



TOWN OF KITTERY, MAINE

TOWN PLANNING AND DEVELOPMENT DEPARTMENT

200 Rogers Road, Kittery, Maine 03904
 PHONE: (207) 475-1323 - FAX: (207) 439-6806
www.kittery.org

APPLICATION: SITE PLAN REVIEW

FEE FOR SITE PLAN REVIEW:	<input type="checkbox"/> \$300.00 PLUS THE GREATER OF:	<input type="checkbox"/> \$50/USE OF UNIT; OR	<input type="checkbox"/> \$5.00/100 SQ FT OF GROSS FLOOR AREA	Application Fee Paid: \$ _____ Date: _____ ASA Fee Paid: (TITLE 3.3 TOWN CODE) \$ _____ Date: _____
		<input type="checkbox"/> \$0.50/LINEAR FOOT OF DOCK, SLIP & FLOAT; OR	<input type="checkbox"/> \$20.00/ UNIT INTENDED TO PROVIDE OVERNIGHT SLEEPING ACCOMODATIONS	

PROPERTY DESCRIPTION	Parcel ID	Map	61	Lot	27A	Zone:	R-RL _____	Total Land Area (Square Feet)	483,516
	Physical Address	460 U.S. Route 1 Kittery, York County, ME 03909							
						Base:	_____		
						Overlay:	_____		
						MS4:	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		

PROPERTY OWNER'S INFORMATION	Name	PigPenPartners	Mailing Address	40 Brickyard Court York County ME 03909
	Phone	207-363-0612		
	Fax			
	Email	asiegel@maine.rr.com		

APPLICANT'S AGENT INFORMATION	Name	Neil J. Rapoza, PE	Name of Business	CIVIL CONSULTANTS
	Phone	207-384-2550	Mailing Address	P.O. Box 100 South Berwick Maine 03908
	Fax	207-384-2112		
	Email	neil@civcon.com		

PROJECT DESCRIPTION	Existing Use: The existing site, owned by Pig Pen Partners, is the location of the When Pigs Fly Restaurant & Pizzeria. The lot utilizes an entrance and exit on to U.S. Route 1, as well as a parking lot of 89 parking spaces.	
	Project Name:	When Pigs Fly Restaurant & Pizzeria
	Proposed Use:	Pig Pen Partners is proposing to modify the site of the existing When Pigs Fly Restaurant & Pizzeria to create permanent outdoor seating and convert interior seating space within the restaurant/pizzeria to an expanded kitchen. The lot will continue to utilize the existing entrance and exit on to U.S. Route 1, as well as the parking lot as it currently exists without modification.

WAIVER REQUEST

	Ordinance Section	Describe why this request is being made.
DESCRIPTION	***EXAMPLE*** 16.32.560 (B)- OFFSTREET PARKING.	***EXAMPLE*** Requesting a waiver of this ordinance since the proposed professional offices have a written agreement with the abutting Church owned property to share parking.

Related Kittery Land Use Code concerning waivers and modifications:

16.10.8.2.5 Conditions or Waivers.

Conditions required by the Planning Board at the final plan review phase must have been met before the final plan may be given final approval unless so specified in the condition or specifically waived, upon written request by the applicant, by formal Planning Board action wherein the character and extent of such waivers which may have been requested are such that they may be waived without jeopardy to the public health, safety and general welfare.

16.7.4.1 Objectives Met. In granting modifications or waivers, the Planning Board must require such conditions as will, in its judgment, substantially meet the objectives of the requirements so waived or modified.

I certify that, to the best of my knowledge, the information provided in this application is true and correct and will not deviate from the plans submitted without notifying the Kittery Planning Department of any changes.			
Applicant's Signature:	 _____	Owner's Signature:	 _____
Date:	3/8/2022 _____	Date:	3/8/2022 _____

COMPLETED BY OFFICE STAFF

ASA CHARGE	AMOUNT	ASA CHARGE	AMOUNT
REVIEW		SERVICES	
LEGAL FEES (TBD)		RECORDER	\$35
ENGINEERS REVIEW (TBD)		FACT FINDING (TBD)	
ABUTTER NOTICES		3 RD PARTY INSPECTIONS (TBD)	
POSTAGE	\$20	OTHER PROFESSIONAL SERVICES	\$50
LEGAL NOTICES		PERSONNEL	
ADVERTISING	\$300	SALARY CHARGES IN EXCESS OF 20 HOURS	
SUPPLIES			
OFFICE	\$5		
SUB TOTAL		SUB TOTAL	
		TOTAL ASA REVIEW FEES	

Minimum Submission Requirements

- 15 COPIES OF THIS APPLICATION
- 15 COPIES OF THE PROPOSED SITE PLAN – 12 REDUCED SIZE AT 11"X17"AND 3 FULL SIZE AT 24"X 36"
- 1 PDF OF THE SITE PLAN SHOWING GPS COORDINATES

SUBMITTALS THE TOWN PLANNER DEEMS SUFFICIENTLY LACKING IN CONTENT WILL NOT BE SCHEDULED FOR PLANNING BOARD REVIEW.

Related Ordinances: Kittery Land Use Code- Title 16

16.10.5.2 Planner Review and Confirmation of Submittal Content - Preliminary Plan.

A completed application must include on the plan or attached thereto, the following items, unless upon the applicant's written request, the Planning Board, by formal action, waives or defers any requirement(s) for submission.

- A. A minimum of fifteen (15) paper copies of the application form, plan and all attachments thereto plus if applicable, five (5) paper copies of the 24 x 36 inches size plan sheets.
- B. Plan must include:
 1. Plan sheets drawn on a reproducible medium and must measure no less than eleven (11) inches by seventeen (17) inches and no larger than twenty-four (24) inches by thirty-six (36) inches; with a:
 2. Scale of the drawings no greater than one inch equals thirty (30) feet for developments less than ten (10) acres, and one inch equals fifty (50) feet for all others;
 3. Code block in the lower right-hand corner. The block must contain:
 - a. Name(s) and address(es) of the applicant and owner,
 - b. Name of the project.
 - c. Name and address of the preparer of the plan, with professional seal, if applicable,
 - d. Date of plan preparation/revision, and a unique ID number for the plan and any revisions;
 4. Standard boundary survey conducted by a surveyor licensed in the state of Maine, in the manner recommended by the State Board of Registration for Land Surveyors;
 5. An arrow showing true north and the magnetic declination, a graphic scale, and signature blocks for the owner(s) and members of the Planning Board;
 6. Locus map showing the property in relation to surrounding roads, within two thousand (2,000) feet of any property line of the development,
 7. Surveyed acreage of the total parcel, of rights-of-way, wetlands, and area to be disturbed and amount of street frontage;
 8. Names and addresses of all owners of record of property abutting the development, including those across a street;
 9. Locations of essential physical features such as watercourses, forest cover, and outcroppings
 10. Proposed development area conditions including, but not limited to:
 - a. Structures; their location and description including signs, to be placed on the site, floor plan of exterior walls and accesses located within one hundred (100) feet of the property line;
 - b. Utilities proposed including power, water, sewer, holding tanks, bridges, culverts and drainage ways;

- c. Sewage facilities type and placement. Test pit locations, at least two of which must meet the State of Maine Plumbing Code requirements, must be shown;
- d. Domestic water source;
- e. Parks, open space, or conservation easement locations;
- f. Lot lines, interior and exterior, right-of-way, and street alignments;
- g. Road and other paved ways plans, profiles and typical sections including all relevant data;
- h. Setbacks Existing and proposed;
- i. Machinery permanently installed locations likely to cause appreciable noise at the lot lines;
- j. Raw, finished or waste materials to be stored outside the buildings, and any stored material of a toxic or hazardous nature;
- k. Topographic contours of existing contours and finished grade elevations within the development;
- l. Sidewalks, curbs, driveways, fences, retaining walls and other artificial features locations and dimensions proposed;;
- m. Landscaping required including size and type of plant material;
- n. Temporary markers locations adequate to enable the Planning Board to readily locate and appraise the layout of the development;
- o. Land proposed to be dedicated to public use and the conditions of such dedication;
- p. Natural features or site elements to be preserved.

C. Supporting documentation must include:

- 1. Vicinity map and aerial photograph showing the property in relation to surrounding properties, roads, geographic, natural resource (wetland, etc.), historic sites, applicable comprehensive plan features such as proposed park locations, land uses, zones, and other features within five hundred (500) feet from any boundary of the proposed development;
- 2. Existing Development Area Conditions including but not limited to:
 - a. Location and description of all structures, including signs, existing on the site, together with accesses located within one hundred (100) feet of the property line;
 - b. Essential physical features such as watercourses, wetlands, flood plains, wildlife habitat areas, forest cover, and outcroppings;
 - c. Utilities existing, including power, water, sewer, holding tanks, bridges, culverts and drainage ways;
- 3. Legal interest documents showing legal interest of the applicant in the property to be developed. Such documents must contain the description upon which the survey was based;
- 4. Property encumbrances currently affecting the property, as well as any proposed encumbrances;
- 5. Water District approval letter, if public water is used, indicating there is adequate supply and pressure to be provided to the development;

6. Erosion and sedimentation control plan endorsed by the York County soil and water conservation district;
 7. Stormwater management plan for stormwater and other surface water drainage prepared by a registered professional engineer including a Maintenance Plan and Agreement that defines maintenance responsibilities, responsible parties, shared costs, and schedule. Where applicable, a Maintenance Agreement must be included in the Document of Covenants, Homeowners Documents and/or as riders to the individual deed and recorded with the York County Registry of Deeds.
 8. Soil survey for York County covering the development. Where the soil survey shows soils with severe restrictions for development, a high intensity Class "A" soil survey must be provided;
 9. Vehicular traffic report estimating the amount and type of vehicular traffic that will be generated by the development on a daily basis and for peak hours.
 10. Traffic impact analysis in accordance with subsection (E)(2) for developments involving forty (40) or more parking spaces or which are projected to generate more than four hundred (400) vehicle trips per day;
 11. Test pit(s) analysis prepared by a licensed site evaluator when sewage disposal is to be accomplished by subsurface disposal, pits, prepared by a licensed site evaluator;
 12. Town Sewage Department or community system authority letter, when sewage disposal is to be through a public or community system, approving the connection and its location;
 - a. Additional submissions as may be required by other sections of this Code such as for clustered development, mobile home parks, or junkyards must be provided.
 - b. Letters of evaluation of the development by the Chief of Police, Fire Chief, Commissioner of Public Works, and, for residential applications, the superintendent of schools, must be collected and provided by the Town Planner.
 - c. Additional Requirements. In its consideration of an application/plan, the Planning Board may at any point in the review, require the applicant to submit additional materials, studies, analyses, and agreement proposals as it may deem necessary for complete understanding of the application.
1. Such materials may include:
 1. Traffic impact study, including the following data:
 - a. An executive summary outlining the study findings and recommendations.
 - b. A physical description of the project site and study area encompassed by the report with a diagram of the site and its relationship to existing and proposed development sites within the study area.
 - c. A complete description of the proposed uses for the project site (in cases where specific uses have not been identified, the highest traffic generators within the category best fitting the proposed development must be used to estimate traffic generators).
 - d. Existing land uses and zone(s) in the vicinity of the site must be described. Any proposals for the development of vacant parcels or redevelopment of parcels within the study area of which the municipality makes the applicant aware, must be included in the description.
 - e. Roadway geometry and existing traffic control devices on all major streets and intersections affected by the anticipated traffic generated.
 - f. Trip generation must be calculated for the proposed project and other proposed new projects and redevelopment projects within the study area using the most recent data available from the Institute of Transportation Engineers' (ITE) Trip Generation Guide, and/or actual field data collected from a comparable trip generator (i.e., comparable in size, location and setting). This data will be presented in a summary table

structure and how such sites compare to the proposed site; other options, if any, which could be used to deliver similar services, particularly if the proposed equipment can be co-located (shared use) on an existing structure; and an analysis to the projected life cycle of this structure and location;

- c. Certification by a structural engineer that construction of the structure satisfies all federal, state and local building code requirements as well as the requirement of maximum permitted co-location at the site as approved by the Planning Board / Town Planner;
- d. Payment of all required performance guarantees as a condition of plan approval, with a note on the plan so stating;
- e. Payment of the Planning Board application fees;
- f. And all other requirements per Section 16.10.

16.10.7.2 Final Plan Application Submittal Content.

A. A complete final plan application must fulfill all the requirements of a preliminary plan as indicated in subsection 16.36.??? of this section and must show the following items, unless the Planning Board, by formal action, upon the applicant's written request, waives or defers any requirement(s) for submission. If no changes occurred to the preliminary plan it also may be considered to be the final plan.

B. Preliminary plan information including vicinity map and any amendments thereto suggested or required by the Planning Board, or other required reviewing agency;

C. Street names and lines, pedestrian ways, lots, easements, and areas to be reserved for or dedicated to public use;

D. Street length of all straight lines, the deflection angles, radii, lengths of curves and central angles of all curves, tangent distances and tangent bearings;

E. Lots and blocks within a subdivision numbered in accordance with local practice;

F. Markers/permanent reference monuments: Their location, source references, and where required, constructed in accordance with specifications herein;

G. Structures; their location and description including signs, to be placed on the site, floor plans and elevations of principal structures as well as detail of all structures showing building materials and colors, and accesses located within one hundred (100) feet of the property line;

H. Outdoor lighting and signage plan; if the

1. Lighting plan, if the application involves the construction of more than five thousand (5,000) square feet of nonresidential floor area, or the creation of more than twenty thousand (20,000) square feet of impervious area, or the creation of three or more dwelling units in a building; prepared by a qualified lighting professional, showing at least the following at the same scale as the site plan:

- a. All buildings, parking areas, driveways, service areas, pedestrian areas, landscaping, and proposed exterior lighting fixtures;
- b. All proposed lighting fixture specifications and illustrations including photometric data, designation as "cut-off" fixtures, color rendering index (CRI) of all lamps (bulbs), and other descriptive information on the fixtures;
- c. Mounting height of all exterior lighting fixtures;
- d. Lighting analyses and luminance level diagrams or photometric point by point diagrams on a twenty (20) foot grid showing that the proposed installation conforms to the lighting level standards of the ordinance codified in this Section together with statistical summaries documenting the average luminance, maximum luminance, minimum luminance, average to minimum uniformity ratio, and maximum to minimum uniformity ratio for each parking area, drive, canopy, and sales or storage area;

e. Drawings of all relevant building elevations showing the fixtures, the portions of the walls to be illuminated, the luminance levels of the walls, and the aiming points for any remote light fixtures; and

f. A narrative that describes the hierarchy of site lighting hierarchy and how the lighting will be used to provide safety, security, and aesthetic effects.

I. Machinery permanently installed locations likely to cause appreciable noise at the lot lines;

J. Materials (raw, finished or waste) storage areas, their types and location; and any stored toxic or hazardous materials, their types and locations;

K. Fences, retaining walls and other artificial features locations and dimensions proposed;

L. Landscaping plan including location, size, and type of plant material;

M. Boundary markers for protected land areas permanently marked using Town environmental boundary markers, their location and type. The five boundary markers are: (1) Conservation Land, (2) Protected Wetland, (3) Protected Vernal Pool, (4) Wildlife Habitat, and (5) Wetlands. Depending on the proposed development the required marker(s), number of markers, placement and spacing, and the method of mounting.

N. Municipal impact analysis of the relationship of the revenues to the Town from the development and the costs of additional publicly funded resources including;

1. Review for impacts. A list of the construction items that will be completed by the developer prior to the sale of lots.

2. Municipal construction and maintenance items. A list of construction and maintenance items that must be borne by the municipality, which must include, but not be limited to:

a.. Schools, including busing;

b. Road maintenance and snow removal;

c. Police and fire protection;

d. Solid waste disposal;

e. Recreation facilities;

f. Runoff water disposal drainage ways and/or storm sewer enlargement with sediment traps

3. Municipal costs and revenues. Cost estimates to the Town for the above services and the expected tax revenue of the development.

O. Open Space Land Cession Offers. Written offers of cession to the municipality of all public open space shown on the plan, and copies of agreements, or other documents showing the manner in which space(s), Code to which is reserved by the subdivider, are to be maintained.

P. Open Space Land Cession Offers Acknowledgement by Town. Written evidence that the municipal officers are satisfied with the legal sufficiency of the documents referred to in subsection (C)(2)(a) of this section. Such written evidence does not constitute an acceptance by the municipality of any public open space referred to in subsection (C)(2)(a) of this section.

Q. Performance Guaranty and Town Acceptance to secure completion of all improvements required by the Planning Board and written evidence the Town manager is satisfied with the sufficiency of such guaranty.

1. Where improvements for the common use of lessees or the general public have been approved, the Planning Board must require a performance guaranty of amount sufficient to pay for said improvements as a part of the agreement.

2. Process. Prior to the issue of a building permit, the applicant must, in an amount and form acceptable to the Town manager, file with the municipal treasurer an instrument to cover the full cost of the required improvements. A period of one year (or such other period as the Planning Board may determine appropriate, not to exceed three years) is the guaranty time within which required improvements must be completed. The performance guaranty must include an amount required for recreation land or improvements as specified.

R. Maintenance Plan and Agreement defining maintenance responsibilities, responsible parties, shared costs, and schedule. Where applicable, a Maintenance Agreement must be included in the Document of Covenants, Homeowners Documents and/or as riders to the individual deed.

S. Phasing Plan. Where, upon applicant's request, the Planning Board may permit phasing of the plans where it can be demonstrated to the Planning Board's satisfaction that such phasing would result in a safe and orderly development of the plan.

1. The applicant may file a section of the approved plan with the municipal officials and the York County registry of deeds if said section constitutes at least twenty-five percent (25%) of the total number of lots, or for plans including buildings, twenty-five percent (25%) of the gross area, contained in the approved plan. In all circumstances, plan approval of the remaining sections of the plan will remain in effect for three years unless the applicant requests and the Planning Board grants extensions of time equivalent to the requirements for approved plans in Section 16.36.050(E).

2. Phasing is subject to any conditions deemed necessary to assure a reasonable mixture of uses is completed within each separate phase of the plan.

3. Where projects are to be constructed in phases, phasing of stormwater management, water mains and streets are part of the review process.

4. Portions of both the developed and undeveloped site, impacted by interim infrastructure conditions such as un-looped water systems, stormwater runoff from unfinished areas onto finished areas and vice versa, dead end streets, etc., must be clearly defined and shown on the plans.

5. The Planning Board may permit construction of phases "out of order" only when the storm drainage plan and the water plan, etc. have been reviewed and it has been demonstrated that the impact on both the developed and undeveloped sections is negligible.

T. Right-of-Way Plan.

1. A completed application for a Planning Board approved right-of-way must include the requirements of Section 16.36.060 with the following modifications:

a. The following submission requirements are not necessary for Right-of-Way review: subsections (B)(2)(l), (m), (p), (r)—(w) and (z); (B)(3)(c)—(h); (B)(4); and (B)(5) of this section.

b. Subsection (B)(2) of this section modified so floor plans and elevations of principal structures are not required;

c. Include the size of the parcel minus the area in the ROW, and the street frontage excluding the ROW;

d. Only need to show and locate on the plan the names and addresses of all owners of record of contiguous property, including those across a street;

e. Include required front yards from the R.O.W. on the plan.

neil@civcon.com

From: outlook_5860CF8220E6E208@outlook.com <asiegel@maine.rr.com>
Sent: Tuesday, March 8, 2022 10:34 AM
To: neil@civcon.com
Subject: When Pigs Fly

“To whom it may concern

I authorize Civil Consultants to represent Christopher Hagan for Federal, State and Local permit applications pertaining to the proposed work at Town of Kittery Tax Map 61 Lot 27A, 460 US Route 1, Kittery, ME.

Andrew Siegel
Pig Pen Partners “

Sent from [Mail](#) for Windows

Commercial Development Modification – Kittery
460 U.S. Route 1



<p>Google Earth Image Kittery, Maine</p>		<p><i>Pig Pen Partners</i> 40 Brickyard Court, York, ME 03909 Site Location: 460 U.S. Route 1, Kittery, ME 03909</p>	
JOB NO: 09-185.04	NTS	DATE: January 2022	

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**CIVIL
CONSULTANTS**

P.O. Box 100 South Berwick, Maine 03908 207-384-2550

Google Image

WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS, That I, ANN E. BLAKE, Successor Trustee of Trust A of The HAROLD L. DURGIN FAMILY TRUST, and ANN E. BLAKE, Trustee of Trust B of The HAROLD L. DURGIN FAMILY TRUST, a trust created and existing under the laws of the State of Maine by a certain Revocable Trust Agreement dated February 25, 1993, for consideration paid, grant to PIG PEN PARTNERS, a Maine general partnership with a place of business at York, County of York and State of Maine, and whose mailing address is 40 Brickyard Court, York, Maine 03909, with WARRANTY COVENANTS, a certain lot or parcel of land, together with the buildings and improvements located thereon, situated at 460 U.S. Route 1, in the Town of Kittery, County of York and State of Maine, and being more specifically bounded and described as follows:

See attached EXHIBIT A for a more specific description of the premises herein conveyed, which description is hereby incorporated herein by this reference.

The premises described on **EXHIBIT A** are shown as "PROPOSED LOT "A"" on a certain plan entitled "**DIVISION OF LAND (TAX MAP 61, LOT 27) FOR TRUST A & TRUST B OF THE HAROLD L. DURGIN FAMILY TRUST (HAROLD L. DURGIN & ANN E. BLAKE, TRUSTEES)** 450 U.S. ROUTE 1 KITTERY, MAINE", dated May 23, 2006, by Doucet Survey, Inc., and recorded in the York County Registry of Deeds at Plan Book 311, Page 46.

The premises described on **EXHIBIT A** are conveyed subject to the following easements:

1. Easement from Harold L. Durgin and Sarah S. Durgin to the State of Maine as described in the fourth paragraph of the deed dated March 12, 1952 and recorded in the York County Registry of Deeds at Book 1204, Page 323; and,
2. Warranty Easement Deed from Ann E. Blake, successor Trustee of Trust A of the Harold L. Durgin Family Trust dated February 25, 1993, and Ann E. Blake, Trustee of Trust B of the Harold L. Durgin Family Trust dated February 25, 1993 to Kittery Commons, LLC dated June 9, 2006 and recorded in the York County Registry of Deeds at Book 14863, Page 0434.

Meaning and intending to convey and hereby conveying the remaining portion of the premises conveyed by (1) corrective quitclaim deed with covenants dated January 12, 2000 from Harold L. Durgin, Trustee of The Harold L. Durgin Family Trust Dated February 25, 1993 to Harold L. Durgin, Trustee of Trust A of The Harold L. Durgin Family Trust Dated February 25, 1993, and recorded in the York County Registry of Deeds at Book 10050, Page 256, and (2) corrective quitclaim deed with covenants dated January 12, 2000 from Harold L. Durgin, Trustee of The Harold L. Durgin Family Trust Dated February 25, 1993 to Ann E. Blake as Trustee of Trust B of The Harold L. Durgin Family Trust Dated February 25, 1993, and recorded in the York County Registry of Deeds at Book 10050, Page 259, and (3) by release deed dated April 19, 2000 from Flagship Management, Inc. to Ann E. Blake, Successor Trustee of Trust A of The Harold L. Durgin Family Trust Dated February 25, 1993 and Ann E. Blake, Trustee of Trust B of The Harold L. Durgin Family Trust Dated February 25, 1993 and recorded in the York County Registry of Deeds at Book 10279, Page 61. Pursuant to Article II of The Harold L. Durgin Family Trust Dated February 25, 1993, said Ann E. Blake became the Successor Trustee of Trust A of The Harold L. Durgin Family Trust upon the death of the surviving trustee Harold L. Durgin. Harold L. Durgin died on February 2, 2001.

IN WITNESS WHEREOF, the said Ann E. Blake, in her capacity as Successor Trustee of Trust A and Trustee of Trust B of The Harold L. Durgin Family Trust Dated February 25, 1993, has caused this instrument to be executed this 29th day of September, 2010.

**TRUST A of The HAROLD L. DURGIN
FAMILY TRUST Dated February 25, 1993**



Witness

By: Ann E. Blake
Ann E. Blake, Successor Trustee

**TRUST B of The HAROLD L. DURGIN
FAMILY TRUST Dated February 25, 1993**



Witness

By: Ann E. Blake
Ann E. Blake, Trustee

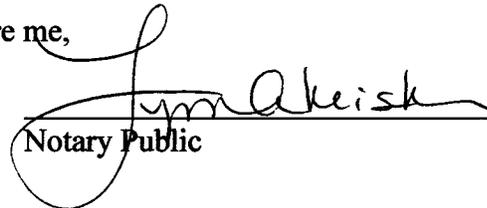
STATE OF MAINE

COUNTY OF YORK

September 29, 2010

Personally appeared the above-named Ann E. Blake, Successor Trustee of Trust A and Trustee of Trust B of The Harold L. Durgin Family Trust Dated February 25, 1993 and acknowledged the foregoing instrument to be her voluntary act and deed in her said capacities, and the voluntary act and deed of said Trust A and Trust B of The Harold L. Durgin Family Trust Dated February 25, 1993.

Before me,



Notary Public

Print Name: Lynn A. Keisker
Notary Public
My Commission Expires 05-14-2017

Instrument prepared by:
DEAN K. BOUFFARD, P.C.
74 State Road, Suite 205
Post Office Box 30
Kittery, Maine 03904-0030
(207) 439-6377

SEAL

EXHIBIT A

A certain lot or parcel of land, together with the buildings and improvements located thereon, situated on U.S. Route 1 and known as 460 U.S. Route 1, in Kittery, County of York and State of Maine, and being more specifically bounded and described as follows:

Beginning at a 5/8" rebar w/ID cap set in the easterly right-of-way line of Lewis Road and the southerly right-of-way line of U.S. Route 1 and thence proceeding North 66° 51' 32" East a distance of 1155.28 feet along the southerly right-of-way line of said U.S. Route 1 to a 2" iron pipe set at the end of a stone wall and land now or formerly of Donald C. and Barbara J. West;

Thence turning and proceeding along said stone wall the following courses and distances:

South 07° 39' 52" East a distance of 231.97 feet to an iron pipe in said stone wall;
South 07° 01' 24" East a distance of 17.66 feet to a fence post with barbed wire found in said stone wall;
South 15° 55' 22" East a distance of 119.30 feet to a 2" iron pipe in said stone wall;
and,
South 15° 38' 55" East a distance of 45.23 feet to a point;

Thence turning and proceeding South 43° 00' 00" West a distance of 135.35 feet along land now or formerly of Kittery Commons, LLC to a 5/8" rebar w/ID cap;

Thence turning and proceeding South 71° 06' 08" West a distance of 519.91 feet along said land now or formerly of Kittery Commons, LLC to a 5/8" rebar w/ID cap;

Thence proceeding South 64° 57' 32" West a distance of 407.72 feet still along said land now or formerly of Kittery Commons, LLC to a point in the easterly right-of-way line of said Lewis Road;

Thence turning and proceeding North 31° 20' 43" West a distance of 438.00 feet along the easterly right-of-way line of said Lewis Road to a 5/8" rebar w/ID cap set in the easterly right-of-way line of Lewis Road and the southerly right-of-way line of U.S. Route 1, and being the place of beginning.

Please return to: 4pgs E
Pig Pen Partners
40 Brickyard Ct.
York, ME 03909

END OF DOCUMENT

Warranty Easement Deed

Ann E. Blake, successor Trustee of Trust A of the Harold L. Durgin Family Trust dated February 25, 1993, and Ann E. Blake, Trustee of Trust B of the Harold L. Durgin Family Trust dated February 25, 1993 (hereafter collectively referred to as "Grantor", which expression shall include their successors and assigns forever), owner of a certain lot or parcel of land situated at the intersection of US Route 1 and Lewis Road in Kittery, Cumberland County, Maine, evidenced by certain deeds dated (a) January 12, 2000 recorded in the York County Registry of Deeds in Book 10050, Page 256; (b) January 12, 2000 recorded in said Registry in Book 10050, Page 259; (c) April 19, 2000 recorded in said Registry in Book 10279, Page 61, for good and valuable consideration, hereby grants to **Kittery Commons, LLC**, a Maine Limited Liability Company with a place of business in Scarborough, Cumberland County, Maine (hereinafter referred to as "Grantee", which expression shall include its successors and assigns forever), a certain exclusive and perpetual easement, running with the land, for the purposes more particularly described hereinafter. That portion of Grantor's aforesaid real estate which is subject to the easement rights herein granted is more particularly bounded and described as follows:

To reach the point of beginning for the easement described herein, commence at an iron rod marking the intersection of the southerly right-of-way line of US Route 1 and the easterly right-of-way line of Lewis Road in Kittery, York County, Maine, and thence running North 66° 51' 32" East along said southerly right-of-way line of US Route 1, 44.68 feet to a 6" square Maine Highway Monument, thence continuing North 66° 51' 32" East along said southerly right-of-way line of US Route 1 a distance of 425.32 feet to an iron rod with cap set flush, and then continuing North 66° 51' 32" East along said southerly right-of-way line of US Route 1 a distance of 111.04 feet to the **point of beginning** for the easement herein described and thereafter by the following bearing courses and distance:

South 05° 13' 26" East a distance of 83.52 feet to a point;

South 83° 09' 37" East a distance of 177.71 feet to a point;

South 38° 10' 22" East a distance of 220.59 feet to a point;

South 55° 28' 39" East a distance of 75.36 feet to a point on the northerly line of land to be conveyed to Kittery Commons, LLC by deed of near or even date herewith to be recorded in the York County Registry of Deeds;

South 71° 06' 08" West along a portion of the northerly line of said Kittery Commons, LLC land a distance of 49.81 feet to a point;

North 55° 28' 39" West a distance of 51.76 feet to a point;

North 38° 10' 22" West a distance of 210.11 feet to a point;

North 83° 09' 37" West a distance of 193.50 feet to a point;

North 05° 13' 26" West a distance of 102.94 feet to a point on the southerly right-of-way line of US Route 1;

North 66° 51' 32" East along said southerly right-of-way line of US Route 1 a distance of 42.04 feet to the point of beginning for the easement herein described.

The express purposes for which Grantee may utilize the above described portion of Grantor's land (hereinafter referred to as the "Easement Corridor") are as follows:

- A. Installation, inspection, examination, testing, maintenance, replacement, repair, removal, upgrade and restoration of potable water lines and related equipment, subsurface sewer lines and related equipment, natural gas lines and related equipment, and any and all other like utilities and/or services and equipment;
- B. Right to remove vegetation, materials, and any other matter determined by Grantee to be adverse to the performance or condition of the services to be located within the Easement Corridor as noted above, subject to those terms and provisions hereinafter set forth; and
- C. Right to access the Easement Corridor at all times and without notice for all purposes hereinabove stated in this Warranty Easement Deed.

Grantee hereby expressly warrants and covenants to Grantor that all work to be performed by Grantee pursuant to the rights granted herein shall be so performed in a good and workmanlike manner and shall be at sole expense of Grantee. Grantee further warrants and covenants to Grantor that during any installation of utilities permitted hereunder, should Grantee's permitted activity during installation extend beyond the Easement Corridor, said activity shall be temporarily permitted by Grantor provided Grantee shall at its own cost and expense restore Grantor's surrounding real estate outside the Easement Corridor to a condition at least equal in quality to that which existed prior to the commencement of the work. Grantee further warrants and covenants to Grantor that Grantee shall not utilize the Easement Corridor or any portion thereof for any purpose not specifically set forth herein. Grantee further warrants and covenants to Grantor that any damage to Grantor's real estate resulting from any malfunction of those permitted facilities installed within the Easement Corridor by Grantee shall be restored by Grantee at Grantee's sole cost and expense.

Grantor hereby warrants and covenants to Grantee that Grantor shall, neither directly nor indirectly, construct, erect, place, store or otherwise locate within the Easement Corridor any buildings, structures, equipment, inventory, goods, vehicles of any type or any other like structure or property, either permanently or temporarily, so as to prevent any damage, destruction, impediment, interference or other negative impact upon those facilities installed by Grantee within the Easement Corridor. Grantor further warrants and covenants to Grantee that in the event Grantor engages in any activity on Grantor's

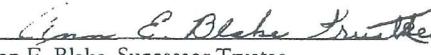
retained land which damages, destroys, impedes, restricts or otherwise negatively affects any of the utility services installed by Grantee within the Easement Corridor, Grantor shall, at its sole cost and expense, repair, replace, restore and otherwise remedy said damage to Grantee's reasonable satisfaction. Grantor further warrants and covenants to Grantee that in the event any excavation activity is performed on Grantor's retained land, Grantor shall abide by all Federal, State and Local rules and regulations relating to such excavation in order to preserve and protect the integrity of the facilities contained within the Easement Corridor, including but not limited to compliance with the "Dig-Safe" requirements in effect at the time of such excavation.

Notwithstanding the foregoing two (2) paragraphs, to the extent that the Easement Corridor extends over the existing driveway to the property, Grantee expressly warrants that all work shall be performed in a good and workmanlike manner and that the driveway shall be restored following such work to a condition at least equal in quality to that which existed prior to commencement of the work. Grantee further warrants that all work affecting the driveway portion of the Easement Corridor shall be completed expeditiously and with the minimum loss of use or disruption to Grantor.

In Witness Whereof, the Grantors have set their hands and seals on this 9th day of June, 2006.

Trust A of the Harold L. Durgin Family
Trust dated February 25, 1993


Witness

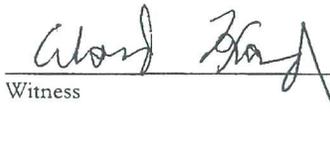
By: 
Ann E. Blake, Successor Trustee

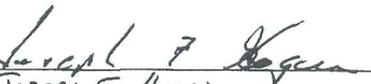
Trust B of the Harold L. Durgin Family
Trust dated February 25, 1993


Witness

By: 
Ann E. Blake, Trustee

Kittery Commons, LLC


Witness

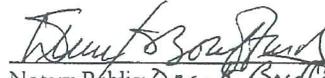
By: 
JOSEPH F. HOGAN
Its: Member

State of Maine
York, SS.

June 9, 2006

Then personally appeared the above-named **Ann E. Blake, Trustee of Trust A of the Harold L. Durgin Family Trust dated February 25, 1993**, in his/her said capacity, and the free act and deed of said **Trust A of the Harold L. Durgin Family Trust dated February 25, 1993**.

Before me,


Notary Public: Dean R. Southard, Attorney at Law
My Commission Expires: Indefinite

State of Maine
York, SS.

June 9, 2006

Then personally appeared the above-named **Ann E. Blake, successor Trustee of Trust B of the Harold L. Durgin Family Trust dated February 25, 1993** in his/her said capacity, and the free act and deed of said **Trust B of the Harold L. Durgin Family Trust dated February 25, 1993**.

Before me,


Notary Public: Dean R. Southard, Attorney at Law
My Commission Expires: Indefinite

State of Maine
York, SS.

June 9, 2006

Then personally appeared the above-named Joseph F. Hogan, duly authorized Member, of **Kittery Commons, LLC** and acknowledged the foregoing instrument to be his/her free act and deed, in his/her said capacity, and the free act and deed of said **Kittery Commons, LLC**.

Before me,


K. Alexander Visbaras, Attorney-At-Law

odh: H:\CLIENTS\Kittery Commons, LLC\US Route 1 - Lewis Road\Warranty Easement Deed

4p → Bonneau + Gesman
PO Box 7230
Houston Tex.
41243-7230

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ZONING

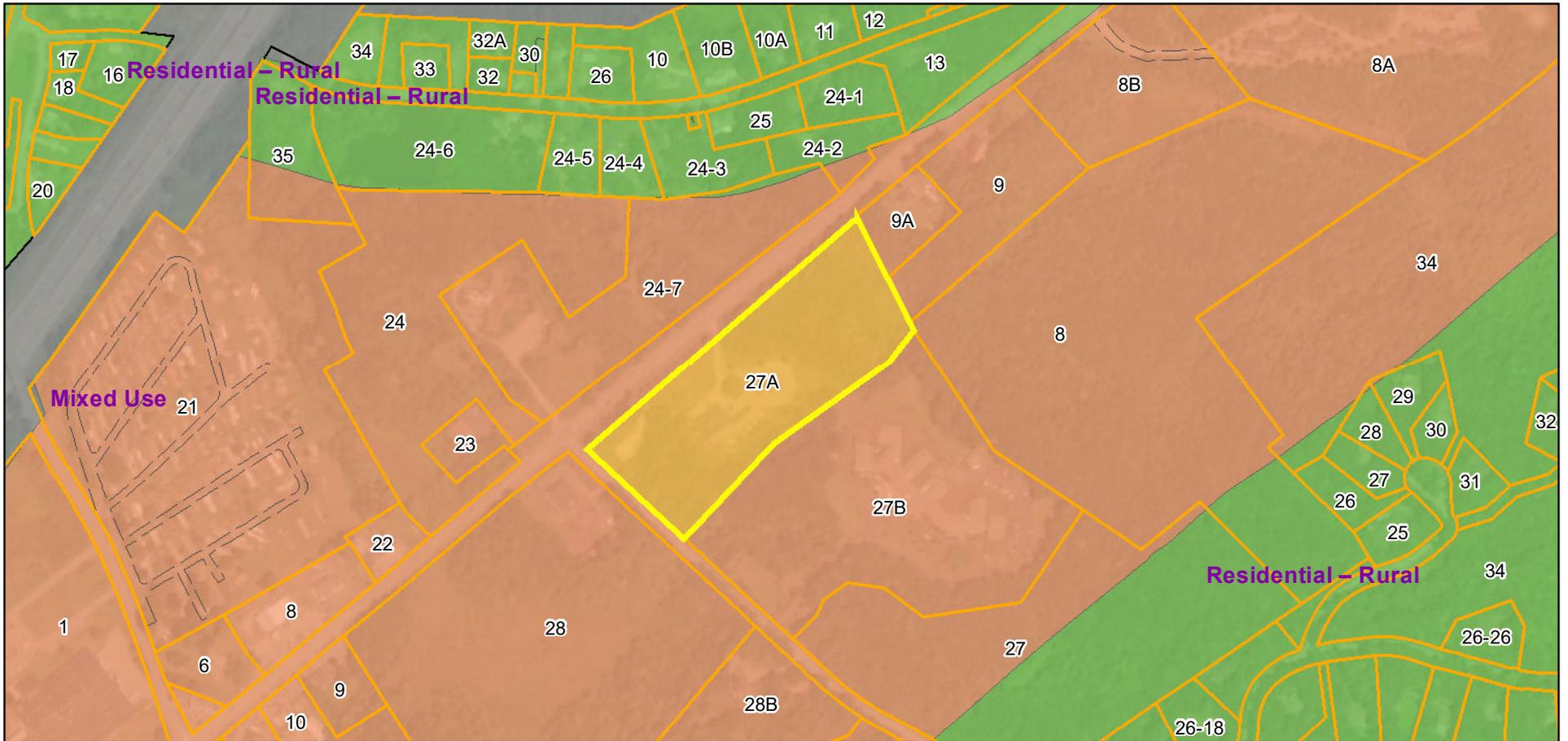
Kittery, ME



February 16, 2022

1 inch = 500 Feet

www.cai-tech.com



	Mixed Use
	Residential - Rural
	Transportation - Maine Turnpike

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



150 Foot Abutters

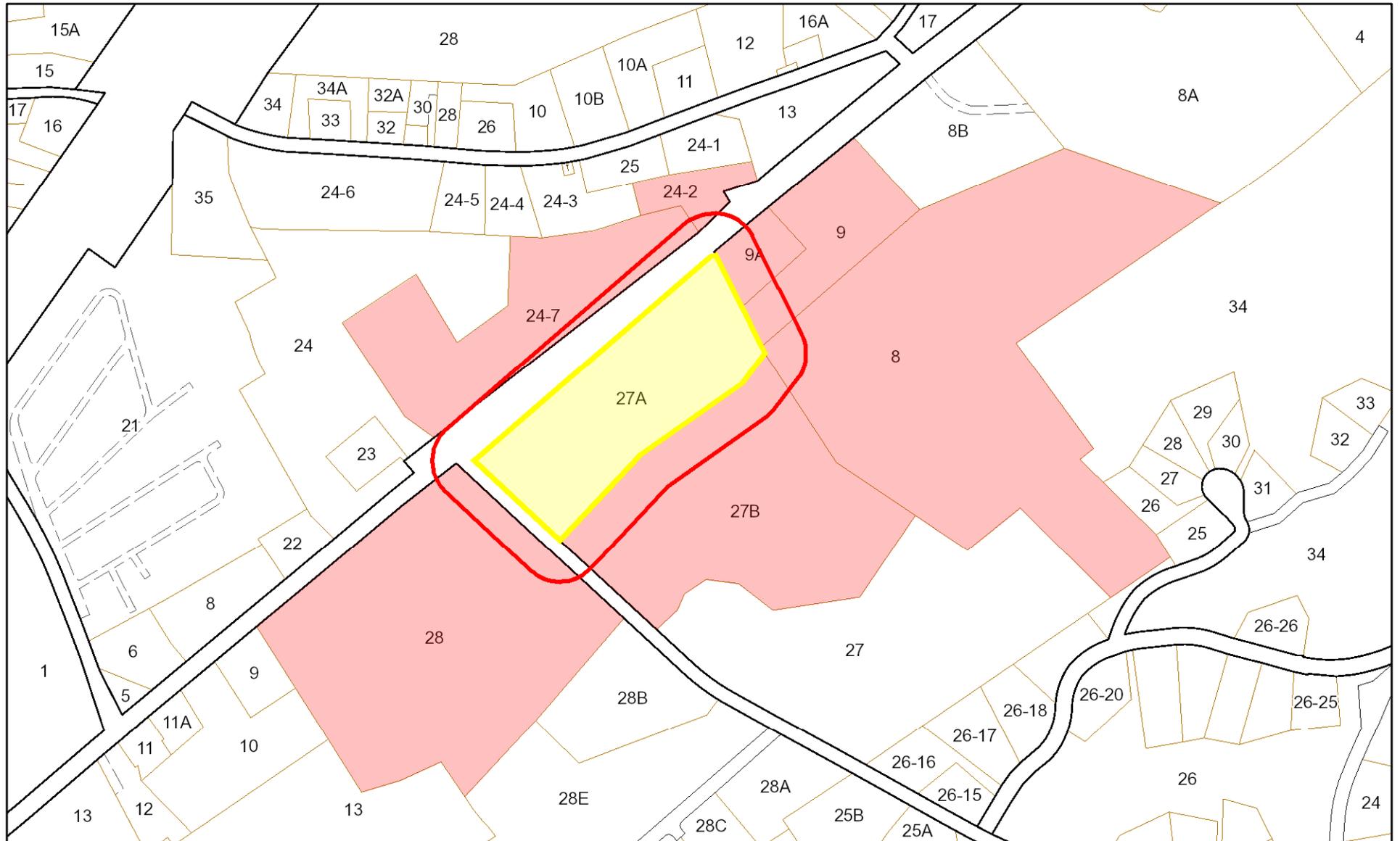
Kittery, ME



January 24, 2022

1 inch = 500 Feet

www.cai-tech.com



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



150 foot Abutters List Report

Kittery, ME
January 24, 2022

Subject Property:

Parcel Number: 61-27A
CAMA Number: 61-27A
Property Address: 460 US ROUTE 1

Mailing Address: PIG PEN PARTNERS
40 BRICKYARD COURT
YORK, ME 03909

Abutters:

Parcel Number: 60-24-2
CAMA Number: 60-24-2
Property Address: 9 ADAMS ROAD

Mailing Address: MOST FANTASTIC YOUNG FAMILY REV
TRUST OF 2021 YOUNG, KATHERINE S
& JOSEPH L
9 ADAMS ROAD
KITTERY, ME 03904

Parcel Number: 60-24-7
CAMA Number: 60-24-7
Property Address: US ROUTE 1

Mailing Address: JAI SHREE DURGA LAXMI LLC
736 SOUTHBRIDGE STREET
AUBURN, MA 01501

Parcel Number: 61-27B
CAMA Number: 61-27B
Property Address: 9 LEWIS ROAD

Mailing Address: KITTERY COMMONS LLC
250 GODDARD ROAD
LEWISTON, ME 04240

Parcel Number: 61-28
CAMA Number: 61-28
Property Address: 450 US ROUTE 1

Mailing Address: KITTERYDOM, LLC
100 CONIFER HILL DRIVE SUITE #402
DANVERS, MA 01923

Parcel Number: 67-8
CAMA Number: 67-8
Property Address: US ROUTE 1

Mailing Address: COBALT PROPERTIES LLC
PO BOX 868
CALAIS, ME 04619

Parcel Number: 67-9
CAMA Number: 67-9
Property Address: 484 US ROUTE 1

Mailing Address: CAPE HOUSE MANAGEMENT LLC
484 US ROUTE 1
KITTERY, ME 03904

Parcel Number: 67-9A
CAMA Number: 67-9A
Property Address: 480 US ROUTE 1

Mailing Address: PORTSMOUTH HOLDINGS, LLC
PO BOX 657
PORTSMOUTH, NH 03802



www.cai-tech.com

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.

Hydrologic Soil Group—York County, Maine



Map Scale: 1:5,730 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

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:
 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 20, Aug 31, 2021

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

Date(s) aerial images were photographed: Dec 31, 2009—Sep 9, 2017

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

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Bm	Biddeford mucky peat, 0 to 3 percent slopes	D	48.3	39.0%
BrB	Brayton and Westbury fine sandy loams, 0 to 8 percent slopes	D	11.1	8.9%
LnB	Lyman loam, 3 to 8 percent slopes, rocky	D	11.3	9.2%
LnC	Lyman loam, 8 to 15 percent slopes, rocky	D	9.4	7.6%
LyB	Lyman-Rock outcrop complex, 3 to 8 percent slopes	D	2.4	1.9%
LyC	Lyman-Rock outcrop complex, 8 to 15 percent slopes	D	3.5	2.8%
LyE	Lyman-Rock outcrop complex, 15 to 80 percent slopes	D	0.5	0.4%
MrB	Marlow fine sandy loam, 3 to 8 percent slopes	C	18.9	15.3%
PeB	Peru fine sandy loam, 3 to 8 percent slopes	C/D	14.5	11.7%
Sc	Scantic silt loam, 0 to 3 percent slopes	D	0.8	0.6%
SkB	Skerry fine sandy loam, 0 to 8 percent slopes	C/D	3.1	2.5%
Totals for Area of Interest			123.8	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



NATURAL RESOURCES

Kittery, ME



February 16, 2022

1 inch = 500 Feet

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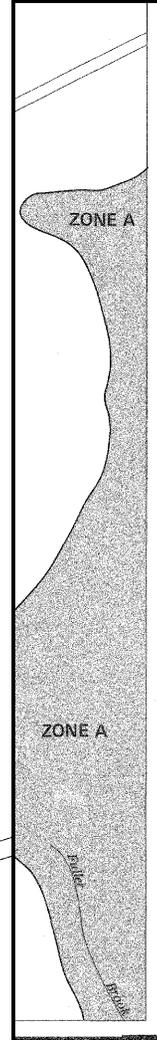
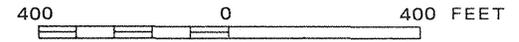


	Right of Way		Inland water Fowl - Wading Bird Habitat - MEGIS
	Cemetery		
	Private Road ROW		
	RoadNotPar		

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
KITTERY, MAINE
YORK COUNTY

PANEL 1 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

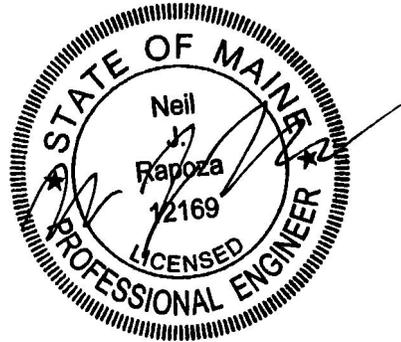
COMMUNITY-PANEL NUMBER
230171 0001 C

EFFECTIVE DATE:
JULY 5, 1984



Federal Emergency Management Agency

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.



The seal affixed above applies to this report, Appendices A through F (*from previous submission*), and Pre- & Post-Development Drainage Plans D1-D2.

***Town of Kittery Site Plan Application
Stormwater Management Plan***

**“WHEN PIGS FLY”
460 ROUTE 1, KITTERY, ME**

Prepared for

**Andrew Siegel
40 Brickyard Court
York, ME 03909**

**October 2010
(Revised March 2022)**



**CIVIL
CONSULTANTS**

Engineers

Planners

Surveyors

Stormwater Management Narrative

**TOWN OF KITTERY
STORMWATER MANAGEMENT PLAN**

**“WHEN PIGS FLY PIZZERIA”
460 US Route 1
Kittery, Maine**

Prepared for:

**Andrew Siegel
40 Brickyard Ct
York, ME 03909**

**October 2010
Revised March 2022**

PROJECT DESCRIPTION:

The proposed commercial development is located on Map 61, Lot 27A, which is situated on Route 1 in Kittery, ME. The project will consist of a new restaurant and food retail store, installation of new associated parking, and demolition of an existing building. Wherever possible, the intention is to re-use existing pavement and building foundations.

Of the site's 11.1 acres, approximately 2.2 acres will be considered developed upon completion of the proposed site improvements. This includes areas of buildings, driveway, parking, and drainage facilities, along with associated utilities, improved existing developed areas, and general site grading.

It is proposed that a 10,000 sf area will also be designated for outdoor dining. This area includes a 180 sf

outdoor bar and associated stonedust/hardpack access path.

Of the disturbed area, approximately ~~0.86~~ **0.89** acres is proposed new impervious (parking, drive, and roofs). The existing impervious cover on the site is approximately 0.42 acres (**prior to 1985**).

Much of the new development will consist of clearing vegetation and re-grading the areas adjacent to the proposed expanded building to allow for new parking. It also includes the disturbance necessary for the installation of the proposed level spreaders and other stormwater conveyance systems, as well as various utilities.

Control of peak stormwater flows from the site will be achieved through the use of a 40 ft stone bermed level lip spreader outletting to a grassed receiving area and a 100 ft stone bermed level lip spreader outletting to a forested receiving area.

The outlet control structures, culverts and other BMP's used to treat developed areas have been designed to the standards presented in "Stormwater Management for Maine – Vol III BMPs Technical Design Manual, January 2006" Rev April 2007.

The project will not create more than 3 acres of developed area or 1 acre of impervious area. Therefore, it will require only a Permit by Rule from the Maine DEP. The PBR Notification will be filed upon approval this site plan application, prior to the start of work.

EXISTING DRAINAGE CONDITIONS:

The site features currently include a 2,353 sf single family residence, and a 1,070 sf shed. There is 14,708 sf of



existing impervious parking/driveway area. The site is located directly on US Route 1 and access is gained through two existing one-way entrances.

The site is bound on the west by Lewis Road, which drains to a wetland feeding Wilson Creek. The receiving wetland to the east drains to Johnson Brook.

The slopes on the site vary between 1% and as much as 14%. Slopes average approximately 6% over the majority of the site.

The project drains west to the Wilson Creek. Flows leaving the site to the east drain to Johnson Brook. These are not listed as Urban Impaired Streams nor do they flow to any bodies of water listed as Lakes Most at Risk from New Development. (See Appendix A for a copy of the applicable USGS map).

Soils in the watershed are hydrologic type C & D. Medium Intensity Soils Mapping for the site was obtained using the USGS Web Soil Survey.

A designated one hundred (100) year flood area is located adjacent to the site with flood location shown on the attached flood map. No development or disturbance is planned within this area (See Appendix E for a copy of the applicable FEMA map).

PROPOSED DRAINAGE:

The majority of the proposed development will flow over land to one of two stone berm level lip spreaders.

Runoff from the eastern portion of the site will be directed to a 40' level spreader that will flow to wetlands associated with Johnson Brook.

Runoff from the western portion of the site will be directed to a 100' level spreader that will flow to wetlands associated with Wilson Creek.

The level spreader has been sized to dissipate flow volume and velocity, as outlined in the Maine DEP BMP Technical Design Manual.

METHODOLOGY:

All runoff calculations were performed using methods based on USDA-SCS Technical Release No. 20 (also known as TR-20). The two-, ten-, and twenty-five-year, twenty-four-hour storm events (Type III rainfall distribution) were used for the site-specific analysis to determine pre- and post-development peak discharge rates and required stormwater conveyance systems.

Runoff curve numbers (CN) and times of concentration (Tc) were determined by the methods outlined in USDA-SCS Technical Release No. 55 (better known as TR-55). On site watershed areas were determined using one-foot contour data provided by previously compiled topography plans. The applicable USGS Quadrangles were used to determine the extent of off-site drainage areas.

The detailed analysis for this project was performed by computer utilizing "HYDROCAD." The computer printouts are attached. **Analysis parameters were updated to align with current practices, including increasing the timeframe of the analysis and decreasing the increment of data points, in an effort to produce a more accurate evaluation of the runoff. This resulted in minor changes to both the pre- and post-development runoff and did not have an effect on**



sizing or capacity of the facilities in place.

As previously noted, USGS Web Soil Survey was used to determine the hydraulic designation for on- and off-site areas and areas that contribute to the development. The general distribution of soils is shown on the attached drainage plans.

The attached Pre- and Post Development plans (D1 & D2) show subcatchment boundaries, hydraulic flow lines, existing and proposed roads, and drainage features and facilities. Land cover type boundaries used in the model for on-site areas are also shown on the plan (i.e. tree lines, wetlands, etc).

ANALYSIS:

The overall perimeter of the watershed remained the same for both Pre- and Post Development.

There were five subcatchments identified for the Pre-Development analysis and six subcatchments identified for Post Development analysis. The modified areas were used to evaluate stormwater management facilities and modifications to the site.

The eastern discharge point (identified as OUT 1 in the calculations) includes flow from the site that outlets east to Johnson Brook. **A portion of this area includes the proposed outdoor bar and access path, along with the outdoor seating area which has been analyzed as having a surface area of 50-75% grass cover to account for the lawn damage due to patron foot traffic in the area.**

The northwestern discharge point (identified as OUT 2 in the calculations) includes runoff which converges at the

culvert at the intersection of Lewis Road and US Route 1. Flow from this culvert feeds a wetland draining to Wilson Creek. **A portion of this subcatchment also includes some outdoor dining area, and has been analyzed similarly to comparable areas that drain to OUT 1 (see above).**

The western discharge point (identified as OUT 3 in the calculations) includes runoff which converges to the culvert at the Lewis Road crossing. Flow from this culvert feeds a wetland draining to Wilson Creek. **A portion of this area was temporarily cleared to allow for overflow gravel parking. This has since been abandoned and allowed to return to natural land cover. This has been conservatively analyzed as 50-75% grass cover for this study.**

The post-development discharge point captures the same flows as described above for the post analysis and are also labeled OUT 1, matching the pre designation.

For further details regarding subcatchment determination, refer to sheets D1 & D2 included in the appendix of this report.

RESULTS:

In order to meet the Town requirement that downstream waterways and abutters are not adversely affected, we have attempted to hold Post-Development flows at or below Pre-Development levels.

The following tables summarize the results of the analyses for the 2-, 10-, and 25-year events:



TWO-YEAR EVENT -

Discharge Point Designation Pre/Post	Peak Runoff (in cfs)		Change (cfs)
	Pre	Post	
OUT 1	<u>7.61</u>	<u>7.32</u>	<u>-0.29</u>
OUT 2	<u>2.24</u>	<u>2.24</u>	<u>N/C</u>
OUT 3	<u>8.51</u>	<u>8.51</u>	<u>N/C</u>

TEN-YEAR EVENT -

Discharge Point Designation Pre/Post	Peak Runoff (in cfs)		Change (cfs)
	Pre	Post	
OUT 1	<u>15.00</u>	<u>14.24</u>	<u>-0.76</u>
OUT 2	<u>3.79</u>	<u>3.79</u>	<u>N/C</u>
OUT 3	<u>16.62</u>	<u>16.29</u>	<u>-0.32</u>

TWENTY-FIVE YEAR EVENT -

Discharge Point Designation Pre/Post	Peak Runoff (in cfs)		Change (cfs)
	Pre	Post	
OUT 1	<u>20.00</u>	<u>18.89</u>	<u>-1.11</u>
OUT 2	<u>4.80</u>	<u>4.80</u>	<u>N/C</u>
OUT 3	<u>22.15</u>	<u>21.55</u>	<u>-0.60</u>

As shown in the tables, peak flows are maintained or reduced in all storm events. The reduction in flows in the larger events is expected to have a positive impact on the adjacent wetlands.

The change in land cover due to outdoor dining and modified model parameters in the revised analysis and did not raise runoff rates beyond the previously existing flows in any storm event.

CONCLUSIONS:

The proposed development will utilize new stormwater BMP's to generally reduce or maintain Post-Development peak runoff rates to Pre-Development rates by increasing the time of concentration of the contributing flows.

It is our opinion that there will be no adverse downstream impacts as a result of this project.

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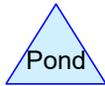
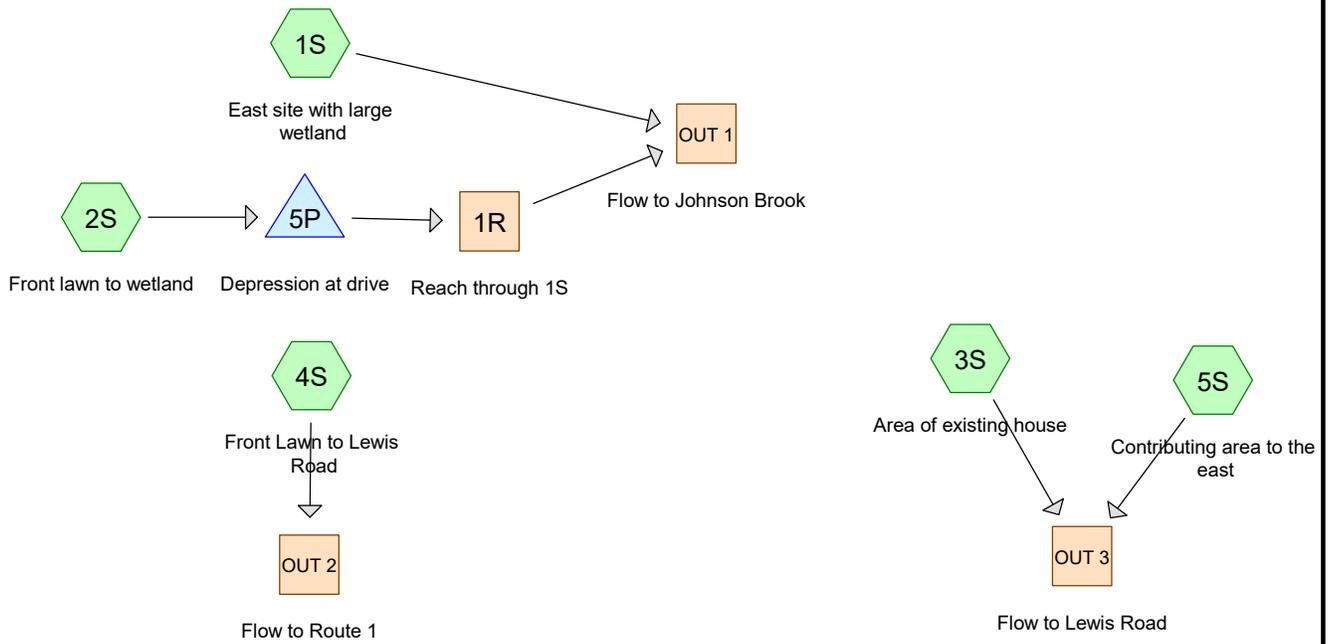
**CIVIL
CONSULTANTS**

Engineers

Planners

Surveyors

Pre-Development Calculations



Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.067	79	50-75% Grass cover, Fair, HSG C (1S, 3S, 4S)
0.557	74	>75% Grass cover, Good, HSG C (2S)
0.288	98	Paved parking, HSG C (2S, 4S)
0.675	92	Paved roads w/open ditches, 50% imp, HSG C (2S, 3S, 4S)
1.405	93	Paved roads w/open ditches, 50% imp, HSG D (1S, 2S, 3S, 5S)
0.202	98	Roofs, HSG C (3S)
10.898	73	Woods, Fair, HSG C (1S, 3S, 5S)
4.666	79	Woods, Fair, HSG D (1S, 3S, 5S)
20.758	78	TOTAL AREA

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
14.687	HSG C	1S, 2S, 3S, 4S, 5S
6.071	HSG D	1S, 2S, 3S, 5S
0.000	Other	
20.758		TOTAL AREA

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	2.067	0.000	0.000	2.067	50-75% Grass cover, Fair	
0.000	0.000	0.557	0.000	0.000	0.557	>75% Grass cover, Good	
0.000	0.000	0.288	0.000	0.000	0.288	Paved parking	
0.000	0.000	0.675	1.405	0.000	2.080	Paved roads w/open ditches, 50% imp	
0.000	0.000	0.202	0.000	0.000	0.202	Roofs	
0.000	0.000	10.898	4.666	0.000	15.564	Woods, Fair	
0.000	0.000	14.687	6.071	0.000	20.758	TOTAL AREA	

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East site with large Runoff Area=332,681 sf 3.67% Impervious Runoff Depth=1.11"
 Flow Length=610' Tc=14.9 min CN=77 Runoff=7.26 cfs 0.708 af

Subcatchment 2S: Front lawn to wetland Runoff Area=0.870 ac 27.07% Impervious Runoff Depth=1.43"
 Flow Length=218' Tc=7.2 min CN=82 Runoff=1.39 cfs 0.103 af

Subcatchment 3S: Area of existing house Runoff Area=5.519 ac 6.83% Impervious Runoff Depth=1.11"
 Flow Length=600' Tc=23.8 min CN=77 Runoff=4.35 cfs 0.512 af

Subcatchment 4S: Front Lawn to Lewis Runoff Area=1.248 ac 26.52% Impervious Runoff Depth=1.64"
 Flow Length=425' Tc=8.0 min CN=85 Runoff=2.24 cfs 0.170 af

Subcatchment 5S: Contributing area to the Runoff Area=5.484 ac 5.59% Impervious Runoff Depth=1.11"
 Flow Length=783' Tc=25.6 min CN=77 Runoff=4.18 cfs 0.509 af

Reach 1R: Reach through 1S Avg. Flow Depth=0.04' Max Vel=0.23 fps Inflow=1.31 cfs 0.103 af
 n=0.050 L=760.0' S=0.0053 '/' Capacity=51.83 cfs Outflow=0.45 cfs 0.103 af

Reach OUT 1: Flow to Johnson Brook Inflow=7.61 cfs 0.812 af
 Outflow=7.61 cfs 0.812 af

Reach OUT 2: Flow to Route 1 Inflow=2.24 cfs 0.170 af
 Outflow=2.24 cfs 0.170 af

Reach OUT 3: Flow to Lewis Road Inflow=8.51 cfs 1.020 af
 Outflow=8.51 cfs 1.020 af

Pond 5P: Depression at drive Peak Elev=58.20' Storage=99 cf Inflow=1.39 cfs 0.103 af
 12.0" Round Culvert n=0.013 L=58.0' S=0.0603 '/' Outflow=1.31 cfs 0.103 af

Total Runoff Area = 20.758 ac Runoff Volume = 2.002 af Average Runoff Depth = 1.16"
92.63% Pervious = 19.228 ac 7.37% Impervious = 1.530 ac

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East site with large Runoff Area=332,681 sf 3.67% Impervious Runoff Depth=2.11"
Flow Length=610' Tc=14.9 min CN=77 Runoff=14.23 cfs 1.340 af

Subcatchment 2S: Front lawn to wetland Runoff Area=0.870 ac 27.07% Impervious Runoff Depth=2.52"
Flow Length=218' Tc=7.2 min CN=82 Runoff=2.47 cfs 0.183 af

Subcatchment 3S: Area of existing house Runoff Area=5.519 ac 6.83% Impervious Runoff Depth=2.11"
Flow Length=600' Tc=23.8 min CN=77 Runoff=8.48 cfs 0.968 af

Subcatchment 4S: Front Lawn to Lewis Runoff Area=1.248 ac 26.52% Impervious Runoff Depth=2.79"
Flow Length=425' Tc=8.0 min CN=85 Runoff=3.79 cfs 0.290 af

Subcatchment 5S: Contributing area to the Runoff Area=5.484 ac 5.59% Impervious Runoff Depth=2.11"
Flow Length=783' Tc=25.6 min CN=77 Runoff=8.17 cfs 0.962 af

Reach 1R: Reach through 1S Avg. Flow Depth=0.06' Max Vel=0.30 fps Inflow=2.11 cfs 0.183 af
n=0.050 L=760.0' S=0.0053 '/' Capacity=51.83 cfs Outflow=1.00 cfs 0.183 af

Reach OUT 1: Flow to Johnson Brook Inflow=15.00 cfs 1.523 af
Outflow=15.00 cfs 1.523 af

Reach OUT 2: Flow to Route 1 Inflow=3.79 cfs 0.290 af
Outflow=3.79 cfs 0.290 af

Reach OUT 3: Flow to Lewis Road Inflow=16.62 cfs 1.931 af
Outflow=16.62 cfs 1.931 af

Pond 5P: Depression at drive Peak Elev=58.50' Storage=286 cf Inflow=2.47 cfs 0.183 af
12.0" Round Culvert n=0.013 L=58.0' S=0.0603 '/' Outflow=2.11 cfs 0.183 af

Total Runoff Area = 20.758 ac Runoff Volume = 3.744 af Average Runoff Depth = 2.16"
92.63% Pervious = 19.228 ac 7.37% Impervious = 1.530 ac

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East site with large Runoff Area=332,681 sf 3.67% Impervious Runoff Depth=2.79"
Flow Length=610' Tc=14.9 min CN=77 Runoff=18.97 cfs 1.776 af

Subcatchment 2S: Front lawn to wetland Runoff Area=0.870 ac 27.07% Impervious Runoff Depth=3.26"
Flow Length=218' Tc=7.2 min CN=82 Runoff=3.18 cfs 0.236 af

Subcatchment 3S: Area of existing house Runoff Area=5.519 ac 6.83% Impervious Runoff Depth=2.79"
Flow Length=600' Tc=23.8 min CN=77 Runoff=11.29 cfs 1.284 af

Subcatchment 4S: Front Lawn to Lewis Runoff Area=1.248 ac 26.52% Impervious Runoff Depth=3.55"
Flow Length=425' Tc=8.0 min CN=85 Runoff=4.80 cfs 0.370 af

Subcatchment 5S: Contributing area to the Runoff Area=5.484 ac 5.59% Impervious Runoff Depth=2.79"
Flow Length=783' Tc=25.6 min CN=77 Runoff=10.88 cfs 1.276 af

Reach 1R: Reach through 1S Avg. Flow Depth=0.07' Max Vel=0.34 fps Inflow=2.51 cfs 0.236 af
n=0.050 L=760.0' S=0.0053 '/' Capacity=51.83 cfs Outflow=1.39 cfs 0.236 af

Reach OUT 1: Flow to Johnson Brook Inflow=20.00 cfs 2.013 af
Outflow=20.00 cfs 2.013 af

Reach OUT 2: Flow to Route 1 Inflow=4.80 cfs 0.370 af
Outflow=4.80 cfs 0.370 af

Reach OUT 3: Flow to Lewis Road Inflow=22.15 cfs 2.559 af
Outflow=22.15 cfs 2.559 af

Pond 5P: Depression at drive Peak Elev=58.71' Storage=489 cf Inflow=3.18 cfs 0.236 af
12.0" Round Culvert n=0.013 L=58.0' S=0.0603 '/' Outflow=2.51 cfs 0.236 af

Total Runoff Area = 20.758 ac Runoff Volume = 4.941 af Average Runoff Depth = 2.86"
92.63% Pervious = 19.228 ac 7.37% Impervious = 1.530 ac

Summary for Subcatchment 1S: East site with large wetland

Runoff = 18.97 cfs @ 12.20 hrs, Volume= 1.776 af, Depth= 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (sf)	CN	Description
113,178	79	Woods, Fair, HSG D
180,503	73	Woods, Fair, HSG C
24,400	93	Paved roads w/open ditches, 50% imp, HSG D
14,600	79	50-75% Grass cover, Fair, HSG C
332,681	77	Weighted Average
320,481		96.33% Pervious Area
12,200		3.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	100	0.0900	0.21		Sheet Flow, 1.1 Grass: Dense n= 0.240 P2= 3.00"
0.4	45	0.0600	1.71		Shallow Concentrated Flow, 1.2 Short Grass Pasture Kv= 7.0 fps
1.6	125	0.0720	1.34		Shallow Concentrated Flow, 1.3 Woodland Kv= 5.0 fps
4.8	340	0.0150	1.19	22.36	Trap/Vee/Rect Channel Flow, 1.4 Bot.W=50.00' D=0.25' Z= 100.0 '/' Top.W=100.00' n= 0.050 Scattered brush, heavy weeds
14.9	610	Total			

Summary for Subcatchment 2S: Front lawn to wetland

Runoff = 3.18 cfs @ 12.10 hrs, Volume= 0.236 af, Depth= 3.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
0.158	98	Paved parking, HSG C
0.120	92	Paved roads w/open ditches, 50% imp, HSG C
0.557	74	>75% Grass cover, Good, HSG C
0.035	93	Paved roads w/open ditches, 50% imp, HSG D
0.870	82	Weighted Average
0.634		72.93% Pervious Area
0.235		27.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0310	0.17		Sheet Flow, 2.1 Grass: Short n= 0.150 P2= 3.00"
2.3	168	0.0300	1.21		Shallow Concentrated Flow, 2.2 Short Grass Pasture Kv= 7.0 fps
7.2	218	Total			

Summary for Subcatchment 3S: Area of existing house

Runoff = 11.29 cfs @ 12.34 hrs, Volume= 1.284 af, Depth= 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
3.516	73	Woods, Fair, HSG C
0.435	79	Woods, Fair, HSG D
0.153	92	Paved roads w/open ditches, 50% imp, HSG C
0.197	93	Paved roads w/open ditches, 50% imp, HSG D
0.202	98	Roofs, HSG C
1.016	79	50-75% Grass cover, Fair, HSG C
5.519	77	Weighted Average
5.142		93.17% Pervious Area
0.377		6.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	75	0.0247	0.08		Sheet Flow, 3.1 Woods: Light underbrush n= 0.400 P2= 3.00"
3.7	170	0.0240	0.77		Shallow Concentrated Flow, 3.2 Woodland Kv= 5.0 fps
2.9	180	0.0440	1.05		Shallow Concentrated Flow, 3.3 Woodland Kv= 5.0 fps
1.0	175	0.0150	2.97	88.26	Trap/Vee/Rect Channel Flow, 3.5 Bot.W=50.00' D=0.50' Z= 8.0 & 30.0 ' Top.W=69.00' n= 0.035 Scattered brush, heavy weeds
23.8	600	Total			

Summary for Subcatchment 4S: Front Lawn to Lewis Road

Runoff = 4.80 cfs @ 12.11 hrs, Volume= 0.370 af, Depth= 3.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
0.402	92	Paved roads w/open ditches, 50% imp, HSG C
0.130	98	Paved parking, HSG C
0.716	79	50-75% Grass cover, Fair, HSG C
1.248	85	Weighted Average
0.917		73.48% Pervious Area
0.331		26.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0310	0.17		Sheet Flow, 4.1 Grass: Short n= 0.150 P2= 3.00"
2.1	155	0.0310	1.23		Shallow Concentrated Flow, 4.2 Short Grass Pasture Kv= 7.0 fps
1.0	220	0.0270	3.52	2.86	Trap/Vee/Rect Channel Flow, 4.3 Bot.W=2.00' D=0.25' Z= 5.0 '/' Top.W=4.50' n= 0.022 Earth, clean & straight
8.0	425	Total			

Summary for Subcatchment 5S: Contributing area to the east

Runoff = 10.88 cfs @ 12.37 hrs, Volume= 1.276 af, Depth= 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
3.238	73	Woods, Fair, HSG C
1.633	79	Woods, Fair, HSG D
0.613	93	Paved roads w/open ditches, 50% imp, HSG D
5.484	77	Weighted Average
5.178		94.41% Pervious Area
0.306		5.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.9	100	0.0300	0.09		Sheet Flow, 3.1 Woods: Light underbrush n= 0.400 P2= 3.00"
3.1	145	0.0240	0.77		Shallow Concentrated Flow, 3.2 Woodland Kv= 5.0 fps
0.2	30	0.0330	2.92		Shallow Concentrated Flow, 3.3 Unpaved Kv= 16.1 fps
1.8	142	0.0700	1.32		Shallow Concentrated Flow, 3.4 Woodland Kv= 5.0 fps
1.6	366	0.0164	3.92	10.29	Trap/Vee/Rect Channel Flow, 3.5 Bot.W=2.00' D=0.50' Z= 3.0 & 10.0 '/' Top.W=8.50' n= 0.022 Earth, clean & straight
25.6	783	Total			

Summary for Reach 1R: Reach through 1S

Inflow Area = 0.870 ac, 27.07% Impervious, Inflow Depth = 3.26" for 25 yr event
 Inflow = 2.51 cfs @ 12.17 hrs, Volume= 0.236 af
 Outflow = 1.39 cfs @ 12.40 hrs, Volume= 0.236 af, Atten= 45%, Lag= 14.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3
 Max. Velocity= 0.34 fps, Min. Travel Time= 37.0 min
 Avg. Velocity = 0.09 fps, Avg. Travel Time= 138.2 min

Peak Storage= 3,086 cf @ 12.40 hrs
 Average Depth at Peak Storage= 0.07'
 Bank-Full Depth= 0.50' Flow Area= 50.0 sf, Capacity= 51.83 cfs

50.00' x 0.50' deep channel, n= 0.050 Scattered brush, heavy weeds
 Side Slope Z-value= 100.0 ' ' Top Width= 150.00'
 Length= 760.0' Slope= 0.0053 ' '
 Inlet Invert= 48.00', Outlet Invert= 44.00'



Summary for Reach OUT 1: Flow to Johnson Brook

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 8.507 ac, 6.06% Impervious, Inflow Depth = 2.84" for 25 yr event
 Inflow = 20.00 cfs @ 12.21 hrs, Volume= 2.013 af
 Outflow = 20.00 cfs @ 12.21 hrs, Volume= 2.013 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Reach OUT 2: Flow to Route 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.248 ac, 26.52% Impervious, Inflow Depth = 3.55" for 25 yr event
 Inflow = 4.80 cfs @ 12.11 hrs, Volume= 0.370 af
 Outflow = 4.80 cfs @ 12.11 hrs, Volume= 0.370 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Reach OUT 3: Flow to Lewis Road

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 11.003 ac, 6.21% Impervious, Inflow Depth = 2.79" for 25 yr event
 Inflow = 22.15 cfs @ 12.35 hrs, Volume= 2.559 af
 Outflow = 22.15 cfs @ 12.35 hrs, Volume= 2.559 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Pond 5P: Depression at drive

Inflow Area = 0.870 ac, 27.07% Impervious, Inflow Depth = 3.26" for 25 yr event
 Inflow = 3.18 cfs @ 12.10 hrs, Volume= 0.236 af
 Outflow = 2.51 cfs @ 12.17 hrs, Volume= 0.236 af, Atten= 21%, Lag= 4.1 min
 Primary = 2.51 cfs @ 12.17 hrs, Volume= 0.236 af

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3

Peak Elev= 58.71' @ 12.17 hrs Surf.Area= 1,108 sf Storage= 489 cf

Plug-Flow detention time= 1.5 min calculated for 0.236 af (100% of inflow)

Center-of-Mass det. time= 1.5 min (817.3 - 815.8)

Volume	Invert	Avail.Storage	Storage Description
#1	57.50'	3,818 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
57.50	20	0	0
58.00	150	43	43
59.00	1,500	825	868
60.00	4,400	2,950	3,818

Device	Routing	Invert	Outlet Devices
#1	Primary	57.50'	12.0" Round Culvert L= 58.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.50' / 54.00' S= 0.0603 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.51 cfs @ 12.17 hrs HW=58.71' TW=48.06' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 2.51 cfs @ 3.20 fps)



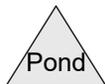
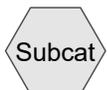
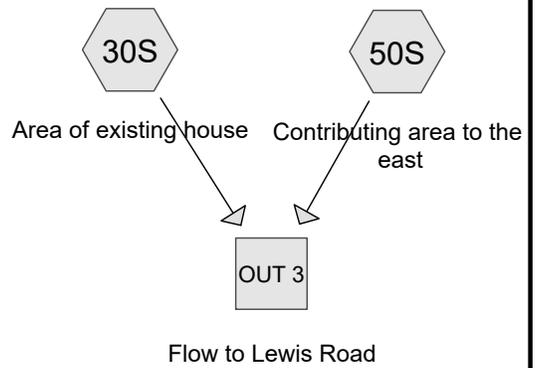
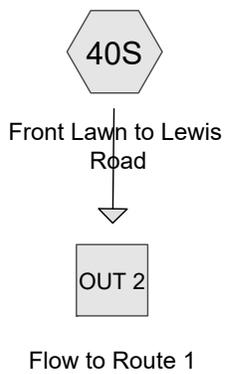
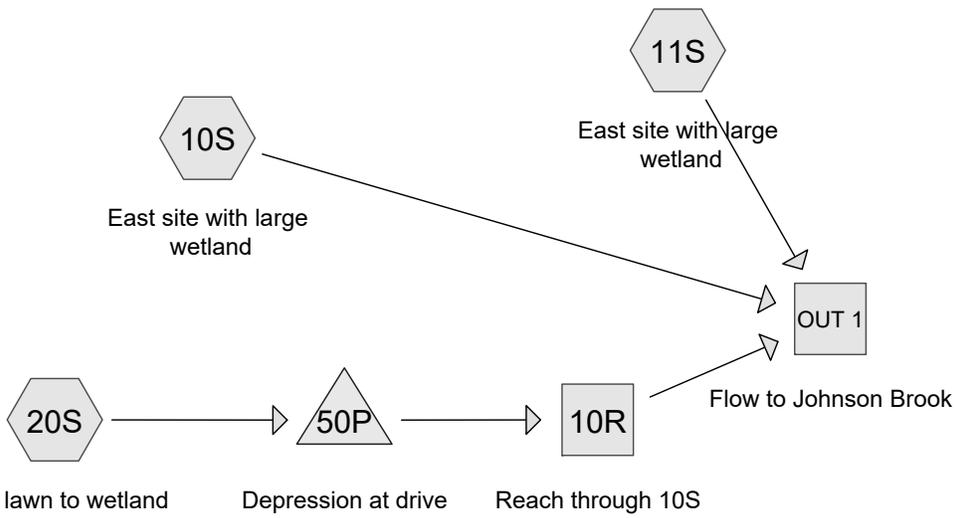
**CIVIL
CONSULTANTS**

Engineers

Planners

Surveyors

Post-Development Calculations



Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.815	79	50-75% Grass cover, Fair, HSG C (30S, 40S)
0.137	79	50-75% Grass cover, Fair, HSG C (OUTDOOR DINING) (20S)
0.783	74	>75% Grass cover, Good, HSG C (10S, 20S)
0.122	70	Brush, Fair, HSG C (RECLAIMED GRAVEL PARKING) (50S)
0.013	96	Gravel surface, HSG C (WALKWAY TO BAR) (20S)
0.649	98	Paved parking, HSG C (10S, 20S, 40S)
0.675	92	Paved roads w/open ditches, 50% imp, HSG C (20S, 30S, 40S)
1.405	93	Paved roads w/open ditches, 50% imp, HSG D (10S, 20S, 30S, 50S)
0.728	98	Roofs, HSG C (30S)
0.004	98	Roofs, HSG C (OUTDOOR BAR BLDG) (20S)
9.764	73	Woods, Fair, HSG C (10S, 11S, 30S, 50S)
4.666	79	Woods, Fair, HSG D (10S, 11S, 30S, 50S)
20.761	79	TOTAL AREA

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
14.690	HSG C	10S, 11S, 20S, 30S, 40S, 50S
6.071	HSG D	10S, 11S, 20S, 30S, 50S
0.000	Other	
20.761		TOTAL AREA

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Prepared by Civil Consultants

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	1.952	0.000	0.000	1.952	50-75% Grass cover, Fair	
0.000	0.000	0.783	0.000	0.000	0.783	>75% Grass cover, Good	
0.000	0.000	0.122	0.000	0.000	0.122	Brush, Fair	
0.000	0.000	0.013	0.000	0.000	0.013	Gravel surface	
0.000	0.000	0.649	0.000	0.000	0.649	Paved parking	
0.000	0.000	0.675	1.405	0.000	2.080	Paved roads w/open ditches, 50% imp	
0.000	0.000	0.732	0.000	0.000	0.732	Roofs	
0.000	0.000	9.764	4.666	0.000	14.430	Woods, Fair	
0.000	0.000	14.690	6.071	0.000	20.761	TOTAL AREA	

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10S: East site with large Runoff Area=5.366 ac 11.68% Impervious Runoff Depth=1.23"
Flow Length=630' Tc=18.7 min CN=79 Runoff=5.24 cfs 0.551 af

Subcatchment 11S: East site with large Runoff Area=2.181 ac 0.00% Impervious Runoff Depth=0.95"
Flow Length=610' Tc=14.9 min CN=74 Runoff=1.71 cfs 0.172 af

Subcatchment 20S: Front lawn to wetland Runoff Area=37,897 sf 29.15% Impervious Runoff Depth=1.50"
Flow Length=218' Tc=7.2 min CN=83 Runoff=1.46 cfs 0.108 af

Subcatchment 30S: Area of existing house Runoff Area=5.612 ac 16.09% Impervious Runoff Depth=1.23"
Flow Length=750' Tc=31.1 min CN=79 Runoff=4.41 cfs 0.576 af

Subcatchment 40S: Front Lawn to Lewis Runoff Area=54,363 sf 26.52% Impervious Runoff Depth=1.64"
Flow Length=425' Tc=8.0 min CN=85 Runoff=2.24 cfs 0.170 af

Subcatchment 50S: Contributing area to the Runoff Area=5.484 ac 5.59% Impervious Runoff Depth=1.11"
Flow Length=783' Tc=25.6 min CN=77 Runoff=4.18 cfs 0.509 af

Reach 10R: Reach through 10S Avg. Flow Depth=0.04' Max Vel=0.24 fps Inflow=1.37 cfs 0.108 af
n=0.050 L=760.0' S=0.0053 '/ Capacity=51.83 cfs Outflow=0.49 cfs 0.108 af

Reach OUT 1: Flow to Johnson Brook Inflow=7.32 cfs 0.832 af
Outflow=7.32 cfs 0.832 af

Reach OUT 2: Flow to Route 1 Inflow=2.24 cfs 0.170 af
Outflow=2.24 cfs 0.170 af

Reach OUT 3: Flow to Lewis Road Inflow=8.51 cfs 1.085 af
Outflow=8.51 cfs 1.085 af

Pond 50P: Depression at drive Peak Elev=58.22' Storage=107 cf Inflow=1.46 cfs 0.108 af
12.0" Round Culvert n=0.013 L=58.0' S=0.0603 '/ Outflow=1.37 cfs 0.108 af

Total Runoff Area = 20.761 ac Runoff Volume = 2.087 af Average Runoff Depth = 1.21"
88.34% Pervious = 18.340 ac 11.66% Impervious = 2.421 ac

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10S: East site with large Runoff Area=5.366 ac 11.68% Impervious Runoff Depth=2.27"
Flow Length=630' Tc=18.7 min CN=79 Runoff=9.86 cfs 1.014 af

Subcatchment 11S: East site with large Runoff Area=2.181 ac 0.00% Impervious Runoff Depth=1.87"
Flow Length=610' Tc=14.9 min CN=74 Runoff=3.57 cfs 0.340 af

Subcatchment 20S: Front lawn to wetland Runoff Area=37,897 sf 29.15% Impervious Runoff Depth=2.61"
Flow Length=218' Tc=7.2 min CN=83 Runoff=2.55 cfs 0.189 af

Subcatchment 30S: Area of existing house Runoff Area=5.612 ac 16.09% Impervious Runoff Depth=2.27"
Flow Length=750' Tc=31.1 min CN=79 Runoff=8.28 cfs 1.061 af

Subcatchment 40S: Front Lawn to Lewis Runoff Area=54,363 sf 26.52% Impervious Runoff Depth=2.79"
Flow Length=425' Tc=8.0 min CN=85 Runoff=3.79 cfs 0.290 af

Subcatchment 50S: Contributing area to the Runoff Area=5.484 ac 5.59% Impervious Runoff Depth=2.11"
Flow Length=783' Tc=25.6 min CN=77 Runoff=8.17 cfs 0.962 af

Reach 10R: Reach through 10S Avg. Flow Depth=0.06' Max Vel=0.31 fps Inflow=2.16 cfs 0.189 af
n=0.050 L=760.0' S=0.0053 '/ Capacity=51.83 cfs Outflow=1.05 cfs 0.189 af

Reach OUT 1: Flow to Johnson Brook Inflow=14.24 cfs 1.544 af
Outflow=14.24 cfs 1.544 af

Reach OUT 2: Flow to Route 1 Inflow=3.79 cfs 0.290 af
Outflow=3.79 cfs 0.290 af

Reach OUT 3: Flow to Lewis Road Inflow=16.29 cfs 2.023 af
Outflow=16.29 cfs 2.023 af

Pond 50P: Depression at drive Peak Elev=58.53' Storage=308 cf Inflow=2.55 cfs 0.189 af
12.0" Round Culvert n=0.013 L=58.0' S=0.0603 '/ Outflow=2.16 cfs 0.189 af

Total Runoff Area = 20.761 ac Runoff Volume = 3.857 af Average Runoff Depth = 2.23"
88.34% Pervious = 18.340 ac 11.66% Impervious = 2.421 ac

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 10S: East site with large Runoff Area=5.366 ac 11.68% Impervious Runoff Depth=2.97"
Flow Length=630' Tc=18.7 min CN=79 Runoff=12.97 cfs 1.330 af

Subcatchment 11S: East site with large Runoff Area=2.181 ac 0.00% Impervious Runoff Depth=2.52"
Flow Length=610' Tc=14.9 min CN=74 Runoff=4.87 cfs 0.459 af

Subcatchment 20S: Front lawn to wetland Runoff Area=37,897 sf 29.15% Impervious Runoff Depth=3.36"
Flow Length=218' Tc=7.2 min CN=83 Runoff=3.26 cfs 0.243 af

Subcatchment 30S: Area of existing house Runoff Area=5.612 ac 16.09% Impervious Runoff Depth=2.97"
Flow Length=750' Tc=31.1 min CN=79 Runoff=10.87 cfs 1.391 af

Subcatchment 40S: Front Lawn to Lewis Runoff Area=54,363 sf 26.52% Impervious Runoff Depth=3.55"
Flow Length=425' Tc=8.0 min CN=85 Runoff=4.80 cfs 0.370 af

Subcatchment 50S: Contributing area to the Runoff Area=5.484 ac 5.59% Impervious Runoff Depth=2.79"
Flow Length=783' Tc=25.6 min CN=77 Runoff=10.88 cfs 1.276 af

Reach 10R: Reach through 10S Avg. Flow Depth=0.07' Max Vel=0.35 fps Inflow=2.56 cfs 0.243 af
n=0.050 L=760.0' S=0.0053 '/ Capacity=51.83 cfs Outflow=1.44 cfs 0.243 af

Reach OUT 1: Flow to Johnson Brook Inflow=18.89 cfs 2.032 af
Outflow=18.89 cfs 2.032 af

Reach OUT 2: Flow to Route 1 Inflow=4.80 cfs 0.370 af
Outflow=4.80 cfs 0.370 af

Reach OUT 3: Flow to Lewis Road Inflow=21.55 cfs 2.667 af
Outflow=21.55 cfs 2.667 af

Pond 50P: Depression at drive Peak Elev=58.73' Storage=517 cf Inflow=3.26 cfs 0.243 af
12.0" Round Culvert n=0.013 L=58.0' S=0.0603 '/ Outflow=2.56 cfs 0.243 af

Total Runoff Area = 20.761 ac Runoff Volume = 5.069 af Average Runoff Depth = 2.93"
88.34% Pervious = 18.340 ac 11.66% Impervious = 2.421 ac

Summary for Subcatchment 10S: East site with large wetland

Runoff = 12.97 cfs @ 12.26 hrs, Volume= 1.330 af, Depth= 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
2.070	79	Woods, Fair, HSG D
1.995	73	Woods, Fair, HSG C
0.560	93	Paved roads w/open ditches, 50% imp, HSG D
0.394	74	>75% Grass cover, Good, HSG C
0.306	98	Paved parking, HSG C
0.041	98	Paved parking, HSG C
5.366	79	Weighted Average
4.739		88.32% Pervious Area
0.627		11.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	50	0.0600	0.15		Sheet Flow, 10.1 Grass: Dense n= 0.240 P2= 3.00"
0.9	75	0.0400	1.40		Shallow Concentrated Flow, 10.2 Short Grass Pasture Kv= 7.0 fps
6.3	100	0.0500	0.27		Sheet Flow, 10.3 Range n= 0.130 P2= 3.00"
1.2	65	0.0308	0.88		Shallow Concentrated Flow, 10.4 Woodland Kv= 5.0 fps
4.8	340	0.0150	1.19	22.36	Trap/Vee/Rect Channel Flow, 10.5 Bot.W=50.00' D=0.25' Z= 100.0 ' /' Top.W=100.00' n= 0.050 Scattered brush, heavy weeds
18.7	630	Total			

Summary for Subcatchment 11S: East site with large wetland

Runoff = 4.87 cfs @ 12.20 hrs, Volume= 0.459 af, Depth= 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
0.528	79	Woods, Fair, HSG D
1.653	73	Woods, Fair, HSG C
2.181	74	Weighted Average
2.181		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	100	0.0900	0.21		Sheet Flow, 11.1 Grass: Dense n= 0.240 P2= 3.00"
0.4	45	0.0600	1.71		Shallow Concentrated Flow, 11.2 Short Grass Pasture Kv= 7.0 fps
1.6	125	0.0720	1.34		Shallow Concentrated Flow, 11.3 Woodland Kv= 5.0 fps
4.8	340	0.0150	1.19	22.36	Trap/Vee/Rect Channel Flow, 11.4 Bot.W=50.00' D=0.25' Z= 100.0 ' Top.W=100.00' n= 0.050 Scattered brush, heavy weeds
14.9	610	Total			

Summary for Subcatchment 20S: Front lawn to wetland

Runoff = 3.26 cfs @ 12.10 hrs, Volume= 0.243 af, Depth= 3.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (sf)	CN	Description
7,492	98	Paved parking, HSG C
5,227	92	Paved roads w/open ditches, 50% imp, HSG C
16,953	74	>75% Grass cover, Good, HSG C
1,525	93	Paved roads w/open ditches, 50% imp, HSG D
* 5,955	79	50-75% Grass cover, Fair, HSG C (OUTDOOR DINING)
* 565	96	Gravel surface, HSG C (WALKWAY TO BAR)
* 180	98	Roofs, HSG C (OUTDOOR BAR BLDG)
37,897	83	Weighted Average
26,849		70.85% Pervious Area
11,048		29.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0310	0.17		Sheet Flow, 20.1 Grass: Short n= 0.150 P2= 3.00"
2.3	168	0.0300	1.21		Shallow Concentrated Flow, 20.2 Short Grass Pasture Kv= 7.0 fps
7.2	218	Total			

Summary for Subcatchment 30S: Area of existing house

Runoff = 10.87 cfs @ 12.43 hrs, Volume= 1.391 af, Depth= 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
3.000	73	Woods, Fair, HSG C
0.439	79	50-75% Grass cover, Fair, HSG C
0.435	79	Woods, Fair, HSG D
0.153	92	Paved roads w/open ditches, 50% imp, HSG C
0.197	93	Paved roads w/open ditches, 50% imp, HSG D
0.728	98	Roofs, HSG C
0.660	79	50-75% Grass cover, Fair, HSG C
5.612	79	Weighted Average
4.709		83.91% Pervious Area
0.903		16.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	35	0.0400	0.18		Sheet Flow, 30.1 Grass: Short n= 0.150 P2= 3.00"
0.5	115	0.0430	4.21		Shallow Concentrated Flow, 30.2 Paved Kv= 20.3 fps
20.3	100	0.0250	0.08		Sheet Flow, 30.3 Woods: Light underbrush n= 0.400 P2= 3.00"
3.1	145	0.0240	0.77		Shallow Concentrated Flow, 30.4 Woodland Kv= 5.0 fps
2.9	180	0.0440	1.05		Shallow Concentrated Flow, 30.5 Woodland Kv= 5.0 fps
1.0	175	0.0150	2.97	88.26	Trap/Vee/Rect Channel Flow, 30.6 Bot.W=50.00' D=0.50' Z= 8.0 & 30.0 ' Top.W=69.00' n= 0.035 Scattered brush, heavy weeds
31.1	750	Total			

Summary for Subcatchment 40S: Front Lawn to Lewis Road

Runoff = 4.80 cfs @ 12.11 hrs, Volume= 0.370 af, Depth= 3.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (sf)	CN	Description
17,511	92	Paved roads w/open ditches, 50% imp, HSG C
5,663	98	Paved parking, HSG C
31,189	79	50-75% Grass cover, Fair, HSG C
54,363	85	Weighted Average
39,945		73.48% Pervious Area
14,419		26.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.0310	0.17		Sheet Flow, 40.1 Grass: Short n= 0.150 P2= 3.00"
2.1	155	0.0310	1.23		Shallow Concentrated Flow, 40.2 Short Grass Pasture Kv= 7.0 fps
1.0	220	0.0270	3.52	2.86	Trap/Vee/Rect Channel Flow, 40.3 Bot.W=2.00' D=0.25' Z= 5.0 ' Top.W=4.50' n= 0.022 Earth, clean & straight
8.0	425	Total			

Summary for Subcatchment 50S: Contributing area to the east

Runoff = 10.88 cfs @ 12.37 hrs, Volume= 1.276 af, Depth= 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 yr Rainfall=5.20"

Area (ac)	CN	Description
3.116	73	Woods, Fair, HSG C
1.633	79	Woods, Fair, HSG D
0.613	93	Paved roads w/open ditches, 50% imp, HSG D
* 0.122	70	Brush, Fair, HSG C (RECLAIMED GRAVEL PARKING)
5.484	77	Weighted Average
5.178		94.41% Pervious Area
0.306		5.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.9	100	0.0300	0.09		Sheet Flow, 50.1 Woods: Light underbrush n= 0.400 P2= 3.00"
3.1	145	0.0240	0.77		Shallow Concentrated Flow, 50.2 Woodland Kv= 5.0 fps
0.2	30	0.0330	2.92		Shallow Concentrated Flow, 50.3 Unpaved Kv= 16.1 fps
1.8	142	0.0700	1.32		Shallow Concentrated Flow, 50.4 Woodland Kv= 5.0 fps
1.6	366	0.0164	3.92	10.29	Trap/Vee/Rect Channel Flow, 50.5 Bot.W=2.00' D=0.50' Z= 3.0 & 10.0 ' Top.W=8.50' n= 0.022 Earth, clean & straight
25.6	783	Total			

Summary for Reach 10R: Reach through 10S

Inflow Area = 0.870 ac, 29.15% Impervious, Inflow Depth = 3.36" for 25 yr event
 Inflow = 2.56 cfs @ 12.17 hrs, Volume= 0.243 af
 Outflow = 1.44 cfs @ 12.40 hrs, Volume= 0.243 af, Atten= 44%, Lag= 14.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 0.35 fps, Min. Travel Time= 36.5 min
Avg. Velocity = 0.09 fps, Avg. Travel Time= 137.7 min

Peak Storage= 3,161 cf @ 12.40 hrs
Average Depth at Peak Storage= 0.07'
Bank-Full Depth= 0.50' Flow Area= 50.0 sf, Capacity= 51.83 cfs

50.00' x 0.50' deep channel, n= 0.050 Scattered brush, heavy weeds
Side Slope Z-value= 100.0 '/' Top Width= 150.00'
Length= 760.0' Slope= 0.0053 '/'
Inlet Invert= 48.00', Outlet Invert= 44.00'



Summary for Reach OUT 1: Flow to Johnson Brook

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area =	8.417 ac, 10.46% Impervious, Inflow Depth = 2.90"	for 25 yr event
Inflow =	18.89 cfs @ 12.24 hrs, Volume=	2.032 af
Outflow =	18.89 cfs @ 12.24 hrs, Volume=	2.032 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Reach OUT 2: Flow to Route 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area =	1.248 ac, 26.52% Impervious, Inflow Depth = 3.55"	for 25 yr event
Inflow =	4.80 cfs @ 12.11 hrs, Volume=	0.370 af
Outflow =	4.80 cfs @ 12.11 hrs, Volume=	0.370 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Reach OUT 3: Flow to Lewis Road

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area =	11.096 ac, 10.90% Impervious, Inflow Depth = 2.88"	for 25 yr event
Inflow =	21.55 cfs @ 12.40 hrs, Volume=	2.667 af
Outflow =	21.55 cfs @ 12.40 hrs, Volume=	2.667 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Pond 50P: Depression at drive

Inflow Area = 0.870 ac, 29.15% Impervious, Inflow Depth = 3.36" for 25 yr event
 Inflow = 3.26 cfs @ 12.10 hrs, Volume= 0.243 af
 Outflow = 2.56 cfs @ 12.17 hrs, Volume= 0.243 af, Atten= 22%, Lag= 4.1 min
 Primary = 2.56 cfs @ 12.17 hrs, Volume= 0.243 af

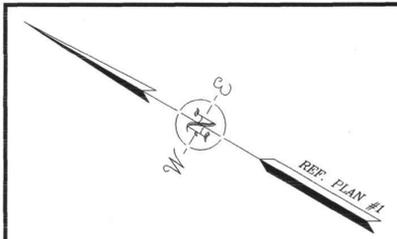
Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs / 3
 Peak Elev= 58.73' @ 12.17 hrs Surf.Area= 1,142 sf Storage= 517 cf

Plug-Flow detention time= 1.7 min calculated for 0.243 af (100% of inflow)
 Center-of-Mass det. time= 1.6 min (814.5 - 813.0)

Volume	Invert	Avail.Storage	Storage Description
#1	57.50'	3,818 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
57.50	20	0	0
58.00	150	43	43
59.00	1,500	825	868
60.00	4,400	2,950	3,818

Device	Routing	Invert	Outlet Devices
#1	Primary	57.50'	12.0" Round Culvert L= 58.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.50' / 54.00' S= 0.0603 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

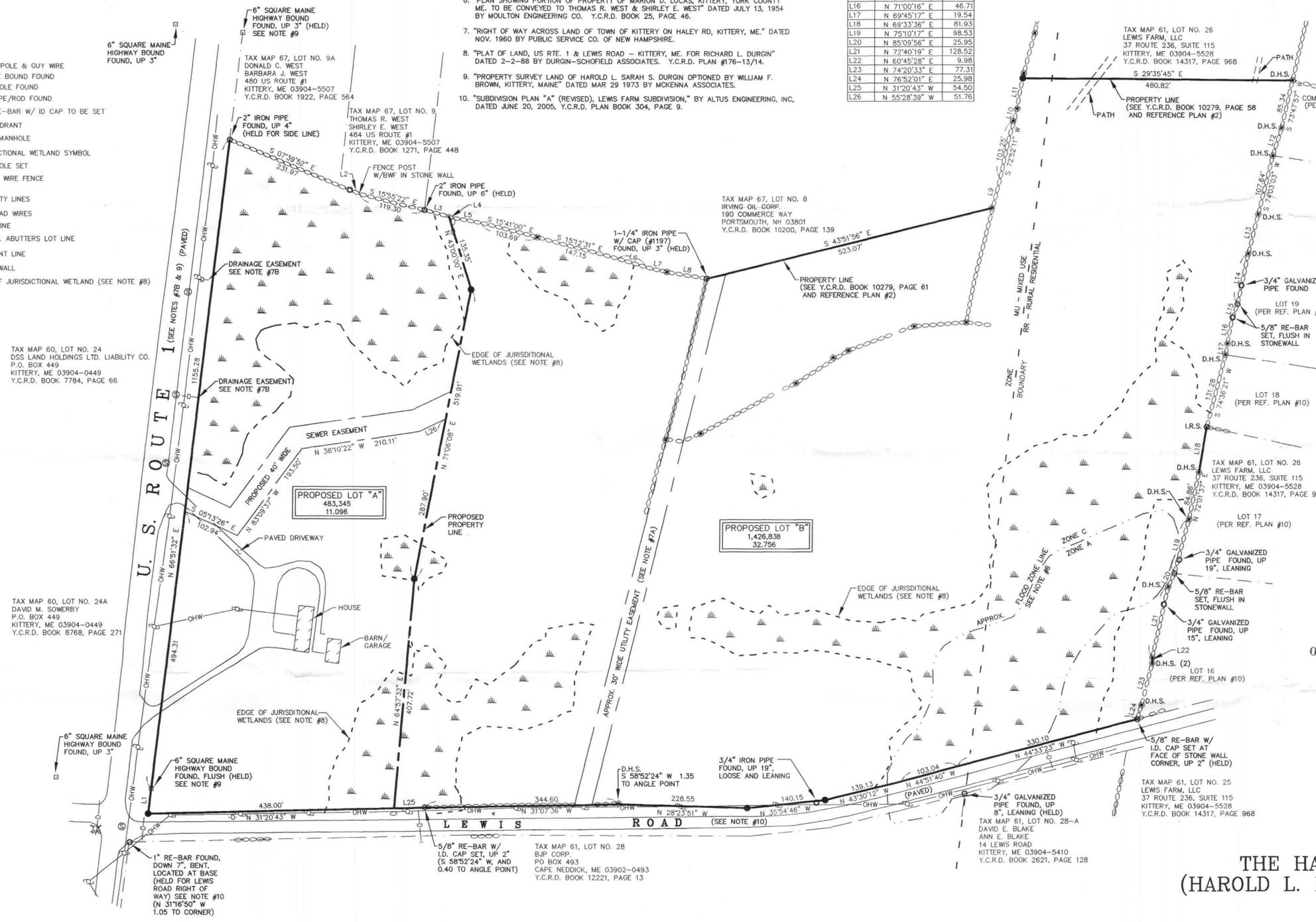
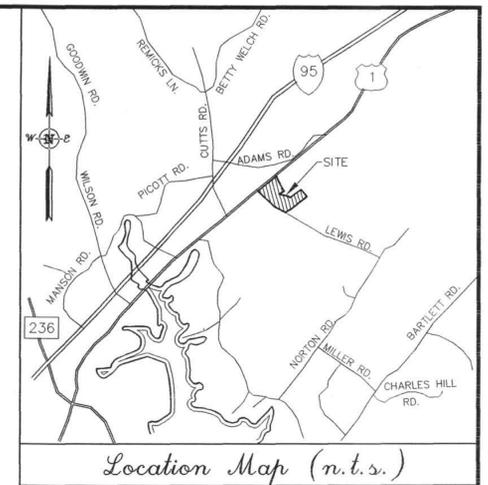
Primary OutFlow Max=2.56 cfs @ 12.17 hrs HW=58.73' TW=48.06' (Dynamic Tailwater)
 ←1=Culvert (Inlet Controls 2.56 cfs @ 3.26 fps)



- LEGEND**
- UTILITY POLE & GUY WIRE
 - GRANITE BOUND FOUND
 - DRILL HOLE FOUND
 - IRON PIPE/ROD FOUND
 - 5/8" RE-BAR W/ ID CAP TO BE SET
 - FIRE HYDRANT
 - SEWER MANHOLE
 - JURISDICTIONAL WETLAND SYMBOL
 - DRILL HOLE SET
 - BARBED WIRE FENCE
 - PROPERTY LINES
 - OVERHEAD WIRES
 - DRAIN LINE
 - APPROX. ABUTTERS LOT LINE
 - EASEMENT LINE
 - STONE WALL
 - EDGE OF JURISDICTIONAL WETLAND (SEE NOTE #8)

- REFERENCE PLANS:**
- "STANDARD BOUNDARY SURVEY OF THE HAROLD L. DURGIN FAMILY TRUST PARCELS," BY DOUCET SURVEY, INC. DATED JUNE 8, 2000.
 - "STANDARD BOUNDARY SURVEY OF LAND EXCHANGE BETWEEN FLAGSHIP MANAGEMENT, INC. AND HAROLD L. DURGIN FAMILY TRUST," BY ANDERSON LIVINGSTON ENGINEERS, INC. DATED MARCH 2000, Y.C.R.D. PLAN BOOK 257, PAGE 39.
 - "STANDARD BOUNDARY SURVEY FOR FLAGSHIP MANAGEMENT, INC. U.S. ROUTE ONE, KITTERY, MAINE" DATED JUNE 1999 BY ANDERSON LIVINGSTON ENGINEERS, INC.
 - "MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP, STATE HIGHWAY "A" KITTERY, YORK COUNTY, FEDERAL AID PROJECT NO. F.1-01-1(5) DATED DECEMBER 1951, Y.C.R.D. BOOK 23, PAGE 45.
 - "STATE OF MAINE, DEPARTMENT OF TRANSPORTATION, RIGHT OF WAY MAP, STATE HIGHWAY "1", KITTERY, YORK COUNTY, FEDERAL AID PROJECT NO. F-01-1 (82) DATED NOVEMBER 1990.
 - "PLAN SHOWING PORTION OF PROPERTY OF MARION D. LUCAS, KITTERY, YORK COUNTY ME. TO BE CONVEYED TO THOMAS R. WEST & SHIRLEY E. WEST" DATED JULY 13, 1954 BY MOULTON ENGINEERING CO. Y.C.R.D. BOOK 25, PAGE 46.
 - "RIGHT OF WAY ACROSS LAND OF TOWN OF KITTERY ON HALEY RD, KITTERY, ME." DATED NOV. 1960 BY PUBLIC SERVICE CO. OF NEW HAMPSHIRE.
 - "PLAT OF LAND, US RTE. 1 & LEWIS ROAD - KITTERY, ME. FOR RICHARD L. DURGIN" DATED 2-2-88 BY DURGIN-SCHOFIELD ASSOCIATES. Y.C.R.D. PLAN #176-13/14.
 - "PROPERTY SURVEY LAND OF HAROLD L. SARAH S. DURGIN OPTIONED BY WILLIAM F. BROWN, KITTERY, MAINE" DATED MAR 29 1973 BY MCKENNA ASSOCIATES.
 - "SUBDIVISION PLAN "A" (REVISED), LEWIS FARM SUBDIVISION," BY ALTUS ENGINEERING, INC. DATED JUNE 20, 2005, Y.C.R.D. PLAN BOOK 304, PAGE 9.

LINE	BEARING	LENGTH
L1	N 66°51'32" E	44.68
L2	N 07°01'24" W	17.66
L3	N 15°38'55" W	45.23
L4	S 07°54'24" E	7.89
L5	S 20°45'24" E	50.02
L6	N 13°20'56" W	53.03
L7	N 17°09'50" W	37.94
L8	N 20°47'10" W	71.43
L9	S 76°11'32" W	54.07
L10	S 78°38'01" W	23.09
L11	N 70°19'10" W	54.50
L12	N 77°49'23" E	51.52
L13	N 73°59'00" E	71.53
L14	N 71°58'07" E	91.54
L15	N 81°05'53" E	25.32
L16	N 71°00'16" E	46.71
L17	N 69°45'17" E	19.54
L18	N 69°33'36" E	81.93
L19	N 75°10'17" E	98.53
L20	N 85°09'56" E	25.95
L21	N 72°40'19" E	128.52
L22	N 60°45'28" E	9.98
L23	N 74°20'33" E	77.31
L24	N 76°52'01" E	25.98
L25	N 31°20'43" W	54.50
L26	N 55°28'39" W	51.76



- NOTES:**
- REFERENCE: TAX MAP 61 LOTS 27
 - TOTAL PARCEL AREA: LOT 27 - 1,910,183 SQ.FT. OR 43.852 AC.
 - OWNER OF RECORD: TAX MAP 61 LOT 27 HAROLD L. DURGIN, TRUSTEE OF TRUST A OF THE HAROLD L. DURGIN FAMILY TRUST ANN E. BLAKE, TRUSTEE OF TRUST B OF THE HAROLD L. DURGIN FAMILY TRUST 14 LEWIS ROAD KITTERY, ME 03904-5410 Y.C.R.D. BOOK 735B, PAGE 132 AND BOOK 10050, PAGE 259
 - ZONES: MU (MIXED USE) RR (RURAL RESIDENTIAL) DIMENSIONAL REQUIREMENTS: MU (MIXED USE) MIN. LOT SIZE (FOR LOTS WITH FRONTAGE ON ROUTE 1) 200,000 SQ. FT. MIN. STREET FRONTAGE (ON ROAD WITH ACCESS TO ROUTE 1 OR LEWIS ROAD) 250 FEET MIN. FRONT YARD 60 FEET MIN. REAR/SIDE YARD 30 FEET MAX. BUILDING HEIGHT 40 FEET BUFFER TO A NEIGHBORING LOT WITH AN EXISTING RESIDENCE WITHIN 100' OF THE LOT LINE 40 FEET A 40 FT. VEGETATION BUFFER SHALL BE MAINTAINED BETWEEN THE MU AND RR DISTRICTS. RR (RURAL RESIDENTIAL) MIN. LOT SIZE (FOR LOTS WITH FRONTAGE ON ROUTE 1) 40,000 SQ. FT. MIN. STREET FRONTAGE 150 FEET MIN. FRONT YARD 40 FEET MIN. REAR/SIDE YARD 20 FEET* MAX. BUILDING HEIGHT 35 FEET * BUILDINGS HIGHER THAN 40 ACTUAL FEET SHALL HAVE SIDE AND REAR YARDS NOT LESS THAN 50% OF THE BUILDING HEIGHT
 - FIELD SURVEY PERFORMED BY DOUCET SURVEY ON 10/99, 5/00 AND 6/00 USING A SOKKIA SET 3000 AND SET 4811 TOTAL STATIONS, A SOKKIA SDR 33 DATA COLLECTOR, TRIMBLE PRO-XR GPS RECEIVER AND A SOKKIA B20 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS. VERTICAL DATUM BASED ON TOWN OF KITTERY SEWER DATUM.
 - FLOOD HAZARD ZONES PER F.I.R.M. MAP #2301710001C FOR THE TOWN OF KITTERY ZONE C-AREAS OF MINIMAL FLOODING ZONE A-AREAS OF 100-YEAR FLOOD; BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS NOT DETERMINED
 - THE PARCEL IS SUBJECT TO THE FOLLOWING: A) 30' UTILITY EASEMENT, Y.C.R.D. BOOK 758 PAGE 30. B) DEED AND DRAINAGE EASEMENT FOR ROUTE 1, Y.C.R.D. BOOK 1204 PAGE 323.
 - WETLANDS WERE DELINEATED BY MARK WEST OF WEST ENVIRONMENTAL, INC IN OCTOBER 1999 & FEBRUARY 2006.
 - THE EDGE OF THE ROUTE 1 R.O.W. IS BASED ON REFERENCE PLAN #4 IN CONJUNCTION WITH THE MAINE HIGHWAY BOUNDS FOUND.
 - THE NORTHERLY SIDE OF LEWIS ROAD R.O.W. IS BASED ON A WIDTH OF 3 ROADS (AS NOTED ON REFERENCE PLAN #5) AND PHYSICAL EVIDENCE WHERE AVAILABLE.

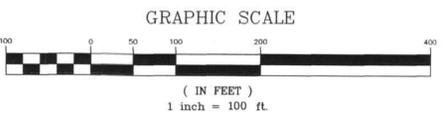
YORK, ss REGISTRY OF DEEDS
 Received 6-9-06
 At 3:46 p.m., and
 Filed in Plan Book 211 page 46
 ATTEST: Debra L. Anderson
 Register
 FOR REGISTRY USE ONLY

000294

DIVISION OF LAND
 (TAX MAP 61, LOT 27)
 FOR
TRUST A & TRUST B
 OF
THE HAROLD L. DURGIN FAMILY TRUST
 (HAROLD L. DURGIN & ANN E. BLAKE, TRUSTEES)
 450 U.S. ROUTE 1
 KITTERY, MAINE
 OWNER'S ADDRESS
 14 LEWIS ROAD
 KITTERY, MAINE 03904
 MAY 23, 2006

NO.	DATE	DESCRIPTION	BY

NOTE:
 ALL ELECTRIC, GAS, TEL. WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.



I HEREBY CERTIFY THAT THIS BOUNDARY SURVEY CONFORMS TO THE STANDARDS OF THE MAINE BOARD OF REGISTRATION FOR LAND SURVEYORS EXCEPTING A SURVEYORS REPORT AND LEGAL DESCRIPTION.

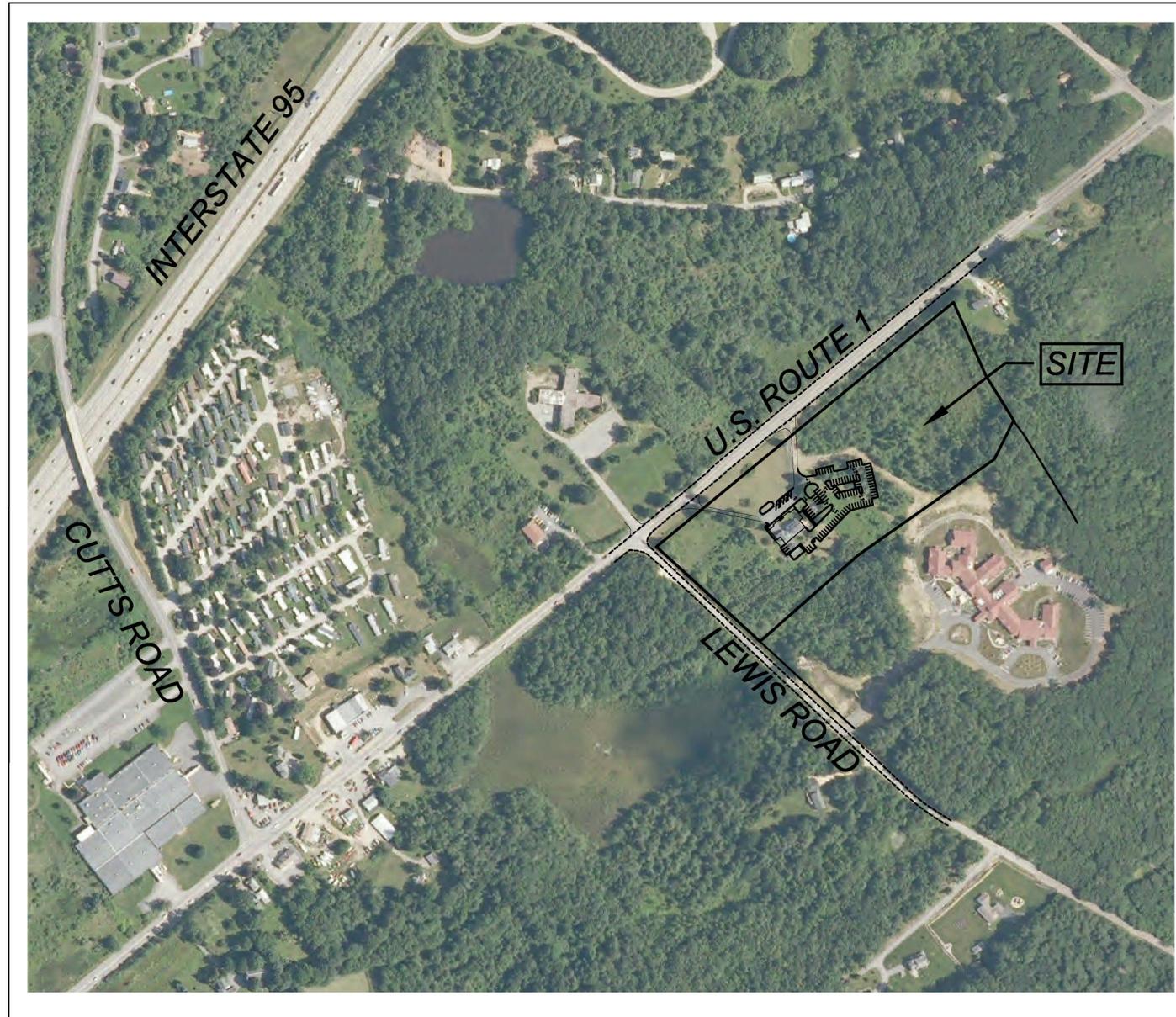
William J. Doucet
 WILLIAM J. DOUCET, P.L.S. 2263
 The certifications shown hereon are intended to meet registry of deed requirements and are not a certification to title or ownership of property shown. Owners of adjoining properties are according to current town assessors records.



DRAWN BY:	M.W.F.	DATE:	MAY 23, 2006
CHECKED BY:	S.V.M.	DRAWING NO.:	2276B
JOB NO.:	2276	SHEET	1 OF 1



WHEN PIGS FLY
460 U.S. ROUTE 1
KITTERY, MAINE
FINAL SITE PLAN APPLICATION



SHEET NUMBER

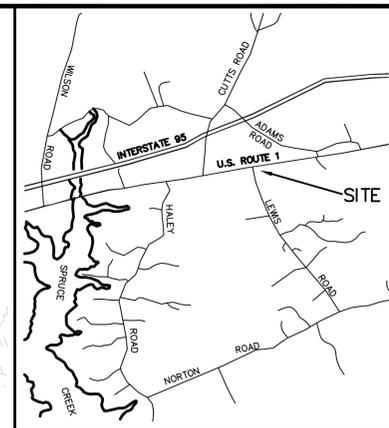
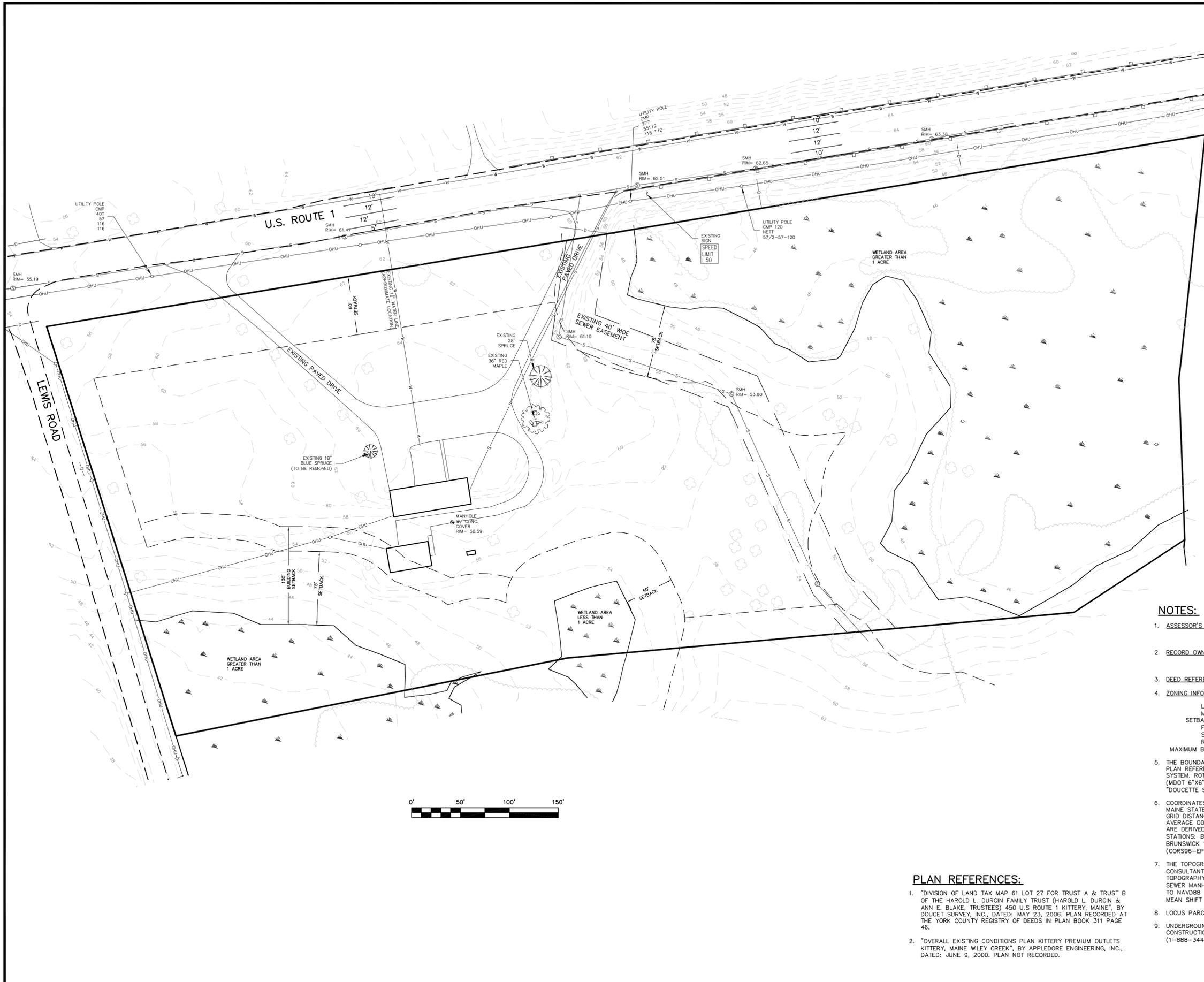
SHEET TITLE

C1	EXISTING CONDITIONS PLAN
C2	OVERALL SITE PLAN
C3	ENLARGED SITE PLAN
C4	CONSTRUCTION DETAILS
C5	MAINTENANCE NOTES
EP	POINT BY POINT LIGHTING STUDY

LOCATION PLAN
 NOT TO SCALE



PREPARED FOR:
ANDREW AND RON SIEGEL

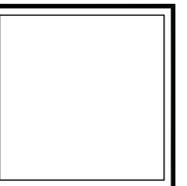


NOTES:

- ASSESSOR'S INFORMATION: TOWN OF KITTERY
ASSESSOR'S MAP 61
LOT 27A
- RECORD OWNER: HAROLD L. DURGIN FAMILY TRUST
14 LEWIS ROAD
KITTERY, MAINE 03904-5410
- DEED REFERENCE: Y.C.R.D. 10050/259
- ZONING INFORMATION: MIXED USE ZONE (MU)
LOT SIZE: 200,000 sq.ft
MINIMUM FRONTAGE: 250' (ROUTE 1/LEWIS RD)
SETBACKS:
FRONT YARD: 60'
SIDE YARD: 30'
REAR YARD: 30'
MAXIMUM BUILDING HEIGHT: 40'
- THE BOUNDARY, EXISTING FEATURES AND WETLANDS WERE DIGITIZED FROM PLAN REFERENCE #1 AND ROTATED TO THE MAINE STATE PLAN COORDINATE SYSTEM. ROTATION IS BASED ON FOUND MONUMENTATION ALONG ROUTE 1 (MDOG 6"x6" GRANITE BOUND W/ DRILL HOLE AND 5/8" REBAR WITH CAP "DOUCETTE SURVEY NH824 ME2263").
- COORDINATES AS SHOWN HEREON ARE ALL GRID QUANTITIES BASED ON THE MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD83. TO CONVERT GRID DISTANCES TO HORIZONTAL GROUND DISTANCES MULTIPLY BY AN AVERAGE COMBINED SCALE FACTOR OF 1.000013295. COORDINATES AS SHOWN ARE DERIVED FROM PRECISE G.P.S. METHODS USING THE FOLLOWING CORS STATIONS: BOSTON WAAS 1 CORS (ZBW1), BARLETT CORS (BARN) AND BRUNSWICK 1 CORS (BRU1). THE HORIZONTAL DATUM IS NAD83 (CORS96-EPOCH 2002.0000).
- THE TOPOGRAPHY WAS DIGITIZED FROM PLAN REFERENCE #2. CIVIL CONSULTANTS PERFORMED A FIELD SURVEY (SEPT. 2010) TO VERIFY THE TOPOGRAPHY ON PLAN REFERENCE #2. ELEVATIONS ARE BASED ON THREE SEWER MANHOLE RIMS AT ROUTE 1 SHOWN ON PLAN REFERENCE #2 (SHIFTS TO NAVD88 BASED ON GPS OBSERVATIONS ARE 1.61', 1.87' AND 1.87' FOR A MEAN SHIFT OF 1.78'). TO OBTAIN NAVD88 ELEVATIONS, SUBTRACT 1.78'.
- LOCUS PARCEL CONTAINS 11.1 ACRES MORE OR LESS.
- UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIGSAFE (1-888-344-7233) FOR LOCATION OF ALL EXISTING UTILITIES.

PLAN REFERENCES:

- "DIVISION OF LAND TAX MAP 61 LOT 27 FOR TRUST A & TRUST B OF THE HAROLD L. DURGIN FAMILY TRUST (HAROLD L. DURGIN & ANN E. BLAKE, TRUSTEES) 450 U.S. ROUTE 1 KITTERY, MAINE", BY DOUGET SURVEY, INC., DATED: MAY 23, 2006. PLAN RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 311 PAGE 46.
- "OVERALL EXISTING CONDITIONS PLAN KITTERY PREMIUM OUTLETS KITTERY, MAINE WILEY CREEK", BY APPLEDORE ENGINEERING, INC., DATED: JUNE 9, 2000. PLAN NOT RECORDED.



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207-384-2550
civcon@civcon.com

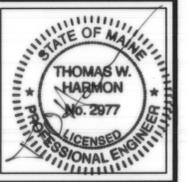
NO.	REVISIONS	INT.	DATE
1			

WHEN PIGS FLY
460 US ROUTE 1 / LEWIS ROAD
KITTERY, MAINE
PREPARED FOR:
ANDREW AND RON SIEGEL
MAILING ADDRESS: 40 BRICKYARD COURT YORK, MAINE 03909



DRAWN	JAA	CALC.	
DATE 7 SEPTEMBER 2010			
CHECKED			
APPROVED			
SCALE 1"=50'			
SHEET TITLE: EXISTING CONDITIONS PLAN			
SHEET NUMBER: C1			
SHEET C1 of			
PROJECT # 09-185.01			

TAX MAP 61 LOT 27A



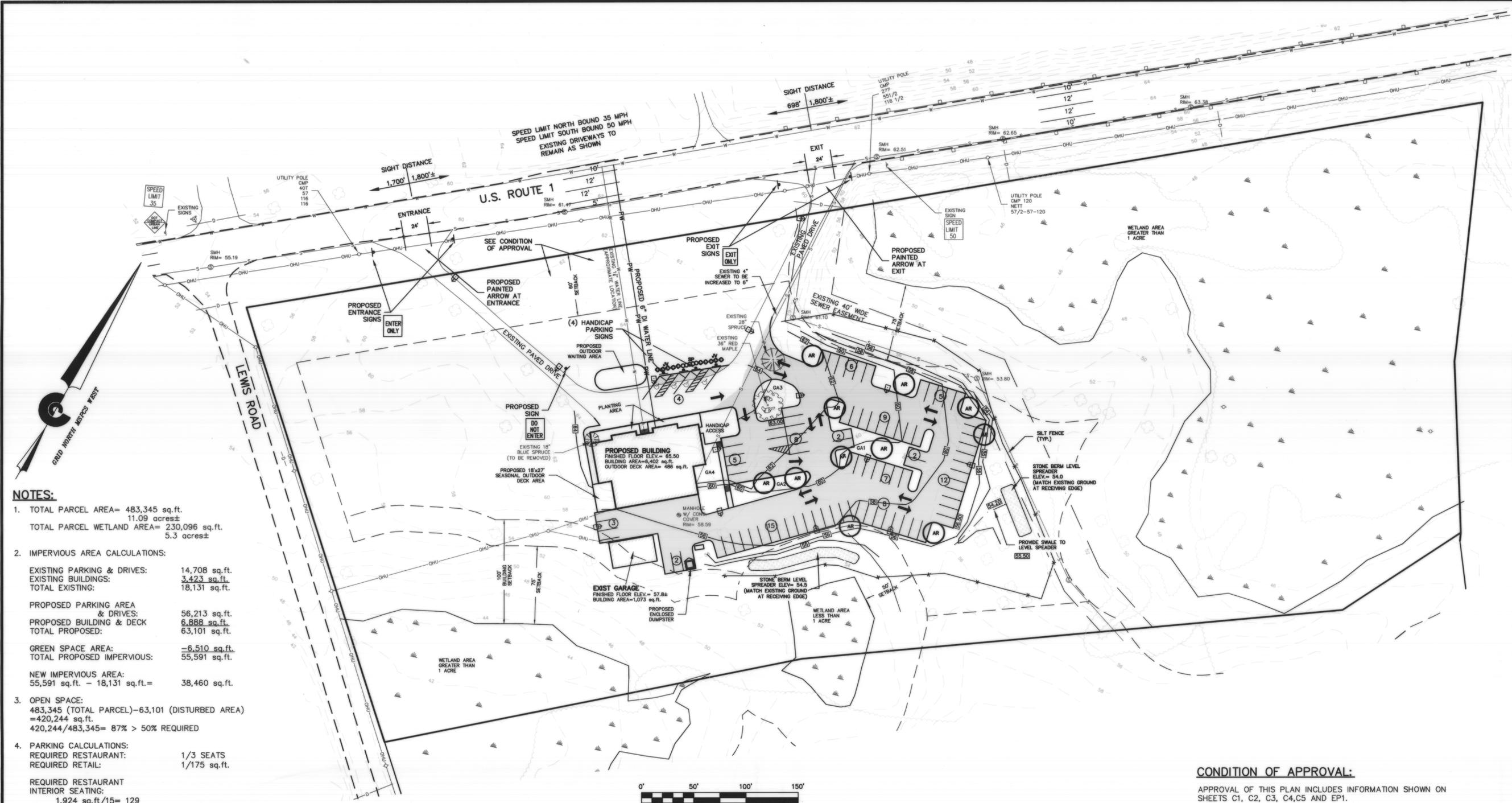
CIVIL CONSULTANTS
CIVIL CONSULTANTS
 Engineers
 Planners
 Surveyors
 P.O. Box 100
 South Berwick
 Maine
 03908
 207-384-2550
 civcon@civcon.com

NO.	REVISIONS	INT.	DATE
5	CLARIFY GRADING AT END OF PARKING LOT	JAA	11/03/10
4	INDICATE LIGHT POLES	JAA	10/27/10
3	REVISE PARKING/NOTES/LANDSCAPING	JAA	10/28/10
2	ADD CONDITION OF APPROVAL/WETLAND AREA	JAA	10/15/10
1	REVISE PARKING AREA LAYOUT	JAA	10/06/10

WHEN PIGS FLY
 460 US ROUTE 1
 KITTERY, MAINE
 PREPARED FOR:
 ANDREW AND RON SIEGEL
 MAILING ADDRESS: 40 BRICKYARD COURT YORK, MAINE 03909

CIVIL CONSULTANTS

DRAWN	JAA	CALC.	
DATE	7 SEPTEMBER 2010		
CHECKED	gdc		
APPROVED	[Signature]		
SCALE	1"=50'		
SHEET TITLE:	•OVERALL SITE PLAN		
SHEET NUMBER:	C2		
SHEET C2 of	PROJECT # 09-185.01		

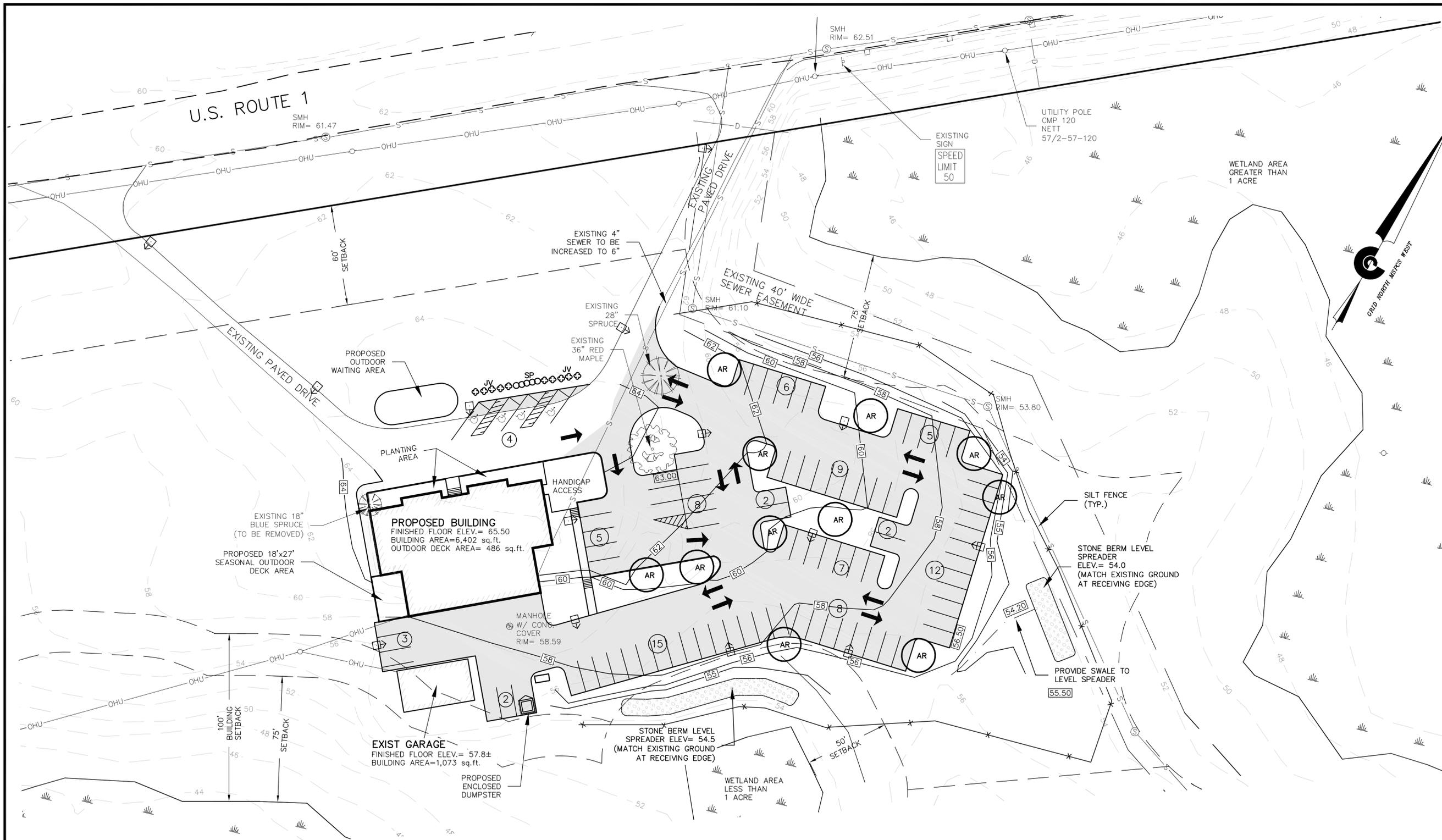


- NOTES:**
- TOTAL PARCEL AREA= 483,345 sq.ft.
 11.09 acres±
 TOTAL PARCEL WETLAND AREA= 230,096 sq.ft.
 5.3 acres±
 - IMPERVIOUS AREA CALCULATIONS:
 EXISTING PARKING & DRIVES: 14,708 sq.ft.
 EXISTING BUILDINGS: 3,423 sq.ft.
 TOTAL EXISTING: 18,131 sq.ft.
 PROPOSED PARKING AREA & DRIVES: 56,213 sq.ft.
 PROPOSED BUILDING & DECK: 6,888 sq.ft.
 TOTAL PROPOSED: 63,101 sq.ft.
 GREEN SPACE AREA: -6,510 sq.ft.
 TOTAL PROPOSED IMPERVIOUS: 55,591 sq.ft.
 NEW IMPERVIOUS AREA:
 55,591 sq.ft. - 18,131 sq.ft. = 38,460 sq.ft.
 - OPEN SPACE:
 483,345 (TOTAL PARCEL)-63,101 (DISTURBED AREA)
 =420,244 sq.ft.
 420,244/483,345= 87% > 50% REQUIRED
 - PARKING CALCULATIONS:
 REQUIRED RESTAURANT: 1/3 SEATS
 REQUIRED RETAIL: 1/175 sq.ft.
 REQUIRED RESTAURANT INTERIOR SEATING:
 1,924 sq.ft./15= 129
 129/3= 43 SPACES
 EXTERIOR SEATING:
 1533 sq.ft./15= 103
 103/3= 35 SPACES
 REQUIRED RETAIL
 1,568 sq.ft./175= 10 SPACES
 TOTAL REQUIRED: 88 SPACES
 TOTAL PROVIDED: 88 SPACES
 (INCLUDES 4 HANDICAPPED SPACES)
 - PARKING AREA GREEN SPACE CALCULATION:
 REQUIRED: 10% OF PARKING AREA
 PARKING AREA= 42,316 sq.ft.
 10% OF PARKING AREA: 4,232 sq.ft.
 PROVIDED GREEN SPACE:
 GA1: 2,357 sq.ft.
 GA2: 1,364 sq.ft.
 GA3: 1,289 sq.ft.
 GA4: 1,500 sq.ft.
 TOTAL PROVIDED AREA: 6,510 sq.ft.

PLAN APPROVED
 KITTERY PLANNING BOARD
 [Signature] CHAIR
 PER APPROVAL NOTE 11/4/2010

 DATE

CONDITION OF APPROVAL:
 APPROVAL OF THIS PLAN INCLUDES INFORMATION SHOWN ON SHEETS C1, C2, C3, C4,C5 AND EP1.



TREES

SYMBOL BOTANICAL NAME COMMON NAME QUANTITY SIZE/UNIT

AR	ACER X FREEMSANII 'AUTUMN BLAZE'	AUTUMN BALZE MAPLE	11	2.5-3"
----	-------------------------------------	--------------------	----	--------

SHRUBS

SYMBOL BOTANICAL NAME COMMON NAME QUANTITY SIZE/UNIT

JV	JUNIPERUS V. SEA GREEN	SEA GREEN JUNIPER	10	2.5-3'
SP	SPIREA X GOLDFLAME	GOLDFLAME SPIREA	5	24"-30"

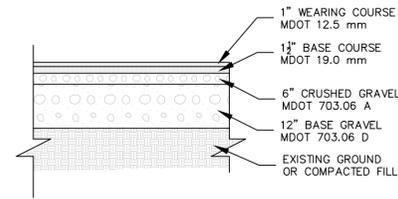


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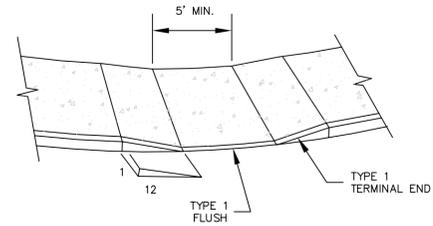
NO.	REVISIONS	INT.	DATE
4	CLARIFY GRADING AT END OF PARKING LOT	JAA	11/03/10
3	INDICATE LIGHT POLES	JAA	10/27/10
2	REVISE PARKING/LANDSCAPING	JAA	10/26/10
1	REVISE PARKING AREA GRADING	JAA	10/06/10

WHEN PIGS FLY
 460 US ROUTE 1 / LEWIS ROAD
 KITTERY, MAINE
 PREPARED FOR:
 ANDREW AND RON SIEGEL
 MAILING ADDRESS: 40 BRICKYARD COURT YORK, MAINE 03909

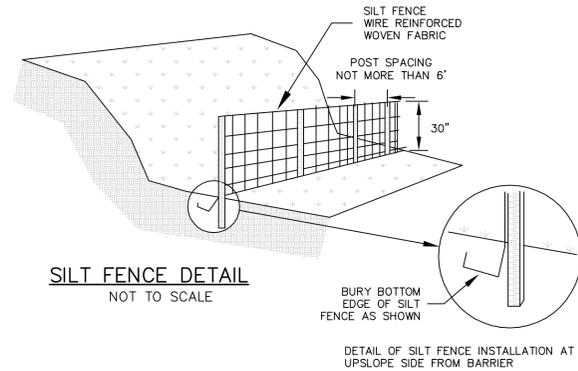
CIVIL CONSULTANTS
 DRAWN JAA CALC.
 DATE 7 SEPTEMBER 2010
 CHECKED
 APPROVED
 SCALE 1"=30'
 SHEET TITLE:
 •ENLARGED
 SITE PLAN
 SHEET NUMBER:
C3
 SHEET C3 of
 PROJECT # 09-185.01



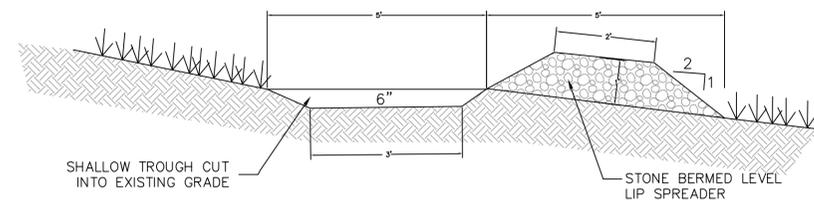
TYPICAL PAVEMENT SECTION
NOT TO SCALE



TYPICAL SIDEWALK RAMP
NOT TO SCALE



SILT FENCE DETAIL
NOT TO SCALE



STONE BERMED LEVEL LIP SPREADER DETAIL
NOT TO SCALE

EROSION AND SEDIMENT CONTROL PRACTICES

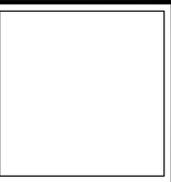
- NO SOIL SHALL BE DISTURBED DURING THE PERIOD OF MARCH 1 THROUGH APRIL 15, NOR DURING ANY OTHER PERIOD WHEN SOILS ARE SATURATED DUE TO RAIN OR SNOW MELT.
- DISTURBED SOILS SHALL BE STABILIZED WITHIN ONE (1) WEEK FROM THE TIME IT WAS LAST ACTIVELY WORKED USING TEMPORARY OR PERMANENT MEASURES SUCH AS PLACEMENT OF RIPRAP, MULCH OR OTHER EROSION CONTROL BLANKET, OR OTHER COMPARABLE MEASURES.
- HAY OR STRAW MULCH, WHERE USED, SHALL BE APPLIED AT A RATE OF AT LEAST ONE (1) BALE PER 500 SQUARE FEET (1-2 TONS PER ACRE).
- IF MULCH IS LIKELY TO BE REMOVED DUE TO STEEP SLOPES OR WIND, IT SHALL BE ANCHORED WITH NETTING, PEG OR TWINE, OR OTHER SUITABLE METHOD AND SHALL BE MAINTAINED UNTIL A CATCH OF VEGETATION IS ESTABLISHED OVER THE ENTIRE DISTURBED AREA.
- IN ADDITION TO PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKETS, ADDITIONAL STEPS SHALL BE TAKEN WHERE NECESSARY IN ORDER TO PREVENT SEDIMENTATION OF THE WATER. EVIDENCE OF SEDIMENTATION INCLUDES VISIBLE GULLY EROSION, DISCOLORATION OF WATER BY SUSPENDED PARTICLES AND SLUMPING OF BANKS. SILT FENCES, STAKED HAY BALES AND OTHER SEDIMENTATION CONTROL MEASURES, WHERE PLANNED FOR, SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF WORK, BUT SHALL ALSO BE INSTALLED WHEREVER NECESSARY DUE TO SEDIMENTATION.
- MULCH OR OTHER TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION OR OTHER PERMANENT CONTROL MEASURES AFTER WHICH TEMPORARY MEASURES WILL BE REMOVED.
- PERMANENT RE-VEGETATION OF ALL DISTURBED AREAS, USING NATIVE PLANT MATERIAL WHEN POSSIBLE, SHALL OCCUR WITHIN 30 DAYS FROM THE TIME THE AREAS WERE LAST ACTIVELY WORKED, OR FOR FALL AND WINTER ACTIVITIES, BY JUNE 15, EXCEPT WHERE PRECLUDED BY THE TYPE OF ACTIVITY (E.G. RIPRAP, ROAD SURFACES, ETC.). THE VEGETATIVE COVER SHALL BE MAINTAINED.
- DISPOSAL OF COLLECTED DEBRIS MUST BE IN CONFORMANCE WITH MAINE SOLID WASTE LAW, TITLE 38 MRSA SECTION 1301 ET. SEQ.
- LIME AND FERTILIZER APPLICATION RATES SHALL NOT EXCEED THE FOLLOWING:
GROUND LIMESTONE: 3 TONS/ACRE (130 LBS./1000 S.F.)
FERTILIZER, 10-10-10 OF EQUIVALENT: 600 LBS./ACRE (14 LBS./1000 S.F.)
FERTILIZER SHALL NOT BE APPLIED BEFORE START OF THE GROWING SEASON NOR AFTER SEPTEMBER 30. FERTILIZED AREAS SHALL BE MULCHED TO REDUCE OFF-SITE TRANSPORT OF NUTRIENTS UNTIL USED BY VEGETATIVE GROWTH.

SEEDING MIXTURE AND SCHEDULE:

SPREAD TOPSOIL UNIFORMLY 6" DEEP OVER AREAS TO BE RECLAIMED. THE FOLLOWING SEED MIXTURE SHALL BE USED:

LAWNS:		
KENTUCKY BLUEGRASS	0.46 LBS./1000 S.F.	
CREeping RED FESCUE	0.46 LBS./1000 S.F.	
PERENNIAL RYE GRASS	0.11 LBS./1000 S.F.	
TOTAL	1.03 LBS./1000 S.F.	

APPLY LIME AND FERTILIZER AS SPECIFIED UNDER THE EROSION AND SEDIMENTATION CONTROL NOTES. WORK INTO THE TOP (4) INCHES OF SOIL PRIOR TO SEEDING. AFTER SEEDING, APPLY MULCH HAY AS SPECIFIED. ON FLAT AREAS AND NOT EXPOSED TO WIND, THE MULCH WILL BE ANCHORED BY WETTING DOWN. IN OTHER AREAS, JUTE NETTING SHALL BE USED FOR ANCHORAGE. THE ABOVE SEEDING SCHEDULE IS APPLICABLE IF SEEDING DURING THE GROWING SEASON (APRIL 15 TO JUNE 15 AND AUGUST 30 TO SEPTEMBER 30). BETWEEN JUNE 15 AND AUGUST 30, SEEDING WILL BE DELAYED UNTIL AUGUST 30. IF SOIL IS DISTURBED BETWEEN OCTOBER 1 AND NOVEMBER 1, DELAY SEEDING UNTIL NOVEMBER 1. AFTER NOVEMBER 1 AND BEFORE A SNOW COVER FORMS, THE SAME PROCEDURE WILL BE FOLLOWED EXCEPT THE SEED RATE WILL BE DOUBLED. AFTER SNOW COVER AND BEFORE APRIL 15, SEEDING WILL BE DELAYED UNTIL APRIL 15. HAY MULCH WILL BE APPLIED AT A RATE OF 150 LBS./1000 SQUARE FEET. THIS WILL BE ANCHORED BY NON-ASPHALTIC TACKIFIER SPRAYED ON LAWNS AND JUTE NETTING IN DRAINAGE WAYS AND OTHER AREAS.



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NO.	REVISIONS	DATE
1	ADD LEVEL SPREADER DETAIL	10/06/10

WHEN PIGS FLY
460 US ROUTE 1 / LEWIS ROAD
KITTERY, MAINE
PREPARED FOR:
ANDREW AND RON SIEGEL
MAILING ADDRESS: 40 BRICKYARD COURT YORK, MAINE 03909

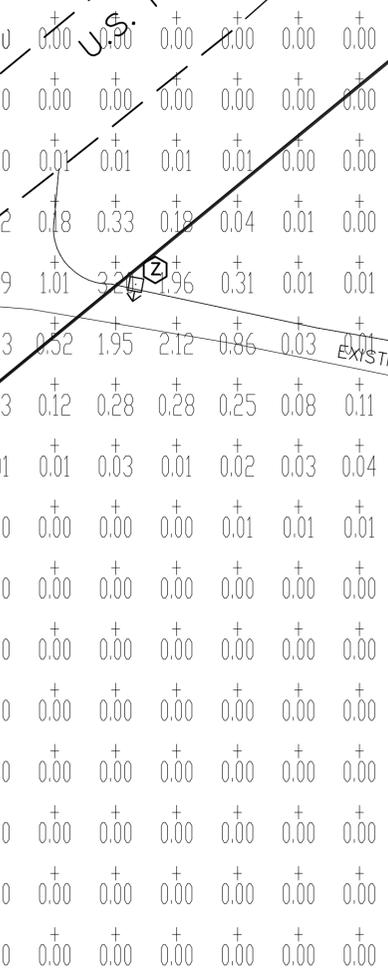
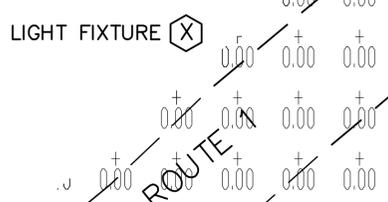
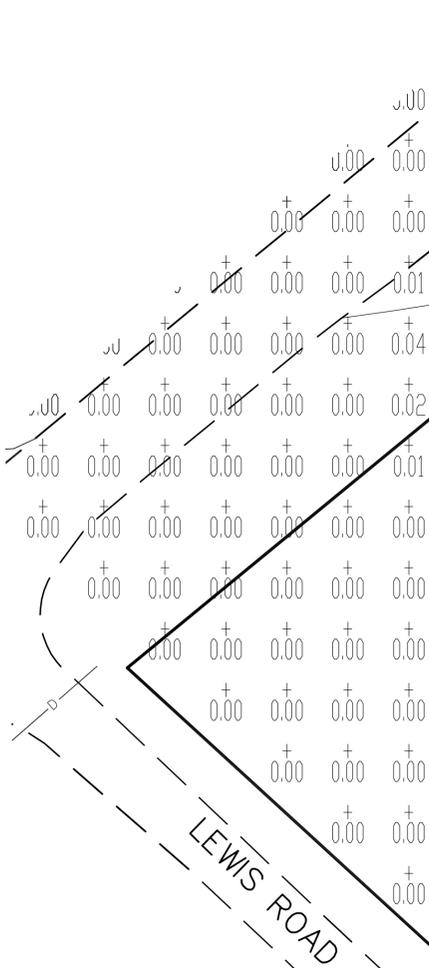
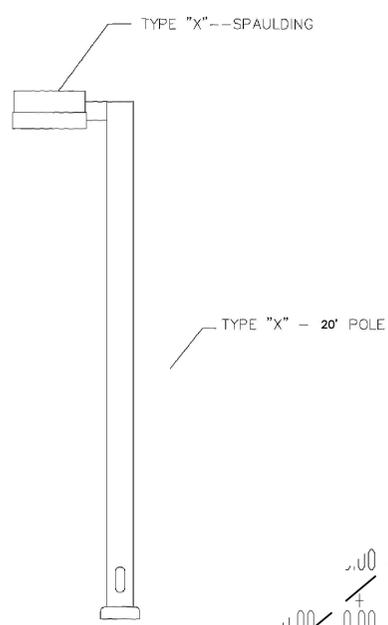
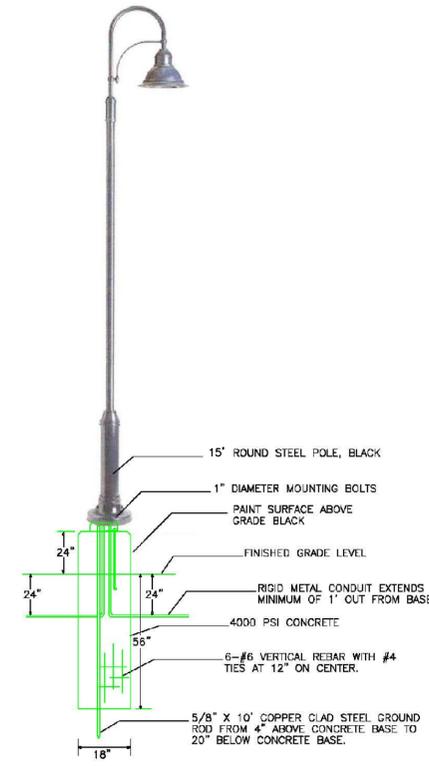


DRAWN JAA CALC.
DATE 7 SEPTEMBER 2010
CHECKED
APPROVED
SCALE AS NOTED

SHEET TITLE:
• CONSTRUCTION
DETAILS

SHEET NUMBER:
C4

SHEET C4 of
PROJECT # 09-185.01

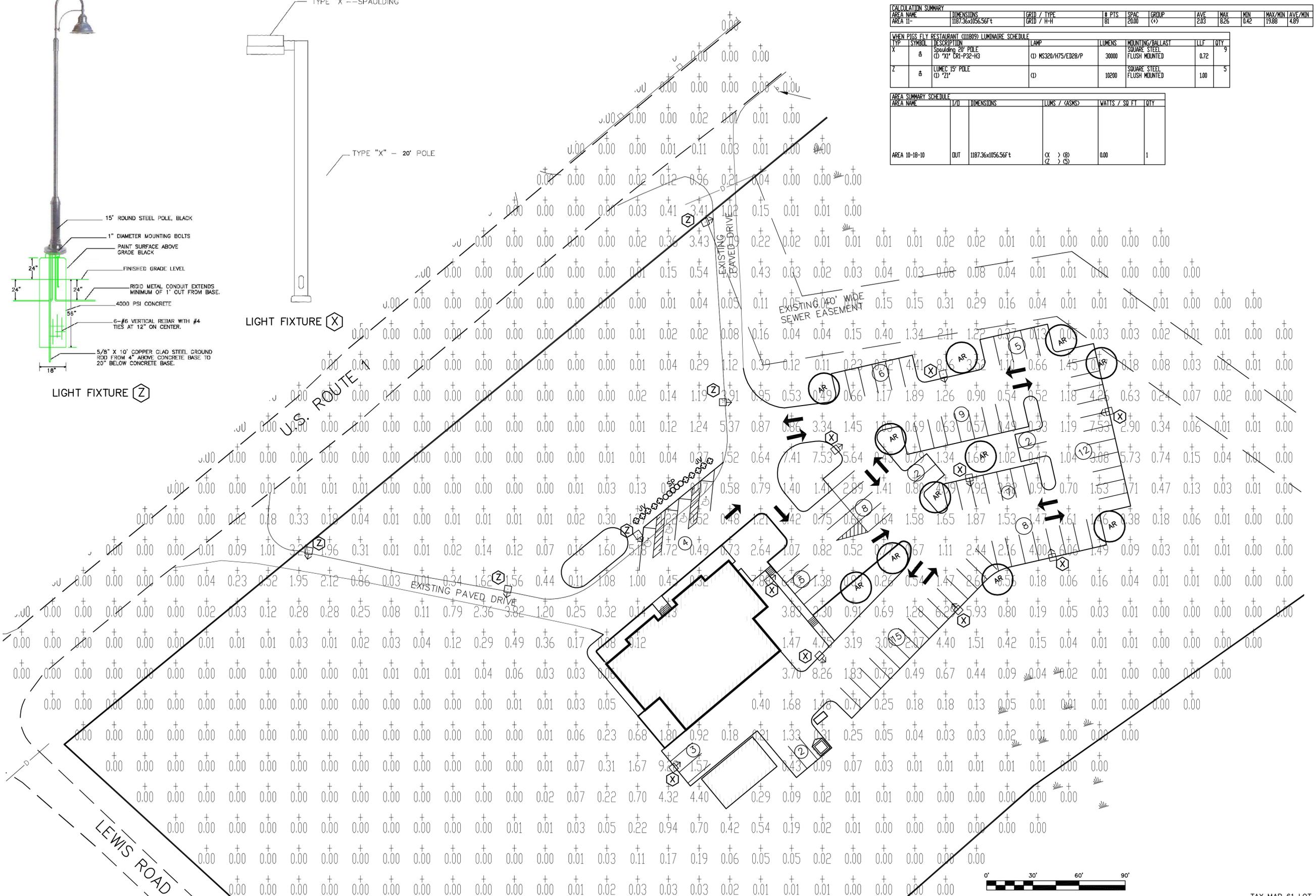


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CALCULATION SUMMARY									
AREA NAME	DIMENSIONS	GRID / TYPE	# PTS	SPAC	GROUP	AVE	MAX	MIN	MAX/MIN
AREA 11	1187.36x1056.56ft	GRID / H-H	81	20.00	(*)	2.03	8.26	0.42	19.88

WHEN PIGS FLY RESTAURANT (11809) LUMINAIRE SCHEDULE						
TYP	SYMBOL	DESCRIPTION	LAMP	LUMENS	MOUNTING/BALLAST	LLF
X	⊗	Spaulding 20' POLE (1) "X" CRI-F32-H3	(1) MS320/H75/ED28/P	30000	SQUARE STEEL FLUSH MOUNTED	0.72
Z	⊗	LUMEC 15' POLE (1) "Z"	(1)	10200	SQUARE STEEL FLUSH MOUNTED	1.00

AREA SUMMARY SCHEDULE				
AREA NAME	L/D	DIMENSIONS	LUMS / (CASHS)	WATTS / SQ FT
AREA 10-18-10	OUT	1187.36x1056.56ft	(X > (8) (Z > (5)	0.00



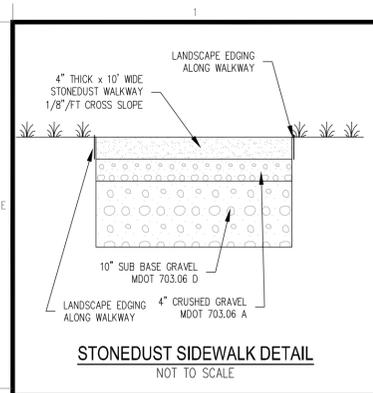
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 03908
 207-384-2550
 civcon@civcon.com

NO.	REVISE LOCATION / HEIGHT	INT.	DATE
1			11/02/10

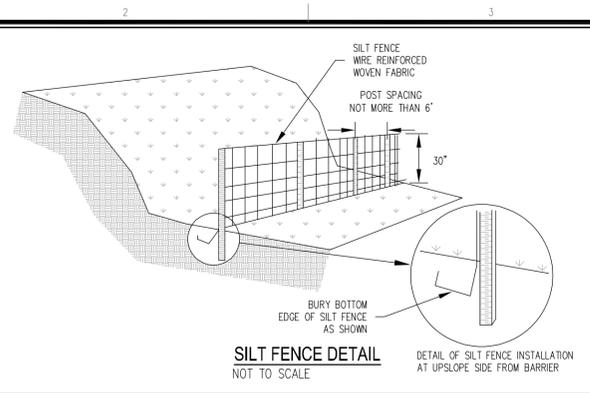
WHEN PIGS FLY
 460 US ROUTE 1
 KITTERY, MAINE
 PREPARED FOR:
 ANDREW AND RON SIEGEL
 MAILING ADDRESS: 40 BRICKYARD COURT YORK, MAINE 03909

ELECTRICAL DESIGN CONSULTANTS

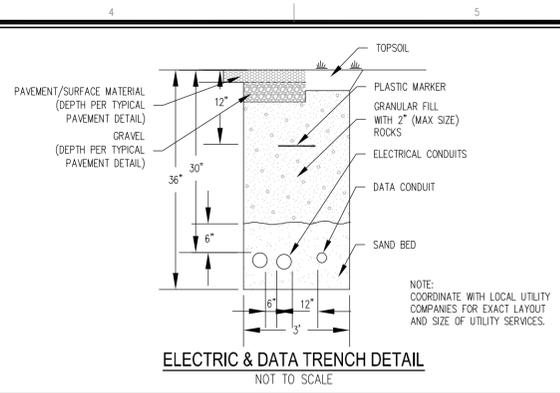
DRAWN: BMC | CALC: RFS
 DATE: 26 OCTOBER 2010
 CHECKED:
 APPROVED:
 SCALE: 1"=30'
 SHEET TITLE:
 • SITE PLAN
 POINT-BY-POINT
 LIGHTING STUDY
 SHEET NUMBER:
 EP
 SHEET 1 of 1
 PROJECT # 09-185.01



STONEDUST SIDEWALK DETAIL
NOT TO SCALE



SILT FENCE DETAIL
NOT TO SCALE



ELECTRIC & DATA TRENCH DETAIL
NOT TO SCALE



HANDICAP VAN ACCESSIBLE SIGN
NOT TO SCALE



HANDICAP PARKING SIGN
NOT TO SCALE

STATE OF MAINE
Neil
12169
LICENSED PROFESSIONAL ENGINEER
03/14/2022

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207-384-2550
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NO.	REVISIONS	INT.	DATE
1			

RECORD OWNER:
PIG PEN PARTNERS
OWNER ADDRESS:
40 BRICKYARD COURT
YORK, ME 03909

WHEN PIGS FLY PIZZERIA - OUTDOOR SEATING
LAND OF PIG PEN PARTNERS - 460 U.S. ROUTE 1
KITTERY, YORK COUNTY, MAINE

PREPARED FOR:
PIG PEN PARTNERS
40 BRICKYARD COURT, YORK, ME 03909

CLIENT ADDRESS:

NOT TO SCALE

DATE: 03/14/2022
DRAWN BY: NJR
CHECKED BY: GRA
APPROVED BY: NJR

NOTES AND DETAILS

PROJECT NO: 09-185.04

C3

SHEET: 3 OF 3

EROSION AND SEDIMENT CONTROL PRACTICES

- NO SOIL SHALL BE DISTURBED DURING THE PERIOD OF MARCH 1 THROUGH APRIL 15, NOR DURING ANY OTHER PERIOD WHEN SOILS ARE SATURATED DUE TO RAIN OR SNOW MELT, UNLESS DIRECTED BY ENGINEER.
- DISTURBED SOILS SHALL BE STABILIZED WITHIN ONE (1) WEEK FROM THE TIME IT WAS LAST ACTIVELY WORKED USING TEMPORARY OR PERMANENT MEASURES SUCH AS PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKET, OR OTHER COMPARABLE MEASURES.
- HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF AT LEAST ONE (1) BALE PER 500 SQUARE FEET (1-2 TONS PER ACRE).
- IF MULCH IS LIKELY TO BE REMOVED DUE TO TO STEEP SLOPES OR WIND, IT SHALL BE ANCHORED WITH NETTING, PEG OR TWINE, OR OTHER SUITABLE METHOD AND SHALL BE MAINTAINED UNTIL A CATCH OF VEGETATION IS ESTABLISHED OVER THE ENTIRE DISTURBED AREA.
- IN ADDITION TO PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKETS, ADDITIONAL STEPS SHALL BE TAKEN WHERE NECESSARY IN ORDER TO PREVENT SEDIMENTATION OF THE WATER. EVIDENCE OF SEDIMENTATION INCLUDES VISIBLE GULLY EROSION, DISCOLORATION OF WATER BY SUSPENDED PARTICLES AND SLUMPING OF BANKS, SILT FENCES, STAKED HAY BALES AND OTHER SEDIMENTATION CONTROL MEASURES, WHERE PLANNED FOR, SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF WORK, BUT SHALL ALSO BE INSTALLED WHEREVER NECESSARY DUE TO SEDIMENTATION.
- MULCH OR OTHER TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION OR OTHER PERMANENT CONTROL MEASURES AFTER WHICH TEMPORARY MEASURES WILL BE REMOVED.
- PERMANENT RE-VEGETATION OF ALL DISTURBED AREAS, USING NATIVE PLANT MATERIAL WHEN POSSIBLE, SHALL OCCUR WITHIN 30 DAYS FROM THE TIME THE AREAS WERE LAST ACTIVELY WORKED, OR FOR FALL AND WINTER ACTIVITIES, BY JUNE 15, EXCEPT WHERE PRECLUDED BY THE TYPE OF ACTIVITY (E.G. RIPRAP, ROAD SURFACES, ETC.). THE VEGETATIVE COVER SHALL BE MAINTAINED.
- DISPOSAL OF COLLECTED DEBRIS MUST BE IN CONFORMANCE WITH MAINE SOLID WASTE LAW, TITLE 38 MRSA SECTION 1301 ET. SEQ.
- LIME AND FERTILIZER APPLICATION RATES SHALL NOT EXCEED THE FOLLOWING:

GROUND LIMESTONE: 3 TONS/ACRE (130 LBS./1000 S.F.)
FERTILIZER, 10-10-10 OF EQUIVALENT: 600 LBS./ACRE (14 LBS./1000 S.F.)

FERTILIZER SHALL NOT BE APPLIED BEFORE START OF THE GROWING SEASON NOR AFTER SEPTEMBER 30. FERTILIZED AREAS SHALL BE MULCHED TO REDUCE OFF-SITE TRANSPORT OF NUTRIENTS UNTIL USED BY VEGETATIVE GROWTH.

SEEDING MIXTURE AND SCHEDULE:

SPREAD TOPSOIL UNIFORMLY 6" DEEP OVER AREAS TO BE RECLAIMED. THE FOLLOWING SEED MIXTURE SHALL BE USED:

LAWNS:		
KENTUCKY BLUEGRASS	1.60 LBS./1000 S.F.	
PERENNIAL RYE GRASS	0.40 LBS./1000 S.F.	
TOTAL	2.00 LBS./1000 S.F.	

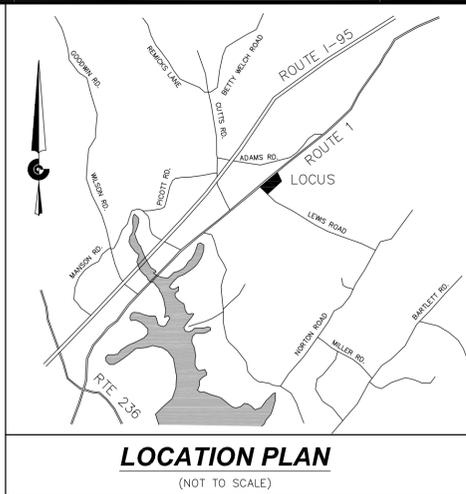
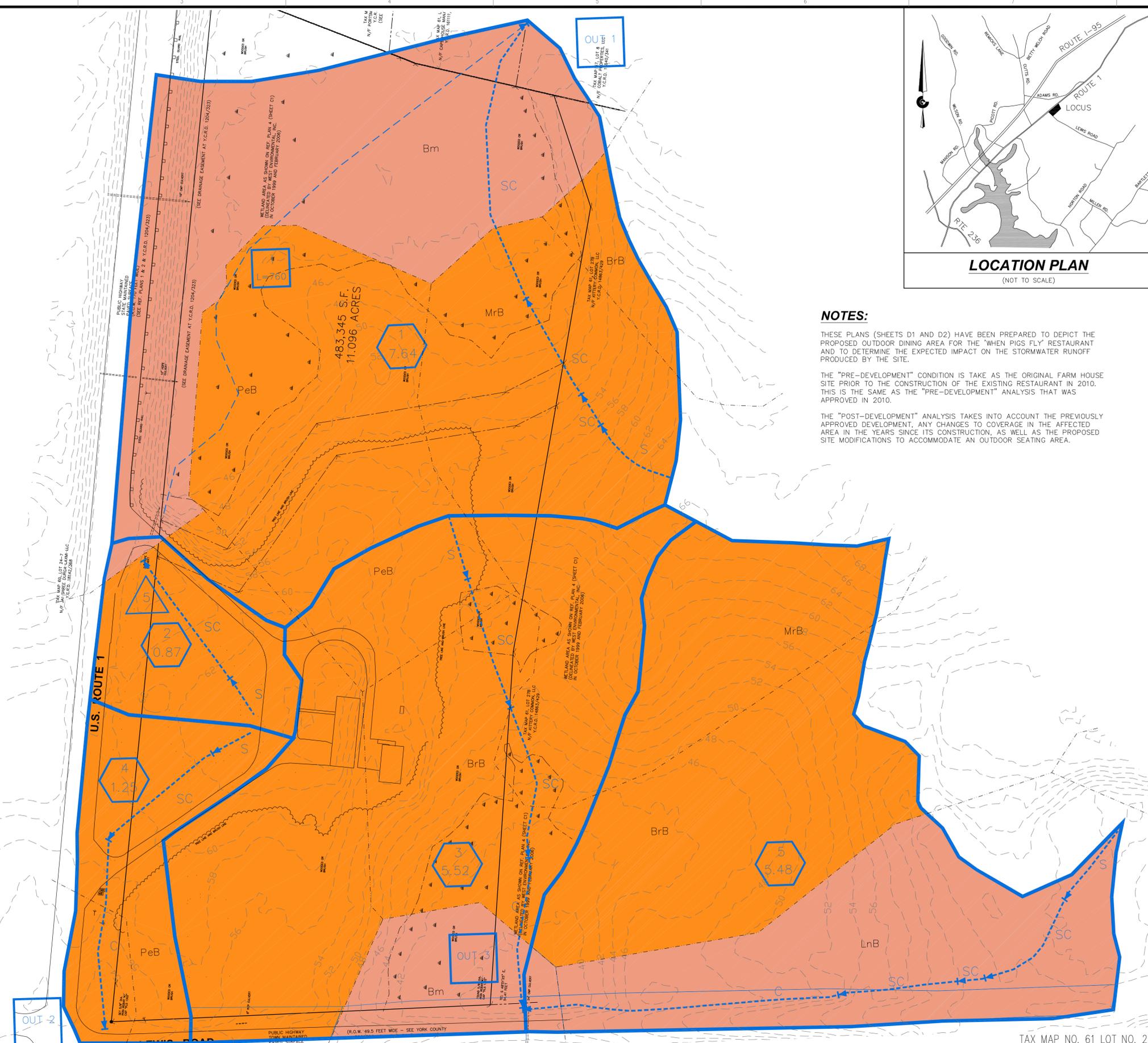
APPLY LIME AND FERTILIZER AS SPECIFIED UNDER THE EROSION AND SEDIMENTATION CONTROL NOTES. WORK INTO THE TOP (4) INCHES OF SOIL PRIOR TO SEEDING. AFTER SEEDING, APPLY MULCH HAY AS SPECIFIED. ON FLAT AREAS AND NOT EXPOSED TO WIND, THE MULCH WILL BE ANCHORED BY WETTING DOWN. IN OTHER AREAS, JUTE NETTING SHALL BE USED FOR ANCHORAGE. THE ABOVE SEEDING SCHEDULE IS APPLICABLE IF SEEDING DURING THE GROWING SEASON (APRIL 15 TO JUNE 15 AND AUGUST 30 TO SEPTEMBER 30). BETWEEN JUNE 15 AND AUGUST 30, SEEDING WILL BE DELAYED UNTIL AUGUST 30. IF SOIL IS DISTURBED BETWEEN OCTOBER 1 AND NOVEMBER 1, DELAY SEEDING UNTIL NOVEMBER 1. AFTER NOVEMBER 1 AND BEFORE A SNOW COVER FORMS, THE SAME PROCEDURE WILL BE FOLLOWED EXCEPT THE SEED RATE WILL BE DOUBLED. AFTER SNOW COVER AND BEFORE APRIL 15, SEEDING WILL BE DELAYED UNTIL APRIL 15. HAY MULCH WILL BE APPLIED AT A RATE OF 150 LBS./1000 SQUARE FEET. THIS WILL BE ANCHORED BY NON-ASPHALTIC TACKIFIER SPRAYED ON LAWNS AND JUTE NETTING IN DRAINAGE WAYS AND OTHER AREAS.

DRAINAGE LEGEND

- POND** POND NUMBER
- SUBCATCHMENT** SUBCATCHMENT NUMBER
0.56 SUBCATCHMENT ACREAGE
- REACH** REACH NUMBER
- Tc COMPONENTS**
 - Tc 1
 - Tc 2
 - Tc 3
 - Tc 4
 - Tc 5
 - Tc 6
 - Tc 7
 - Tc 8
 - Tc 9
 - Tc 10
 - Tc 11
 - Tc 12
 - Tc 13
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 - Tc 45
 - Tc 46
 - Tc 47
 - Tc 48
 - Tc 49
 - Tc 50
- ROUTING DIRECTION**
- SOILS LEGEND**
 - A Soils: SCS Soils: HISS Soils:
 - B Soils: SCS Soils: HISS Soils:
 - C Soils: SCS Soils: BrB, MrB, PeB HISS Soils:
 - D Soils: SCS Soils: Bm, LnB HISS Soils:
- SOIL INFORMATION OBTAINED USING USGS WEB SOIL SURVEY, AUGUST 2010
- Subcatchment Boundaries Pre-Development
- Subcatchment Boundaries Post-Development
- SCS Soil Line
- Tc Flow Path & Direction Pre-Development
- Tc Flow Path & Direction Post-Development

LEGEND:

- DECIDUOUS TREE
- CONIFEROUS TREE
- L.P. GAS LINE
- HIGHWAY STATION
- CONC.
- SIGN
- SPRINKLER CONNECTION
- GROUND LAMP
- LAMP POLE
- IRRIGATION CONTROL
- CATCH BASIN
- WATER VALVE
- WATER SHUTOFF
- FIRE HYDRANT
- MAIL BOX
- FOUND IRON ROD
- FOUND IRON PIPE
- FOUND GRANITE HIGHWAY BOUND
- SEWER MANHOLE
- ELECTRICAL MANHOLE
- UTILITY POLE W/NUMBER
- GUY WIRE
- OVERHEAD WIRES
- UNDERGROUND WIRES
- STATE PLANE COORDINATES
- LOCUS BOUNDARY LINE
- APPROX. ABUTTERS BOUNDARY
- EASEMENT BOUNDARY LINE
- Y.C.R.D. YORK COUNTY REGISTRY OF DEEDS
- 1257/125
- BIT. ASPH. PAVE. BITUMINOUS ASPHALT PAVEMENT
- STONE WALL
- TREE LINE
- WETLAND
- SEWER LINE
- WATER LINE
- HDPE HIGH DENSITY POLYETHYLENE
- PVC POLYVINYL CHLORIDE
- CMP CORRUGATED METAL PIPE

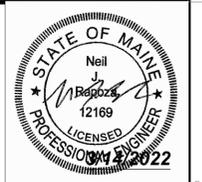


NOTES:

THESE PLANS (SHEETS D1 AND D2) HAVE BEEN PREPARED TO DEPICT THE PROPOSED OUTDOOR DINING AREA FOR THE 'WHEN PIGS FLY' RESTAURANT AND TO DETERMINE THE EXPECTED IMPACT ON THE STORMWATER RUNOFF PRODUCED BY THE SITE.

THE "PRE-DEVELOPMENT" CONDITION IS TAKE AS THE ORIGINAL FARM HOUSE SITE PRIOR TO THE CONSTRUCTION OF THE EXISTING RESTAURANT IN 2010. THIS IS THE SAME AS THE "PRE-DEVELOPMENT" ANALYSIS THAT WAS APPROVED IN 2010.

THE "POST-DEVELOPMENT" ANALYSIS TAKES INTO ACCOUNT THE PREVIOUSLY APPROVED DEVELOPMENT, ANY CHANGES TO COVERAGE IN THE AFFECTED AREA IN THE YEARS SINCE ITS CONSTRUCTION, AS WELL AS THE PROPOSED SITE MODIFICATIONS TO ACCOMMODATE AN OUTDOOR SEATING AREA.



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PRE-DEVELOPMENT
 STORMWATER
 MANAGEMENT PLAN
 (2010)

PROJECT NO: 09-185.04

D1
 SHEET: 1 OF 2

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