

**CITY OF LEWISTON**  
**PLANNING BOARD MEETING**  
Monday, April 8, 2013 – 5:30 P.M.  
City Council Chambers, First Floor  
Lewiston City Building  
27 Pine Street, Lewiston

## **AGENDA**

**I. ROLL CALL**

**II. ADJUSTMENTS TO THE AGENDA**

**III. CORRESPONDENCE**

**IV. PUBLIC HEARINGS:**

- a) An application submitted by WBRC Architects – Engineers on behalf of the Lewiston School Department to construct a new three story building addition on the existing Lewiston Middle School building and additional parking at 75 Central Avenue.
- b) An application submitted by Survey Works, Inc. on behalf of Marc A. Pellerin to divide Lot 1A of the Pond Ridge Acres Subdivision located at 551 Pond Road with remaining undeveloped land to be combined with the abutting property at 22 Pond Ridge Drive.

**V. OTHER BUSINESS:**

- a) Riverfront Master Plan: Simard Payne Park Improvement Update
- b) Disposition of 147 Sabattus Street.
- c) Housing Density throughout New England and Proposals for Lewiston: Bates College Intern
- d) Any other business Planning Board Members may have relating to the duties of the Lewiston Planning Board.

**VIII. READING OF THE MINUTES:** Motion to adopt the draft minutes from March 25, 2013.

**VII. ADJOURNMENT**



## CITY OF LEWISTON

### Department of Planning & Code Enforcement



**TO:** Planning Board  
**FROM:** David Hediger, City Planner  
**DATE:** April 4, 2013  
**RE:** April 8, 2012 Planning Board Agenda Item IV(a)

**An application submitted by WBRC Architects – Engineers on behalf of the Lewiston School Department to construct a new three story building addition on the existing Lewiston Middle School building and additional parking at 75 Central Avenue.**

WBRC Architects – Engineers on behalf of the Lewiston School Department has submitted an application to construct a new three story building addition to the existing Lewiston Middle School building and additional parking at 75 Central Avenue. This 10.6 acre parcel is located in the Institutional Office (IO) district in which academic institution/schools are a permitted use. The proposed three-story 9,000 square foot addition will be in front of the building in the area of the existing main entrance and shall consist of additional classroom and office space.

Staff notes the following with respect to the proposed improvements:

- The proposed addition to the front of the building results in minimal new impervious area, in part to the existing conditions consisting of pavement and granite. Therefore, drainage will be directed to existing infrastructure
- The total number of classrooms for the middle school shall be 84 with the completed addition. Article XII, Section 17 requires a minimum of 84 parking spaces be provided on site. The site currently consists of 83 spaces. The applicant proposes to add 11 new spaces to the rear of the property for a total of 94 spaces. This will exceed the code's minimum requirements for the site. The applicant acknowledges that parking on site can be a challenge at times. However, at times this is due to abutting properties utilizing the schools parking during peak hours. The proposed additional parking should assist in improving the availability of parking. Said parking improvement will be graded toward the existing athletic fields. Given the minor amount of new impervious area draining into an existing vegetated area, Public Works is satisfied with the grading and drainage proposed.
- Staff has been discussing with the applicant how pick-up and drop-off of children may be improved. Currently, there is no designated area for buses or parents to park. This will be further compounded once construction begins on site. The applicant is proposing to relocate bus parking from Central Avenue to Campus Avenue and to utilize an existing parking lot off Central Avenue for bus parking. The plan also includes striped parking in front of the school for parent pick-up and drop off. The applicant and staff believe this may improve the current congestion experienced during peak hours. The applicant has indicated in their March 29, 2013 response to city review comments that striping and signage for the bus and parent parking will be completed prior to construction of the school renovations and additions. This will necessitate the applicant work with Lewiston

Police to amend the traffic schedule for said changes to occur and to coordinate said striping changes with Public Works. Staff believes it is important these parking improvements be made prior to construction and recommends it be noted as a condition of approval that all parking improvements as shown on the approved plans must be completed prior the issuance of any building permits or activity associated with this project.

- All other review comments by staff have been addressed to the City's satisfaction.

This project is subject to development review approval from the Planning Board pursuant to Article XIII, Section 4 of the Zoning and Land Use Code.

#### **ACTIONS NECESSARY**

1. Make a motion to consider an application submitted by WBRC Architects – Engineers on behalf of the Lewiston School Department to construct a new three story building addition on the existing Lewiston Middle School building and additional parking at 75 Central Avenue.
2. Obtain input on the application;
3. Make a determination that the application is complete;
4. Make a motion finding that the application meets all of the necessary criteria contained in the Zoning and Land Use Code, including Article XIII, Section 4 of the Zoning and Land Use Code and to grant approval to the City of Lewiston School Department for construction of a new three story building addition to the existing Lewiston Middle School building and additional parking at 75 Central Avenue, subject to any concerns raised by the Planning Board or staff.



March 29, 2013

**LEWISTON PLANNING & CODE ENFORCEMENT DEPARTMENT**

Attn: David Hediger, City Planner  
27 Pine Street  
Lewiston, ME 04240-7201

RE: 3744.10 / Lewiston Middle School Renovation and Expansion  
Lewiston Middle School, 75 Central Avenue  
Response to City Review Comments

Dear Mr. Hediger:

Lewiston Middle School is applying for Development Review approval for a new three-story 9,000 gross square foot addition located on the front of the building facing Central Avenue. The project also includes new parking spaces, sidewalks, granite steps, brick paver entry plaza, and other site improvements.

The following is in response to the comments from city departmental review. Comments and questions were provided from City Planning, Lewiston Police Department, and Lewiston Public Works.

**Planning and Police Department**

The current pick-up/drop-off process that occurs at Lewiston Middle School is inefficient and blocks traffic on Central Avenue. There is currently no designated parking area for buses or for parents to pick-up/drop-off students. Due to the inefficiency of the pick-up/drop off process and the construction out front of the building, a temporary relocation was requested by the owner. The included layout plan (CP101) shows bus parking spaces striped along Campus Avenue. In addition to the spaces on Campus Avenue buses will line up within the parking lot loop on Campus Avenue. See the bus layout sketch in Section 2 of the application materials for more information. The centerline of Campus Avenue will be shifted slightly to provide enough room for parking. A small strip of pavement will also be provided to maintain the width of the parking spaces on the opposite side of the street. The plan also includes striped parking spaces along Central Avenue that will be designated for parent pick-up/drop-off parking.

RE: Lewiston Middle School Renovation

March 29, 2013

Page 2 of 2

The spaces along Central Avenue not striped for parent pick-up/drop-off parking will be restriped as regular parking spaces. All striping and signage for bus parking spaces (including centerline restriping and paving), parent pick-up/drop-off spaces, and regular parking spaces on Central Avenue will be completed prior to construction of the school renovations and additions. The owner is also seeking to amend the City of Lewiston Traffic Schedule to allow these parking configurations to occur.

The cover sheet of the plan set has been updated to include language from Article XIII, Section 11 in the City of Lewiston Zoning and Land Use Code.

### **Public Works**

The 12" Hi-Q storm drain pipe connecting into the existing catch basin on Central Avenue has been changed to a 6" SDR 35 PVC pipe to match the 6" outlet pipe already connected to the structure.

The concrete bedding for the curb in detail J5/C501 has been revised to specify 1500 PSI concrete instead of 4500 PSI as requested.

If you have any questions or comments or require additional materials, please feel free to contact our office (207-947-4511) or email (<mailto:chris.parent@wbrcae.com>)

Sincerely,

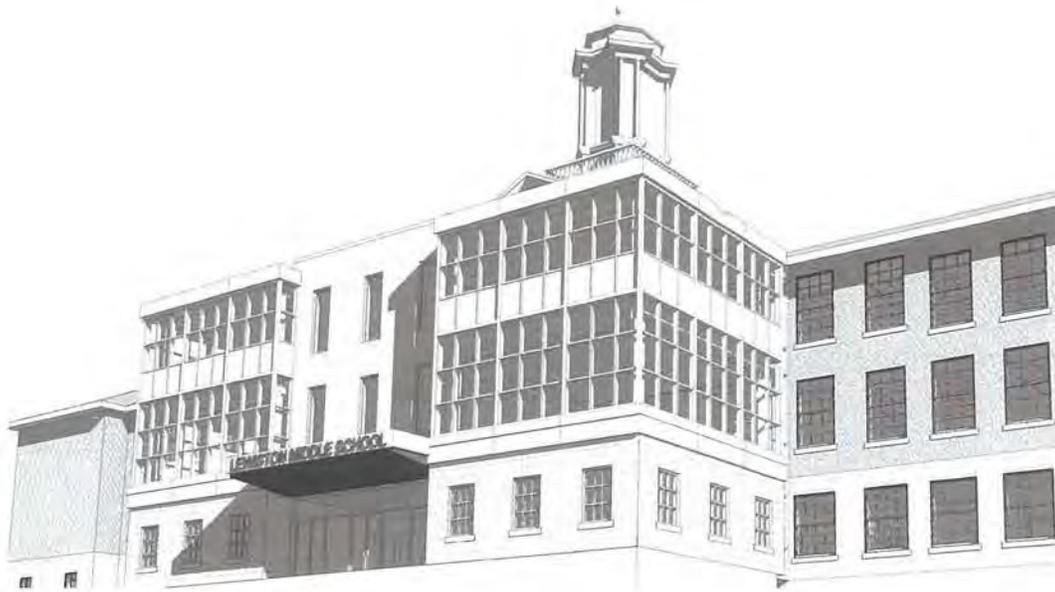
WBRC Architects / Engineers

A handwritten signature in black ink, appearing to read "Chris Parent". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Chris Parent, E.I.  
Engineering Intern

# Lewiston Middle School Addition

## Development Review Application



Prepared for:  
**Lewiston Public Schools**  
Dingley Building, 36 Oak Street  
Lewiston, Maine 04240



**LEWISTON**  
**PUBLIC SCHOOLS**

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Prepared by:  
**WBRC Architects – Engineers**  
44 Central Street  
Bangor, Maine 04401  
(authorized agent for this project)

**WBRC**   
ARCHITECTS • ENGINEERS  
BANGOR PORTLAND SARASOTA

March 15, 2013

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Development Review Application and Authorization – Section 1

# LEWISTON PUBLIC SCHOOLS

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36 Oak Street  
Lewiston, ME 04240  
[www.lewistonpublicschools.org](http://www.lewistonpublicschools.org)  
TDD: 207-795-4100  
FAX: 207-795-4177

Administration: 207-795-4100  
Business: 207-795-4104  
Curriculum: 207-795-4103  
ELL Program: 207-795-4105  
Maintenance: 207-795-4107  
Nutrition: 207-795-4106  
Payroll: 207-795-4109  
Special Education: 207-795-4108  
Technology: 207-753-6416

February 15, 2013

To Whom It May Concern:

Lewiston Public Schools have retained the services of WBRC Architects / Engineers located in Bangor, Maine to prepare requisite local permit application materials for a new building addition to Lewiston Middle School located on the Central Avenue in Lewiston, Maine.

We the undersigned hereby authorize WBRC Architects / Engineers, and their sub-consultants contracted and assigned to the above mentioned project, to act on the behalf of Lewiston Public Schools, in matters related to these permits, including signing of documentation. Please contact my office at (207) 795-4100 should you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Bill Webster". The signature is written in a cursive, slightly slanted style.

William Webster, Jr.  
Superintendent of Schools



# PROJECT DATA

The following information is required where applicable, in order to complete the application

## IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	<u>141,730</u>	sq. ft.
Proposed Total Paved Area	<u>71,962</u>	sq. ft.
Proposed Total Impervious Area	<u>142,932</u>	sq. ft.
Proposed Impervious Net Change	<u>+1,202</u>	sq. ft.
Impervious surface ratio existing	<u>30.7</u>	% of lot area
Impervious surface ratio proposed	<u>30.9</u>	% of lot area

## BUILDING AREA/LOT

### COVERAGE

Existing Building Footprint	<u>61,800</u>	sq. ft.
Proposed Building Footprint	<u>64,800</u>	sq. ft.
Proposed Building Footprint Net change	<u>3,000</u>	sq. ft.
Existing Total Building Floor Area	<u>121,000</u>	sq. ft.
Proposed Total Building Floor Area	<u>130,000</u>	sq. ft.
Proposed Building Floor Area Net Change	<u>9,000</u>	sq. ft.
New Building	<u>Yes (Addition)</u>	(yes or no)
Building Area/Lot coverage existing	<u>13.4</u>	% of lot area
Building Area/Lot coverage proposed	<u>14.0</u>	% of lot area

### ZONING

Existing	<u>Institutional Office (IO)</u>
Proposed, if applicable	<u>Institutional Office (IO)</u>

### LAND USE

Existing	<u>Academic Institution</u>
Proposed	<u>Academic Institution</u>

### RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units	<u>N/A</u>
Proposed Number of Residential Units	<u>N/A</u>
Subdivision, Proposed Number of Lots	<u>N/A</u>

### PARKING SPACES

Existing Number of Parking Spaces	<u>83</u>
Proposed Number of Parking Spaces	<u>94</u>
Required Number of Parking Spaces	<u>84</u>
Number of Handicapped Parking Spaces	<u>4</u>

### ESTIMATED COST OF PROJECT

\$9.1 Million

## DELEGATED REVIEW AUTHORITY CHECKLIST

### SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	<u>N/A</u>	sq. ft.
Proposed Disturbed Area	<u>N/A</u>	sq. ft.
Proposed Impervious Area	<u>N/A</u>	sq. ft.

- 1. If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.*
- 2. If the proposed impervious area is greater than one acre including any impervious area created since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.*
- 3. If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.*
- 4. If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.*

### TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing (Since July 1, 1997) No Change in Traffic Expected passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) No Change in Traffic Expected passenger car equivalents (PCE)

If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

### Zoning Summary

1. Property is located in the Institutional Office (IO) zoning district.

2. Parcel Area: 10.6 acres / 461,470 square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	<u>10,000 sf.</u>	<u>461,470 sf.</u>
Street Frontage	<u>100 ft.</u>	<u>1,643 ft.</u>
Min Front Yard	<u>10 ft.</u>	<u>26 ft.</u>
Min Rear Yard	<u>10 ft.</u>	<u>/10 ft. (No change proposed)</u>
Min Side Yard	<u>10 ft.</u>	<u>/10 ft. (No change proposed)</u>
Max. Building Height	<u>75 ft.</u>	<u>42 ft.</u>
Use Designation	<u>Academic Institution/Academic Institution (No change proposed)</u>	
Parking Requirement	<u>1.5 space/ per classroom</u>	
Total Parking:	<u>84 spaces</u>	<u>94 spaces</u>
Overlay zoning districts (if any):	<u>No overlay district /</u>	
Urban impaired stream watershed?	YES/ <input checked="" type="checkbox"/> NO If yes, watershed name _____	

## DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submission shall include payment of fee and fifteen (15) complete packets containing the following materials:

1. Full size plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

Refer to the application checklist for a detailed list of submittal requirements.

L/A's development review process and requirements have been made similar for convenience and to encourage development. Each City's ordinances are available online at their prospective websites:

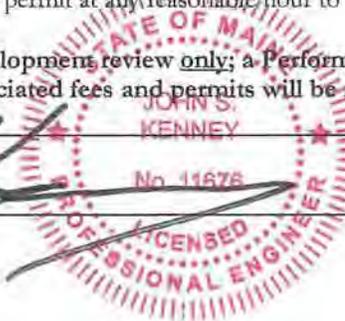
Auburn: [www.auburnmaine.org](http://www.auburnmaine.org) under City Departments/ Planning and Permitting/Land Use Division/Zoning Ordinance

Lewiston: <http://www.ci.lewiston.me.us/clerk/ordinances.htm> Refer to Appendix A of the Code of Ordinances

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant: 	Date: <u>3/15/2013</u>
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# Development Review Checklist

City of Auburn Planning and Permitting Department  
City of Lewiston Department of Planning and Code Enforcement



**THE FOLLOWING INFORMATION IS REQUIRED WHERE APPLICABLE TO BE SUBMITTED FOR AN APPLICATION TO BE COMPLETE**

PROJECT NAME: Lewiston Middle School Addition

PROPOSED DEVELOPMENT ADDRESS and PARCEL #:

Address: 75 Central Avenue, Lewiston, Maine 04240

Parcel #: RE00006180

Map-Lot: 173-119

Required Information		Check Submitted		Applicable Ordinance	
		Applicant	Staff	Lewiston	Auburn
<b>Site Plan</b>					
	Owner's Names/Address	X		X	
	Names of Development	X		X	
	Professionally Prepared Plan	X		X	
	Tax Map or Street/Parcel Number	X		X	
	Zoning of Property	X		X	
	Distance to Property Lines	X		X	
	Boundaries of Abutting land	X		X	
	Show Setbacks, Yards and Buffers	X		X	
	Airport Area of Influence (Auburn only)	N/A			
	Parking Space Calcs	X		X	
	Drive Openings/Locations	X		X	
	Subdivision Restrictions	N/A		X	
	Proposed Use	X		X	
	PB/BOA/Other Restrictions	X		X	
	Fire Department Review	X		X	
	Open Space/Lot Coverage	X		X	
	Lot Layout (Lewiston only)	X		X	
	Existing Building (s)	X		X	
	Existing Streets, etc.	X		X	
	Existing Driveways, etc.	X		X	
	Proposed Building(s)	X		X	
	Proposed Driveways	X		X	
<b>Landscape Plan</b>					
	Greenspace Requirements	N/A		X	
	Setbacks to Parking	N/A		X	
	Buffer Requirements	N/A		X	
	Street Tree Requirements	N/A		X	
	Screened Dumpsters	N/A		X	
	Additional Design Guidelines	N/A		X	
	Planting Schedule	X		X	

<b>Stormwater &amp; Erosion Control Plan</b>				
	Compliance w/ chapter 500	X		X
	Show Existing Surface Drainage	X		X
	Direction of Flow	X		X
	Location of Catch Basins, etc.	X		X
	Drainage Calculations	X		X
	Erosion Control Measures	X		X
	Maine Construction General Permit	N/A		X
	Bonding and Inspection Fees	N/A		X
	Post-Construction Stormwater Plan	X		X
	Inspection/monitoring requirements	X		X
	Third Party Inspections (Lewiston only)	X		X
<b>Lighting Plan</b>				
	Full cut-off fixtures	N/A		X
	Meets Parking Lot Requirements	N/A		X
<b>Traffic Information</b>				
	Access Management	X		X
	Signage	X		X
	PCE - Trips in Peak Hour	N/A		X
	Vehicular Movements	X		X
	Safety Concerns	X		X
	Pedestrian Circulation	X		X
	Police Traffic	X		X
	Engineering Traffic	X		X
<b>Utility Plan</b>				
	Water	X		X
	Adequacy of Water Supply	N/A		X
	Water main extension agreement	N/A		X
	Sewer	X		X
	Available city capacity	N/A		X
	Electric	X		X
	Natural Gas	X		X
	Cable/Phone	N/A		X
<b>Natural Resources</b>				
	Shoreland Zone	N/A		X
	Flood Plain	N/A		X
	Wetlands or Streams	N/A		X
	Urban Impaired Stream	N/A		X
	Phosphorus Check	N/A		X
	Aquifer/Groundwater Protection	N/A		X
	Applicable State Permits	N/A		X
	No Name Pond Watershed (Lewiston only)	N/A		X
	Lake Auburn Watershed (Auburn only)	N/A		
	Taylor Pond Watershed (Auburn only)	N/A		
<b>Right Title or Interest</b>				

	Verify	X		X	
	Document Existing Easements, Covenants, etc.	N/A		X	
<b>Technical &amp; Financial Capacity</b>					
	Cost Est./Financial Capacity	X		X	
	Performance Guarantee	N/A		X	
<b>State Subdivision Law</b>					
	Verify/Check	N/A		X	
	Covenants/Deed Restrictions	N/A		X	
	Offers of Conveyance to City	N/A		X	
	Association Documents	N/A		X	
	Location of Proposed Streets & Sidewalks	N/A		X	
	Proposed Lot Lines, etc.	N/A		X	
	Data to Determine Lots, etc.	N/A		X	
	Subdivision Lots/Blocks	N/A		X	
	Specified Dedication of Land	N/A		X	
<b>Additional Subdivision Standards</b>					
	Single-Family Cluster (Lewiston only)	N/A		X	
	Multi-Unit Residential Development (Lewiston only)	N/A		X	
	Mobile Home Parks	N/A		X	
	Private Commercial or Industrial Subdivisions (Lewiston only)	N/A		X	
	PUD (Auburn only)	N/A			
<b>A jpeg or pdf of the proposed site plan</b>		X		X	
<b>Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving</b>		X		X	

## Development Review Narrative – Section 2

### Project Overview

The applicant, Lewiston Middle School, is applying for site plan approval for a new three-story 9,000 gross square foot addition located on the front of the building facing Central Avenue. The project also includes new parking spaces, sidewalks, granite steps, brick paver entry plaza, and other site improvements.

### Existing Site

The project is located at 75 Central Avenue. A large portion of the lot is currently developed by either building, parking, sidewalks, and sports fields. An existing conditions plan has been prepared by a registered land surveyor and provided in the plan set see SV101.

#### Key Features of the project Parcel:

- Slopes on the site range from 2-5% in existing parking and building areas and in excess of 20% along banks.
- Utilities including water, overhead electric, natural gas, storm sewer, and gravity sanitary sewer are available in Central Avenue. Town water and sewer are also available in Campus Avenue.

### Proposed Improvements

#### Removals

1. Removals have been limited to only that which is necessary to construct the building and site improvements. See CD101- Site Removals Plan for more information.

#### Circulation and Layout

1. New sidewalks and granite steps will be constructed to allow access to the new main entrance.
2. The parking requirements are as follows:

$$\text{Required Parking Spaces: } \frac{1.5 \text{ Spaces}}{\text{Classroom}} (56 \text{ Classrooms}) = 84 \text{ Spaces}$$

The minimum required parking is not sufficient for the current parking demand. The parking area is currently used for faculty and visitors. The largest lot, however, is a shared lot for bordering properties which creates parking problems. Currently, there are 83 parking spaces on the site. One additional space will be added to meet the

requirement and ten more will be added to meet the parking demand. This will bring the total parking spaces to 94 including 4 ADA accessible spaces. These new spaces will be located behind the building near the dumpster enclosure. See CP101- Site Layout Plan for more information on parking and circulation.

3. During construction the school bus pick up/drop off area will be relocated from its existing location on Central Ave. The temporary relocation will occur on Campus Ave. Buses will load and unload on Campus Avenue and within the Campus Avenue parking lot loop. The centerline and parking spaces on the opposite side of the road will have to be shifted slightly to allow enough room for bus parking on Campus Ave. Parking spaces along the school side of the road on Central Ave. will be designated for parent drop off/pick up during select hours of the day. See CP101 – Site Layout Plan for more information on pick up/drop off configurations.

### **Buildings**

The applicant is proposing the following building on the parcel;

1. Front Addition
  - 3,000+/- square foot footprint addition
  - Three-story, steel-frame structure with masonry, curtain wall and metal panel siding.

### **Utilities**

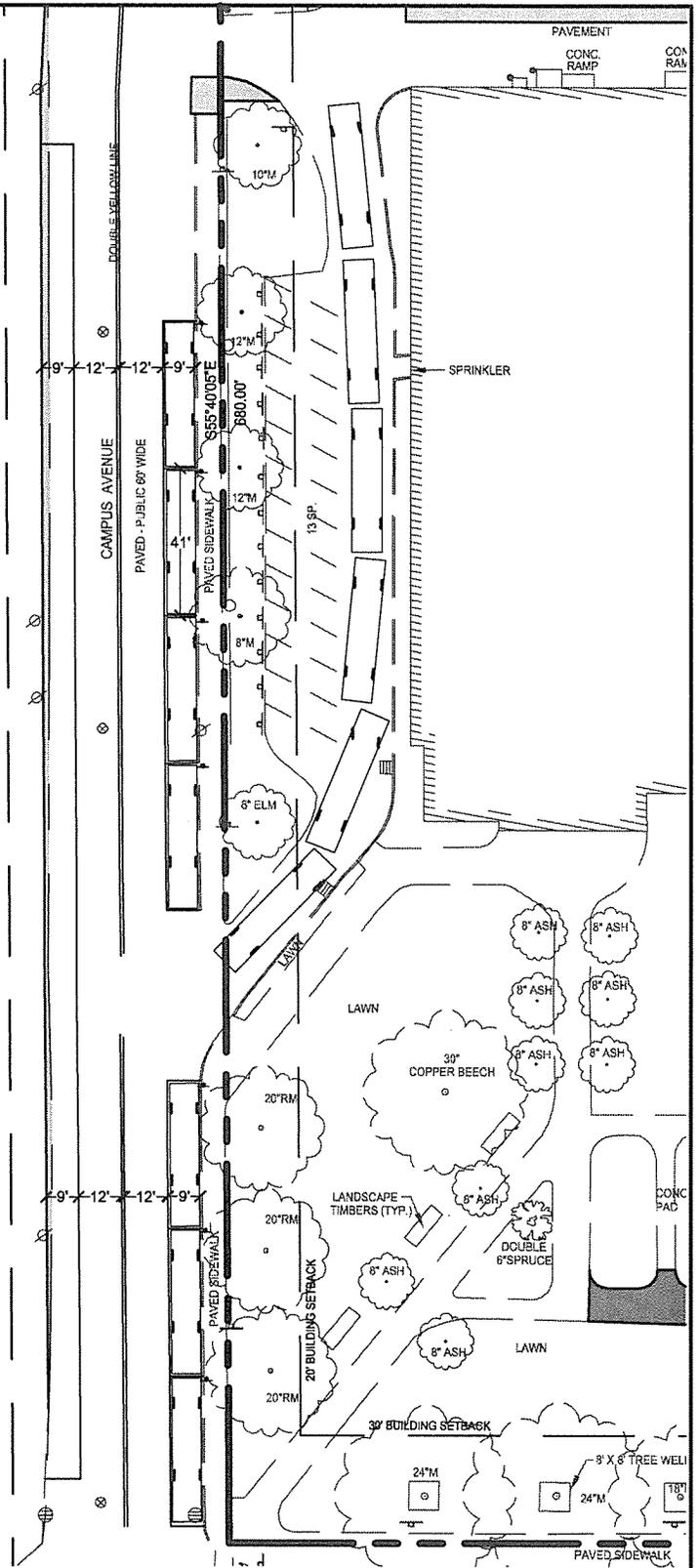
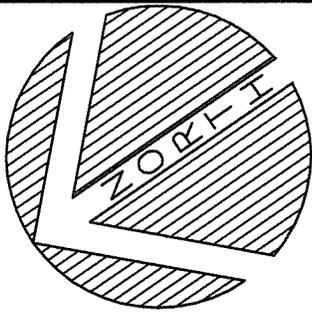
1. A new foundation drain will be placed around the perimeter of the new building addition. It will outlet through a storm drain to a new manhole. The manhole will then outlet to the nearest catch basin located on Central Avenue. A roof drain will also outlet to this manhole.
2. New underground electric will be run from the old flag pole locations to the new locations. The new flagpoles will be internal halyard and have down lighting fixtures to avoid causing light pollution. The new fixtures will not produce any undue adverse impacts on neighboring properties or right of ways. See lighting product sheet attached at the end of this section.

### **Stormwater**

1. The increase in stormwater flow to the municipal system is considered negligible due to the minor increase in impervious area. See Section 7 for complete Stormwater Analysis.

### **Planting**

1. No buffering is required as part of this project.
2. Bank stabilization plantings are proposed in front of the new addition.



**WBRC**  
 ARCHITECTS • ENGINEERS

BANGOR, MAINE  
 207-547-4311  
 PORTLAND, MAINE  
 207-528-4311  
 SARASOTA, FLORIDA  
 941-573-1583  
 WWW.WBRCCAR.COM

SCALE:	1"=50'	
WBRC CAD FILE:	374410-SP101	
PROJECT No.	3744.10	
JOB CAP/DRAW:	CHP	
PM:	SEP	SHEET No.
CHECKED BY:	JSK	BUS LAYOUT
DATE:	03.15.13	©COPYRIGHT 2005 WBRC

PROJECT: LEWISTON MIDDLE SCHOOL  
 RENOVATION AND EXPANSION

SHEET TITLE: BUS  
 LAYOUT

# FLAGPOLE DOWNLIGHTING

## LED FLAGPOLE LIGHTING

By aiming these HIGH-TECH LED Flagpole Lighting fixtures down as opposed to the traditional up lights, these Flagpole Lighting fixtures will not contribute to the concerns over light pollution.

- These 120 Volt HIGH-TECH, commercial-grade LED Flagpole Lighting Fixtures will provide 25 times (more than 10 YEARS) longer lamp life than halogen lamps.
- Very high color rendition to bring out colors more vividly
- Easy to install
- Helping the U.S. Government comply with federally-mandated 30% energy reduction requirements



**Each kit comes complete with elbows, a truck-mounted junction with ornament adapter, a 40-foot lead, and the LED driver. With a photo cell, each LED has a lifespan of roughly 50,000 hours. Ball Finial is NOT included.**



**Single LED Flagpole Downlights**  
Designed for external halyard poles up to 35 foot in stationary truck applications

5-watt: \$299.90 MSRP  
20-watt: \$499.90 MSRP



**Double LED Flagpole Downlights**  
Capable of providing 360-degree lighting  
Designed for up to 35 foot external halyard poles

5-watt: \$499.90 MSRP  
20-watt: \$899.90 MSRP



**Double LED Flagpole Downlight/Truck Combo**  
Designed for internal halyard poles up to 40 feet tall  
Capable of providing 360-degree lighting with proper aiming

5-watt: \$629.90 MSRP  
20-watt: \$999.90 MSRP

## Financial Capacity and Technical Ability – Section 3

**May 15, 2012 minutes  
City of Lewiston**

THE HONORABLE ROBERT E. MACDONALD., MAYOR, PRESIDING.

PRESENT: Mayor Macdonald, Councilors Butler, D'Auteuil, Libby, Christ, Saddlemire, Cayer and Desjardins, City Administrator Edward Barrett, and City Clerk Kathleen Montejo.

Pledge of Allegiance to the Flag.

Moment of Silence. The Mayor asked everyone to note that it is Police Memorial Week and to keep fallen officers in their thoughts at this time.

**PROCLAMATION RECOGNIZING THE 40<sup>TH</sup> CHURCH & PASTORAL  
ANNIVERSARY OF FIRST UNITED PENTECOSTAL CHURCH**

The Mayor issued a proclamation to Pastor Churchill in recognition of the 40th anniversary of his church and his long-time commitment and dedication as the Pastor in the Lewiston community.

**MAYOR'S RECOGNITION – COLLEGE STUDENT NIGHT IN DOWNTOWN  
LEWISTON**

The Mayor presented a certificate of recognition to students from Bates College who coordinated a College Student night in the downtown. He thanked them for working with the Chamber of Commerce to bring business to the downtown area and thanked local businesses for offering special sales for this evening. It was noted that over one hundred students participated in the program.

**PRESENTATION OF THE ALFRED A. PLOURDE MEMORIAL SCHOLARSHIP**

Council President Cayer presented the annual scholarship award to Lewiston High School senior Mackenzi Masselli. Mr. Plourde's widow Janice also present and congratulated Kenzi on this honor.

**PUBLIC COMMENT PERIOD**

Mr. Al Churchill, 70 Blake Street, addressed the Council and noted he lives at Blake Street Towers and would like to see the College Street bus schedule change to better accommodate the area residents. Mr. Churchill was directed to speak with Deputy City Administrator Phil Nadeau who oversees the bus system. Hilary Dow and Calvin Rink of the Chamber Regional Marketing Committee also addressed the Council and let them know they are working on a Community Branding Initiative to help to better define the area.

**PUBLIC HEARING AND FIRST PASSAGE REGARDING AMENDMENTS TO THE  
GENERAL ASSISTANCE ORDINANCE REGARDING BURIALS AND CREMATIONS**

Mayor Macdonald opened the public hearing to receive citizen input and comment. Social Services Director Sue Charron reviewed the proposed ordinance and recent state law changes and the proposal is to amend the city ordinances to match the new state laws. The funeral homes will now have to cover the cremation costs from the fee they receive from the city. Dee Dee Doucette of 66 Howe Street spoke and does not feel it is fair to ask the funeral homes to provide

the cremation costs from their service fee amount and she feels it would create hard feelings between the funeral homes and the city.

Mayor Macdonald then closed the hearing.

### **VOTE (145-2012)**

Motion by Councilor Saddlemire, seconded by Councilor Butler:

That the proposed amendments to the City Code of Ordinances, Chapter 46 “General Assistance”, Section 46-98 “Basic necessities; maximum level of assistance, burial and cremations”, receive first passage by a roll call vote and that the public hearing on said ordinance be continued to the next regular City Council meeting for final passage.

Passed - Vote 7-0

### **PUBLIC HEARING AND ADOPTION OF THE FY2013 LEWISTON CAPITAL IMPROVEMENT PROGRAM BOND ISSUE**

Councilor Cayer noted he supports the school projects in the bond. He said it has been difficult times in the past two years noting the City has had to lay off employees and cut services due to the high debt. He said the high debt is difficult to deal with when there are pressing needs such as addressing the issues of blight and needed parking improvements. He also noted the need to bring some schools up to basic standards.

Mayor Macdonald opened the public hearing to receive citizen input and comment. Several members of the public addressed the Council:

- 1) Bruce Damien, Planning Board member - would like to see the full amount for the Comprehensive Plan restored, encouraged full funding for the Riverfront Study as well noting will be the signature piece for the city for the next twenty years.
- 2) Ronnie Paradis – need to dedicate funds to the downtown area to demolish buildings that are beyond repair and are blight; also spoke in favor of the funding for the Middle School project and the July 10 referendum vote
- 3) Dee Dee Doucette – Not in favor of demolishing buildings, there is a lot of history in the buildings and they should be renovated instead.

### **VOTE (146-2012)**

Motion by Councilor Butler, seconded by Councilor Saddlemire:

To remove \$50,000 from the Comprehensive Plan item and \$15,000 from the Armory rehabilitation item and add \$65,000 into the Acquisitions and Demolitions line.

Passed - Vote 7-0

### **VOTE (147-2012)**

Motion by Councilor Butler, seconded by Councilor Saddlemire:

To adopt the FY2013 Lewiston Capital Improvement Program Bond Issue Order as amended:

ORDERED, That \$22,796,400 be appropriated for financing the following projects in the Lewiston Capital Improvement Program:

<b>Project</b>	<b>Amount</b>
Acquisition & Demolition	215,000
Comprehensive Plan	100,000
Vehicle Wash Facility	180,000
Library Building Improvement	60,000
Police Department Sidewalk Replace.	50,000
Social Services Expansion	200,000
Armory Rehab.	60,000
GIS Photogrammetric Update	75,000
General Street Rehab.	607,000
Russell Street Overlay	71,000
Main Street (Pettingill to Bearce)	120,700
RT. 196/Lisbon Street Project	142,700
<b>Total General Fund</b>	<b>1,881,400</b>
McMahon Addition	5,500,000
LMS Improvements	9,165,000
Montello Lockers	125,000
<b>Total School Department</b>	<b>14,790,000</b>
L/A Water Treatment Program	530,000
Distribution Main Replacement	1,770,000
<b>Total Water Fund</b>	<b>2,300,000</b>
Oak Street Sewer Separation	550,000
Jepson Brook Sewer Separation	1,000,000
Interceptor Inspection & Rehab.	200,000
Sanitary Line Rehabilitation	325,000
<b>Total Sewer Fund</b>	<b>2,075,000</b>
Oak Street Stormwater Separation	550,000
Hart Brook Water Quality Imp	100,000
Jepson Brook Drainage Channel Study	100,000
Jepson Brook Stormwater Separation	1,000,000
<b>Total Stormwater Fund</b>	<b>1,750,000</b>
<b>GRAND TOTAL</b>	<b>22,796,400</b>

FURTHER ORDERED, since the Lewiston Middle School Project exceeds the charter required 15% of the 2012 tax levy, the project will be sent to referendum on July 10, 2012 for voter approval;

FURTHER ORDERED, as the general property tax based debt of \$16,671,400 exceeds the debt

limitation of \$5,792,278, this Council order requires five affirmative votes for passage;

FURTHER ORDERED, That to meet this appropriation, \$22,796,400 shall be raised by Public Improvement Bond Issue(s);

FURTHER ORDERED, That the City Council instruct the Finance Director to advertise for bids for \$22,796,400, or increments thereof, of Public Improvement Bonds; to award the loan; and to employ Palmer & Dodge to furnish the legal opinion for the same; provided that in the alternative, the Finance Director is authorized to award the loan to the Maine Municipal Bond Bank;

FURTHER ORDERED, That the bonds shall be signed by the City Treasurer and Mayor;

FURTHER ORDERED, That the date, maturities, denominations, interest rate or rates, place or places of payment, form or other details of the bonds and of the provisions for the sale thereof shall be determined by the Finance Director;

FURTHER ORDERED, That bonds issued hereunder may be subject to call for redemption on such terms as may be determined by the Finance Director.

FURTHER ORDERED, On or before the call date, the Finance Director is authorized to refund/advance refund this bond series if a net present value benefit is derived.

Passed - Vote 7-0

#### **ADOPTION OF MEETING SCHEDULE FOR THE MONTHS OF JULY AND AUGUST**

#### **VOTE (148-2012)**

Motion by Councilor Libby, seconded by Councilor Christ:

To suspend Section 1,(a) of the Rules Governing the City Council, and to only hold one regular meeting during the month of July, said meeting to be held on Tuesday, July 17<sup>th</sup> at 7:00pm and to hold only one regular meeting during the month of August, said meeting to be held on Tuesday, August 14<sup>th</sup> at 7:00pm.

Passed - Vote 7-0

#### **RECOMMENDATIONS FROM THE CITY CLERK/REGISTRAR OF VOTERS ON ACTIONS NECESSARY TO CONDUCT THE STATE CANDIDATE PRIMARY ELECTION TO BE HELD ON TUESDAY, JUNE 12, 2012**

#### **VOTE (149-2012)**

Motion by Councilor Butler, seconded by Councilor Cayer:

A. That the hours for acceptance of registrations in person only, prior to the June 12<sup>th</sup> election, as required by MRSA Title 21A, sec. 122, 6A(2), be set at 8:00am to 4:30pm, May 23 through June 11, 2012; and additional hours until 7:00pm on Thursday, June 7, 2012.

B. That the names of those persons who register during the closed session for registration shall be recorded in accordance with MRSA Title 21A, sec. 122, subsec. 7B.

C. Pursuant to Title 21A, sec 759(7), absentee ballots will be processed at the central polling place at 4:00pm, 7:00pm and any and all remaining shall be processed at 8:00pm, if necessary.

Passed - Vote 7-0

### **REPORTS AND UPDATES**

City Administrator Ed Barrett introduced Noel Madore who will be serving as a summer intern in the Administrator's Office until August. Mr. Madore is a senior at the University of Maine.

### **OTHER BUSINESS**

No other business was presented at this time.

### **EXECUTIVE SESSION**

#### **VOTE (150-2012)**

Motion by Councilor Cayer, seconded by Councilor Butler:

To enter into an Executive Session pursuant to MRSA Title 1, section 405 (6) (D) to discuss Labor Negotiations regarding the Maine Association of Police - Patrol Unit.

Passed - Vote 7-0 Session began at 8:25pm and ended at 8:44pm.

#### **VOTE (151-2012)**

Motion by Councilor Butler, second by Councilor D'Auteuil:

To adjourn at 8:45P.M. Passed - Vote 7-0

A true record, Attest:

Kathleen M. Montejo, MMC  
City Clerk  
Lewiston, Maine

Lewiston-Auburn

## Lewiston voters approve Middle School improvements



Bonnie Washuk, Staff Writer

Lewiston-Auburn | Tuesday, July 10, 2012 at 10:00 pm

LEWISTON — With some saying they were glad a 1933 school building is being restored, voters said yes Tuesday to spending \$9.1 million to improve and expand the Lewiston Middle School.

Unofficial ballot returns Tuesday night showed the vote was 651-219, with a voter turnout of 3.6 percent, higher than expected for a first-ever July referendum, City Clerk Kathy Montejo said.

Lewiston School Superintendent Bill Webster said he was pleased and grateful.

“Thank you, voters of Lewiston,” Webster said. “I appreciate the fact that voters recognized the importance of this referendum to both meeting our obligation to students, and enhancing the learning environment at Lewiston Middle School.”

The classic brick building, which architects have said has good bones, was originally built as Lewiston High School and became the middle school when the new high school was built on East Avenue.

For 79 years the building has never had a major renovation. Outside, it looks beautiful, but inside it is tired and worn with smelly bathrooms, inadequate lockers, dingy halls and not enough classroom, cafeteria and library space.

Ten voters interviewed Tuesday afternoon all said they voted yes.

“The school’s old and it really needs the updating,” said Carrie Kivus, 45. She and her husband, Timothy, 46, graduated from the school in 1981, “and it was old when we were there,” she said. They have one child who attended the school, another will attend this fall.

The school “is obsolete,” he said. Problems include inadequate heating, it’s too hot or too cold, she said. “The bathrooms are awful. The lockers are awful. There’s water stains everywhere.” When asked about increasing property taxes, Kivus said, “I don’t care. It’s money well spent.”

Siyad Abdi, 40, voted yes saying the school needs to be expanded to accommodate more students.

Roger Charpentier, 62, voted yes "because that school is needed heavily for the amount of people in the city. That building is so old." He graduated when the building was Lewiston High School.

Monique Gagne, 76, voted yes and appreciated that the building will be preserved.

"They just tore down my Edward Little and I'm upset. I didn't want that to happen here in Lewiston. I like to keep the old buildings," Gagne said. She likes historic buildings in Quebec and Italy. "Here, we tear them down. It's sentimental to us."

Richard Grandmaison "voted yes, reluctantly," he said. "Why? My brother was the maintenance man over there, my father was the maintenance man at the high school. The School Department does not spend enough money maintaining their facilities." He and his wife, Diane, graduated from the school in 1961 when it was the high school. "There were 2,000 students in that building then," she said.

Brent Watson, 36, voted yes acknowledging he has a "vested interest. I teach there. Within a few years two of my own children will be there."

The school's old. When people walk into the building, "you're met with nothing. You have to go up the stairs" to greet a receptionist. Renovation plans call for offices and the receptionist to be moved to the first floor. That will make it more inviting, Watson said.

City officials estimated the \$9.1 million bond, which will be paid for by local taxpayer money, could increase property taxpayers by about \$37.50 a year on a home valued at \$150,000.

Superintendent Webster said the impact will be less than that, because Lewiston's student population is rising, which means more state money for education could decrease the impact on property taxes.

Webster said he'll meet with architects on Wednesday. The construction timetable is not worked out, but he estimated renovation could begin this winter and be completed in two years.

[bwashuk@sunjournal.com](mailto:bwashuk@sunjournal.com)

## **WBRC ARCHITECTS / ENGINEERS**

### **Firm Description**

#### **A. Office Background:**

WBRC Architects / Engineers is a full service architectural/engineering firm. The office has been in continuous operation since 1902.

Presently, the staff consists of over sixty (60) people of which there are thirteen (13) Registered Architects, thirteen (13) Registered Professional Engineers, one (1) Landscape Architect, two (2) Registered Interior Designers, and numerous qualified technical support staff across all disciplines.

#### **B. History and Organization:**

The firm of WBRC Architects / Engineers has provided services in architecture and engineering since 1902. Established in that year by C. Parker Crowell and Lancaster, the firm has evolved over the years with the following name changes: Crowell, Lancaster, Higgins; Crowell, Lancaster, Higgins and Webster; Higgins, Webster and Lloyd; Higgins, Webster and Partners; Webster, Baldwin, Rohman, Day; Webster/Baldwin/Rohman/Day/Czarniecki, P.A., and in 1989 the firm's name was changed to WBRC Architects / Engineers.

#### **C. Services:**

WBRC Architects / Engineers is a service-oriented business, which caters to the needs of our clients. We actively involve our clients in the design and construction decision-making process. We provide complete state of the art services including programming, permitting, schematic design, design development, construction documents, bid evaluation, construction supervision, post construction evaluation and a full range of supplemental services.

#### **D. General Experience:**

Our office has extensive experience in the areas of feasibility studies, energy retrofit architecture, interior architecture, urban streetscape design, urban planning, environmental planning and permitting, historic preservation, and rehabilitation and renovation. Representative project types include commercial buildings, community service facilities, municipal buildings, schools, offices, colleges, medical facilities, churches and housing.

**E. Project permitting and regulatory submittal and review experience:**

**HOLLYWOOD SLOTS GAMING FACILITY/ BANGOR HISTORIC TRACK, Bangor, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

\$90.0M development consisting of a 9-acre footprint gaming facility and attached 150 room hotel and 1,500 space parking garage situated adjacent to the Penobscot River. Offsite mitigation of stormwater included over \$1.0M in stormwater interceptors and attenuation basins on adjacent city-owned Bass Park property, home of Bangor Historic Track. The permitting efforts included the treatment of all post-1975 development on Bass Park, including 16 acres of impervious area and 9 acres of non-impervious area.

Project required extensive demolition and removals of existing built retail neighborhood, elimination and rerouting of I-395 off-ramp, and onsite development of walks, plantings, and site amenities consistent with City's waterfront park.

**HAMPDEN ACADEMY, Hampden, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

\$52.0 M, 170,000 square feet, planned high school to replace the historical Hampden Academy which had fallen into disrepair. The project is located on a parcel adjacent to three other Hampden schools, in both the Reeds Brook watershed and the Souadabscook Stream watershed. A careful site selection process included consideration of ecological impacts. The owner chose the site with the least amount of wetlands, no potential vernal pools, and in the area of significant existing development.

**BREWER PK-8 SCHOOL, Brewer, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

\$39.0M, 156,000 square feet, consolidated PK-8 school with associated site improvements, and an 8-lane track facility. Project achieved both stormwater quality and quantity requirements using only Low-Impact Development BMPs. The mitigation requirement for the alteration of 20,000 square feet of wetland was waived due to the fact that the project was a redevelopment of an existing site and all available site space was used to avoid impacting any wetlands on additional properties. The project design avoided impact within 25 feet of an intermittent stream on the property.

### **PENINSULA ELEMENTARY SCHOOL, Gouldsboro, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

\$12M, 41,000 square foot K-8 school on a 21-acre parcel in the village of Prospect Harbor. The site design included several LID methods in order to effectively treat the quality and quantity of stormwater runoff. The site design was able to achieve a Tier II wetland alteration permit despite the existence of several acres of wetland on the site. WBRC worked closely with the Army Corps of Engineers and US Department of Fish and Wildlife to permit the impact of vernal pools. The vernal pools will be monitored annually to assess the condition of the wildlife.

### **ORCHARD TRAILS HOUSING, Orono, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

\$24.0M, 144 unit, 576 bed housing project adjacent to the University of Maine at Orono Campus. Project required extensive pre-design planning for 60 acre parcel to develop a 20 acre development in avoidance of onsite freshwater wetlands and mapped vernal pools.

### **HERMON MIDDLE SCHOOL, Hermon, Maine**

(Stormwater, NRPA/ Army Corps, MDOT)

For this repeat client, the Hermon School Department, WBRC was hired on the basis of their vast experience in the educational sector and know-how in terms of renovation and new construction. WBRC provided full A/E services including architecture, civil, structural, mechanical, electrical, plumbing, interior design and landscaping for 14,000 SF of New Construction and 28,000 SF of Renovation scope. WBRC provided schematic design, design development, construction documents, bidding and construction administration services. The project was implemented on time, in the proper quality and within budget. WBRC also provided additional cost saving services by assisting the Owner with direct procurement of large ticket vendor items such as lockers, bleachers & furniture. Total Construction Cost: \$4.9 Million.

The schools are located in a phosphorus-impacted watershed, necessitating careful design to avoid non-point source pollution. The school was able to share many facilities with the High School, resulting in a reduction of impervious area.

### **HERMON TENNIS FACILITY, Hermon, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps)

Construction of tennis facility on parcel adjacent to Hermon High School.

### **MAINE MARITIME ACADEMY, Castine, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

WBRC prepared a Site Location of Development permit for all post-1975 development on the campus, and continues to provide permit modifications for additional campus improvements. Recent projects include an addition to the Student Union, parking upgrades, master planning, and aesthetic improvements to the main quad. All designs must result in zero net increase in peak flows due to overloaded existing stormwater systems.

### **PENJAJAWOC WATERSHED BMP RETROFIT DESIGN, Bangor, Maine**

(Stormwater, BMP retrofit/ LID)

Assisted the MDEP and City of Bangor to identify stormwater BMP retrofits within an urban-impaired stream. Hydrology modeling of a 5,500 acre watershed and nearly 4 miles of stream channel. Developed “case studies” and predicted positive impact to stream water quality for three (3) distinctly unique BMP retrofit approaches.

### **MDI BIOLOGICAL LABORATORY, Salisbury Cove, Maine**

(Stormwater PBR, LEED)

15,000 SF, 3.5-story, structural steel frame laboratory building on shallow spread footings. The project is located on ecologically-sensitive Mount Desert Island. A LEED approach to site design was used, including minimization of site disturbance, minimal impervious areas, shading, and stormwater reduction methods. Currently seeking LEED Platinum certification.

### **PRESQUE ISLE MIDDLE SCHOOL, Presque Isle, Maine**

(Stormwater, MDOT)

Aging facilities and declining enrollments necessitated consolidation of Presque Isle’s two middle schools. The school’s new exterior façade and south facing building addition adds a new library and a 465-seat performing arts center.

Discussions with administrators and teachers were key to this project’s success. The renovations give an old building a new look. The floor plan gives teachers more opportunity for collaboration and public facilities that can be used by the entire community.

### **KENNEBEC VALLEY YMCA, Augusta, Maine**

(Site Location of Development, MDOT)

Faced with a 100+ year old, multi-leveled facility, landlocked in downtown without parking, ball fields, room for expansion, and a dwindling membership; the Kennebec Valley YMCA realized it needed to build new to survive. The city of Augusta made available a 6-acre parcel in the Capital District. WBRC was tasked with developing concept designs, selecting a construction manager and prepping exhibits for this successful \$10M fund-raising campaign.

### **ADVANCED ENGINEERED WOOD COMPOSITES LABORATORY, Orono, Maine**

(Site Location of Development Modification, LEED)

The Advanced Engineered Wood Composites Center Office Expansion, located at the University of Maine, is a 6,880 square foot addition dedicated to research, education and economic development focused on the material science and structural application of hybrid composites. The facility is constructed of many different manufactured wood structural component types, representing the latest in wood engineering technology. The Office Expansion provides additional space for the Centers growing population of Graduate Students, Research Engineers, Visiting Faculty and Staff. The project is LEED certified. Construction was completed in May of 2005 by The Sheridan Corporation.

### **BELFAST ELEMENTARY SCHOOLS, Belfast, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps)

\$7.9 million Captain Albert W. Stevens Elementary School (Belfast Elementary School) consists of a 2-story 54,514 SF project designed for 330 students. It replaces three older, smaller schools. The school district was able to purchase 16 acres adjacent to the district's existing eight-acre site and next to its expanding residential neighborhoods. By avoiding nearby wetlands, a curving drive and islands of existing vegetation were created en route to the new school site. Bus drop-off, parent drop-off, teacher parking, and visitor parking are all separate but close to the school's main supervised entrance. The entrance is a two-story element with a covered walkway and battened walls. The floor plan is a unique cross shape with two-story classroom wings making up two legs of the cross. Grades K through 1 are located on the first floor, and grades 2 through 5 are on the second floor. A two-story volume library space connects the classroom wings. The other two arms of the cross include the gymnasium and cafeteria, separated by a stage that doubles as a music room. The center of the cross is a two-story lobby entrance with a central stair that bridges to the upper classrooms.

## **WINTHROP HIGH SCHOOL, Winthrop, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

WBRC faced a number of challenges in designing a new high school to share a hilltop campus with the existing middle school built in the 1960s. A new access road for the site situated on a hill overlooking the town was built. The unique building design successfully incorporates architectural details that reflect the town's heritage of manufacturing and agriculture. This new campus integrates technology, recreational activities and services.

The building includes a performing arts center, broadcast studio, publication center, project room and ITV/ATM technology, along with team sports and lifelong learning facilities for the community.

Located in the watershed of Lake Cobbosseecontee, a lake which experiences water quality problems due to excess phosphorus, mostly due to non-point source pollution in the surrounding watershed. WBRC worked closely with the Cobbossee Watershed District to appropriately lessen the impact of the development.

## **EASTERN MAINE COMMUNITY COLLEGE, Bangor, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

WBRC prepared a Site Location of Development permit for all post-1975 development on the campus, and continues to provide permit modifications for additional campus improvements. Recent projects include additions to Katahdin Hall, parking improvements, and improvements to the main quad. The site is located in a DEP-designated Urban Impaired Stream watershed (Penjajawoc).

The addition to Katahdin Hall was a \$3.1M, 40,000 SF renovation/addition that transformed a 1960's dormitory building into a dynamic Campus Center for the college. WBRC updated the campus master plan and were involved in all aspects of A/E professional services on the project. Featured spaces include: Student Services Center, Library, Cafeteria/Kitchen, Early Childhood Ed. Training, Conference and Faculty Offices.

Other projects include the EMCC Campus-wide master planning, master permitting (SLODA, NRPA, and Local) for 10-year build out of local community college campus. Project included development of a new main entrance boulevard, new student quad, 550 space satellite parking area, reconfigured access and pedestrian routes, and stormwater management planning for development of additional buildings and impervious area. WBRC designed several LID measures to effectively improve water quality in the Penjajawoc Stream.

## **HAMPDEN BUSINESS & COMMERCE PARK, Hampden, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

The Hampden Business and Commerce Park is a 135 acre project being developed by the Town of Hampden. The configuration of this multi-phased park will favor a core of shops and open space, with a "Main Street appeal of carefully sited "signature" building clusters, adjoining pedestrian plazas, and purposefully laid out sidewalk and recreational trail elements. Rear "traditional businesses" having low employee counts include: inter-modal and freight processing, manufacturing, compounding, processing, treatment or warehousing of goods and products, wholesale distribution, and wholesale sales.

A public transit stop has been incorporated into the core of this transit-oriented development, well situated within a ten minute or less walking distance anywhere from within the park.

The preservation of view corridors within the park through a "clustering" or "coving" approach permits combining of lots into larger parcels (10+ acres) without jeopardizing the appearance of the site.

WBRC was retained to provide Master Planning, Master Permitting, Master Architectural Guidelines, Design-Development and Construction services.

## **SEARSPORT MIDDLE-HIGH SCHOOL, Searsport, Maine**

(Site Location of Development, Stormwater, NRPA/ Army Corps)

WBRC worked with MSAD #56 to restore the school's accreditation through a series of cost-effective upgrades to the existing school. The new addition at the front façade gave a brand new look to the entire school, complementary to the rich architectural heritage of Searsport. The cafeteria, designed with tiered seating areas is transformed into a performing arts center by the removal of tables, extending the use and value of the structure. The result is a highly functional attractive facility that serves both educational and community needs.

## **DIRIGO PINES, Orono, Maine**

(Site Location of Development Modification, Stormwater, NRPA/ Army Corps)

Site design and permitting for the addition of several duplex units to the Dirigo Pines Retirement Community. The site design included a modification of the existing detention pond as well as the addition of several LID measures such as bioretention filters and level spreaders. WBRC worked closely with the Orono Land Trust to preserve existing trail continuity.

**CROSSWINDS ASSISTED LIVING, Fort Kent, Maine**  
(Stormwater)

Due Diligence for master permitting and design of a 60 acre parcel to include assisted living, nursing home, hotel, duplexes, and apartments in Fort Kent, Maine.

**CAMPUS CREST “THE GROVE”, Orono, Maine**  
(Site Location of Development, Stormwater, NRPA/ Army Corps)

planned construction of several student housing units in an area of existing multi-family buildings. The site design included several stormwater treatment measures including detention ponds as well as several LID measures such as bioretention filters and level spreaders. WBRC managed a land swap deal between the owner and the Orono Land Trust to preserve a more valuable parcel of land, and to develop a parcel of lower ecological value.

**PENOBSCOT BAY MEDICAL CENTER, Rockport, Maine**  
(Site Location of Development, NRPA/ Army Corps)

Ongoing consulting relationship for several permits relevant to additional development on the site.

**HUSSON COLLEGE, Bangor, Maine**  
(Site Location of Development, Stormwater/ LID, NRPA/Army Corps, MDOT)

Permitting for multiple campus improvements on a 200+ acre campus including: Husson Commons, Furman Student Center, multiple athletic facilities, and a new performing arts center/ administration building entitled the “Meeting House”, and associated parking lots.

**BANGOR PARKADE, Bangor, Maine**  
(Site Location of Development, Stormwater, NRPA/ Army Corps, MDOT)

Permitting for a ground-up \$24M, 25 acre, 175,000 g.s.f. mixed-use retail development on Stillwater Avenue in Bangor. Project included acquisition and set-aside of nearly 18 acres of open space, including a 150’ wide landscaped corridor between an abutting residential neighborhood.

**APPLE TREE ACRES, Belfast, Maine**  
(Site Location of Development, NRPA/Army Corps, Stormwater, DHHS, MDOT)

Planned \$16M, 260 acre, 147 lot planned unit residential subdivision (PUD) consisting of 4 phases of clustered village type development surrounding common green areas, with a 109 acre land trust bequest. All utilities were developed onsite (sanitary, water

supply, stormwater treatment). Housing units and lot development were pre-permitted.

**CROSBY MANOR ESTATES, Belfast, Maine**

(Site Location of Development - Delegated Municipal Review, NRPA/ Army Corps)

55 Unit Planned Unit Development on a 22-acre parcel fronting Northport Avenue and Belfast Bay. Project consisted of development of privately owned condominium development with common infrastructure including off-peak sanitary discharge to Municipal wastewater collection system, Public Water Main extension, and approx. 3,300 LF of Private Roads.

**BANGOR MALL/ FILENES EXPANSION, Bangor, Maine**

(Site Location of Development, Stormwater, MDOT)

\$24.0M Expansion consisting of 170,000 GSF addition to the existing 555,000 GSF Bangor Mall Facility on a 104-acre parcel. Project consisted of repairs/modifications to 20-year-old detention basins for 100-year storm event freeboard and discharge, expansion of parking lot (6 additional acres) within a total 18 acre project disturbance area. Project included onsite and offsite City/MDOT traffic widening/ signalization improvements, utility rerouting, and an extensive landscaping and buffering plan.

**EMMC/ Waterworks Redevelopment, Bangor, Maine**

(Site Location of Development)(NRPA)

\$3.0M Renovation/ Redevelopment of existing waterworks facility adjacent to the former Bangor Dam included a 28,000 GSF of office space with parking, retaining wall improvements, infrastructure, landscaping and walks. Historic preservation was a key issue as well as traffic and close proximity to river ecosystem. Non-point source pollution from parking lot runoff was addressed with on-site treatment.

**HERMON HIGH SCHOOL, Hermon, Maine**

(Site Location of Development, NRPA/ Army Corps, MDOT)

\$12.5M High School on new 40-acre site with 410 space parking lot and associated playing fields for projected 800 student population and 50 staff. Development of the parking lots and Baseball, softball, Soccer, Track and multi-purpose fields in conjunction with roof runoff required two detention ponds to control surface runoff. A Wet pond was developed adjacent to U.S. Route 2 to remove phosphorus, nitrate and petroleum pollutants from parking, roof and playing fields.

The 97,000 SF project required avoidance of an adjacent State Jurisdictional wetland, widened Route 2 approaches, and on-site water and sanitary sewer systems. Fire

protection was afforded through development of underground storage for the building sprinkler systems and dry hydrants in the wet ponds.

As a result of the streamlined WBRC/ MDEP Review process and pre-application meetings, the review period was completed in four months.

**DARLINGS AUTO MALL, Bangor, Maine**

(Site Location of Development, Stormwater)

\$4.1M Commercial Subdivision with multi-phased auto dealership and new car display parking lot.

**THE DOWNEAST MAINE OUTLET, Ellsworth, Maine**

(Site Location of development, NRPA/ Army Corps)

\$5M (7) - lot commercial development with 100,560 s.f. multi-phased retail outlet. Extensive expansion to City road systems, access, sanitary and water infrastructure was incorporated into the overall design. Avoidance of wetlands and development of stormwater detention was required.

**BANGOR MALL BUSINESS PARK, Bangor, Maine**

(Site Location of Development, NRPA/ Army Corps)

\$1M commercial subdivision adjacent to Bangor Mall Development and Interstate I-95. Located behind the Shaw's Supermarket and now home to Wal-Mart and Home Quarters (HQ) Warehouses, the project street and lot layout required careful avoidance of State Jurisdictional Wetlands.

**BREWER HOUSING AUTHORITY MASTER PLAN, Brewer, Maine**

(Site Location of development, NRPA/ Army Corps)

Post-1970 permitting of 102 existing housing units and \$3.0M of road systems and phased development of 52 additional housing units. Avoidance of wetlands was required.

**BANGOR INTERNATIONAL AIRPORT PARKING LOT EXPANSION, Bangor, Maine**

(Site Location of development)

\$0.5M, 550 lot expansion to the airport parking complex for contract with the City of Bangor. The project included storm drainage reconstruction, recycling of asphalt base material and parking (traffic) control systems.

**LONGWOOD TERRACE SUBDIVISION, Orono, Maine**

(Site Location of development, NRPA/Army Corps)

Planned \$1.2M, 52 – lot residential subdivision in medium density residential area with extensive wetlands avoidance.

**ST. MARY'S PARISH Bangor, Maine**

(Site Location of development, Stormwater)

Expansion to existing parish complex consisted of construction of new \$1,500,000 educational facility (23,000 SF) and associated parking. Storm drainage / detention and traffic were addressed with various on and off-site improvements. Revision included detention systems modifications to minimize net useable site impact.

**BANGOR WATERWORKS REDEVELOPMENT Bangor, Maine**

(Site location of development)

Planned \$2.8M Redevelopment of existing waterworks facility adjacent to the Bangor Dam included a 37-unit interval ownership resort complete with parking, indoor pool, health club, and game room. Historic preservation was a key issue as well as traffic and close proximity to river ecosystem. Non-point source pollution from parking lot runoff was addressed with on-site treatment.

**OCEANARIUM - BAR HARBOR, Bar Harbor, Maine**

(NRPA/Army Corps)

Development of a three-phased oceanarium complex on Thomas Island with related nature interpretation trails. Project was the former site of a Wildlife Park and required extensive removals of existing fences, structures, etc. from the upland area. Avoidance of a Coastal Wetland was required.

**BFCU / HOGAN ROAD BRIDGE, Bangor, Maine**

(NRPA/Army Corps, FEMA)

Site development including 1,000 l.f. access road and bridge to serve a new Credit Union amongst an established retail neighborhood on Hogan Road. This project required avoidance and filling of wetlands, as well as extensive HEC-2 floodplain analysis for bridging/ fill within regulatory floodplain limits.

**EVERGREEN WOODS, Bangor, Maine**

(Revision - Site Location of development)

Professional / business subdivision located adjacent to Penjajawoc Stream on Mt. Hope Avenue in Bangor, Maine. Project consisted of expansion of parking to existing approved site location of development permit.

Property Deed and Tax Map– Section 4

342/91

# Know all Men by these Presents,

That the Franklin Company, a Corporation duly established by law, in the State of Maine, in consideration of One Dollar

paid by the City of Lewiston a municipal corporation in the County of Androscoggin in the State of Maine,

the receipt whereof is hereby acknowledged, do hereby grant, convey, remise, release, and forever quit-claim unto the said

City of Lewiston, its successors

Acertain lot or parcel of land lying and being in said City of Lewiston, bounded and described as follows, to wit; Commencing at the intersection of the southwesterly line of Campus Avenue with the southeasterly line of Central Avenue; thence southwesterly, by the southeasterly line of Central Avenue five hundred thirty-seven ( 537 ) feet to land conveyed by this Grantor to the City of Lewiston, by Deed No. 1604 dated Feb. 1, 1923; thence southeasterly by the northeasterly line of said City of Lewiston land three hundred thirty ( 330 ) feet; thence southwesterly, by the southeasterly line of City of Lewiston land two hundred forty ( 240 ) feet to Vale Street; thence southeasterly by the Northeasterly line of Vale Street one hundred eighty-eight ( 188 ) feet to an angle in said line of Vale Street; thence southerly, by the easterly line of Vale Street about one hundred thirty-five ( 135 ) feet to Sabattus Street; thence easterly by the Northerly line of Sabattus Street about ninety-six (96) feet to the Easterly boundary line of the Franklin Co. land; thence Northeasterly, by said boundary line about three hundred and eight ( 308 ) feet to land conveyed by this Grantor to the City of Lewiston by deed No. 1517, dated April 15, 1919; thence Northwesterly, by the southwesterly line of the City of Lewiston land, five hundred (500) feet; thence Northeasterly by the northwesterly line of said City of Lewiston land, five hundred (500) feet to Campus Avenue; thence Northwesterly, by the southwesterly line of Campus Avenue, one hundred eighty ( 180 ) feet to Central Avenue and point of beginning. The above parcel of land is conveyed subject to the following restrictions which the said Grantee hereby agrees to observe, viz: That no building shall be built upon said land excepting a schoolhouse and such building if and when built only on a location easterly from the land conveyed by said Franklin Company to said City of Lewiston by deed no. 1604, dated February 1, 1923, and shall not be built within thirty (30) feet from the Northeasterly line of said Vale Street, and all the said land, excepting for said schoolhouse shall remain forever open to the sky.

Counter-... signed Francis W. Febyan, President.

with all the privileges and appurtenances thereto belonging.

On have and in hold the above released premises to the said

City of Lewiston, its successors its and their

do covenant with the said City of Lewiston, its successors

shall warrant and defend the same to the said City of Lewiston

claiming by, through, or under said Corporation, but against none other.

In Witness Whereof, the said Franklin Company has caused its corporate seal to be affixed to these presents, and the same to be signed by Charles Stetson, its Treasurer

this twenty-ninth day of March in the year of our Lord one thousand nine hundred and twenty- six.

Signed, Sealed and Delivered in presence of Charles W. Jordan

The Franklin Company ( Corp. Seal )  
by Charles Stetson, Treasurer

## COMMONWEALTH OF MASSACHUSETTS.

Suffolk, SS, in Boston,  
On the twenty-ninth day of March in the year of our Lord one thousand nine hundred and twenty- six personally appeared before me the above-named Charles Stetson, Treasurer of the Franklin

COMPANY, and acknowledged the foregoing instrument to be the free act and deed of said Corporation.

Received September 17, 1929 at 3 o'clock, 8 M. P. M. and recorded from the original.

Attest: \_\_\_\_\_, Register.

No. 1617. 342  
**Know all Men by these Presents,**

342/93  
LOCUS

That the Franklin Company, a Corporation duly established by law, in the State of Maine, in consideration of  
**One dollar**

The Inhabitants  
of the City of Lewiston, in the County of Androscoggin and State  
paid by  
of Maine,

the receipt whereof is hereby acknowledged, do hereby grant, convey, remise, release, and forever quit-claim unto the said  
**Inhabitants, their successors** heirs and assigns.

A certain lot or parcel of land lying and being in said City  
of Lewiston, bounded and described as follows, to wit.  
Commencing at the intersection of the southwesterly line of  
Skinner Street and the Northwesterly line of Golder Street; thence running  
Northwesterly, by the southwesterly line of Skinner Street five hundred (500)  
feet to a Proposed Street fifty (50) feet wide, running southwesterly from  
Skinner Street and parallel to Golder Street; thence southwesterly, by the  
southeasterly line of said Proposed Street five hundred (500) feet to a  
Proposed Street fifty (50) feet wide running parallel to Skinner Street;  
Thence southeasterly, by the Northeasterly line of said Proposed Street  
five hundred (500) feet to the southeasterly boundary line of the Franklin  
Company's land.  
Thence NorthEasterly by said boundary line and the North -  
Westerly line of Golder Street five hundred (500) feet to the point of  
beginning.

\$8.00  
Doc. Rev.  
Stamps:  
Cancelled

with all the privileges and appurtenances thereto belonging.  
We have and do hereby release the above premises to the said  
**Inhabitants, their successors** heirs and assigns, to have and to hold forever. And the said Corporation  
do covenant with the said **Inhabitants, their successors** heirs and  
assigns, that the premises are free from all incumbrances, made or suffered by said Corporation; and that the said Corporation  
shall warrant and defend the same to the said **Inhabitants, their successors**  
heirs and assigns forever, against the lawful claims and demands of all persons,  
claiming by, through, or under said Corporation, but against none other.

Counter-  
signed  
Francis W.  
Fabyan,  
President.

In Witness Whereof, the said Franklin Company has caused its corporate seal to be affixed to these presents,  
and the same to be signed by **Charles Stetson, its Treasurer**

thereunto duly authorized,  
this fifteenth day of April in the year of our Lord one thousand nine hundred  
and ~~twenty~~ nineteen.

Signed, Sealed and Delivered  
in presence of  
**Charles W. Jordan**  
The Franklin Company (Corp. Seal)  
By **Charles Stetson, Treasurer**

COMMONWEALTH OF MASSACHUSETTS.  
Suffolk Boston  
On the fifteenth day of April in the year of our Lord one thousand nine hundred  
and ~~twenty~~ nineteen,  
Charles Stetson  
personally appeared before me the above-named  
Treasurer of said Franklin

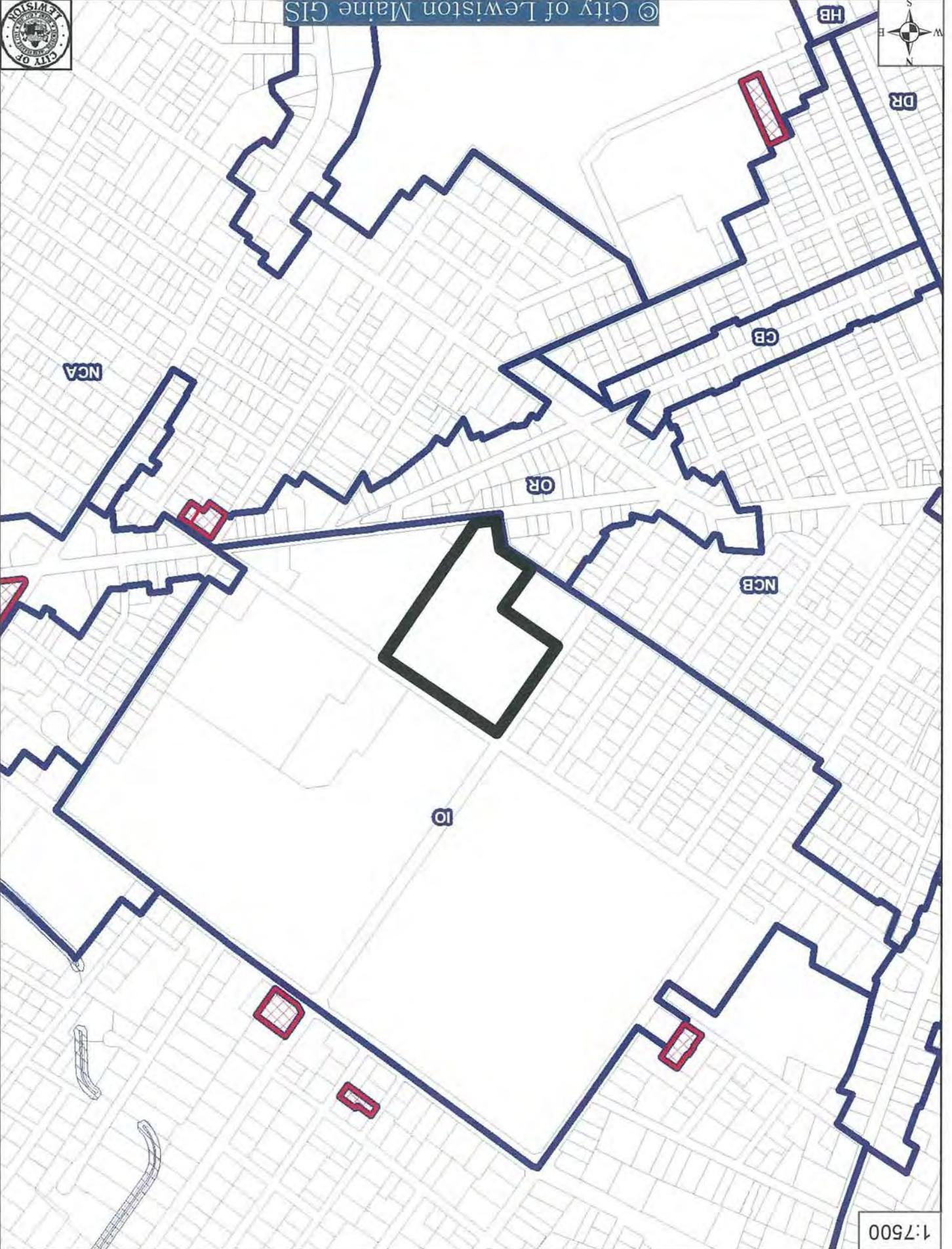
COMPANY, and acknowledged the foregoing instrument to be the free act and deed of said Corporation.

Charles W. Jordan,  
Commissioner of Maine (Seal)  
Received September 17, 1929 at 8 o'clock, 8 M. P. M. and recorded

from the original.  
Attest: \_\_\_\_\_, Register.



Zoning and Location Maps – Section 5



1:7500



## Construction Schedule – Section 6

### Construction Plan

The construction will consist of one phase which is scheduled to start Summer 2013

The general sequence of construction is as follows

- Start construction
- Install temporary Erosion and Sedimentation Control Measures
- Construct temporary sediment basins in the treatment filter locations to remove sediment from stormwater runoff during construction
- Site Clearing/Grubbing
- Excavate for New Foundation
- Stockpile possible general fill from excavation
- Stabilize denuded areas and stockpiles within 15 days of last construction activity as construction impact develops
- Construct new stormwater drainage system, and tie into existing system
- Place general fill to bring roads and drives to elevation of subbase
- Construct Building(s)
- Place road base material, curbing, fine grade around building and drives, place binder pavement course, and place surface course
- Fine grade roadway side slopes and disturbed areas, place loam with seed or specified stabilization technique
- Install/construct all permanent Erosion and Sedimentation Control Measures
- Construct and or stabilize stormwater runoff treatment filters
- When site construction activity is complete and the site is stabilized (>80% catch of grass), remove silt fence and reseed any areas disturbed by their removal
- Occupancy

## Stormwater Management Plan – Section 7

### Project Description:

The project consists of a new 3,000 square foot (footprint) addition to the existing building. The sidewalks and stairs in front of the building will be reconfigured to provide access to the main entrance. Although the building footprint will increase, the total impervious area in front of the building will decrease by 1,225+/- square feet. Additional parking is required as part of this project and will be located behind the building near the dumpster pad. The addition of this parking will increase the impervious area behind the building by 2,427 +/- square feet. This brings the total increase of impervious area for this project up to 1,202+/- square feet or 0.028 acres.

### Surface Water and Flooding:

Water from the site does not drain to any lakes, streams, ponds, rivers, or any downstream water bodies. It currently drains into the municipal combined sewer/stormwater system or infiltrates into the ground. The improvements to the site have been designed to allow water to flow similar to existing conditions. The site is not in a flood hazard zone and does not experience any flooding or pondage currently. See attached FEMA Flood Map.

### Soils

Soils for this project were obtained from NRCS Web Soil Survey. The majority of the site is made up of "Made land, loamy materials" or "Md" and is classified in Hydrologic Soil Group "C". A small portion of the site is made up of "Elmwood fine sandy loam" or "EmB" and is classified in Hydrologic Soil Group "C". This soils information was used to determine curve numbers (CN) for stormwater runoff analysis. See attached hydrologic soil group map for more information.

### Runoff Analysis

Stormwater runoff evaluation was developed in accordance with the methodology outlined and implemented within the HydroCAD stormwater modeling system. The HydroCAD modeling system was developed using techniques from the SCS TR-20 and TR-55 publications. The 2-year (3.0"), 10-year (4.6") and 25-year (5.4") 24-hour, Type III storm events were used to calculate the peak rates of runoff for the proposed development.

Based on the above methodology, the following modeling assumptions were incorporated into the calculations:

- The runoff curve numbers represented within the analysis identify the site ground cover characteristics. The following list represents the "Curve Numbers (CN)" used for this analysis:

<u>CN</u>	<u>Description</u>
98	Paved parking & roofs, HSG C
79	50-75% Grass cover, Fair, HSG C

- Typically, the time of concentration path within each watershed (subcatchment) was identified by sheet flow (100' max for paved areas and 250' max for all other ground covers); shallow concentrated flow; pipes, and swales. For time of concentration, the slopes for each different segment were calculated by total vertical drop over the total segment length.
- The travel time (Tt) path serving each watershed (subcatchment) typically is represented by a subsurface storm drainpipe or existing natural drainage way. Reaches within the analysis identify the travel time segment.

### **Water Quality and BMP**

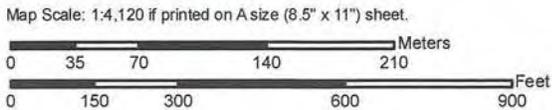
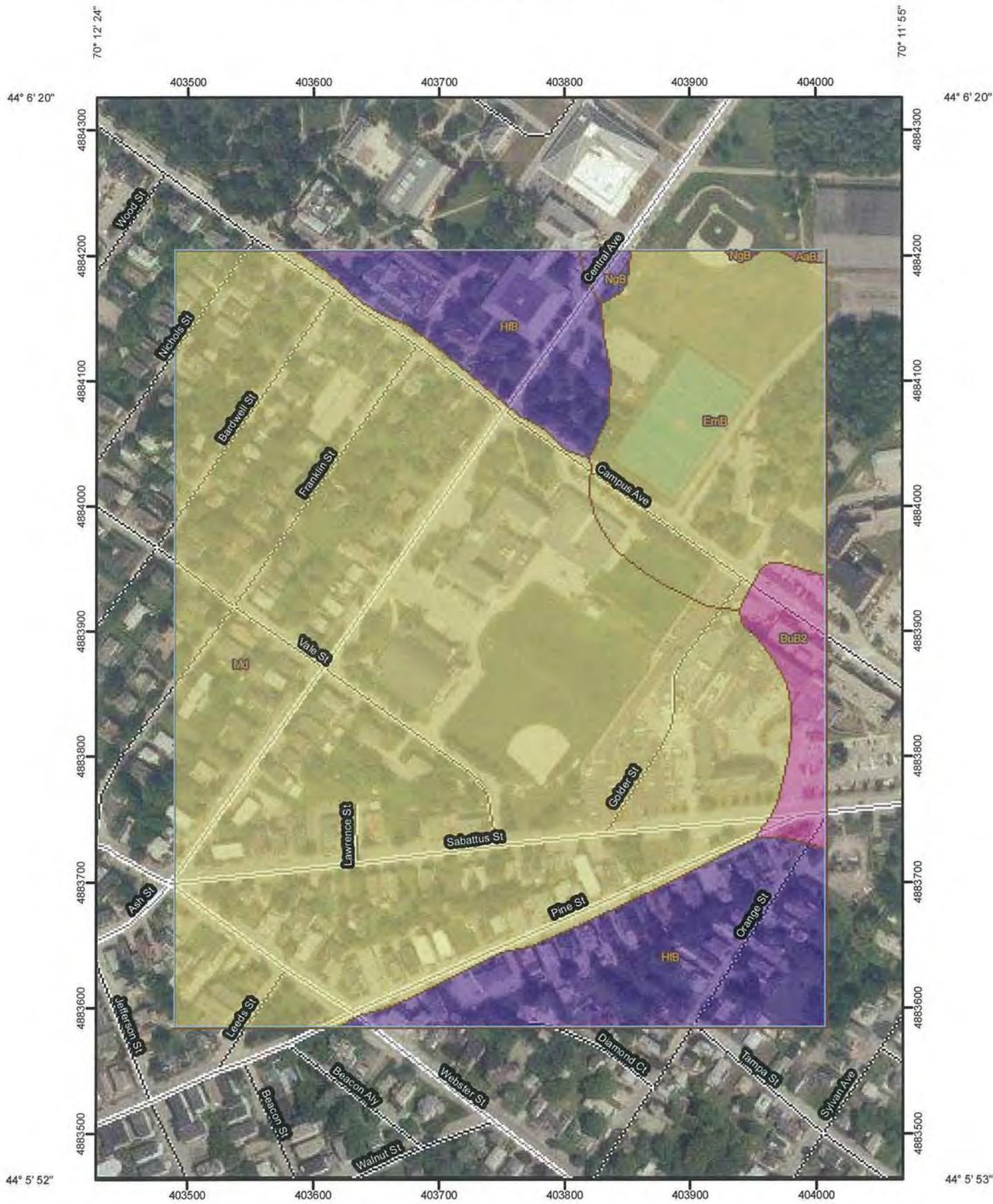
The quality of the stormwater is not expected to be affected as part of this project and the project is not located in a watershed most at risk for development as noted in Chapter 500 of the DEP Stormwater Management Guidelines. All disturbed areas will either be paved, stabilized, or revegetated using Best Management Practices. See Section 8 for the erosion and sedimentation control plan.

### **Results**

Results from the stormwater runoff analysis show that the subcatchment that includes the new building addition and sidewalks will have less runoff for all three storms (2, 10, and 25-year). The subcatchment behind the building that includes new parking will experience a negligible increase in stormwater runoff. See attached HydroCAD results for more information.

### **Conclusion**

No additional water will enter the municipal combined sewer/stormwater system in front of the main entrance. The additional parking areas experience a negligible increase in flow. The additional water is anticipated to sheet flow through a large grassed area labeled as "Multi-Purpose Field" and eventually infiltrate into the ground.



## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Units

### Soil Ratings

 A

 A/D

 B

 B/D

 C

 C/D

 D

 Not rated or not available

### Political Features

 Cities

### Water Features

 Streams and Canals

### Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

## MAP INFORMATION

Map Scale: 1:4,120 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

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 accurate map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: UTM Zone 19N NAD83

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

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine  
Survey Area Data: Version 13, Jul 27, 2009

Date(s) aerial images were photographed: Data not available.

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

## Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Androscoggin and Sagadahoc Counties, Maine (ME606)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AaB	Adams loamy sand, 0 to 8 percent slopes	A	0.1	0.1%
BuB2	Buxton silt loam, 0 to 8 percent slopes, eroded	D	2.3	2.9%
EmB	Elmwood fine sandy loam, 2 to 8 percent slopes	C	11.4	14.3%
HfB	Hartland very fine sandy loam, 2 to 8 percent slopes	B	13.2	16.7%
Md	Made land, loamy materials	C	51.9	65.5%
NgB	Ninigret fine sandy loam, 0 to 8 percent slopes	B	0.3	0.4%
<b>Totals for Area of Interest</b>			<b>79.2</b>	<b>100.0%</b>

## 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.

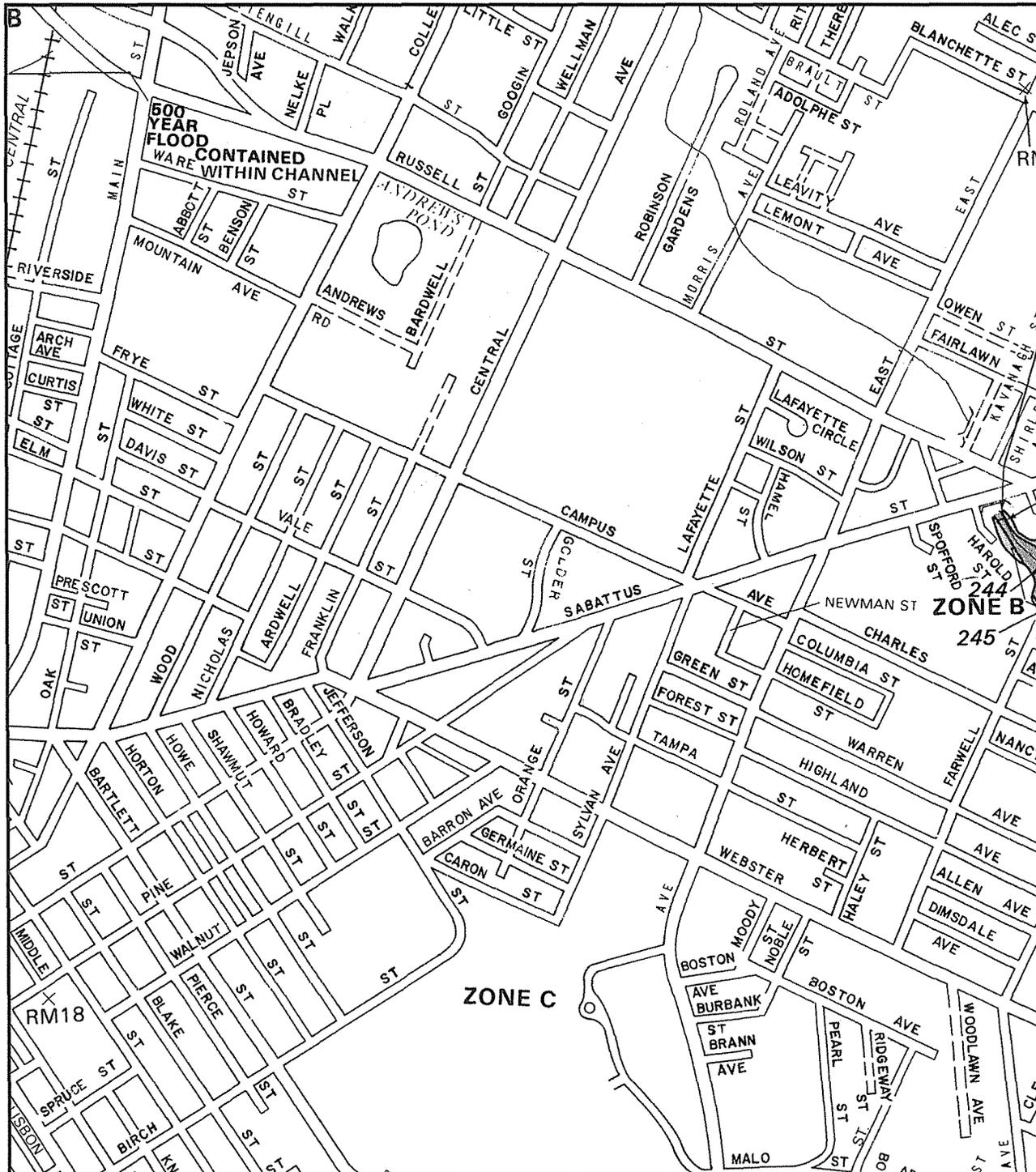
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

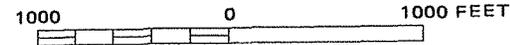
*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY OF  
**LEWISTON,**  
**MAINE**  
ANDROSCOGGIN COUNTY

PANEL 10 OF 15

COMMUNITY-PANEL NUMBER  
230004 0010 B

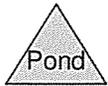
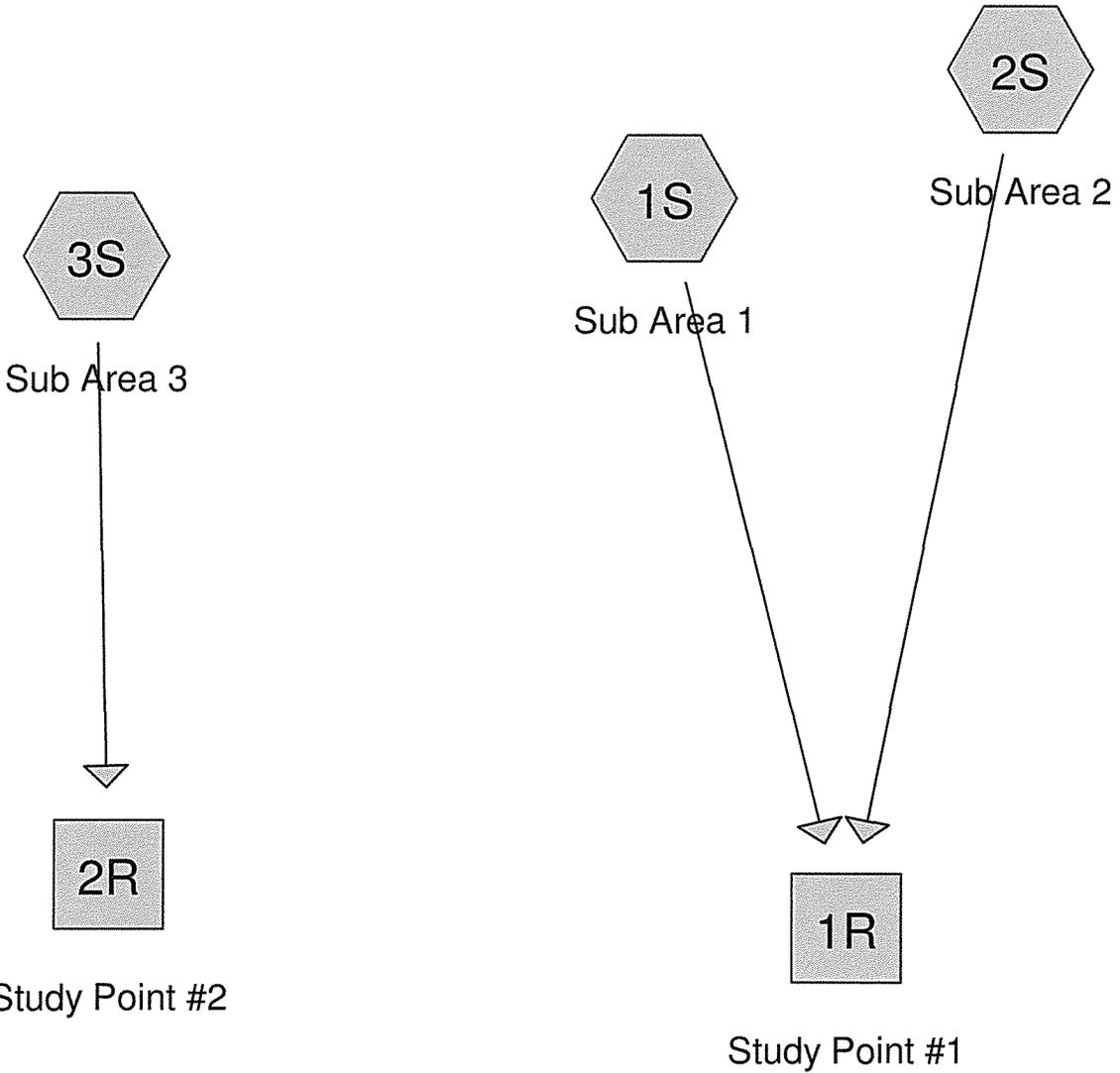
EFFECTIVE DATE:  
SEPTEMBER 28, 1979



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

PRE-STORMWATER HYDROCAD RESULTS



## Pre-Stormwater

Prepared by Microsoft

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Printed 2/13/2013

Page 2

### Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.029	79	50-75% Grass cover, Fair, HSG C (1S, 2S, 3S)
0.761	98	Paved parking, HSG C (1S, 2S, 3S)
<b>1.790</b>	<b>87</b>	<b>TOTAL AREA</b>

**Pre-Stormwater**

Prepared by Microsoft

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Type III 24-hr 2 YR Rainfall=3.00"

Printed 2/13/2013

Page 3

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: Sub Area 1**

Runoff Area=33,194 sf 55.59% Impervious Runoff Depth>1.86"  
Flow Length=508' Tc=9.4 min CN=90 Runoff=1.54 cfs 0.118 af

**Subcatchment 2S: Sub Area 2**

Runoff Area=19,057 sf 61.55% Impervious Runoff Depth>1.95"  
Flow Length=246' Tc=9.4 min CN=91 Runoff=0.92 cfs 0.071 af

**Subcatchment 3S: Sub Area 3**

Runoff Area=25,715 sf 11.60% Impervious Runoff Depth>1.21"  
Flow Length=124' Tc=9.7 min CN=81 Runoff=0.78 cfs 0.060 af

**Reach 1R: Study Point #1**

Inflow=2.46 cfs 0.189 af  
Outflow=2.46 cfs 0.189 af

**Reach 2R: Study Point #2**

Inflow=0.78 cfs 0.060 af  
Outflow=0.78 cfs 0.060 af

**Total Runoff Area = 1.790 ac Runoff Volume = 0.249 af Average Runoff Depth = 1.67"**  
**57.46% Pervious = 1.029 ac 42.54% Impervious = 0.761 ac**

**Pre-Stormwater**

Prepared by Microsoft

HydroCAD® 9.10 s/n 00653 © 2010 HydroCAD Software Solutions LLC

Type III 24-hr 2 YR Rainfall=3.00"

Printed 2/13/2013

Page 4

**Summary for Subcatchment 1S: Sub Area 1**

Runoff = 1.54 cfs @ 12.13 hrs, Volume= 0.118 af, Depth> 1.86"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 YR Rainfall=3.00"

Area (sf)	CN	Description
14,742	79	50-75% Grass cover, Fair, HSG C
18,452	98	Paved parking, HSG C
33,194	90	Weighted Average
14,742		44.41% Pervious Area
18,452		55.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	85	0.0360	0.20		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.8	224	0.0110	2.13		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.1	33	0.0636	9.37	1.84	<b>Pipe Channel, 6" PVC</b> 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.5	166	0.0100	5.90	4.63	<b>Pipe Channel, 12" PVC</b> 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
9.4	508	Total			

**Summary for Subcatchment 2S: Sub Area 2**

Runoff = 0.92 cfs @ 12.13 hrs, Volume= 0.071 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 YR Rainfall=3.00"

Area (sf)	CN	Description
7,328	79	50-75% Grass cover, Fair, HSG C
11,729	98	Paved parking, HSG C
19,057	91	Weighted Average
7,328		38.45% Pervious Area
11,729		61.55% Impervious Area

**Pre-Stormwater**

Prepared by Microsoft

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Type III 24-hr 2 YR Rainfall=3.00"

Printed 2/13/2013

Page 5

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	118	0.0470	0.24		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.2	94	0.0040	1.28		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.0	34	0.1350	16.54	5.77	<b>Pipe Channel, 8" PVC</b> 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
9.4	246	Total			

**Summary for Subcatchment 3S: Sub Area 3**

Runoff = 0.78 cfs @ 12.14 hrs, Volume= 0.060 af, Depth&gt; 1.21"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 YR Rainfall=3.00"

Area (sf)	CN	Description
22,733	79	50-75% Grass cover, Fair, HSG C
2,982	98	Paved parking, HSG C
25,715	81	Weighted Average
22,733		88.40% Pervious Area
2,982		11.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0300	1.18		<b>Sheet Flow, Sheet</b> Smooth surfaces n= 0.011 P2= 3.00"
9.4	100	0.0240	0.18		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.00"
9.7	124	Total			

**Summary for Reach 1R: Study Point #1**

Inflow Area = 1.200 ac, 57.76% Impervious, Inflow Depth &gt; 1.89" for 2 YR event

Inflow = 2.46 cfs @ 12.13 hrs, Volume= 0.189 af

Outflow = 2.46 cfs @ 12.13 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Study Point #2**

Inflow Area = 0.590 ac, 11.60% Impervious, Inflow Depth &gt; 1.21" for 2 YR event

Inflow = 0.78 cfs @ 12.14 hrs, Volume= 0.060 af

Outflow = 0.78 cfs @ 12.14 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min

**Pre-Stormwater**

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*Type III 24-hr 2 YR Rainfall=3.00"*

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Pre-Stormwater**

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Type III 24-hr 10 YR Rainfall=4.60"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: Sub Area 1**

Runoff Area=33,194 sf 55.59% Impervious Runoff Depth>3.29"  
Flow Length=508' Tc=9.4 min CN=90 Runoff=2.65 cfs 0.209 af

**Subcatchment 2S: Sub Area 2**

Runoff Area=19,057 sf 61.55% Impervious Runoff Depth>3.39"  
Flow Length=246' Tc=9.4 min CN=91 Runoff=1.56 cfs 0.124 af

**Subcatchment 3S: Sub Area 3**

Runoff Area=25,715 sf 11.60% Impervious Runoff Depth>2.46"  
Flow Length=124' Tc=9.7 min CN=81 Runoff=1.59 cfs 0.121 af

**Reach 1R: Study Point #1**

Inflow=4.21 cfs 0.333 af  
Outflow=4.21 cfs 0.333 af

**Reach 2R: Study Point #2**

Inflow=1.59 cfs 0.121 af  
Outflow=1.59 cfs 0.121 af

**Total Runoff Area = 1.790 ac Runoff Volume = 0.454 af Average Runoff Depth = 3.04"**  
**57.46% Pervious = 1.029 ac 42.54% Impervious = 0.761 ac**

**Pre-Stormwater**

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Type III 24-hr 10 YR Rainfall=4.60"

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**Summary for Subcatchment 1S: Sub Area 1**

Runoff = 2.65 cfs @ 12.13 hrs, Volume= 0.209 af, Depth&gt; 3.29"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 YR Rainfall=4.60"

Area (sf)	CN	Description
14,742	79	50-75% Grass cover, Fair, HSG C
18,452	98	Paved parking, HSG C
33,194	90	Weighted Average
14,742		44.41% Pervious Area
18,452		55.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	85	0.0360	0.20		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.8	224	0.0110	2.13		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.1	33	0.0636	9.37	1.84	<b>Pipe Channel, 6" PVC</b> 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.5	166	0.0100	5.90	4.63	<b>Pipe Channel, 12" PVC</b> 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
9.4	508	Total			

**Summary for Subcatchment 2S: Sub Area 2**

Runoff = 1.56 cfs @ 12.13 hrs, Volume= 0.124 af, Depth&gt; 3.39"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 YR Rainfall=4.60"

Area (sf)	CN	Description
7,328	79	50-75% Grass cover, Fair, HSG C
11,729	98	Paved parking, HSG C
19,057	91	Weighted Average
7,328		38.45% Pervious Area
11,729		61.55% Impervious Area

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Type III 24-hr 10 YR Rainfall=4.60"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	118	0.0470	0.24		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.2	94	0.0040	1.28		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.0	34	0.1350	16.54	5.77	<b>Pipe Channel, 8" PVC</b> 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
9.4	246	Total			

**Summary for Subcatchment 3S: Sub Area 3**

Runoff = 1.59 cfs @ 12.14 hrs, Volume= 0.121 af, Depth&gt; 2.46"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 YR Rainfall=4.60"

Area (sf)	CN	Description
22,733	79	50-75% Grass cover, Fair, HSG C
2,982	98	Paved parking, HSG C
25,715	81	Weighted Average
22,733		88.40% Pervious Area
2,982		11.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0300	1.18		<b>Sheet Flow, Sheet</b> Smooth surfaces n= 0.011 P2= 3.00"
9.4	100	0.0240	0.18		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.00"
9.7	124	Total			

**Summary for Reach 1R: Study Point #1**Inflow Area = 1.200 ac, 57.76% Impervious, Inflow Depth > 3.33" for 10 YR event  
Inflow = 4.21 cfs @ 12.13 hrs, Volume= 0.333 af  
Outflow = 4.21 cfs @ 12.13 hrs, Volume= 0.333 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Study Point #2**Inflow Area = 0.590 ac, 11.60% Impervious, Inflow Depth > 2.46" for 10 YR event  
Inflow = 1.59 cfs @ 12.14 hrs, Volume= 0.121 af  
Outflow = 1.59 cfs @ 12.14 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min

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*Type III 24-hr 10 YR Rainfall=4.60"*

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

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Type III 24-hr 25 YR Rainfall=5.40"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: Sub Area 1**

Runoff Area=33,194 sf 55.59% Impervious Runoff Depth>4.03"  
Flow Length=508' Tc=9.4 min CN=90 Runoff=3.21 cfs 0.256 af

**Subcatchment 2S: Sub Area 2**

Runoff Area=19,057 sf 61.55% Impervious Runoff Depth>4.13"  
Flow Length=246' Tc=9.4 min CN=91 Runoff=1.87 cfs 0.151 af

**Subcatchment 3S: Sub Area 3**

Runoff Area=25,715 sf 11.60% Impervious Runoff Depth>3.13"  
Flow Length=124' Tc=9.7 min CN=81 Runoff=2.01 cfs 0.154 af

**Reach 1R: Study Point #1**

Inflow=5.08 cfs 0.406 af  
Outflow=5.08 cfs 0.406 af

**Reach 2R: Study Point #2**

Inflow=2.01 cfs 0.154 af  
Outflow=2.01 cfs 0.154 af

**Total Runoff Area = 1.790 ac Runoff Volume = 0.560 af Average Runoff Depth = 3.75"**  
**57.46% Pervious = 1.029 ac 42.54% Impervious = 0.761 ac**

**Pre-Stormwater**

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Type III 24-hr 25 YR Rainfall=5.40"

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**Summary for Subcatchment 1S: Sub Area 1**

Runoff = 3.21 cfs @ 12.13 hrs, Volume= 0.256 af, Depth> 4.03"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 YR Rainfall=5.40"

Area (sf)	CN	Description
14,742	79	50-75% Grass cover, Fair, HSG C
18,452	98	Paved parking, HSG C
33,194	90	Weighted Average
14,742		44.41% Pervious Area
18,452		55.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	85	0.0360	0.20		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.8	224	0.0110	2.13		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.1	33	0.0636	9.37	1.84	<b>Pipe Channel, 6" PVC</b> 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.5	166	0.0100	5.90	4.63	<b>Pipe Channel, 12" PVC</b> 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
9.4	508	Total			

**Summary for Subcatchment 2S: Sub Area 2**

Runoff = 1.87 cfs @ 12.13 hrs, Volume= 0.151 af, Depth> 4.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 YR Rainfall=5.40"

Area (sf)	CN	Description
7,328	79	50-75% Grass cover, Fair, HSG C
11,729	98	Paved parking, HSG C
19,057	91	Weighted Average
7,328		38.45% Pervious Area
11,729		61.55% Impervious Area

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Type III 24-hr 25 YR Rainfall=5.40"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	118	0.0470	0.24		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.2	94	0.0040	1.28		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.0	34	0.1350	16.54	5.77	<b>Pipe Channel, 8" PVC</b> 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
9.4	246	Total			

**Summary for Subcatchment 3S: Sub Area 3**

Runoff = 2.01 cfs @ 12.14 hrs, Volume= 0.154 af, Depth &gt; 3.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 YR Rainfall=5.40"

Area (sf)	CN	Description
22,733	79	50-75% Grass cover, Fair, HSG C
2,982	98	Paved parking, HSG C
25,715	81	Weighted Average
22,733		88.40% Pervious Area
2,982		11.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	24	0.0300	1.18		<b>Sheet Flow, Sheet</b> Smooth surfaces n= 0.011 P2= 3.00"
9.4	100	0.0240	0.18		<b>Sheet Flow,</b> Grass: Short n= 0.150 P2= 3.00"
9.7	124	Total			

**Summary for Reach 1R: Study Point #1**Inflow Area = 1.200 ac, 57.76% Impervious, Inflow Depth > 4.06" for 25 YR event  
Inflow = 5.08 cfs @ 12.13 hrs, Volume= 0.406 af  
Outflow = 5.08 cfs @ 12.13 hrs, Volume= 0.406 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Study Point #2**Inflow Area = 0.590 ac, 11.60% Impervious, Inflow Depth > 3.13" for 25 YR event  
Inflow = 2.01 cfs @ 12.14 hrs, Volume= 0.154 af  
Outflow = 2.01 cfs @ 12.14 hrs, Volume= 0.154 af, Atten= 0%, Lag= 0.0 min

**Pre-Stormwater**

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*Type III 24-hr 25 YR Rainfall=5.40"*

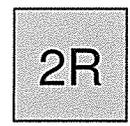
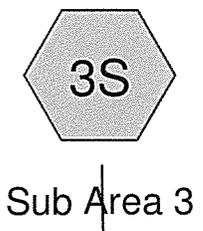
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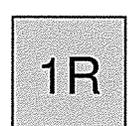
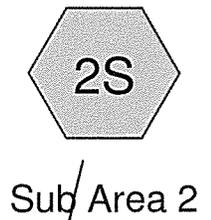
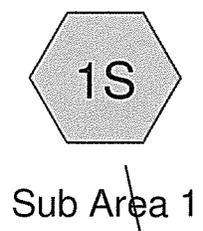
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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

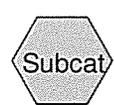
## POST-STORMWATER HYDROCAD RESULTS



Study Point #2



Study Point #1`



## Post-Stormwater

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### Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.001	79	50-75% Grass cover, Fair, HSG C (1S, 2S, 3S)
0.788	98	Paved parking, HSG C (1S, 2S, 3S)
<b>1.790</b>	<b>87</b>	<b>TOTAL AREA</b>

**Post-Stormwater**

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Type III 24-hr 2 YR Rainfall=3.00"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: Sub Area 1**

Runoff Area=33,195 sf 53.75% Impervious Runoff Depth>1.78"  
Flow Length=508' Tc=9.4 min CN=89 Runoff=1.48 cfs 0.113 af

**Subcatchment 2S: Sub Area 2**

Runoff Area=19,058 sf 58.32% Impervious Runoff Depth>1.86"  
Flow Length=250' Tc=8.8 min CN=90 Runoff=0.90 cfs 0.068 af

**Subcatchment 3S: Sub Area 3**

Runoff Area=25,715 sf 20.96% Impervious Runoff Depth>1.34"  
Flow Length=124' Tc=8.0 min CN=83 Runoff=0.92 cfs 0.066 af

**Reach 1R: Study Point #1`**

Inflow=2.38 cfs 0.181 af  
Outflow=2.38 cfs 0.181 af

**Reach 2R: Study Point #2**

Inflow=0.92 cfs 0.066 af  
Outflow=0.92 cfs 0.066 af

**Total Runoff Area = 1.790 ac Runoff Volume = 0.247 af Average Runoff Depth = 1.65"**  
**55.95% Pervious = 1.001 ac 44.05% Impervious = 0.788 ac**

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Type III 24-hr 2 YR Rainfall=3.00"

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**Summary for Subcatchment 1S: Sub Area 1**

Runoff = 1.48 cfs @ 12.13 hrs, Volume= 0.113 af, Depth&gt; 1.78"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 YR Rainfall=3.00"

Area (sf)	CN	Description
15,353	79	50-75% Grass cover, Fair, HSG C
17,842	98	Paved parking, HSG C
33,195	89	Weighted Average
15,353		46.25% Pervious Area
17,842		53.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	85	0.0360	0.20		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.8	224	0.0110	2.13		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.1	33	0.0636	9.37	1.84	<b>Pipe Channel, 6" PVC</b> 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.5	166	0.0100	5.90	4.63	<b>Pipe Channel, 12" PVC</b> 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
9.4	508	Total			

**Summary for Subcatchment 2S: Sub Area 2**

Runoff = 0.90 cfs @ 12.12 hrs, Volume= 0.068 af, Depth&gt; 1.86"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2 YR Rainfall=3.00"

Area (sf)	CN	Description
7,944	79	50-75% Grass cover, Fair, HSG C
11,114	98	Paved parking, HSG C
19,058	90	Weighted Average
7,944		41.68% Pervious Area
11,114		58.32% Impervious Area

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Type III 24-hr 2 YR Rainfall=3.00"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	119	0.0600	0.26		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.3	97	0.0040	1.28		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.0	34	0.1350	16.54	5.77	<b>Pipe Channel, 8" PVC</b> 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
8.8	250	Total			

**Summary for Subcatchment 3S: Sub Area 3**

Runoff = 0.92 cfs @ 12.12 hrs, Volume= 0.066 af, Depth> 1.34"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2 YR Rainfall=3.00"

Area (sf)	CN	Description
20,326	79	50-75% Grass cover, Fair, HSG C
5,389	98	Paved parking, HSG C
25,715	83	Weighted Average
20,326		79.04% Pervious Area
5,389		20.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	46	0.0200	1.14		<b>Sheet Flow, Sheet (Pavement)</b> Smooth surfaces n= 0.011 P2= 3.00"
7.3	78	0.0280	0.18		<b>Sheet Flow, Sheet (Grass)</b> Grass: Short n= 0.150 P2= 3.00"
8.0	124	Total			

**Summary for Reach 1R: Study Point #1`**

Inflow Area = 1.200 ac, 55.42% Impervious, Inflow Depth > 1.81" for 2 YR event  
 Inflow = 2.38 cfs @ 12.13 hrs, Volume= 0.181 af  
 Outflow = 2.38 cfs @ 12.13 hrs, Volume= 0.181 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Study Point #2**

Inflow Area = 0.590 ac, 20.96% Impervious, Inflow Depth > 1.34" for 2 YR event  
 Inflow = 0.92 cfs @ 12.12 hrs, Volume= 0.066 af  
 Outflow = 0.92 cfs @ 12.12 hrs, Volume= 0.066 af, Atten= 0%, Lag= 0.0 min

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*Type III 24-hr 2 YR Rainfall=3.00"*

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

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Type III 24-hr 10 YR Rainfall=4.60"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: Sub Area 1**

Runoff Area=33,195 sf 53.75% Impervious Runoff Depth>3.20"  
Flow Length=508' Tc=9.4 min CN=89 Runoff=2.59 cfs 0.203 af

**Subcatchment 2S: Sub Area 2**

Runoff Area=19,058 sf 58.32% Impervious Runoff Depth>3.30"  
Flow Length=250' Tc=8.8 min CN=90 Runoff=1.56 cfs 0.120 af

**Subcatchment 3S: Sub Area 3**

Runoff Area=25,715 sf 20.96% Impervious Runoff Depth>2.63"  
Flow Length=124' Tc=8.0 min CN=83 Runoff=1.79 cfs 0.130 af

**Reach 1R: Study Point #1`**

Inflow=4.13 cfs 0.323 af  
Outflow=4.13 cfs 0.323 af

**Reach 2R: Study Point #2**

Inflow=1.79 cfs 0.130 af  
Outflow=1.79 cfs 0.130 af

**Total Runoff Area = 1.790 ac Runoff Volume = 0.453 af Average Runoff Depth = 3.03"**  
**55.95% Pervious = 1.001 ac 44.05% Impervious = 0.788 ac**

**Post-Stormwater**

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Type III 24-hr 10 YR Rainfall=4.60"

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**Summary for Subcatchment 1S: Sub Area 1**

Runoff = 2.59 cfs @ 12.13 hrs, Volume= 0.203 af, Depth&gt; 3.20"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 YR Rainfall=4.60"

Area (sf)	CN	Description
15,353	79	50-75% Grass cover, Fair, HSG C
17,842	98	Paved parking, HSG C
33,195	89	Weighted Average
15,353		46.25% Pervious Area
17,842		53.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	85	0.0360	0.20		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.8	224	0.0110	2.13		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.1	33	0.0636	9.37	1.84	<b>Pipe Channel, 6" PVC</b> 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.5	166	0.0100	5.90	4.63	<b>Pipe Channel, 12" PVC</b> 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
9.4	508	Total			

**Summary for Subcatchment 2S: Sub Area 2**

Runoff = 1.56 cfs @ 12.12 hrs, Volume= 0.120 af, Depth&gt; 3.30"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 YR Rainfall=4.60"

Area (sf)	CN	Description
7,944	79	50-75% Grass cover, Fair, HSG C
11,114	98	Paved parking, HSG C
19,058	90	Weighted Average
7,944		41.68% Pervious Area
11,114		58.32% Impervious Area

**Post-Stormwater**

Type III 24-hr 10 YR Rainfall=4.60"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	119	0.0600	0.26		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.3	97	0.0040	1.28		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.0	34	0.1350	16.54	5.77	<b>Pipe Channel, 8" PVC</b> 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
8.8	250	Total			

**Summary for Subcatchment 3S: Sub Area 3**

Runoff = 1.79 cfs @ 12.11 hrs, Volume= 0.130 af, Depth> 2.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10 YR Rainfall=4.60"

Area (sf)	CN	Description
20,326	79	50-75% Grass cover, Fair, HSG C
5,389	98	Paved parking, HSG C
25,715	83	Weighted Average
20,326		79.04% Pervious Area
5,389		20.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	46	0.0200	1.14		<b>Sheet Flow, Sheet (Pavement)</b> Smooth surfaces n= 0.011 P2= 3.00"
7.3	78	0.0280	0.18		<b>Sheet Flow, Sheet (Grass)</b> Grass: Short n= 0.150 P2= 3.00"
8.0	124	Total			

**Summary for Reach 1R: Study Point #1`**

Inflow Area = 1.200 ac, 55.42% Impervious, Inflow Depth > 3.23" for 10 YR event  
Inflow = 4.13 cfs @ 12.13 hrs, Volume= 0.323 af  
Outflow = 4.13 cfs @ 12.13 hrs, Volume= 0.323 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Study Point #2**

Inflow Area = 0.590 ac, 20.96% Impervious, Inflow Depth > 2.63" for 10 YR event  
Inflow = 1.79 cfs @ 12.11 hrs, Volume= 0.130 af  
Outflow = 1.79 cfs @ 12.11 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min

**Post-Stormwater**

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*Type III 24-hr 10 YR Rainfall=4.60"*

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Post-Stormwater**

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Type III 24-hr 25 YR Rainfall=5.40"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: Sub Area 1**

Runoff Area=33,195 sf 53.75% Impervious Runoff Depth>3.92"  
Flow Length=508' Tc=9.4 min CN=89 Runoff=3.15 cfs 0.249 af

**Subcatchment 2S: Sub Area 2**

Runoff Area=19,058 sf 58.32% Impervious Runoff Depth>4.03"  
Flow Length=250' Tc=8.8 min CN=90 Runoff=1.88 cfs 0.147 af

**Subcatchment 3S: Sub Area 3**

Runoff Area=25,715 sf 20.96% Impervious Runoff Depth>3.32"  
Flow Length=124' Tc=8.0 min CN=83 Runoff=2.24 cfs 0.163 af

**Reach 1R: Study Point #1`**

Inflow=5.01 cfs 0.396 af  
Outflow=5.01 cfs 0.396 af

**Reach 2R: Study Point #2**

Inflow=2.24 cfs 0.163 af  
Outflow=2.24 cfs 0.163 af

**Total Runoff Area = 1.790 ac Runoff Volume = 0.559 af Average Runoff Depth = 3.75"**  
**55.95% Pervious = 1.001 ac 44.05% Impervious = 0.788 ac**

**Post-Stormwater**

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Type III 24-hr 25 YR Rainfall=5.40"

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**Summary for Subcatchment 1S: Sub Area 1**

Runoff = 3.15 cfs @ 12.13 hrs, Volume= 0.249 af, Depth> 3.92"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 YR Rainfall=5.40"

Area (sf)	CN	Description
15,353	79	50-75% Grass cover, Fair, HSG C
17,842	98	Paved parking, HSG C
33,195	89	Weighted Average
15,353		46.25% Pervious Area
17,842		53.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	85	0.0360	0.20		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.8	224	0.0110	2.13		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.1	33	0.0636	9.37	1.84	<b>Pipe Channel, 6" PVC</b> 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.5	166	0.0100	5.90	4.63	<b>Pipe Channel, 12" PVC</b> 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.010 PVC, smooth interior
9.4	508	Total			

**Summary for Subcatchment 2S: Sub Area 2**

Runoff = 1.88 cfs @ 12.12 hrs, Volume= 0.147 af, Depth> 4.03"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 YR Rainfall=5.40"

Area (sf)	CN	Description
7,944	79	50-75% Grass cover, Fair, HSG C
11,114	98	Paved parking, HSG C
19,058	90	Weighted Average
7,944		41.68% Pervious Area
11,114		58.32% Impervious Area

**Post-Stormwater**

Type III 24-hr 25 YR Rainfall=5.40"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	119	0.0600	0.26		<b>Sheet Flow, Sheet</b> Grass: Short n= 0.150 P2= 3.00"
1.3	97	0.0040	1.28		<b>Shallow Concentrated Flow, SCF</b> Paved Kv= 20.3 fps
0.0	34	0.1350	16.54	5.77	<b>Pipe Channel, 8" PVC</b> 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
8.8	250	Total			

**Summary for Subcatchment 3S: Sub Area 3**

Runoff = 2.24 cfs @ 12.11 hrs, Volume= 0.163 af, Depth&gt; 3.32"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 25 YR Rainfall=5.40"

Area (sf)	CN	Description
20,326	79	50-75% Grass cover, Fair, HSG C
5,389	98	Paved parking, HSG C
25,715	83	Weighted Average
20,326		79.04% Pervious Area
5,389		20.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	46	0.0200	1.14		<b>Sheet Flow, Sheet (Pavement)</b> Smooth surfaces n= 0.011 P2= 3.00"
7.3	78	0.0280	0.18		<b>Sheet Flow, Sheet (Grass)</b> Grass: Short n= 0.150 P2= 3.00"
8.0	124	Total			

**Summary for Reach 1R: Study Point #1`**Inflow Area = 1.200 ac, 55.42% Impervious, Inflow Depth > 3.96" for 25 YR event  
Inflow = 5.01 cfs @ 12.13 hrs, Volume= 0.396 af  
Outflow = 5.01 cfs @ 12.13 hrs, Volume= 0.396 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Summary for Reach 2R: Study Point #2**Inflow Area = 0.590 ac, 20.96% Impervious, Inflow Depth > 3.32" for 25 YR event  
Inflow = 2.24 cfs @ 12.11 hrs, Volume= 0.163 af  
Outflow = 2.24 cfs @ 12.11 hrs, Volume= 0.163 af, Atten= 0%, Lag= 0.0 min

**Post-Stormwater**

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*Type III 24-hr 25 YR Rainfall=5.40"*

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Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Erosion and Sediment Control Plan – Section 8

## Erosion and Sedimentation Control Plan

All erosion and sedimentation control measures are designed according to the Maine Department of Environmental Protection's Maine Erosion and Sediment Control Best Management Practices Manual, 2003. Sediment control measures must be in place before activity begins. Measures must remain in place and functional until the site is permanently stabilized.

1. Pollution prevention. Minimize disturbed areas and protect natural down-gradient buffer areas to the extent practicable. The discharge may not result in erosion of any open drainage channels, swales, upland, or coastal or freshwater wetlands. Minimize disturbed areas through phasing. If work within an area is not anticipated to begin within two weeks time, leave the area in its naturally existing cover if practicable.
2. Sediment barriers. Prior to construction, properly install sediment barriers at the edge of any down-gradient disturbed area and adjacent to any drainage channels within the disturbed area. Maintain the sediment barriers until the disturbed area is permanently stabilized.
3. Temporary stabilization. Stabilize with mulch or other non-erodable cover any exposed soils that will not be worked for more than 7 days. Stabilize areas within 75 feet of a wetland or waterbody within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first.
4. Removal of temporary sediment control measures. Remove any temporary sediment control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize. Remove silt fence by cutting the fence materials at ground level to avoid additional soil disturbance.
5. Permanent stabilization. Permanently stabilize all disturbed areas that will not be worked for more than one year or that have been brought to final grade by planting vegetation, seeding, sod, or through the use of permanent mulch, or riprap, or road sub-base. If using vegetation for stabilization, select the proper vegetation for the light, soil and moisture conditions; amend areas of disturbed subsoils with topsoil, compost, or fertilizers; protect seeded areas with mulch or, if necessary, erosion control blankets; and schedule sodding, planting, and seeding to avoid die-off from summer drought and fall frosts. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well-established. If necessary, areas must be seeded and mulched again if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. One or more of the following may apply to a particular site.
  - (a) Seeded areas. For seeded areas, permanent stabilization means a 90% cover of healthy plants with no evidence of washing or rilling of the topsoil.
  - (b) Sodded areas. For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.
  - (c) Permanent Mulch. For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.
  - (d) Riprap. For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.
  - (e) Agricultural use. For construction projects on land used for agricultural purposes (e.g., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.

- (f) Paved areas. For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.
  - (g) Ditches, channels, and swales. For open channels, permanent stabilization means the channel is stabilized with a 90% cover of healthy vegetation, with a well-graded riprap lining, or with another non-erosive lining such as concrete or asphalt pavement. There must be no evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.
6. **Winter construction.** "Winter construction" is construction activity performed during the period from November 1 through April 15. If disturbed areas are not stabilized with permanent measures by November 1 or new soil disturbance occurs after November 1, but before April 15, then these areas must be protected and runoff from them must be controlled by additional measures and restrictions.

**Natural Resource Protection** Any areas within 100 feet from any natural resources, if not stabilized with a minimum of 75 % mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with an erosion control cover. During winter construction, a double row of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Projects crossing the natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

**Sediment Barriers** During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.

**Mulching** All area shall be considered to be denuded until seeded and mulched. Hay and straw mulch shall be applied at a rate of 150 lb. per 1,000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 s.f. or 1.5 tons/acre) and shall be properly anchored. Erosion control mix must be applied with a minimum 4-inch thickness. Mulch shall not be spread on top of snow. The snow will be removed down to a one-inch depth or less prior to application. After each day of final grading, the area will be properly stabilized with anchored hay or straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched or adequately anchored so that ground surface is not visible though the mulch. Between the dates of November 1 and April 15, all mulch shall be anchored by either mulch netting, asphalt emulsion chemical, tracking or wood cellulose fiber. The cover will be considered sufficient when the ground surface is not visible though the mulch. After November 1st, mulch and anchoring of all exposed soil shall occur at the end of each final grading workday.

**Soil Stockpiling** Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or with a four-inch layer of erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall. Any soil stockpile will not be placed (even covered with mulched) within 100 feet from any natural resources.

**Seeding** Between the dates of October 15 and April 1st, loam or seed will not be required. During periods of above freezing temperatures finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until such time as the final treatment can be applied. If the date is after November 1st and if the exposed area has been loomed, final graded with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched. Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas shall receive 4' of loam and seed at an application rate of 5lbs/1000 s.f. All areas seeded during the winter will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75 % catch) shall be revegetated by replacing loam, seed and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

**Overwinter stabilization of ditches and channels** All stone-lined ditches and channels must be constructed and stabilized by November 15. All grass-lined ditches and channels must be constructed and stabilized by September 1. If a ditch or channel is not grass-lined by September 1, then one of the following actions must be taken to stabilize the ditch for late fall and winter. Install a sod lining in the ditch: A ditch must be lined with properly installed sod by October 1. Proper installation includes: pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring sod at the base of the ditch with jute or plastic mesh to prevent the sod from sloughing during flow conditions. Install a stone lining in the ditch: A ditch must be lined with stone riprap by November 15. A registered professional engineer must be hired to determine the stone size and lining thickness needed to

withstand the anticipated flow velocities and flow depths within the ditch. If necessary, the contractor will regrade the ditch prior to placing the stone lining so to prevent the stone lining from reducing the ditch's cross-sectional area.

**Overwinter stabilization of disturbed slopes** All stone-covered slopes must be constructed and stabilized by November 15. And all slopes to be vegetated must be seeded and mulched by September 1. The department will consider any area having a grade greater than 15% to be a slope. If a slope to be vegetated is not stabilized by September 1, then one of the following actions must be taken to stabilize the slope for late fall and winter. Stabilize the soil with temporary vegetation and erosion control mats -- By October 1 the disturbed slope must be seeded with winter rye at a seeding rate of 3 pounds per 1000 square feet and then install erosion control mats or anchored mulch over the seeding. If the rye fails to grow at least three inches or fails to cover at least 75% of the slope by November 1, then the contractor will cover the slope with a layer of erosion control mix or with stone riprap as described in the following standards. Stabilize the soil with sod -- The disturbed slope must be stabilized with properly installed sod by October 1. Proper installation includes the contractor pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. The contractor will not use late-season sod installation to stabilize slopes having a grade greater than 33% (3H:1V) or having groundwater seeps on the slope face. Stabilize the soil with erosion control mix -- Erosion control mix must be properly installed by November 15. The contractor will not use erosion control mix to stabilize slopes having grades greater than 50% (2H:1V) or having groundwater seeps on the slope face. Stabilize the soil with stone riprap -- Place a layer of stone riprap on the slope by November 15. The development's owner will hire a registered professional engineer to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.

**Overwinter stabilization of disturbed soils** By September 15, all disturbed soils on areas having a slope less than 15% must be seeded and mulched. If the disturbed areas are not stabilized by this date, then one of the following actions must be taken to stabilize the soil for late fall and winter. Stabilize the soil with temporary vegetation -- By October 1, seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting. Monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1, then mulch the area for over-winter protection as described below. Stabilize the soil with sod -- Stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. Stabilize the soil with mulch -- By November 15, mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

**MAINTENANCE** Maintenance measures shall be applied as needed during the entire construction season. After each rainfall, snow storm or period of thawing and runoff, the site contractor shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function. Following the temporary and/or final seeding and mulching, the contractor shall, in the spring, inspect and repair any damages and/or bare spots. An established vegetative cover means a minimum of 85 to 90 % of areas vegetated with vigorous growth.

#### **STABILIZATION SCHEDULE BEFORE WINTER**

**September 15** All disturbed areas must be seeded and mulched. All slopes must be stabilized, seeded and mulched. All grass-lined ditches and channels must be stabilized with mulch or an erosion control blanket.

**October 1** If the slope is stabilized with an erosion control blanket and seeded. All disturbed areas to be protected with an annual grass must be seeded at a seeding rate of 3 pounds per 1000 square feet and mulched.

**November 15** All stone-lined ditches and channels must be constructed and stabilized. Slopes that are covered with riprap must be constructed by that date.

**December 1** All disturbed areas where the growth of vegetation fails to be at least three inches tall or at least 75% of the disturbed soil is covered by vegetation, must be protected for over-winter.

NOTE: The dates given are for projects in South-Central Maine. Adjust the dates given based on the project's location within the state -- reducing times up to three weeks for project's in Northern Maine and extending times up to two weeks for project's on the coast in extreme Southern Maine.

7. Stormwater channels. Ditches, swales, and other open stormwater channels must be constructed and stabilized using measures that achieve long-term erosion control. Each channel should be constructed in

sections so that the section's grading, shaping, and installation of the permanent lining can be completed the same day. If a channel's final grading or lining installation must be delayed, then diversion berms must be used to divert stormwater away from the channel, properly-spaced check dams must be installed in the channel to slow the water velocity, and a temporary lining installed along the channel to prevent scouring.

8. Roads. Gravel and paved roads must be constructed with crowns or other measures, such as water bars, to ensure that stormwater is delivered immediately to adjacent stable ditches, vegetated buffer areas, catch basin inlets, or street gutters.
9. Culverts. Culvert inlets must be protected with appropriate materials and protection must extend at least as high as the expected maximum elevation of storage behind the culvert. Culvert outlets must incorporate measures, such as aprons or plunge pools, to prevent scour of the stream channel.
10. Parking areas. Parking areas must be constructed to ensure runoff is delivered to adjacent swales, catch basins, curb gutters, or buffer areas without eroding areas downslope. The parking area's subbase compaction and grading must be done to ensure runoff is evenly distributed to adjacent buffers or side slopes. Catch basins must be located and set to provide enough storage depth at the inlet to allow inflow of peak runoff rates without by-pass of runoff to other areas.



1. During construction. The following standards must be met during construction:
  - (a) Inspection and corrective action. Inspect disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. Inspect these areas at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.
  - (b) Maintenance. Maintain all measures in effective operating condition until areas are permanently stabilized. If best management practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (rainfall).
  - (c) Documentation. Keep a log (report) summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

# WEEKLY SITE INSPECTION REPORT

PROJECT: \_\_\_\_\_

DATE OF INSPECTION: \_\_\_\_\_ WEATHER/TEMPERATURE \_\_\_\_\_

PERSON CONDUCTING THE INSPECTION \_\_\_\_\_

A. EROSION AND SEDIMENTATION CONTROLS	
1. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	1. Where: _____ Action Taken: _____
2. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	2. Where: _____ Action Taken: _____
3. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	3. Where: _____ Action Taken: _____
4. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	4. Where: _____ Action Taken: _____
5. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	5. Where: _____ Action Taken: _____
6. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	6. Where: _____ Action Taken: _____
B. MATERIALS STORAGE AREA	
1. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	1. Where: _____ Action Taken: _____
2. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	2. Where: _____ Action Taken: _____
3. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	3. Where: _____ Action Taken: _____
C. VEHICLE ACCESS POINTS	
1. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	1. Where: _____ Action Taken: _____
2. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	2. Where: _____ Action Taken: _____
3. _____ <input type="checkbox"/> Functioning _____ <input type="checkbox"/> Requires maintenance	3. Where: _____ Action Taken: _____

2. Post-construction. The following standards must be met after construction.
- (a) Plan. Carry out the following inspection and maintenance plan.
  - (b) Inspection and corrective action. All measures must be maintained in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections. The following areas, facilities, and measures must be inspected and identified deficiencies must be corrected. Areas, facilities, and measures other than those listed below may also require inspection on a specific site. Inspection or maintenance tasks other than those discussed below must be included in the maintenance plan developed for a specific site.
    - (i) Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.
    - (ii) Inspect ditches, swales and other open stormwater channels in the spring, in late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, to control vegetated growth that could obstruct flow, and to repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or sideslopes.
    - (iii) Inspect culverts in the spring, in late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet.
    - (iv) Inspect and, if required, clean-out catch basins at least once a year, preferably in early spring. Clean-out must include the removal and legal disposal of any accumulated sediments and debris at the bottom of the basin, at inlet any grates, at any inflow channels to the basin, and at any pipes between basins. If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).
    - (v) Inspect resource and treatment buffers at least once a year for evidence of erosion, concentrating flow, and encroachment by development. If flows are concentrating within a buffer, site grading, level spreaders, or ditch turn-outs must be used to ensure a more even distribution of flow into a buffer. Check down slope of all spreaders and turn-outs for erosion. If erosion is present, adjust or modify the spreader's or turnout's lip to ensure a better distribution of flow into a buffer. Clean out any accumulation of sediment within the spreader bays or turn-out pools.
  - (c) Regular maintenance
    - (i) Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader. Grading of gravel roads, or grading of the gravel shoulders of gravel or paved roads, must be routinely performed to ensure that stormwater drains immediately off the road surface to adjacent buffer areas or stable ditches, and is not impeded by accumulations of graded material on the road shoulder or by excavation of false ditches in the shoulder. If water bars or open-top culverts are used to divert runoff from road surfaces, clean out any sediment within or at the outlet of these structures to restore their function.

- (ii) Manage each buffer's vegetation consistently with the requirements in any deed restrictions for the buffer. Wooded buffers must remain fully wooded and have no disturbance to the duff layer. Vegetation in non-wooded buffers may not be cut more than three times per year, and may not be cut shorter than six inches.
- (d) Documentation. Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal.  
  
The log must be made accessible to department staff and a copy provided to the department upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

# ANNUAL SITE INSPECTION/MAINTENANCE REPORT

PROJECT: \_\_\_\_\_ YEAR: \_\_\_\_\_

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

Location	Inspection	Maintenance	Inspected/maintained by
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Replant bare areas or areas with sparse growth <input type="checkbox"/> Armor area with appropriate lining	Inspected/Maintained By: _____ Date: _____ Comments: _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Replant bare areas or areas with sparse growth <input type="checkbox"/> Armor area with appropriate lining	Inspected/Maintained By: _____ Date: _____ Comments: _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Replant bare areas or areas with sparse growth <input type="checkbox"/> Armor area with appropriate lining	Inspected/Maintained By: _____ Date: _____ Comments: _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Replant bare areas or areas with sparse growth <input type="checkbox"/> Armor area with appropriate lining	Inspected/Maintained By: _____ Date: _____ Comments: _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Replant bare areas or areas with sparse growth <input type="checkbox"/> Armor area with appropriate lining	Inspected/Maintained By: _____ Date: _____ Comments: _____

# ANNUAL SITE INSPECTION/MAINTENANCE REPORT

PROJECT: \_\_\_\_\_

YEAR: \_\_\_\_\_

**Ditches, Swales, or other Open Stormwater Channels** - Inspect in the spring, in late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, to control vegetated growth that could obstruct flow, and to repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or sideslopes.

Location	Inspection	Maintenance	Inspected/maintained by
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove obstructions to flow <input type="checkbox"/> Remove sediment & debris <input type="checkbox"/> Control vegetated growth <input type="checkbox"/> Repair ditch lining <input type="checkbox"/> Mow <input type="checkbox"/> Repair slumping side slopes <input type="checkbox"/> Replace riprap	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____ _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove obstructions to flow <input type="checkbox"/> Remove sediment & debris <input type="checkbox"/> Control vegetated growth <input type="checkbox"/> Repair ditch lining <input type="checkbox"/> Mow <input type="checkbox"/> Repair slumping side slopes <input type="checkbox"/> Replace riprap	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____ _____ _____

# ANNUAL SITE INSPECTION/MAINTENANCE REPORT

PROJECT: \_\_\_\_\_ YEAR: \_\_\_\_\_

**Culverts** – Inspect culverts in the spring, in late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert’s inlet and outlet.

Location	Inspection	Maintenance	Inspected/maintained by
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove obstructions to flow <input type="checkbox"/> Remove sediment & debris <input type="checkbox"/> Repair erosion damage at inlet and outlet	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove obstructions to flow <input type="checkbox"/> Remove sediment & debris <input type="checkbox"/> Repair erosion damage at inlet and outlet	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove obstructions to flow <input type="checkbox"/> Remove sediment & debris <input type="checkbox"/> Repair erosion damage at inlet and outlet	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove obstructions to flow <input type="checkbox"/> Remove sediment & debris <input type="checkbox"/> Repair erosion damage at inlet and outlet	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove obstructions to flow <input type="checkbox"/> Remove sediment & debris <input type="checkbox"/> Repair erosion damage at inlet and outlet	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____

# ANNUAL SITE INSPECTION/MAINTENANCE REPORT

PROJECT: \_\_\_\_\_ YEAR: \_\_\_\_\_

**Catch Basins** - Inspect and, if required, clean-out catch basins at least once a year, preferably in early spring. Clean-out must include the removal and legal disposal of any accumulated sediments and debris at the bottom of the basin, at inlet any grates, at any inflow channels to the basin, and at any pipes between basins. If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).

Location	Inspection	Maintenance	Inspected/maintained by
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove sediment & debris from bottom of basin <input type="checkbox"/> Remove sediment & debris at inlet grates <input type="checkbox"/> Remove sediment & debris from inflow channels <input type="checkbox"/> Remove sediment & debris from pipes <input type="checkbox"/> Remove floatable debris and oil (with oil-absorptive pads)	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____ _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Requires maintenance	<input type="checkbox"/> Remove sediment & debris from bottom of basin <input type="checkbox"/> Remove sediment & debris at inlet grates <input type="checkbox"/> Remove sediment & debris from inflow channels <input type="checkbox"/> Remove sediment & debris from pipes <input type="checkbox"/> Remove floatable debris and oil (with oil-absorptive pads)	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____ _____ _____

# ANNUAL SITE INSPECTION/MAINTENANCE REPORT

PROJECT: \_\_\_\_\_

YEAR: \_\_\_\_\_

**Resource and Treatment Buffers** – Inspect resource and treatment buffers at least once a year for evidence of erosion, concentrating flow, and encroachment by development. If flows are concentrating within a buffer, site grading, level spreaders, or ditch turn-outs must be used to ensure a more even distribution of flow into a buffer. Check down slope of all spreaders and turn-outs for erosion. If erosion is present, adjust or modify the spreader’s or turnout’s lip to ensure a better distribution of flow into a buffer. Clean-out any accumulation of sediment within the spreader bays or turn-out pools. Wooded buffers must remain fully wooded and have no disturbance to the duff layer. Vegetation in non-wooded buffers may not be cut more than three times per year, and may not be cut shorter than six inches.

Location	Inspection	Maintenance	Inspected/maintained by
	<input type="checkbox"/> Functioning <input type="checkbox"/> Erosion <input type="checkbox"/> Concentrating flow <input type="checkbox"/> Encroachment	<input type="checkbox"/> Grade site <input type="checkbox"/> Install/repair level spreader <input type="checkbox"/> Install ditch turnout <input type="checkbox"/> Remove accumulated sediment <input type="checkbox"/> Mow non-wooded buffer	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Erosion <input type="checkbox"/> Concentrating flow <input type="checkbox"/> Encroachment	<input type="checkbox"/> Grade site <input type="checkbox"/> Install/repair level spreader <input type="checkbox"/> Install ditch turnout <input type="checkbox"/> Remove accumulated sediment <input type="checkbox"/> Mow non-wooded buffer	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____ _____
	<input type="checkbox"/> Functioning <input type="checkbox"/> Erosion <input type="checkbox"/> Concentrating flow <input type="checkbox"/> Encroachment	<input type="checkbox"/> Grade site <input type="checkbox"/> Install/repair level spreader <input type="checkbox"/> Install ditch turnout <input type="checkbox"/> Remove accumulated sediment <input type="checkbox"/> Mow non-wooded buffer	Inspected/Maintained By: _____ Date: _____ Comments: _____ _____ _____

# ANNUAL SITE INSPECTION/MAINTENANCE REPORT

PROJECT: \_\_\_\_\_ YEAR: \_\_\_\_\_

**Regular Maintenance** – Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader. Grading of gravel roads, or grading of the gravel shoulders of gravel or paved roads, must be routinely performed to ensure that stormwater drains immediately off the road surface to adjacent buffer areas or stable ditches, and is not impeded by accumulations of graded material on the road shoulder or by excavation of false ditches in the shoulder. If water bars or open-top culverts are used to divert runoff from road surfaces, clean out any sediment within or at the outlet of these structures to restore their function.

Location	Maintenance	Maintained by
	<input type="checkbox"/> Sweep parking lot <input type="checkbox"/> Grade shoulder & remove excess sand	Maintained By: _____ Date: _____ Comments: _____ _____
	<input type="checkbox"/> Sweep parking lot <input type="checkbox"/> Grade shoulder & remove excess sand	Maintained By: _____ Date: _____ Comments: _____ _____
	<input type="checkbox"/> Sweep parking lot <input type="checkbox"/> Grade shoulder & remove excess sand	Maintained By: _____ Date: _____ Comments: _____ _____
	<input type="checkbox"/> Sweep parking lot <input type="checkbox"/> Grade shoulder & remove excess sand	Maintained By: _____ Date: _____ Comments: _____ _____

3. Maintenance contract.

No proprietary devices are proposed for this project.

4. Re-certification. Submit a certification of the following to the department within three months of the expiration of each five-year interval from the date of issuance of the permit.

(a) Identification and repair of erosion problems. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

(b) Inspection and repair of stormwater control system. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.

(c) Maintenance. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the department, and the maintenance log is being maintained.

5. Duration of maintenance. Perform maintenance as described and required in the permit unless and until the system is formally accepted by the municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the department stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with department standards. Upon such assumption of responsibility, and approval by the department, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

## Housekeeping Plan

1. Spill prevention. Controls must be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
2. Groundwater protection. During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
3. Fugitive sediment and dust. Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

NOTE: An example of the use of BMPs to control fugitive sediment and dust is as follows. Operations during wet months that experience tracking of mud off the site onto public roads should provide for sweeping of road areas at least once a week and prior to significant storm events. Where chronic mud tracking occurs, a stabilized construction entrance should be provided. Operations during dry months, that experience fugitive dust problems, should wet down the access roads once a week or more frequently as needed.

NOTE: Dewatering a stream without a permit from the department violates state water quality standards and the Natural Resources Protection Act.

4. Debris and other materials. Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
 

NOTE: To prevent these materials from becoming a source of pollutants, construction and post-construction activities related to a project may be required to comply with applicable provision of rules related to solid, universal, and hazardous waste, including, but not limited to, the Maine solid waste and hazardous waste management rules; Maine hazardous waste management rules; Maine oil conveyance and storage rules; and Maine pesticide requirements.
5. Trench or foundation de-watering. Trench de-watering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the department.
6. Non-stormwater discharges. Identify and prevent contamination by non-stormwater discharges.

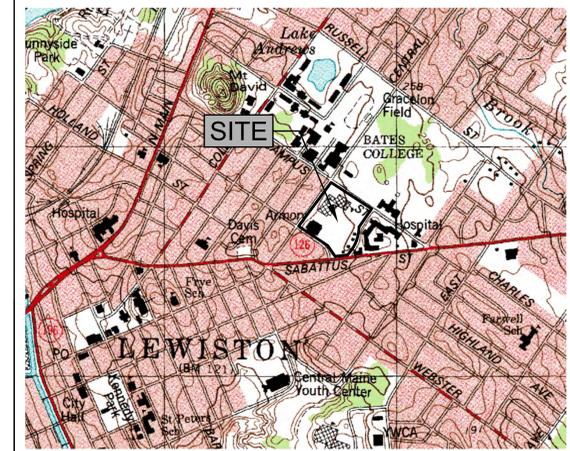
Site Permitting Plans – Appendix A  
(see attached set of plans)

# LEWISTON MIDDLE SCHOOL RENOVATION AND EXPANSION LEWISTON, MAINE

# INDEX

## DRAWINGS INDEX

GI001	COVER SHEET
C-001	SITE GENERAL NOTES AND ABBREVIATIONS
SV101	BOUNDARY & TOPOGRAPHIC SURVEY
CD101	SITE REMOVALS PLAN
CP101	SITE LAYOUT & MATERIALS PLAN
CG101	SITE GRADING & EROSION CONTROL PLAN
CU101	SITE UTILITY PLAN
C501	SITE DETAILS
C502	SITE DETAILS
C503	SITE BORING LOGS
SW101	PRE-STORMWATER PLAN
SW102	POST-STORMWATER PLAN



LOCATION MAP

SCALE: 1"=1000'

THIS IS TO CERTIFY THAT AFTER REVIEWING THE SITE PLAN SUBMISSION INFORMATION FOR THE PROJECT SHOWN ON THE PLAN AND CONSIDERING EACH OF THE CRITERIA SET FORTH IN THE TOWN ORDINANCE, THE UNDERSIGNED HAVE MADE FINDING OF FACT ESTABLISHING THAT THIS PLAN ALONG WITH ITS ADDITIONAL SUBMISSION MATERIAL HAS MET ALL THE CRITERIA SET FORTH AND THEREFORE THE SITE PLAN IS APPROVED.

LEWISTON PLANNING BOARD APPROVED ON: \_\_\_\_\_  
CONDITIONS: \_\_\_\_\_

PLANNING BOARD SIGNED ON: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### ARTICLE XIII, SECTION 11 - EXPIRATION OF APPROVAL

- (A) INITIATION OF DEVELOPMENT WITHIN TWO YEARS.
- (1) IF DEVELOPMENT HAS NOT OCCURRED AS DEFINED WITHIN THE SCOPE OF THIS CODE WITHIN TWO YEARS, DEVELOPMENT REVIEW APPROVAL SHALL EXPIRE. THE APPLICANT MAY NOT BEGIN CONSTRUCTION OR OPERATION OF THE DEVELOPMENT UNTIL A NEW APPROVAL IS GRANTED. A STATEMENT TO THIS EFFECT MUST APPEAR ON ALL APPROVED PLANS.
- (2) AN EXTENSION OF DEVELOPMENT REVIEW APPROVAL MUST BE MADE WITHIN TWO YEARS OF THE INITIAL GRANTING OF APPROVAL. THE APPLICANT MUST STATE THE REASONS WHY THE DEVELOPMENT WAS NOT BEGUN WITHIN TWO YEARS FROM THE GRANTING OF THE INITIAL APPROVAL AND THE REASONS WHY THE APPLICANT WILL BE ABLE TO BEGIN THE ACTIVITY APPENDIX A - ZONING AND LAND USE CODE ARTICLE XIII, DEVELOPMENT REVIEW AND STANDARDS LEWISTON CODE A XIII:25 WITHIN TWO YEARS FROM THE GRANTING OF AN EXTENSION. IF GRANTED, EXTENSIONS OF APPROVAL MAY INCLUDE INFORMATION SUBMITTED IN THE INITIAL APPLICATION BY REFERENCE. ONLY ONE EXTENSION OF THE INITIAL APPROVAL SHALL BE ALLOWED UNDER THESE PROVISIONS.
- (B) REEXAMINATION AFTER FIVE YEARS.
- (1) IF THE APPROVED DEVELOPMENT IS NOT COMPLETED WITHIN FIVE YEARS FROM THE DATE OF THE GRANTING OF APPROVAL OR EXTENSION OF APPROVAL, SAID APPROVAL SHALL EXPIRE AND THE APPLICANT SHALL REAPPLY FOR A NEW APPROVAL. A STATEMENT TO THIS EFFECT MUST APPEAR ON ALL APPROVED PLANS. THE APPROPRIATE REVIEWING AUTHORITY MUST REEXAMINE ITS INITIAL APPROVAL AND MAY IMPOSE ADDITIONAL TERMS OR CONDITIONS OR PRESCRIBE OTHER NECESSARY CORRECTIVE ACTION TO RESPOND TO SIGNIFICANT CHANGES IN CIRCUMSTANCES WHICH MAY HAVE OCCURRED BETWEEN THE DATE OF ORIGINAL APPROVAL AND THE DATE OF EXPIRATION OF THAT APPROVAL, INCLUDING ANY EXTENSION THERE TO. WITHIN THE SCOPE OF THIS CODE, THESE CHANGES MAY INCLUDE, BUT NOT BE LIMITED TO ZONING, STORMWATER, ENVIRONMENT, AND TRAFFIC REGULATIONS. THE APPROPRIATE AUTHORITY MAY WAIVE REQUIRING ANY ADDITIONAL TERMS OR CONDITIONS OR OTHER NECESSARY CORRECTIVE ACTIONS FOR A PARTICULAR DEVELOPMENT FOR WHICH IT IS DETERMINED THE CHANGES TO BE INSIGNIFICANT.

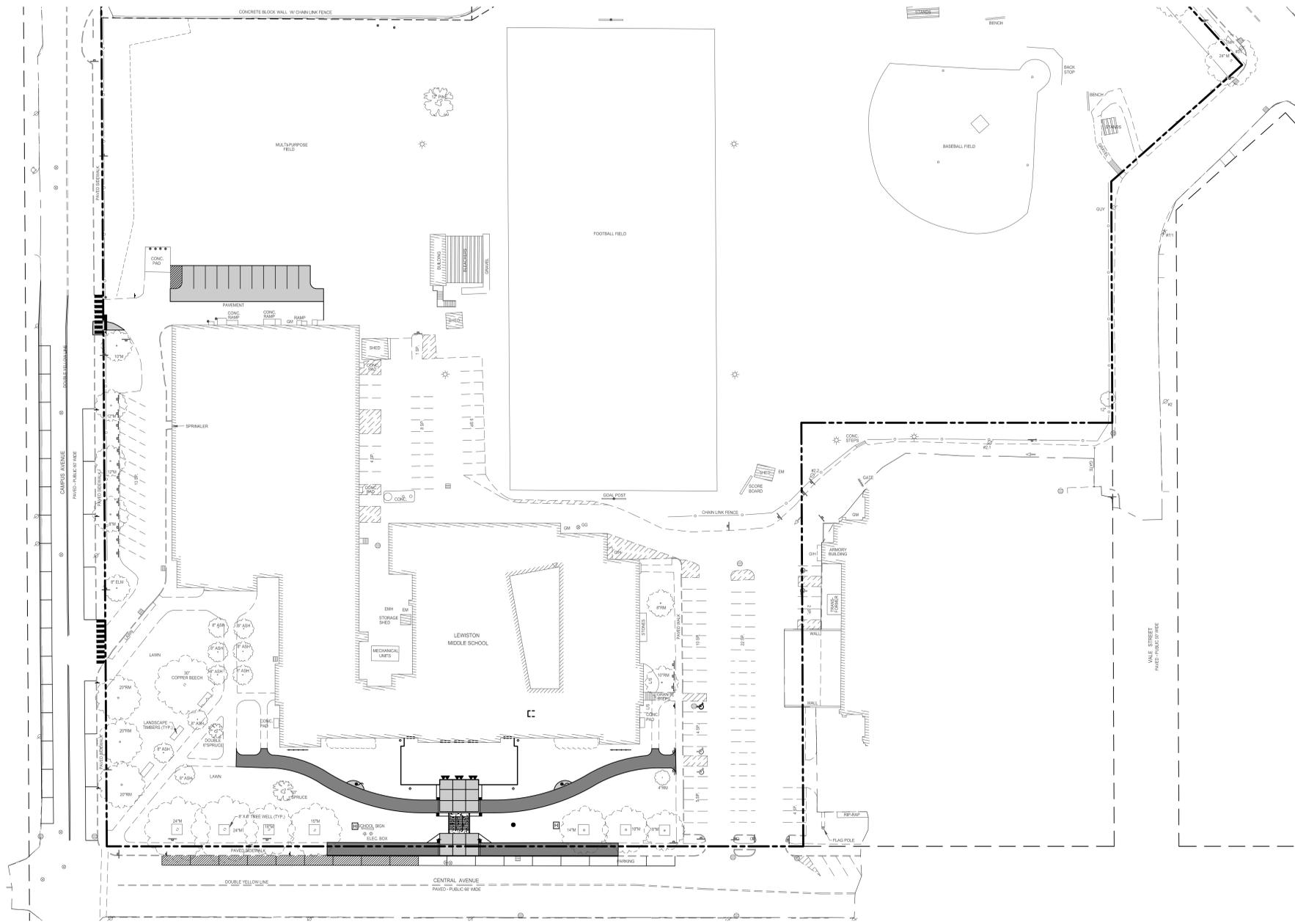
APPROVAL DRAWINGS  
03.15.13  
NOT FOR CONSTRUCTION

SIGNATURE DATE

OWNER : \_\_\_\_\_  
ARCHITECT : \_\_\_\_\_  
CONTRACTOR : \_\_\_\_\_

COMM. No.  
3744.10

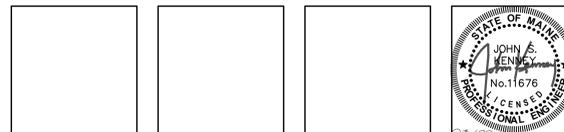
SHEET No.  
GI001



APPLICANT: LEWISTON PUBLIC SCHOOLS  
DINGLEY BUILDING, 36 OAK STREET  
LEWISTON, MAINE 04240



BANGOR, MAINE  
(207) 947-4511  
PORTLAND, MAINE  
(207) 828-4511  
SARASOTA, FLORIDA  
(941) 556-0757  
WWW.WBRCAE.COM



**UTILITY NOTES**

- E1 ALL UNDERGROUND SECONDARY SHALL BE RUN IN SCH. 40 CONDUIT UNLESS SPECIFIED OTHERWISE.
- E2 ALL UNDERGROUND ELECTRICAL FOR SITE LIGHTING SHALL BE RUN IN SCH. 40 P.V.C. CONDUIT.
- E3 ALL CABLE TELEVISION / TELEPHONE LINES SHALL BE RUN IN SCH. 40 P.V.C. CONDUIT.
- E4 PROVIDE PULL WIRE IN ALL UNDERGROUND CONDUITS.
- E5 MAINTAIN 2" - 6" COVER OVER CABLE TELEVISION/TELEPHONE.
- S1 WHERE NEW WATER AND SEWER RUN SIDE BY SIDE, MAINTAIN A TEN FOOT (10') HORIZONTAL SEPARATION. WHERE THEY CROSS, MAINTAIN AN EIGHTEEN INCH (18") VERTICAL SEPARATION, WITH WATERLINE ABOVE SEWER. IF WITHIN 18" MIN. VERTICAL SEPARATION, ENCASE WATERLINE 10" EITHER SIDE OF SEWER IN CONC. 3,000 PSI MIN.
- S2 SEWER SERVICE, WHEN ENTERING THE BUILDING, SHALL BE 6" - 0" BELOW FINISH FLOOR, UNLESS NOTED OTHERWISE.
- W1 MAINTAIN A 5' - 6" MINIMUM COVER OVER WATER LINE.
- U1 THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- U2 THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCHING AND BACKFILLING OF ALL CONDUIT. CONDUIT AND WIRING SHALL BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- U3 PRIOR TO ANY EARTHWORK ACTIVITIES, THE CONTRACTOR SHALL CONTACT CONTROLLING UTILITY CO., OR CALL "DIGSAFE" AT 1-800-225-4977. ANY UTILITIES ENCOUNTERED THAT ARE TO REMAIN IN PLACE OR BE ABANDONED SHALL BE DISCONNECTED AND TERMINATED IN ACCORDANCE WITH THE CONTROLLING UTILITY CO. AND NATIONALLY OR LOCALLY APPLICABLE CODES AND ORDINANCES.
- U4 NO UTILITY TRENCH SHALL BE BACKFILLED UNTIL WORK HAS BEEN INSPECTED AND APPROVED BY PROJECT ENGINEER AND CONTROLLING UTILITY CO. OR DISTRICT.
- U5 ALL SANITARY SEWER LINE TO BE SDR 35 PVC MEETING ALL PERFORMANCE CHARACTERISTICS OF ASTM D3034. ALL PIPES AND FITTINGS SHALL HAVE PUSH-ON JOINTS WITH RUBBER GASKETS CONFORMING TO ASTM D1869 AND F477.
- U6 ALL NEW WATER SERVICE LINE SHALL BE TYPE K COPPER MEETING ALL PERFORMANCE CHARACTERISTICS OF ASTM B-882. FOR TYPE K COPPER, ALL FITTINGS SHALL BE COMPRESSION TYPE.
- U7 ALL NEW WATER SPRINKLER SERVICE SHALL BE CLASS 52 DUCTILE IRON MEETING ALL PERFORMANCE CHARACTERISTICS OF THE LATEST VERSION OF ASTM AND AWWA.
- U8 THE FOLLOWING UTILITY COMPANIES ARE LOCATED WITHIN THE PROJECT SITE:  
 - BANGOR WATER DISTRICT  
 - BANGOR WASTE WATER TREATMENT PLANT  
 - BANGOR HYDRO ELECTRIC COMPANY  
 - BANGOR GAS COMPANY  
 - FAIR POINT COMMUNICATIONS  
 - TIME WARNER

**SPOT ELEVATION REFERENCE INDEX**

**SYMBOLS**

- BITUMINOUS PAVEMENT SECTION
- TOPSOIL, LOAM AND SEED, SOD
- GRANULAR FILL MATERIAL
- COARSE AGGREGATE
- UNDISTURBED NATIVE SOIL
- CONCRETE SECTION
- GENERAL FILL MATERIAL
- SAND OR STONE DUST, CONCRETE (PLAN)
- RIGID INSULATION
- STEEL, CAST IRON



**REMOVALS NOTES**

- R1 THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES AND SHALL NOTIFY THE ARCHITECT OF UTILITIES DEVIATING FROM THOSE SHOWN ON THIS PLAN
- R2 THE CONTRACTOR SHALL MEET THE REQUIREMENTS OF THE UTILITY COMPANIES WHEN INSTALLING WORK ON OR NEAR THEIR POLES.
- R3 REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED MARKINGS.
- R4 ALL DEMOLITION DEBRIS AND REMOVALS SHALL BE DISPOSED OFF SITE AND IN CONFORMANCE WITH LOCAL AND STATE ORDINANCES
- R5 TREE CANOPY AS SHOWN ON PLANS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE SITE CONTRACTOR

**LAYOUT NOTES**

- L1 THE CONTRACTOR SHALL NOTIFY THE OWNER/ARCHITECT OF CONDITIONS VARYING FROM THOSE SHOWN ON THE DRAWING SHEET PRIOR TO CONTINUING WORK.
- L2 THE CONTRACTOR SHALL EMPLOY A REGISTERED LAND SURVEYOR IN THE LAYOUT OF BUILDING, DRIVES AND SITE ELEMENTS.
- L3 THE CONTRACTOR SHALL VERIFY AND CLEARLY MARK LOCATION OF ALL PROPERTY LINES PRIOR TO COMMENCING WORK.

**GRADING NOTES**

- G1 TOPOGRAPHIC INFORMATION BASED ON A SURVEY BY OWEN HASKELL, INC.
- G2 BOUNDARY INFORMATION BASED ON A SURVEY BY OWEN HASKELL, INC.
- G3 ALL ELEVATIONS SHOWN HEREIN ARE BASED ON A SURVEY BY OWEN HASKELL, INC.
- G4 ALL TOPSOIL AND ORGANICS SHALL BE REMOVED FROM PAVEMENT AND BUILDING AREAS PRIOR TO CONSTRUCTION. THIS MATERIAL SHALL NOT BE USED AS GENERAL SITE FILL.
- G5 FINISH GRADES ONE FOOT FROM BUILDING SHALL BE 8" BELOW FINISH FLOOR UNLESS OTHERWISE NOTED.
- G6 FINISH GRADES OF SIDEWALKS AT BUILDING ENTRANCES SHALL BE FLUSH WITH FINISH FLOOR UNLESS OTHERWISE NOTED
- G7 TEST PIT LOCATIONS ARE APPROXIMATE-REFER TO SUMMIT GEOENGINEERING SERVICES INC. GEOTECHNICAL REPORT BOUND INTO SPECIFICATIONS. BORING LOGS ARE INCLUDED IN DRAWING SET.
- G8 ALL DISTURBED AREAS NOT RECEIVING PAVEMENT, BUILDING, STONE DUST, COARSE AGGREGATE, ETC. SHALL RECEIVE 6" OF LOAM AND SEED UNLESS OTHERWISE NOTED.

6. WINTER CONSTRUCTION "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.

**SPECIFICATIONS:**  
 NATURAL RESOURCE PROTECTION ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH AN EROSION CONTROL COVER. DURING WINTER CONSTRUCTION, A DOUBLE ROW OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED WITH A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS. SEDIMENT BARRIERS DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.  
 MULCHING ALL AREA SHALL BE CONSIDERED TO BE DENUED UNTIL SEEDING AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS/1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4-INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. ON EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.  
 SOIL STOCKPILING STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH MULCHED) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.  
 SEEDING BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDING AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOOSED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDING AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1000 S.F. ALL AREAS SEEDING DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.  
 OVERWINTER STABILIZATION OF DITCHES AND CHANNELS ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE DITCH FOR LATE FALL AND WINTER. INSTALL A SOD LINING IN THE DITCH; A DITCH MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS. INSTALL A STONE LINING IN THE DITCH; A DITCH MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL ENGINEER MUST BE HIRED TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.  
 OVERWINTER STABILIZATION OF DISTURBED SLOPES ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15, AND ALL SLOPES TO BE VEGETATED MUST BE SEEDING AND MULCHED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS - BY OCTOBER 1 THE DISTURBED SLOPE MUST BE SEEDING WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP AS DESCRIBED IN THE FOLLOWING STANDARDS. STABILIZE THE SOIL WITH SOD - THE DISTURBED SLOPE MUST BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE. STABILIZE THE SOIL WITH EROSION CONTROL MIX - EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE. STABILIZE THE SOIL WITH STONE RIPRAP - PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPER'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.  
 OVERWINTER STABILIZATION OF DISTURBED SOILS BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDING AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER. STABILIZE THE SOIL WITH TEMPORARY VEGETATION - BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDING SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PINS. MONITOR THE SOIL FOR GROWTH OVER THE WINTER. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW. STABILIZE THE SOIL WITH SOD - STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. STABILIZE THE SOIL WITH MULCH - BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.  
**MAINTENANCE:**  
 MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO MAINTAIN THEIR CONTINUOUS FUNCTIONALITY. DURING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85 TO 90 % OF AREAS VEGETATED WITH VIGOROUS GROWTH.

**STABILIZATION SCHEDULE BEFORE WINTER:**

SEPTEMBER 15 ALL DISTURBED AREAS MUST BE SEEDING AND MULCHED. ALL SLOPES MUST BE STABILIZED, SEEDING AND MULCHED. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE STABILIZED WITH MULCH OR AN EROSION CONTROL BLANKET.  
 OCTOBER 1 IF THE SLOPE IS STABILIZED WITH AN EROSION CONTROL BLANKET AND SEEDING, ALL DISTURBED AREAS TO BE PROTECTED WITH AN ANNUAL GRASS MUST BE SEEDING AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND MULCHED.  
 NOVEMBER 15 ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED. SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THAT DATE.  
 DECEMBER 1 ALL DISTURBED AREAS WHERE THE GROWTH OF VEGETATION FAILS TO BE AT LEAST THREE INCHES TALL OR AT LEAST 75% OF THE DISTURBED SOIL IS COVERED BY VEGETATION, MUST BE PROTECTED FOR OVER-WINTER.  
**NOTE:**  
 THE DATES GIVEN ARE FOR PROJECTS IN SOUTH-CENTRAL MAINE. ADJUST THE DATES GIVEN BASED ON THE PROJECT'S LOCATION WITHIN THE STATE - REDUCING TIMES UP TO THREE WEEKS FOR PROJECTS IN NORTHERN MAINE AND EXTENDING TIMES UP TO TWO WEEKS FOR PROJECTS ON THE COAST IN EXTREME SOUTHERN MAINE.

- 7. STORMWATER CHANNELS, DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE CONSTRUCTED AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL. PROPERLY SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING.
- 8. ROADS, GRAVEL AND PAVED ROADS MUST BE CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO ADJACENT STABLE DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN INLETS, OR STREET GUTTERS.
- 9. CULVERTS, CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS AND MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLETS MUST INCORPORATE MEASURES, SUCH AS APRONS OR PLUNGE POOLS, TO PREVENT SCOUR OF THE STREAM CHANNEL.
- 10. PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB GUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWN SLOPE. THE PARKING AREAS SUBBASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED AND SET TO PROVIDE ENOUGH STORAGE DEPTH AT THE INLET TO ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY-PASS OF RUNOFF TO OTHER AREAS.

**INSPECTION AND MAINTENANCE PLAN**

- 1. DURING CONSTRUCTION, THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.
  - (A) INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER A STORM EVENT, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.
  - (B) MAINTENANCE. MAINTAIN ALL MEASURES IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE MAINTAINED OR MODIFIED, ADDITIONAL BMPs ARE NECESSARY, OR OTHER CORRECTIVE ACTION IS NEEDED, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL).
  - (C) DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVIDED, OR OTHER CORRECTIVE ACTION. PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED, FOR EACH BMP REQUIRING MAINTENANCE. BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.
- 2. HOUSEKEEPING PLAN
  - 1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
  - 2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERM SLOPES, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
  - 3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

**NOTE:** AN EXAMPLE OF THE USE OF BMPs TO CONTROL FUGITIVE SEDIMENT AND DUST IS AS FOLLOWS. OPERATIONS DURING WET MONTHS THAT EXPERIENCE TRACKING OF MUD OFF THE SITE ONTO PUBLIC ROADS SHOULD PROVIDE FOR SWEEPING OF ROAD AREAS AT LEAST ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. WHERE CHRONIC MUD TRACKING OCCURS, A STABILIZED CONSTRUCTION ENTRANCE SHOULD BE PROVIDED. OPERATIONS DURING DRY MONTHS THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN THE ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY.  
**NOTE:** DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT VIOLATES STATE WATER QUALITY STANDARDS AND THE NATURAL RESOURCES PROTECTION ACT.

**NOTE:** TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF RULES RELATED TO SOLID, UNIVERSAL, AND HAZARDOUS WASTE, INCLUDING BUT NOT LIMITED TO, THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES, MAINE HAZARDOUS WASTE MANAGEMENT RULES, MAINE OIL CONVEYANCE AND STORAGE RULES, AND MAINE PESTICIDE REQUIREMENTS.

**TRENCH OR FOUNDATION DE-WATERING.** TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, OFFERDAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. REPAIRS TO ANY OTHER CONTIGUOUS FUNCTIONALITY OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

**SITE DEFINITION**

- 1. POSITIVE DRAINAGE SHALL MEAN PROVIDING A MINIMUM DOWN GRADIENT SLOPE OF ONE PERCENT TO A REFERENCED STRUCTURE OR VEGETATIVE SWALE UNLESS OTHERWISE NOTED.

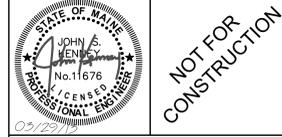
**SITE ABBREVIATIONS**

Ø	DIAMETER
ACP	ASBESTOS CEMENT PIPE
ADD. ALT.	ADDITIONAL ALTERNATE BID ITEM
ARCH.	AERIAL ELECTRIC ARCHITECTURAL
B.C.	BOTTOM OF CURB
BLDG.	BUILDING
BOT.	BOTTOM
C	CENTERLINE
CB	CATCH BASIN
C.I.	CAST IRON, CONTRACTOR INST'D.
C.I.P.	CAST IN PLACE
CMP	CORRUGATED METAL PIPE
C	CENTER
CONC.	CLEANOUT
C.P.P.	CONCRETE
C.P.P.	CORRUGATED PLASTIC PIPE
CTV	CABLE TELEVISION
CFS	CUBIC FEET PER SECOND
D.I.	DITCH INVERT, DUCTILE IRON
DIA.	DIAMETER
DM.	DIMENSION
DWH	DRAIN MANHOLE/DROP MANHOLE
DN	DOWN
DWG	DRAWING
E	EAST
E.P.	EDGE OF PAVEMENT
E.L. ELEV.	ELEVATION
EQ.	EQUAL
EXIST.	EXISTING
EXP.	EXPANSION
FD	FOOTING DRAIN
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
F.F.	FINISH
F.F.	FINISH FLOOR
FFM	FEET PER MINUTE
FT.	FEET
FTG.	FOOTING
GA.	GAUGE
GA.	GALVANIZED
GP	GALLONS PER MINUTE
GRAN.	GRANULAR
G.V.	GATE VALVE
G	GAS
H.C.	HANDICAP
HORIZ., HOR.	HORIZONTAL
HPS	HIGH PRESSURE SODIUM
HMA	HOT MIX ASPHALT
I.D.	IDENTIFICATION, INSIDE DIAMETER
I.E.	INVERT ELEVATION
INV.	INVERT
INSUL.	INSULATION
LBS.	POUNDS
L.A.	LINEAR FEET
LPS	LOW PRESSURE SODIUM
L	LENGTH
MAS	MASONRY
MATL.	MATERIAL
MAX.	MAXIMUM
MH	MANHOLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N	NORTH, NEW UTILITY
N.I.C.	NOT IN CONTRACT
NFD	NEW FOUNDATION DRAIN
NFM	NEW FORCE MAIN
NGAS	NATURAL GAS
NO	NO
NO.	NUMBER
NRD	NEW ROOF DRAIN
NSS	NEW SANITARY SEWER
NSD	NEW STORM DRAIN
NTS	NOT TO SCALE
NUE	NEW UNDERGROUND ELECTRIC
NUP	NEW UNDERDRAIN
NUS	NEW UNDERGROUND PRIMARY
NUS	NEW UNDERGROUND SECONDARY
NW	NEW WATER LINE
O.A.	ON CENTER
OS/OI	OWNER SUPPLIED/OWNER INST'D
OR	OVERHEAD ELECTRIC
OHW	OVERHEAD WIRE
PVMT.	PAVEMENT
PREF.	PRE-FABRICATED
PB	PULL BOX
PI	POINT OF INTERSECTION
P I	PROVIDE AND INSTALL
P.F.	PROVIDE AND INSTALL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P.C.	POINT OF TANGENT
P	POINT
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
S	SEWER
SS	SANITARY SEWER
SCH	SCHEDULE
SCH	STORM DRAIN
PVMT.	SECTION
SIM.	SIMILAR
SMH	SEWER MANHOLE
SPECS	SPECIFICATIONS
SO	SQUARE
S.F.	SQUARE FEET
STA.	STATION
STYRO.	STYROFOAM
TBM	TEMPORARY BENCH MARK
T.O.W.	TOP OF WALL
T.C.	TOP OF CURB
TEMP.	TEMPORARY
THK.	THICK
TV	TELEVISION
TYP	TYPICAL
T.S.	TOP OF SLAB
UE	UNDERGROUND ELECTRIC
US	UNDERGROUND SECONDARY
UP	UNDERGROUND PRIMARY
VERT., VER.	VERTICAL
W	WATER
W	WITH
WO	WITHOUT
WSO	WATER SHUTOFF
W	(CURB STOP OR GATE VALVE)
W.W.F.	WELDED WIRE FABRIC
W.V	WATER SHUT OFF / GATE VALVE

4	PER CITY COMMENTS	03.29.13
3	DESIGN DEVELOPMENT	03.21.13
2	APPROVAL DRAWINGS	03.15.13
1	SCHEMATIC DESIGNING	10.16.12
0	SD PRICING	10.03.12
REV.	DESCRIPTION	DATE

**APPROVAL DRAWINGS**

03.15.13  
 CURRENT ISSUE STATUS:



**NOT FOR CONSTRUCTION**

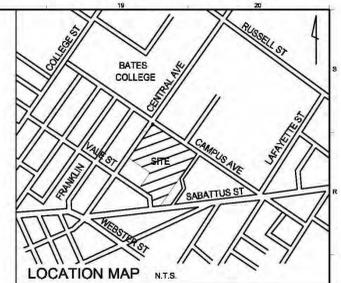
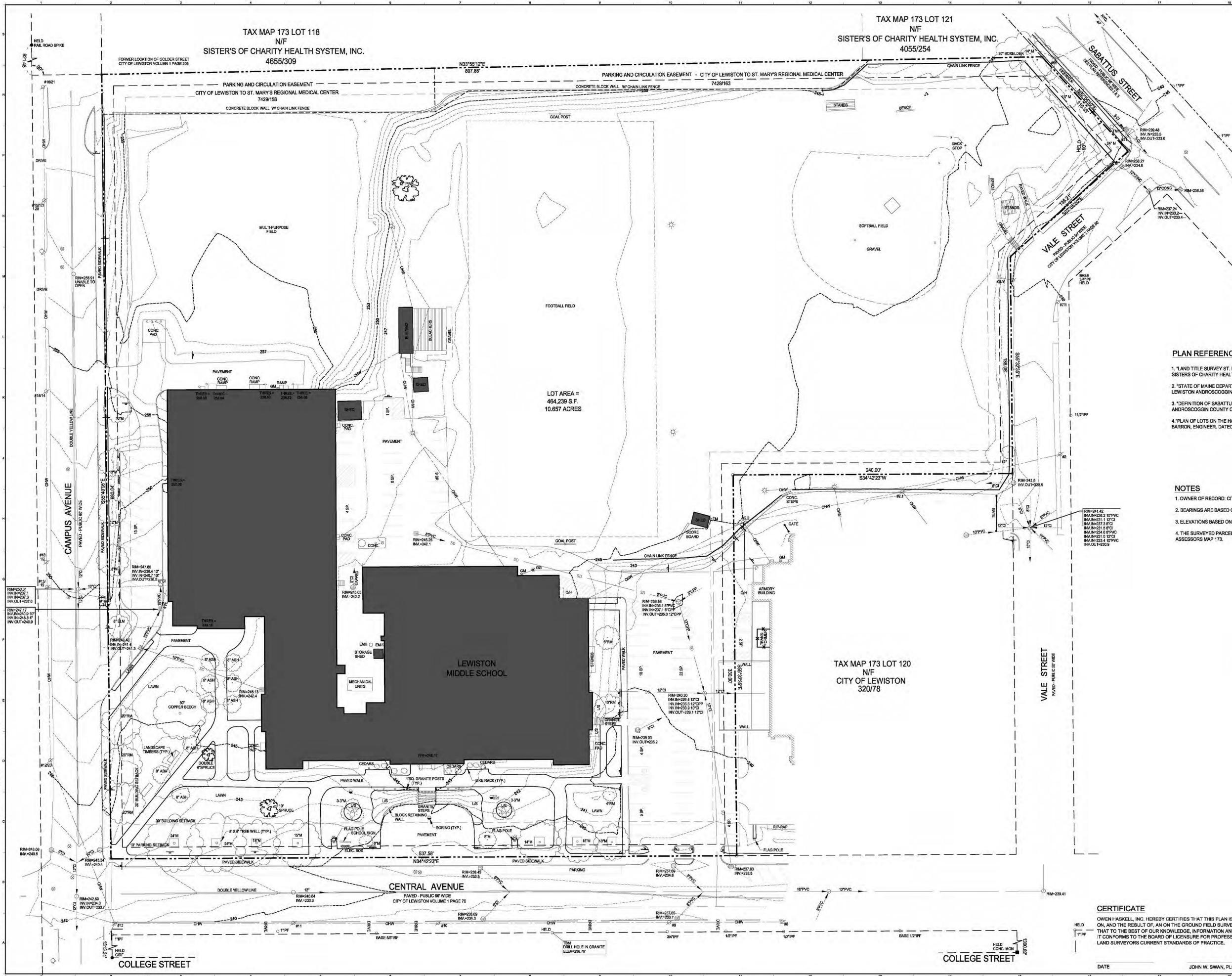


**LEWISTON MIDDLE SCHOOL RENOVATIONS AND EXPANSION**

PROJECT: LEWISTON, MAINE

**SITE GENERAL NOTES & ABBREVIATIONS**

SHEET TITLE:	
WBRC CAD FILE:	374410-G1006.DWG
PROJECT NO.:	3744-10
SCALE:	NO SCALE
PROJECT MANAGER:	SEP
DRAWN BY:	TAR
CHECKED BY:	ARB
SHEET NO.:	C-001



- LEGEND**
- CAPPED IRON ROD TO BE SET
  - IRON PIPE OR ROD FOUND
  - GAS VALVE
  - WATER VALVE
  - HYDRANT
  - UTILITY POLE
  - LIGHT POLE
  - ELECTRIC OR GAS METER
  - MANHOLE
  - CATCH BASIN
  - SIGN
  - DECIDUOUS TREE
  - CONIFEROUS TREE
  - FENCE
  - CURB
  - OVERHEAD WIRES
  - UNDERGROUND ELECTRIC
  - TELEPHONE
  - WATER LINE
  - GAS LINE
  - SANITARY SEWER
  - STORM DRAIN
  - 1' CONTOUR
  - 12" M
  - 12" RM
  - U/S
  - LANDSCAPED HYDRANT

**PLAN REFERENCES**

1. LAND TITLE SURVEY ST. MARY'S HOSPITAL, CAMPUS AVENUE, LEWISTON, MAINE PREPARED FOR SISTERS OF CHARITY HEALTH SYSTEMS, INC. BY TECHNICAL SERVICES, INC. DATED FEBRUARY 2001.
2. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP STATE HIGHWAY "153" LEWISTON ANDROSCOGGIN COUNTY COMMISSIONERS, DATED MAY 31, 1930.
3. DEFINITION OF SABATTUS ST. LEWISTON, MAINE GOLDER ST. TO THE POND ROAD BY THE ANDROSCOGGIN COUNTY COMMISSIONERS, DATED MAY 31, 1930.
4. PLAN OF LOTS ON THE HALEY FARM OWNED BY THE FRANKLIN CO. LEWISTON, ME BY GEO. H. BARRON, ENGINEER, DATED AUG. 10 1934.

**NOTES**

1. OWNER OF RECORD: CITY OF LEWISTON DEED BOOK 342 PAGES 91 AND 93
2. BEARINGS ARE BASED ON ME STATE PLANE COORDINATE SYSTEM (NAD83)
3. ELEVATIONS BASED ON NGVD 1929 PER GPS OBSERVATION.
4. THE SURVEYED PARCEL IS LOT 119 AS SHOWN ON THE CITY OF LEWISTON TAX ASSESSORS MAP 173.

REV.	DESCRIPTION	DATE

**UPDATED-PRINT**  
10.04.12

CURRENT ISSUE STATUS: FINAL

**OWEN HASKELL, INC.**  
PROFESSIONAL LAND SURVEYORS  
390 U.S. ROUTE ONE, UNIT #10  
FALMOUTH, ME 04105 (207) 774-0424

**WBRC**  
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SARASOTA, FLORIDA 941-201-9300

**LEWISTON MIDDLE SCHOOL**  
75 CENTRAL AVENUE  
LEWISTON, MAINE

**BOUNDARY & TOPOGRAPHIC SURVEY**

SHEET TITLE: \_\_\_\_\_  
WBRC CAD FILE: 3744.00 DRAWING SCALE: 1"=30'

PROJECT NO.: 3744.00 PROJECT MANAGER: JWS SHEET NO.: SV101

SCALE: 1"=30' DRAWN BY: JLV CHECKED BY: RRL

CERTIFICATE  
OWEN HASKELL, INC. HEREBY CERTIFIES THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND FIELD SURVEY AND THAT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT STANDARDS OF PRACTICE.

DATE: \_\_\_\_\_ JOHN W. SWAN, PLS NO. 1038

LOT AREA =  
484,239 S.F.  
10.657 ACRES

TAX MAP 173 LOT 120  
N/F  
CITY OF LEWISTON  
320/78

TAX MAP 173 LOT 118  
N/F  
SISTER'S OF CHARITY HEALTH SYSTEM, INC.  
4655/309

TAX MAP 173 LOT 121  
N/F  
SISTER'S OF CHARITY HEALTH SYSTEM, INC.  
4055/254

CENTRAL AVENUE  
PAVED - PUBLIC 66' WIDE  
CITY OF LEWISTON VOLUME 1 PAGE 76

COLLEGE STREET

COLLEGE STREET

- REMOVALS NOTES:**
1. SEE NOTES R1 THROUGH R4 ON SHEET C-001 FOR ADDITIONAL REMOVALS INFORMATION.
  2. CLEARING LIMITS SHALL EXTEND ONLY TO SUCH A POINT NECESSARY TO COMPLETE EARTHWORK ACTIVITIES.
  3. THE UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE AND IS BASED ON A SURVEY COMPLETED BY XXX SURVEYORS. THE SITE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY SITE CLEARING, GRUBBING AND EARTHWORK ACTIVITIES.
  4. ALL SOIL AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY WORK. SEE C0101 FOR MORE INFORMATION. THE SITE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL SOIL AND EROSION CONTROL MEASURES.
  5. SOME TREE TRIMMING NOT SHOWN ON THIS PLAN MAY BE NECESSARY FOR CONSTRUCTION PURPOSES. THE SITE CONTRACTOR SHOULD EVALUATE AND SCHEDULE ACCORDINGLY.
  6. THE SECURITY FENCE SHALL BE SUPPLIED AND INSTALLED BY THE FENCING CONTRACTOR. THE ACTUAL LOCATION OF THE TEMPORARY SECURITY FENCING MAY VARY DEPENDING ON THE SEQUENCE OF CONSTRUCTION. THE FENCING CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE TEMPORARY SECURITY FENCING THROUGHOUT THE DURATION OF THE CONTRACT AND AS THE CONSTRUCTION SCHEDULE PROGRESSES THIS TEMPORARY FENCING SHALL REMAIN. THE FENCING CONTRACTOR SHALL REMOVE TEMPORARY FENCE ONCE WORK IS COMPLETE.
  7. COORDINATE ALL CONSTRUCTION ACTIVITIES WITHIN THE STREET R.O.W.'S WITH THE OFFICIALS AND STAFF OF THE CITY OF LEWISTON PUBLIC SERVICES, AS WELL AS AGENCIES THAT HAVE JURISDICTION AND AUTHORITY.
  8. THE CONTRACTOR SHALL MAINTAIN SAFE ACCESS TO ALL THE EXIST. BUILDING WITHIN THE PROJECT LIMITS, WHICH INCLUDES H.C. ACCESS, EMERGENCY VEHICLE ACCESS DELIVERY TRUCK ACCESS, AND TEMPORARY ACCESS. THE ACCESS TO THE BUILDING SHALL BE COORDINATED WITH THE OWNER. THESE ACCESSES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION DURATION.

- REMOVE AND RESET EXISTING "NOTICE" SIGN. SEE SHEET CP101 FOR ADDITIONAL INFORMATION (TYP)
- REMOVE EXISTING PAVEMENT TO LIMITS SHOWN (TYP)
- SAWCUT PAVEMENT TO CREATE A SQUARE, FLUSH EDGE. PROVIDE "BUTT JOINT" (TYP)
- REMOVE EXISTING FENCE TO LIMITS SHOWN (TYP)
- EXISTING ADA SPACE TO REMAIN
- GRIND OFF DOUBLE YELLOW LINE STRIPING IN CONFLICT WITH PROPOSED STRIPING (TYP)
- PORTIONS OF EXISTING BUILDING TO BE REMOVED / RENOVATED. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION (TYP)
- EXISTING PROPERTY LINE LOCATION (TYP)
- REMOVE & RESET EXISTING GRANITE POSTS. SEE SHEET CP101 FOR ADDITIONAL INFORMATION (TYP)
- REMOVE EXISTING SHRUBS (TYP)
- LIMITS OF CONSTRUCTION (TYP)
- EXISTING CONCRETE PAD TO REMAIN
- EXISTING HOT MIX ASPHALT SIDEWALK TO REMAIN (TYP)
- SAWCUT PAVEMENT TO CREATE A SQUARE, FLUSH EDGE. PROVIDE "BUTT JOINT" (TYP)
- REMOVE EXISTING HOT MIX ASPHALT SIDEWALK TO LIMITS SHOWN (TYP)
- EXISTING TREE TO REMAIN (TYP)
- EXISTING SCHOOL SIGN TO REMAIN (TYP)
- EXISTING TREE PLANTER & ASSOCIATED TREE TO REMAIN (TYP)
- REMOVE & RESET EXISTING GRANITE CURB (TYP)
- EXISTING ELECTRICAL BOX TO REMAIN (TYP)
- REMOVE & RESET EXISTING "NO PARKING" SIGNAGE. SEE SHEET CP101 FOR ADDITIONAL INFORMATION (TYP)
- REMOVE EXISTING GEO-BLOCK RETAINING WALL (TYP)
- REMOVE EXISTING PAVEMENT TO LIMITS SHOWN (TYP)

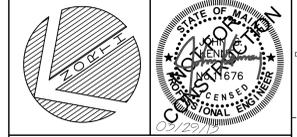
- REMOVE EXISTING BIKE RACKS (TYP)
- EXISTING SHRUBS TO REMAIN (TYP)
- EXISTING CONCRETE PAD TO REMAIN (TYP)
- EXISTING HOT MIX ASPHALT SIDEWALK TO REMAIN (TYP)
- REMOVE EXISTING HOT MIX ASPHALT SIDEWALK (TYP)
- REMOVE EXISTING GRANITE TREADS AND HANDRAILS. SALVAGE FOR REUSE. SEE CP101 FOR MORE INFORMATION
- TEMPORARY CHAIN LINK TREE PROTECTION
- EXISTING TREE PLANTER & ASSOCIATED TREE TO REMAIN (TYP)
- REMOVE EXISTING FLAG POLE, BASE AND LIGHTING. SALVAGE POLE AND BASE FOR REUSE. SEE CP101 FOR MORE INFORMATION (TYP)
- SAWCUT PAVEMENT TO CREATE A SQUARE, FLUSH EDGE. PROVIDE "BUTT JOINT" (TYP)
- GRIND OFF EXISTING PARKING SPACE STRIPING IN CONFLICT WITH PROPOSED STRIPING (TYP)
- LIMITS OF SURVEY (TYP)
- REMOVE EXISTING TREES (TYP)
- NEW TEMPORARY SECURITY FENCING (TYP)
- EXISTING CATCH BASIN TO REMAIN (TYP)
- EXISTING PAVEMENT STRIPING TO REMAIN (TYP)
- SITE IMPROVEMENTS SHOWN FOR REFERENCE ONLY. SEE SHEET CP101 FOR ADDITIONAL INFORMATION (TYP)
- APPROXIMATE LOCATION OF TEMPORARY CHAIN LINK DOUBLE SWING GATE (TYP)
- EXISTING WATER VALVES TO REMAIN (TYP)

**LEGEND**

EXISTING	LEGEND	PROPOSED
	TREE REMOVALS	
	UTILITY POLE	
	STREET LIGHTING	
	BUILDING LIGHTING	
	WATER SHUTOFF / GATE VALVE	
	TRANSFORMER PAD	
	DUMPSTER	
	MANHOLE	
	SEWER MANHOLE	
	MONITORING WELL	
	CATCH BASIN	
	FIRE HYDRANT	
	SIGN	
	FENCING	
	PAVEMENT REMOVALS	
	LIMITS OF CONSTRUCTION	
	PROPERTY SETBACK	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	

REV.	DESCRIPTION	DATE
4	PER CITY COMMENTS	03.29.13
3	DESIGN DEVELOPMENT	03.21.13
2	APPROVAL DRAWINGS	03.15.13
1	SCHEMATIC DESIGN	10.16.12
0	SD PRICING	10.03.12

**APPROVAL DRAWINGS**  
03.15.13  
CURRENT ISSUE STATUS:



**LEWISTON MIDDLE SCHOOL RENOVATIONS AND EXPANSION**

**SITE REMOVALS PLAN**

WBRC CAD FILE:	374410-SP101.DWG
PROJECT No:	3744.10
SCALE:	1"=30'
PROJECT MANAGER:	TAR
DRAWN BY:	SEP
CHECKED BY:	ARB

7429158  
CONCRETE BLOCK WALL W/ CHAIN LINK FENCE

PERMITTING DATA		
ITEM	REQUIRED	PROPOSED
<b>BUILDING SETBACK</b>		
FRONT SETBACK	30 FT.	48 FT.
SIDE SETBACK	20 FT.	52 FT.
REAR SETBACK	20 FT.	275 FT.
<b>PARKING SETBACK</b>		
FRONT SETBACK	10 FT.	9.5 FT. (EXISTING)
SIDE SETBACK	10 FT.	12 FT.
REAR SETBACK	10 FT.	228 FT.
BUILDING HEIGHT	75 FT. MAX	42 FT.
PARKING SPACES	84	94
H.C. PARKING SPACES	4	4
MIN. LOT SIZE	10,000 SQ. FT.	461,470 SQ. FT.
MAX. IMPERVIOUS SURFACE RATIO	75%	30.9%
MAX. LOT COVERAGE	50%	14%
MIN. OPEN SPACE	25%	69.1%

LOT DATA	
EXISTING USE:	ACADEMIC INSTITUTION
PROPOSED USE:	ACADEMIC INSTITUTION
LOT SIZE:	10.6 ACRES
TAX MAP #:	173
LOT #:	119
PRE DEVELOPMENT IMPERVIOUS AREA:	141,730 SQ. FT.
POST DEVELOPMENT IMPERVIOUS AREA:	142,932 SQ. FT.
NET CHANGE:	+1,202 SQ. FT.

- LAYOUT NOTES:**
- SEE NOTES L1 THROUGH L3 ON SHEET C-001 FOR ADDITIONAL LAYOUT INFORMATION.
  - ALL CURB RADII SHALL BE 5' UNLESS OTHERWISE NOTED.
  - COORDINATE ALL SIDEWALK LOCATIONS WITH ARCH. AND STRUCTURAL DRAWINGS TO VERIFY NEW EXTERIOR DOOR LOCATIONS. FIELD ADJUST AS REQUIRED.
  - REFER TO STRUCTURAL SHEETS FOR NEW FOUNDATION LAYOUT. COORDINATE LAYOUT WITH FOUNDATION CONTRACTOR.
  - SEE SHEET CU101 FOR ADDITIONAL INFORMATION RELATED TO THE LAYOUT OF SITE LIGHTS AND UTILITY POLES AND THEIR RESPECTIVE CONDUIT AND WIRING. COORDINATE LAYOUT WITH THE ELECTRICAL CONTRACTOR.

LOT AREA =  
461,470 S.F.  
10.594 ACRES

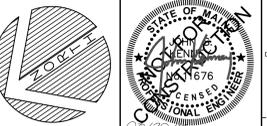
- RESET "NOTICE" SIGN
- A5 C501 NEW 2' W X 6' L PAINTED WHITE PEDESTRIAN CROSSWALK
- A5 C501 NEW "FULL DEPTH" HOT MIX ASPHALT PAVEMENT
- A5 C501 NEW 24" WIDE WHITE PAINTED STOP LINE
- J1 C501 NEW "FULL DEPTH" HOT MIX ASPHALT PAVEMENT
- J1 C501 NEW STOP SIGNAGE
- J1 C501 NEW "BUS PARKING ONLY" SIGNAGE (TYP)
- J1 C501 NEW 4" WIDE PAINTED STRIPING FOR (17) PARALLEL PARKING SPACES (TYP)
- J1 C501 NEW 4" WIDE PAINTED STRIPING FOR (7) NEW BUS PARKING SPACES (TYP)
- J1 C501 NEW DOUBLE YELLOW LINE CENTERLINE
- N1 C501 NEW 2' W X 6' L PAINTED WHITE PEDESTRIAN CROSSWALK
- N1 C501 NEW FLAG POLE AND LIGHTING (TYP)
- J10 C501 NEW BRICK PAVER SIDEWALK (TYP)
- N10 C501 NEW BIKE RACK (TYP)
- A10 C501 NEW HOT MIX ASPHALT SIDEWALK (TYP)
- MATCH EXISTING SIDEWALK LOCATION (TYP)
- (2) RESET "NO PARKING" SIGNAGE (TYP)
- J1 C501 EXISTING PROPERTY LINE LOCATION (TYP)
- J1 C501 NEW "STUDENT LOADING AND UNLOADING ONLY" SIGNAGE (TYP)
- MATCH EXISTING SIDEWALK LOCATION (TYP)
- NEW STRIPED "PARENT DROP OFF/PICK UP" PARKING SPACES (TYP)
- J5 C501 RESET EXISTING GRANITE CURB (TYP)

- J14 C501 NEW BRICK PAVERS OVER STRUCTURAL ENTRY SLAB
- E5 C501 NEW ADA PAVEMENT MARKING
- J1 C501 NEW ADA SIGNAGE
- N10 C501 NEW BIKE RACK (TYP)
- J10 C501 NEW EXTERIOR DOOR LOCATION (TYP)
- J10 C501 NEW BRICK PAVER PLAZA (TYP)
- NEW 4" WIDE PAINTED STRIPING FOR (9) NEW PARKING SPACES (TYP)
- RESET EXISTING GRANITE POSTS (TYP)
- LIMITS OF SURVEY (TYP)
- RESET GRANITE TREADS AND HANDRAILS (TYP)

EXISTING	LEGEND	PROPOSED
UTILITY POLE	UTILITY POLE	UTILITY POLE
STREET LIGHTING	STREET LIGHTING	STREET LIGHTING
BUILDING LIGHTING	BUILDING LIGHTING	BUILDING LIGHTING
WATER SHUTOFF / GATE VALVE	WATER SHUTOFF / GATE VALVE	WATER SHUTOFF / GATE VALVE
TRANSFORMER PAD	TRANSFORMER PAD	TRANSFORMER PAD
DUMPSTER	DUMPSTER	DUMPSTER
MANHOLE	MANHOLE	MANHOLE
SEWER MANHOLE	SEWER MANHOLE	SEWER MANHOLE
MONITORING WELL	MONITORING WELL	MONITORING WELL
CATCH BASIN	CATCH BASIN	CATCH BASIN
FIRE HYDRANT	FIRE HYDRANT	FIRE HYDRANT
SEER	SEER	SEER
FENCING	FENCING	FENCING
P.T. GUARD RAIL	P.T. GUARD RAIL	P.T. GUARD RAIL
PAVEMENT	PAVEMENT	PAVEMENT
SIDEWALK	SIDEWALK	SIDEWALK
SUPPLEMENTAL CONC. CURB	SUPPLEMENTAL CONC. CURB	SUPPLEMENTAL CONC. CURB
HOT MIX ASPHALT CURB	HOT MIX ASPHALT CURB	HOT MIX ASPHALT CURB
PRECAST CONC. WHEEL STOP	PRECAST CONC. WHEEL STOP	PRECAST CONC. WHEEL STOP
GEO BLOCK RETAINING WALL	GEO BLOCK RETAINING WALL	GEO BLOCK RETAINING WALL
CIP CONCRETE RETAINING WALL	CIP CONCRETE RETAINING WALL	CIP CONCRETE RETAINING WALL
CENTERLINE	CENTERLINE	CENTERLINE
CONTROL PT.	CONTROL PT.	CONTROL PT.
PROPERTY SETBACK	PROPERTY SETBACK	PROPERTY SETBACK
PROPERTY LINE	PROPERTY LINE	PROPERTY LINE
ABUTTING PROPERTY LINE	ABUTTING PROPERTY LINE	ABUTTING PROPERTY LINE
FREE LINE	FREE LINE	FREE LINE

REV.	DESCRIPTION	DATE
4	PER CITY COMMENTS	03.29.13
3	DESIGN DEVELOPMENT	03.21.13
2	APPROVAL DRAWINGS	03.15.13
1	SCHEMATIC DESIGN	10.16.12
0	SD PRICING	10.03.12

**APPROVAL DRAWINGS**  
03.15.13

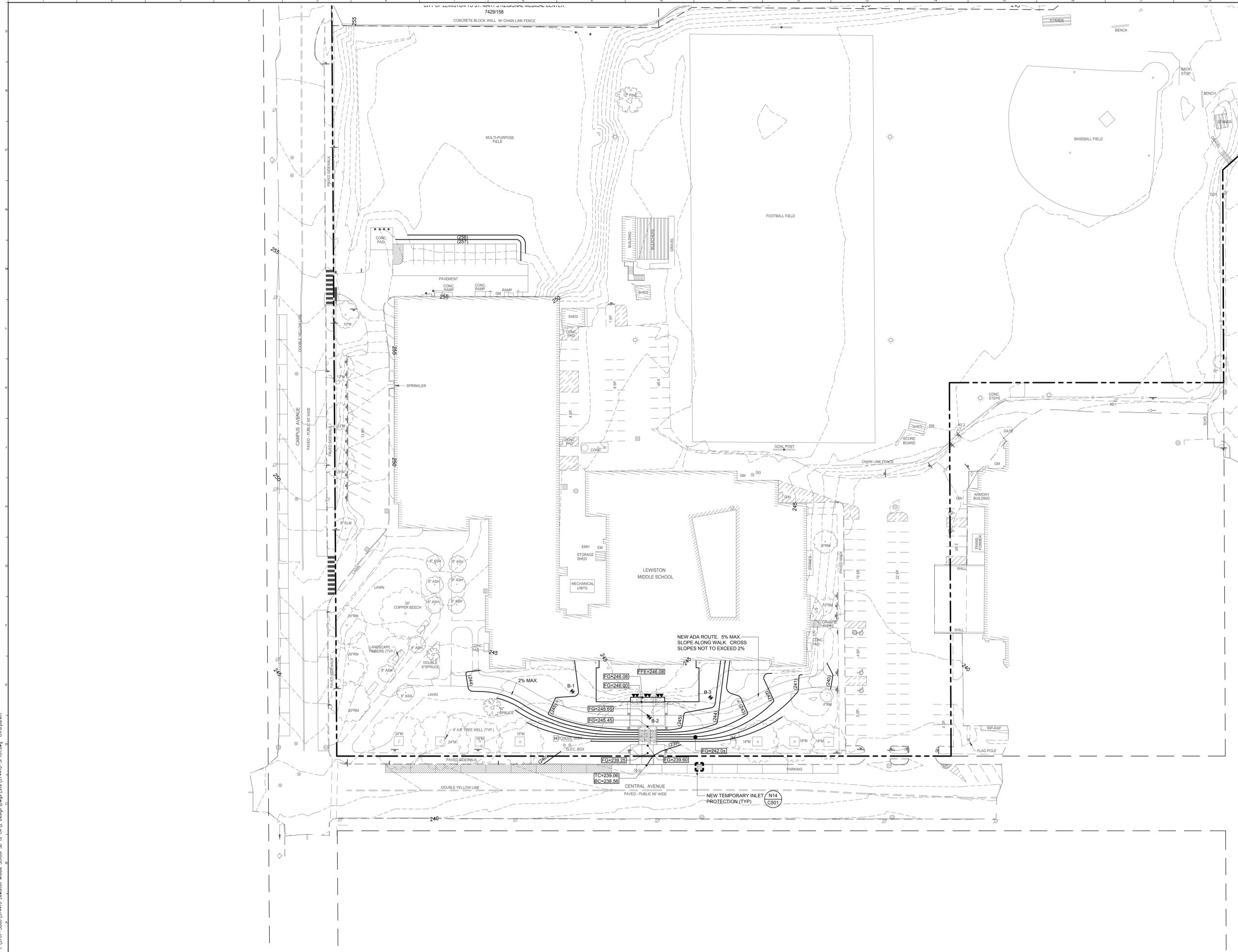


**LEWISTON MIDDLE SCHOOL RENOVATIONS AND EXPANSION**

**SITE LAYOUT PLAN**

PROJECT No.	3744.10	GRAPHIC SCALE	1"=30'
PROJECT MANAGER	SEP	SHEET No.	CP101
DRAWN BY	TAR		
CHECKED BY	ARB		

Mar. 28, 2013 - 3:58pm  
 I:\J01-3800\374410 Lewiston Middle School SD to CA V Design\Draws\Site\374410-SP101.dwg chris.parent

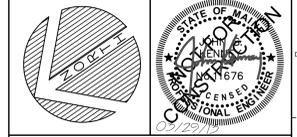


- GRADING NOTES:**
- SEE NOTES G1 THROUGH G8 ON SHEET C-001 FOR ADDITIONAL GRADING INFORMATION.
  - ALL DISTURBED AREAS NOT RECEIVING PAVEMENT SHALL BE PROVIDED WITH LOAM AND SEED PER THE CONTRACT DOCUMENTS.
  - PROPOSED GRADING SHOWN ON THIS PLAN IS BASED ON A TOPOGRAPHIC SURVEY PREPARED OWEN HASKELL, INC.
  - TEST PIT LOCATION AND INFORMATION PROVIDED BY SUMMIT GEOENGINEERING SERVICES INC.

EXISTING	LEGEND	PROPOSED
	UTILITY POLE	
	STREET LIGHTING	
	BUILDING LIGHTING	
	WATER SHUT/OFF / GATE VALVE	
	TRANSFORMER PAD	
	DUMPER	
	MANHOLE	
	SEWER MANHOLE	
	MONITORING WELL	
	CATCH BASIN	
	FIRE HYDRANT	
	SIGN	
	FENCING	
	P.T. GUARD RAIL	
	PAVEMENT	
	SIDEWALK	
	SLIPFORM CONC. CURB	
	HOT MIX ASPHALT CURB	
	PRECAST CONC. WHEEL STOP	
	GEO BLOCK RETAINING WALL	
	CIP CONCRETE RETAINING WALL	
	CONTOURS	
	SEDIMENTATION CONTROL FENCE	
	FLOW PATH	
	TEMP. SILT INLET PROTECTION	
	BANK STABILIZATION MESH	
	PROPERTY SETBACK	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	

REV.	DESCRIPTION	DATE
4	PER CITY COMMENTS	03.29.13
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**APPROVAL DRAWINGS**  
 03.15.13  
 CURRENT ISSUE STATUS:

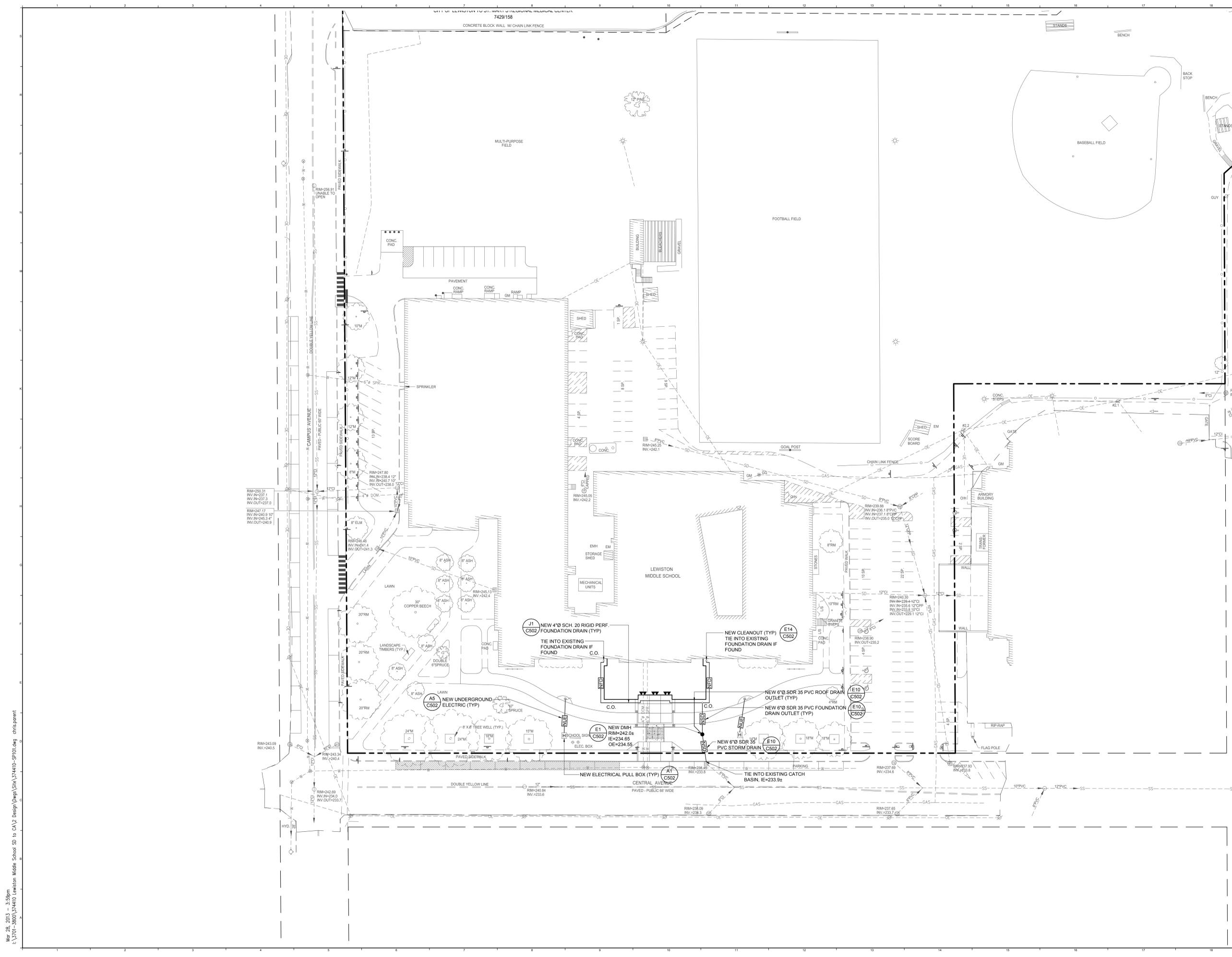


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 SANARCTA, FLORIDA 32137-9301

**LEWISTON MIDDLE SCHOOL**  
 RENOVATIONS AND EXPANSION  
 PROJECT: LEWISTON, MAINE

**SITE GRADING**  
 PLAN

SHEET TITLE:	374410-SP101.DWG
WBRC CAD FILE:	3744.10
PROJECT No:	3744.10
SCALE:	1"=30'
PROJECT MANAGER:	SEP
DRAWN BY:	TAR
CHECKED BY:	ARB
SHEET No:	CG101

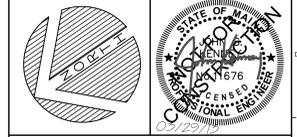


- UTILITY NOTES:**
- SEE NOTES E1 THROUGH U8 ON SHEET C-001 FOR ADDITIONAL UTILITY INFORMATION.
  - ALL TRENCH EXCAVATION AND BACKFILL FOR ELECTRICAL SYSTEMS SHALL BE BY THE SITE CONTRACTOR. CONDUIT, PULL BOXES, RISER POLES, LIGHT BASES, ETC. SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. LIGHT BASES TO BE SET BY THE SITE CONTRACTOR.
  - SITE CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY PROPOSED WORK.
  - PROVIDE 4" MIN. RIGID INSULATION BETWEEN WATER LINE AND SANITARY SEWER LINE. EXTEND 8' IN ALL DIRECTIONS WHERE THEY CROSS.
  - DOMESTIC WATER DISTRIBUTION AND FIRE SUPPRESSION PIPING AND APPURTENANCES SHALL BE SUPPLIED AND INSTALLED BY SITE CONTRACTOR. ALL EXCAVATION AND BACKFILL REQUIRED FOR ANY PART OF THE WATER SUPPLY SYSTEM AND FIRE SUPPRESSION PIPING SHALL BE BY THE SITE CONTRACTOR. COORDINATE INSTALLATION OF PIPING WITH THE PLUMBING AND MECHANICAL CONTRACTORS. PIPING FOR NEW BUILDING SHALL BE SUPPLIED AND INSTALLED BY THE PLUMBING CONTRACTOR FROM THE BUILDING TO A COORDINATED POINT LOCATED 10' FROM THE BUILDING PENETRATION.

EXISTING	LEGEND	PROPOSED
UTILITY POLE	UTILITY POLE	UTILITY POLE
STREET LIGHTING	STREET LIGHTING	STREET LIGHTING
BUILDING LIGHTING	BUILDING LIGHTING	BUILDING LIGHTING
WATER SHUTOFF / GATE VALVE	WATER SHUTOFF / GATE VALVE	WATER SHUTOFF / GATE VALVE
TRANSFORMER PAD	TRANSFORMER PAD	TRANSFORMER PAD
DUMPSTER	DUMPSTER	DUMPSTER
MANHOLE	MANHOLE	MANHOLE
SEWER MANHOLE	SEWER MANHOLE	SEWER MANHOLE
MONITORING WELL	MONITORING WELL	MONITORING WELL
CATCH BASIN	CATCH BASIN	CATCH BASIN
FIRE HYDRANT	FIRE HYDRANT	FIRE HYDRANT
SIGN	SIGN	SIGN
FENCING	FENCING	FENCING
P.T. GUARD RAIL	P.T. GUARD RAIL	P.T. GUARD RAIL
PAVEMENT	PAVEMENT	PAVEMENT
SIDEWALK	SIDEWALK	SIDEWALK
SUPPLEMENT CONC. CURB	SUPPLEMENT CONC. CURB	SUPPLEMENT CONC. CURB
HOT MIX ASPHALT CURB	HOT MIX ASPHALT CURB	HOT MIX ASPHALT CURB
PRECAST CONC. WHEEL STOP	PRECAST CONC. WHEEL STOP	PRECAST CONC. WHEEL STOP
GEI BLOCK RETAINING WALL	GEI BLOCK RETAINING WALL	GEI BLOCK RETAINING WALL
CIP CONCRETE RETAINING WALL	CIP CONCRETE RETAINING WALL	CIP CONCRETE RETAINING WALL
GAS SERVICE / MAIN	GAS SERVICE / MAIN	GAS SERVICE / MAIN
WATER SERVICE / MAIN	WATER SERVICE / MAIN	WATER SERVICE / MAIN
STORM DRAIN	STORM DRAIN	STORM DRAIN
UNDERDRAIN	UNDERDRAIN	UNDERDRAIN
FOOTING DRAIN	FOOTING DRAIN	FOOTING DRAIN
CLEANOUT	CLEANOUT	CLEANOUT
SANITARY SEWER	SANITARY SEWER	SANITARY SEWER
UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC
UNDERGROUND SECONDARY	UNDERGROUND SECONDARY	UNDERGROUND SECONDARY
UNDERGROUND PRIMARY	UNDERGROUND PRIMARY	UNDERGROUND PRIMARY
AERIAL ELEC. / PRIMARY	AERIAL ELEC. / PRIMARY	AERIAL ELEC. / PRIMARY
PROPERTY SETBACK	PROPERTY SETBACK	PROPERTY SETBACK
PROPERTY LINE	PROPERTY LINE	PROPERTY LINE
ADJUTING PROPERTY LINE	ADJUTING PROPERTY LINE	ADJUTING PROPERTY LINE
TREE LINE	TREE LINE	TREE LINE

REV.	DESCRIPTION	DATE
4	PER CITY COMMENTS	03.29.13
3	DESIGN DEVELOPMENT	03.21.13
2	APPROVAL DRAWINGS	03.15.13
1	SCHEMATIC DESIGN	10.16.12
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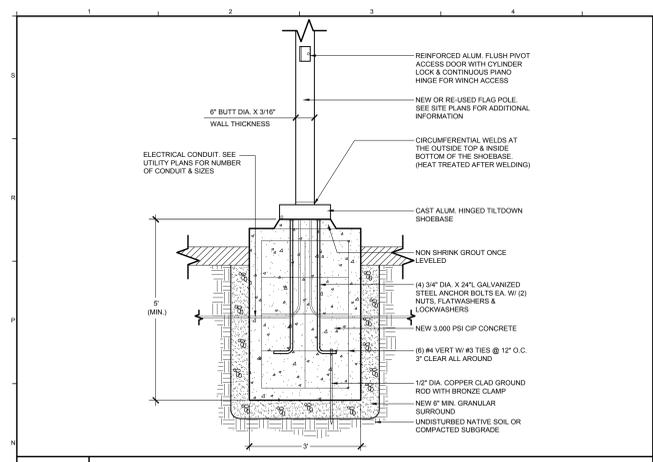
**APPROVAL DRAWINGS**  
03.15.13



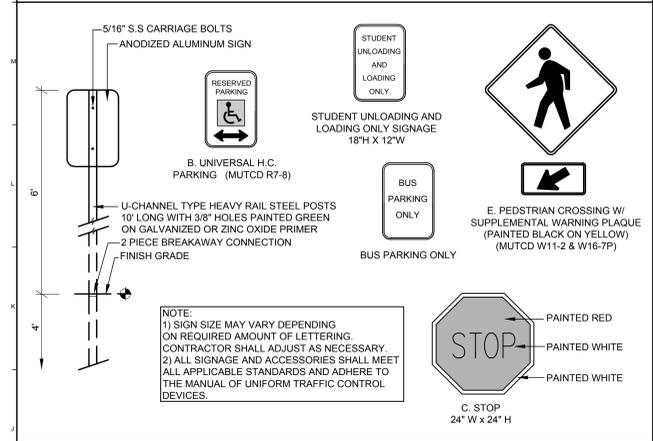
**LEWISTON MIDDLE SCHOOL**  
RENOVATIONS AND EXPANSION

**SITE UTILITY PLAN**

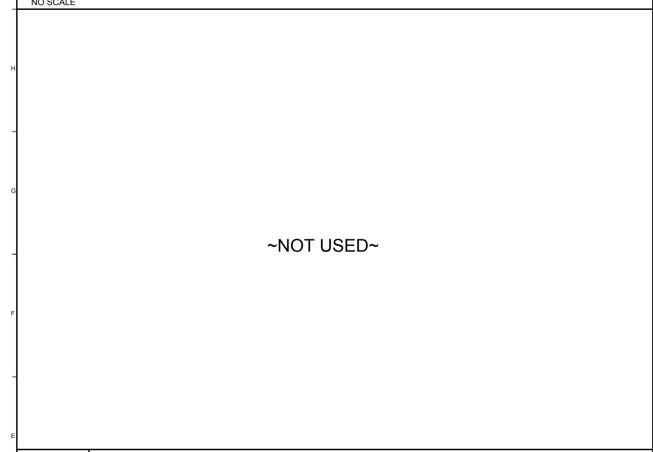
SHEET TITLE:	374410-SP101.DWG
WBRC CAD FILE:	3744.10
PROJECT No:	3744.10
SCALE:	1"=30'
PROJECT MANAGER:	SEP
DRAWN BY:	TAR
CHECKED BY:	ARB
SHEET No:	CU101



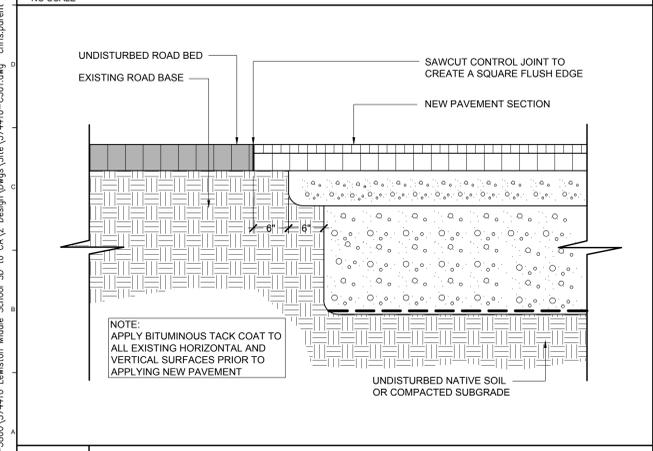
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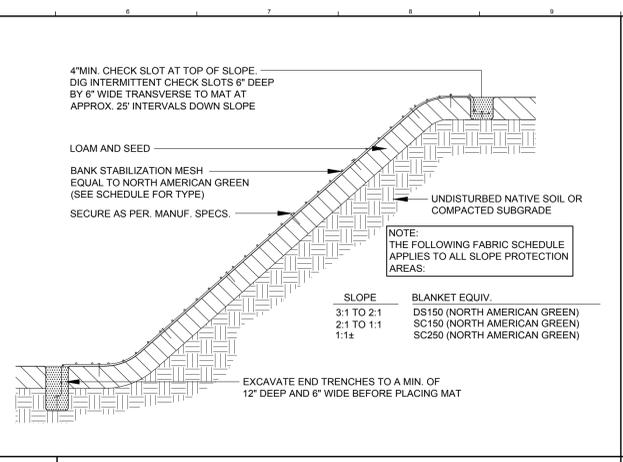
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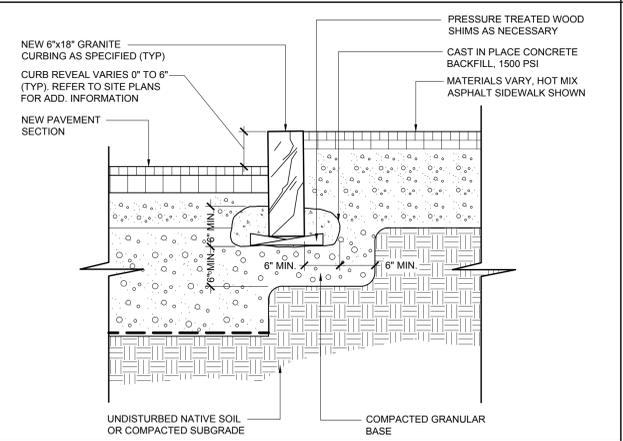
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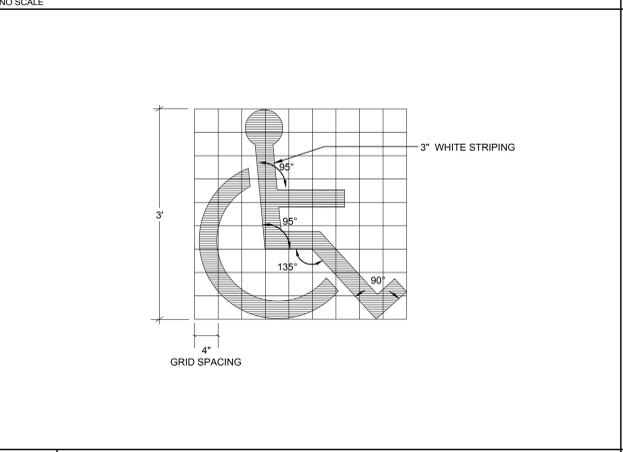
**A1 HOT MIX ASPHALT "BUTT JOINT"**



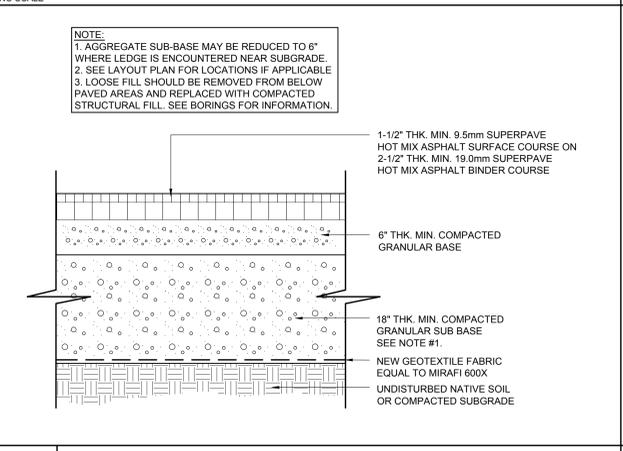
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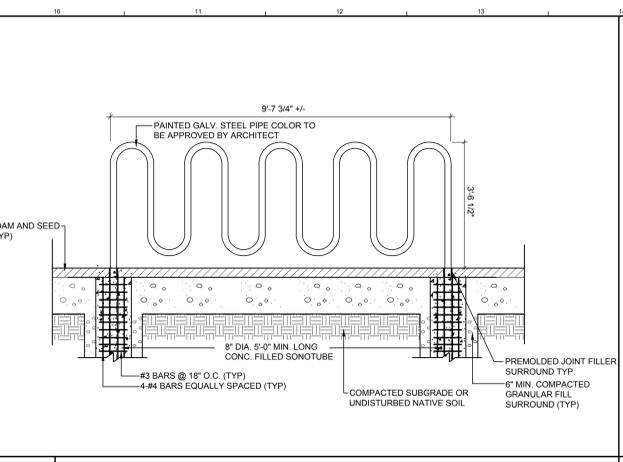
**J5 RESET VERTICAL GRANITE CURB**



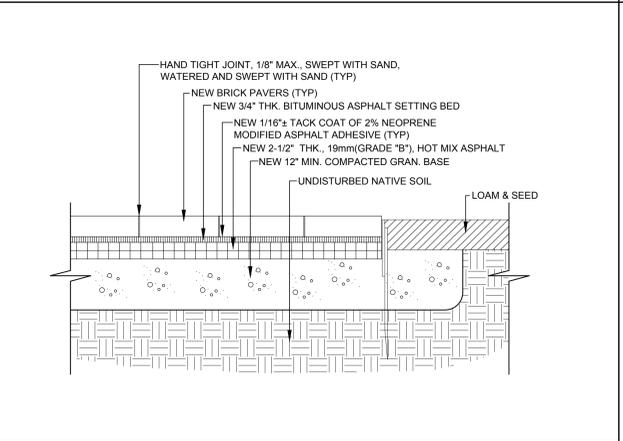
**E5 NEW H.C. PAVEMENT MARKINGS**



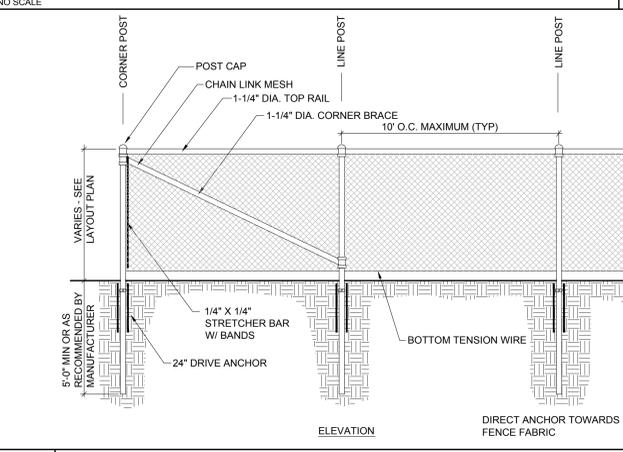
**A5 NEW "FULL DEPTH" HOT MIX ASPHALT PAVEMENT SECTION**



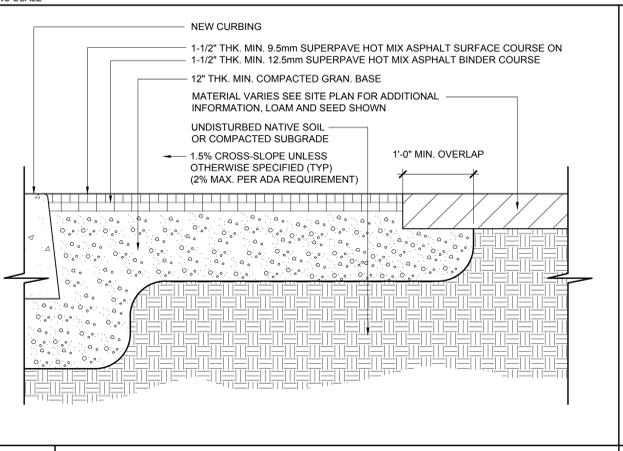
**N10 NEW BIKE RACK**



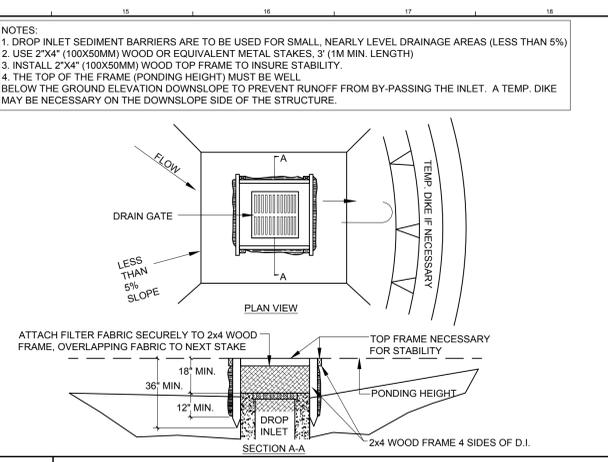
**J10 NEW BRICK PAVER PLAZA / SIDEWALK**



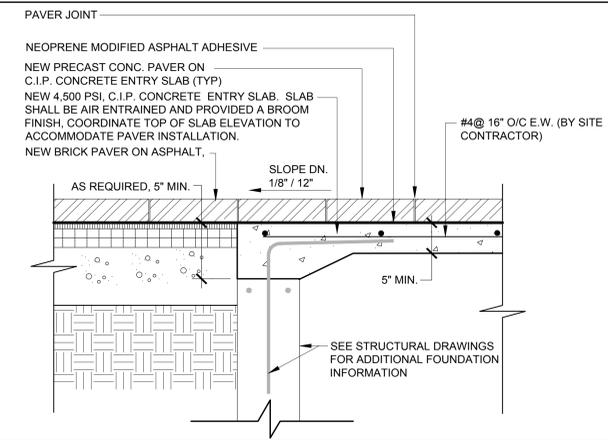
**E10 TEMPORARY SECURITY CHAIN LINK FENCE**



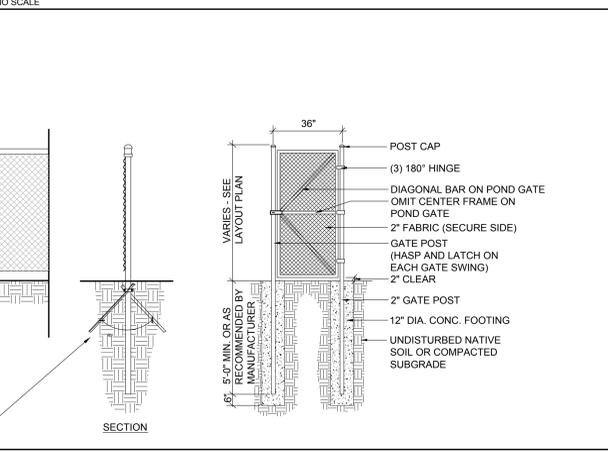
**A10 NEW HOT MIX ASPHALT SIDEWALK**



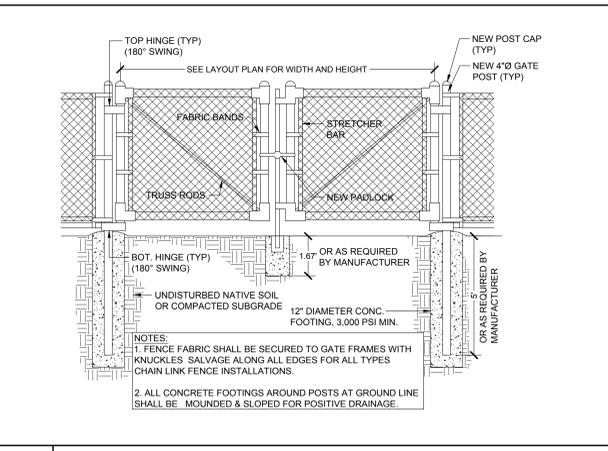
**N14 NEW TEMPORARY SILT INLET PROTECTION**



**J14 NEW BRICK PAVERS ON STRUCTURAL ENTRY SLAB**



**E10 TEMPORARY SECURITY CHAIN LINK FENCE**



**A14 TEMPORARY SECURITY DOUBLE SWING GATE**

4	PER CITY COMMENTS	03.29.13
3	DESIGN DEVELOPMENT	03.21.13
2	APPROVAL DRAWINGS	03.15.13
1	SCHEMATIC DESIGN	10.16.12
0	SD PRICING	10.03.12
REV.	DESCRIPTION	DATE

**APPROVAL DRAWINGS**

03.15.13

CURRENT ISSUE STATUS:



**WBRC ARCHITECTS • ENGINEERS**

**LEWISTON MIDDLE SCHOOL RENOVATIONS AND EXPANSION**

PROJECT: LEWISTON, MAINE

**SITE DETAILS**

SHEET TITLE: 3744-10-C501.DWG

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PROJECT No: 3744.10 SCALE: NO SCALE

PROJECT MANAGER: SEP SHEET No: 1

DRAWN BY: TAR C501

CHECKED BY: ARB

Mar 28, 2013 - 3:46pm  
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~NOT USED~

~NOT USED~

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N5

N10

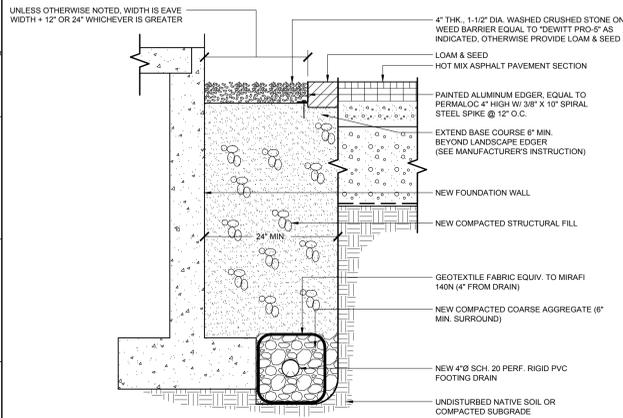
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J1

J5

J10

J14

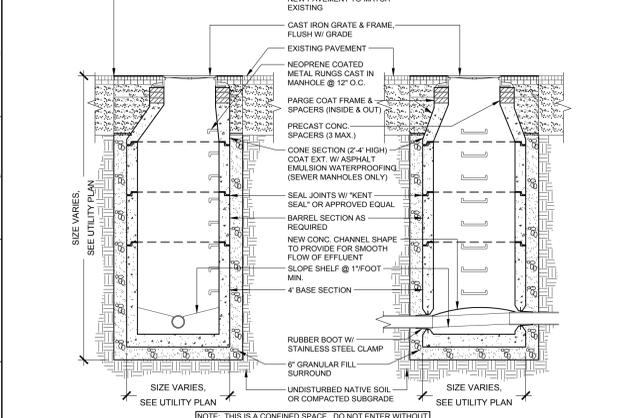
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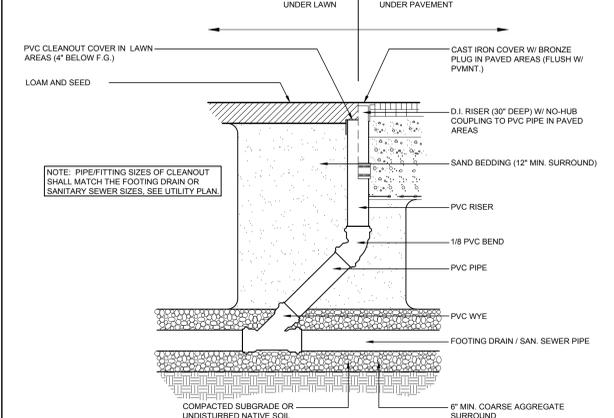
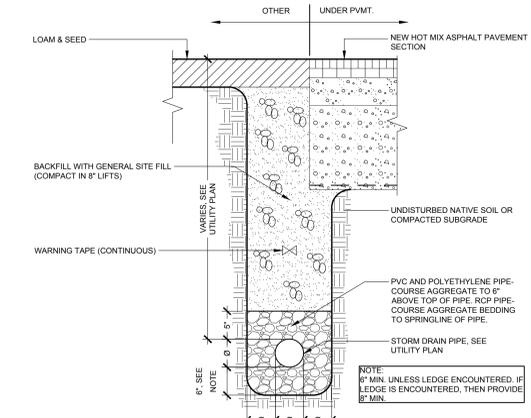
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E5

E10

E14

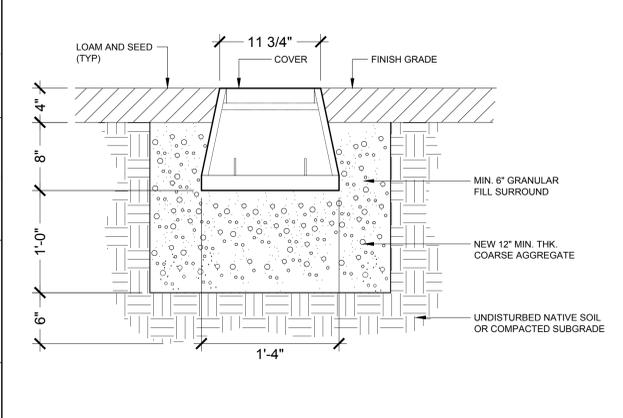
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NO SCALE

NO SCALE

NO SCALE

NO SCALE



A1

A5

A10

A14

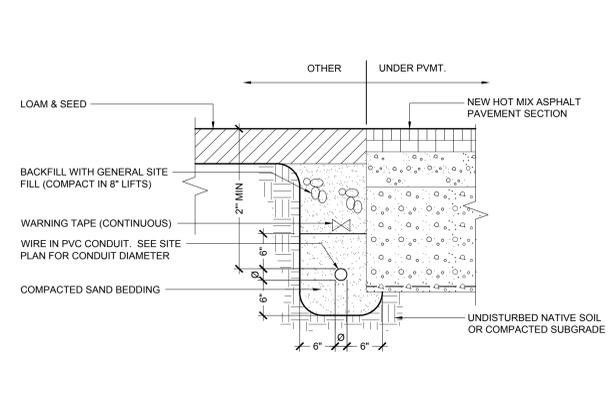
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NO SCALE

NO SCALE

NO SCALE



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REV.	DESCRIPTION	DATE
4	PER CITY COMMENTS	03.29.13
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0	SD PRICING	10.03.12

APPROVAL DRAWINGS  
03.15.13

CURRENT ISSUE STATUS:



**WBRC**  
ARCHITECTS • ENGINEERS  
WWW.WBRC.COM  
BANGOR, MAINE 207-641-4511  
PORTLAND, MAINE 207-528-4511  
BANGOR, FLORIDA 904-271-9101

LEWISTON MIDDLE SCHOOL  
RENOVATIONS AND EXPANSION  
PROJECT: LEWISTON, MAINE

SHEET TITLE:  
SITE  
DETAILS

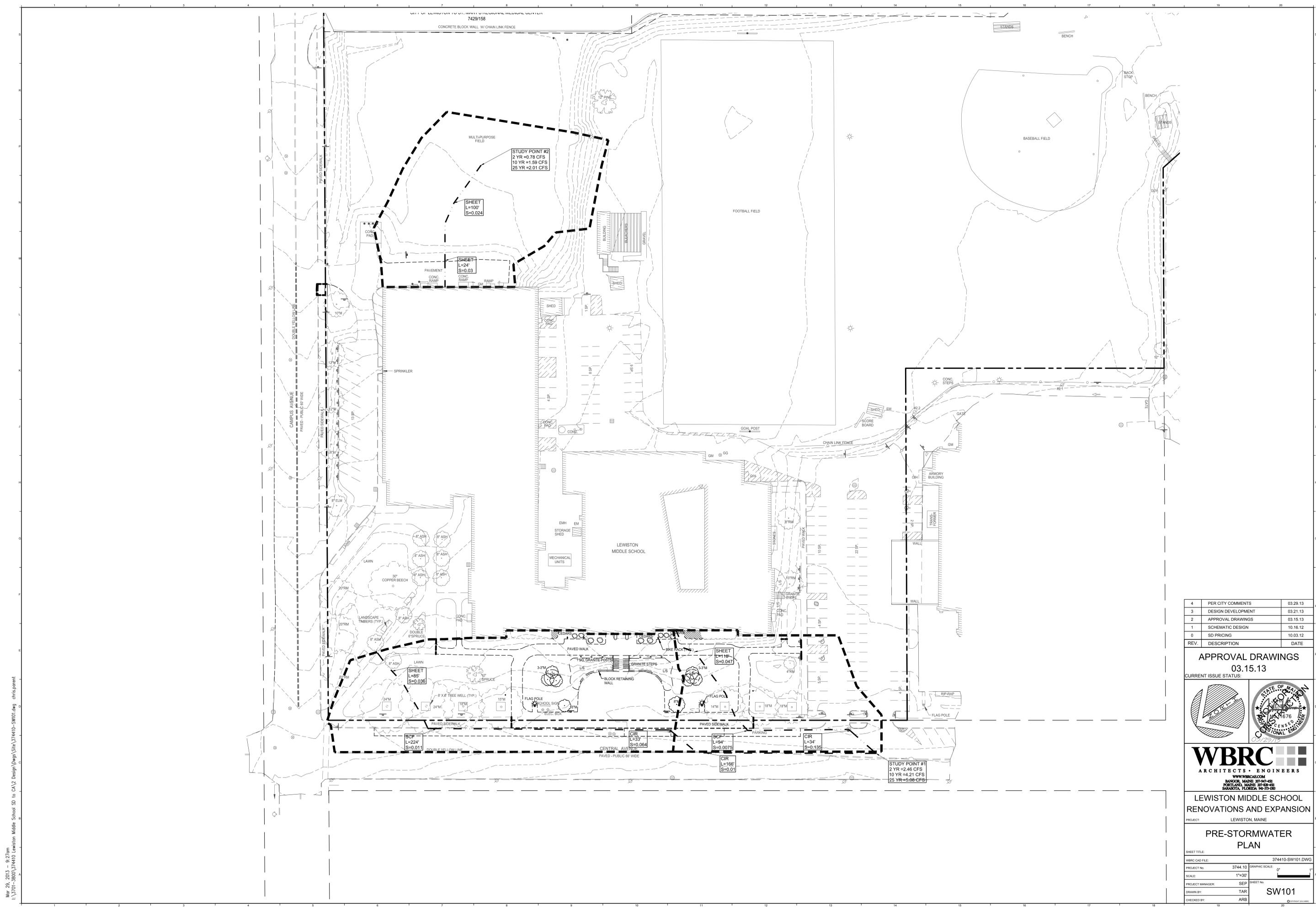
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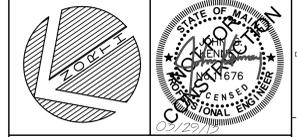
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REV.	DESCRIPTION	DATE

**APPROVAL DRAWINGS**  
03.15.13  
CURRENT ISSUE STATUS:



**WBRC**  
ARCHITECTS • ENGINEERS  
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BANGOR, MAINE 207-941-4511  
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SANARCA, FLORIDA 904-777-9811

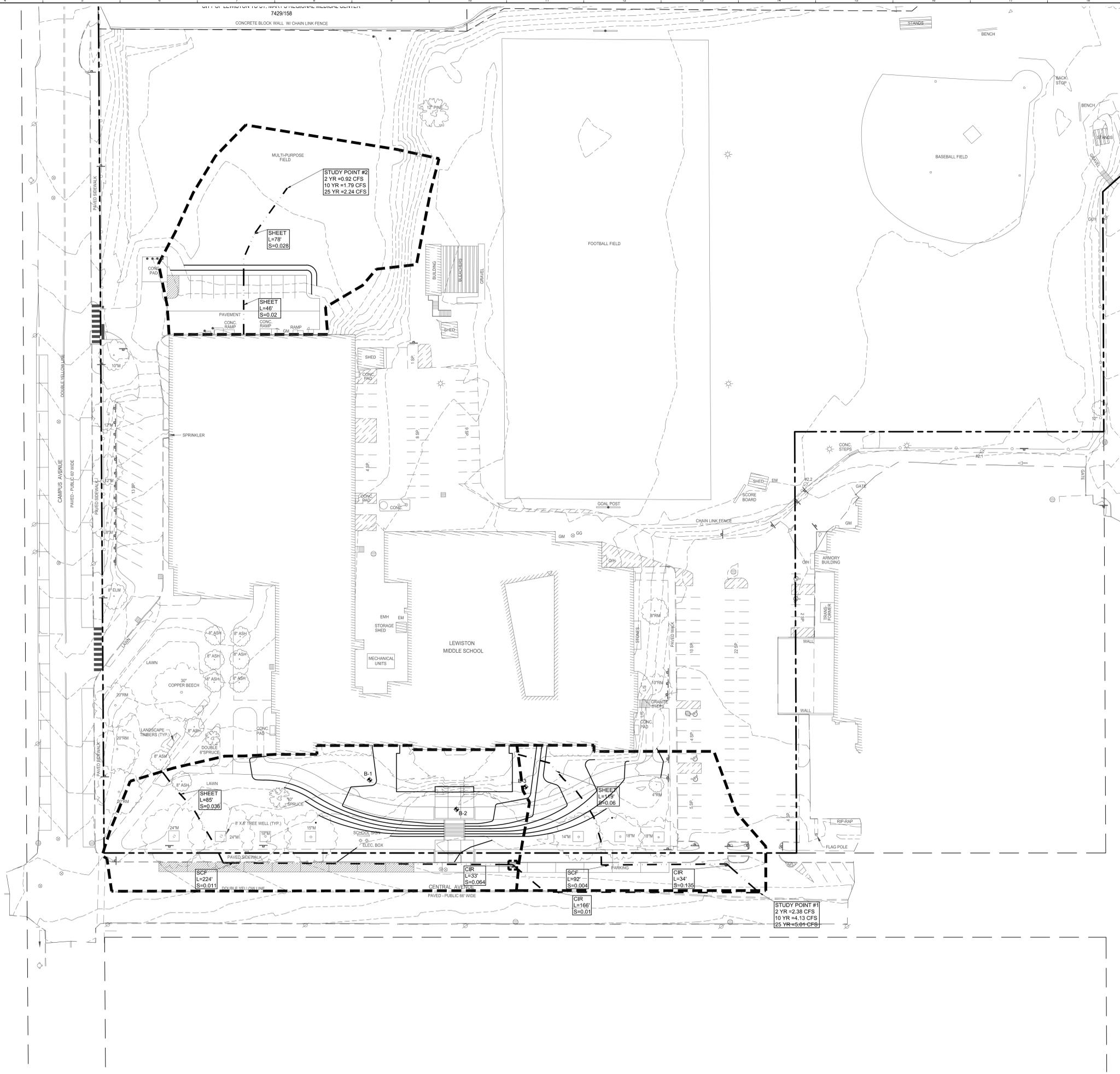
**LEWISTON MIDDLE SCHOOL  
RENOVATIONS AND EXPANSION**  
PROJECT: LEWISTON, MAINE

**PRE-STORMWATER  
PLAN**

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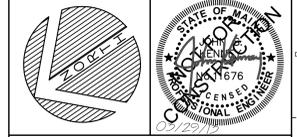
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Mar. 29, 2013 - 9:28am  
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2	APPROVAL DRAWINGS	03.15.13
1	SCHEMATIC DESIGN	10.16.12
0	SD PRICING	10.03.12
REV.	DESCRIPTION	DATE

**APPROVAL DRAWINGS**  
 03.15.13  
 CURRENT ISSUE STATUS:



**WBRC**  
 ARCHITECTS • ENGINEERS  
 WWW.WBRC.COM  
 BANGOR, MAINE 207-94-4511  
 PORTLAND, MAINE 207-528-4511  
 SANARCA, FLORIDA 941-377-9811

**LEWISTON MIDDLE SCHOOL  
 RENOVATIONS AND EXPANSION**  
 PROJECT: LEWISTON, MAINE

**POST-STORMWATER  
 PLAN**

SHEET TITLE:	374410-SW101.DWG
WBRC CAD FILE:	3744.10
PROJECT No:	3744.10
SCALE:	1"=30'
PROJECT MANAGER:	SEP
DRAWN BY:	TAR
CHECKED BY:	ARB
SHEET No:	SW102



## CITY OF LEWISTON

### Department of Planning & Code Enforcement



**TO: Planning Board**  
**FROM: David Hediger, City Planner**  
**DATE: April 4, 2013**  
**RE: April 8, 2012 Planning Board Agenda Item IV(b)**

**An application submitted by Survey Works, Inc. on behalf of Marc A. Pellerin to divide Lot 1A of the Pond Ridge Acres Subdivision located at 551 Pond Road with remaining undeveloped land to be combined with the abutting property at 22 Pond Ridge Drive.**

Survey Works, Inc. on behalf of Marc A. Pellerin has submitted an application to divide Lot 1A of the Pond Ridge Acres Subdivision located at 551 Pond Road with remaining undeveloped land to be combined with the abutting property at 22 Pond Ridge Drive. This 4.57 acre parcel is located in the Rural Agricultural (RA) district and consists of an unfinished single family dwelling. The applicant has made the request to annex 2.41 acres of the existing Lot 1A. This land is to be combined with the abutting property at 22 Pond Ridge Drive owned by Marc A. Pellerin. The remaining 2.16 acres (Lot 1B) will consist of the existing unfinished home and sold as an individual lot.

The proposed lot split meets all of the applicable space and bulk requirements of the RA district. At this time, the applicant has no desire to develop the 2.41 acre parcel. Rather, it will be combined with the abutting developed lot at 22 Pond Ridge Drive. Therefore, staff has recommended and the applicant has noted as condition of approval on the subdivision plan that "annexed land is to be combined with the abutting property currently owned by Marc Pellerin and is not to be developed unless approved by the Planning Board".

While this request is simply an amendment to split an existing lot with one of the lots to be combined with an abutting lot, Article XIII, Section 2(10) requires approval by the Planning Board. Furthermore, this subdivision is subject to the City's delegated review authority from DEP being a subdivision over 100 acres with 34 lots for which the DEP has historically allowed the city to review. Therefore, this project is subject to development review approval from the Planning Board pursuant to Article XIII, Sections 4 and 5 of the Zoning and Land Use Code.

#### **ACTIONS NECESSARY**

1. Make a motion to consider an application submitted by Survey Works, Inc. on behalf of Marc A. Pellerin to divide Lot 1A of the Pond Ridge Acres Subdivision located at 551 Pond Road.
2. Obtain input on the application;
3. Make a determination that the application is complete;
4. Make a motion finding that the application meets all of the necessary criteria contained in the Zoning and Land Use Code, including Article XIII, Section 4 and 5 of the Zoning and Land Use Code and to grant approval to Marc A Pellerin to divide the existing Lot 1A of

the Pond Ridge Acres Subdivision located at 551 Pond Road with undeveloped portion of Lot 1A to be combined with the abutting property at 22 Pond Ridge Drive and for remaining developed land to be identified as Lot 1B, subject to any concerns raised by the Planning Board or staff.

**Subdivision Application  
Lewiston, Maine**

**2<sup>nd</sup> Amended Subdivision Plan  
“Pond Ridge Acres”**

**551 Pond Road, Lewiston  
Tax Map 58, Lot 21**

**March 28, 2013**

**Prepared For:  
Marc A. Pellerin**

**Prepared By:  
*SurveyWorks Inc.***



*SurveyWorks, Incorporated*  
Land Use Consultants

# Table of Contents

---

## *1 Application*

- A. Application Letter
- B. Proof of Application Fee Payment
- C. Development Review Application
- D. Development Review Checklist

## *2 Documents of Interest*

- A. Source Deed
- B. Abutters' List
- C. Agreement With Respect To Lots 1A & 2A

## *3 Soils Information*

- A. Preliminary Subsurface Wastewater Disposal Application- Lot 1A
- B. Subsurface Wastewater Disposal Application- Lot 1B

## *4 Exhibits*

- A. Lewiston Tax Map
- B. Lewiston Zoning Map

## *5 Plan Reductions*

- A. Proposed 2<sup>nd</sup> Amended Subdivision Plan  
"Pond Ridge Acres Subdivision"
- B. Amended Subdivision Plan  
"Pond Ridge Acres Subdivision" BK 43 PG 133

1



*SurveyWorks, Incorporated*  
Land Use Consultants

March 28, 2013

Bruce Damon, Chairman  
City of Lewiston Planning Board  
27 Pine Street - 3rd Floor  
Lewiston, ME 04240

RE: 551 Pond Road, Pond Ridge Acres Subdivision

Dear Mr. Damon & Board Members,

Marc A. Pellerin, owner of "Lot 1A" of the "Pond Ridge Acres" Subdivision, respectfully requests that he be added to the April 8<sup>th</sup> Planning Board Meeting Agenda for review and approval of a minor change to the lot size of Lot 1A. The original project was approved by the City of Lewiston on January 12, 2004.

The minor change request is to allow for the annexing of 2.41 acres of the existing Lot 1A, as shown on *Amended Subdivision Plan Pond Ridge Acres Subdivision*, dated December 5, 2003, and recorded at Androscoggin County Registry of Deeds in Book 43, Page 133. This land is to be annexed to the abutting property owner Marc A. Pellerin, Tax Map 133, Lot 7, while allowing for the remaining 2 acre lot with existing house to be sold. Both the remaining land of Lot 1A and the annexed land will conform to municipal zoning requirements.

Furthermore, the annexed land is not to be developed unless approved by the Planning Board.

*SurveyWorks, Inc.* has been retained by Marc A. Pellerin to act as his agent at all Planning Board Meetings related to this project, and to provide all necessary information and documentation required for subdivision review in accordance with the City of Lewiston Subdivision and Land Use Ordinances.

We look forward to presenting this application to the Board Members, and thank you for the opportunity.

Respectfully Submitted,

Jimmy Courbron  
Project Manager  
*SurveyWorks, Inc.*

**528 River Road  
Greene, ME 04236-4103  
Tel. (207) 946-4480  
Fax (207) 946-4483**





# PROJECT DATA

The following information is required where applicable, in order to complete the application

## IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	N/A	sq. ft.
Proposed Total Paved Area	N/A	sq. ft.
Proposed Total Impervious Area	N/A	sq. ft.
Proposed Impervious Net Change	0	sq. ft.
Impervious surface ratio existing	N/A	% of lot area
Impervious surface ratio proposed	N/A	% of lot area

## BUILDING AREA/LOT COVERAGE

Existing Building Footprint	3483	sq. ft.
Proposed Building Footprint	N/A	sq. ft.
Proposed Building Footprint Net change	0	sq. ft.
Existing Total Building Floor Area	N/A	sq. ft.
Proposed Total Building Floor Area	N/A	sq. ft.
Proposed Building Floor Area Net Change	0	sq. ft.
New Building	no	(yes or no)
Building Area/Lot coverage existing	0.04+/-	% of lot area
Building Area/Lot coverage proposed	N/A	% of lot area

## ZONING

Existing  
Proposed, if applicable

Rural Agricultural (RA)

NA

## LAND USE

Existing  
Proposed

Lot 1B  
Existing dwelling / Wood Lot  
Lot 1B = Existing Driveway / Lot 1A = Wood Lot

## RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units  
Proposed Number of Residential Units  
Subdivision, Proposed Number of Lots

1  
1 No Change  
2 Lot 1B

## PARKING SPACES

Existing Number of Parking Spaces  
Proposed Number of Parking Spaces  
Required Number of Parking Spaces  
Number of Handicapped Parking Spaces

N/A  
N/A  
N/A  
N/A

## ESTIMATED COST OF PROJECT

\$ 0.00

## DELEGATED REVIEW AUTHORITY CHECKLIST

### SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	N/A	sq. ft.
Proposed Disturbed Area	N/A	sq. ft.
Proposed Impervious Area	N/A	sq. ft.

1. If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.
2. If the proposed impervious area is greater than one acre including any impervious area created since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.
3. If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.
4. If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.

### TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing (Since July 1, 1997) N/A passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) N/A passenger car equivalents (PCE)  
If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

### Zoning Summary

1. Property is located in the rural agricultural zoning district.

2. Parcel Area: 4.57 acres / 199,069 square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	<u>60,000 sq</u>	<u>Lot 1B</u>
Street Frontage	<u>200 ft</u>	<u>200 ft</u>
Min Front Yard	<u>25 ft</u>	<u>25 ft</u>
Min Rear Yard	<u>25 ft</u>	<u>25 ft</u>
Min Side Yard	<u>25 ft</u>	<u>25 ft</u>
Max. Building Height	<u>35 ft</u>	<u>&lt; 35 ft</u>
Use Designation	<u>single family</u>	<u>single family</u>
Parking Requirement	<u>1 space/ per N/A square feet of floor area</u>	
Total Parking:	<u>N/A</u>	<u>N/A</u>
Overlay zoning districts (if any):	<u>None</u>	<u>None</u> / <u>N/A</u>
Urban impaired stream watershed?	<u>YES/NO If yes, watershed name</u> <u>None</u>	

## DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submission shall include payment of fee and fifteen (15) complete packets containing the following materials:

1. Full size plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

Refer to the application checklist for a detailed list of submittal requirements.

L/A's development review process and requirements have been made similar for convenience and to encourage development. Each City's ordinances are available online at their prospective websites:

Auburn: [www.auburnmaine.org](http://www.auburnmaine.org) under City Departments/ Planning and Permitting/Land Use Division/Zoning Ordinance

Lewiston: <http://www.ci.lewiston.me.us/clerk/ordinances.htm> Refer to Appendix A of the Code of Ordinances

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant: 	Date: <u>3/28/13</u>
--	----------------------



# Development Review Checklist

City of Auburn Planning and Permitting Department  
City of Lewiston Department of Planning and Code Enforcement



THE FOLLOWING INFORMATION IS REQUIRED WHERE APPLICABLE TO BE SUBMITTED FOR AN APPLICATION TO BE COMPLETE

PROJECT NAME: 2<sup>nd</sup> Amended Subdivision Plan "Pond Ridge Acres"

PROPOSED DEVELOPMENT ADDRESS and PARCEL #: 551 Pond Road, ID # RE00013689

Required Information		Check Submitted		Applicable Ordinance	
		Applicant	Staff	Lewiston	Auburn
<b>Site Plan</b>					
	Owner's Names/Address	✓			
	Names of Development	✓			
	Professionally Prepared Plan	✓			
	Tax Map or Street/Parcel Number	✓			
	Zoning of Property	✓			
	Distance to Property Lines	✓			
	Boundaries of Abutting land	✓			
	Show Setbacks, Yards and Buffers	✓			
	Airport Area of Influence (Auburn only)	N/A			
	Parking Space Calcs	N/A			
	Drive Openings/Locations	✓			
	Subdivision Restrictions	✓			
	Proposed Use	✓			
	PB/BOA/Other Restrictions	✓			
	Fire Department Review	N/A			
	Open Space/Lot Coverage	N/A			
	Lot Layout (Lewiston only)				
	Existing Building (s)	✓			
	Existing Streets, etc.	✓			
	Existing Driveways, etc.	✓			
	Proposed Building(s)	N/A			
	Proposed Driveways	N/A			
<b>Landscape Plan</b>					
	Greenspace Requirements	N/A			
	Setbacks to Parking	N/A			
	Buffer Requirements	N/A			
	Street Tree Requirements	N/A			
	Screened Dumpsters	N/A			

	Additional Design Guidelines	N/A			
	Planting Schedule	N/A			
<b>Stormwater &amp; Erosion Control Plan</b>					
	Compliance w/ chapter 500	N/A			
	Show Existing Surface Drainage	N/A			
	Direction of Flow	N/A			
	Location of Catch Basins, etc.	N/A			
	Drainage Calculations	N/A			
	Erosion Control Measures	N/A			
	Maine Construction General Permit	N/A			
	Bonding and Inspection Fees	N/A			
	Post-Construction Stormwater Plan	N/A			
	Inspection/monitoring requirements	N/A			
	Third Party Inspections (Lewiston only)	N/A			
<b>Lighting Plan</b>					
	Full cut-off fixtures	N/A			
	Meets Parking Lot Requirements	N/A			
<b>Traffic Information</b>					
	Access Management	N/A			
	Signage	N/A			
	PCE - Trips in Peak Hour	N/A			
	Vehicular Movements	N/A			
	Safety Concerns	N/A			
	Pedestrian Circulation	N/A			
	Police Traffic	N/A			
	Engineering Traffic	N/A			
<b>Utility Plan</b>					
	Water	N/A			
	Adequacy of Water Supply	N/A			
	Water main extension agreement	N/A			
	Sewer	N/A			
	Available city capacity	N/A			
	Electric	✓			
	Natural Gas	N/A			
	Cable/Phone	N/A			
<b>Natural Resources</b>					
	Shoreland Zone	N/A			
	Flood Plain	✓			
	Wetlands or Streams	✓			
	Urban Impaired Stream	N/A			
	Phosphorus Check	N/A			
	Aquifer/Groundwater Protection	N/A			
	Applicable State Permits	N/A			

	No Name Pond Watershed (Lewiston only)	✓			
	Lake Auburn Watershed (Auburn only)	N/A			
	Taylor Pond Watershed (Auburn only)	N/A			
<b>Right Title or Interest</b>					
	Verify	✓			
	Document Existing Easements, Covenants, etc.	✓			
<b>Technical &amp; Financial Capacity</b>					
	Cost Est./Financial Capacity	N/A			
	Performance Guarantee	N/A			
<b>State Subdivision Law</b>					
	Verify/Check	✓			
	Covenants/Deed Restrictions	✓			
	Offers of Conveyance to City	N/A			
	Association Documents	✓			
	Location of Proposed Streets & Sidewalks	N/A			
	Proposed Lot Lines, etc.	✓			
	Data to Determine Lots, etc.	✓			
	Subdivision Lots/Blocks	✓			
	Specified Dedication of Land	N/A			
<b>Additional Subdivision Standards</b>					
	Single-Family Cluster (Lewiston only)	N/A			
	Multi-Unit Residential Development (Lewiston only)	N/A			
	Mobile Home Parks	N/A			
	Private Commercial or Industrial Subdivisions (Lewiston only)	N/A			
	PUD (Auburn only)	N/A			
<b>A jpeg or pdf of the proposed site plan</b>					
<b>Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving</b>					

2

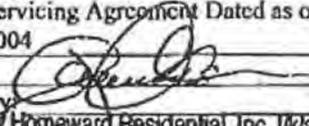
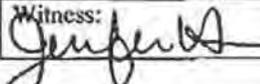
Return to:  
Jennifer  
PO Box 1222  
Lewiston, ME 04243-1222

QUIT-CLAIM DEED  
(special warranty deed)

KNOW ALL PERSONS BY THESE PRESENTS, that Deutsche Bank National Trust Company as Trustee of Ameriquet Mortgage Securities, Inc. Asset Backed Pass-Through Certificates, Series 2004-R12, Under the Pooling and Servicing Agreement Dated as of December 1, 2004, (the "Grantor"), c/o American Home Mortgage Servicing, Inc., 1525 S. Belt Line Road, Coppell, Texas, 75019, a banking corporation, for good and valuable consideration, hereby remises, releases, bargains, sells and conveys, and forever quitclaims unto Marc A. Pellerin with a mailing address of P. O. Box 1222, Lewiston, Maine 04243, the real estate and improvements thereon, located at 551 Pond Road, Lewiston, State of Maine, as more particularly described in EXHIBIT A attached hereto.

TO HAVE AND TO HOLD the same, together with all the privileges and appurtenances thereunto belonging, to the said Grantee, to his own use and behoof forever.

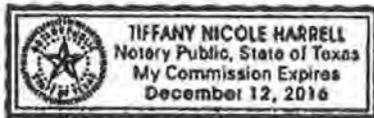
IN WITNESS WHEREOF, the said Deutsche Bank National Trust Company as Trustee of Ameriquet Mortgage Securities, Inc. Asset Backed Pass-Through Certificates, Series 2004-R12, Under the Pooling and Servicing Agreement Dated as of December 1, 2004, has caused this instrument to be sealed with its corporate seal and signed in its corporate name by Jennifer Pater, its Assistant Secretary on the 24<sup>th</sup> day of the month of January, 2013.

SIGNED, SEALED AND DELIVERED in presence of,	Deutsche Bank National Trust Company as Trustee of Ameriquet Mortgage Securities, Inc. Asset Backed Pass-Through Certificates, Series 2004-R12, Under the Pooling and Servicing Agreement Dated as of December 1, 2004
	
Witness:  Jennifer Hahn	By by <u>Homeward Residential, Inc. v/a American Home Mortgage Servicing, Inc., as Attorney in Fact</u> <u>Jennifer Pater Assistant Secretary</u>

STATE OF Texas  
COUNTY OF Dallas

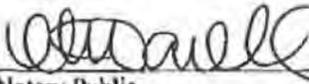
Dated: January 24, 2013

Then personally appeared the above-named Jennifer Pater, Assistant Secretary the Grantor and acknowledged the foregoing instrument to be her free act and deed in her said capacity and the free act and deed of Grantor.



SEAL

Before me,

  
Notary Public  
Print Name: Tiffany Harrell

## Exhibit A

A certain lot or parcel of land, with any buildings thereon, situated in Lewiston, County of Androscoggin, State of Maine, bounded and described as follows:

Being Lot 1A on the Plan entitled Amended Subdivision Plan Pond Ridge Acres Subdivision made for Todd J. and Amy Mulherin dated December 5, 2003 and recorded in the Androscoggin County Registry of Deeds in Plan Book 43, Page 133.

Being a portion of the premises described in the deed from Todd J. Mulherin to Todd J. Mulherin and Amy Mulherin dated September 30, 2003 and recorded in the Androscoggin County Registry of Deeds in Book 5651, Page 277. Being further described as a portion of the premises conveyed by Signature Homes Inc. to Nasir Ahmed dated July 29, 2004 and recorded August 27, 2004 in the Androscoggin County Registry of Deeds in Book 6047, Page 287.

This conveyance is made subject to the following to the extent they affect the premises conveyed herein:

1. All matters shown on the Subdivision Plan entitled Amendment Subdivision Plan Pond Ridge Acres Subdivision dated December 5, 2003 and approved by the Lewiston Planning Board on January 12, 2004, which is recorded in the Androscoggin County Registry of Deeds in Plan Book 43, Page 133.
2. In Book 4322, Page 10, an easement dated September 1, 1999 and recorded September 27, 1999 from Lewiston Development Group and/or Development Concepts to Central Maine Power Company and New England Telephone and Telegraph Company for poles and wires along Pond Ridge Road.
3. In Book 2303, Page 112, a Residential Electric Service Contract dated May 17, 1988 and recorded August 25, 1988 between Central Maine Power Company and Lewiston Development Group (a predecessor in title) regarding electric service to customers in the Pond Ridge Drive Development.
4. In Book 2303, Page 245, an Easement dated June 16, 1988 and recorded August 25, 1988 from Lewiston Development Group to Central Maine Power Company and New England Telephone and Telegraph Company for sixteen poles extending from Pole #52, No Name Pond Road northerly 3265 feet on Pond Ridge Drive.
5. The requirement that all septic systems located in lots in the Pond Ridge Subdivision be underlain by at least two feet of soil as set forth in the letter from the State of Maine Department of Environmental Protection dated September 14, 1987 and attached to the Affidavit of Roger P. Provencher, Jr. dated February 1, 1988 and recorded on February 2, 1988, in Book 2208, Page 228.
6. In Book 819, Page 188, an easement dated June 15, 1959 from Alexander F. Sherry and Annie S. Sherry to Central Maine Power Company for poles and wires.

7. In Book 819, Page 189, an Easement dated June 5, 1959 from Bertrand A. Beaulé to Central Maine Power Company for poles and wires.
8. In Book 2208, Page 230, a Declaration of Protective Covenants and Restrictions for Pond Ridge Acres, Lewiston, Maine, signed by Lewiston Development Group, a predecessor in title, dated January 25, 1988 and recorded February 2, 1988 which imposes restrictions on the premises.
9. In Book 2204, Page 173, a Limited Development Conservation Easement dated October 6, 1987 and recorded January 22, 1988, from Lewiston Development Group to the City of Lewiston.
10. The Pond Ridge Acres Subdivision Plans recorded at Plan Book 33, Pages 121 and 122 as amended and recorded in Plan Book 34, Pages 81 and 82, both show a 12" CMP culvert extending under Pond Road indicating apparent drainage onto this parcel.

This conveyance is made with the benefit of all rights, easements, privileges and appurtenances belonging thereto.

27

Client: Marc A. Pellerin  
Job #: 13-4002

# Abutter's List

Address: Pond Rd, Lewiston  
Date: March 23, 2013

<i>Map/Block/Lot</i>	<i>Name and Mailing Address</i>	<i>Book/Page</i>
Locus Map 58 Lot 21	Marc Pellerin P.O. Box 1222 Lewiston, ME 04243	BK 8598 PG 298
Map 58 Lot 18	Dorothy Larrabee 495 Pond Road Lewiston, ME 04240	BK 5365 PG 31
Map 58 Lot 20	Diane Dube 567 Pond Road Lewiston, ME 04240	BK 2326 PG 270
Map 58 Lot 27	Wells Fargo National Bank 567 Pond Road Lewiston, ME 04240	BK 8399 PG 293
Map 33 Lot 7	Marc A. Pellerin 22 Pond Ridge Road Lewiston, ME 04240	BK 2477 PG 11
Map 33 Lot 8	Marc & Debra Anne St. Hilaire 24 Pond Ridge Road Lewiston, ME 04240	BK3868 PG 47
Map 33 Lot 9	Mechanics Savings Bank 26 Pond Ridge Road Lewiston, ME 04240	BK 8322 PG 78

**AGREEMENT WITH RESPECT TO LOTS 1A and 2A  
AMENDED SUBDIVISION PLAN  
POND RIDGE ACRES  
PLAN BOOK 43, PAGE 133**

THIS AGREEMENT is made this 15<sup>th</sup> day of March, 2004,

AMONG SIGNATURE HOMES, INC., a Maine corporation,  
hereinafter referred to as "Owner",

AND LEWISTON DEVELOPMENT GROUP, a Maine  
partnership, hereinafter referred to as "Developer",

AND POND RIDGE ACRES HOMEOWNERS  
ASSOCIATION, a Maine nonprofit corporation,  
hereinafter referred to as the "Association".

**RECITALS**

1. Owner acquired certain land (the "Real Estate") depicted as Lot 1A and Lot 2A on the Plan entitled Amended Subdivision Plan Pond Ridge Acres Subdivision made for Todd J. and Amy Mulherin dated December 5, 2003 and recorded in the Androscoggin County Registry of Deeds in Plan Book 43, Page 133, by deed from Todd J. Mulherin and Amy Mulherin (the "Mulherins") dated January 29, 2004 and recorded in said registry in Book 5785, Page 72.

2. The Mulherins acquired the Real Estate by deed from Todd J. Mulherin by deed dated September 30, 2003 and recorded in said registry in Book 5651, Page 277; Todd J. Mulherin acquired title to the Real Estate by deed from Mark E. Lanzier dated September 8, 2003 and recorded in said registry in Book 5651, Page 275; and Mark E. Lanzier acquired the Real Estate by deed from Developer dated June 5, 2003 and recorded in said registry in Book 5455, Page 90 (the "Deed from Developer").

3. Although the Deed from Developer states that the Real Estate is conveyed "subject to any easements and restrictions of record and together with the benefit of all rights, easements, privileges and appurtenances belonging thereto", the Deed from Developer does not explicitly refer to the Declaration of Protective Covenants and Restrictions for Pond Ridge Acres, Lewiston, Maine, signed by Lewiston Development Group dated January 25, 1988 and recorded February 2, 1988 in Book 2208, Page 230 (the "Declaration").

4. The Association is the Association referred to in the Declaration.

5. Owner, Developer and the Association agree that the Real Estate is and should be a Lot subject to the easements, covenants and restrictions in the Declaration and benefited by the rights, easements and privileges in the Declaration.

### AGREEMENT

NOW, THEREFORE, for valuable consideration, the receipt and adequacy of which each of the parties does hereby acknowledge, the parties, intending to be legally bound, agree as follows:

**Section 1: Recitals.** The recital clauses set forth above are true and correct and are incorporated herein by reference as though set forth verbatim herein.

**Section 2: Real Estate Subject to and Benefited by the Declaration.** The Real Estate is a Lot subject to the easements, covenants and restrictions in the Declaration and benefited by the rights, easements and privileges in the Declaration.

**Section 3: Assessments.** The Association agrees that the Real Estate is not subject to any back assessments and that the initial lot assessments will be made only at such time as each lot has been improved with a residential dwelling and sold to a homeowner.

**Section 4: Headings.** Section headings are for convenience only. They are not intended to expand or restrict the scope or the substance of the provisions of this Agreement.

**Section 5: Gender, Etc.** Wherever used in this Agreement, the singular shall include the plural, the plural shall include the singular, and pronouns shall be read as masculine, feminine or neuter as the context requires.

**Section 6: Governing Law.** This Agreement shall be governed by the laws of the State of Maine.

**Section 7: Amendment.** This Agreement may not be amended, modified or revoked except by a writing signed by the party against whom enforcement of the amendment, modification or revocation is sought.

**Section 8: Entire Agreement.** This is the entire agreement among the parties. There is no other agreement, oral or written, relating to this Agreement.

**Section 9: Severability.** If any provision of this Agreement shall be determined to be invalid or unenforceable in any respect or in any jurisdiction, the remaining provisions of this Agreement shall remain in full force and effect and shall be enforceable to the maximum extent permitted by applicable law.

**Section 10: Counterparts.** This Agreement may be signed on any number of counterparts with the same effect as if the signatures were on the same instrument.

SIGNED AND DATED as of the date first written above by the duly authorized president or partner of the respective parties, as applicable.

SIGNATURE HOMES, INC.

By: [Signature]  
Nasir Ahmed, President

LEWISTON DEVELOPMENT GROUP

By: [Signature]  
Roger P. Provencher, Jr., Partner

POND RIDGE ACRES HOMEOWNERS ASSOCIATION

By: [Signature]  
Roger P. Provencher, Jr., President

STATE OF MAINE

March 15, 2004

Personally appeared the above named Nasir Ahmed and acknowledged the foregoing to be his free act and deed in said capacity and the free act and deed of Signature Homes, Inc.

Before me,

[Signature]  
Notary Public / Attorney at Law

Print Name: JOLINE RICHARD  
Notary Public, Maine

My Commission Expires October 16, 2010 MARCH 3, 2004

STATE OF MAINE

Personally appeared the above named Roger P. Provencher, Jr. and acknowledged the foregoing to be his free act and deed in said capacity and the free act and deed of Lewiston Development Group.

Before me,

[Signature]

Notary Public / Attorney at Law  
Print Name: BERTRAND LAMONTE

MY COMMISSION EXPIRES APRIL 27, 2006  
**SEAL**

STATE OF MAINE

MARCH 3, 2004

Personally appeared the above named Roger P. Provencher, Jr. and acknowledged the foregoing to be his free act and deed in said capacity and the free act and deed of Pond Ridge Acres Homeowners Association.

Before me,

Bertrand A. Labonte

Notary Public / ~~Attorney at Law~~

Print Name: BERTRAND LABONTE

MY COMMISSION EXPIRES  
APRIL 27, 2008



ANDROSCOGGIN COUNTY  
Tina M. Chouinard  
REGISTER OF DEEDS

3

**SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION**

Maine Department of Human Services  
Division of Health Engineering, SHS 11  
(207) 287-5689 FAX (207) 287-3165

<b>PROPERTY LOCATION</b>		<b>)) Caution: Permit Required - Attach in Space Below ((</b>	
City, Town, or Plantation	LEWISTON	Town/City _____	Permit # _____
Street or Road	551 POND ROAD	Date Permit Issued ____/____/____	fee: \$ _____ Double fee charged <input type="checkbox"/>
Subdivision Lot #	LOT# 1A	L.P.I. # _____	
<b>OWNER/APPLICANT INFORMATION</b>		Local Plumbing Inspector Signature _____	
Name (last,first,MI)	PELLERIN, MARC A.	The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.	
Mailing Address Of Owner Applicant	P.O. BOX 1222 LEWISTON, ME 04243		
Daytime Tel. #	207-784-5491		
<b>Owner or Applicant Statement</b>		<b>Caution: Inspection Required</b>	
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit		I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application	
Signature of Owner or Applicant _____ Date _____		Municipal Tax Map # <u>58</u> Lot # <u>21</u>	
		(1st) Date Approved _____ (2nd) Date Approved _____	

PERMIT INFORMATION			
<b>TYPE OF APPLICATION</b> <input checked="" type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type Replaced: _____ Year Installed: _____ <input type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. <25% Expansion <input type="checkbox"/> b. >25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	<b>THIS APPLICATION REQUIRES</b> <input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion permit	<b>DISPOSAL SYSTEM COMPONENTS</b> <input checked="" type="checkbox"/> 1. Complete Non-Engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-Engineered treatment tank (only) <input type="checkbox"/> 5. Holding Tank, _____ Gallons <input type="checkbox"/> 6. Non-Engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Disposal Field (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components	<b>SIZE OF PROPERTY</b> 73,038± <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> acres
<b>SHORELAND ZONING</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>DISPOSAL SYSTEM TO SERVE:</b> <input checked="" type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: <u>3</u> <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ <input type="checkbox"/> 3. Other: _____ (specify) Current Use <input type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input checked="" type="checkbox"/> Undeveloped	<b>TYPE OF WATER SUPPLY</b> <input checked="" type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other: _____	

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
<b>TREATMENT TANK</b> <input checked="" type="checkbox"/> 1. Concrete <input type="checkbox"/> a. Regular <input checked="" type="checkbox"/> b. Low Profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other _____ CAPACITY <u>1000</u> gallons	<b>DISPOSAL FIELD TYPE / SIZE</b> <input checked="" type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. Cluster Array <input type="checkbox"/> c. Linear <input type="checkbox"/> b. Regular Load <input type="checkbox"/> d. H-20 Load <input type="checkbox"/> 4. Other _____ SIZE <u>1000</u> <input checked="" type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft.	<b>GARBAGE DISPOSAL UNIT</b> <input checked="" type="checkbox"/> 1.No <input type="checkbox"/> 2.Yes <input type="checkbox"/> 2.Maybe if Yes, Or Maybe Specify one below: <input type="checkbox"/> a. multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. Increase in Tank Capacity <input type="checkbox"/> d. Filter on Tank Outlet	<b>DESIGN FLOW</b> <u>270</u> gallons per day BASED ON: <input checked="" type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS FOR OTHER FACILITIES
<b>SOIL DATA &amp; DESIGN CLASS</b> PROFILE CONDITION <u>3 / C / All</u> at Observation Hole # <u>1</u> Depth <u>18</u> OF MOST LIMITING SOIL FACTOR	<b>DISPOSAL FIELD SIZING</b> <input type="checkbox"/> 1. Medium - 2.6 sq. ft./gpd <input checked="" type="checkbox"/> 2. Medium-Large - 3.3 sq. ft./gpd <input type="checkbox"/> 3. Large - 4.1 sq. ft./gpd <input type="checkbox"/> 4. Extra Large - 5.0 sq. ft./gpd (ITEM NUMBERS ARE USED FOR DATA ENTRY PURPOSES)	<b>EFFLUENT/EJECTOR PUMP</b> <input type="checkbox"/> 1. Not Required <input checked="" type="checkbox"/> 2. May Be Required <input type="checkbox"/> 3. Required Specify only for engineered systems: Dose: _____ gallons	<input type="checkbox"/> 3. Section 4G (meter readings) <b>ATTACH WATER-METER DATA</b> <b>LATITUDE AND LONGITUDE</b> Lat. <u>44</u> d <u>07</u> m <u>35.65</u> s Lon. <u>70</u> d <u>08</u> m <u>50.11</u> s if g.p.s., state margin of error _____

SITE EVALUATOR STATEMENT		
I CERTIFY that on <u>3/13/13</u> (date) I completed a site evaluation on this property and state that the data reported are accurate USE ONLY COPIES STAMPED WITH SITE EVALUATOR'S SEAL IN BLUE INK FOR CONSTRUCTION AND PERMITS		
Site Evaluator Signature <u>GEORGE A. COURBRON</u>	SE # <u>88</u> <u>946-4480</u>	Date <u>3/13/13</u> <u>george@surveyworksinc.com</u>
Site Evaluator Name Printed	Telephone Number #	E-mail address

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services  
 Division of Environmental Health, STS 11  
 (207) 287-5689 FAX (207) 287-3165

Town, City, Plantation  
**LEWISTON**

Street, Road, Subdivision  
**551 POND ROAD**

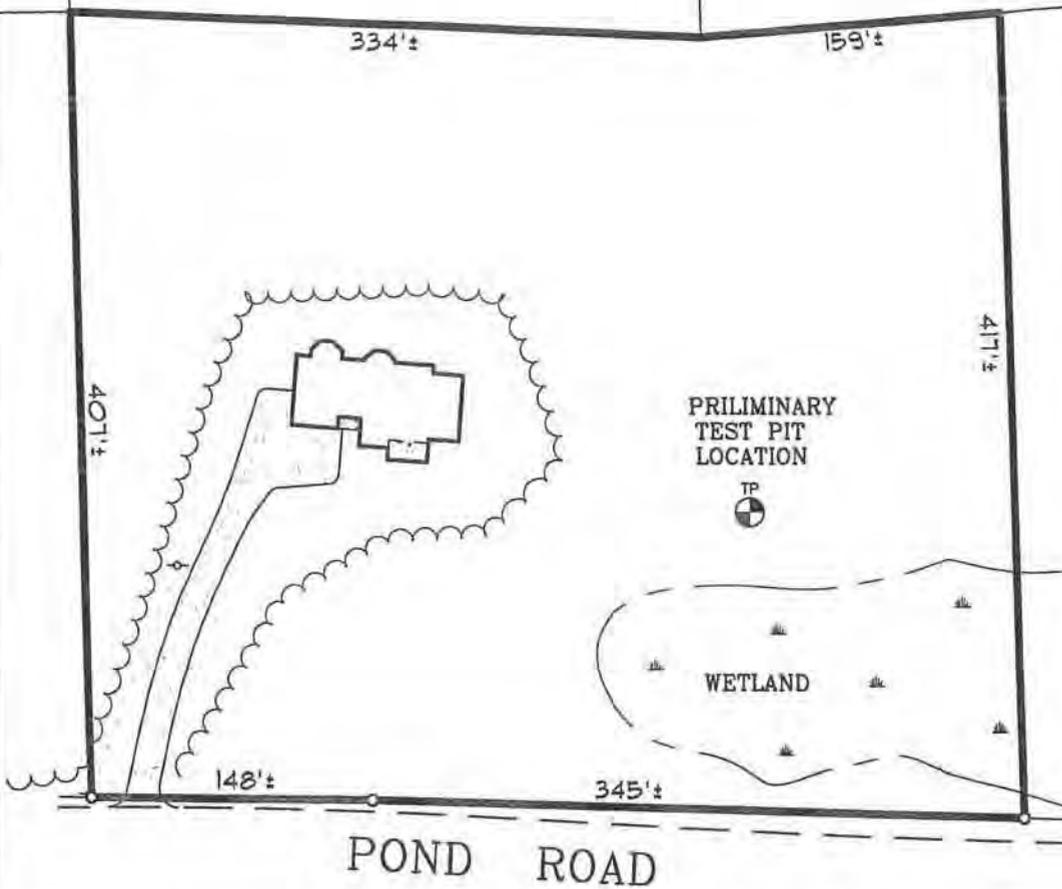
Owner or Applicant Name  
**MARC A. PELLERIN**

## SITE PLAN

Scale 1" = 100' FL

**SITE LOCATION PLAN**  
 (Attach map from Maine Atlas  
 for First Time System Variance)

SEE ATTACHED



## SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation holes Shown Above)

Observation Hole #	Depth of Organic Horizon Above Mineral Soil			
	Texture	Consistency	Color	Mottling
0			DARK BROWN	
6	FINE		BROWN	
12	SANDY	FRIABLE	YELLOWISH	
20	LOAM		BROWN	
30		FIRM	LIGHT OLIVE BROWN	
32	LEDGE OR LARGE ROCK AT 32 INCHES			
50				

<b>Soil Classification</b>	<b>Slope</b>	<b>Limiting Factor</b>	<input type="checkbox"/> GroundWater
3 C/A11	14	18"	<input type="checkbox"/> Restrictive Layer
Profile Condition	Percent	Depth	<input type="checkbox"/> Bedrock

Observation Hole #	Depth of Organic Horizon Above Mineral Soil			
	Texture	Consistency	Color	Mottling
0				
6				
12				
20				
30				
40				
50				

<b>Soil Classification</b>	<b>Slope</b>	<b>Limiting Factor</b>	<input type="checkbox"/> GroundWater
		"	<input type="checkbox"/> Restrictive Layer
Profile Condition	Percent	Depth	<input type="checkbox"/> Bedrock

Site Evaluator Signature

88  
 SE #

3/13/13  
 Date

**SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION**Maine Department of Human Services  
Division of Environmental Health, STS 11  
(207) 287-5689 FAX (207) 287-3165Town, City, Plantation  
**LEWISTON**Street, Road, Subdivision  
**551 POND ROAD**Owner or Applicant Name  
**MARC A. PELLERIN****SUBSURFACE WASTEWATER DISPOSAL PLAN**Scale 1" = N/A ft.

THE TEST BORING FOUND THAT THE NECESSARY SOIL PRECONDITIONS FOR THE PLACEMENT OF A RAISED SEPTIC SYSTEM TO SERVE A THREE (3) BEDROOM HOME EXISTS ON THIS LOT. I RECOMMEND THAT THE AREAS OVER AND IN CLOSE PROXIMITY TO THE TEST PIT LOCATION BE PROTECTED TO PREVENT ACCIDENTAL DISTURBANCE. IT IS ALSO IMPORTANT TO NOTE, THAT IF LOT LINES ARE MOVED, WELLS DRILLED, ECT., THAT INFRINGE UPON THE REQUIRED SETBACKS, ADDITIONAL TEST PITS MAY BE NECESSARY

THE SOILS INFORMATION CONTAINED IN THIS REPORT IS PRELIMINARY AND INTENDED FOR THE PURPOSES OF REVIEW AND PLANNING. PRIOR TO THE ISSUANCE OF EITHER A BUILDING OR PLUMBING PERMIT, A DETAILED SITE INVESTIGATION WILL BE REQUIRED ON THE PROPERTY. AT THIS TIME ADDITIONAL TEST PITS MAY BE REQUIRED, AN ELEVATION REFERENCE POINT WILL BE ESTABLISHED AND THE DISPOSAL AREA CORNERS WILL BE STAKED OUT. THE APPLICANT WILL THEN BE FURNISHED WITH A COMPLETED SET OF HHE-200 FORMS (PLUMBING PERMIT APPLICATION) IN ORDER TO OBTAIN PERMITS.

**BACKFILL REQUIREMENTS****CONSTRUCTION ELEVATIONS****ELEVATION REFERENCE POINT**

Depth of Backfill (upslope) _____"	Finished Grade Elevation _____	N/A"	Location & Description _____
Depth of Backfill (downslope) _____"	Top of Distribution Pipe or Proprietary Device _____	N/A"	N/A
DEPTHS AT CROSS-SECTION (SHOWN BELOW)	Bottom of Disposal Field _____	N/A"	Reference Elevation is: <u>0.0</u> " or _____

fill depths may vary due to uneven ground contour

**DISPOSAL AREA CROSS SECTION**Vert Scale 1" = 5 ft.  
Horz Scale 1" = 10 ft.

THE OWNER OR APPLICANT IS RESPONSIBLE TO INVESTIGATE AND DETERMINE WHETHER OR NOT ADDITIONAL REQUIREMENTS MUST BE MET REGARDING OTHER BUILDING REGULATIONS ( I.E. ZONING, BUILDING CODES, MINIMUM LOT SIZE, ECT.). ADDITIONALLY THE OWNER/APPLICANT IS RESPONSIBLE FOR OBTAINING ANY LOCAL, STATE OR FEDERAL PERMITS THAT MAY BE REQUIRED FOR INSTALLATION OF THIS SEPTIC SYSTEM BEFORE CONSIDERING THIS LOT BUILDABLE.

# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services  
Division of Health Engineering, 10 SHS  
(207) 287-5672 Fax: (207) 287-3165

## PROPERTY LOCATION

City, Town, or Plantation: Lewiston  
Street or Road: Pond Road  
Subdivision, Lot #:

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

PP-2009-0044  
LEWISTON PERMIT # 7839 TOWN COPY  
Date Permit Issued: 4/12/07 \$ 1,100  If Double Fee Charged

## OWNER/APPLICANT INFORMATION

Name (last, first, MI): Powlin, Robert  Owner  Applicant  
Mailing Address of Owner/Applicant: P.O. Box 3253  
Auburn, ME 04212  
Daytime Tel. #:

Local Plumbing Inspector Signature: Gary Campbell P.I. # 901  
Municipal Tax Map # \_\_\_\_\_ Lot # \_\_\_\_\_

## OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a permit.  
Signature of Owner or Applicant: [Signature] Date: \_\_\_\_\_

## CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.  
(1st) date approved: \_\_\_\_\_  
Local Plumbing Inspector Signature: \_\_\_\_\_ (2nd) date approved: \_\_\_\_\_

## PERMIT INFORMATION

<b>TYPE OF APPLICATION</b> <input checked="" type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. Minor Expansion <input type="checkbox"/> b. Major Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	<b>THIS APPLICATION REQUIRES</b> <input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	<b>DISPOSAL SYSTEM COMPONENTS</b> <input checked="" type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components
<b>SIZE OF PROPERTY</b> <u>4.57</u> <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES	<b>DISPOSAL SYSTEM TO SERVE</b> <input checked="" type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: <u>3</u> <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ <input type="checkbox"/> 3. Other: _____ (specify) Current Use <input type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input type="checkbox"/> Undeveloped	<b>Proposed TYPE OF WATER SUPPLY</b> <input checked="" type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other
<b>SHORELAND ZONING</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

## DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

<b>TREATMENT TANK</b> <input checked="" type="checkbox"/> 1. Concrete <input checked="" type="checkbox"/> a. Regular <input type="checkbox"/> b. Low Profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: _____ CAPACITY: <u>1000</u> GAL.	<b>DISPOSAL FIELD TYPE &amp; SIZE</b> <input checked="" type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. cluster array <input type="checkbox"/> c. Linear <input type="checkbox"/> b. regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: _____ SIZE: <u>900</u> <input type="checkbox"/> sq. ft. <input type="checkbox"/> lin. ft.	<b>GARBAGE DISPOSAL UNIT</b> <input type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input checked="" type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. Increase in tank capacity <input checked="" type="checkbox"/> d. Filter on Tank Outlet	<b>DESIGN FLOW</b> <u>270</u> gallons per day BASED ON: <input checked="" type="checkbox"/> 1. Table 501.1 (dwelling unit(s)) <input type="checkbox"/> 2. Table 501.2 (other facilities) SHOW CALCULATIONS for other facilities
<b>SOIL DATA &amp; DESIGN CLASS</b> PROFILE CONDITION DESIGN: <u>41C 11</u> at Observation Hole # _____ Depth: <u>30</u> of Most Limiting Soil Factor	<b>DISPOSAL FIELD SIZING</b> <input type="checkbox"/> 1. Small—2.0 sq. ft. / gpd <input type="checkbox"/> 2. Medium—2.6 sq. ft. / gpd <input checked="" type="checkbox"/> 3. Medium—Large 3.3 sq. ft. / gpd <input type="checkbox"/> 4. Large—4.1 sq. ft. / gpd <input type="checkbox"/> 5. Extra Large—5.0 sq. ft. / gpd	<b>EFFLUENT/EJECTOR PUMP</b> <input type="checkbox"/> 1. Not Required <u>See note Page 3</u> <input checked="" type="checkbox"/> 2. May Be Required <u>Page 3</u> <input type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ gallons	<input type="checkbox"/> 3. Section 503.0 (meter readings) ATTACH WATER METER DATA <b>LATITUDE AND LONGITUDE</b> at center of disposal area Lat. <u>44</u> d <u>07.464</u> m _____ s Lon. <u>76</u> d <u>08.831</u> m _____ s if g.p.s. state margin of error: <u>21"</u>

## SITE EVALUATOR STATEMENT

I certify that on 5-5-04 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature: [Signature] SE #: 45 Date: 4-10-07  
 Site Evaluator Name Printed: Darryl N. Brown Telephone Number: 897-6752 E-mail Address: darryl@main-landdevelopment.com

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services  
Division of Health Engineering  
(207) 267-5672 FAX (207) 267-4172

Town, City, Plantation  
**Lewiston**

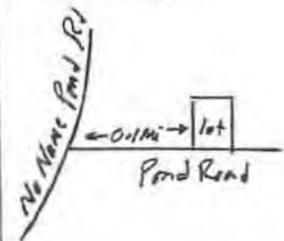
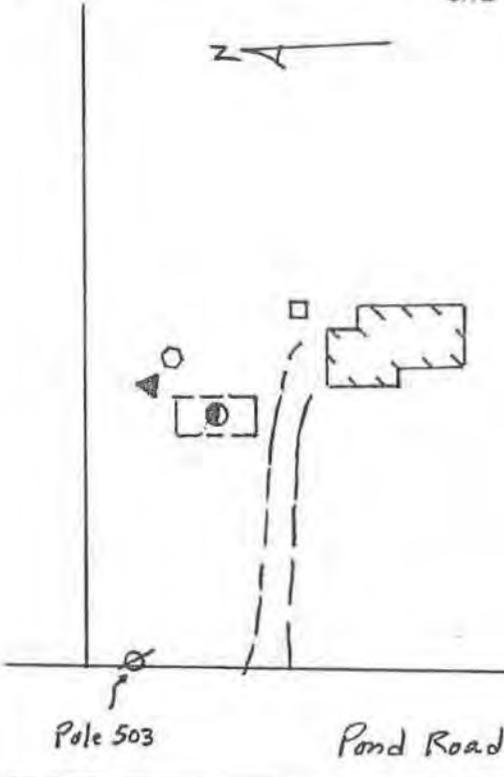
Streets, Road, Subdivision  
**Pond Road**

Owner's Name  
**Robert Paulin**

SITE PLAN

Scale  $\frac{1"}{100}$  Ft.  
or as shown

SITE LOCATION PLAN  
(Map from Maine Atlas recommended)



- Soil Test
- ▼ Elev. Ref. Point
- 2nd Tie Point
- Possible Location of Septic tank and pump (if required)

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 1  Test Pit  Boring  
" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0	Sandy loam	friable	brown	
10	Sandy loam	friable	reddish brown	
20	Sandy till	friable	olive	
30				
40				
50				

Soil Classification: 4 C Slope: 4-8 % Limiting Factor: 30 "  
Profile: Condition:  Ground Water  Restrictive Layer  Bedrock  Pit Depth

Observation Hole \_\_\_\_\_  Test Pit  Boring  
" Depth of Organic Horizon Above Mineral Soil

DEPTH BELOW MINERAL SOIL SURFACE (inches)	Texture	Consistency	Color	Mottling
0				
10				
20				
30				
40				
50				

Soil Classification: \_\_\_\_\_ Slope: \_\_\_\_\_ % Limiting Factor: \_\_\_\_\_ "  
Profile: Condition:  Ground Water  Restrictive Layer  Bedrock  Pit Depth

*[Signature]*  
Site Evaluator Signature

45  
SE \*

4-10-07  
Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services  
Division of Health Engineering  
(207) 287-5672 FAX: (207) 287-4122

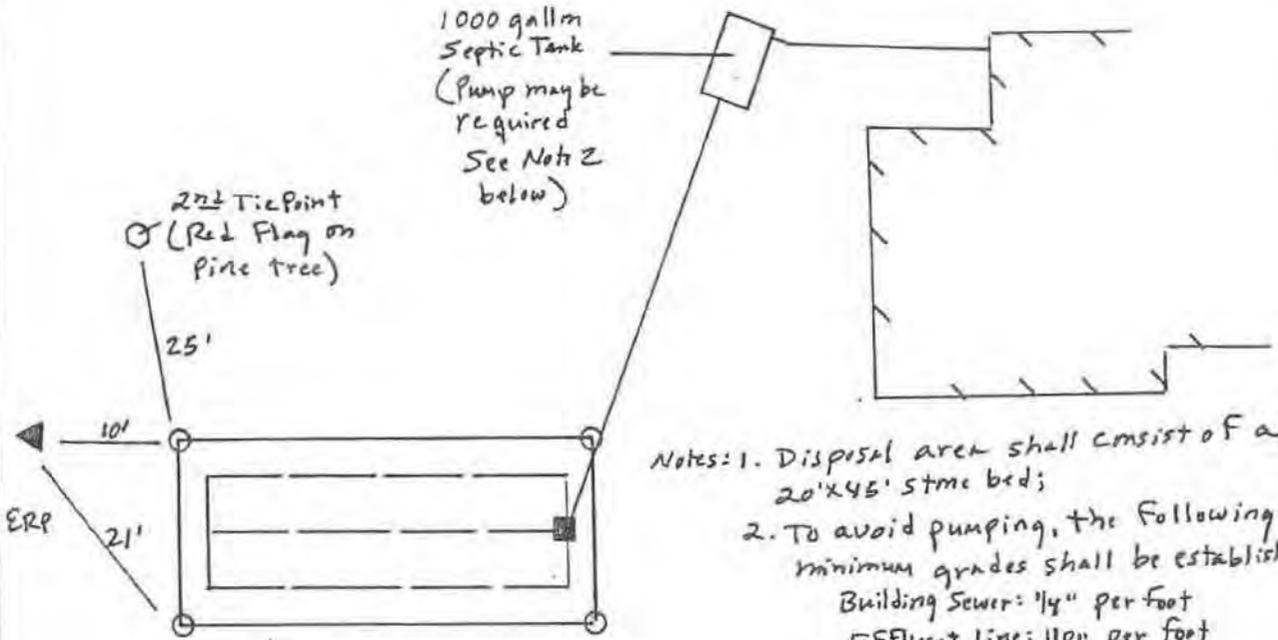
Town, City, Plantation  
**Lewiston**

Street, Road, Subdivision  
**Pond Road**

Owner's Name  
**Robert Poulin**

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE 1" = 20' FT



- Notes:
1. Disposal area shall consist of a 20'x45' stone bed;
  2. To avoid pumping, the following minimum grades shall be established:  
Building Sewer: 1/4" per foot  
Effluent line: 1/8" per foot
  3. Refer to attached copy of Chapter 8 of Wastewater Rules.

FILL REQUIREMENTS

Depth of Fill (Upslope) 6"  
Depth of Fill (Downslope) 28"±

CONSTRUCTION ELEVATIONS

Finished Grade Elevation -42"  
Top of Distribution Pipe or Proprietary Device -55"  
Bottom of Disposal Area -66"

ELEVATION REFERENCE POINT

Location & Description Nail w/ red flag in 3" hardwood  
Reference Elevation 0"

DISPOSAL AREA CROSS SECTION

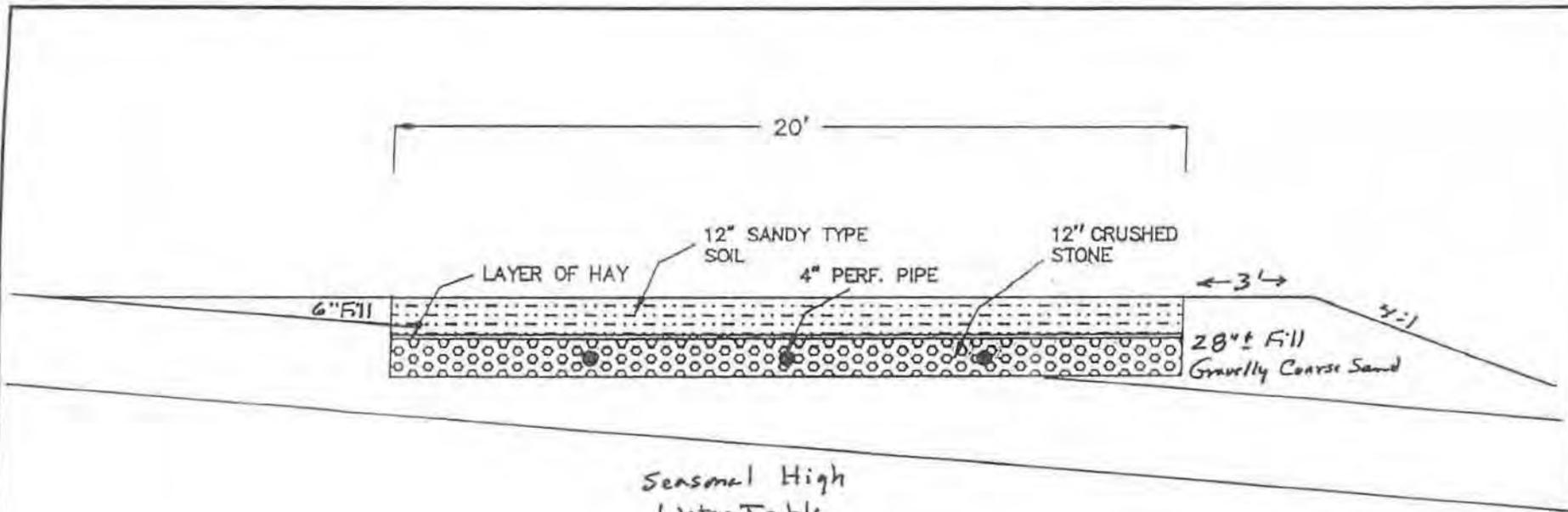
SCALE:  
VERTICAL: 1" =  
HORIZONTAL: 1" =

See Attached X-Section

*[Signature]*  
Site Evaluator Signature

45  
SE =

4-10-07  
Date



Seasonal High  
Water Table

ORIGINAL SOIL SURFACE

% SLOPE 4-8

DIRECTION  
OF SLOPE →

ATTACHMENT TO HHE-200  
CROSS SECTION OF  
BED SYSTEM

MADE FOR:  
Robert Poulin  
Lewiston

COMPILED BY:  
MAIN-LAND DEVELOPMENT CONSULTANTS, INC.  
P.O. BOX Q - LIVERMORE FALLS, MAINE 04254

SCALE: 1" = 4'

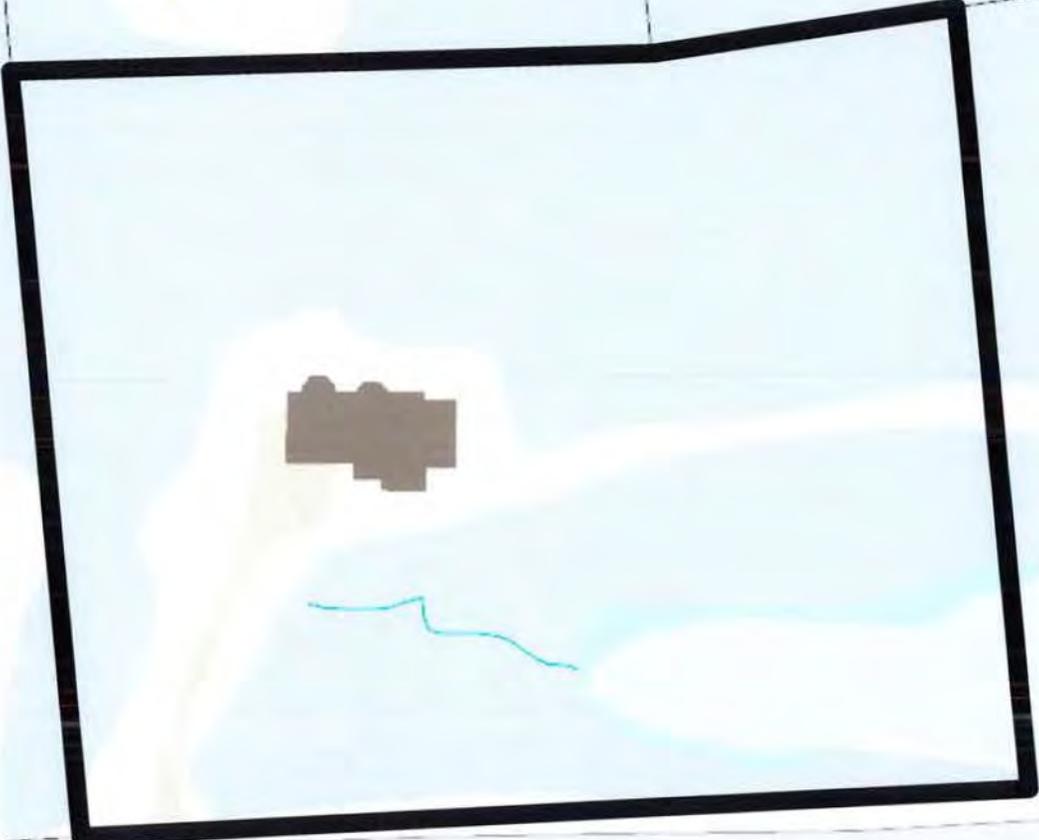
DATE: 4-10-07

DRAWN BY: JM

4



© City of Lewiston Maine GIS



# Tax Map 58 Lot 21

551 Pond Road, Lewiston

1:1200





© City of Lewiston Maine GIS

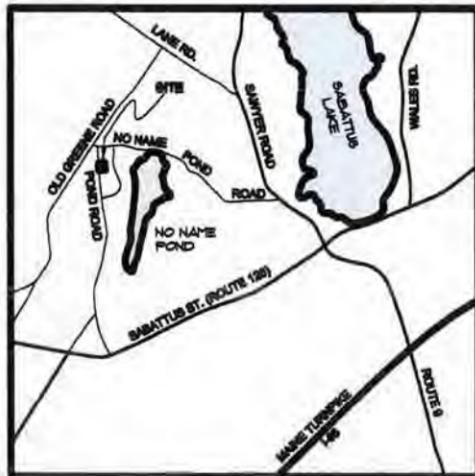
POND RD.

Zoning  
RA

No Name Pond Watershed



5



LOCATION MAP  
(NOT TO SCALE)

**ZONING:** RURAL AGRICULTURAL (RA)

- MINIMUM NET LOT AREA PER DWELLING UNIT — 60,000 S.F.  
 MINIMUM FRONTAGE:  
 DETACHED SINGLE FAMILY DWELLING — 200 FEET  
 ATTACHED SINGLE FAMILY DWELLING — 300 FEET  
 MINIMUM FRONT SETBACK:  
 DETACHED SINGLE FAMILY DWELLING — 25 FEET  
 ATTACHED SINGLE FAMILY DWELLING — 90 FEET  
 MINIMUM SIDE & REAR SETBACKS:  
 DETACHED SINGLE FAMILY DWELLING — 25 FEET  
 ATTACHED SINGLE FAMILY DWELLING — 50 FEET

FOR ADDITIONAL ZONING REQUIREMENTS EFFECTING PROPERTY SEE ARTICLE XI SECTION 2 (DISTRICT REGULATIONS OF THE CITY OF LEWISTON'S ZONING AND LAND USE CODE).

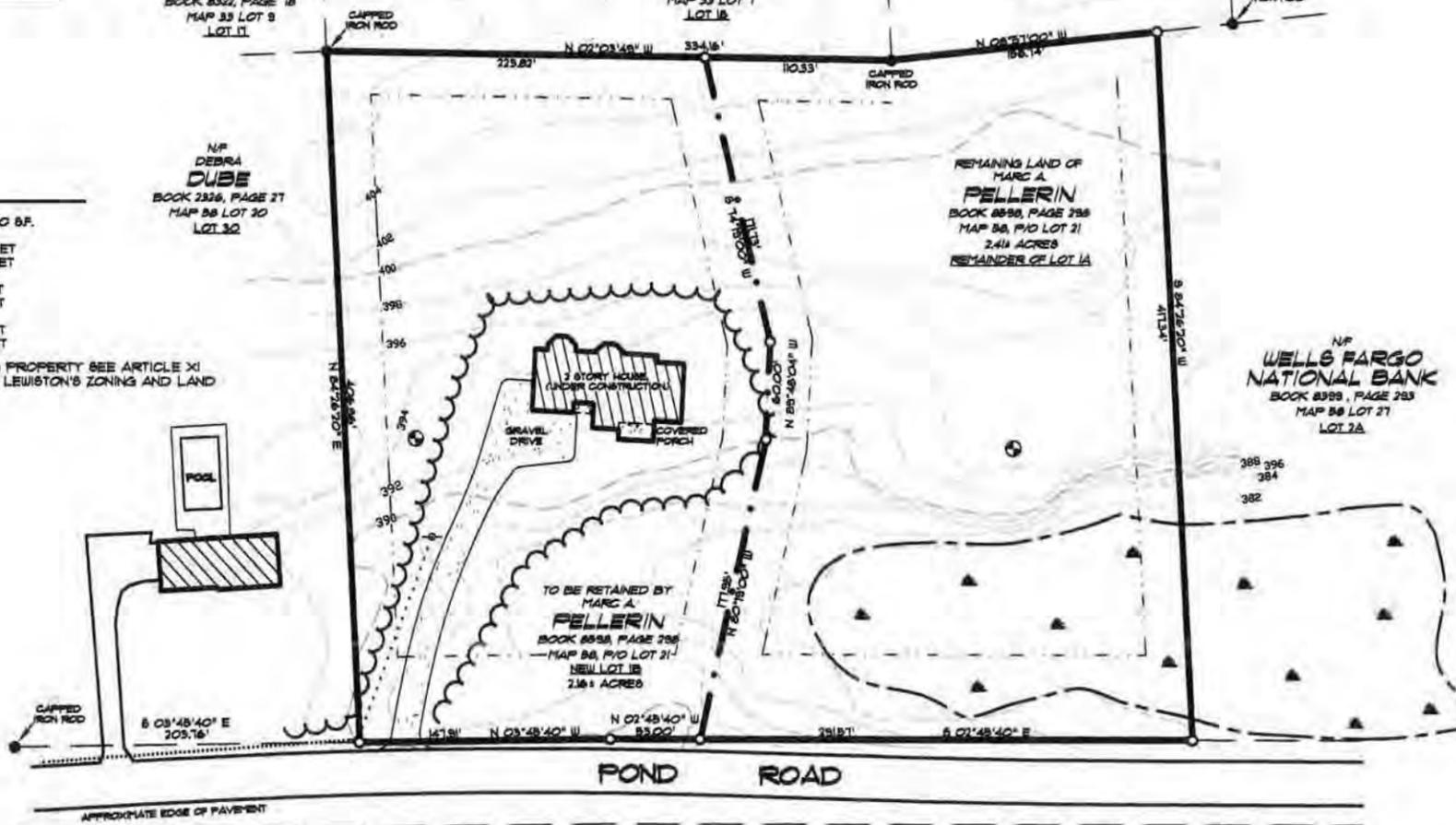
NF  
 DEBRA  
**DUBE**  
 BOOK 2326, PAGE 27  
 MAP 58 LOT 20  
 LOT 32

MARC R & DEBRA ANN  
**ST. HILAIRE**  
 BOOK 3898, PAGE 47  
 MAP 33 LOT 7  
 LOT 18

NF  
 MARC A  
**PELLERIN**  
 BOOK 2447, PAGE 11  
 MAP 33 LOT 7  
 LOT 19

REMAINING LAND OF  
 MARC A  
**PELLERIN**  
 BOOK 8998, PAGE 298  
 MAP 88, P/O LOT 21  
 2.411 ACRES  
 REMAINDER OF LOT 1A

NF  
**WELLS FARGO  
 NATIONAL BANK**  
 BOOK 8398, PAGE 293  
 MAP 58 LOT 21  
 LOT 2A



**RECORDING DATA**

ANDROSCOGGIN COUNTY REGISTRY OF DEEDS  
 RECEIVED \_\_\_\_\_ AT \_\_\_\_\_ M  
 AND RECORDED IN PLAN BOOK \_\_\_\_\_ PAGE \_\_\_\_\_  
 ATTEST \_\_\_\_\_ REGISTRAR

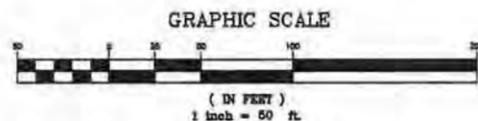
**CONDITION OF APPROVAL:**

- 1) THE ANNEXED LAND IS TO BE COMBINED WITH THE ADJUTING PROPERTY CURRENTLY OWNED BY MARC A. PELLERIN (BK 2447, PG 11), AND IS NOT TO BE DEVELOPED UNLESS APPROVED BY THE PLANNING BOARD.

**APPROVAL:**

APPROVED BY THE CITY OF LEWISTON'S PLANNING BOARD CHAIRMAN

DATE OF APPROVAL \_\_\_\_\_



2ND AMENDED SUBDIVISION PLAN

"POND RIDGE ACRES"

581 POND ROAD LEWISTON, MAINE

ANDROSCOGGIN COUNTY

OWNER OF RECORD & PREPARED FOR

**MARC A. PELLERIN**

P.O. BOX 1222 LEWISTON, MAINE 04243

**LEGEND:**

- INSTRUMENT LOCATED SURVEY MONUMENT FOUND (AS NOTED)
- CAPPED 5/8" IRON REBAR (TO BE SET)
- PROPERTY LINE SURVEYED
- UTILITY POLE WITH OVERHEAD UTILITY LINES
- STONE WALL
- TREE LINE
- EDGE OF RIGHT OF WAY / ADJUTING LINES
- EDGE OF PAVEMENT (SEE NOTE 10)
- FENCED AREA
- WETLAND (SEE NOTE 10)
- MINOR CONTOUR LINE (SEE NOTE 7)
- MAJOR CONTOUR LINE (SEE NOTE 7)
- SETBACK LINES
- NF OR FORMALLY
- TEST PIT

**NOTES:**

- 1) THE PURPOSE OF THIS PLAN IS TO SHOW RELEVANT INFORMATION NECESSARY FOR THE REVIEW AND APPROVAL BY THE CITY OF LEWISTON'S PLANNING BOARD FOR THE REVISION TO A PREVIOUSLY ACCEPTED SUBDIVISION PLAN (SEE NOTE 8A), AND THE ANNEXING OF A PORTION OF LOT 1A (AS DEPICTED ON SUBDIVISION PLAN, SEE NOTE 8A) TO AN ADJUTING.
- 2) ALL BEARINGS REFER TO TRUE NORTH AS DESCRIBED ON PLAN IN NOTE 8B.
- 3) ALL BOOK AND PAGE NUMBERS REFER TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS (ACRD).
- 4) OWNER OF RECORD: MARC A. PELLERIN, SEE DEED DATED JANUARY 24, 2013 RECORDED AT THE ACRD IN BOOK 8998 PAGE 298.
- 5) PLAN REFERENCE(S):  
 A) 1<sup>ST</sup> AMENDED SUBDIVISION PLAN, POND RIDGE ACRES SUBDIVISION, PREPARED FOR TODD J. & AMY MULHERN BY JKL LAND SURVEYING, DATED DECEMBER 8, 2003, AND RECORDED AT THE ACRD IN BOOK 43, PAGE 133.  
 B) PLAN OF LOTS, POND RIDGE ACRES SUBDIVISION, PREPARED FOR LEWISTON DEVELOPMENT GROUP, BY WRIGHT-PIERCE ARCHITECTS & ENGINEERS, DATED JUNE 12, 1987, RECORDED AT THE ACRD IN BOOK 34, PAGE 82.
- 6) PARCEL IS SHOWN ON THE CITY OF LEWISTON'S GIS MAP 58 LOT 21.
- 7) CONTOUR LINE INFORMATION IS BASED ON GIS MAP DATA ACQUIRED FROM THE CITY OF LEWISTON, MAINE AERIAL PHOTOGRAPHY AND MAPPING COMPILATION PERFORMED BY JAMES W. SEWALL CO. BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHS DATED MAY 5, 1991. PLANIMETRICS AND TOPOGRAPHY FEATURES MEET NATIONAL MAP ACCURACY STANDARDS FOR 100 SCALE MAPS WITH 2' CONTOURS. HORIZONTAL DATUM: NAD 83 STATE PLANE MAINE WEST, VERTICAL DATUM: NGVD 1929. UNITS: FEET.
- 8) THE DEPTH, SIZE, LOCATION, EXISTENCE, OR NONEXISTENCE OF UNDERGROUND UTILITIES AND/OR STRUCTURES WERE NOT SHOWN BY THIS SURVEYOR, BEFORE BEGINNING ANY EXCAVATION, DIG SAFE OR OTHER QUALIFIED AGENCIES SHOULD BE NOTIFIED.
- 9) THE PRINCIPAL STRUCTURES ARE NOT LOCATED IN A FEMA 100 YEAR FLOOD HAZARD AREA.
- 10) WETLANDS SHOWN ARE BASED ON THE GIS DATA REFERENCED IN NOTE 7. NO ON-SITE WETLAND LOCATION HAS BEEN CONDUCTED BY THIS FIRM OR OTHER AS OF THE DATE OF THIS PLAN.
- 11) DUE TO SIGNIFICANT SNOW COVER AT TIME OF SURVEY, CERTAIN KNOWN OR UNKNOWN EVIDENCE OF PROPERTY, IMPROVEMENTS, AND/OR SITE CONDITIONS MAY NOT BE SHOWN ON THIS PLAN.
- 12) PLANS MARKED "PROGRESS PRINT" ARE FOR REVIEW AND MAY CONTAIN ERRORS OR OMISSIONS. ORIGINAL FINAL PLANS BEAR AN EMBOSSED SEAL & ARE SIGNED IN INK. OTHERS ARE COPIES AND MAY NOT BE VALID.

PREPARED BY

**SWI SurveyWorks, Inc.**  
 Land Use Consultants

528 River Road  
 Greens, Maine 04236

MARCH 28, 2013

FOR SURVEYWORKS, INC.



JOB NO. 13-4002

**CERTIFICATION:**

THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYOR'S STANDARDS FOR A BOUNDARY SURVEY, EXCEPT FOR THE FOLLOWING AGREED TO EXCEPTIONS:

- 1) NOT ALL PUBLIC AND/OR PRIVATE RECORDS (DEEDS, PLANS, ETC.) REVIEWED HAS BEEN NOTED ON THIS PLAN.
- 2) NO SURVEYOR'S REPORT HAS BEEN WRITTEN.

THIS CERTIFICATION AND FINDINGS MADE ARE AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THE SURVEY WITHIN THE SCOPE OF SERVICE REQUESTED, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

PLAN SHALL BE CONSIDERED PRELIMINARY SUBJECT TO CHANGE UNLESS EMBOSSED HERE



**LEGEND:**

- FRONTYR RECORD (1/4\"/>

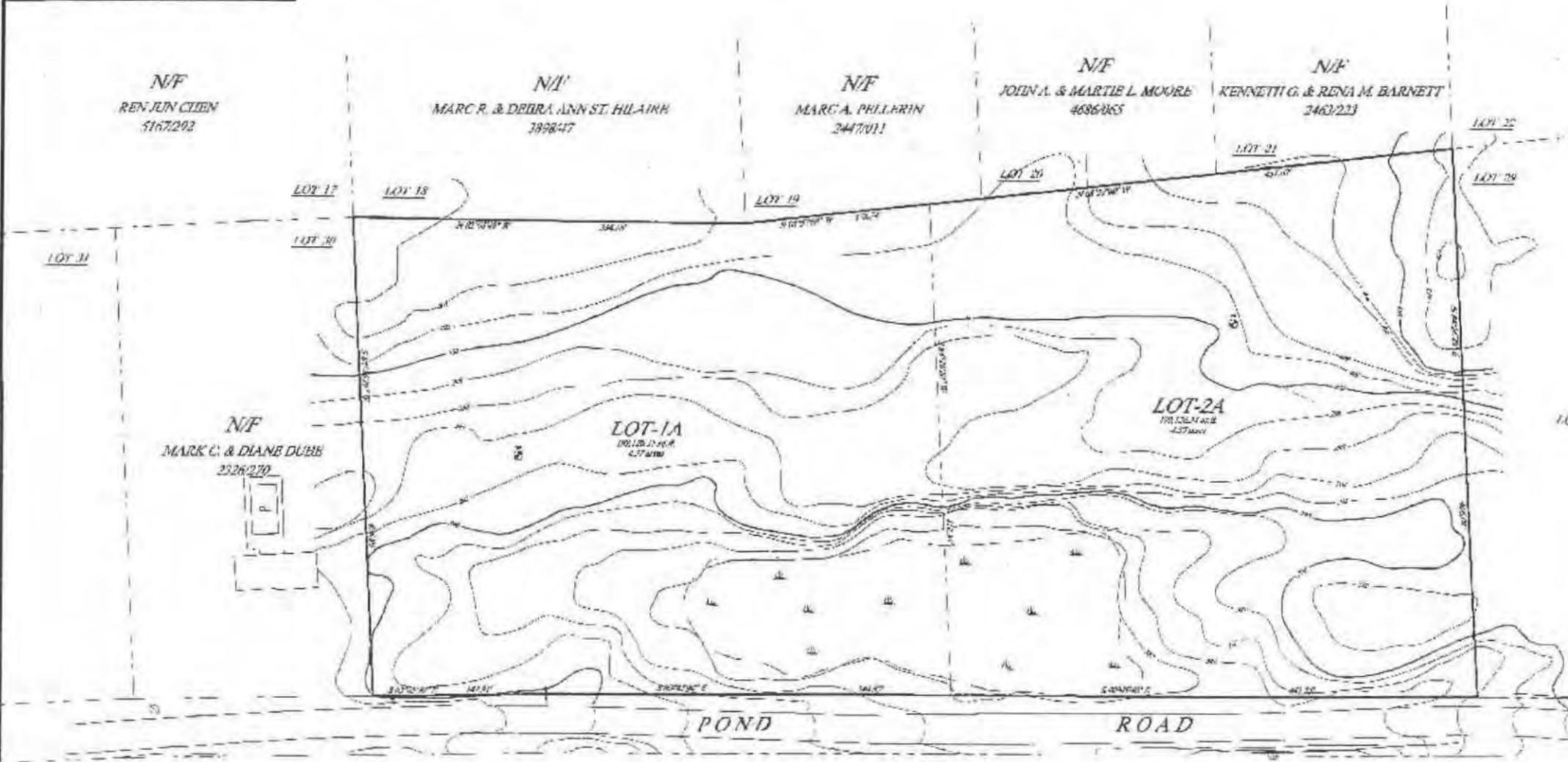
**REFERENCES:**

1. PLAN OF LOTS - POND RIDGE ACRES SUBDIVISION - LEWISTON, MAINE, AS Laid out by JOHN W. MOORE & COMPANY, INC. IN 1987 AND RECORDED IN 1987 AND 1988 IN THE OFFICE OF THE CLERK OF COURTS, MAINE, AT BANGOR.

TOTAL AREA: 398,252.69 Sq. Ft. or 9.14 ACRES

**NOTES:**

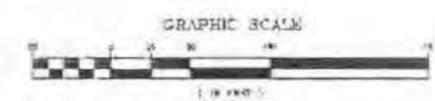
1. BEARINGS ARE BASED ON THE 1983 NORTH AMERICAN DATUM. THE PLAN OF POND RIDGE ACRES SUBDIVISION WAS MADE IN THE OFFICE OF THE CLERK OF COURTS, MAINE, AT BANGOR IN 1987 AND 1988.
2. THIS IS NOT A SURVEY. THIS PLAN IS INTENDED TO SHOW THE LOCATION OF THE LOTS AND THE LOCATION OF THE POND RIDGE ACRES SUBDIVISION. THE PLAN OF POND RIDGE ACRES SUBDIVISION WAS MADE IN THE OFFICE OF THE CLERK OF COURTS, MAINE, AT BANGOR IN 1987 AND 1988.
3. BEARINGS ARE BASED ON THE CITY OF LEWISTON GIS DATABASE.



OWNER OF RECORD:  
TODD J. & AMY MULHERN  
5651277

NF  
LOUIS B. & LYNN J. GRENIER  
2719033

**NOT TO SCALE**



**RECORDING INFORMATION:**

AMENDED SUBDIVISION PLAN NO. 133  
RECORDED IN THE OFFICE OF THE CLERK OF COURTS, MAINE, AT BANGOR, ON 1/28/04 AT 10:48 AM.  
BY: [Signature] Notary Public  
NOTARY: [Signature] Notary Public

**APPROVAL:**

CITY OF LEWISTON PLANNING BOARD  
APPROVED: [Signature]  
DATE: 1/28/04

**CERTIFICATION:**

I, the undersigned, being a duly qualified and licensed land surveyor in the State of Maine, do hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly qualified and licensed land surveyor in the State of Maine.  
[Signature]  
[Signature]

**AMENDED SUBDIVISION PLAN**  
**POND RIDGE ACRES SUBDIVISION**  
NO. 133  
TODD J. & AMY MULHERN  
[Signature]  
**JKL LAND SURVEYING**  
[Signature]



## CITY OF LEWISTON

### Department of Planning & Code Enforcement



**TO: Planning Board**  
**FROM: David Hediger, City Planner**  
**DATE: April 4, 2013**  
**RE: April 8, 2013 Planning Board Agenda Item V(a)**

#### **Riverfront Master Plan: Simard Payne Park Improvement Update**

Richardson Associates on behalf of the City has been working on designing a new park to connect Lincoln Street to Oxford Street and Simard Payne Park as well as making improvements to Simard Payne Park. This effort is result recommendations made by the Riverfront Master Plan that was adopted last year. Staff from a number of departments have been meeting over the last few months to provide guidance and assistance as to the type of improvements envisioned as part of the Riverfront Master Plan. Richardson has been directed to pursue an aggressive timeline with respect to planning and design of said improvements with the goal of going out to bid for construction mid-to-late summer 2013.

Richardson is now at the point in the planning process where design work is set to begin. Before doing so, Richardson will be making a presentation of what improvements are being considered at this time. While no official action is required of this item, staff is looking for comments and suggestion from the Planning Board on the plan provided to date. After this meeting, Richardson will work aggressively toward design said improvements and developing a phasing plan for the City to determine how and where best to utilize the funding made available through the HUD Riverfront grant as previously identified and approved as part of the LCIP.

**NO ACTION NECESSARY**



GW

City of Lewiston  
Lewiston, ME

Lewiston Riverfront Concept - GATEWAY PLAZA

Scale: 1"=16'-0" (original drawing size)  
Original Drawing Size: 24"x36"  
Reproduction: 11"x17" (50%)

Richardson & Associates, Landscape Architects  
11 Middle Street, Lewiston, ME 04072  
Original Issue Date: 04/03/13

207 266 9291



ENTRY SCULPTURE

LEWISTON HOUSE OF PIZZA

LAWN AREA

LAWN AREA

CANAL

SIMARD PAYNE PARK  
SOUTH PLAZA

LEWISTON INDUSTRIAL CENTER

NIGHT ST

LINCOLN ST

FLUSHWOOD PLANKING

PLANTING SCREEN  
shrubs  
trees  
groundcovers

OXFORD ST. ENHANCEMENTS

PLANTING SCREEN  
shrubs  
trees  
groundcovers

EXISTING RAIL LINES

SCORED CONCRETE

GRASSES & PERENNIALS



## CITY OF LEWISTON

### Department of Planning & Code Enforcement



**TO: Planning Board**  
**FROM: David Hediger, City Planner**  
**DATE: April 4, 2013**  
**RE: April 8, 2013 Planning Board Agenda Item V(b)**

#### **Request for the disposition of 147 Sabattus Street.**

Pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code, the board shall review and make a recommendation to the city council with regard to the disposition of all public ways, lands, buildings and other municipal facilities.

The City recently took possession of the property at 147 Sabattus Street due to matured tax liens. There are two buildings on this property with a total of ten residential units. The property consists of 0.19 acres and is located in the Neighborhood Conservation "B" (NCB) district in which multifamilies are a permitted use. The Assessor's has a current value of \$182,080 on the property (\$24,240 on the land, \$157, 840 on the structure). However, given its current state of disrepair, it's been deemed uninhabitable by the city and certainly worth less.

There has been interest by a potential buyer to renovate the structure. Given this interest, Administration is requesting a favorable recommendation to dispose of said property so that the city may explore options of possible redevelopment of the site. Reference should be made to City Administrator Ed Barrett's memo dated march 28, 2013.

#### **ACTION NECESSARY:**

Make a motion pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code to send a favorable recommendation to the City Council for the disposition of 147 Sabattus Street.



## City of Lewiston Executive Department

EDWARD A. BARRETT  
City Administrator

PHIL NADEAU  
Deputy City Administrator



---

March 28, 2013

To: Lewiston Planning Board  
Fr: Edward A. Barrett  
Su: Property Disposition – 147 Sabattus Street

The City recently took possession of the property at 147 Sabattus Street due to matured tax liens. There are two buildings on this property with a total of ten residential units.

Staff's initial thought was to proceed to demolish these structures. We have, however, been approached by a group with an interest in acquiring and renovating this property. Their initial plan calls for nine rental units and an office.

Given the number of properties waiting condemnation and demolition by the City, the potential to redevelop this property is appealing.

At this point, I would recommend that we begin the process of disposing of this property and would ask your recommendation to do so. The Council will then be asked to approve disposition and identify the method of sale to be used. In this instance, I will recommend that we issue a request for proposals which would require a plan for the reuse of the property and allow us to take factors other than price into account.

Our objective here is to both avoid the cost of demolition and return these structures to productive use.

1:480

RE00010360  
128 SABATTUS ST  
(Addr Pt ID 6820)

RE00001684  
146 SABATTUS ST  
(Addr Pt ID 5581)

128

146

148

150

156

SABATTUS ST.

133

143

147

149

151

**Zoning**  
**NCB**  
RE00001683  
147 SABATTUS ST  
(Addr Pt ID 143)

RE00000829  
133 SABATTUS ST  
(Addr Pt ID 2616)

RE00002873  
143 SABATTUS ST  
(Addr Pt ID 2621)

RE00007374  
149 SABATTUS ST  
(Addr Pt ID 12337)

RE00005369  
151 SABATTUS ST  
(Addr Pt ID 9472)

RE00005366  
149 SABATTUS ST  
(Addr Pt ID 12338)

HOWARD ST.

8

RE00002151  
8 HOWARD ST  
(Addr Pt ID 6086)

RE00000626  
5 BRADLEY ST  
(Addr Pt ID 666)

BRADLEY ST.

12

RE00007376  
12 BRADLEY ST  
(Addr Pt ID 2209)

17

13

RE00005577  
20 HOWARD ST  
(Addr Pt ID 8720)



1:480

RE00010360  
128 SABATTUS ST  
(Addr Pt ID 6820)

RE00001684  
146 SABATTUS ST  
(Addr Pt ID 5581)

RE00007374  
149 SABATTUS ST  
(Addr Pt ID 12337)

RE00005369  
151 SABATTUS ST  
(Addr Pt ID 9472)

RE00005366  
149 SABATTUS ST  
(Addr Pt ID 12338)

Zoning  
NCB RE00001683  
147 SABATTUS ST  
(Addr Pt ID 143)

RE00000829 143 SABATTUS ST  
133 SABATTUS ST (Addr Pt ID 2621)  
(Addr Pt ID 2616)

RE00002873  
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(Addr Pt ID 2621)

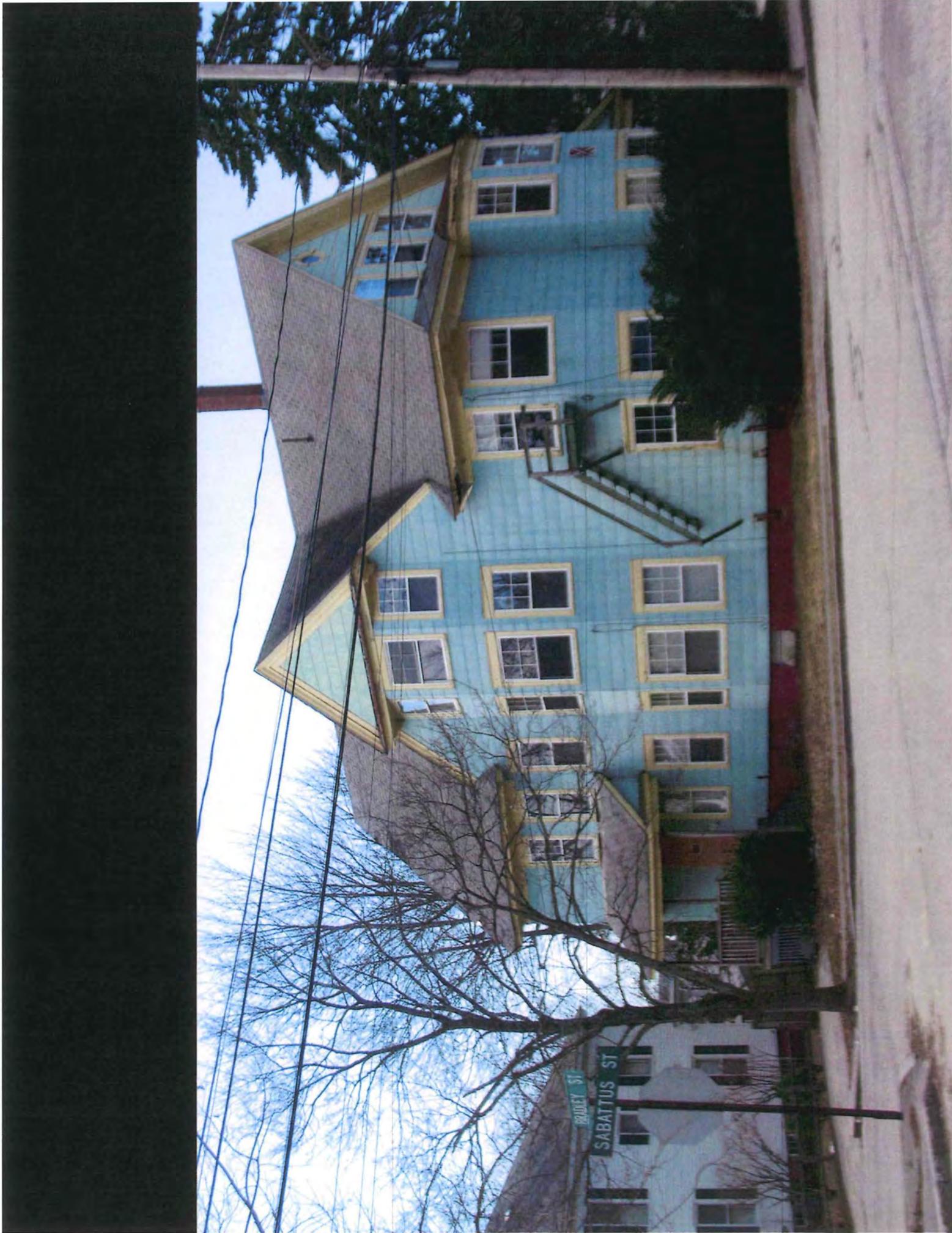
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(Addr Pt ID 6086)

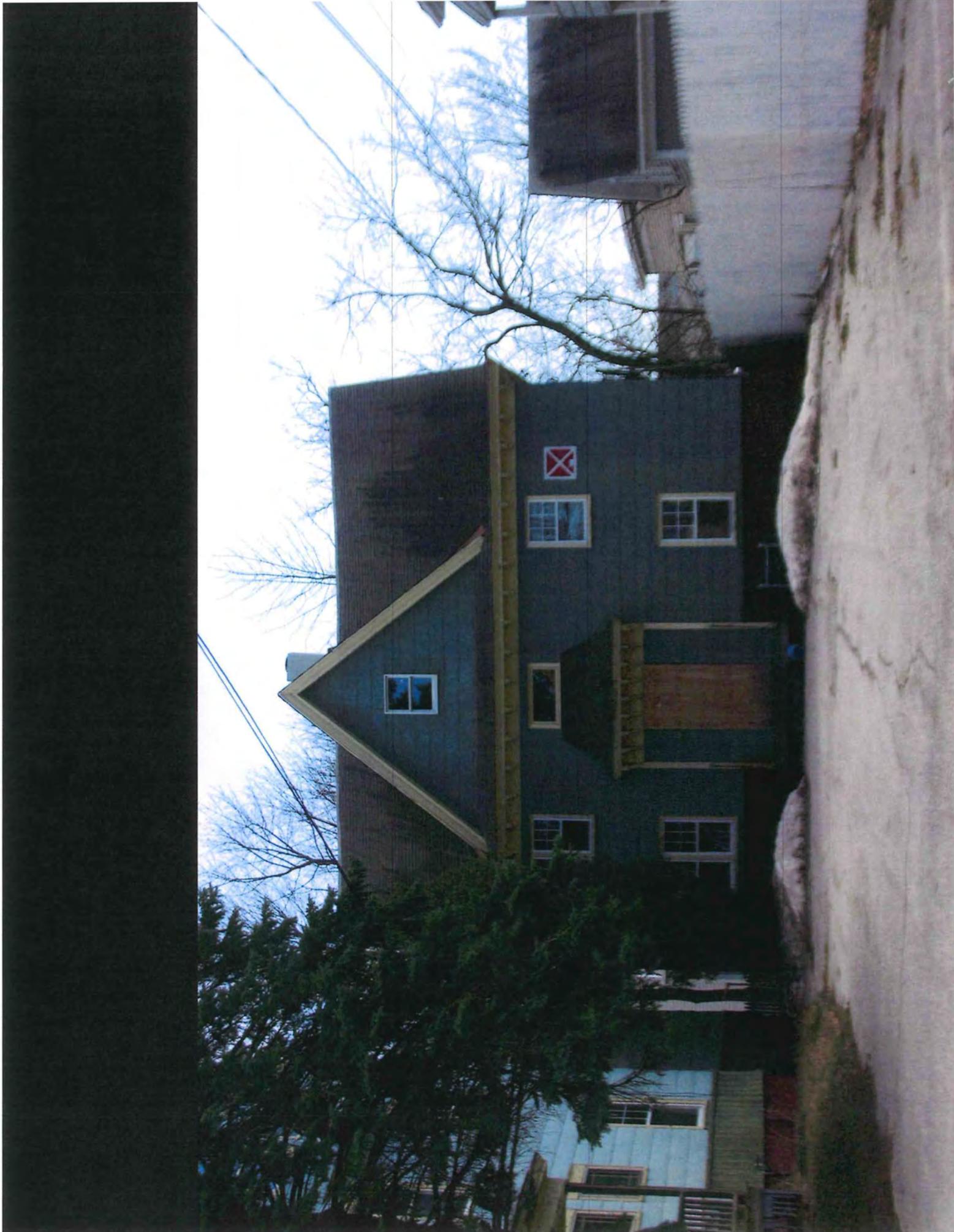
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RE00007376  
12 BRADLEY ST  
(Addr Pt ID 2209)

RE00005577  
20 HOWARD ST  
(Addr Pt ID 8720)









## CITY OF LEWISTON

### Department of Planning & Code Enforcement



**TO:** Planning Board  
**FROM:** David Hediger, City Planner  
**DATE:** April 4, 2013  
**RE:** April 8, 2013 Planning Board Agenda Item V(c)

#### **Housing Density throughout New England and Proposals for Lewiston: Report from Bates College Intern**

Bates College student Jedd Countyey is currently interning with Planning and Code Enforcement after expressing an interesting in planning related topics. Staff discussed and asked Mr. Countyey to consider a number of topics that have been of interest either staff, the Planning Board, or Administration.

At this point, the topic of discussion has been housing density. Mr. Countyey has completed some research on the matter as it relates to neighboring New England communities and has been provided the opportunity to discuss his finding and recommendations. Staff felt this was a relevant discussion to have with the Board given the number of demolitions the city has completed and the large number of vacant buildings in the community. It may also lead to some interesting ideas for consideration as the community works on a new comprehensive plan in the coming months.

**NO ACTION NECESSARY**

## Research on Housing Density throughout New England and Proposals for Lewiston

Prepared by Jedd Countey, Bates College

In conducting this research, I have contacted and researched the cities of Burlington, Lowell, Portland, Biddeford, Brunswick, Lawrence, and Worcester. The questions below are a few of the initial inquiries David proposed. I have outlined the proposals and answers in the bullet points. If anyone one has additional question, I would be happy to share my full notes on these cities.

*What is an appropriate density?*

- Density should be based off of the existing urban fabric. The character of the downtown area must be taken into account, so as to develop a coherent neighborhood and community.

*How is density measured?*

- As of today, Lewiston has a net lot area requirement of 1,250 sf/ dwelling unit. Most cities today express their ordinances in FAR (floor area ratio). FAR is the total sf of a building divided by the total sf of the lot. Seeing that most downtown lots in Lewiston are 5,000 sf, Lewiston has a FAR of roughly 4.
- Perhaps Lewiston should also measure their density with FAR
- Perhaps we should measure density in more specific terms of what we want to achieve i.e. bedrooms.

*With density, how important is open space and parking?*

- Developers should not be responsible for providing either
- Lowell's Parking policy
- Lowell and Burlington's approach to open space

*How much of this do you let be driven by the market and demand for units versus the community stirring development toward a desired density?*

- Lowell offers tax incentives to market rate housing developments in lower income areas to avoid concentrations of poverty.
- Portland has an Inclusionary Zoning Ordinance to create a downtown with a diversity of incomes.

The most effective actions I propose for Lewiston in regards to the density of the downtown areas are as follows:

- Tax incentives or bonuses for bringing in market rate houses in the downtown area
- Remove existing parking regulations on developers, and require that, instead, they lease space in the public parking garages.
- Remove existing open space regulations on developers, and require that, instead, they pay a fee to the city that will go towards the Parks department.
- Rethink density measurements

### Highlights from Research Notes

#### Lewiston:

- Downtown net lot area requirement: 1,250 sf/ dwelling unit (similar to FAR)
- Most downtown lots are 5,000 sf
- FAR: 4

#### Burlington:

- Downtown density: 5.5 FAR
- Brunswick Maine Street: maximum building footprint per structure of 30,000 sf
- Brunswick Lower Park Row: maximum building footprint per structure of 4,500 sf, 7 units per acre

#### Portland:

- Downtown and Parkside have densities' of 60 units per acre.
- Portland's Inclusionary Zoning Ordinance provides 'incentives to developers or market-rate housing to incorporate affordable housing within projects, thereby mitigating the limited supply of land suitable for housing and helping to meet the housing needs of all economic groups within Portland'.

#### Lowell:

- "City's downtown has experienced tremendous growth over the past decade as a result of significant redevelopment efforts, with over 2,200 market rate and 1,300 subsidized units being added to existing housing stock."
- "Lowell subsidizes 12.6% of all its residential units, a far greater percentage than its peer communities"
- "Provide incentives for market rate housing areas where the concentration of subsidized housing causes a concentration of poverty"
- FAR: 4

#### Biddeford:

- MSRD 3 (high density) dimensional requirements: no minimum lot size, no frontage, no setbacks (except all nonresidential building and structures shall be set back at least 50 feet from any residential dwellings in the zone or any abutting zone that permits residential dwelling units. Buildings with mixed uses, including residential, the setback is to be determined by the Planning Board. The Planning Board will consider the neighboring properties and determine how the new development impacts the neighboring properties.)

#### Lawrence:

- Minimum lot area: 5000 sqf – minimum lot area per dwelling unit: 2,500 sqf – Lot coverage: maximum 40% for dwelling and 50% for all buildings – Height: 6 stories, 70 feet.
- Parking: One parking space per studio apartment or one bedroom apartment, two parking spaces per other dwelling unit.

Worcester:

- Density Bonuses: The Planning Board may permit an increase in the maximum number of units permitted in the zoning district (the base number of units) of an additional percentage equal to the percentage of affordable units plus five percent up to a maximum twenty –five percent density for twenty percent affordable housing. In RG-5 zones the maximum density bonus shall be limited to fifteen percent to prevent overcrowding.
- Parking: Shrewsbury Parking Overlay District (creating a better pedestrian experience by sharing parking)