000	PBTAJ INC		74 INDUSTRIAL PARK RD	SACO	ME	04072
71008001000	RED REALTY CO. INC		PO BOX 2003	ABINGTON	MA	02351
71009001000	TYLORD LLC	C/O TITAN & CHRISTINA FAN	82 INDUSTRIAL PARK RD	SACO	ME	04072
71010000000	UNITED STATES POSTAL SERVICE	FACILITIES SERVICE OFFICE	6 GRIFFIN RD	NO WINDSOR	CT	06006-0300
72002000000	BROCKWAY-SMITH COMPANY		100 BRICKSTONE SQ, SUITE 206	ANDOVER	MA	01810

SECTION 8

STORMWATER MANAGEMENT REPORT

DM ROMA
CONSULTING ENGINEERS

STORMWATER MANAGEMENT REPORT

GRAVEL LAYDOWN LOT EXPANSION
71 INDUSTRIAL PARK ROAD
SACO, MAINE

A. Introduction

Vic-Sam Holdings, LLC, the applicant, is proposing to expand their existing laydown yard at 71 Industrial Park Road in Saco. This will be an expansion of their existing Supply Yard facility. The property is better defined as Lot 1-2 on the City of Saco Assessor's Map 71 and is located within the Industrial Zoning District. The site is currently developed with the existing gravel laydown lot being utilized by Casco Bay Transportation; a transportation company located north of the property along Industrial Park Road.

B. Property History

The original site development was permitted by the land owner at the time, LAW Property Management, LLC, as a multi-tenant facility containing a 25,000 square foot building, a 10,000 square foot building, associated paved parking and driveways, utilities and stormwater infrastructure. This project received Site Plan approval from the City of Saco Planning Board in January 2017, including a Stormwater Permit approval under the City's municipal capacity agreement with the Maine Department of Environmental Protection (MDEP). The associated design was approved for 102,735 square feet of new impervious surface consisting of the proposed buildings, access driveway and paved parking throughout the site. In addition, 96,570 square feet of landscaped area was approved resulting in a total developed area of 199,305 square feet.

LAW Property Management, LLC did not complete the project and in April 2018 sold the property to Vic-Sam Holdings, LLC, the current land owner and applicant. In April 2019, Vic-Sam Holdings, LLC requested the site plan amendment to construct a gravel laydown area to be utilized by Casco Bay Transportation for temporary and long-term storage of materials (primarily steel) that is offloaded from the railroad tracks that run through their other Industrial Park Road location and transported to this site. The laydown area was designed within the limits of the originally approved impervious surface, but without the construction of the buildings, the pavement and the utility services. The supply yard development did include the construction of the previously designed and approved stormwater infrastructure, including a wet pond in the rear of the site. This was all coordinated and approved with the City of Saco Planning Office and received Amended Site Plan approval in September 2019. The facility was then built in the Spring/Summer 2020.

Since the completion of construction in 2020, the site has been utilized for water tank trailer storage, steel and drilling equipment storage from a geotechnical specialty construction company and

railroad tie timber storage for the railroad company. Based on conversations with the owner of Casco Bay Transportation, the company has lost several opportunities to grow the business due to the limited laydown space on the site.

Based on aerial imagery, in 2022, a portion of the site that was previously approved to remain wooded was cleared of trees and gravel placed to provide additional storage for the railroad company to store additional railroad tie timbers during a track replacement project. That expansion cleared approximately 42,395 square feet of woodland and created an additional gravel laydown area totaling approximately 18,745 square feet. As this additional clearing and gravel placement was not part of the original approval, the Codes and Planning Departments contacted the land owner in July 2023 and indicated that an amendment to the Site Plan approval was required or the site would be in violation.

C. Proposed Development

As indicated previously, the Supply Yard facility is undersized for the current needs of Casco Bay Transportation and their clients, but the applicant also understands that an expansion should be properly proposed and permitted through the City. In addition to the previously constructed gravel laydown area and as part of the Site Plan amendment, the applicant is proposing to expand the gravel laydown area to accommodate the current and future needs of the company. The unpermitted gravel laydown area will be re-graded to drain to properly designed stormwater infrastructure. In addition, a portion of the gravel laydown area will be removed as it located within the building setback. This will be removed and revegetated with loam and seed.

The existing gravel laydown area will also be further expanded in the center of the site along with extending to the southeast along the southern property boundary. This will allow for the storage of more material in addition to providing a more navigable site as it is at capacity in the existing conditions.

D. Alterations to Land Cover

As a result of the proposed laydown area expansion, the cumulative development will consist of approximately 144,915 square feet (3.33 acres) of impervious surfaces and approximately 103,950 square feet (2.39 acres) of landscaping and stormwater features resulting in a total developed area of 248,865 square feet (5.71 acres).

E. Existing Conditions for Stormwater Calculations

Since the proposed project is an amendment to an existing project, the existing conditions utilized in the stormwater calculations throughout this report will assume a completely wooded site, prior to any land development.

The project site generally drains to the south through undeveloped woodlands. Runoff is directed through wetland channels to Innis Brook. Runoff is conveyed through the brook until it combines

with Goosefare Brook. The brook meanders beneath roads and other manmade structures until it discharges into the Atlantic Ocean. Goosefare Brook has been classified as an Urban Impaired Stream.

Soils on the property were determined utilizing the Medium Intensity Soil Maps for York County, Maine published by the Natural Resources Conservation Service. The soils boundaries and hydrologic soils group (HSG) designations are indicated on the watershed maps within the design plan set and a Soils Map has been included as Attachment 1 of this report.

F. Methodology and Modeling Assumptions

The proposed stormwater management system has been designed utilizing Best Management Practices to maintain existing drainage patterns while providing stormwater quality improvement measures. The goal of the storm drainage system design is to remove potential stormwater pollutants from runoff generated by the development while providing attenuation of the peak rates of runoff leaving the site. The method utilized to predict the surface water runoff rates in this analysis is a computer program entitled HydroCAD, which is based on the same methods that were originally developed by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, and utilized in the TR-20 modeling program. Peak rates of runoff are forecasted based upon land use, hydrologic soil conditions, vegetative cover, contributing watershed area, time of concentration, rainfall data, storage volumes of detention basins and the hydraulic capacity of structures. The computer model predicts the amount of runoff as a function of time, with the ability to include the attenuation effect due to dams, lakes, large wetlands, floodplains and constructed stormwater management basins. The input data for rainfalls with statistical recurrence frequencies of 2-, 10-, 25- and 50-years was obtained from Appendix H of the MDEP, Chapter 500 Stormwater Management, last revised in 2015. The National Weather Service developed four synthetic storm types to simulate rainfall patterns around the country. For analysis in York County, Maine, the type III rainfall pattern with a 24-hour duration is appropriate.

G. Basic Standards

Since the project will result in over one acre of land disturbance, the project is required by the City and MDEP to provide permanent and temporary Erosion Control Best Management Practices. These methods are outlined in detail in the plan set.

H. General Standards

Since the project will result in over one acre of impervious surface, the stormwater infrastructure will need to be designed to the General Standards of MDEP Chapter 500 Stormwater Management regulations requiring water quality treatment for no less than 95% of the resulting impervious surfaces and 80% of the total developed area associated with the project.

To meet these standards in the initial phase, a wet pond was designed and constructed as the site's primary stormwater infrastructure to provide water quality treatment. With the increase in gravel

laydown space, additional stormwater treatment was required to meet the standards. With the limited space on the project site, the wet pond design was further reviewed and determined that modifications could be made to provide the additional permanent pool volume necessary to provide treatment for the additional development. During the initial design, offsite impervious and landscaped area was accounted for in the design of the stormwater infrastructure and treatment calculations. As a result of the proposed modifications to the wet pond and treatment of the tributary offsite development, the project's stormwater design provides equivalent treatment for more than 100% of the site's impervious surface and over 90% of the total developed area.

The General Standards calculations have been included as Attachment 2 of this report. The sizing calculations for the wet pond, including the original test pit logs and spillway sizing have been included as Attachment 3 of this report.

I. Flooding Standard

As the project will generate over 3 acres of impervious surface, the stormwater infrastructure is required to meet the Flooding Standard of MDEP Chapter 500. The Flooding Standard requires the project to detain, retain or result in the infiltration of stormwater from the 24-hour storms of the 2-year, 10-year and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. In addition, the City of Saco requires the analysis of the 50-year storm event. To maintain these flow rates, the construction of the wet pond and a proposed detention pond are incorporated into the stormwater infrastructure. To demonstrate compliance with the Flooding Standard, three (3) study points were originally analyzed.

Study Point (SP-1) was evaluated in the original phase of the project as the location at the entrance of the site where runoff crosses the southwestern property line onto land owned by Garland Manufacturing Company (Garland). There are no proposed changes to the approved site design in this location and was not further analyzed as part of this report.

The second study point (SP-2) is where drainage from the middle of the site, north westerly of the original tote road, drains southerly onto property owned by Saco Industrial, LLC. The third study point (SP-3) is the location where runoff from the property southeasterly of the tote road drains across the southeasterly property line and eventually to Innis Brook. The results of the analysis are summarized in Table 1 below:

Table 1 – Peak Rates of Stormwater Runoff

Study Point	2-Year (cfs)		10-Year (cfs)		25-Year (cfs)		50-Year (cfs)	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
SP-2	1.35	0.00	3.43	0.05	5.39	0.17	7.15	0.32
SP-3	0.42	0.51	1.42	1.41	2.58	2.49	3.70	3.51

As a result of the stormwater infrastructure and decrease in tributary area at Study Point 2, the project's design reduces the peak rates of runoff at each study point in all analyzed storm events with the exception of a slight increase at Study Point 3 during the 2-year storm event. There was a similar increase in the 2-year storm at this study point in the originally approved design. We do not anticipate the 0.09 cfs increase to create any additional erosion problems downstream of this study point or capacity problems once the runoff reaches Innis Brook during this storm event. The watershed maps showing pre-development and post-development drainage patterns are included in the plan set and the stormwater model output, including the spillway design for the detention pond, has been included as Attachment 4 of this report.

J. Urban Impaired Stream Standard

The runoff from the project site leaves the property and drains to Innis Brook, a tributary of Goosefare Brook, a waterbody classified by MDEP as an Urban Impaired Stream. The Urban Impaired Stream Standard requires any project within these watersheds to either pay a compensation fee or mitigate project impacts by reducing or eliminating an off-site or on-site pre-development stormwater source. This standard was partially met in the initial phase of this project by treating offsite runoff from the industrial site to the north. A fee was paid for the remaining mitigation credits. To determine the mitigation credits required for the current phase, a calculation was performed to demonstrate compliance with the standard and has been included as Attachment 5 of this report.

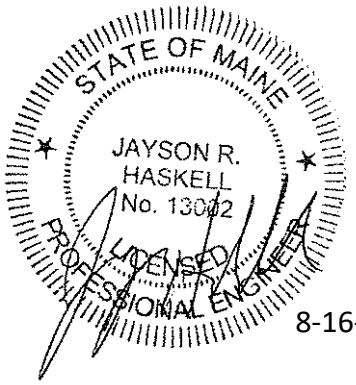
K. Maintenance of common facilities or property

The applicant will be responsible for the maintenance of the proposed stormwater facilities. An Inspection, Maintenance and Housekeeping Plan has been prepared for the project and has been included as Attachment 6 of this report.

Prepared by:

DM ROMA CONSULTING ENGINEERS

Jayson R. Haskell P.E.
Southern Maine Regional Manager

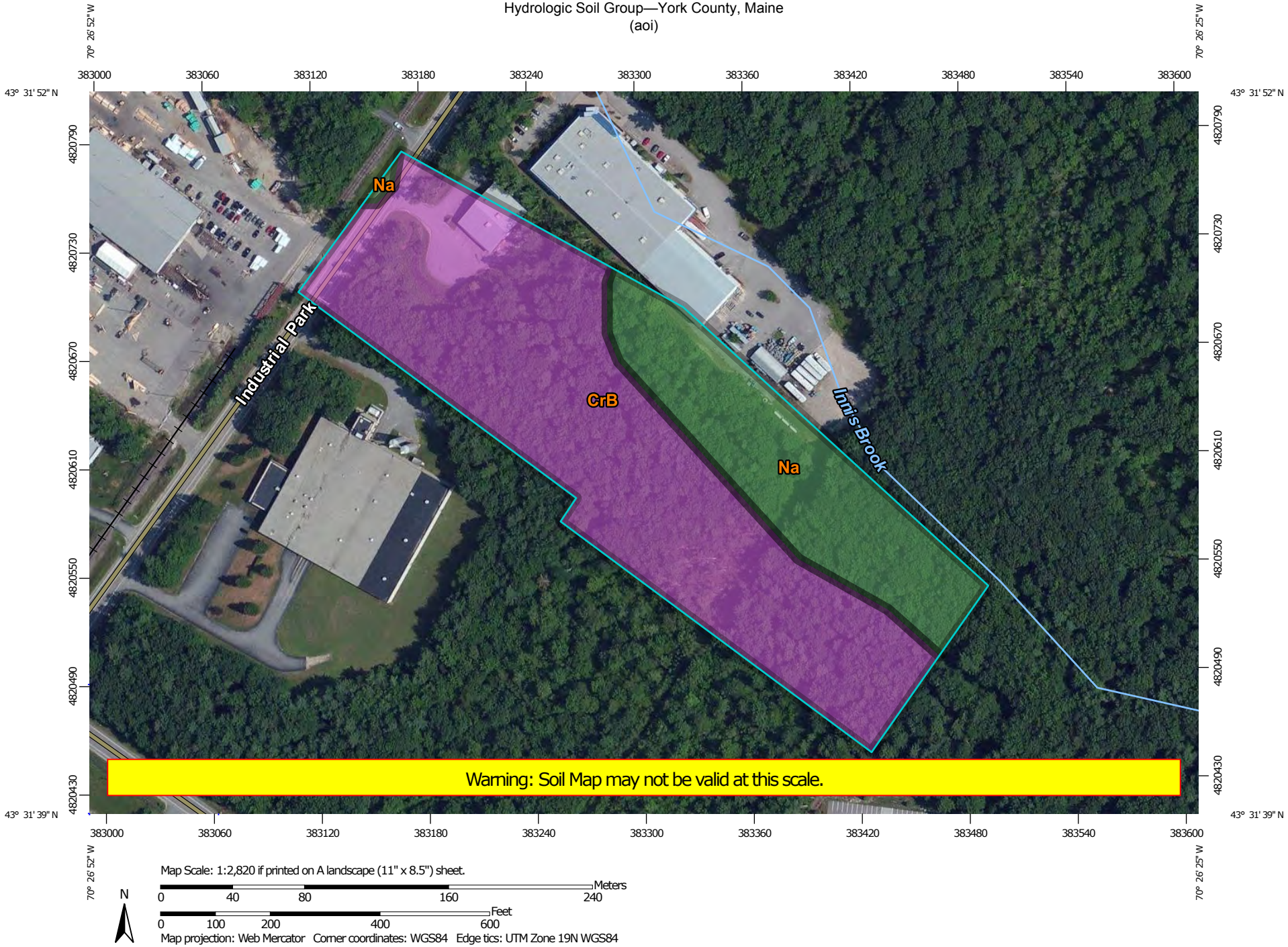


8-16-2023

ATTACHMENT 1

SOILS MAP

Hydrologic Soil Group—York County, Maine
(aoi)



Map Scale: 1:2,820 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 40 80 160 240

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: York County, Maine
Survey Area Data: Version 14, Sep 11, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 20, 2010—Jul 18, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — York County, Maine (ME031)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CrB	Croghan loamy sand, 0 to 8 percent slopes	A	8.4	71.1%
Na	Naumburg sand	A/D	3.4	28.9%
Totals for Area of Interest			**11.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

ATTACHMENT 2

GENERAL STANDARD CALCULATIONS

Stormwater Treatment Table

71 Industrial Park Road

	Total Watershed Area (SF)	New Impervious Area (SF)	New Landscaped Area (SF)	Existing/Offsite Impervious Area (SF)	Existing/Offsite Landscaping Area (SF)	Existing Undeveloped Area (SF)	Treatment Provided	Impervious Area Treated (SF)	Landscaped Area Treated (SF)	Treatment Device
WS-10	29,175	4,460	2,545	3,710	3,025	15,435	No	0	0	None
WS-11	16,215	680	8,750	765	0	6,020	No	0	0	None
WS-20	11,545	0	3,965	0	0	7,580	No	0	0	None
WS-30	59,900	7,180	12,060	0	0	40,660	Yes	7,180	12,060	Wet Pond
WS-31	63,420	61,755	1,425	0	0	240	Yes	61,755	1,425	Wet Pond
WS-32	69,150	9,260	16,165	24,465	5,430	13,830	Yes	33,725	21,595	Wet Pond
WS-33	34,440	34,440	0	0	0	0	Yes	34,440	0	Wet Pond
WS-34	52,650	20,325	32,325	0	0	0	Yes	20,325	32,325	Wet Pond
WS-35	16,075	6,815	9,260	0	0	0	No	0	0	None
WS-36	29,625	0	17,455	0	0	12,170	No	0	0	None
Total		**144,915**	**103,950**					**157,425**	**67,405**	

New Impervious Area =	144,915	sf
New Impervious Area Requiring Treatment (95%)	137,669	sf
Provided New Impervious Treatment=	157,425	sf
	108.6%	New Impervious Area Treated
New Developed Area =	248,865	sf
New Developed Area Requiring Treatment (80%)=	199,092	sf
New Developed Area Treated=	224,830	sf
	90.3%	New Developed Area Treated

ATTACHMENT 3

WET POND SIZING CALCULATIONS

Wet Pond Calculations

Tributary Impervious Area=	157,425	sf	(WS-30 Thru WS-34 Impervious Area)
Tributary Landscaped Area=	67,405	sf	(WS-30 Thru WS-34 Landscaped Area)

Permanent Pool Volume (PPV) Calculation

PPV (Required) = 2.0"xImpervious Area + 0.8"xLandscaped Area

PPV (Required) = 30,731 cf

Stage Storage Volume

Elevation	Area (sf)	Storage (cf)
86.5	1,090	0
88	1,925	2,248
90	3,930	7,745
92	6,680	18,310
94	8,750	34,225
95	15,735	46,469
96	18,730	63,701
97	21,750	83,942

Permanent Pool Elevation= 94.4

Provided PPV= 38,285 cf > Required

Mean Depth Calculation

Mean Depth @ 1' Below Permanent Pool (El. 93.2)

Mean Depth= Storage Volume / Surface Area > 3.0

93.4	29,074	cf
	8,420	sf

Mean Depth= 3.45 >3'

Channel Protection Volume (CPV) Calculation

CPV (Required) = 1.0"xImpervious Area + 0.4"xLandscaped Area

CPV (Required) = 15,366 cf

Outlet of Pond Set @ 95.55

Storage Volume @Outlet 55,750 cf

CPV=Storage Volume @ Outlet - Permanent Pool Volume=

Provided CPV= 17,465 cf > Required

Gravel Bench Calculations

Bench Length (Required) = 3' for every 1,000 cf of Provided CPV

Bench Length (Required) = 52.4 lf

Bench Length (Provided): 60.0 lf > Required

Flow Rate of Gravel Bench = Surface Area of Gravel Bench x Gravel Infiltration Rate

Infiltration Rate of Gravel = 20 in/hr

Surface Area of Bench = 240 sf

Exfiltration Flow Rate of Bench= 0.111 cfs

Sediment Forebay Sizing

Tributary Pavement Requiring Sanding 145,670 sf

Required Sediment Forebay Volume :

10 storms/year x sanded area (acres) x 500lbs/acre-storm / 90 lbs/cf

Sediment Volume (Required) 185.8 cf

Sediment Volume (Provided): 215.0 cf > Required

SPILLWAY RUN - WET POND

Summary for Pond WP1:

Inflow Area = 279,560 sf, 12.82% Impervious, Inflow Depth = 4.06" for 25-YEAR event
Inflow = 20.65 cfs @ 12.09 hrs, Volume= 94,468 cf
Outflow = 1.48 cfs @ 14.56 hrs, Volume= 26,681 cf, Atten= 93%, Lag= 148.4 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Secondary = 1.48 cfs @ 14.56 hrs, Volume= 26,681 cf

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 98.05' @ 14.56 hrs Surf.Area= 25,508 sf Storage= 70,312 cf

Plug-Flow detention time= 444.7 min calculated for 26,664 cf (28% of inflow)
Center-of-Mass det. time= 274.7 min (1,069.0 - 794.3)

Volume	Invert	Avail.Storage	Storage Description
#1	94.40'	98,661 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
94.40	11,485	0	0
95.00	15,735	8,166	8,166
96.00	18,730	17,233	25,398
97.00	21,750	20,240	45,638
98.00	25,045	23,398	69,036
99.00	34,205	29,625	98,661

Device	Routing	Invert	Outlet Devices
#1	Primary	91.70'	**12.0" Round Culvert X 0.00** L= 36.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 91.70' / 91.50' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	94.40'	**0.11 cfs Gravel Bench at all elevations**
#3	Device 1	97.75'	**13.1" Horiz. Rim** C= 0.600 Limited to weir flow at low heads
#4	Device 1	95.55'	**2.9" W x 10.5" H Vert. Orifice** C= 0.600
#5	Secondary	97.95'	**19.2' long x 6.0' breadth Emergency Spillway** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=94.40' (Free Discharge)
└1=**Culvert** (Controls 0.00 cfs)
  └2=**Gravel Bench** (Passes 0.00 cfs of 0.11 cfs potential flow)
  └3=**Rim** (Controls 0.00 cfs)
  └4=**Orifice** (Controls 0.00 cfs)

Secondary OutFlow Max=1.45 cfs @ 14.56 hrs HW=98.05' (Free Discharge)
└5=**Emergency Spillway** (Weir Controls 1.45 cfs @ 0.75 fps)

PEAK ELEVATION DURING SPILLWAY RUN = 98.05'
TOP OF BERM ELEV.=99.10 = 1.05' FREEBOARD >1'

PAGE ____ OF ____

4659

FORM F Rev. 07/11

SOIL PROFILE / CLASSIFICATION INFORMATION

DETAILED DESCRIPTION OF SUBSURFACE CONDITIONS AT PROJECT SITES

Project Name: 71 Industrial Park Road

Applicant Name: CAW Calibration

Project Location (municipality): Saco

Exploration Symbol # STW-1 ■ Test Pit ☐ Boring ☐ Probe

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0	Loamy sand	Friable	Dark Brown	
10	Sand	Friable	Brown	
20	Sand	Friable	gray	Common + Distinct
30	Sandy Clay Loam	Firm	gray	Water Standing at 29"
40				
50				
60				

Soil Details by S.E.

Soil Classification: 7 Profile D Condition

Slope: 2 Percent

Limiting Factor: 14 " Depth ■ Groundwater ☐ Restrictive Layer ☐ Bedrock

Soil Details by S.S.

Soil Series/Phase Name: Elmwood Variant SPD

☐ Hydric ■ Non-hydric

Hydrologic _____ Soil Group

Exploration Symbol # _____ ☐ Test Pit ☐ Boring ☐ Probe

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0				
10				
20				
30				
40				
50				
60				

Soil Details by S.E.

Soil Classification: _____ Profile _____ Condition

Slope: _____ Percent

Limiting Factor: _____ " Depth ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Soil Details by S.S.

Soil Series/Phase Name:

☐ Hydric ☐ Non-hydric

Hydrologic _____ Soil Group

Exploration Symbol # _____ ☐ Test Pit ☐ Boring ☐ Probe

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0				
10				
20				
30				
40				
50				
60				

Soil Details by S.E.

Soil Classification: _____ Profile _____ Condition

Slope: _____ Percent

Limiting Factor: _____ " Depth ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Soil Details by S.S.

Soil Series/Phase Name:

☐ Hydric ☐ Non-hydric

Hydrologic _____ Soil Group

Exploration Symbol # _____ ☐ Test Pit ☐ Boring ☐ Probe

_____ " Organic horizon thickness Ground surface elev. _____

_____ " Depth of exploration or to refusal

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Redox Features
0				
10				
20				
30				
40				
50				
60				

Soil Details by S.E.

Soil Classification: _____ Profile _____ Condition

Slope: _____ Percent

Limiting Factor: _____ " Depth ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Soil Details by S.S.

Soil Series/Phase Name:

☐ Hydric ☐ Non-hydric

Hydrologic _____ Soil Group

INVESTIGATOR INFORMATION AND SIGNATURE

Signature Mark J. Hampton

Date 11/22/16

Name Printed Mark J. Hampton

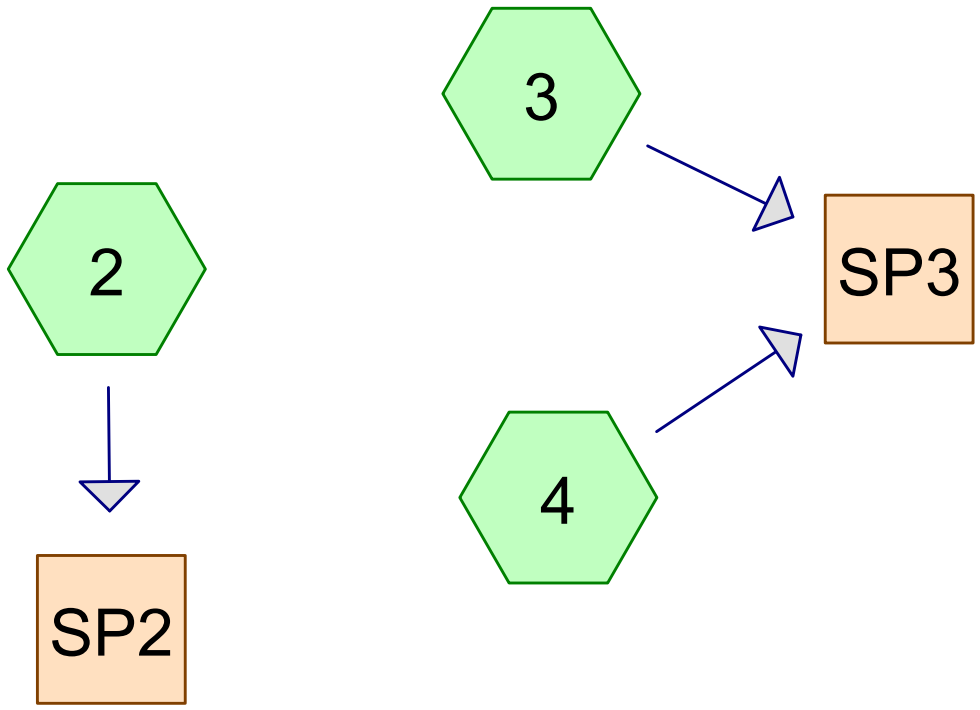
Cert/Lic/Reg. # 263/216

Title ■ Licensed Site Evaluator ■ Certified Soil Scientist ☐ Certified Geologist ☐ Professional Engineer

affix professional seal

ATTACHMENT 4

HYDROCAD OUTPUT



Subcat Reach Pond Link

Routing Diagram for 19011-pre
Prepared by DM Roma Consulting Engineers, Printed 8/16/2023

Time span=5.00-48.00 hrs, dt=0.05 hrs, 861 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2: Runoff Area=154,075 sf 15.81% Impervious Runoff Depth=0.79"
Flow Length=740' Tc=43.0 min CN=68 Runoff=1.35 cfs 0.232 af

Subcatchment 3: Runoff Area=64,960 sf 0.00% Impervious Runoff Depth=0.56"
Flow Length=373' Tc=31.2 min CN=63 Runoff=0.42 cfs 0.070 af

Subcatchment 4: Runoff Area=42,695 sf 0.00% Impervious Runoff Depth=0.04"
Flow Length=355' Tc=17.7 min CN=44 Runoff=0.01 cfs 0.003 af

Reach SP2: Inflow=1.35 cfs 0.232 af
Outflow=1.35 cfs 0.232 af

Reach SP3: Inflow=0.42 cfs 0.074 af
Outflow=0.42 cfs 0.074 af

Time span=5.00-48.00 hrs, dt=0.05 hrs, 861 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2: Runoff Area=154,075 sf 15.81% Impervious Runoff Depth=1.81"
Flow Length=740' Tc=43.0 min CN=68 Runoff=3.43 cfs 0.533 af

Subcatchment 3: Runoff Area=64,960 sf 0.00% Impervious Runoff Depth=1.45"
Flow Length=373' Tc=31.2 min CN=63 Runoff=1.30 cfs 0.180 af

Subcatchment 4: Runoff Area=42,695 sf 0.00% Impervious Runoff Depth=0.37"
Flow Length=355' Tc=17.7 min CN=44 Runoff=0.12 cfs 0.030 af

Reach SP2: Inflow=3.43 cfs 0.533 af
Outflow=3.43 cfs 0.533 af

Reach SP3: Inflow=1.42 cfs 0.210 af
Outflow=1.42 cfs 0.210 af

Time span=5.00-48.00 hrs, dt=0.05 hrs, 861 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2: Runoff Area=154,075 sf 15.81% Impervious Runoff Depth=2.78"
Flow Length=740' Tc=43.0 min CN=68 Runoff=5.39 cfs 0.818 af

Subcatchment 3: Runoff Area=64,960 sf 0.00% Impervious Runoff Depth=2.32"
Flow Length=373' Tc=31.2 min CN=63 Runoff=2.18 cfs 0.288 af

Subcatchment 4: Runoff Area=42,695 sf 0.00% Impervious Runoff Depth=0.82"
Flow Length=355' Tc=17.7 min CN=44 Runoff=0.41 cfs 0.067 af

Reach SP2: Inflow=5.39 cfs 0.818 af
Outflow=5.39 cfs 0.818 af

Reach SP3: Inflow=2.58 cfs 0.355 af
Outflow=2.58 cfs 0.355 af

Time span=5.00-48.00 hrs, dt=0.05 hrs, 861 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2: Runoff Area=154,075 sf 15.81% Impervious Runoff Depth=3.65"
Flow Length=740' Tc=43.0 min CN=68 Runoff=7.15 cfs 1.077 af

Subcatchment 3: Runoff Area=64,960 sf 0.00% Impervious Runoff Depth=3.13"
Flow Length=373' Tc=31.2 min CN=63 Runoff=2.99 cfs 0.389 af

Subcatchment 4: Runoff Area=42,695 sf 0.00% Impervious Runoff Depth=1.29"
Flow Length=355' Tc=17.7 min CN=44 Runoff=0.79 cfs 0.106 af

Reach SP2: Inflow=7.15 cfs 1.077 af
Outflow=7.15 cfs 1.077 af

Reach SP3: Inflow=3.70 cfs 0.494 af
Outflow=3.70 cfs 0.494 af

Summary for Subcatchment 2:

Runoff = 1.35 cfs @ 12.67 hrs, Volume= 0.232 af, Depth= 0.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

	Area (sf)	CN	Description
	1,510	96	Gravel surface, HSG A
	1,040	96	Gravel surface, HSG D
	41,185	30	Woods, Good, HSG A
	80,555	77	Woods, Good, HSG D
*	11,755	98	Building
*	12,600	98	Pavement
	5,430	80	>75% Grass cover, Good, HSG D
	154,075	68	Weighted Average
	129,720		84.19% Pervious Area
	24,355		15.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.8	150	0.0150	0.08		**Sheet Flow, A TO B** Woods: Light underbrush n= 0.400 P2= 3.30"
8.8	375	0.0200	0.71		**Shallow Concentrated Flow, B TO C** Woodland Kv= 5.0 fps
1.4	215	0.0100	2.57	19.29	**Trap/Vee/Rect Channel Flow, C TO D** Bot.W=10.00' D=0.50' Z= 10.0 '/' Top.W=20.00' n= 0.030
43.0	740	Total			

Summary for Subcatchment 3:

Runoff = 0.42 cfs @ 12.55 hrs, Volume= 0.070 af, Depth= 0.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

Area (sf)	CN	Description
85	96	Gravel surface, HSG A
935	96	Gravel surface, HSG D
20,010	30	Woods, Good, HSG A
43,930	77	Woods, Good, HSG D
64,960	63	Weighted Average
64,960		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.8	150	0.0250	0.09		**Sheet Flow, A TO B** Woods: Light underbrush n= 0.400 P2= 3.30"
4.2	155	0.0150	0.61		**Shallow Concentrated Flow, B TO C** Woodland Kv= 5.0 fps
0.2	68	0.0300	6.63	72.91	**Trap/Vee/Rect Channel Flow, C TO D** Bot.W=6.00' D=1.00' Z= 5.0 '/' Top.W=16.00' n= 0.030
31.2	373	Total			

Summary for Subcatchment 4:

Runoff = 0.01 cfs @ 15.62 hrs, Volume= 0.003 af, Depth= 0.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

Area (sf)	CN	Description
725	96	Gravel surface, HSG A
30,115	30	Woods, Good, HSG A
11,855	77	Woods, Good, HSG D
42,695	44	Weighted Average
42,695		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.0	85	0.0250	0.08		**Sheet Flow, A TO B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.7	270	0.0180	6.48	207.24	**Trap/Vee/Rect Channel Flow, B TO C** Bot.W=6.00' D=2.00' Z= 5.0 '/' Top.W=26.00' n= 0.035
17.7	355	Total			

Summary for Reach SP2:

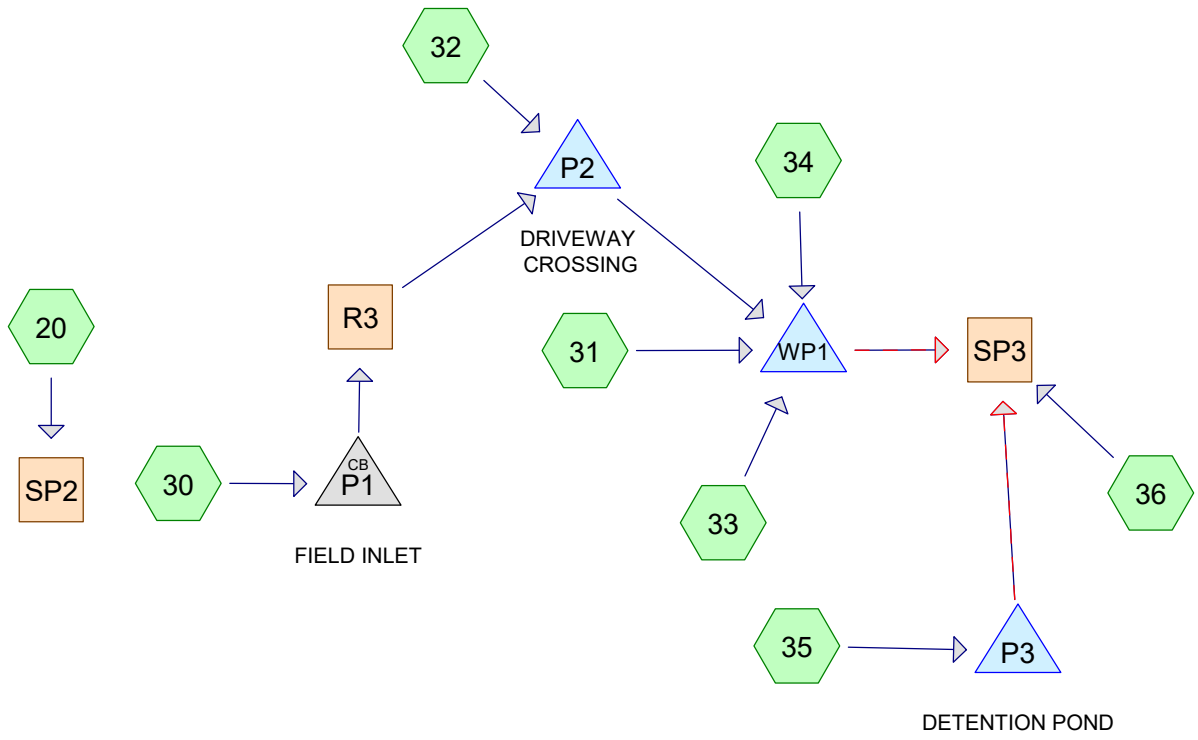
Inflow Area = 3.537 ac, 15.81% Impervious, Inflow Depth = 0.79" for 2-YEAR event
Inflow = 1.35 cfs @ 12.67 hrs, Volume= 0.232 af
Outflow = 1.35 cfs @ 12.67 hrs, Volume= 0.232 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs

Summary for Reach SP3:

Inflow Area = 2.471 ac, 0.00% Impervious, Inflow Depth = 0.36" for 2-YEAR event
Inflow = 0.42 cfs @ 12.55 hrs, Volume= 0.074 af
Outflow = 0.42 cfs @ 12.55 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-48.00 hrs, dt= 0.05 hrs



Subcat Reach Pond Link

Routing Diagram for 19011-POST
Prepared by DM Roma Consulting Engineers, Printed 8/16/2023

Time span=0.00-80.00 hrs, dt=0.05 hrs, 1601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 20: Runoff Area=11,545 sf 0.00% Impervious Runoff Depth=0.07"
Flow Length=36' Tc=9.5 min CN=46 Runoff=0.00 cfs 69 cf

Subcatchment 30: Runoff Area=59,900 sf 0.00% Impervious Runoff Depth=0.01"
Flow Length=303' Tc=22.2 min CN=41 Runoff=0.00 cfs 60 cf

Subcatchment 31: Runoff Area=63,420 sf 0.00% Impervious Runoff Depth=2.74"
Flow Length=372' Tc=6.0 min CN=95 Runoff=4.32 cfs 14,496 cf

Subcatchment 32: Runoff Area=69,150 sf 35.22% Impervious Runoff Depth=1.92"
Flow Length=516' Tc=36.2 min CN=86 Runoff=1.85 cfs 11,077 cf

Subcatchment 33: Runoff Area=34,440 sf 0.00% Impervious Runoff Depth=2.85"
Flow Length=297' Tc=6.0 min CN=96 Runoff=2.40 cfs 8,173 cf

Subcatchment 34: Runoff Area=52,650 sf 21.81% Impervious Runoff Depth=1.69"
Flow Length=195' Tc=6.0 min CN=83 Runoff=2.35 cfs 7,422 cf

Subcatchment 35: Runoff Area=16,075 sf 0.00% Impervious Runoff Depth=0.56"
Flow Length=118' Tc=6.0 min CN=63 Runoff=0.18 cfs 757 cf

Subcatchment 36: Runoff Area=29,625 sf 0.00% Impervious Runoff Depth=0.65"
Flow Length=221' Tc=12.3 min CN=65 Runoff=0.33 cfs 1,604 cf

Reach R3: Avg. Flow Depth=0.00' Max Vel=0.66 fps Inflow=0.00 cfs 60 cf
n=0.025 L=185.0' S=0.0141 '/' Capacity=314.57 cfs Outflow=0.00 cfs 60 cf

Reach SP2: Inflow=0.00 cfs 69 cf
Outflow=0.00 cfs 69 cf

Reach SP3: Inflow=0.51 cfs 43,518 cf
Outflow=0.51 cfs 43,518 cf

Pond P1: FIELD INLET Peak Elev=100.03' Inflow=0.00 cfs 60 cf
12.0" Round Culvert n=0.013 L=205.0' S=0.0049 '/' Outflow=0.00 cfs 60 cf

Pond P2: DRIVEWAY CROSSING Peak Elev=97.06' Storage=60 cf Inflow=1.85 cfs 11,137 cf
24.0" Round Culvert n=0.013 L=75.0' S=0.0053 '/' Outflow=1.85 cfs 11,137 cf

Pond P3: DETENTION POND Peak Elev=94.07' Storage=108 cf Inflow=0.18 cfs 757 cf
Primary=0.07 cfs 757 cf Secondary=0.00 cfs 0 cf Outflow=0.07 cfs 757 cf

Pond WP1: Peak Elev=96.12' Storage=27,707 cf Inflow=9.69 cfs 41,229 cf
Primary=0.45 cfs 41,158 cf Secondary=0.00 cfs 0 cf Outflow=0.45 cfs 41,158 cf

Time span=0.00-80.00 hrs, dt=0.05 hrs, 1601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 20: Runoff Area=11,545 sf 0.00% Impervious Runoff Depth=0.46"
Flow Length=36' Tc=9.5 min CN=46 Runoff=0.05 cfs 438 cf

Subcatchment 30: Runoff Area=59,900 sf 0.00% Impervious Runoff Depth=0.25"
Flow Length=303' Tc=22.2 min CN=41 Runoff=0.07 cfs 1,243 cf

Subcatchment 31: Runoff Area=63,420 sf 0.00% Impervious Runoff Depth=4.32"
Flow Length=372' Tc=6.0 min CN=95 Runoff=6.62 cfs 22,834 cf

Subcatchment 32: Runoff Area=69,150 sf 35.22% Impervious Runoff Depth=3.37"
Flow Length=516' Tc=36.2 min CN=86 Runoff=3.22 cfs 19,441 cf

Subcatchment 33: Runoff Area=34,440 sf 0.00% Impervious Runoff Depth=4.43"
Flow Length=297' Tc=6.0 min CN=96 Runoff=3.64 cfs 12,723 cf

Subcatchment 34: Runoff Area=52,650 sf 21.81% Impervious Runoff Depth=3.08"
Flow Length=195' Tc=6.0 min CN=83 Runoff=4.26 cfs 13,530 cf

Subcatchment 35: Runoff Area=16,075 sf 0.00% Impervious Runoff Depth=1.45"
Flow Length=118' Tc=6.0 min CN=63 Runoff=0.57 cfs 1,937 cf

Subcatchment 36: Runoff Area=29,625 sf 0.00% Impervious Runoff Depth=1.59"
Flow Length=221' Tc=12.3 min CN=65 Runoff=0.96 cfs 3,919 cf

Reach R3: Avg. Flow Depth=0.04' Max Vel=0.84 fps Inflow=0.07 cfs 1,243 cf
n=0.025 L=185.0' S=0.0141 '/' Capacity=314.57 cfs Outflow=0.07 cfs 1,243 cf

Reach SP2: Inflow=0.05 cfs 438 cf
Outflow=0.05 cfs 438 cf

Reach SP3: Inflow=1.41 cfs 74,486 cf
Outflow=1.41 cfs 74,486 cf

Pond P1: FIELD INLET Peak Elev=100.16' Inflow=0.07 cfs 1,243 cf
12.0" Round Culvert n=0.013 L=205.0' S=0.0049 '/' Outflow=0.07 cfs 1,243 cf

Pond P2: DRIVEWAY CROSSING Peak Elev=97.29' Storage=108 cf Inflow=3.24 cfs 20,685 cf
24.0" Round Culvert n=0.013 L=75.0' S=0.0053 '/' Outflow=3.24 cfs 20,685 cf

Pond P3: DETENTION POND Peak Elev=94.36' Storage=590 cf Inflow=0.57 cfs 1,937 cf
Primary=0.09 cfs 1,937 cf Secondary=0.00 cfs 0 cf Outflow=0.09 cfs 1,937 cf

Pond WP1: Peak Elev=96.89' Storage=43,301 cf Inflow=15.72 cfs 69,772 cf
Primary=1.07 cfs 68,631 cf Secondary=0.00 cfs 0 cf Outflow=1.07 cfs 68,631 cf

Time span=0.00-80.00 hrs, dt=0.05 hrs, 1601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 20: Runoff Area=11,545 sf 0.00% Impervious Runoff Depth=0.95"
Flow Length=36' Tc=9.5 min CN=46 Runoff=0.17 cfs 916 cf

Subcatchment 30: Runoff Area=59,900 sf 0.00% Impervious Runoff Depth=0.62"
Flow Length=303' Tc=22.2 min CN=41 Runoff=0.35 cfs 3,110 cf

Subcatchment 31: Runoff Area=63,420 sf 0.00% Impervious Runoff Depth=5.61"
Flow Length=372' Tc=6.0 min CN=95 Runoff=8.48 cfs 29,650 cf

Subcatchment 32: Runoff Area=69,150 sf 35.22% Impervious Runoff Depth=4.60"
Flow Length=516' Tc=36.2 min CN=86 Runoff=4.34 cfs 26,506 cf

Subcatchment 33: Runoff Area=34,440 sf 0.00% Impervious Runoff Depth=5.73"
Flow Length=297' Tc=6.0 min CN=96 Runoff=4.64 cfs 16,435 cf

Subcatchment 34: Runoff Area=52,650 sf 21.81% Impervious Runoff Depth=4.28"
Flow Length=195' Tc=6.0 min CN=83 Runoff=5.85 cfs 18,767 cf

Subcatchment 35: Runoff Area=16,075 sf 0.00% Impervious Runoff Depth=2.32"
Flow Length=118' Tc=6.0 min CN=63 Runoff=0.96 cfs 3,104 cf

Subcatchment 36: Runoff Area=29,625 sf 0.00% Impervious Runoff Depth=2.50"
Flow Length=221' Tc=12.3 min CN=65 Runoff=1.56 cfs 6,166 cf

Reach R3: Avg. Flow Depth=0.10' Max Vel=1.44 fps Inflow=0.35 cfs 3,110 cf
n=0.025 L=185.0' S=0.0141 '/' Capacity=314.57 cfs Outflow=0.35 cfs 3,110 cf

Reach SP2: Inflow=0.17 cfs 916 cf
Outflow=0.17 cfs 916 cf

Reach SP3: Inflow=2.49 cfs 101,308 cf
Outflow=2.49 cfs 101,308 cf

Pond P1: FIELD INLET Peak Elev=100.34' Inflow=0.35 cfs 3,110 cf
12.0" Round Culvert n=0.013 L=205.0' S=0.0049 '/' Outflow=0.35 cfs 3,110 cf

Pond P2: DRIVEWAY CROSSING Peak Elev=97.50' Storage=170 cf Inflow=4.67 cfs 29,616 cf
24.0" Round Culvert n=0.013 L=75.0' S=0.0053 '/' Outflow=4.67 cfs 29,616 cf

Pond P3: DETENTION POND Peak Elev=94.67' Storage=1,158 cf Inflow=0.96 cfs 3,104 cf
Primary=0.11 cfs 3,104 cf Secondary=0.00 cfs 0 cf Outflow=0.11 cfs 3,104 cf

Pond WP1: Peak Elev=97.60' Storage=59,256 cf Inflow=20.65 cfs 94,468 cf
Primary=1.40 cfs 92,038 cf Secondary=0.00 cfs 0 cf Outflow=1.40 cfs 92,038 cf

Time span=0.00-80.00 hrs, dt=0.05 hrs, 1601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 20: Runoff Area=11,545 sf 0.00% Impervious Runoff Depth=1.47"
Flow Length=36' Tc=9.5 min CN=46 Runoff=0.32 cfs 1,414 cf

Subcatchment 30: Runoff Area=59,900 sf 0.00% Impervious Runoff Depth=1.04"
Flow Length=303' Tc=22.2 min CN=41 Runoff=0.73 cfs 5,188 cf

Subcatchment 31: Runoff Area=63,420 sf 0.00% Impervious Runoff Depth=6.70"
Flow Length=372' Tc=6.0 min CN=95 Runoff=10.04 cfs 35,432 cf

Subcatchment 32: Runoff Area=69,150 sf 35.22% Impervious Runoff Depth=5.65"
Flow Length=516' Tc=36.2 min CN=86 Runoff=5.29 cfs 32,585 cf

Subcatchment 33: Runoff Area=34,440 sf 0.00% Impervious Runoff Depth=6.82"
Flow Length=297' Tc=6.0 min CN=96 Runoff=5.49 cfs 19,581 cf

Subcatchment 34: Runoff Area=52,650 sf 21.81% Impervious Runoff Depth=5.31"
Flow Length=195' Tc=6.0 min CN=83 Runoff=7.20 cfs 23,304 cf

Subcatchment 35: Runoff Area=16,075 sf 0.00% Impervious Runoff Depth=3.13"
Flow Length=118' Tc=6.0 min CN=63 Runoff=1.31 cfs 4,189 cf

Subcatchment 36: Runoff Area=29,625 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=221' Tc=12.3 min CN=65 Runoff=2.12 cfs 8,236 cf

Reach R3: Avg. Flow Depth=0.16' Max Vel=1.83 fps Inflow=0.73 cfs 5,188 cf
n=0.025 L=185.0' S=0.0141 '/' Capacity=314.57 cfs Outflow=0.72 cfs 5,188 cf

Reach SP2: Inflow=0.32 cfs 1,414 cf
Outflow=0.32 cfs 1,414 cf

Reach SP3: Inflow=3.51 cfs 125,503 cf
Outflow=3.51 cfs 125,503 cf

Pond P1: FIELD INLET Peak Elev=100.51' Inflow=0.73 cfs 5,188 cf
12.0" Round Culvert n=0.013 L=205.0' S=0.0049 '/' Outflow=0.73 cfs 5,188 cf

Pond P2: DRIVEWAY CROSSING Peak Elev=97.68' Storage=239 cf Inflow=6.02 cfs 37,773 cf
24.0" Round Culvert n=0.013 L=75.0' S=0.0053 '/' Outflow=6.01 cfs 37,773 cf

Pond P3: DETENTION POND Peak Elev=94.94' Storage=1,725 cf Inflow=1.31 cfs 4,189 cf
Primary=0.12 cfs 4,189 cf Secondary=0.00 cfs 0 cf Outflow=0.12 cfs 4,189 cf

Pond WP1: Peak Elev=97.99' Storage=68,677 cf Inflow=24.81 cfs 116,091 cf
Primary=2.83 cfs 112,343 cf Secondary=0.32 cfs 735 cf Outflow=3.15 cfs 113,078 cf

Summary for Subcatchment 20:

Runoff = 0.00 cfs @ 14.90 hrs, Volume= 69 cf, Depth= 0.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

Area (sf)	CN	Description
2,790	39	>75% Grass cover, Good, HSG A
1,175	80	>75% Grass cover, Good, HSG D
5,540	30	Woods, Good, HSG A
2,040	77	Woods, Good, HSG D
11,545	46	Weighted Average
11,545		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	13	0.3333	0.24		**Sheet Flow, A to B** Grass: Dense n= 0.240 P2= 3.30"
8.6	23	0.0100	0.04		**Sheet Flow, B to C** Woods: Light underbrush n= 0.400 P2= 3.30"
9.5	36	Total			

Summary for Subcatchment 30:

Runoff = 0.00 cfs @ 22.05 hrs, Volume= 60 cf, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

	Area (sf)	CN	Description
*	7,180	96	Gravel
	11,575	39	>75% Grass cover, Good, HSG A
	485	80	>75% Grass cover, Good, HSG D
	38,890	30	Woods, Good, HSG A
	1,770	77	Woods, Good, HSG D
	59,900	41	Weighted Average
	59,900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.1	150	0.0450	0.12		**Sheet Flow, A TO B** Woods: Light underbrush n= 0.400 P2= 3.30"
0.6	40	0.0450	1.06		**Shallow Concentrated Flow, B TO C** Woodland Kv= 5.0 fps
0.5	113	0.0070	3.57	16.07	**Trap/Vee/Rect Channel Flow, C TO D** Bot.W=2.00' D=1.00' Z= 2.0 & 3.0 '/' Top.W=7.00' n= 0.025
22.2	303	Total			

Summary for Subcatchment 31:

Runoff = 4.32 cfs @ 12.09 hrs, Volume= 14,496 cf, Depth= 2.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

	Area (sf)	CN	Description
*	61,755	96	Gravel
	370	39	>75% Grass cover, Good, HSG A
	1,055	80	>75% Grass cover, Good, HSG D
	240	77	Woods, Good, HSG D
	63,420	95	Weighted Average
	63,420		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	32	0.0500	0.20		**Sheet Flow, A TO B** Grass: Short n= 0.150 P2= 3.30"
1.5	118	0.0150	1.29		**Sheet Flow, B TO C** Smooth surfaces n= 0.011 P2= 3.30"
1.8	222	0.0170	2.10		**Shallow Concentrated Flow, C TO D** Unpaved Kv= 16.1 fps
6.0	372	Total			

Summary for Subcatchment 32:

Runoff = 1.85 cfs @ 12.50 hrs, Volume= 11,077 cf, Depth= 1.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

	Area (sf)	CN	Description
*	9,260	96	New Gravel
	16,165	80	>75% Grass cover, Good, HSG D
*	11,755	98	Existing Building
*	12,600	98	Existing Pavement
*	110	96	Existing Gravel Parking
*	5,430	80	Existing Lawn HSG D
	3,530	30	Woods, Good, HSG A
	10,300	77	Woods, Good, HSG D
	69,150	86	Weighted Average
	44,795		64.78% Pervious Area
	24,355		35.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.8	150	0.0150	0.08		**Sheet Flow, A TO B** Woods: Light underbrush n= 0.400 P2= 3.30"
3.0	181	0.0200	0.99		**Shallow Concentrated Flow, B TO C** Short Grass Pasture Kv= 7.0 fps
0.4	185	0.0141	7.49	119.77	**Trap/Vee/Rect Channel Flow, C TO D** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.025
36.2	516	Total			

Summary for Subcatchment 33:

Runoff = 2.40 cfs @ 12.09 hrs, Volume= 8,173 cf, Depth= 2.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

	Area (sf)	CN	Description
*	34,440	96	Gravel
	34,440		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.7	150	0.0200	1.51		**Sheet Flow, A TO B** Smooth surfaces n= 0.011 P2= 3.30"
0.2	22	0.0200	2.28		**Shallow Concentrated Flow, B to C** Unpaved Kv= 16.1 fps
1.0	125	0.0100	2.06	6.45	**Trap/Vee/Rect Channel Flow, C to D** Bot.W=0.00' D=0.25' Z= 50.0 '/' Top.W=25.00' n= 0.018 Rubble masonry, cemented
3.1					**Direct Entry, 6 MINUTE MIN. TC**
6.0	297	Total			

Summary for Subcatchment 34:

Runoff = 2.35 cfs @ 12.09 hrs, Volume= 7,422 cf, Depth= 1.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

	Area (sf)	CN	Description
*	20,325	96	Gravel
	9,120	39	>75% Grass cover, Good, HSG A
	11,720	80	>75% Grass cover, Good, HSG D
*	11,485	98	Water Surface
	52,650	83	Weighted Average
	41,165		78.19% Pervious Area
	11,485		21.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	110	0.0200	1.42		**Sheet Flow, A to B** Smooth surfaces n= 0.011 P2= 3.30"
0.1	17	0.3300	4.02		**Shallow Concentrated Flow, B to C** Short Grass Pasture Kv= 7.0 fps
0.4	68	0.0100	3.02	15.11	**Trap/Vee/Rect Channel Flow, C to D** Bot.W=2.00' D=1.00' Z= 3.0 '/' Top.W=8.00' n= 0.035 Earth, dense weeds
4.2					**Direct Entry, 6 MINUTE MIN. TC**
6.0	195	Total			

Summary for Subcatchment 35:

Runoff = 0.18 cfs @ 12.12 hrs, Volume= 757 cf, Depth= 0.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

	Area (sf)	CN	Description
*	6,815	96	Gravel
	9,260	39	>75% Grass cover, Good, HSG A
	16,075	63	Weighted Average
	16,075		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	52	0.0200	1.23		**Sheet Flow, A TO B** Smooth surfaces n= 0.011 P2= 3.30"
0.5	7	0.3300	0.21		**Sheet Flow, B TO C** Grass: Dense n= 0.240 P2= 3.30"
0.2	59	0.0200	6.11	85.50	**Trap/Vee/Rect Channel Flow, C TO D** Bot.W=1.00' D=2.00' Z= 3.0 '/' Top.W=13.00' n= 0.035 Earth, dense weeds
4.6					**Direct Entry,**
6.0	118	Total			

Summary for Subcatchment 36:

Runoff = 0.33 cfs @ 12.21 hrs, Volume= 1,604 cf, Depth= 0.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.30"

Area (sf)	CN	Description
6,825	39	>75% Grass cover, Good, HSG A
10,630	80	>75% Grass cover, Good, HSG D
2,670	30	Woods, Good, HSG A
5,080	77	Woods, Good, HSG D
200	30	Meadow, non-grazed, HSG A
4,220	78	Meadow, non-grazed, HSG D
29,625	65	Weighted Average
29,625		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.9	70	0.0150	0.10		**Sheet Flow, A TO B** Grass: Dense n= 0.240 P2= 3.30"
0.4	151	0.0300	6.63	72.91	**Trap/Vee/Rect Channel Flow, B TO C** Bot.W=6.00' D=1.00' Z= 5.0 '/' Top.W=16.00' n= 0.030
12.3	221	Total			

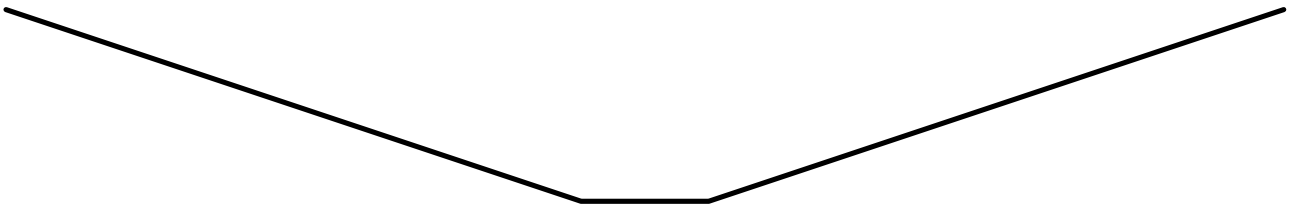
Summary for Reach R3:

Inflow Area = 59,900 sf, 0.00% Impervious, Inflow Depth = 0.01" for 2-YEAR event
Inflow = 0.00 cfs @ 22.05 hrs, Volume= 60 cf
Outflow = 0.00 cfs @ 22.20 hrs, Volume= 60 cf, Atten= 0%, Lag= 9.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.66 fps, Min. Travel Time= 4.7 min
Avg. Velocity = 0.66 fps, Avg. Travel Time= 4.7 min

Peak Storage= 1 cf @ 22.13 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 3.00' Flow Area= 33.0 sf, Capacity= 314.57 cfs

2.00' x 3.00' deep channel, n= 0.025 Earth, clean & winding
Side Slope Z-value= 3.0 '/' Top Width= 20.00'
Length= 185.0' Slope= 0.0141 '/'
Inlet Invert= 99.00', Outlet Invert= 96.40'



Summary for Reach SP2:

Inflow Area = 11,545 sf, 0.00% Impervious, Inflow Depth = 0.07" for 2-YEAR event
Inflow = 0.00 cfs @ 14.90 hrs, Volume= 69 cf
Outflow = 0.00 cfs @ 14.90 hrs, Volume= 69 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Reach SP3:

Inflow Area = 325,260 sf, 11.02% Impervious, Inflow Depth > 1.61" for 2-YEAR event
Inflow = 0.51 cfs @ 12.21 hrs, Volume= 43,518 cf
Outflow = 0.51 cfs @ 12.21 hrs, Volume= 43,518 cf, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Summary for Pond P1: FIELD INLET

Inflow Area = 59,900 sf, 0.00% Impervious, Inflow Depth = 0.01" for 2-YEAR event
Inflow = 0.00 cfs @ 22.05 hrs, Volume= 60 cf
Outflow = 0.00 cfs @ 22.05 hrs, Volume= 60 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 22.05 hrs, Volume= 60 cf

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 100.03' @ 22.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	100.00'	**12.0" Round Culvert** L= 205.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 100.00' / 99.00' S= 0.0049 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 22.05 hrs HW=100.03' (Free Discharge)
1=Culvert (Barrel Controls 0.00 cfs @ 0.49 fps)

Summary for Pond P2: DRIVEWAY CROSSING

Inflow Area = 129,050 sf, 18.87% Impervious, Inflow Depth = 1.04" for 2-YEAR event
Inflow = 1.85 cfs @ 12.50 hrs, Volume= 11,137 cf
Outflow = 1.85 cfs @ 12.51 hrs, Volume= 11,137 cf, Atten= 0%, Lag= 0.5 min
Primary = 1.85 cfs @ 12.51 hrs, Volume= 11,137 cf

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 97.06' @ 12.51 hrs Surf.Area= 150 sf Storage= 60 cf

Plug-Flow detention time= 1.0 min calculated for 11,130 cf (100% of inflow)
Center-of-Mass det. time= 1.0 min (852.4 - 851.4)

Volume	Invert	Avail.Storage	Storage Description
#1	96.40'	2,507 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
96.40	50	0	0
97.00	125	52	52
98.00	560	343	395
99.00	1,000	780	1,175
100.00	1,665	1,333	2,507

Device	Routing	Invert	Outlet Devices
#1	Primary	96.40'	**24.0" Round Culvert** L= 75.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 96.40' / 96.00' S= 0.0053 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=1.85 cfs @ 12.51 hrs HW=97.06' (Free Discharge)
1=Culvert (Barrel Controls 1.85 cfs @ 3.08 fps)

Summary for Pond P3: DETENTION POND

Inflow Area = 16,075 sf, 0.00% Impervious, Inflow Depth = 0.56" for 2-YEAR event
Inflow = 0.18 cfs @ 12.12 hrs, Volume= 757 cf
Outflow = 0.07 cfs @ 12.49 hrs, Volume= 757 cf, Atten= 59%, Lag= 22.4 min
Primary = 0.07 cfs @ 12.49 hrs, Volume= 757 cf
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 94.07' @ 12.49 hrs Surf.Area= 1,543 sf Storage= 108 cf

Plug-Flow detention time= 13.6 min calculated for 757 cf (100% of inflow)
Center-of-Mass det. time= 13.6 min (914.7 - 901.2)

Volume	Invert	Avail.Storage	Storage Description
#1	94.00'	9,663 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
94.00	1,490	0	0
95.00	2,225	1,858	1,858
96.00	3,410	2,818	4,675
97.00	6,565	4,988	9,663

Device	Routing	Invert	Outlet Devices
#1	Primary	93.50'	**2.0" Vert. 2" Diam End Cap** C= 0.600
#2	Device 1	93.75'	**6.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 93.75' / 93.50' S= 0.0104 '/' Cc= 0.900 n= 0.013, Flow Area= 0.20 sf
#3	Secondary	95.00'	**5.0' long x 11.5' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
Coef. (English) 2.55 2.60 2.70 2.67 2.67 2.67 2.66 2.64

Primary OutFlow Max=0.07 cfs @ 12.49 hrs HW=94.07' (Free Discharge)
└**1=2" Diam End Cap** (Orifice Controls 0.07 cfs @ 3.36 fps)
└**2=Culvert** (Passes 0.07 cfs of 0.20 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=94.00' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond WP1:

Inflow Area = 279,560 sf, 12.82% Impervious, Inflow Depth = 1.77" for 2-YEAR event
Inflow = 9.69 cfs @ 12.09 hrs, Volume= 41,229 cf
Outflow = 0.45 cfs @ 15.91 hrs, Volume= 41,158 cf, Atten= 95%, Lag= 229.1 min
Primary = 0.45 cfs @ 15.91 hrs, Volume= 41,158 cf
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 96.12' @ 15.91 hrs Surf.Area= 19,099 sf Storage= 27,707 cf

Plug-Flow detention time= 1,320.4 min calculated for 41,132 cf (100% of inflow)
Center-of-Mass det. time= 1,320.5 min (2,128.0 - 807.5)

Volume	Invert	Avail.Storage	Storage Description
#1	94.40'	98,661 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
94.40	11,485	0	0
95.00	15,735	8,166	8,166
96.00	18,730	17,233	25,398
97.00	21,750	20,240	45,638
98.00	25,045	23,398	69,036
99.00	34,205	29,625	98,661

Device	Routing	Invert	Outlet Devices
#1	Primary	91.70'	**12.0" Round Culvert** L= 36.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 91.70' / 91.50' S= 0.0056 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	94.40'	**0.11 cfs Gravel Bench at all elevations**
#3	Device 1	97.75'	**13.1" Horiz. Rim** C= 0.600 Limited to weir flow at low heads
#4	Device 1	95.55'	**2.9" W x 10.5" H Vert. Orifice** C= 0.600
#5	Secondary	97.95'	**19.2' long x 6.0' breadth Emergency Spillway** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.45 cfs @ 15.91 hrs HW=96.12' (Free Discharge)
└**1=Culvert** (Passes 0.45 cfs of 7.40 cfs potential flow)
  ├**2=Gravel Bench** (Exfiltration Controls 0.11 cfs)
  ├**3=Rim** (Controls 0.00 cfs)
  └**4=Orifice** (Orifice Controls 0.34 cfs @ 2.43 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=94.40' (Free Discharge)
└**5=Emergency Spillway** (Controls 0.00 cfs)

SPILLWAY RUN - DETENTION POND

Summary for Pond P3: DETENTION POND

Inflow Area = 16,075 sf, 0.00% Impervious, Inflow Depth = 2.32" for 25-YEAR event
Inflow = 0.96 cfs @ 12.10 hrs, Volume= 3,104 cf
Outflow = 0.07 cfs @ 14.05 hrs, Volume= 1,247 cf, Atten= 92%, Lag= 116.9 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Secondary = 0.07 cfs @ 14.05 hrs, Volume= 1,247 cf

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 95.03' @ 14.05 hrs Surf.Area= 2,261 sf Storage= 1,926 cf

Plug-Flow detention time= 327.1 min calculated for 1,247 cf (40% of inflow)
Center-of-Mass det. time= 193.9 min (1,047.1 - 853.2)

Volume	Invert	Avail.Storage	Storage Description
#1	94.00'	9,663 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
94.00	1,490	0	0
95.00	2,225	1,858	1,858
96.00	3,410	2,818	4,675
97.00	6,565	4,988	9,663

Device	Routing	Invert	Outlet Devices
#1	Primary	93.50'	**2.0" Vert. 2" Diam End Cap X 0.00** C= 0.600
#2	Device 1	93.75'	**6.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 93.75' / 93.50' S= 0.0104 '/' Cc= 0.900 n= 0.013, Flow Area= 0.20 sf
#3	Secondary	95.00'	**5.0' long x 11.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.55 2.60 2.70 2.67 2.67 2.67 2.66 2.64

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=94.00' (Free Discharge)
└**1=2" Diam End Cap** (Controls 0.00 cfs)
└**2=Culvert** (Passes 0.00 cfs of 0.13 cfs potential flow)

Secondary OutFlow Max=0.07 cfs @ 14.05 hrs HW=95.03' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.07 cfs @ 0.45 fps)

PEAK ELEVATION DURING SPILLWAY RUN = 95.03'
TOP OF BERM ELEV.=96.5 = 1.47' FREEBOARD >1'

ATTACHMENT 5

URBAN IMPAIRED STREAM STANDARD CALCULATIONS

Urban Impaired Stream Compensation Fee Calculation

Mitigation Credits Required

Non-roof Impervious Area	0.5	per acre
Roof	0.2	per acre
Landscaped Area	0.1	per acre

Previously Approved Impervious Area=	102,735	sf
Total Proposed Impervious Area=	144,915	sf
Net New Impervous Area=	42,180	sf
Previously Approved Landscaped Area=	96,570	sf
Total Proposed Landscaped Area=	103,950	sf
Net New Landscaped Area=	7,380	sf
New On-site Non-roof Impervious Area=	42,180	sf
	0.97	ac.
New On-site Roof Area =	0	sf
	0.00	ac.
New Landscaped Area =	7,380	sf
	0.17	ac.
Total Credits Required	**0.50**	**credits**

Mitigation Credits Provided

Compensation Fee =	$25,000	per credit
Required Compensation Fee=	**$12,527.55**	

ATTACHMENT 6

INSPECTION, MAINTENANCE AND HOUSEKEEPING PLAN

DM ROMA
CONSULTING ENGINEERS

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

(Prepared by Jayson Haskell, PE #13002)

GRAVEL LAYDOWN LOT EXPANSION
71 INDUSTRIAL PARK ROAD
SACO, MAINE

Responsible Party

Owner: Vic-Sam Holdings, LLC
102 Industrial Park Road
Saco, Maine 04072

The owner/applicant is responsible for the maintenance of all stormwater management structures and related site components and the keeping of a maintenance log book with service records. If the property is transferred to another entity in the future, the stormwater management components will remain the responsibility of the applicant until a Transfer Application is submitted to the Maine Department of Environmental Protection. Records of all inspections and maintenance work performed must be kept on file with the owner and retained for a minimum of five years. The maintenance log will be made available to the City and Maine Department of Environmental Protection (MDEP) upon request. At a minimum, the maintenance of stormwater management systems will be performed on the prescribed schedule.

The procedures outlined in this plan are provided as a general overview of the anticipated practices to be utilized on this site. In some instances, additional measures may be required due to unexpected conditions. *The Maine Erosion and Sedimentation Control BMP* and *Stormwater Management for Maine: Best Management Practices* Manuals published by the MDEP should be referenced for additional information.

During Construction

1. **Inspection and Corrective Action:** It is the contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. Inspection shall occur on all disturbed and impervious areas, erosion control measures, material storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as 24 hours before and after a storm event generating more than 0.5 inch of rainfall over a 24-hour period and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.

2. **Maintenance:** Erosion controls shall be maintained in effective operating condition until areas are permanently stabilized. If best management practices (BMPs) need to be repaired, the repair work should be initiated upon discovery of the problem but no later than the end of the next workday. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven calendar days and prior to any rainfall event.

3. **Snow Storage:** The wet pond shall not be utilized for snow storage. Snow storage areas shall be located away from the wet pond and detention pond, and in areas that will direct snow melt runoff into either the wet pond or detention pond on site.

4. **Documentation:** A report summarizing the inspections and any corrective action taken must be maintained on site. The log must include the name(s) and qualifications of the person making the inspections; the date(s) of the inspections; and the major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to MDEP and City staff, and a copy must be provided upon request. The owner shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

Housekeeping

1. **Spill prevention:** Controls must be used to prevent pollutants from construction and waste materials on site to enter stormwater, which includes storage practices to minimize exposure of the materials to stormwater. The site contractor or operator must develop, and implement as necessary, appropriate spill prevention, containment, and response planning measures.

2. **Groundwater protection:** During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials. Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide for treatment within the infiltration area, in order to prevent the accumulation of fines, reduction in infiltration rate, and consequent flooding and destabilization.

3. **Fugitive sediment and dust:** Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control, but other water additives may be considered as needed. If off-site tracking occurs, public roads should be swept immediately and no less than once a week and prior to significant storm events. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.

4. **Debris and other materials:** Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source.

5. **Excavation de-watering:** Excavation de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water removed from the ponded area, either through gravity or pumping, must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the Department.

6. **Authorized Non-stormwater discharges:** Identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:
   (a) Discharges from firefighting activity;
   (b) Fire hydrant flushings;
   (c) Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);
   (d) Dust control runoff in accordance with permit conditions and Appendix (C)(3);
   (e) Routine external building washdown, not including surface paint removal, that does not involve detergents;
   (f) Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;
   (g) Uncontaminated air conditioning or compressor condensate;
   (h) Uncontaminated groundwater or spring water;
   (i) Foundation or footer drain-water where flows are not contaminated;
   (j) Uncontaminated excavation dewatering (see requirements in Appendix C(5));
   (k) Potable water sources including waterline flushings; and
   (l) Landscape irrigation.

7. **Unauthorized non-stormwater discharges:** Approval from the City does not authorize a discharge that is mixed with a source of non-stormwater, other than those discharges in compliance with Section 6 above. Specifically, the City's approval does not authorize discharges of the following:
   (a) Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;
   (b) Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
   (c) Soaps, solvents, or detergents used in vehicle and equipment washing; and
   (d) Toxic or hazardous substances from a spill or other release.

Post Construction

1. **Inspection and Corrective Action:** All stormwater measures must be maintained by the owner in effective operating condition. A qualified third-party inspector hired by the owner shall at least annually inspect the stormwater management facilities. This person should have knowledge of erosion and stormwater control including the standards and conditions of the site's approvals. The inspector shall be certified through the MDEP to inspect the stormwater infrastructure. The following areas, facilities, and measures must be inspected, and identified deficiencies must be corrected. Areas, facilities, and measures other than those listed below may also require inspection on a specific site.

   A. **Vegetated Areas:** Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

   B. **Ditches, Swales, and Open Channels:** Inspect ditches, swales, and other open channels in the spring, late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, control vegetative growth that could obstruct flow, and repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Repair any slumping side slopes as soon as practicable. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side slopes.

   C. **Storm Drains:** Inspect storm drains in the spring, late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the storm drain's outlet.

   D. **Outlet Control Structure:** Inspect and, if required, clean out structure at least once a year, preferably in early spring. Clean out must include the removal and legal disposal

of any accumulated sediments and debris at the bottom of the structure and inlet grate.

E. Wet Pond: Inspect gravel trench outlet after every major storm (0.5 inches rainfall over 24 hours) in the first six months to ensure proper function. Thereafter the gravel trench should be inspected at least once every six months with at least one inspection after a major storm event. The wet pond should drain within 24 to 48 hours of the end of the storm event. If water does not drain through the gravel trench within 72 hours, the top several inches of the gravel must be replaced with fresh material. The removed sediment shall be disposed of in an acceptable manner. Wet Ponds should also be inspected annually for erosion, destabilization of side slopes, embankment settling and other signs of structural failure. Dredging should occur to remove sediment once the accumulated volume loss reaches 15% or approximately every 15-20 years. The wet pond is not intended to function as a snow storage area. Inspector to verify that winter plowing operations are not dumping or pushing snow into the pond.

F. Emergency Spillways: Spillways should be inspected semi-annually and following major storm events for the first year and every six months thereafter to remove any obstructions to flow. Any woody vegetation growing through riprap lining must be removed. Replace riprap on areas where any underlying filter fabric is showing through the stone or where stones have been dislodged.

G. Detention Pond: The detention pond should be inspected annually for erosion, destabilization of side slopes, embankment settling and other signs of structural failure, and loss of storage volume due to sediment accumulation. Corrective action should be taken immediately upon identification of problems.

a. Inlet & Outlet Inspections: The inlet and outlet of the ponds should be checked periodically to ensure that flow structures are not blocked by debris. Inspections should be conducted monthly during wet weather conditions (March to November).

b. Embankment Maintenance: Embankments should be maintained to preserve their integrity as impoundment structures, including: mowing, control of woody vegetation, rodent, and outlet maintenance and repair. Ponds should be mowed no more than twice a year during the growing season to maintain maximum grass heights less than 12 inches. All accumulated trash and debris should be removed.

c. Sediment Removal: Sediment should be removed from the pond when necessary.

H. **Regular Maintenance:** Clear accumulations of winter sand along parking areas once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along pavement shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.

I. **Documentation:** Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal. The log must be made accessible to City and MDEP staff upon request. The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization. Attached is a sample log.

Re-certification

As a requirement of the City, the stormwater infrastructure shall be inspected annually by a qualified inspector meeting the requirements in Section 805-2 Post-Construction Stormwater Management Plan of the "Good Neighbor" Performance Standards. The inspector shall perform an initial inspection to determine the status of the stormwater management facilities. If the initial inspection identifies any deficiencies with the facilities, the same inspector shall re-inspect the facilities after they have been maintained or repaired to determine if they are performing as intended. Once the site is satisfactory, the inspector shall submit the Annual Stormwater Certification to the City of Saco Department of Public Works. The certification form shall be submitted to the City prior to July 15 of each year. A copy of the form has been included in this document.

Duration of Maintenance

Perform maintenance as described.

INSPECTION AND MAINTENANCE LOG – GENERAL INSPECTION

GRAVEL LAYDOWN LOT EXPANSION
71 INDUSTRIAL PARK ROAD
SACO, MAINE

The following stormwater management and erosion control items shall be inspected and maintained as prescribed in the Maintenance Plan with recommended frequencies as identified below. The owner is responsible for keeping this maintenance log on file for a minimum of five years and shall provide a copy to the City and MDEP upon request. Inspections are to be performed by a qualified third-party inspector and all corrective actions shall be performed by personnel familiar with stormwater management systems and erosion controls.

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Vegetated Areas	Inspect slopes and embankments early in Spring.			
Ditches, swales and other open channels	Inspect after major rainfall event.			
	Inspect for erosion or slumping and repair			
	Mowed at least annually			
Storm Drains	Inspect semiannually and after major rainfall.			
	Repair erosion at inlet or outlet of pipe.			
	Repair displaced riprap.			
	Clean accumulated sediment in culverts when >20% full.			
Regular Maintenance	Clear accumulation of winter sand in paved areas annually.			

INSPECTION AND MAINTENANCE LOG – WET POND

GRAVEL LAYDOWN LOT EXPANSION
71 INDUSTRIAL PARK ROAD
SACO, MAINE

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Sediment Pre-treatment	Inspect annually			
	Remove sediment as necessary to maintain a minimum 50% sediment storage volume			
Wet Pond	Check after each rainfall event to ensure that pond drains within 24-48 hours.			
	Replace top several inches of gravel in trench if pond does not drain within 72 hours.			
	Inspect annually for erosion or sediment accumulation and repair as necessary.			
	Inspector to verify wet pond is not utilized for snow storage			
Culverts	Inspect semiannually and after major rainfall.			
	Repair erosion at outlet of pipe.			
	Repair displaced riprap at outlet of culvert.			
	Clean accumulated sediment in culvert when >20% full.			
Outlet Control Structure	Inspect to ensure that structure is properly draining.			
	Remove accumulated sediment semiannually.			
	Inspect grates/inlets and remove debris as needed.			
Emergency Spillway	Inspect and remove obstructions as necessary.			
	Remove woody vegetation.			
	Replace riprap as necessary.			

INSPECTION AND MAINTENANCE LOG – DETENTION POND

GRAVEL LAYDOWN LOT EXPANSION
71 INDUSTRIAL PARK ROAD
SACO, MAINE

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Detention Pond	Inlet & Outlet of pond inspected for debris blockage			
	Mow grass no more than twice a year to maintain a grass height of less than 12”.			
	Inspect embankment for erosion and destabilization.			
	Remove accumulated trash, debris and sediment from pond and embankment.			
Culverts	Inspect semiannually and after major rainfall.			
	Repair erosion at outlet of pipe.			
	Repair displaced riprap at outlet of culvert.			
	Clean accumulated sediment in culvert when >20% full.			
Emergency Spillway	Inspect and remove obstructions as necessary.			
	Remove woody vegetation.			
	Replace riprap as necessary.			

FORM 2

Annual Stormwater Management Facilities Certification

(to be completed by a Qualified Post-Construction Stormwater Inspector and sent to City of Saco Public Works Department)

I, _____ (print or type name), a Qualified Post-Construction Stormwater Inspector, certify the following:

1. I am making this Annual Stormwater Management Facilities Certification for the following property: _____ (print or type name of subdivision, condominium or other development) located at _____ (print or type address), (the "Property");

2. The owner, operator, tenant, lessee or homeowners' association of the Property is: _____ (name(s) of owner, operator, tenant, lessee, homeowners' association or other party having control over the Property);

3. I have knowledge of erosion and stormwater control and have reviewed the approved Post-Construction Stormwater Management Plan for the Property;

4. On _____, 20__, I inspected the Stormwater Management Facilities, including but not limited to parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures required by the approved Post-Construction Stormwater Management Plan for the Property;

5. At the time of my inspection of the Stormwater Management Facilities on the Property, I identified the following need(s) for routine maintenance or deficiencies in the Stormwater Management Facilities:

_____

_____

6. On _____, 20__, I took the following routine maintenance or the following corrective action(s) to address the deficiencies in the Stormwater Management Facilities

stated in 5. above:

_____

_____

7. As of the date of this certification, the Stormwater Management Facilities are functioning as intended by the approved Post-Construction Stormwater Management Plan for the Property.

Date:_____, 20__. By:_____
Signature

_____
Print Name

STATE OF MAINE
_____, ss. _____, 20__

Personally appeared the above-named _____, the _____ of _____, and acknowledged the foregoing Annual Certification to be said person's free act and deed in said capacity.

Before me, _____
Notary Public/Attorney at Law
Print Name: _____

8. The owner, operator, tenant, lessee, or other party having control over the Property shall sign below verifying the information above was completed by a Qualified Post-Construction Stormwater Inspector.

Date:_____, 20__. By:_____
Signature

_____
Print Name

STATE OF MAINE
_____, ss. _____, 20__

Personally appeared the above-named _____, the _____ of _____, and acknowledged the

foregoing Annual Certification to be said person's free act and deed in said capacity.

Before me, _____
Notary Public/Attorney at Law

Print Name: _____

Mail or hand deliver this certification to the City of Saco at the following address:
City of Saco c/o City Engineer
300 Main Street
Saco, ME 04072

SECTION 9

PROJECT SIGN

Section 9 – Project Sign

The property currently contains a sign indicating “Casco Bay Transportation Annex” which was coordinated with the codes department prior to placement. The sign measures 8 feet wide by 4 feet tall and is approximately 3 feet from the ground along the entrance driveway. The sign is not internally or externally lit. Below is a photo of the sign. The proposed project does not include any additional signage.

SECTION 10

TRAFFIC

Section 10 – Traffic Analysis

Since the use of the property will not change from the existing to the proposed condition, the change in traffic will generally be associated with the larger footprint of storage within the facility. Since the laydown area is generally storage of goods and materials, similar to a warehouse facility, we have utilized the "Warehousing" industrial use identified as Land Use Code #150 by the Institute of Transportation Engineers (ITE) Trip Generation handbook (10^{th} edition) to determine the impact of the laydown area expansion. Based on the ITE handbook, the Warehousing use is expected to generate 0.19 vehicular trip ends per 1,000 square feet of floor area in the PM Peak Hour. With the increase of storage space of approximately 44,810 square feet, we anticipate there to be approximately 8 additional vehicle trip ends in the PM Peak Hour as a result of the proposed development.

Based on the total laydown area of approximately 131,900 square feet, the ITE handbook estimates the development to generate approximately 25 vehicle trip ends in the PM Peak Hour. Based on the applicant's actual use of the property, we anticipate there to be far less traffic generated by the site as there has been very little turnover of the materials stored on the site since the facility began operation. Since the development will create less than 100 vehicle trips at the peak hour, a Maine Department of Transportation Traffic Movement Permit is not required.

The vehicular sight distance was measured at the intersection of the existing driveway and Industrial Park Road. Exiting the site, the sight distance to the right was measured in excess of 1,000 feet and approximately 900 feet looking left to the 90° turn in Industrial Park Road. These distances exceed the City's recommended sight distance of 445 feet for the posted 40 mile per hour speed limit.

SECTION 11

MAINE HISTORIC PRESERVATION COMMISSION REVIEW

Section 11 – Maine Historic Preservation Commission Coordination

During the initial permitting of this property, the Maine Historic Preservation Commission (MHPC) was consulted with to determine if a project on this site would have any negative affect on abutting historical properties. MHPC responded indicating that there are no surrounding properties that would be affected by a project on the property. A copy of this letter has been included in this section for review.

DM Roma Consulting Engineers

December 7, 2016

Mr. Kirk F. Mohney, Director
Maine Historic Preservation Commission
55 Capitol Street
65 State House Station
Augusta, ME 04333-0065

DEC 13 2016
1796-16

Re: Maine DEP NRPA Tier 1 Permit Review
Multi-Unit Facility
71 Industrial Park Road, Saco, Maine

Dear Mr. Mohney:

On behalf of LAW Property Management, LLC, we are submitting to you a copy of the Maine Department of Environmental Protection (MDEP) Natural Resource Protection Act (NRPA) Tier 1 permit for their new facility on the Industrial Park Road in Saco, Maine. It is part of the Tier 1 permit requirements to submit to you the permit for your review.

The 6.4-acre parcel is currently undeveloped and is located in the City's industrial park, surrounded by industrial use sites with a wooded, undeveloped lot to the southeast. The project consists of a 25,000 square foot building, a 10,000 square foot building, paved access drive and parking, utilities and stormwater infrastructure. The development of the property could not avoid the impact of approximately 12,920 square feet of wetlands requiring this permit through the MDEP.

Please review the attached submission and your records and let us and MDEP know if you have any concerns with the proposed development. If you have any questions, please do not hesitate to contact me.

Sincerely,

DM Roma Consulting Engineers

Jayson R. Haskell, P.E.
Senior Project Manager

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Kirk F. Mohney, [redacted] State Historic Preservation Officer
Maine Historic Preservation Commission

12/14/16
Date

Cc: Louis Waterhouse, LAW Property Management, LLC
Maine DEP

59 Harvest Hill Road, Windham, ME 04062 T: (207) 229-3295 E: jayson@dmroma.com

SECTION 12

OTHER REGULATORY APPROVALS

Section 12 – Other Regulatory Approvals

As indicated previously, the project site is currently subject to both a Tier 1 Wetland Alteration Permit from the Maine Department of Environmental Protection (MDEP) and Maine General Permit from the US Army Corps of Engineers (ACOE) for the impact to approximately 12,920 square feet. With the inclusion of the gravel laydown expansion associated with the proposed project, the wetland impact total will be approximately 35,515 square feet.

Since the project will generate more than 15,000 square feet of wetland impact, the project expansion will require the submission of a Tier 2 Wetland Alteration permit to the MDEP and further reviewed by the ACOE. This permit requires additional information for review in addition to the need for wetland impact mitigation. As there isn't a significant amount of land on the property to propose creation or preservation to the MDEP, the payment of an in-leu fee will be proposed. The final amount will be determined at the end of the review process.

Included as an attachment to this submission is a copy of the application and supporting documentation for City review. As a requirement of the Tier 2 level permitting, notices have been sent to all the direct abutters and a public notice will be published in the local newspaper informing the public about the intent to file with the MDEP along with a notification of a public informational meeting. Due to scheduling conflicts and the necessary notification time tables required by the MDEP, this application can not be submitted until after the public informational meeting on September 5, 2023. We intend to incorporate any questions provided during this meeting into the final application document and intend to submit on September 6, 2023. This is also indicated in the Public Notice of Intent to File included in the provided application.

Natural Resources Protection Act Tier 2 Wetland Alteration Permit Application

To the Maine Department of Environmental Protection

Gravel Laydown Lot Expansion

71 Industrial Park Road
Saco, Maine

Applicant:
Vic-Sam Holdings, LLC
102 Industrial Park Road
Saco, Maine 04072

Prepared By:
DM Roma Consulting Engineers
P.O. Box 1116
Windham, ME 04062

DM ROMA

CONSULTING ENGINEERS

TABLE OF CONTENTS

NATURAL RESOURCES PROTECTION ACT TIER 2 WETLAND ALTERATION PERMIT APPLICATION

GRAVEL LAYDOWN LOT EXPANSION, 71 INDUSTIRAL PARK ROAD, SACO MAINE

Department of Environmental Protection
Bureau of Land Resources
17 State House Station
Augusta, Maine 04333
Telephone: 207-287-7688

FOR DEP USE
ATS #_____
L- _____
Total Fees: _____
Date Received: _____

APPLICATION FOR A NATURAL RESOURCES PROTECTION ACT PERMIT

[1] **Name of Applicant:** VIC-SAM HOLDINGS LLC	[5] **Name of Agent:** DM ROMA ENGINEERS
[2] **Applicant's Mailing Address:** 102 INDUSTRIAL PARK ROAD, SACO, ME 04072	[6] **Agent's Mailing Address:** PO BOX 1116 WINDHAM, ME 04062
[3] **Applicant's Daytime Phone:** 207-710-2323	[7] **Agent's Daytime Phone:** 207-591-5055
[4] **Applicant's Email Address:** Rick@cascobaytransportation.com	[8] **Agent's Email Address:** JAYSON@DMROMA.COM

[9] **Location of Activity (nearest Road, Street, Rt.#):** 71 INDUSTRIAL PARK ROAD	[10] **Town:** SACO	[11] **County:** YORK

[12] Type of Resource: (Check all that apply)

- ☑ River, stream or brook
- ☐ Great Pond
- ☐ Coastal Wetland
- ☐ Freshwater Wetland
- ☐ Wetland Special Significance
- ☐ Significant Wildlife Habitat
- ☐ Fragile Mountain

[13] Name of Resource: INNIS BROOK

[14] Amount of Impact (sq. ft.):

Fill: 35,515

Dredging/Veg Removal/Other: 0

[15] Type of Wetland: (Check all that apply)

- ☑ Forested
- ☐ Scrub Shrub
- ☐ Emergent
- ☐ Wet Meadow
- ☐ Peatland
- ☐ Open Water
- ☐ Other_____

FOR FRESHWATER WETLANDS

Tier 1	*Tier 2*	*Tier 3*
☐ 0 – 4,999 sq. ft. ☐ 5,000 – 9,999 sq. ft. ☐ 10,000 – 14,999 sq. ft.	☑ 15,000 – 43,560 sq. ft.	☐ > 43,560 sq. ft. or ☐ Smaller than 43,560 sq. ft., not eligible for Tier 1

[16] Proposed Start Date and Brief Activity Description:

Fall of 2023 start to construct an expansion to an existing gravel yard space for equipment and material lay down.

[17] Size of Lot or Parcel & UTM Locations: ☐ _____ square feet, or 6.4 acres UTM Northing: 4,820,553 UTM Easting: 383,414

[18] Title, Right or Interest:

☑ Own ☐ Lease ☐ Purchase Option ☐ Written Agreement

[19] **Deed Reference Numbers:** Book: 17863 Page: 318	[20] **Map and Lot Numbers:** Map: 71 Lot: 1-2
[21] **DEP Staff Previously Contacted:**	[22] **Part of a larger project:** ☐ Yes ☑ No **After-the-Fact:** ☑ Yes ☐ No

[23] **Resubmission of Application?** ☐ Yes ☑ No	**If yes, previous application #:**	**Previous project manager:**
[24] **Written Notice of Violation?** ☐ Yes ☑ No	**If yes, name of DEP enforcement staff involved:**	[25] **Previous Wetland Alteration:** ☑ Yes ☐ No

[26] Detailed Directions to the Project Site:

From Route 1 in Saco, head northwest on Spring Hill Road, continue on Industrial Park Road to 71 Industrial Park Road

[27]

TIER 1	TIER 2/3 AND INDIVIDUAL PERMITS	
☐ Title, right or interest documentation	☑ Title, right or interest documentation	☑ Erosion Control/Construction Plan
☐ Topographic Map	☑ Topographic Map	☑ Functional Assessment (Attachment 3), if required
☐ Narrative Project Description	☑ Copy of Public Notice/Public Information Meeting Documentation	☑ Compensation Plan (Attachment 4), if required
☐ Plan or Drawing (8 1/2" x 11")	☑ Wetlands Delineation Report (Attachment 1) that contains the Information listed under Site Conditions	☑ Appendix A and others, if required
☐ Photos of Area	☑ Alternatives Analysis (Attachment 2) including description of how wetland impacts were Avoided/Minimized	☑ Statement/Copy of cover letter to MHPC
☐ Statement of Avoidance & Minimization		☐ Description of Previously Mined Peatland, if required
☐ Statement/Copy of cover letter to MHPC		

FEES, CERTIFICATIONS AND SIGNATURES LOCATED ON PAGE 2

[28] FEES

FEE: I will pay the Natural Resources Protection Act Permit fee (https://www.maine.gov/dep/feeschedule.pdf) by:

☑ **Credit Card** – Pay online through the **Payment Portal. (Attach payment confirmation when filing this application form.)**

☐ **Check** – Fill in all the information below and mail a copy of this form (without attachments) and a check made payable to "Treasurer, State of Maine," to: Maine DEP, 17 State House Station, Augusta, ME 04333-0017.

Name: **Phone:** **Ext.** **Check #:** **Email Filing Date:**

IMPORTANT
IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following:

DEP SIGNATORY REQUIREMENT

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor a permit be issued.

CORPS SIGNATORY REQUIREMENT

USC Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry shall be fines not more than $10,000 or imprisoned not more than five years or both. I authorize the Corps to enter the property that is subject to this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

DEP SIGNATORY REQUIREMENT

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Further, I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by emailing the decision to the address located on the front page of this application (see #4 for the applicant and #8 for the agent)."

Jayne Hasbrouck (AGENT) Date: 8-17-2023
SIGNATURE OF AGENT/APPLICANT

Signature of Agent: Jayne Hasbrouck Date: 8-17-2023

NOTE: Any changes in activity plans must be submitted to the DEP and the Corps in writing and must be approved by both agencies prior to implementation. Failure to do so may result in enforcement action and/or the removal of the unapproved changes to the activity.

VIC – SAM, Holdings LLC

Date 2-28-2019

To Whom It May Concern,

I, Patrick Bryan, member of VIC-SAM Holdings, LLC, owner of the property at 71 Industrial Park Road in Saco, Maine, name Jayson Haskell, of DM Roma Consulting Engineers, as my representative in matters concerning this property.

Thank you

Notary Public:
Laurie J. Parke
6/21/21

102 Industrial Park Rd., Saco, Maine 04072 Ph: 207-710-2323 Fax: 207-710-2324

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Wed Aug 16 2023 15:15:06. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
VIC-SAM HOLDINGS, LLC	20131584DC	LIMITED LIABILITY COMPANY (DOMESTIC)	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
11/14/2012	N/A	MAINE

Other Names	(A=Assumed ; F=Former)
NONE	

Clerk/Registered Agent

PATRICK H. BRYAN
102 INDUSTRIAL PARK RD.
SACO, ME 04072

New Search

Click on a link to obtain additional information.

List of Filings	View list of filings	
Obtain additional information:		
Additional Addresses	Plain Copy	Certified copy
Certificate of Existence (more info)	Short Form without amendments ($30.00)	Long Form with amendments ($30.00)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files.
If you encounter problems, visit the troubleshooting page.

If you encounter technical difficulties while using these services, please contact the Webmaster. If you are unable to find the information you need through the resources provided on this web site, please contact the Division of Corporations, UCC & Commissions Reporting and Information Section at 207-624-7752 or e-mail.

ATTACHMENTS FOR A TIER 2 NATURAL RESOURCES PROTECTION ACT PERMIT

For a Tier 2 permit application, follow the general instructions on pages 4 to 8 (green) and in addition, submit the following information, the required attachments and a completed Appendix A with the blue application form and signature page.

☑ A check for the correct fee. Use current fee schedule to determine fee. **If new applicant is a registered corporation, provide either a** *Certificate of Good Standing* **(available from the Secretary of State) or a statement signed by a corporate officer affirming that the corporation is in good standing.**

☑ The appropriate United States Geological Survey Map (U.S.G.S. topography map, 7 ½ minute) if available or the Maine Atlas and Gazetteer with the activity location clearly marked and labeled on the map. A photocopy of the applicable portion of the topography map is sufficient provided it is clear and readable.

☑ A copy of the documentation substantiating the applicant's title, right or interest in the project site.

☑ Written certification by a knowledgeable professional experienced in wetland science that the activity will not alter, or cause to be altered, a wetland of special significance as described in 38 M.R.S. Sec. 480-X(4) or (5).

☑ A narrative and drawing showing the proposed erosion control plan. The narrative should include a sequence for construction and provisions for installing and maintaining erosion control measures. The drawing must show the location of all proposed erosion control measures. Note: The Maine Erosion and Sedimentation Control BMP's, March 2003, can provide guidance in developing the drawing.

☐ For work in previously mined peatlands, provide information on the past mining activity including the approximate dates of the mining activity, the area and depth to which peat has been excavated from the site, any restoration work on the site, and the current condition of the site.

☑ As a requirement of the Corps only, a copy of this application, a location map and a brief project description must be sent to the Maine Historic Preservation Commission (MHPC) before, or at the same time, the application is filed with the DEP. The applicant should submit a copy of the cover letter to the MHPC or a signed statement that this has been done. The address is: MHPC, 65 State House Station, Augusta, ME 04333-0065.

☑ Documentation that public notice of Intent to File has been provided for the proposed activity in accordance with Department rules. A public notice is required for all activities requiring Tier 2 review. A blank Notice of Intent to File form is provided below for your use.

☑ **Submit two (2) copies of the application and all attachments to the DEP.** Be sure to retain a copy of the application for your records. **If you submit a copy directly to the Corps, indicate that in your application.**

☑ **Submit a copy of the application with all attachments to the municipality**.

NOTE: <u>All drawings must be drawn to scale and labeled with the applicant's name, the scale used and the date prepared.</u> **Please note that the Corps requires all drawings to be submitted on 8 1/2" x 11" paper, which are clear, legible and reproducible.**

(blue)

To complete this portion of the Tier 2 application, you must refer to the Wetland and Waterbodies Protection Rules, Chapter 310, available from the Department. All Tier 2 applications must include the information requested in Attachments 1 and 2. As noted in the General Instructions on page 2, a pre-application meeting and a public information meeting is required for freshwater wetland projects that must provide compensation unless waived in writing by the Department. At that meeting, Department staff will determine whether Attachments 3 and 4 are required. Tier 2 applicants must hold public information meetings whether the pre-application meeting is waived or not.

NOTE: Unless you have expertise in delineating wetlands and conducting wetland assessments, the Department requires that you hire a consultant/wetland scientist to provide assistance in completing this portion of the application.

1. SITE CONDITIONS

☑ Submit as **Attachment 1**, a wetland delineation report containing the following:

- ❍ A top view drawing of the entire project, including existing and proposed fill, excavation, roads and structures;
- ❍ A plan at the scale of a minimum of 1 inch equals 100 feet, that shows two-foot contour intervals, existing wetland boundaries, the area of the wetland to be altered, activity location and dimensions, and wetland classification(s). All components of the activity impacting the wetland or other protected natural resources must be included;
- ❍ A description of existing wetland characteristics including water depths, vegetation, and fauna;
- ❍ Current photographs of the wetland to be altered that show its characteristics. Photographs may be taken from the air or the ground but should be taken during the growing season.
- ❍ A description of the methods used to delineate the wetland boundaries and a copy of data sheets completed during the delineation. Please note that wetland delineations must be performed using the 1987 Corps of Engineers Wetland Delineation Manual, or its successor unless otherwise approved by the DEP and the Corps.

2. ALTERNATIVE ANALYSIS

☑ Submit as **Attachment 2**, a report that analyzes whether a practical alternative to the alteration exists. The report must address the activity purpose and need, and why the activity cannot be completed by:

- ❍ Utilizing, managing or expanding one or more other sites that would avoid the wetland impact;
- ❍ Reducing the size, scope, configuration or density of the activity as proposed, thereby avoiding or minimizing the wetland impact; or
- ❍ Developing alternative activity designs, such as cluster development, that avoid or lessen the wetland impact.

(blue)

3. FUNCTIONAL ASSESSMENT

☑ Submit as **Attachment 3,** when required by the Wetland and Waterbodies Protection Rules and Department staff, a functional assessment conducted by a qualified professional on the wetland area to be altered which analyzes the area based on the functions and values it serves and how these will be affected by the proposed alteration.

NOTE: The functional assessment must be conducted by a qualified professional(s) using an acceptable methodology approved by the Department and the Corps. If other than an established methodology is proposed, the applicant must submit documentation describing how the methodology was developed, how the wetland functions and values are determined using the methodology, and how much field testing the technique has undergone. In cases where the size of the wetland alteration or other factors make use of an established assessment methodology impractical or inappropriate, the Department and the Corps may instead accept the best professional judgment of a qualified professional. The applicant must notify the Department if he or she intends to use best professional judgment. Contact the Department for further information.

4. COMPENSATION

NOTE: Applicants and their agents are strongly recommended to contact the DEP and the Corps prior to developing a compensation plan.

For applications that include compensation, activities will be held to the Standards For Compensation (Section 6) of the Wetland and Waterbodies Protection Rules.

A. For applications that propose wetland restoration, creation, or enhancement,

☑ Submit as **Attachment 4**, a plan for the proposed compensation work including:

- ❍ A drawing at a scale of one inch equals 100 feet showing proposed boundaries and characteristics of the compensation site, including existing and proposed two-foot contour intervals, wetland boundaries, vegetation types, and sources of water;

- ❍ A narrative describing the specific goals of the compensation work in terms of particular wetland functions and values. These goals must be related to the lost or degraded functions of the wetland to be impacted by the activity. This narrative must also identify the criteria by which to measure success of the compensation work;

- ❍ Proposed implementation and management procedures for the compensation work;

- ❍ A description of the short-term and long-term sources of water for the wetland, including the water quality of these sources;

- ❍ A narrative and drawing showing the planting plan, if applicable, including a description of plant species, sizes and sources of plant material, numbers of each species/size, proposed spacing of plants and an explanation of how, when and where seeding and/or planting will take place;

(blue)

- ❍ A narrative and drawing of proposed buffers and other protection measures, such as sediment control measures;

- ❍ A description of the plans for monitoring the compensation work, including identifying criteria which will be used to determine if mid-course corrections are required, a description of proposed remediation measures, and a schedule for implementation;

- ❍ A narrative describing plans, if any, for control of non-indigenous plant species;

- ❍ A schedule for implementing the compensation plan;

- ❍ A demonstration of sufficient scientific expertise to carry out the proposed compensation work and; if experimental techniques are proposed, a description of available literature on methods;

- ❍ A demonstration of sufficient financial resources to complete the proposed compensation work, including subsequent monitoring and corrective actions;

- ❍ Documentation of a deed restriction or conservation easement to be conveyed to a qualified holder for protection of the compensation area. This documentation must:

  a) Provide for maintenance of the area as a wetland and/or buffer in perpetuity;

  b) Authorize the Department to act as an enforcing agent; and

  c) Include the requirement that the Department approve any future alterations in, on or over the compensation area.

B. For applications which propose preservation of wetlands or adjacent uplands,

- ❑ Submit as part of **Attachment 4**, the following information:

  - ❍ A location map of the preservation site;

  - ❍ A legal description of the property to be preserved;

  - ❍ A description of the preservation site including existing vegetation, sources of water, functions and values, existing uses, and potential threats to the functions and values of the site; and

  - ❍ Documentation of a conservation easement or deed restriction which protects the property as a conservation area in perpetuity, and authorizes the Department to act as an enforcement agent. These areas may be deeded to local or state conservation groups or agencies, but the Department must approve any land management practices.

(blue)

ATTACHMENT 1

ACTIVITY DESCRIPTION

Attachment 1 – Activity Description

Zoning:	Industrial Zoning District (I)
Acreage:	6.40 Acres
Tax Map/Lot:	Map 71 Lot 1-2
Existing Use:	Supply Yard
Proposed Use:	Supply Yard

Vic-Sam Holdings, LLC is proposing to expand their existing laydown yard at 71 Industrial Park Road in Saco. This will be an expansion of their existing Supply Yard facility.

Permitting History

The original site development design was permitted by the land owner at the time, LAW Property Management, LLC, as a multi-tenant facility containing a 25,000 square foot building, a 10,000 square foot building, associated paved parking and driveways, utilities and stormwater infrastructure. That project received Site Plan approval from the City of Saco Planning Board in January 2017, including a Stormwater Permit approval under the City's municipal capacity agreement with the Maine Department of Environmental Protection (MDEP). The project also received a Tier 1 Wetland Alteration permit from the MDEP (L-27281-TC-A-N) and a Maine General Permit from the US Army Corps of Engineers (NAE-2016-02756) for the impact of approximately 12,920 square feet of wetlands as a result of the development. LAW Property Management, LLC did not complete the project and in April 2018 sold the property to Vic-Sam Holdings, LLC, the current land owner and applicant.

In March 2019, Vic-Sam Holdings, LLC requested the transfer of the MDEP permit and coordinated with the City of Saco to construct a gravel laydown area to be utilized by Casco Bay Transportation, a transportation company located north of the property at 102 Industrial Park Road, for temporary and long-term storage of materials (primarily steel) that is offloaded from the railroad tracks that run through their other Industrial Park Road location and transported to this site. The laydown area was designed within the limits of the originally approved impervious surface, but without the construction of the buildings, the pavement and the utility services. The supply yard development included the construction of the previously designed and approved stormwater infrastructure, including a wet pond in the rear of the site. This was all coordinated and approved with the City of Saco Planning Office and received Amended Site Plan approval in September 2019. The facility was then built in the Spring/Summer 2020.

Existing Site Conditions and Supply Yard Expansion

Since the completion of construction in 2020, the site has been utilized for water tank trailer storage, steel and drilling equipment storage from a geotechnical specialty construction company and railroad tie timber storage for the railroad company. Based on conversations with the owner of Casco Bay Transportation, the company has lost several opportunities to grow the business due to the limited laydown space on the site.

Based on aerial imagery, in 2022, a portion of the site that was previously approved to remain wooded was cleared of trees and gravel placed to provide additional storage for the railroad company to store additional railroad tie timbers during a track replacement project. That expansion cleared approximately 42,395 square feet of woodland and created an additional gravel laydown area totaling approximately 18,745 square feet.

As a result of that expansion of the gravel space, approximately 5,500 square feet of additional forested wetlands were also impacted. This was in addition to the previously permitted wetlands, increasing the total existing wetland impact to approximately 18,420 square feet.

Proposed Development

As indicated previously, the Supply Yard facility is undersized for the current needs of Casco Bay Transportation and their clients, but the applicant also understands that an expansion should be properly proposed and permitted through the City and MDEP. In addition to the previously constructed gravel laydown area and as part of the Site Plan amendment, the applicant is proposing to further expand the gravel laydown area to accommodate the current and future needs of the company. The unpermitted gravel laydown area will be re-graded to drain to properly designed stormwater infrastructure. In addition, a portion of the gravel laydown area will be removed as it located within the building setback. This will be removed and revegetated with loam and seed.

The existing gravel laydown area will be expanded in the center of the site along with extending it to the southeast along the southern property boundary. The proposed expansion will create an additional 1.03 acres of usable laydown space which will allow for the storage of more material in addition to increasing the mobility within the site as it is at capacity in the existing conditions. The expansion will also include upgrades to the existing stormwater infrastructure, including the existing wet pond.

As a result of the proposed expansion, approximately 17,095 square feet of additional forested wetlands will be impacted. The resultant 35,515 square feet of total proposed wetland impact will require amendments to the existing MDEP and ACOE wetland alteration permits.

ATTACHMENT 2

ALTERNATIVES ANALYSIS

Attachment 2 – Alternative Analysis

The applicant's business needs an industrial site that is located close to rail service and the Maine Turnpike (I-95). They currently own a property at 102 Industrial Park Road, with rail service on site, as well as the property associated with this application at 71 Industrial Park Road. The current project design will, upon completion of construction, provide approximately 131,900 square feet (3.02± acres) at 71 Industrial Park Road.

Alternative properties for sale or available for lease in the vicinity of the Saco Industrial Park that would be suitable for their needs were considered. A property currently offered for sale located off Industrial Park Road behind the existing US Postal Service building was considered. The property consists of approximately 11.6 acres, with a significant portion of the site consisting of wetlands (5.33± acres). In addition to wetlands, along the southwesterly portion of the site Innis Brook traverses the property, with two natural drainage ways tributary to Innis Brook bifurcating the site from the existing access drive along the northerly portion of the property to the southerly property limit.

If the alternative location was selected as the site of the proposed laydown area, we expect that the construction associated with creating the 2.6± acre laydown area would result in not only similar wetland impact numbers but also would be constrained by buffers to Innis Brook. The site would be further constrained due to natural drainage ways.

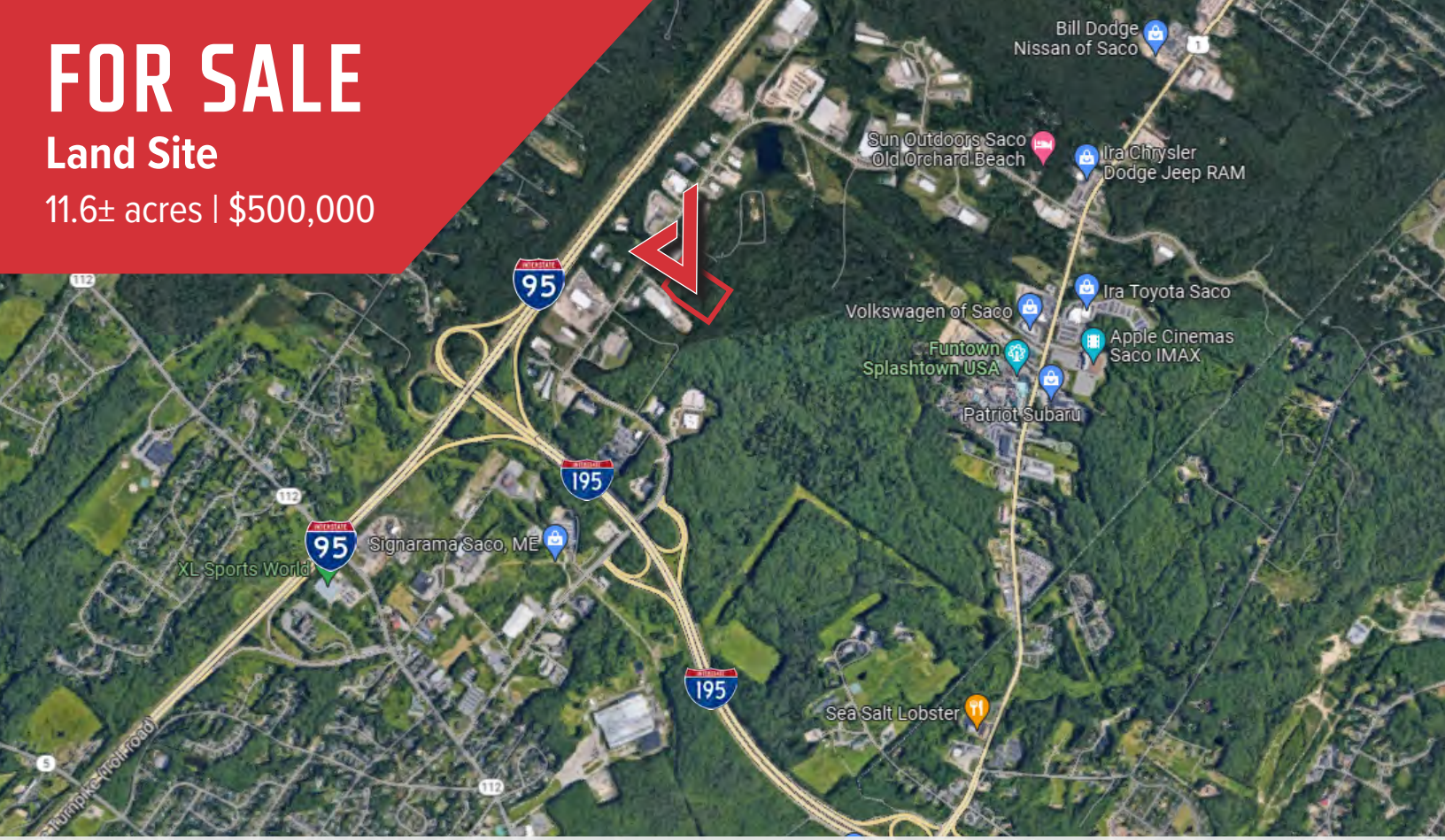
The applicant currently owns and occupies the property at 71 Industrial Park Road, that has existing stormwater facilities. Ultimately abandoning the property at 71 Industrial Park Road, and construction of a replacement laydown area at the alternate property would likely create more than the 35,515± square feet of wetland impact proposed with this permit application.

To further avoid the wetland impact, the laydown area surface was brought as close to existing grade while still providing positive drainage to direct all gravel surfaces to the stormwater wet pond. This minimized the fill slopes, further reduced by steepening the slopes to 2H:1V with the use of erosion control blanket. The proposed design will avoid further impact to the wetlands located between the wet pond and the proposed detention pond, and is proposing to place wetland seed mix within the wetland area to support the wetland vegetation.

FOR SALE

Land Site

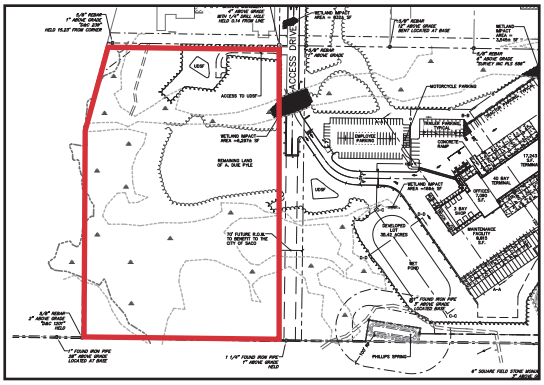
11.6± acres | $500,000



Industrial Park Road, Saco

Property Highlights

- *Owner: A. Duie Pyle*
- *Assessor's Reference: Map 72, Lot 7 (to be divided)*
- *Deed Reference: Book 12164, Page 204*
- *Zoning: Industrial*



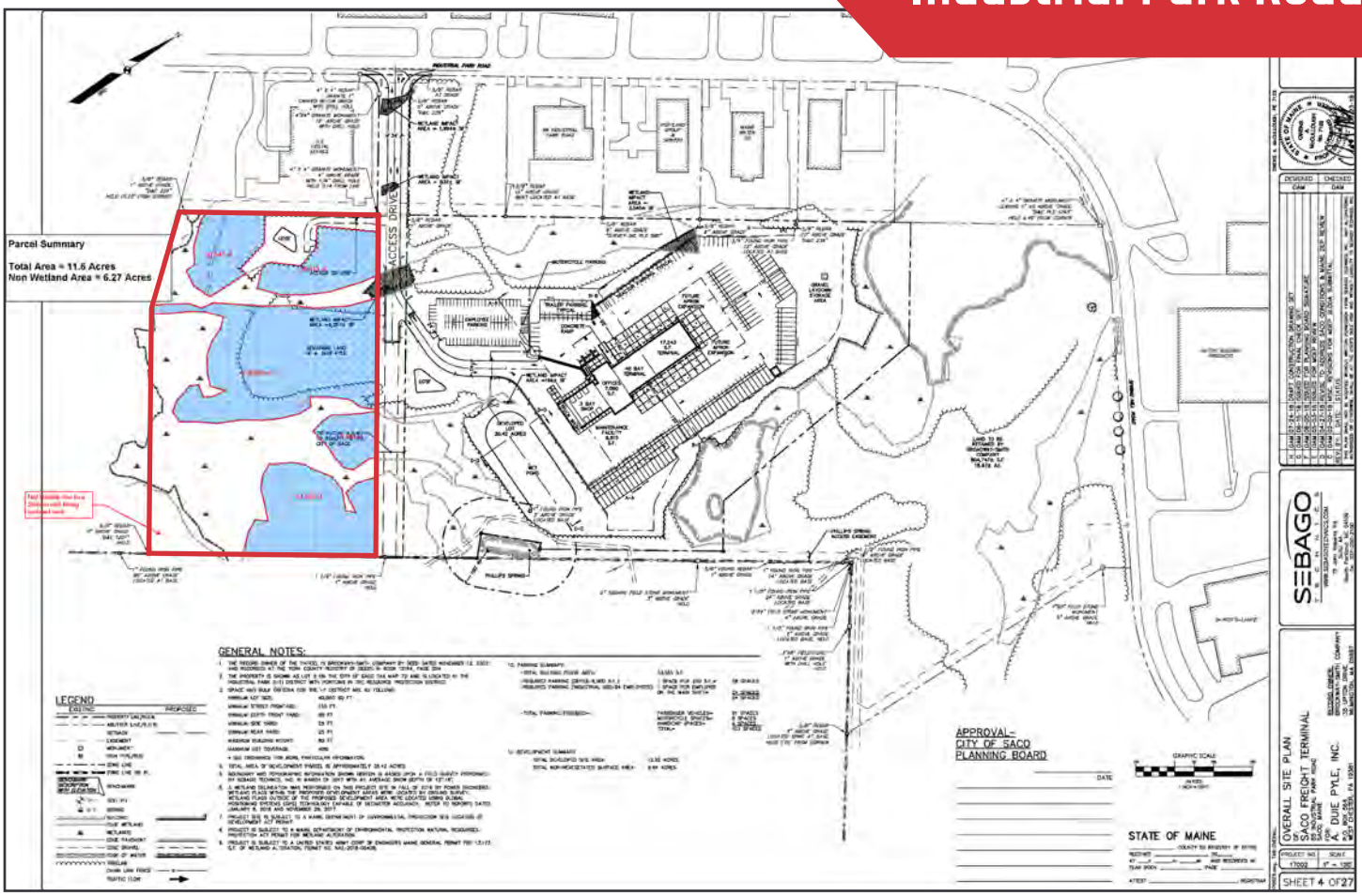
Property Description

We are pleased to offer this vacant industrial land for sale off of Industrial Park Road in the Saco Industrial Park. The lot totals 11.6± acres, with 6.27± of uplands. The lot has municipal water and sewer, natural gas, and 3 phase power will be brought on-site.

Tom Dunham, SIOR | tdunham@dunhamgroup.com | 207.671.7100
Greg Hastings, SIOR | ghastings@dunhamgroup.com | 207.415.1700
207.773.7100 | dunhamgroup.com

The Dunham Group | Commercial Real Estate

Industrial Park Road



Dept. of Professional & Financial Regulation
Office of Professional & Occupational Regulation
MAINE REAL ESTATE COMMISSION
35 State House Station Augusta ME 04333-0035

REAL ESTATE BROKERAGE RELATIONSHIPS FORM

Right Now You Are A Customer

Are you interested in buying or selling residential real estate in Maine? Before you begin working with a real estate licensee it is important for you to understand that Maine Law provides for different levels of brokerage service to buyers and sellers. You should decide whether you want to be represented in a transaction (as a client) or not (as a customer). To assist you in deciding which option is in your best interest, please review the following information about real estate brokerage relationships:

Maine law requires all real estate brokerage companies and their affiliated licensees ("licensee") to perform certain basic duties when dealing with a buyer or seller. You can expect a real estate licensee you deal with to provide the following customer-level services:

- √ To disclose all material defects pertaining to the physical condition of the real estate that are known by the licensee;
- √ To treat both the buyer and seller honestly and not knowingly give false information;
- √ To account for all money and property received from or on behalf of the buyer or seller; and
- √ To comply with all state and federal laws related to real estate brokerage activity.

Until you enter into a written brokerage agreement with the licensee for client-level representation you are considered a "customer" and the licensee is not your agent. As a customer, you should not expect the licensee to promote your best interest, or to keep any information you give to the licensee confidential, including your bargaining position.

You May Become A Client

If you want a licensee to represent you, you will need to enter into a written listing agreement or a written buyer representation agreement. These agreements create a client-agent relationship between you and the licensee. As a client you can expect the licensee to provide the following services, in addition to the basic services required of all licensees listed above:

- √ To perform the terms of the written agreement with skill and care;
- √ To promote your best interests;
  - For seller clients this means the agent will put the seller's interests first and negotiate the best price and terms for the seller;
  - For buyer clients this means the agent will put the buyer's interests first and negotiate for the best prices and terms for the buyer; and
- √ To maintain the confidentiality of specific client information, including bargaining information.

COMPANY POLICY ON CLIENT-LEVEL SERVICES — WHAT YOU NEED TO KNOW

The real estate brokerage company's policy on client-level services determines which of the three types of agent-client relationships permitted in Maine may be offered to you. The agent-client relationships permitted in Maine are as follows:

- √ The company and all of its affiliated licensees represent you as a client (called "single agency");
- √ The company appoints, with your written consent, one or more of the affiliated licensees to represent you as an agent(s) (called "appointed agency");
- √ The company may offer limited agent level services as a disclosed dual agent.

WHAT IS A DISCLOSED DUAL AGENT?

In certain situations a licensee may act as an agent for and represent both the buyer and the seller in the same transaction. This is called disclosed dual agency. *Both the buyer and the seller must consent to this type of representation in writing.*

Working with a dual agent is not the same as having your own exclusive agent as a single or appointed agent. For instance, when representing both a buyer and a seller, the dual agent must not disclose to one party any confidential information obtained from the other party.

Remember!
Unless you enter into a written agreement for agency representation, you are a customer—not a client.

THIS IS NOT A CONTRACT

It is important for you to know that this form is not a contract. The licensee's completion of the statement below acknowledges that you have been given the information required by Maine law regarding brokerage relationships so that you may make an informed decision as to the relationship you wish to establish with the licensee/company.

To Be Completed By Licensee

This form was presented on (date)_____

To_____
Name of Buyer(s) or Seller(s)

by_____
Licensee's Name

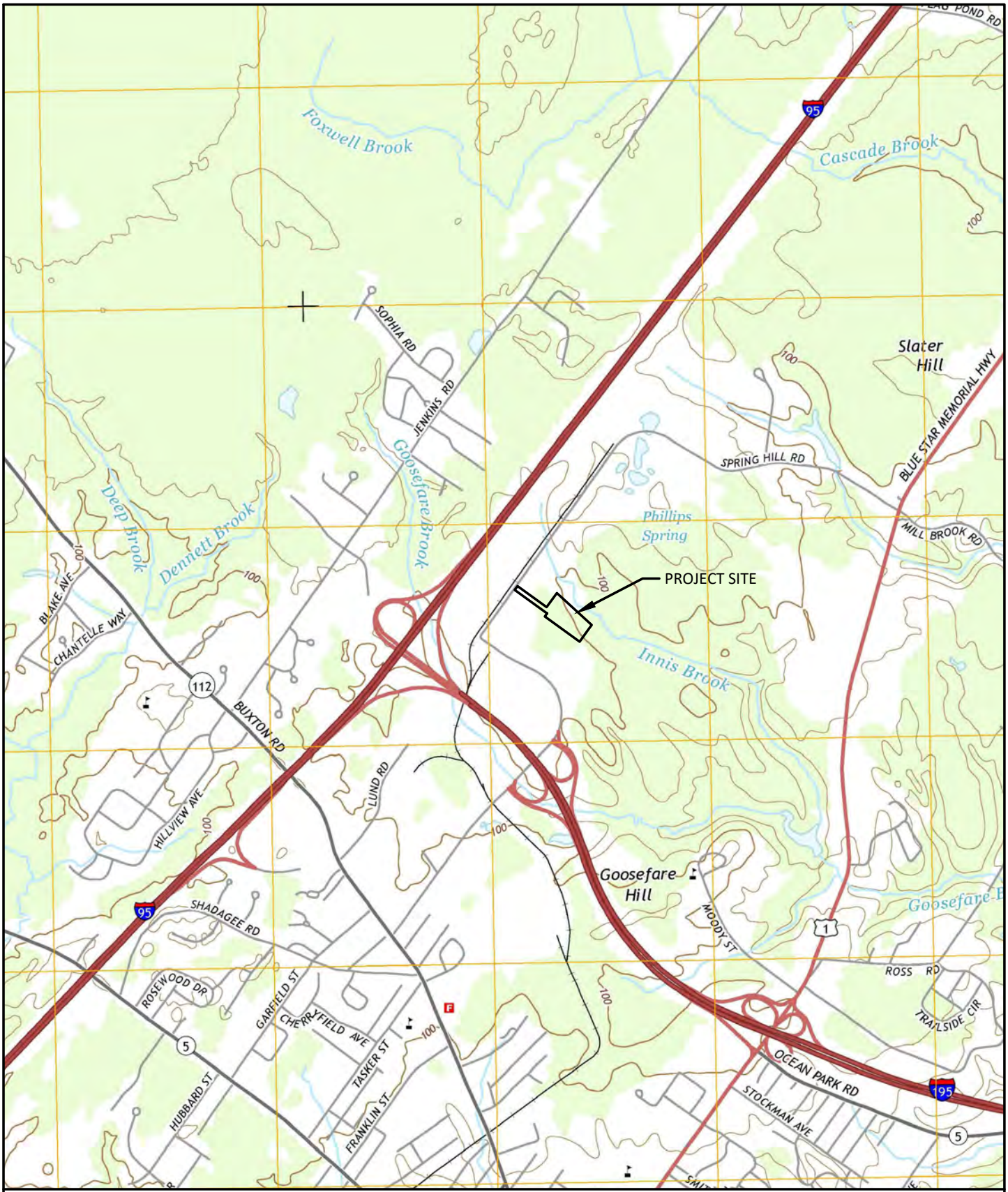
on behalf of_____
Company/Agency

MREC Form#3 Revised 07/2006
Office Title Changed 09/2011

To check on the license status of the real estate brokerage company or affiliated licensee go to www.maine.gov/professionallicensing. Inactive licensees may not practice real estate brokerage.

ATTACHMENT 3

SITE LOCATION MAP



SITE LOCATION MAP

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

SCALE: 1"=2,000'
DATE: 2-28-2019
JOB NUMBER: 19011

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506

ATTACHMENT 4

PHOTOGRAPHS OF THE SITE

PHOTO 1 – WETLAND IMPACT AREA ASSOCIATED WITH PROPOSED GRAVEL LAYDOWN AREA

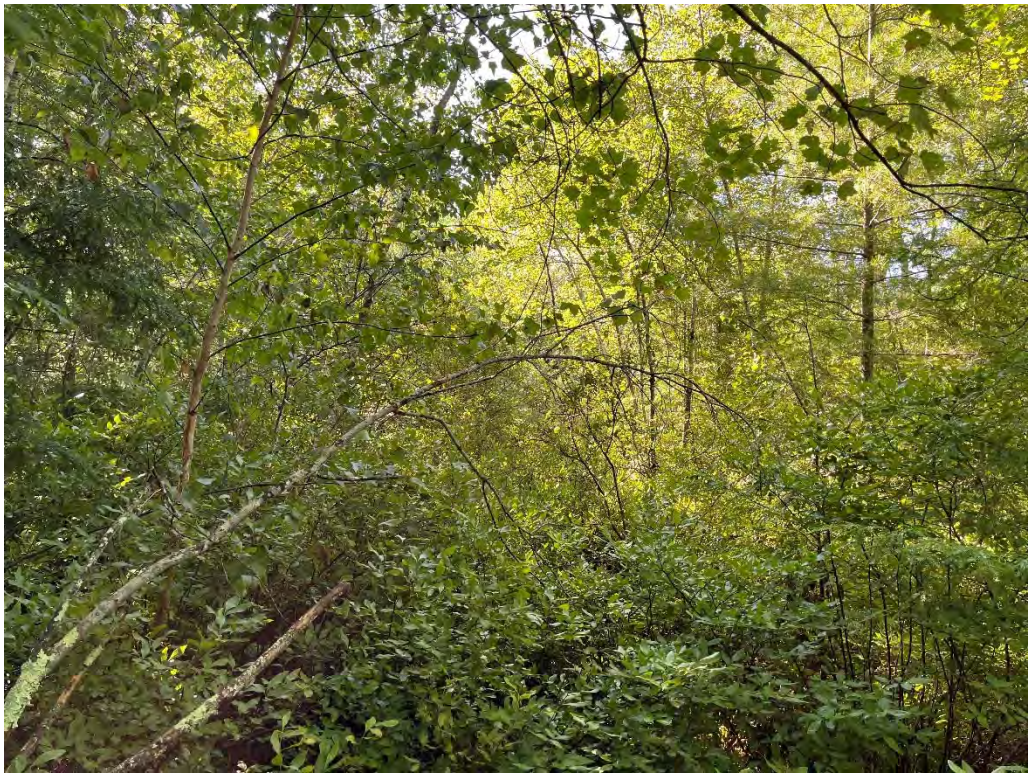


PHOTO 2-WETLAND TO BE IMPACTED

PHOTO 3 – WETLAND TO BE IMPACTED

PHOTO 4 – WETLAND TO BE IMPACTED

PHOTO 5 – WETLAND AREA TO REMAIN AND INSTALLED WITH WETLAND SEED MIX

PHOTO 6 - WETLAND AREA TO REMAIN AND INSTALLED WITH WETLAND SEED MIX

ATTACHMENT 5

DESIGN PLANS

(SEE DESIGN PLAN SET)

ATTACHMENT 6

CROSS SECTION DRAWINGS

(SEE DETAIL SHEETS WITHIN PLAN SET)

ATTACHMENT 7

CONSTRUCTION PLAN

Attachment 7 – Construction Plan

Prior to land disturbance, silt fence or erosion control mix berms will be installed around the perimeter of the site, downslope of any construction activity. Once erosion control is in place, tree clearing, stumping and grubbing in the limits of the development will be performed. Earth movement will then be done to the designed subgrade. Once the laydown area is at subgrade, subbase gravel and base gravel will be placed and compacted along with slope stabilization treatments. When the site is stabilized, the construction of the stormwater improvements (improvements to the existing wetpond, and construction of the proposed detention pond) will occur.

ATTACHMENT 8

EROSION CONTROL PLAN

Attachment 8 – Erosion Control Plan

During construction the contractor will utilize temporary erosion controls including silt fence/erosion control mix berms, and erosion control blankets with permanent erosion control such as riprap stabilization. Proposed erosion control measures are shown on the Grading and Drainage Plan along with notes and details on the Detail Sheets included in the design plan set.

ATTACHMENT 9

SITE CONDITION REPORT

Attachment 9 – Site Condition Report

As part of the previous permitting for the project site, Mark Hampton Associates performed the natural resources delineation throughout the site identifying the limits of wetlands. The wetland delineation letter is included in this section. As noted in the attached Wetland Delineation letter, the wetland delineation was completed in accordance with the 1987 US Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement of the Corps of Engineers Wetland Delineation Manual for the Northcentral and Northeast Regions.

Photos of the wetlands are included in Attachment 4 of this application.

MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

4659

September 22, 2016

Mr. Louis Waterhouse
LAW Calibration
2 Main Street Suite 15-107
Biddeford, ME 04005

Re: Wetland Delineation, 6.4 acre parcel 71 Industrial Park Road, Saco, ME

Dear Louis,

Today, I completed a wetland delineation on an 6.4 acre parcel located at 71 Industrial Park Drive, Saco, ME. The wetland delineation was completed in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual for the Northcentral and Northeast Regions dated January 2012. These manuals require the presence of three parameters for a wetland to be present, wetland hydrology, hydrophytic vegetation, and hydric soils.

The wetlands I found on the parcel were flagged with yellow flagging. The flagging was labeled in an alphanumeric sequence. The wetland flags were located by gps equipment capable of locating a point to within three feet. The wetland data has been forwarded to DM Roma Consulting Engineers. The wetlands found onsite are forested wetlands. The wetlands on the parcel are related to drainage moving across the site from west to east. The wetlands on the parcel do not meet the definition of wetlands of special significance as defined by Maine Department of Environmental Protection.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton C.S.S., L.S.E.
Certified Soil Scientist #216
Licensed Site Evaluator #263

P.O. BOX 1931 • PORTLAND, ME 04104-1931 • 207-756-2900 • mhampto1@maine.rr.com

ATTACHMENT 10

NOTICE OF INTENT TO FILE

Attachment 10 – Notice of Intent to File

Public Notice has been performed in accordance with Maine DEP standard procedures. Please find included in this section the following items:

- Public Notice of Intent to File
- List of project abutters
- Certificate of Mailing
- Public Notice Filing and Certification Form
- Neighborhood Meeting Information

PUBLIC NOTICE:
NOTICE OF INTENT TO FILE

Please take notice that VIC-SAM Holdings LLC, 102 Industrial Park Road, Saco, Maine 04072 is intending to file a Natural Resources Protection Act permit application pursuant to the provisions of 38 M.R.S.A. §§ 480-A thru 480-BB with the Maine Department of Environmental Protection on or about September 6, 2023. The application is for the expansion of an existing gravel laydown area associated with a supply yard utilized by Casco Bay Transportation located at 71 Industrial Park Road, as shown on City of Saco's Assessor Map 71 as Lot 1-2.

A public informational meeting will be held on Tuesday September 5, 2023 at the project site at 71 Industrial Park Road in Saco beginning at 5:30 PM. The purpose of the meeting is for the applicant to inform the public of the project and its anticipated environmental impacts and to educate the public about the opportunities for public comment on the project.

A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the Commissioner or Board of Environmental Protection. Public comment on the application will be accepted throughout the processing of the application. The application will be filed for public inspection at the Department of Environmental Protection's office in Portland during normal working hours. A copy of the application may also be seen at the municipal offices in Saco, Maine. Written public comments may be sent to the regional office in Portland where the application is filed for inspection: MDEP, Southern Maine Regional Office, 312 Canco Road, Portland, ME 04103.

Abutters List - 71 Industrial Park Road Saco (Direct Abutters)

Grantee	Mailing	City	State	Zip
YC REAL ESTATE LLC	77 INDUSTRIAL PARK RD	SACO	ME	04072
47 IPR LLC	33 TURNER ST	PORTLAND	ME	04101
SACO INDUSTRIAL LLC	555 CONSTITUTION DR	TAUNTON	MA	02780
3 DAUGHTERS LLC	151 VAUGHN STREET	PORTLAND	ME	4101
SWEETSER HOME	50 MOODY ST	SACO	ME	4072
GARLAND MFG CO	PO BOX 538	SACO	ME	04072-0538
BOISE CASCADE BUILDING MATERIALS DISTRIBUTORS	PO BOX 50	BOISE	ID	83728-0050
CITY OF SACO	300 MAIN ST	SACO	ME	4072

UNITED STATES POSTAL SERVICE®

Firm Mailing Book For Accountable Mail

Name and Address of Sender

DM Roma
PO Box 1116
Windham, ME 04062

Check type of mail or service

- ☐ Adult Signature Required
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery (COD)
- ☐ Insured Mail
- ☐ Priority Mail
- ☐ Priority Mail Express
- ☐ Registered Mail
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation
- ☐ Signature Confirmation Restricted Delivery

Affix Stamp Here
(for additional copies)
Postmark with Date

UNITED STATES POSTAL SERVICE®
0000

U.S. POSTAGE PAID
WESTBROOK, ME
04092
AUG 17, 23
AMOUNT
$4.56
R2305M144393-4

	USPS Tracking/Article Number	Addressee (Name, Street, City, State, & ZIP Code™)	Postage	(Extra Service) Fee	Handling Charge
1.		YC REAL ESTATE LLC. 77 INDUSTRIAL PARK ROAD SACO, ME 04072			
2.		47 IPR LLC. 33 TURNER ST. PORTLAND, ME 04101			
3.		SACO INDUSTRIAL LLC 555 CONSTITUTION DRIVE TAUNTON, MA 02780			
4.		3 DAUGHTERS LLC 151 VAUGHN ST. PORTLAND, ME 04101			
5.		SWEETSER HOME 50 MOODY ST. SACO, ME 04072			
6.		GALLAND MFG. CO. PO BOX 538 SACO, ME 04072-0538			
7.		BOISE CASCADE BUILDING MATERIALS DIST. PO BOX 50 BOISE, IDAHO 83728-0050			
8.		CITY OF SACO 300 MAIN ST. SACO, ME 04072			

WESTBROOK ME 04092
AUG 17 2023
USPS

Handling Charge - if Registered and over $50,000 in value

Adult Signature Required | Adult Signature Restricted Delivery | Restricted Delivery | Return Receipt | Signature Confirmation | Signature Confirmation Restricted Delivery | Special Handling

Total Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster, Per *(Name of receiving employee)*
8	8	

Complete in ink

PUBLIC NOTICE FILING AND CERTIFICATION

Department Rules, Chapter 2, require an applicant to provide public notice for all Tier 2, Tier 3 and individual Natural Resources Protect Act projects. In the notice, the applicant must describe the proposed activity and where it is located. **"Abutter"** for the purposes of the notice provision means any person who owns property that is BOTH (1) adjoining and (2) within one mile of the delineated project boundary, including owners of property directly across a public or private right of way.

1. **Newspaper:** You must publish the Notice of Intent to File in a newspaper circulated in the area where the activity is located. The notice must appear in the newspaper within 30 days prior to the filing of the application with the Department. You may use the attached Notice of Intent to File form, or one containing identical information, for newspaper publication and certified mailing.

2. **Abutting Property Owners:** You must send a copy of the Notice of Intent to File by certified mail to the owners of the property abutting the activity. Their names and addresses can be obtained from the town tax maps or local officials. They must receive notice within 30 days prior to the filing of the application with the Department.

3. **Municipal Office:** You must send a copy of the Notice of Intent to File and a **duplicate of the entire application** to the Municipal Office.

   ATTACH a list of the names and addresses of the owners of abutting property.

CERTIFICATION

By signing below, the applicant or authorized agent certifies that:

1. A Notice of Intent to File was published in a newspaper circulated in the area where the project site is located within 30 days prior to filing the application;
2. A certified mailing of the Notice of Intent to File was sent to all abutters within 30 days of the filing of the application;
3. A certified mailing of the Notice of Intent to File, and a duplicate copy of the application was sent to the town office of the municipality in which the project is located; and
4. Provided notice of and held a public informational meeting, if required, in accordance with Chapter 2, Rules Concerning the Processing of Applications, Section 13, prior to filing the application. Notice of the meeting was sent by certified mail to abutters and to the town office of the municipality in which the project is located at least ten days prior to the meeting. Notice of the meeting was also published once in a newspaper circulated in the area where the project site is located at least seven days prior to the meeting.

The Public Informational Meeting was held on _____.
Date

Approximately _____ members of the public attended the Public Informational Meeting.

_____ _____
Signature of Applicant or authorized agent Date

(blue)

ATTACHMENT 11

MAINE HISTORIC PRESERVATION COMMISSION COORDINATION

DM Roma Consulting Engineers

December 7, 2016

Mr. Kirk F. Mohney, Director
Maine Historic Preservation Commission
55 Capitol Street
65 State House Station
Augusta, ME 04333-0065

DEC 13 2016
1796-16

Re: Maine DEP NRPA Tier 1 Permit Review
Multi-Unit Facility
71 Industrial Park Road, Saco, Maine

Dear Mr. Mohney:

On behalf of LAW Property Management, LLC, we are submitting to you a copy of the Maine Department of Environmental Protection (MDEP) Natural Resource Protection Act (NRPA) Tier 1 permit for their new facility on the Industrial Park Road in Saco, Maine. It is part of the Tier 1 permit requirements to submit to you the permit for your review.

The 6.4-acre parcel is currently undeveloped and is located in the City's industrial park, surrounded by industrial use sites with a wooded, undeveloped lot to the southeast. The project consists of a 25,000 square foot building, a 10,000 square foot building, paved access drive and parking, utilities and stormwater infrastructure. The development of the property could not avoid the impact of approximately 12,920 square feet of wetlands requiring this permit through the MDEP.

Please review the attached submission and your records and let us and MDEP know if you have any concerns with the proposed development. If you have any questions, please do not hesitate to contact me.

Sincerely,

DM Roma Consulting Engineers

Jayson R. Haskell, P.E.
Senior Project Manager

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Kirk F. Mohney, [redacted] State Historic Preservation Officer
Maine Historic Preservation Commission

12/14/16
Date

Cc: Louis Waterhouse, LAW Property Management, LLC
Maine DEP

59 Harvest Hill Road, Windham, ME 04062 T: (207) 229-3295 E: jayson@dmroma.com

ATTACHMENT 12

FUNCTIONAL ASSESSMENT

Attachment 12 – Functional Assessment

We have coordinated with Mark Hampton Associates to perform the required Functional Assessment on the wetlands that are to be impacted.

Based on our investigation into the property and the features of the existing forested wetland, we anticipate the primary function loss of impacting the wetland is flooding control and storage. The flooding function will be altered from the wetland to the proposed wet pond and detention pond designed on site to provide flooding attenuation for up to the 50-year storm event.

Once the assessment is performed by Mark Hampton Associates, a copy of the form will be provided to the Department for review.

ATTACHMENT 13

COMPENSATION

Attachment 13 – Compensation Plan

As compensation for the wetland impacts, totaling approximately 35,515 square feet, we are proposing to pay the in-lieu fee. In York County, the current in lieu fee is $5.61 per square foot of wetland impact. Therefore, the applicant will be providing a check in the amount of **$199,239.15** to the Maine Natural Resource Conservation Program (MNRCP) upon application approval.

APPENDIX A

MDEP VISUAL EVALUATION FIELD SURVEY CHECKLIST

APPENDIX A - MDEP VISUAL EVALUATION
FIELD SURVEY CHECKLIST
(Natural Resources Protection Act, 38 M.R.S. §§ 480 A - Z)

Name of applicant: VIC-SAM Holdings LLC. Phone: (207) 710-2323

Application Type: NRPA Tier 2

Activity Type: (brief activity description) wetland impact associated with expansion of gravel supply yard

Activity Location: Town: Saco County: York

GIS Coordinates, if known: UTM Northing: 4,820,553 m Easting: 383,414 m

Date of Survey: 8/16/2023 Observer: Jayson Haskell, PE Phone: (207) 591-5055

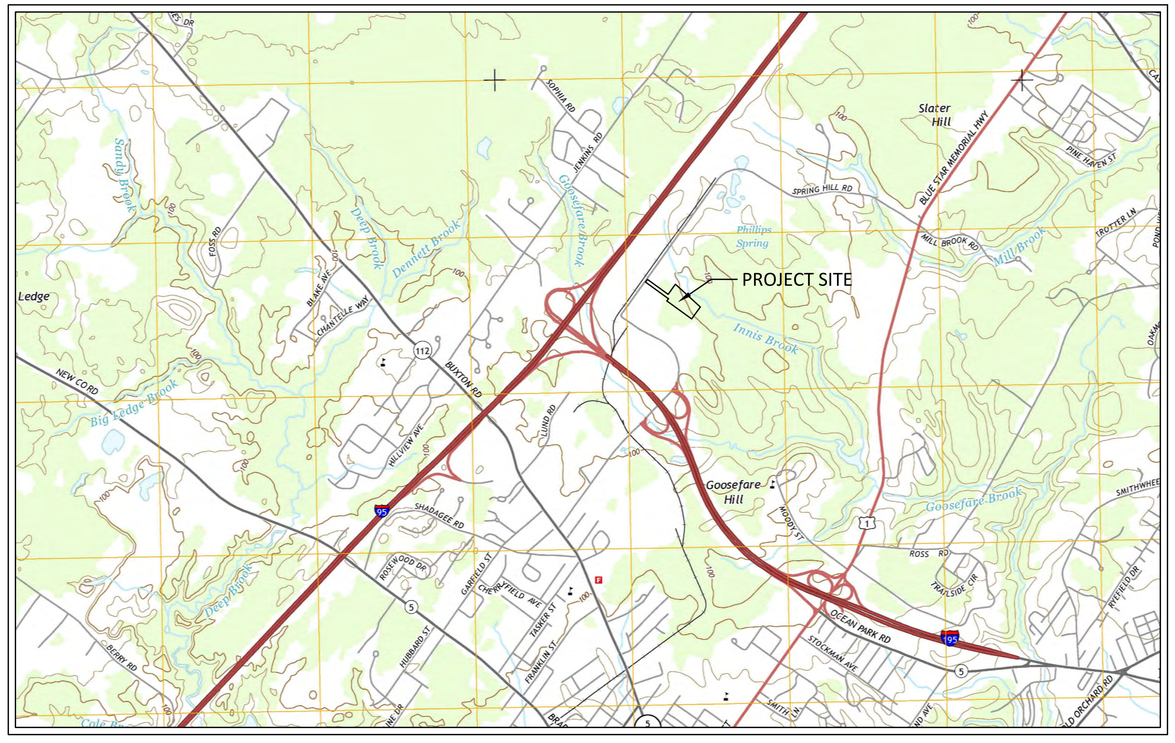
	Distance Between the Proposed Visibility Activity and Resource (in Miles)		
1. Would the activity be visible from:	0-¼	¼-1	1+
A. A National Natural Landmark or other outstanding natural feature?	☐	☐	☑
B. A State or National Wildlife Refuge, Sanctuary, or Preserve or a State Game Refuge?	☐	☐	☑
C. A state or federal trail?	☐	☑	☑
D. A public site or structure listed on the National Register of Historic Places?	☐	☐	☑
E. A National or State Park?	☐	☐	☑
F. 1) A municipal park or public open space?	☐	☑	☐
2) A publicly owned land visited, in part, for the use, observation, enjoyment and appreciation of natural or man-made visual qualities?	☐	☐	☑
3) A public resource, such as the Atlantic Ocean, a great pond or a navigable river?	☐	☐	☑
2. What is the closest estimated distance to a similar activity?	☑	☐	☐
3. What is the closest distance to a public facility intended for a similar use?	☐	☑	☐
4. Is the visibility of the activity seasonal? (i.e., screened by summer foliage, but visible during other seasons)		☐Yes	☑No
5. Are any of the resources checked in question 1 used by the public during the time of year during which the activity will be visible?		☐Yes	☑No

(blue)

GRAVEL LAYDOWN LOT EXPANSION

71 INDUSTRIAL PARK ROAD
SACO, MAINE

CONSULTANTS	
CIVIL ENGINEER	DM ROMA CONSULTING ENGINEERS
LAND SURVEYOR	DOW & COULOMBE, INC.
WETLAND SCIENTIST	MARK HAMPTON ASSOCIATES



PROJECT VICINITY MAP

ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION

AUGUST 18, 2023

PREPARED BY:

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 591-5055

APPLICANT:

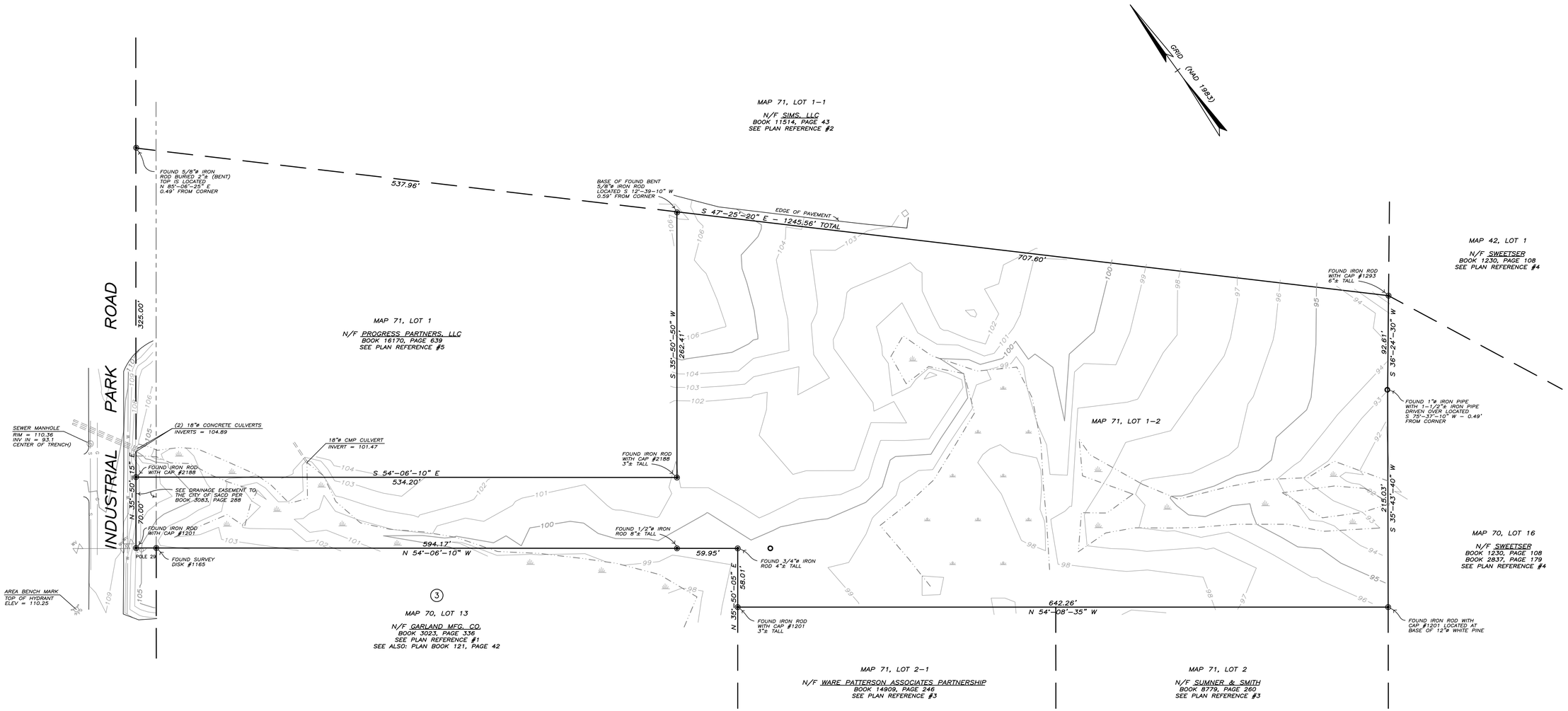
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

GRAVEL LAYDOWN LOT EXPANSION

DRAWING SHEET INDEX

PLAN ATTACHMENTS

ORIGINAL APPROVED SITE PLAN
PRE-DEVELOPMENT WATERSHED MAP
POST DEVELOPMENT WATERSHED MAP



LEGEND :

●	SET IRON ROD WITH CAP (UNLESS OTHERWISE NOTED)
□	CATCH BASIN
Ⓓ	DRAIN MANHOLE
	HYDRANT
	WATER VALVE
Ⓢ	SEWER MANHOLE
☼	LIGHT POST
	UTILITY POLE
ø	DIAMETER
N/F	NOW OR FORMERLY
—— W ——	WATER MAIN
—— S ——	SANITARY SEWER MAIN
—— SD ——	STORM DRAIN
—— OU ——	OVERHEAD UTILITY LINES
—— G ——	GAS LINE
40	CONTOUR LINE
	WETLAND BOUNDARY – WETLAND AREA SEE NOTE #

LOCUS DEED REFERENCE :

DAN L. HUTCHENS AND KATHLEEN HUTCHENS
TO
LAW PROPERTY MANAGEMENT, LLC
OCTOBER 18, 2016 BOOK 17343, PAGE 776

PLAN REFERENCES :

1. "PLAN OF LOTS, SACO INDUSTRIAL PARK", DATED MAY 20, 1983, BY WRIGHT-PIERCE, RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 124, PAGES 7 AND 8.
2. "PLAN SHOWING A STANDARD BOUNDARY SURVEY MADE FOR CASCO NORTHERN BANK, N.A.", DATED AUGUST 10, 1987, AS REVISED MARCH 10, 1995, BY DOW & COULOMBE, INC.
3. "PLAN SHOWING A STANDARD BOUNDARY SURVEY MADE FOR L. M. VALENTINO ASSOCIATES", DATED OCTOBER 9, 1987, AS REVISED APRIL 28, 1998, BY DOW & COULOMBE, INC.
4. "PLAN SHOWING A STANDARD BOUNDARY SURVEY MADE FOR SWEETSER CHILDREN'S SERVICES", DATED JUNE 7, 1999, AS REVISED MAY 5, 2003, BY DOW & COULOMBE, INC., RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 281, PAGE 11.
5. "DIVISION OF LAND OF: M.T.D. INC.", DATED NOVEMBER 16, 2005, BY SEBAGO TECHNICS, RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 306, PAGE 12.

NOTES :

1. TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS SURVEY CONFORMS TO STATE OF MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS' STANDARDS; CHAPTER 90, ADOPTED APRIL, 2001.
   EXCEPTIONS: A PROPOSED LEGAL DESCRIPTION WAS NOT PREPARED.
   A SURVEYOR'S REPORT WAS NOT PREPARED.
2. AREA EQUALS 6.4048 ACRES.
3. INFORMATION IN PARENTHESES COPIED FROM DEED AND PLAN REFERENCES.
4. LOT NUMBER (3) REFERS TO PLAN REFERENCE #1.
5. ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988.
6. WETLANDS WERE IDENTIFIED ON SITE BY MARK HAMPTON AND LOCATED BY DOW & COULOMBE, INC.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

No.	Revision	Date
1.	ADDED TOPOGRAPHIC SURVEY OF SOUTHEASTERN PORTION OF LOCUS.	11-17-2016

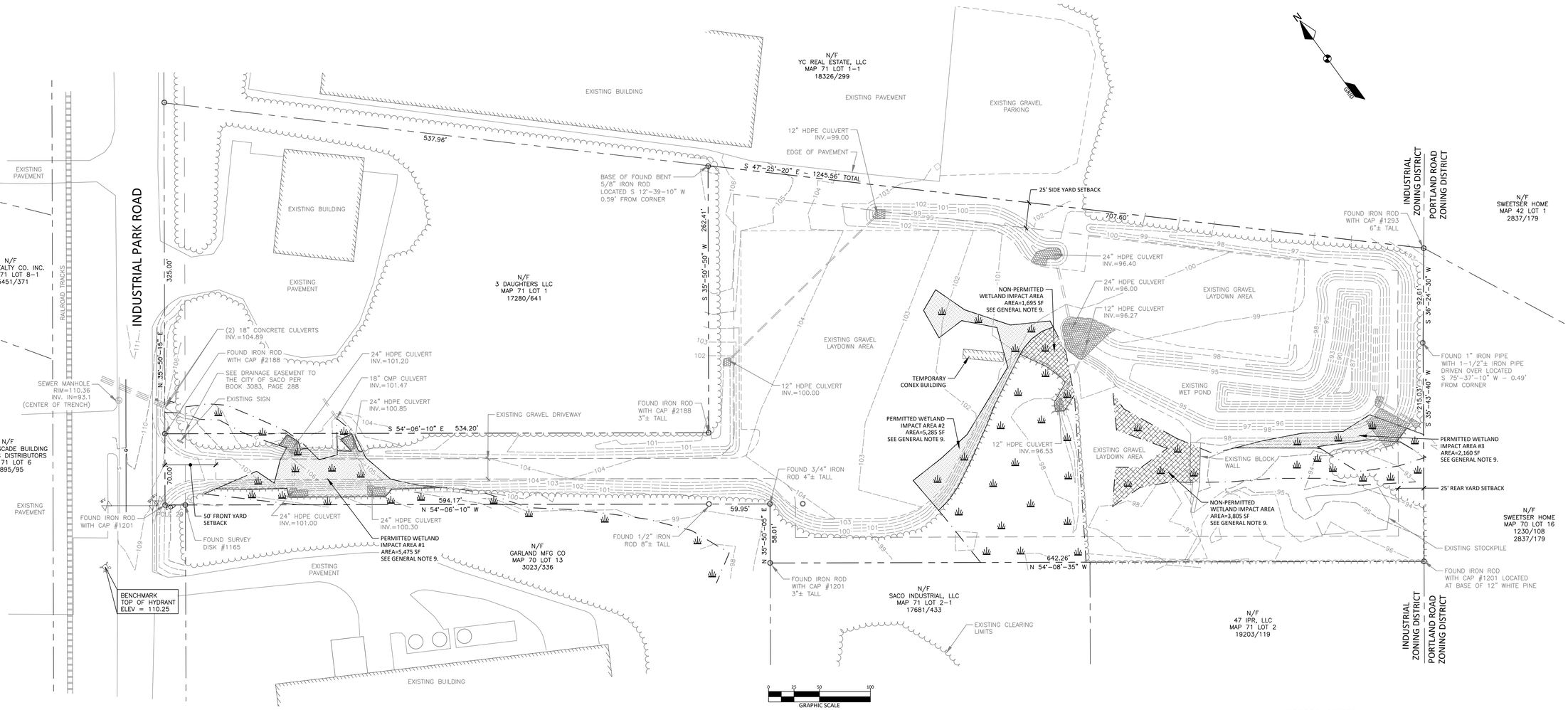
STATE OF MAINE
MICHAEL P. DOUCETTE
COULOMBE
No. 1293
PROFESSIONAL LAND SURVEYOR

PLAN SHOWING A BOUNDARY SURVEY MADE FOR
LAW PROPERTY MANAGEMENT, LLC
(MAILING ADDRESS : 6 GRACELAND AVENUE, SACO, ME 04072)
PARCEL LOCATED AT 71 INDUSTRIAL PARK ROAD
SACO MAINE

Dow & Coulombe, Inc.
Land Surveyors & Land Planners Since 1864
13 Park Street, Saco, Maine 04072
Telephone: (207)284-4521 • Fax: (207)284-4522
info@dowcoulombe.com • www.dowcoulombe.com

Date: NOVEMBER 9, 2016
H. Scale: 1" = 50'
Drawn by: MJC
Chk'd by: PDD
Appv'd by: MJC
SHEET 1 OF 1

ZONE-21S
DWGS2016\WATERHOUSE21Sr1



LEGEND

EXISTING	PROPOSED
PROPERTY LINE/R.O.W.	
ABUTTER PROPERTY LINE	
SETBACK	
EASEMENT LINE	
GRANITE MONUMENT	
IRON PIN/DRILL HOLE	
EDGE OF PAVEMENT/CURB	
EDGE OF GRAVEL	
EDGE OF WETLANDS	
CONTOUR LINE	
TREELINE	
CULVERT/STORMDRAIN	
SEWER MANHOLE	
SANITARY SEWER PIPE	
WATER MAIN	
WATER VALVE	
HYDRANT	
UTILITY POLE	
GAS MAIN	
GAS VALVE	

GENERAL NOTES:

1. THE OWNER OF RECORD OF THE PROPERTY IS VIC-SAM HOLDINGS, LLC BY DEED RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS ON MARCH 26, 2018 IN BOOK 17683 PAGE 318.
2. TOTAL AREA OF THE PARCEL IS APPROXIMATELY 6.40 ACRES.
3. PARCEL TAX MAP REFERENCE: LOT 1-2 ON THE CITY OF SACO TAX MAP 71.
4. PLAN REFERENCES:
   A) A PLAN SHOWING A BOUNDARY SURVEY MADE FOR LAW PROPERTY MANAGEMENT, LLC FOR PARCEL LOCATED AT 71 INDUSTRIAL PARK ROAD PREPARED BY DOW & COULOMBE, INC. DATED NOVEMBER 9, 2016.
   B) SITE PLAN OF 71 INDUSTRIAL PARK ROAD, SACO, MAINE, FOR RECORD OWNER LAW PROPERTY MANAGEMENT, LLC PREPARED BY DM ROMA CONSULTING ENGINEERS DATED JANUARY 26, 2017.
   C) AMENDED SITE PLAN OF 71 INDUSTRIAL PARK ROAD, SACO, MAINE FOR RECORD OWNER VIC-SAM HOLDINGS, LLC, PREPARED BY DM ROMA CONSULTING ENGINEERS DATED OCTOBER 3, 2019.
5. BOUNDARY INFORMATION SHOWN HEREON IS BASED SOLELY ON PLAN REFERENCE 4A. THE TOPOGRAPHIC INFORMATION IS A COMBINATION OF PLAN REFERENCE 4A, DESIGN INFORMATION FROM THE CONSTRUCTION OF THE INITIAL GRAVEL LAYDOWN YARD PROJECT REFERENCED ON PLAN REFERENCE 4C, A FIELD SURVEY IN JULY 2023 UTILIZING SURVEY GRADE GPS EQUIPMENT AND DIGITIZED AERIAL IMAGERY. BEARINGS ARE REFERENCED TO GRID NORTH BASED ON THE MAINE STATE PLANE, WEST ZONE, NAD83, U.S. FEET HORIZONTAL DATUM. ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
6. THE PROPERTY IS LOCATED IN THE INDUSTRIAL DISTRICT (I).
7. SPACE AND BULK REQUIREMENTS: I DISTRICT

MIN LOT SIZE:	40,000 SF
MIN STREET FRONTAGE:	150 FT
MIN FRONT YARD:	50 FT
MIN SIDE/REAR YARD:	25 FT
MAX LOT COVERAGE:	40%
MAX BUILDING HEIGHT:	60 FT

   *SEE ZONING ORDINANCE FOR MORE PARTICULAR INFORMATION
8. WETLAND DELINEATION PERFORMED BY MARK HAMPTON ASSOCIATES IN SEPTEMBER 2016 AND SURVEY LOCATED BY DOW & COULOMBE, INC.
9. THE PROPERTY IS SUBJECT TO A MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MAINE DEP) NATURAL RESOURCE PROTECTION ACT TIER 1 PERMIT #L-27281-TC-AN AND ARMY CORPS OF ENGINEERS CATEGORY 1 MAINE GENERAL PERMIT #NAE-2016-02756. THE ORIGINAL PERMITS WERE ACQUIRED FOR THE IMPACT OF APPROXIMATELY 12,920 S.F. OF FORESTED WETLANDS AS A RESULT OF THE PROJECT. AN ADDITIONAL 5,500 S.F. OF WETLANDS WERE IMPACTED AS A RESULT OF A LAYDOWN EXPANSION OUTSIDE OF THE ORIGINAL APPROVAL. THE TOTAL EXISTING WETLAND IMPACT IS APPROXIMATELY 18,420 S.F.

PERMITTING PLAN

STATE OF MAINE
JAYSON R. HASKELL
No. 10026
REGISTERED PROFESSIONAL ENGINEER
8-18-2023

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 591-5055

REV	DATE	BY	DESCRIPTION
A	8-18-23	JRH	ISSUED FOR PERMITTING

EXISTING CONDITIONS PLAN

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
107 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

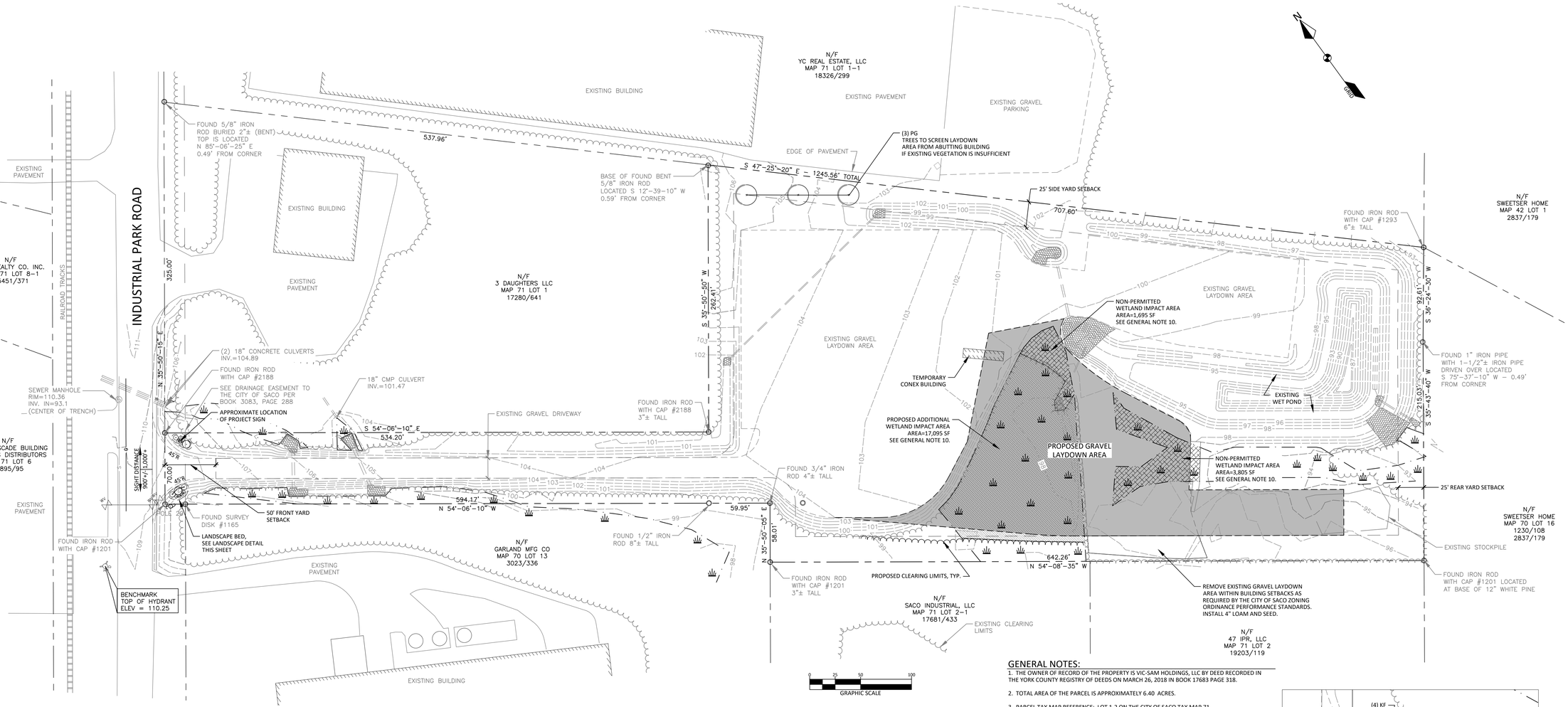
19011
JOB NUMBER:

1" = 50'
SCALE:

8-18-2023
DATE:

SHEET 3 OF 7

EC-1



LEGEND

EXISTING		PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER PROPERTY LINE	
	SETBACK	
	EASEMENT LINE	
	GRANITE MONUMENT	
	IRON PIN/DRILL HOLE	
	EDGE OF PAVEMENT/CURB	
	EDGE OF GRAVEL	
	EDGE OF WETLANDS	
200	CONTOUR LINE	201
	TREELINE	
	CULVERT/STORMDRAIN	
S	SEWER MANHOLE	
S W	SANITARY SEWER PIPE	
W WV	WATER MAIN	
WV	WATER VALVE	
	HYDRANT	
	UTILITY POLE	
G	GAS MAIN	
	GAS VALVE	

AMENDMENT NOTE:
THIS PLAN SUPERCEDES THE PREVIOUS APPROVED SITE PLAN ENTITLED "SITE PLAN OF 71 INDUSTRIAL PARK ROAD, SACO, MAINE FOR RECORD OWNER VIC-SAM HOLDINGS, LLC PREPARED BY DM ROMA CONSULTING ENGINEERS DATED OCTOBER 3, 2019. THE AMENDMENTS TO THIS PLAN INCLUDE THE EXPANSION OF THE GRAVEL LAYDOWN YARD TO ADDRESS BOTH EXISTING AND PROPOSED PROJECT CONDITIONS.

PLANT LIST

TREES	QTY	KEY	BOTANICAL	COMMON	SIZE	COMMENTS
	3	PG	PICEA PUNGENS 'GLAUCA'	BLUE COLORADO SPRUCE	4'-5' HT.	B&B
PERENNIALS & SHRUBS	QTY	KEY	BOTANICAL	COMMON	SIZE	COMMENTS
	8	KF	CALAMAGROSIS ACUTIFLORA	KARL FOERSTER REED GRASS	3 GAL.	FULL & DENSE
	2	MJ	MAGNOLIA 'JANE'	JANE MAGNOLIA	5 GAL.	FULL & DENSE
	3	IH	CORNUS ALBA 'IVORY HALO'	IVORY HALO DOGWOOD	5 GAL.	FULL & DENSE

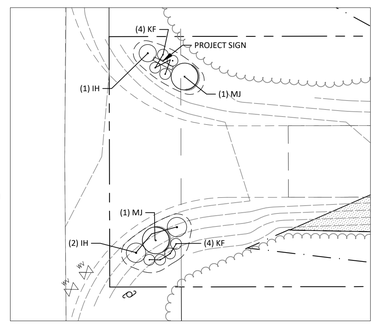
ABBREVIATIONS
QTY. = QUANTITY
B&B = BALL AND BURLAP
GAL. = GALLON

GENERAL NOTES:

1. THE OWNER OF RECORD OF THE PROPERTY IS VIC-SAM HOLDINGS, LLC BY DEED RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS ON MARCH 26, 2018 IN BOOK 17683 PAGE 318.
2. TOTAL AREA OF THE PARCEL IS APPROXIMATELY 6.40 ACRES.
3. PARCEL TAX MAP REFERENCE: LOT 1-2 ON THE CITY OF SACO TAX MAP 71.
4. PLAN REFERENCES:
   A) A PLAN SHOWING A BOUNDARY SURVEY MADE FOR LAW PROPERTY MANAGEMENT, LLC FOR PARCEL LOCATED AT 71 INDUSTRIAL PARK ROAD PREPARED BY DOW & COULOMBE, INC. DATED NOVEMBER 9, 2016.
   B) SITE PLAN OF 71 INDUSTRIAL PARK ROAD, SACO, MAINE, FOR RECORD OWNER LAW PROPERTY MANAGEMENT, LLC PREPARED BY DM ROMA CONSULTING ENGINEERS DATED JANUARY 26, 2017.
   C) AMENDED SITE PLAN OF 71 INDUSTRIAL PARK ROAD, SACO, MAINE FOR RECORD OWNER VIC-SAM HOLDINGS, LLC, PREPARED BY DM ROMA CONSULTING ENGINEERS DATED OCTOBER 3, 2019.
5. BOUNDARY INFORMATION SHOWN HEREON IS BASED SOLELY ON PLAN REFERENCE 4A. THE TOPOGRAPHIC INFORMATION IS A COMBINATION OF PLAN REFERENCE 4A, DESIGN INFORMATION FROM THE CONSTRUCTION OF THE INITIAL GRAVEL LAYDOWN YARD PROJECT REFERENCED ON PLAN REFERENCE 4C AND FIELD SURVEY IN JULY 2023 UTILIZING SURVEY GRADE GPS EQUIPMENT. BEARINGS ARE REFERENCED TO GRID NORTH BASED ON THE MAINE STATE PLANE, WEST ZONE, NAD83, U.S. FEET HORIZONTAL DATUM. ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
6. THE PROPERTY IS LOCATED IN THE INDUSTRIAL DISTRICT (I).
7. SPACE AND BULK REQUIREMENTS: I DISTRICT

MIN LOT SIZE:	40,000 SF
MIN STREET FRONTAGE:	150 FT
MIN FRONT YARD:	50 FT
MIN SIDE/REAR YARD:	25 FT
MAX LOT COVERAGE:	40%
MAX BUILDING HEIGHT:	60 FT

   *SEE ZONING ORDINANCE FOR MORE PARTICULAR INFORMATION
8. WETLAND DELINEATION PERFORMED BY MARK HAMPTON ASSOCIATES IN SEPTEMBER 2016 AND SURVEY LOCATED BY DOW & COULOMBE, INC.
9. SITE DATA SUMMARY:
   PROPOSED IMPERVIOUS AREA: 144,915 S.F.
   PROPOSED TOTAL DEVELOPED AREA: 248,865 S.F.
10. THE PROPERTY IS SUBJECT TO A MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MAINE DEP) NATURAL RESOURCE PROTECTION ACT TIER 1 PERMIT #L-27281-TC-AN AND ARMY CORPS OF ENGINEERS CATEGORY 1 MAINE GENERAL PERMIT #NAE-2016-02756. THE ORIGINAL PERMITS WERE ACQUIRED FOR THE IMPACT OF APPROXIMATELY 12,920 S.F. OF FORESTED WETLANDS AS A RESULT OF THE PROJECT. AN ADDITIONAL 5,500 S.F. OF WETLANDS WERE IMPACTED AS A RESULT OF A LAYDOWN EXPANSION OUTSIDE OF THE ORIGINAL APPROVAL. THE TOTAL EXISTING WETLAND IMPACT IS APPROXIMATELY 18,420 S.F. THE PROPOSED LAYDOWN EXPANSION BEYOND THE EXISTING CONDITIONS WILL GENERATE AN ADDITIONAL 17,095 S.F. OF WETLAND IMPACT FOR A TOTAL OF 35,515 S.F. OF WETLAND IMPACT ASSOCIATED WITH THE PROJECT UPON COMPLETION. THE PROPOSED PROJECT IS REQUIRED TO OBTAIN A TIER 2 WETLAND ALTERATION PERMIT FROM THE MAINE DEP AND AMEND THE MAINE GENERAL PERMIT WITH THE US ARMY CORPS OF ENGINEERS.



LANDSCAPE DETAIL
SCALE: 1"=20'

APPROVED - CITY OF SACO PLANNER:

DATE

STATE OF MAINE
JAYSON R. HASKELL
No. 13032
LICENSED PROFESSIONAL ENGINEER
8-18-2023

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 593-5055

REV	DATE	BY	DESCRIPTION
A	8-18-23	JRH	ISSUED FOR PERMITTING

AMENDED SITE PLAN

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
107 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

19011
JOB NUMBER:

1" = 50'
SCALE:

8-18-2023
DATE:

SHEET 4 OF 7

S-1

24" HDPE CULVERT
INV.=96.40

EXISTING GRAVEL
LAYDOWN AREA

24" HDPE CULVERT
INV.=96.00

SEDIMENT FOREBAY
SEE DETAIL

12" HDPE CULVERT
INV.=96.27
TO BE REMOVED

NON-PERMITTED
WETLAND IMPACT AREA
AREA=1,695 SF
SEE GENERAL NOTE 9.

EXPAND WET POND PERMANENT
POOL TO PROVIDE MORE
STORAGE VOLUME. SEE TYPICAL
WET POND SECTION DETAIL FOR
POND LINER REQUIREMENTS.

8' WIDE SAFETY BENCH

60' LONG UNDERDRAINED
GRAVEL BENCH,
SEE DETAIL

WET POND BOTTOM
ELEVATION=86.5

EXPAND WET POND PERMANENT POOL
TO PROVIDE MORE STORAGE VOLUME.
SEE TYPICAL WET POND SECTION DETAIL
FOR POND LINER REQUIREMENTS.

INSTALL SILT FENCE OR
EROSION CONTROL MIX BERM
TYP., SEE DETAIL

RAISE POND ACCESS ROAD
ELEVATION FROM 98.5 TO 99.1
SEE POND ACCESS ROAD DETAIL

OCS-1
RIM=96.75
INV. IN=91.8
INV. OUT=91.7
SEE DETAIL FOR STRUCTURE
MODIFICATIONS.

12" HDPE CULVERT
L=34'
S=0.006
INV.=91.5

INSTALL NEW 2x8 P.T. BOARD ABOVE
EXISTING EMERGENCY SPILLWAY BOARDS AND
INSTALL RIPRAP PROTECTION AROUND BOARD
AND EXTEND RIPRAP TO NEW TOP OF BERM
ELEVATION.
NEW CREST ELEV.=97.95
SEE DETAIL

RAISE BERM ELEVATION
FROM 98.5 TO 99.1
SEE POND BERM
MODIFICATION DETAIL

INSTALL ADDITIONAL WETLAND SEED
MIX WITHIN LIMITS OF PRESERVED
WETLAND TO RE-ESTABLISH WETLAND
VEGETATION

NEW 5' WIDE EMERGENCY SPILLWAY
CREST ELEV.=95.00
SEE DETAIL

6"SD
INV. OUT=93.50
SEE DETENTION
POND DETAIL

NON-PERMITTED EXISTING
WETLAND IMPACT AREA
AREA=3,805 SF

REMOVE EXISTING BLOCK
RETAINING WALL AND
INSTALL 2H:1V VEGETATED
SLOPE.

2H:1V SLOPE. INSTALL
EROSION CONTROL
BLANKET, SEE DETAIL

6" HDPE PIPE
L=24'
S=1.0%
INV. IN=93.75

DETENTION POND (DP)
SEE DETAIL

12" HDPE CULVERT
INV.=96.53
TO BE REMOVED

PROPOSED ADDITIONAL
WETLAND IMPACT AREA
AREA=17,095 SF

PROPOSED GRAVEL
LAYDOWN AREA

STEEPEN FILL SLOPE TO 2H:1V
WITHIN WETLAND IMPACT.
INSTALL 4" LOAM, SEED AND
EROSION CONTROL BLANKET, TYP.
ALL SLOPES OVER 3H:1V

APPROXIMATE
CLEARING LIMITS, TYP.

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER PROPERTY LINE	
	EASEMENT LINE	
	BUILDING	
	EDGE OF PAVEMENT/CURB	
	EDGE OF GRAVEL	
	EDGE OF WETLANDS	
200 201	CONTOUR LINE	200 201
	TREELINE	
	CATCHBASIN	
	CULVERT/STORMDRAIN	
	UNDERDRAIN	UD
	UTILITY POLE	
	FILTER BARRIER	FB
	RIPRAP	

STATE OF MAINE
JAYSON R. HASKELL
No. 10026
LICENSED PROFESSIONAL ENGINEER
8-18-2023

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 593-5055

REV	DATE	BY	DESCRIPTION
A	8-18-23	JRH	ISSUED FOR PERMITTING

GRADING & DRAINAGE PLAN

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

19011
JOB NUMBER:

1" = 20'
SCALE:

8-18-2023
DATE:

SHEET 5 OF 7

GD-1

EROSION AND SEDIMENTATION CONTROL NOTES:

EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS TO OCCUR DURING THE FOLLOWING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY.

IN ORDER TO EFFECTIVELY PREVENT AND CONTROL EROSION RELATED TO SOIL DISTURBANCE, THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) SHALL BE EMPLOYED:

1. POLLUTION PREVENTION

MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES. CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND VOLUME, TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE.

WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

2. TEMPORARY SOIL STABILIZATION BMPS

TEMPORARY MULCHING SHALL BE APPLIED IMMEDIATELY TO ANY AREAS THAT HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED. ANY DISTURBED SOIL WITHIN 75' OF A STREAM, WATER BODY OR WETLAND MUST RECEIVE TEMPORARY MULCH WITHIN 48 HOURS FOLLOWING DISTURBANCE AND BEFORE ANY STORM EVENT. ALL OTHER AREAS SHALL RECEIVE TEMPORARY MULCH WITHIN 7 DAYS OF DISTURBANCE. AREAS WHICH CANNOT BE SEEDED DURING THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION. THE FOLLOWING ARE ACCEPTABLE TEMPORARY MULCHING METHODS:

HAY OR STRAW MULCHES NEED TO BE AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS. APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SQ FT OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75-90% OF THE GROUND SURFACE. HAY OR STRAW CAN BE DRIVEN INTO THE GROUND WITH TRACKED EQUIPMENT IF SLOPES ARE LESS THAN 3%, OR CAN BE ANCHORED WITH JUTE, WOOD FIBER OR PLASTIC NETTING ON STEEPER SLOPES.

EROSION CONTROL MIX MUST CONSIST PRIMARILY OF ORGANIC MATERIAL AND WILL INCLUDE ANY OF THE FOLLOWING: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK OR OTHER ACCEPTABLE PRODUCTS BASED ON A SIMILAR RAW SOURCE. WOOD OR BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS ARE NOT ACCEPTABLE. EROSION CONTROL MIX CAN BE USED AS A STAND-ALONE REINFORCEMENT ON SLOPES OF 2 HORIZONTAL TO 1 VERTICAL OR LESS AND DRAINING IN SHEET FLOW. IT CAN BE PLACED WITH A HYDRAULIC BUCKET, WITH A PNEUMATIC BLOWER OR BY HAND, AND MUST PROVIDE 100% SOIL COVERAGE.

EROSION CONTROL MIX SHALL MEET THE FOLLOWING SPECIFICATIONS:
- -ORGANIC MATTER CONTENT SHALL BE BETWEEN 80-100%, DRY WEIGHT BASIS.
- -PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6 IN. SCREEN AND BETWEEN 70-85% PASSING 0.75 IN. SCREEN
- -ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED
- -LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX

WHEN USED AS MULCH, THE THICKNESS OF THE ERISION CONTROL MIX IS BASED UPON THE FOLLOWING:

LENGTH OF SLOPE	3:1 SLOPE OR LESS	BETWEEN 2:1 AND 3:1 SLOPE
LESS THAN 20 FT	2.0 IN.	4.0 IN.
BETWEEN 20 - 60 FT	3.0 IN.	5.0 IN.
BETWEEN 60 - 100 FT	4.0 IN.	6.0 IN.

CHEMICAL MULCHES AND SOIL BINDERS MAY BE USED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL CONSULT WITH THE MANUFACTURER TO DETERMINE ADEQUATE APPLICATION RATES AND METHODS.

TEMPORARY MULCH SHALL BE INSPECTED FOLLOWING ANY SIGNIFICANT RAINFALL EVENT. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED. ERISION CONTROL MATS AND MULCH ANCHORING MUST BE INSPECTED AFTER RAINFALL EVENTS FOR DISLOCATION OR FAILURE, AND REPAIRED IMMEDIATELY. INSPECTIONS SHALL TAKE PLACE UNTIL 95% OF THE SOIL SURFACE IS COVERED WITH PERMANENT VEGETATION. WHERE MULCH IS USED WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE, AND REPAIR AS NEEDED.

TEMPORARY VEGETATION SHALL BE ESTABLISHED ON SOILS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 30 DAYS. IF TEMPORARY VEGETATION CANNOT BE ESTABLISHED PRIOR TO OCTOBER 15, TEMPORARY MULCH SHALL BE APPLIED THROUGH THE WINTER AND TEMPORARY VEGETATION SHALL BE PLANTED AT THE BEGINNING OF THE GROWING SEASON THE FOLLOWING YEAR. TO PREPARE THE SEEDBED, THE CONTRACTOR SHALL APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OF 10-10-10 (N-P205-K20) OR EQUIVALENT AND LIMESTONE AT A RATE OF 3 TONS PER ACRE, IF NECESSARY. LOOSEN SOIL TO A DEPTH OF 2 INCHES IN AREAS THAT HAVE BEEN COMPACTED BY CONSTRUCTION ACTIVITIES. GRASS SEED SHALL BE SELECTED BASED UPON THE TIME OF YEAR THE PLANTING WILL TAKE PLACE AS SUMMARIZED IN THE FOLLOWING TABLE:

SEED	LB. PER ACRE	RECOMMENDED SEEDING DATES
WINTER RYE	112	8/15 - 10/1
OATS	80	4/1 - 7/1 8/15 - 9/15
ANNUAL RYEGRASS	40	4/1 - 7/1

TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED TO MAINTAIN AT LEAST 95% VEGETATIVE COVER OF SOIL SURFACE. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES SHALL BE USED IN THE INTERIM SUCH AS TEMPORARY MULCH, FILTER BARRIERS, ETC.

3. SEDIMENT BARRIER BMPS

PRIOR TO CONSTRUCTION TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED AT THE DOWNGRADIENT EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA . SEDIMENT BARRIERS INCLUDE ANY OF THE FOLLOWING:

FILTER BARRIER FENCE, ALSO CALLED SILT FENCE, SHALL BE INSTALLED WHERE SHOWN ON THE PLANS AND IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. THE FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL PROVIDE A MINIMUM OF 6 MONTHS USABLE CONSTRUCTION LIFE INCLUDING PROTECTION AGAINST ULTRA-VIOLET LIGHT. THE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES INSTALLED AND POST SPACING SHALL NOT EXCEED 6 FEET. JOINTS IN THE FENCE SHALL BE AVOIDED TO THE EXTENT POSSIBLE, AND IF NECESSARY SHALL BE SPLICED TOGETHER AT A SUPPORT POST WITH A MINIMUM 6 INCH OVERLAP. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP, AND THE BOTTOM 6-8 INCHES OF FABRIC SHALL BE "TOED-IN" TO THE TRENCH AND COMPACTED. THE TRENCH SHOULD BE UPHILL OF THE FABRIC PRIOR TO BURIAL.

EROSION CONTROL MIX BERMS ARE LINEAR BARRIERS COMPOSED OF EROSION CONTROL MIX AS SPECIFIED ABOVE. THE BERM MUST BE A MINIMUM OF 12 INCHES TALL AND 24 INCHES WIDE AT THE BASE IF UPHILL SLOPES ARE LESS THAN 5%. STEEPER SLOPES OR SLOPES GREATER THAN 20 FEET LONG MAY REQUIRE A LARGER WIDTH BERM. EROSION CONTROL MIX BERMS SHALL BE PROHIBITED AT THE BASE OF A LONG OR STEEP SLOPE (8% OR GREATER) WITHOUT THE ADDITIONAL SUPPORT OF A FILTER FENCE INSTALLED ON THE DOWNHILL SIDE OF THE BERM.

SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED RUNNING ONTO THE STOCKPILE. SEDIMENT BARRIERS SHALL BE INSPECTED AFTER ANY SIGNIFICANT RAINFALL EVENT AND REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE BARRIERS. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR EDGES OF THE BARRIER, OR IF LARGE VOLUMES OF WATER ARE IMPOUNDED BEHIND THE BARRIER, IT MAY BE NECESSARY TO INSTALL A SEDIMENT BASIN UPGRADIENT OF THE SEDIMENT BARRIER. SEDIMENT SHALL BE REMOVED ONCE IT REACHES HALF THE BARRIER HEIGHT. AFTER THE BARRIER IS REMOVED, ANY REMAINING SILT SHALL EITHER BE REMOVED OR GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

TEMPORARY EROSION CONTROL MEASURES ARE REMOVED ONCE THE SITE IS PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

4. STORM DRAIN INLET PROTECTION

STORM DRAIN INLETS THAT ARE MADE OPERATIONAL BEFORE THEIR DRAINAGE AREA IS STABILIZED SHALL BE PROTECTED WITH A FILTER UNTIL THE DRAINAGE AREA IS EITHER PAVED OR STABILIZED WITH 95% VEGETATIVE GROWTH. THE FOLLOWING ARE ACCEPTABLE BMPS ASSOCIATED WITH STORM DRAIN INLET PROTECTION:

MANUFACTURED SEDIMENT FILTERS ARE THE PREFERRED METHOD FOR PROTECTING CATCH BASIN INLETS IN PAVED OR GRAVEL ROADWAYS. THE FILTERS TYPICALLY CONSIST OF A FABRIC OR OTHER PERVIOUS MATERIAL THAT IS PLACED ABOVE OR BELOW THE GRATE THAT TRAPS SEDIMENT ON THE SURFACE AND ALLOWS WATER TO FLOW THROUGH THE GRATE. CONSIDERATIONS SUCH AS WEATHER CONDITIONS, SLOPES, TRIBUTARY WATERSHED AREA AND EXPECTED SEDIMENT ACCUMULATION SHOULD BE FACTORED INTO MAKING A DECISION ON ANY PARTICULAR PRODUCT, AND THE MANUFACTURER'S RECOMMENDATIONS ON INSTALLATION AND MAINTENANCE SHALL BE STRICTLY ADHERED TO.

5. STABILIZED CONSTRUCTION ENTRANCE/EXIT

TO REDUCE THE TRACKING OF SEDIMENT ONTO ROADWAYS, A STABILIZED CONSTRUCTION EXIT SHALL BE INSTALLED AT ALL POINTS OF EGRESS WHERE VEHICLES MAY TRAVEL FROM THE PROJECT SITE TO A PUBLIC ROAD OR OTHER PAVED AREA. THE STONE PAD SHALL CONSIST OF A MINIMUM 6-INCH DEPTH OF 2-3 INCH CRUSHED STONE, AND SHALL BE PLACED ON A GEOTEXTILE FABRIC. THE PAD SHALL EXTEND AT LEAST 50 FEET INTO THE PROJECT SITE AND BE A MINIMUM OF 10 FEET WIDE. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, AND THE CONTRACTOR SHALL SWEEP PAVEMENT AT EXITS THAT HAVE EXPERIENCED ANY MUD-TRACKING PRIOR TO THE NEXT STORM EVENT. MAINTAIN THE PAD UNTIL ALL DISTURBED AREAS ARE STABILIZED.

INSPECTION & MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ALL CONSTRUCTION OPERATIONS COMPLY WITH THE INSPECTION AND MAINTENANCE PROCEDURES FOR THE PROJECT, INCLUDING, BUT NOT LIMITED TO THOSE INCLUDED IN THIS PLAN SET, THE "INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN", AND THE "MAINE EROSION AND SEDIMENTATION CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS". INSPECTION SHALL OCCUR ON ALL DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIAL STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. THESE AREAS SHALL BE INSPECTED AT LEAST ONCE A WEEK AS WELL AS 24 HOURS BEFORE AND AFTER A STORM EVENT GENERATING MORE THAN 0.5 INCH OF RAINFALL OVER A 24-HOUR PERIOD AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.
2. EROSION CONTROLS SHALL BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF BMPS NEED TO BE MAINTAINED OR MODIFIED, ADDITIONAL BMPS ARE NECESSARY, OR OTHER CORRECTIVE ACTION IS NEEDED, IMPLEMENTATION MUST BE COMPLETED WITHIN SEVEN CALENDAR DAYS AND PRIOR TO ANY RAINFALL EVENT.
3. A REPORT SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN MUST BE MAINTAINED ON SITE. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS; THE DATE(S) OF THE INSPECTIONS; AND THE MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO MDEP AND TOWN STAFF, AND A COPY MUST BE PROVIDED UPON REQUEST. THE OWNER SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

6. DUST CONTROL

THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST ON THE PROJECT SITE AND ON ADJACENT ROADWAYS. EXPOSED SOIL SURFACES SHALL BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST. GRAVEL SURFACES SHALL EITHER BE TREATED WITH AN APPLICATION OF CALCIUM CHLORIDE OR COVERED WITH CRUSHED STONE IF DUST CONTROL BECOMES DIFFICULT WITH NORMAL WATER APPLICATIONS.

7. LAND GRADING AND SLOPE PREPARATION

GRADING SHALL BE PLANNED SO AS TO MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING. ON LARGE PROJECTS THIS SHOULD BE ACCOMPLISHED BY PHASING THE OPERATION AND COMPLETING THE FIRST PHASE UP TO FINAL GRADING AND SEEDING BEFORE STARTING THE NEXT PHASE. ANY EXPOSED AREA THAT WILL NOT BE FINISH GRADED WITHIN 7 DAYS SHALL BE TREATED WITH MULCH OR PLANTED WITH TEMPORARY VEGETATION. PROVISIONS SHALL BE MADE TO SAFELY CONVEY SURFACE RUNOFF TO STORM DRAINS, PROTECTED OUTLETS OR TO STABLE WATER COURSES TO ENSURE THAT SURFACE RUNOFF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASS SHALL NOT BE STEEPER THAN 2:1. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS. FILL MATERIAL SHALL BE FREE OF STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

8. TOPSOIL

IF POSSIBLE, TOPSOIL SHALL BE STOCKPILED ON THE PROJECT SITE AND REUSED. HIGH QUALITY TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM), AND SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROCKS, ROOTS AND NOXIOUS WEEKS. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2 INCHES TO ENSURE BONDING WITH SUBSOIL. THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 4 INCHES. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. IT IS NECESSARY TO COMPACT THE TOPSOIL ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL, BUT UNDUE COMPACTION IS TO BE AVOIDED.

9. PERMANENT SOIL STABILIZATION

IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

SEEDED AREAS: TO PREPARE THE SEEDBED, APPLY 10-20-20 FERTILIZER AT A RATE OF 800 POUNDS PER ACRE AND GROUND LIMESTONE AT A RATE OF 3 TONS PER ACRE. WORK THE FERTILIZER AND LIMESTONE INTO THE TOPSOIL TO A DEPTH OF 4 INCHES AND REMOVE ANY STONES, ROOTS OR OTHER VISIBLE DEBRIS. SELECT A SEED MIXTURE THAT IS APPROPRIATE FOR THE SOIL TYPE AND MOISTURE CONTENT AS FOUND AT THE SITE, AND FOR THE AMOUNT OF SUN EXPOSURE AND FOR LEVEL OF USE. REFER TO THE USDA SOIL CONSERVATION SERVICE OR THE LOCAL SOIL AND WATER CONSERVATION DISTRICT FOR APPROPRIATE SEED MIXTURES. APPLY SEED UNIFORMLY IN ACCORDANCE WITH SUPPLIER RECOMMENDATIONS AND IMMEDIATELY COVER WITH MULCH AS DESCRIBED IN THE TEMPORARY MULCHING SECTION OF THIS PLAN.

HYDROSEEDING SHALL BE DONE IN ACCORDANCE WITH SUPPLIERS RECOMMENDATIONS. FOR SEEDED AREAS TO BE PERMANENTLY STABILIZED, 90% OF THE DISTURBED SOIL SHALL BE COVERED WITH MATURE HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

SOD STRIPS SHALL BE LAID AT RIGHT ANGLES TO DIRECTION OF SLOPE OR FLOW OF WATER STARTING AT LOWEST ELEVATION. JOINTS SHALL BE STAGGERED, AND ALL STRIPS SHALL BE ROLLED OR TAMPED INTO PLACE. ON SLOPES, SOD SHALL BE ANCHORED WITH STAPLES, WIRE OR PINS. IRRIGATE SODDED AREA IMMEDIATELY AFTER INSTALLATION. FOR SODDED AREAS TO BE PERMANENTLY STABILIZED, THE ROOTS OF THE SOD MUST BE COMPLETELY BOUND INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

PERMANENT MULCH IS A LONG TERM COVER THAT PROVIDES A GOOD BUFFER AROUND DISTURBED AREAS. THE EROSION CONTROL MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND MAY INCLUDE SHREDDED BARK, STUMP GRINDINGS OR COMPOSTED BARK. WOOD CHIPS, GROUND CONSTRUCTION DEBRIS, REPROCESSED WOOD PRODUCTS OR BARK CHIPS ARE NOT ACCEPTABLE. THE EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS AND MATERIAL TOXIC TO PLANT GROWTH.

RIPRAP STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNEVEN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. THE DEPTH OF STONE SHALL BE A MINIMUM OF 2.2 TIMES THE MAXIMUM STONE DIAMETER. A GRAVEL OR GEOTEXTILE FILTER BLANKET SHALL BE PLACED BETWEEN THE RIPRAP AND UNDERLYING SOIL SURFACE. GRAVEL FILTER BLANKETS SHALL MEET MDOT TYPE-C UNDERDRAIN MATERIAL SPECIFICATIONS AND BE AT LEAST 6 INCHES THICK. GEOTEXTILE FILTER BLANKETS SHALL BE SPECIFIED BASED ON SITE CONDITIONS. RIPRAP SLOPES SHALL BE TOED INTO THE BASE OF THE EMBANKMENT BY EXCAVATING A TRENCH AT THE BOTTOM OF THE SLOPE AND INSTALLING A STABLE BASE OF RIPRAP TO GRADE.

DITCHES, CHANNELS AND SWALES ARE CONSIDERED PERMANENTLY STABILIZED WHEN THE CHANNEL HAS 90% COVER OF HEALTHY VEGETATION WITH A WELL GRADED RIPRAP LINING, EROSION CONTROL BLANKET, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE BANKS, OR DOWNCUTTING OF THE CHANNEL.

10. STORMWATER CHANNELS

EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL, PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING.

WINTER EROSION AND SEDIMENTATION CONTROL NOTES:

THE WINTER CONSTRUCTION PERIOD TYPICALLY BEGINS IN EARLY NOVEMBER AND ENDS IN MID APRIL. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS TO OCCUR DURING THE FOLLOWING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AN AREA SHALL BE CONSIDERED DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN THE ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. A COVER OF EROSION CONTROL MIX IS THE PREFERRED TEMPORARY MULCH DURING WINTER CONDITIONS.

1. NATURAL RESOURCE PROTECTION

ANY AREAS WITHIN 75 FEET FROM ANY REGULATED NATURAL RESOURCES SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH AN EROSION CONTROL COVER. DURING WINTER CONSTRUCTION, A DOUBLE ROW OF SEDIMENT BARRIERS (FOR EXAMPLE, SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY REGULATED NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE REGULATED NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

2. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

3. MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 3 TONS PER ACRE (TWICE THE NORMAL ACCEPTED RATE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCHES THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. SNOW MUST BE REMOVED DOWN TO A ONE-INCH DEPTH PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERTY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WITH THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

4. SOIL STOCKPILING

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RAT EOR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STACKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED WITHIN 100 FEET FROM ANY REGULATED NATURAL RESOURCE.

5. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOOMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF DORMANT SEEDING IS USED, ALL DISTURBED AREAS SHALL RECEIVE 4 INCHES OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS PER 1,000 S.F. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75%) IN THE SPRING SHALL BE REVEGETATED.

6. OVER-WINTER STABILIZATION OF DITCHES AND CHANNELS

ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED BY NOVEMBER 1. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A GRASS-LINED DITCH OR CHANNEL IS STABILIZED BY SEPTEMBER 1, THEN EITHER A SOD LINING SHALL BE INSTALLED PRIOR TO OCTOBER 1 OR THE DITCH MUST BE LINED WITH STONE RIPRAP BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE PRIOR TO NOVEMBER 1.

7. OVER-WINTER STABILIZATION OF DISTURBED SLOPES

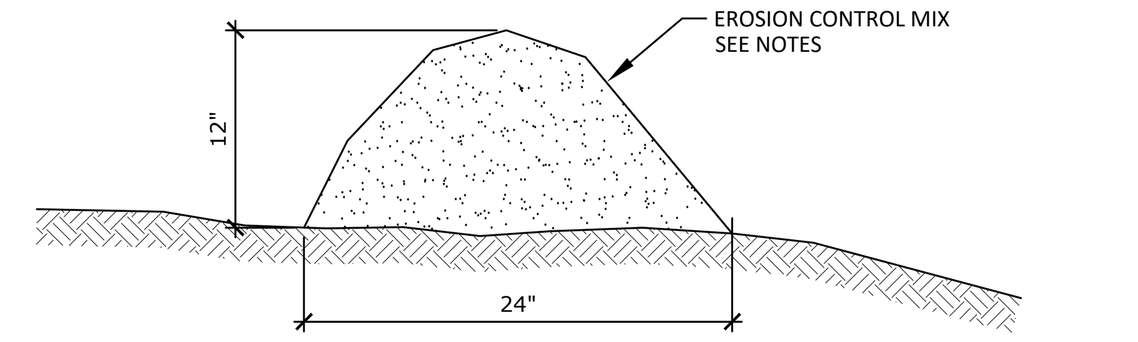
ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. ALL AREAS HAVING A GRADE STEEPER THAN 8% SHALL BE CONSIDERED A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN THE SLOPE SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS BY OCTOBER 1, SOD BY OCTOBER 1, EROSION CONTROL MIX BY NOVEMBER 1 OR STONE RIPRAP BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.

8. OVER-WINTER STABILIZATION OF DISTURBED SOILS

BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN THE AREA SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION BY OCTOBER 1, SOD BY OCTOBER 1, OR MULCH BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.

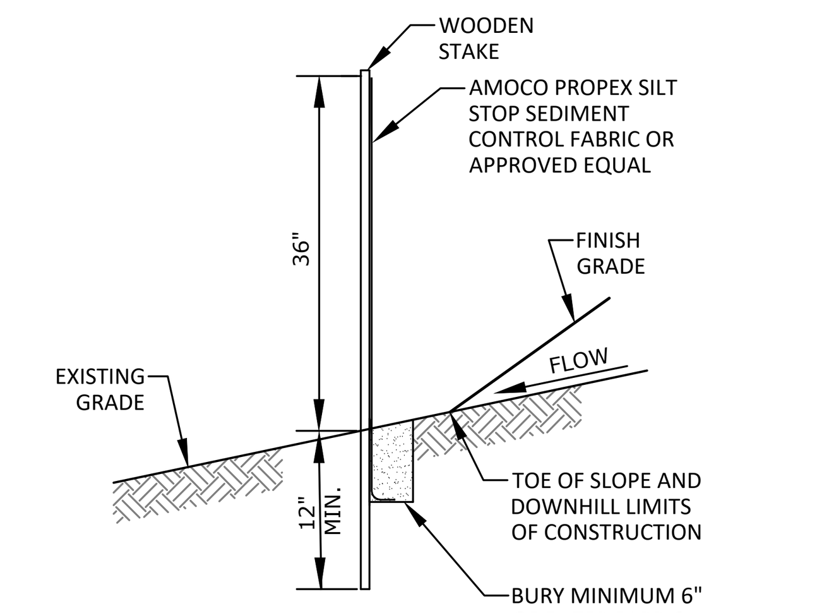
9. MAINTENANCE

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM, PERIOD OF THAWING AND RUNOFF AND AT LAST ONCE A WEEK, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.



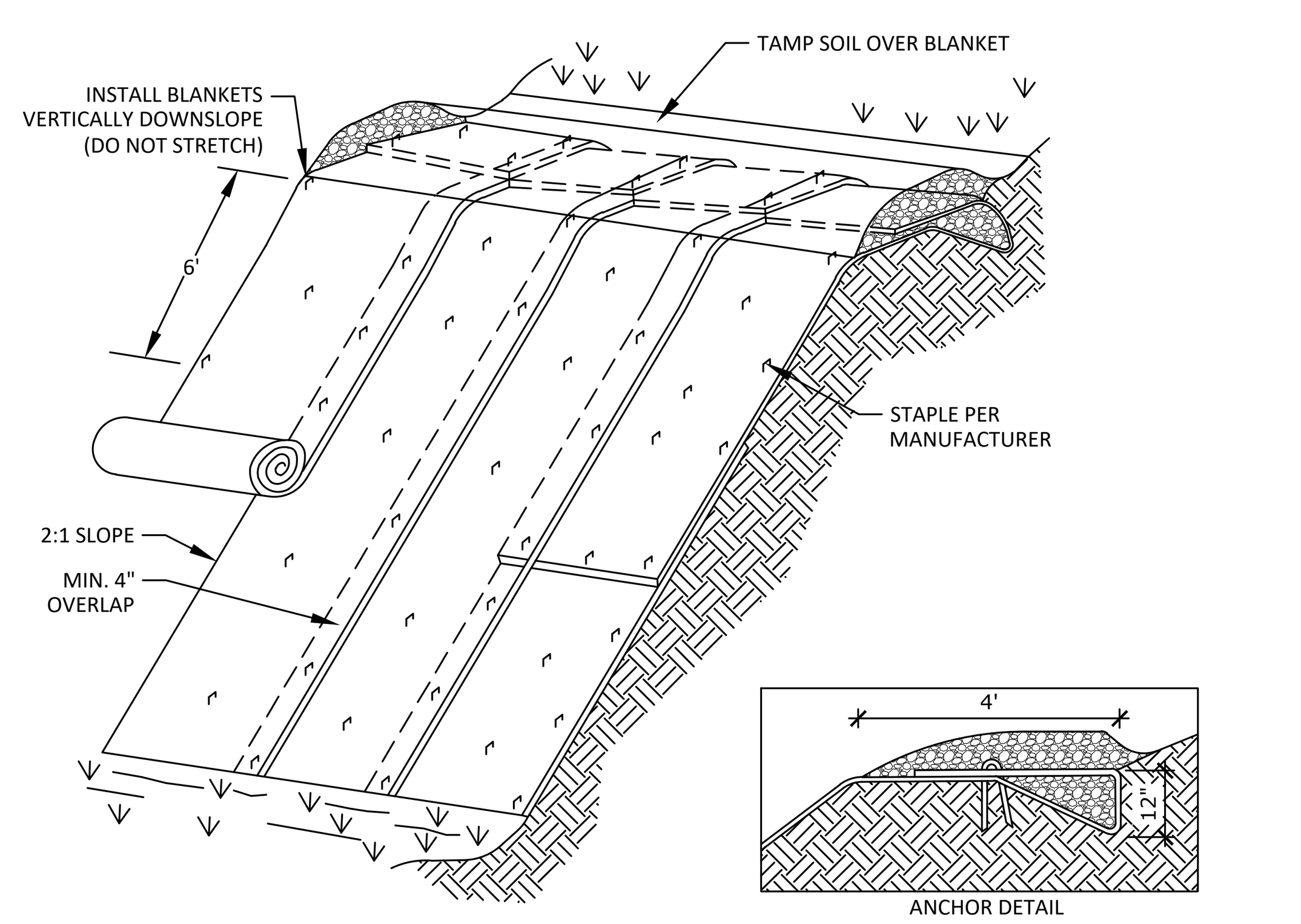
NOTES:
1. EROSION CONTROL MIX BERM INSTALLED 12" HIGH AND 24" WIDE CONSISTING OF STUMP GRINDINGS WITH NO ROCKS GREATER THAN 4" OR LARGE AMOUNTS OF FINES.

EROSION CONTROL MIX BERM
NOT TO SCALE

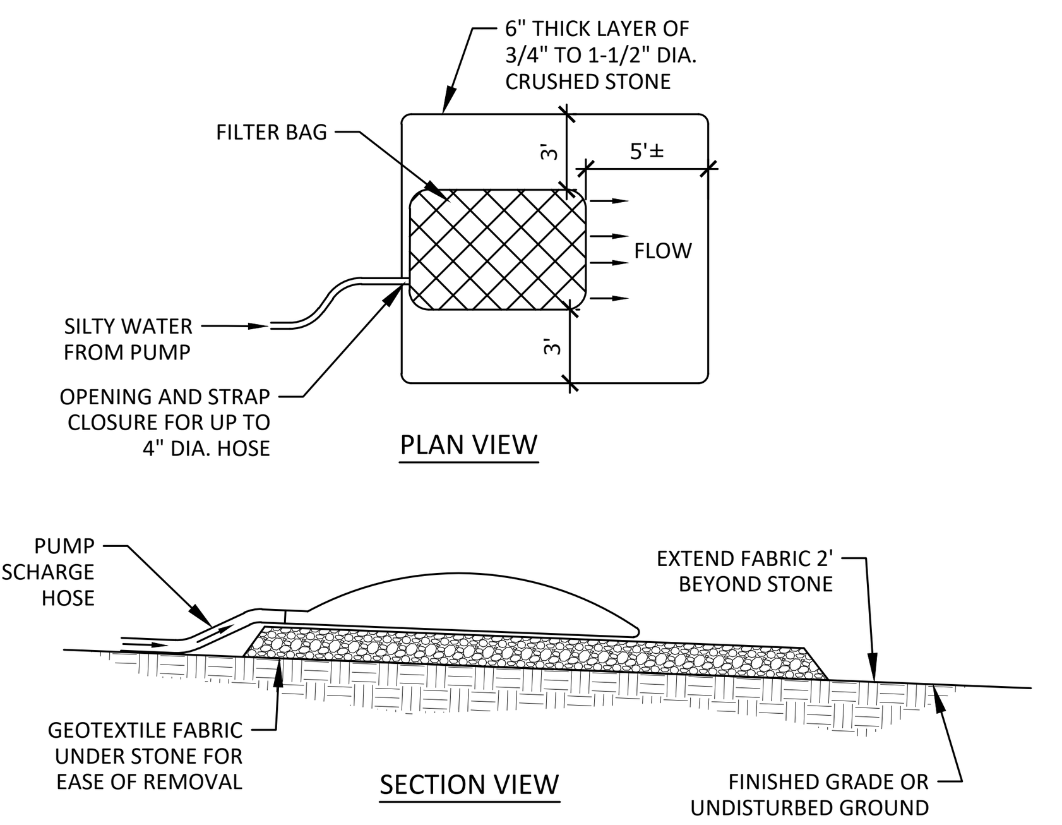


NOTES:
1. SEE SECTION 3 OF THE EROSION AND SEDIMENTATION CONTROL NOTES, THIS SHEET, FOR INSTALLATION LOCATION REQUIREMENTS AND ADDITIONAL DETAIL.

SEDIMENT FILTER FENCE
NOT TO SCALE



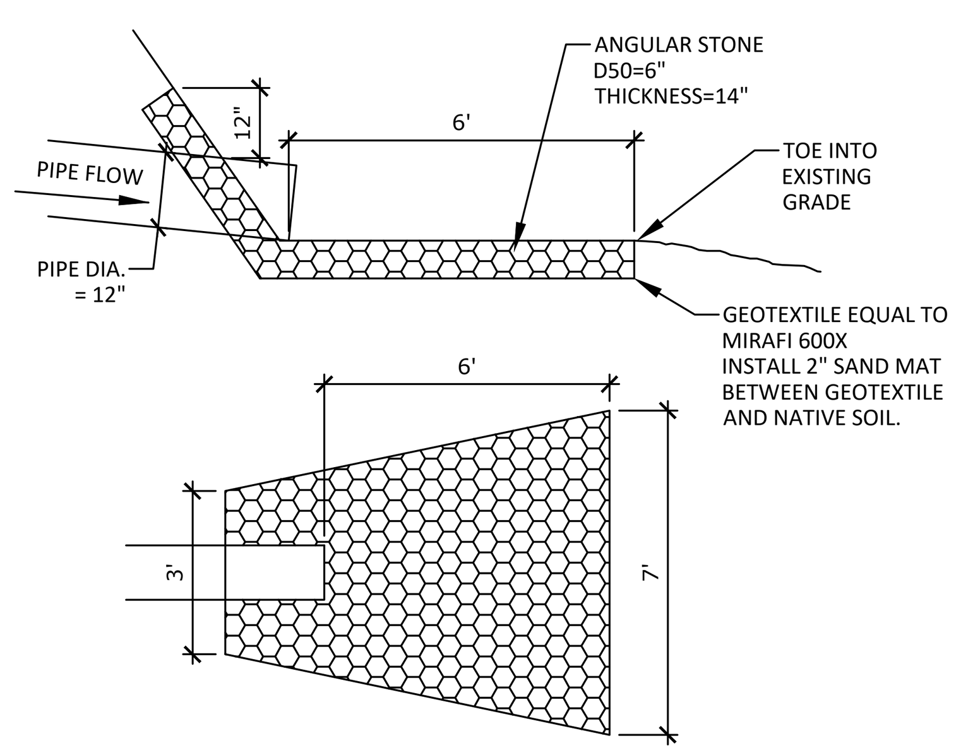
EROSION CONTROL BLANKET
NOT TO SCALE



DEWATERING GEOTEXTILE FILTER BAG
NOT TO SCALE

HOUSEKEEPING NOTES

1. SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.
2. GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.
3. FUGITIVE SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.
4. DEBRIS AND OTHER MATERIALS: MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
5. EXCAVATION DE-WATERING: EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
6. AUTHORIZED NON-STORMWATER DISCHARGES: IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
   - (a) DISCHARGES FROM FIREFIGHTING ACTIVITY;
   - (b) FIRE HYDRANT FLUSHINGS;
   - (c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
   - (d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
   - (e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
   - (f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
   - (g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
   - (h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
   - (i) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
   - (j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
   - (k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
   - (l) LANDSCAPE IRRIGATION.
7. UNAUTHORIZED NON-STORMWATER DISCHARGES: APPROVAL FROM THE MDEP DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON_STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH SECTION 6 ABOVE. SPECIFICALLY, THE MDEP'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
   - (a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
   - (b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
   - (c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
   - (d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.



RIPRAP APRON AT PIPE
NOT TO SCALE

STATE OF MAINE
JAYSON R. HASKELL
No. 13002
LICENSED PROFESSIONAL ENGINEER
8-18-2023

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 591-5055

REV	DATE	BY	DESCRIPTION
A	8-18-23	JRH	ISSUED FOR PERMITTING

DETAILS
71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

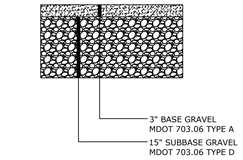
19011
JOB NUMBER:

AS NOTED
SCALE:

8-18-2023
DATE:

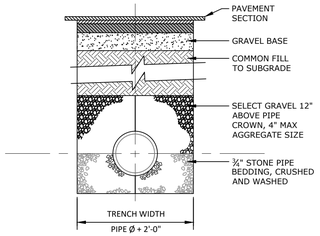
SHEET 6 OF 7

D-1



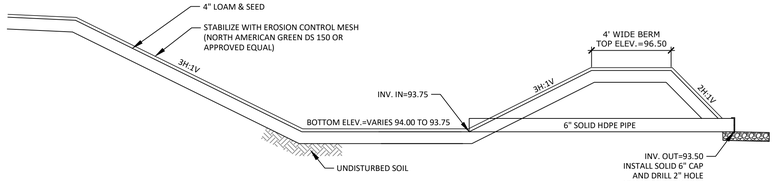
TYPICAL GRAVEL LAYDOWN SECTION

NOT TO SCALE



TYPICAL TRENCH SECTION

NOT TO SCALE



DETENTION POND SECTION

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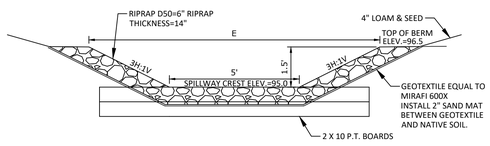
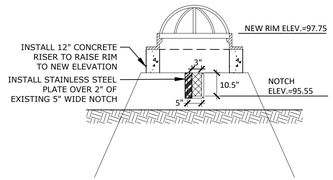


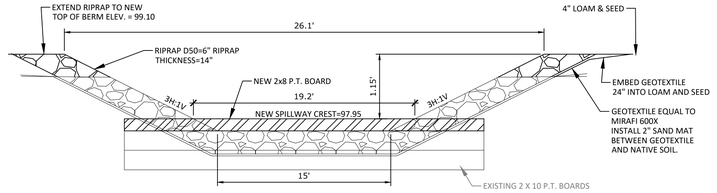
EMERGENCY SPILLWAY CROSS-SECTION (DETENTION POND)

NOT TO SCALE



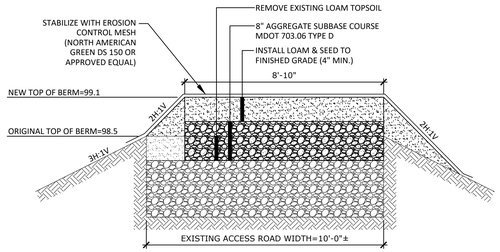
OCS-1 MODIFICATIONS

NOT TO SCALE



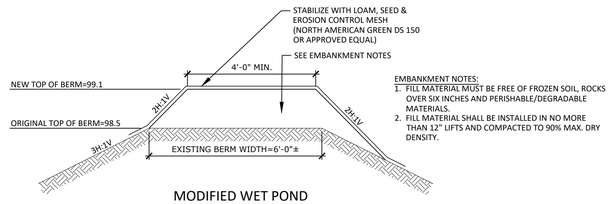
MODIFIED WET POND
EMERGENCY SPILLWAY CROSS-SECTION

NOT TO SCALE



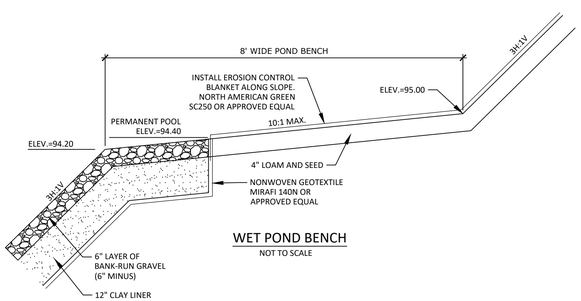
MODIFIED WET POND
POND ACCESS ROAD

NOT TO SCALE



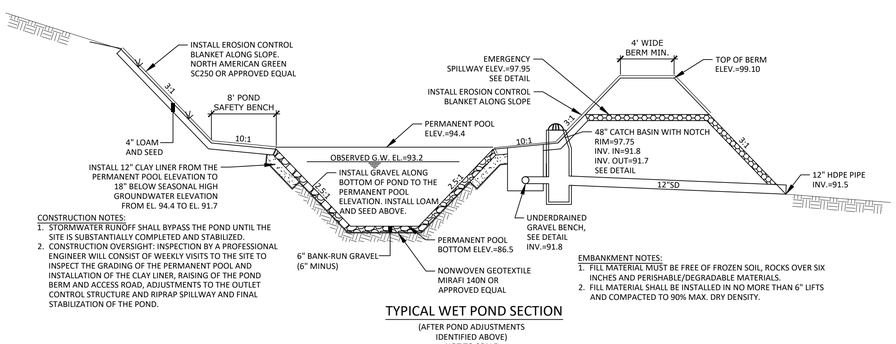
MODIFIED WET POND
VEGETATED BERM

NOT TO SCALE



WET POND BENCH

NOT TO SCALE



CONSTRUCTION NOTES:
1. STORMWATER RUNOFF SHALL BYPASS THE POND UNTIL THE SITE IS SUBSTANTIALLY COMPLETED AND STABILIZED.
2. CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL CONSIST OF WEEKLY VISITS TO THE SITE TO INSPECT THE GRADING OF THE PERMANENT POOL AND INSTALLATION OF THE CLAY LINER, RAISING OF THE POND BERM AND ACCESS ROAD, ADJUSTMENTS TO THE OUTLET CONTROL STRUCTURE AND RIPRAP SPILLWAY AND FINAL STABILIZATION OF THE POND.

EMBANKMENT NOTES:
1. FILL MATERIAL MUST BE FREE OF FROZEN SOIL, ROCKS OVER SIX INCHES AND PERISHABLE/DEGRADABLE MATERIALS.
2. FILL MATERIAL SHALL BE INSTALLED IN NO MORE THAN 6" LIFTS AND COMPACTED TO 90% MAX. DRY DENSITY.

TYPICAL WET POND SECTION

(AFTER POND ADJUSTMENTS IDENTIFIED ABOVE)
NOT TO SCALE

DM ROMA
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P.O. BOX 1116
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(207) 591-5055

STATE OF MAINE
JAYSON R. HASKELL
No. 15002
REGISTERED PROFESSIONAL ENGINEER
8.18.2023

REV	DATE	BY	DESCRIPTION
A	8-18-23	JRH	ISSUED FOR PERMITTING

DETAILS

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

19011
JOB NUMBER:

AS NOTED
SCALE:

8-18-2023
DATE:

SHEET 7 OF 7

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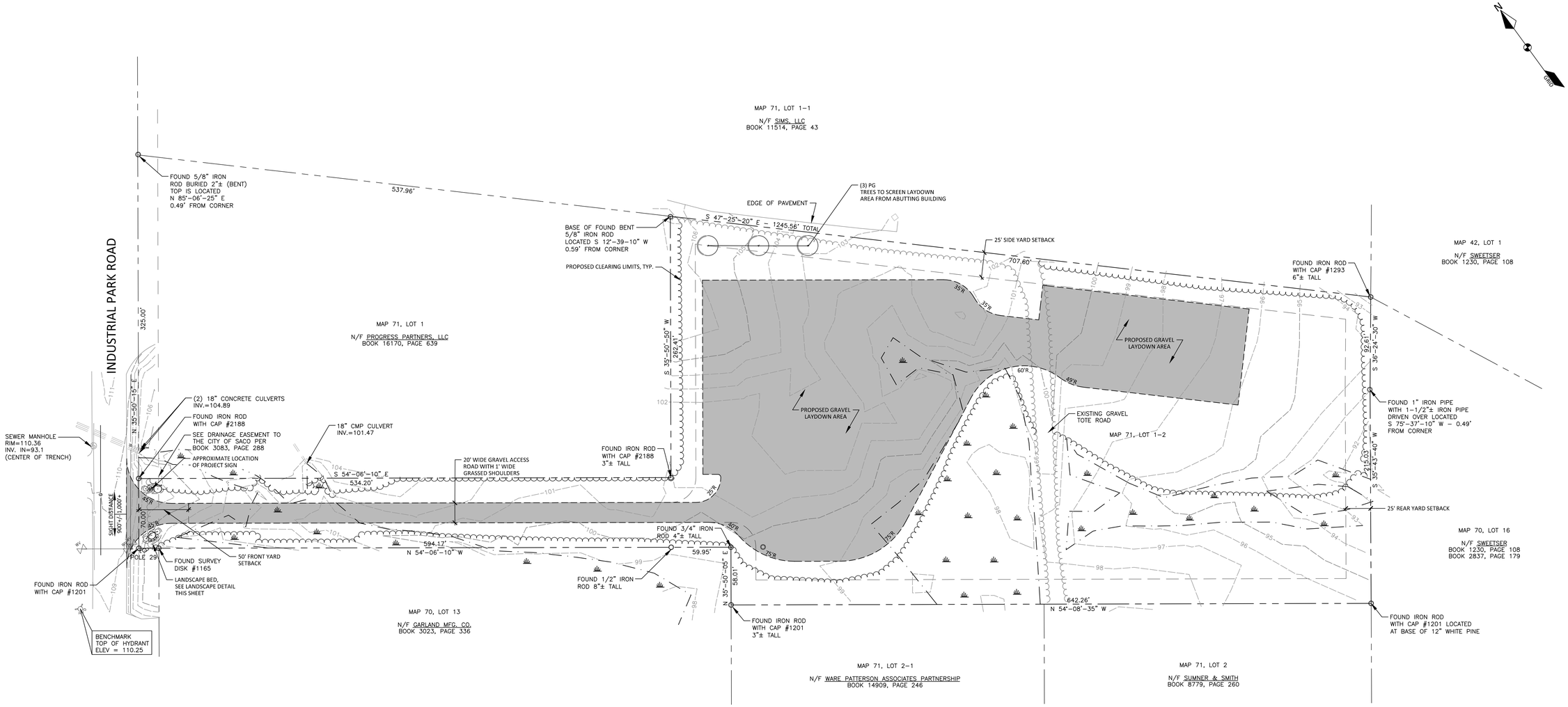


0 25 50 100
GRAPHIC SCALE

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE/R.O.W.	
	ABUTTER PROPERTY LINE	
	SETBACK	
	EASEMENT LINE	
⊡	GRANITE MONUMENT	
○	IRON PIN/DRILL HOLE	
	EDGE OF PAVEMENT/CURB	
	EDGE OF GRAVEL	
	EDGE OF WETLANDS	
-200- -201-	CONTOUR LINE	
	TREELINE	
	CULVERT/STORMDRAIN	
Ⓢ	SEWER MANHOLE	
S	SANITARY SEWER PIPE	
W	WATER MAIN	
⋈	WATER VALVE	
	HYDRANT	
	UTILITY POLE	
G	GAS MAIN	
⋈	GAS VALVE	

GENERAL NOTES:

1. THE OWNER OF RECORD OF THE PROPERTY IS VIC-SAM HOLDINGS, LLC BY DEED RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS ON MARCH 26, 2018 IN BOOK 17683 PAGE 318.
2. TOTAL AREA OF THE PARCEL IS APPROXIMATELY 6.40 ACRES.
3. PARCEL TAX MAP REFERENCE: LOT 1-2 ON THE CITY OF SACO TAX MAP 71.
4. PLAN REFERENCES:
   A) A PLAN SHOWING A BOUNDARY SURVEY MADE FOR LAW PROPERTY MANAGEMENT, LLC FOR PARCEL LOCATED AT 71 INDUSTRIAL PARK ROAD PREPARED BY DOW & COULOMBE, INC. DATED NOVEMBER 9, 2016.
   B) SITE PLAN OF 71 INDUSTRIAL PARK ROAD, SACO, MAINE, FOR RECORD OWNER LAW PROPERTY MANAGEMENT, LLC PREPARED BY DM ROMA CONSULTING ENGINEERS DATED JANUARY 26, 2017.
5. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED SOLELY ON PLAN REFERENCE 4A. BEARINGS ARE REFERENCED TO GRID NORTH BASED ON THE MAINE STATE PLANE, WEST ZONE, NAD83, U.S. FEET HORIZONTAL DATUM. ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
6. THE PROPERTY IS LOCATED IN THE I-1 INDUSTRIAL PARK DISTRICT (I-1).
7. SPACE AND BULK REQUIREMENTS: I-1 DISTRICT

MIN LOT SIZE:	40,000 SF
MIN STREET FRONTAGE:	50 FT
MIN FRONT YARD:	50 FT
MIN SIDE/REAR YARD:	25 FT
MAX LOT COVERAGE:	40%
MAX BUILDING HEIGHT:	60 FT

   *SEE ZONING ORDINANCE FOR MORE PARTICULAR INFORMATION
8. WETLAND DELINEATION PERFORMED BY MARK HAMPTON ASSOCIATES IN SEPTEMBER 2016 AND SURVEY LOCATED BY DOW & COULOMBE, INC.
9. SITE DATA SUMMARY:
   PROPOSED IMPERVIOUS AREA: 102,735 S.F.
   PROPOSED TOTAL DEVELOPED AREA: 199,305 S.F.
10. THE PROPOSED DEVELOPMENT WILL IMPACT APPROXIMATELY 12,920 S.F. OF EXISTING WETLANDS. THIS PROPERTY IS SUBJECT TO A MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION NATURAL RESOURCE PROTECTION ACT TIER 1 PERMIT #L-27281-TC-AN AND ARMY CORPS OF ENGINEERS CATEGORY 1 MAINE GENERAL PERMIT #NAE-2016-02756.

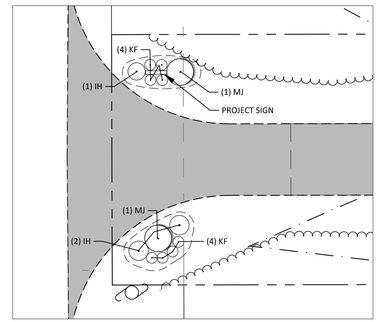
AMENDMENT NOTE:

THIS PLAN SUPERCEDES THE PREVIOUS APPROVED SITE PLAN ENTITLED "SITE PLAN OF 71 INDUSTRIAL PARK ROAD, SACO, MAINE FOR RECORD OWNER LAW PROPERTY MANAGEMENT, LLC PREPARED BY DM ROMA CONSULTING ENGINEERS DATED JANUARY 26, 2017. THE AMENDMENTS TO THIS PLAN INCLUDE THE REMOVAL OF THE TWO (2) INDUSTRIAL BUILDINGS, PAVEMENT, REVISIONS TO LIMITS OF DRIVING SURFACE AND REVISIONS TO THE LANDSCAPING AT THE ENTRANCE OF THE PROPERTY.

PLANT LIST

TREES	QTY	KEY	BOTANICAL	COMMON	SIZE	COMMENTS
	3	PG	PICEA PUNGENS 'GLAUCA'	BLUE COLORADO SPRUCE	4'-5' HT.	B&B
PERENNIALS & SHRUBS	QTY	KEY	BOTANICAL	COMMON	SIZE	COMMENTS
	8	KF	CALAMAGROSIS ACUTIFLORA	KARL FOERSTER REED GRASS	3 GAL.	FULL & DENSE
	2	MJ	MAGNOLIA 'JANE'	JANE MAGNOLIA	5 GAL.	FULL & DENSE
	3	IH	CORNUS ALBA 'IVORY HALO'	IVORY HALO DOGWOOD	5 GAL.	FULL & DENSE

ABBREVIATIONS
QTY. = QUANTITY
B&B = BALL AND BURLAP
GAL. = GALLON



LANDSCAPE DETAIL
SCALE: 1"=20'

APPROVED - CITY OF SACO PLANNER:

DATE

STATE OF MAINE
JAYSON R. HASKELL
No. 13002
LICENSED PROFESSIONAL ENGINEER
10-3-19

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506

REV	DATE	BY	DESCRIPTION
A	4-9-19	JRH	ISSUED TO CLIENT FOR REVIEW
B	4-26-19	JRH	ISSUED FOR CONSTRUCTION
1	9-30-19	JRH	REVISED PER CITY REVIEW
2	10-3-19	JRH	RE-ISSUED FOR CONSTRUCTION

AMENDED SITE PLAN

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

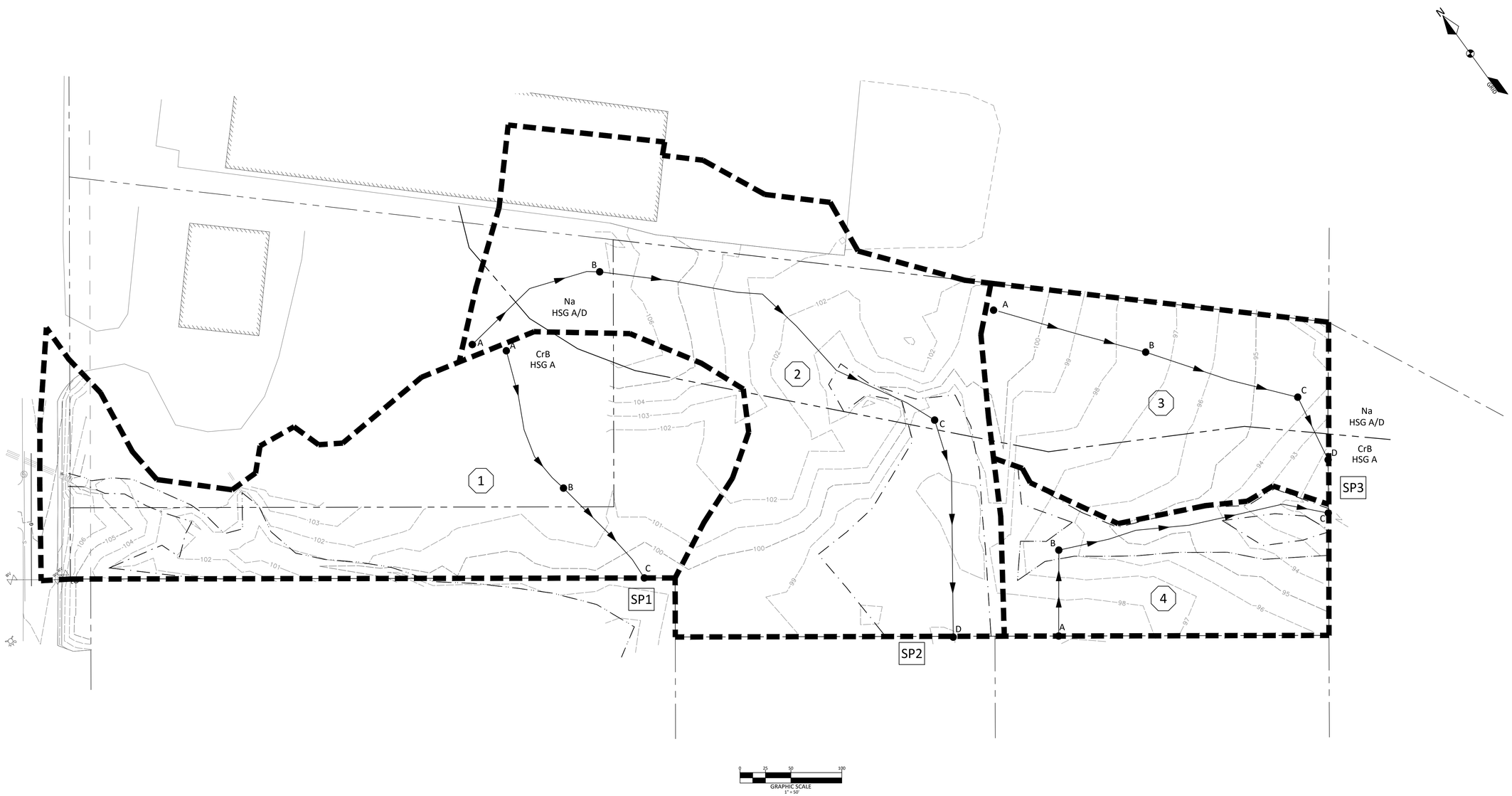
19011
JOB NUMBER:

1" = 50'
SCALE:

10-3-2019
DATE:

SHEET 3 OF 7

S-1



WATERSHED MAP LEGEND

- 1 — WATERSHED NO.
- SP1 — REACH/STUDY POINT
- P1 — POND
- A — B — WATERSHED BOUNDARY
- A — B — TIME OF CONCENTRATION
- REACH PATH
- SOIL BOUNDARY

STATE OF MAINE
JAYSON R. HASKELL
No. 10302
LICENSED PROFESSIONAL ENGINEER
8-18-2023

DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 591-5055

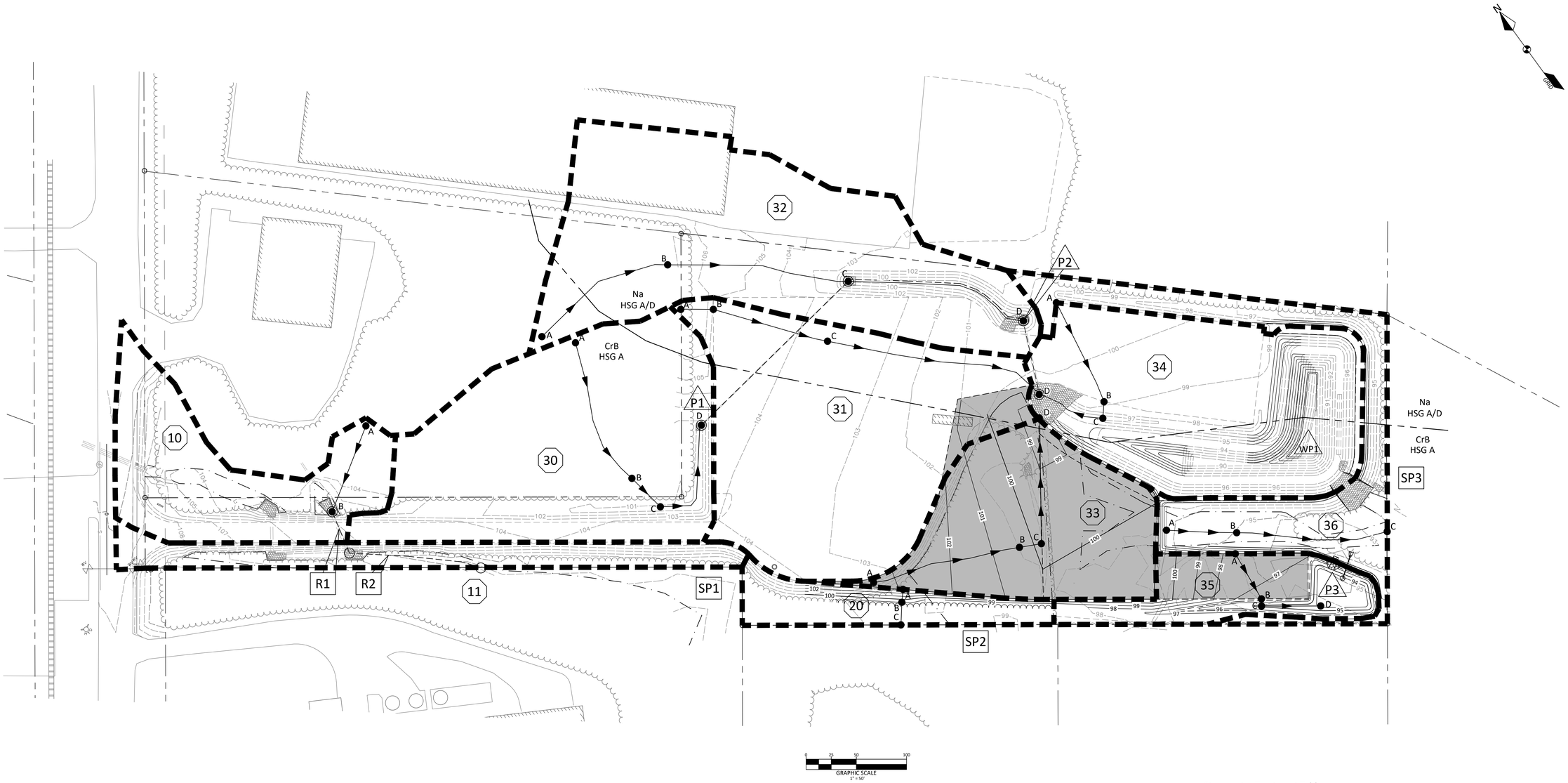
REV	DATE	BY	DESCRIPTION
A	8-18-23	JRH	ISSUED FOR PERMITTING

PRE-DEVELOPMENT WATERSHED MAP

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

19011 JOB NUMBER:
1" = 50' SCALE:
8-18-2023 DATE:
SHEET 1 OF 2
WM-1



WATERSHED MAP LEGEND

- 1 — WATERSHED NO.
- SP1 — REACH/STUDY POINT
- P1 — POND
- WATERSHED BOUNDARY
- A → B — TIME OF CONCENTRATION
- REACH PATH
- SOIL BOUNDARY

Stormwater Treatment Table
71 Industrial Park Road

	Total Watershed Area (SF)	New Impervious Area (SF)	New Landscaped Area (SF)	Existing/Offsite Impervious Area (SF)	Existing/Offsite Landscaping Area (SF)	Existing Undeveloped Area (SF)	Treatment Provided	Impervious Area Treated (SF)	Landscaped Area Treated (SF)	Treatment Device
WS-10	29,175	4,460	2,545	3,710	3,025	15,435	No	0	0	None
WS-11	16,215	680	8,750	765	0	6,020	No	0	0	None
WS-20	11,545	0	3,965	0	0	7,580	No	0	0	None
WS-30	59,900	7,180	12,060	0	0	40,660	Yes	7,180	12,060	Wet Pond
WS-31	63,420	61,755	1,425	0	0	240	Yes	61,755	1,425	Wet Pond
WS-32	69,150	9,260	16,165	24,465	5,430	13,830	Yes	33,725	21,595	Wet Pond
WS-33	34,440	34,440	0	0	0	0	Yes	34,440	0	Wet Pond
WS-34	52,650	20,325	32,325	0	0	0	Yes	20,325	32,325	Wet Pond
WS-35	16,075	6,815	9,260	0	0	0	No	0	0	None
WS-36	29,625	0	17,455	0	0	12,170	No	0	0	None
Total		**144,915**	**103,950**					**157,425**	**67,405**	

New Impervious Area =	144,915	sf
New Impervious Area Requiring Treatment (95%)	137,669	sf
Provided New Impervious Treatment=	157,425	sf
	108.6%	New Impervious Area Treated
New Developed Area =	248,865	sf
New Developed Area Requiring Treatment (80%)=	199,092	sf
New Developed Area Treated=	224,830	sf
	90.3%	New Developed Area Treated

STATE OF MAINE — JAYSON R. HASKELL No. 10026 — PROFESSIONAL ENGINEER — 8-18-2023

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WINDHAM, ME 04062
(207) 591-5055

REV.	DATE	BY	DESCRIPTION
A	8-18-23	JRH	ISSUED FOR PERMITTING

POST DEVELOPMENT WATERSHED MAP

71 INDUSTRIAL PARK ROAD
SACO, MAINE

FOR RECORD OWNER:
VIC-SAM HOLDINGS, LLC
102 INDUSTRIAL PARK ROAD
SACO, MAINE 04072

19011 JOB NUMBER:
1" = 50' SCALE:
8-18-2023 DATE:
SHEET 2 OF 2
WM-2