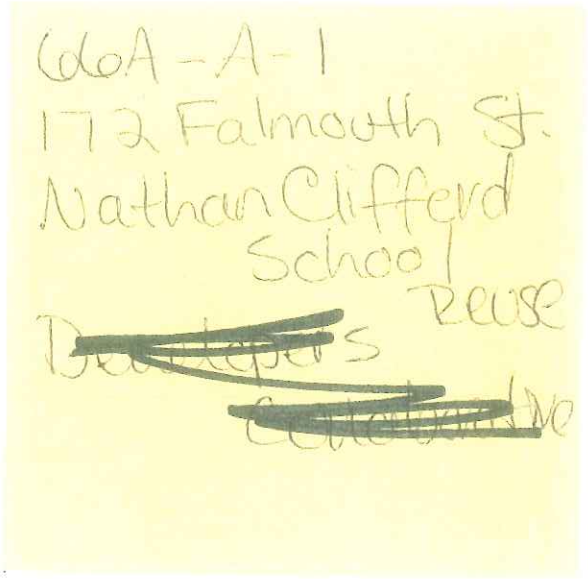
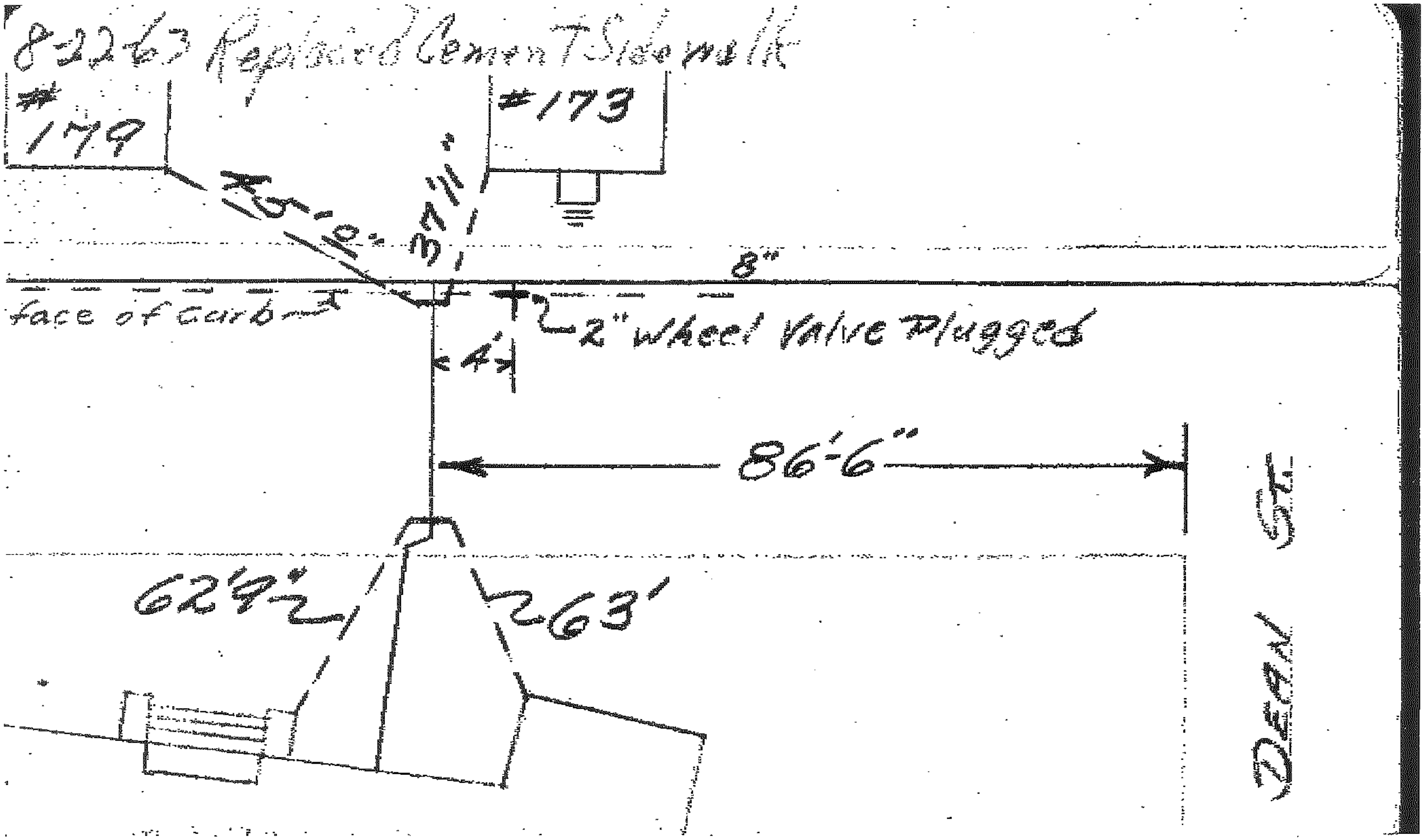

CoA-A-1
172 Falmouth St.
Nathan Clifford
School
Reuse


8-22-63 Replaced Cement Sidewalk
#179
#173
45'-0"
37'11"
8"
face of curb
2" Wheel Valve Plugged
4'
86'-6"
62'9"
63'
DEAN ST

ATTACHMENT G

Correspondence with CMP

J.9

10/7/2013

Stephen Bushey
Fay, Spofford & Thorndike
778 Main Street
South Portland, ME 04106
Sent via email to: SBushey@fstinc.com and SKeef@fstinc.com

RE: Ability to Serve Letter for the Nathan Clifford School project in Portland, ME.

Dear Mr. Bushey:

CMP has the ability to serve your proposed project located on Falmouth Street in Portland, Maine, in accordance with our CMP Handbook (web link below). We can provide you the desired pad or pole mounted transformers per your request and city approval, in accordance with our CMP Standards Handbook. We may be able to utilize the existing services but this will depend upon loads and city approvals. If you have any questions on the process, or need help in completion of the documents, please feel free to contact me. If this is a three phase project, I will be working with you through completion. If it is single phase, the Portland Service Center will be coordinating the work.

New Service Milestones

- Call 1-800-565-3181 to establish a new account and an SAP work order.
- Submit any electronic drawings (PDF (preferred) or DWG files) of the site layout and proposed electrical connections if you have them.
- Submit Load information. Please complete this CMP spreadsheet using load information
- Submit the easement information worksheet. Please complete this CMP form and either email or fax back to us.
- Preliminary meetings with CMP to determine the details of job
- Field planner design appointment to cost out job and develop CMP Invoice.
- Submit invoice for payment.
- Easements signed and payment received.
- Job scheduled for completion after the electrical inspection has been received.

This process can take several months, depending upon several factors including transformer delivery, potential substation upgrades, return of completed paperwork, and other jobs in the system that may be ahead of yours. In addition, contact with the other utilities, including telephone and cable, should be commenced as soon as practical. They may have additional work or charges in addition to the CMP work required to bring your project on line.

162 Canco Road Portland, ME 04103
Tel (800) 750-4000
207-842-2367 office
207-458-0382 cell
207-626-4082 fax

www.cmpco.com

For your convenience, here is a link to the CMP Website which contains our Handbook with details on most service requirements:

CMP Handbook of Standard Requirements
(http://www.cmpco.com/MediaLibrary/3/6/Content%20Management/YourAccount/PDFs%20and%20Docs/handbook.pdf)

If you have any questions, please contact me.

Regards,

Jamie Cough

Jamie Cough
Energy Services Advisor
Central Maine Power Company
162 Canco Road
Portland, ME 04103
207-842-2367 office
207-458-0382 cell
207-626-4082 fax

5.10.1

ATTACHMENT A

Ability Letter from Unitil and Portland Water District

3.11

Unitil
ME GAS OPERATIONS

November 18, 2013

Mr. Stephen Bushey
Fay, Spoffard & Thorndike
778 Main Street,
South Portland Maine 04103

Re: 180 Falmouth Street, Portland, ME

Dear Mr. Bushey;

Thank you for your interest in using natural gas for the above referenced project.

Unitil has natural gas in the vicinity of this project to provide service. The evaluation to complete the design, costs and determining if any customer contribution will be needed is in process and will be completed shortly. Unitil welcomes the opportunity for further discussions regarding this project.

If you have any further questions or require additional information, please contact me directly at (207) 541-2535 or at Mathers@unitil.com.

Sincerely,

Bridget L. Harmon
Business Development Representative
Unitil Corporation
(o) 207-541-2536 (f) 207-541-2586

3.12

Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

November 19, 2013

Fay, Spofford & Thorndike
778 Main Street, Suite 8
South Portland, ME 04106

Attn: Stephen R. Bushey, P.E.
Re: Nathan Clifford School Redevelopment; 172 Falmouth Street, Portland
Ability to Serve with PWD Water

Dear Mr. Bushey:

The Portland Water District has received your request for an Ability to Serve determination for the noted site submitted on October 2, 2013. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter.

Please note that this letter does not constitute approval of this project from the District. Please review this letter for any special conditions specified by the District and to determine the appropriate next steps to take to move your project through the submittal and approval process.

Existing Site Service

According to District records, the project site does currently have existing water service. A 4-inch diameter cast iron, cement lined domestic service line and a 6-inch diameter cast iron fire service line, located as shown on the attached water service cards, provide water service to this site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of these services.

Water System Characteristics

According to District records, there is an 8-inch diameter cast iron water main on the north side of Falmouth Street and a public fire hydrant located across the street from the site.

The current data from the nearest hydrant with flow test information is as follows:

Hydrant Location:	Falmouth Street opposite Deane Street
Hydrant Number:	POD-HYD00164
Last Tested:	6/25/1991
Static Pressure:	74 psi
Residual Pressure:	Not Measured
Flow:	1,044 GPM

Public Fire Protection

It is not anticipated that this project will include the installation of new public hydrants to be accepted into the District water system. The decision to require new hydrants and to determine

225 DOUGLASS STREET P.O. BOX 3553 PORTLAND, MAINE 04104-3553
PHONE: 207.774.5961 FAX: 207.761.8307 WEB: WWW.PWD.ORG

their locations is solely that of the local fire department. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

The ability to serve request indicated that the total water usage required for the proposed development is 3,998 gallons per day. The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of the proposed 22-unit residential living facility.

Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact the MEANS Division to request a hydrant flow test and we will work with you to get more complete data.

Conditions of Service

The District can confirm that the existing water system has the capacity to serve the proposed redevelopment project. The existing services at this site may be used by the proposed development as long as the project team determines that they will provide adequate flow and pressure for the proposed use. The site is currently metered by two 2-inch diameter water meters. Each of these meters is capable of handling up to 160 gallons per minute. The District will require more information about the peak flow rate for the building in order to determine the appropriate meter size. If the peak flow demand (gallons per minute) is not known, please provide a fixture count tabulation.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

Glissen Havu

Glissen Havu, E.I.
Design Engineer

172 Falmouth Street

Portland

PORTLAND WATER DISTRICT
225 Douglass Street
Portland, ME 04104

Scale 0 25 50 100 150 200 Feet — 1 inch = 100 feet

Legend

- Air Valve
- Blow Off
- By Pass
- Distribution
- Transmission
- Connection
- Attribute Change
- Reducer
- Hydrant
- Hydrant Control
- Combined Service
- Domestic Service
- Fire Service
- Private Hydrants
- Meter Pits
- Manhole
- CSO
- Gravity
- Force

Disclaimer: This map is suitable for preliminary study and analysis and is based on PWD record information. PWD is not liable for any damages whatsoever resulting from inaccurate data or from errors made in the location and marking of its infrastructure.

Drawn By: GJH	Prepared For: FST, Inc.
Scale: As Noted	Date: September 27, 2013

REG. NO. 6143 NO. 180 Falmouth St Portland ST.

NAME City of Portland PRESSURE

NAME Nathan Clifford School

NAME 6" Fire Service

SERVICE RECORD		RENEWAL RECORDS	
KIND OF PIPE	C.I.	KIND OF PIPE	
SIZE OF PIPE	6"	SIZE OF PIPE	
MAIN TO STOP	37	MAIN TO STOP	
STOP TO ST. LINE	8	STOP TO ST. LINE	
ST. LINE TO BUILDING	113	ST. LINE TO BUILDING	
TOTAL LENGTH	158	TOTAL LENGTH	
SERVICE COMPLETED	10/3/50	SERVICE COMPLETED	
REMARKS	From Falmouth St Ledge	REMARKS	

SERVICE SHUT AT CORP. COCK

MAINE PRINTING CO.

J.15

NO. 180 Falmouth ST., DIVISION Port.

REG. NO. 6844 CODE NO. MP-3-1C

NAME City of Portland (School)

NAME

NAME

SERVICE RECORD	
SIZE OF PIPE	4"
KIND OF PIPE	C.I. M.J.
MAIN TO STOP	1' x 39'
STOP TO ST. LINE	7'
ST. LINE TO BLDG.	~~[illegible]~~
DATE	8/9/63
DEPTH OF MAIN	5'6"
SIZE OF TAP	
DEPTH ON PRIVATE	
SHUT AT CORP.	
REMARKS (SEE REVERSE) 5M 1-60 E.P.	

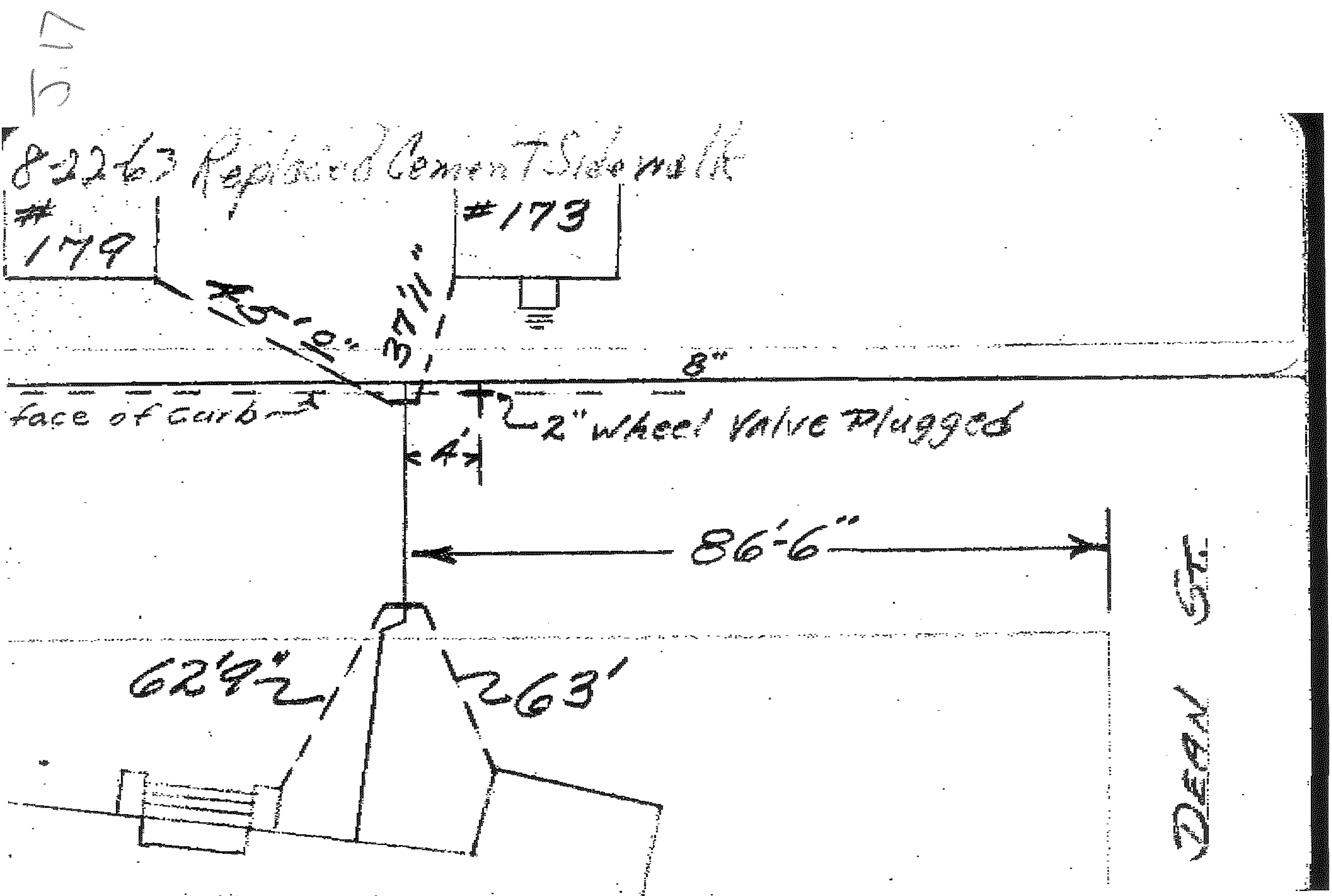
MEASURES

NOTE: 3" A.C.I.P. [illegible] ON FALMOUTH

OVER

Had to Wedge 15" of ledge. Full Length of Service.

8-9



J.17
8-22-63 Replaced Cement Sidewalk
#179
#173
45'-0"
37'11"
8"
face of curb
2" Wheel Valve Plugged
4'
86'-6"
62'9"
263'
DEAN ST.

5.18

MECHANICAL SYSTEMS ENGINEERS, INC.
Royal River Center, Unit #10
10 Forest Falls Drive, Yarmouth, Maine 04096
Tel. (207) 846-1441 * Fax. (207) 846-1443
mechsyst@maine.rr.com

11/7/2013

RE: Nathan Clifford School Apartments – Portland, Maine
HVAC Federal Emission Requirements

The heating, ventilating and air conditioning equipment for this project will be residential equipment and because of the small capacity will fall below the Federal and State Emission reporting requirements.

This HVAC equipment will meet the Requirement of ASHRAE 90.1 -2007 Energy Efficiency Standard and the requirements of the International Energy Conservation Code (2009 IECC).

Sincerely yours,

Kurt Magnusson, P.E.

K.1

4. FIRE SAFETY

4.1 OVERVIEW

FST has completed the Fire Department checklist and performed ongoing coordination with Fire Department representatives and City Planning officials. The accompanying memorandum outlines our findings with respect to compliance with the City's Public Safety standards as set forth in the City's Technical Manual Section 3 – Public Safety Standards.

Generally, the site access conditions will include four sided building access from all the surrounding streets. Fire hydrants are located on Falmouth Street opposite the site thus offering ample fire protection support. The proposed building will be fully sprinkled and code compliant to current standards.

Additional fire safety review and building related fire code evaluation and compliance evidence will be provided as part of the building permit process.

4.2 ATTACHMENTS

Attachment H – NFPA 1 Review to Access and Other Fire Department Issues Memo

K.2

ATTACHMENT H

NFPA 1 Review to Access and Other Fire Department Issues Memo

K3

5 November 2013

Planning Staff
City of Portland, Maine

RE: Building Code Summary – Nathan Clifford School Redevelopment

Applicable Codes: MUBEC (Maine Uniform Building and Energy Code)
International Building Code, 2009 (IBC)
International Energy Conservation Code, 2009 (IECC)
NFPA 101 Life Safety (to be separately reviewed by Fire Protection Engineer)

Summary: The existing Nathan Clifford School, a three (3) story building with a basement, is to be converted into 22 apartments in accordance with the *National Park Service, Secretary of the Interiors Standards for the Treatment of Historic Properties*. The building is a Registered Local Historic Landmark, and is in the process of being nominated for the National Register of Historic Places.

The structure is a hybrid load-bearing masonry and steel structure with wood floor and partition structures. Having been recently occupied as a school, the structure is well-maintained and intact.

Building Footprint: 11,508 sq.ft.

Structure is equipped throughout with an approved automatic sprinkler system in accordance with Chapter 9 of the IBC (901.6.1 NFPA 13R).

International Building Code, 2009 (preliminary review of major chapters):

Chapter 3 – Occupancy Classification

Section 310.1 R-2 Residential Apartment

Chapter 5 – General Building Heights and Areas

Table 503 – Allowable Area 16,000 sq.ft. for Type 3B without increases
Existing Footprint Area 11,508 sq.ft.
Allowable Height 4 stories
Existing Height 3 stories plus Basement

K.4

Chapter 6 – Types of Construction

Table 601 – Type IIIB (3B)

Primary Structural Frame – 0 Hours

Bearing Walls, Exterior – 2 Hours

Bearing Walls, Interior – 0 Hours

Non-bearing Walls and Partitions – 0 Hours

Floor Construction – 0 Hours

Roof Construction – 0 Hours

Chapter 7 – Fire and Smoke Features

Section 708.2	Shaft Enclosure where 4 stories – 2 Hours
Section 709.3	Corridor Fire Partitions (Non-Bearing) – 1/2 Hour
Section 709.3 ex.2	Dwelling Unit Separation – 1/2 Hour
Table 715.4	Corridor Doors – 0.33 Hours (20 Min.)
Section 715.4.3.1	Corridor Doors to have Smoke Control
Section 717.3.2 ex.2	Draftstopping or sprinkle concealed spaces

Chapter 9 – Fire Protection Systems

Section 901.6.1	Supervised automatic sprinkler system
Section 903.3.1.2	NFPA 13R sprinkler system
Section 905.3.1	Class III Standpipe in stairwells
Section 906.1.1	Portable Fire Extinguishers required
Section 907.2.9.1	Manual Fire Alarm System not required where sprinkled
Section 907.2.9.2	Single and Multi-station smoke alarms required
Section 912.1	Fire Department Connection required

Chapter 10 – Means of Egress

Section 1007.2.1	Elevator Back-up Generator not required
Section 1022.1	Exit Enclosures 2 Hours where connecting 4 stories

Chapter 30 – Elevators and Conveying Systems

Section 3006.4	Elevator Machine Room rated 2 Hours

K.5

Chapter 34 – Existing Buildings and Structures

Section 3409.1 Historic Buildings: The provisions of this code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard.

If you have any questions with regards to this letter, please contact our office. As indicated above, the review of the NFPA Codes is being provided by our Fire Protection Engineer. The code review contained herein is preliminary and deals with the major chapter headings and building elements, and does not constitute the complete analysis which will be provided at the time of the Building Permit application.

Respectfully,

David Lloyd
Maine Licensed Architect #936

End of Memo

K.6

PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST

A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant
2.
3. Name address, telephone number of architect

4. Proposed uses of any structures [NFPA and IBC classification]
5.
6. Square footage of all structures [total and per story]

7. Elevation of all structures

8. Proposed fire protection of all structures
   - ***As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)***

9. Hydrant locations

10. Water main[s] size and location

11. Access to all structures [min. 2 sides]

12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1

K.7

ENGINEERS
FST
Since 1914

FAY, SPOFFORD & THORNDIKE
778 Main Street, Suite 8
South Portland, ME 04106
Toll Free: 800.835.8666
Main: 207.775.1121
Fax: 207.879.0896
www.fstinc.com

October 1, 2013

Captain Chris Pirone
City of Portland Fire Department
380 Congress Street
Portland, ME 04101

Subject: **Nathan Clifford School Redevelopment**
Fire Department Site Review Checklist

Dear Captain Pirone:

In accordance with instructions in the City's Site Plan Review packet, please find enclosed the drawing necessary for your review of the proposed Nathan Clifford School Redevelopment project. We have listed each item in your checklist below, followed by our response.

1. *Name, address, telephone number of applicant.*

   Developers Collaborative Predevelopment, LLC
   17 Chestnut Street
   Portland, ME 04101
   207-772-7673

2. *Name, address, telephone number of architect.*

   Project Architect: Archetype, PA
   48 Union Wharf
   Portland, ME 04101
   Attn: David Lloyd, P.E.
   207-772-6022

3. *Proposed uses of any structures (NFPA and IBC classification).**

Building	IBC Code	NFPA Code
Former School	R-2 – Type 3	Fully sprinkled per NFPA 13R

* to be confirmed by Archetype Architects

4. *Square footage of all structures (total and per story).*

Nathan Clifford School:

- Basement (Common Area) 11,537 SF
- First Floor – Residential 11,537 SF
- Second Floor – Residential 11,537 SF
- Third Floor – Residential 11,537 SF

TOTAL 46,148 SF

5. *Elevation of all structures.*

Not available at this time.

6. *Proposed fire protection of all structures.*

The building will have a sprinkler system with additional protection per code. Fire flows and requirements for system storage or booster pumping are subject to the fire system design which will be performed prior to the request for a building permit.

7. *Hydrant locations.*

Hydrants are currently located on Falmouth Street opposite the corner of Deane Street and on Payson and Deane Streets just south of the project site.

8. *Water main(s) size and location.*

The site is served by a 6" sprinkler service of Falmouth Street. The building is expected to have internal sprinkler risers and a Siamese fire pump connection on the Deane Street side of the building.

9. *Access to all structures (min. 2 sides).*

The accompanying site plan depicts the site access conditions from Falmouth Street, Deane Street, and Payson Street.

10. *A code summary shall be included referencing NFPA 1 and all fire department technical standards.*

NFPA 1 – Chapter 18 Fire Department Access and Water Supply

18.2 Fire Department Access:

The project site is located in a downtown urban condition and is surrounded by public streets on three sides. The following street widths are currently available:

Street	Width
Falmouth Street	36 ft.
Deane Street	36 ft.
Payson Street	36 ft.

Per NFPA 1 – Chapter 18.2.3.3.1, there will be public street access within 50 ft. of at least one exterior door. Per NFPA 1 – Chapter 18.2.3.2.2.1, all first story floors shall be located not more than 450 ft. from a Fire Department access road.

City of Portland Technical Manual – Section 3 Public Safety

3.4.1 Every dead-end roadway more than one hundred fifty (150') feet in length shall provide a turnaround at the closed end. Turnarounds shall be designed to facilitate future street connectivity and shall always be designed to the right (refer to Figure I-5).

Supporting Evidence: Not applicable

3.4.2 Where possible, developments shall provide access for Fire Department vehicles to at least two sides of all structures. Access may be from streets, access roads, emergency access lanes, or parking areas.

Supporting Evidence: As depicted on the site plans, the proposed building layout provides for minimum two sided access to all structures.

3.4.3 Building setbacks, where required by zoning, shall be adequate to allow for emergency vehicle access and related emergency response activities and shall be evaluated based on the following factors:

- *Building Height.*
- *Building Occupancy.*
- *Construction Type.*
- *Impediments to the Structures.*
- *Safety Features Provided.*

Supporting Evidence: The proposed development layout has contemplated emergency access conditions and provided for safe and efficient access along three public streets for emergency vehicles.

3.4.4. Fire Dept. access roads shall extend to within 50' of an exterior door providing access to the interior of the structure.

Supporting Evidence: All buildings will be provided with an exterior door that will be within 50' of a Fire Department access route.

3.4.5. Site access shall provide a minimum of nine (9) feet clearance height to accommodate ambulance access.

Supporting Evidence: A minimum of 9 ft. vertical clearance will be provided below any overhead signage or utilities entering the site.

3.4.6. Elevators shall be sized to accommodate an 80 x 24 inch stretcher.

Supporting Evidence: Elevator design has not yet commenced but it is understood that this requirement must be met.

3.4.7. All structures are required to display the assigned street number. Numbers shall be clearly visible from the public right of way.

Supporting Evidence: The applicant will work with the City's Public Services Division to assign street addresses and numbering to meet City Standards.

If you need any further information, please contact our office.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E., C.P.E.S.C.
Senior Engineer

SRB/smk

Attachments: Drawing C-2.1 Demolition Plan
Drawing C-3.0 Site Layout, Landscape & Utility Plan

c: Bill Needelman, City of Portland Planning Department
Kevin Bunker, Developers Collaborative
David Lloyd, Archetype, PA

R:\SP-M101-Nathan Clifford School\Admin\Permitting\City of Portland - Level III Site Plan Application\SP-M101 2013.10.01 Pirone-Fire Dept Review.doc

5. CONSTRUCTION MANAGEMENT PLAN

The following statement is made in accordance with the City of Portland Code of Ordinances, Chapter 14 Land Use, Section 14-525(c)(9).

5.1 CONSTRUCTION MANAGEMENT PLAN

Developers Collaborative Predevelopment LLC is seeking to commence construction during winter 2013-14 and complete the work by late 2014. The residential development construction will involve demolition, new interior building construction and site work. The accompanying construction plan outlines the anticipated timeline and sequence of activities.

5.2 ATTACHMENTS

Attachment I – Construction Management Plan

PROPOSED CONSTRUCTION MANAGEMENT PLAN FOR THE NATHAN CLIFFORD SCHOOL REDEVELOPMENT PROJECT

CONSTRUCTION APPROACH NARRATIVE:

The core element of the plan is to have the project management team and the field supervision team working together out of office trailer(s) on site. This team will be linked directly to the General Contractor's project management and job cost accounting systems. The goal of this arrangement is to ensure clear and timely communication within the General Contractor team and seamless coordination of project activities. Project management will be overseen by a Senior Project Manager working out of the General Contractor's home office. The General Contractor will locate a Project Manager and one or more Superintendents on the site for direct oversight and management of the Infrastructure work, site work and individual buildings.

The work involves the renovation of the existing school building and construction of a new 38 space parking lot. This work will require coordination with the adjacent property owners along Falmouth Street, Payson Street and Deane Streets.

Key issues to be addressed include:

- Public safety and continued accessibility along the adjoining streets.
- Communication with abutters
- Traffic management
- Parking for workforce
- Coordination of material deliveries
- Laydown and material storage areas including job trailers
- Crane pads and erection sequences (if required)
- Waste management
- Office trailer areas
- Designated areas for stockpiled materials
- Snow removal

The General Contractor will work with the City of Portland, owner and other entities to coordinate with the various off site construction activities including all work within the Public Right of Ways.

M.1

6. SOLID WASTE

6.1 INTRODUCTION

This section of the application provides the estimates of solid waste generation, considers the reductions of the waste through the use of recycling, provides information on waste projections during construction of the development, and outlines the planned procedures for the transport and disposal of solid wastes that will be generated by the operation of the proposed Nathan Clifford Residences development.

The following volumes of solid waste associated with the construction and operation of the development have been estimated:

- 25 cubic yards of stumps and grubbings from the construction of the proposed development, associated site work improvements, access drive, and landscaping.
- 200 cubic yards of demolition debris is expected to require disposal in a licensed facility.
- 82 cubic yards of construction debris related to the new building construction activities (excluding volume of recycled materials).
- 2,706 pounds per week of solid waste will be generated by the operations of the development[1]. After the recyclable material has been removed, it is estimated that the project will generate 35 tons of recyclable waste and 35 tons of non-recyclable waste per year.

6.2 SOLID WASTES GENERATED DURING CONSTRUCTION OF THE SITE

The solid wastes generated during the development site work will include minor packaging materials and minor amounts of solid waste that can be processed with the waste stream of the General Contractor for the building.

The applicant will retain a General Contractor to perform earthwork and land clearing on site. Land clearing will include minor building demolition, site cleanup, vegetation clearing, grubbing and topsoil removal. Removed topsoil may be screened and may be reused for onsite landscaping purposes if acceptable based on environmental conditions.

The Contractor will be permitted to dispose of trees and limbs by removing to an offsite location.

[1] Based on Table 14-1 of the CEQR Technical Manual, January 2012 Edition; Source: New York City Department of Sanitation.

M12

6.3 SOLID WASTES GENERATED DURING AND DEMOLITION OF THE EXISTING BUILDINGS

The solid wastes generated during the development construction will include interior demolition and removal of debris. The existing structure may require environmental remediation, principally asbestos abatement, lead paint removal and universal waste. Friable and non-friable asbestos, fluorescent bulbs, and mercury thermostats will be removed by appropriate professionals and transported to a secure location prior to demolition. The applicant intends to enter into a contract with a Licensed Hazardous Waste Removal Contractor during the winter 2013 for the removal of some asbestos containing materials prior to the commencement of the major building demolition and new interior building construction. The contract documents will pass the responsibility for the removal of all remaining asbestos containing waste, lead and other hazardous materials as they are discovered to the General Contractor for the project. The General Contractor will be responsible to retain, as a subcontractor, a licensed hazardous waste removal specialist who will transport all hazardous materials to an approved disposal location. We expect that any hazardous materials will be brought to the WMI Crossroads Facility in Norridgewock, Maine. The applicant is agreeable, as a condition of compliance that all records, including waste volumes, disposal locations, bills of lading, etc. be provided to the City of Portland once the demolition activities are complete.

The existing buildings are largely wood and masonry. It is expected that about 200 cubic yards of demolition debris will be generated, assuming an equivalent volume of 6 inches over the 11,000 s.f. existing footprint area. About 10 percent of this will be masonry materials that are expected to be recycled for pavement aggregates or aggregate fill. This leaves about 180 cubic yards of other debris. Perhaps 50 percent of this can be recycled, leaving about 90 cubic yards of material that must be disposed of at an approved licensed waste facility. The waste disposal options will be the same as those for construction.

6.4 SOLID WASTE GENERATED DURING THE CONSTRUCTION OF THE PROPOSED BUILDINGS

The contract provisions and the wastes generation estimates for the proposed buildings will be as follows:

- The construction contract will provide a goal for recycling of solid waste of 80%.
- The construction contract will require a plan for recycling and the location of recycling facilities to be identified prior to any solid wastes removal from the site.
- Construction Debris and Waste – 68 c.y. after recycling.

Unless otherwise directed by the City, the waste stream will be transported and disposed of at the following locations:

Hazardous Materials:	WMI Crossroads Facility in Norridgewock, Maine
Mixed Construction Material:	Riverside Recycling Facility in Portland, Maine; WMI Crossroads Facility in Norridgewock, Maine or Juniper Ridge in Old Town, Maine (Contractor option)
Separated Wood Construction Debris:	KTI Biofuels in Lewiston, Maine
Separated Metal/Ferrous Material:	One Steel Recycling Inc. in Arundel or Oakland, Maine

The collection, transfer, disposal, and payment of all fees for solid wastes shall be the responsibility of the Contractor, with all waste transferred by a licensed non-hazardous waste transporter.

6.5 SOLID WASTE GENERATED FROM THE OPERATION OF THE DEVELOPMENT

The waste from development operations will be picked up through a contract with a licensed solid waste transporter.

6.6 FLUORESCENT LIGHTS AND FIXTURES

The development will use fluorescent light bulbs that do not have PCB ballasts. The electrical switches for the project will be specified to not contain mercury. Fluorescent bulbs and other universal wastes will be taken to Riverside Recycling Facility in Portland.

6.7 HAZARDOUS AND SPECIAL WASTES

The developer anticipates use of cleaners, solvents, etc. will be within normal household thresholds thus requiring no special measures for storage or use.

6.8 GRIT/SEDIMENT REMOVAL

The applicant will be responsible for the maintenance of the minor storm drain systems within the site. They will be responsible for the long-term maintenance of the stormwater management collection systems and the associated infrastructure including the removal of sand and sediment. Potential disposal facilities which accept this type of material include Commercial Recycling in Scarborough, Maine and Dragon Cement in Thomaston, Maine. It is anticipated that the material from the project site will be delivered to Commercial Recycling where it will be kiln dried and used as a suitable mixing material for asphalt-based products. Given the limited amount of drainage infrastructure on the site, these volumes are considered to be insignificant.

M.4

6.9 ATTACHMENTS

Attachment J – Computations of Types and Volumes of Solid Wastes for Construction Project

M.5

ATTACHMENT J

Computations of Types of Volumes of Solid Wastes for Construction Project

VII.6

SOLID WASTES COMPUTATIONS AND DISPOSAL

A. SITE CONSTRUCTION:

- Type: Wood Waste from Clearing Operations
- Basis of Quality Computations: By Inspection
- Site Construction Miscellaneous Areas Onsite

Location	Area to be Cleared	Rate per Acre	Yield
Developed yard area	.25 acres	100 cubic yards per acre	= 25 c.y.
		Total	**= 25 c.y.**

Disposition:

Trees: Cut above stump line. Chip and haul to approved offsite location or use on-site as mulch.

Stumps: Provide the Contractor the option in the construction documents to chip on site and use for erosion control mix, or haul to an approved disposal area.

Other Wastes Associated with Other Site Construction:

Cardboard from packaging etc.: Quantity should be limited. Construction documents will require a recycling program. Specify a goal of 80% recycling. All other to be placed in a separate dumpster on the site paid for and designated for Contractor. Contractor to haul to the Riverside Recycling Facility, or to the WMI Crossroads facility in Norridgewock, Maine.

B. NEW BUILDING CONSTRUCTION:

Basis of Estimate: 10 c.y./1,500 s.f. of finished space

Area: Approximately 46,000± square feet

Solid Waste: Approximately 307 c.y.

Set a goal in the construction documents to require segregation of cardboard and paper with a goal of 80%; segregation of metals with a goal of 85%.

Total: 307 c.y. before recycling

Net: 61 c.y. if 80% of the material is recycled

Require Contractor to: Provide multiple 30 c.y. dumpsters. Haul to facilities identified in Section 8.2 with shipping manifest. The Contractor should identify recycling methods and sites prior to construction.

Disposition:

Assume 10 percent is concrete which can be sent to the approved aggregate recycling facilities operated by Shaw Bros. or R.J. Grondin and Sons for processing into recycled aggregate.

Of the remaining 90 percent, assume 70 percent is wood or metal which can be transported to KTI Biofuels in Lewiston (for wood) or One Steel Recycling in Oakland, Maine for metals.

This will leave about 83 cubic yards of mixed construction debris that should be hauled to the Riverside Recycling Facility in Portland, WMI Crossroads facility in Norridgewock, Maine or the Juniper Ridge Facility in Old Town, Maine.

Require Contractor to: Provide dumpsters designated by material type. The contractor should identify recycling methods and sites prior to construction.

All haulers must have a current non-hazardous waste haul license. The Contractor shall provide the names of the haulers 10 days prior to removal of any demolition debris or construction debris from the site.

7. CONFORMITY WITH APPLICABLE DESIGN STANDARDS

The following statement is made in accordance with the City of Portland Code of Ordinances, Chapter 14 Land Use, Article V Section 14-526.

7.1 OVERVIEW

This project conforms with all the applicable design standards of Section 14-526 as demonstrated in the following narrative.

(a) Transportation Standards

1. Impact on Surrounding Street Systems:

   The development will fit in with the existing street system as it will use an existing access location off Payson Street. Based on the number of residential units the project is expected to have an insignificant impact on traffic in the neighborhood, particularly when the displacement of former school operations is considered.

2. Access and Circulation:

   a. Site Access and Circulation.

      (i) The development provides access via Payson Street. Door controlled access will be provided at each end of the building and ample turning movement is provided at the street entrance. The proposed parking lot has been configured to meet the City's Technical Standards.

      (ii) Access and egress have been designed to avoid conflicts with existing turning movements and traffic flows.

      (iii) The site does not feature drive up services as mentioned in this requirement.

      (iv) Site access has been designed so as not to impede potential future connection to adjacent streets.

   b. Loading and Servicing.

      (i) Not required. There will be adequate area along adjacent streets for infrequent periods of tenants moving in/out of the building. A small existing curb cut on Deane Street will remain for use as a short-term residential loading/unloading area.

   c. Sidewalks.

      (i) Sidewalks are in place to connect to the sidewalks on Falmouth, Deane and Payson Streets. All sidewalk improvements shall conform to the City of Portland Technical Manual as shown on the project design drawings.

N.2

(ii) The sidewalk ramps on Falmouth Street shall be improved to correct a deteriorated condition.

(iii) Internal sidewalks are proposed to allow access from entry doors to the sidewalks on adjacent streets.

(iv) Select public sidewalk improvements per the City's recommendations.

3. Access and Circulation:

   a. The development will be served by the existing #3, #4 and #5 Metro service routes that have street stops at Hadlock Field and the nearby USM Campus. Transit service does not currently traverse Falmouth Street.

   b. A new transit stop is not proposed.

   c. A new transit stop is not proposed based on the close proximity of nearby transit stops.

   d. Waiver: The applicant requests a waiver of the transit facility requirement.

4. Parking:

   a. Location and Required Number of Vehicle Parking Spaces:

      (i) The applicant is providing parking on a 1.68 space per residential unit ratio which satisfies Section 14-332 (a) (2) of the code.

      (ii) The applicant has not prepared a TDM strategy.

      (iii) The applicant proposes the amount of parking which is appropriate for the anticipated uses of this site.

      (iv) Parking spaces and aisles have been designed to meet the dimensional requirements of the Technical Manual.

      (v) Parking lots have been designed to withstand site conditions. The parking lot will be paved and graded to drain to a formal drainage system.

   b. Location and Required Number of Bicycle Parking Spaces:

      (i) The project will include interior bicycle storage. Additional street racks will also be provided at one or more locations with the adjacent sidewalk systems.

   c. Motorcycles and Scooter Parking:

      (i) The project does not provide designated motorcycle/scooter parking.

   d. Snow Storage:

      (i) Snow storage management will employ two strategies;

1. On-site snow storage around the perimeter of the site.

2. Snow removal and offsite storage. Generally speaking, the nature of the proposed site use precludes the need for significant snow removal.

5. Transportation Demand Management (TDM):

   a. A TDM plan is not required for the project.

(b) Environmental Quality Standards

1. Preservation of Significant Natural Features:

   a. The existing site retains no prominent significant natural features therefore no issue related to the preservation of these features applies.

   b. The applicant is not requesting a waiver from this standard.

2. Landscaping and Landscaping Preservation:

   a. Landscape Preservation.

      (i) The site's existing tree population will be maintained. The applicant will discuss the condition of several existing trees with the City Arborist to determine their health and possible need for replacement. An existing specimen tree located at the rear of the school, which we understood was specifically dedicated, shall be maintained and the parking lot is designed to avoid cutting of this special tree.

      (ii) Not applicable.

      (iii) Adequate measures to protect existing vegetation during construction will be provided.

      (iv) The applicant will not require a waiver from this standard.

   b. Site Landscaping.

      (i) Landscaped Buffers:

         (a) There are no observable service or loading areas. The proposed dumpster area will have an enclosure for screening consisting of either wood or PVC.

         (b) The development will be designed to meet the understory planting requirements of Section 4 of the Technical Manual. The project landscape architect is currently reviewing the existing site plant material suitable for reuse and landscape understory compliance.

         (c) Not applicable.

         (d) The applicant intends to preserve the site landscaping to the extent practicable.

(ii) Parking Lot Landscaping:

a) The landscape architect is currently reviewing opportunities to satisfy these requirements by the placement of new trees and shrubs.

b) Not applicable.

c) Not applicable.

(iii) Not applicable.

3. Water Quality, Stormwater Management and Erosion Control:

a. Stormwater:

(i) All stormwater draining onto the site from adjacent properties will be accounted for in the pipe sizing and redirection to a new discharge location as necessary. Runoff from the site will continue to be directed to the City's storm drainage systems in the streets.

(ii) All stormwater runoff is proposed to discharge to the City street systems. The project will not adversely impact adjacent lots or the City street system.

(iii) All stormwater runoff is proposed to discharge to the City street systems. The project will not adversely impact adjacent lots or the City street system.

(iv) All stormwater runoff is proposed to discharge to the City street systems. The project will not adversely impact adjacent lots or the City street system.

b. The Stormwater Management Plan will meet the requirements and goals stated in Section 5 of the Technical Manual.

c. The project is not located in a watershed of an urban impaired stream as listed by the MeDEP.

d. N/A

e. The project is serviced by both a public wastewater system and public drainage system. The project will not pose a risk of groundwater contamination.

f. The project will be connected to the public sanitary sewer system which is adequately sized for the project flows.

(c) Public Infrastructure and Community Safety Standards.

1. Consistency with City Master Plans:

a. The project has been designed to be consistent with the City's Zoning Ordinance and off-site infrastructure.

b. Not applicable.

2. Public Safety and Fire Prevention:

   a. The site has been designed to promote safe and inviting public and residential access.

   b. No changes to emergency access conditions within the surrounding streets is proposed.

   c. Fire hydrants are located within the adjacent street system. The new buildings will be fully sprinklered.

3. Availability and Adequate Capacity of Public Utilities:

   a. The applicant will secure letters from all applicable utilities stating their ability to serve this project.

   b. All on site electrical lines will be underground.

   c. All new utility infrastructures will meet the provisions of the Technical Manual.

   d. The project has an existing sewer service connection.

   e. The sanitary sewer collection system meets all applicable sections of the Technical Manual. A stormwater management system is not required based on the project size; however, stormwater BMPs will be introduced as part of the project site work.

   f. The project will use an outside trash enclosure to store trash and recyclables temporarily until a contracted waste management company can pick up and dispose of the solid waste.

(e) Site Design Standards.

1. Massing, Ventilation and Wind Impact:

   a. The bulk, location and height of the existing building does not result in adverse impacts to abutting properties.

   b. HVAC venting is proposed to be directed to the building roof and directed away from public spaces.

2. Shadows:

   a. The development is located in the R-5 Zone and this standard is not applicable to existing structures.

3. Snow and Ice Loading:

   a. The proposed building is located such that accumulated snow and ice will not fall onto adjacent properties or public ways.

N.6

4. View Corridors:

   a. The project site is located outside the Downtown Vision View Corridor Protection Plan.

5. Historic Resources:

   a. The development is not located in a historic district, historic landscape district or City designated landmark. However, a nomination to the National Register of Historic Places is pending. In any event, the project will use state and federal historic tax credits as part of the redevelopment and will thus adhere to a strict standard of preservation of significant architectural features. The Applicant has retained a historic preservation consultant and architect familiar with historic buildings and continues to work with the City's historic preservation staff.

   b. The development is not located adjacent to or within 100 ft. of a designated landmark, historic district, or historic landscape district.

   c. There are no known archaeological resources on the site.

   d. The age of the structure warrants a Historic Preservation Application for Certification of Appropriateness. A copy of the submitted application is attached.

6. Exterior Lighting:

   a. Site Lighting.

      (i) Exterior lighting will be designed to meet the requirements of Section 12 of the Technical Manual. Proposed lighting cut sheets are attached.

7. Noise and Vibration:

   The project noise levels will be designed to meet the permitted levels as outlined in the R-5 Zone. All HVAC and mechanical equipment is proposed to be mounted on the roof.

8. Signage and Wayfinding:

   a. All street and wayfinding signage shall meet the requirements of the Manual on Uniform Traffic Devices (MUTCD) and Division 22 of the City Code.

      (i) The project is not located in a historic district or subject to Article IX.

      (ii) Not applicable.

      (iii) All street and wayfinding signage shall meet the requirements of the Manual on Uniform Traffic Devices (MUTCD) and Division 22 of the City Code.

9. Zoning Related Design Standards:

   a. The project is designed to be a medium density development with multiple story building, onsite parking and attractive public space.

N.7

7.2 ATTACHMENTS

Attachment K – Application for Certificate of Appropriateness

Attachment L – Proposed Lighting Cut Sheets

Date: November 4, 2012

HISTORIC PRESERVATION
APPLICATION FOR CERTIFICATE OF APPROPRIATENESS

Pursuant to review under the City of Portland's Historic Preservation Ordinance (Chapter 14, Article IX of the Portland City Code), application is hereby made for a Certificate of Appropriateness for the following work on the specified historic property:

PROJECT ADDRESS:

180 Falmouth Street

CHART/BLOCK/LOT: 66A A 012 (for staff use only)

PROJECT DESCRIPTION: Describe below each major component of your project. Describe how the proposed work will impact existing architectural features and/or building materials. If more space is needed, continue on a separate page. Attach drawings, photographs and/or specifications as necessary to fully illustrate your project—see following page for suggested attachments.

The following is a basic outline of exterior work being proposed for the former Nathan Clifford School

1. Masonry that is cracked or needing of repointing is shown on exterior elevations.
2. Existing granite steps, where failing, to be reset, see elevations.
3. Existing cast iron entry steps that are rusted through to be restored see elevations.
4. Cornice that is blackened to be cleaned.
5. Existing aluminum windows to remain and caulked, see elevations for restoration of existing wood windows or their replacement with aluminum. New aluminum replacements to match existing aluminum windows.
6. Existing wood entry doors to be restored with the exception of the lower level entry door on east elevation. Note: An added element, not original , to be changed , see elevations.
7. Site plan, attached, showing new parking lot and landscaping at south side of building. North side of site no changes planned to landscaping.

0.2

CONTACT INFORMATION:

APPLICANT

Name: Nathan Clifford LLC
Address: c/o Developers Collaborative
17 Chestnut Street
Portland, ME 04101
Zip Code:
Work #: (207) 772-7673
Cell #: (207) 766-1632
Fax #:
Home:
E-mail: bunker.kevin@gmail.com

PROPERTY OWNER

Name: City of Portland
Address: 386 Congress Street
Portland, ME
Zip Code:
Work #:
Cell #:
Fax #:
Home:
E-mail:

BILLING ADDRESS

Name: Same as applicant
Address:
Zip:
Work #:
Cell #:
Fax #:
Home:
E-mail:

ARCHITECT

Name: Archetype
Address: 48 Union Wharf
Portland, ME
Zip: 04101
Work #: (207) 772-6022
Cell #: (207) 831-8627
Fax #: (207) 772-4056
Home:
E-mail: lloyd@archetypepa.com

CONTRACTOR

Name:
Address:
Zip Code:
Work #:
Cell #:
Fax #:
Home:
E-mail:

Applicant's Signature

Owner's Signature (if different)

0.3

SECTION 04520
BRICK REPOINTING AND REPLACEMENT

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Repointing of brick to brick joints – Contractor is to include in his bid the cost of repointing as shown on drawings.
2. Replication of the color, texture and joint profile of the original tinted brick and stone pointing mortar.
3. Removal and replacement with new matching bricks of spalled, cracked, damaged and missing as called out on drawings.
4. Rebuilding with original bricks areas of debonded face bricks.

B. Existing Masonry Buildings:

1. Cut a minimum 3/8" depth or to sound mortar all brick mortar joints and repoint with mortar matching existing as closely as possible.
2. Remove and replace all badly spalled, cracked, or deteriorated brick with new brick to match existing as closely as possible.
3. Wash all masonry surfaces within work area.
4. Clean up and dispose of spent debris properly.

C.

1. All testing and/or permits, if required, are the responsibility of others.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

B. International Masonry Industry All-Weather Council (IMIAC) - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.

1.03 DEFINITIONS

A. Defective Mortar Joints: Joints in which mortar is missing, loose, spalled, eroded, powdered, broken, hollow, unsound, soft, or weathered more than 3/16 inch (5 mm) from original plane. Sound joints containing fine hairline cracks are excluded.

B. Defective Bricks: Bricks which have cracked, spalled or been previously patched or coated. Any brick that has lost its fire-skin and/or its integrity as a masonry unit.

1.04 SUBMITTALS

A. Submit under provisions of Section
   1. Samples: New replacement bricks to match originals in sufficient quantity to show full color and texture range, samples of brick ties and helical anchors.
   2. Manufacturer's data on all products used in this section including but not limited to: Cement, sand, lime, replacement bricks, brick ties and helical anchors.
   3. Qualification Statement: Brick masons qualifications, including previous projects.

1.05 QUALITY ASSURANCE

A. Installer:
   1. Minimum 5 years experience in work of this Section.
   2. Successful completion of at least 5 projects of similar scope and complexity within past 3 years.

B. Preconstruction Testing Laboratory Services: Under provisions of Section
   1. Select 4 samples from stockpiled material and existing construction. Test new and existing bricks to ensure that they are compatible.
   2. Test brick in accordance with ASTM C 67 Report the following for new and existing historic bricks:
      a) Compressive strength.
      b) Absorption.
      c) Initial rate of absorption.

C. Mockups:
   1. Replacement of Damaged bricks: Remove and replace existing damaged bricks in locations approved by project architect with new matching bricks.
      a) Prior to setting new bricks the mock up area will be evaluated for brick and mortar removal.
      b) Brick setting to be evaluated for brick matching and workmanship including alignment with existing courses and joint widths.
   3. Raking out and repointing procedures.
      a) 25 square feet (5' x 5') of raking out. Sample to be evaluated for depth of mortar removal, preservation of brick edges and flushing out of joint in preparation for repointing.
      b) Mortar color and texture: Submit samples of matching mortar on boards or in channels. After preliminary approval of mortar color submitted on boards proceed with brick repointing mock-up.
      c) Repoint 25 square feet (5' x 5') of brick joints with approved mortar. Sample to be evaluated for mortar color, texture and joint profile.
      d) Work up to be evaluated for overall workmanship and procedures.

   4. Rebuilding of areas of debonded brick masonry.
      b) Prior to re-setting bricks area shall be evaluated for mortar removal from existing wall and salvaged bricks.

0.5

c) Reset original bricks with brick ties – Helifix stainless steel 10mm dryfix masonry pinning system by Helifix North American Corp., Concord, Ontario, Canada. Mock up a 5' x 5' area to be evaluated for alignment with existing brick courses, joint width overall workmanship. Approved mockup may remain as part of the Work.

1.06 DELIVERY, STORAGE AND HANDLING

A. Protect materials from moisture absorption and damage.

1.07 PROJECT CONDITIONS

A. Protection of Work:
1. Cover top of wall with strong waterproof membrane at end of each day or shutdown. Cover partially completed walls when work is not in progress.
2. Extend cover minimum of 24 inches (600 mm) down both sides; hold securely in place.
3. Prevent staining and damage to exposed masonry.
4. Protect sills, ledges, and projections from mortar droppings; remove droppings immediately.

B. Environmental Requirements:
1. Hot weather requirements: If ambient temperature is over 95 degrees F (35 degrees C) or relative humidity is less than 50 percent, protect from direct sun and wind exposure for minimum 48 hours after installation.
2. Cold weather requirements:
a) In accordance with IMIAC requirements.
b) Do not use frozen materials or build upon frozen work.

1.08 SEQUENCING

A. After award of contract submit brief statement of project sequencing indicating start and finish dates.

PART 2 – PRODUCTS

2.01 Materials General

A. Comply with referenced standards and other requirements indicated applicable to each type of material required.

B. Reference in the specifications to materials by trade name is to establish a standard of quality. It is not intended to exclude other manufacturers whose materials that, in the judgment of the Architect or his designated representative, are equivalent to those named based on sample panels.

2.02 Mortar Materials

A. Lime: ASTM C 207, Type S hydrated bag lime
B. Cement: ASTM C 150, Type I or Type II Portland cement. Cement must comply with ASTM C 91, not more than 0.30 % soluble alkali.
C. Sand: ASTM C 144: color, size and type to match existing mortar.
D. Water: Potable, clean and free from deleterious amounts of acids, alkalis and organic matter.
E. Pigments: Chemically pure mineral oxides, alkali proof and light fast as manufactured by Solomon Grind – Chem Services, Inc of Springfield, IL., Lander-Sigal or approved equal.

F. Mix proportions:
For brick repointing joints: 1:1:6 mixture of Type I or Type II (non-staining) Portland Cement, Type S hydrated bag lime and sand and pigment to match existing historical mortar..

For brick setting joints: 1:1:6 mixture of Type I or Type II Portland Cement, Type S hydrated bag lime and sand.

2.03 Bricks

A. Brick: Provide new bricks as required to repair areas of cracked spalled or damaged bricks. New bricks to match existing in compressive strength, absorption, initial rate of absorption, color, size, and surface texture.

2.04 ACCESSORIES

A. Anchors: Stainless steel, ASTM A 167 Type 302 or 304.

PART 3 - EXECUTION

3.01 PREPARATION

A. Prior to beginning work examine existing mortar joints to determine procedures required to match new mortar to existing, including:
1. Order in which horizontal and vertical joints were tooled.
2. Style of tooling including depth and profile.

3.02 REPLACEMENT OF DAMAGED AND MISSING MASONRY

A. Remove damaged and deteriorated masonry without damage to adjacent masonry.

B. Install new or salvaged masonry bricks where existing units are missing or were removed.

C. Establish lines, levels, and courses to match existing. Fit new masonry to bond and coursing of existing masonry.

D. Lay masonry plumb and true to line.

E. Do not shift masonry after mortar has achieved initial set. If adjustments must be made after initial set, remove mortar and replace with new.

F. Lay bricks in full mortar bed, with full head joints.

G. Do not butter corners or excessively furrow joints.

H. Cut masonry with straight, true cuts and clean, unchipped edges. Prevent oversized or undersized joints. Discard damaged units.

I. Where fresh masonry joins existing, or partially set masonry, remove loose masonry and mortar; clean and lightly wet exposed surface of set masonry.

3.03 RAKING OUT OF MORTAR JOINTS

A. Remove all mortar material from joints using hand tools. The use of hand held grinders or pneumatic tools will be allowed where joint widths can accommodate a single pass of the blade without touching either edge of the stone or bricks. Each mechanic must demonstrate proficiency in the use of hand held grinders or pneumatic tools.

B. Rake out joints to a minimum depth of 3/8" or until sound mortar is reached. Contractor to satisfy themselves as to existing conditions at the time of bidding. No allowances will be made for extra raking out work.

C. Remove mortar to provide reveals with square backs and to expose masonry for contact with pointing mortar. Remove dirt and loose debris.

D. Do not spall edges or widen joints.

E. If joints are flushed with water to remove debris, the flushing shall be done the day before mortar application to avoid excess moisture.

3.04 MORTAR APPLICATION

A. Moisten joints with clean water and stiff natural bristle brush before application of mortar to sufficient degree to avoid absorption of mortar water.

B. Thoroughly mix ingredients in quantities needed for immediate use.

C. Mix dry ingredients mechanically until uniformly distributed. Add water to achieve workable consistency.

D. Discard lumpy, caked, frozen and hardened mixes and mixes not used within 2 hours after initial mixing.

E. Do not use antifreeze compounds to lower freezing temperature of mortar.

F. First layer to create a uniform depth for later applications and to be thoroughly Compacted into cavities: apply mortar to a maximum thickness of 3/8"

G. After joints have been filled to a uniform depth, apply remaining mortar in successive ¼" thick layers: fully compact each layer and allow to dry to thumbprint hardness before applying next layer.

H. When final layer is thumbprint hard, tool to match approved sample joint.

I. Avoid feather-edging of mortar joint.

J. Immediately after repointing, remove excess mortar by light brushing with a natural bristle brush. Do not leave encrusted matter.

K. Keep mortar damp for 48 hours after pointing to permit proper hardening of mortar. The following cures are permissible:

a. Cover masonry temporarily with burlap, which is moistened periodically.

Or

b. Cover wall with plastic sheets temporarily to prevent evaporation.

3.05 CLEANING

A. The cleaning shall be done with clean water applied vigorously with fiber brushes. After cleaning with brushes the stone shall be thoroughly rinsed with clear water. Proprietary cleaning compounds containing caustic agents, intended for removing mortar smears shall not be used without the written approval of the Architect. The goal is to remove all smears before they set so that caustic agents are not required.

END OF SECTION

P. 1

BEACON
design . performance . technology

Ordering
rev 03.21.2013

Type: S1 & S2

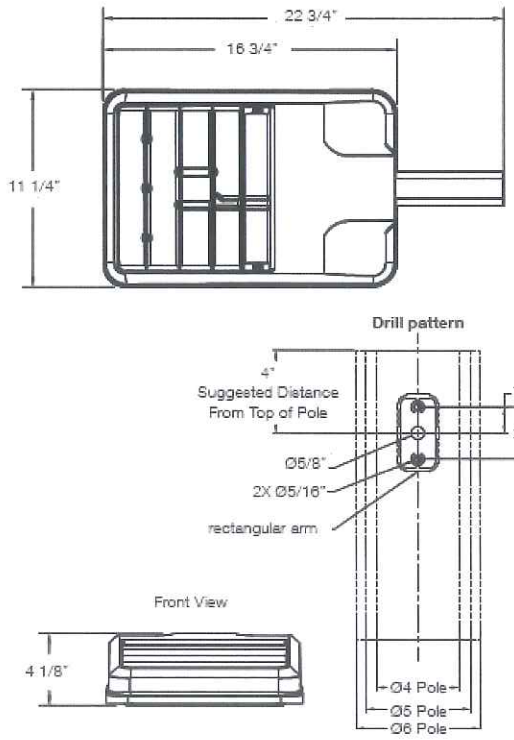
Ordering Code: VP-S 22NB-50 4K **-UNV-PCRU120 RA BB

Job Name: Clifford School Renovation

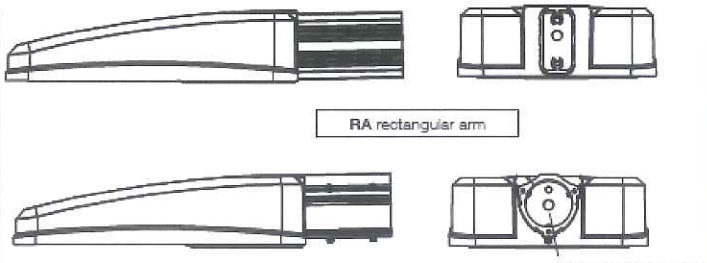
Notes: ** = Distribution Type
S1 Distribution - T3
S2 Distribution - T5QM

VIPER (SMALL)

details



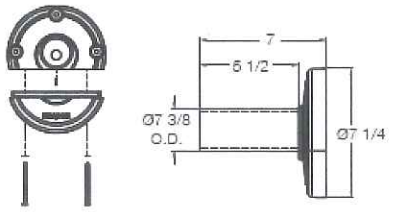
weight: 15lbs **epa:** 0.67 ft²



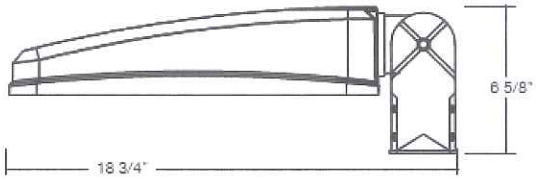
RA rectangular arm

SF2 2-3/8" OD slip-fitter

Accepts 2 3/8" OD tenon, min 4" long.



WB wall bracket



PK2 2-3/8" adjustable knuckle

ORDERING EXAMPLE: VP-S / 30NB-90 / 5K / T5R / UNV / PCRU-TL / SF2 / BB

model	engine-watts	cct-color temp	optics	voltage	electrical options	mounting options	color
VP-S	**22NB-50**	**5K** 5000K	**T2** type II	**UNV** 120-277	**PCRU** photocell (specify voltage)[1]	**RA** rectangular arm	**BB** black
(small)	**22NB-70**	**4K** 4000K	**T3** type III	**347**	**PCR3** photocell receptacle [2]	**SF2** 2-3/8" OD slip-fitter	**BZ** bronze
	30NB-70	**3K** 3000K	**T4** type IV	**480**	**PCR4** photocell receptacle [3]	**PK2** 2-3/8" adjustable knuckle	**BW** white
	30NB-90		**T5R** rectangular	**12VDC** *(consult factory)*	**TL** twistlock photocontrol		**BG** green
		5k 5000K (standard)	**T5QM** sq medium		**SC** shorting cap	**WB** wall bracket	**BY** gray
			T5W round wide		**NP** no photocontrol		**MB** met. bronze
					2PF dual power feed [4, 5]		**MT** met. titanium
					std. electrical options		___ **RAL**
					lifeshield™ thermal protection		___ **OTHER**
					20k-surge protection [6]		
					dimming drivers		

[1] **120-277** only [2] **347V** only [3] **480V** only [4] not available on **30NB-90** [5] not available @ **347V/480V** input [6] not available @ **347V** input

Specification

rev 03.21.2013

VIPER (SMALL)

GENERAL: The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS and with 5 different mounting options for application in a wide variety of new and existing installations. Luminaires are suitable for wet locations.

BEZEL OPTICAL SYSTEM: Each Viper luminaire is supplied with an one piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel. The cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system. Two-piece silicone and microcellular polyurethane foam gasket ensures a weather-proof seal around each individual LED.

The optical cartridge is secured to the die cast housing with fasteners. The optics are held in place without the use of adhesives. The cartridge assembly is available in various lighting distributions using TIR designed acrylic optical lenses over each LED.

LIFESHIELD™ CIRCUIT: Thermal circuit shall protect the luminaire from excessive temperature by interfacing with the 0-10V dimmable drivers to reduce drive current as necessary. The factory-preset temperature limits shall be designed to ensure maximum hours of operation to assure L70 rated lumen maintenance. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range.

A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55°C (131°F). The thermal circuit will allow higher maximum wattages than would be permissible on an unregulated luminaire (if some variation in light output is permissible), without risk of premature LED failure or lumen depreciation. Operation shall be smooth and undetectable to the eye. Thermal circuit shall directly measure the temperature at the LED solder point. Thermal circuit shall consist of surface mounted components mounted on the LED engine (printed circuit board). For maximum simplicity and reliability, the device shall have no dedicated enclosure, circuit board, wiring harness, gaskets, or hardware. Device shall have no moving parts, and shall operate entirely at low voltage. The device shall be located in an area of the luminaire that is protected from the elements. Thermal circuit shall be designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers.
Device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.). The device will effectively control the solder point temperature as needed; otherwise it will allow the other control device(s) to function unimpeded.

PRINTED CIRCUIT BOARD (PCB): Aluminum thermal clad board with 0.062" thick aluminum base layer, thermally conductive dielectric layer, 0.0014" thick copper circuit layer circuit layer designed with copper pours to minimize thermal impedance across dielectric. Board will be mounted to the heat sink using minimum 12 #4-40 screws to ensure contact with thermal pad and heat sink. Use of thermal grease will not be allowed.

HOUSING AND LED THERMAL MANAGEMENT: The Viper' monolithic housing design creates over 4.5 square feet (small Viper) or 7.7 square feet (large Viper) of heat-sinking surface area. Vertical fins, combined with flow-thru openings prevent sediment and moisture buildup on critical heat sinking surfaces without the need for grates, screens or other debris control tactics. The Viper housing, electrical compartment and fitter are made from die cast aluminum that is pre-treated and powder-coated to meet the most rugged industry standards. The finish is corrosion resistant to meet ASTMB-117, resists cracking or loss of adhesion per ASTM D522, resists surface impacts of up to 160 inch-pound. All external hardware is corrosion resistant. The housing serves as a heat-sink for the LED bezel with a separate compartment for the drivers.

ELECTRICAL ASSEMBLY: The fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections. The housing is designed for an optional twist lock photo control receptacle.
ACCESSIBILITY: Although the Viper luminaire is designed to operate for many years without maintenance, accessibility is a key component in its design. The Drivers are mounted on a removable door that is secured with keyslotted screws and hinges down for convenient access. The drivers are field replaceable using quick disconnects.

DRIVERS: Luminaires are equipped with an LED driver that accepts 100V through 277V, 50 Hz to 60 Hz (UNIV), or a driver that accepts 347V or 480V input. Power factor is .92 at full load. All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL- 217F Notice 2. Dimming drivers are standard, with connections for external dimming equipment available upon request. Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only.

SURGE PROTECTOR: The onboard surge protector shall be a UL recognized component for the United States and Canada and have a surge current rating of 20,000 Amps using the industry standard 8/20 pSec wave. The LSP shall have a clamping voltage of 925V and surge rating of 540J. The case shall be a high-temperature, flame resistant plastic enclosure.

FASTENERS: All fasteners shall be stainless steel. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required, consult factory).

AGENCY CERTIFICATION: The luminaire shall bear a CSA label and be marked suitable for wet locations.

WARRANTY: Beacon luminaires feature a 5 year limited warranty. Beacon LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer. See Warranty Information on www.beaconproducts.com complete details and exclusions.

Power/Lumens & Distrubutions

Engine	Wattage	Delivered Lumens (varies by optic)	Delivered LPW	TM21 Calculated % Lumen Maint. at 100,000 hrs
22NB	50	4700-5020	93-103	96.19%
22NB	70	5780-6200	82-103	85.79%
30NB	70	6408-6850	91-109	95.02%
30NB	90	7700-8260	85-97	85.79%

TM21 is the framework for taking LM-80 data and making useful LED lifetime projections. Reported and Calculated Lifetimes shown are based on hours at the time of this printing. For current Reported and Calculated hours please contact factory or Beacon's web-site.

CCT (color Temp) Lumen Output Multipliers	CRI (Color Rendering)
5000K = 1.0	min 67 CRI
4000K = .92	min 70 CRI
3000K = .75	min 80 CRI

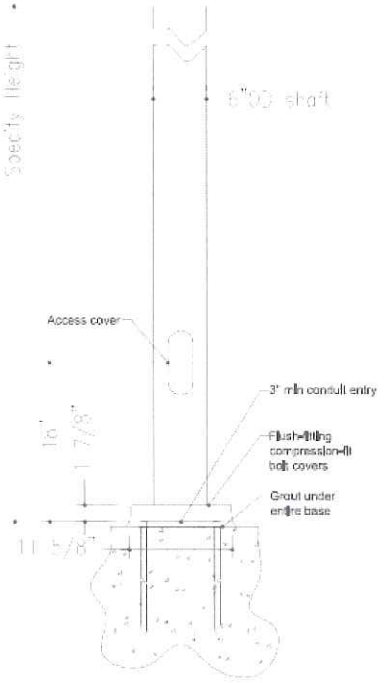
Types S1 & S2 Poles Clifford School Renovation

VAN6

Posts & Arms | **6" Vandal Resistant Post**

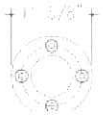
VAN6/S/20'/6Q/OT/BB (Types S1 & S2)

post details

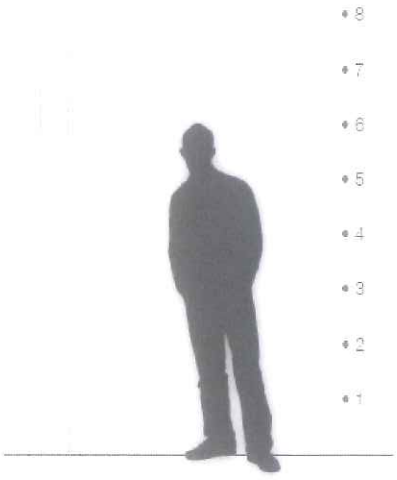


anchor base details

8 3/4" bolt circle



perspective



ordering logic

model

☐	VAN6	6 Vandal Resistant Post

profile

☐	S	smooth
☐	F	fluted

height

☐	12	12'
☐	14	14'
☐	16	16'
☐	18	18'
☐	OTHER	20ft

shaft

☐	6M	Ø6", .188" wall thickness (S)
☐	6Q	Ø6", .250" wall thickness

pole top

☐	OT	open top (for post top arm)
☐	TN	tenon (standard 3"x3")
☐	ARC	acorn finial
☐	BAL	ball finial
☐	OTHER	

options

☐	GFI-IU	20AMP GFCI receptacle with painted aluminum cover
☐	OTHER	

color

☐	BB	black
☐	BZ	bronze
☐	GR	green
☐	WH	white
☐	GY	gray
☐	RAL	RAL

ordering example

VAN6 / S / 18 / 6M / OT / GFI-IU / BB

specifications

construction

Post shall be made from a one-piece, seamless extruded aluminum shaft welded to a cast aluminum monolithic base. A welded ground lug is accessible through the hand hole, which shall be located on the post shaft (opposite of the opening) and concealed by a formed aluminum cover. All cast aluminum parts shall be low copper alloy A356. All extruded aluminum parts shall be alloy 6061-T6. Cast aluminum bolt covers, which are mechanically attached to the base plate, are optional for this post and should be considered when a base cover will not be used. Standard fluted shaft profile shall be 12-flat flutes.

anchor bolts

1"X24"x3" anchor bolts, double hex nuts and flat washers shall be hot dipped galvanized steel. A bolt circle template shall be provided for installation.

vibration dampeners

Vibration dampener pads shall be provided when required by customer or deemed necessary by Beacon products. Please consult factory for bridge mounted applications.

EPA (effective projected area)

EPA is defined as (surface area X drag factor) and measured in ft². Allowable post, luminaire arm, luminaire and accessory EPAs are derived from the most current published AASHTO (American Association of State Highway and Transportation Officials) standard currently AASHTO 2001 (50yr design life). Customer assumes all responsibility for selecting the appropriate post for installation (consult factory for assistance). Luminaire arm, luminaire and accessory EPA must be equal to or less than allowable EPA of post. Consult a professional engineer for compliance with local codes and standards.

fasteners

All fasteners shall be stainless steel. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required).

finish

Finish shall be Beacote V polyester powdercoat paint, electrostatically applied and thermocured. All painted surfaces shall be subjected to chemical pre-treatment prior to painting by full immersion process. Finish shall meet or exceed AAMA 2604 standards.

available EPA index

catalog #	wall thickness	nominal height	AASHTO 2001 wind zones (mph) 90	100	110	120	130	140	150
VAN6/S/12/6G	.125"	12'	15.3	12.2	10.0	8.3	6.9	5.9	5.1
VAN6/S/14/6G	.125"	14'	12.5	9.9	8.0	6.6	5.5	4.7	4.0
VAN6/S/16/6M	.188"	16'	16.4	13.1	10.6	8.6	7.4	6.2	5.3
VAN6/S/16/6Q	.250"	16'	22.3	17.9	14.6	12.1	10.2	8.7	7.5
VAN6/S/18/6M	.188"	18'	13.6	10.7	8.7	7.1	5.9	5.0	4.2
VAN6/S/20/6Q	.250"	20'	15.8	12.5	10.1	8.3	6.9	5.8	5.0
VAN6/S/25/6Q	.250"	25'	10.5	7.9	6.3	5.0	4.1	3.4	2.8
VAN6/F/14/6Q	.250"	14'	24.9	19.4	15.3	12.2	9.8	7.9	6.3
VAN6/F/18/6Q	.250"	18'	17.1	12.9	9.7	7.4	5.6	4.0	2.9
VAN6/F/20/6Q	.250"	20'	14.1	10.3	7.6	5.4	3.9	2.6	1.4
VAN6/F/25/6Q	.250"	25'	8.3	5.4	3.2	1.6	0.3	0.0	0.0

CAUTION: Consult factory for structural approval prior to attaching banners or other appendages. Warranty void if pole is cut, welded, drilled or otherwise modified outside Beacon factory.

P. 4

BEACON
design . performance . technology

Ordering
rev 03.21.2013

Type: S3

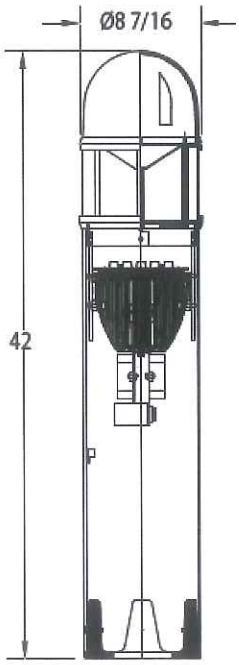
Ordering Code: MTB-F 42 AF 24NB-27 4K IND5 BB

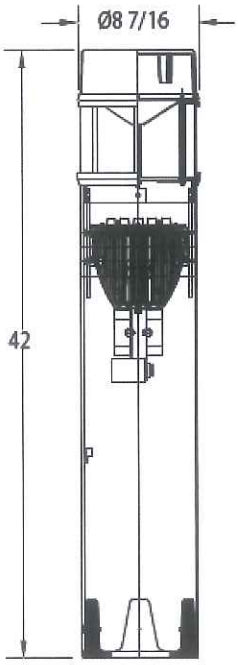
Job Name: Clifford School Renovation

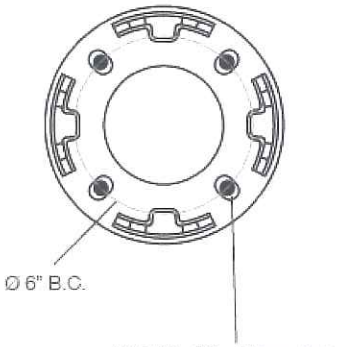
Notes:

METRO led bollard

MTB-D	MTB-F	anchor bolt detail







ORDERING EXAMPLE: MTB-F / 42 / AC / 24NB-27 / 4K / UNV / IND5 / BB

model	height (overall)	lens finish	engine-watts	cct-color temp	voltage	optics	options	color
MTB-F flat top	**42** 42"	**AC** clear acrylic	**24NB-27**	**5K** 5000K	**UNV** 120-277V	**IND5** indirect type V *(360° standard)*	**HSS-120** housing side shield 120°	**BB** black
MTB-D domed top	__ custom	**AF** frosted acrylic	24NB-55	**4K** 4000K	347V		**HSS-180** housing side shield 180°	**BZ** bronze
				3K 3000K	480V		**OCS-BI** microwave motion sensor [2]	**BW** white
					12VDC [1]			**BG** green
				5k 5000K (standard)	____ other			**BY** gray
								MB met. bronze
								MT met. titanium
								___ RAL
								___ other

[1] consult factory for **12VDC** [2] **OCS-BI** motion sensor time delay operates 1/2 leds & half power

METRO led bollard

Specification

rev 03.21.2013

GENERAL: Each Beacon Metro Bollard is a luminaire with an LED heat sink and an LED engine containing 24 high powered indirect LEDs. Die cast louvers are optional. The LED engine is concealed in shaft to eliminate glare. The optics are narrow beams designed to provide glare free indirect lighting.

UPPER HOUSING: A die cast aluminum dome top secures to a one-piece die cast aluminum top assembly with concealed tamper resistant screws.

LOWER HOUSING: .125" wall 6063-T5 extruded aluminum which connects to the top the mounting tenon with internal bolts, inaccessible after installation.

LENS & OPTICAL SYSTEM: Beacon LED Bollards feature The LED module and heat sink shall be removable and upgradable. The drivers shall be mounted on a removable plate and protected by a 10,000 amp transient surge protector.

The heat sink shall be 356 cast aluminum and be tested with 24 Cree XP-G / 130 lumen LEDs at 4500k. The 24 LED Array shall be 60 watts maximum and be provided with 12 degree wide beam Type V lenses. Each LED shall have one optical lens. The Heat Sink & LED Array shall be mounted to a mounting plate and pointed upwards into an indirect reflector. No direct top mounted optics or aiming of individual LEDs will not be accepted.

ELECTRICAL: Luminaires are equipped with LED drivers that accepts 100V through 277V, 50 Hz to 60 Hz (UNIV), or a driver that accepts 347V or 480V input. Power factor is .92 at full load. All electrical components are rated at 50,000 hours at full load and 25°C ambient conditions per MIL-217F Notice 2. Optional 0 to 10 volt dimming drivers are available upon request. All driver components supplied are component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600VAC at 50°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

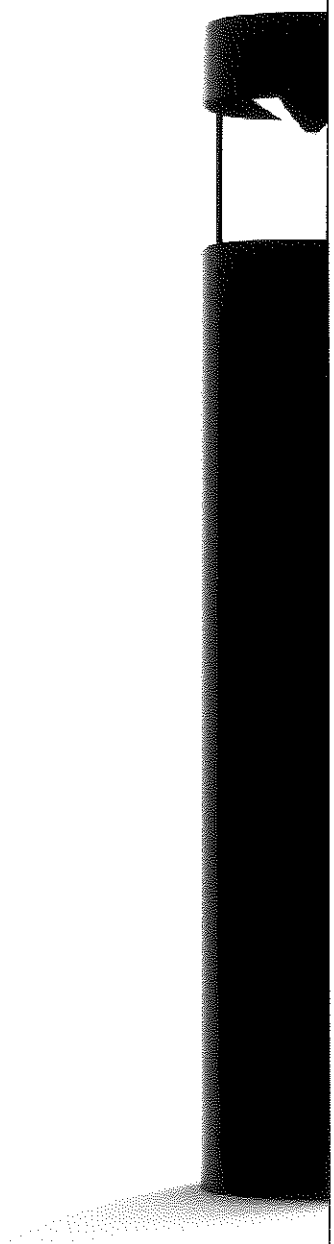
SURGE PROTECTOR: The onboard surge protector shall be a UL recognized component for the United States and Canada and have a surge current rating of 10,000 Amps using the industry standard 8/20 µSec wave. The LSP shall have a clamping voltage of 320V and surge rating of 372J. The case shall be a high-temperature, flame resistant plastic enclosure.

FASTENERS: All fasteners shall be stainless steel. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required, consult factory).

MOUNTING: A high strength steel mounting plate, hot-dip galvanized after fabrication, is secured and double-nut leveled to the concrete footing with (4) 1/2" x 8" x I 1/2" anchor bolts on a 4 3/4" - 6" bolt circle.

AGENCY CERTIFICATION: The luminaire shall bear a CSA label and be marked suitable for wet locations.

WARRANTY: Beacon luminaires feature a 5 year limited warranty. Beacon LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer. See Warranty Information on www.beaconproducts.com complete details and exclusions.



Q.1

ENGINEERS
FST
Since 1914

FAY, SPOFFORD & THORNDIKE
778 Main Street, Suite 8
South Portland, ME 04106
Toll Free: 800.835.8666
Main: 207.775.1121
Fax: 207.879.0896
www.fstinc.com

November 18, 2013

Mr. William Needelman, AICP
Planning and Development Department
City of Portland, Maine
389 Congress Street
Portland, Maine 04101-3509

Subject: Nathan Clifford School Redevelopment
Response to Peer Review Comments

Dear Bill:

We have received and reviewed your comments as emailed on November 14, 2013 as well as Woodard & Curran's peer review comments dated November 13, 2013 regarding the Final Level III Site Plan Application for the Nathan Clifford School Redevelopment project. We offer our responses to these comments. For ease of reference we have repeated each comment in *italics* followed by our response.

WOODARD & CURRAN COMMENTS

Comment 1:

The Applicant has noted that underground utility installation details and confirmation of capacity to serve the development from the utility companies is being coordinated at this time. If response is not received prior to Public Hearing, we recommend that statements of ability to serve the project and a final utility plan be required as a Condition of Approval.

Response:

We have provided the ability to provide service response from Central Maine Power. We contacted Unitil regarding their ability to provide natural gas service into the building and we are including their response in Attachment A to this letter. We have also received a reply from the Portland Water District for water supply which has also been included in Attachment A. We continue to wait on a reply from the City of Portland Public Services Division regarding wastewater collection and treatment. If this reply is not available at the time of the Planning Board hearing we are quite amenable to allowing a subsequent submission as a condition of approval.

Q2

Comment 2:

The Applicant has proposed a rain garden for stormwater quality treatment. The Applicant should provide design details for the rain garden, a summary of the area draining to the rain garden (impervious and pervious area), and calculations demonstrating that the rain garden is sized to handle the water quality volume generated from the contributing area.

Response:

Details for the proposed rain garden are included in the accompanying plans. The rain garden sizing and performance criteria are contained in Attachment B to this response letter.

Comment 3:

The project will result in a net increase in impervious area of approximately 1,984 square feet; therefore, the project is required to include stormwater management features to control the rate of stormwater runoff from the site in compliance with the Flooding Standard. The Applicant has demonstrated an effort to reduce impervious area on the site, and proposes a stormwater management system that will reduce the rate of runoff from the site. As such, and upon review of the additional information requested in Comment #2, we anticipate determining that the project is in general conformance with the Flooding Standard.

Response:

We have modified the plans based on several layout comments and as a result the overall level of imperviousness on the site has been reduced so that the post development impervious area is about 1,091 SF less than the existing conditions. As a result, we believe the project is exempt from compliance with the City's Stormwater Standards. However, we have included in the project design a Rain Garden that will function as a water quality treatment measure and quantity control measure.

Comment 4:

A stormwater inspection and maintenance plan must be developed in accordance with and in reference to MaineDEP Chapter 500 guidelines and Chapter 32 of the City of Portland Code of Ordinances for the stormwater management systems on the site.

Response:

We have prepared an abbreviated stormwater inspection and maintenance plan for the site and this document now accompanies this letter response as Attachment C.

Comment 5:

Per Section 13 of the City's Technical Manual, the Applicant is required to submit a Boundary Survey that has been Stamped by a Maine Licensed Professional Surveyor. At this time, only an unstamped existing conditions plan has been received. The Applicant has noted that Owen Haskell, Inc. has completing an ALTA Boundary and Topographic Survey Plan for the Site; this Survey should be included as part of the Final Submission Package.

Response:

We have included the Stamped Boundary plan as Attachment D to this letter.

Comment 6:

The "Resident Garden Boxes with Wood Chip Surface" area depicted on C-5 (Landscaping Plan) is located in a drainage pathway, where stormwater will drain through a curb-break off the parking lot area. The design should be adjusted to avoid drainage impacts to this area.

Response:

The Garden Box area has been adjusted so as to allow the flow of runoff towards the rain garden area. The garden area is currently a site amenity being considered by the developer that is subject to tenant interest. If tenant interest is low, the area may simply be grassed as lawn area.

Comment 7:

A 6" culvert is proposed below a walkway adjacent to the Rain Garden. The culvert is proposed to be laid flat (no slope); we recommend modifying the design to include at least minimal slope to reduce the potential for sediment depositing within the culvert.

Response:

We have modified the pipe layout to provide a modest pitch through the pipe to assure good flow.

STAFF COMMENTS (NOVEMBER 14, 2013 EMAIL TRANSMISSION)

Comment 1:

City Arborist, Jeff Tarling, is suggesting that the existing street tree collection and preservation of the Falmouth Street yard trees will satisfy the street tree requirement. There are, however, two trees in poor condition, and the project will be asked to fund and coordinate with the Arborist for their replacement.

Response:

We have spoken with Mr. Tarling and suggested that at the commencement of construction the developer's contractor coordinate with the City Arborist regarding any salvage of existing plant material on the site. In addition, the applicant is willing to contribute to the removal and replacement of two existing street trees.

Comment 2:

The dumpster should be located further away from the Payson Street abutter and the pathway to the open space. Planning recommends either in the location of parking spaces 31-32 or 28-29, or other location with separation and screening from abutters and the public street system.

Response:

The applicant has considered this comment and is now proposing an interior trash collection room on the south (rear) side of the building adjacent the parking lot. The rectangular space will contain space for several trash receptacles that may be carted out to the parking area for loading into the trash vendors compacting vehicle. This trash room will be accessible from the inside for tenant use. This will also preclude the need for an outside trash enclosure. The interior space will also allow for recycling to the extent practicable.

Comment 3:

DPS will be making additional comments regarding sidewalks, curbing, and the ADA ramps at Payson and Deane Street. FYI: The Deane Street curb cut at the loading area. DPS will likely suggest closing this cut. If the opening has an important role in your program, please describe for consideration.

Response:

We have modified the plan to include the area of sidewalk repairs/replacement identified by Public Services to this office. Regarding the Deane Street curb opening, it is the applicant's desire to maintain this opening as it provides direct access to the only accessible door into the building and also the most direct means of access to the proposed building elevator. Having this opening will be beneficial to tenants as they move in/out of the building as well as for general delivery of items that might otherwise be more difficult to move in/out of the building either via the building's stair entries or absent this relatively minor off-street loading space.

Comment 4:

There are other hanging thread issues regarding playground design, reuse of equipment, etc. Any thoughts on the granite half circle in the play area? If you don't want it, DPS may take it.

Q.5

Response:

The applicant remains amenable to working with City staff during the demolition phase for the salvage and/or removal of playground equipment and the design of the onsite public space. The applicant continues to weigh the reuse of the existing granite half circle within the site's landscape scheme. If it is determined that it will not be reused than they are amenable to discussing its removal by City forces.

An additional item not previously provided is a statement regarding HVAC emissions. We have included a letter in Attachment E.

At this time we are not aware of any further staff comments. We look forward to appearing before the Planning Board at their November 26, 2013 meeting at which we are hopeful a Final approval will be granted.

If you have any questions regarding these materials please contact this office.

Sincerely,

FAY, SPOFFORD & THORNDIKE

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk

Attachments: Attachment A – Ability Letter from Unitil & Portland Water District
Attachment B – Rain Garden Sizing & Performance Criteria
Attachment C – Stormwater Inspection & Maintenance Manual
Attachment D – Stamped Boundary Plan
Attachment E – Statement Regarding HVAC Emissions

c: Kevin Bunker, Developers Collaborative Predevelopment LLC
David Lloyd, Archetype, PA

R:\SP-M101-Nathan Clifford School\Admin\Permitting\City of Portland - Level III Final Site Plan application\SP-M101 2013.11.18-Needelman-ComRes.doc

R1

Attachment A
Comment Response Letter
11/19/13

Nathan Clifford School Redevelopment
Falmouth Street, Portland Maine
Applicant: Developers Collaborative Predevelopment LLC
Engineer: FST Inc
date: November 2013

1. Task: Determine sizing for proposed Rain Garden to serve proposed 38 space parking area and related landscape space.

2. Assumptions: The design includes a modest reduction in overall site imperviousness. The site currently drains to an onsite catch basin and/or directly to Deane Street. The drainage system within Deane Street is part of a larger combined sewer system. Per the City's Public Services division, if the developer maintains or decreases the site's impervious areas as part of the development then no further stormwater management measures will be required. Although the site plans indicate a slight decrease in imperviousness, it remains the applicant's intent to provide a small rain garden at the downgradient end of the site that will aid in providing a minor amount of water quality treatment and runoff storage, thus assuring no impacts to the downstream drainage and combined sewer infrastructure.

The following predevelopment and post development impervious areas have been computed:

Category	Existing Area (SF)	Proposed Area (SF)
Pavement	0	12284
Walks	0	1087
Ramp	0	188
Building	11690	11690
Existing Concrete	165	165
Existing Walks	616	616
Existing Pavement	14650	
Total	27121	26030

net decrease 1091 SF

Note the site plans indicate that the proposed pedestrian walks on the south side of the site will consist of pervious pavers that have not been considered as impervious areas. These areas total approximately 1,515 SF.

Reference:
1. Section 7.2 Underdrained Bioretention Cell BMP from Volume III: BMP Technical Design Manual. MeDEP December 2012
2. Site and Grading Plans by FST, Inc. November 2013

Calculations:

General Design Criteria: **Comments**

1. Treatment Volume

1" x impervious area or 12,745 SF = 1,062 CF plus
0.4" x landscape area or 7,500 SF = 250 CF
Total = 1,312 CF

Proposed storage = 359 CF
Proposed filter storage = 0.33 of filter volume or 435 CF
Total storage = 1,094 CF or approximately 83% of requirement — slightly below standard

2. Filter Area

No less than sum of 7% of impervious area and 3% of landscape area.

0.07 x 12,745 plus 0.03 x 7,500 = 1,118 SF
Proposed Size is approximately 1317 SF — meets standard

3. Basin Size

Less than 2,000 SF — meets standard

4. Construction Components

See typical Section in Detail sheets — meets standard

5. Impoundment Depth

Maximum 6" — meets standard

6. Outlet

6" underdrain system provided to be connected to the existing catch basin — meets standard

7. Sediment Pretreatment

Riprap aprons off the pavement surfaces will be provided to capture sediment before reaching the rain garden.

8. Access

Access available off the parking lot

R.2

ATTACHMENT C

Stormwater Inspections & Maintenance Manual

R3

INSPECTION AND MAINTENANCE MANUAL FOR STORMWATER MANAGEMENT AND RELATED STORMWATER FACILITIES

NATHAN CLIFFORD SCHOOL REDEVELOPMENT PORTLAND, ME

PREPARED FOR:

DEVELOPERS COLLABORATIVE PREDEVELOPMENT, LLC
17 CHESTNUT STREET
PORTLAND, MAINE 04101
(207) 766-1632

PREPARED BY:

FAY, SPOFFORD & THORNDIKE
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, MAINE 04106
(207) 775-1121

NOVEMBER 2013

R. 4

TABLE OF CONTENTS

R.5

I. INTRODUCTION

Relatively complex stormwater management facilities are commonly installed in development projects including, commercial facilities, and many other developments. The complexity and goals of these systems vary with the nature of the receiving water, as well as the type of development. Runoff from developed areas of the project, including rooftops, paved or lawn areas, typically contain materials that can impact the receiving waters. Source control and the installation of wet ponds, infiltration galleries, and water quality units, often combined with pretreatment measures or followed by vegetated buffer strips and other best management practices, can significantly reduce the non-point pollution discharge from the developed area. These measures are particularly important to projects in the watersheds of sensitive water bodies, or projects with potential impacts to groundwater. With the increased cost of land and development, there is an increased tendency to construct portions of the stormwater management systems underground.

The effectiveness of water quality management provisions and other components of the stormwater management system are dependent on their design, upkeep, and maintenance to assure they meet their intended function over an extended period of years. It is critical that the stormwater management facilities are regularly inspected, and that maintenance is performed on an as-needed basis. It must also be recognized that the effectiveness of these facilities, and their maintenance requirements, are related to the stormwater drainage facilities that collect and transport the flow to the ponds, infiltration galleries, and other treatment measures. Thus, maintenance should be directed to the total system, not just the pond or primary stormwater management facility.

The purpose of this document is to define, in detail, the inspection and maintenance requirements deemed necessary to assure that the stormwater management facilities function as intended when they were designed. Subsequent sections identify individual maintenance items, give a brief commentary of the function and need for the item, a description of the work required, and a suggested frequency of accomplishment. While the suggested programs and schedules must be adapted to specific projects, the material presented should provide guidance for a successful long-term program for operation and maintenance. A supplemental section provides guidance for construction monitoring of the facilities during their installation and more detailed checklists. Certain facilities, specifically the groundwater recharge and infiltration beds are not intended to be placed in service until the tributary catchment area has the permanent cover in place and any contributing turf areas have achieved a 90% catch of vegetation (i.e. established).

R-6

A. GUIDELINES OVERVIEW

A summary of the individual components of stormwater management facilities has been prepared. The format used in the summary is as follows:

Preface: A general description of what function/benefit the element is intended to provide. This is a short summary and not intended to provide the design basis which can be found in other sources.

Inspection: This section provides the inspection requirements for the individual component.

Maintenance: The section provides general information on the routine maintenance requirements of this element.

Frequency: This section outlines the best judgment of the designer on the system to the frequency of maintenance.

Comments: This section provides any particular comment on the site-specific features of this element. This is a summary only. The owner/operator should review the design drawings and documents carefully to understand the particular elements of the project. The end of this section should allow for the owner/operator to make notes on the specific program. This may include the selected maintenance procedure, cross-references to applicable design drawings, etc.

A list of the individual inspection/maintenance elements is provided in the table of contents. The guidelines are proposed for initial use with adjustments made as appropriate based upon specific project experience.

II. PROJECT OVERVIEW

Key permits issued (or applied for) on the project include:

- City of Portland Site Plan Review

A copy of the permit for the project should be appended to this manual as Appendix B. The Owner/Operator of the stormwater management system should review this permit for a general description and background of the project, as well as any specific permit conditions or requirements of the project.

The applicant has retained Fay, Spofford & Thorndike for civil engineering for the Nathan Clifford School Redevelopment in Portland, Maine. Fay, Spofford & Thorndike has prepared the design for the stormwater management facilities and may be contacted at:

Fay, Spofford & Thorndike
778 Main Street, Suite 8
South Portland, Maine 04106
(207) 775-1121

It is recommended the preparer of the plan be contacted with any particular questions on the design intent or similar issues.

R. 7

The proposed design will include a rain garden to provide a limited amount of water quality treatment.

The project is subject to the requirements of the City of Portland Code of Ordinances, Chapter 32. Specifically the post construction stormwater management plan. The City requirements have been reiterated for ease of reference; however, the owner shall be responsible to meet the current City code.

"Any person owning, operating or otherwise having control over a BMP required by a post construction stormwater management plan shall maintain the BMP's in accordance with the approved plan and shall demonstrate compliance with that plan as follows:

(a) Inspections. The owner of operator of a BMP shall hire a qualified post-construction stormwater inspector to at least annually, inspect the BMP's, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

(b) Maintenance and repair. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action (s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action (s) to the department of public services ("DPS") in the annual report.

(c) Annual report. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification to DPS in a form provided by DPS, certifying that the person has inspected the BMP (s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, including the record of the deficiency and corrective action (s) taken.

(d) Filing fee. Any persons required to file an annual certification under this section shall include with the annual certification a filing fee established by DPS to pay the administrative and technical costs of review of the annual certification.

(e) Right of entry. In order to determine compliance with this article and with the post-construction stormwater management plan, DPS may enter upon property at reasonable hours with the consent of the owner, occupant or agent to inspect the BMP's."

R.8.

III. STANDARD INSPECTION/MAINTENANCE DESCRIPTIONS

The following narratives describe the inspection/maintenance provisions for the site's rain garden area and related parking lot. These O&M procedures will complement scheduled sweeping of the pavement areas anticipated to occur at least twice per year. Proper O&M is necessary to make sure the system functions as designed.

A. RAIN GARDEN

Preface: The rain garden is an underdrain system with multi-media aggregates. A typical section is in the site drawings for the project.

Inspection: The rain garden can be inspected visually. A good time for inspection is within one day of a substantial rain event.

Maintenance:

Inlets
Inlets to each rain garden area should be kept open and in good working condition. This is particularly important around curb breaks and the sidewalk culvert. These locations should be marked on the roadway at the completion of construction to allow for winter snow dam removal. All eroded areas should be repaired.

Initial Turf Maintenance (when applicable)
Grassed soil filters should be allowed to develop for one full growing season post-construction prior to their first mowing. This allows for natural reseeding of grass seed mixes and establishment of a healthy stand of grass.

Long-Term Turf Maintenance (when applicable)
It is preferable to only mow grassed soil filter two to three times per year. While grassed soil filters can be mown during routine lawn maintenance, excessive mowing reduces the viability of grasses and grass roots and can overcompact the surface layer of the soil filter media.

Large Debris
Large debris within the ponding area should be removed.

Erosion in the Soil Filter Area
Any eroded areas should be repaired as soon as practicable.

Weeds in the Soil Filter Area
Periodic weeding of the soil filter area may be necessary, particularly in the landscaped soil filters. Hand weeding is required as the use of herbicides is not recommended.

Surface Mulch Layer (when applicable)
Areas devoid of mulch should be re-mulched by hand. Every year, in the spring, a fresh layer of mulch should be added to the soil filter area.

R.9

Sedimentation (or Clogging) of Soil Filter Area
If the soil filter area is holding water for a period longer than 48-72 hours, the soil mix has, more than likely, become clogged with sediment and/or the underdrains have clogged. To correct a standing water problem, the following remedial actions are recommended:

1. Evaluate the drainage area to the soil filter area to identify any potential sources of sediment, such as an erosive condition, that may be contributing to clogging. If a source is identified, it is recommended that that source be eliminated to the fullest extent practicable before proceeding with the remaining recommendations provided below.
2. Flush the underdrains. Use cleanouts to flush the underdrains. Sediment in the drains may be preventing the soil mix from draining. Make sure to provide a way to capture any flushed sediment before it enters the storm drain system downstream of the device. If, after flushing the underdrains, the device continues to hold water, the soil mix may be contaminated. As such, following the guidelines provided below is recommended.
3. Gage the extent of soil contamination. To do this, it is recommended that one or more test pits be dug with a shovel and that the soil layer be evaluated for contamination. Once the levels of contamination have been determined (for example, the top 4" of soil appears to be contaminated), it is recommended that you proceed with the remaining remedial actions.
4. Harvest the plants (when applicable). Care should be taken in the removal and temporary storage of the plants so that as many as possible can be harvested for replanting in the soil filter area once the functioning of the device has been restored sufficiently.
5. Remove the mulch layer.
6. Remove the top few inches of contaminated soil plus an additional 2-inch of soil, and replace the removed soil with a clean soil mix in accordance with the soil mix specification applicable to the particular soil filter area.
7. Monitor the functioning of the soil filter area during the next two to three rain events. If the device appears to be draining as intended (e.g., there is no standing water 48-72 following a rain event), proceed with the remaining remedial actions. If the area continues to hold standing water, then the entire soil filter area soil mix and the underdrains may need to be removed and replaced. Reuse of any undamaged underdrains may be possible once they have been cleaned thoroughly.
8. Replant the harvested plants, and replace any plants that were rendered unusable during or following their removal from the soil filter area.
9. Replace the removed mulch layer with fresh mulch.
10. Water the plants in the soil filter for the next two or more weeks unless there is sufficient rainfall. This will help the plants to reestablish themselves.

Frequency: The rain garden should be cleaned 2 times per year.

Applicability: **Snow storage with the filter should be prohibited by Maintenance Personnel.**

B. CONTROL STRUCTURES

Preface: The water quality volume will be detained in the open rain garden and filter through the treatment measure. A ft. dia. catch basin will control the release from the rain garden filter media with an orifice cap on the outlet pipe. Runoff for storm events larger than 1" will overflow the existing catch basin grate and enter the pipe discharge to the City's combined system in Deane Street. The control structure will be designed to be inspected by removing the catch basin cover and inspection of the pipe and channels. Debris should be removed whenever observed. Entry may require CONFINED SPACE ENTRY procedures and appropriately trained personnel.

Inspection: The outlet control structures must be inspected to assure it maintains its intended hydraulic characteristics. The inspection would note any debris or sediment which may accumulate in the structure and in the inlet and outlet pipes. It is noted that it does not take much debris or silt to alter the hydraulic characteristics of the discharge. The inlet should be inspected to assure it is not blocked or restricted or there is sediment to the extent that its flow characteristics may be altered.

Maintenance: Maintenance of the existing catch basin will consist primarily of removing debris which may accumulate and sealing the bulkhead if leakage occurs.

Frequency: The control structure should be inspected quarterly, and after a high intensity rainfall event (in excess of 3 inches in a 24-hour period.

Maintenance/Inspection Responsibility:

Inspection Personnel: The maintenance personnel will be an outside agent hired by the applicant and will perform the scheduled maintenance/inspection.

Dates of inspections, maintenance performed, and any observed problems should be noted in the logs/records maintained by the outside agent.

Outside Contract Services: The outlet structure should be opened/inspected by the outside agent of the applicant on a quarterly basis. The logs and records of inspections and maintenance of the control structures should be maintained on site.

Replacement Parts/Repairs: No normal replacement parts are required. Inspection personnel should have a bucket to remove debris from the structure. If leakage of the structure occurs, it is recommended that repairs be made by a professional contractor familiar with hydraulic grouts.

R. 11

C. STORMWATER INLETS

Preface: The success of any stormwater facility relies on the ability to intercept stormwater runoff at the design locations. Stormwater inlets may include catch basins, open culverts, curb breaks, and field inlets. Inlets exist throughout the system at the points of collection. This section is directed at maintenance of the actual inlet point.

Inspection: The inspection of inlet points will need to be coordinated with other maintenance items, these include:

- Roadway/parking lot maintenance areas
- Building maintenance areas
- Grounds maintenance

The key elements of the inspection are to assure the inlet entry point is clear of debris and will allow the intended water entry.

Maintenance: The key maintenance is the removal of any blockage which restricts the entry of stormwater to the inlet. The removed material should be taken out of the area of the inlet and placed where it will not re-enter the runoff collection system. Snow should be removed from inlets in parking lots/roadway areas. Grass clippings and leaves should be bagged and removed particularly near the yard inlets near the building or parking lot edges.

Frequency: All inlets should be inspected on a quarterly basis, and after/during significant storm events.

Maintenance/Inspection Responsibility:

Maintenance Personnel: The applicant's outside agent will perform the normal maintenance/inspections of the inlets.

D. PARKING LOT CLEANING

To protect the rain garden water quality filter, it is recommended the parking lot be 4 times between April and November and that power washing with an appropriate vacuum/power wash vehicle be done once a year or as required by the Long Creek Watershed Management District.

Maintenance: It is recommended this service be contracted with the firm that maintains lawns and landscaping.

E. LITTER

Litter should be removed as a matter of course by workers and a part of the grounds maintenance contract.

F. SUMMARY CHECKLIST

The above described inspection and maintenance items have been summarized on a checklist appended hereto as Appendix C.

R.12

IV. PROGRAM ADMINISTRATION

A. GENERAL

A reliable administrative structure must be established to assure implementation of the maintenance programs described in the foregoing section. Key factors that must be considered in establishing a responsive administrative structure include:

1. Administrative body must be responsible for long-term operation and maintenance of the facilities.

2. Administrative body must have the financial resources to accomplish the inspection and maintenance program over the life of the facility.

3. The administrative body must have a responsible administrator to manage the inspection and maintenance programs.

4. The administrative body must have the staff to accomplish the inspection and maintenance programs, or must have authority to contract for the required services.

5. The administrative body must have a management information system sufficient to file, retain, and retrieve all inspection and maintenance records associated with the inspection and maintenance programs.

If any of the above criteria cannot be met by the entity assigned inspection and maintenance responsibilities, it is likely that the system will fail to meet its water quality objectives at some point during its life. While each of the above criteria may be met by a variety of formats, it is critical to clearly establish the assigned administrative body in a responsible and sustainable manner.

B. RECORD KEEPING

Records of all inspections and maintenance work accomplished must be kept and maintained to document facility operations. These records should be filed and retained for a minimum 5-year time span. The filing system should be capable of ready retrieval of data for periodic reviews by appropriate regulatory bodies. Where possible, copies of such records should also be filed with the designated primary regulatory agency for their review for compliance with permit conditions. Typical inspection and maintenance record forms are attached hereto as Appendix A.

C. CONTRACT SERVICES

In some instances or at specific times, the Maintenance Personnel may not have the staff to conduct the required inspection and/or maintenance programs as outlined in this document. In such cases the work should be accomplished on a contractual basis with a firm or organization that has the staff and equipment to accomplish the required work.

R. 13

The service contract for inspection and maintenance should be formal, well written legal document which clearly defines the services to be provided, the contractual conditions that will apply, and detailed payment schedules. Liability insurance should be required in all contracts.

APPENDIX A

Sample Inspection Logs

NATHAN CLIFFORD SCHOOL
PORTLAND, MAINE

RAIN GARDEN
ANNUAL INSPECTION & MAINTENANCE LOG

FACILITY:		**YEAR:**	
LOCATION:		**CONTRACTOR:**	
FUNCTION:		**INSPECTOR:**	
DATE OF INSPECTION:			
ITEM IDENTIFICATION	**DESCRIPTION OF CONDITIONS**	**MAINTENANCE ACCOMPLISHED**	**DATE OF MAINTENANCE**
GENERAL COMMENTS:			

NATHAN CLIFFORD SCHOOL
PORTLAND, MAINE

RAIN GARDEN
MONTHLY INSPECTION & MAINTENANCE LOG

FACILITY:			YEAR:			
LOCATION:			CONTRACTOR:			
FUNCTION:						
MONTH	DAY	INSPECTOR	WATER DEPTH	OVERFLOW WEIR		WEIR CONDITION
				CLEAR	DEBRIS	
JANUARY						
FEBRUARY						
MARCH						
APRIL						
MAY						
JUNE						
JULY						
AUGUST						
SEPTEMBER						
OCTOBER						
NOVEMBER						
DECEMBER						
LIST SPECIAL MAINTENANCE UNDERTAKEN:						

NATHAN CLIFFORD SCHOOL
PORTLAND, MAINE

RAIN GARDEN
SEMI-ANNUAL INSPECTION & MAINTENANCE LOG

SEMI-ANNUAL INSPECT 1.2	FACILITY:
DATE:	LOCATION:
INSPECTOR:	FUNCTION:
WEIR CONDITION:	
OUTLET CONDITION	

FORE BAY SUMP	EST. DEPTH SED.	REMOVED? Y/N	EST. VOL. CY	WHERE DISPOSED OF	STRUCTURAL CONDITION

CONTROL STRUCTURE:
DESCRIBE CONDITIONS FOUND & MAINTENANCE ACCOMPLISHED:

R.16

R.17

APPENDIX B

Permits for Project

(To be Added at a Subsequent Time)

R.18

APPENDIX C

Summary Checklist
Inspection and Maintenance

R.19

Stormwater Management System Maintenance Program Summary Checklist						
		Frequency				
Item	Commentary	Monthly	Quarterly	Semi-Annual	Annual	Long Term
Control Structure	Inspect outlet control to assure it maintains its hydraulic characteristics. Inspect inlets for blockage.		X			
Rain Garden	Inspect at least twice per year and replace dead vegetation as necessary.			X		
Parking Lot Cleaning	Parking lot should be swept 4 times between April and November. Power washing with an appropriate vacuum/power wash vehicle should be done once a year or as required by the Long Creek Watershed Management District.		X		X	
Litter	Litter should be removed daily.					

Memorandum
Planning and Urban Development Department
Planning Division

To: Carol Morrissette, Chair and Members of the Portland Planning Board

From: Bill Needelman, Senior Planner

Date: October 18, 2013

Re: Nathan Clifford School Reuse
172 Falmouth Street
Developer's Collaborative. Represented by: Kevin Bunker
Engineering: Steve Bushey, PE. FST
Architect: David Lloyd, Archetype

Project #: 2013-229 **CBL:** 066A A001001

Meeting Date: October 22, 2013

I. Introduction:

The Planning Board is asked to hold a workshop review of a preliminary proposal by the Developer's Collaborative, represented by Kevin Bunker, for the re-use and redevelopment of the Nathan Clifford School in the Oakdale neighborhood. The applicant proposes to develop the school building into 19 market rate residential units with associated site changes for parking, pedestrian circulation, and solid waste collection. A significant portion of the site is to remain accessible to the public as improved open space.

The proposal requires review by the Planning Board as a Level III Site Plan for change of use and Subdivision. The project will be separately reviewed by the Zoning Board of Appeals as a conditional use (residential conversion of a non-residential structure in the R-5 zone), and by the Historic Preservation Board for a Certificate of Appropriateness under the Historic Preservation Ordinance.

The applicant has provided a preliminary application and the Board can expect greater detail and a more thorough review pending submission of a final application. This workshop was noticed by mail to 227 neighbors and interested parties and was advertised in the October 14 and 15, 2013 editions of the Portland Press Herald.

II. Background:

Following the closure of the Nathan Clifford School, the City Council established an advisory task force to recommend uses and a process for finding a new owner and developer for the historic school building and grounds. In November 2012, the Council adopted the advisory task force's recommendation to seek a developer with a preference for proposals that are generally consistent with the current R-5 zoning. Based on a request for qualifications process, the City is currently negotiating with the Developer's Collaborative as the presumed developer of the project. The Developer's Collaborative proposed a residential redevelopment of the site that keeps within the limits of the R-5 zone, does not require exterior additions or changes to the building footprint, and retains a significant portion of the site available for public use.

III. Site Description

The Nathan Clifford School opened in 1909 on portions of the old City Farm in the then emerging Oakdale Neighborhood. Designed by the Stevens architectural firm, the school was a model building in its day and served as a neighborhood anchor for nearly a century.

The building sits on +/-62,000 sq ft of land with its front door facing northerly onto Falmouth Street and has significant frontage to the east on Deane Street and to the West on Payson Street. The southerly portion of the site is occupied by paved play surfaces, a playground, a small multi-use field and track.