



TOWN OF BRUNSWICK

PLANNING BOARD

28 FEDERAL STREET, BRUNSWICK, ME 04011-1583

**TOWN OF BRUNSWICK
PLANNING BOARD
AGENDA
BRUNSWICK STATION
16 STATION AVENUE, BRUNSWICK, ME
ROOM 217
Tuesday, September 25, 2012
7:00 P.M.**

- 1. Case Number : 12-030 Brunswick Police Station:** The Board will review and take action on a **Final Plan** application submitted by the Town of Brunswick to construct a police station at 1 & 3 Stanwood Street and 81 & 85 Pleasant St (**Assessor's Map U15, Lots 74,75,76,77**) in the **Town Residential 1 Zoning District**.

- 2. Case Number 12-031 Brunswick Landing Subdivision:** The Board will review and take action on a **Sketch Plan** application submitted by the Midcoast Regional Redevelopment Authority to create 43 lots at Brunswick Landing (**Assessor's Map 40, Lot 2**) in the **BNAS Reuse Zoning District**.

- 3. Case Number 12-023 Workshop - Midcoast Regional Redevelopment Authority Subdistrict Amendments:** The Board will hold a workshop to review and comment on proposed subdistrict zoning amendments at Brunswick Landing (**Assessor's Map 40, Lot 2**) in the **BNAS Reuse Zoning District**.

4. Other Business

5. Minutes

It is the practice of the Planning Board to allow public comment on development review applications and all are invited to attend and participate.

Please call the Brunswick Department of Planning and Development (725-6660) with questions or comments. Individuals needing auxiliary aids for effective communications please call 725-6659 or TDD 725-5521. This meeting will be televised.

MAJOR DEVELOPMENT REVIEW
FINAL PLAN APPLICATION

1. Project Name: BRUNSWICK POLICE STATION
2. Project Applicant
Name: TOWN OF BRUNSWICK
Address: 28 FEDERAL STREET
BRUNSWICK, ME 04011-1583
Phone Number: 207-725-6660
3. Authorized Representative
Name: DONHAM & SWEENEY-ARCHITECTS
Address: 68 HARRISON AVE.
BOSTON, MA 02111
Phone Number: 617-423-1400 OR 207-586-6000
4. List of Design Consultants. Indicate the registration number, address and phone number
Of any engineer, surveyor, architect, landscape architect or planner used:
 1. DONHAM & SWEENEY-ARCHITECTS, 68 HARRISON AVE, BOSTON MA, 02111 617-423-1400 BRETT DONHAM #496
 2. SITELINES, PA, 4 CUMBERLAND ST., BRUNSWICK, ME 04011 207-725-1200 CURTIS NEWFIELD #9779
5. Physical location of property being affected: 1 & 3 STANWOOD STREET AND 81 & 85 PLEASANT STREET
6. Lot Size: 73,184 SF
7. Zoning District: TR-1
8. Indicate the interest of the applicant in the property and abutting property. For example, is the applicant the owner of the property and abutting property? If not, who owns the property subject to this application? THE APPLICANT IS THE OWNER OF THE PROPERTY, BUT NOT THE ABUTTING PROPERTY.
9. Assessor's Tax Map U15 Lot Number 74,75,76,77 of subject property.
10. Brief Description of proposed: CONSTRUCT A NEW POLICE STATION WITH RELATED PARKING & LANDSCAPING
11. Describe Specific Physical Improvements to be Done: NEW BUILDING IS DESCRIBED ON THE ATTACHED PLANS & ELEVATIONS IT HAS A 65'x117' & 2 FLOORS FOR A TOTAL AREA OF ABOUT 21,000 SF.

Owner Signature: _____

Applicant Signature (if different): [Signature]

Required Attachments (by Applicant):

- Final Plan Check List
- Final Plan Requirements for Open Space Developments (if applicable)
- Request for Waivers (if applicable)
- Required Copies of Final Plan

Required Attachment (by Planning and Development Department):

- Listing of all owners of property within 200-foot radius of property under review.

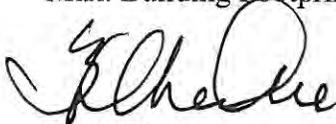
Brett Donham, Principal, AIA
Jeff Shaw, Principal, AIA LEED AP

C. Christopher Logan, Associate, AIA

BRUNSWICK POLICE STATION
ZONING CALCULATIONS

31 August 2012

Standard	Allowed or Required	Proposed
Min. Lot Area deducting for the "slip lane" on Stanwood Street	7,500 SF	73,184 SF after
Min. Width	65 Ft.	276.14 Ft.
Min. Front Yard	15 Ft.	43 Ft.
Min. Rear Yard	15 Ft.	83 Ft.
Min. Side Yard	15 Ft.	19 Ft.
Max. Impervious Surface	50 %	46.8 %
Max. Building Height	35 Ft.	32 Ft.
Max. Building Footprint	7,500 SF	7,398 SF



Brett Donham



FINAL PLAN REQUIREMENTS

BRUNSWICK POLICE STATION

Key: "O" = omit; "S"=submit; "NA"=not applicable; "W" = waiver P=pending

Item	O	S	NA	W	P	Comments
Name of Development		X				
Scale, date, north point, area, number of lots (if subdivision)		X				
Boundaries of all lots and tracts with accurate distances and bearings, locations of all permanent monuments property identified as existing or proposed.		X				
Certification by a professional land surveyor that the land has been surveyed and the boundaries established in accordance with the State of Maine Board of Licensure for Professional Surveyors standards for Category 1 (Standard Boundary Survey), conditions 1, 2, or 3.		X				
Existing zoning district and overlay designation.		X				
Names of engineer and surveyor; and professional registration numbers of those who prepared the plan.		X				
Names of current owner(s) of subject parcel and abutting parcels.		X				
Name, location, width of paving and rights-of-way, profile, cross-section dimensions, curve radii of existing and proposed streets; profiles of center-lines of proposed streets, at a horizontal scale of 1" equals 50' and vertical scale of 1 inch equals 5 feet, with all elevations referred to in U.S.G.S. datum.			X			
A general road plan noting circulation, direction, traffic control devices, street lighting and type of lighting proposed.			X			
Existing and proposed easements associated with the development.			X			
Kind, location, profile and cross-section of all proposed drainage facilities, both within the development and outside of it, and a storm-water management plan which includes the submission requirements listed in the storm-water management checklist available in the Planning Department.		X				
Location of features, natural and artificial, such as water bodies, wetlands, streams, vegetation, railroads, ditches and buildings.		X				

O S NAW P

Location of existing and proposed utilities; water, sewer, electrical lines, and profiles of underground facilities. Tentative locations of any private wells.		X				
Existing and proposed location, size, profile and cross section of sanitary sewers; description, plan and location of other means of sewage disposal with evidence of soil suitability.		X				
Topography with counter intervals of not more than 2 feet.		X				
A Class A (high intensity) Soil Survey prepared in accordance with the standards of the Maine Association of Professional Soil Scientists.			X			
Location of all existing trees over 10 inches in diameter, locations of tree stands, and a plan showing all trees to be removed as a result of the development proposal.		X				
Lighting plan showing details of all proposed lighting and the location of that lighting in relation to the site.		X				
Existing locations and proposed locations, widths and profiles of sidewalks.		X				
Location map.			X			
Approximate locations and dimensions of proposed parking areas.		X				
Proposed ownership and approximate location and dimensions of open spaces for conservation and recreation.			X			
Grading, erosion control, and landscaping plan; proposed finished grades, slopes, swells, and ground cover or other means of stabilization.		X				
Reference to special conditions stipulated by the Planning Board, with conditions either set forth in full or on the plan or identified as specific documents filed with the Board.					X	
A wetlands map drawn by a specialist delineating wetland boundaries in accordance with the methods prescribed by the US Army Corps of Engineers.			X			
Dedicated public open spaces, areas protected by conservation easements, and existing and proposed open spaces or recreation areas.			X			

O S NA W P

For Open Space Development, a note indicating the total permitted lot count of the entire land tract based upon the destiny standards in this Ordinance, the number of lots created by the Plan, and the numebr of lots permitted to be subdivided in the future, as well as a table showing setback requirements and impervious surface coverage limits for each lot.			X			
Building envelops showing acceptable locations for principal and accessory structures.		X				

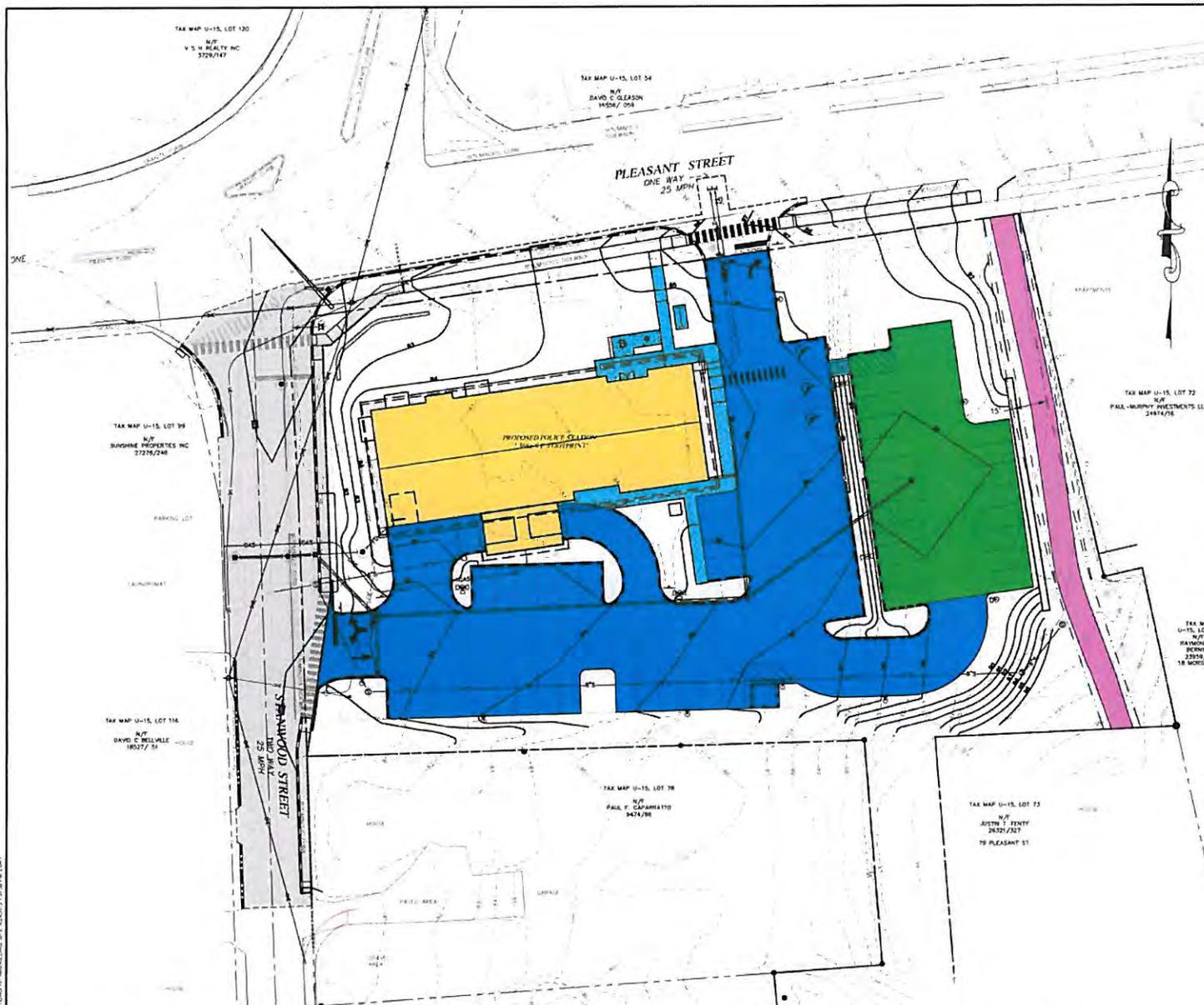
FINAL PLAN/SUPPORTING DOCUMENTS

Key: "O" = omit; "S"=submit; "NA"=not applicable; "W" = waiver P=pending

Item	O	S	NA	W	P	Comments
Documentation of Ownership or contract.			X			
Drafts of legal documents appropriate to the application, including: deeds, easements, conservation easements, deed restrictions or covenants, home/property owners association declarations and by-laws, and such other agreements or documents as are necessary to show the manner in which conservation land will be owned, maintained, and protected.			X			
Draft performance guarantee or conditional agreement.			X			
Disclosure of any required permits from the Department of Environmental Protection, Marine Resources, US Army Corps of Engineers, Department of Inland Fisheries and Wildlife, or other agencies, as applicable; or, if a permit has already been granted, a copy of that permit.			X			
Any additional studies required by the Planning Baord, which are deemed necessary in accordance with this Ordiancne.					X	TRAFFIC STUDY TO BE SUBMITTED 9/6/12
Storm water management program for the propsoed project prepared by a professional engineer.		X				
A storm water management checklist prepared by the Cumebrland County Soil and Water Conservation District made availabel at the Brunswick Department of Planning and Development.						

4
D S H W P

An erosion and sedimentation control checklist prepared by the Cumberland County Soil and Water Conservation District.			X		
A statement from the Brunswick-Topsham Water District of conditions under which water will be provided.					X
A statement from the Brunswick-Topsham Water District of its review and comments on the proposed use if the project involves development within the Aquifer Protection Zone.			X		
A Statement from the Fire Chief recommending the number, size, and location of hydrants, available pressure levels, road layout and street and project name, and any other fire protection measures to be taken.					X
A statement from the Superintendent of the Brunswick Sewer District of the conditions under which the Sewer District will provide sewerage disposal service and approval of the sanitary sewers proposed within the development.					X
Where a septic system is to be used, evidence of soil suitability.			X		
All applicable materials necessary for the reviewing entity to review the proposal in accordance with the Criteria of Section 411.					
A plan of all buildings with new construction or expansion of an existing facility, including type, size, and footprint, floor layout, setback, elevation of first floor slab, storage, and loading areas.		X			
An elevation view of all sides of each building proposed indicating height, color, bulk, surface treatment, and signage.		X			
A circulation plan describing all pedestrian and vehicle traffic flow on surrounding road systems.			X		
The size and proposed location of water supply and sewage disposal systems.		X			
A site landscaping plan indicating grade change, vegetation to be preserved, new plantings used to stabilize areas of cut and fill, screening, the size, location and purpose and type of vegetation.		X			

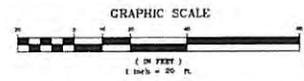


- IMPERVIOUS AREAS**
- POROUS PAVEMENT
6,530 SF (TOTAL)
1,959 SF (30%)*
 - BUILDING
7,368 SF
 - WALKS
1,790 SF
 - PAVEMENT
20,922 SF
 - ABUTTER DRIVE
2,223 SF

TOTAL IMP. AREA
34,262 SF

TOTAL LOT AREA**
73,184 SF

RATIO 46.8%



IMPERVIOUS AREA SUMMARY		
BRUNSWICK POLICE STATION STANWOOD & PLEASANT STREETS, BRUNSWICK, ME		
TOWN OF BRUNSWICK BRUNSWICK, ME		
SITELINES, PA ENGINEERS • PLANNERS • SURVEYORS LANDSCAPE ARCHITECTS 8 CUMBERLAND STREET, BRUNSWICK, ME 04011 207.725.1200 www.sitelinespa.com		
FILED BY	SCALE	SHEET
DRN BY	JOB #	
CHD BY	SS	
DATE	FILE #/DATE AS	

*POROUS PAVEMENT IS CONSIDERED 70% PERVIOUS. 30% APPLIED TO TOTAL IMPERVIOUS AREA
 **TOTAL LOT AREA AFTER TRANSFER OF LAND TO ROW FOR SLIP LANE CONSTRUCTION

LAND PROJECT: 20120301/STANWOOD/PLANS/DRG 01P - EXHIBIT 1 (SHEET 01 OF 04)

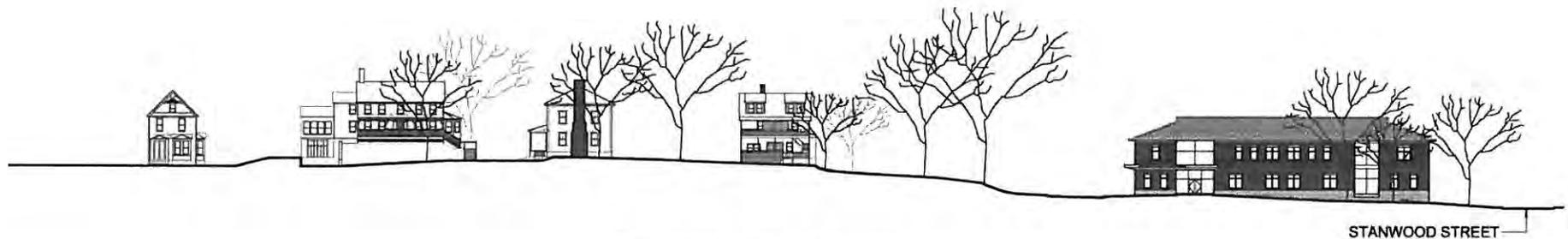
Village Review Board Hearing
Brunswick Police Station
August 28, 2012



Donham & Sweeney
ARCHITECTS

Douglas Richmond Architects

Village Review Board Hearing
Brunswick Police Station
August 28, 2012



BRUNSWICK POLICE STATION
PLEASANT STREET VIEW

STANWOOD STREET

Donham & Sweeney
ARCHITECTS

Douglas Richmond Architects

Village Review Board Hearing
Brunswick Police Station
August 28, 2012



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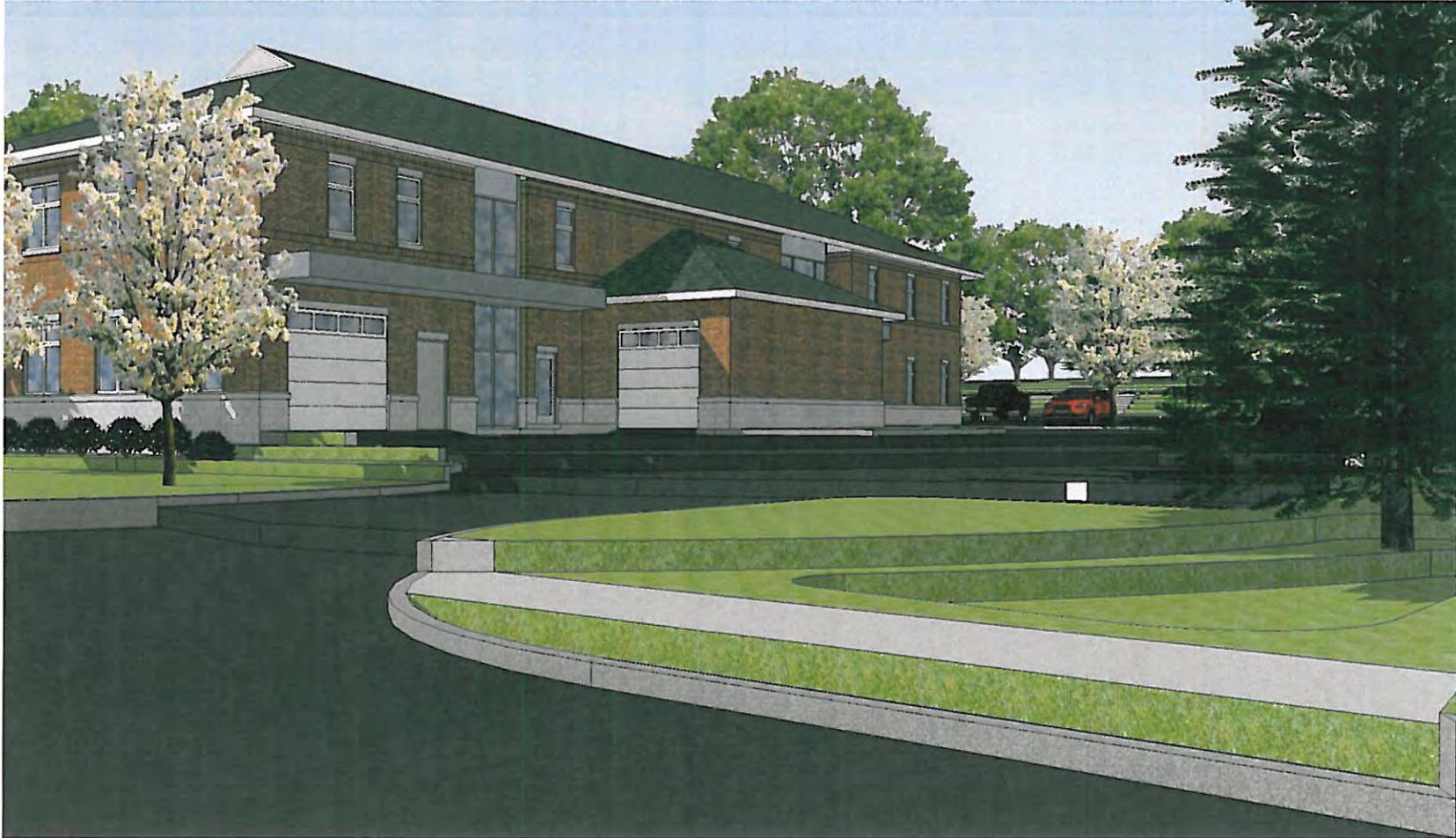
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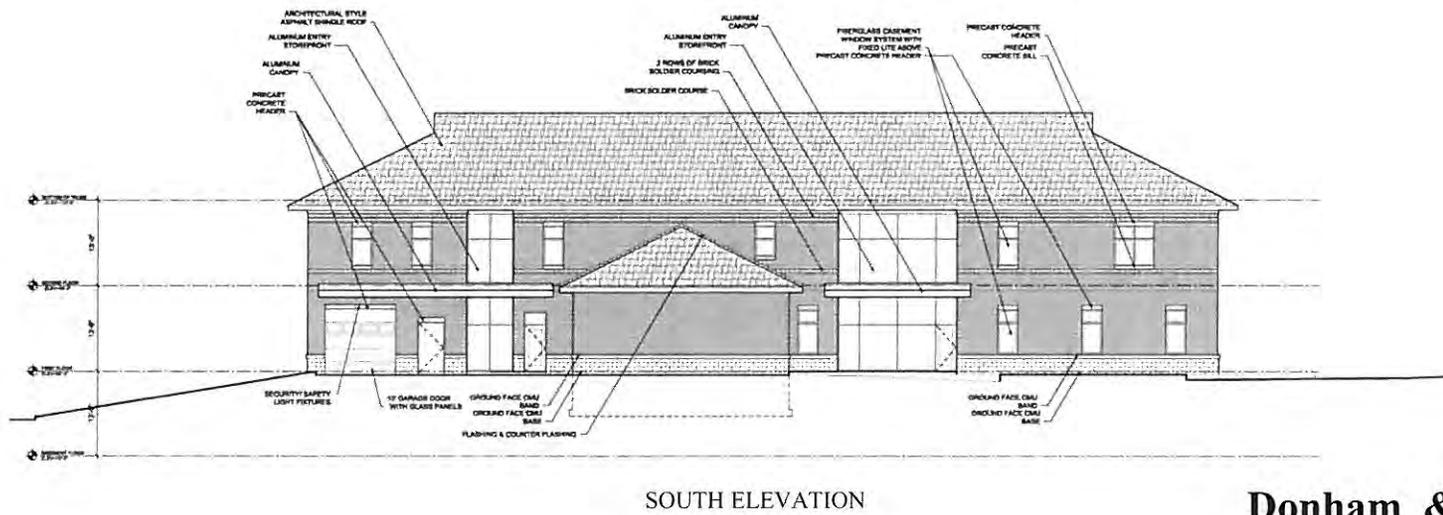
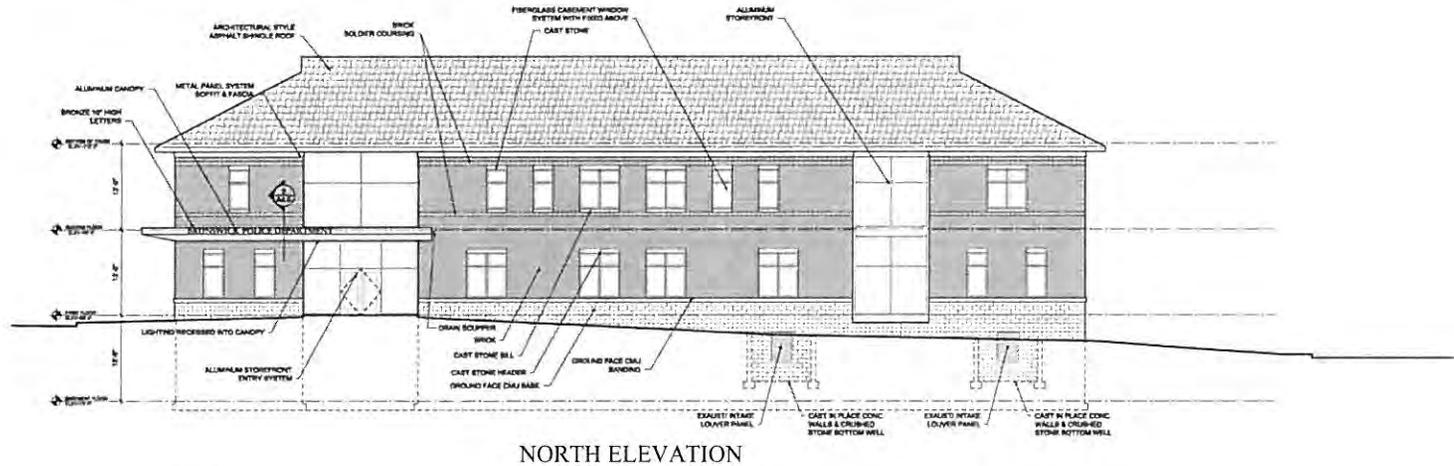
Donham & Sweeney
ARCHITECTS

Douglas Richmond Architects

Village Review Board Hearing

Brunswick Police Station

August 28, 2012



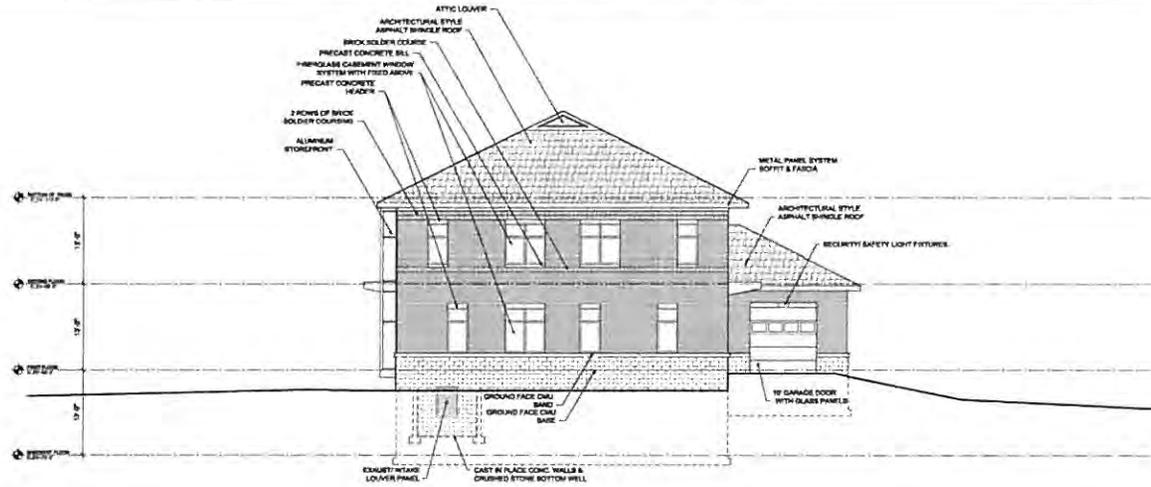
Donham & Sweeney
ARCHITECTS

Douglas Richmond Architects

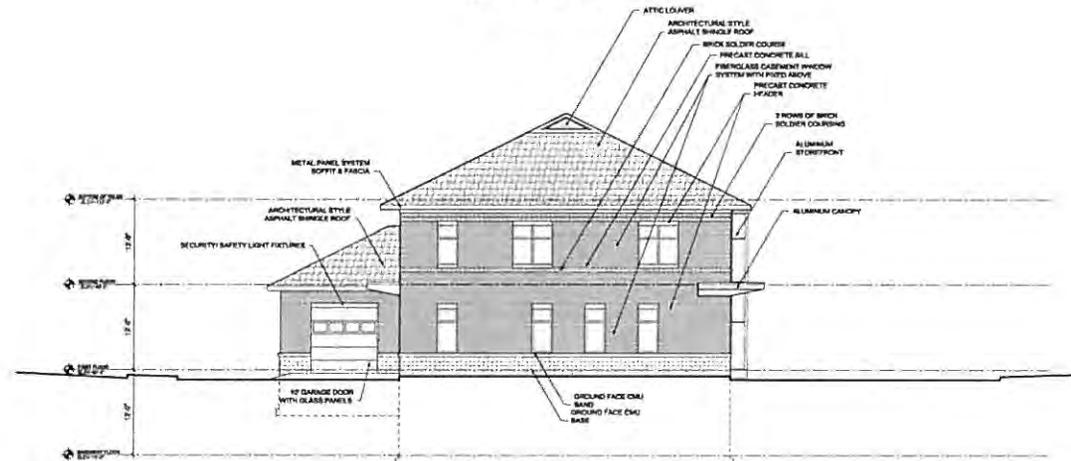
Village Review Board Hearing

Brunswick Police Station

August 28, 2012



WEST ELEVATION



EAST ELEVATION

Donham & Sweeney
ARCHITECTS

Douglas Richmond Architects

From: DONHAM, BRETT [BDONHAM@DONHAMANDSWEENEY.com]
Sent: Friday, August 31, 2012 9:28 AM
To: Curtis Neufeld
Cc: "Joe Marden"; Shaw, Jeff
Subject: FW: Police Station

Curt,

Please submit the Solid Waste Statement with the package, revised as indicated. We will indicate the dollar amount as "waived" until Gary Brown gets back to me.

From: Curtis Neufeld [<mailto:cneufeld@sitelinespa.com>]
Sent: Thursday, August 30, 2012 11:47 AM
To: DONHAM, BRETT; Shaw, Jeff
Cc: "Joe Marden"
Subject: Police Station

Brett, Per our conversation

Typical Solid Waste Statement (adjust and necessary, the rate per ton is current)

With regard to Solid Waste, using a rate of 1 pound per 100 s.f. of floor area per day (office/warehouse), it can be estimated that the Project will generate 38.3 tons of solid waste per year (assuming 7 days of operation for 52 weeks). Based on a rate of \$258.56 per ton, a fee of \$9,909.31 is estimated. **We have assumed this fee is waived.**

Typical Waivers **Please include this statement below, too, Curt.**

Based on the specifics of the project, the applicant will request waivers for the following application items:

- Class A Soil Survey. The project is located on soils suitable for the proposed use. The site is served by municipal water and sewer, so no wells or subsurface disposal systems will be required, which may necessitate a soils survey.
- Profile, cross-section dimensions, curve radii of existing streets. No changes are proposed to adjacent streets.
- Profile of water and sewer service lines. Sewer services will be extended to the parcel under separate work. The water service lines have been reviewed by the BTWD and profiles are not required. No new main extensions are proposed.

I have this covered in our part of the submission.

Our analysis of the zoning for the Police Station site shows the following dimensional restrictions compared to our proposed designs after removal of the slip lane area.

Standard	Allowed or Required	Proposed
Min. Lot Area	7,500 SF	68,717 SF NOW 75,237(
Min. Width	65 Ft.	300.77 Ft. NOW 276.14
Min. Front Yard	15 Ft.	43 Ft. NOW 43 ft
Min. Rear Yard	15 Ft.	70 Ft. NOW 83 ft
Min. Side Yard	15 Ft.	17 Ft. NOW 19
Max. Impervious Surface	50 %	49 % Now 46.8%
Max. Building Height	35 Ft.	32 Ft. SAME
Max. Building Footprint	7,500 SF	7,350 SF 7,398 ft

Curtis Y. Neufeld
Vice President
Sitelines PA

Brunswick Sewer District

10 PINE TREE ROAD
BRUNSWICK, MAINE 04011
bsd@brunswicksewer.org

TELEPHONE (207) 729-0148

FAX (207) 729-0149

September 4, 2012

Curtis Y. Newfeld, P.E.
Vice President
Sitelines, PA
8 Cumberland Street
Brunswick, Maine 04011

Re: Proposed Police Station – Ability to Serve
Pleasant Street/Stanwood Street
Brunswick, Maine

Dear Curtis:

This letter is to acknowledge receipt of your request of August 30, 2012 for confirmation of the District's willingness and capacity to serve the above referenced project.

It is my understanding the Town of Brunswick proposes to construct a 6,800 S.F. Police Station at the intersection of Pleasant Street and Stanwood Street in Brunswick, Maine. The project's average daily flow (ADF) is anticipated to be 540 gpd.

I have reviewed the material provided and conclude that the project as proposed will not adversely affect facilities of the District. I can state for this reason that the necessary willingness and capacity to serve the project exists throughout all affected components of the District's system.

It will be necessary for the project to secure an entrance permit from the District. That permit will be issued upon receipt of application for the project and following our review of construction details proposed. The project will be subject to the District's entrance charge program. Based on the ADF projected, the Entrance Charge will be assessed at \$3,634.97.
[(540gpd/175gpd) x \$1178]

Upon review of the Site Layout and Utility Plan provided, I have the following comments:

1. Project sanitary sewer service line will be privately owned and maintained in accordance with provisions of District Rules & Regulations. The District anticipates take over of ownership of proposed main line sewer constructed to tie in 2 existing homes, as shown on the plans.
2. The project, prior to any sewer facility construction, will require a sanitary sewer entry permit to discharge to District facilities. Entrance charge \$3,634.97 is due upon issuance of permit.
3. All sewer-related construction will be performed to District standards.

4. All sanitary sewer construction will comply with provisions of the Maine State Plumbing Code.
5. Design and construction of project sanitary sewers will exclude all non-sanitary ground, surface, foundation drain, floor drain, and roof drain waters. Sump pump discharges are not allowed.
6. Horizontal clearance between utility infrastructures will be sufficient to allow future utility maintenance operations without disturbance to adjacent utility infrastructure.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

BRUNSWICK SEWER DISTRICT

A handwritten signature in cursive script, appearing to read "R. A. Pontau Jr.", written in black ink on a white background.

Robert A. Pontau Jr., PE
Assistant General Manager

CC: Darcy Dutton, Brunswick Sewer District
Wesley Wharff, Brunswick Sewer District
Kris Hultgren, Town Planner, Brunswick, Maine



BRUNSWICK & TOPSHAM
WATER DISTRICT

PO Box 489
Topsham, Maine 04086
Telephone (207) 729-9956
Fax (207) 725-6470

Alan J. Frasier, PE
General Manager

Craig W. Douglas, PE
District Engineer

Daniel O. Knowles, CPA
Director of Finance and
Data Management Systems

William G. Alexander, Jr.
Operations Manager

September 5, 2012

Curtis Neufeld
Sitelines
8 Cumberland Street
Brunswick, ME 04011
Via email: cneufeld@sitelinespa.com

RE: Brunswick Police Station, Pleasant Street, Brunswick

Dear Mr. Neufeld:

This letter is to inform you that the District has the ability to serve the referenced project, and will provide service in accordance with Maine Public Utilities Commission and Brunswick & Topsham Water District Rules and Regulations.

Service must be taken from a public main in the street on which the property fronts. There is an existing 12-inch water main on Pleasant Street.

The customer or its authorized agent must make application for service. An application form is enclosed for your convenience. We require that the customer provide us with the estimated peak domestic demand so that we may properly size the service line and meter. If fire sprinklers are proposed, the sprinkler system designer should specify the service size required.

Please keep us informed as this project progresses. If you have any questions, please call.

Yours truly,

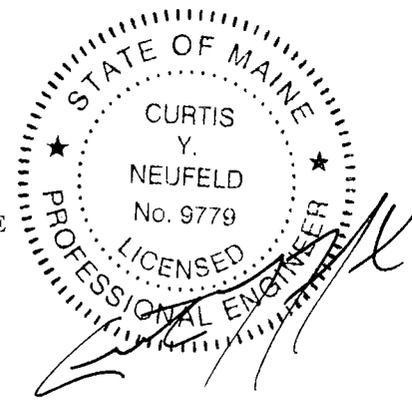
Eric Gagnon
Engineering Technician

Enc.

Cc: Craig Douglas

**BRUNSWICK POLICE STATION
STANWOOD AND PLEASANT STREETS, BRUNSWICK, MAINE**

STORMWATER MANAGEMENT PLAN



Introduction

The Town of Brunswick (herein referred to as Applicant) is proposing the construction of a two-story, 7,368 s.f. footprint police station building, with associated parking, infrastructure and landscaping to be located at the intersection of Stanwood and Pleasant Street in Brunswick, Maine. In anticipation of the future development, the three (3) residential homes, and a commercial building located on the site have been demolished. There is no existing stormwater management system present on the site, and stormwater runoff currently sheets off the site to the adjacent streets. There are no known areas of significant flooding on or abutting the site. The majority of stormwater runoff from the proposed development will be collected on-site and directed to a hydro-dynamic separator for treatment prior to discharge to the municipal storm drain system. A portion of the site will be paved with porous pavement that will allow stormwater to infiltrate beneath the pavement.

Study Methodology

Topographical data was obtained from on the ground survey. Drainage patterns were determined using the topographic mapping and were verified by a site reconnaissance visit. Surficial soils located in the vicinity of the site were obtained from the United States Department of Agriculture Natural Resources Conservation Service Soil Survey Geographic (SSURGO) Database (see Attachments). The Applicant's parcel includes the soil classifications listed below.

SOILS TYPES IN LOCAL STUDY AREA

Soils Series	Hydrologic Group (HSG) **
Hollis	C/D
Windsor	A

**Hydrologic Soils Group taken from SCS TR-55 Manual

Test pits were excavated at several locations on the site during the site analysis process by the town. The soils were observed to consist of sands having few fines and favorable for infiltration. Groundwater was not observed in any test pits to depths of 10' or greater. Based on the character of the soils observed, the Windsor soils are evident in the project area.

Flooding

The project area is located in Zone C (Areas of Minimal Flooding) of the Flood Insurance Rate Maps (FIRMs) for Cumberland County, Maine. The project area is located on Panel 15 of 35 (Community Panel 230042-0015-B, Effective June 3, 1986). An excerpt of the applicable FIRM is enclosed.

Off-Site Watersheds

There is an existing storm drain system in the Pleasant and Stanwood Streets rights-of-way. These storm drain systems combine at the intersection and continue north along Route 1, and discharge into the Androscoggin River. The surrounding area generally drains in a northwesterly direction towards

the Androscoggin River. Based on discussions with Town staff, the municipal drainage system has sufficient capacity to accommodate the stormwater runoff from the proposed development.

Pre-Development Conditions

The proposed site was previously developed and consisted of a commercial building, three (3) residential houses and associated driveways and parking areas. The buildings have been demolished, however, the paved areas remain (refer to Existing Conditions plan). The existing development included approximately 21,459 s.f. (0.49 acres) of impervious area. The terrain slopes generally westerly across the site towards Stanwood Street, and the lots drained to the front of the parcels.

Post-Development Conditions

Under post-development conditions, the parcel will be redeveloped and some of the land use will be converted to impervious areas (roofs and parking). It should be noted that a portion of the proposed parking area will consist of porous pavement (refer to Site Layout plan). The Town staff has determined pervious pavement will be considered 30% impervious for Town permitting purposes. The current design includes approximately 34,262 s.f. (0.79 acres) of impervious surface, or an increase of 12,803 s.f. (0.29 acres). A plan highlighting the proposed impervious areas has been enclosed. The porous pavement areas have been highlighted separately from the regular pavement for ease of review. As noted in the referenced plan, the impervious surface coverage is calculated to be 46.8%, which is based on total lot area after transfer of 2,052 s.f. to the Stanwood Street ROW to allow construction of a right turn lane.

Site Stormwater Evaluation

Based on discussions with Town staff, the proposed development has been designed to comply with the criteria of a draft ordinance for stormwater management. The draft ordinance requires a project to address stormwater quality treatment on a sliding scale based on the new impervious area constructed on the parcel. The combined parcels that will comprise the site had a pre-development impervious area of 21,459 s.f. (0.49 acres) based on the existing conditions survey. The proposed project will result in 34,262 s.f. (0.78 acres) of impervious area, or an increase 12,803 s.f. (0.29 acres). The proposed draft ordinance criteria require a project resulting in between 0.25 acre and 0.50 acres of new impervious area to provide treatment of a minimum of 25% of the total impervious area and 20% of the disturbed area. As such, the development has been designed to provide water quality treatment per the draft ordinance requirements.

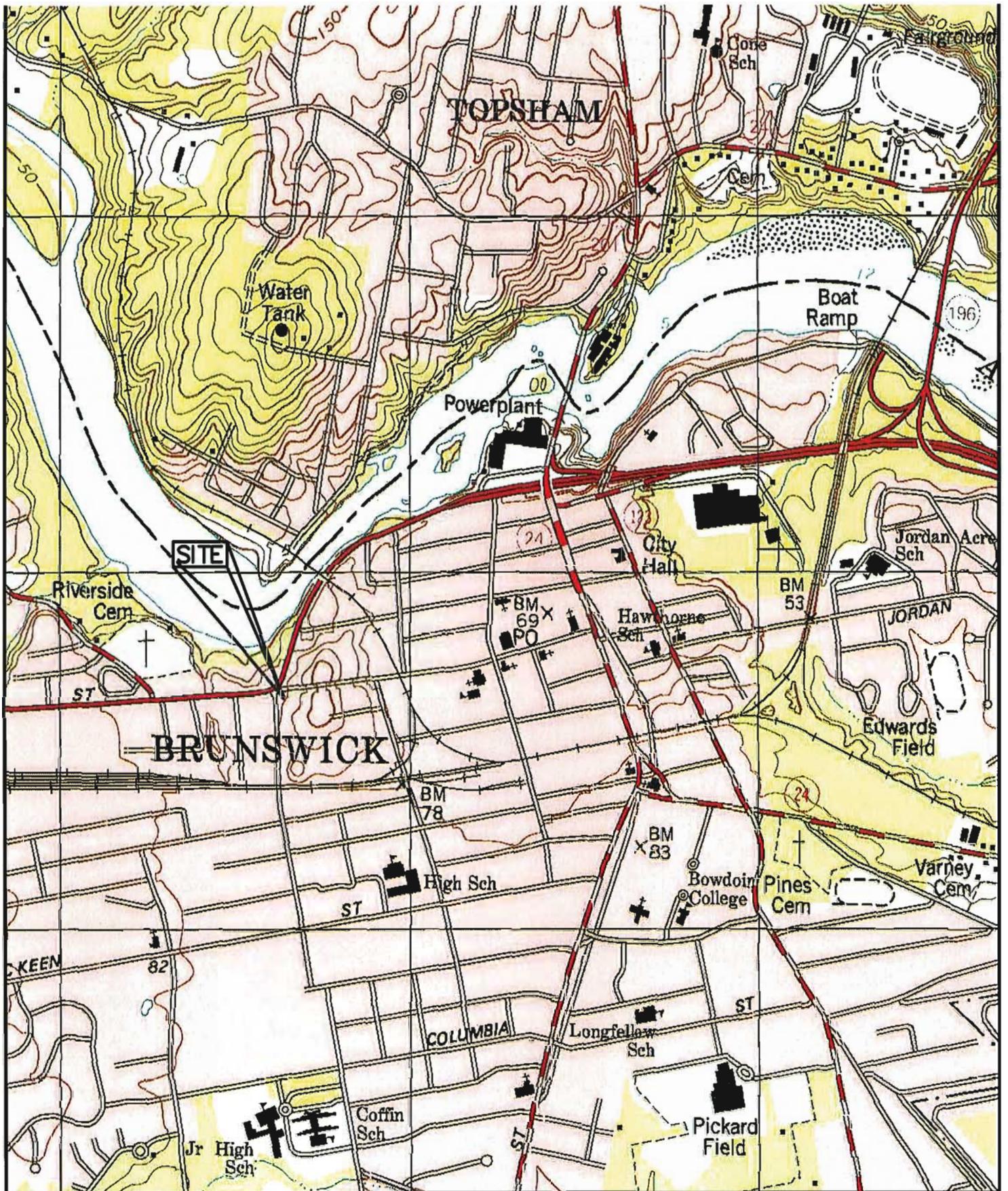
The water quality treatment is to be accomplished using best managements practices (BMP) approved by the Maine Department of Environmental Protection (MDEP). It is proposed to treat runoff from the site by a combination of porous pavement, drip edge filtration and a proprietary water quality unit. The upper parking lot will be constructed with porous pavement per the MDEP criteria. Additionally, the majority of the roof will be treated via a drip edge BMP. The table below summarizes the stormwater treatment in relation to the percentage of total impervious area:

Stormwater Treatment Summary		
BMP	Area (s.f.)	% of Total Impervious
Roof Drip line Filtration	3,750 s.f.	11.0%
Porous Pavement	6,350 s.f.	18.5%
Treated	10,100 s.f.	29.5%

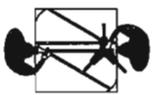
This combination of stormwater treatment BMPS satisfies the requirements of the draft ordinance. The remainder of the paved areas will be directed to a hydrodynamic separator known as a CDS unit from Contech Engineered Solutions, LLC. This treatment unit provides for removal of suspended solids, floating debris, and hydrocarbons. The treatment unit is designed to treat 100% of runoff up to a specific design flow rate, above which some runoff is by-passed through a weir inside the unit. An advantage of this treatment unit is that it is maintained by removal of solids and debris via a vactor-truck, which the town Public Works Department already uses on a contract basis for annual maintenance. It should be noted, the CDS treatment unit is not approved as a standalone device by the MDEP. However, as the project scale does not trigger MDEP permit requirements, and will meet the draft ordinance requirements with the porous pavement and drip edge BMPs, and based on discussions with Town staff, the proposed level of treatment provided is acceptable.

Conclusion

Runoff from the proposed impervious area for the project will be captured and conveyed to either a roofline drip edge, porous pavement, or a hydrodynamic separator. The stormwater management plan will not have an adverse impact on the municipal drainage system, adjacent parcels, or the receiving water bodies. The development has been designed to comply with the proposed draft ordinance for stormwater management. The project has been conceived with erosion and sedimentation controls and BMPs during and after construction.



SHEET: 1 OF 1

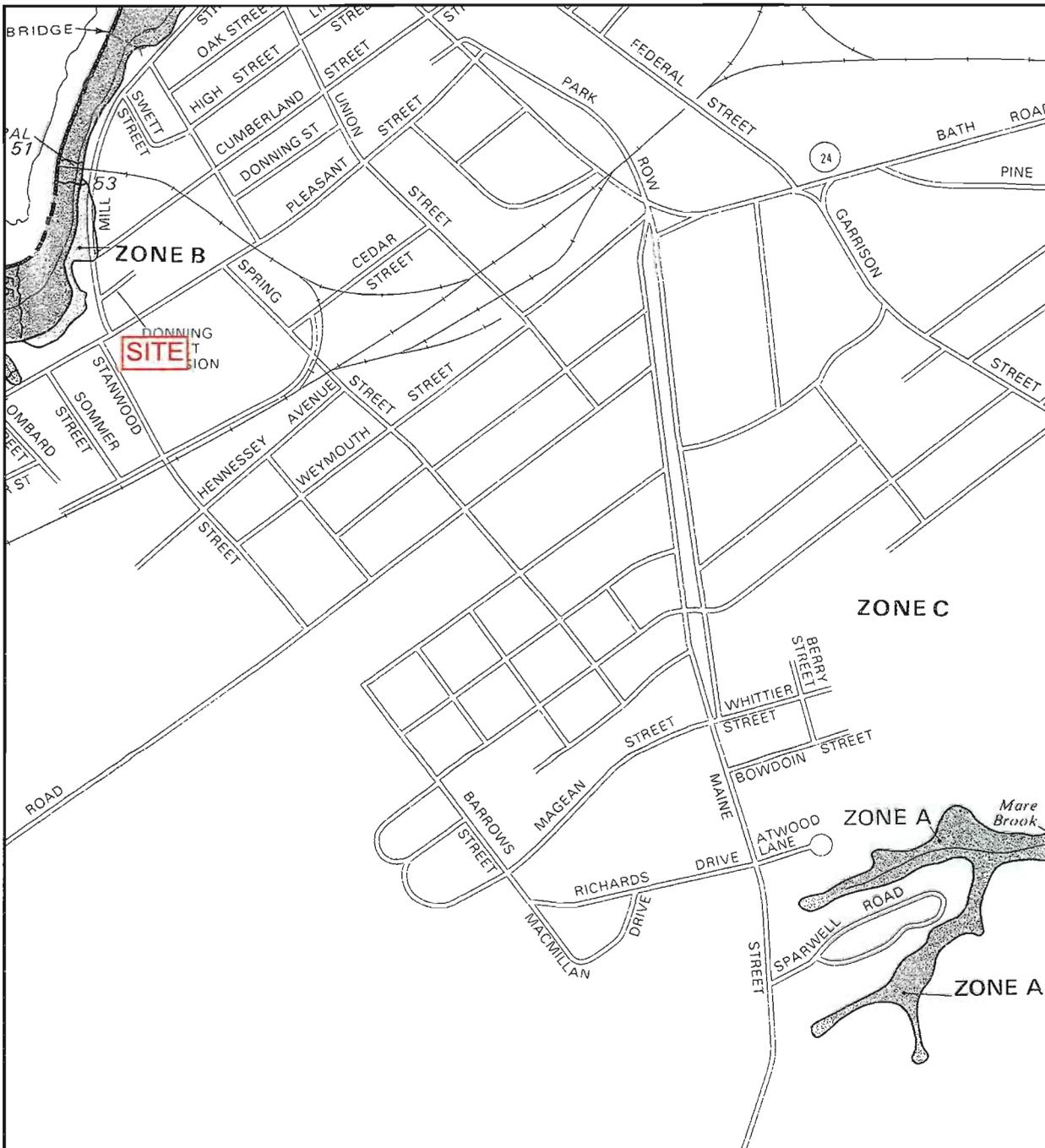


SITELINES
ENGINEERS PLANNERS

8 CUMBERLAND ST. BRUNSWICK, ME 04011
(207) 725-1200 FAX 725-1114

USGS LOCATION MAP
PROPOSED POLICE STATION
TOWN OF BRUNSWICK, MAINE

DATE: 12/15/2011
SCALE: NOT TO SCALE
JOB: 1911
FILE: 1911-USGS



APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
BRUNSWICK, MAINE
CUMBERLAND COUNTY

PANEL 15 OF 35
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230042 0015 B

EFFECTIVE DATE:
JANUARY 3, 1986



Federal Emergency Management Agency

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

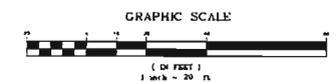
IMPERVIOUS AREAS

- POROUS PAVEMENT
6,530 SF (TOTAL)
1,959 SF (30%)*
- BUILDING
7,368 SF
- WALKS
1,790 SF
- PAVEMENT
20,922 SF
- ABUTTER DRIVE
2,223 SF

TOTAL IMP. AREA
34,262 SF

TOTAL LOT AREA**
73,184 SF

RATIO 46.8%



IMPERVIOUS AREA SUMMARY

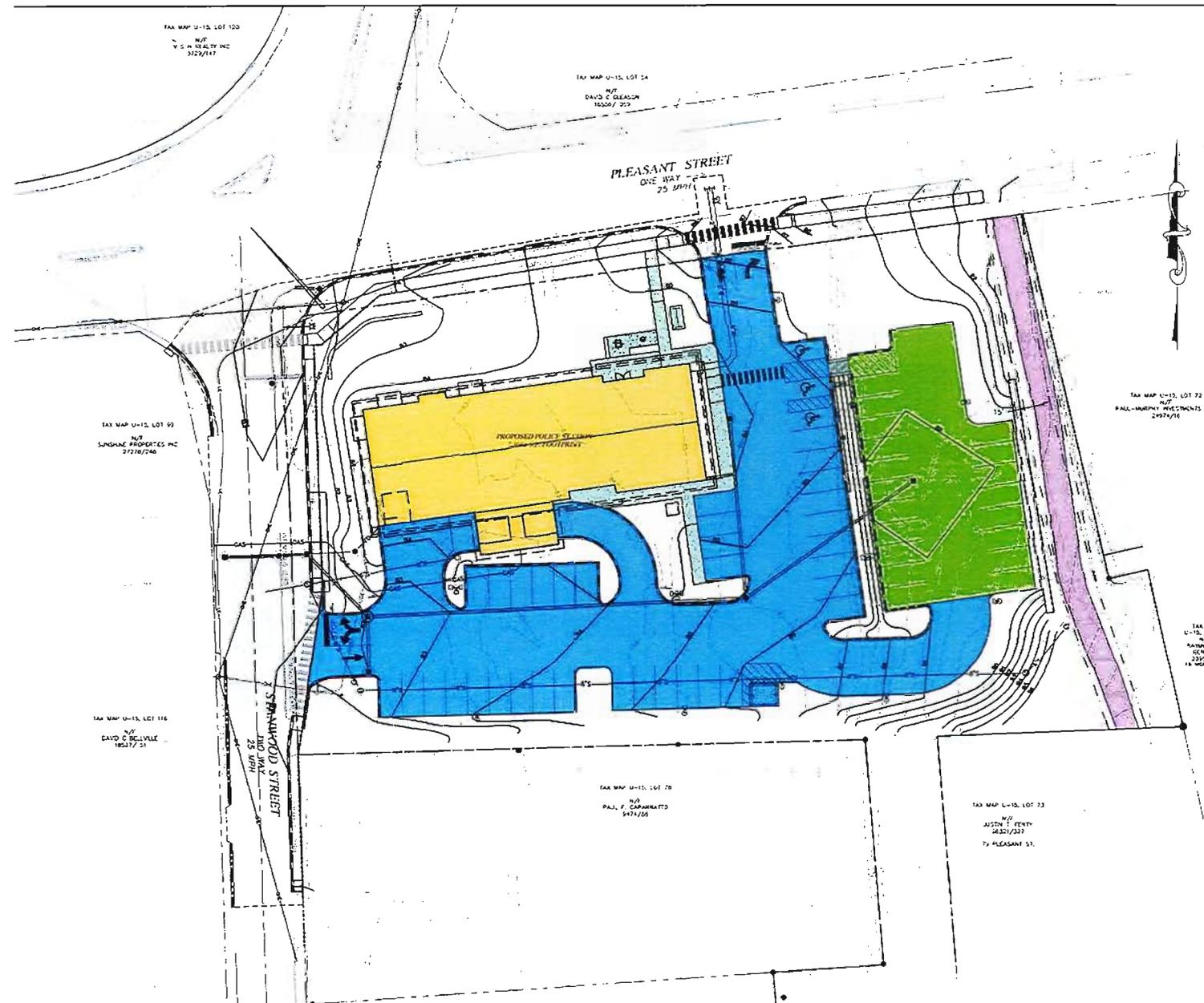
BRUNSWICK POLICE STATION
SPANWOOD & PLEASANT STREETS, BRUNSWICK, ME

TOWN OF BRUNSWICK
BRUNSWICK, ME



SITELINES, PA
ENGINEERS + PLANNERS + SURVEYORS
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FIELD NO.	SCALE	SHEET
DRAWN BY	DATE	
CHECKED BY	NO.	
DATE	FILE #	PHUREAN



*POROUS PAVEMENT IS CONSIDERED 70% PERVIOUS. 30% APPLIED TO TOTAL IMPERVIOUS AREA
**TOTAL LOT AREA AFTER TRANSFER OF LAND TO ROW FOR SLIP LANE CONSTRUCTION

The CDS is a swirl concentrator hybrid technology that provides continuous deflective separation – a combination of swirl concentration and patented indirect screening – into a uniquely capable product. It effectively screens, separates and traps debris, sediment and oil from stormwater runoff and is an ideal system to meet trash Total Maximum Daily Load (TMDL) requirements.

Features & Benefits

One-of-a-Kind Screening Technology

- Captures and retains 100% of floatables and neutrally buoyant debris 2.4mm or larger
- Effectively removes solids down to 100µm
- Self-cleaning screen – the only non-blocking screening technology available
- Water velocities within the swirl chamber continually shear debris off the screen to keep it clean
- Various screening apertures available

Proven Performance

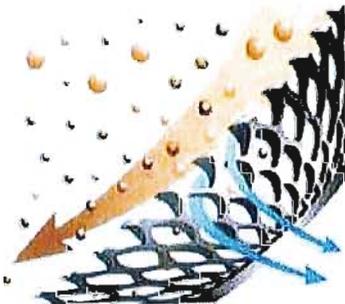
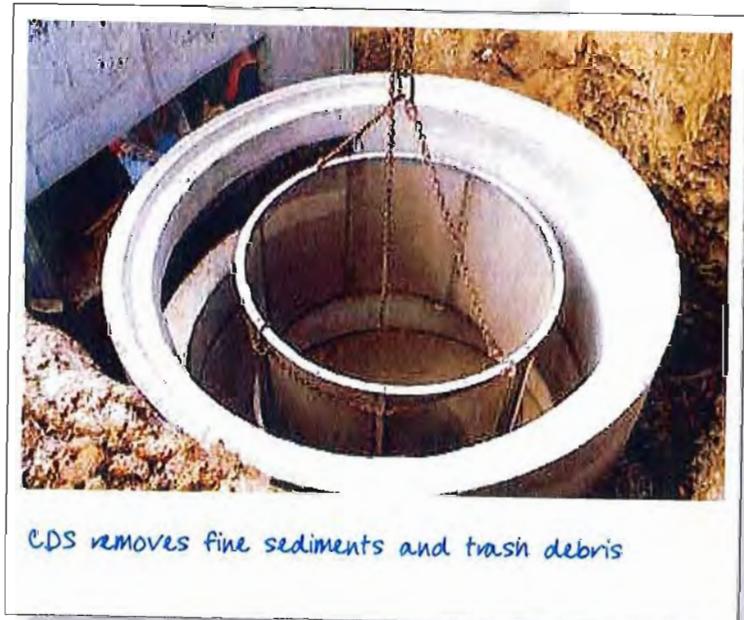
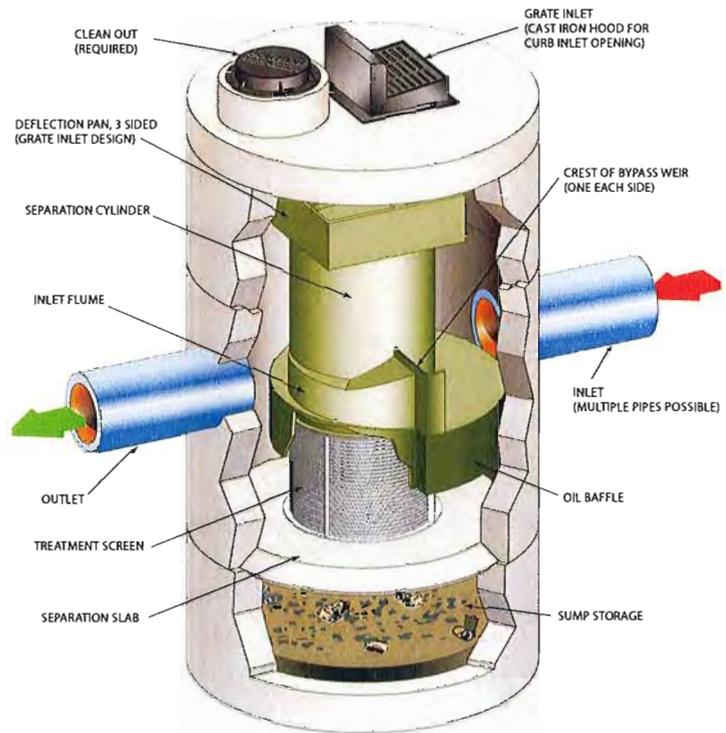
- Performance verified by NJ CAT and WA Ecology

Excellent Pollutant Retention

- Isolated Storage Sump eliminates scour potential
- Oil Baffle improves hydrocarbon removal

Multiple Options to Meet Site-Specific Needs

- Inline, offline, grate inlet and drop inlet configuration
- Accepts multiple pipe inlets and 90-180° angles – eliminate the need for junction manholes
- Internal and external peak bypass options available
- High treatment flow capacity – up to 300 cfs



Continuous deflective separation — water velocities within the swirl chamber continually shear debris off the screen to keep it clean

Applications

HDS products work well as standalone or end-of-pipe treatment systems and can easily be implemented in a retrofit scenario. They are particularly effective at removal of solids, trash and debris – and can help you meet TMDL requirements for these pollutants. HDS systems are also optimal pretreatment systems – and an important building block in a low impact development (LID) design. By removing solids, trash and debris prior to detention, infiltration or re-use systems, you can significantly increase their service life.

Water Quality

HDS products provide high-performance stormwater pollutant removal. These systems are effective in removing solids to meet water quality goals and can be designed to achieve site treatment goals for TSS or oil.

Pretreatment for Low Impact Development (LID) Designs

Hydrodynamic separation systems installed as pretreatment reduce downstream loading to reduce maintenance



Inlet and Outlet Pollution Control

Our HDS products are especially effective for solids and trash and debris. They can be installed at either the inlet or outlet of a drainage system to prevent pollutants from being discharged into lakes, streams or the ocean.



A Vortechs protects detention system from sediment build-up and reduces maintenance



CDS unit installed to remove trash before entering Lake Meritt in Oakland, CA



VortSentry HS is an effective option where space is limited

Hydrodynamic Separation



Selecting the right stormwater solution just got easier...



It's simple to choose the right low impact development (LID) solution to achieve your runoff reduction goals with the Contech UrbanGreen Staircase. First, select the runoff reduction practices that are most appropriate for your site, paying particular attention to pretreatment needs. If the entire design storm cannot be retained, select a treatment best management practice (BMP) for the balance. Finally, select a detention system to address any outstanding downstream erosion.



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Removing Pollutants with Hydrodynamic Separation

Hydrodynamic separators are some of the first technologies to be developed for treating stormwater. Our hydrodynamic separation (HDS) products have been providing reliable stormwater treatment solutions for more than 20 years. With performance proven in the lab and in the field at sites across the country, these systems are widely accepted for effective solids removal. They are an optimal choice for pretreatment systems, especially efficient on gross solids, trash and debris, while also removing total suspended solids (TSS).

Fundamentals of HDS

- Create a low velocity vortex action to:
 - Increase efficiency by increasing length of flow path and eliminating short circuiting
 - Concentrate solids in stable, low velocity flow field
- Incorporate flow controls to:
 - Minimize turbulence and velocity
 - Prevent flow surges and resuspension
 - Retain floating pollutants
- Provide easy access to captured pollutants to make maintenance easy

Learn more about hydrodynamic separation at www.ContechES/stormwater

Our hydrodynamic separation products have been providing reliable stormwater treatment solutions for more than 20 years ❖ ❖ ❖

CDS Guide

Operation, Design, Performance and Maintenance



CDS®

Using patented continuous deflective separation technology, the CDS system screens, separates and traps debris, sediment, and oil and grease from stormwater runoff. The indirect screening capability of the system allows for 100% removal of floatables and neutrally buoyant material without blinding. Flow and screening controls physically separate captured solids, and minimize the re-suspension and release of previously trapped pollutants. Inline units can treat up to 6 cfs, and internally bypass flows in excess of 50 cfs. Available precast or cast-in-place, offline units can treat flows from 1 to 300 cfs. The pollutant removal capacity of the CDS system has been proven in lab and field testing.

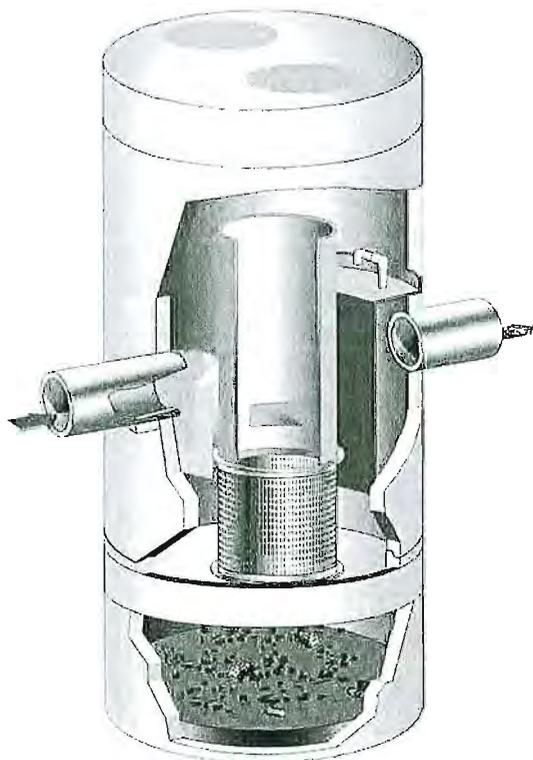
Operation Overview

Stormwater enters the diversion chamber where the diversion weir guides the flow into the unit's separation chamber and pollutants are removed from the flow. All flows up to the system's treatment design capacity enter the separation chamber and are treated.

Swirl concentration and screen deflection force floatables and solids to the center of the separation chamber where 100% of floatables and neutrally buoyant debris larger than the screen apertures are trapped.

Stormwater then moves through the separation screen, under the oil baffle and exits the system. The separation screen remains clog free due to continuous deflection.

During the flow events exceeding the design capacity, the diversion weir bypasses excessive flows around the separation chamber, so captured pollutants are retained in the separation cylinder.



Design Basics

There are three primary methods of sizing a CDS system. The Water Quality Flow Rate Method determines which model size provides the desired removal efficiency at a given flow rate for a defined particle size. The Rational Rainfall Method™ and Probabilistic Method are used when a specific removal efficiency of the net annual sediment load is required.

Typically in the United States, CDS systems are designed to achieve an 80% annual solids load reduction based on lab generated performance curves for a gradation with an average particle size (d50) of 125-microns (μm). For some regulatory environments, CDS systems can also be designed to achieve an 80% annual solids load reduction based on an average particle size (d50) of 75-microns (μm).

Water Quality Flow Rate Method

In many cases, regulations require that a specific flow rate, often referred to as the water quality design flow (WQQ), be treated. This WQQ represents the peak flow rate from either an event with a specific recurrence interval (i.e. the six-month storm) or a water quality depth (i.e. 1/2-inch of rainfall).

The CDS is designed to treat all flows up to the WQQ. At influent rates higher than the WQQ, the diversion weir will direct most flow exceeding the treatment flow rate around the separation chamber. This allows removal efficiency to remain relatively constant in the separation chamber and reduces the risk of washout during bypass flows regardless of influent flow rates.

Treatment flow rates are defined as the rate at which the CDS will remove a specific gradation of sediment at a specific removal efficiency. Therefore they are variable based on the gradation and removal efficiency specified by the design engineer.

Rational Rainfall Method™

Differences in local climate, topography and scale make every site hydraulically unique. It is important to take these factors into consideration when estimating the long-term performance of any stormwater treatment system. The Rational Rainfall Method combines site-specific information with laboratory generated performance data, and local historical precipitation records to estimate removal efficiencies as accurately as possible.

Short duration rain gauge records from across the United States and Canada were analyzed to determine the percent of the total annual rainfall that fell at a range of intensities. US stations' depths were totaled every 15 minutes, or hourly, and recorded in 0.01-inch increments. Depths were recorded hourly with 1-mm resolution at Canadian stations. One trend was consistent at all sites; the vast majority of precipitation fell at low intensities and high intensity storms contributed relatively little to the total annual depth.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Rainfall Method. Since most sites are relatively small and highly impervious, the Rational Rainfall Method is appropriate. Based on the runoff flow rates calculated for each intensity, operating rates within a proposed CDS system are determined. Performance efficiency curve determined from full scale laboratory tests on defined sediment PSDs is applied to

calculate solids removal efficiency. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

Probabilistic Rational Method

The Probabilistic Rational Method is a sizing program CONTECH developed to estimate a net annual sediment load reduction for a particular CDS model based on site size, site runoff coefficient, regional rainfall intensity distribution, and anticipated pollutant characteristics.

The Probabilistic rational method is an extension of the rational method used to estimate peak discharge rates generated by storm events of varying statistical return frequencies (i.e.: 2-year storm event). Under this method, an adjustment factor is used to adjust the runoff coefficient estimated for the 10-year event, correlating a known hydrologic parameter with the target storm event. The rainfall intensities vary depending on the return frequency of the storm event under consideration. In general, these two frequency dependent parameters increase as the return frequency increases while the drainage area remains constant.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Method. Since most sites are relatively small and highly impervious, the Rational Method is appropriate. Based on the runoff flow rates calculated for each intensity, operating rates within a proposed CDS are determined. Performance efficiency curve on defined sediment PSDs is applied to calculate solids removal efficiency. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

Treatment Flow Rate

The inlet throat area is sized to ensure that the WQQ passes through the separation chamber at a water surface elevation equal to the crest of the diversion weir. The diversion weir bypasses excessive flows around the separation chamber, thus helping to prevent re-suspension or re-entrainment of previously captured particles.

Hydraulic Capacity

CDS hydraulic capacity is determined by the length and height of the diversion weir and by the maximum allowable head in the system. Typical configurations allow hydraulic capacities of up to ten times the treatment flow rate. As needed, the crest of the diversion weir may be lowered and the inlet throat may be widened to increase the capacity of the system at a given water surface elevation. The unit is designed to meet project specific hydraulics.

Performance

Full-Scale Laboratory Test Results

A full-scale CDS unit (Model CDS2020-5B) was tested at the facility of University of Florida, Gainesville, FL. This full-scale CDS unit was evaluated under controlled laboratory conditions of pumped influent and the controlled addition of sediment.

Two different gradations of silica sand material (UF Sediment & OK-110) were used in the CDS performance evaluation. The particle size distributions (PSD) of the test materials were

analyzed using standard method "Gradation ASTM D-422 with Hydrometer" by a certified laboratory. UF Sediment is a mixture of three different U.S. Silica Sand products referred as: "Sil-Co-Sil 106", "#1 DRY" and "20/40 Oil Frac". Particle size distribution analysis shows that the UF Sediment has a very fine gradation ($d_{50} = 20$ to $30 \mu\text{m}$) covering a wide size range (uniform coefficient C_u averaged at 10.6). In comparison with the hypothetical TSS gradation specified in the NJDEP (New Jersey Department of Environmental Protection) and NJCAT (New Jersey Corporation for Advanced Technology) protocol for lab testing, the UF Sediment covers a similar range of particle size but with a finer d_{50} (d_{50} for NJDEP is approximately $50 \mu\text{m}$) (NJDEP, 2003). The OK-110 silica sand is a commercial product of U.S. Silica Sand. The particle size distribution analysis of this material, also included in Figure 1, shows that 99.9% of the OK-110 sand is finer than 250 microns, with a mean particle size (d_{50}) of 106 microns. The PSDs for the test material are shown in Figure 1.

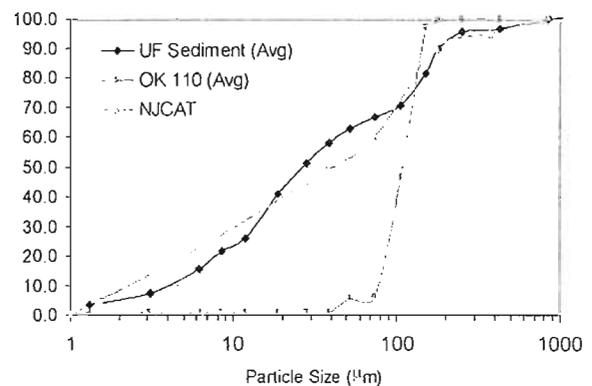


Figure 1. Particle size distributions for the test materials, as compared to the NJCAT/NJDEP theoretical distribution.

Tests were conducted to quantify the CDS unit (1.1 cfs (31.3-L/s) design capacity) performance at various flow rates, ranging from 1% up to 125% of the design capacity of the unit, using the 2400 micron screen. All tests were conducted with controlled influent concentrations approximately 200 mg/L. Effluent samples were taken at equal time intervals across the entire duration of each test run. These samples were then processed with a Dekaport Cone sample splitter to obtain representative sub-samples for Suspended Sediment Concentration (SSC – ASTM Standard Method D3977-97) and particle size distribution analysis.

Results and Modeling

Based on the testing data from the University of Florida, a performance model was developed for the CDS system. A regression analysis was used to develop a fitting curve for the scattered data points at various design flow rates. This model, which demonstrated good agreement with the laboratory data, can then be used to predict CDS system performance with respect to SSC removal for any particle size gradation assuming sandy-silt type of inorganic components of SSC. Figure 2 shows CDS predictive performance for two typical particle size gradations (NJCAT gradation and OK-110 sand).

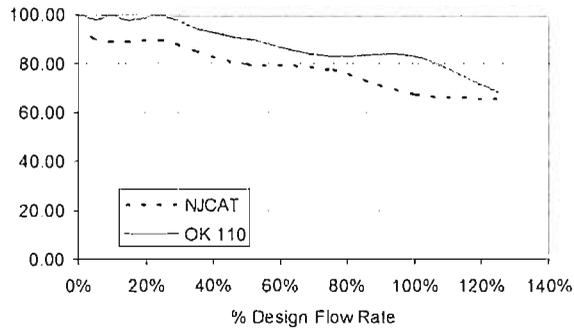


Figure 2. CDS stormwater treatment predictive performance for various particle gradations as a function of operating rate.

Many regulatory jurisdictions set a performance standard for hydrodynamic devices by stating that the devices shall be capable of achieving an 80% removal efficiency for particles having a mean particle size (d50) of 125 microns (WADOE, 2008). The model can be used to calculate the expected performance of such a PSD (shown in Figure 3). Supported by the laboratory data, the model indicates (Figure 4) that the CDS system with 2400 micron screen achieves approximately 80% removal at 100% of design flow rate, for this particle size distribution (d50 = 125 μm).

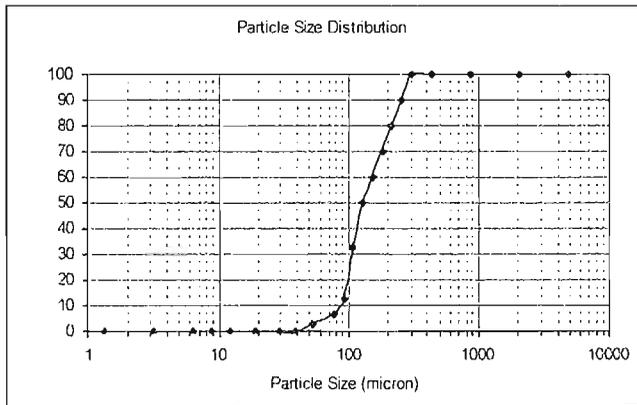


Figure 3. PSD with d50 = 125 microns, used to model performance for Ecology submittal.

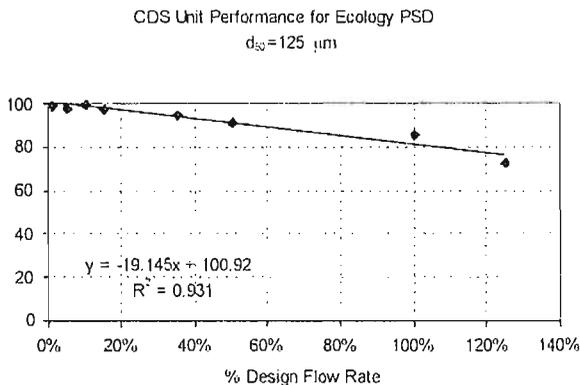


Figure 4. Modeled performance for CDS unit with 2400 microns screen, using Ecology PSD.

Maintenance

The CDS system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit, e.g., unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant deposition and transport may vary from year to year and regular inspections will help insure that the system is cleaned out at the appropriate time. At a minimum, inspections should be performed twice per year (i.e. spring and fall) however more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment washdown areas. Additionally, installations should be inspected more frequently where excessive amounts of trash are expected.

The visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions to inlet and/or separation screen. The inspection should also identify evidence of vector infestation and accumulations of hydrocarbons, trash, and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If sorbent material is used for enhanced removal of hydrocarbons then the level of discoloration of the sorbent material should also



be identified during inspection. It is useful and often required as part of a permit to keep a record of each inspection. A simple form for doing so is provided.

Access to the CDS unit is typically achieved through two manhole access covers. One opening allows for inspection and cleanout of the separation chamber (screen/cylinder) and isolated sump. The other allows for inspection and cleanout of sediment captured and retained behind the screen. For units possessing a sizable depth below grade (depth to pipe), a single manhole access point would allow both sump cleanout and access behind the screen.

The CDS system should be cleaned when the level of sediment has reached 75% of capacity in the isolated sump and/or when an appreciable level of hydrocarbons and trash has accumulated. If sorbent material is used, it should be replaced when significant discoloration has occurred. Performance will not be impacted until 100% of the sump capacity is exceeded however it is recommended that the system be cleaned prior to that for easier removal of sediment. The level of sediment is easily determined by measuring from finished grade down to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Finer, silty particles at the top of the pile typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the as-built drawing for the unit to determine if the height of the sediment pile off the bottom of the sump floor exceeds 75% of the total height of isolated sump.

Cleaning

Cleaning of the CDS systems should be done during dry weather conditions when no flow is entering the system. Cleanout of the CDS with a vacuum truck is generally the most effective and convenient method of excavating pollutants from the system. Simply remove the manhole covers and insert the vacuum hose into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The area outside the screen should be pumped out also if pollutant build-up exists in this area.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, an oil or gasoline spill should be cleaned out immediately. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use adsorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash can be netted out if you wish to separate it from the other pollutants. The screen should be power washed to ensure it is free of trash and debris.

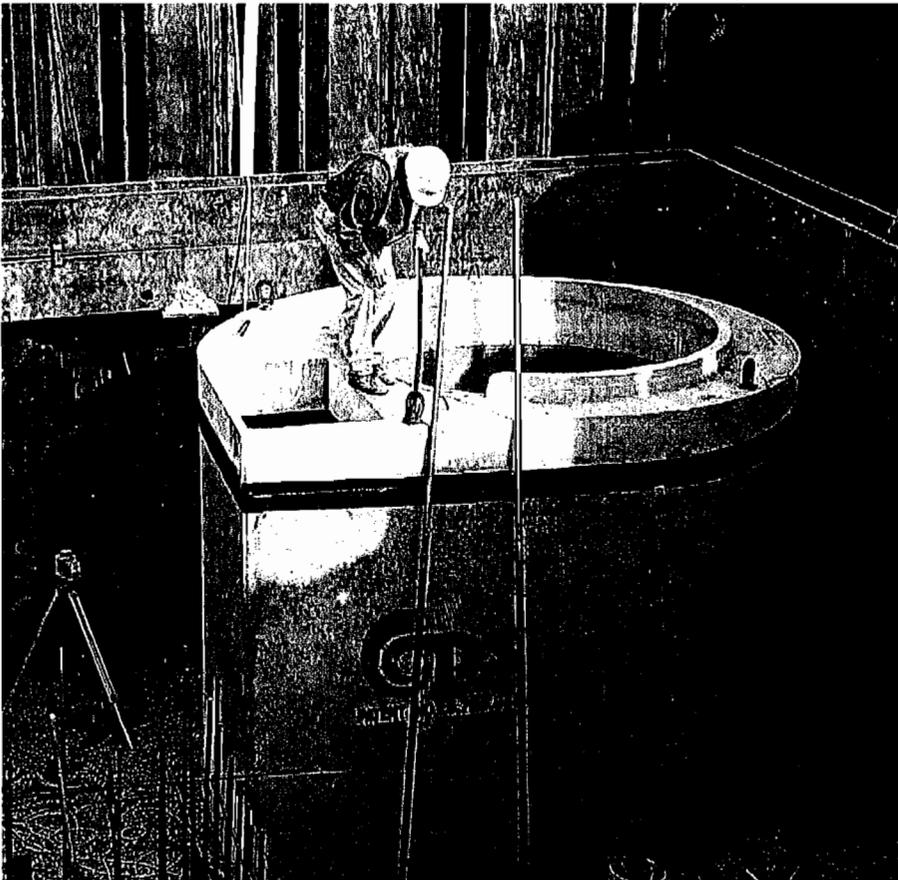
Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure proper safety precautions. Confined Space Entry procedures need to be followed. Disposal of all material removed from the CDS system should be done in accordance with local regulations. In many locations, disposal of evacuated sediments may be handled in the same manner as disposal of sediments removed from catch basins or deep sump manholes. Check your local regulations for specific requirements on disposal.



CDS Model	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	yd3	m3
CDS2015-4	4	1.2	3.0	0.9	0.5	0.4
CDS2020	5	1.5	3.5	1.1	1.3	1.0
CDS3020	6	1.8	4.0	1.2	2.1	1.6
CDS3035	6	1.8	5.0	1.5	2.1	1.6
CDS4040	8	2.4	5.7	1.7	5.6	4.3

Table 1: CDS Maintenance Indicators and Sediment Storage Capacities

Note: To avoid underestimating the volume of sediment in the chamber, carefully lower the measuring device to the top of the sediment pile. Finer silty particles at the top of the pile may be more difficult to feel with a measuring stick. These finer particles typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile.



Section 7.6

Roof Dripline Filtration BMP

7.6.1 Description

The runoff from a peaked roof without gutters may be detained at the drip line, be filtered through the foundation backfill and be discharged via a foundation underdrain pipe or equivalent.

7.3.2 General Design Criteria

The roof dripline filtration BMP needs to be designed with storage or for infiltration with the following design criteria:

- All appropriate specifications from the Stormwater Management rules, Appendix E, and the Stormwater Management for Maine BMP Manual, Chapter 7, Filtration BMPs, apply to this design.
- To meet the General Standards requirements (treatment of 1 inch of runoff), a minimum storage capacity within a reservoir course is needed to allow for the treatment of one inch or more of runoff.
- To meet the Flooding Standards requirements, the reservoir needs to provide a minimum storage capacity for the direct entry of the rain precipitation from a 24-hour, 25-year storm (5 + inches) or an overflow may be needed or provided for.
- The filter bed may be part of the foundation backfill.
- An underdrain pipe system is needed to drain the infiltrated water and can have the dual purpose of underdraining the foundation also.
- Stored volume needs to fully drain within no less than 24 hours and no more than 48 hours. An orifice may be needed to regulate the outflow.

7.6.3 Specific Design Criteria

Drip line edge: The drip line trench needs to extend the length of the building or area of roof to be treated.

Treatment Storage: the reservoir bed at the drip line must consist of crushed rock with a porosity of 40%. Its width and depth is sized based on the runoff volume from the roof. (for example, a 30 foot wide roof panel will need a 4 foot wide by 1.5 foot deep rock storage bed.

Reservoir Course: The depth of the reservoir course shall be based on the desired storage volume and frost. The reservoir course should consist of clean washed $\frac{3}{4}$ to 1 inch aggregate that is free of debris.

Overflow: Unless an overflow system is provided for the runoff from larger storms, a deeper storage bed will need to be provided.

Treatment Filter: The backfill for the foundation may be used as the filter media as long as the material is a mineral soil with between 4 and 7% fines (passing #200 sieve) and is 4 inches thick at a minimum.

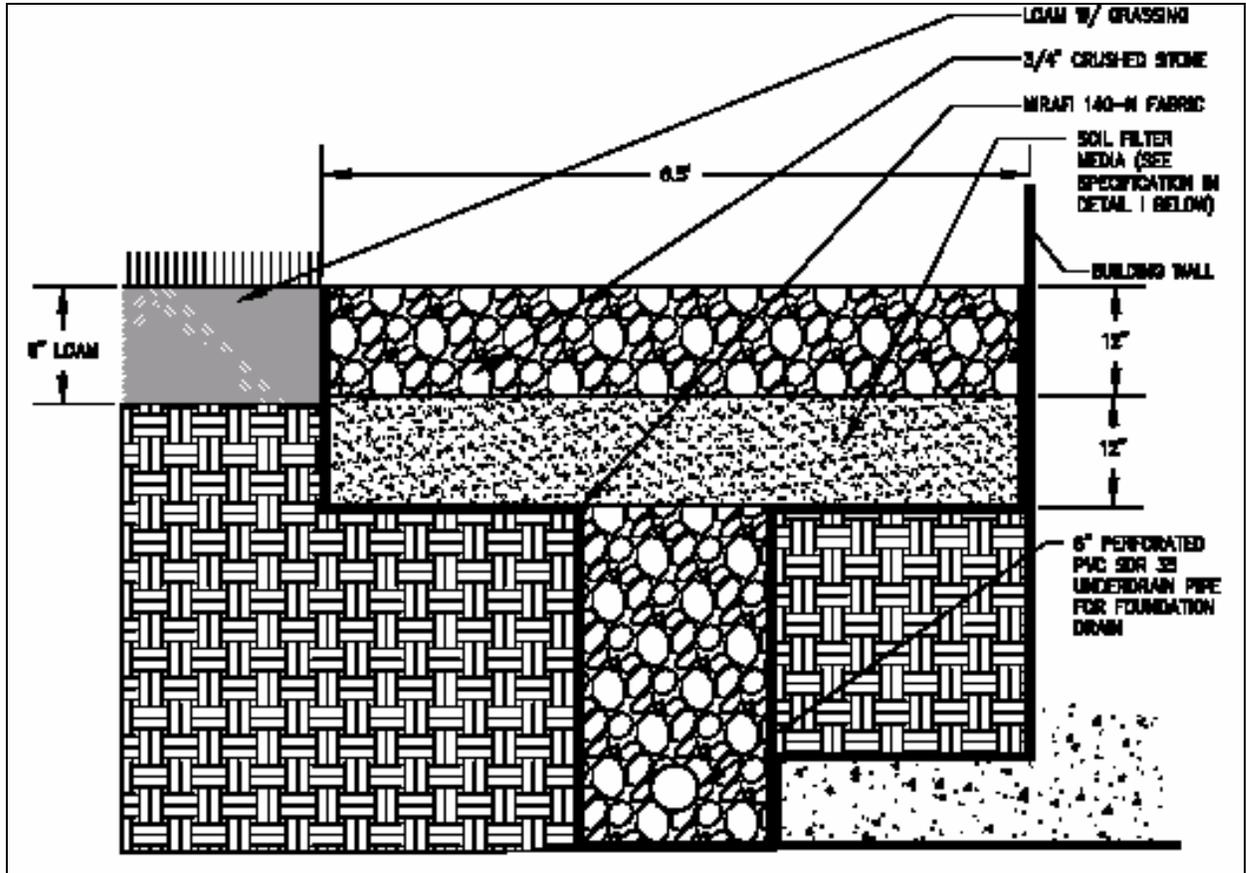
Impermeable Membrane: To prevent the penetration of water into a basement, the system may be lined with an impermeable membrane.

Underdrain Bed: An underdrained bed consisting of a minimum of 12 inches of underdrain gravel meeting the MDOT Specification 703.22, Type B should be a minimum of 12 inches to provide sufficient coverage for the underdrain piping. Crushed rock is an acceptable option and should be wrapped in filter fabric.

7.6.4 Maintenance Criteria

A dripline filter bed needs to be maintained like any other filter basin. The maintenance activities for filter BMPs listed in Chapter 7 of the BMP manual apply equally to this type of structure. Any debris must be removed from

the reservoir course. The Maintenance plan needs to address that these structures are part of the stormwater management plan for the project, cannot be paved over or altered in anyway. No gutter may be installed on the roof line.



Section 7.7

Manmade Pervious Surfaces

7.7.1 Description

A porous surface consists of the use of a permeable surface material and mineral base and subbase materials which allow penetration of runoff and into the underlying soils.

The efficiency of pavement alternative systems will depend on whether the surface is designed to store and infiltrate most runoff with the remainder discharged to a storm drainage system or over-land flow. The effectiveness of pervious alternatives will also depend on their long term maintenance and serviceability.

7.7.2 General Design Criteria

A typical permeable pavement alternative consists of a top porous structure that is providing structural strength and will allow the infiltration of runoff, a filter course, a reservoir course (with drainage if needed), a geotextile fabric and existing soil or subbase material. The following surface alternatives are example of pervious surfaces:

Porous Asphalt and Concrete: Porous asphalt is similar to conventional asphalt except that it contains very few particles smaller than coarse sand (less than # 30 sieve). Without these finer particles, water is able to infiltrate and into the subsurface.

Block pavers: Block paves are interlocking concrete blocks that leave void spaces between which water can infiltrate. The void spaces can be filled with gravel or soil and grass.

Plastic grid Pavers: These are often constructed from recycled material and come in a honeycomb pattern. The voids are filled with gravel or may be grassed.

Artificial ball fields (turf ballfields): These are also considered pervious surfaces that require similar design considerations. The

synthetic nature of the turf may be a concern for the infiltration of chemical into the subsurface; however, no restriction will be applied until more data is available on this subject.

Any manmade pervious surface shall be subject to the General Standards of Chapter 500, Stormwater Management Rules and the DEP licensing staff must be consulted for permitting requirements. However, the use of this technology will provide needed level of treatment to meet the General Standards if designed as below.

7.7.3 Specific Design Criteria

Traffic Volumes: Pavement alternatives are limited to areas with light to moderate traffic. They are not recommended for most roadways, and cannot withstand heavy vehicles.

Grading: The site should slope with less than 5% and preferably closer to 1%.

Sediment loading: Pavement should not be used in areas expected to receive high levels of sediments as they are highly susceptible to clogging. Also alternative measures such as salt should be implemented over these areas in the winter.

Reservoir Course: The reservoir course should consist of clean washed 1 1/2-inch to 3-inch aggregate that is free of debris. The depth of the reservoir course shall be based on the desired storage volume and frost penetration.

7.7.3 Design Criteria for Infiltration

- All specifications from SW rules, Appendix D, Section 2 apply.

- At a minimum, one foot separation is needed below the road subbase and above the groundwater table. The depth of the water table elevation needs to be considered in designing the road for sufficient frost protection depth.
- A filter layer providing pretreatment before infiltration to groundwater needs to be included in the road design and can be part of the subbase and base. The media must be a mineral soil with between 4 and 7% fines (passing #200 sieve) and should be a minimum of 8 inches thick.
- To meet the General Standards requirements (1 inch infiltration), a minimum storage capacity within the filter layer or subbase and base is needed to allow the direct entry of one inch or more.
- To meet the Flooding Standards requirements, the road design needs to provide a minimum storage capacity for the direct entry of the rain precipitation from a 24-hour, 25-year storm (5 + inches).
- Infiltration rate should be confirmed with a double ring infiltrometer test to determine the soils ability to accept water. The test needs to be on native subgrade even if there is fill above it, and not on the fill itself. Recommended infiltration should be less than 2.41 inches per hour but great enough that the inch of stored precipitation infiltrates in 24 hours (i.e. >0.04 inches per hour).
- The stored volume needs to fully infiltrate within 24-48 hours
- Provide appropriate drainage and discharge of flows from larger storms where is needed.

7.7.4 Design Criteria for Storage and Filtration

- Appropriate specifications from SW rules, Appendix E and BMP design standards for an underdrained filter bed apply
- To meet the General Standards requirements (treatment of 1 inch of runoff), a minimum storage capacity within the filter layer or subbase and base is needed to allow the treatment of one inch or more.

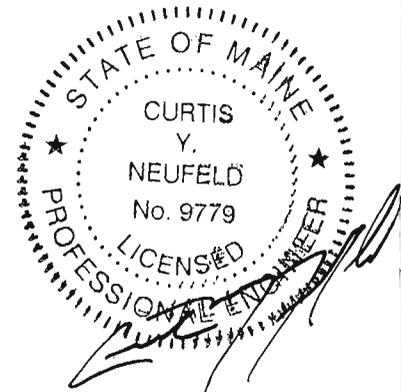
- To meet the Flooding Standards requirements, the road design needs to provide a minimum storage capacity for the direct entry of the rain precipitation from a 24-hour, 25-year storm (5 + inches).
- The filter bed may be part of the road base and subbase horizon. The filter media must be a mineral soil with between 4 and 7% fines (passing #200 sieve) and must be a minimum of 4 inches thick. .
- An underdrained bed consisting of a minimum of 12 inches of underdrain gravel meeting the MDOT Specification 703.22, Type B should be a minimum of 12 inches to provide sufficient coverage for the underdrain piping.
- An underdrain pipe network is needed to drain adequately the underdrain bed. Pipes should be placed perpendicular to the slope and should be spaced no further apart than 20 feet. An orifice may be needed to control the outflow.
- Stored volume needs to fully drain within 24-48 hours.
- Provide appropriate drainage and discharge of flows from larger storms where is needed.

7.7.5 Maintenance Criteria

Pervious surfaces and pavement, whether asphalt, concrete or paving stones, have the potential to become impervious if not properly maintained. The following need to be planned for and be met:

- Design pervious pavement structures to prevent erosion from surrounding areas from reaching the pavement and sediment deposition.
- Restrain vehicles with muddy wheels from accessing pervious pavement areas.
- Limit salt use for deicing and do not use sand.
- Remove leaves and organic debris in the fall.
- Sweep, vacuum and/or pressure wash pavement **twice** annually at a minimum.

Erosion and Sedimentation Control Plan
“Brunswick Police Station”
Stanwood and Pleasant Streets, Brunswick, Maine



A. Narrative

I. Project Description

The Brunswick Development Corporation (herein referred to as Applicant) is proposing the construction of a two-story, 7,368 s.f. footprint police station building, with associated parking, infrastructure and landscaping to be located at the intersection of Stanwood and Pleasant Street in Brunswick, Maine.

II. Technical Guide

Best Management Practices

The stormwater maintenance management for this project will be performed consistent with the two references listed below and as amended in this plan. Where standards are not consistent, the more stringent requirement shall apply.

References

The primary references for the stormwater management design were as follows:

- 1 “Stormwater Management for Maine”, Maine Department of Environmental Protection No. DEPLW0738, January 2006.
- 2 “Maine Erosion and Sedimentation Best Management Practices”, Maine Department of Environmental Protection, current edition on-line.

III. Existing and Proposed Drainage Features

The proposed site has previously been developed. The parcels were previously occupied by three (3) residential buildings and a building used for restaurant use, which have all been demolished in anticipation of the proposed development. The topography of the site is relatively gradual sloping from east to west across the site. Development of the site consists of the construction of a building, vehicular access, parking facilities, a stormwater management system, utilities and lawn/landscaped areas. The increased runoff from the site will be directed to either a roof dripline infiltration system, porous pavement, or an in-line hydrodynamic separator.

IV. Erosion/Sedimentation Control Devices

The following erosion/sedimentation control devices are planned for this site during the construction period. These devices are installed as indicated on the drawings.

1. Sediment Barrier will be installed down gradient of disturbed areas to trap runoff borne sediments until the site is stabilized. Installation details are provided in the drawings on the Erosion Control detail sheets. If moderate to highly erodible soils are to be disturbed, then a wood waste compost/bark filter berm with a minimum height of 18 inches shall be placed down slope of the sediment barrier.
2. Straw or hay mulch is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed on slopes of less than 10 percent shall be anchored by applying water; mulch placed on slopes steeper than 10 percent shall be covered with "Tenax R-4" fabric netting or approved equal and anchored with staples in accordance with the manufacturer's recommendations. Mulch application rates are provided as noted. Regardless of mulch application rate, soil must not be visible when mulching is complete. All slopes greater than 15% during regular construction season and 8% during winter season are to have mulch pinned down by netting or a manufactured combination pinned mulch/net matt may be used.
3. Loam and seed is intended to serve as the primary permanent stabilization method for all denuded areas not covered with other erosion control measures, such as riprap. Application rates are to be provided as noted.
4. No seeding or mulching shall be done when soil is covered by snow. If seeding is necessary, snow will be removed exposing bare soil before seeding and mulching.
5. If hydro seeding is used, all mulching/netting requirements still apply.

V. Temporary/Erosion/Sedimentation Control Measures

The following are planned as temporary erosion/sedimentation control measures during construction:

1. Sediment barrier shall be installed along the down gradient side of the parking areas, the vegetated filter basins and all fill sections. The sediment barrier will remain in place until the site is stabilized.
2. Temporary stockpiles of stumps, grubblings, or common excavation will be protected as follows:
 - a. Temporary Stockpiles shall not be located within 25 feet of the wetlands nor in areas with slopes over 10 percent, and shall be located away from drainage swales.
 - b. The stockpile shall be stabilized within 14 days and be covered with mulch and "Terrajute" fabric netting. Sediment barrier shall be installed along the down gradient side of the stockpile.

c. Stockpiles shall be seeded, mulched and anchored with "Tenax R-4" fabric netting if they are to remain in place over 21 days.

3. All denuded areas, which have been rough graded and are not located within the parking and driveway sub base area, shall receive mulch or erosion control mesh fabric within 15 days of final grading.

4. If work is conducted between September 1st and December 1st of any calendar year, all denuded areas will be covered with hay mulch, applied at twice the normal application rate, and anchored with "Tenax R-4" fabric netting. The period between final grading and mulching shall be reduced to a 14-day maximum. The period between final grading and mulching shall be reduced 3 days for construction done between December 1st and March 30th.

5. Pavement shall be swept or washed to control mud and dust as necessary.

6. Seeding cutoff dates: All areas not permanently seeded by September 1st should (a) be temporarily seeded with rye and mulched by October 1st, (b) covered with sod by November 1st, or (c) mulched for over winter stabilization by November 15th.

VI. Permanent Erosion Control Measures

The following permanent erosion control measures have been designed as part of the Erosion/Sedimentation Control Plan:

1. All areas disturbed during construction, but not subject to other restoration (paving, riprap, etc.) will be loamed, limed, fertilized, mulched, and seeded. "Tenax R-4" fabric netting anchored with staples shall be placed over the mulch in areas where the finish grade slope is greater than 10 percent. This protection shall be installed within 7 days on the areas noted on the Erosion Control Plan Sheet; all other areas shall receive protection within 15 days. Native topsoil shall be stockpiled and reused for final restoration when it is of sufficient quality.

VII. Timing and Sequence of Erosion/Sedimentation Control Measures During Construction

THE FOLLOWING CONSTRUCTION SEQUENCE IS MANDATORY:

1. Install stabilized construction entrance and maintain until site is paved.
2. Only those areas necessary for construction will be disturbed.
3. Prior to the start of construction, sediment barrier will be installed across the slope(s), on the contour, at or just below the limits of clearing or grubbing, and/or just above any adjacent travelled way to protect it from construction-related erosion.

4. Clear and grub work site as needed to execute plans using caution not to over expose the site.
5. Storm drains and catch basins will be installed prior to construction of site elements that discharge to these systems. Catch basin inlet protection shall be installed in all new and existing catch basins that will receive runoff from the project.
6. Construct footings and building foundation, including foundation drainage.
7. Disturbed areas are to be permanently stabilized within 15 days of final grading, or temporarily stabilized within 30 days of the initial disturbances of soils. Disturbed areas will be stabilized before storms. Loam will be saved for later use where possible. Excess soil materials will be used as fill, removed from site, or stockpiled at an approved location. Stockpiles shall not block or divert surface drainage such that it causes an adverse impact.
8. Install utilities, storm drains, catch basins, and appurtenances.
9. Construct parking areas.
10. Construct buildings.
11. Install pavement and curbing.
12. Loam, lime, fertilize, seed, and mulch landscaped and other disturbed areas.
13. Once the site is stabilized and a 90% catch of vegetation has been obtained, remove all temporary erosion control measures.
14. Touch up loam and seed.

Note: All denuded areas not subject to final paving, riprap or gravel shall be revegetated. At a minimum, the erosion control measures shall be reviewed and repaired once a week or immediately following any significant rainfall or snowmelt. Sediment trapped behind these barriers shall be removed when it reaches a depth of 6 inches and be discarded on the site. All erosion control measures shall be installed and maintained as indicated on the drawings.

VIII. Submittals

The project will be bid to site contractors. The site contractor shall submit a schedule for the completion of the work, which will satisfy the following criteria:

1. Items in the construction sequence shall generally be completed in the specified order; separate items may be constructed simultaneously. Work must also be scheduled or phased to minimize the extent of the exposed areas as specified below. The intent of this

sequence is to provide for erosion control and to have structural measures such as sediment barrier in place before large areas of land are denuded.

2. The work shall be conducted to:

a. Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 30 days.

b. Revegetate disturbed areas as rapidly as possible. If areas are sited on the Erosion Control Plan Sheet as "Special Treatment", they shall be permanently stabilized within 24 hours; all other areas shall be permanently stabilized within 14 days of initial disturbance (7 days if area is located within 25 feet of wetland boundary).

c. Incorporate planned inlets and drainage systems as early as possible into the construction phase. Surface drainage shall be immediately lined or revegetated as soon as installation is complete.

3. If the summer/fall construction schedule is not possible and construction is planned between September 1st and April 1st of any calendar year, then the Site Contractor shall submit a schedule, which will satisfy the following criteria:

a. Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 30 days.

b. During the construction process, all disturbed areas shall be covered with mulch within 14 days of final grading.

c. Once final grade has been established, the site contractor may choose to dormant seed the disturbed areas prior to placement of mulch and "Tenax R-4" fabric netting anchored with staples.

4. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 3.6#/1,000 s.f.

All areas seeded during the winter months will be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 90 percent catch) shall be revegetated by replacing loam, seed, and mulch.

a. The area of denuded non-stabilized construction shall be considered to be denuded until the sub base gravel is installed in parking areas, the base slab gravel is installed in building areas, or the areas of future loam and seed have been loamed, meshed, and mulched. The mulch rate shall be twice the rate specified in the seeding plan (90#/1,000 s.f. x 2 = 180#/s.f.).

b. Within the exposed work area, temporary sedimentation sumps shall be provided at the interface between parking areas and graded slopes. This shall be accomplished by creating an area 18" below adjacent temporary grades. The sedimentation area shall have a bottom width of 3" and 3:1 side slopes. Culverts to allow access shall be installed by the site contractor. Along the sedimentation sumps, barriers shall be provided at sufficient intervals to permit runoff to be accumulated to a minimum depth of 12" before overflowing.

c. If the project construction occurs such that winter construction is used, these items shall be deferred to permit their completion between May 15th and September 15th of any calendar year. The site contractor must use any added measures which may be necessary to control erosion/sedimentation from the site.

The site contractor shall note that no areas shall remain denuded for a period of over 30 days before it is temporarily stabilized. Temporary stabilization shall be installation of gravel or mulching.

IX. Provision for Maintenance of the Erosion/Sedimentation Control Features

The project will be contracted by the Owner for construction by a site contractor. The project is subject to the requirements of a MEDEP Permit-by-Rule (PBR). This permit requires the site contractor to prepare a list and designate by name, address and telephone number all individuals who will be responsible for implementation, inspection and maintenance of all erosion control measures identified within this section. As contained in the erosion and sedimentation control plan of the contract drawings of this section, one of these individuals shall prepare and sign a report which will include:

1. Assuring and certifying the owner's construction sequence is in conformance with the specified schedule of this section. A weekly certification stating compliance, any deviations, and corrective measures necessary to comply with the erosion control requirements of this section shall be prepared and signed by the inspector(s).
2. In addition to the weekly certifications, the inspector(s) shall maintain written reports recording construction activities on the site, which include:
 - Dates when major grading activities occur in a particular area.
 - Dates when construction activities cease in a particular area, either temporarily or permanently.
 - Dates when an area is stabilized.
3. Inspection of the project work site on a weekly basis and after each significant rainfall event (0.5 inches or more within any consecutive 24-hour period) during construction until permanent erosion control measures have been properly installed and the site has been stabilized. Inspection of the project work site shall include:

- Identification of proper erosion control measure installation in accordance with the erosion control detail sheet or as specified in this section.
- Determine whether erosion control measure is properly operating. If not, identify damage to control device and determine remedial measures.
- Identify areas, which appear vulnerable to erosion and determine additional erosion control measures to improve conditions.
- Inspect areas of recent seeding to determine catch of grass. A minimum catch of 90 percent is required prior to removal of erosion control measures.

Accumulated silt/sediment should be removed when the depth of sediment reaches 50 percent of the barrier height. Accumulated silt/sediment should be removed from behind sediment barrier when the depth of the sediment reaches 6 inches.

4. If inspections of the site indicate a change should be made to the erosion control plan, to either improve effectiveness or correct a site-specific deficiency, the inspector shall immediately implement the corrective measure and notify the Owner, Owner's representative, and MEDEP project analyst of the recommended change.

5. Once construction has been completed, long-term maintenance of the catch basins will be the responsibility of the Owner. The catch basin sumps shall be inspected in April and October of each year. Sediment shall be removed when the depth of sediment reaches one-half the depth of the sump (typically 12").

All certifications, inspection forms, and written reports prepared by the inspector(s) shall be filed on site, and a copy will be kept at the general contractor's office. All written reports will be available for on site inspection as needed.

X. Facility Operation and Maintenance

Maintenance measures will commence upon completion of construction. Maintenance measures shall consist of the following:

- A. Storm drain maintenance shall be performed to maintain capacity.
- B. Surface drainage shall be maintained to repair erosion problems and remove accumulated debris. As a minimum, channel deposition, and sediment barrier shall be reviewed and repaired once a week or immediately after any significant rainfall or snow melt. Sediment trapped behind barriers shall be excavated once it reaches a depth of 6" and regraded on site.
- C. The storm drain pipes shall be maintained to keep inlets and outlets free of debris. As a minimum, inlets, outlets and their appurtenances shall be reviewed weekly.

XI. Seeding Plan:

1. Instructions on preparation of soil: Prepare a good seed bed for planting method used.
2. Apply lime as follows: 138#/1000 s.f.
3. Fertilize with 18.4 pounds of 10, 20, 10 N-P-K/1000 s.f.
4. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
5. Seed with the following mixture:
 - 47% Red Fescue
 - 5% Red Top
 - 40% Tall Fescue
 - 7% Perennial Rye
 - 1% Inert

When using small grain as nurse crop, seed it at one-half the normal seeding rate.

6. Mulching instructions: Apply at the rate of 90# per 1000 s.f.

	<u>Amount</u>	<u>Units # Tons, Etc.</u>
• Total Lime	138	#/1000 s.f.
• Total Fertilizer	18.4	#/1000 s.f.
• Total Seed	3.0	#/1000 s.f.
• Total Mulch	90	#/1000 s.f.

XIII. Construction Schedule

Site improvements will begin in the Fall of 2012 depending upon final project approval by the Owner.

Erosion and Sedimentation Control Plan

A comprehensive erosion and sedimentation control plan has been prepared as part of the site design to address temporary and permanent erosion and sedimentation control measures. Erosion control details, notes, and requirements are included in the submitted plan set.

Type:
Job:
Catalog number:

/	/	/	
Fixture	Electrical Module	Finish	Options
See page 2			See pages 3-4

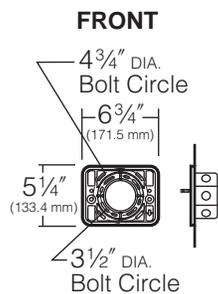
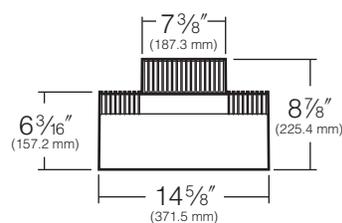
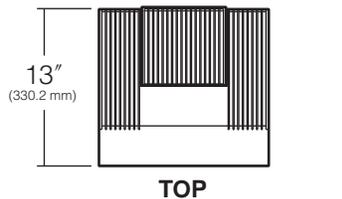
Approvals:

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Page: 1 of 4

Specifications

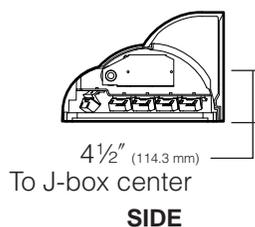
WD14-LED

60 Light Emitting Diodes
Total Max System Watts = 73W
Maximum Weight = 26 lbs.



Mounting Plate

Attaches directly to any standard 4" J-box (by others)



Reflector Housing: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy with integral cooling fins. Rotates against ballast housing to provide 10° of adjustment with degree markers cast into the housing. At 0° adjustment, lens is totally concealed from view above horizontal with fixture aimed downward.

Ballast Housing: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy with integral cooling fins. Fastens to mounting plate with keyhole slots freeing both hands for securing and wiring. One stainless steel socket-head screw on each side of housing frees the reflector housing to rotate for aiming. Tightening the screws locks the two housings together with sealing provided by a silicone gasket. For visual aiming, adjustment may be accomplished with the fixture on.

Lens Frame: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy with integral hinges and stainless steel pins. Toolless access to reflector housing with sealing provided by a one-piece extruded and vulcanized silicone gasket. Lens is clear flat 3/16" thick tempered glass sealed to lens frame with a silicone gasket and retainer clips. For UP models, lens is mounted flush with frame for water run off, and is silicone sealed.

Electronic Module: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Module includes a driver, thermal control device and surge protector. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.

Optical Module: Precision, replaceable MicroEmitters are positioned to achieve directional control toward desired task. The entire EmitterDeck fastens to the housing as a one-piece module.

Electrical Components: High power factor ballasts are rigidly mounted inside the housing and are factory prewired with a quick-disconnect plug for mating to the socket.

Mounting Plate: Mounting plate attaches directly to any standard 4" junction box. All mounting plates are die-cast aluminum with reinforced ribs. Two studs are provided in each plate with flange nuts to allow fixture mounting by keyhole slots. Sealant must be applied (by others) between mounting plate and mounting surface to insure a dry junction box.

Finish/Color: Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; A.S.T.M. 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray®, Platinum Silver, or White. Custom colors are available.

Warranty: Kim Lighting warrants Wall Director LED products ("Product(s)") sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of ten (10) years for exterior housing paint finish(s), (iii) a period of six (6) years for LED Light Engines and, (iv) a period of five (5) years for LED power components (driver, surge protector and LifeShield™ device), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each product.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

Listings and Ratings

ETL to UL 1598 ¹ Standards	IP66 Rated	CE	25°C Ambient
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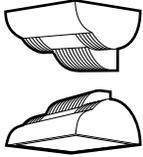
¹Suitable for wet locations

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.

Type:

Job:

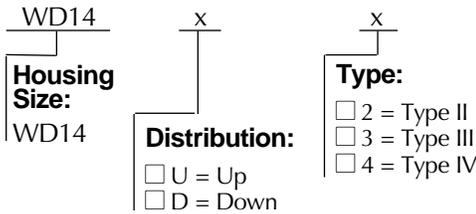
Page: 2 of 4



Standard Features

Fixture

Cat. No. designates **WD14** fixture, Up (U) or Down (D) configuration, and light distribution (2, 3 or 4).



Light Distribution:



Type II



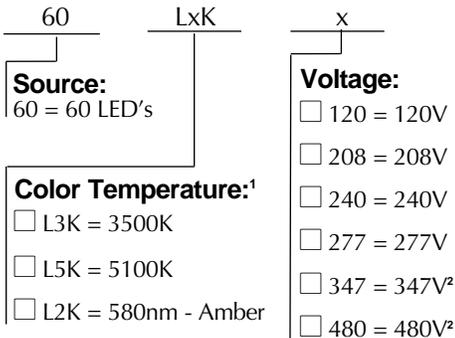
Type III



Type IV

Electrical Module

Cat. Nos. for Electrical Modules available:



¹4300K and 6500K are also available on an "Engineered-to-Order" (ETO) basis.

²Due to current unavailability of 347V and 480V drivers, specification of these voltages may feature an integral step-down transformer.

Fixture	Total System Watts	Volt	Operating Amps
WD14-Small	73	120	0.61
WD14-Small	73	208	0.35
WD14-Small	73	240	0.30
WD14-Small	73	277	0.26
WD14-Small	73	347	0.21
WD14-Small	73	480	0.15

Finish

Super TGIC powder coat paint over a titanated zirconium conversion coating.

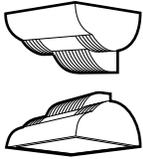
Color: Black Dark Bronze Light Gray Stealth Gray® Platinum Silver White Custom Color¹
 Cat. No.: BL DB LG SG PS WH CC

¹Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____

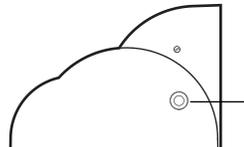
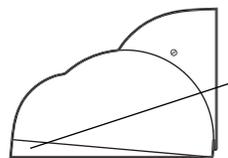
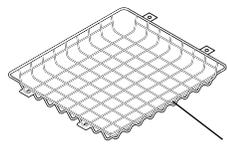
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Job:

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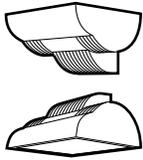


Optional Features

<p>Base Socket Cat. No. <input type="checkbox"/> G12 <input type="checkbox"/> No Option</p>	<p>G12 base socket available for 70W and 150W Pulse Start Metal Halide lamps only.</p>																
<p>Photocell Control Cat. No. (see right) <input type="checkbox"/> No Option</p>	<p>Factory installed inside housing with fully gasketed sensor on side wall.</p> <table> <tr> <td>Cat. No.</td> <td>Line Volts:</td> <td>Cat. No.</td> <td>Line Volts:</td> </tr> <tr> <td><input type="checkbox"/> A-30</td> <td>120V</td> <td><input type="checkbox"/> A-33</td> <td>277V</td> </tr> <tr> <td><input type="checkbox"/> A-31</td> <td>208V</td> <td><input type="checkbox"/> A-34</td> <td>480V</td> </tr> <tr> <td><input type="checkbox"/> A-32</td> <td>240V</td> <td><input type="checkbox"/> A-35</td> <td>347V</td> </tr> </table>  <p>Photocell Control</p>	Cat. No.	Line Volts:	Cat. No.	Line Volts:	<input type="checkbox"/> A-30	120V	<input type="checkbox"/> A-33	277V	<input type="checkbox"/> A-31	208V	<input type="checkbox"/> A-34	480V	<input type="checkbox"/> A-32	240V	<input type="checkbox"/> A-35	347V
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<p>5° Shield Cat. No. <input type="checkbox"/> 5DS14 <input type="checkbox"/> No Option</p>	<p>Aluminum shield field-attached to lens frame. Maintains a horizontal cutoff fixture edge when the luminaire is tilted 5°. Finished to match the fixture.</p>  <p>5° Shield</p>																
<p>Polycarbonate Lens: Cat. No. <input type="checkbox"/> LS <input type="checkbox"/> No Option</p>	<p>Clear flat polycarbonate lens replaces standard tempered glass lens.</p> <p>NOTE: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight. A program of regular inspection and periodic replacement is highly recommended to maintain optimum fixture performance.</p>  <p>Polycarbonate Lens</p>																
<p>Wire Guard Cat. No. <input type="checkbox"/> WG14 <input type="checkbox"/> No Option</p>	<p>11 ga. (.12" dia.) BB Wire, (.75" sq. welded mesh pattern,) 11 3/8" x 10 1/4" x 1 1/2" deep. Finish is super TGIC thermoset polyester powder coat paint, over zinc plated wireform. Finished to match the fixture.</p> <p>NOTE: Only available with flat lens applications.</p>  <p>Wire Guard</p>																
<p>Fusing Cat. No. (see right) <input type="checkbox"/> No Option</p>	<table> <tr> <td>Line Volts:</td> <td>120V</td> <td>208V</td> <td>240V</td> <td>277V</td> <td>347V</td> <td>480V</td> </tr> <tr> <td>Cat. No.:</td> <td><input type="checkbox"/> SF</td> <td><input type="checkbox"/> DF</td> <td><input type="checkbox"/> DF</td> <td><input type="checkbox"/> SF</td> <td><input type="checkbox"/> SF</td> <td><input type="checkbox"/> DF</td> </tr> </table>	Line Volts:	120V	208V	240V	277V	347V	480V	Cat. No.:	<input type="checkbox"/> SF	<input type="checkbox"/> DF	<input type="checkbox"/> DF	<input type="checkbox"/> SF	<input type="checkbox"/> SF	<input type="checkbox"/> DF		
Line Volts:	120V	208V	240V	277V	347V	480V											
Cat. No.:	<input type="checkbox"/> SF	<input type="checkbox"/> DF	<input type="checkbox"/> DF	<input type="checkbox"/> SF	<input type="checkbox"/> SF	<input type="checkbox"/> DF											
<p>Surface Conduit Mount Cat. No. <input type="checkbox"/> SCM14U <input type="checkbox"/> SCM14D <input type="checkbox"/> No Option</p>	<p>Cast aluminum junction box and fixture mount for attachment (by others) to existing walls, beams or columns. SCM14 has one 3/4" NPT conduit tap in each side and bottom. Must be securely mounted to wall surface. Finished to match the fixture.</p> <p>SCM14U for UP fixtures only. SCM14D for DOWN fixtures only.</p> <p>Note: Must be securely mounted to all surface.</p>																

Type:

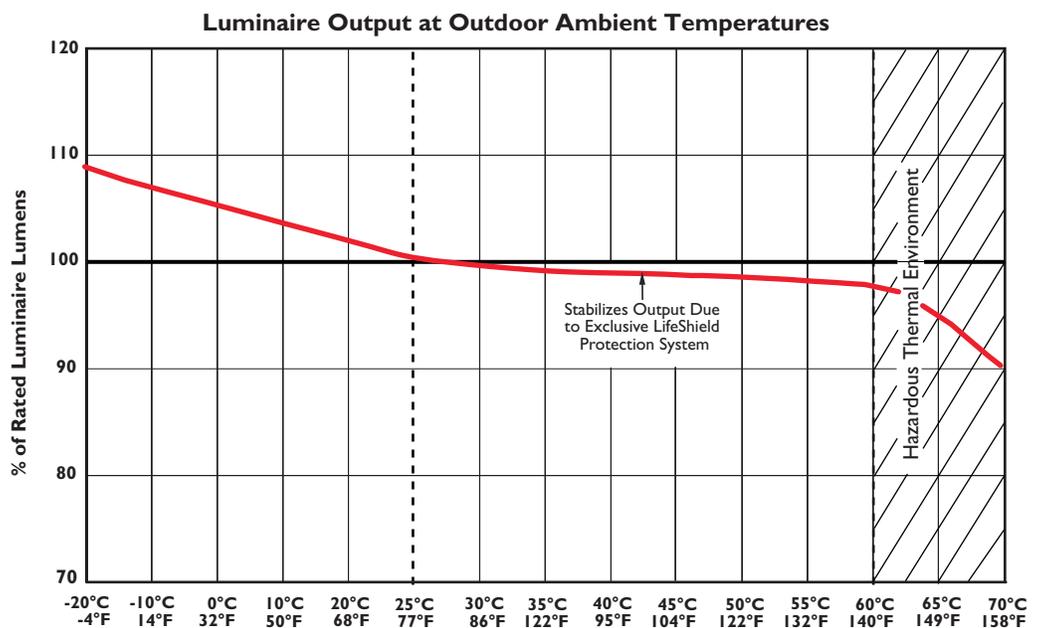
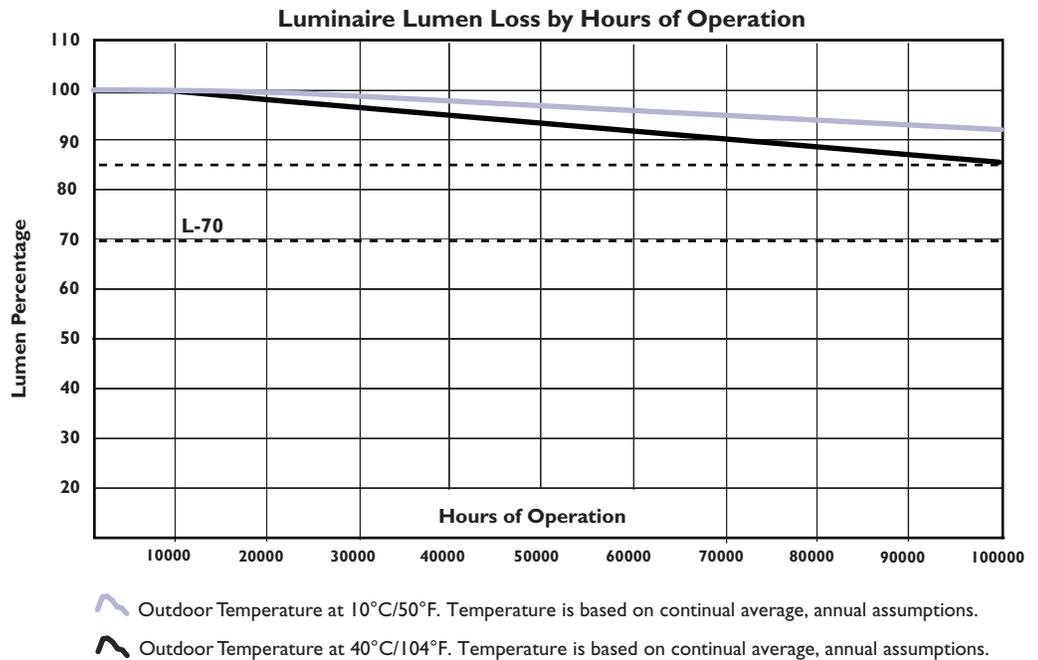
Job:



Lumen Performance Charts

NOTES:

1. Lumen loss stabilization is a result of Kim Lighting's MicroEmitter™ luminaires exclusive LifeShield™ Protection System and Dual Heat Management.
2. The LifeShield™ Protection System will lower the current to the LEDs significantly if the luminaire is exposed to direct heat (sun) or excessive abnormal conditions.
3. Luminaire Lumen Loss assumptions are based on LM-80 results and an actual outdoor product testing based upon 5100K CCT, 350mA drive current. 25°C/77°F tab ambient and cathode temperature at 85°C/185°F. Assumptions past 6,000 hours are interpolated.
4. Cathode temperature baseline is at 85°C/185°F. If cathode temperature increases during ambient changes and abnormal environment conditions, % of rated lumens will slightly decrease.
5. Outdoor ambient temperatures are assumed SITU average by geographic region.
6. As Solid State Lighting technology and thermal management systems continually advance, lumen loss projections are subject to improvement.



Type:
Job:
Catalog number:

/	/	/	/	/	
Mtg.	Fixture	Electrical Module	Finish	Options	Optional
See page 2				See pages 3-4	

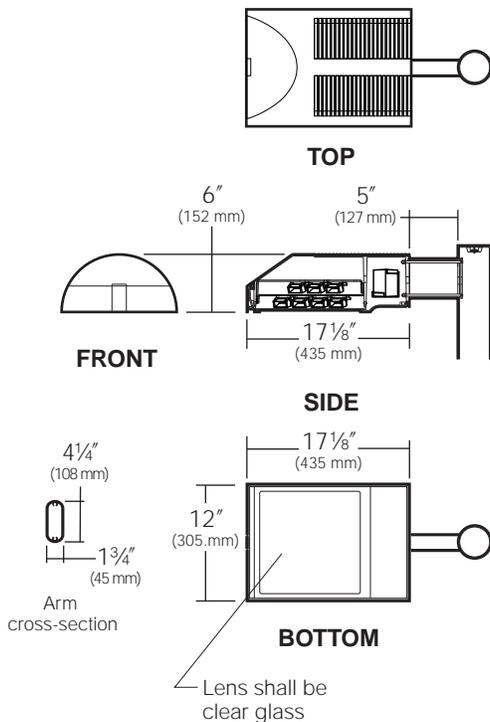
Select pole from Kim Arms and Poles Selection Guide. If pole is provided by others indicate O.D. for arm fitting.

Approvals:

Date:
Page: 1 of 5

Specifications

SAR-LED
60 Light Emitting Diodes
Total System Watts = 73W
Maximum Weight = 30 lbs.



Housing: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy with integral cooling ribs over the optical chamber and electrical compartment. Solid barrier wall separates optical and electrical compartments. Double-thick wall with gussets on the support-arm mounting end. Housing forms a half cylinder with 55° front face plane providing a recess to allow a flush single-latch detail. All hardware is stainless steel or electro-zinc plated steel.

Lens Frame: One-piece die-cast, low copper (<0.6% Cu) aluminum alloy lens frame with 1" minimum depth around the gasket flange. Integral hinges with stainless steel pins provide no-tool mounting and removal from housing. Single die-cast aluminum cam-latch provides positive locking and sealing of the optical chamber by a one-piece extruded and vulcanized silicone gasket. Clear 3/16" thick tempered glass lens retained by eight steel clips with full silicone gasketing around the perimeter.

Electronic Module: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Module includes a driver, thermal control device and surge protector. Electrical module attaches to housing with no-tool hinges and latches, accessible by opening the lens frame only. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.

Optical Module: Precision, replaceable MicroEmitters are positioned to achieve directional control toward desired task. The entire EmitterDeck fastens to the housing as a one-piece module.

Support Arm: One-piece extruded aluminum with internal bolt guides and fully radiused top and bottom. Luminaire-to-pole attachment is by internal draw bolts, and includes a pole reinforcing plate with wire strain relief. Arm is circular cut for specified round pole.

Optional Wall Mounting: Fixture mounted to poured concrete walls only. A modified support arm is provided with side access to allow field splices within the arm. A wall embedment bracket is provided to accept draw bolts, and a trim plate covers the wall-embedded junction box. All wall mount components are finished to match the fixture.

Finish: Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray®, Platinum Silver, or White. Custom colors are available.

Warranty: Kim Lighting warrants The Archetype LED products ("Product(s)") sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of ten (10) years for exterior housing paint finish(s), (iii) a period of six (6) years for LED Light Engines (MicroEmitters) and, (iv) a period of five (5) years for LED power components (LED Driver, LifeShield™ device, Surge Protector), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each product.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

Listings and Ratings		
ETL to UL 1598 ¹ Standards	CE	25°C Ambient

¹Suitable for wet locations.
KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.



Patent Pending

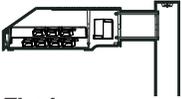
Type:

Job:

Page: 2 of 5

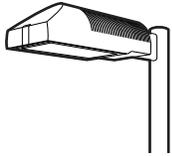


Standard Features

<p>Mounting 3SY configuration is available for round poles only.</p> <p style="text-align: center;">Flat Lens</p>	<p>Plan View:</p> <div style="display: flex; justify-content: space-around; align-items: center;">  </div> <p>EPA: 0.7 1.4 1.2 1.9 1.9 2.5</p> <p>Cat. No.: <input type="checkbox"/> 1SA <input type="checkbox"/> 2SB <input type="checkbox"/> 2SL <input type="checkbox"/> 3ST <input type="checkbox"/> 3SY <input type="checkbox"/> 4SC <input type="checkbox"/> 1W</p>																												
<p>Fixture Cat. No. designates fixture and optic</p> <p style="text-align: center;">Flat Lens</p> 	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>SAR x</p> <p>Housing Size: SAR</p> <p>Distribution:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 2 = Type II Full Cutoff <input type="checkbox"/> 3 = Type III Full Cutoff <input type="checkbox"/> 4 = Type IV Full Cutoff <input type="checkbox"/> 5 = Type V Square Full Cutoff <input type="checkbox"/> L = Type L Left Full Cutoff <input type="checkbox"/> R = Type R Right Full Cutoff </div> <div style="width: 50%;"> <p style="text-align: center;">Light Distribution:</p> <div style="display: grid; grid-template-columns: repeat(3, 1fr); gap: 10px;"> <div style="text-align: center;"> Type II</div> <div style="text-align: center;"> Type III</div> <div style="text-align: center;"> Type IV Forward Throw</div> <div style="text-align: center;"> Type V Square</div> <div style="text-align: center;"> Type R Right</div> <div style="text-align: center;"> Type L Left</div> </div> </div> </div>																												
<p>Electrical Module</p>	<p>Cat. Nos. for Electrical Modules available:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 30%;"> <p>60 LxK</p> <p>Source: 60 = 60 LED's</p> <p>Color Temperature:¹</p> <ul style="list-style-type: none"> <input type="checkbox"/> L3K = 3500K <input type="checkbox"/> L5K = 5100K <input type="checkbox"/> L2K = 580nm - Amber </div> <div style="width: 30%;"> <p>x</p> <p>Voltage:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 120 = 120V <input type="checkbox"/> 208 = 208V <input type="checkbox"/> 240 = 240V <input type="checkbox"/> 277 = 277V <input type="checkbox"/> 347 = 347V² <input type="checkbox"/> 480 = 480V² </div> </div> <p>¹4300K and 6500K are also available on an "Engineered-to-Order" (ETO) basis. ²Due to current unavailability of 347V and 480V drivers, specification of these voltages may feature an integral step-down transformer.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Fixture</th> <th>Total System Watts</th> <th>Volt</th> <th>Operating Amps</th> </tr> </thead> <tbody> <tr> <td>SAR-Small</td> <td>73</td> <td>120</td> <td>0.61</td> </tr> <tr> <td>SAR-Small</td> <td>73</td> <td>208</td> <td>0.35</td> </tr> <tr> <td>SAR-Small</td> <td>73</td> <td>240</td> <td>0.30</td> </tr> <tr> <td>SAR-Small</td> <td>73</td> <td>277</td> <td>0.26</td> </tr> <tr> <td>SAR-Small</td> <td>73</td> <td>347</td> <td>0.21</td> </tr> <tr> <td>SAR-Small</td> <td>73</td> <td>480</td> <td>0.15</td> </tr> </tbody> </table>	Fixture	Total System Watts	Volt	Operating Amps	SAR-Small	73	120	0.61	SAR-Small	73	208	0.35	SAR-Small	73	240	0.30	SAR-Small	73	277	0.26	SAR-Small	73	347	0.21	SAR-Small	73	480	0.15
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<p>Finish Super TGIC powder coat paint over a titanated zirconium conversion coating.</p>	<p>Color: Black Dark Bronze Light Gray Stealth Gray® Platinum Silver White Custom Color¹</p> <p>Cat. No.: <input type="checkbox"/> BL <input type="checkbox"/> DB <input type="checkbox"/> LG <input type="checkbox"/> SG <input type="checkbox"/> PS <input type="checkbox"/> WH <input type="checkbox"/> CC</p> <p>¹Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____</p>																												

Type:

Job:



Optional Features

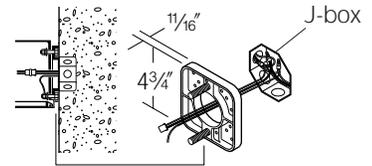
Wall Mounting

- Cat. No. 1W
 No Option

Select from Mounting on page 2.

Fixture mounts to 3" or 4" junction boxes by a cast aluminum adapter plate with fixture mounting bolts.

NOTE: Junction box in wall must provide adequate fixture support. See NEC sections 370-13, 17 and 410-14, 16. Quick-disconnect plug and wiring are provided to allow field connections prior to fixture mounting.



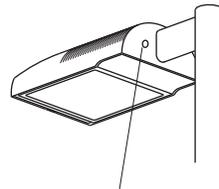
Wall mount using adapter plate 3" or 4" J-box in wall (by others)

Photocell Control

- Cat. No. (See right)
 No Option

Fixture supplied with an internal photocell with the sensor on the fixture end facing the pole. For multiple-fixture pole mountings, one fixture has a photocell to operate the others. Not available if wall mounted (1W).

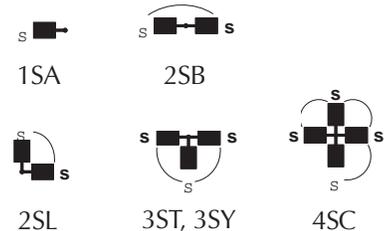
- | | |
|-------------------------------|-------------|
| Cat. No. | Line Volts: |
| <input type="checkbox"/> A-30 | 120V |
| <input type="checkbox"/> A-31 | 208V |
| <input type="checkbox"/> A-32 | 240V |
| <input type="checkbox"/> A-33 | 277V |
| <input type="checkbox"/> A-35 | 347V |
| <input type="checkbox"/> A-34 | 480V |



Photocell Sensor

Mounting Configuration:

S – Fixture with Photocell Sensor
 S – slave unit(s)
 No fixture wattage limit.



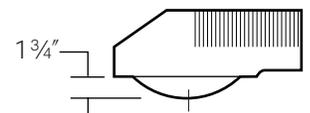
Dimming Controls

The Archetype LED driver is a 0-10V dimming interface, allowing 0-100% illumination output when synchronized with a control and dimming system, provided by others. Kim Lighting is working with several control system manufacturers to develop a variety of proven turnkey solutions to meet any application's need. Kim Lighting will advise availability of complete control packages, and even two-way monitoring systems, once they have been tested and exceed Kim's high quality standards.

Convex Glass Lens

- Cat. No. CGL
 No Option

The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.



Convex Glass Lens

Polycarbonate Lens

- Cat. No. LS
 No Option

Fixture supplied with a one-piece flat, clear, UV stabilized polycarbonate, fully gasketed, replacing the standard tempered glass lens.

CAUTION: Use only when vandalism is anticipated to be high.



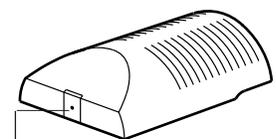
Flat Lens

Tamper-Resistant Latch

- Cat. No. TL
 No Option

Standard die-cast latch is provided with a captive 10-32 stainless steel flat socket-head screw to prevent unauthorized opening.

NOTE: Required only for vandal protection in locations where fixtures can be reached by unauthorized persons.



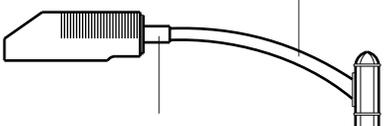
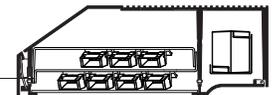
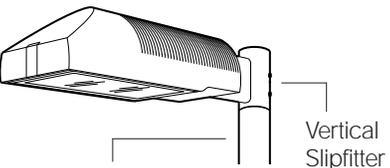
Tamper-Resistant Latch

Type:

Job:

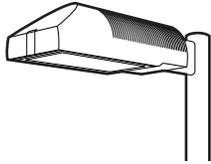


Optional Features

<p>Fusing Cat. No. (see right) <input type="checkbox"/> No Option</p>	<p>Line Volts: 120V 208V 240V 277V 347V 480V Cat. No.: <input type="checkbox"/> SF <input type="checkbox"/> DF <input type="checkbox"/> DF <input type="checkbox"/> SF <input type="checkbox"/> SF <input type="checkbox"/> DF</p>	 Single Fuse					
<p>Horizontal Slipfitter Mount Cat. No. <input type="checkbox"/> HSF <input type="checkbox"/> No Option</p>	<p>Replaces standard mounting arm with a slipfitter which allows fixture to be mounted to a horizontal pole davit-arm with 2" pipe-size mounting end (2 3/8" O.D.). Cast aluminum slipfitter with set screw for an up or down 5° adjustment lock. Bolts to housing from inside the electrical compartment using mounting holes for the standard support arm. Davit-arm must be field drilled at a set screw location to insure against fixture rotation. Finished to match fixture and arm.</p>	<p>Davit-arm with 2" pipe-size fixture mount (by others)</p>  Horizontal Slipfitter Mount by Kim					
<p>Special Options for Street Lighting Cat. No. <input type="checkbox"/> AF <input type="checkbox"/> No Option</p>	<p>Air Filter (AF): Allows for ventilation through the optical chamber, filtering all air particles above 500 microns. Assembly mounted on solid wall between optical compartment and latch cavity.</p>	 Air Filter					
<p>Vertical Slipfitter Mounts Cat. No. includes Mounting Cat. No. (See right) <input type="checkbox"/> No Option</p>	<p>Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1SA, 2SB, 2SL, 3ST, 3SY, 4SC). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.</p> <p>NOTE: 3SY only available on round slipfitter.</p>	 Pole with 2" pipe-size tenon (by others) Vertical Slipfitter Mount by Kim					
<table border="0"> <tr> <td> Cat. No. <input type="checkbox"/> VSF-1SA <input type="checkbox"/> VSF-2SB <input type="checkbox"/> VSF-2SL <input type="checkbox"/> VSF-3ST <input type="checkbox"/> VSF-3SY <input type="checkbox"/> VSF-4SC Round </td> <td style="text-align: center;">  Stainless steel set screws </td> <td style="text-align: center;">  Square </td> <td> Cat. No. <input type="checkbox"/> SVSF-1SA <input type="checkbox"/> SVSF-2SB <input type="checkbox"/> SVSF-2SL <input type="checkbox"/> SVSF-3ST <input type="checkbox"/> SVSF-4SC </td> <td> Mounting Configuration 1SA - single arm mount 2SB - 2 at 180° 2SL - 2 at 90° 3ST - 3 at 90° 3SY - 3 at 120° 4SC - 4 at 90° </td> </tr> </table>			Cat. No. <input type="checkbox"/> VSF-1SA <input type="checkbox"/> VSF-2SB <input type="checkbox"/> VSF-2SL <input type="checkbox"/> VSF-3ST <input type="checkbox"/> VSF-3SY <input type="checkbox"/> VSF-4SC Round	 Stainless steel set screws	 Square	Cat. No. <input type="checkbox"/> SVSF-1SA <input type="checkbox"/> SVSF-2SB <input type="checkbox"/> SVSF-2SL <input type="checkbox"/> SVSF-3ST <input type="checkbox"/> SVSF-4SC	Mounting Configuration 1SA - single arm mount 2SB - 2 at 180° 2SL - 2 at 90° 3ST - 3 at 90° 3SY - 3 at 120° 4SC - 4 at 90°
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Type:

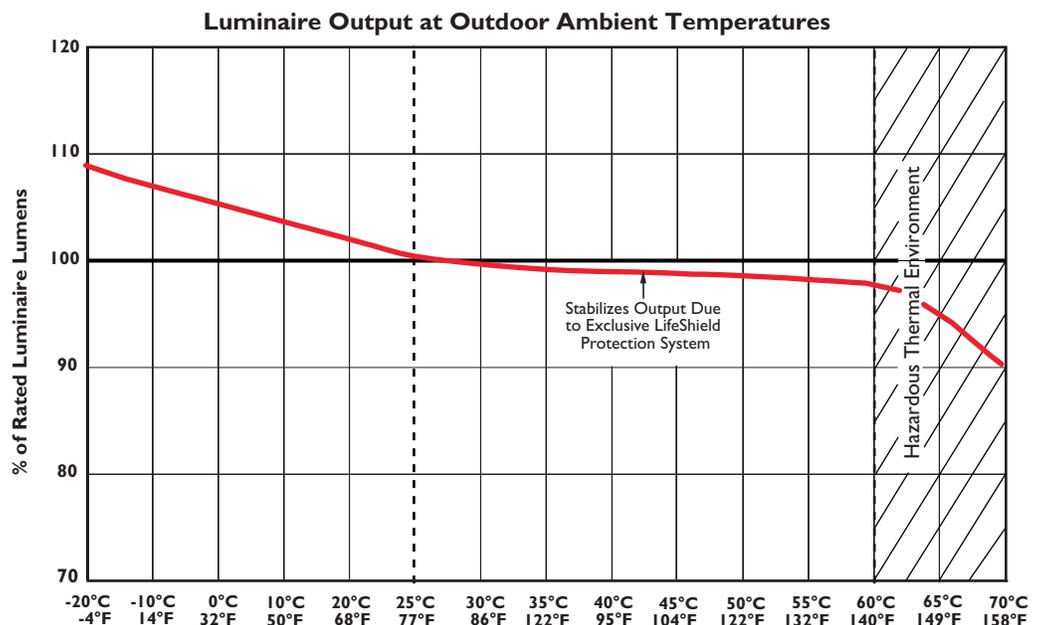
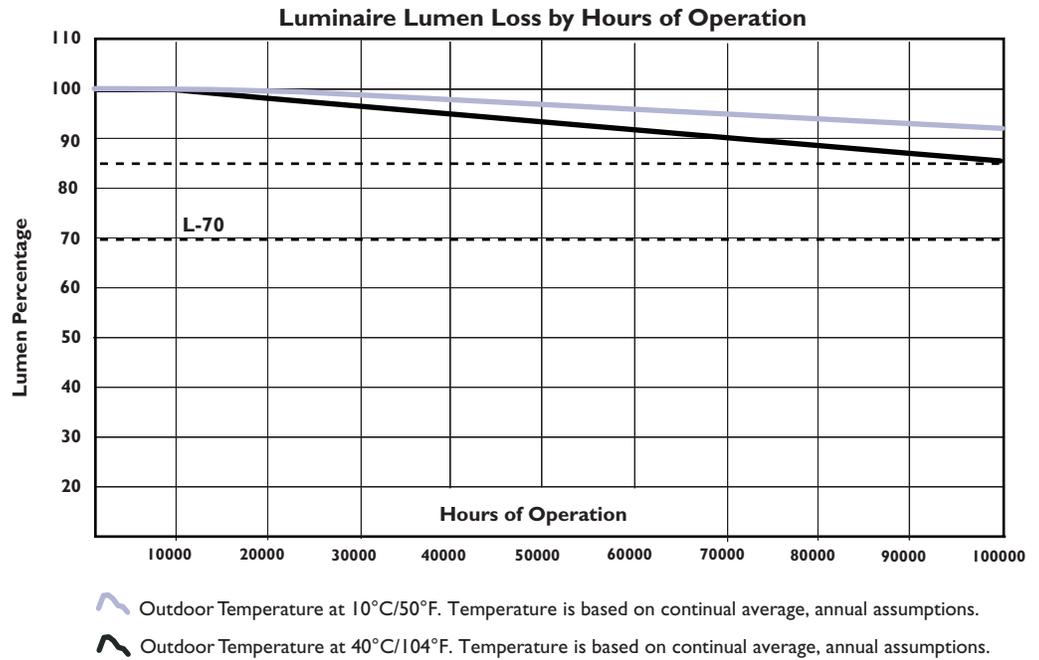
Job:

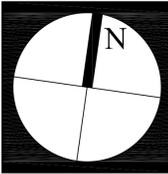


Lumen Performance Charts

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5. Outdoor ambient temperatures are assumed SITU average by geographic region.
6. As Solid State Lighting technology and thermal management systems continually advance, lumen loss projections are subject to improvement.





GENERAL NOTES

- 1) EXTERIOR COLUMN LINE NOT ON CENTER LINE OF STUDS. SEE STRUCTURAL FOR DIMS. AND LOCATIONS.
- 2) ALL INTERIOR AND EXTERIOR CONCRETE PADS ARE BY THE GENERAL CONTRACTOR
- 3) SEE AX.X FOR ALL DETAILS TYPICAL RUNNING TRIM, MARKERBOARDS AND TACKBOARDS.

FINISH LEGEND

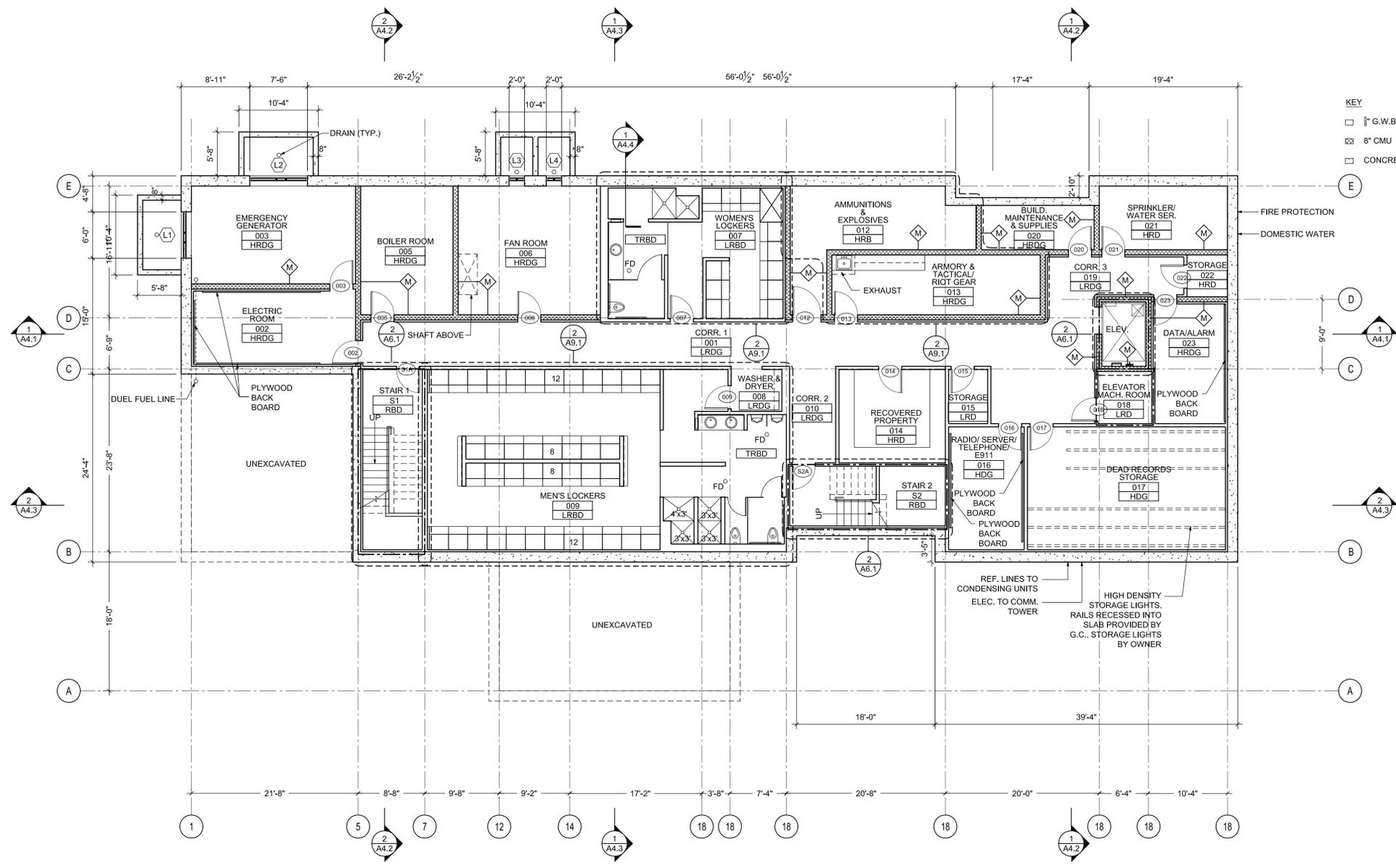
- NONE
- C PRECISION LOC. BROADLOOM CARPET BY CONSTANTINE CARPET, 34 OZ., DENSITY 9792, 100% UTRON NYLON 6.6, CONTINUOUS DYED, LOW VOC OR ZERO VOC ADHESIVE
- E EPOXY PAINT
- F FRP PANELS
- G HIGH GLOSS PAINT
- H CONCRETE HARDENER
- J HEAVY-DUTY CONCRETE HARDENER
- L LINOLEUM
- M WALK OFF MAT
- N SEAMLESS EPOXY
- P PAINT
- Q STONE TILE
- R RUBBER TILE / BASE / TREADS
TILE SHALL BE 0.080, 4" TALL BY ARMSTRONG OR EQUAL, LOW VOC ADHESIVE
- S SEALER
- T CERAMIC FLOOR/BASEWALL TILE
FULL HEIGHT WALL TILE AT ALL WET WALLS. SEE DWG. A9.1 FOR ELEVATIONS.
- V VINYL COMPOSITION TILE / BASE
- X MATCH EXISTING
- Z VARIES - SEE FLOOR PLAN FOR LOCATION OF FINISHES.

FINISH NOTES

- 1) PROVIDE CHAIR RAIL AT THE FOLLOWING ROOMS: 001, 010, 019, 105, 107, 108, 117, 201, 212, 213, 214, 222.
- 2) PROVIDE WAINSCOTTING AT THE FOLLOWING ROOM: 102
- 3) ALL DETENTION AREA ROOMS SHALL HAVE EPOXY SLOPED TO FLOOR DRAINS
- 4) ONLY USE PRIMER AT THE FOLLOWING ROOMS: 017, 018

FLOOR PLAN NOTES

- SEE 1/2" TOILET ROOM PLANS ON DWG A9.1
- SEE 1/2" STAIR PLANS ON DWG Axx
- SEE 1/2" DETENTION AREA PLANS ON DWG A9.2
- SEE 1/2" ELEVATOR PLAN ON DWG Axx



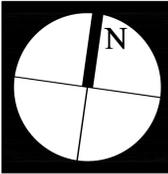
1 BASEMENT FLOOR PLAN
SCALE: 1/8" = 1'-0"

Donham & Sweeney ARCHITECTS
68 Harrison Avenue
Boston, MA 02111
Post Office Box 265
Alma ME 04535
donhamandsweeney.com 207 586 6000

BRUNSWICK POLICE STATION
BRUNSWICK, ME
project number: 1110
BASEMENT FLOOR PLAN

Scale: 1/8" = 1'-0"
Drawn by: RLS
issue date
SD SUBMISSION 05.15.2012
100% DD 08.07.2012
Progress 08.17.2012

A2.0



GENERAL NOTES

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FINISH LEGEND

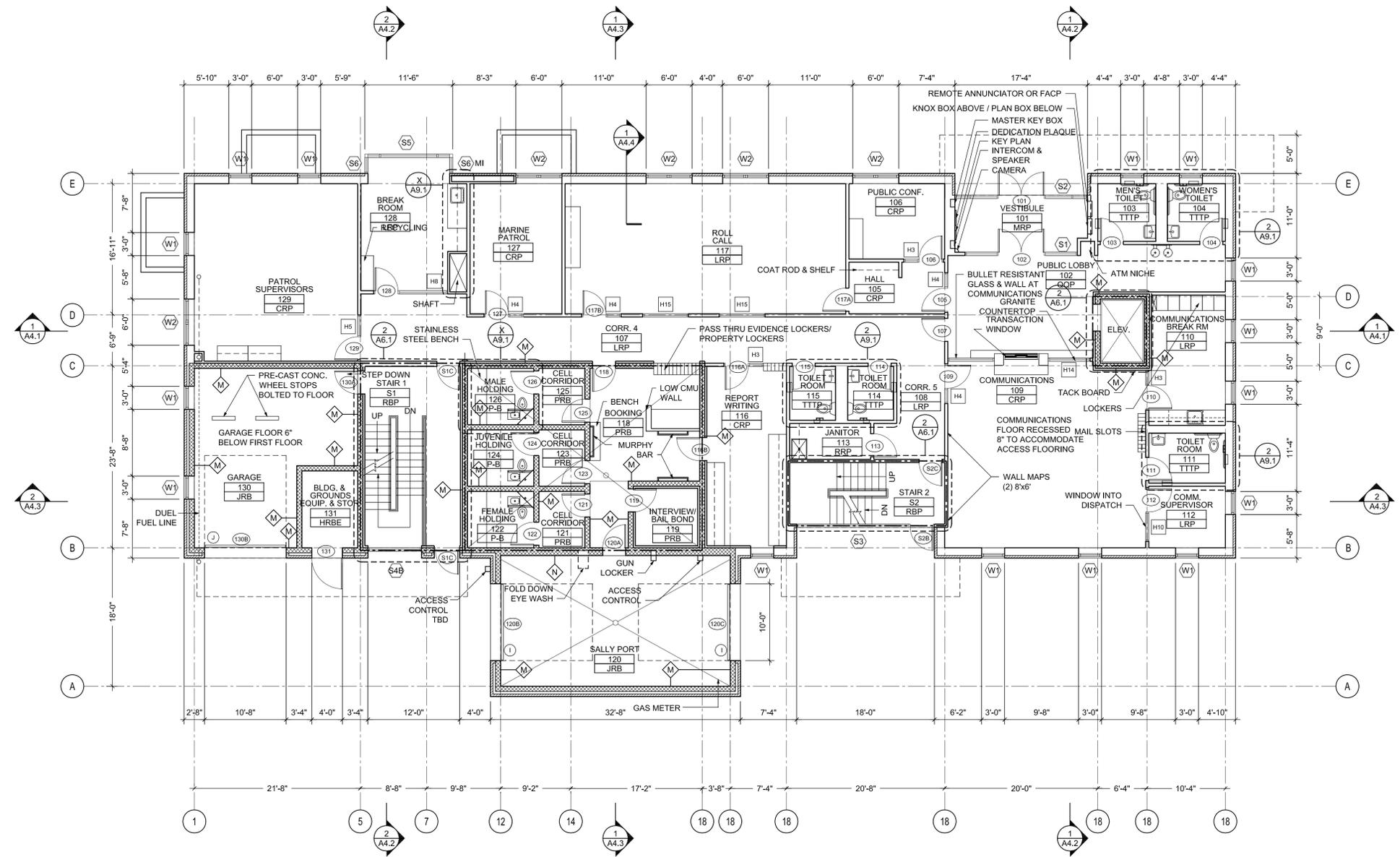
- NONE
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FINISH NOTES

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- 3) ALL DETENTION AREA ROOMS SHALL HAVE EPOXY SLOPED TO FLOOR DRAINS
- 4) ONLY USE PRIMER AT THE FOLLOWING ROOMS: 017, 018

FLOOR PLAN NOTES

- SEE 1/2" TOILET ROOM PLANS ON DWG A9.1
- SEE 1/2" STAIR PLANS ON DWG A.x.x
- SEE 1/2" DETENTION AREA PLANS ON DWG A9.2
- SEE 1/2" ELEVATOR PLAN ON DWG A.x.x



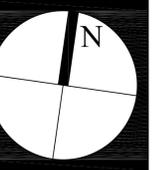
1 FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

Donham & Sweeney
ARCHITECTS
68 Harrison Avenue
Boston, MA 02111
Post Office Box 265
Boston, MA 02111
4 Head Tide Church Rd.
Alna, ME 04535
207 586 6000
donhamandsweeney.com

BRUNSWICK POLICE STATION
BRUNSWICK, ME
project number: 1110
FIRST FLOOR PLAN

Scale: 1/8" = 1'-0"
Drawn by: RLS
issue date
SD SUBMISSION 05.15.2012
100% DD 08.07.2012
Progress 08.17.2012

A2.1



GENERAL NOTES

- 1) EXTERIOR COLUMN LINE NOT ON CENTER LINE OF STUDS. SEE STRUCTURAL FOR DIMS. AND LOCATIONS.
- 2) ALL INTERIOR AND EXTERIOR CONCRETE PADS ARE BY THE GENERAL CONTRACTOR
- 3) SEE AX.X FOR ALL DETAILS TYPICAL RUNNING TRIM, MARKERBOARDS AND TACKBOARDS.

FINISH LEGEND

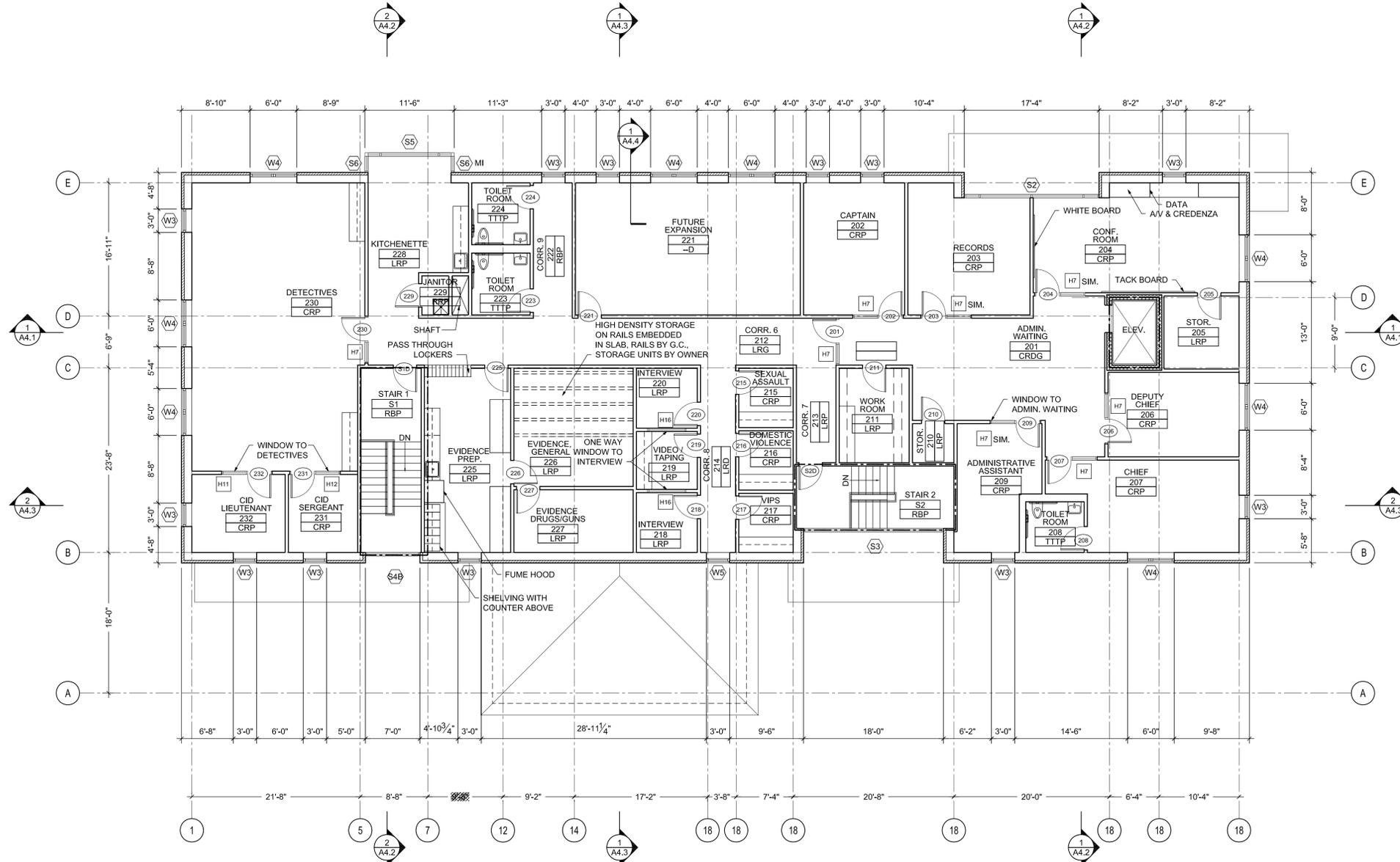
- NONE
- C PRECISION LOC BROADLOOM CARPET BY CONSTANTINE CARPET, 34 OZ., DENSITY 9792, 100% UTRON NYLON 6.6, CONTINUOUS DYED, LOW VOC OR ZERO VOC ADHESIVE
- E EPOXY PAINT
- F FRP PANELS
- G HIGH GLOSS PAINT
- H CONCRETE HARDENER
- J HEAVY-DUTY CONCRETE HARDENER
- L LINOLEUM
- M WALK OFF MAT
- N SEAMLESS EPOXY
- P PAINT
- Q STONE TILE
- R RUBBER TILE / BASE / TREADS
TILE SHALL BE 0.080, 4" TALL BY ARMSTRONG OR EQUAL, LOW VOC ADHESIVE
- S SEALER
- T CERAMIC FLOOR/BASE/WALL TILE
FULL HEIGHT WALL TILE AT ALL WET WALLS. SEE DWG. A9.1 FOR ELEVATIONS.
- V VINYL COMPOSITION TILE / BASE
- X MATCH EXISTING
- Z VARIES - SEE FLOOR PLAN FOR LOCATION OF FINISHES.

FINISH NOTES

- 1) PROVIDE CHAIR RAIL AT THE FOLLOWING ROOMS: 001, 010, 019, 105, 107, 108, 117, 201, 212, 213, 214, 222.
- 2) PROVIDE WAINSCOTTING AT THE FOLLOWING ROOM: 102
- 3) ALL DETENTION AREA ROOMS SHALL HAVE EPOXY SLOPED TO FLOOR DRAINS
- 4) ONLY USE PRIMER AT THE FOLLOWING ROOMS: 017, 018

FLOOR PLAN NOTES

- SEE 1/2" TOILET ROOM PLANS ON DWG A9.1
- SEE 1/2" STAIR PLANS ON DWG Ax.x
- SEE 1/2" DETENTION AREA PLANS ON DWG A9.2
- SEE 1/2" ELEVATOR PLAN ON DWG Ax.x

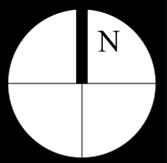


1 SECOND FLOOR PLAN
SCALE: 1/8"=1'-0"

BRUNSWICK POLICE STATION
BRUNSWICK, ME
project number: 1110
SECOND FLOOR PLAN

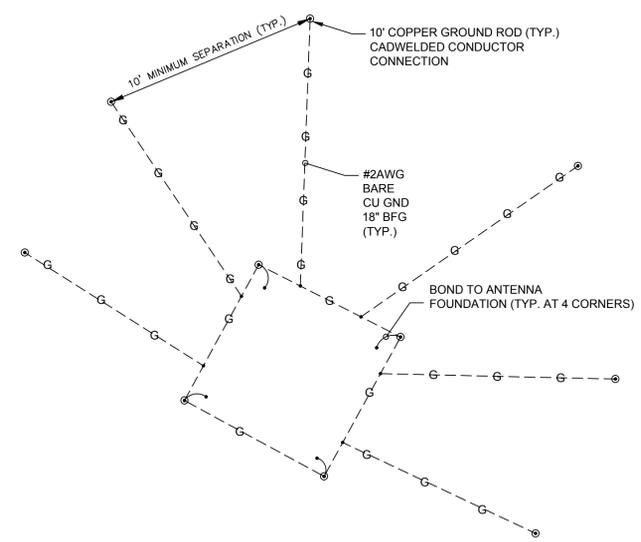
Scale: 1/8" = 1'-0"
Drawn by: RLS
issue date
SD SUBMISSION 05.15.2012
100% DD 08.07.2012
Progress 08.17.2012

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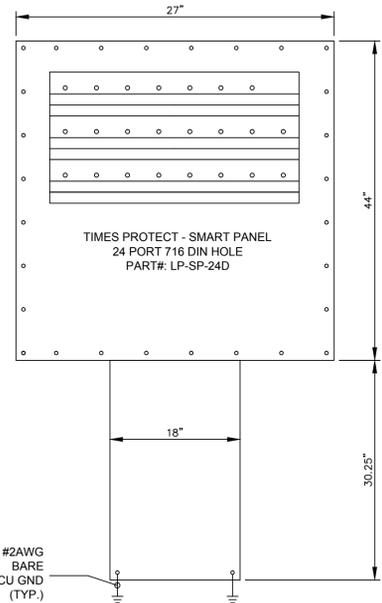


NOTES:

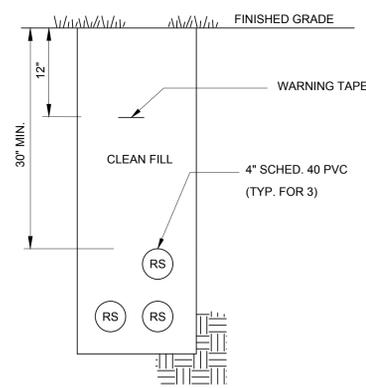
- SEE SHEET E0.0 FOR LEGEND AND GENERAL NOTES.
- ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL EQUIPMENT WITH CENTRAL MAINE POWER (CMP). PROVIDE ALL CONDUITS, WIRES, STEEL SWEEPS, STEEL RISER PIPES AS REQUIRED BY CMP.
- CT CABINET AND METER SOCKET SHALL BE LOCATED ON THE EXTERIOR OF THE BUILDING AT THE POINT WHERE THE CONDUITS ENTER THE BUILDING. COORDINATE SIZE AND MOUNTING DETAILS WITH CMP.



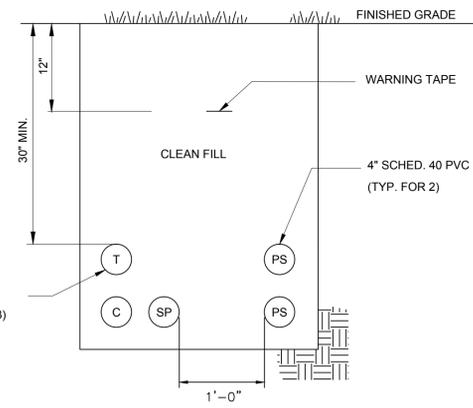
4 ANTENNA FOUNDATION GROUNDING DETAIL
SCALE: NOT TO SCALE



4 POLYPHASOR DETAIL
SCALE: NOT TO SCALE



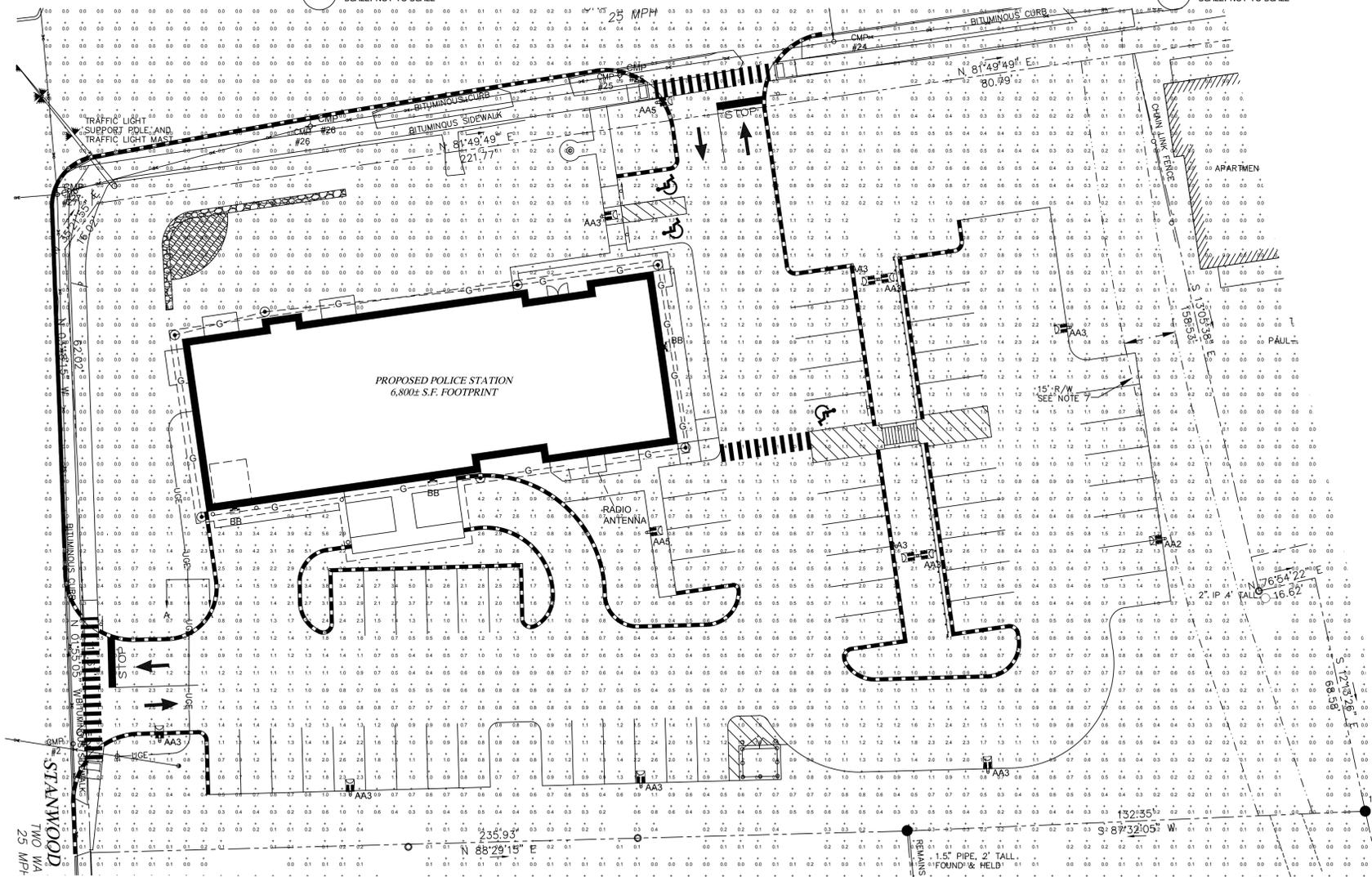
3 DUCT BANK SECTION B-B
SCALE: NOT TO SCALE



2 DUCT BANK SECTION A-A
SCALE: NOT TO SCALE

DUCT BANK KEY:

- C = CABLE TV (TERMINATE AT TELEPHONE BACKBOARD)
- GC = GENERATOR CONTROL
- PG = GENERATOR POWER
- PS = POWER (SECONDARY)
- RS = RADIO SYSTEM CONDUITS
- SP = SPARE (TERMINATE AT TELEPHONE BACKBOARD)
- T = TELEPHONE (TERMINATE AT TELEPHONE BACKBOARD)



1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'

Brunswick Police Station (11063) LUMINAIRE SCHEDULE

TYP	DESCRIPTION	LUMENS	LLF	QTY
BB	KIM LIGHTING WD14D3LED-5100K WALL DIRECTOR LED	3476	1.00	6
AA3	KIM LIGHTING SAR3LED-5100K ARCHETYPE LED	3476	1.00	12
AA5	KIM LIGHTING SAR5LED-5100K ARCHETYPE LED	3279	1.00	3

**FOR REVIEW
NOT FOR CONSTRUCTION**

SWIFTCURRENT
Engineering Services
10 Forest Falls Dr., Unit 8B
Yarmouth, ME 04096
Tel: (207) 847-9280

Donham & Sweeney ARCHITECTS
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Alma, ME 04535
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**BRUNSWICK POLICE STATION
BRUNSWICK, ME**
project number: 1110
ELECTRICAL SITE PLAN

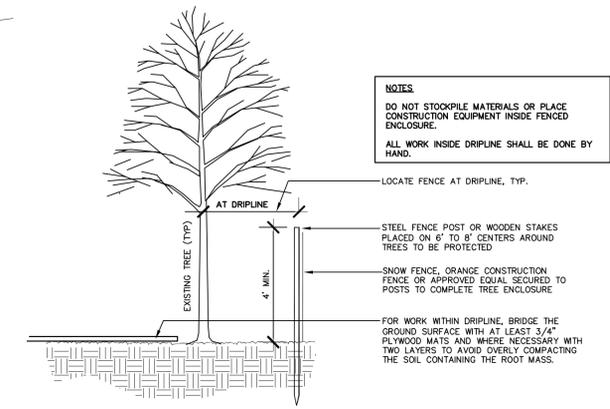
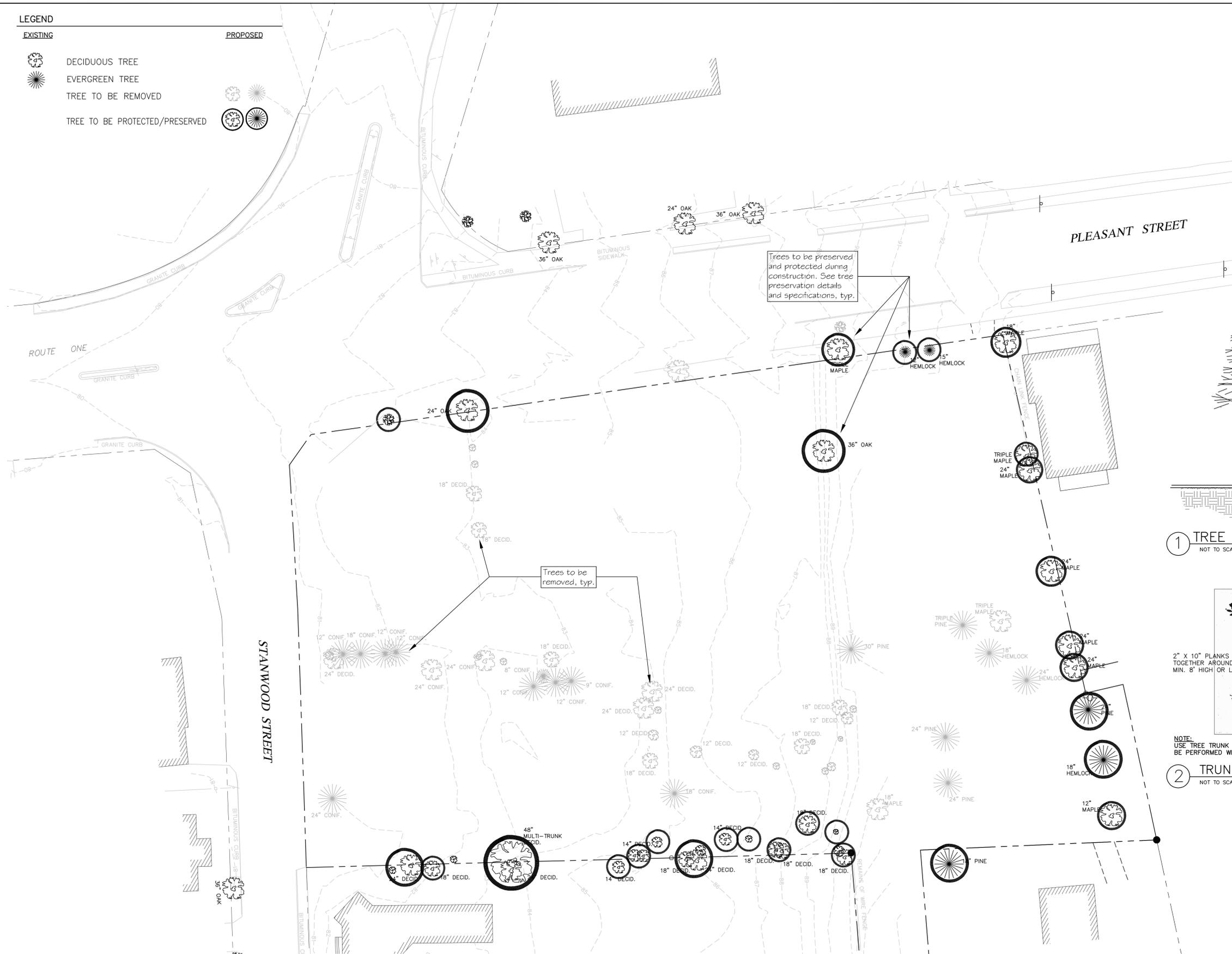
Scale: 1" = 20'
Drawn by: TDM
issue date
Schematic Design 08.27.2012

ES1.0

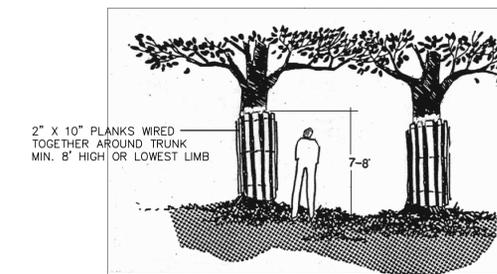
GENERAL PLANTING NOTES

- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT (TJD&A) AT ONCE IN WRITING OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AS INDICATED ON THE PLAN AND ACTUAL FIELD CONDITIONS AND RECEIVE WRITTEN INSTRUCTIONS PRIOR TO PROCEEDING.
- CONTRACTOR SHALL EXERCISE SPECIAL CARE TO AVOID ANY DAMAGE TO EXISTING TREES TO REMAIN AND MONUMENTS RESULTING FROM SITE PREPARATION AND CONSTRUCTION OPERATIONS. ALL TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. SEE TREE PROTECTION DETAILS.

EXISTING	PROPOSED



1 TREE & ROOT PROTECTION DETAIL
NOT TO SCALE



NOTE:
USE TREE TRUNK PROTECTION DETAIL WHEN WORK OTHER THAN HAND WORK IS TO BE PERFORMED WITHIN THE DRIP LINE OF THE TREE.

2 TRUNK PROTECTION
NOT TO SCALE

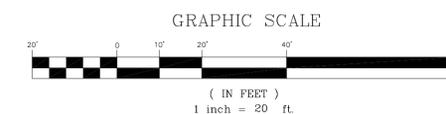
- 08-31-12 DESIGN DEVELOPMENT COORDINATION MAP
- 08-02-12 DESIGN DEVELOPMENT COORDINATION MAP

TITLE:
TREE PRESERVATION / REMOVAL PLAN

PROJECT:
**BRUNSWICK POLICE STATION
STANDWOOD & PLEASANT STREETS, BRUNSWICK, ME**

OWNER:
**BRUNSWICK DEPARTMENT CORPORATION
BRUNSWICK, ME**

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8 CUMBERLAND STREET, BRUNSWICK, ME 04011
207.725.1200 www.sitelinespa.com



LEGEND

EXISTING	PROPOSED

PLANT LIST

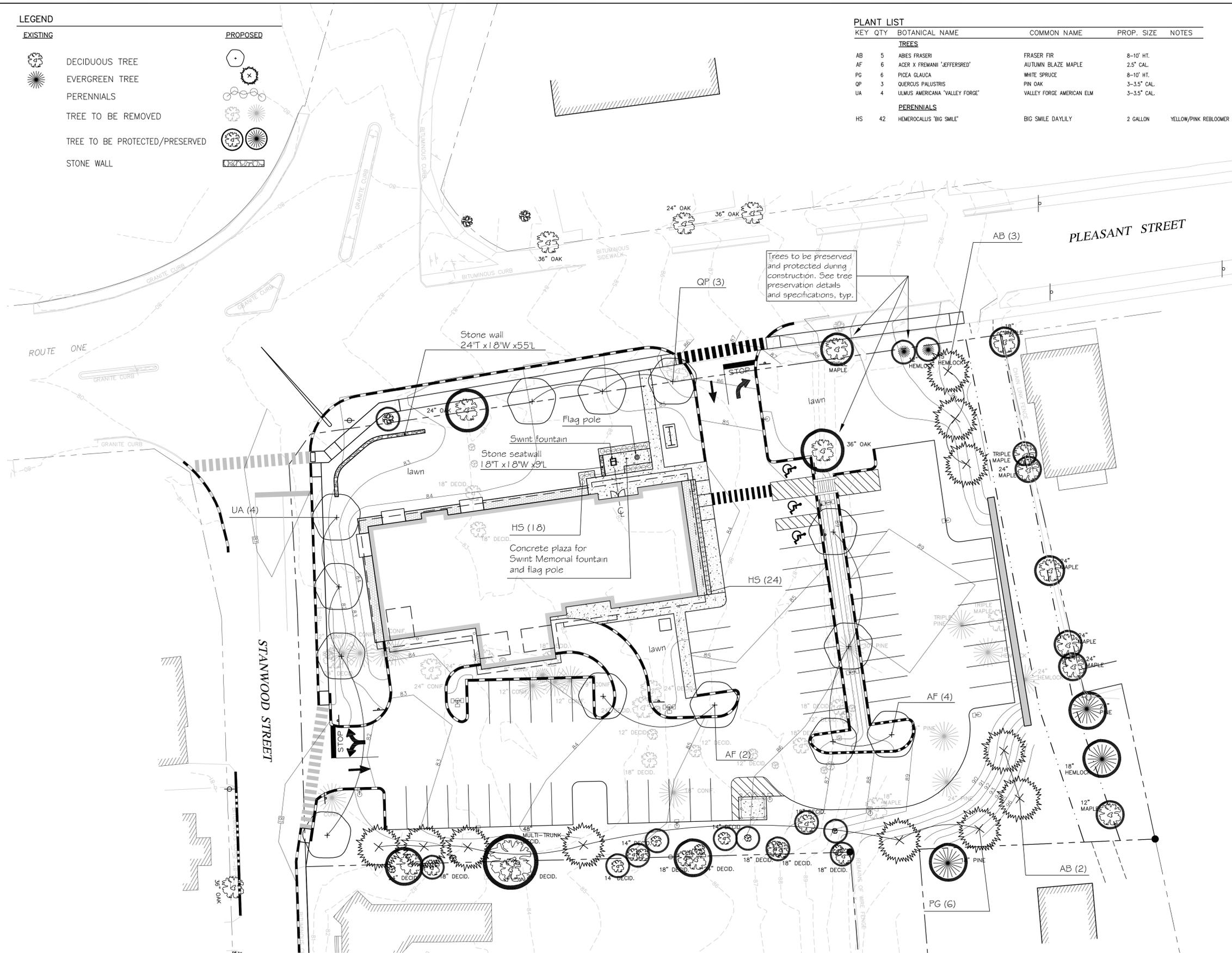
KEY	QTY	BOTANICAL NAME	COMMON NAME	PROP. SIZE	NOTES
TREES					
AB	5	ABIES FRASERI	FRASER FIR	8-10' HT.	
AF	6	ACER X FREMANII 'JEFFERSRED'	AUTUMN BLAZE MAPLE	2.5' CAL.	
PG	6	PICEA GLAUCA	WHITE SPRUCE	8-10' HT.	
QP	3	QUERCUS PALUSTRIS	PIN OAK	3-3.5' CAL.	
UA	4	ULMUS AMERICANA 'VALLEY FORGE'	VALLEY FORGE AMERICAN ELM	3-3.5' CAL.	
PERENNIALS					
HS	42	HEMEROCALLIS 'BIG SMILE'	BIG SMILE DAYLILY	2 GALLON	YELLOW/PINK REBLOOMER

tjd&a

Terrence J. DeWan & Associates
Landscape Architects & Planners
207.846.0757

GENERAL PLANTING NOTES

- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT (TJD&A) AT ONCE IN WRITING OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AS INDICATED ON THE PLAN AND ACTUAL FIELD CONDITIONS AND RECEIVE WRITTEN INSTRUCTIONS PRIOR TO PROCEEDING.
- CONTRACTOR SHALL EXERCISE SPECIAL CARE TO AVOID ANY DAMAGE TO EXISTING TREES TO REMAIN AND MONUMENTS RESULTING FROM SITE PREPARATION AND CONSTRUCTION OPERATIONS. ALL TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. SEE TREE PROTECTION DETAILS.
- PLANTING AREA SIZE, SHAPE, AND EXACT LOCATION SHALL BE DETERMINED IN THE FIELD WITH PROJECT LANDSCAPE ARCHITECT AND OWNER'S REPRESENTATIVE. ALL SOD SHALL BE REMOVED FROM PLANTING BEDS AND DISPOSED OF OFF-SITE.
- THE LANDSCAPE CONTRACTOR SHALL CALL DIG-SAFE (1-888-344-7233) PRIOR TO START OF WORK.
- THE LANDSCAPE CONTRACTOR SHALL NOTIFY PROJECT LANDSCAPE ARCHITECT A MINIMUM OF 48 HOURS PRIOR TO INSTALLATION TO COORDINATE INSPECTION & LOCATION OF PLANT MATERIAL.
- THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR ANY SITE IMPROVEMENTS DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO OWNER.
- ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE (1) FULL YEAR AFTER ACCEPTANCE BY OWNER.
- PLANT SUBSTITUTIONS AND SIZE VARIATIONS ARE ONLY ACCEPTED IF APPROVED BY PROJECT LANDSCAPE ARCHITECT AND OWNER.



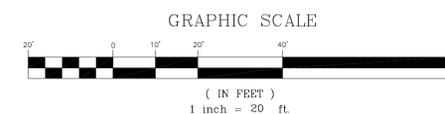
- 08-31-12 DESIGN DEVELOPMENT COORDINATION MAP
- 08-02-12 DESIGN DEVELOPMENT COORDINATION MAP

TITLE: **LANDSCAPE PLAN**

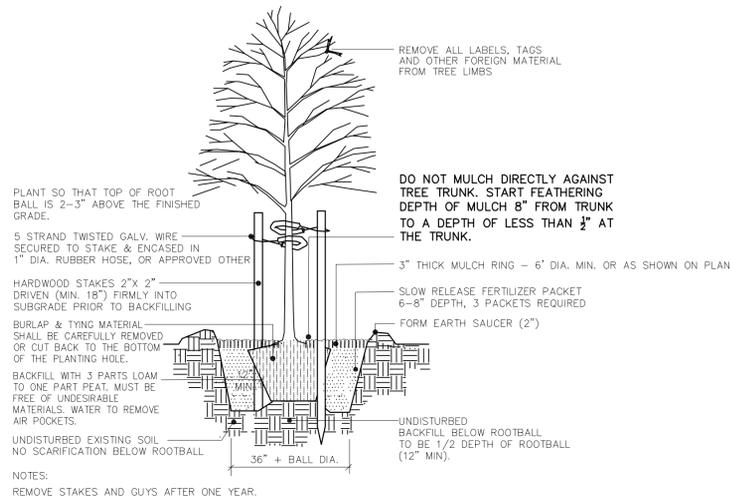
PROJECT: **BRUNSWICK POLICE STATION
STANWOOD & PLEASANT STREETS, BRUNSWICK, ME**

OWNER: **BRUNSWICK DEPARTMENT CORPORATION
BRUNSWICK, ME**

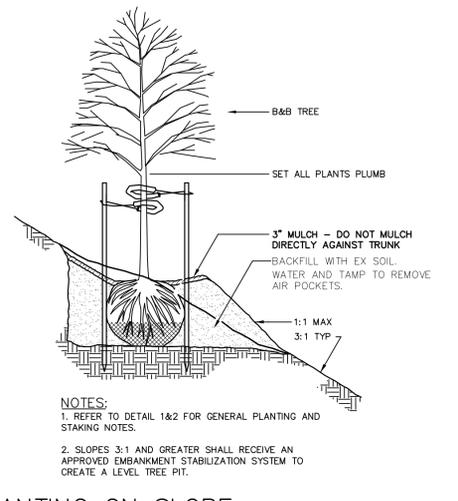
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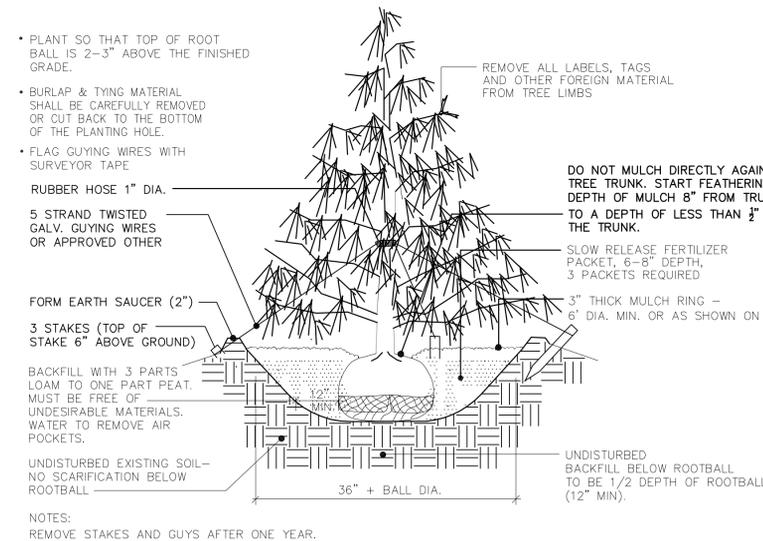
L2



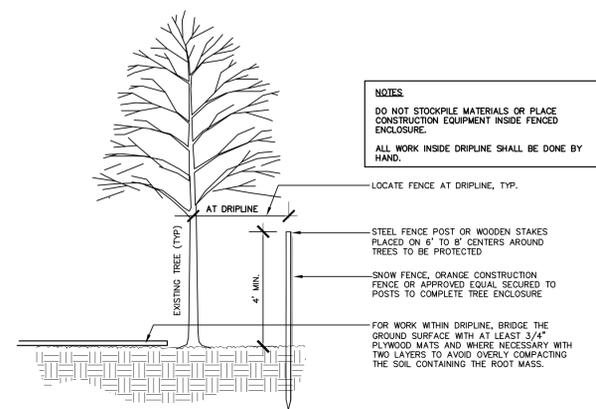
1 DECIDUOUS TREE PLANTING & STAKING
 NOT TO SCALE



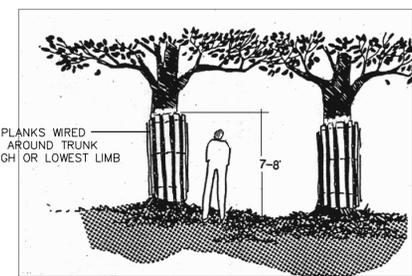
4 TREE PLANTING ON SLOPE
 NOT TO SCALE



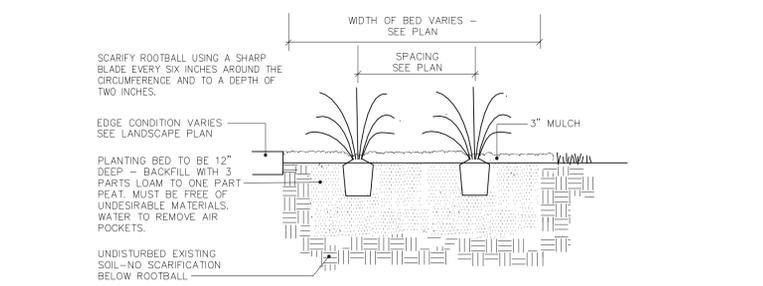
2 EVERGREEN TREE PLANTING & GUYING
 NOT TO SCALE



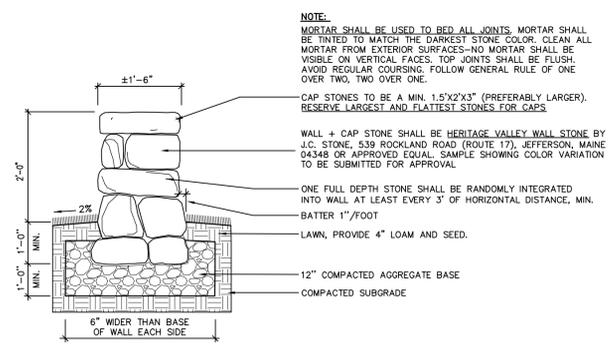
5 TREE & ROOT PROTECTION DETAIL
 NOT TO SCALE



6 TRUNK PROTECTION
 NOT TO SCALE



3 PERENNIAL OR GROUNDCOVER PLANTING
 NOT TO SCALE

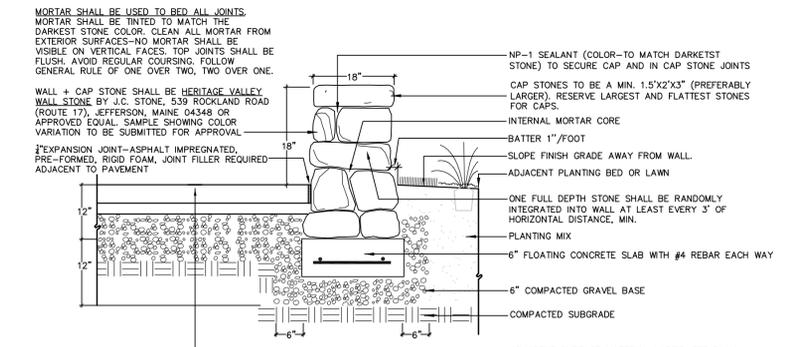


7 STONE WALL
 NOT TO SCALE

LANDSCAPE SPECIFICATIONS

- 1.0 DESCRIPTION
- A. All applicable portions of General Requirements are to be considered as included with this section.
 - B. Work under this Section shall include all labor, materials, services, equipment and accessories necessary to furnish and install plant material in complete accordance with the specifications and applicable Drawings.
- 1.2 QUALITY ASSURANCE
- A. Installer's Personnel Qualifications: Reputable landscape contractor with a min. 5 years experience in landscape construction and licensed to perform work as described in this section.
 - B. Comply with applicable federal, state, county and local regulations governing landscape materials and work.
- 1.3 WARRANTY
- A. Warranty that all plants: (Trees, Shrubs, Perennials, Ornamental Grasses, Groundcovers, etc.) planted under this Contract shall be healthy and in flourishing condition of active growth for one (1) year and all lawns shall be guaranteed for thirty (30) from date of Final Acceptance by Owner.
 - B. If a replacement plant dies, the contractor shall assist in determining the specific plant issue and advise accordingly. Any damage due to replacement operations shall be repaired by the Contractor. At the end of the warranty period, inspections shall be made by Owner and Project Landscape Architect. All plants not in a healthy growing condition shall be removed and replaced with plants of a like kind and size before the close of the next planting season.
- 1.4 MATERIALS
- A. All plant stock shall be nursery grown and comply with ANSI Z60.1 (American Standard for Nursery Stock).
 - B. All stock shall be balled and burlapped (B&B), container grown stock, or sod.
 - C. Damaged plants and plants that do not meet requirements will be rejected.
 - D. Mulch: Shredded, dark brown/black bark mulch (no pieces larger than 3" in any direction) at least 6 months old, shall consist of soft wood bark fragments of such size and texture as to successfully resist washing or blowing under normal conditions, but capable of being easily and uniformly spread around the plants. The mulch shall contain no foreign material.
 - E. Tree Stabilization: Stakes for tree support shall be hardwood free from knots, rot, cross grain or other defects that would impair strength. Chafing guards shall be all the same color on the project
 - F. Fertilizer: Slow release packets containing the following composition: Nitrogen 16%, Phosphoric Acid 8%, and Potash 16% (3 packets, spaced equidistant per tree and 1 per shrub at 6-8" depth).
- 1.6 INSTALLATION
- A. Site Preparation: Prior to beginning the work of this section, verify that site grading and planting bed preparation have been properly completed.
 - B. Seasons for planting, unless otherwise directed by Project Landscape Architect, shall be within the following dates:
 1. Potted and Container Grown Plants: Spring 4/1 to 7/15, and Fall 8/15 to 10/15
 2. Balled and Burlapped: Spring 4/1 to 7/15, and Fall 8/15 to 10/15
 - C. Inspection: The landscape contractor shall notify Project Landscape Architect a minimum of 48 hours prior to installation to coordinate inspection and location of plant material.
 - D. Plant Placement: Plant material locations and bed outlines shall be as indicated on the Landscape Plan or as coordinated in the field by Project Landscape Architect. Turf shall be cut from planting beds by sod cutter or hand cutting. Plant material locations may be adjusted slightly to meet field conditions.
 - E. Planting: All planting shall be done as shown on drawings and as specified herein and in strict accordance with standard horticultural practices. Dispose of subsoil removed from planting excavations off-site.
 - F. Pruning: All dead or damaged branches shall be removed from trees and shrubs.
 - G. Staking & Guying: Plants shall be staked and guyed within 24 hours of planting according to drawings provided.
 - H. Mulching:
 1. Trees and shrubs: rings around trees and entire shrub or entire planting areas as indicated on Landscape Plan.
 2. Planting Areas: 3 inches average thickness of mulch over entire planting area. The edges shall be cut so that the mulch maintains its depth and does not spill onto adjacent surfaces. Edge trimmings shall be removed from the site.
 - H. Watering: Water shall be tanked to the site by contractor unless other arrangements have been made with the Owner.
 - I. Clean-up: The Contractor shall remove all debris, construction equipment, excess fill, rocks, and other excess material caused by this work, from the site upon completion of work.

END OF SECTION



8 STONE SEATWALL
 NOT TO SCALE

2.	08-31-12	DESIGN DEVELOPMENT COORDINATION	MAP
1.	08-02-12	DESIGN DEVELOPMENT COORDINATION	MAP

TITLE: LANDSCAPE DETAILS

PROJECT: BRUNSWICK POLICE STATION
 STANDWOOD & PLEASANT STREETS, BRUNSWICK, ME

OWNER: BRUNSWICK DEPARTMENT CORPORATION
 BRUNSWICK, ME

SITELINES, PA
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 LANDSCAPE ARCHITECTS
 8 CUMBERLAND STREET, BRUNSWICK, ME 04011
 207.725.1200 www.sitelinespa.com

GENERAL NOTES:

- DRAWINGS ARE BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION FROM MULTIPLE SOURCES BY SITELINES, PA.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES AND IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-800-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IN AREAS OF POTENTIAL CONFLICTS TEST PITS SHALL BE REQUIRED TO VERIFY EXISTING UTILITY LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- RIM ELEVATIONS OF PROPOSED SANITARY SEWER MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.
- THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, CABLE AND FIRE ALARM). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER AND ARCHITECT.
- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATIONS, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE CONSTRUCTION MANAGER REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.
- THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS AND GRADES BEFORE WORK BEGINS. CONTRACTOR SHALL CONFIRM LOCATION AND DEPTH ALL UTILITY LINE CROSSINGS WITH TEST PITS PRIOR TO BEGINNING WORK. CONFLICTS SHALL BE REPORTED IN WRITING TO CONSTRUCTION MANAGER FOR RESOLUTION OF THE CONFLICT.
- ALL AREAS OUTSIDE THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS, STRUCTURES, OR PAVEMENT SHALL RECEIVE 4 INCHES OF LOAM AND SEED.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR ANY POLE RELOCATION AND FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, CABLE, FIRE ALARM AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
- UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED.
- ALL PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATION BY A MAINE REGISTERED LICENSED PROFESSIONAL LAND SURVEYOR (PLS) AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PREPARE AN AS-BUILT PLAN SURVEY SHOWING LOCATIONS OF ALL SURFACE FEATURES AND SUBSURFACE UTILITY SYSTEMS INCLUDING THE LOCATION TYPE, SIZE AND INVERTS.
- THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED ONLY UPON THE ESTABLISHMENT OF ALL LANDSCAPED AREAS. ALL WORK SHALL BE IN COMPLIANCE WITH THE ENVIRONMENTAL QUALITY HANDBOOK FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION, AS ADOPTED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- ALL MATERIALS AND CONSTRUCTION METHODS USED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL LOCAL MUNICIPAL STANDARDS AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- THE CONTRACTOR IS REQUIRED TO CONTROL DUST DURING CONSTRUCTION. EXPOSED SOIL AREAS SHALL BE SPRAYED WITH WATER AS NEEDED TO CONTROL DUST EMISSIONS. COVER EXPOSED SOIL AREAS AS QUICKLY AS PRACTICAL TO PREVENT WINDS FROM GENERATING DUST.
- ALL HANDICAP ACCESSIBLE PARKING SPACES, RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
- ALL SITE SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

LAYOUT NOTES:

- ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR BUILDING. FOUNDATION
- OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.
- PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
- BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION.
- REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION DIMENSIONS FOR LAYOUT.

GRADING AND DRAINAGE NOTES:

- UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
POLYVINYL CHLORIDE PIPE (PVC)
SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS OR SDR 35
- TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.
- THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

PERMITTING REQUIREMENTS:

AGENCY: TOWN OF BRUNSWICK	PERMIT: SITE PLAN APPROVAL BUILDING	STATUS: PENDING (BY CONTRACTOR)
-------------------------------------	--	--

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION	STORMWATER PERMIT-BY-RULE	PENDING
---	---------------------------	---------

BRUNSWICK POLICE STATION

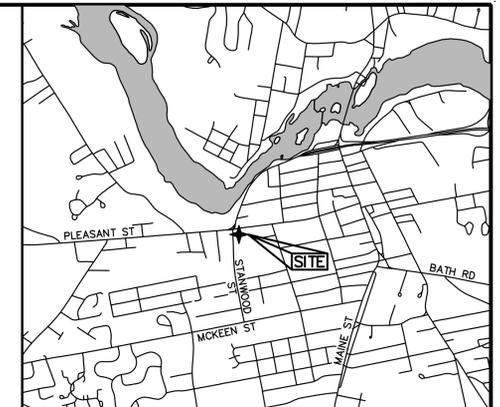
STANWOOD & PLEASANT STREETS

BRUNSWICK, ME 04011

PREPARED FOR:

TOWN OF BRUNSWICK

BRUNSWICK, ME 04011



LOCATION MAP
NOT TO SCALE

LEGEND

EXISTING		PROPOSED
●	IRON MARKER FOUND	○
	5/8" REBAR TOPPED WITH AN ALUMINUM CAP READING "BRUCE W. MARTINSON - PLS 2137" TO BE SET	
	GRANITE MONUMENT SET	□
	CATCH BASIN	⊕
	SEWER MANHOLE	⊗
	FIRE HYDRANT	⊙
	WATER GATE VALVE	⊕
	WATER SHUT-OFF	⊙
	BLOW-OFF/CLEAN-OUT	○
	UTILITY POLE	●
	UTILITY LINE	— UGE — (OVERHEAD UTILITY LINE)
	PROPERTY LINE	---
	EASEMENTS	---
	SETBACK/BUFFER	---
	SOILS BOUNDARY	---
	WETLAND BOUNDARY	---
	STREAM	—
	CULVERT	—
	CURB	—
	EDGE OF PAVEMENT	—
	ROAD CENTERLINE	—
	BUILDING	— 12"SD —
	STORM DRAIN(SEE PLAN FOR SIZE)	— 6"S —
	SEWER LINE(SEE PLAN FOR SIZE)	— 8"W —
	WATER LINE(SEE PLAN FOR SIZE)	—
	UNDERDRAIN(SEE PLAN FOR SIZE)	—
	SLOPE ARROW	— -1.5% —
	CONTOURS	— 100 —
	TEMPORARY INLET PROTECTION	○
	CLEARING LIMIT	—
	TREE LINE	—
	SEDIMENT BARRIER	SB
	RIPRAP	⊗
	CONSTRUCTION ENTRANCE	⊗
	PROPOSED PAVEMENT	—
	SPOT GRADE	T100.50 B100.00

UTILITY CONTACTS

CODE ENFORCEMENT

JEFF HUTCHINSON
TOWN OF BRUNSWICK
28 FEDERAL STREET
BRUNSWICK, MAINE 04011
207-725-6651

ELECTRIC SERVICE

CENTRAL MAINE POWER
280 BATH ROAD
BRUNSWICK, MAINE 04011
207-721-8054

TELEPHONE SERVICE

FAIRPOINT
BATH ROAD (P.O. BOX 360)
BRUNSWICK, MAINE 04011
207-442-8018

CABLE SERVICE

COMCAST CONSTRUCTION OFFICE
336 BATH ROAD
BRUNSWICK, MAINE, 04011
207-729-6660

WATER SERVICE

BRUNSWICK-TOPSHAM WATER DISTRICT
ALAN FRASIER, P.E., SUPERINTENDENT
BOX 580
BRUNSWICK, MAINE 04011
207-729-9956

SANITARY SEWER

BRUNSWICK SEWER DISTRICT
LEONARD BLANCHETTE
10 PINE TREE ROAD
BRUNSWICK, MAINE 04011
207-729-0148

PUBLIC WORKS DEPARTMENT

JOHN FOSTER, P.E.
9 INDUSTRY ROAD
BRUNSWICK, MAINE 04011
207-725-6654

BRUNSWICK FIRE DEPARTMENT

KENNETH BRILLANT, FIRE CHIEF
21 TOWN HALL PLACE
BRUNSWICK, MAINE 04011
207-725-5541

PROJECT TEAM

CIVIL ENGINEER

SITELINES P.A.
ATTN: CURTIS Y. NEUFELD, P.E.
8 CUMBERLAND STREET
BRUNSWICK, MAINE 04011
207-725-1200
WWW.SITELINESPA.COM

SURVEYOR

SITELINES P.A.
ATTN: KEVIN CLARK, PLS
8 CUMBERLAND STREET
BRUNSWICK, MAINE 04011
207-725-1200
WWW.SITELINESPA.COM

ARCHITECT

DONHAM & SWEENEY ARCHITECTS
ATTN: JEFF SHAW, AIA
68 HARRISON AVENUE
BOSTON, MASSACHUSETTS 02111
617-423-1400

LANDSCAPE ARCHITECT

TERRENCE J. DEWAN & ASSOCIATES
ATTN: MATTHEW PHILLIPS
121 WEST MAIN ST.
YARMOUTH, MAINE 04096
207-846-0757

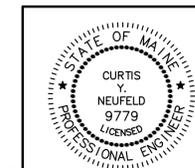
SHEET INDEX	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	EXISTING CONDITIONS AND DEMOLITION PLAN
C3	SITE LAYOUT PLAN
C4	UTILITY PLAN
C5	GRADING, DRAINAGE, & EROSION CONTROL PLAN
C6	SITE DEVELOPMENT DETAILS SHEET 1 OF 2
C7	SITE DEVELOPMENT DETAILS SHEET 2 OF 2
C8	EROSION CONTROL DETAILS AND NOTES
	SITE LAYOUT PLAN, STANWOOD STREET RECONSTRUCTION

- 09-04-12 SUBMITTED TO TOWN FOR APPROVAL JIM
- 08-03-12 DESIGN DEVELOPMENT SUBMISSION RPL
- 05-15-12 SCHEMATIC DESIGN SUBMISSION RPL
- 02-17-12 SCHEMATIC DESIGN SUBMISSION RPL

TITLE: **COVER SHEET**

PROJECT: **BRUNSWICK POLICE STATION
STANWOOD & PLEASANT STREETS, BRUNSWICK, ME**

OWNER: **TOWN OF BRUNSWICK
BRUNSWICK, ME**

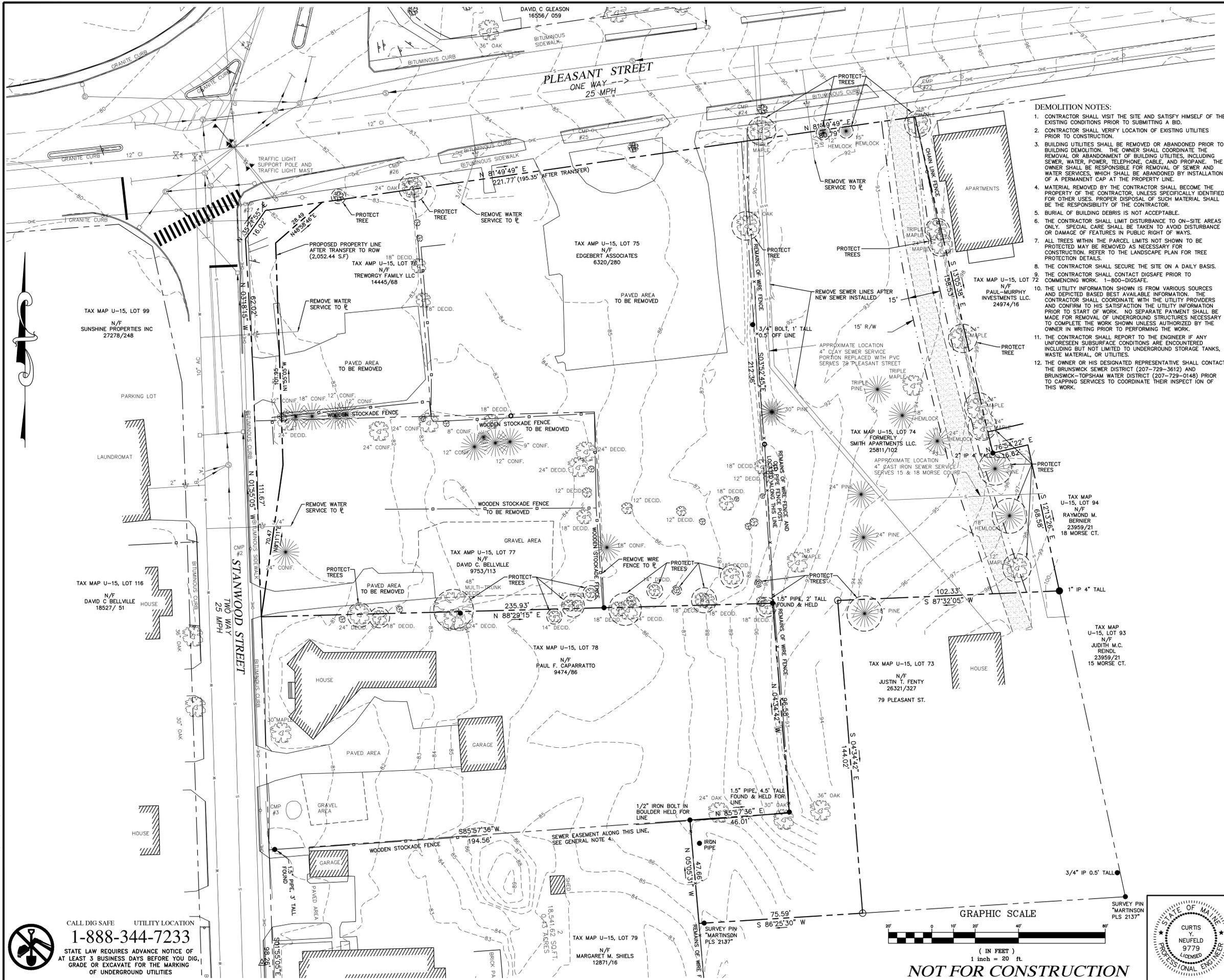


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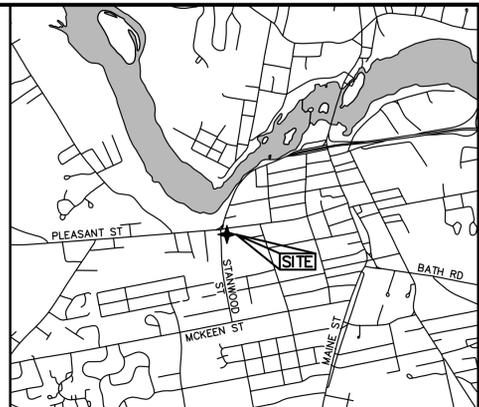
FIELD WK: KPC	SCALE: N/A	SHEET:
DRN BY: RPL	JOB #: 1911	C1
CHD BY: CYN	SS:	
DATE: 02/14/2012	FILE: 1911COVERDET	

NOT FOR CONSTRUCTION

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1-888-344-7233
STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG. GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES



- DEMOLITION NOTES:**
- CONTRACTOR SHALL VISIT THE SITE AND SATISFY HIMSELF OF THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.
 - CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 - BUILDING UTILITIES SHALL BE REMOVED OR ABANDONED PRIOR TO BUILDING DEMOLITION. THE OWNER SHALL COORDINATE THE REMOVAL OR ABANDONMENT OF BUILDING UTILITIES, INCLUDING SEWER, WATER, POWER, TELEPHONE, CABLE, AND PROPANE. THE OWNER SHALL BE RESPONSIBLE FOR REMOVAL OF SEWER AND WATER SERVICES, WHICH SHALL BE ABANDONED BY INSTALLATION OF A PERMANENT CAP AT THE PROPERTY LINE.
 - MATERIAL REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS SPECIFICALLY IDENTIFIED FOR OTHER USES. PROPER DISPOSAL OF SUCH MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - BURIAL OF BUILDING DEBRIS IS NOT ACCEPTABLE.
 - THE CONTRACTOR SHALL LIMIT DISTURBANCE TO ON-SITE AREAS ONLY. SPECIAL CARE SHALL BE TAKEN TO AVOID DISTURBANCE OR DAMAGE OF FEATURES IN PUBLIC RIGHT OF WAYS.
 - ALL TREES WITHIN THE PARCEL LIMITS NOT SHOWN TO BE PROTECTED MAY BE REMOVED AS NECESSARY FOR CONSTRUCTION. REFER TO THE LANDSCAPE PLAN FOR TREE PROTECTION DETAILS.
 - THE CONTRACTOR SHALL SECURE THE SITE ON A DAILY BASIS.
 - THE CONTRACTOR SHALL CONTACT DIGSAFE PRIOR TO COMMENCING WORK. 1-800-DIGSAFE.
 - THE UTILITY INFORMATION SHOWN IS FROM VARIOUS SOURCES AND DEPICTED BASED BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDERS AND CONFIRM TO HIS SATISFACTION THE UTILITY INFORMATION PRIOR TO START OF WORK. NO SEPARATE PAYMENT SHALL BE MADE FOR REMOVAL OF UNDERGROUND STRUCTURES NECESSARY TO COMPLETE THE WORK SHOWN UNLESS AUTHORIZED BY THE OWNER IN WRITING PRIOR TO PERFORMING THE WORK.
 - THE CONTRACTOR SHALL REPORT TO THE ENGINEER IF ANY UNFORESEEN SUBSURFACE CONDITIONS ARE ENCOUNTERED INCLUDING BUT NOT LIMITED TO UNDERGROUND STORAGE TANKS, WASTE MATERIAL, OR UTILITIES.
 - THE OWNER OR HIS DESIGNATED REPRESENTATIVE SHALL CONTACT THE BRUNSWICK SEWER DISTRICT (207-729-3612) AND BRUNSWICK-TOPSHAM WATER DISTRICT (207-729-0148) PRIOR TO CAPPING SERVICES TO COORDINATE THEIR INSPECTION OF THIS WORK.



LOCATION MAP NOT TO SCALE

- NOTES:**
- OWNER OF RECORD:**
BRUNSWICK DEVELOPMENT CORPORATION
 - PLAN REFERENCE(S):**
A. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, STATE HIGHWAY "26", D.O.T. FILE NO. 3-382, SHEET 1 OF 1, DATED APRIL 1990.
B. MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP, STATE HIGHWAY "1", MILL STREET, F.A.P. NO U-01-(19) S.H.C. FILE NO. 3-105, SHEET 1 OF 3, DATED JANUARY 1955.
C. MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP, STATE HIGHWAY "1", PLEASANT STREET, F.A.P. NO U-01-(19) S.H.C. FILE NO. 3-104, SHEET 3 OF 3, DATED JANUARY 1955.
 - AREA INFORMATION:**
EXISTING LOTS 75,237 S.F. (1.727 ACRES)
PROPOSED TRANSFER TO ROW 2,052 S.F. (0.047 ACRES)
PROPOSED LOT 73,184 S.F. (1.680 ACRES)
 - TAX MAP REFERENCE:**
TAX MAP U-15, LOTS 74, 75, 76 & 77
 - BASIS OF BEARINGS:**
BEARINGS ARE MAGNETIC (2005) AND ARE BASED ON HAND COMPASS BEARINGS ALONG RANDOM TRAVERSE LINES.
 - ROAD INFORMATION:**
FOR RIGHT OF WAY INFORMATION, SEE PLAN REFERENCE 2.A.
 - 15' R/W:**
PER BK 25811, PG 102 & BK 26321, PG 327 - FIFTEEN FOOT RIGHT OF WAY RUNNING THROUGH PARCEL 1 NEAR THE EASTERLY BOUNDARY THEREOF FROM SAID STREET, TO AND BENEFITTING SAID FRANK H. RIDLEY PARCEL TO THE SOUTH.
 - DATUM:**
HORIZONTAL - BASED ON NAD 83, MAINE STATE PLANE, WEST ZONE ESTABLISHED WITH THE USE OF SURVEY GRADE GPS EQUIPMENT AND POST PROCESSED TO CENTIMETER ACCURACY
VERTICAL: NGVD-29, SOURCE: NGS BENCHMARK DESIGNATION "U 99" LOCATED ON THE BOWDOIN COLLEGE CAMPUS, ELEVATION 82.60.

4.	09-04-12	SUBMITTED TO TOWN FOR APPROVAL	JJM
3.	08-03-12	DESIGN DEVELOPMENT SUBMISSION	RPL
2.	05-15-12	SCHEMATIC DESIGN SUBMISSION	RPL
1.	02-17-12	SCHEMATIC DESIGN SUBMISSION	RPL

TITLE: EXISTING CONDITIONS AND DEMOLITION PLAN

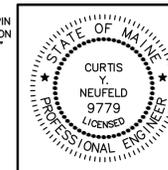
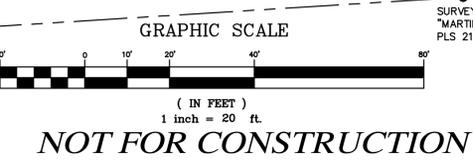
PROJECT: BRUNSWICK POLICE STATION
STANWOOD & PLEASANT STREETS, BRUNSWICK, ME

OWNER: TOWN OF BRUNSWICK
BRUNSWICK, ME

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FIELD WK: KPC	SCALE: N/A	SHEET:
DRN BY: RPL	JOB #: 1911	C2
CHD BY: CYN	SS:	
DATE: 02/14/2012	FILE: 1911EXISTINGDEM	

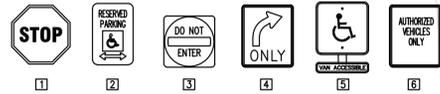
CALL DIG SAFE UTILITY LOCATION
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STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES



X:\LAND PROJECTS\1911\DWG\1911EXISTINGDEM.DWG - EXIST.DEMO. 9/18/2012 4:10:07 PM, CURT

SITE TABULATIONS:
 STANDARD SPACES = 53 SPACES
 ADA COMPLIANT SPACES = 3 SPACES
 TOTAL PARKING SPACES = 56 SPACES

SIGN LEGEND:



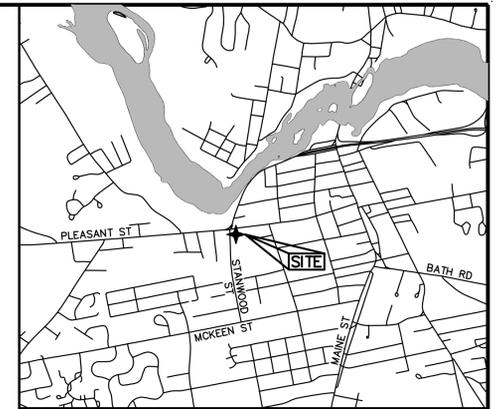
CURBING LEGEND:

SLOPED GRANITE CURB
 VERTICAL GRANITE CURB

TAX MAP U-15, LOT 120
 N/F
 V S H REALTY INC
 3729/147

LAYOUT NOTES:

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR BUILDING.
 2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.
 3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
 4. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION.
 5. ALL HANDICAP ACCESSIBLE PARKING SPACES, RAMP AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
 6. ALL SITE SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 7. COORDINATE SITE WORK WITH ARCHITECTURAL DRAWINGS INCLUDING BUILDING FEATURES AND FOUNDATION PLAN.
- SEE SHEET C4 FOR UTILITY PLAN
 SEE SHEET C5 FOR DRAINAGE AND GRADING PLAN



LOCATION MAP
 NOT TO SCALE

NOTES:

1. OWNER OF RECORD:
BRUNSWICK DEVELOPMENT CORPORATION
2. PLAN REFERENCE(S):
A. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, STATE HIGHWAY "26", D.O.T. FILE NO. 3-382, SHEET 1 OF 1, DATED APRIL 1990.
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FOR RIGHT OF WAY INFORMATION, SEE PLAN REFERENCE 2.A.
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PER BK 25811, PG 102 & BK 26321, PG 327 - FIFTEEN FOOT RIGHT OF WAY RUNNING THROUGH PARCEL 1 NEAR THE EASTERLY BOUNDARY THEREOF FROM SAID STREET, TO AND BENEFITTING SAID FRANK H. RIDLEY PARCEL TO THE SOUTH.
8. DATUM:
HORIZONTAL - BASED ON NAD 83, MAINE STATE PLANE, WEST ZONE ESTABLISHED WITH THE USE OF SURVEY GRADE GPS EQUIPMENT AND POST PROCESSED TO CENTIMETER ACCURACY.
VERTICAL: NGVD-29, SOURCE: NGS BENCHMARK DESIGNATION "U 9" LOCATED ON THE BOWDOIN COLLEGE CAMPUS, ELEVATION 82.60.
9. FLOOD ZONE:
THE PARCEL IS LOCATED IN ZONE C OF THE NATIONAL FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 230042 0015 B. ZONE C IS IDENTIFIED AS AN AREA OF MINIMAL FLOODING.
10. DIMENSIONS:
DIMENSIONS SHOWN ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
11. COORDINATE:
COORDINATE SITE WORK WITH ARCHITECTURAL DRAWINGS INCLUDING BUILDING FEATURES AND FOUNDATION PLAN.

ZONING

REFERENCE:
TOWN OF BRUNSWICK ZONING ORDINANCE

CRITERIA:	REQUIRED:
ZONE: TR-1 (TOWN RESIDENTIAL 1)	
MIN. LOT AREA	7,500 S.F.
DIMENSION REQUIREMENTS:	
1.) MIN. LOT WIDTH	85 FT
2.) YARD DEPTHS:	
FRONT	15 FT
REAR	15 FT
SIDE	15 FT
3.) BUILDING HEIGHT	MAX. 35 FT
MAXIMUM IMPERVIOUS SURFACE COVERAGE	50%
MAXIMUM BUILDING FOOTPRINT PER STRUCTURE	7,500 S.F.

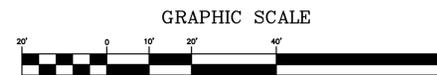
APPROVAL
TOWN OF BRUNSWICK PLANNING BOARD

DATE:

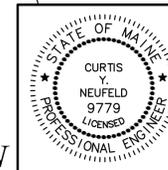
CHAIRMAN:



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NOT FOR CONSTRUCTION



TITLE:
SITE LAYOUT PLAN

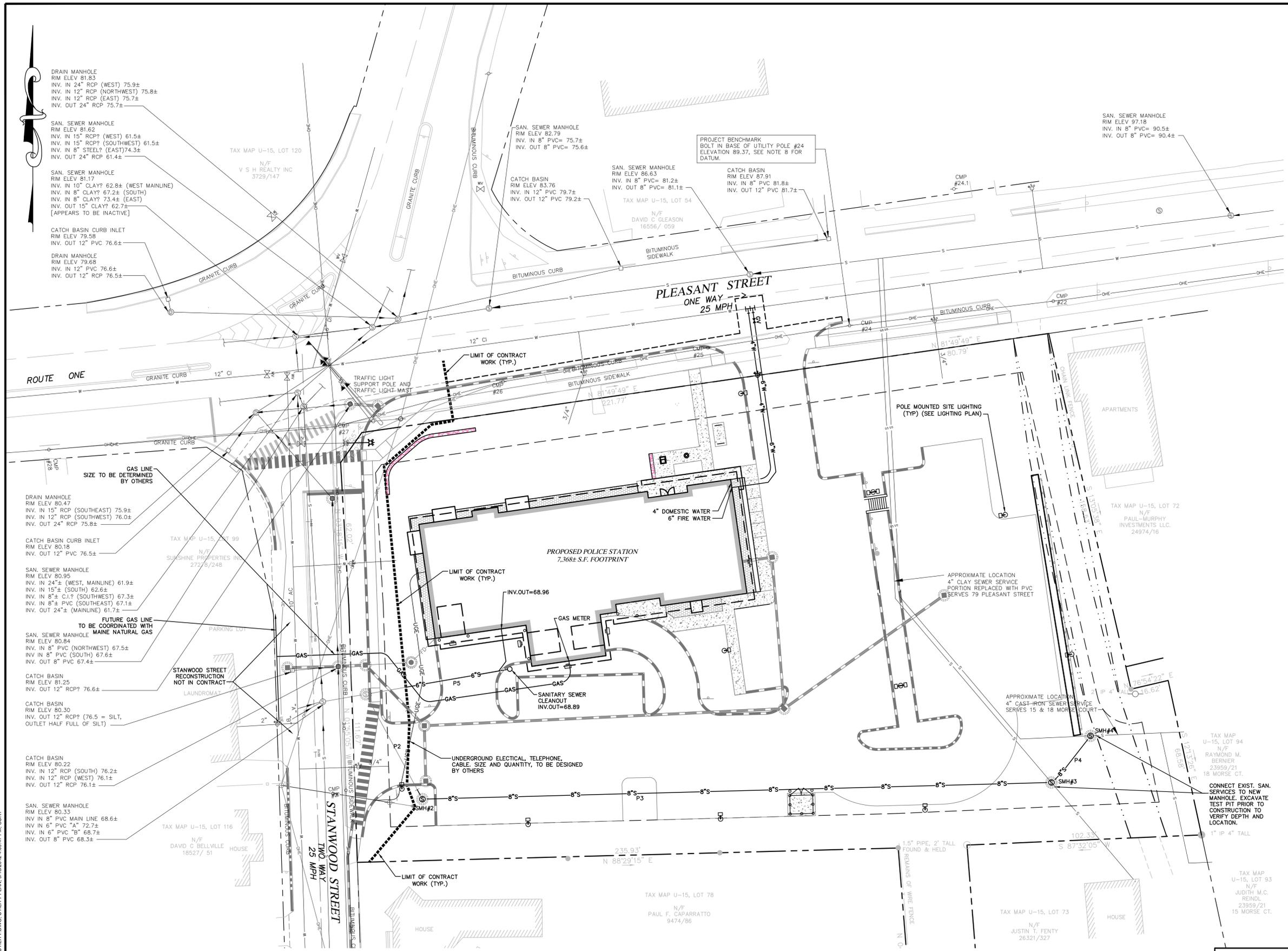
PROJECT:
**BRUNSWICK POLICE STATION
 STANWOOD & PLEASANT STREETS, BRUNSWICK, ME**

OWNER:
**TOWN OF BRUNSWICK
 BRUNSWICK, ME**

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FIELD WK:	SCALE: 1" = 20'	SHEET:
DRN BY: RPL	JOB #: 1911	C3
CHD BY: CYN	SS:	
DATE: 02/10/2012	FILE: 1911SITE	

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- LAYOUT NOTES:**
1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB.
 2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.
 3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
 4. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY INFORMATION.

- UTILITY NOTES:**
1. THE CONTRACTOR SHALL SUMMIT SHOP DRAWINGS OF ALL DRAINAGE AND SEWER STRUCTURES AND PIPING PRIOR TO CONSTRUCTION.
 2. RIM ELEVATIONS OF PROPOSED SANITARY SEWER MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.
 3. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, CABLE AND FIRE ALARM). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER AND ARCHITECT.
 4. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATIONS, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE CONSTRUCTION MANAGER REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.

SEWER STRUCTURE DATA:

SMH#1
RIM = 80.50
INV. IN = 68.58 (FROM BLDG)
INV. IN = 70.48 (FROM SMH#2)
INV. OUT = 68.48 (TO EX.SMH)

SMH#2
RIM = 82.50
INV. IN = 73.08 (FROM SMH#3)
INV. OUT = 72.98 (TO SMH#1)

SMH#3
RIM = 95.15
INV. IN = TBD AFTER TEST PIT
INV. IN = 86.83 (FROM SMH#4)
INV. OUT = 86.73 (TO SMH#2)

SMH#4
RIM = 95.13
INV. IN = TBD AFTER TEST PIT
INV. OUT = 87.93 (TO SMH#3)

SEWER PIPE DATA:

P2 TYPE = 8" PVC L=4' S=0.0500
P3 TYPE = 8" PVC L=273' S=0.0500
P4 TYPE = 8" PVC L=22' S=0.0500
P5 TYPE = 6" PVC L=45' S=0.0500

TITLE: UTILITY PLAN

PROJECT: BRUNSWICK POLICE STATION
STANWOOD & PLEASANT STREETS, BRUNSWICK, ME

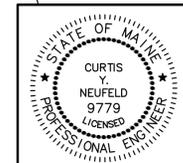
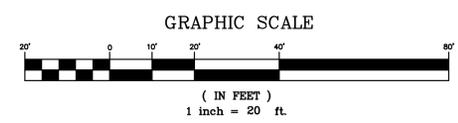
OWNER: TOWN OF BRUNSWICK
BRUNSWICK, ME

4. 09-04-12	SUBMITTED TO TOWN FOR APPROVAL	JJM
3. 08-03-12	DESIGN DEVELOPMENT SUBMISSION	CYN
2. 02-15-12	SCHEMATIC DESIGN SUBMISSION	RPL
1. 02-17-12	SCHEMATIC DESIGN SUBMISSION	RPL

CONNECT EXIST. SAN. SERVICES TO NEW MANHOLE. EXCAVATE TEST PIT PRIOR TO CONSTRUCTION TO VERIFY DEPTH AND LOCATION.

1" IP 4" TALL

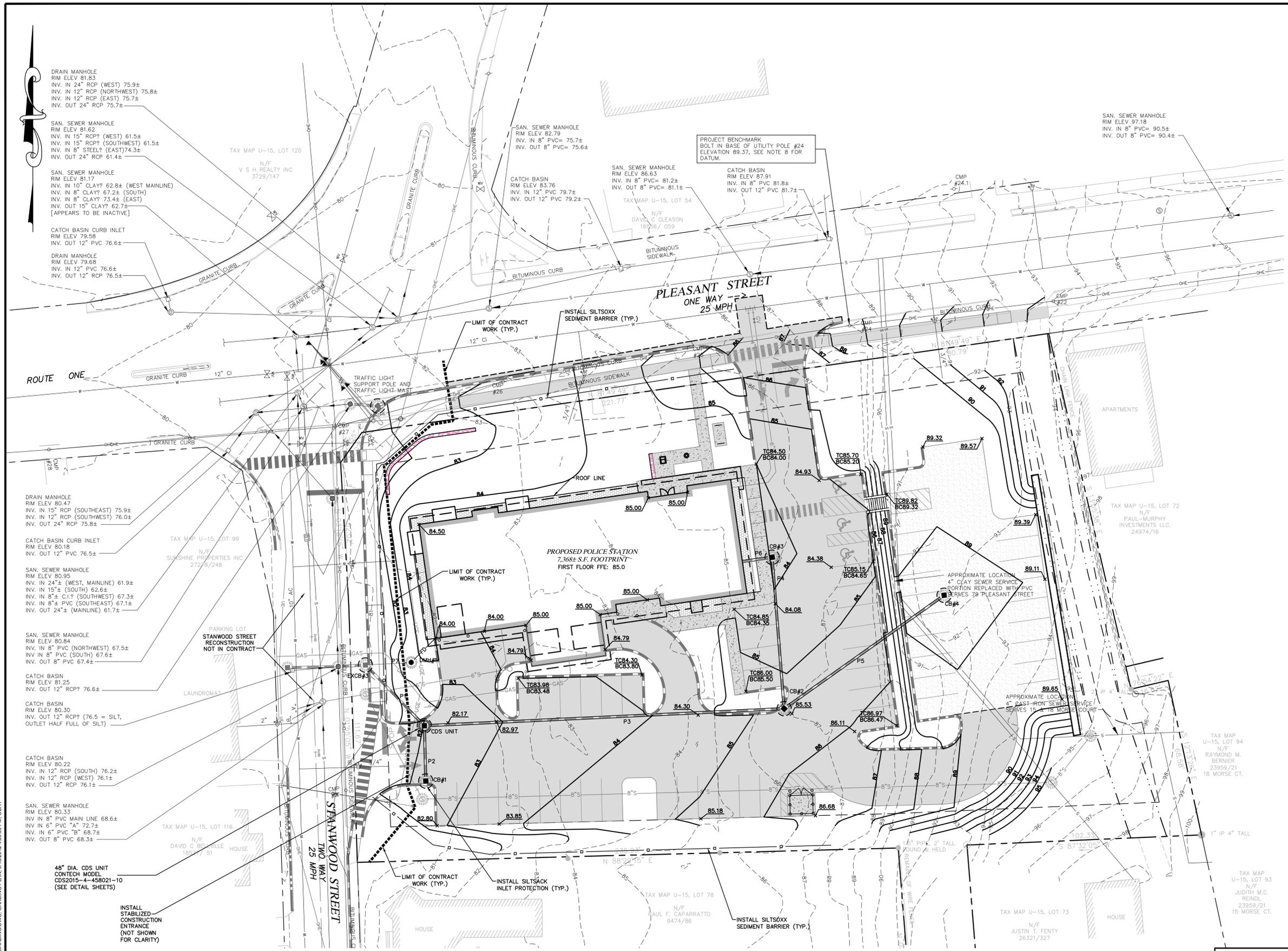
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FIELD WK: BVD	SCALE: N/A	SHEET:
DRN BY: RPL	JOB #: 1955	C4
CHD BY: CYN/KPC	SS:	
DATE: 02/14/2012	FILE: 1911UTILITY	

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- GRADING AND DRAINAGE NOTES:**
1. THE CONTRACTOR SHALL PHASE GRADING EFFORTS SUCH THAT TOTAL SITE DISTURBANCE IS MINIMIZED. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING EFFORTS OR WITHOUT DELAY UPON THEIR COMPLETION, DEPENDENT UPON THE SITUATION.
 2. ALL FILL SLOPES SHALL BE A MINIMUM OF 3:1 HORIZONTAL TO VERTICAL UNLESS OTHERWISE NOTED OR DIRECTED.
 3. THE LIMITS OF DISTURBANCE SHALL GENERALLY BE THE MINIMAL EXTENT NECESSARY ONLY TO PERFORM THE GRADING EFFORTS SHOWN ON THE DRAWINGS. SPECIAL CARE SHALL BE TAKEN TO AVOID DISTURBANCE OF OBJECTS AND AREAS NOT SPECIFICALLY IDENTIFIED FOR MODIFICATION OR REMOVAL.
 4. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED IN ACCORDANCE WITH THE DRAWINGS, UNLESS INTENDED FOR OTHER SURFACE COVER.
 5. STORM DRAINS SHALL BE CONSTRUCTED CONCURRENTLY WITH GRADING EFFORTS TO PROVIDE ADEQUATE CONVEYANCE FOR ANY SITE RUNOFF CONDITIONS.
 6. WHERE FINAL GRADING HAS BEEN COMPLETED, SURFACE RESTORATION FOR DISTURBED AREAS WILL BE COMPLETED AS SOON AS PRACTICABLE. FOR VEGETATIVE AREAS, VEGETATION WILL BE PROGRESSIVELY ESTABLISHED.
 7. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MOST SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS

- DRAINAGE STRUCTURES AND PIPE DATA:**
- DMH#1 (SUMP PIT)
RIM=83.50
INV.IN= 70.50 (FROM FOUNDATION DRAIN)
INV.OUT= 76.55 (FM TO CB#1B)
- EXCB#3 (NOT IN CONTRACT)
RIM= 80.24
INV.IN= 76.34 (FROM DMH#1)
INV.IN= 76.34 (FROM CDS UNIT)
INV.OUT= 76.24 (TO EXIST. CB)
- CB#1
RIM= 82.23
INV.OUT= 77.20 (TO CDS UNIT)
- CDS UNIT
RIM= 82.00
INV.IN= 77.10 (FROM CB#1)
INV.IN= 77.10 (FROM CB#2)
INV.OUT= 77.00 (TO STUB)
- CB#2
RIM= 85.45
INV.IN= 78.14 (FROM CB#3)
INV.IN= 78.14 (FROM CB#4)
INV.OUT= 78.04 (TO CDS UNIT)
- CB#3
RIM= 83.59
INV.IN= 77.00 (FROM 6" FD)
INV.OUT= 78.76 (TO CB#2)
- CB#4
RIM= 88.67
INV.OUT= 82.24 (TO CB#2)
- PIPE DATA:
P1 TYPE 12" HDPE L=17' S=0.0200
P2 TYPE 12" HDPE L=20' S=0.0050
P3 TYPE 12" HDPE L=153' S=0.0061
P4 TYPE 12" HDPE L=62' S=0.0100
P5 TYPE 12" HDPE L=82' S=0.0500
P6 TYPE 12" HDPE L=10' S=0.0100
P6 TYPE 2" FLEXIBLE HDPE L=6' S=0.0050

4. 09-04-12 SUBMITTED TO TOWN FOR APPROVAL JLM
3. 08-03-12 DESIGN DEVELOPMENT SUBMISSION RPL
2. 05-15-12 SCHEMATIC DESIGN SUBMISSION RPL
1. 02-17-12 SCHEMATIC DESIGN SUBMISSION RPL

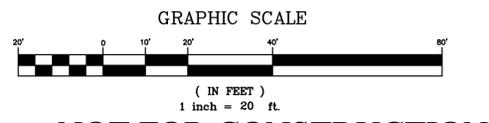
TITLE: **GRADING, DRAINAGE, & EROSION CONTROL PLAN**

PROJECT: **BRUNSWICK POLICE STATION**
STANWOOD & PLEASANT STREETS, BRUNSWICK, ME

OWNER: **TOWN OF BRUNSWICK**
BRUNSWICK, ME

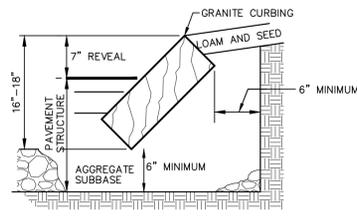
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FIELD WK: BVD	SCALE: N/A	SHEET:
DRN BY: RPL	JOB #: 1955	C5
CHD BY: CYN	SS:	
DATE: 02/14/2012	FILE: 1911GRADING	

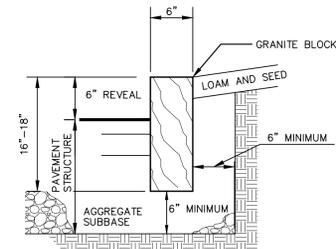


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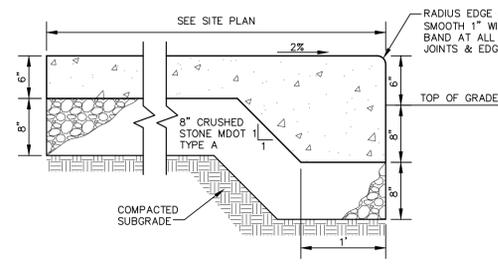
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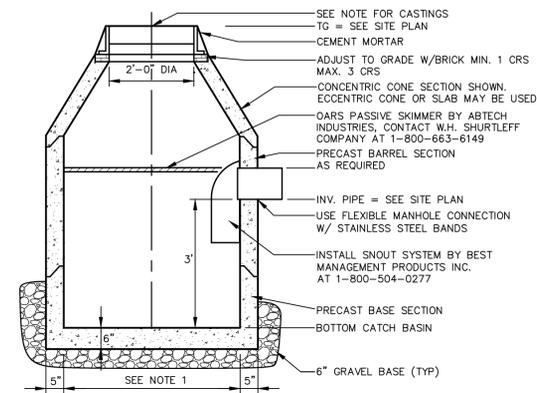
SLOPED GRANITE CURB
NOT TO SCALE



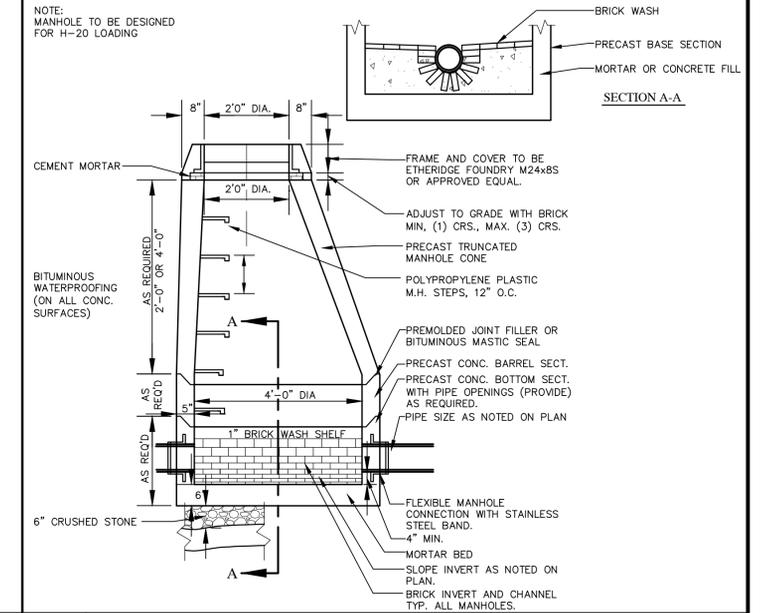
VERTICAL GRANITE CURB
NOT TO SCALE



- NOTES:**
1. CONCRETE SHALL BE CAST-IN-PLACE 5000 PSI W/FIBER REINFORCEMENT.
 2. APPLY MEDIUM BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.
 3. PROVIDE 1-1/2" DEEP TOOLED CONTROL JOINT PERPENDICULAR TO WALK AT 5' O.C.
 4. PROVIDE EXPANSION JOINT AT 20' INTERVALS.
 5. PROVIDE ISOLATION JOINT W/SELF LEVELING SEALER WHERE WALK ABUTS ANY VERTICAL SURFACE.



- NOTES:**
1. 4'-0" I.D. TYPICAL SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
 2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
 3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
 4. CATCH BASIN FRAME AND GRATE TO BE LABARON FOUNDRY MODEL LF-244-S GRATE OR APPROVED EQUAL.



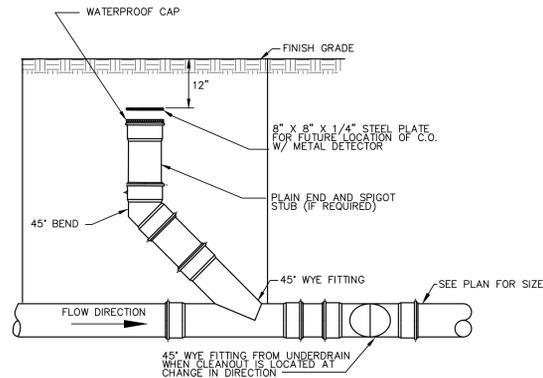
NOTE: MANHOLE TO BE DESIGNED FOR H-20 LOADING

A GRANITE CURB
N.T.S.

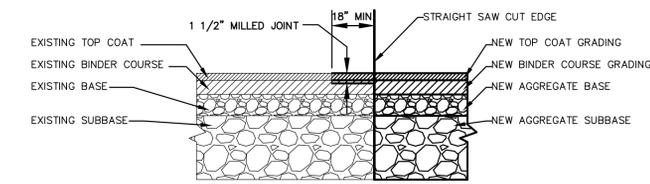
B INTEGRAL CONCRETE CURB AND SIDEWALK
N.T.S.

C CATCH BASIN OR DRAINAGE MANHOLE W/ SNOUT
N.T.S.

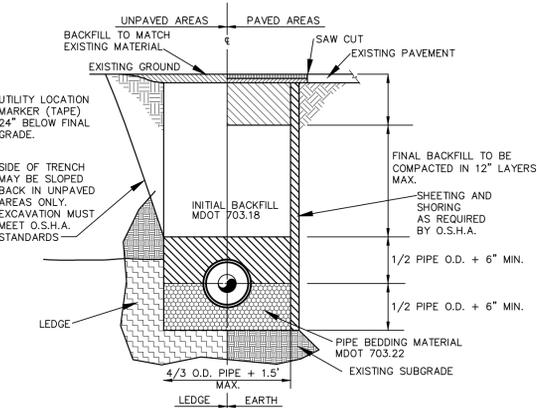
D SEWER MANHOLE DETAIL
N.T.S.



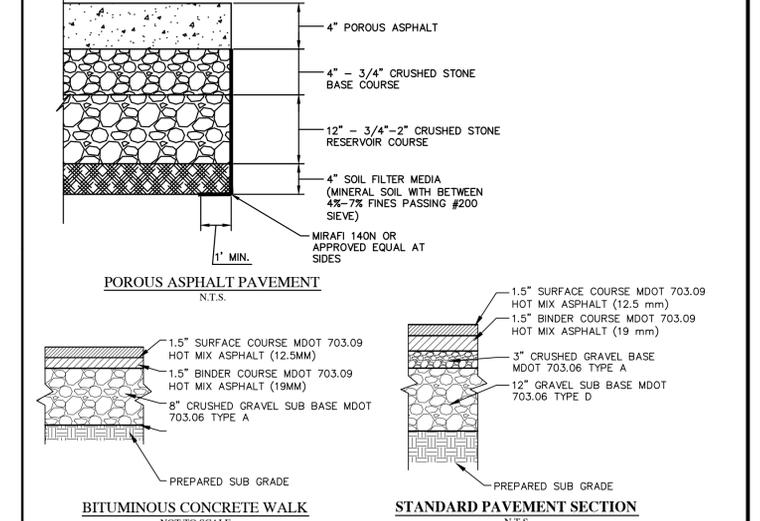
E SEWER CLEAN OUT DETAIL
N.T.S.



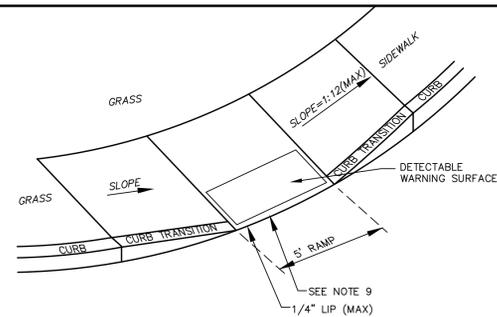
F PAVEMENT SAW CUT SECTION "FULL DEPTH RECONSTRUCTION"
N.T.S.



G TYPICAL PIPE TRENCH DETAIL
N.T.S.

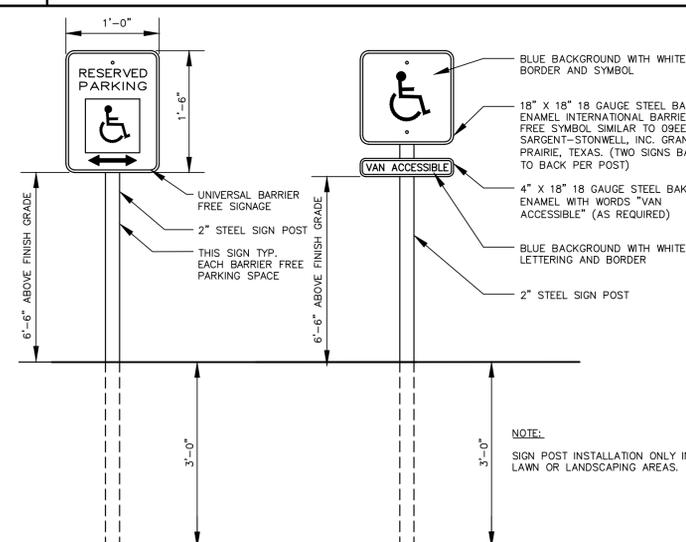


H TYPICAL PAVEMENT SECTION
N.T.S.

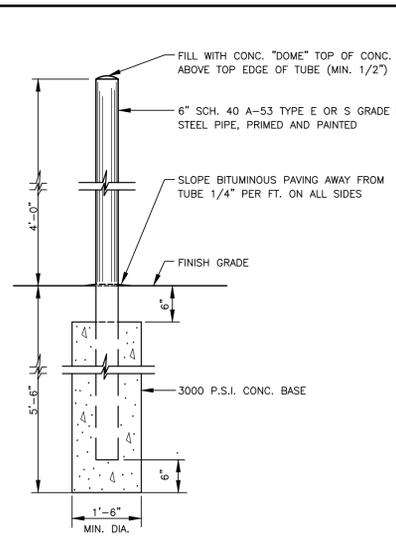


- NOTES:**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1% MIN).
 2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMP SHALL BE 5%.
 3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMP SHALL BE 7.5%.
 4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
 5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
 6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
 7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
 8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'X5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
 9. ELIMINATE ALL CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.
 10. DETECTABLE WARNING SURFACES TO BE CAST IRON PLATES SET IN CONCRETE

I TIP DOWN SIDEWALK RAMP
N.T.S.



J BARRIER FREE PARKING SIGN
N.T.S.



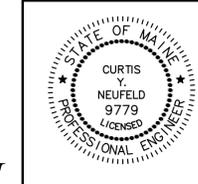
K TYPICAL BOLLARD DETAIL
N.T.S.

4. 09-04-12 SUBMITTED TO TOWN FOR APPROVAL JUM
3. 08-03-12 DESIGN DEVELOPMENT SUBMISSION RPL
2. 05-15-12 SCHEMATIC DESIGN SUBMISSION RPL
1. 02-17-12 SCHEMATIC DESIGN SUBMISSION RPL

SITE DEVELOPMENT DETAILS
SHEET 1 OF 2

BRUNSWICK POLICE STATION
STANWOOD & PLEASANT STREETS, BRUNSWICK, ME

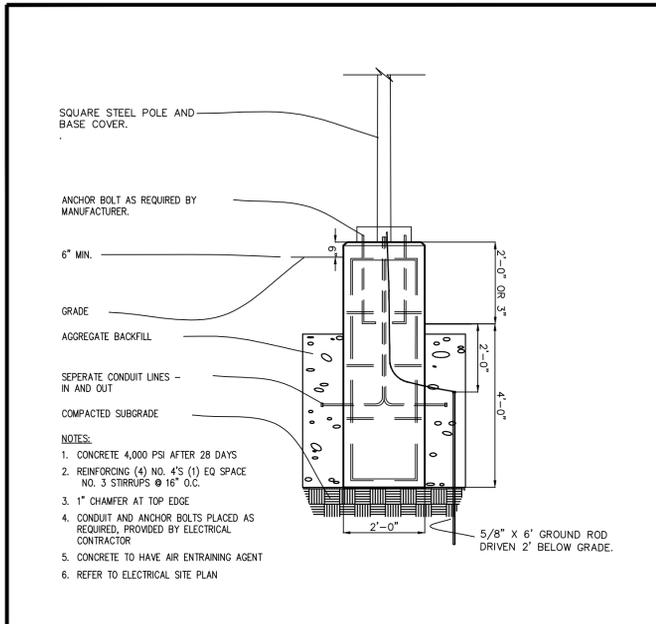
TOWN OF BRUNSWICK
BRUNSWICK, ME



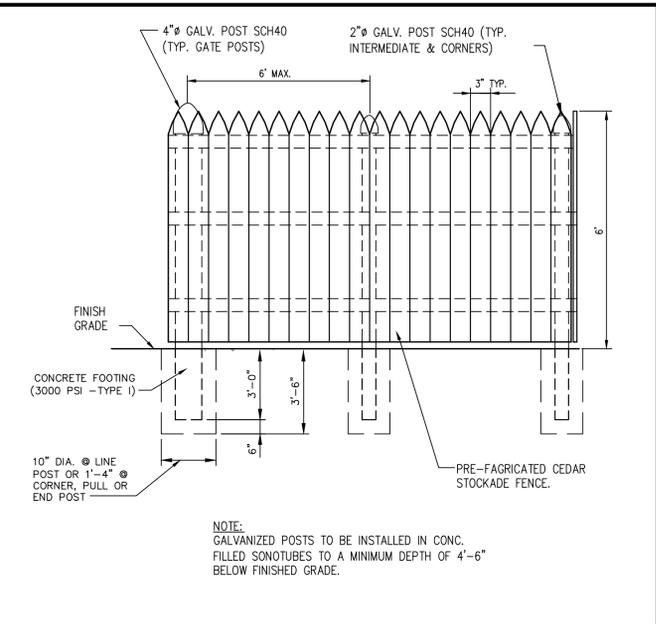
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FIELD WK: KPC	SCALE: N/A	SHEET:
DRN BY: RPL	JOB #: 1955	C6
CHD BY: CYN	SS:	
DATE: 02/07/2012	FILE: 1911COVERDET	

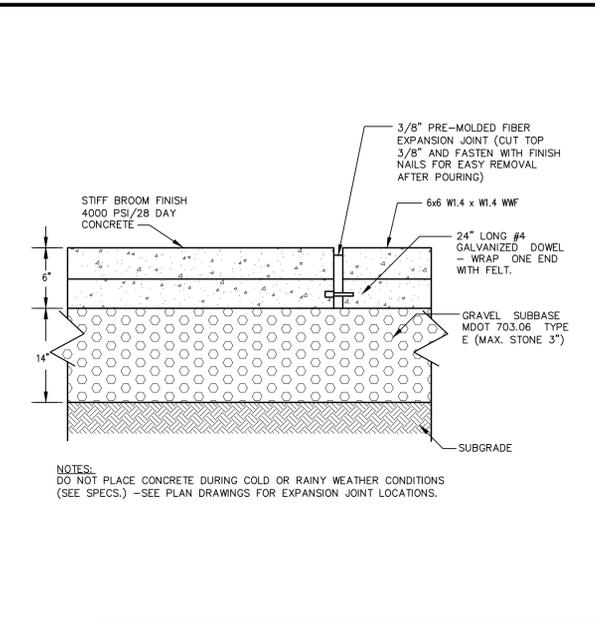
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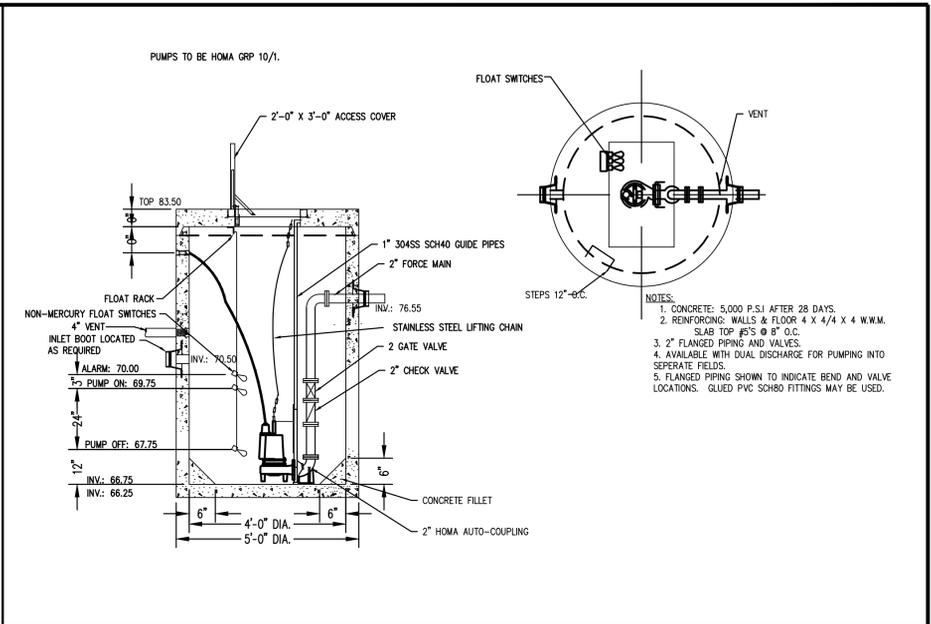
A LIGHT POLE BASE DETAIL
N.T.S.



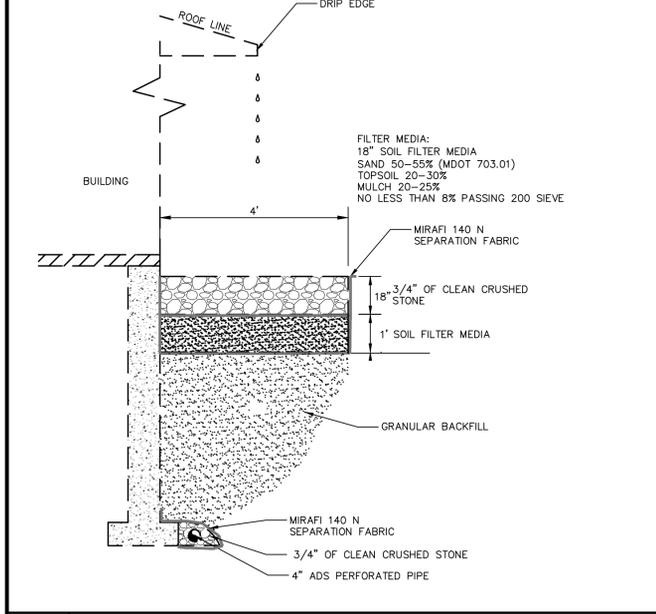
B STOCKADE FENCE DETAIL
N.T.S.



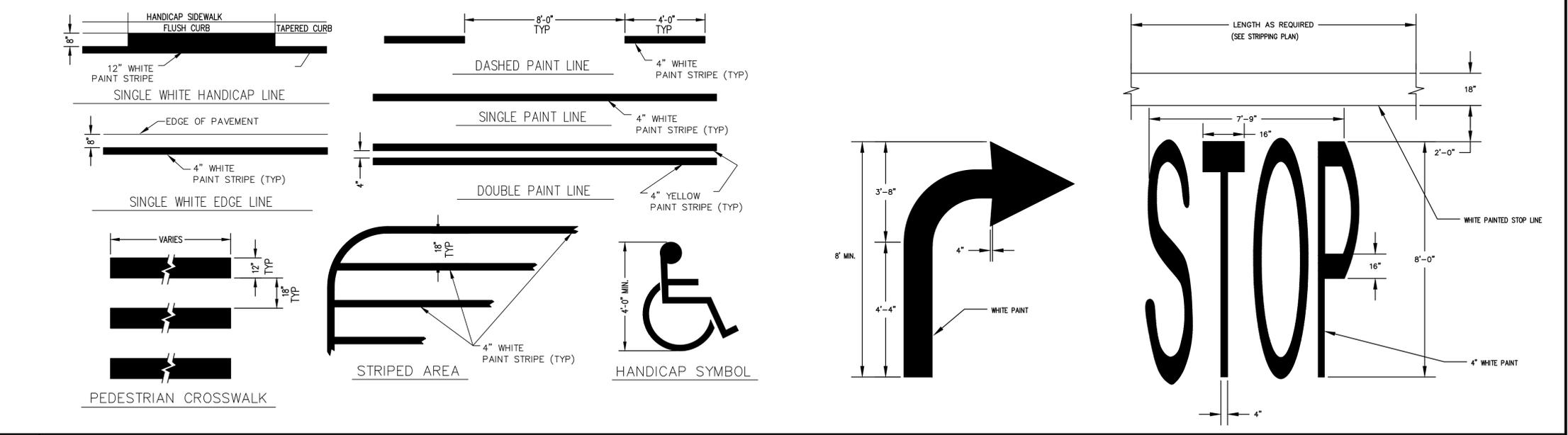
C CONCRETE DUMPSTER PAD DETAIL
N.T.S.



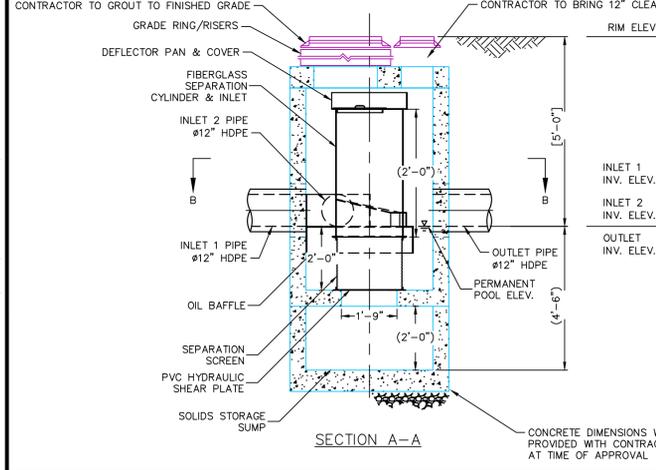
D FOUNDATION DRAIN SUMP PUMP
N.T.S.



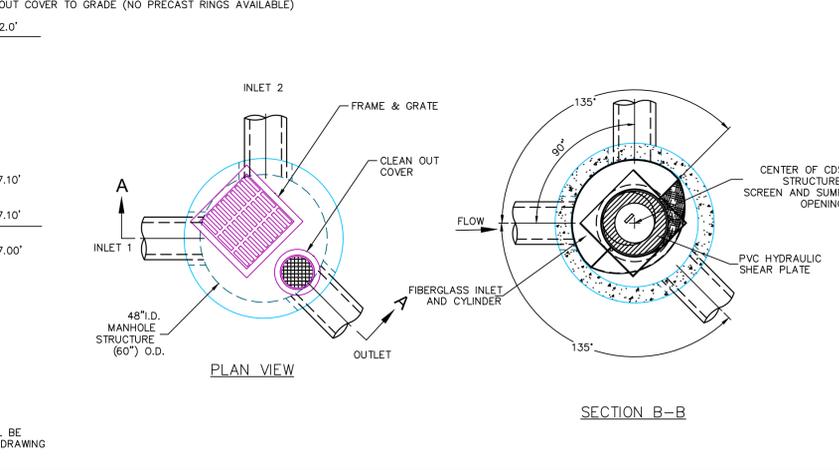
E DRIPLINE INFILTRATION DETAIL
N.T.S.



F PAVEMENT MARKING DETAILS
N.T.S.



G CDS UNIT DETAILS
N.T.S.



H PLAN VIEW AND SECTION B-B

GENERAL NOTES:
 1. CONTRACTOR TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 2. DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 3. FOR SITE SPECIFIC DRAWINGS WITH DETAILED DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.conteches.com
 4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 5. STRUCTURE SHALL MEET AASHTO H520 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
 6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

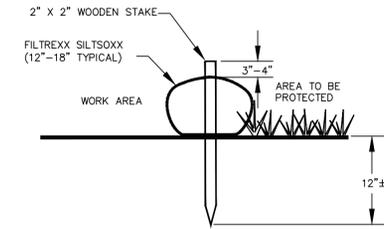
INSTALLATION NOTES:
 A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
 D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
 E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

I GENERAL NOTES AND INSTALLATION NOTES

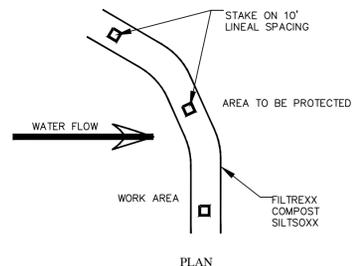
<p>4. 09-04-12 SUBMITTED TO TOWN FOR APPROVAL JIM</p> <p>3. 08-03-12 DESIGN DEVELOPMENT SUBMISSION RPL</p> <p>2. 05-15-12 SCHEMATIC DESIGN SUBMISSION RPL</p> <p>1. 02-17-12 SCHEMATIC DESIGN SUBMISSION RPL</p>	
<p>SITE DEVELOPMENT DETAILS SHEET 2 OF 2</p> <p>BRUNSWICK POLICE STATION STANWOOD & PLEASANT STREETS, BRUNSWICK, ME</p> <p>TOWN OF BRUNSWICK BRUNSWICK, ME</p>	
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<p>FIELD WK: KPC</p> <p>DRN BY: RPL</p> <p>CHD BY: CYN</p> <p>DATE: 02/07/2012</p>	<p>SCALE: N/A</p> <p>JOB #: 1911</p> <p>SS:</p> <p>FILE: 1911COVERDET</p>
<p>SHEET: C7</p>	

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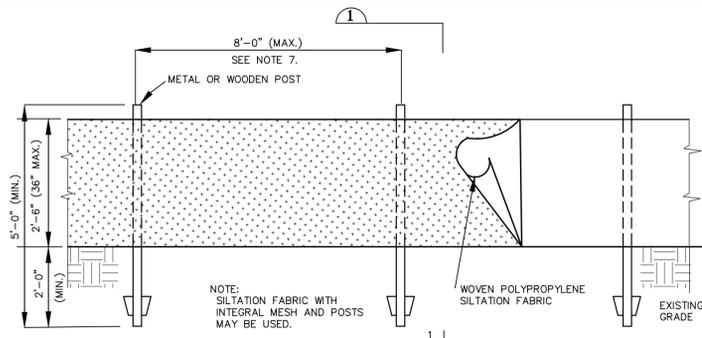


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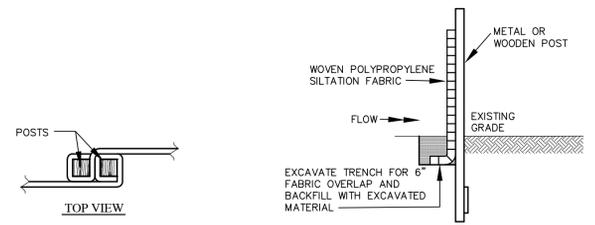


PLAN

- NOTES:
1. ALL MATERIALS TO MEET FILTREXX SPECIFICATIONS
 2. SILTSSOXX COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS
 3. SILTSSOXX DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
 4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.



ELEVATION



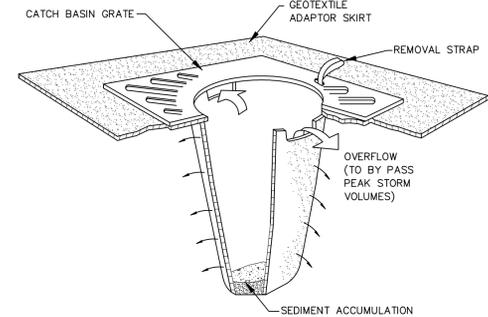
TOP VIEW

SECTION

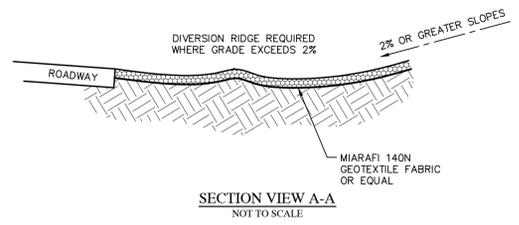
- INSTALLATION:
1. EXCAVATE A 6" X 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
 2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
 3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
 4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. BACK FILL THE TRENCH AND TAMP THE SOIL.
 5. JOIN SECTION AS SHOWN IN TOP VIEW.
 6. BARRIER SHALL BE MIRAFI SILT FENCE (100X) OR APPROVED EQUIVALENT.
 7. A STONE "FILLET" MAY BE USED FOR ANCHORING FABRIC IF IT CANNOT BE KEVED IN.

A FILTREXX SILTSSOXX DETAIL "SEDIMENT BARRIER OPTION" N.T.S.

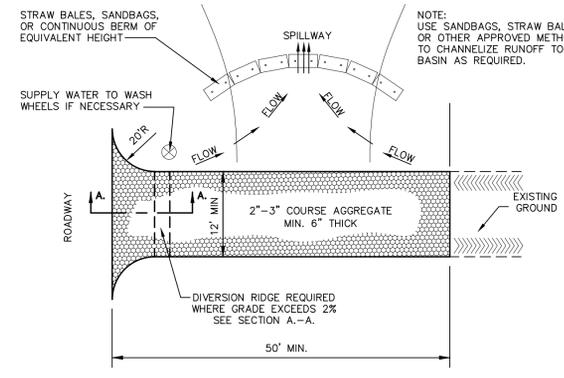
B SILT FENCE DETAIL "SEDIMENT BARRIER OPTION" N.T.S.



- NOTES:
1. CATCH BASIN PROTECTION TO BE "SILTSAK" (BY ACF ENVIRONMENTAL) OR "STREAM GUARD" (BY FOSS ENVIRONMENTAL SERVICES).
 2. INSERT TO BE EMPTIED IN AN APPROVED MANNER WHEN IT IS 1/2 FULL OF SEDIMENT.
 3. INSPECT INSERT AFTER ALL RAINFALL EVENTS, REPAIR AND MAINTAIN AS REQUIRED.



SECTION VIEW A-A NOT TO SCALE



PLAN VIEW NOT TO SCALE

- NOTE:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR, AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR BASIN.

C TEMPORARY INLET PROTECTION DETAIL N.T.S.

D STABILIZED CONSTRUCTION ENTRANCE N.T.S.

EROSION AND SEDIMENTATION NOTES:
 1. CONTRACTOR SHALL FOLLOW BEST MANAGEMENT PRACTICES OF THE CUMBERLAND COUNTY SOIL CONSERVATION SERVICE AND THE MAINE DEP BEST MANAGEMENT PRACTICES HANDBOOK.

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES:
EROSION/SEDIMENTATION CONTROL DEVICES:
 THE FOLLOWING EROSION/SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

1. SEDIMENT BARRIER: SILT SOXX OR APPROVED EQUAL WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. IN AREAS WHERE STORMWATER DISCHARGES THE SEDIMENT BARRIER WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SEDIMENT BARRIER AND TO PROVIDE ADDITIONAL TREATMENT.
2. HAY BALES: HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.
3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.
4. LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.
5. STRAW AND HAY MULCH: USED TO COVER DENUDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. JUTE MESH IS TO BE USED OVER MULCH ONLY.
6. IN LIEU OF MULCH, USE EROSION CONTROL BLANKET (EQUAL TO NORTH AMERICAN GREEN SC150) TO STABILIZE AREAS OF CONCENTRATED FLOW AND DRAINAGE WAYS.

TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES:
 PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION OF THE DEVELOPMENT:

1. SEDIMENT BARRIER ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SEDIMENT BARRIER WILL REMAIN IN PLACE UNTIL THE SITE IS 85% REVEGETATED.
2. HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SEDIMENT BARRIER.
3. PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:
 - A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.
 - B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. SEE ITEM 3 IN CONSTRUCTION PHASE NOTES BELOW.
 - C. STABILIZE STOCKPILES WITHIN 15 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH.
 - D. SURROUND STOCKPILE SOIL WITH SEDIMENT BARRIER AT BASE OF PILE.
4. ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL OR WITHIN 15 DAYS AFTER COMPLETING THE ROUGH GRADING OPERATIONS. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOD WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.
5. IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 15 DAY MAXIMUM.
6. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

PERMANENT EROSION CONTROL MEASURES:
 THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.
2. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP. (NONE ANTICIPATED)

POST-CONSTRUCTION REVEGETATION:
 THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.
2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10:20:20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:
 LAWNS SHALL BE: ALLEN, STERLING & LATHROP "TUFTURF", 70% DIAMOND TALL FESCUE, 20% PLEASURE OLUS PERENNIAL RYEGRASS, 10% BARON KENTUCKY BLUEGRASS. SEEDING RATE SHALL BE 7-LBS./1,000 SQ. FT.
 SWALES SHALL BE: WILDFLOWER MEADOW (SEED) FESCUA OVINA SHEEP FESCUE; SOW AT A RATE OF 12 OZ. PER 1,000 SQ.FT. TRIFOLIUM REPENS WHITE CLOVER; SOW AT A RATE OF 1/2 OZ PER 1,000 SQ.FT. (FLOWERS) ACHILLEA MILEPILLIUM YARROW, AQUILEGIA CANADENSIS COLUMBINE, ASPLETIAS TUBEROSA BUTTERFLY MILKWEED, ASTER NOVAE-ANGLIAE AND NEW-ENGLAND ASTER, BAPTISIA AUSTRALIS WILD INDIGO, BOLTONIA ASTEROIDS FALSE ASTER, CHRYSANTHEMUM LEUCANTHEMUM OXEYE DAISY, DIGITALIS PURPUREA FOXGLOVE, ECHINACEA PURPUREA PURPLE CONEFLOWER, LUPINUS PERENNIS LUPINE, MONARDA FISTULOSA BERGAMOT, PAPAVER ORIENTALE ORIENTAL POPPY, RUDBECKIA HIRTA BLACK-EYED SUSAN, SALVIA OFFICINALIS SAGE; SOW AT A RATE OF 1/3 OZ. EACH PER 1,000 SQ.FT. OR 4 OZ. PER 1,000 SQ.FT. IN COMBINATION
3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDED. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.
 - A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)
 - I. BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
 - II. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.
 - III. SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION.
 - B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15.
4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED. ALSO REFER TO NOTE 9 OF WINTER CONSTRUCTION.
 - A. ONLY UNFROZEN LOAM SHALL BE USED.
 - B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
 - C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.
 - D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
 - E. FERTILIZING, SEEDING AND MULCHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY.
 - F. ALTERNATIVE HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.
5. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING CATCH IS INADEQUATE.

- MONITORING SCHEDULE:**
 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:
1. HAY BALE BARRIERS, SEDIMENT BARRIER, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SEDIMENT BARRIER BEHIND THE HAY BALES.
 2. VISUALLY INSPECT RIPRAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. DISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.
 3. REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDED WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDED AS NEEDED. EXPOSED AREAS WILL BE RESEEDED AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

CONSTRUCTION PHASE:
 THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

1. ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. IF FINAL GRADING, LOAMING AND SEEDING WILL NOT OCCUR WITHIN 15 DAYS, SEE ITEM NO. 4.
2. PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SEDIMENT BARRIER AND/OR HAY BALES WILL BE INSTALLED AT THE TOE OF SLOPE AND IN AREAS AS LOCATED ON THE PLANS TO PROTECT AGAINST ANY CONSTRUCTION RELATED EROSION. IMMEDIATELY FOLLOWING CONSTRUCTION OF CULVERTS AND SWALES, RIP RAP APRONS SHALL BE INSTALLED, AS SHOWN ON THE PLANS.
3. TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM THE EXISTING DRAINAGE COURSE. NO STOCKPILE SHALL BE CLOSER THAN 100' OF A RESOURCE INCLUDING, BUT NOT LIMITED TO, WETLANDS, STREAMS, AND OPEN WATER BODIES. ALL STOCKPILES SHALL HAVE A SEDIMENT BARRIER BELOW THEM REGARDLESS OF TIME OF PRESENCE. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 15 DAYS SHALL BE:
 - A. TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
 - B. SEEDED WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.
 - C. INSTALL SEDIMENT BARRIER AROUND STOCKPILE AT BASE OF PILE. STOCKPILES TO HAVE SEDIMENT BARRIER INSTALLED AT TIME OF ESTABLISHMENT AT BASE OF PILE.
4. ALL DISTURBED AREAS EXPECTED TO REMAIN LONGER THAN 30 DAYS SHALL BE EITHER:
 - A. TREATED WITH ANCHORED MULCH IMMEDIATELY, OR
 - B. SEEDED WITH CONSERVATION MIX OF ANNUAL RYE GRASS (0.9 LBS/1000 SQ. FT) AND MULCHED IMMEDIATELY.
5. ALL GRADING WILL BE HELD TO A MAXIMUM 2:1 SLOPE WHERE PRACTICAL. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING, OR WITH STONE, WITHIN 5 DAYS AFTER FINAL GRADING IS COMPLETE. (SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION.)
6. ALL CULVERTS WILL BE PROTECTED WITH STONE RIPRAP (D50 = 6" UNLESS OTHERWISE SPECIFIED) AT INLETS AND OUTLETS.
7. EXISTING TREES REMOVED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE GROUND AND USED FOR MULCH OR HAULED OFF-SITE TO AN APPROVED FACILITY FOR GRINDING OR OTHER DISPOSAL. STUMPS SHALL ALSO BE GROUND AND USED FOR MULCH OR REMOVED FROM THE SITE TO AN APPROVED FACILITY FOR GRINDING OR OTHER DISPOSAL. **BURYING OF STUMPS IS PROHIBITED.**

EROSION CONTROL DURING WINTER CONSTRUCTION:

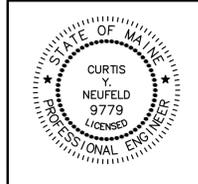
1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.
4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.
6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT. EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SEDIMENT BARRIER OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.
7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS, SLOPES GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH EXCELISOR OR CURLEX.
8. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.
9. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

SITE INSPECTION AND MAINTENANCE:

1. WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING RAIN FALLS, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (85% GRASS CATCH). NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEARED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. SUCH INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP.
2. SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER.
3. LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER.

4.	09-04-12	SUBMITTED TO TOWN FOR APPROVAL	JJM
3.	08-03-12	DESIGN DEVELOPMENT SUBMISSION	RPL
2.	05-15-12	SCHEMATIC DESIGN SUBMISSION	RPL
1.	02-17-12	SCHEMATIC DESIGN SUBMISSION	RPL

EROSION CONTROL DETAILS AND NOTES
BRUNSWICK POLICE STATION
 STANWOOD & PLEASANT STREETS, BRUNSWICK, ME
 TOWN OF BRUNSWICK
 BRUNSWICK, ME



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 LANDSCAPE ARCHITECTS
 8 CUMBERLAND STREET, BRUNSWICK, ME 04011
 207.725.1200 www.sitelinespa.com

FIELD WK: KPC	SCALE: N/A	SHEET:
DRN BY: RPL	JOB #: 1911	C8
CHD BY: CYN	SS:	
DATE: 02/07/2012	FILE: 1911COVERDET	

NOT FOR CONSTRUCTION

**Draft Findings of Fact
Brunswick Police Station
Major Site Plan Final Review
Review Date: September 25, 2012**

Project Name: Brunswick Police Station

Case Number: 12-030

Tax Map: Map U15, Lots 74, 75, 76, and 77

Applicant: Town of Brunswick
28 Federal Street
Brunswick, Maine 04011

Authorized Representative: Donham and Sweeney -Architects
68 Harrison Avenue
Boston, MA 02011

Motion 1: That the major development review application is deemed complete.

PROJECT SUMMARY

The Town of Brunswick is proposing to construct a new Police Station at the intersection of Pleasant and Stanwood Streets, on a cleared lot previously occupied by 3 residential and 1 mixed use structure. Primary access to the 2-story facility and associated parking will be from Pleasant Street with additional vehicular access provided to Stanwood Street.

The development is located in the Town Residential 1 (TR1) Zoning District, Village Review Overlay Zone and within the town's Growth Area. It will be serviced by the town's water and sewer systems. The project meets Zoning Ordinance use, space and bulk standards.

The applicant requests a joint Sketch Plan and Final Plan approval by the Planning Board.

The following waivers have been requested by the applicant:

1. Section 412.2.B.8 – Name, location and width of paving for proposed roads
2. Section 412.2.B.14 – Location of proposed cross section of sanitary sewers
3. Section 412.2.B.16 – Class A Soil Survey

Staff recommends approval of the requested waivers.

Review Standards from Section 411 of the Town of Brunswick Zoning Ordinance

411.1 Ordinance Provisions

The property is located in the Town Residential (TR1) Zoning District and Village Review Overlay Zone. A municipal facility is an allowed use within any zoning district. All dimensional and lot configuration requirements are met. The proposed development complies with all applicable standards of the Town Residential 1 Zoning District and Village Review Overlay Zone. *The Board finds that the provisions of Section 411.1 are satisfied.*

411.2 Preservation of Natural Features

There are few natural features as the site was previously developed. Several existing trees primarily located along the southern and eastern property lines will remain, in addition to two significant oak trees of 24" and 36" diameter fronting Pleasant Street. The tree preservation/removal plan was reviewed by the Town Arborist. Noteworthy is the need for adequate tree protection prior to and during construction, necessary pruning of existing trees and potential concerns over the spacing of new tree plantings. There are no steep slopes on the property, it is not within a flood hazard area and no part of the land is within a Natural Resource Protection Zone. The development does not occur within or cause harm to any land which is not suitable for development. *The Board finds that the provisions of Section 411.2 are satisfied, conditional upon tree protection measures as detailed on sheet L1 be implemented before site work commences, necessary pruning of existing trees and new plantings be performed in consultation with the Town Arborist.*

411.3 Surface Waters, Wetlands and Marine Resources

No water bodies, streams, wetlands or vernal pools are identified on the site. The development will not adversely affect the Mere Brook watershed or the water quality of Casco Bay or its estuaries. *The Board finds that the provisions of Section 411.3 are satisfied.*

411.4 Flood Hazard Areas

Based on the Flood Insurance Rate Map, community panel # 230042 0015-B, effective date, 6/3/1986, the project site is located within Zone C, described as areas of minimal flooding and outside the regulatory 100-year flood zone. The development activity does not occur within a FEMA flood hazard area and therefore minimizes any risk of flooding. *The Board finds that the provisions of Section 411.4 are satisfied.*

411.5 Stormwater Management

The project is not located within an Urban Impaired Stream. No additional state permitting is required because the project does not include more than 20,000 sf of new impervious surface or more than an acre of disturbed area. There is no existing stormwater management system on site and stormwater runoff currently sheets off the site to the adjacent streets. A portion of the site will be paved with porous pavement that will allow stormwater to infiltrate beneath the pavement. The proposed facilities are designed to comply with the criteria of the draft zoning ordinance stormwater management provisions. Runoff from the proposed impervious area for the project will

be captured and conveyed to either a roofline drip edge, porous pavement, or a hydrodynamic separator to insure adequate water quality treatment and detention of peak flows. The project satisfies the recommended stormwater quality standards described in the Storm Water Management for Maine: Best Management Practices, published by the State of Maine Department of Environmental Protection, as amended. *The Board finds that the provisions of Section 411.5 are satisfied, conditional upon the final review and approval of the photometric plan with calculation zone analysis by the Public Works Director.*

411.6 Groundwater

The project will be served by the town's municipal water system. No activities are proposed or anticipated that will extract groundwater for commercial purposes. The Board finds that the development will not, alone or in conjunction with existing activities; adversely affect the quality or quantity of groundwater. *The Board finds that the provisions of Section 411.6 are satisfied.*

411.7 Erosion and Sedimentation Control

The project has been designed to incorporate Best Management Practices as outlined in the Maine Erosion and Sediment Control BMPs as published by the Maine DEP, current edition. This includes silt fencing and other measures to minimize transport of sediment from the site. Specific provisions for permanent and temporary erosion control features have been provided on the Final Plan. The proposed development will not cause unreasonable soil erosion or reduction in the land's capacity to hold water so that a dangerous or unhealthy situation results. *The Board finds that the provisions of Section 411.7 are satisfied.*

411.8 Sewage Disposal

The project will be served by the town's sewer system. A letter from the Brunswick Sewer District confirming capacity to serve the project was submitted. *The Board finds that the provisions of Section 411.8 are satisfied.*

411.9 Water Supply

The project will be served by the town's municipal water system. A letter from the Brunswick-Topsham Water District confirming capacity to serve the project was submitted. *The Board finds that the provisions of Section 411.9 are satisfied.*

411.10 Aesthetic, Cultural and Natural Values

The project received approval from the Village Review Board on August 28, 2012 and it found that the design of the building maintains the cultural character of the neighborhood. The proposed project will not have any undue adverse effect on the scenic or natural beauty of the area, historic sites, or significant wildlife habitat identified by the Maine Department of Environmental Protection and Inland Fisheries & Wildlife or by the Town of Brunswick, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline. *The Board finds that the provisions of Section 411.10 are satisfied.*

411.11 Community Impact

The project is the construction of a new police station for the Town of Brunswick. As this is considered a relocation of an existing municipal facility, impacts on community services is anticipated to be similar. The Brunswick Sewer District and Brunswick-Topsham Water District have confirmed their capacity to serve the project. The Public Works Director confirmed that no additional solid waste impact fee is required due to no net increase in waste generated from prior uses anticipated. In addition, the site-lighting plan was reviewed by the Public Works Director. Site lighting will be done with full-cut-off LED light fixtures which meet dark-sky criteria. The photometric plan appears adequate but a review of the calculation zone analysis to verify light levels is requested. The town's emergency services are able to adequately serve the location and will be improved by this project. No impact on school enrollment is anticipated as a result of the project. Overall, municipal resources are available to service the project. *The Board finds that the provisions of Section 411.11 are satisfied.*

411.12 Traffic

The development is located at the intersection of Stanwood and Pleasant Street. A detailed traffic study was completed and reviewed by the Town Engineer. The Town Engineer concurs with the study's conclusions that the project will not have a significant impact at the intersection. Off-street parking and on-site vehicular access is adequate for the use. The proposed development will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing and the traffic associated with the development shall maintain level of service within 200 feet of any existing curb cut. *The Board finds that the provisions of Section 411.12 are satisfied.*

411.13 Pedestrian and Bicycle Access and Safety

The Board finds that the development will accommodate bicyclists and addresses pedestrian access, safety and circulation within the site. *The Board finds that the provisions of Section 411.13 are satisfied.*

411.14 Development Patterns

The use of the property will be a police station and is located in the town's Growth Area. The surrounding properties are commercial and residential. The project will utilize public water and sewer service. The development is consistent with the surrounding properties on Pleasant and Stanwood Street and consistent in scale and architecture. As proposed, the development is respectful of Brunswick's historic development pattern and will have no adverse impact on adjacent residential areas. *The Board finds that the provisions of Section 411.14 are satisfied.*

411.15 Architectural Compatibility

The development was reviewed and the architecture approved by the Village Review Board on August 28, 2012. The design of the police station facility was developed by an appointed committee of the Town Council through a public process. Its features emulated existing architecture of the town and are compatible with its surroundings in

terms of size, scale, mass and design. *The Board finds that the provisions of Section 411.15 are satisfied.*

411.16 Municipal Solid Waste Disposal

The project will not generate an increase in solid waste when compared to prior uses of the site. As a result, the Director of Public Works is not requiring a solid waste impact fee. The development will not cause an unreasonable burden on the municipality's ability to dispose of solid waste. *The Board finds that the provisions of Section 411.16 are satisfied.*

411.17 Recreation Needs

The development will not cause an unreasonable burden on the municipality's ability to provide recreational services. No recreation impact fee is required for this nonresidential use. *The Board finds that the provisions of Section 411.17 are not applicable.*

411.18 Access for Persons with Disabilities

The development shall comply with the Americans with Disabilities Act as applicable, which will be reviewed as part of the building permit application. *The Board finds that the provisions of Section 411.18 are satisfied.*

411.19 Financial Capacity and Maintenance

Funding for the project has been authorized by the Brunswick Town Council. The Town of Brunswick has adequate financial and technical capacity to complete the project, and that once completed, the project is expected to have adequate resources to maintain itself. *The Board finds that the provisions of Section 411.19 are satisfied.*

411.20 Noise and Dust

Best Management Practices as outlined in the Maine Erosion and Sediment Control BMP's published by the Maine Department of Environmental Control, will be utilized to control dust during construction. Noise will be limited through the compliance of the site contractor with the standard hours of construction per Section 524.1. Upon construction completion, there are no anticipated impacts with regard to noise or dust. *The Board finds that the provisions of Section 411.20 are satisfied.*

411.21 Right, Title and Interest

The property is currently owned by the Brunswick Development Corporation, with sufficient right, title and interest given to the Town of Brunswick to develop the land. *The Board finds that the provisions of Section 411.21 are satisfied.*

411.22 Payment of Application Fees

The applicant has paid all applicable development review application fees. *The Board finds that the provisions of Section 411.22 are satisfied.*

**DRAFT MOTIONS
BRUNSWICK POLICE STATION
CASE NUMBER
12-030**

Motion 2: That the Board waives the following requirements:

1. Section 412.2.B.8 – Name, location and width of paving for proposed roads
2. Section 412.2.B.14 – Location of proposed cross section of sanitary sewers
3. Section 412.2.B.16 – Class A Soil Survey

Motion 3: That the Sketch and Final Plan is approved with the following conditions:

1. That the Board's review and approval does hereby refer to these findings of fact, the plans and materials submitted by the applicant and the written and oral comments of the applicant, his representatives, reviewing officials, and members of the public as reflected in the public record. Any changes to the approved plan not called for in these conditions of approval or otherwise approved by the Director of Planning and Development as a minor modification shall require a review and approval in accordance with the Brunswick Zoning Ordinance.
2. That tree protection measures as detailed on sheet L1 be implemented before site work commences, necessary pruning of existing trees and new plantings be performed in consultation with the Town Arborist.
3. That the final photometric plan for the development, with calculation zone analysis, is reviewed and approved by the Public Works Director.

* Please note that site plan approvals by the Planning Board shall expire at the end of two years after the date of Final Plan approval unless all construction has been completed by that date (Section 407.4.B of the Brunswick Zoning Ordinance).

Brunswick, Maine

John A. Foster, PE
Town Engineer/Director PWD
e-mail: foster@brunswickme.org

Public Works Department
9 Industry Road
Brunswick, Maine 04011
(207) 725-6654
FAX (207) 725-6655
www.brunswickme.org/dpw

September 19, 2012

Anna Breinich, Director of Planning
Planning Department
28 Federal Street
Brunswick, Maine 04011

PROJECT: Brunswick Police Station
SW Corner of Pleasant Street & Stanwood Street
Case No. 12-030

SUBJECT: Final Plan Comments

Dear Anna:

I have reviewed the final plans and information for the above project as submitted by Donham & Sweeney – Architects with civil design by Curtis Neufeld, PE, Sitelines, Inc.. I have the following comments and findings for the project:

1. Storm Drainage

- a.) I have reviewed the storm water management plan proposed for the site and find the plan to be acceptable as submitted. The plan calls for the use of a hydro-dynamic separator to treat runoff along with roofline drip edge and porous pavement to insure adequate water quality treatment and detention of peak flows.

2. Erosion & Sedimentation Control

- a.) I have reviewed the Erosion & Sedimentation Control plan proposed for the site and find the plan to be acceptable as submitted.

3. Solid Waste Collection and Impact Fee

- a.) The applicant has calculated a solid waste impact fee for the new building. While that is an acceptable analysis the project can deduct the solid waste previously generated on these 4 properties and the impact fee is then typically assessed on the net increase. The four existing lots contained 11 residential units along with a restaurant (House of Pizza). I have factored in the theoretical waste generated by the prior uses and have determined there is no net increase in solid waste from this site. Therefore, we do not recommend a solid waste impact fee for this project.

4. Site Lighting

- a.) I have reviewed the proposed site lighting plan as shown on the Electrical Site Plan prepared by Swiftcurrent Engineering Services. The site lighting will be done with full cut-off LED light fixtures which meet dark-sky criteria. The photometric plan appears adequate but I have asked for a calculation zone analysis to verify the light levels meet IES recommendations that we typically use. I would ask that the Planning Board approve the site plan subject to my final review of the photometric plan with calculation zone analysis.

PROJECT: Brunswick Police Station, Case No. 12-030
SUBJECT: Final Plan Comments
September 19, 2012
page 2

5. Traffic Impact

- a.) I have reviewed the Traffic study for the site as submitted by Gorrill-Palmer Consulting Engineers, Inc. The study concludes and I concur the project will not have a significant impact at the intersection of Pleasant/Stanwood and Mill Streets.

If you have any questions or comments on the above please let me know.

Sincerely,

TOWN OF BRUNSWICK

A handwritten signature in black ink that reads "John A. Foster". The signature is stylized with a large, looped initial "J" and a cursive "A" and "F".

John A. Foster,
Town Engineer/Director PWD

W:\bk_PWD\PB\FinalSitePlanReviewPoliceStation.docx

Anna Breinich

From: Peter Baecher
Sent: Wednesday, September 19, 2012 12:06 PM
To: Anna Breinich
Subject: Police Station landscaping

Hi Anna,

I have looked over the landscape plan for the Police Station as you requested.

My overall sense is that the landscape plan is fine, though I would like to offer a few comments:

- (1) My main concern has to do with tree protection. Although the details shown on sheet L1 are acceptable, tree protection measures need to be implemented before the sitework commences. Sometimes when it is listed on the landscape sheet it does not receive attention until the landscape contractor arrives on the site. By then much damage can have already taken place during the general sitework. Therefore, I would like to make sure that the tree protection measures are specified in the sitework section so that tree protection measures are installed prior to overall sitework. [I have reviewed the plans but do not have a copy of the specifications, so I am assuming from what I see on L1 that the tree protection measures are listed in the landscape specification section only. If they are already included in the sitework section also then that is acceptable.]
- (2) I did not notice on the plans any reference to the pruning needed on some of the trees that are to remain, especially the 36" oak. It would be best to include a requirement that crown cleaning pruning (primarily deadwood removal) be performed on the trees to be protected. It is also essential that this work be performed by a licensed Maine arborists or licensed ISA arborists. This is important so that pruning is performed by knowledgeable professionals. As it is a Town of Brunswick project, I am available to oversee the performance and acceptability of this work in my capacity as Town Arborist, if you wish to list that in the specifications or on the plans.
- (3) I have a minor concern over the spacing of the Valley Forge Elms and the Pin Oaks shown on the plan. They seem somewhat close together at 30' spacing. I think the elms could be spaced a bit further apart; the oaks are restricted due to a driveway. I would ask the landscape architect to evaluate the spacing to be sure that it will provide the effect that they are seeking.
- (4) Another minor item --- perhaps the stone wall near the corner could use a simple perennial bed to add some interest?

Thanks for the opportunity to comment on the landscape plan. Please contact me if you have any questions.

Thanks,
Peter

Peter Baecher, Parks and Facilities Manager/Town Arborist
Brunswick Parks and Recreation Department
30 Federal Street
Brunswick, ME 04011

Phone: 207-725-6656

Fax: 207-725-0148

email: pbaecher@brunswickme.org

September 21, 2012

Ms. Joanne King, Co-Chair
Mr. Ed Knox, Co-Chair
Brunswick Police Station Building Committee
28 Federal Street
Brunswick, Maine 04011

Dear Ms. King and Mr. Knox,

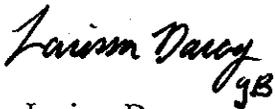
I am writing this letter to you as co-chairs of the Brunswick Police Station Building Committee in an effort to provide your committee with certainty regarding the location of the future Brunswick Police Station.

The Brunswick Development Corporation purchased four properties at the corner of Pleasant and Stanwood Streets earlier last year. It is the intent of the BDC to transfer these properties to the Town of Brunswick once the police station project has been approved. The Town Council and the BDC Board have both authorized the negotiations and I expect that they will be concluded shortly.

I hope that you find this letter of intent sufficient for your committee to be confident that the BDC intentions are limited to providing these properties to the Town of Brunswick for the police station project.

On behalf of the BDC, thank you for your work on this important project. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Larissa Darcy". The signature is written in black ink and includes a small flourish at the end.

Larissa Darcy
President
Brunswick Development Corporation

MEMO

To: Brunswick Planning Board
From: Anna Breinich, AICP, Director of Planning and Development
Date: September 21, 2012
Subject: Case Number 12-031: Brunswick Landing Subdivision Phase 1 Sketch Plan

PROJECT SUMMARY

Case No. 12-031, Brunswick Landing Subdivision Phase 1. The Board will review and comment on a **Sketch Plan** application submitted by the Midcoast Regional Redevelopment Authority (MRRA) , for a 42-lot subdivision of a portion of the former Brunswick Naval Air Station. (**Assessor's Map 40 Lot 2**). This property is located in the **BNAS Reuse Zoning District, subdistricts R-R/OS, R-R, CMU and R-PO.**

SKETCH PLAN COMPLETENESS AND APPROVAL

Staff has reviewed the sketch plan application and has determined that it is complete.

Motion 1: That the Board deems the Sketch Plan to be complete.

The project involves the subdivision of a 333 acre tract, known as Brunswick Landing, into 43 lots for mixed use purposes and will include the establishment of rights-of-way over the existing road network. Through the subdivision, MRRA will then be able to market and develop parcels in an organized matter and in accordance with state subdivision law. An opinion by the Town Attorney, Patrick Scully, regarding the need for the subdivision at this time is attached. The opinion also addresses the acceptance of use of GPS coordinates in lieu of metes and bounds by survey at this time. Each lot will be surveyed as part of site plan and/or change of use approvals.

Upon approval of the final plan, a common development plan may be submitted by MRRA at a later date, detailing intended uses in accordance with the approved BNAS Reuse Master Plan.

A brief project overview includes:

- This is a functional subdivision, memorializing what is on the ground
- MRRA does not own ALL of Phase 1 yet, map shows what has been conveyed
- MRRA has their own utilities and tenants are billed for these as part of lease agreement.
- Purchase and Sales Agreement included as well as deed references for transfers that have taken place

- Assigned ROW widths to streets are based on anticipated travel requirements. All will be private roads, no roads will be removed. MRRA will own roads and infrastructure and maintain roadways until Town is able to take over
- Vernal pools and wildlife habitat identified on several parcels and open space will be a part of such parcels to accommodate them
- Archeological resources have been identified
- Will rely on existing storm water system with intent that each lot utilize low impact development to address storm water

Growth/Rural Area Designation

The proposed redevelopment is within the Growth Area.

Natural Resource Constraints

Natural resources constraints are identified and will be addressed as part of the final plan. The applicant is working with DEP to amend the Site Location Permit originally issued in 1988.

Waivers requested of the applicant include:

Section 412.1 T, Sketch Plan Application Fee
Section 412.2 B.3, Survey

DRAFT MOTIONS

Motion 2: That the Board approves the Sketch Plan.

PHASE 1
BRUNSWICK LANDING SUBDIVISION

TOWN OF BRUNSWICK
SKETCH PLAN SUBDIVISION APPLICATION

for the
MIDCOAST REGIONAL REDEVELOPMENT
AUTHORITY

SEPTEMBER 4, 2012

REVISED: SEPTEMBER 19, 2012



**MAJOR DEVELOPMENT REVIEW
SKETCH PLAN APPLICATION**

1. Project Name: Brunswick Landing - Phase I

2. Project Applicant

Name: Midcoast Regional Redevelopment Authority
Address: 2 Pegasus Street, Suite 1, Unit 200
Brunswick, ME 04011
Phone Number: (207) 798-6512

3. Authorized Representative

Name: Wright-Pierce
Address: 99 Main Street
Topsham, ME 04086
Phone Number: (207) 725-8721

3. List of Design Consultants. Indicate the registration number, address and phone number
Of any engineer, surveyor, architect, landscape architect or planner used:

1. Wright-Pierce - Jan B. Wiegman, P.E. #5852
2. _____
3. _____

5. Physical location of property being affected: Brunswick Landing

6. Lot Size: 333 AC

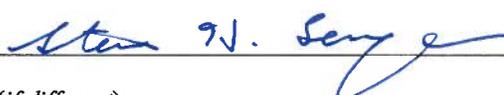
7. Zoning District: R-R, R-PO, R-CMU

8. Indicate the interest of the applicant in the property and abutting property. For example, is the applicant the owner of the property and abutting property? If not, who owns the property subject to this application? The applicant holds title to portions of the proposed Phase I area that have been transferred to MRRA. The transfer of the remaining land is covered under an existing agreement with the Navy.

9. Assessor's Tax Map _____ Lot Number _____ of subject property. Currently being assessed and delineated.

10. Brief description of proposed use: Proposed subdivision of a portion of former Naval Base for the redevelopment of the property into private development projects.

11. Describe specific physical improvements to be done: Delineation of lots, rights of way and utility easements.

Owner Signature: 

Applicant Signature (if different): _____

Required Attachments (by Applicant):

- Sketch Plan Check List
- Sketch Plan Requirements for Open Space Developments (if applicable)
- Request for Waivers (if applicable)
- Required Copies of Sketch Plan

Required Attachment (by Planning and Development Department):

- Listing of all owners of property within 200-foot radius of property under review.

SKETCH PLAN REQUIREMENTS

Key: "O"= omit; "S"=submit; "NA"=not applicable; "W" = waiver; "P"=pending

Item	O	S	NA	W	P	Comments
Indicate Variances Granted			X			
Indicate Special Permits			X			
Indicate Special Exceptions			X			
Date, north point, scale		X				
Land area, existing use of the property, location of proposed development, locations reserved for future development		X				
Tentative rights-of-way locations, lot lines, lot numbers, lot areas		X				
Estimated soil boundary locations from the Soil Conservation Service Medium Intensity Soil Survey noting areas of severe and very severe soil limitations		X				
Existing natural, topographical, and cultural features including areas of steep slopes, bedrock outcrops, ponds, streams, aquifers, and other water bodies, wetlands, groundwater recharge areas, slumps, flood hazard areas, trees, and other vegetation, excavation sites, stone walls, net site area, historic and archeological sites, structures, or districts, and any other pertinent features.		X				
Tentative locations of proposed structures, owners of existing structures, and neighboring land uses		X				
Special conservation and recreation areas		X				
Location map		X				
Zoning information, including the zoning district(s) in which the property is located and the location of any overlay zones depicted on the plan.		X				
Any conditions imposed by previous development on the site.		X				
Other information Planning Board/Staff Review Committee deems necessary to conduct an informed review.		X				
Letter of consent signed by property owner authorizing the development review application in cases where applicant is not the owner of the property.		X				
Application Fee				X		
For Open Space Developments, sketch plan design review requirements indicated in Section 308.1				X		
Open Space Development: Request for Bonus Density			X			

Section 1

Project Description

The Midcoast Regional Redevelopment Authority (MRRA) has acquired and is continuing to acquire land within the former Brunswick Naval Air Station from the United States of America as part of the base closure. MRRA's goal with the acquisition of the land is to facilitate the redevelopment of the property into private projects which will provide economic benefit for the region. To facilitate the redevelopment of the property, now called Brunswick Landing, MRRA has identified a 400 acre portion of the site as the most likely to be redeveloped given the transfers that have taken place to date and the concentration of existing facilities that are conducive to redevelopment.

The proposed project, Brunswick Landing Subdivision Phase 1, will consist of a forty-three (43) lot subdivision of the 400 acres which will include the establishment of rights of ways over the existing roadways and development parcels. The existing development on the parcel with roads and buildings make the portions of the site a functional subdivision. By establishing the subdivision, MRRA will be able to market the property and develop the site in an organized manner. The lots have been arranged to take advantage of existing buildings and parking areas.

A significant planning effort has gone into the closure of the base and the impacts associated with the closure and redevelopment. A Final Environmental Impact Statement (FEIS) was prepared for the base closure and issued in 2010. This application utilizes information from the FEIS as supporting information.

The proposed subdivision includes land in several zoning districts including Residential, Community Mixed Use, Professional Office, Business & Technology Industries and Recreation & Open Space. A design guideline was developed for development within the Brunswick Landing site.

Section 2

Internal Street and Road Network

Except for a proposed additional entrance at Bath Road, the existing internal street and road network (Network) of Brunswick Landing will be used to provide access from Bath Road to the individual lots within the Subdivision. In conjunction with defining the lots of the Subdivision, right-of-way lines have been established at the existing internal streets. Based on the expected level of service of each street within the Network, right-of-way widths vary for the different streets – from a width of 149 feet for the main entrance to the Subdivision at the intersection of Admiral Fitch Avenue with Bath Road, to a width of 50 feet for the southerly portion of Pegasus Street at Neptune Drive that will handle a lower volume of traffic.

The only modification to the Network will be the construction of a turnaround at the westerly terminus of Allagash Drive on Lot 8.

The following is a list of the streets within the Subdivision with their respective right-of-way widths and their approximate existing pavement widths:

Street name	Right-of-Way Width	Existing Pavement Width
Admiral Fitch Avenue at Bath Road	149 feet	59 feet (divided)
Admiral Fitch Avenue	80 feet	28 feet to 42 feet
Allagash Drive	60 feet	21 feet to 23 feet
Anchor Drive	60 feet	19 feet
Atlantic Avenue	60 feet	37 feet to 39 feet
Bath Road Entrance – future	75 feet	59 feet (divided)
Burbank Avenue	75 feet	29 feet
Forrestal Drive	60 feet	35 feet
Katahdin Drive-North	60 feet	21 feet
Katahdin Drive -South	60 feet	72 feet
Neptune Drive	60 feet	22 feet to 32 feet
Orion Street	80 feet	24 feet to 26 feet
Pegasus Street	75 feet	23 feet to 30 feet
Pegasus Street at Neptune Drive	50 feet	24 feet
Pelican Street	60 feet	24 feet
Seahawk Avenue	75 feet	33 feet to 34 feet
Venture Avenue	60 feet	18 feet to 38 feet

The Network will be kept private and any necessary maintenance, repair and/or reconstruction of the streets within the Network will be managed by a Common Area Maintenance Agreement (CAMA) to be entered into by and between the applicant and owners of the lots within the Subdivision. The CAMA is currently under development.

Executive Summary

The following Executive Summary is prepared for the reader's convenience, but is not intended to be a substitute for reading the full report.

The Naval Air Station in Brunswick is situated on approximately 3,220 acres in the town of Brunswick, Maine. The site is on the southerly side of Route 24 with the main access gate located on that route. In 2005, the BNAS was identified and approved for closure as part of the Base Closure and Realignment Act of 1990. The base currently includes an air strip, housing units, offices, and supporting uses for a Navy base.

As a result of the mandate for closure, a study is required for the facility. Part of this study is a review of transportation issues, and an evaluation of the potential redevelopment of the site. There are two Alternatives being considered associated with the reuse of the site. Alternative 1 (Reuse) is consistent with the *Brunswick Naval Air Station Master Reuse Plan*, and includes a mix of land uses. Alternative 1 is also expected to retain the existing air strip.

Alternative 2 (High Density) includes similar uses but increases the square footage and number of residential units. To accommodate the increase in square footage and number of units, the air strip is not proposed to be retained in Alternative 2. The purpose of this Traffic Impact Study is to evaluate the existing adjacent roadway network and to identify what mitigation may be necessary to accommodate the traffic associated with Alternatives 1 or 2.

As part of this report, the potential impacts for several phases were examined, in addition to the Alternatives. The Navy desires to quantify off-site mitigation for several phases, which include the development anticipated for 2016, 2021, and 2026, as well as 2031. As such, information and phased mitigation strategies are discussed in this report.

Based on the completion of the impact study, the following conclusions have been reached regarding the Naval Air Station and its potential impacts to local transportation infrastructure following redevelopment:

1. The study area requested to be reviewed by the client for this redevelopment included sixteen intersections in the immediate area. Should this redevelopment move forward, a review from the Town and MaineDOT will be required, which may result in an expanded study area and potential additional mitigation.
2. The phases are anticipated to generate the following peak hour trip ends, based on the *ITE Trip Generation Manual* during the PM peak hour of adjacent street traffic:

2016, Alternative 1: 883 PM peak hour trip ends

2016, Alternative 2: 1,503 PM peak hour trip ends

2021, Alternative 1: 2,120 PM peak hour trip ends

2021, Alternative 2: 3,467 PM peak hour trip ends

2026, Alternative 1: 3,933 PM peak hour trip ends

2026, Alternative 2: 6,516 PM peak hour trip ends

2031, Alternative 1: 6,473 PM peak hour trip ends

2031, Alternative 2: 10,589 PM peak hour trip ends

(Note: A trip end is either a trip in or out of the site. Therefore a single vehicle making a round trip would equal two trip ends). These volumes are after consideration was taken for 35% and 50% shared trips between the on-site uses during Alternative 1 and 2 respectively. In addition to the internal shared trips, a two percent reduction was taken for bus use and a one half percent reduction was taken for pedestrian / bicycle use.

3. The trips were assigned to the adjacent roadway network based on a 25-mile radius gravity model. The area was extended up to 30 miles where drivers had easy access to an Interstate highway. It is anticipated that over 90 percent of the traffic will enter / exit the site via a proposed Route 1 connector, which could significantly affect the capacity of Route 1.
4. Prior to performing the capacity analysis, local projects that have either just been completed or are in the design process were identified and are listed as follows:

Other Projects:

- Maine Street / Bath Road Project – Redesign of “rotary” area around the church; it is our understanding that as of the time of this report that a final concept and design have yet to take place
 - Route 24 (Bath Road Project) – Extending westbound receiving lanes to the west of the Merry Meeting Plaza intersection
 - Bath Road Project from Cook’s Corner to Old Bath Road – widen and drainage work to provide two travel lanes in each direction
 - Route 24 restriping – Restripe Gurnet Road between Cook’s Corner and just south of Forrestal Drive to provide for one northbound and two southbound travel lanes with a center-two-way-left turn lane between them which transitions into formal left turn lanes at the Cook’s Corner Mall / Cinema signalized intersection.
5. In addition to “other projects”, some anticipated access changes to / from the site were either provided by the applicant or assumed in performing the review and analysis. Those access changes are identified as follows:

Assumed Site Access Modifications:

- A full movement connector would be constructed directly from the site to Route 1. The need for this connection was confirmed in doing the capacity analysis. The five year projection (2016) shows that this connection will either be needed or significant redesign of Bath Road between Merry Meeting Plaza and Cooks Corner will be needed and the area may still operate at very low levels of service. Beyond the 2016 projection, the adjacent roadway network cannot feasibly handle the forecast traffic, even with significant improvements, and analysis without the connection yields meaningless results. This connector is critical to this project since over 90% of the site generated traffic is forecast to use this connector and Route 1. This connector is grade separated from Bath Road and the parallel train tracks along Bath Road.
- Relocate the Naval Air Station main gate access from the existing signalized location to the existing signalized intersection with Merry Meeting Plaza. This would also include the removal of the existing signal at the existing main gate access. For the purpose of this report, the following mitigation was utilized:
 - The exit from the site would include separate left/through and right exit lanes
 - A formal 175 foot long left turn lane on Bath Road
 - A formal 100 foot long right turn lane on Bath Road

This modification was assumed to be in place from the beginning, i.e. starting in 2016.

- Provide a new access drive from the site onto Bath Road approximately 1,300 feet east of the Bath Road / Jordan Avenue intersection. It is recommended that if possible, the site drive be located across from Jordan Avenue rather than 1,300 feet to the east. The driveway was presumably located at the proposed location to avoid impacting the air strip in Alternative 1, but it appears that it could be located across from Jordan Avenue in Alternative 2 since the air strip is proposed to be removed. For the purpose of this report, the following mitigation was utilized:
 - The exit from the site would include separate left and right exit lanes
 - A formal 100 foot long left turn lane on Bath Road
 - A formal 200 foot long right turn lane on Bath Road
 - The intersection is signalized, although consideration should also be given to a roundabout at this location

This modification was assumed to be in place beginning in 2026, but could be constructed anytime prior to then. It is recommend that it not be constructed after that time because the intersection at Merry Meeting Plaza would then start to experience low levels of service and queuing issues.

- The access to Forrestal Drive onto Route 24 would become one of the primary accesses to the site. Although a formal signal warrant analysis will be required before a signal can be installed, it appears from the volumes at this intersection

beginning in 2016 for both Alternatives 1 and 2 that signalization would not only be warranted, but necessary for the intersection to function, especially if the Route 1 connector is not constructed. If the Route 1 connector is constructed, signalization may be delayed until 2021. Capacity analysis of this intersection without signalization would yield unrealistic results. Therefore, signalization of the intersection was assumed beginning in 2016. Two modifications for this intersection that were not included in the capacity analysis, but are still recommended, are; 1) the construction of a southbound right turn lane on Route 24 for vehicles turning onto Forrestal Drive and 2) separate left/thru and right lanes exiting Forrestal Drive. Although these modifications do not appear to be needed from a level of service (LOS) perspective, they do appear to be needed to maintain operations of the intersection and to help reduce queue lengths on each of those approaches.

For the "No Action" scenario, 342 housing units near the intersection of Forrestal Drive and Route 24 were assumed to be fully occupied. Because Forrestal Drive is anticipated to be the primary access, it will operate at low levels of service due to the increased trip generation. A formal signal warrant would be required before a signal could be installed; however, it appears that the intersection would be approaching the criteria for considering signalization in this scenario.

- The existing signalized intersections of Bath Road at: Merry Meeting Plaza, Naval Air Station Main Gate, and the Cook's Corner Mall currently operate off of one controller. In relocating the main gate access to across from Merry Meeting Plaza and removing the main gate signal, each intersection would operate off its own controller.

6. A number of scenarios were considered for review as listed and described as follows:

- *No Build* – This includes the same trip generation to/from the site as was counted on August 28, 2008. The adjacent roadway traffic was seasonally adjusted to reflect the 30th highest hour of the year, which is typically used as the design hour volume.
- *No Action* – This scenario assumes that the base is closed and not re-occupied; however, the residential units located on the easterly side of the base, near the intersection with Forrestal Drive and Route 24, are fully occupied. This includes approximately 342 residential units.
- *2016 Alternative 1* – This is the year 2016 with the combination of uses identified in Section V and is forecast to generate 883 trip ends on the adjacent roadway network.
- *2016 Alternative 2* – This is the year 2016 with the combination of uses identified in Section V and is forecast to generate 1,503 trip ends on the adjacent roadway network.
- *2021 Alternative 1* – This is the year 2021 with the combination of uses identified in Section V and is forecast to generate 2,120 trip ends on the adjacent roadway network.

-
- *2021 Alternative 2* – This is the year 2021 with the combination of uses identified in Section V and is forecast to generate 3,467 trip ends on the adjacent roadway network.
 - *2026 Alternative 1* – This is the year 2026 with the combination of uses identified in Section V and is forecast to generate 3,933 trip ends on the adjacent roadway network.
 - *2026 Alternative 2* – This is the year 2026 with the combination of uses identified in Section V and is forecast to generate 6,516 trip ends on the adjacent roadway network.
 - *2031 Alternative 1* – This is the year 2031 with the combination of uses identified in Section V and is forecast to generate 6,473 trip ends on the adjacent roadway network.
 - *2031 Alternative 2* – This is the year 2031 with the combination of uses identified in Section V and is forecast to generate 10,589 trip ends on the adjacent roadway network.

Anticipated Mitigation in Addition to the “Other Projects” and “Assumed Site Access Modifications”:

2008 No Build

It is important to note that the mitigation identified in this scenario is due to existing design deficiencies, and that this mitigation could be needed regardless of if the Naval Air Station proceeds with Alternative 1 or 2. For instance, the roadway segment between Cook’s Corner and Merry Meeting Plaza currently does not operate well and is expected to operate very poorly in the future, regardless of the Naval Air Station moving forward with Alternative 1 or 2. This scenario does include the same trip generation to/from the site as was counted on August 28, 2008, with adjacent roadway traffic seasonally adjusted to the 30th highest hour.

- *All projects identified previously under “Other Roadway Projects” and “Assumed Site Access Modifications”*
- *Bath Road at Route 24 (Cook’s Corner)*

Extend the northbound dual left turn lanes from approximately 150 feet to approximately 250 feet. This will include the removal of some raised median.

- *Bath Road from Naval Air Station main gate to west of Merry Meeting Plaza*

Provide two eastbound and two westbound through lanes from the main gate to approx. 1,000 feet west of the Merry Meeting Plaza intersection. Some of this for the eastbound direction was accomplished recently as part of the other projects identified previously in this section.

-
- *Bath Road at Sills Drive (Route 123) / Federal Street*

Install a queue detector on Bath Road for the eastbound approach so that the queue of the eastbound traffic does not interfere with the functioning of the anticipated “rotary” area to the west of the intersection.

No Action

The difference between this scenario and the previous “2008 No Build” is the subtraction of the BNAS traffic from the adjacent roadway system and the addition of traffic from the residential units near the intersection of Forrestal Drive / Route 24. Because the base traffic has been removed, the “Assumed Site Access Modifications” no longer apply; however, the other modifications would still be relevant.

Five Year Projection (2016)

- *All previous mitigation identified in the “No Build” condition as well as those identified under “Other Roadway Projects” and “Assumed Site Access Modifications”.*
- *Bath Road at Sills Drive (Route 123) / Federal Street*

Extend the northbound left turn lane from approximately 150 feet to 350 feet

- *Route 24 at Forrestal Drive*

Signalize intersection

Provide for a southbound right turn lane on Route 24 for right turning vehicles into the site

Provide separate left/thru and right lanes on Forrestal Drive

Ten Year Projection (2021)

- *All previous mitigation identified – No additional mitigation identified*

Fifteen Year Projection (2026)

- *All previous mitigation identified – No additional mitigation identified*

Twenty Year Projection (2031)

- *All previous mitigation identified with the addition of:*

- *Bath Road / Route 24 (Cooks Corner)*

Extend the eastbound dual left turn lanes from approximately 300 feet to 375 feet.
(High Density Only)

- *Route 24 at Forrestal Drive*

Conversion of center two-way left turn lane on Route 24 to formal left turn lane and construction of raised median for access management

Additional Regional Mitigation for Alternatives 1 and 2

This study included the primary intersections in the immediate area of the Naval Air Station. The MaineDOT is currently pursuing a larger regional study to identify roadway impacts outside the immediate area which are expected to occur given the significant volume of traffic that the site is forecast to generate.

7. Based on a review of the latest available MaineDOT crash history of the previous three years, there are eight locations identified as high crash locations. Those locations are:
 - Gurnet Road at Entrance to Cooks Corner Mall / Cinema
 - Bath Road at Old Bath Road at Lowes Driveway
 - Bath Road at Tibbetts Drive
 - Cleaveland St. at Maine St. at Noble St.
 - Bath Road East at Maine St. at Upper Park Row
 - Gurnet Road from Bath Road to Cook Corner Mall
 - Bath Road from Tibbetts Drive to Thomas Point Road
 - Bath Road from Thomas Point Road to Gurnet Road
8. When the traffic generated by the redevelopment of the site exceeds that generated today, then a MaineDOT Traffic Movement Permit will be required. This document is not intended for that purpose.

2016 Trip Generation Summary – PM Peak Hour of Adjacent Street Traffic

District	Use	Alt. 1 - Reuse PM Peak Hr. of Adj. St.		Alt. 2 - High Density PM Peak Hr. of Adj. St.	
		Size (SF or Units)	Trip Ends	Size (SF or Units)	Trip Ends
Professional Office	Office	NA		NA	
	Civic and Cultural	NA		NA	
	Retail and Commercial	NA		NA	
Subtotal					
Business and Technology	Industry Warehouse and Storage	234,576	202	443,191	381
	Office	67,105	87	101,523	131
	Retail and Commercial	15,625	42	19,482	53
Subtotal			331 (161)		565 (274)
Community Mixed Use (Non-Residential)	Office	114,802	148	502,930	649
	Civic and Cultural	26,925	44	75,301	123
	Education Facility	19,149	49	49,741	126
	Retail and Commercial	129,353	351	250,439	679
Subtotal			592 (289)		1,577 (768)
Community Mixed Use (Residential)	Residential	364 Units	201	814 Units	435
Subtotal			201 (97)		435 (212)
Residential	Residential	144 Units	124	230 Units	204
Subtotal			124 (61)		204 (99)
Education	Office	12,500	35	33,750	76
	Education Facility	39,618	101	72,662	185
	Residential	65 Units	40	72 Units	45
Subtotal			176 (86)		306 (149)
Aviation	Airport	22,500 OPS	21	NA	
	Industry Warehouse and Storage	422,426	368	NA	
Subtotal			389 (189)		
Total			1,813 (883)		3,087 (1,502)

NA = Not Applicable

(XX) = Trip Generation after shared trips, bus, and pedestrian / bicycle deductions

2021 Trip Generation Summary – PM Peak Hour of Adjacent Street Traffic

District	Use	Alt. 1 - Reuse PM Peak Hr. of Adj. St.		Alt. 2 - High Density PM Peak Hr. of Adj. St.	
		Size (SF or Units)	Trip Ends	Size (SF or Units)	Trip Ends
Professional Office	Office	305,106	394	NA	
	Civic and Cultural	25,046	41	NA	
	Retail and Commercial	30,790	83	NA	
Subtotal			518 (252)		
Business and Technology	Industry Warehouse and Storage	559,007	481	1,059,495	911
	Office	159,260	205	251,308	324
	Retail and Commercial	36,305	98	48,704	132
Subtotal			784 (381)		1367 (667)
Community Mixed Use (Non-Residential)	Office	261,415	337	1,110,227	1432
	Civic and Cultural	63,909	105	183,605	301
	Education Facility	45,004	114	121,484	309
	Retail and Commercial	282,179	765	577,887	1566
Subtotal			1321 (643)		3608 (1757)
Community Mixed Use (Residential)	Residential	826 Units	455	1,954 Units	1039
Subtotal			455 (221)		1039 (506)
Residential	Residential	289 Units	248	504 Units	448
Subtotal			248 (121)		448 (219)
Education	Office	25,000	60	78,125	148
	Education Facility	79,235	201	161,847	411
	Residential	129 Units	80	148 Units	92
Subtotal			341 (165)		651 (318)
Aviation	Airport	30,000 OPS	25	NA	
	Office	14,592	38		
	Industry Warehouse and Storage	814,467	628	NA	
Subtotal			691 (337)		
Total			4,358 (2,120)		7,113 (3,467)

NA = Not Applicable

(XX) = Trip Generation after shared trips, bus, and pedestrian / bicycle deductions

2026 Trip Generation Summary – PM Peak Hour of Adjacent Street Traffic

District	Use	Alt. 1 - Reuse PM Peak Hr. of Adj. St.		Alt. 2 - High Density PM Peak Hr. of Adj. St.	
		Size (SF or Units)	Trip Ends	Size (SF or Units)	Trip Ends
Professional Office	Office	610,211	787	NA	
	Civic and Cultural	50,092	82	NA	
	Retail and Commercial	61,581	167	NA	
Subtotal			1036 (504)		
Business and Technology	Industry Warehouse and Storage	1,008,283	867	1,925,055	1656
	Office	284,513	367	492,615	635
	Retail and Commercial	61,586	167	97,409	264
Subtotal			1401 (681)		2555 (1244)
Community Mixed Use (Non-Residential)	Office	420,472	542	1,632,060	2105
	Civic and Cultural	114,208	187	348,625	572
	Education Facility	78,536	200	231,498	588
	Retail and Commercial	399,543	1083	962,933	2610
Subtotal			2012 (980)		5875 (2864)
Community Mixed Use (Residential)	Residential	1798 Units	1007	4958 Units	2736
Subtotal			1007 (490)		2736 (1334)
Residential	Residential	430 Units	369	1648 Units	1258
Subtotal			369 (179)		1258 (613)
Education	Office	25,000	60	131,251	224
	Education Facility	79,235	201	244,460	621
	Residential	129 Units	80	166 Units	103
Subtotal			341 (165)		948 (461)
Aviation	Airport	37,800 OPS	31	NA	
	Office	72,959	140	NA	
	Industry Warehouse and Storage	1,819,402	1747	NA	
Subtotal			1918 (936)		
Total			8,084 (3,933)		13,372 (6,516)

NA = Not Applicable

(XX) = Trip Generation after shared trips, bus, and pedestrian / bicycle deductions

2031 Trip Generation Summary – PM Peak Hour of Adjacent Street Traffic

District	Use	Alt. 1 - Reuse PM Peak Hr. of Adj. St.		Alt. 2 - High Density PM Peak Hr. of Adj. St.	
		Size (SF or Units)	Trip Ends	Size (SF or Units)	Trip Ends
Professional Office	Office	1,220,422	1574	NA	
	Civic and Cultural	100,184	164	NA	
	Retail and Commercial	123,162	334	NA	
Subtotal			2072 (1010)		NA
Business and Technology	Industry Warehouse and Storage	1,906,837	1640	3,656,175	3144
	Office	535,019	690	975,230	1258
	Retail and Commercial	112,147	304	194,817	528
Subtotal			2634 (1284)		4930 (2404)
Community Mixed Use (Non-Residential)	Office	738,586	953	2,675,727	3452
	Civic and Cultural	214,805	352	678,665	1113
	Education Facility	145,601	370	451,524	1147
	Retail and Commercial	634,270	1719	1,733,027	4697
Subtotal			3394 (1653)		10409 (5072)
Community Mixed Use (Residential)	Residential	2456 Units	1310	6827 Units	3563
Subtotal			1310 (639)		3563 (1736)
Residential	Residential	573 Units	491	1439 Units	1298
Subtotal			491 (239)		1298 (633)
Education	Office	25,000	60	237,501	360
	Education Facility	79,235	201	409,684	1040
	Residential	129 Units	80	203 Units	126
Subtotal			341 (165)		1526 (744)
Aviation	Airport	45,500 OPS	37	NA	
	Office	145,918	188	NA	
	Industry Warehouse and Storage	2,693,584	2817	NA	
Subtotal			3042 (1483)		
Total			13,284 (6,473)		21,726 (10,589)

NA = Not Applicable

(XX) = Trip Generation after shared trips, bus, and pedestrian / bicycle deductions

For the “No Action” scenario, the trips were assigned to the local roadway network based on existing traffic patterns rather than a gravity model. This was done because the residential trips would be expected to be more similar to existing local traffic patterns than following a regional demand pattern. All of the “No Action” trips were considered to enter and exit via the Forrestal Drive / Route 24 intersection.

A summary of the trip assignment to each of the access roads is summarized as follows:

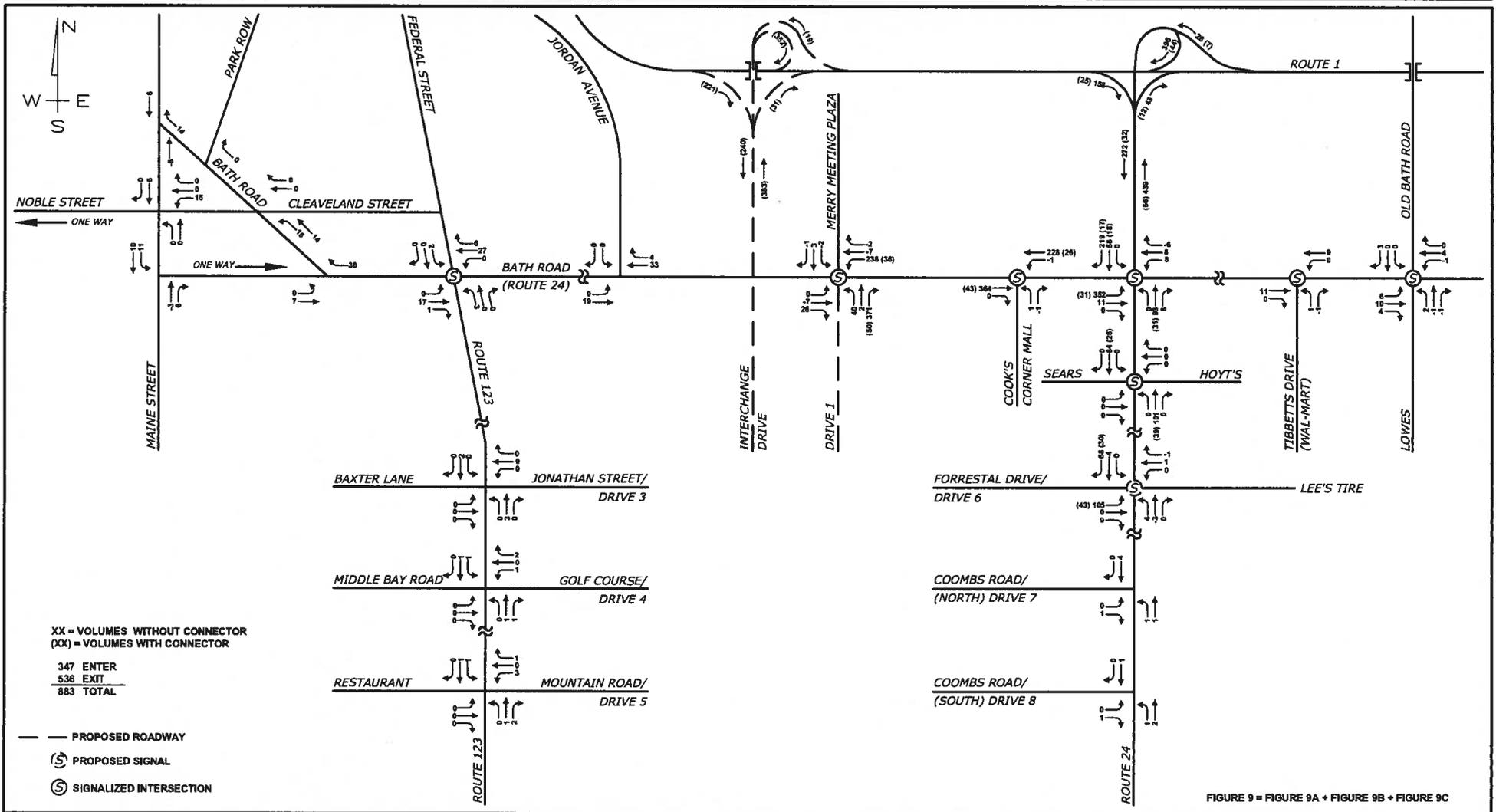
Directional Volumes at Select Portals – PM Peak Hour

Portal	No Build		No Action		2016*				2021				2026				2031			
	Enter	Exit	Enter	Exit	Alt 1		Alt 2		Alt 1		Alt 2		Alt 1		Alt 2		Alt 1		Alt 2	
					Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit
Route 123	224	203	-	-	5	7	8	5	14	20	23	31	23	35	26	57	38	56	79	99
Bath Road	109	588	-	-	65 (267)	92 (413)	117 (382)	159 (538)	143	209	257	341	234	370	474	551	384	614	743	969
Route 24	79	54	183	99	33 (75)	54 (116)	53 (234)	91 (330)	86	124	151	205	143	231	260	303	223	401	411	538
Route 1 Connector	NA	NA	-	-	240	383	432	618	567	957	1040	1442	1018	1880	2127	2711	1577	3181	3222	4532
Total	412	845	183	99	343	536	610	873	810	1310	1471	2019	1418	2516	2887	3622	2222	4252	4455	6138

* (XX) = Without Route 1 Connector
 XX = With Route 1 Connector
 Alternative 1 = Reuse
 Alternative 2 = High Density

Most of the proposed development is anticipated in the northeast quadrant of the site. For that reason, although there are numerous accesses to the site, most of the traffic entering and leaving the site is expected to use the accesses nearest their respective quadrant. In addition, most of the existing off-site development is also concentrated near the northeast quadrant, further supporting the assumption that most of the site traffic will use the accesses nearest that quadrant.

Total Trip Assignment: 5-Year Reuse Scenario



REDEVELOPMENT FOR NAVAL AIR STATION, BRUNSWICK, MAINE
JUNE 2009

Total Trip Assignment: 10-Year Reuse Scenario

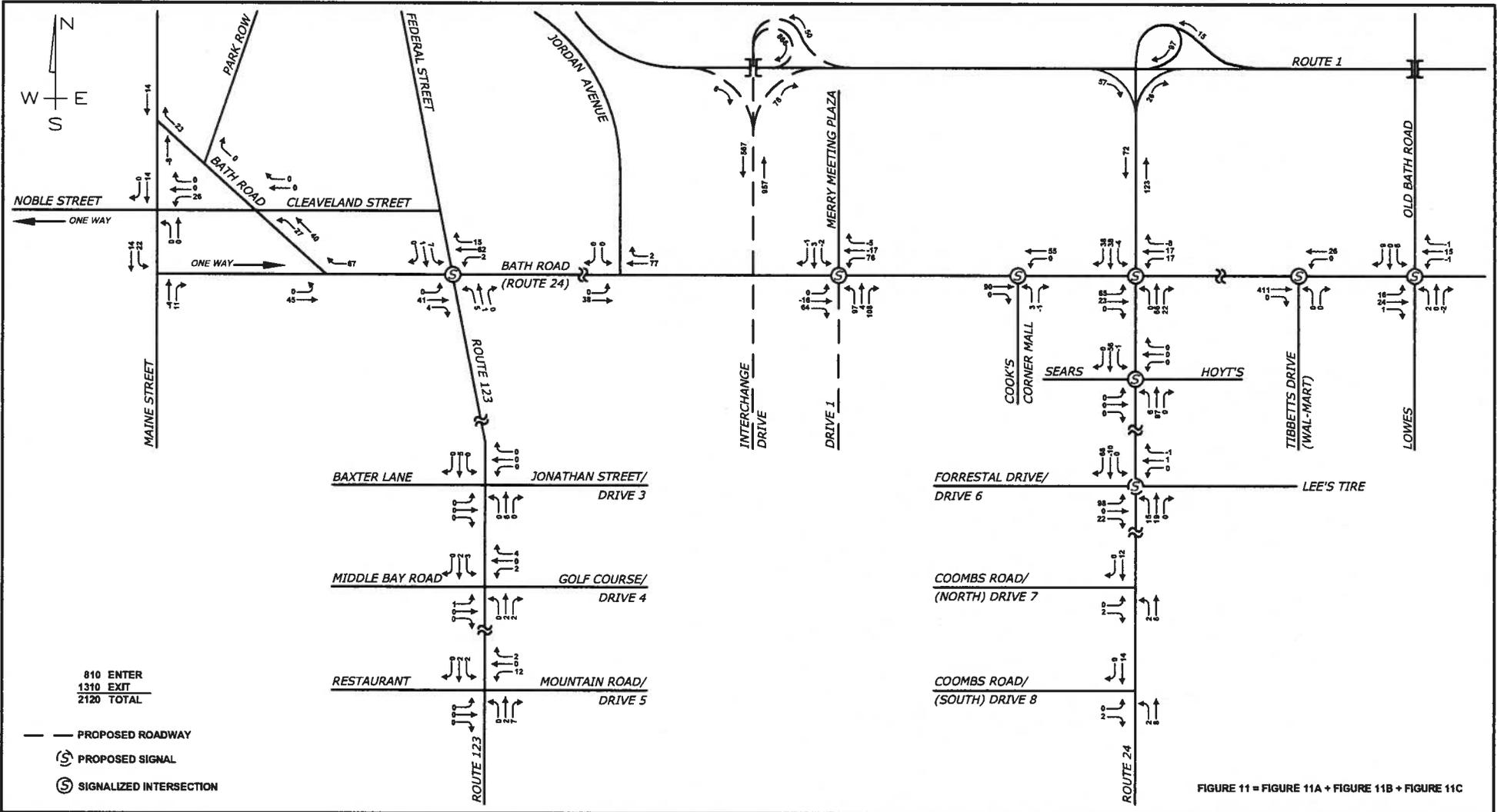
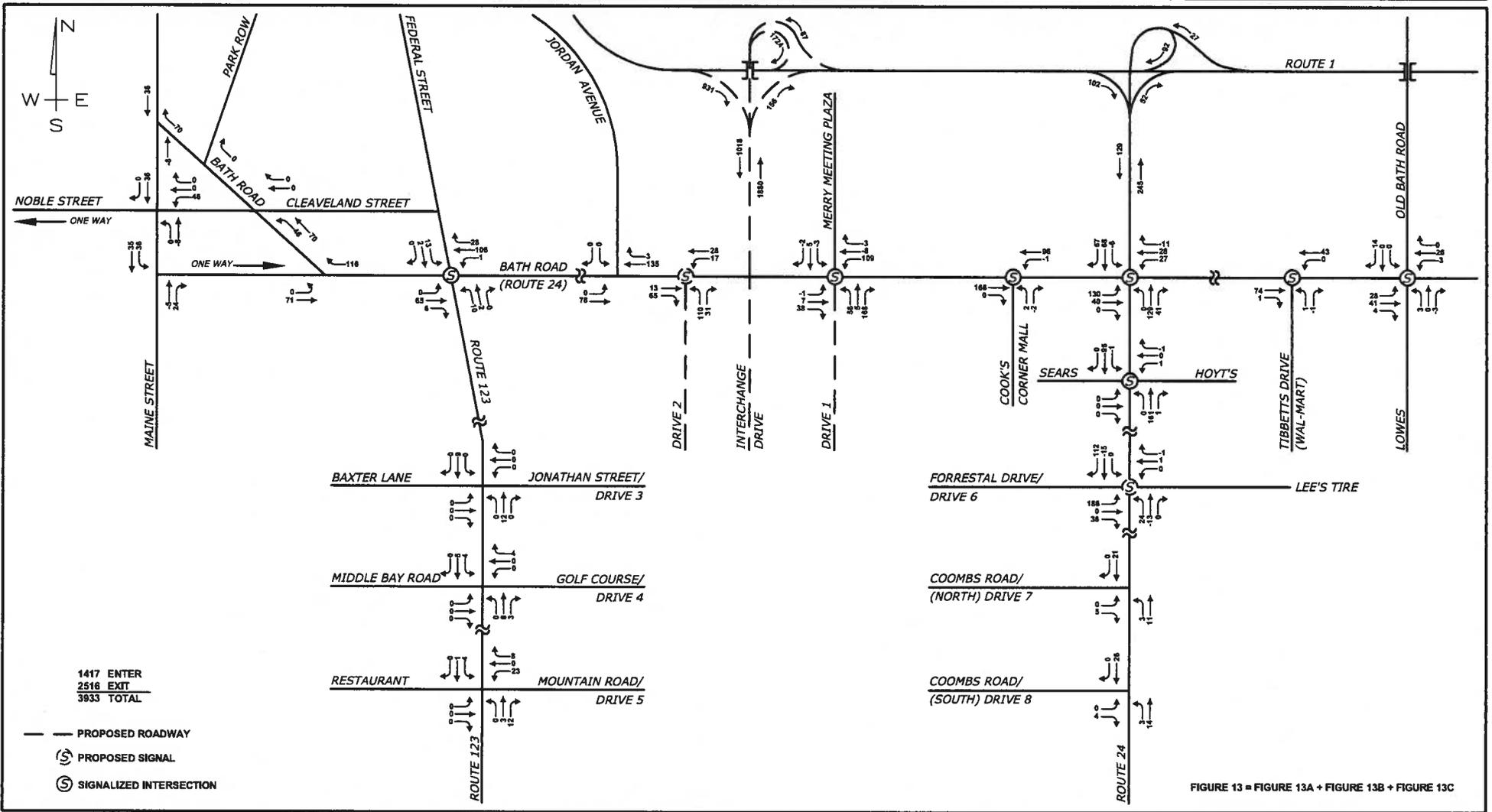


FIGURE 11 = FIGURE 11A + FIGURE 11B + FIGURE 11C

REDEVELOPMENT FOR NAVAL AIR STATION, BRUNSWICK, MAINE JUNE 2009

Total Trip Assignment: 15-Year Reuse Scenario



REDEVELOPMENT FOR NAVAL AIR STATION, BRUNSWICK, MAINE JUNE 2009

Total Trip Assignment: 20-Year Reuse Scenario

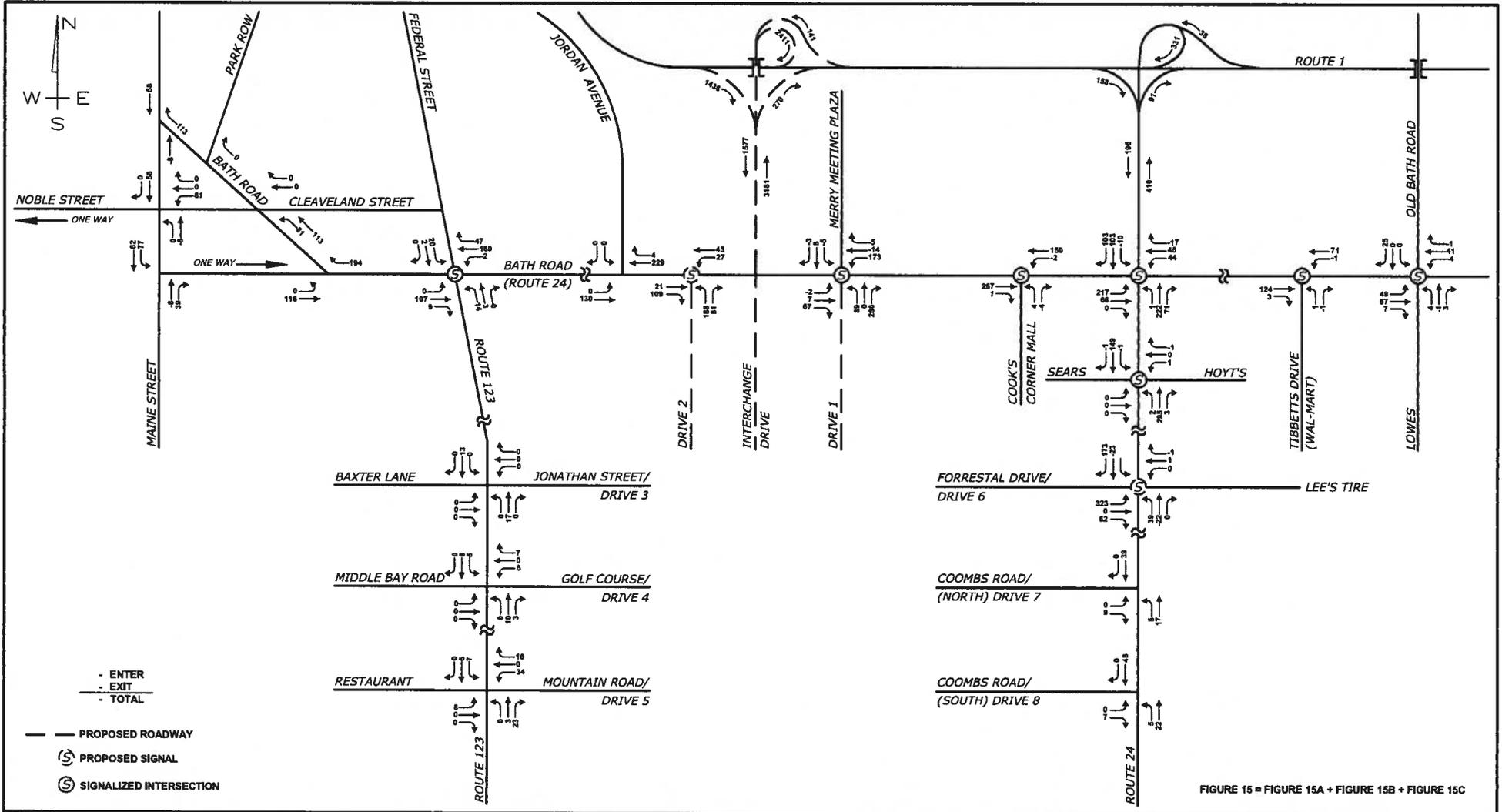


FIGURE 15 = FIGURE 15A + FIGURE 15B + FIGURE 15C

REDEVELOPMENT FOR NAVAL AIR STATION, BRUNSWICK, MAINE JUNE 2009

Design Hour Volumes - 10-Year (2021) Reuse Scenario - PM Peak Hour

Figure No. 19

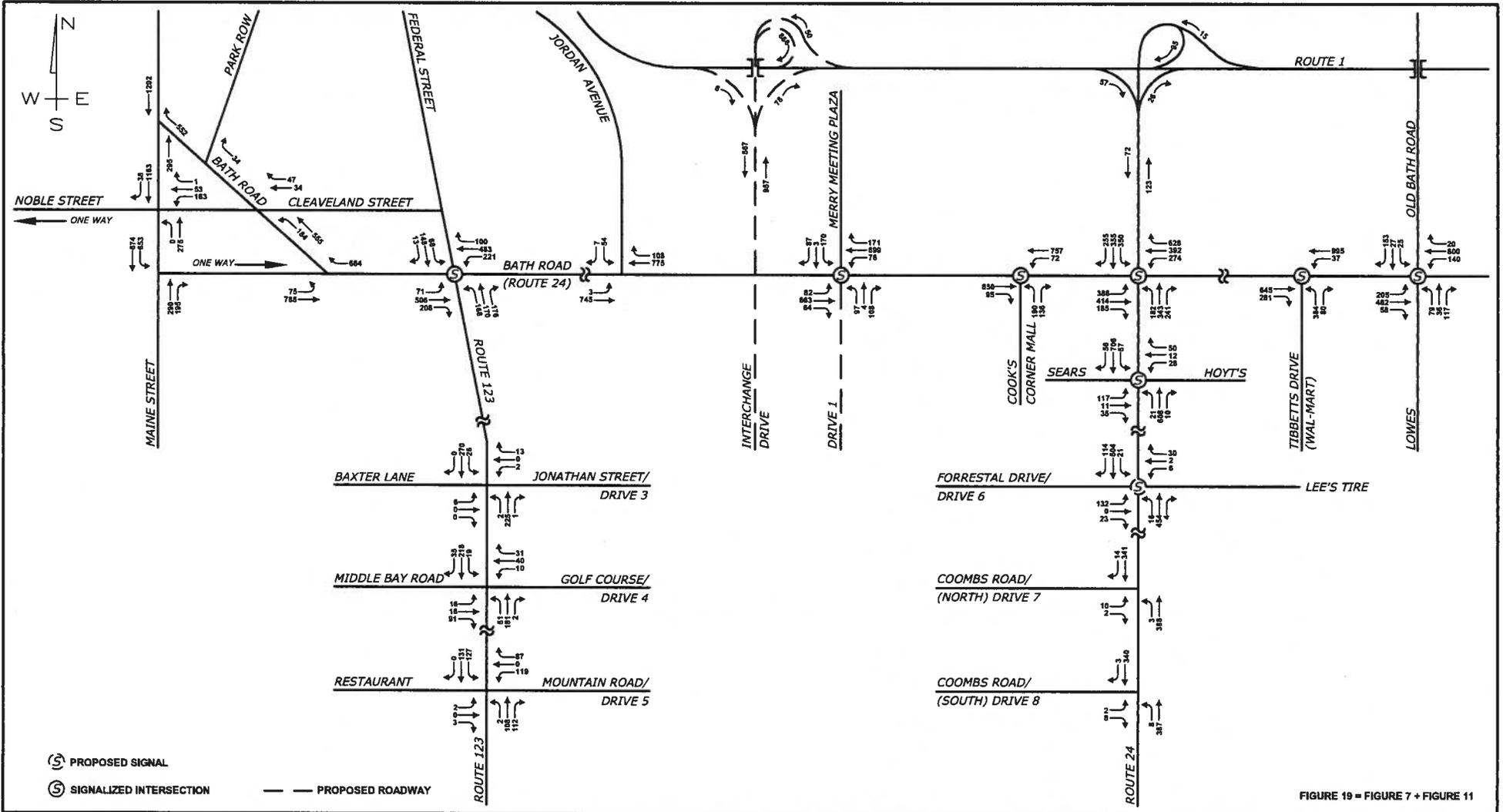


FIGURE 19 = FIGURE 7 + FIGURE 11

REDEVELOPMENT FOR NAVAL AIR STATION, BRUNSWICK, MAINE JUNE 2009

Section 3

Soils

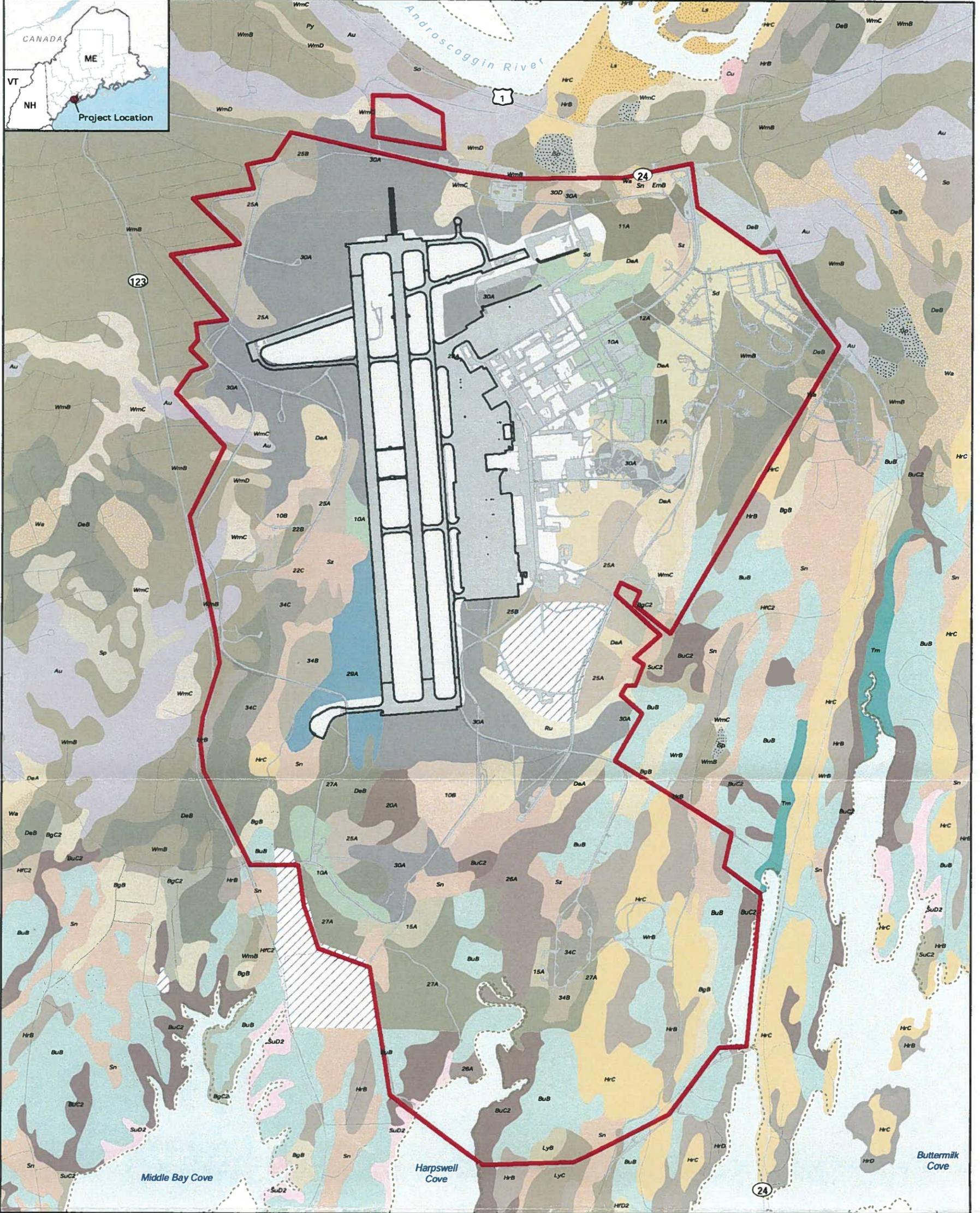
Soils on the Brunswick Landing Subdivision site are shown on the attached map entitled “Figure 2-5, Soils of NAS Brunswick, Brunswick, Maine”, prepared by Ecology & Environment, Inc.

According to the Final Environmental Impact Statement for the Disposal and Reuse of Naval Air Station Brunswick, Maine, dated November 2010, published by the U.S. Department of the Navy, (EIS) “*Soil types present on NAS Brunswick are ... of glacial origin: soils derived primarily from glaciofluvial parent material are found primarily in the northern half of the site, and soils derived primarily from glaciomarine parent material are found primarily in the southern half of the site. Other soil types present on the site include Urban land, Udorthents, and Haplaquents (Normandeau Associates 1998a; Geo-Marine, Inc. 2001). The Urban land, Udorthents, and Haplaquents soils of NAS Brunswick are considered man-made or urban soil units that are developed from cutting, filling, building construction, and paving. Because the urban/man-made soils have been highly modified from their original condition, ratings for limitations for such soils complexes are based on the characteristics of the other soils in the complexes that have not been highly modified. For example, ratings for the Udorthents-Adams complex are based on characteristics of the Adams soils that are included in the complex. No ratings are possible for the Urban land-Udorthents-Haplaquents association, due to the variability of the soils and the extent of modifications from the original conditions.*”

According to the EIS, “*The soils of NAS Brunswick vary in constructability. Constructability limitations arise from a variety of physical properties, such as shrink-swell potential, or features such as whether the soil is subject to ponding or flooding. Specific design and construction practices can be employed to overcome the constructability limitations of the soil on a site. The more common sources of constructability limitations on NAS Brunswick include shallow depth to saturation, frost action, low strength, and the likelihood that excavated cutbanks would cave in. Shallow depth to saturation may require dewatering during excavation and construction and other measures to facilitate construction in a saturated environment. Frost action can destabilize roadways and shallow excavations unless specific design and construction measures are taken to manage dimensional changes due to freezing and thawing of water in the soil. Soil strength, which refers to a soil’s inherent ability to withstand loading (e.g., from heavy equipment, buildings, roads, and other structures), is influenced by wetness, mineralogy, soil-particle shape and size distribution, and soil structure; consequently, different soils have different strengths. Soils also vary in their ability to maintain a steep or vertical bank when excavated. Sandy soils often require less steep cutbanks or more shoring to prevent collapse during excavation compared to loamy or clayey soils. Such limitations do not necessarily mean the soil cannot be used for a given purpose, but rather that the construction methods and structural designs may require additional elements to overcome the limitations. Costs usually increase in order to address the limiting soil qualities. ...To varying degrees, all soils may require specific measures to control soil erosion and limit runoff of sediment during clearing and construction activities.*”

Limited construction activities are proposed by the applicant in connection with this Subdivision. Construction activities proposed by the applicant and developers of individual lots within this Subdivision will be subject to review and approval by the Town of Brunswick and the appropriate State and Federal agencies on a site-specific basis.

Wetlands have been mapped by others and the wetland boundaries are delineated on the accompanying Subdivision plan. Any proposed construction activities on a lot within the Subdivision having wetlands will be carried out in conformance with applicable Town of Brunswick and State and Federal rules and regulations.



Legend

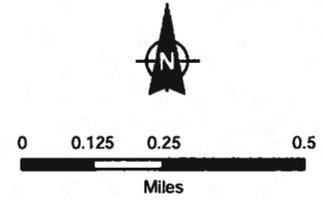
Soil Type	25B	Adams loamy fine sand	BgC2	Belgrade very fine sandy loam	HrC	Hollis fine sandy loam	SuC2	Suffield silt loam
/// No Value	26A	Gouldsboro silt loam	BuB	Buxton silt loam	HrD	Hollis fine sandy loam	SuD2	Suffield silt loam
10A	27A	Lamoine silt loam	BuC2	Buxton silt loam	*Ls	Limerick-Saco silt loams	Sz	Swanton fine sandy loam
10B	28A	Urban land-Udorthents-Haplaquents association	Cu	Cut and fill land	LyB	Lyman fine sandy loam	*Tm	Tidal marsh
11A	29A	Haplaquents-Scantic complex	DeA	Deerfield loamy sand	LyC	Lyman fine sandy loam	*Wa	Walpole fine sandy loam
12A	30A	Udorthents-Adams complex	DeB	Deerfield loamy sand	Py	Podunk fine sandy loam	WmB	Windsor loamy sand
15A	30D	Udorthents-Adams complex	EmB	Elmwood fine sandy loam	*Ru	Rumney fine sandy loam	WmC	Windsor loamy sand
*20A	34B	Tunbridge fine sandy loam	Gp	Gravel pits	*Sd	Saugatuck loamy sand	WmD	Windsor loamy sand
22B	34C	Tunbridge fine sandy loam	HfC2	Hartland very fine sandy loam	*Sn	Scantic silt loam	WrB	Woodbridge fine sandy loam
22C	Au	Au Gres loamy sand	HfD2	Hartland very fine sandy loam	*So	Scarboro sandy loam		
25A	BqB	Belgrade very fine sandy loam	HrB	Hollis fine sandy loam	*Sp	Sebago mucky peat		

Note: * Indicates Hydric Soil Types

Source: Normandeau Associates, 1998.

NAS Brunswick Property Boundary

Figure 2-5
Soils of NAS Brunswick
Brunswick, Maine



Section 4

Subdivision Plan

The proposed subdivision is shown on the accompanying plan entitled “Sketch Subdivision Plan, Brunswick Landing, Midcoast Regional Redevelopment Authority, Subdivision – Phase 1, Brunswick, Maine,” Drawing C-2, dated September 19, 2012, by Wright-Pierce (Subdivision Plan).

The foundations of the Brunswick Landing Subdivision (Subdivision) are the existing street and road network and the existing buildings. The major existing streets have been used to provide access from Bath Road to the various proposed lots. As discussed in Section 2, Internal Street and Road Network of this application, right-of-way lines have been established at the existing internal streets with the expected level of service of each street having dictated the right-of-way width of the particular street. Where possible, the lots have been configured to include existing buildings and associated parking as well as to provide a variety of development opportunities and to conform to the applicable dimensional requirements of the Town of Brunswick Zoning Ordinance.

The Subdivision encompasses in part a portion of land controlled by the applicant and land under option by the applicant. Generally, the Subdivision is bounded on the north by Bath Road, on the east by a residential development that was formerly a part of Naval Air Station Brunswick (NASB) now owned by a private developer, on the south by a designated conservation area and by land slated to be acquired by the applicant in the future, and on the west by land designated as Airport Property that includes the airfield, associated structures and improvements.

The forty-three lots in the Subdivision range in size from approximately one acre to a little over 66 acres. Within the perimeter of the Subdivision, are several parcels that were previously transferred or are in the process of being transferred to other entities. The entities include Family Focus Education, the Town of Brunswick and Maine Community College System.

Currently, and for the near future, access to the Subdivision property from Bath Road is and will be via the main entrance to the former NASB in the northeasterly corner of the Subdivision. In conjunction with traffic management improvements proposed to be made to Bath Road as part of the development of the former NASB, the signal at current main entrance will be removed and a new entrance would be established at the signal opposite the entrance to the “Merry Meeting Plaza”. The location of the new entrance and right of way is shown on the Subdivision Plan.

The Zoning District boundaries and designations shown on the Subdivision plan are taken from the Town of Brunswick Zoning Map except for a portion of the zone boundary between the R-CMU and R-R Zones, which has been redrawn in accordance with a proposed zone change recently requested by the applicant.

Access and utilities to the lots in the Brunswick Landing development previously conveyed are subject to an agreement granting reciprocal easements for access and utilities.

Section 5

Conservation and Recreation Areas

The former Brunswick Naval Air Station in Brunswick consists of approximately 3,200 acres of land that will be transferred from Federal government to private, state and local government control. Of the overall land area, over 1,570 acres (49%) will be designated for conservation/recreation land. The remaining land will be used for an airport (730 acres, 23%) and for redevelopment (900 acres, 28%). The proposed Phase 1 Brunswick Landing Subdivision lays out the development lots for a 400-acre portion of the former base cantonment area.

With the transfer of the base, approximately 49% of the overall base area will be designated as conservation/recreation land. The remaining areas will be used for redevelopment opportunities without additional dedicated conservation areas. There are natural resources within the development that will require buffers and are not currently proposed for development. There are vernal pools which have been identified and will require limited development within 250 of the resource. There will also be portions of lots that will not be developed because of wetlands and other restrictions leaving open space within some of the lots.

Section 6

Location Map

The area of proposed Brunswick Landing Subdivision is depicted on the attached Location Map.



PLAN
SCALE: 1"=2000'

BRUNSWICK LANDING SUBDIVISION LOCATION MAP BRUNSWICK, MAINE		
PROJ NO:	12218A	DATE: SEPT. 2012
WRIGHT-PIERCE 		1
Engineering a Better Environment		

Section 7

Existing Features

The Brunswick Landing development and in particular the Phase 1 of the Brunswick Landing Subdivision (Subdivision) has existing features that have directed the plan development. Primarily the existing roadway network established by the Navy has been kept intact and will be utilized for the layout of the subdivision. Right of way limits for the roads have been established as part of this Subdivision plan and the lots were developed with frontage on the roads.

There are also many existing buildings located throughout the Subdivision and the lots have been laid out to take advantage of the buildings. It is likely that many of the buildings may be reused. Some areas without buildings have been laid out with the existing topography being considered in the lot line location. The wetlands were also considered in the lay out of the lots.

Section 8

Supporting Information

The following supporting information was excerpted from the Final Environmental Impact Statement (EIS) prepared by the Navy for the closing of the Naval Air Station and other studies that were conducted by MRRA as part of planning for future development on the site. The alternative that Brunswick Landing is pursuing is Alternative 1 in the EIS. We have included excerpts from the traffic study section that includes estimates of traffic at full build out and the improvements necessary to support the traffic.

The vernal pool mapping done on the site revealed six vernal pools within the Phase 1 portion of the project, none of which were classified as significant by the Maine Department of Environmental Protection.

The programmatic agreement has been included to provide insight into the historical and archeological resources at the base. Although the locations of the resources are not revealed in the agreement, leases and land transfers of sites that contain the historical and archeological resources must contain provisions for the enforcement of federal historic preservation efforts on the sites.

Also included in this section is an excerpt outlining the guiding principles from the design guidelines that were developed for Brunswick Landing development.

H

Vernal Pool Survey Report

Vernal Pool Survey Report

**A Technical Report in Support of the
Environmental Impact Statement for the
Disposal and Reuse of NAS Brunswick
Naval Air Station Brunswick
Brunswick, Maine**

June 2009

Prepared for:

**U.S. Department of Navy
BRAC Project Management Office - Northeast
Philadelphia, Pennsylvania**

Prepared by:

**ECOLOGY AND ENVIRONMENT, INC.
368 Pleasant View Drive
Lancaster, New York 14086**


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List of Abbreviations and Acronyms



AMSL	above mean sea level
E & E	Ecology and Environment, Inc.
EIS	Environmental Impact Statement
GPS	Global Positioning System
MEDEP	Maine Department of Environmental Protection
NAS	Naval Air Station
NRPA	Natural Resources Protection Act
TRC	TRC Environmental Corporation

1

Introduction

This report has been prepared to support the Environmental Impact Statement (EIS) for the disposal and reuse of Naval Air Station (NAS) Brunswick in Brunswick, Maine. The Navy contracted with Ecology and Environment, Inc. (E & E) to survey vernal pools at NAS Brunswick and its outlying properties in the spring of 2009.

Vernal pools are considered important resources in the state of Maine. According to the Maine Department of Environmental Protection (MEDEP):

*“a vernal pool, also referred to as a seasonal forest pool, is a natural, temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubranchipus* sp.), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species”* (06-096 CMR Chapter 335).

If a vernal pool supports a certain abundance of vernal pool indicator species (wood frogs, spotted salamander, blue-spotted salamander, or fairy shrimp) or supports a threatened, endangered, or rare species for a critical part of its life history, the pool is considered a “significant” vernal pool by the state of Maine. To be deemed a significant vernal pool, the abundance of wood frog, spotted salamander, and blue-spotted salamander egg masses must reach at least 40, 20, and 10, respectively, within the pool area. Only a single species must meet its critical level for the pool to be considered significant. The presence of fairy shrimp at any life stage meets the requirements for significant vernal pool status.

Significant vernal pools may also provide valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species, such as Blanding’s turtle (*Emydoidea blandingii*), spotted turtle (*Clemmys guttata*), wood turtle (*Glyptemys insculpta*), ringed boghaunter dragonfly (*Williamsonia linteri*), and ribbon snake *Thamnophis sauritus*). Significant vernal pool habitat, including

Final Environmental Impact Statement
Disposal and Reuse of NAS Brunswick, Maine

critical terrestrial habitat around the vernal pool depression within a 250-foot radius, is protected under the Maine Natural Resources Protection Act (NRPA).

With the exception of the vernal pool survey conducted by TRC in 2008 (see section 5 of this report), no previous formal vernal pool surveys had been conducted at NAS Brunswick. The following report provides a brief site description, an overview of the methodology used to identify and categorize vernal pools, and a discussion of the survey results.

2

Site Description

NAS Brunswick is located on approximately 3,117 acres in the town of Brunswick, Cumberland County, Maine (see Figure 2-1). Three outlying properties (the McKeen Street Housing Annex, East Brunswick Radio Transmitter Site, and Sabino Hill Rake Station) that are being reviewed in the EIS were initially included as part of this study; however, these properties do not support vernal pool habitat. The East Brunswick Radio Transmitter Site and Sabino Hill Rake Station are characterized entirely as upland communities and neither site supports habitat that could be considered vernal pool. The McKeen Street Housing Annex does support limited wetland habitat on the south end of the property; however, no vernal pool habitat was identified during the site survey conducted by E & E biologists in April 2009. Therefore, these three properties are not discussed further in this report.

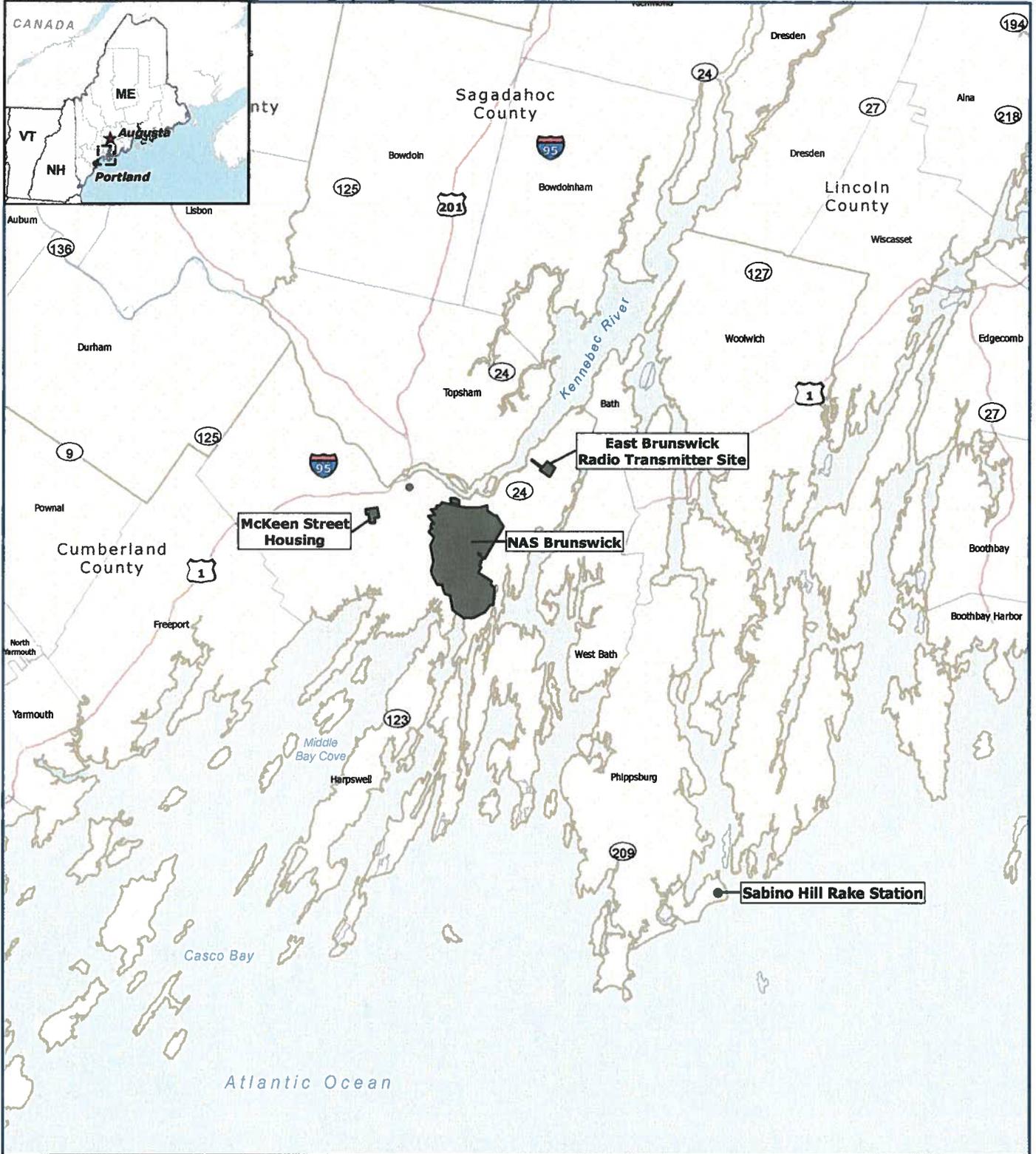
NAS Brunswick is located within the Central Maine Coastal and Interior Ecoregion. This area is comprised of glacially scoured and dissected peneplain, which slopes toward the coast and exhibits glacial features such as kames, eskers, and terraces. The topography is relatively flat to gently rolling, with elevations ranging from sea level to 1,000 feet above mean sea level (AMSL). Forests are the dominant vegetation type and consist of northern hardwood, northern hardwood-spruce, northern coastal spruce-fir, and spruce-fir-northern hardwood communities. Coastal pitch pine communities are known to occur in this ecoregion but are now uncommon. Open communities such as grasslands and tidal marshes also occur, but they do not comprise a large percentage of the overall land cover of this ecoregion (McNab and Avers 1994).

The land surrounding NAS Brunswick is predominantly residential with areas of undeveloped forests and wetlands. Upland forests are the dominant vegetation community on the installation, covering approximately 1,242 acres (41%) of the total land area (E & E 2008). Large forested communities are located on the western, southern, and eastern portions of the base. These forested communities are interspersed with wetlands, ponds, and streams. Other vegetation communities at NAS Brunswick include a variety of grasslands, wetlands, and maintained lands. Developed areas occupy the central and north-central portions of the installation. Much of the eastern and western portions of the installation are forested and interspersed with wetlands, streams, and ponds. The southern and sou-

Final Environmental Impact Statement
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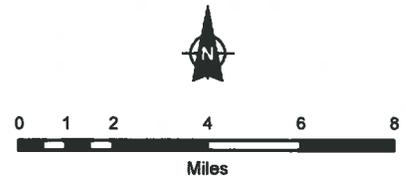
theastern portions of the base are characterized by forest and tidal wetlands associated with Harpswell Cove and Buttermilk Cove.

NAS Brunswick is located within four watersheds: the Mere Brook/Harpswell Cove watershed, Buttermilk Cove watershed, Middle Bay watershed, and the Androscoggin River watershed. The installation is located within 0.5 mile of the Androscoggin River and Casco Bay. The installation is bisected by Mere Brook, which eventually drains into Harpswell Cove. Numerous streams, wetlands, and permanent freshwater ponds are scattered throughout the installation. Approximately 465 acres of wetlands are present on NAS Brunswick, 71% of which are freshwater and 29% are tidal (E & E 2008).



- NAS Brunswick
- Municipal Boundary
- County Boundary

Figure 2-1
 NAS Brunswick and
 Outlying Properties
 Brunswick, Maine



3

Methodology

The vernal pool survey was conducted by E & E according to methodologies recommended by the Maine DEP for vernal pool surveys (Maine DEP 2009). The significance of a vernal pool must be determined and documented by an individual qualified by sufficient experience and training in either wetland ecology or wildlife ecology. In order to successfully identify vernal pools, field surveys must be conducted during the amphibian breeding season in early spring. In southern Maine, the MEDEP recommends conducting surveys for wood frogs between April 7 and April 21 and spotted salamanders between April 20 and May 21 (MEDEP 2009).

Prior to conducting the field survey, a desktop analysis was conducted to identify potential vernal pools at NAS Brunswick. The desktop analysis included a review of recent aerial photographs and previously mapped wetlands.

The field portion of the vernal pool survey was completed in three phases:

Phase 1: Initial survey to locate pooled areas (April 2-10)

Phase 2: Initial round of egg mass counts (April 13-17)

Phase 3: Second round of egg mass counts (April 28-30)

The installation was divided into seven search zones to facilitate the survey schedule and assist with data management. During the initial survey period, each search zone was walked in transects to ensure complete coverage of the area. Any pooled areas containing standing water several inches deep were identified as "Potential Vernal Pools." Each pool location was photographed, and a single Global Positioning System (GPS) point was taken with a Trimble GeoXH unit. In addition, information about the habitat within 250 feet surrounding the pool was recorded on standardized datasheets.

During the second phase of the survey, all of the previously identified potential vernal pools were revisited. If the sites were dry, they were recorded as such and were not revisited during the third phase. If the pool contained standing water, the pool was checked for the presence of vernal pool indicator species. The number of species and/or egg masses was recorded, and an assessment was made to determine whether the pool was significant based on the MEDEP criteria (see Table 3-1).

Table 3-1 Presence and Abundance Criteria for Determining Significant Vernal Pool Status in Maine

Species	Abundance Criterion
Wood frog	Presence of 40 or more egg masses
Spotted salamander	Presence of 20 or more egg masses
Blue-spotted salamander	Presence of 10 or more egg masses
Fairy shrimp	Presence in any life stage

Source: MEDEP 2009.

Pools identified as significant during the second phase were not revisited during the third phase. If the count was lower than the abundance criteria for determining a pool as a significant vernal pool, the site was revisited during the third phase of surveys. Pools visited during the third phase were assessed further to determine whether they were significant.

Specific characteristics of each vernal pool and significant vernal pool (i.e., water depth, water temperature, pool dimensions, and dominant vegetation) were recorded on standardized datasheets. The perimeter of each pool was delineated using the Trimble GeoXH GPS unit. The photolog and datasheets for the vernal pools and significant vernal pools are provided in Appendix A and Appendix B, respectively.

4

Results

During the initial search period, 169 pooled areas were identified (see Figure 4-1 and Table 4-1). Of these, 27 were identified as vernal pools, and 20 of these were identified as significant vernal pools using the criteria set by the MEDEP (MEDEP 2009). Blue-spotted salamander egg masses or fairy shrimp were not observed within any of the vernal pools. The delineated boundaries of vernal pools and significant vernal pools are identified on Figures 4-2 through 4-9.

Pool 119 contained a significant number of wood frog and spotted salamander egg masses (≥ 47 and ≥ 89 , respectively) but was determined to be permanent; therefore, this pool was not included in the total significant vernal pool count. According to MEDEP Chapter 335, vernal pools are temporary to semi-permanent. While permanent ponds may provide habitat for vernal pool breeding amphibians, they are not designated as vernal pools by the state of Maine (06-096 CMR Chapter 335).

Table 4-1 Pooled Areas Detected within NAS Brunswick

Pool Identification Number	Total Egg Mass Count		Presence of Fairy Shrimp	Pool Classification
	Wood Frog	Spotted Salamander		
	Significant Vernal Pool Criteria			
	≥ 40 egg masses	≥ 20 egg masses	Yes/No	
Pool 1	No egg masses detected		No	Pooled Area
Pool 2	No egg masses detected		No	Pooled Area
Pool 3	No egg masses detected		No	Pooled Area
Pool 4	No egg masses detected		No	Pooled Area
Pool 5	No egg masses detected		No	Pooled Area
Pool 6	No egg masses detected		No	Pooled Area
Pool 7	No egg masses detected		No	Pooled Area
Pool 8	4	0	No	Vernal Pool
Pool 9	No egg masses detected		No	Pooled Area
Pool 10	9	0	No	Vernal Pool
Pool 11	No egg masses detected		No	Pooled Area
Pool 12	No egg masses detected		No	Pooled Area
Pool 13	No egg masses detected		No	Pooled Area
Pool 14	37	0	No	Vernal Pool

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Table 4-1 Pooled Areas Detected within NAS Brunswick

Pool Identification Number	Total Egg Mass Count		Presence of Fairy Shrimp	Pool Classification
	Wood Frog	Spotted Salamander		
Significant Vernal Pool Criteria				
	≥40 egg masses	≥20 egg masses	Yes/No	
Pool 15	2	0	No	Vernal Pool
Pool 16	No egg masses detected		No	Pooled Area
Pool 17	No egg masses detected		No	Pooled Area
Pool 18	No egg masses detected		No	Pooled Area
Pool 19	No egg masses detected		No	Pooled Area
Pool 20	No egg masses detected		No	Pooled Area
Pool 21	No egg masses detected		No	Pooled Area
Pool 22	No egg masses detected		No	Pooled Area
Pool 23	No egg masses detected		No	Pooled Area
Pool 24	No egg masses detected		No	Pooled Area
Pool 25	4	12	No	Vernal Pool
Pool 26	No egg masses detected		No	Pooled Area
Pool 27	No egg masses detected		No	Pooled Area
Pool 28	No egg masses detected		No	Pooled Area
Pool 29	No egg masses detected		No	Pooled Area
Pool 30	No egg masses detected		No	Pooled Area
Pool 31	No egg masses detected		No	Pooled Area
Pool 32	0	≥ 20	No	Significant Vernal Pool
Pool 33	11	1	No	Vernal Pool
Pool 34	No egg masses detected		No	Pooled Area
Pool 35	3	27	No	Significant Vernal Pool
Pool 36	≥ 40	10	No	Significant Vernal Pool
Pool 37	No egg masses detected		No	Pooled Area
Pool 38	No egg masses detected		No	Pooled Area
Pool 39	0	3	No	Vernal Pool
Pool 40	No egg masses detected		No	Pooled Area
Pool 41	No egg masses detected		No	Pooled Area
Pool 42	No egg masses detected		No	Pooled Area
Pool 43	No egg masses detected		No	Pooled Area
Pool 44	No egg masses detected		No	Pooled Area
Pool 45	No egg masses detected		No	Pooled Area
Pool 46	No egg masses detected		No	Pooled Area
Pool 47	No egg masses detected		No	Pooled Area
Pool 48	69	0	No	Significant Vernal Pool
Pool 49	No egg masses detected		No	Pooled Area
Pool 50	No egg masses detected		No	Pooled Area
Pool 51	0	17	No	Vernal Pool
Pool 52	74	0	No	Significant Vernal Pool
Pool 53	2	0	No	Vernal Pool

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Table 4-1 Pooled Areas Detected within NAS Brunswick

Pool Identification Number	Total Egg Mass Count		Presence of Fairy Shrimp	Pool Classification
	Wood Frog	Spotted Salamander		
Significant Vernal Pool Criteria				
	≥40 egg masses	≥20 egg masses	Yes/No	
Pool 54	44	0	No	Significant Vernal Pool
Pool 55	No egg masses detected		No	Pooled Area
Pool 56	No egg masses detected		No	Pooled Area
Pool 57	No egg masses detected		No	Pooled Area
Pool 58	No egg masses detected		No	Pooled Area
Pool 59	No egg masses detected		No	Pooled Area
Pool 60	No egg masses detected		No	Pooled Area
Pool 61	No egg masses detected		No	Pooled Area
Pool 62	No egg masses detected		No	Pooled Area
Pool 63	No egg masses detected		No	Pooled Area
Pool 64	No egg masses detected		No	Pooled Area
Pool 65	No egg masses detected		No	Pooled Area
Pool 66	No egg masses detected		No	Pooled Area
Pool 67	No egg masses detected		No	Pooled Area
Pool 68	No egg masses detected		No	Pooled Area
Pool 69	No egg masses detected		No	Pooled Area
Pool 70	No egg masses detected		No	Pooled Area
Pool 71	No egg masses detected		No	Pooled Area
Pool 72	No egg masses detected		No	Pooled Area
Pool 73	No egg masses detected		No	Pooled Area
Pool 74	No egg masses detected		No	Pooled Area
Pool 75	7	4	No	Vernal Pool
Pool 76	No egg masses detected		No	Pooled Area
Pool 77	No egg masses detected		No	Pooled Area
Pool 78	0	1	No	Vernal Pool
Pool 79	0	3	No	Vernal Pool
Pool 80	161	2	No	Significant Vernal Pool
Pool 81	No egg masses detected		No	Pooled Area
Pool 82	No egg masses detected		No	Pooled Area
Pool 83	≥ 40	6	Yes	Significant Vernal Pool
Pool 84	No egg masses detected		No	Pooled Area
Pool 85	57	0	No	Significant Vernal Pool
Pool 86	No egg masses detected		No	Pooled Area
Pool 87	No egg masses detected		No	Pooled Area
Pool 88	No egg masses detected		No	Pooled Area
Pool 89	No egg masses detected		No	Pooled Area
Pool 90	No egg masses detected		No	Pooled Area
Pool 91	No egg masses detected		No	Pooled Area
Pool 92	No egg masses detected		No	Pooled Area

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Table 4-1 Pooled Areas Detected within NAS Brunswick

Pool Identification Number	Total Egg Mass Count		Presence of Fairy Shrimp	Pool Classification
	Wood Frog	Spotted Salamander		
Significant Vernal Pool Criteria				
	≥40 egg masses	≥20 egg masses	Yes/No	
Pool 93	No egg masses detected		No	Pooled Area
Pool 94	3	5	No	Vernal Pool
Pool 95	No egg masses detected		No	Pooled Area
Pool 96	No egg masses detected		No	Pooled Area
Pool 97	0	14	No	Vernal Pool
Pool 98	2	12	No	Vernal Pool
Pool 99	No egg masses detected		No	Pooled Area
Pool 100	51	0	No	Significant Vernal Pool
Pool 101	No egg masses detected		No	Pooled Area
Pool 102	No egg masses detected		No	Pooled Area
Pool 103	No egg masses detected		No	Pooled Area
Pool 104	No egg masses detected		No	Pooled Area
Pool 105	No egg masses detected		No	Pooled Area
Pool 106	No egg masses detected		No	Pooled Area
Pool 107	No egg masses detected		No	Pooled Area
Pool 108	No egg masses detected		No	Pooled Area
Pool 109	No egg masses detected		No	Pooled Area
Pool 110	No egg masses detected		No	Pooled Area
Pool 111	4	4	No	Vernal Pool
Pool 112	No egg masses detected		No	Pooled Area
Pool 113	No egg masses detected		No	Pooled Area
Pool 114	12	3	Yes	Significant Vernal Pool
Pool 115	No egg masses detected		No	Pooled Area
Pool 116	No egg masses detected		No	Pooled Area
Pool 117	No egg masses detected		No	Pooled Area
Pool 118	54	8	No	Significant Vernal Pool
Pool 119 (permanent)	≥ 47	≥ 89	No	Permanent Pool
Pool 120	47	35	No	Significant Vernal Pool
Pool 121	No egg masses detected		No	Pooled Area
Pool 122	14	0	No	Vernal Pool
Pool 123	≥ 50	0	No	Significant Vernal Pool
Pool 124	14	0	No	Vernal Pool
Pool 125	No egg masses detected		No	Pooled Area
Pool 126	No egg masses detected		No	Pooled Area
Pool 127	No egg masses detected		No	Pooled Area
Pool 128	2	5	No	Vernal Pool
Pool 129	No egg masses detected		No	Pooled Area
Pool 130	No egg masses detected		No	Pooled Area

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Table 4-1 Pooled Areas Detected within NAS Brunswick

Pool Identification Number	Total Egg Mass Count		Presence of Fairy Shrimp	Pool Classification
	Wood Frog	Spotted Salamander		
Significant Vernal Pool Criteria				
	≥40 egg masses	≥20 egg masses	Yes/No	
Pool 131-1	No egg masses detected		No	Pooled Area
Pool 131-2	No egg masses detected		No	Pooled Area
Pool 132	No egg masses detected		No	Pooled Area
Pool 133	No egg masses detected		No	Pooled Area
Pool 134	No egg masses detected		No	Pooled Area
Pool 135	No egg masses detected		No	Pooled Area
Pool 136	No egg masses detected		No	Pooled Area
Pool 137	No egg masses detected		No	Pooled Area
Pool 138	0	8	No	Vernal Pool
Pool 139	No egg masses detected		No	Pooled Area
Pool 140	No egg masses detected		No	Pooled Area
Pool 141	No egg masses detected		No	Pooled Area
Pool 142	96	10	No	Significant Vernal Pool
Pool 143	6	0	No	Vernal Pool
Pool 144	≥ 28	≥ 22	No	Significant Vernal Pool
Pool 145	No egg masses detected		No	Pooled Area
Pool 146	19	>62	Yes	Significant Vernal Pool
Pool 147	No egg masses detected		No	Pooled Area
Pool 148	No egg masses detected		No	Pooled Area
Pool 149	0	11	No	Vernal Pool
Pool 150	No egg masses detected		No	Pooled Area
Pool 151	No egg masses detected		No	Pooled Area
Pool 152	No egg masses detected		No	Pooled Area
Pool 153	1	6	No	Vernal Pool
Pool 154	2	1	No	Vernal Pool
Pool 155	No egg masses detected		No	Pooled Area
Pool 156	No egg masses detected		No	Pooled Area
Pool 157	No egg masses detected		No	Pooled Area
Pool 158	4	49	No	Significant Vernal Pool
Pool 159	No egg masses detected		No	Pooled Area
Pool 160	No egg masses detected		No	Pooled Area
Pool 161	No egg masses detected		No	Pooled Area
Pool 162	17	0	No	Vernal Pool
Pool 163	36	23	No	Significant Vernal Pool
Pool 164	No egg masses detected		No	Pooled Area
Pool 165	No egg masses detected		No	Pooled Area
Pool 166	11	0	No	Vernal Pool
Pool 167	104	1	No	Significant Vernal Pool
Pool 168	0	8	No	Vernal Pool

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Disposal and Reuse of NAS Brunswick, Maine

Table 4-1 Pooled Areas Detected within NAS Brunswick

Pool Identification Number	Total Egg Mass Count		Presence of Fairy Shrimp	Pool Classification
	Wood Frog	Spotted Salamander		
Significant Vernal Pool Criteria				
	≥40 egg masses	≥20 egg masses	Yes/No	
Totals				
Pooled Areas				121
Vernal Pools				27
Significant Vernal Pools				20
Permanent Pools				1

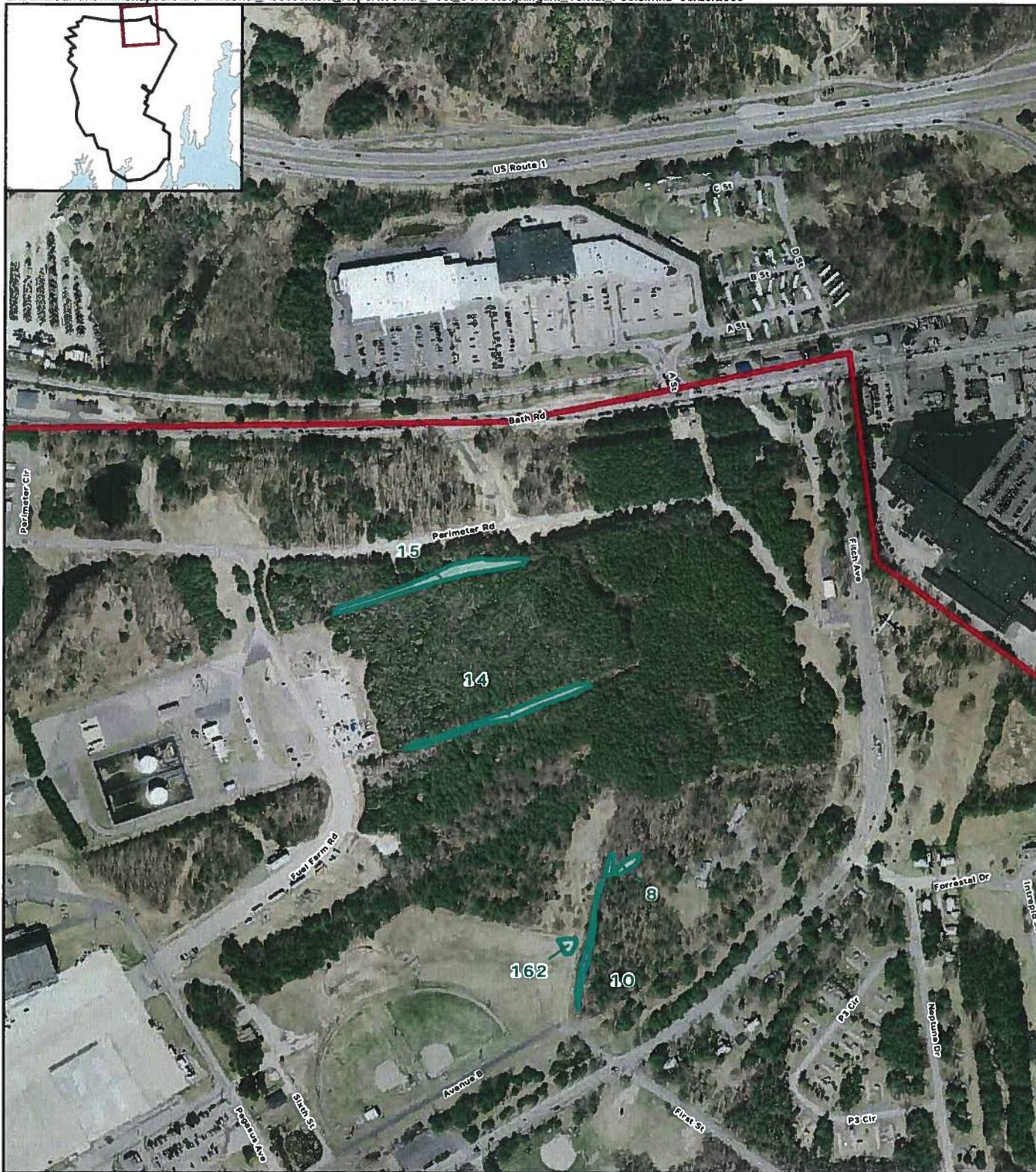
Blue = Significant Vernal Pool

Note: Values for wood frog and spotted salamander egg masses reflect the maximum number detected over three potential visits for each species.

Approximately 75% of the significant vernal pool habitat identified at NAS Brunswick was located within mixed forest communities. Dominant tree species identified at these locations included white pine (*Pinus strobus*), red maple (*Acer rubrum*); and balsam fir (*Abies balsamea*). The remaining 25% of the significant vernal pool habitat was identified within successional shrubland or grassland communities.

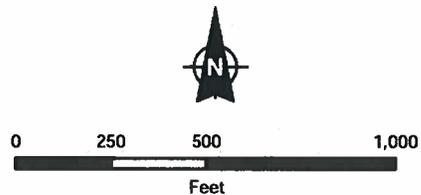
Significant vernal pools ranged in length from 41 to 239 feet and had an average length of 136.9 feet. These pools ranged in width from 10 to 137 feet and had an average width of 47.6 feet. Significant vernal pool depth ranged from 4 to greater than 48 inches and averaged 14.6 inches. Pool temperatures at these locations ranged from 38 to 68 degrees Fahrenheit and had a mean temperature of 52.1 degrees Fahrenheit.

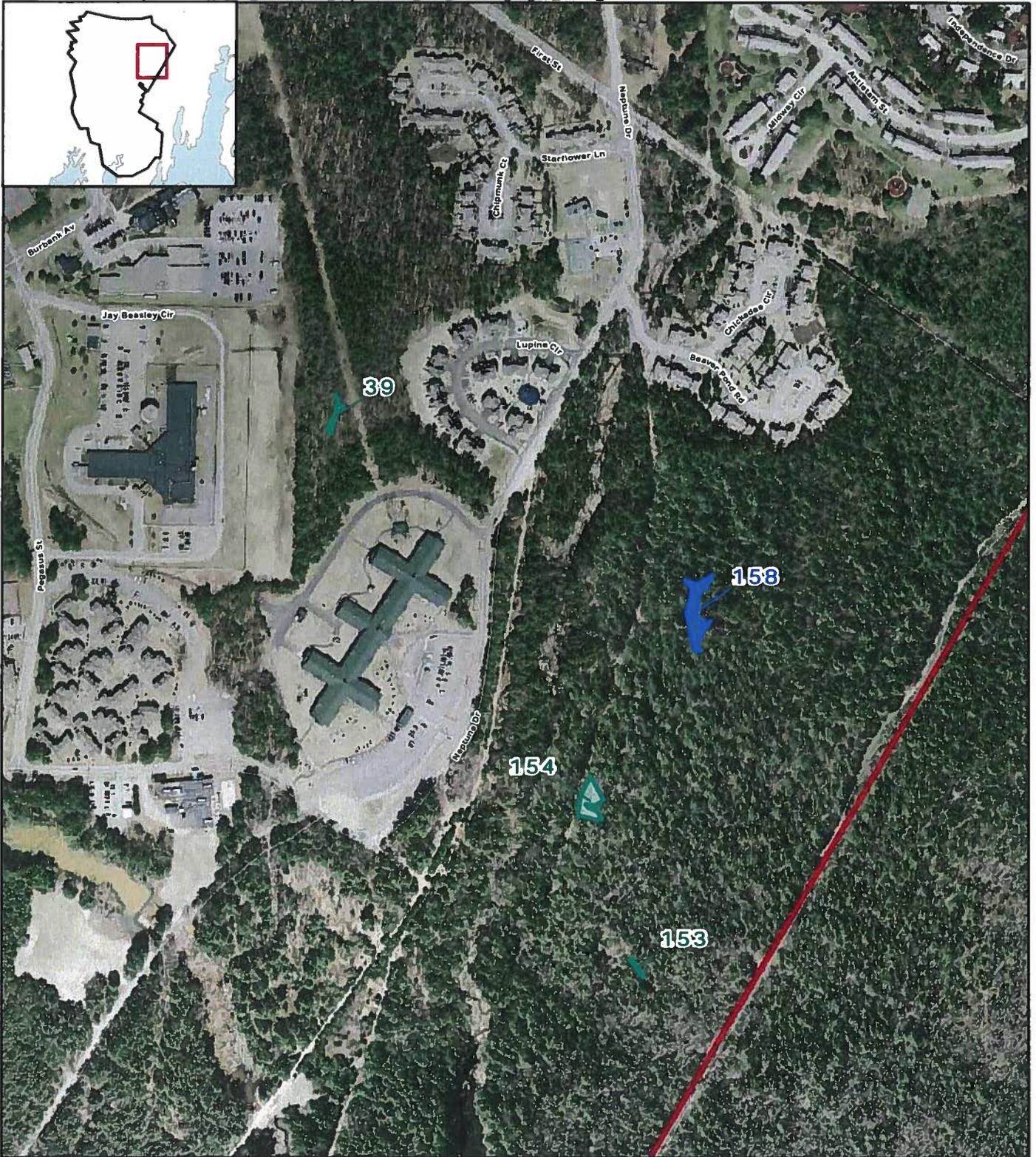




- Vernal Pool
- Significant Vernal Pool
- NAS Brunswick Property Boundary

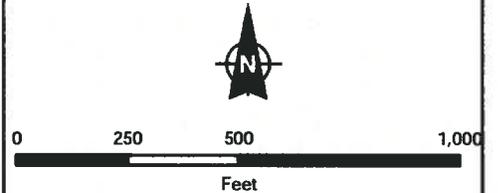
Figure 4-2
 Significant Vernal Pools and
 Vernal Pools at
 NAS Brunswick
 Brunswick, Maine

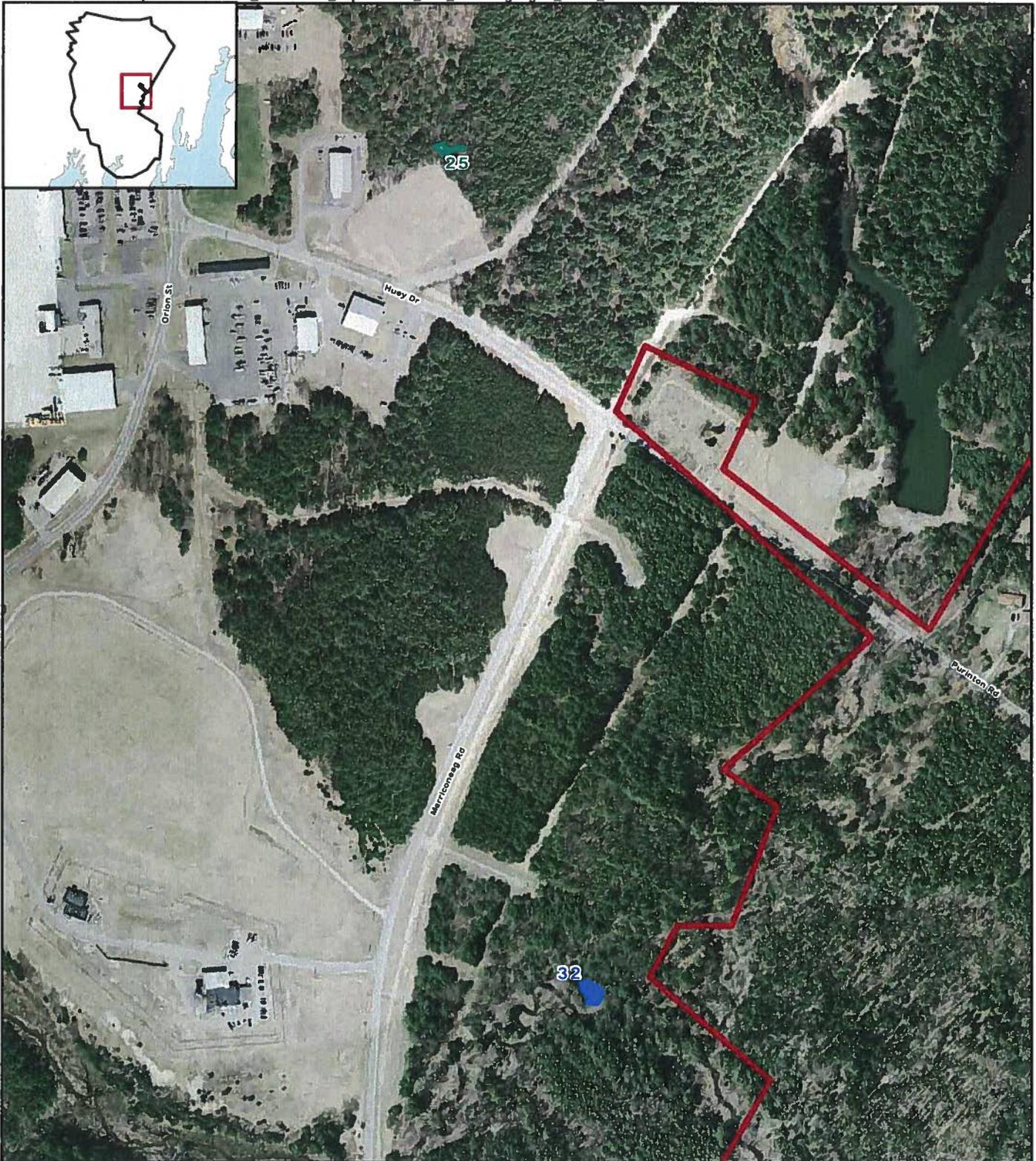




-  Vernal Pool
-  Significant Vernal Pool
-  NAS Brunswick Property Boundary

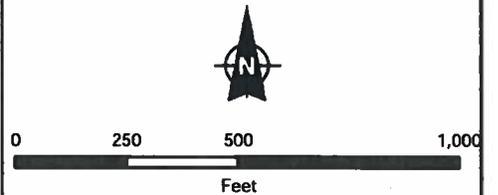
Figure 4-3
Significant Vernal Pools and
Vernal Pools at
NAS Brunswick
Brunswick, Maine

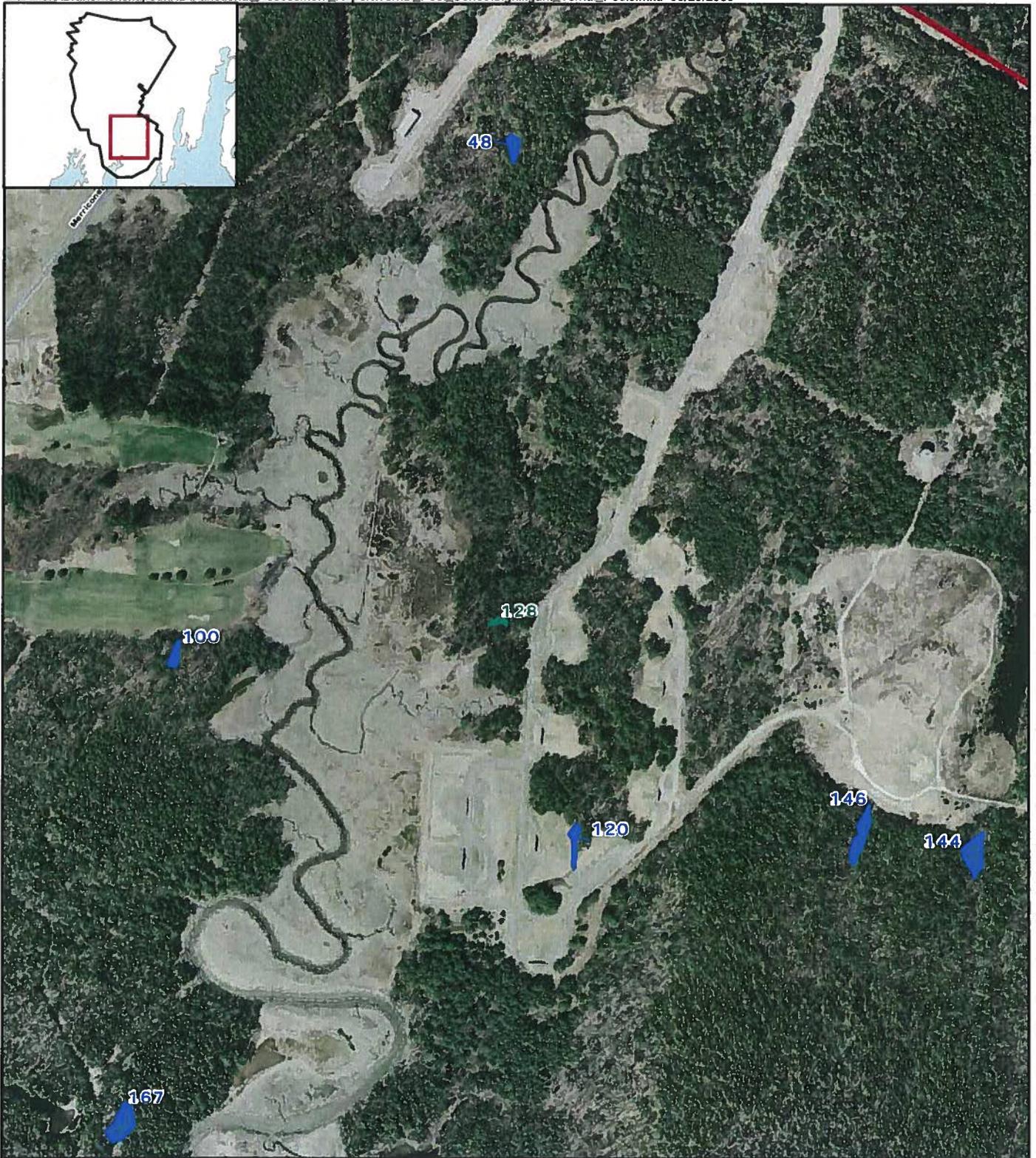




-  Vernal Pool
-  Significant Vernal Pool
-  NAS Brunswick Property Boundary

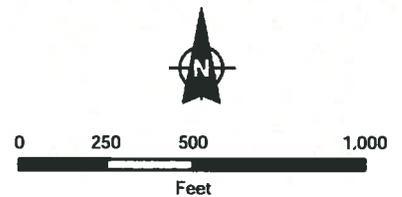
Figure 4-4
Significant Vernal Pools and
Vernal Pools at
NAS Brunswick
Brunswick, Maine

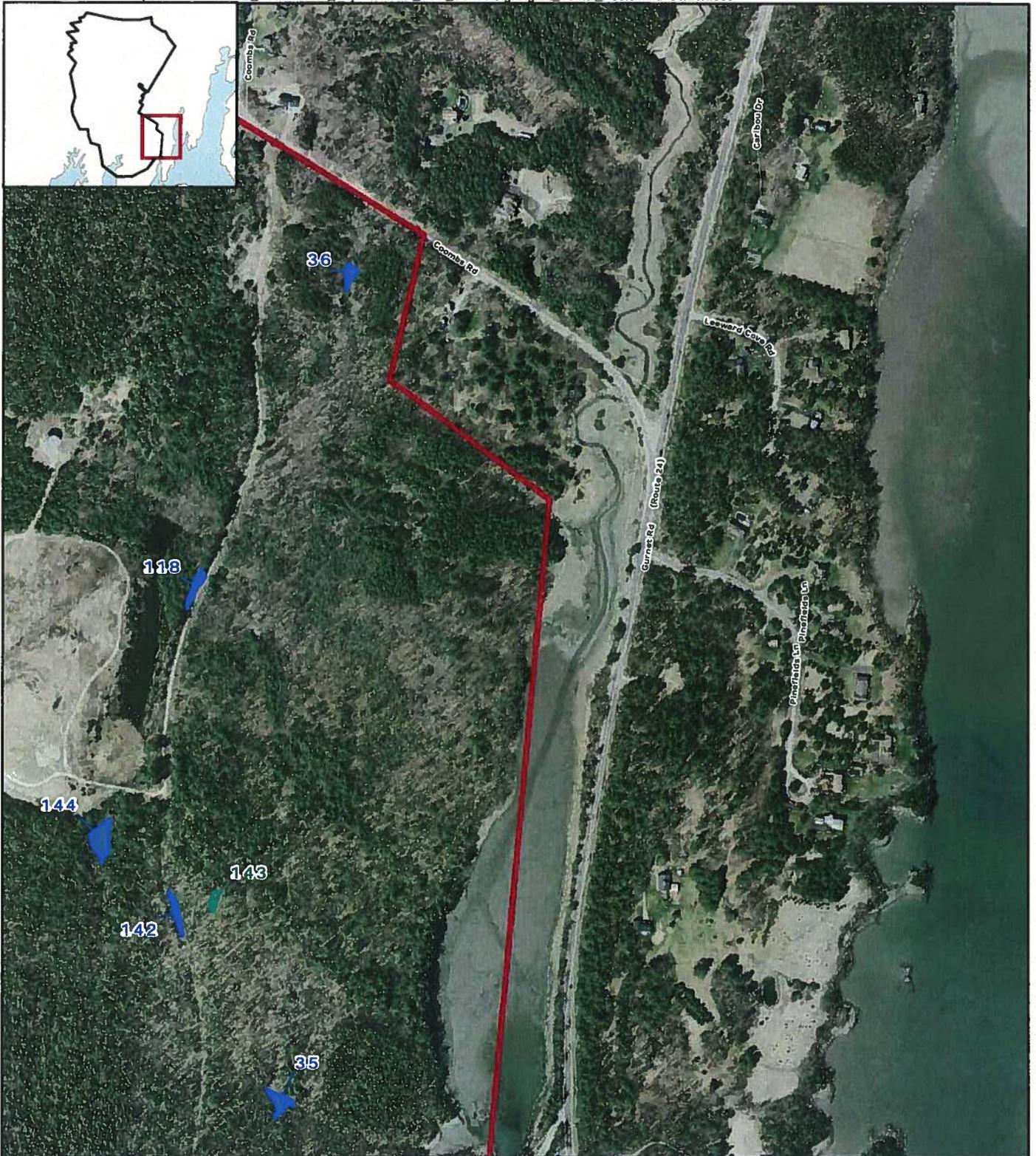




-  Vernal Pool
-  Significant Vernal Pool
-  NAS Brunswick Property Boundary

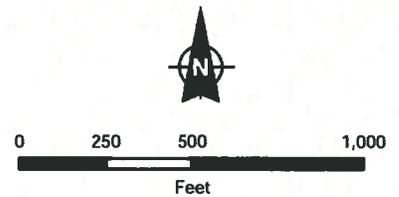
Figure 4-5
Significant Vernal Pools and
Vernal Pools at
NAS Brunswick
Brunswick, Maine

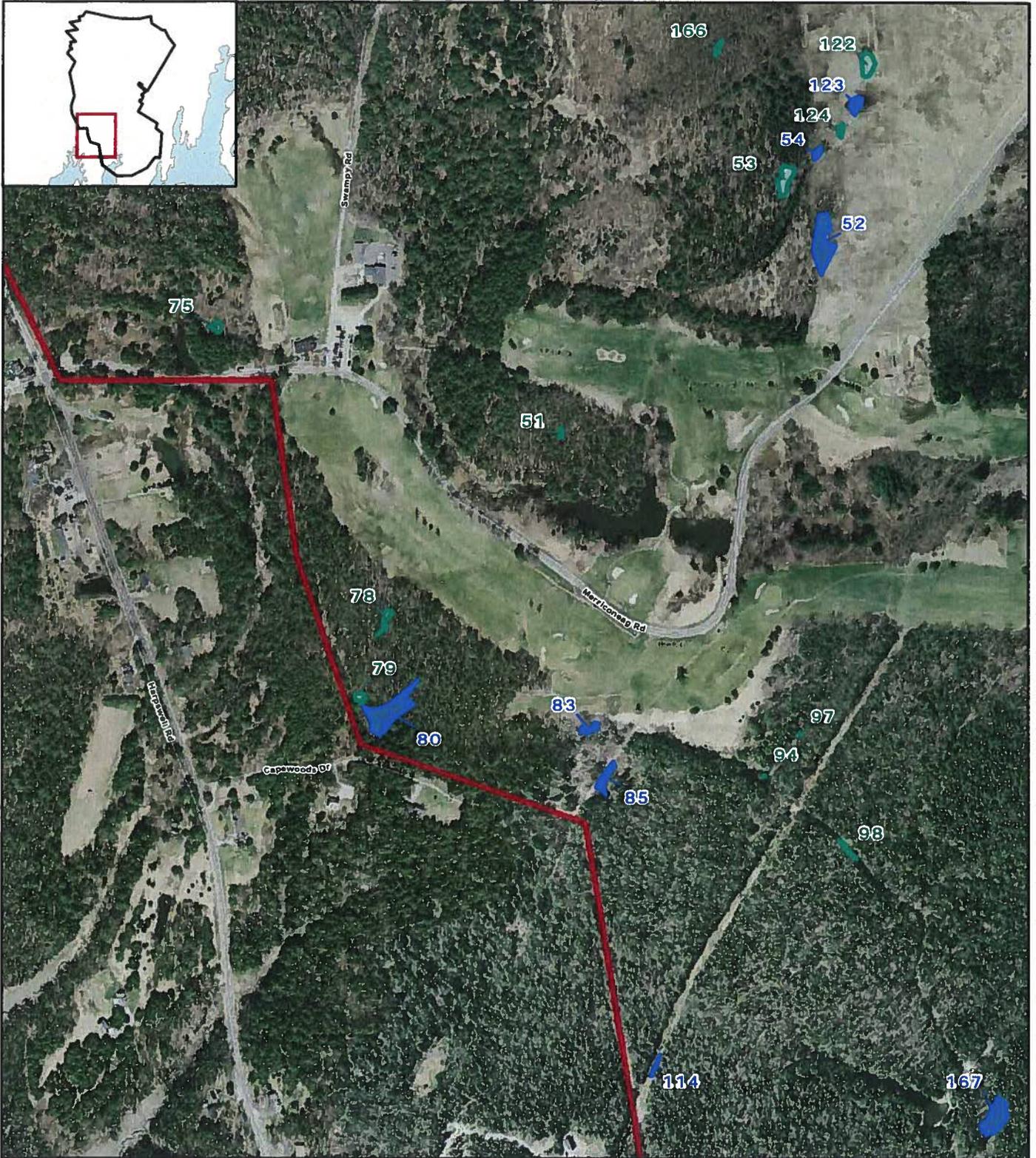




-  Vernal Pool
-  Significant Vernal Pool
-  NAS Brunswick Property Boundary

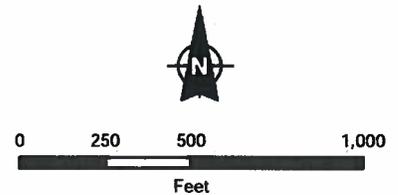
Figure 4-6
Significant Vernal Pools and
Vernal Pools at
NAS Brunswick
Brunswick, Maine

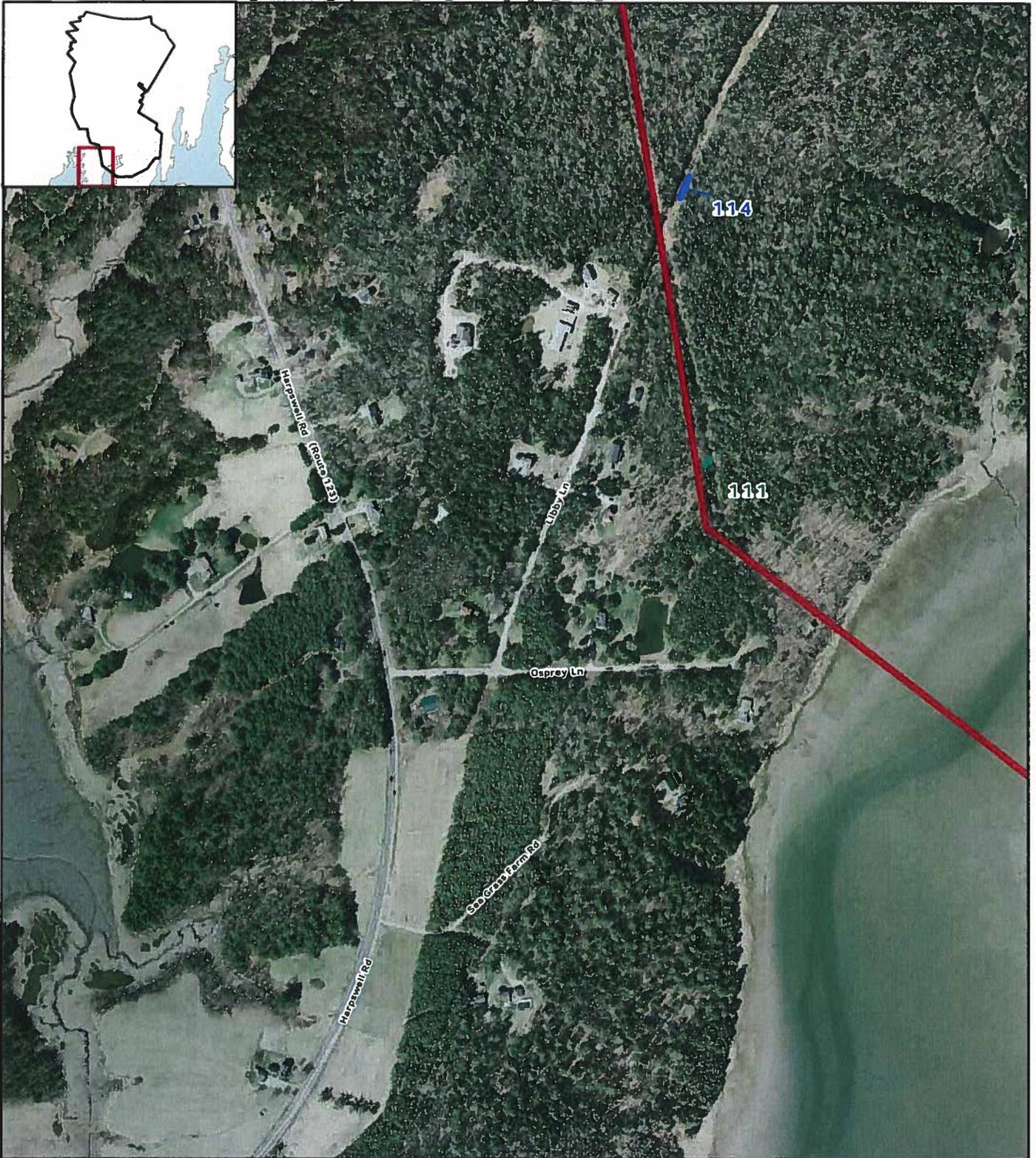




-  Vernal Pool
-  Significant Vernal Pool
-  NAS Brunswick Property Boundary

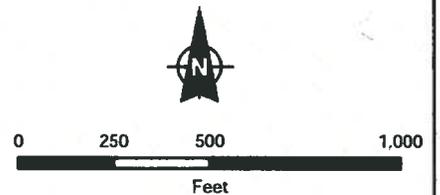
Figure 4-7
Significant Vernal Pools and
Vernal Pools at
NAS Brunswick
Brunswick, Maine

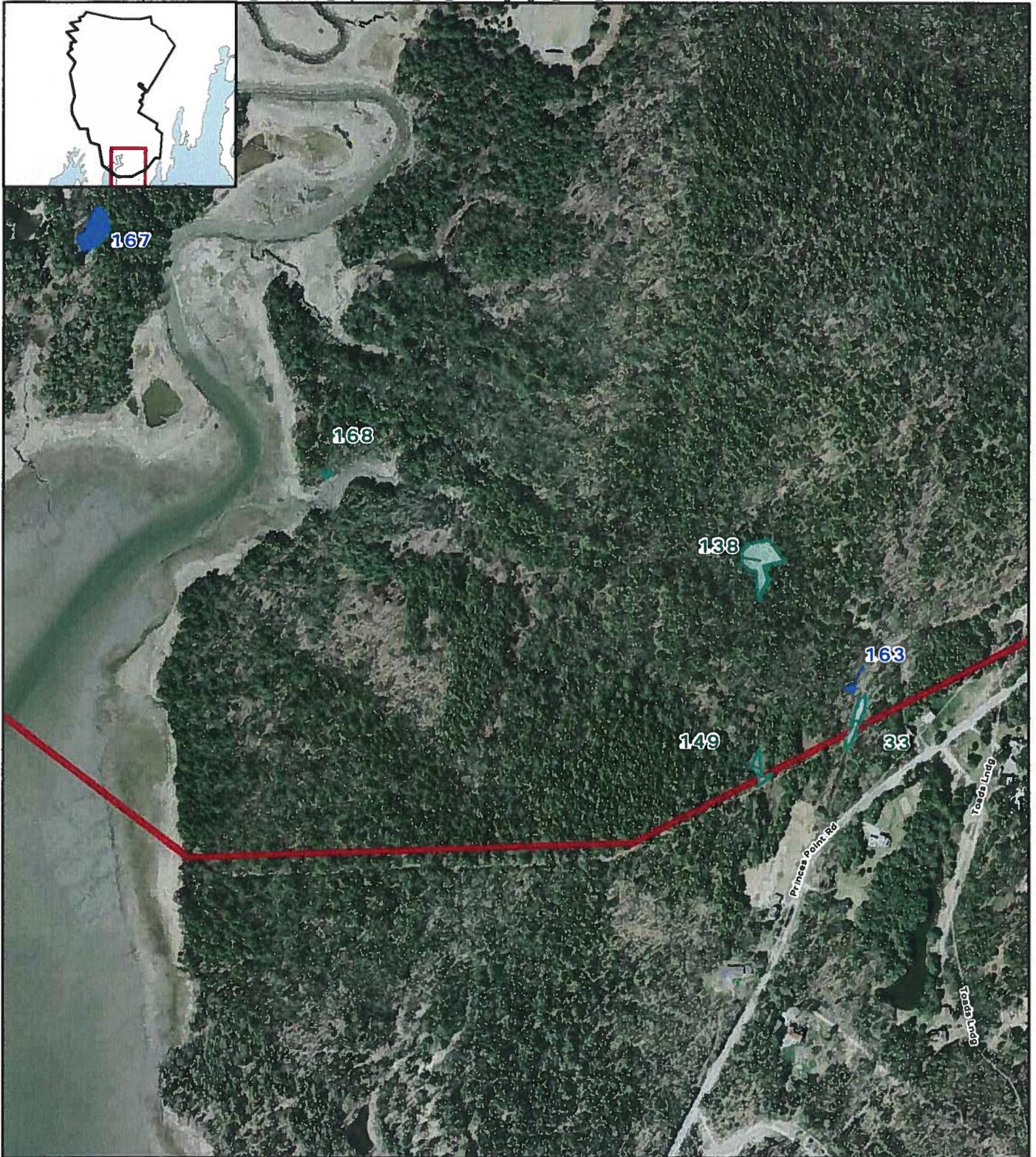




-  Vernal Pool
-  Significant Vernal Pool
-  NAS Brunswick Property Boundary

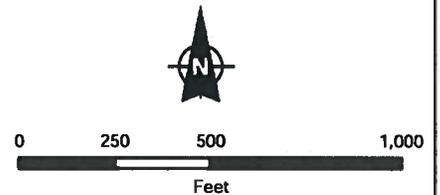
Figure 4-8
Significant Vernal Pools and
Vernal Pools at
NAS Brunswick
Brunswick, Maine





-  Vernal Pool
-  Significant Vernal Pool
-  NAS Brunswick Property Boundary

Figure 4-9
Significant Vernal Pools and
Vernal Pools at
NAS Brunswick
Brunswick, Maine



5

TRC Report

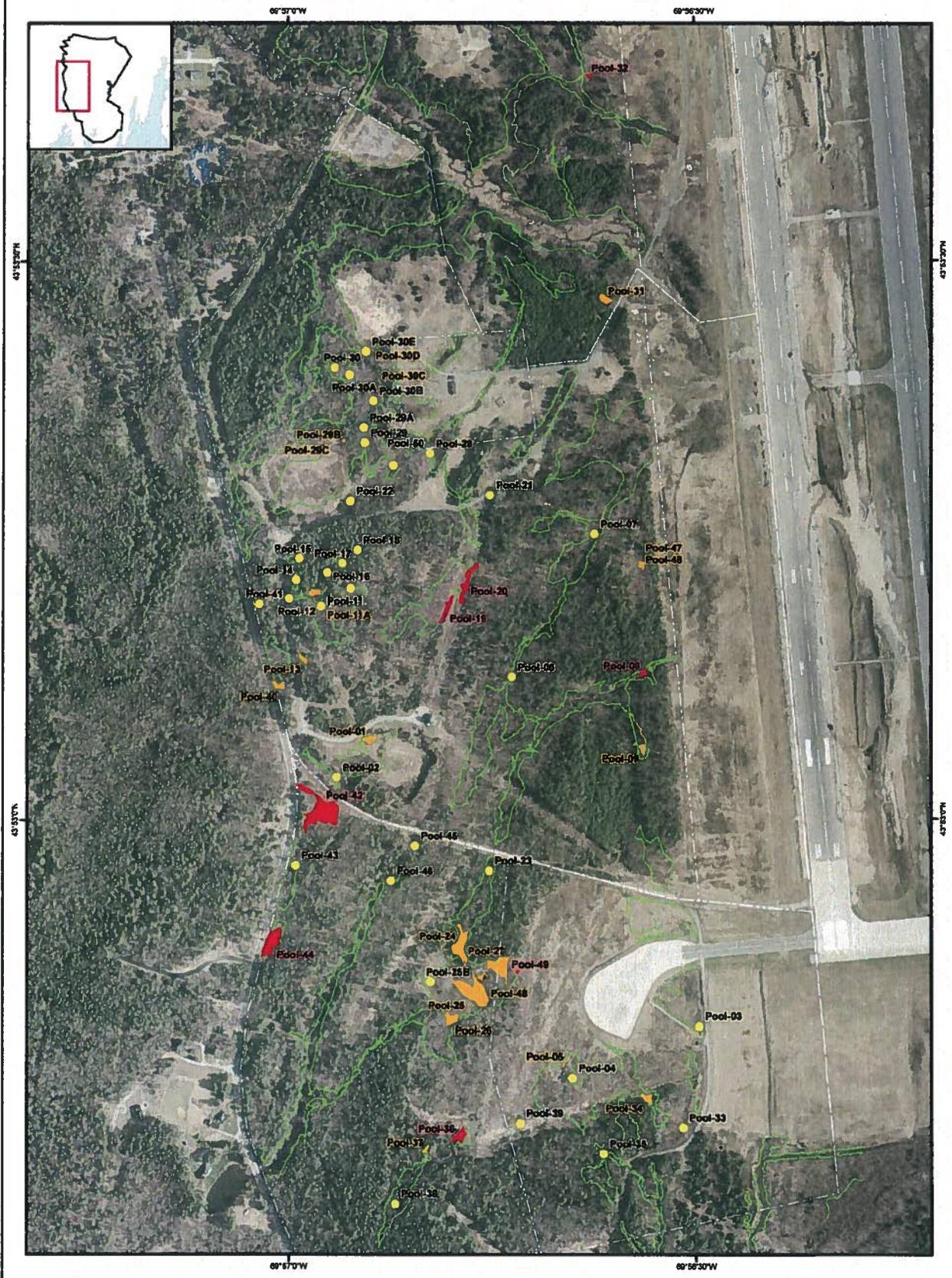
In spring 2008, TRC Environmental Corporation (TRC) conducted a comprehensive vernal pool survey on the western portion of NAS Brunswick (see Figure 5-1). During this survey, the presence/absence of vernal pool habitat was documented. TRC conducted three rounds of vernal pools visits (April 10-11, and 14; April 22-23; and May 7-8) (TRC 2008). Data were collected using established methods utilized by various state and federal agencies and recorded on standardized datasheets. In addition to the data collected, the areal extents of the vernal pools were delineated and each pool was photo-documented.

TRC documented a total of 59 pools during the 2008 survey (see Figure 5-1). Each pool was classified in accordance with the Maine DEP standards (see Table 5-1). Eight of these pools met the MEDEP criteria for significant vernal pools (TRC 2008).

Table 5-1 Types of Pooled Areas Identified by TRC during the 2008 Studies

Type of Pooled Area	Number of Pools
Pooled Areas	32
Vernal Pools	19
Significant Vernal Pools	8
Total	59

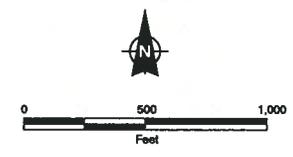
Source: TRC 2008.



- LEGEND**
- Pools Surveyed
 - Vernal Pools
 - Significant Vernal Pools
 - Wetland Boundaries
 - NAS Brunswick Project Boundary

Figure 5-1
Pooled Areas Mapped by TRC
at NAS Brunswick,
Brunswick, Maine

Source: TRC, 2008



6

Regulatory Requirements

As of September 1, 2007, significant vernal pool habitat is protected under the Maine NRPA. An activity in, on, over, or adjacent to a significant vernal pool must avoid unreasonable impacts on the significant vernal pool habitat and obtain approval from the DEP, through a Permit by Rule or individual NRPA approval. Significant vernal pools may be created for the purposes of compensatory mitigation, provided they meet the outlined criteria (06-096 CMR Chapter 335).

7

References

- Calhoun, A.J.K., T.E. Walling, S.S. Stockwell, and M. McCollough. 2003. Evaluating Vernal Pools as a Basis for Conservation Strategies: A Maine Case Study. *Wetlands*. 23:70-81.
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- Maine Department of Environmental Protection (MEDEP). 2009. Significant Wildlife Habitat: Significant Vernal Pools. Web site accessed at <http://www.maine.gov/dep/blwq/docstand/nrpa/vernalpools/index.htm> April 2009.
- McNab, W. H., and E. A. Avers. 1994. *Ecological Subregions of the United States*. Washington, DC: USDA Forest Service, Washington Office.
- TRC Environmental Corporation (TRC). 2008. Naval Air Station Brunswick Vernal Pool Summary Report. Prepared for Bowdoin College, May 2008.

O

Programmatic Agreement

The figures referred to in the Programmatic Agreement identify the locations of culturally sensitive resources; therefore, the figures are not included in Appendix O - Programmatic Agreement of the FEIS. The figures are, however, available to the appropriate organizations and/or agencies.

PROGRAMMATIC AGREEMENT (PA)

BETWEEN THE UNITED STATES NAVY AND THE MAINE STATE HISTORIC PRESERVATION OFFICER (SHPO) ON THE LEASE AND PROPERTY TRANSFER OF PROPERTIES LOCATED AT NAVAL AIR STATION BRUNSWICK, MAINE AND TOPSHAM ANNEX, TOPSHAM, MAINE

WHEREAS, the United States Navy (Navy) is responsible for implementation of applicable provisions of the Defense Base Closure and Realignment Act of 1990 (Pub. L. 101-510), as amended in 2005, and the Navy is proceeding with the closure and disposal of excess and surplus property in a manner consistent with the "2005 Report to the President of Defense Base Closure and Realignment Commission," dated 8 September 2005; and

WHEREAS, the Navy has determined that the disposal of Naval Air Station (NAS) Brunswick and the McKean Street Housing Annex, East Brunswick Radio Transmitter Site, and Topsham Annex in a manner consistent with the NAS Brunswick & Topsham Reuse Master Plans may have an effect upon historic properties, which may be eligible for inclusion in the National Register of Historic Places (NRHP); and

WHEREAS, the Navy has consulted with the Maine State Historic Preservation Officer (SHPO) pursuant to 36 CFR § 800.2 implementing Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f); and

WHEREAS, the Navy has consulted with the Passamaquoddy (Indian Township and Pleasant Point Reservations), the Aroostook Band of the Micmac, the Penobscot, and the Houlton Band of the Maliseet tribes, to identify if they have religious or cultural interest in the Area of Potential Effects (APE) and,

WHEREAS, the Navy has consulted with the: Pejepscot Historical Society, and the towns of Brunswick and Topsham pursuant to 36 CFR § 800.2 implementing Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f); and

WHEREAS, the Navy has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect and invited comment from the ACHP and after consultation ACHP has elected not to be a signatory to this PA; and

WHEREAS, the Navy is providing the Federal Aviation Administration, the United States Coast Guard, the United States Army and other potential property recipients the opportunity to acquire properties at NAS Brunswick to support their reuse plans; and

WHEREAS, the Navy has prepared detailed evaluations of eligibility of the buildings and structures pursuant to the National Register of Historic Places (NRHP) at NAS Brunswick and

Topsham Annex in the documents titled "Historic Architecture Comprehensive Survey Update of Buildings and Structures at NAS Brunswick, ME" dated May 2010; and "Comprehensive Architectural Survey of 14 buildings in the Military Triangle of Topsham Annex of NAS Brunswick, Maine" May 2010; and

WHEREAS, the Navy has previously identified five Ammunition magazines as eligible for inclusion in the NRHP. Navy's current survey efforts documented an additional 76 architectural resources falling within the period of significance of NAS Brunswick and its associated five remote annexes (WW II and Cold War). 15 of the newly evaluated resources are eligible for listing in the NRHP under the Program Comment for WW II and Cold War Era (1939-1974) Ammunition Storage Facilities (2006) for a total of 20; and,

WHEREAS, the remaining 61 architectural resources within NAS Brunswick have been determined, in consultation with the SHPO to be not eligible for inclusion in the NRHP; and,

WHEREAS, The Navy has conducted comprehensive survey of the Military Triangle of Topsham Annex and has determined, in consultation with the SHPO, that Facility 333 is individually eligible for inclusion in the NRHP; and,

WHEREAS, the Navy has conducted a comprehensive archaeological identification survey on NAS Brunswick, the findings of which are contained in "Comprehensive Archaeological Identification Survey at NAS Brunswick, Brunswick, Maine" dated February 2010, and "Modification 01: Comprehensive Archaeological Identification Survey at NAS Brunswick, Brunswick, Maine" dated June 30 2010; and

WHEREAS, the Navy's Archaeological survey efforts have been completed, the Navy has, in consultation with the SHPO determined that the 706 acres surveyed represent a completed survey; and

WHEREAS, the Navy's survey efforts resulted in the recordation of 35 archaeological sites, 27 of which are recommended for evaluative testing pursuant to Maine State Archaeological guidelines.

NOW, THEREFORE, the Navy and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations to take into account effect of the undertaking on the historic properties, and evidences compliance with Section 106 of the NHPA in accordance with 36 CFR 800.6(c) and 36 CFR 800.14.

I. STIPULATIONS

NAS BRUNSWICK, BRUNSWICK, ME

A. The Navy prepared and forwarded to the SHPO the final report titled "Historic Architecture Comprehensive Survey Update of Buildings and Structures at NAS Brunswick, ME" dated May 2010, and "Comprehensive Archaeological Identification Survey at NAS Brunswick, Brunswick Maine" dated August 2010.

1. The Maine SHPO has reviewed the "Historic Architecture Comprehensive Survey Update of Buildings and Structures at NAS Brunswick, ME" received on 14 June 2010 to continue consultation pursuant to Section 106 of the National Historic Preservation Act, as amended. The final report conforms to the SHPO's requirements for architectural survey projects in Maine. The SHPO concurs with the findings regarding the eligibility of historic resources at NAS Brunswick.
2. The Maine SHPO has reviewed the "Comprehensive Archaeological Identification Survey at NAS Brunswick, Brunswick, Maine" dated August 2010 (received on 14 June 2010) to continue consultation pursuant to Section 106 Of the National Historic Preservation Act, as amended. The final report conforms to the SHPO's requirements for archaeological survey projects in Maine. The SHPO concurs with the findings regarding the eligibility of historic resources at NAS Brunswick.

B. Due to the potential adverse effect to NAS Brunswick on identified archaeological sites or historic resources from the disposal and reuse of these properties, property recipients shall be required to contact the SHPO prior to any development that may affect these sites. In order to ensure the further protection of the historic properties, the covenants attached as Attachment A will be included in any long-term lease in furtherance of conveyance and/or deed of transfer by the Navy on which any archaeological sites or historic resources are located. The covenants provide for enforcement by either the Navy or the SHPO, and shall be binding on all property recipients and future transferees. (Figures 1 and 2)

TOPSHAM ANNEX, TOPSHAM, ME

A. The Navy prepared and forwarded to the SHPO the final report titled "Comprehensive Architectural Survey of 14 buildings in the Military Triangle of Topsham Annex of NAS Brunswick, Maine" May 2010.

1. The Maine SHPO has reviewed the "Comprehensive Architectural Survey of 14 buildings in the Military Triangle of Topsham Annex of NAS Brunswick, Maine", May 2010, to continue consultation pursuant to Section 106 of the National Historic Preservation Act, as amended. The final report conforms to the SHPO's requirements for architectural survey projects in Maine. The SHPO concurs with the findings regarding the eligibility of historic resources at Topsham Annex.

2. In consultation with SHPO, it has been determined that no additional archaeological investigations are warranted for Topsham Annex.

- B. Due to the potential adverse effects to the eligible historic property located at Topsham Annex, (Building 333), property recipients shall be required to contact the SHPO prior to any development that may affect this site. In order to **ensure long-term preservation of the property's historic significance**, the covenants attached as Attachment A will be included in any long-term lease in furtherance of conveyance and/ or deed of transfer by the Navy. The covenants provide for enforcement by either the Navy or the SHPO, and shall be binding on all property recipients and future transferees. (Figure 3)

II. RESOLVING OBJECTIONS

- A. Should any party object to any action or recommendation pertaining to the implementation of this PA the parties shall consult for no more than fifteen (15) calendar days to resolve the objection. If the Navy determines that the objection cannot be resolved, the Navy shall forward all documentation relevant to the objection to the SHPO including the Navy's proposed resolution of the objection. Within thirty (30) calendar days following receipt of all pertinent documentation, the SHPO shall exercise one of the following options:
- i. Advise the Navy the SHPO concurs in its proposed resolution of the objection, whereupon the Navy shall resolve the objection accordingly; or
 - ii. Provide the Navy with recommendations, which the Navy shall take into account in reaching a final decision regarding its proposed resolution of the objection; or
 - iii. Notify the Navy it will comment pursuant to 36 CFR § 800.6(b), and proceed to comment. The resulting comment shall be taken into account by the Navy in accordance with 36 CFR § 800.6(c)(2).
- B. Should the SHPO not exercise one of the foregoing options within thirty (30) calendar days following receipt of all pertinent documentation, the Navy may assume the SHPO concurrence in its proposed resolution of the objection.
- C. The Navy shall take into account any SHPO recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection; the Navy's responsibility to carry out all actions under this PA that are not the subject of the objection shall remain unchanged.
- D. At any time during implementation of the measures stipulated in this PA should an objection to any measure within this PA or its manner of implementation be raised by a

member of the public, the Navy shall consider the objection and consult as needed with the objecting party, the SHPO, and other parties to this PA.

III. AMENDMENTS AND NON-COMPLIANCE

- A. If either of the parties to this PA believes the terms of the PA cannot be carried out or the PA should be amended, that party shall immediately consult with the other party to develop amendments to the PA. The process of amending the PA shall be the same as that used in creating the original PA. If the parties cannot agree upon an amendment, the disagreement shall be addressed pursuant to Stipulation IV.
- B. If the terms of this PA are not carried out, the Navy shall immediately notify the SHPO and shall consult to determine if amendments are necessary. If the terms of this PA are not carried out, the Navy shall not take or sanction any action which would cause an adverse effect to the historic property or any action that would foreclose the SHPO consideration of modifications or alternatives to the Undertaking.
- C. Execution of this PA by the Navy and the SHPO, and implementation of its terms, evidence that the Navy has afforded the Maine SHPO an opportunity to comment on the effect of this Undertaking and its effects on the historic properties.

IV. SIGNATURES

 9-27-10
BRAC PMO *NA* DATE

 9/23/10
State Historic Preservation Officer, Maine DATE

Attachment A

TO BE INCLUDED IN ALL NAS BRUNSWICK LEASES IN FURTHERANCE OF CONVEYANCE AND DEEDS WHERE ARCHAEOLOGICAL SITES ARE LOCATED:

Covenant re: Archeological Matters: As more fully described in the document attached to this Quitclaim Deed and incorporated herein as Exhibit A, areas within NAS Brunswick ME have been identified and are referred to within, collectively, as Archeological Sites. GRANTEE, its successors, and its assigns hereby covenant at all times to the Maine State Historic Preservation Officer ("ME SHPO") to maintain and preserve the Archeological Site as follows:

- 1. No disturbance of the ground surface or any other thing shall be undertaken or permitted to be undertaken on the Archeological Sites that would affect the physical integrity of the Archeological Site without first obtaining the prior written permission of the ME SHPO (signed by a fully authorized representative thereof). Should the ME SHPO require, as a condition to granting of such permission, that GRANTEE conduct a Phase II survey, archeological data recovery operations or other activities designed to mitigate the adverse effect of the proposed activity on the Archeological Site, GRANTEE shall at its own expense conduct such activities in accordance with the Secretary of the Interior's Standards and Guidelines for Archeological Documentation (48 FR 447344-37) and such standards and guidelines as ME SHPO may specify (including, but not limited to, standards and guidelines for research design, field work, analysis, preparation and dissemination of reports, disposition of artifacts and other materials, consultation with Native American or other organizations, and re-interment of human remains).**
- 2. GRANTEE shall make every reasonable effort to prohibit any person from vandalizing or otherwise disturbing the Archeological Site and shall promptly report any such disturbance to the ME SHPO.**
- 3. GRANTEE will allow the ME SHPO or his/her designee, upon reasonable advance notice to GRANTEE, an annual inspection of the Archeological Sites in order to ascertain whether GRANTEE is complying with the conditions of this preservation covenant.**
- 4. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, GOVERNMENT, or (upon 60**

days prior notice to GOVERNMENT) ME SHPO, may, following reasonable written notice to GRANTEE, institute a suit to enjoin said violation, seek damages, return of any Archeological artifacts removed, require, if appropriate, the restoration of the Archeological Site or to seek any other remedy available at law or equity.

5. The failure by GOVERNMENT or by the ME SHPO to exercise any right or remedy granted under this covenant shall not have the effect of waiving or limiting the exercise by GOVERNMENT or by the ME SHPO of any other right or remedy or the use of such right or remedy at any other time.

6. This covenant shall be binding on GRANTEE, its successors, and its assigns in perpetuity. The restrictions, stipulations, and covenants contained herein shall be inserted by GRANTEE, its successors, and its assigns, verbatim or by express reference in any deed or other legal instrument by which such party divests itself of either the fee simple title or any lesser estate in the archeological site or any part thereof.

7. This covenant shall be a binding servitude upon the real property that includes the Archeological Site and shall be deemed to run with the land. Recording this Quitclaim Deed shall constitute conclusive evidence that GRANTEE agrees to be bound by the foregoing conditions and restrictions and to perform the obligations herein set forth.

TO BE INCLUDED IN ALL NAS BRUNSWICK AND TOPSHAM ANNEX LEASES IN FURTHERANCE OF CONVEYANCE AND DEEDS WHERE HISTORIC RESOURCES ARE LOCATED:

Covenant re: Historic Preservation: NAS Brunswick and Topsham Annex have been identified as containing historic structures eligible for listing in the National Register of Historic Places (collectively, "Historic Resources"). GRANTEE, on behalf of itself, its successors, and its assigns, hereby covenants to the ME SHPO to preserve and maintain the Historic Resources in a manner that preserves and maintains the attributes that contribute to the eligibility of the Historic Resources for listing in the National Register of Historic Places. Such attributes include exterior features (including facades and fenestration, scale, color, materials, and mass), interior features determined significant in consultation with the ME SHPO, and views from, to, and across the property.

1. All parcels on which historic resources are situated within NAS Brunswick and Topsham Annex as described below in the document attached

to this Quitclaim Deed and incorporated herein as Exhibit A, will be preserved and maintained in accordance with The Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (National Park Service). No construction, alteration, rehabilitation, remodeling, demolition, disturbance of the ground surface, or other action shall be undertaken or permitted to be undertaken within NAS Brunswick and Topsham Annex that would materially affect the integrity or the appearance of the attributes described above without prior approval by the ME SHPO and a record of such.

2. To ensure that the long-term preservation of the property's historic significance will be preserved, all parcels on which historic resources are situated within NAS Brunswick and Topsham Annex as identified in Exhibit A, will be maintained in accordance with The Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (National Park Service). No construction, alteration, rehabilitation, remodeling, demolition, disturbance of the ground surface, or other action that would materially affect the integrity or the appearance of the attributes described above of that property situated within NAS Brunswick ME and Topsham Annex ME shall take place without prior notice to and consultation with the ME SHPO in accordance with paragraphs 2.A through 2.C below. Such notice shall describe in reasonable detail the proposed undertaking and its expected effect on the integrity or appearance of the property situated within NAS Brunswick ME and Topsham Annex ME.

- A. Within thirty (30) calendar days of the ME SHPO's receipt of notification provided by GRANTEE pursuant to the foregoing provisions of this paragraph 2, the ME SHPO will respond to GRANTEE in writing as follows:

- (i) that GRANTEE may proceed with the proposed undertaking without further consultation; or

- (ii) that GRANTEE must initiate and complete consultation with the ME SHPO before GRANTEE may proceed with the proposed undertaking.

- B. If the ME SHPO fails to respond to GRANTEE's written notice, as described in the above paragraph 2.A, within thirty (30) calendar days of the ME SHPO's receipt of the same, GRANTEE may proceed with the proposed undertaking without further consultation with the ME SHPO.

C. If the response provided to GRANTEE by the ME SHPO pursuant to the above paragraph 2.A requires consultation with the ME SHPO, both parties shall so consult in good faith to arrive at mutually agreeable and appropriate measures that GRANTEE will implement to mitigate any adverse effects associated with the proposed undertaking. If the parties are unable to arrive at such mutually agreeable mitigation measures, GRANTEE shall, at a minimum, undertake recordation for the concerned property in accordance with the Secretary of Interior standards for recordation and any applicable state standards for recordation, or in accordance with such other standards to which the parties may mutually agree prior to proceeding with the proposed undertaking. Pursuant to this covenant, any mitigation measures to which GRANTEE and the ME SHPO mutually agree, or any recordation that may be required, shall be carried out solely at the expense of GRANTEE.

3. Upon acquisition of NAS Brunswick ME and Topsham Annex ME, GRANTEE shall take prompt action to secure the Historic Resources from the elements, vandalism, and arson, and shall undertake any stabilization that may be required to prevent deterioration. GRANTEE will be responsible for this security and stabilization, to the same extent required of GOVERNMENT, at the time of deed transfer. GRANTEE will make every effort to retain or reuse, to the extent practicable, the historic structures.

4. In the event that archeological materials are encountered during construction or ground disturbance activities, work shall cease in the immediate area until the ME SHPO is consulted and provides written permission to recommence work. Should the ME SHPO require, as a condition of the granting of such permission, that GRANTEE conduct archeological phase II survey, data recovery operations or other activities designed to mitigate the potential adverse effect of the proposed activity on the archeological site, GRANTEE shall at its own expense conduct such activities in accordance with the Secretary of the Interior's Standards and Guidelines for Archeological Documentation (48 FR 447344-37) and such standards and guidelines as the ME SHPO may specify, including, but not limited to, standards and guidelines for research design, field work, analysis, preparation and dissemination of reports, disposition of artifacts and other materials, consultation with Native American or other organizations, and re-interment of human remains.

5. GRANTEE will allow the ME SHPO or his/her designee, upon reasonable advance written notice to GRANTEE, to conduct an annual inspection of the Historic Resources in order to ascertain whether GRANTEE is complying with the conditions of this preservation covenant.

6. GRANTEE will provide the ME SHPO with a written summary of actions taken to implement the provisions of this preservation covenant within one (1) year after the effective date of the transfer of NAS Brunswick ME and Topsham Annex ME. Similar reports will be submitted to the ME SHPO biannually thereafter until the Navy has disposed the excess portions of the NAS Brunswick ME and Topsham Annex ME properties.

7. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, GOVERNMENT, or (upon 60 days prior notice to GOVERNMENT) ME SHPO, may, following reasonable written notice to GRANTEE, institute a suit to enjoin said violation, seek damages, require the restoration of the Archeological Site or to seek any other remedy available at law or equity.

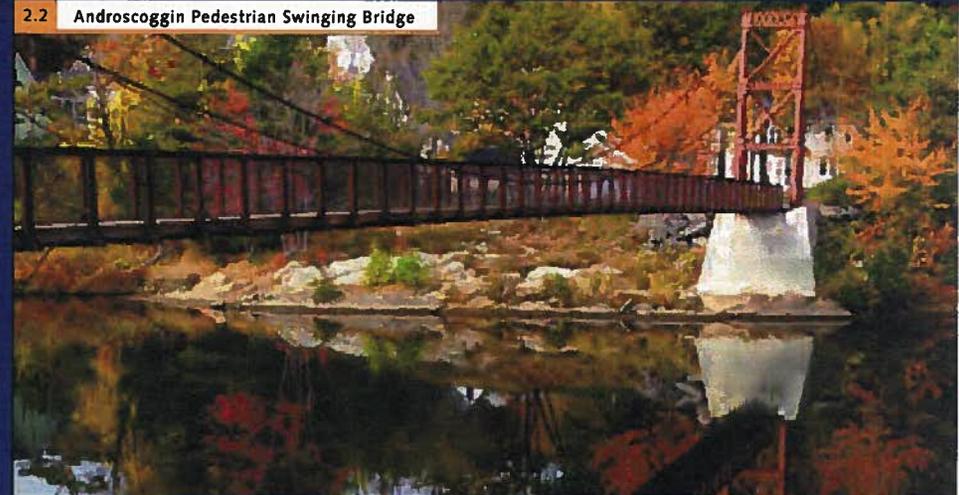
8. The failure of GOVERNMENT or the ME SHPO to exercise any right or remedy granted under this covenant shall not have the effect of waiving or limiting the exercise by GOVERNMENT or the ME SHPO of any other right or remedy or the use of such right or remedy at any other time.

9. This covenant is binding on GRANTEE, its heirs, successors and assigns in perpetuity. The restrictions, stipulations and covenants contained herein shall be inserted by GRANTEE, its successors and assigns, verbatim or by express reference in any deed or other legal instrument by which it divests himself/herself/itself of either the fee simple title or any lesser estate in NAS Brunswick ME and Topsham Annex ME or any part thereof.

2: Guiding Principles

This chapter describes the guiding principles that underlie the foundation of the Brunswick Landing and Topsham Commerce Park Design Guidelines. These principles are used to structure the values, inspirations, and components that comprise the completed design guidelines, and are central to the overarching theme and intent of the entire project. Based largely on the ideals of Smart Growth, these guiding principles are integral to the successful development and redevelopment of Brunswick Landing and the Topsham Commerce Park.

2.2 Androscoggin Pedestrian Swinging Bridge



2.3 Downtown Brunswick



2.4 Curb cuts to facilitate infiltration



Sustainability Principles

Transit Oriented Development

The reduction of single vehicle trips to and from Brunswick Landing and Topsham Commerce Park is a tangible method to minimize the carbon footprint of the development, while creating a safe and pleasant environment. Transit-Oriented Development (TOD) is a smart growth planning principle, outlining a mix of moderate to high density land uses oriented around a walkable, multi-modal mass transportation system. Typically, the density radiates outwardly from the transportation linkage; the further away from transit, the lower the density. An ideal TOD development scenario ensures that the majority of the development is within half a mile of transit, to ensure walkability to mass transportation for pedestrians, and minimizing the requirement for land consumptive surfacing parking.

Transit oriented development also typically integrates features and initiatives within the design to encourage and support mass transit ridership. Reduced personal parking availability, rideshare incentives, extended hours of transit service, bike facilities, and high-quality pedestrian shelters are all elements that characterize TODs.

Context Sensitive Transportation

Context sensitive solution (CSS) transportation design is defined by the Institute of Transportation Engineers as a collaborative, interdisciplinary approach that integrates stakeholders into the process to develop solutions that address a number of factors, such as aesthetics, circulation, sustainability, safety, and overall design. A CSS approach considers the entire realm in which any given transportation solution will function, and looks beyond the boundaries of a more traditional engineering approach. By undertaking a CSS approach early on in the development process, it will ensure that the circulation and built transportation infrastructure considers future growth holistically, and integrates sustainable design principles where applicable.

LEED and the Built Environment

The Brunswick Landing and Topsham Commerce Park redevelopments should mitigate the impact of built form on the natural environment where feasible, through the use of sustainable materials, environmentally sound construction practices, and green building technologies. It is not only the final product that determines the sustainability of a project, but also the process of implementation. In order to achieve a true measure of environmental responsibility, it is important to undertake the redevelopment in an ecologically-considerate manner. By integrating green building science into the design process and implementation phases of the project, it should be a natural catalyst to employ LEED building and neighborhood standards.

Stormwater and Low-Impact Development

Impervious surfacing is one of the most detrimental landscape modifications with respect to the hydrologic cycle. Excessive hard surfacing may result in increased run-off, surcharges to the stormwater management system, and the possible introduction of contaminants into the environment. Traditional stormwater management deals with collection and convergence of run-off, with little or no regard for infiltration or treatment. The basis of this approach is to collect the water in catch basins and maintenance holes as quickly as possible, and carry it through pipes to discharge points back to water bodies, often without any treatment. The limitations of this approach include the lack of any steps to avoid contamination of the destination water bodies, increased speed of run off and erosion, and capacity failure due to the ever increasing scale of storm events.

2.5 Rain gardens in the streetscape



Alternatives to the conventional stormwater system include detention / retention ponds, bioswales, rain gardens, and green roofs. These options reduce the impervious area of the built environment, allowing water to filter back into the ground or evaporate, mimicking the natural hydrological process. The potential for contamination is reduced, as the distance stormwater run-off travels is lessened, minimizing the opportunities to acquire hydrocarbon residues off asphalt surfaces. Interception by vegetation also captures contaminants before they can be discharged back to the source water bodies.

Rain gardens, stormwater ponds, and green roofs also help reduce heat and air pollution by adding vegetation to the landscape. Additional plant material modifies the microclimate, shading and cooling buildings, and capturing airborne pollutants. In terms of public green space, these stormwater management alternatives can be valuable green assets, providing open and amenity space for both the public and private realm.

Current Best Management Practices promulgated by the MDEP supports these alternatives to conventional stormwater management.

Green Infrastructure

Green infrastructure is often defined as an integrated network of green space that seeks to preserve ecological function, and providing associated benefits to humans. Green infrastructure is a different approach to thinking about land conservation and open space planning, as it considers not only the ecological function of the landscape, but also the values of land development and growth, and the impacts of the built environment.

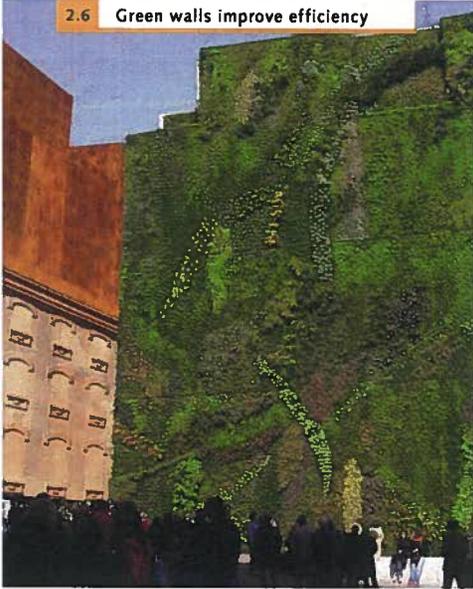
Green Energy

Climate change may currently be the most pressing global environmental issue. Sources estimate that close to 86% of primary global energy production can be attributable to fossil fuels, and demand for energy is on the rise. It is critical to reduce global dependency on fossil fuels, and the development of new communities presents an excellent opportunity to switch focus towards sustainable energy generation, and to apply leading energy conservation design approaches.

Renewable Energy

Renewable energy is generated from naturally-occurring, replenishable resources, such as sunlight, ocean tides, precipitation, geothermal heat, wind, or biomass. As oil prices continue to rise, and the impacts of climate change are felt, the conversion to renewable energy becomes more attractive, from both an economic and environmental point of view. Large-scale renewable energy production continues to grow across North America, with wind and solar farms appearing in all states and provinces. Large scale wind production is the most common form of on-grid green energy generation, but geothermal and solar applications continue to grow. Smaller, off-grid projects are also becoming increasingly common, as new development and redevelopment sites look to future-forward energy alternatives.

2.6 Green walls improve efficiency



Heat Distribution

A central district energy system would connect multiple buildings and users to a network of sustainably generated heating and cooling energy. Such energy, produced from sources such as combined heat / power, industrial waste heat, renewable energy, or geothermal, would be distributed across the development in a network of subterranean pipes. District energy systems produce and deliver steam, hot water, or chilled water on a large scale and for a large client base, reducing overall energy costs. By centrally locating the energy system, individual buildings have access to the additional space that would typically accommodate a conventional heating and cooling system. By concentrating production on a large scale, cost and environmental efficiencies are increased, and negative impacts are reduced.

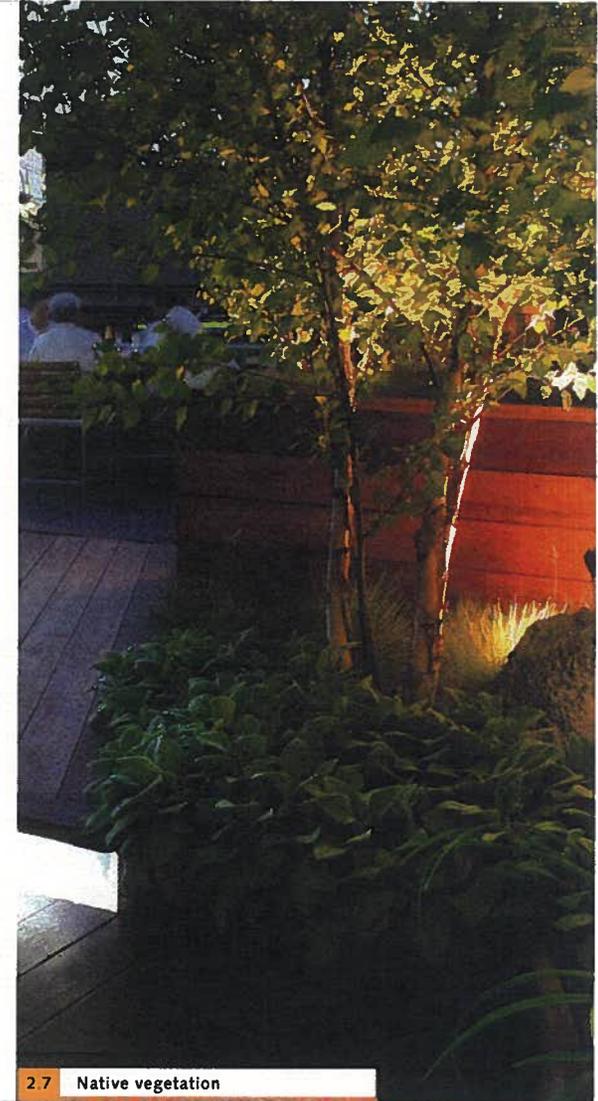
District energy systems are currently in place throughout the world. The City of The Hague has developed an innovative energy concept that consists of a seawater central supply unit with a heat exchanger and heat pump unit that uses the nearby sea as a temperature source. The central heating system supplies 1000 residential units. A similar system has been built in the City of Halifax, servicing a large, multi-tower office complex. University and hospital campuses typically run off a district energy system, and capitalize on the cost savings and sustainability benefits.

Mix of Land Uses

Development that supports a mixture of land uses often leads to the creation of sustainable and highly livable communities. Mixed land use is a catalyst for the ideal conditions for enhanced walkability, viable multi-modal public transportation linkages, and increased socio-economic diversity.

Smart growth supports the integration of mixed land uses into communities as a critical component of achieving better places to live. A neighborhood should attempt to include a balanced mix of housing, working, shopping, recreation and civic uses. The close proximity of these uses provides the residents with sustainable alternatives to driving, such as walking or biking. Mixed land use supports a more diverse and sizeable population and good commercial base for supporting viable public transit. Mixed land use helps to enhance the vitality and perceived security of an area by increasing the number and types of interactions of people on the street.

Large parcels of land containing single uses such as housing subdivisions, apartment clusters, office parks, and shopping centers contribute to suburban sprawl, contrary to smart growth. Single use districts make life less convenient and require more driving. Mixed land use can bring substantial fiscal and economic benefits. Commercial uses in close proximity to residential areas are often reflected in higher property values, and therefore help raise local tax revenues.



2.7 Native vegetation

Compact Development Form

Conventional, sprawl - style land development can be land consumptive and vehicle-dependent. A compact development form permits the continued growth of a community, but in a more contextually sensitive and sustainable manner. By encouraging higher densities and taller buildings, and limiting surface parking and development footprints, a community can preserve green space and limit impervious surfacing, two critical steps towards greater development sustainability.

There are a number of key benefits to a compact development form. Compact development promotes pedestrian connectivity and ridership of multi-modal mass transit, as destinations and people are closer together. Private and public capital and operational costs may be reduced, as services such as water and electricity are being provided to more consumers over smaller geographical distances. Often, property values are higher in compact developments, as the benefits such as access to transit and services are very attractive to potential residents.

Native Vegetation & Urban Forestry

Traditional planting design considers aesthetic principles first, with less regard for ecological function and long-term sustainability. Implementing a native planting regime not only can produce richly textured and beautiful open space, but also supports greater ecological function, as well as improving on site sustainability. The benefits of native planting design include:

1. Lower maintenance costs because native plants are evolved for the local conditions, and will grow to a predictable size.
2. Public health benefits due to less intensive maintenance practices. Native plants require less fertilizers, pesticides, and mechanical care, so there are less toxins and noise input into the environment.
3. Water conservation, because native plants are adapted to the climate of the site, and won't require watering after establishment.
4. Native plants will attract butterflies, other pollinators, and song birds, increasing the aesthetic and ecological value of the open space.



2.8 Native vegetation in a bioswale

2.9 Native vegetation in a bioswale

Trees in the urban landscape are not just individual plants, but rather comprise the forest that offers numerous benefits to communities. No longer just a handful of remnant trees that survived development, the urban forest is a critical component of the green infrastructure of a city, and should be managed as such.

An urban forest management program will provide a framework to ensure that the Brunswick Landing and Topsham Commerce Park trees and forests are appropriately cared for to meet community objectives. The development of such a plan, in keeping with the overarching Brunswick-Topsham urban forestry objectives, will ensure the long-term health, viability, and sustainability of trees in these areas.

The urban forest provides a number of tangible benefits:

- » Stormwater capture and infiltration
- » Noise and light pollution abatement
- » Energy conservation through microclimate modification
- » Habitat provision
- » Streetscape beautification
- » Sequestration of air pollutants
- » Increased property value



2.10 Water Gardens are ideal amenities



2.11 Impact of light pollution

Social Equity & Community Development

The more traditional sprawl development pattern is vehicle-dependent, given the larger geographical distances that are often covered. Vehicle-dependent development favors higher income brackets, and often works against the formation of a cohesive community. Widely spaced single-family lots, cul-de-sacs, and garages do not encourage neighborhood interaction, and do not facilitate moderate to high densities, multi-modal transportation, and walkable communities. Development that supports principles of social equity often inspires the creation of true community and sense of place. The Brunswick Landing and Topsham Commerce Park designs are based on the fundamental principles of smart growth that include a variety of land uses. This diversity provides attractive and practical residential housing for a broad demographic and socioeconomic range. The social development of 'community' could be fostered through the establishment of neighborhood associations and connections with local business development groups.

Public Amenities

Memorable spaces should have a variety of amenities that enhance the quality, visual character, and sense of community of the development. Public art, interpretive signage, and character-driven site furnishings add depth, comfort, and vitality to the urban landscape. The provision of unique and innovative public amenities will ensure that Brunswick & Topsham become destinations for residents and visitors alike. Parks, trails, plazas, and open space become the fabric of a neighborhood, and in turn the catalyst for community development.

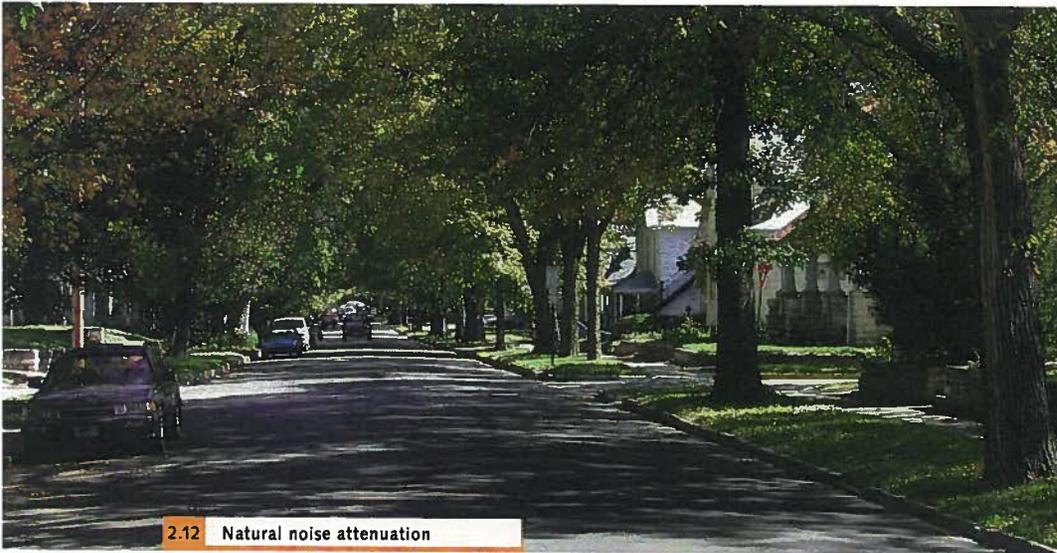
Light Pollution Abatement

Light pollution is often defined as excessive or obtrusive artificial light. The environmental and public health impacts of light pollution are often overlooked, but still have significant negative impacts. Over-illumination taxes the public electricity system, disrupts many aspects of nocturnal ecology, and may cause a variety of adverse human health conditions.

Energy efficient, dark-sky compliant light fixtures are specially designed to direct light downward, focusing on where the light is really needed. Streets, corridors, and plazas can still be effectively lit for visibility and security, while mitigating the negative impacts of light pollution, such as glare, over-illumination, sky glow, and light clutter.

Benefits of Light Pollution Abatement:

- » Energy savings for the municipality.
- » Greenhouse gas reduction, from the conservation of electricity.
- » Glare reduction, leading to improved safety for night-time driving.
- » Reduction in the disturbance of nocturnal ecology.
- » Aesthetic benefits of improved vision of the night sky.
- » Mitigation of the potential negative health impacts of over-illumination.



2.12 Natural noise attenuation



2.13 Example of contextual design

Acoustic Ecology

Noise pollution often occurs as a result of poor urban planning, when conflicting land uses are cited close together. Acoustic ecology is the study of soundscapes, and their impacts on human health and experiences. The impacts of a negative soundscape dominated by noise pollution are tangible; damage to human physiological and psychological health, characterized by hearing loss, stress, hypertension, or sleep disturbance.

Noise pollution also impacts the environment, creating stress for animals, interfering with their communication patterns, and disrupting predation regimes. Negative soundscapes will deter animal migration, and compromise habitat such that typical territories are drastically reduced in size. By considering the acoustic ecology of a landscape or neighborhood, smart planning strategies can seek to mitigate any detrimental environmental impacts of noise pollution.

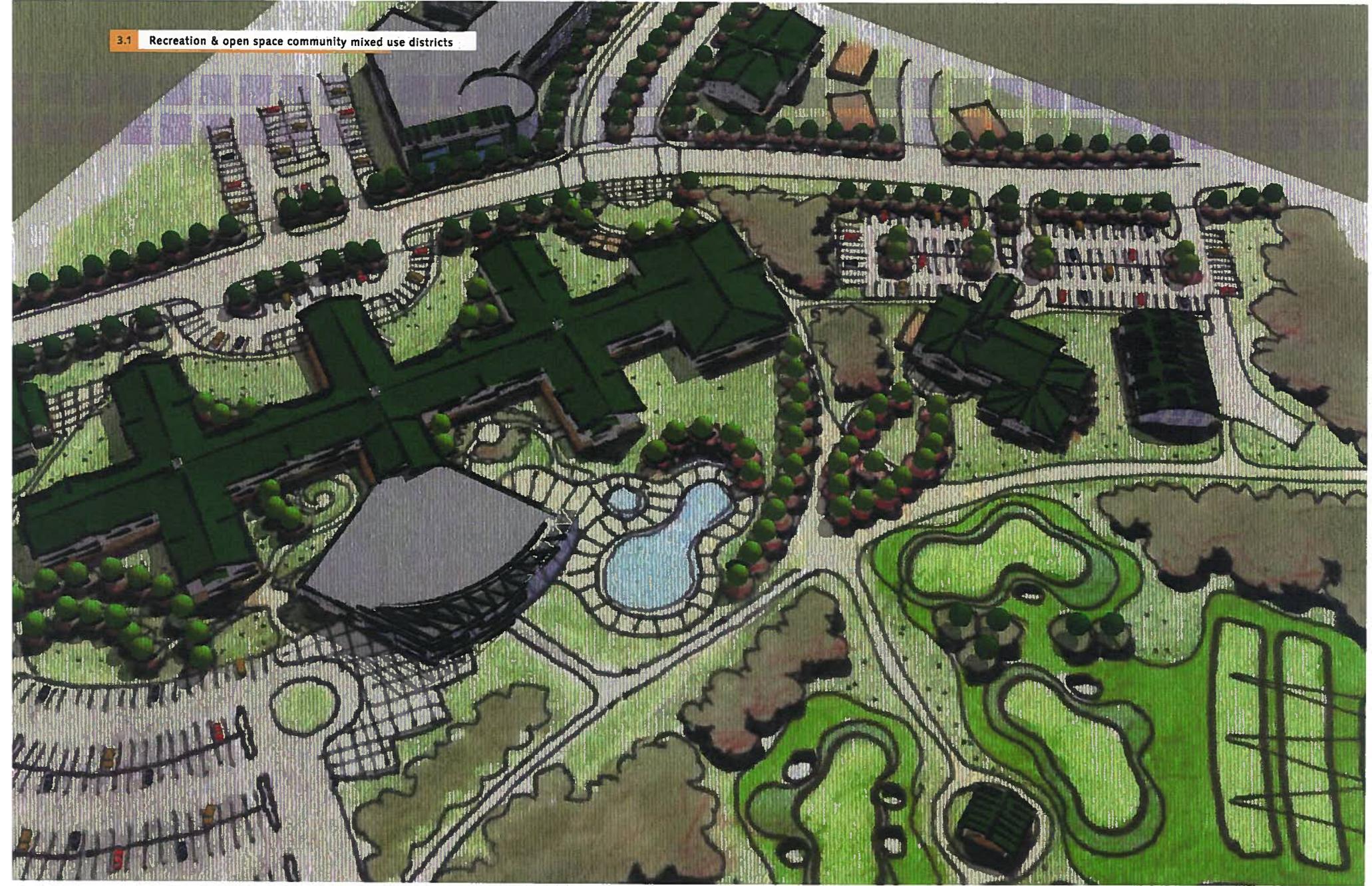
Smart Growth planning suggests that locally undesirable land uses, such as those that detract from a positive soundscape, should be developed following existing patterns of transportation or land use, and not grouped together. In areas where negative noise generation is unavoidable, noise attenuation, soundscape cognizant design, and other design modifications should be employed to minimize the impacts to the neighborhood soundscape.

Contextual Design

Regional architecture has developed in response to climate and culture; the most appropriate and ecologically-sound buildings often grow out of local building traditions. Residential privacy should be ensured through conscious building design and site layout rather than by increased distances between dwellings.

Smart growth seeks to create interesting, unique communities, which reflect the values and cultures of the people who reside there, and foster the types of physical environments which support a more cohesive community fabric. It also supports development which uses natural and man-made boundaries and landmarks to create a sense of defined neighborhoods, towns and regions. Architectural and natural elements will help to create high-quality communities that reflect the interests of all residents; there is a greater likelihood that buildings (and therefore entire neighborhoods) will retain their economic vitality and value over time.

3.1 Recreation & open space community mixed use districts



Section 9

Right, Title and Interest

A portion of the Subdivision property is controlled by the Midcoast Regional Redevelopment Authority (MRRA) as described in the following quitclaim deeds of the United States of America:

- Book 29003, Page 3, dated September 30, 2011;
- Book 29003, Page 167, dated September 30, 2011;
- Book 29004, Page 173, dated September 30, 2011;
- Book 29437, Page 1, dated March 14, 2012;
- Book 29438, Page 1, dated March 14, 2012; and
- Book 29754, Page 1, dated June 27, 2012, all recorded in York County Registry of Deeds.

Transfers within the project area are shown on attached Figure 2.

A portion of the Subdivision property is under an option to purchase as set forth in an “Agreement for the Purchase of Real Property between the United States of America and Midcoast Regional Redevelopment Authority”, dated September 30, 2011. A copy of this agreement is attached.

Reference is also made to an “Agreement Granting Reciprocal Easements for Ingress and Egress, General Access, and Utility Service”, dated March 28, 2011, recorded in Book 28607, Page 205, York County Registry of Deeds.

**AGREEMENT FOR THE PURCHASE OF REAL PROPERTY
BETWEEN THE UNITED STATES OF AMERICA AND
MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY**

This Agreement for the Purchase of Real Property (hereinafter referred to as "**Agreement**") is made as of this 30th day of September, 2011, between the UNITED STATES OF AMERICA, acting by and through the Department of the Navy ("**Government**"), and the MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY, a body politic and corporate and a public instrumentality of the State of Maine organized under Title 5, Maine Revised Statutes Annotated, Section 13083-G, et seq. ("**MRRA**"). Government and MRRA are sometimes referred to herein individually as a "Party" and collectively as the "Parties."

RECITALS

- A. The Defense Base Closure and Realignment Commission's recommendations for 2005 included the closure of the former Naval Air Station, Brunswick, Maine ("**NASB**"). The Government declared the former NASB complex surplus to the needs of the United States on February 16, 2007 and formally closed it on May 31, 2011.
- B. Pursuant to provisions of the Federal Property and Administrative Services Act of 1949, and approved June 30, 1949, (63 Stat. 377), as amended, and 49 U.S.C. Sections 47151-47153 (formally known as the Surplus Property Act of 1944 [58 Stat. 765], as amended), a delegation from the Administrator of General Services to the Secretary of Defense and subsequent delegation to the Secretary of the Navy, the Secretary of the Navy is authorized to convey surplus property at a closing installation and under the power and authority provided by the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510) as amended, and the implementing regulations of the Department of Defense (32 CFR Part 174);
- C. Pursuant to the power and authority provided by section 2903 of the National Defense Authorization Act for Fiscal Year 1994 (P.L. 103-160) and the implementing regulations of the Department of Defense (32 CFR Part 174), the Secretary of the Navy may convey surplus property at a closing installation to the recognized local redevelopment authority for economic development and job generation purposes ("**EDC**").
- D. Pursuant to a letter dated July 23, 2010 the Department of Defense, Office of Economic Adjustment officially recognized the Midcoast Regional Redevelopment Authority as the Local Redevelopment Authority ("**LRA**") for purposes of implementing the local redevelopment plan for NASB.
- E. By application dated April 6, 2010, as amended, (the "**EDC Application**"), MRRA proposed to acquire approximately One Thousand and Ninety-Eight (± 1098) acres of land, more or less, and the associated improvements situated thereon at the NASB consistent with the provisions of the Economic Development Conveyance Authority authorized by section 2905(b)(4) of the Defense Base Closure and Realignment Act of 1990, as amended (Pub. L. No. 101-510 [1990]). The EDC Application was approved by the Government with a Non-Binding Summary of Acquisition Terms and Conditions being accepted and executed on September 14, 2011.

F. The property that is the subject of this Agreement consists of +1,098 acres of land (the “**Real Property**”), more fully described in **Exhibit “A”** attached hereto and made a part hereof, together with the personal property located thereon and more fully described in the Bill of Sale (as defined below) (together with the Real Property, the “**Property**”).

AGREEMENT

1. **Property.** At the Initial Closing, the Government agrees to convey and MRRA agrees to accept in accordance with the terms and conditions of this Agreement, the real property consisting of +249.37 acres of land, more fully described in **Exhibit “A-1”** and **Exhibit “B”**, attached hereto and made a part hereof (the “**Property**”), together with the buildings and improvements and personal property located thereon; utilities, utility systems and poles to the extent provided herein; and all rights, easements and appurtenances thereunto belonging; all subject to the terms, conditions and general provisions set forth in this Agreement.

Upon execution of a FOST for any portion of the remaining EDC property consisting of +848.63 acres of land, an additional closing shall occur (each, an “**Additional Closing**”) on a date mutually agreeable to the parties. Such date shall not be more than 30 days after the date of the FOST. At each Additional Closing, the Government shall convey, and MRRA shall accept, in accordance with the terms and conditions of this Agreement, the applicable portion of the EDC property, together with the buildings and improvements and personal property located thereon, and all rights, easements and appurtenances thereunto belonging; all subject to the terms, conditions and general provisions more fully set forth in this Agreement. Additionally, the parties will execute a Lease in Furtherance of Conveyance (“**LIFOC**”), in a form mutually acceptable to both parties, for any portion of the Property not conveyed at the Initial Closing for which a Finding of Suitability to Lease (“**FOSL**”) is issued as of the date of the Initial Closing. Further, any portion of the Property for which a FOSL is issued will be added to the LIFOC within 30 days of issuance of the FOSL. The LIFOC will terminate for each parcel 10 days after the delivery of a good and sufficient Quitclaim Deed for each respective parcel or sub-parcel.

2. **Consideration.** The parties agree that the total Purchase Price shall be Ten Million, Six Hundred Thousand Dollars (\$10,600,000.00). Consideration shall be paid as follows:

A. **Deposit.** MRRA shall pay the Government Twenty-Five Thousand Dollars (\$25,000.00) at the Initial Closing (as defined herein).

B. **\$3 Million Note.** MRRA shall execute and deliver a purchase money promissory note from LRA to the Government (the “**Note**”) in the original principal amount of Three Million Dollars (\$3,000,000.00). The Note shall be paid in nine annual principal installments of One Hundred and Fifty Thousand Dollars (\$150,000.00) plus interest and a final tenth principal payment of One Million, Six Hundred and Fifty Thousand Dollars (\$1,650,000.00) plus interest beginning three (3) years after the Initial Closing or January 1, 2015 whichever is earlier. No interest shall accrue during the thirty-six months following the Initial Closing. Interest shall be calculated at 150 basis points over the U.S. Treasury 10 Year Composite Rate utilizing the rate established on the day execution of

this Agreement for Purchase. The Note shall be secured by a Three Million Dollar (\$3,000,000.00) declining balance letter of credit, written for a term of one year which shall be provided not later than June 1, 2014. The letter of credit shall include an automatic annual renewal provision and shall be from a national banking association reasonably acceptable to the Government and in a form and pursuant to terms reasonably acceptable to the Government. The parties agree that the balance on the letter of credit may decline in an amount equal to the amount of principal paid on the Note by MRRA in each annual payment. In lieu of a declining balance letter of credit, the Government agrees to accept a loan guarantee from the Finance Authority of Maine executed by the appropriate state official in a form acceptable to the Government to secure the Note.

The expected schedule for delivery of land and facilities comprising the ±1098 acres covered by this Economic Development Conveyance is attached hereto and made a part hereof as **Exhibit "C"**. At the initial closing, the Government intends to convey title to 249.37 of the 1098 acres, (22.71%), and hereby agrees to convey whatever portion of the Property for which a FOST has been issued. MRRA shall have the right to withhold from each annual payment due under the Note an amount equal to the proportionate amount of the Property not yet conveyed to MRRA multiplied by the amount due, (hereinafter the "**Deferred Amount**"). No interest will accrue on the Deferred Amount and the Deferred Amount will be added to the amount due in the next annual payment in accordance with the terms and conditions of the Note. For clarity purposes only, the following example and description is provided. The numerator shall be equal to the total number of acres of the Property conveyed divided by the denominator which shall be equal to 1098. Therefore if the Government fails to convey any additional property within the three year period after the Initial Closing, MRRA's obligation to pay the initial \$150,000.00 payment will be limited to the proportionate amount of the Property actually conveyed (249.37 acres) divided by 1098 acres, which equals 22.71% of the Property. Accordingly, MRRA would be obligated to pay Government \$34,065 with \$115,935 deferred without the accrual of interest, and added to MRRA's obligation for Year 2 of the Note. This deferment of payment under the Note shall continue until all of the Property is conveyed to MRRA.

C. Government Participation in Gross Real Estate Proceeds. The anticipated amount the Government will receive under this provision is estimated to be Seven Million, Six Hundred Thousand Dollars (\$7,600,000.00). The parties hereby acknowledge that the actual amount received by the Government may be less than or could exceed \$7,600,000.00 depending upon the success of the LRA's implementation of the Reuse Plan and sale of EDC Property. MRRA shall continue to pay Consideration calculated on gross Real Estate Proceeds for a period of twenty-three (23) years after the Initial Closing or January 1, 2038 whichever is earlier, as follows:

(i) The LRA shall have no obligation to pay any Additional Consideration on the initial Seven Million Dollars (\$7,000,000.00) of the gross Real Estate Proceeds received on the sale, transfer, conveyance, assignment or lease of any portion of the Property. The term "**Real Estate Proceeds**" means all monies received by MRRA from the sale, transfer, conveyance, assignment, license or lease of any portion of the Property excluding any monies received by MRRA in connection

with the operation and maintenance of the Utilities and Utilities Distribution System; and

(ii) For the gross real estate proceeds received on the sale, transfer, conveyance, assignment, license or lease of any portion of the Property by MRRA in excess of Seven Million Dollars (\$7,000,000.00) and up to Thirty-Seven Million, Four Hundred Thousand Dollars (\$37,400,000.00), MRRA shall pay the Government Twenty-Five Percent (25%) of such gross Real Estate Proceeds; and,

(iii) MRRA shall have no obligation to pay any Additional Consideration on the gross Real Estate Proceeds received on the sale, transfer, conveyance, assignment, license or lease of any portion of the Property by MRRA in excess of Thirty-Seven Million, Four Hundred Thousand Dollars (\$37,400,000.00) and up to Forty-Two Million, Four Hundred Thousand (\$42,400,000.00); and

(iv) For all gross real estate proceeds received on the sale, transfer, conveyance, assignment, license or lease of any portion of the Property by MRRA in excess of Forty-Two Million, Four Hundred Thousand Dollars (\$42,400,000.00), MRRA shall pay the Government Fifty Percent (50%) of such gross Real Estate Proceeds.

(v) The first payment of Additional Consideration shall be paid to the Government on or before April 1, 2015 and shall consist of the appropriate percentage of Real Estate Proceeds due to the Government, if any, for Real Estate Proceeds for the time period prior to January 1, 2015. Additional payments of Additional Consideration shall be made on or before April 1st of each year and shall consist of the appropriate percentage of Real Estate Proceeds due to the Government for the time period between January 1st and December 31 of the previous year (i.e. on April 1, 2016, MRRA shall pay the Government the appropriate percentage of Real Estate Proceeds due to the Government for Real Estate Proceeds received by MRRA between January 1, 2015 and December 31, 2015).

D. Government Right to Challenge Fair Market Value for purposes of determining amount of Government's Participation in Gross Real Estate Proceeds. The LRA agrees to provide the Government with thirty (30) days notice prior to executing any final deed, sale, assignment, license or lease permitting or establishing development rights on the Property, (the "**Disposition Notice**"). The Disposition Notice shall identify (a) the portion of the Property proposed for Disposition (the "**Disposition Parcel**") and (b) the Proposed Sale Price or Contract Price that will be received by the LRA from the Disposition Parcel. If the LRA cannot provide the Proposed Sale Price, it shall include the minimum amount of Real Estate Proceeds the LRA will accept for the Disposition Parcel.

(i) Government Objection to Disposition Notice. When a Disposition Notice is provided, the Government shall have the right to object to the Proposed Sale Price or Contract Price, and if appropriate, will provide the LRA with a Fair Market Value Concern Notice ("**Fair Market Value Concern Notice**"), as hereinafter

defined, in writing within twenty (20) days of receipt of such Disposition Notice. A Fair Market Value Concern Notice may be issued by the Government only if the Government reasonably believes that the LRA is proposing to convey, sell, assign, license or lease a Disposition Parcel that is priced (i) for less than eighty percent (80%) of the Fair Market Value for those Disposition Parcels with a Proposed Sale Price or Contract Price of One Million Dollars (\$1,000,000.00) or less, or (ii) for less than ninety percent (90%) of the Fair Market Value for those Disposition Parcels with a Proposed Sale Price or Contract Price exceeding One Million Dollars (\$1,000,000.00). The Fair Market Value Concern Notice shall (i) identify the Government's basis for its objection, and (ii) include the Government's initial estimate of the Fair Market Value. If the Government fails to provide a written Fair Market Value Concern Notice within twenty (20) days of receipt of a Disposition Notice, then the Government waives any right to challenge the value of the Real Estate Proceeds received by the LRA for such Disposition Parcel.

(ii) **LRA Obligations upon Receipt of Government Fair Market Value Concern Notice.** Nothing in this section shall be interpreted as preventing the LRA from consummating the sale, transfer, conveyance, assignment, license or lease of the Disposition Parcel at any price; provided, however, that the LRA agrees that it will hold in escrow 25% or 50% of the amount estimated by the Government as Fair Market Value in its Fair Market Value Concern Notice. The percentage to be withheld shall be determined by the total amount of Real Estate Proceeds received by the LRA as specified in the "Government Participation in Gross Real Estate Proceeds" as set forth above. Further, the LRA agrees that the percentage of Real Estate Proceeds payable to the Government for the Disposition Parcel shall be calculated based on the Appraisal as defined by paragraph (C) below or the actual Real Estate Proceeds received by the LRA for the Disposition Parcel, whichever is higher.

(iii) **Government Right to an Appraisal.** Within sixty (60) days after providing a Fair Market Value Concern Notice to the LRA, if any is provided, the Government, at its sole cost, shall provide the LRA with a letter appraisal identifying the Fair Market Value of the Disposition Parcel. "**Fair Market Value**" shall mean the fair market value of the Disposition Parcel as determined by an appraisal that is paid for by the Government. The Parties agree that any such appraisal shall be conducted in accordance with the appraisal instructions set forth in **Exhibit "D"** attached hereto, (hereinafter the "**Appraisal**"). If the Government fails to complete the Appraisal within sixty (60) days after the provision of a Fair Market Value Concern Notice to MRRA, then the Government waives any right to challenge the value of the Real Estate Proceeds received by the MRRA for such Disposition Parcel.

3. Title; Deed.

A. The Property shall be conveyed by a good and sufficient Deed substantially similar in form and substance to that shown in **Exhibit "E"** attached hereto and made a part hereof, with all provisions completed to the satisfaction of the parties hereto (the "**Deed**"), and title to the Property shall be fee simple. The Deed shall contain covenants and warranties required under the Comprehensive Environmental Response, Compensation and Liability Act ("**CERCLA**") and other applicable laws and shall convey all rights and title held to the Property, free from all parties in possession and encumbrances, except for the following:

- (i) institutional controls, reservations and restrictions required pursuant to the FOSTs.
- (ii) existing easements, reservations, and restrictions of record insofar as the same are in force and applicable as of the date of such Deed.
- (iii) an access and utility easement which will be granted to Affordable Mid Coast Housing, LLC as required by the Second Amended, Restated and Bifurcated Brunswick Real Estate Ground Lease and Conveyance of Facilities between the United States of America, Department of the Navy and Affordable Mid Coast Housing, LLC, dated October 29, 2010, and recorded in the Cumberland County Registry of Deeds at Book 28222, Page 303 (the "**PPV Lease**") in a form substantially similar to the Grant of Easement shown in **Exhibit "F"**.
- (iv) existing building or zoning laws, as applicable.
- (v) applicable notices, conditions and restrictions of the NEPA Record of Decision ("**ROD**") for the Main Base portion of NASB, published by the Government on February 15, 2011, the Finding of No Significant Impact ("**FONSI**") for the Topsham Annex portion of NASB, issued December 10, 2010, and applicable state or federal laws. MRRA acknowledges receipt of the ROD and FONSI.
- (vi) applicable notices, conditions, restrictions and covenants required by the "Programmatic Agreement between the United States Navy and the Maine State Historic Preservation Officer ("**SHPO**") on the Lease and Property Transfer of Properties located at the Naval Air Station Brunswick, Maine and Topsham Annex, Topsham, Maine" dated September 27, 2010. MRRA acknowledges receipt of this Programmatic Agreement.
- (vii) rights under Agreement Granting Reciprocal Easements for Ingress and Egress, General Access and Utility Service dated March 28, 2011, Navy Contract No. N47692-11-RP-11X01, recorded on March 29, 2011 in the Cumberland County Register of Deeds as Document No. 16298, at Book 28607, Pages 205-238.

(viii) access and utility easements reserved to the United States Army, United States Coast Guard, and Federal Aviation Administration and its assigns.

(ix) any such other easements, encumbrances, reservations or restrictions as may be mutually agreed upon in writing by the Parties hereto.

(x) rights established in favor of the Lessee under the Second Amended, Restated and Bifurcated Brunswick Real Estate Ground Lease and Conveyance of Facilities between the United States of America, Department of the Navy and Affordable Mid Coast Housing, LLC, dated October 29, 2010, and recorded in the Cumberland County Registry of Deeds at Book 28222, Page 303 (the "**PPV Lease**"). MRRA acknowledges receipt of this lease and understands it assumes the rights, duties and obligations of the Government under this lease.

B. Prior to the Closing (as hereinafter defined), MRRA may, at MRRA's sole option, obtain (i) a preliminary title report of the Property issued by the Title Insurance Company (as hereinafter defined) (the "**Title Report**") and (ii) a survey of the Property (the "**Survey**", together with the Title Report and the Survey, collectively being referred to as the "**Title and Survey Materials**"). MRRA shall have an opportunity to review the Title and Survey Materials to determine, in its sole discretion, their acceptability, including, without limitation, the legal description of the Property based upon the Survey, the quality of title (including any proposed Restrictions), and all other matters included in the Survey and the Title Report. Any title and survey materials, which may be desired by MRRA, will be procured at its sole cost and expense.

C. **Reinvestment of Gross Real Estate Proceeds.** With the exception of proceeds that are used to pay the Government, MRRA hereby agrees and covenants that the Gross Real Estate Proceeds from a sale, lease or license received by MRRA during the first seven years after the Initial Closing shall be used to support economic redevelopment of, or related to NASB. The use of Gross Real Estate Proceeds to pay for, or offset the costs of public investment on or related to NASB for any of the following purposes shall be considered a use to support the economic redevelopment of, or related to NASB:

- (A) Road construction;
- (B) Transportation management facilities;
- (C) Storm and sanitary sewer construction;
- (D) Police and fire protection facilities and other public facilities;
- (E) Utility construction;
- (F) Building rehabilitation;
- (G) Historic property preservation;
- (H) Pollution prevention equipment or facilities;
- (I) Demolition;
- (J) Disposal of hazardous materials generated by demolition;
- (K) Landscaping, grading, and other site or public improvements; and
- (L) Planning for or the marketing of the development and reuse of the installation;
- (M) Administration of the reuse of the installation; and
- (N) Management and administration of the Homeless Trust Fund.

Consistent with standard accounting practices for tax purposes, MRRA shall maintain adequate records and books of account for income and expenses related to redevelopment of the Property detailing transactions received from the sale, transfer, conveyance, assignment, lease or license of any portion of the Property. MRRA shall provide the Government with access to such records and books of account.

MRRA shall submit to the Government an annual financial statement certified by an independent certified public accountant. The statement shall cover MRRA's use of proceeds it receives from the sale, transfer, conveyance, assignment, lease or license of any portion of the Property. The first statement shall cover the 12 month period beginning on the date of the Initial Closing and shall be delivered to the Government within sixty (60) days of the end of that period and annually thereafter.

If, after review of the annual financial statements, it is determined that the Gross Real Estate Proceeds were not reinvested in allowable uses described herein, MRRA shall repay to the Government 100% of the Gross Real Estate Proceeds that are not appropriately reinvested. Such payments shall be made by a check payable to the Treasurer of the United States of America and shall be submitted within 120 days after the Navy notifies MRRA that such payment is due. This covenant shall survive all closings for the Property.

4. **Closing Deliveries.** On the Closing Date (as hereinafter defined), the Government shall deliver or cause to be delivered to MRRA:

- A. the Deed, duly executed by the Government;
- B. execution of an appropriate affidavit agreed to by both parties.
- C. a Bill of Sale for the utility systems on, over, under or within the Real Property, which shall be substantially in the form of **Exhibit "G"**, attached hereto and made a part hereof (collectively "Bill of Sale"), duly executed by the Government without warranties conveying any and all personal property located on the Property to MRRA; and
- D. all keys to the buildings or other improvements located on the Property held by the Government for the land conveyed to MRRA. The Government shall retain copies of necessary keys required for environmental work.

5. **Closing Date.** Subject to the provisions of this Agreement, the Deed and the other Government Documents shall be delivered to MRRA on September 30, 2011 (the "**Closing Date**") at the offices of MRRA in Brunswick, Maine, or at such other place as is otherwise agreed upon in writing by the Parties.

6. **Covenants.**

- A. With the exception of a Grant of Easement for utilities and utility distribution system to Affordable Mid Coast Housing, LLC, the Government shall not enter into any agreements, leases, letters of intent or other rental or occupancy agreements (written or verbal) which grant any ownership, possessory or equitable interest in and to all or any

portion of the Property, without first providing MRRA with 30 days' prior written notice (except in an emergency, when shorter notice may be given).

B. The Government shall not enter into any contract or other agreement with respect to all or any portion of the Property, which will survive the Closing, or which would otherwise affect the ownership, use, operation or enjoyment of all or any portion of the Property after the Closing, without first providing MRRA with 30 days' prior written notice (except in an emergency, when shorter notice may be given).

C. Until Closing, the Government shall (i) operate and maintain the Property in accordance with Federal Management Regulations (41 CFR Chapter 102-75, Subpart D, Management of Excess and Surplus Property).

D. From and after the date hereof, the Government shall not create any new restrictions, liens, encumbrances, rights, titles or interest in others other than those identified in Section 3 hereof without first providing MRRA with 30 days' prior written notice (except in an emergency, when shorter notice may be given).

7. **Conditions Precedent to Closing.** The following shall be conditions precedent to the Parties' obligation to consummate the Closing:

A. All of the representations and warranties made in this Agreement shall be true and correct as of the Closing Date and all of the covenants and agreements made by the Government and MRRA in this Agreement shall have been fully and timely performed.

B. Should any of the above-mentioned conditions not be met by the Closing Date, either party shall have the right to postpone the Closing Date thirty (30) days. In the event Closing does not occur by July 1, 2012, the Government, at its sole discretion, has the right to declare this agreement null and void by providing written notice thereof to MRRA, and the Government shall be free to dispose of the Property by the appropriate methods, including public sale.

8. **Termination.** The Purchase Agreement shall not be terminable by MRRA or by the Government, except in the event of a default after notice and a reasonable opportunity to cure.

9. **Restrictions on Participation.**

A. No member of or delegate to the United States Congress shall be admitted to any share or part of this Agreement or to any benefit to arise therefrom, but this provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit.

B. In no event shall the Government enter into any direct contract, agreement or incur any obligation with MRRA's contractors, employees, or vendors for any of MRRA's indemnification, insurance and payment obligations made pursuant to this Purchase and Sale Agreement.

10. **Further Assurances.** The parties hereto acknowledge that it is their mutual intent to effectuate an orderly, amicable, and expeditious transfer of the Property from the Government to MRRA and that, toward that end, (i) any ambiguities herein shall, to the extent practicable, be construed in the way most liberally conducive to the aforesaid conveyance and (ii) the parties hereto both agree to take such additional acts and/or to permit such additional actions (including but not limited to any actions required in the event it shall become necessary, before or after the conveyances contemplated herein, to effect a formal subdivision or subdivisions of the Property) as appropriate and allowable under applicable law. This paragraph will survive the Closing.

11. **No Brokerage.** Each Party warrants to the other Party that no person or agency has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial agencies maintained by MRRA for the purpose of securing business.

12. **Entire Agreement.** All terms and conditions with respect to this Agreement are expressly contained herein and the Government and MRRA agree that no other representation or promise has been made with respect to the Property not expressly contained herein. This Agreement may not be canceled, modified, or amended except by a written instrument executed by both the Government and MRRA.

13. **Waiver.** No waiver of any breach of any agreement or provision contained herein shall be deemed a waiver of any preceding or succeeding breach of any other agreement or provision herein contained. No extension of time for the performance of any obligation or act shall be deemed an extension of time for the performance of any other obligation or act.

14. **Notices.** Notices shall be deemed sufficient under this Agreement if made in writing and submitted to the addresses set forth below (or to any new or substitute address hereinafter specified, in a writing theretofore delivered in accordance with the notice procedure set forth herein by the intended recipient of such notice). All notices shall be delivered (i) by hand, (ii) by certified mail – return receipt requested, or (iii) by reputable overnight carrier.

In the case of MRRA:

Midcoast Regional Redevelopment Authority
Attn: Executive Director
4 Admdiral Fitch Avenue
Brunswick, ME 04011

In the case of the Government, to:

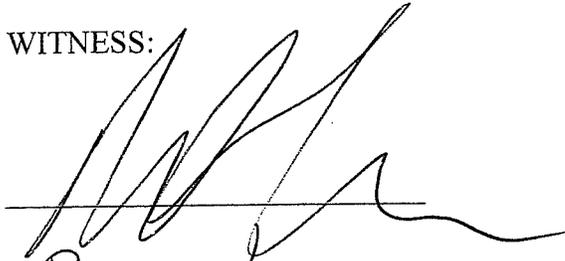
BRAC Program Management Office, Northeast
4911 South Broad Street
Building 679
Philadelphia, Pa 19112
Attn: Real Estate Contracting Officer

15. **Remedies.** If either Party defaults under this Agreement, the sole and exclusive remedy of the other Party, at law or in equity, shall be to terminate this Agreement.
16. **Time is of the Essence.** The parties agree that time is of the essence regarding all provisions and requirements set forth in this Agreement.
17. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which, combined, shall constitute one and the same Agreement.

[SIGNATURES ON NEXT PAGE]

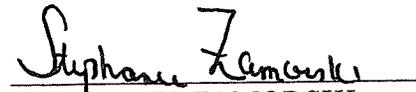
IN WITNESS WHEREOF, the Parties hereto have duly executed this Agreement as of the date first written above.

WITNESS:


ROBERT LECLERC

THE UNITED STATES OF AMERICA

By:


STEPHANIE ZAMORSKI
Real Estate Contracting Officer

WITNESS:


Kathy Paradis

MIDCOAST REGIONAL
REDEVELOPMENT AUTHORITY

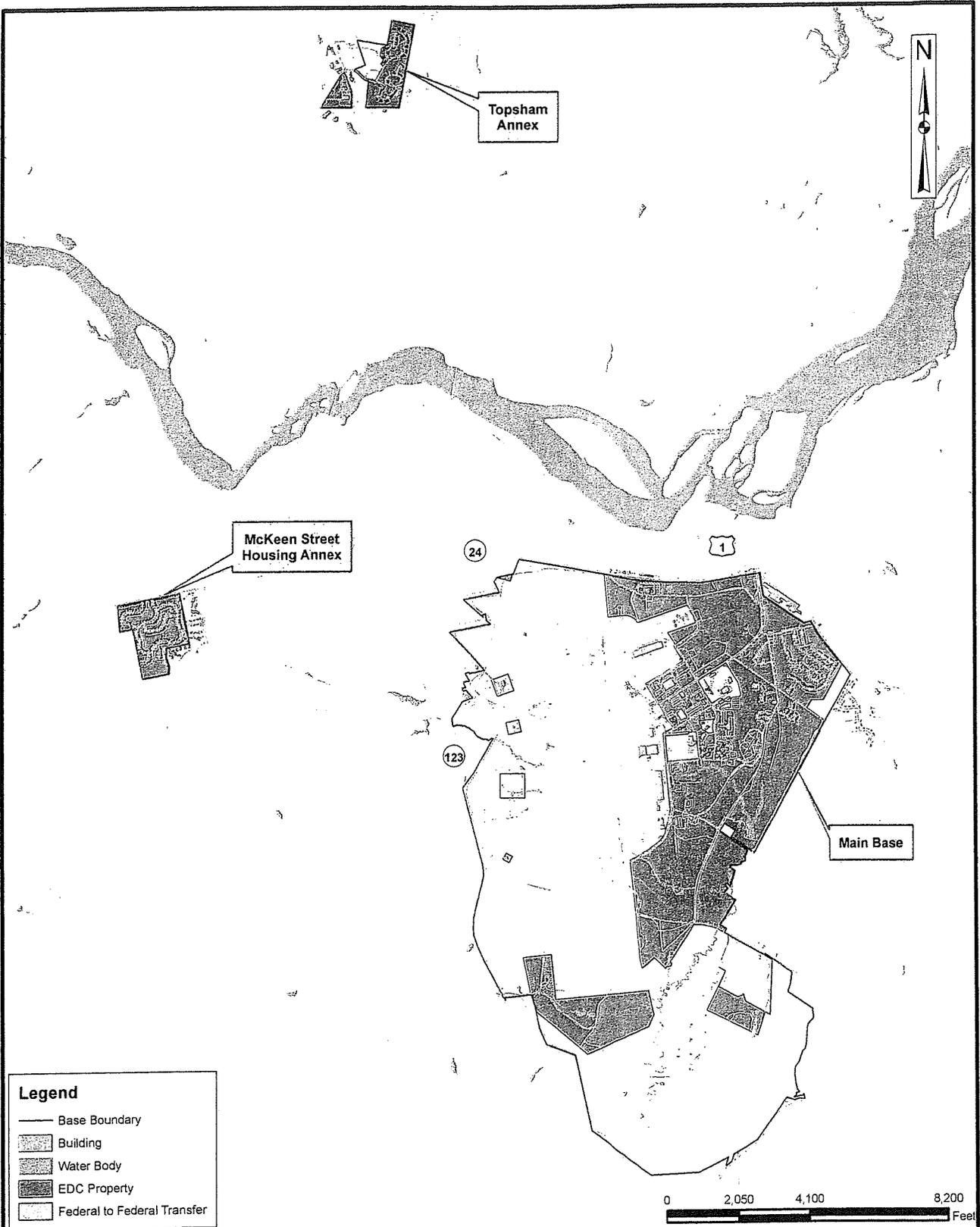
By:


STEVEN LEVESQUE
Executive Director

SCHEDULE OF EXHIBITS

- Exhibit "A" - Plan of EDC Property
- Exhibit "A-1" - Plan of Conveyed Property
- Exhibit "B" - EDC Parcels at Initial Closing
- Exhibit "C" - Expected Schedule of Delivery for Land and Facilities
- Exhibit "D" - Appraisal Instructions
- Exhibit "E" - Form of Deed
- Exhibit "F" - Form of Grant of Easement to Affordable Mid Coast Housing, LLC
- Exhibit "G" - Form of Bill of Sale for Utility Systems

EXHIBIT A
PLAN OF EDC PROPERTY



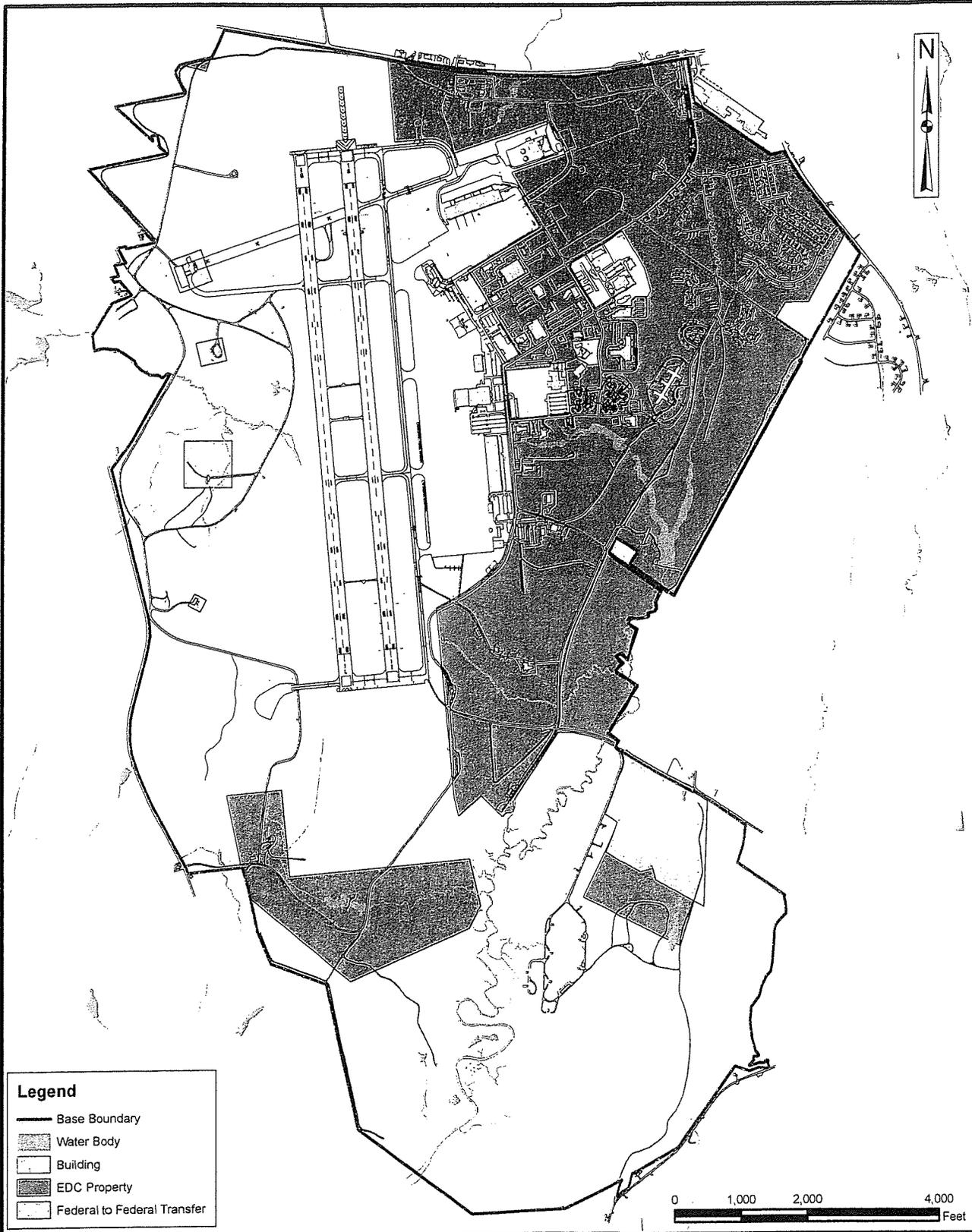
Legend

- Base Boundary
- Building
- Water Body
- EDC Property
- Federal to Federal Transfer



EXHIBIT "A"
 EDC PROPERTY
 FORMER NAVAL AIR STATION BRUNSWICK
 BRUNSWICK, MAINE

SCALE AS NOTED	
FILE G:_POST_EDC_PROPERTY_HOUSING_FULLBASE.MXD	
REV 0	DATE 09/15/11
FIGURE NUMBER A	



Legend

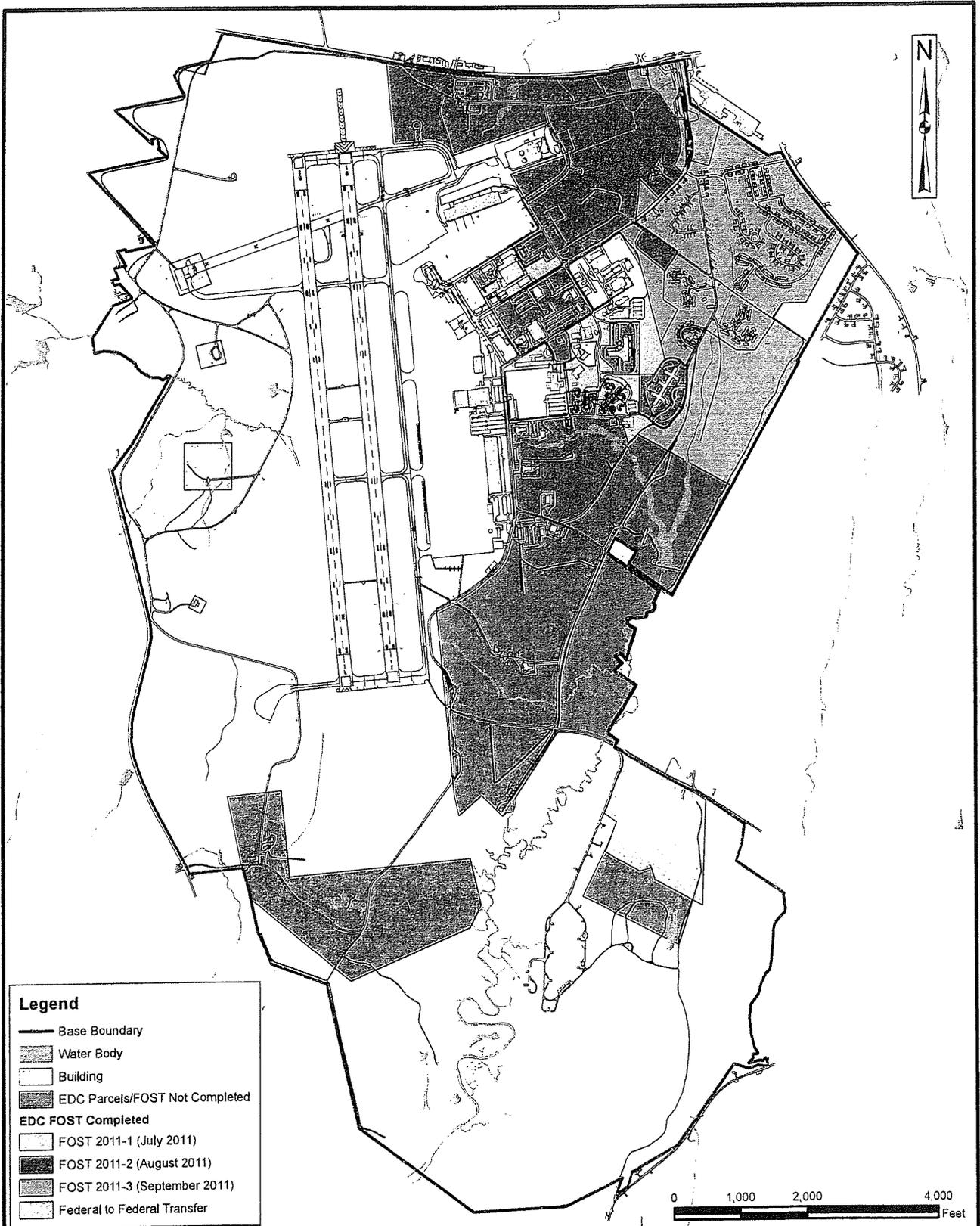
- Base Boundary
- Water Body
- Building
- EDC Property
- Federal to Federal Transfer



EXHIBIT "A"
MAIN BASE EDC
FORMER NAVAL AIR STATION BRUNSWICK
BRUNSWICK, MAINE

SCALE AS NOTED	
FILE G:\FOST_EDC_PROPERTY_MAINBASE.MXD	
REV 0	DATE 09/15/11
FIGURE NUMBER A	

EXHIBIT A-1
PLAN OF CONVEYED PROPERTY



Legend

- Base Boundary
- Water Body
- Building
- EDC Parcels/FOST Not Completed
- EDC FOST Completed**
 - FOST 2011-1 (July 2011)
 - FOST 2011-2 (August 2011)
 - FOST 2011-3 (September 2011)
 - Federal to Federal Transfer



EXHIBIT "A-1"
EDC FOST PARCELS
FORMER NAVAL AIR STATION BRUNSWICK
BRUNSWICK, MAINE

SCALE AS NOTED	
FILE G:_FOST_EDC_PROPERTY_TRANSFER_MAINBASE.MXD	
REV 0	DATE 09/15/11
FIGURE NUMBER D	

EXHIBIT B
EDC PARCELS AT INITIAL CLOSING

EXHIBIT "B"
EDC Parcels - Initial Closing

	A	B	C	D	E
1	Deed	Parcel Names	Acres	Buildings	FOST #
2	EDC Phase I - Main Base EDC Parcels	EDC-1	0.94		2011-1
3		EDC-2	9.57	294	2011-1
4	(*EDC-3 re-configured due to survey issues)	EDC-3*	21.95	24, 25, 43, 48, 54, 228, 460, 516, 592, 639	2011-1
5		EDC-4	4.19	27, 30	2011-1
6	Total Acres Phase I		36.65		
7	EDC Phase II - Main Base EDC & EDC Housing Parcels	EDC-HSG-MAIN-A	141.76	Land associated w/ PPV-owned housing	2011-3
8		EDC-HSG-MAIN-C	0.37	Land associated w/PPV-owned housing	2011-3
9	Total Acres Phase II		142.13		
10	EDC Phase III - McKeen Street EDC Housing Parcels	EDC-HSG-MCKN	70.2	Land associated w/PPV-owned housing	2011-3
11	Total Acres Phase III		70.2		
12	EDC Phase V - Utility Parcels	EDC - Utility Features	0.39	42, 49, 111, 124, 146, 147, 277, 537, B590 L.S., 638, B750 L.S., Water Main Valve Pit, N.F.F.L.S., Defoaming Shed, Recloser Substation, Staflower Lane L.S., Lupine Circle L.S. and Topsham 385 & 388	2011-2
13	Total Acres Phase IV		0.39		
14					
15	Initial Closing - Total Acres		249.37		

EXHIBIT C
EXPECTED SCHEDULE
FOR DELIVERY OF LAND AND FACILITIES

EXHIBIT C
Expected Schedule of Delivery of Land and Facilities

	A	B	C	D	E	F
1	Parcel	EDC Acres	Buildings	FOST #	FOST	Disposal
2	FOST Completed					
3	EDC-1	0.97		2011-1	27-Jul-11	<i>31-Oct-11</i>
4	EDC-2	9.67	294	2011-1	27-Jul-11	<i>31-Oct-11</i>
5	EDC-3	33.73	24, 25, 43, 48, 54, 228, 460, 516, 592, 639, 730, 737, 738, 742, 743, 744, 745, 747, 748, 749	2011-1	27-Jul-11	<i>31-Oct-11</i>
6	EDC-4	4.36	27, 30	2011-1	27-Jul-11	<i>31-Oct-11</i>
7	EDC - Utility Features	0.5	42, 49, 111, 124, 146, 147, 277, 537, B590 L.S., 638, B750 L.S., Water Main Valve Pit, N.F.F.L.S., Defoaming Shed, Recloser Substation, Stafflower Lane L.S., Lupine Circle L.S. and Topsham 385 & 388	2011-2	2-Aug-11	<i>31-Oct-11</i>
8	EDC-HSG-MAIN-A	143.6	Land associated w/ PPV- owned housing	2011-3	13-Sep-11	<i>31-Oct-11</i>
9	EDC-HSG-MAIN-C	0.34	Land associated w/PPV-owned housing	2011-3	13-Sep-11	<i>31-Oct-11</i>
10	EDC-HSG-MCKN	70.2	Land associated w/PPV-owned housing	2011-3	13-Sep-11	<i>31-Oct-11</i>
11	EDC-HSG-TPSM	46.4	Land associated w/PPV-owned housing	2011-3	13-Sep-11	<i>31-Oct-11</i>
12	EDC-5	37.3	33, 35, 37, 38, 109, 415, 471	2011-3	13-Sep-11	<i>31-Oct-11</i>
13	EDC-6	13.9		2011-3	13-Sep-11	<i>31-Oct-11</i>
14	EDC-7	67.8		2011-3	13-Sep-11	<i>31-Oct-11</i>
15	Total acreage for Land where FOST is completed	428.77				
16						
17	FOST Required					
18	EDC-HSG-MAIN-B	6	Land associated w/ PPV-owned housing, B904 & 905	TBD	<i>TBD</i>	<i>TBD</i>
19	EDC-8/14	252.49		2012-1	<i>31-Mar-12</i>	<i>15-May-12</i>
20	EDC-15+	410.74		2013-1	<i>31-May-13</i>	<i>30-Jun-13</i>
21	Total Acreage for Land where FOST is required	669.23				
22						
23	Total EDC Acres	1098				

EXHIBIT D
APPRAISAL INSTRUCTIONS

Exhibit "D"

**SPECIFICATIONS FOR REAL PROPERTY APPRAISAL
For Property Known as "Property covered by Contract for Sale"**

GENERAL SPECIFICATIONS:

Appraisal of approximately (acres determined by subject sale parcel) +/- acres of land with improvements, known as (description of property taken from the Contract for Sale). The property is further identified in Metes and Bounds Survey and Title Reports to be provided to the appraiser (in cooperation with the LRA's most current data).

1(a) - Scope of Service. The appraiser shall furnish all materials, supplies, tools, equipment, personnel and travel and shall complete all requirements of this contract including performance of the professional services listed herein.

The project consists of a **Complete, Self-Contained Appraisal Report, as described below**, for the lands and improvements which are as identified above. The appraiser shall furnish three copies of the appraisal report with a CD of the report in Microsoft word, or PDF format., All excel spread sheets, Argus runs, lease analysis, photos, or other electronic programs shall be imbedded in the report and shall be delivered to the General Services Administration's identified Contact.

For the purposes of these specifications, any appraisal report, whether identified by the appraiser as a self-contained report or a summary report, will conform to the "Uniform Standards of Professional Appraisal Practice" (USPAP) requirements for a 'self-contained' report by its preparation in accordance with the "Uniform Appraisal Standards for Federal Land Acquisitions" (UASFLA, 2000; Section A). The report shall provide an estimate of market value for the estate to be appraised and, except as expressly set forth herein, shall conform to Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA). No departure from any of the standards may be invoked.

The date of the value estimate shall be the last date the appraiser inspected the appraised property, which shall be no earlier than the date of the Contract for Sale.

If clarification of these specifications is needed, and/or to arrange for the site inspection, the appraiser shall contact:

Navy Base Closure Officer
Attn: Stephanie Zamorski
4911 South Broad Street
Building 679
Philadelphia, PA 19112
Voice: 215-897-4905
E-mail: Stephanie.Zamorski@navy.mil

The Navy will provide the LRA with a minimum of 48 hours notice in order to permit their participation in a prework meeting or phone call, pre-work conference or site visit by the appraiser.

A mandatory prework meeting or phone call shall be held between the appraiser, the assigned Navy representative, a representative of the LRA and the seller of the property prior to the commencement of the assignment.

1(b) - Appraisal Report. The appraiser shall make a detailed field inspection of the subject property as identified, and shall make such investigations and studies as are necessary to derive sound conclusions and to prepare the appraisal report.

1(c) - Pre-Work Conference: the appraiser is required to participate in the pre-work conference for discussion and understanding of these instructions. The pre-work conference will be held in conjunction with the property examination. A representative of the LRA and the seller of the property shall have the opportunity to participate in the pre-work conference.

1(d) - Examination Notice. The Appraiser shall provide the seller of the property and the Government 10 days advance notice of the property visitation date and shall give the LRA, or its designated representative, the seller of the property and the Government an opportunity to accompany the Appraiser during any inspection of the property if access to and inspection of the property is desired. These notices shall be documented in the Appraiser's transmittal letter of the appraisal report. The Appraiser shall certify that the signer of the report has personally visited the appraised property and has personally visited each of the comparable transactions used in the comparative analyses.

1(e) - Definition of Terms: Unless specifically defined herein or in either USPAP or UASFLA, definitions of all terms are the same as those found in "The Dictionary of Real Estate Appraisal" (Appraisal Institute), current edition. UASFLA shall take precedence in any differences among definitions, except as such defined terms may be modified by these specifications.

2. Analysis of Highest and Best Use. For appraisals, UASFLA defines highest and best use as, "The highest and most profitable use for which the property is adaptable and needed or likely to be needed in the reasonably near future." The appraiser may also refer to definitions as found in "The Dictionary of Real Estate Appraisal". In determining the highest and best use of the subject property, the use of the subject property as determined under the most recent Development Plan which has been approved by the LRA for the subject property shall be dispositive. The LRA shall provide the appraiser with a copy of the most recent Development Plan no later than the date of the pre-work conference. If the LRA has not approved a Development Plan for the subject property, then in determining highest and best use, the appraiser shall give deference to the LRA's Approved Reuse Plan, the LRA's approved Master Plan and the LRA's Zoning and Land Use By-Laws and also shall refer to the LRA's Accepted EDC Application.

If speculation or investment is the highest and best use of the property, the appraisal should describe and explain its interim and most probable ultimate use.

Market value cannot be predicated upon potential uses that are speculative and conjectural. Sales comparisons shall be determined using the sales of similar properties in the Maine Mid-Coast real estate market.

Market value shall reflect the fact that the Reuse Plan and the EDC Application contemplate a coordinated master development at the former NAS Brunswick and impose limitations and requirements on the master development (including minimum and maximum amounts of mixed-use commercial, office, retail, residential, senior housing, affordable housing and workforce housing components and associated recreation and other public amenities). Accordingly, market value shall be determined in the context of the aggregate development, and the associated limitations and requirements thereon, contemplated by the Reuse Plan and the EDC Application.

The appraiser's opinion of a reasonable probability of a zoning change must have a factual foundation. The appraisal report shall include a description of the investigation undertaken to determine the probability of rezoning. The investigation shall include thorough research of the use(s) and zoning of properties situated similarly to the subject property, but only within the area covered by the zoning authority of the subject property. The stated rezoning conclusion shall be supported by facts surfaced in the research. A property cannot be valued as if it were already rezoned for a different use. The property must be valued only in light of the probability of obtaining a zone change.

3. Comprehensive Review. Federal law requires review of all appraisals by a qualified review appraiser to assure they meet applicable appraisal requirements, including those in UASFLA, General Services Administration policy, and these specifications. Compliance with USPAP will also be reviewed. Findings of deficiency shall be discussed and corrections requested once the appraisal report has been delivered. A value estimate is acceptable for agency use only after the assigned Navy staff review appraiser has approved the appraisal report.

4. DELIVERIES OR PERFORMANCE

The appraiser shall submit to the assigned Navy Review Appraiser a draft Self-Contained Appraisal Report for approval within 30 days of the date of value. The Review Appraiser will review within 15 days the draft appraisal report for acceptance or recommend revisions. If revisions are necessary, the revised report shall be submitted within 15 days of notification. The Review Appraiser will then review the final report for acceptance.

ADDITIONAL INSTRUCTIONS TO APPRAISER

In determining market value, the appraiser shall recognize the concept of “key occupant recognition”. This concept states that users of space create value in real estate. “Anchor tenants”, either residential or commercial in nature, are what enable all classes of property to be

developed. Special consideration and concessions may be attached to anchor tenants in terms of such items as land value, rent, sales prices, and expense reimbursements. The appraiser in their valuation should follow the intent of UASFLA in their analysis of “all available economic uses.”

All appraisal work will be performed by a senior appraiser working for a national or regional firm with the MAI designation with at least 10 years experience in appraising land development within the Maine Mid-Coast market. The appraiser will follow referenced methodology and present the “as is” value of the land under analysis.

EXHIBIT E
FORM OF DEED

Exhibit "E"
QUITCLAIM DEED

THIS INDENTURE ("Quitclaim Deed") is made the _____ day of September, 2011 between **United States of America**, acting by and through the Secretary of the Navy, Base Closure Program Management Office Northeast, Philadelphia, PA, hereinafter referred to as "GOVERNMENT," and the **Midcoast Regional Redevelopment Authority**, a body politic and corporate and a public instrumentality of the State of Maine organized under Title 5, Maine Revised Statutes Annotated, Section 13083-G, et seq., hereinafter referred to as "GRANTEE." It is based upon the following facts:

Recitals

WHEREAS, the Secretary of the Navy is authorized to convey surplus property at a closing installation to the recognized Local Redevelopment Authority for economic development purposes pursuant to Section 2905(b)(4) of the National Defense Authorization Act for Fiscal Year 1994 (P.L. 103-160) as amended, and the implementing regulations of the Department of Defense (32 CFR Part 174); and

WHEREAS, GRANTEE, by application dated April 6, 2010 requested an economic development conveyance ("EDC") of surplus portions of the former Naval Air Station, Brunswick Maine, consisting of a total of 1098 acres, more or less, hereinafter referred to as the "EDC Property"; and

WHEREAS, the GOVERNMENT and the GRANTEE have agreed that the EDC Property, comprised of several individual parcels of land, with improvements, and related personal property thereon, collectively referred to as the "Individual Parcels" will be conveyed to the GRANTEE by separate deeds of the Individual Parcels as they are determined suitable for transfer; and

WHEREAS, an agreement ("Purchase Agreement") for the purchase of the EDC Property, therein described was executed by the GOVERNMENT and GRANTEE on _____ 2011; and

WHEREAS, the GOVERNMENT and the GRANTEE have agreed that at the EDC Initial Closing the GOVERNMENT will convey to the GRANTEE approximately 249.37 acres of land by four Quitclaim Deeds consisting of several Individual Parcels, identified as the Phase I Main Base EDC Parcels; Phase II Main Base EDC Housing Parcels, Phase III McKen Street Parcel, and Phase IV EDC Utility Parcels; and

WHEREAS, this Quitclaim Deed constitutes Phase ___ of the Initial Conveyance of Individual Parcels, consisting of ___ non-contiguous parcels, also sometimes referred to as

subparcels _____, containing _____ acres of land, more or less, hereinafter referred to as the "PROPERTY".

NOW THEREFORE, in consideration of the foregoing, of the terms and conditions set forth below, and of the terms and conditions set forth in the Purchase Agreement, including total purchase price in the amount of Ten Million, Six Hundred Thousand Dollars (\$10,600,000.00) for the EDC Property, in the form of (i) Cash Deposit in the amount of \$25,000.00 to be paid at the Initial Conveyance; (ii) Purchase Money Promissory Note in the amount of Three Million Dollars \$3,000,000.00; and (iii) the balance to be paid through Government Participation in Gross Real Estate Proceeds, the receipt and adequacy of which, as consideration, the parties hereto both acknowledge; and the parties hereto, intending to be legally bound hereby, have agreed to, and do hereby, effectuate the conveyance set forth below.

By the acceptance of this Quitclaim Deed or any rights hereunder, the GRANTEE, for itself, its successors and assigns, agrees that the transfer of all the Property transferred by this Quitclaim Deed is accepted subject to the following terms, restrictions, reservations, covenants, and conditions set forth below, which shall run with the land, in perpetuity. The terms, reservations, restrictions, covenants, and conditions contained in this Quitclaim Deed shall be expressly referenced in any deed or other legal instrument by which the GRANTEE divests itself of either the fee simple title or any other lesser estate in the Property or any portion thereof with the proviso that any such subsequent transferee assumes all of the obligations upon the GRANTEE by the provisions of this Quitclaim Deed with respect to the property being transferred.

The failure of the GOVERNMENT to insist in any one or more instances upon complete performance of any of the terms, covenants, conditions, reservations or restrictions in this Quitclaim Deed shall not be construed as a waiver or relinquishment of the future performance of any such terms, covenants, conditions, reservations or restrictions and the obligations of the GRANTEE, its successors and assigns, with respect to such future performance shall continue in full force and effect.

Conveyance Language

GOVERNMENT does hereby, subject to any easements and encumbrances of record and subject to the reservations, exceptions, notices, covenants, conditions, and restrictions expressly contained herein, grant, sell, convey, remise, release, and quitclaim unto GRANTEE, its heirs, successors, and assigns, without any warranty express or implied as to the quantity or quality of GOVERNMENT's title (except such warranties as are specifically set forth herein, required by 42 U.S.C. § 9620(h)(3), or otherwise required by law), all right, title, and interest in that certain real property (collectively, the "PROPERTY"), including, but not limited to the underlying estate, buildings, structures, and improvements, including but not limited to utilities, utility distribution systems and components, and personal property situated or installed thereon, which the GOVERNMENT has in and to the Property, consisting of _____ acres of land, more fully described in the legal descriptions attached to this Quitclaim Deed and incorporated herein as **Exhibit "A"**.

TOGETHER WITH all and singular the ways, waters, water-courses, driveways, rights, hereditaments and appurtenances, whatsoever thereunto belonging, or in any way appertaining, and the reversions and remainders, rents, issues and profits thereof, and any interest the Government has in water rights and mineral rights, and all the estate, right, title, interest, property, claim and demand whatsoever of GOVERNMENT, in law, equity, or otherwise howsoever, of, in, and to the same and every part thereof, and

TO HAVE AND TO HOLD the PROPERTY, the hereditaments and premises hereby granted, or mentioned and intended so to be, with the appurtenances, unto the said GRANTEE, its heirs, its successors, and its assigns, and subject to the reservations, restrictions, and conditions set forth in this instrument, to and for the only proper use and behoof of the said GRANTEE, its heirs, its successors, and its assigns forever.

Special Sections

I. Reinvestment Covenant: GRANTEE acknowledges and agrees to the terms and provisions within the reinvestment covenant attached hereto as **Exhibit "B"**.

II. Reservation regarding Reciprocal Easements: An Agreement Granting Reciprocal Easements for Ingress and Egress, General Access and Utility Service dated March 28, 2011, Navy Contract No. N47692-11-RP-11X01, recorded on March 29, 2011 in the Cumberland County Register of Deeds as Document No. 16298, at Book 28607, Pages 205-238 creating reciprocal easements granting general access, ingress and egress, and utility service affecting the PROPERTY has been executed by the parties hereto and is incorporated by reference and made apart hereof as if set out in length.

III. Reservation of Easements: Subject to Reciprocal Easement Agreement (Navy Contract No. N47692-11-RP-11X01), GOVERNMENT hereby reserves unto itself and any assigns that are Federal agencies for the United States of America the following easements, as more particularly described in **Exhibit "C"** attached to this Quitclaim Deed and made a part hereof:

- A. United States Coast Guard: (access and utilities easement)
- B. Federal Aviation Administration: (access and utilities easement)
- C. United States Army: (access and utilities easement)

IV. Reservation of Utility Easement for PPV Housing: A Utility Easement dated 30 September 2011, Navy Contract No. N47692-11-RP-11Q11, granting access to and use of the streets, roads, and easements for electric, telephone, gas, water and sewer and other facilities affecting the PROPERTY has been granted by United States of America, Department of the Navy, to the Affordable Mid Coast Housing, LLC (Lessee), and is incorporated by reference and made apart hereof as if set out in length.

V. **Federal Facility Agreement:** The Naval Air Station Brunswick Federal Facilities Agreement, dated 19 October 1990, as amended, is incorporated herein by reference and made a part hereof as if set out in length.

VI. **Notice of Environmental Condition:** Information concerning the environmental condition of the PROPERTY, identified as Parcels _____, is contained in the document known as the Finding of Suitability to Transfer, FOST 2011-____ (FOST) dated _____, which is attached hereto and made a part hereof as **Exhibit "D"** and incorporated herein by reference, and the receipt of which is hereby acknowledged by the GRANTEE.

VII. **Representation, Warranty, and Covenant required by 42 U.S.C. § 9620(h)(4)(D)(i) for Parcels _____:** In accordance with the requirements and limitations contained in Title 42 U.S.C. § 9620(h)(4)(D)(i), for Parcels _____, the GOVERNMENT hereby warrants that any response action or corrective action found to be necessary after the date of this transfer shall be conducted by the GOVERNMENT.

VIII. **Reservation of Access as Required by 42 U.S.C. §9620(h)(4)(D)(ii) for Parcels _____:** The GOVERNMENT reserves for itself, United States Environmental Protection Agency (USEPA) and Maine Department of Environmental Protection (MEDEP), their officers, agents, employees, contractors, and subcontractors all reasonable and appropriate rights of access to the PROPERTY for the purpose of monitoring and enforcing these restrictions, provisions and conditions, for the purposes described below, and for such other purposes consistent with any provision of the Federal Facility Agreement (FFA). The right of access described herein shall include the right to conduct tests, investigations, and surveys (including, where necessary, drilling, soil and water sampling, test pitting, boring, soil gas surveys and other similar activities), and to conduct tests or surveys required by the USEPA or MEDEP relating to assessment of environmental conditions on the PROPERTY. Such right shall also include the right to conduct, operate, maintain, or undertake any other response as reasonably necessary (including but not limited to soil removals, monitoring wells, pumping wells, and treatment facilities). Any such entry, and all responses, shall be coordinated in advance by the GOVERNMENT, with such coordination including reasonable notice provided to GRANTEE or its successors and assigns, and shall be performed in a manner which eliminates, or minimizes to the maximum extent possible, (i) any damage to any structures now or hereafter located on the PROPERTY and (ii) any disruption or disturbance of the use and enjoyment of the PROPERTY.

IX. **Reuse Restrictions:** GRANTEE, its successors, and assigns, covenant that FOST Parcels _____ at **Exhibit "D"** cannot be used for residential or other uses that include long-term elder care facilities, child day care, pre-school, child playground or any other similar child occupied facility or activity. Parcels _____ shall not be used for dwellings of any kind, lodgings, campground, community centers, recreational facilities, stables, farms, or vegetable gardens.

X. Covenant and Restriction Concerning the Use of Groundwater: GRANTEE, its successors, and assigns, covenant and agree that no groundwater extraction/production supply wells shall be installed or permitted, and that no access to groundwater for dewatering or other purposes shall be permitted in the PROPERTY without the prior written approval of the Department of the Navy (Navy), United States Environmental Protection Agency (USEPA) and Maine Department of Environmental Protection (MEDEP), as appropriate.

XI. Covenant and Restriction Concerning Soil Disturbance: GRANTEE, its successors, and assigns, covenant and agree that no soil excavation, drilling, digging, or other ground-disturbing activities, including disturbance of building slabs, roads, and other structures and paved areas shall be permitted on FOST Parcels _____ at **Exhibit "D"**, without the prior written approval of the Department of the Navy (Navy), United States Environmental Protection Agency (USEPA) and Maine Department of Environmental Protection (MEDEP), as appropriate. GRANTEE, its successors, and assigns, or their subcontractors, shall stop all work and notify the GOVERNMENT immediately if previously unknown contamination, such as, but without limitation, buried debris, stained soil, unusual odors, is discovered during soil disturbing activity on the PROPERTY

XII. Asbestos Containing Materials Disclosure and Acknowledgment: The GRANTEE, its successors, and assigns, covenant and agree that they will comply with all federal, state and local laws relating to Asbestos Containing Materials (ACM) in their use of the buildings and structures on the PROPERTY (including demolition and disposal of underground utilities [e.g., abandoned steam or fuel pipelines] that may contain ACM wrapping). GOVERNMENT assumes no new or further liability as a result of this transfer than it would otherwise have for losses, judgments, claims, demands or expenses, or damages of whatever nature or kind from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with ACM from buildings, structures, and underground utilities on the PROPERTY. Due to the potential presence of undiscovered ACM associated with underground utilities, any subsurface work performed by the GRANTEE must be conducted in accordance with applicable regulations and conducted by trained, properly-equipped personnel. Buildings are transferred "As-Is" and asbestos hazards in said buildings are the responsibility of the GRANTEE. An Asbestos Containing Materials Hazard Disclosure and Acknowledgement Statement is provided as **EXHIBIT "E"** to this Quitclaim Deed.

XIII. Lead Based Paint Hazard Disclosure and Acknowledgment: The GRANTEE, its successors, and assigns agree that they will comply with all federal, state, and local laws relating to Lead Based Paint (LBP) in their use of the buildings and structures on the PROPERTY (including demolition and disposal of existing improvements). The GOVERNMENT assumes no new or further liability as a result of this transfer than it would otherwise have for losses, judgments, claims, demands, expenses, or damages of whatever nature or kind from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with LBP from buildings or structures on the

PROPERTY. Buildings will be transferred "As-Is" and LBP hazards in said buildings are the responsibility of the GRANTEE. A Lead Based Paint Hazard Disclosure and Acknowledgment Statement is provided as **EXHIBIT "F"** to this Quitclaim Deed.

XIV. Presence of Polychlorinated Biphenyls (PCB's): The GRANTEE, its successors and assigns are hereby warned and do acknowledge that certain portions of the improvements, such as but not limited to fluorescent light fixture ballasts, on the PROPERTY may contain PCBs. Prior to beginning any maintenance, alterations, demolition, restoration, or construction work affecting fluorescent light fixtures, the GRANTEE must determine if PCB ballasts are present. If present, PCB ballasts and/or fixtures must be disposed of in accordance with applicable Federal, State, and local laws and regulations relating to PCB's. The GRANTEE, its successors and assigns, covenant that in their use and occupancy of the PROPERTY they will comply with all applicable Federal, State, and local laws and regulations relating to PCB's. The GRANTEE, its successors and assigns are hereby warned and do acknowledge that buildings constructed or renovated between 1950 and 1978 have the potential to have PCBs contained within caulking, and the PCBs can migrate from the caulk into air, dust and surrounding material, such as wood, bricks and soil. Such materials must be handled, managed and disposed of during maintenance and/or renovations by the GRANTEE in accordance with applicable Federal, State, and local laws and regulations relating to PCB's.

XV. Reservation Regarding Groundwater Monitoring Wells: The GOVERNMENT its successors and assigns reserves for itself an easement for all existing and future groundwater monitoring wells located within the PROPERTY for (a) the periodic sampling of existing groundwater monitoring wells to satisfy the requirements of the Navy Installation Restoration (IR) and Petroleum Programs and (b) the maintenance or abandonment of all existing and future monitoring wells. Existing groundwater monitoring wells are more fully described in the FOST, Figure ____ and Table _____, at **Exhibit "D"**, attached hereto and made a part hereof. The GOVERNMENT its successors and assigns shall further have the right, in common with all others entitled thereto, to pass and repass on streets, roadways, and passageways as may exist and as reasonably necessary to perform periodic sampling and required maintenance of the existing and any future groundwater monitoring wells. The GRANTEE, its successors, and assigns shall be able to use the PROPERTY in any manner that does not relocate or otherwise interfere with the integrity, maintenance or continued usefulness of the monitoring wells, or any part or portion thereof without the prior written consent of the GOVERNMENT. If wells become damaged or otherwise rendered inoperable, they will be replaced by the Navy and the cost will be borne by the GRANTEE or its successors and assigns.

XVI. Covenant and Restriction Regarding Annual Certification: GRANTEE its successors and assigns covenants that it or its designee shall perform inspections of the PROPERTY to ensure that all land use controls, as hereinafter set forth, are being complied with and provide written certification annually to the GOVERNMENT certifying such compliance, for as long as land use controls are required on the PROPERTY. Such annual certifications shall be provided using the form attached hereto as **Exhibit "G"**, or similar form as may later be approved by the GOVERNMENT.

XVII. Covenant for Historic Property: Historic assets exist within the boundaries of the PROPERTY. The GRANTEE, its successors and assigns, hereby covenant that it shall consult with the Maine Historic Preservation Officer prior to any development that may affect sites identified in the Programmatic Agreement between the United States Navy and the Maine Historic Preservation Officer, signed September 27, 2010, marked **Exhibit “H”**, attached hereto and made a part hereof. The following “Covenant Regarding Archeological Matters” and “Covenant Regarding Historic Preservation” are binding on the GRANTEE, its successors and assigns, in perpetuity:

(a) Covenant Regarding Archeological Matters: As more fully described in **Exhibit “H”** attached to this Quitclaim Deed, areas within the PROPERTY have been identified and are referred to within, collectively, as Archeological Sites. GRANTEE, its successors, and its assigns hereby covenant at all times to the Maine State Historic Preservation Officer (“ME SHPO”) to maintain and preserve the Archeological Site as follows:

1. No disturbance of the ground surface or any other thing shall be undertaken or permitted to be undertaken on the Archeological Sites that would affect the physical integrity of the Archeological Site without first obtaining the prior written permission of the ME SHPO (signed by a fully authorized representative thereof). Should the ME SHPO require, as a condition to granting of such permission, that GRANTEE conduct a Phase II survey, archeological data recovery operations or other activities designed to mitigate the adverse effect of the proposed activity on the Archeological Site, GRANTEE shall at its own expense conduct such activities in accordance with the Secretary of the Interior’s Standards and Guidelines for Archeological Documentation (48 FR 447344-37) and such standards and guidelines as ME SHPO may specify (including, but not limited to, standards and guidelines for research design, field work, analysis, preparation and dissemination of reports, disposition of artifacts and other materials, consultation with Native American or other organizations, and re-interment of human remains).
2. GRANTEE shall make every reasonable effort to prohibit any person from vandalizing or otherwise disturbing the Archeological Site and shall promptly report any such disturbance to the ME SHPO.
3. GRANTEE will allow the ME SHPO or his/her designee, upon reasonable advance notice to GRANTEE, an annual inspection of the Archeological Sites in order to ascertain whether GRANTEE is complying with the conditions of this preservation covenant.
4. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, GOVERNMENT, or (upon 60 days prior notice to GOVERNMENT) ME SHPO, may, following reasonable written notice to GRANTEE, institute a suit to enjoin said violation, seek damages, return of any Archeological artifacts removed, require, if appropriate, the restoration of the Archeological Site or to seek any other remedy available at law or equity.

5. The failure by GOVERNMENT or by the ME SHPO to exercise any right or remedy granted under this covenant shall not have the effect of waiving or limiting the exercise by GOVERNMENT or by the ME SHPO of any other right or remedy or the use of such right or remedy at any other time.

6. This covenant shall be binding on GRANTEE, its successors, and its assigns in perpetuity. The restrictions, stipulations, and covenants contained herein shall be inserted by GRANTEE, its successors, and its assigns, verbatim or by express reference in any deed or other legal instrument by which such party divests itself of either the fee simple title or any lesser estate in the archeological site or any part thereof.

7. This covenant shall be a binding servitude upon the real property that includes the Archeological Site and shall be deemed to run with the land. Recording this Quitclaim Deed shall constitute conclusive evidence that GRANTEE its successors and assigns agrees to be bound by the foregoing conditions and restrictions and to perform the obligations herein set forth.

(b) Covenant Regarding Historic Preservation: The PROPERTY has been identified as containing historic structures eligible for listing in the National Register of Historic Places (collectively, "Historic Resources"). GRANTEE, its successors, and assigns, hereby covenant to the ME SHPO to preserve and maintain the Historic Resources in a manner that preserves and maintains the attributes that contribute to the eligibility of the Historic Resources for listing in the National Register of Historic Place. Such attributes include exterior features (including facades and fenestration, scale, color, materials, and mass), interior features determined significant in consultation with the ME SHPO, and views from, to, and across the property.

1. All parcels on which historic resources are situated within the PROPERTY as described in **Exhibit "H"** attached to this Quitclaim Deed, will be preserved and maintained in accordance with The Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (National Park Service). No construction, alteration, rehabilitation, remodeling, demolition, disturbance of the ground surface, or other action shall be undertaken or permitted to be undertaken within the PROPERTY that would materially affect the integrity or the appearance of the attributes described above without prior approval by the ME SHPO and a record of such.

2. To ensure that the long-term preservation of the property's historic significance will be preserved, all parcels on which historic resources are situated within the PROPERTY as identified in **Exhibit "H"**, will be maintained in accordance with The Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (National Park Service). No construction, alteration, rehabilitation, remodeling, demolition, disturbance of the ground surface, or other action that would materially affect the integrity or the appearance of the attributes described above of that

property situated within the PROPERTY shall take place without prior notice to and consultation with the ME SHPO in accordance with paragraphs 2.A through 2.C below. Such notice shall describe in reasonable detail the proposed undertaking and its expected effect on the integrity or appearance of the property situated within the PROPERTY.

A. Within thirty (30) calendar days of the ME SHPO's receipt of notification provided by GRANTEE its successors and assigns pursuant to the foregoing provisions of this paragraph 2, the ME SHPO will respond to GRANTEE in writing as follows:

- (i) that GRANTEE its successors and assigns may proceed with the proposed undertaking without further consultation; or
- (ii) that GRANTEE its successors and assigns must initiate and complete consultation with the ME SHPO before GRANTEE its successors and assigns may proceed with the proposed undertaking.

B. If the ME SHPO fails to respond to GRANTEE's written notice, as described in the above paragraph 2.A, within thirty (30) calendar days of the ME SHPO's receipt of the same, GRANTEE its successors and assigns may proceed with the proposed undertaking without further consultation with the ME SHPO.

C. If the response provided to GRANTEE its successors and assigns by the ME SHPO pursuant to the above paragraph 2.A requires consultation with the ME SHPO, both parties shall so consult in good faith to arrive at mutually agreeable and appropriate measures that GRANTEE its successors and assigns will implement to mitigate any adverse effects associated with the proposed undertaking. If the parties are unable to arrive at such mutually agreeable mitigation measures, GRANTEE its successors and assigns shall, at a minimum, undertake recordation for the concerned property in accordance with the Secretary of Interior standards for recordation and any applicable state standards for recordation, or in accordance with such other standards to which the parties may mutually agree prior to proceeding with the proposed undertaking. Pursuant to this covenant, any mitigation measures to which GRANTEE its successors and assigns and the ME SHPO mutually agree, or any recordation that may be required, shall be carried out solely at the expense of GRANTEE its successors and assigns.

3. Upon acquisition of the PROPERTY, GRANTEE its successors and assigns shall take prompt action to secure the Historic Resources from the elements, vandalism, and arson, and shall undertake any stabilization that may be required to prevent deterioration. GRANTEE will be responsible for this security and stabilization, to the same extent required of GOVERNMENT, at the time of deed transfer. GRANTEE will make every effort to retain or reuse, to the extent practicable, the historic structures.

4. In the event that archeological materials are encountered during construction or ground disturbance activities, work shall cease in the immediate area until the ME

SHPO is consulted and provides written permission to recommence work. Should the ME SHPO require, as a condition of the granting of such permission, that GRANTEE its successors and assigns conduct archeological phase II survey, data recovery operations or other activities designed to mitigate the potential adverse effect of the proposed activity on the archeological site, GRANTEE shall at its own expense conduct such activities in accordance with the Secretary of the Interior's Standards and Guidelines for Archeological Documentation (48 FR 447344-37) and such standards and guidelines as the ME SHPO may specify, including, but not limited to, standards and guidelines for research design, field work, analysis, preparation and dissemination of reports, disposition of artifacts and other materials, consultation with Native American or other organizations, and re-interment of human remains.

5. GRANTEE its successors and assigns will allow the ME SHPO or his/her designee, upon reasonable advance written notice to GRANTEE, to conduct an annual inspection of the Historic Resources in order to ascertain whether GRANTEE is complying with the conditions of this preservation covenant.

6. GRANTEE its successors and assigns will provide the ME SHPO with a written summary of actions taken to implement the provisions of this preservation covenant within one (1) year after the effective date of the transfer of the PROPERTY. Similar reports will be submitted to the ME SHPO biannually thereafter until the Navy has disposed the excess portions of the NAS Brunswick ME properties.

7. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, GOVERNMENT, or (upon 60 days prior notice to GOVERNMENT) ME SHPO, may, following reasonable written notice to GRANTEE its successors and assigns, institute a suit to enjoin said violation, seek damages, require the restoration of the Archeological Site or to seek any other remedy available at law or equity.

8. The failure of GOVERNMENT or the ME SHPO to exercise any right or remedy granted under this covenant shall not have the effect of waiving or limiting the exercise by GOVERNMENT or the ME SHPO of any other right or remedy or the use of such right or remedy at any other time.

9. This covenant is binding on GRANTEE, its successors and assigns in perpetuity. The restrictions, stipulations and covenants contained herein shall be inserted by GRANTEE, its successors and assigns, verbatim or by express reference in any deed or other legal instrument by which it divests himself/herself/itself of either the fee simple title or any lesser estate in the PROPERTY or any part thereof.

General Provisions

XVIII. Conveyance is “As Is – Where Is”: Except as expressly provided in this Quitclaim Deed or as otherwise required by law, the PROPERTY is being conveyed “AS IS” and “WHERE IS,” without representation, warranty, or guaranty as to quality, quantity, character, condition, size, kind, or fitness for a particular purpose.

XIX Covenant regarding FAA Construction: GRANTEE, its successors and assigns covenants that all construction, alterations, or improvements on the PROPERTY, of whatever type or nature, shall, to extent (if any) required by law, fulfill the requirements of the Federal Aviation Administration for compliance with the regulations set forth in 14 CFR Part 77, entitled “Objects Affecting Navigable Airspace”, and issued under the authority of the Federal Aviation Act of 1958, as amended.

XX. Covenant regarding Non-Discrimination: GRANTEE, its successors, and assigns and every successor in interest to the PROPERTY, or any part thereof, covenants that GRANTEE and such heirs, successors, and assigns shall not discriminate upon the basis of race, color, religion, disability, or national origin in the use, occupancy, sale, or lease of the PROPERTY, or in their employment practices conducted thereon. This covenant shall not apply however, to the lease or rental of a room or rooms within a family dwelling unit, nor shall it apply with respect to PROPERTY used primarily for religious purposes. The United States of America shall be deemed a beneficiary of this covenant without regard to whether it remains the owner of any land or interest therein in the locality of the PROPERTY hereby conveyed and shall have the sole right to enforce this covenant in any court of competent jurisdiction.

XXI. General Notice Provision:

To facilitate such future cooperation, the following points of contact have been designated by the GOVERNMENT, Secretary, GRANTEE and EPA:

GOVERNMENT: Director
Navy BRAC Program Management Office Northeast
4911 South Broad Street
Philadelphia, PA 19112-1303

GRANTEE: Executive Director
Midcoast Regional Redevelopment Authority
4 Admiral Fitch Avenue
Brunswick, ME 04011

USEPA: U.S. Environmental Protection Agency
Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

XXII. In the event of a conflict between the terms and provisions of this Quitclaim Deed and the terms and provisions of the Finding of Suitability to Transfer (**Exhibit "D"**) herein, the terms and provisions of this Quitclaim Deed shall control.

IN WITNESS WHEREOF, the GRANTEE has hereunto executed and accepted this Quitclaim Deed and agrees for itself, its successors and assigns, to be bound by all of the terms and provisions of this Quitclaim Deed, on the day and year first written above.

MIDCOAST REGIONAL
REDEVELOPMENT AUTHORITY

By: _____
Steven H. Levesque
Executive Director

WITNESS:

Signature

Name

ACKNOWLEDGEMENT:

STATE OF MAINE)
) SS:
COUNTY OF CUMBERLAND)

I, the undersigned a Notary Public for the State of Maine, do hereby certify that this day personally appeared before me in the State and county aforesaid, Steven H. Levesque, for and on behalf of the MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY, whose name is signed to the foregoing document and acknowledged the same to be his free act in deed in such official capacity.

Given under my hand and seal this _____ day of September, 2011

Notary Public

(Seal)

EXHIBIT F

FORM OF GRANT OF EASEMENT TO
AFFORDABLE MID COAST HOUSING, LLC

EXHIBIT F

All correspondence in connection with
this contract should include reference
to N47692-11-RP-11P _____

GRANT OF EASEMENT

THIS INDENTURE, made the _____ day of _____, 2011
between the United States of America, hereinafter called the "Government", acting through the
Department of the Navy, and Affordable Mid Coast Housing, LLC, hereinafter called the
"Grantee".

WHEREAS, the Government owns that certain real property situated at the Naval Air
Station Brunswick, Maine (the "Station"): and

WHEREAS, in accordance with Second Amended, Restated and Bifurcated Brunswick
Real Estate Ground Lease and Conveyance of Facilities by and between the United States of
America, Department of the Navy, as lessor, and Affordable Mid Coast Housing, LLC, dated
_____ (the "Lease"), the Grantee has the right of access to and use of the streets, roads,
and easements and all electric, telephone, gas, water and sewer and other facilities, and
infrastructure, referred to as the "Appurtenances", but hereinafter referred to as the "Utility
Distribution System" now or in the future appurtenant to, serving or benefiting the Grantee's
Housing Units, which are located on a portion of the Station (the "Leased Land"); and

WHEREAS, the Lease provides that in the event the Government conveys, transfers,
and/or assigns any portion of the Station, the Government shall grant to Affordable Mid Coast
Housing, LLC an easement for continuing access to the Utility Distribution System or access to
any utility systems constructed after the date of the Lease (the "New Utility System"), subject to
certain conditions contained therein; and

WHEREAS, the Grantee has requested an easement for the construction, installation,
operation, maintenance, repair, and replacement of gas distribution, water distribution and sewer
service, and electric power and communication facilities, on that portion of the Station
hereinafter described; and

WHEREAS, the Secretary of the Navy has found that the grant of such easement on the
terms and conditions hereinafter stated is not incompatible with the public interest and interest of
national defense and is advantageous to the United States of America; and

WHEREAS, 10 U.S.C. 2668 authorizes the Government to grant an easement in, on, or
over real property of the Government; and

NOW THEREFORE, this indenture witnesseth that, in consideration of One Dollar,
hereby acknowledged, and subject to the terms and conditions set forth below, the Government
hereby grants to the Grantee, its successors and assigns, for a period of time commencing on
_____ until either October 31, 2054 or the earlier termination of the Lease,
whichever occurs first, an easement for the construction, installation, operation, maintenance,
repair and replacement of new or existing electric, telephone, gas, water, and sewer and other

utility facilities and infrastructure (the "Utility Distribution System"), such easement being on, over and across a portion of the Station described and more fully shown on that Utility Site Plan Drawing No. _____, dated _____, a copy of which is attached hereto and made a part hereof marked "**Exhibit A**" (the "Easement Area"), together with the right of ingress and egress to and from the Easement Area.

THIS EASEMENT is granted subject to the following terms and conditions:

1. Grantee shall indemnify, defend, and save Government, its successors and assigns, harmless and shall pay all costs, expenses, and reasonable attorney's fees for all trial and appellate levels and post judgment proceedings in connection with any fines, suits, actions, damages, liability, and causes of action of every nature whatsoever arising or growing out of, or in any manner connected with, the occupation or use of the Easement Area by Grantee, its employees, agents, servants, guests, invitees, and contractors, including but not limited to, any fines, claims, demands, and causes of actions of every nature whatsoever which may be made upon, sustained, or incurred by Government, its successors and assigns, by reason of any breach, violation, omission, or non-performance of any term, covenant, or condition hereof on the part of Grantee or the employees, agents, servants, guests, or invitees of Grantee. This indemnification also applies to claims arising out of the furnishing of any utilities or services by the Government, its successors and assigns, or any interruption therein or failure thereof, whether or not the same shall be occasioned by the negligence or lack of diligence of Grantee, its officers, agents, servants or employees. However, this indemnity shall not extend to damages due to the fault or negligence of the Government, its successors and assigns, or its contractors. This covenant shall survive the termination of this Easement.

2. All work in connection with the construction, installation, operation, maintenance repair, and replacement of the Utility Distribution System within the Easement Area shall be performed by the Grantee without cost or expense to the Government, its successors and assigns, and such work shall be consistent with the standards of the Government, its successors and assigns.

3. The Grantee shall maintain the Easement Area in good condition at all times and shall promptly make all repairs thereto that may necessary for the preservation of the condition of the Easement Area and the continued operation and maintenance of the Easement Area.

4. This Easement shall be limited to the specific location of the Utility Distribution System located on such portion of the Station that exclusively serves the Grantee's Housing Units, and any such Utility Distribution System that unreasonably interferes with the use of the Station by the Government, its successors and assigns, will be abandoned or may be relocated to a mutually agreed upon location as not to unreasonably interfere with the use of such portion of the Station by the Government, its successors and assigns, by the Grantee at Grantee's expense in order to continue use of such Utility Distribution System;

This Easement shall be limited to the specific location of the Utility Distribution System located on such portion of the Station that exclusively serves the Grantee's Housing Units, and any such New Utility Systems that will unreasonably interfere with the use of such portion of the Station

by the Government, its successors and assigns, will be relocated to a mutually agreed upon location as not to unreasonably interfere with the use of such portion of the Station by the Government, its successors and assigns, by Grantee at Grantee's expense in order to use such New Utility Systems.

5. The Grantee's rights hereunder shall be subject to such reasonable rules and regulations as may be prescribed by the Government, its successors and assigns, to assure that the exercise of such rights will not interfere with Government, its successors and assigns, activities at the Station.

6. The Government, its successors and assigns shall not be obligated to maintain the operation or functionality of the Utility Distribution System;

7. The Government, its successors and assigns, shall not be obligated to provide any Utility Service through the Utility Distribution System;

8. Grantee shall obtain the provision of the utility service directly from the applicable utility provider;

9. The Government, its successors and assigns, shall not be obligated to process any utility payment or any other payment for the provision of utility service to Grantee;

10. The Government, its successors and assigns, reserves the right to close a particular utility line if needed to protect its land and improvements (the "Government property") provided however, that reasonable notice shall be provided to the Grantee prior to such closure to the extent that providing such notice will not exacerbate the condition causing damage to the Government property or further damage, cause harm to, or otherwise threaten the protection of human health or the environment, or Government property.

11. This easement shall terminate upon either October 31, 2054 or the earlier termination of the Lease executed between the Government and Affordable Midcoast Housing, LLC dated _____, whichever occurs first.

12. Upon the termination of this Easement, the Grantee, at its expense, shall remove, to the extent requested by the Government, its successors and assigns, improvements installed or constructed hereunder, and shall restore the Easement Area to the same or as good a condition as that which existed prior to the exercise by the Grantee of its rights hereunder. Such restoration shall be done in a manner satisfactory to the Government, its successors and assigns.

13. If at any future time, the Government, its successors and assigns, determines that the easement unduly interferes with any of its activities, it shall have the right to terminate this Easement, in whole or in part, to the extent necessary to eliminate such interference; PROVIDED THAT, unless the Government, its successors and assigns, shall have determined that relocation is not feasible, it shall convey to the Grantee, without charge, a substitute easement permitting the Grantee to relocate the Utility Distribution System, or portion thereof,

on adjacent Station land at the Grantee's cost and expense. The substitute easement shall contain the same terms and conditions of those of this Easement.

14. This Easement may be terminated upon failure by the Grantee to comply with any of its terms and conditions, upon abandonment of the rights granted herein, or upon non-use of such rights for a period of two consecutive years. Should the Government, its successors and assigns, choose to terminate this Easement prior to expiration of the term, the Grantee shall be provided sufficient time to vacate the Easement Area.

15. The Government, its successors and assigns, may use the Easement Area of this Easement for any purposes that do not unreasonably interfere with the use and enjoyment by the Grantee of the rights granted by this Easement.

16. The Grantee must comply with the following provisions as set forth to ensure the protection and well being of the Easement Area:

(a) Grantee shall comply with the applicable Federal, state, and local laws, regulations, and standards that are or may become applicable to its activities on the Easement Area.

(b) The Main Base Parcel as described in Exhibit "A" is subject to Naval Air Station Brunswick Federal Facilities Agreement (FFA), dated 19 October 1990, as amended, which is incorporated herein by reference and made a part hereof as if set out in length. Grantee agrees that should any conflict arise between the terms of such agreement as it presently exists or may be amended ("FFA," "Interagency Agreement" or "IAG") and the provisions of this Easement, the terms of the FFA or IAG will take precedence. Grantee further agrees that notwithstanding any other provision herein, Government, its successors and assigns, assumes no liability to Grantee should implementation of the FFA interfere with Grantee's use of the Easement Area. GRANTEE shall have no claim on account of any such interference against the Government, its successors and assigns.

(c) Historic assets exist within the boundaries of the Naval Air Station Brunswick. The Grantee shall consult with the Maine Historic Preservation Officer prior to any work that may affect sites identified in the Programmatic Agreement between the United States Navy and the Maine Historic Preservation Officer, signed September 27, 2010, marked **Exhibit "C"**, attached hereto and made a part hereof. The "Covenant Regarding Archeological Matters" and "Covenant Regarding Historic Preservation" contained therein are binding on the GRANTEE.

(d) Grantee shall be solely responsible for obtaining at its cost and expense any environmental permits required for its operations under this Easement, independent of any existing permits. Copies of all required operation permits shall be provided to the Government, its successors and assigns.

(e) Grantee shall indemnify and hold harmless Government, its successors and assigns, from any costs, expenses, liabilities, fines, or penalties resulting from discharges, emissions, spills, storage, disposal, arising from Grantee's occupancy, use or operations, or any other action by Grantee giving rise to Government liability, civil or criminal, or responsibility under Federal,

EXHIBIT G
FORM OF BILL OF SALE - UTILITIES

EXHIBIT "G"

**FORM OF BILL OF SALE
UTILITY DISTRIBUTION SYSTEM AND COMPONENTS
LOCATED ON PROPERTY CONVEYED TO
MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY**

THIS BILL OF SALE is made as of this ____ day of _____, 2011 by the UNITED STATES OF AMERICA, acting by and through the DEPARTMENT OF THE NAVY, BRAC Program Management Office Northeast, hereinafter referred to as the "Government," with an address of 4911 South Broad Street, Philadelphia, Pennsylvania 19112.

KNOW ALL PERSONS BY THESE PRESENTS, that the Government, in accordance with its authority under Section 2903 of the National Defense Authorization Act for Fiscal Year 1994 (P.L. 103-160) and the implementing regulations of the Department of Defense, 32 C.F.R. Part 174, and acting in accordance with Section ___ of that certain Agreement for the Purchase of Real Property Between the Government and the Midcoast Regional Redevelopment Authority ("MRRA") dated as of _____, and for good and valuable consideration, and intending to be legally bound does hereby sell, assign, transfer, and set over unto the MRRA, its successors and assigns, forever any and all right, title and interest in and to the Utility Facilities and Utility Structures (as such terms are defined in **Exhibit A**) to the extent such Utility Systems are owned by the Government and located on or used in connection with the real property described in **Exhibit B** (the "Conveyed Utilities") attached hereto and made a part hereof. The Utility Systems comprised of the underground components of the water distribution, waste water collection and electrical distribution systems and the aboveground lines, poles and transformers of the electrical system, are depicted on the drawings marked **Exhibit C** attached hereto and made a part hereof.

The Conveyed Utilities are hereby sold, assigned, transferred, remised and released "AS IS, WHERE IS AND WITH ALL FAULTS" and without representation, warranty, or guaranty as to quality, character, condition, size, kind or fitness for a particular purpose. The GOVERNMENT assumes no responsibility, nor shall be responsible for any liability, action, or claim that may result from the condition, use or ownership of the Conveyed Utilities.

TO HAVE AND TO HOLD the same to MRRA, its successors, and its assigns, forever.

Exhibit A

TERMS

For purposes of this Bill of Sale, the following terms shall have the meanings noted below

Utilities (or, when singular, Utility):

- NASB Main Base: Electricity, potable water, sanitary sewer system, storm drainage system, storm sewer system, and telecommunications.
- Topsham Annex: Potable water, sanitary sewer system, storm drainage system, and storm sewer system.
- McKeen Street Housing Area: Potable water, sanitary sewer system, storm drainage system, and storm sewer system.

Utility Facilities (or, when singular, Utility Facility): Subsurface or elevated pipes, poles, lines, service connections, conduits, tanks, feeders, wire, fixtures, ducts, manholes, handholes, cables and similar equipment, facilities, and devices now or hereafter used for supplying, distributing or storing any Utility.

Utility Structures (or, when singular, Utility Structure): Any subsurface containment vessel, reservoir, vault, or similar improvement, used or intended to be used for the containment, conduction, distribution, assembly, location or relocation of any Utility Facility.

Exhibit B

LEGAL DESCRIPTION OF REAL PROPERTY UPON WHICH THE CONVEYED UTILITIES ARE LOCATED

Survey of Naval Air Station Brunswick

A certain lot or parcel of land known as Naval Air Station, Brunswick situated southerly of and adjacent to Bath Road (also known as Route 24) in the Town of Brunswick, County of Cumberland, State of Maine, as shown on a boundary survey of Naval Air Station, Brunswick Sheets 1 through 11, for BRAC Program Management Office, by Sebago Technics, Inc., dated August 2008 and last revised December 4, 2008, with reference to project number 08118, said parcel being more particularly bounded and described as follows:

Beginning at a 6-inch by 6-inch granite monument seven inches above grade stamped "VC" found in the southerly side line of Bath Road, being located S 80°- 10'- 16" E, 1136.11 feet from a concrete retaining wall at the easterly side of St. John's Cemetery;

Thence S 79°- 40'- 01" E, by and along the southerly side of Bath Road, a distance of 1245.84 feet to a 5/8-inch "STI PLS 2080" capped rebar;

Thence S 79°- 37'- 23" E, continuing along the southerly side of Bath Road, a distance of 567.77 feet to a 5/8-inch "STI PLS 2080" capped rebar;

Thence S 10°- 22'- 37" W, continuing along the southerly side of Bath Road, a distance of 6.00 feet to a 5/8-inch "STI PLS 2080" capped rebar at the beginning of a non-tangent curve;

Thence continuing by the southerly side of Bath Road along a curve to the left with a radius of 9588.29 feet, a length of 1271.97 feet, having a chord of S 83°- 25'- 28" E, 1271.04 feet to a 5/8-inch "STI PLS 2080" capped rebar;

Thence S 02°- 46'- 31" W, continuing along the southerly side of Bath Road, a distance of 10.00 feet to a 5/8-inch "STI PLS 2080" capped rebar at a non-tangent curve;

Thence continuing by the southerly side of Bath Road along a curve to the left with a radius of 9598.29 feet, a length of 250.98 feet, having a chord of S 87°- 58'- 26" E, 250.97 feet to a 5/8-inch "STI PLS 2080" capped rebar;

Thence N 01°- 16'- 37" E, continuing along the southerly side of Bath Road, a distance of 10.00 feet to a 5/8-inch "STI PLS 2080" capped rebar;

Thence S 88°- 21'- 00" E, continuing along the southerly side of Bath Road, a distance of 840.00 feet to a 5/8-inch rebar;

Thence N 80°- 54'- 34" E, continuing along the southerly side of Bath Road, a distance of 900.26 feet to a 5/8-inch "STI PLS 2080" capped rebar;

Thence N 81°- 02'- 40" E, continuing along the southerly side of Bath Road, a distance of 322.36 feet;

Thence N 83°- 28'- 28" E, continuing along the southerly side of Bath Road, a distance of 50.05 feet to a 5/8-inch "STI PLS 2080" capped rebar;

Thence N 80°- 54'- 34" E, continuing along the southerly side of Bath Road, a distance of 433.92 feet to the westerly corner of land now or formerly of Developers Diversified Cooks Corner LP as described in deeds recorded in Book 13256, Page 155, Book 13256, Page 134, and Book 13877, Page 145;

Thence S 08°- 23'- 45" E, by and along land of said Developers Diversified Cooks Corner LP, a distance of 664.95 feet to an 8-inch by 8-inch concrete monument with a brass plug;

Thence S 55°- 31'- 45" E, by and along land of said Developers Diversified Cooks Corner LP, a distance of 549.61 feet to an 8-inch by 8-inch concrete monument with a brass plug;

Thence S 56°- 10'- 50" E, by and along land of said Developers Diversified Cooks Corner LP, a distance of 857.00 feet to a 5-inch by 5-inch granite monument with drill hole;

Thence N 78°- 31'- 40" E, by and along land of said Developers Diversified Cooks Corner LP, a distance of 212.10 feet to a point, 1.7 feet northwesterly of a 4-inch by 4-inch granite monument with drill hole on the westerly side of Gurnet Road (also known as Route 24), at the beginning of a non-tangent curve;

Thence by the westerly side of Gurnet Road along a curve to the left with a radius of 3294.77 feet, a length of 712.05 feet, having a chord of S 32°- 58'- 39" E, 710.67 feet to a point of tangency;

Thence S 39°- 10'- 08" E, by and along the westerly side of Gurnet Road, a distance of 1209.60 feet to a point, 0.3 feet northeasterly of a ¾-inch iron pipe with an aluminum cap stamped "S.F. Beal Jr. RLS 257" at the northerly corner of the Amended Subdivision Plan, Wildwood as recorded in Plan Book 191, Page 29;

Thence S 29°- 52'- 58" W, by and along the westerly side of said Amended Wildwood Subdivision Plan, passing the above referenced ¾-inch iron pipe, passing through a ½-inch capped rebar with stamp "Brian Smith RLS 1175" at the southwesterly corner of Lot 6, and a ½-inch capped rebar with stamp "Brian Smith RLS 1175" at the southwesterly corner of Lot 12, a total distance of 1849.04 feet to a ½-inch capped rebar with stamp "Brian Smith RLS 1175" at the southwesterly corner of Lot 15;

Thence in accordance with an unrecorded deed provided by the U.S. Navy, S 75°- 29'- 12" E, by and along Lot 15, a distance of 28.20 feet to land now or formerly of the Town of Brunswick as described in a deed recorded in Book 8389, Page 100;

Thence S 28°- 56'- 54" W, by and along land of said Town of Brunswick, land now or formerly of Dwight C. Holbrook as described in a deed recorded in Book 3134, Page 183, land now or formerly of Donald and Phyllis Barrett, Trustees as described in a deed recorded in Book 21953, Page 9, land now or formerly of Evelyn G. Coffin as described in a deed recorded in Book 11713, Page 115, land now or formerly of Suzanne E. Safford as described in a deed recorded in Book 23635, Page 288, and land now or formerly of William M. Smith, Jr. and Pamela J. Smith as described in a deed recorded in Book 19846, Page 148, a total distance of 3977.28 feet to a point, 0.9 feet westerly of a 5/8-inch rebar with aluminum cap stamped "David B. Chittim, LS 1199" at the northerly sideline of Old Gurnet Road;

Thence N 54°- 39'- 06" W, by and along the northerly side of the former Old Gurnet Road, a distance of 812.76 feet to the southerly corner of the New Meadows Cemetery;

Thence N 31°- 40'- 54" E, by and along the southeasterly side of the New Meadows Cemetery, a distance of 222.50 feet to its easterly corner;

Thence N 56°- 31'- 06" W, by and along the northeasterly side of the New Meadows Cemetery, a distance of 100.00 feet;

Thence N 57°- 57'- 06" W, continuing along the northeasterly side of the New Meadows Cemetery, a distance of 277.20 feet to its northerly corner;

Thence S 30°- 22'- 54" W, by and along the northwesterly side of the New Meadows Cemetery, a distance of 205.10 feet to its westerly corner and the northerly side of the former Old Gurnet Road;

Thence S 28°- 44'- 54" W, across the public right-of-way of the former Old Gurnet Road, a distance of 49.50 feet to the southerly side of the former Old Gurnet Road;

Thence S 61°- 15'- 06" E, by and along the southerly side of the former Old Gurnet Road, a distance of 10.19 feet;

Thence S 54°- 39'- 06" E, continuing along the southerly side of the former Old Gurnet Road, a distance of 973.25 feet to Little Mere Brook where it intersects with the northerly corner of land now or formerly of Wilbur and Estelle Purinton, Trustees as described in a deed recorded in Book 14171, Page 194;

Thence in a general southerly, southwesterly direction by and along Little Mere Brook approximately 900 feet;

Thence S 55°- 30'- 19" E, by and along land of said Wilbur and Estelle Purinton, Trustees, approximately 32 feet to a 4-inch by 4-inch granite monument, said monument having a tie-line of S 42°- 14'- 04" W, a distance of 685.87 feet from the northerly corner of said Wilbur and Estelle Purinton, Trustees as previously referenced;

Thence S 55°- 30'- 19" E, by and along land of said Wilbur and Estelle Purinton, Trustees, a distance of 116.70 feet to a ¾-inch iron pipe at the northerly corner of land now or formerly of Robert and Charlene Berg, Trustees, as described in a deed recorded in Book 12717, Page 85;

Thence S 17°- 10'- 30" W, by and along land of said Robert and Charlene Berg, Trustees, a distance of 483.41 feet to a 4-inch by 4-inch granite monument at the easterly corner of Getchel Cemetery;

Thence N 42°- 11'- 49" W, by and along the northeasterly side of Getchel Cemetery, a distance of 131.93 feet;

Thence S 63°- 01'- 54" W, by and along the northwesterly side of Getchel Cemetery, a distance of 79.87 feet;

Thence S 42°- 21'- 41" E, by and along the southwesterly side of Getchel Cemetery, a distance of 139.50 feet to a 4-inch by 4-inch granite monument at the southerly corner of Getchel Cemetery and the northwesterly side of said Robert and Charlene Berg, Trustees;

Thence S 42°- 10'- 31" W, by and along the northwesterly side of Robert and Charlene Berg, Trustees, a distance of 157.70 feet;

Thence S 55°- 32'- 40" E, by and along the southwesterly side of Robert and Charlene Berg, Trustees, a distance of 386.45 feet to the northerly corner of land now or formerly of Charles and Judith Ferguson as described in a deed recorded in Book 4930, Page 177;

Thence S 30°- 28'- 09" W, by and along the northwesterly side of Charles and Judith Ferguson, a distance of 484.62 feet;

Thence S 34°- 50'- 13" W, by and along the northwesterly side of Charles and Judith Ferguson, a distance of 351.53 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317";

Thence S 56°- 49'- 47" E, by and along the southwesterly side of Charles and Judith Ferguson, a distance of 211.68 feet to the centerline of the Old Town Road, also the northerly sideline of Old Gurnet Road;

Thence S 30°- 26'- 35" W, crossing the relocated Old Gurnet Road, a distance of 119.00 feet to a point, 0.4 feet northerly of a 4-inch by 4-inch granite monument;

Thence S 59°- 33'- 25" E, by and along the southerly side of the relocated Old Gurnet Road, a distance of 618.50 feet to a 6-inch by 6-inch granite monument stamped with an "H" and a drill hole at a point of curvature;

Thence by the southerly side of the relocated Old Gurnet Road, along a curve to the left with a radius of 5769.58 feet, a length of 218.18 feet, having a chord of S 60°- 38'- 25" E, 218.17 feet to a point of tangency;

Thence S 61°- 43'- 25" E, by and along the southerly side of the relocated Old Gurnet Road, a distance of 354.00 feet to a point of curvature;

Thence by the southerly side of the relocated Old Gurnet Road, along a curve to the right with a radius of 5689.58 feet, a length of 161.46 feet, having a chord of S 60°- 54'- 38" E, 161.46 feet to the apparent westerly side of Princes Point Road;

Thence N 01°- 22'- 53" W, by and along the apparent westerly side of Princes Point Road, a distance of 32.65 feet to the southerly side of Old Gurnet Road at its intersection with Coombs Road;

Thence S 56°- 48'- 25" E, by and along the southerly side of Old Gurnet Road, a distance of 389.69 feet;

Thence S 55°- 15'- 07" E, by and along the southerly side of Old Gurnet Road, a distance of 552.39 feet to the northerly corner of land now or formerly of Richard A. Coffin as described in a deed recorded in Book 3983, Page 251;

Thence S 07°- 28'- 40" W, by and along the westerly side of land of said Richard A. Coffin, a distance of 302.74 feet;

Thence S 18°- 57'- 50" W, continuing along the westerly side of land of said Richard A. Coffin passing a 3/4-inch rod at the base of a 30-inch pine tree, a distance of 270.01 feet;

Thence S 55°- 31'- 30" E, by and along the southerly side of land of said Richard A. Coffin, a distance of 767.70 feet to a point, 4.6 feet southerly of a 4-inch by 4-inch granite monument with drill hole;

Thence continuing S 55°- 31'- 30" E, by and along the southerly side of land of said Richard A. Coffin, a distance of approximately 103 feet to the high water line of Buttermilk Cove, also known as Duck Cove;

Thence in a general southerly, westerly, easterly and southerly direction along the high water line approximately 3,200 feet to the northerly side of Princes Point Road;

Thence S 69°- 58'- 04" W, by and along the northerly side of Princes Point Road, a distance of approximately 51.00 feet to the easterly extension of the southerly meander of Old Buttermilk Roadbed near a 5/8-inch iron bar in ledge outcrop located 0.8 feet easterly of the easterly corner of land now or formerly of Paul A. and Doris B. Brilliant as described in a deed recorded in Book 3201, Page 783, said intersection of Old Buttermilk Roadbed and Princes Point Road, being located S 04°- 32'- 26" W, 2645.95 feet along a tie-line, from the last referenced granite monument;

Thence N 83°- 37'- 17" W, by and along the northerly side of Paul A. and Doris B. Brillant, also being the southerly meander of Old Buttermilk Roadbed a distance of 115.68 feet;

Thence S 71°- 17'- 43" W, continuing along the northerly side of Paul A. and Doris B. Brillant and the southerly meander of Old Buttermilk Roadbed, a distance of 141.17 feet to a 1-inch iron pipe;

Thence N 71°- 51'- 17" W, continuing along the northerly side of Paul A. and Doris B. Brillant and the southerly meander of Old Buttermilk Roadbed, a distance of 233.05 feet to a 4-inch by 4-inch granite monument with drill hole on southerly side of said Roadbed;

Thence S 35°- 17'- 03" W, by and along the westerly side of Paul A. and Doris B. Brillant and the westerly side of Princes Point Road, a distance of 1472.51 feet;

Thence S 60°- 02'- 00" W, by and along the westerly side of Princes Point Road and the northerly side of land now or formerly of John and Christine Carrington as described in a deed recorded in Book 10339, Page 332, a distance of 790.95 feet;

Thence S 16°- 27'- 43" W, by and along the westerly side of John and Christine Carrington, a distance of 216.83 feet to a point, 0.8 feet northwesterly of a 5/8-inch rebar;

Thence S 51°- 15'- 04" W, by and along the northerly side of Princes Point Road, a distance of 137.00 feet to a 6-inch by 6-inch granite monument with and "H" and drill hole, at a point of curvature;

Thence by the northerly side of Princes Point Road along a curve to the left with a radius of 605.96 feet, a length of 73.57 feet, having a chord of S 47°- 46'- 23" W, 73.52 feet;

Thence N 70°- 24'- 58" W, by and along land now or formerly of the heirs of Chard, a distance of 10.99 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317", in the easterly side of the former Princes Point Road;

Thence N 17°- 23'- 58" E, by and along the former location of Princes Point Road, a distance of 262.24 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317";

Thence S 60°- 02'- 00" W, across the former location of Princes Point Road, a distance of 36.54 feet;

Thence S 63°- 23'- 10" W, across the former location of Princes Point Road and land now or formerly owned by Thomas Ericson as described in a deed recorded in Book 22982, Page 217, a distance of 928.12 feet to the northerly corner of land now or formerly of Thomas and Deana Farrell as described in a deed recorded in Book 9599, Page 279;

Thence S 86°- 56'- 20" W, by and along land of said Thomas and Deana Farrell and land now or formerly of Dana and Odile Mayo as described in a deed recorded in Book 3592, Page 24, a distance of 1351.85 feet to a point, 1.2 feet northwesterly of a 4-inch by 4-inch granite monument;

Thence N 53°- 09'- 20" W, by and along land of said Dana and Odile Mayo, crossing Harpswell Cove, and by and along land now or formerly of Bruce and Joan Kidman, as described in a deed recorded in Book 16497, Page 337, and by and along land now or formerly of Jeffrey and Karleen Smat as described in a deed recorded in Book 12479, Page 262, a total distance of 2124.94 feet to a 4-inch by 4-inch granite monument;

Thence N 12°- 19'- 50" W, by and along land of said Jeffrey and Karleen Smat, land now or formerly of Ellen H. Mulvaney, Trustee as described in a deed recorded in Book 20305, Page 61, land now or formerly of Edward J. Maillet, III and Kelly A. Maillet as

described in a deed recorded in Book 17708, Page 52, land now or formerly of Jon Johnson as described in a deed recorded in Book 21518, Page 340, and land now or formerly of Raymond and Cynthia Rusakovich as described in a deed recorded in Book 22331, Page 282, a total distance of 2209.40 feet to a point in the center of Merriconeag Road roadbed, 7.4 feet northwesterly of a 5/8-inch rebar;

Thence N 69°- 16'- 50" W, by and along land of Kenneth H. and Jennifer L. Hatridge as described in a deed recorded in Book 22046, Page 284 and land now or formerly of Elizabeth Fleming as described in a deed recorded in Book 23546, Page 210, a distance of 869.64 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317", at the southeasterly corner of land now or formerly of Dion B. Linkel as described in a deed recorded in Book 4552, Page 185;

Thence N 23°- 12'- 50" W, by and along land of said Dion B. Linkel, a distance of 509.48 feet to a point, 5.00 feet easterly of a 5/8-inch rebar with aluminum cap stamped "Harty and Harty PLS 2089";

Thence N 11°- 32'- 50" W, by and along land now or formerly of Chrispian Nimmo-Williams as described in a deed recorded in Book 23974, Page 43, and land now or formerly of Heirs of Florence E. Dyer as described in a deed recorded in Book 2263, Page 50, a distance of 671.64 feet;

Thence N 16°- 04'- 50" W, by and along land of said Florence E. Dyer Heirs, land now or formerly Sylvia J. Dyer as described in a deed recorded in Book 16485, Page 35 a distance of 326.74 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317";

Thence S 83°- 58'- 10" W, by and along the northerly side of said Sylvia J. Dyer, a distance of 794.95 feet to a point, 17.1 feet northwesterly of a 5/8-inch rebar below grade on the easterly side of Harpswell Road, also known as Route 123;

Thence N 21°- 05'- 56" W, by and along the easterly side of Harpswell Road, a distance of 94.80 feet;

Thence N 28°- 24'- 56" W, continuing along the easterly side of Harpswell Road, a distance of 791.53 feet to a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 27°- 05'- 56" W, continuing along the easterly side of Harpswell Road, a distance of 269.78 feet to a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 24°- 08'- 56" W, continuing along the easterly side of Harpswell Road, a distance of 465.19 feet to a 5/8-inch rebar;

Thence N 18°- 53'- 56" W, continuing along the easterly side of Harpswell Road, a distance of 350.98 feet to a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 07°- 58'- 56" W, continuing along the easterly side of Harpswell Road, a distance of 193.61 feet to a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 01°- 19'- 04" E, continuing along the easterly side of Harpswell Road, a distance of 294.08 feet;

Thence N 10°- 23'- 04" E, continuing along the easterly side of Harpswell Road, a distance of 196.53 feet to a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 14°- 32'- 04" E, continuing along the easterly side of Harpswell Road, a distance of 607.03 feet to a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 14°- 48'- 04" E, continuing along the easterly side of Harpswell Road, a distance of 210.65 feet to a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 10°- 49'- 04" E, continuing along the easterly side of Harpswell Road, a distance of 285.15 feet to a point, 8.00 feet northeasterly of a 5/8-inch rebar with cap "STI PLS 2080";

Thence N 03°- 11'- 14" W, continuing along the easterly side of Harpswell Road, a distance of 192.21 feet to a 5/8-inch rebar below grade;

Thence N 10°- 30'- 29" W, continuing along the easterly side of Harpswell Road, a distance of 101.72 feet;

Thence N 14°- 17'- 27" W, continuing along the easterly side of Harpswell Road, a distance of 2280.78 feet to a 5/8-inch rebar at the southerly corner of land now or formerly of Gary and Cynthia Farveau as described in a deed recorded in Book 3744, Page 3;

Thence N 36°- 17'- 33" E, by and along the southeasterly side of Gary and Cynthia Farveau, a distance of 517.83 feet to a 9-inch by 9-inch Brunswick Town Common Corner with drill hole on top and the letter "D" engraved on its westerly side;

Thence N 29°- 19'- 28" E, continuing along the southeasterly side of Gary and Cynthia Farveau, and other land of said Gary and Cynthia Farveau as described in a deed recorded in Book 8910, Page 245, and land now or formerly of Gary Farveau and Scott Farveau as described in a deed recorded in Book 22736, Page 258, a total of a distance of 799.84 feet to a point, 0.4 feet southeasterly of a 4-inch by 4-inch granite monument with a drill hole;

Thence N 29°- 19'- 28" E, continuing along land of said Gary Farveau and Scott Farveau, a distance of approximately 335 feet to Mere Brook;

Thence generally westerly, northwesterly, and northerly direction by and along Mere Brook, an approximate distance of 1500 feet to the southeasterly corner of land now or formerly of Raymond and Faye St.Pierre as described in a deed recorded in Book 19476, Page 31;

Thence N 32°- 29'- 48" E, by and along land now or formerly of Robert Coffin II as described in a deed recorded in Book 12418, Page 271, a distance of approximately 165 feet to a 4-inch by 4-inch granite monument with a drill hole on top, said monument being located N 41°- 37' -54" W, a distance of 1370.30 feet on a tie-line from the last called granite monument;

Thence N 32°- 29'- 48" E, by and along land of said Robert Coffin II, and land now or formerly of Delia Writt and Glen Austin, Jr. as described in a deed recorded in Book 9177, Page 40, land now or formerly of June Austin as described in a deed recorded in Book 12824, Page 75, and land now or formerly of Anita Cady as described in a deed recorded in Book 10437, Page 176, a total distance of 397.21 feet to a point, 1.4 feet southwesterly of a 5/8-inch rebar;

Thence N 68°- 44'- 48" E, by and along land of said Peter Haughton as described in a deed recorded in Book 22283, Page 37, land now or formerly of Alice R. Cressey as described in a deed recorded in Book 12360, Page 143, and land now or formerly of Donald and Lori Smith as described in a deed recorded in Book 24421, Page 277, a distance of 307.42 feet to a 6-inch by 6-inch concrete monument with pyramid top being 3.7 feet westerly of a 8-inch by 8-inch concrete monument with a brass plug;

Thence N 40°- 28'- 12" W, by and along the northeasterly side of said Donald and Lori Smith, and land now or formerly of John Ambrosse and Deborah Jordan as described in a deed recorded in Book 16631, Page 265, a distance of 281.30 feet to the northerly corner of said John Ambrosse and Deborah Jordan;

Thence S 76°- 12'- 48" W, by and along the northwesterly corner of said John Ambrosse and Deborah Jordan a distance of 76.87 feet to a point, 0.3 feet easterly of a 5/8-inch capped rebar with stamp 1062 at land retained by David D. and Diane M. Hamblen as described in a deed recorded in Book 12512, Page 270;

Thence N 36°- 53'- 12" W, by and along land retained by David D. and Diane M. Hamblen, a distance of 85.72 feet to a point, .3 feet westerly of a 5/8-inch capped rebar with stamp "1062" at the southwesterly corner of land now or formerly of Donald W. Garland II, as described in a deed recorded in Book 7374, Page 298;

Thence N 76°- 12'- 48" E, by and along the southerly side of Donald W. Garland II, a distance of 114.30 feet;

Thence N 20°- 54'- 12" W, by and along the easterly side of Donald W. Garland II, a distance of 166.50 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317", at the southerly side of Hambleton Avenue;

Thence N 77°- 46'- 49" E, by and along the southerly side of Hambleton Avenue, a distance of 168.12 feet to the easterly side of Garrison Avenue;

Thence N 28°- 56'- 02" W, by and along the easterly side of Garrison Avenue, a distance of 251.66 feet to a 4-inch by 4-inch granite monument at the southerly corner of land now or formerly of the Greater Brunswick Housing Corporation as described in a deed recorded in Book 4529, Page 244;

Thence N 78°- 22'- 13" E, by and along Greater Brunswick Housing Corporation, a distance of 111.50 feet to a point, 1.2 feet northwesterly of a 4-inch by 4-inch granite monument;

Thence S 10°- 37'- 47" E, continuing along Greater Brunswick Housing Corporation, a distance of 6.00 feet;

Thence N 78°- 22'- 13" E, continuing along Greater Brunswick Housing Corporation, a distance of 12.00 feet to a point, 1.3 feet northwesterly of a 4-inch by 4-inch granite monument with a drill hole;

Thence S 10°- 37'- 47" E, continuing along Greater Brunswick Housing Corporation, a distance of 28.65 feet to a 5/8-inch rebar;

Thence N 78°- 15'- 13" E, continuing along Greater Brunswick Housing Corporation, a distance of 437.15 feet to an 8-inch by 8-inch granite monument with a brass plug at the northeasterly side of Wilson Street;

Thence N 41°- 58'- 59" W, by and along the northeasterly side of Wilson Street, a distance of 706.41 feet;

Thence N 42°- 43'- 41" W, continuing along the northeasterly side of Wilson Street, a distance of 778.98 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317", at the southerly side of land now or of Leonard Shean, Jr. and Anita Shean as described in a deed recorded in Book 4617, Page 246;

Thence N 78°- 48'- 29" E, by and along land of Leonard Shean, Jr. and Anita Shean, other land of Leonard Shean, Jr. and Anita Shean as described in a deed recorded in Book 20571, Page 331, land now or formerly Scott Paiement as described in a deed recorded in Book 20529, Page 104, land now or formerly of Irene Rush as described in a deed recorded in Book 14661, Page 263, land now or formerly of Kenneth and Deborah Anderson as described in a deed recorded in Book 21544, Page 285, land now or formerly of David A. and Mary Lou Boll as described in a deed recorded in Book 16168, Page 108, land now or formerly of William and Sandra Kenney as described in a deed

recorded in Book 7680, Page 48, land now or formerly of Joseph and Catherine McCarthy as described in a deed recorded in Book 4237, Page 122, land now or formerly of James and Lori Paulette as described in a deed recorded in Book 10125, Page 324, land now or formerly of Richard Alexander and Linda Wilson as described in a deed recorded in Book 23526, Page 168, land now or formerly of Hunter Ray and Anne Marie Johnson as described in a deed recorded in Book 8474, Page 267, land now or formerly of James and Charlene Lindbert as described in a deed recorded in Book 8301, Page 29, and land now or formerly of Frances Yanok and Helen Perrey as described in a deed recorded in Book 9569, Page 126, a total distance of 1192.66 feet to a 8-inch by 8-inch concrete monument with a brass plug;

Thence N 47°- 43'- 31" W, by and along land of said Frances Yanok and Helen Perrey, a distance of 171.06 feet to the southerly side of land now or formerly of Doris Emmons as described in a deed recorded in Book 4600, Page 303;

Thence N 78°- 48'- 29" E, by and along the southerly side of said Doris Emmons, a distance of 16.85 feet;

Thence N 10°- 39'- 03" W, by and along the easterly side of said Doris Emmons, a distance of 165.00 feet;

Thence S 78°- 48'- 29" W, by and along the northerly side of said Doris Emmons, a distance of 82.50 feet;

Thence S 10°- 39'- 03" E, by and along the westerly side of said Doris Emmons, a distance of 77.50 feet to 5/8-inch rebar with cap stamped "Brian Smith" at land now or formerly of Beverly Bonenfant and Brenda McDonald as described in a deed recorded in Book 4116, Page 14;

Thence N 47°- 43'- 31" W, by and along land of said Beverly Bonenfant and Brenda McDonald, land now or formerly of James, Rebecca and Beck Atkins as described in a deed recorded in Book 20647, Page 44, the easterly terminus of Davis Street, land now or formerly of James, Rebecca, and Beck Atkins as described in a deed recorded in Book 22686, Page 178, land now or formerly of Hollis and June Bruce as described in a deed recorded in Book 3001, Page 40, and land now or formerly of Sandra Drehobl as described in a deed recorded in Book 3171, Page 883, a total distance of 765.10 feet;

Thence N 78°- 53'- 54" E, by and along the southerly side of a plan titled "Plan Showing Lots, Brunswick, Maine for the Northeastern Housing Corporation" and recorded in Plan Book 27, Page 34, a total distance of 1051.53 feet;

Thence N 26°- 24'- 06" W, by and along the easterly side of Abijah Road, and its northwesterly extension, a distance of 342.54 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317";

Thence N 33°- 35'- 54" E, a distance of 137.44 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317", at the southerly corner of land now or formerly of the Roman Catholic Bishop of Portland;

Thence N 76°- 56'- 54" E, by and along land of the Roman Catholic Bishop of Portland, a distance of 474.74 feet to a set 5/8-inch rebar with cap stamped "STI PLS 2317";

Thence N 23°- 10'- 54" E, continuing along land of the Roman Catholic Bishop of Portland, a distance of 269.82 feet to a 4-inch by 4-inch granite monument;

Thence N 01°- 20'- 06" W, continuing along land of the Roman Catholic Bishop of Portland, a distance of 6.24 feet;

Thence N 22°- 48'- 54" E, continuing along land of the Roman Catholic Bishop of Portland, a distance of 169.10 feet to a point, 0.6 feet westerly of a 5/8-inch rebar on the southerly side of Bath Road;

Thence S 80°- 10'- 16" E, by and along the southerly side of Bath Road, a distance of 1136.11 feet to the POINT OF BEGINNING.

Meaning and intending to describe a certain parcel of land containing approximately 136,581,320 square feet or 3,135 acres.

Excluding therefrom, 5 certain parcels of land identified as United States Army Parcel, United States Coast Guard Parcel, and FAA Parcels, more particularly bounded and described as follows:

United States Army Parcel:

A certain lot or parcel of land located on the former Brunswick Naval Air Station on the easterly side of Ordnance Road in the Town of Brunswick, County of Cumberland, State of Maine and more particularly described as follows:

Beginning at a point with a Latitude 43° 52' 33.9685" North and Longitude 69° 55' 27.4853" West on the easterly side of Ordnance Road at the remaining land of The United States of America as described in Deed Book 2255, Page 121 recorded in the Cumberland County Registry of Deeds;

Thence N 22°31'43" E, along Ordnance Road, a distance of 700.00 feet, more or less, to a point of curvature;

Thence northwesterly along a curve turning to the left, an arc length of 290.59 feet, and having a radius of 360.00 feet to a point on the northerly line of Parcel 805 as depicted on Plan of Real Estate to be Acquired for Ordnance Facilities, U.S. Naval Air Station, Brunswick, Maine dated 30 November 1954 recorded in the Cumberland Registry of Deeds in Plan Book 44, Page 48a;

Thence S 59°35'28" E, along Parcel 805, a distance of 494.93 feet to a found granite monument and point of curvature;

Thence southeasterly along Parcel 805 and a curve turning to the left, an arc length of 218.20 feet and having a radius of 5770.46 feet, to a found one-inch iron pin in ledge:

Thence S 61°45'27" E, along Parcel 805, a distance of 353.99 feet to a found granite monument and point of curvature;

Thence southeasterly along Parcel 805 and Parcel 821 and a curve turning to the right, an arc length of 306.69 feet, and having a radius of 5789.97 feet to a point on the southerly side of Coombs Road;

Thence S 55°49'40" E, along Parcel 821 and Coombs Road, a distance of 120.00 to a point at said remaining land of The United States of America;

Thence S 02°07'09" W, along remaining land of The United States of America, a distance of 1573.89 feet to a point;

Thence N 61°09'39" W, along remaining land of The United States of America, a distance of 815.00 feet to a point;

Thence N 16°09'39" W, along remaining land of The United States of America, a distance of 185.00 feet to a point;
Thence S 73°50'21" W, along remaining land of The United States of America, a distance of 185.00 feet to a point;
Thence N 61°09'39" W, along remaining land of The United States of America, a distance of 615.00 feet to a point;
Thence N 22°31'43" E, along remaining land of The United States of America, a distance of 485.00 feet to a point;
Thence N 58°53'00" W, along remaining land of The United States of America, a distance of 240.00 feet to Ordnance Road at the point of beginning.

The above described parcel of land contains 51 Acres, more or less.

United States Coast Guard Parcel:

A certain lot or parcel of land situated easterly of Harpswell Road, so-called, also known as State Route 123, in the Town of Brunswick, County of Cumberland and State of Maine, being more particularly described as follows:

COMMENCING on the easterly side of said Harpswell Road at a 5/8" iron rebar capped "P.L.S. 2080", said rebar marking the southwesterly corner of land now or formerly of Gary C. Favreau and Cynthia L. Favreau, and said rebar marking the northwesterly corner of land now or formerly of the United States of America;

THENCE N69°56'E a distance of 1156.9' to a 5/8" iron rebar capped "P.L.S. 1338" at the true point of beginning;

THENCE N90°00'E a distance of 700.0' to a 5/8" iron rebar capped "P.L.S. 1338";

THENCE S00°00'E a distance of 700.0' to a 5/8" iron rebar capped "P.L.S. 1338";

THENCE N90°00'W a distance of 700.0' to a 5/8" iron rebar capped "P.L.S. 1338";

THENCE N00°00'E a distance of 700.0' to the point of beginning.

Containing 11.25 acres, more or less. Bearings are based on grid north, Maine State Plane Coordinate System, NAD83, West Zone

FAA Parcels:

Transmitter Site

A certain parcel of land located easterly of, but not adjacent to the Harpswell Road (Route 123) in the Town of Brunswick, County of Cumberland, State of Maine, being more particularly bounded and described as follows:

BEGINNING at a survey pin set at a point being located S 41° 18' 47" E, a distance of 1606.91' from a granite monument marked "H" located adjacent to the intersection of the southerly sideline of Hambleton Avenue and the easterly sideline of Garrison Avenue.

THENCE N 77° 32' 53" E, a distance of 281.57' to a point on the westerly line of a proposed access and utility easement;
THENCE continuing N 77° 32' 53" E, a distance of 50.30' to a point on the easterly line of said proposed access and utility easement;
THENCE continuing N 77° 32' 53" E, a distance of 43.13' to a survey pin set;
THENCE S 12° 27' 03" E, a distance of 350.00' to a survey pin set;
THENCE S 77° 32' 53" W, a distance of 375.00' to a survey pin set;
THENCE N 12° 27' 03" W, a distance of 350.00' to a survey pin set at the POINT OF BEGINNING.

Containing 131,250 sq. ft. or 3.01 acres.

RAPCON – Tower Site

A certain parcel of land located easterly of, but not adjacent to the Harpswell Road (Route 123) in the Town of Brunswick, County of Cumberland, State of Maine, being more particularly bounded and described as follows:

BEGINNING at a survey pin set at a point being located N 87° 53' 09" E, a distance of 653.73' from a granite monument marked "H" and being located adjacent to the intersection of the southerly sideline of Hambleton Avenue and the easterly sideline of Garrison Avenue.

THENCE N 69° 45' 53" E, a distance of 500.00' to a survey pin set;
THENCE S 20° 14' 47" E, a distance of 500.00' to a survey pin set;
THENCE S 69° 45' 53" W, a distance of 500.00' to a survey pin set;
THENCE N 20° 14' 47" W, a distance of 500.00' to a survey pin set at the POINT OF BEGINNING.

Containing 250,000 sq. ft. or 5.74 acres.

Radar Site

A certain parcel of land located easterly of, but not adjacent to the Harpswell Road (Route 123) in the Town of Brunswick, County of Cumberland, State of Maine, being more particularly bounded and described as follows:

BEGINNING at a survey pin set at a point being located N 66° 1' 44" E, a distance of 620.94' from a capped survey pin (PLS #2080) found on the easterly sideline of the said Harpswell Road;

THENCE N 28° 25' 05" E, a distance of 20.85' to a point on the southerly line of a proposed access and utility easement;
THENCE continuing N 28° 25' 05" E, a distance of 53.10' to a point on the northerly line of said proposed access and utility easement;
THENCE continuing N 28° 25' 05" E, a distance of 126.05' to a survey pin set;
THENCE S 61° 34' 55" E, a distance of 200.00' to a survey pin set;
THENCE S 28° 25' 05" W, a distance of 200.00' to a survey pin set;

THENCE N 61° 34' 55" W, a distance of 200.00' to a survey pin set at the POINT OF BEGINNING.

Containing 40,000 sq. ft. or 0.92 acres.

Airport PBC-1

A certain parcel of land, with the improvements thereon, said parcel abutting Bath Road (a.k.a. Route 24), in the Town of Brunswick, County of Cumberland, State of Maine, and being more particularly described as follows:

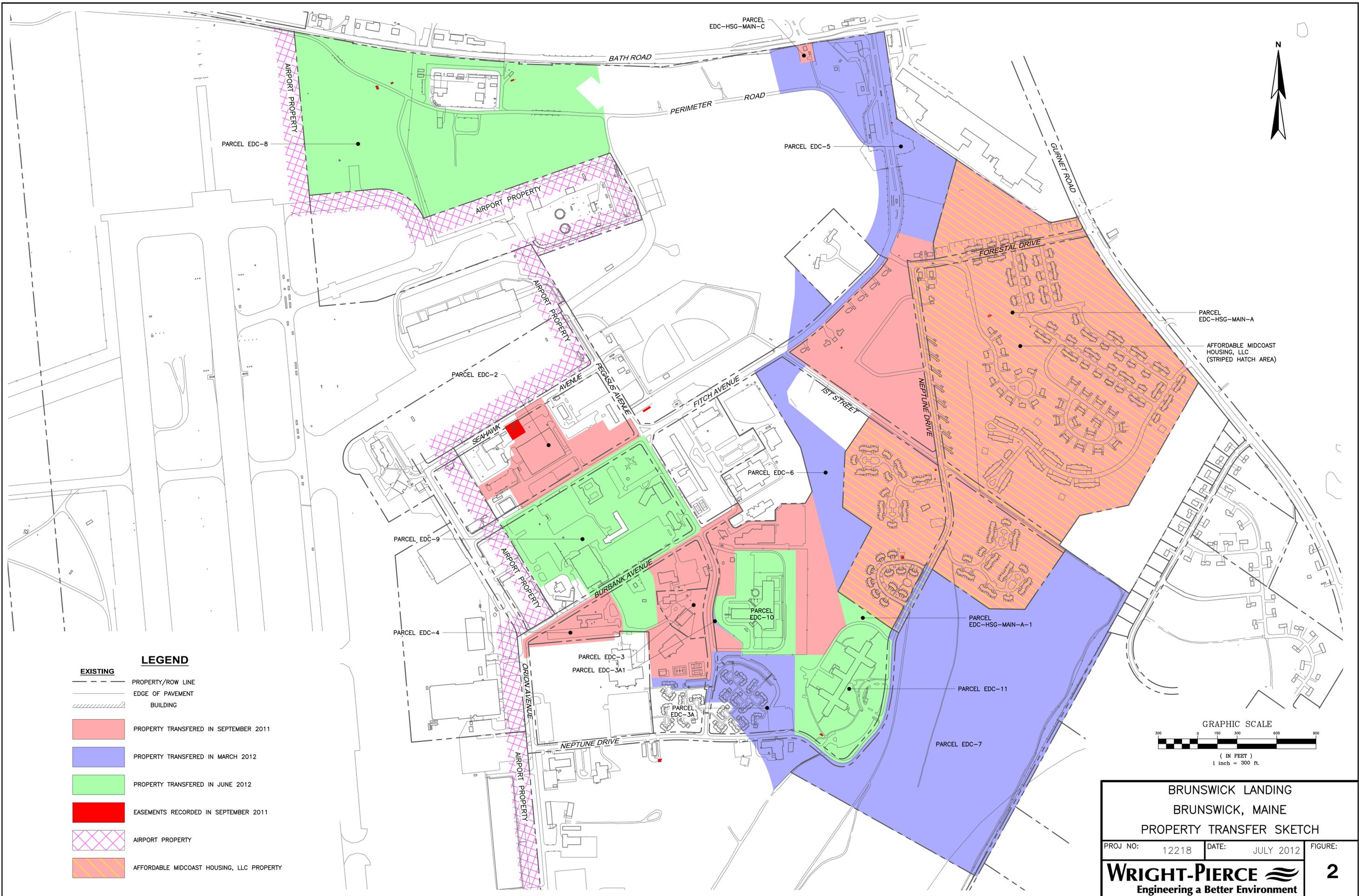
Beginning at a 6" x 6" granite monument inscribed "VC" on top, located on the apparent southerly right-of-way line of said Bath Road as shown on a plan entitled, "Boundary Survey - Brunswick Naval Air Station", dated 1997, by Sebago Technics, Inc, and recorded in the registry of Deeds for said County in Plan Book 197, Pages 457-466; thence S 79° 40' 01" E along said road line a distance of 1245.84 feet to a survey pin found at an angle point in said line; thence S 79° 37' 23" E along said road line a distance of 111.79 feet to a survey pin to be set at the intersection of said road line with a northerly projection of a line which is 643.00 feet offset east of, and parallel to, the easterly sideline of Runway 01 Right located on the parcel described herein, said point also being at remaining land of the United States Navy (USN); thence S 05° 19' 31" E along said USN land and along said line offset from Runway 01 Right, a distance of 2086.68 feet to a point; thence N 84° 39' 07" E along said USN land a distance of 430.73 feet to a point; thence N 70° 01' 21" E along said USN land a distance of 1252.95 feet to a point; thence S 31° 18' 26" E along USN said land a distance of 495.90 feet to a point; thence S 59° 24' 40" W along said USN land a distance of 60.00 feet to a point; thence S 31° 18' 26" E along said USN land a distance of 62.07 feet to a point; thence S 58° 40' 50" W along said USN land a distance of 1853.67 feet to a point of curvature; thence southwesterly and southerly along a curve to the left having a radius of 173.00 feet, an arc distance of 211.50 feet to a point of compound curvature; thence southeasterly along a curve having a radius of 109.48 feet, an arc distance of 167.29 feet to a point; thence S 31° 16' 42" E along a line non-tangent to the last mentioned curve, and along said USN land a distance of 483.85 feet to a point; thence S 05° 00' 54" E along said USN land a distance of 1620.46 feet to a point; thence N 84° 37' 16" E along said USN land a distance of 884.55 feet to a point on the proposed westerly right-of-way line of a private way known as Orion Street; thence S 05° 22' 44" E along said USN land and said street line a distance of 1395.54 to a survey pin to be set at a point of curvature in said line; thence southerly along said USN land and said street line, and along a curve to the right having a radius of 880.00 feet, an arc distance of 211.68 feet to a point; thence S 84° 47' 31" W along said USN land a distance of 532.49 feet to a point; thence S 05° 12' 29" E along said USN land a distance of 273.09 feet to a point; thence N 84° 47' 31" E along said USN land a distance of 438.12 feet to a point on said line of Orion Street; thence S 15° 00' 56" W along said USN land and said street line a distance of 181.20 feet to a point of curvature in said line; thence southwesterly along said USN land and said street line, and along a curve to the right having a radius of 615.00 feet, an arc distance of 15.82

feet to a point; thence S 84° 47' 31" W along said USN land a distance of 369.83 feet to a point; thence S 05° 12' 29" E along said USN land a distance of 376.21 feet to a point on said line of Orion Street; thence S 51° 26' 14" W along said USN land and said street line a distance of 168.03 feet to a survey pin to be set at a point of curvature in said line; thence southwesterly along said USN land and said street line, and along a curve to the right having a radius of 1965.00 feet, an arc distance of 391.95 feet to a survey pin to be set at a point of tangency in said line; thence S 62° 51' 57" W along said USN land and said street line a distance of 244.01 feet to a survey pin to be set at a point of curvature in said line; thence southwesterly along said USN land and said street line, and along a curve to the right having a radius of 285.00 feet, an arc distance of 2.01 feet to a survey pin to be set at a point where said street line intersects a southerly projection of said line which is 643.00 feet offset east of, and parallel to, the easterly sideline of Runway 01 Right located on the parcel described herein; thence S 05° 19' 31" E along said USN land and along said line offset from Runway 01 Right, a distance of 2827.89 feet to a survey pin to be set; thence S 14° 12' 02" E along said USN land a distance of 964.16 feet to a survey pin to be set; thence S 84° 40' 32" W along said USN land a distance of 2435.24 feet to a point; thence N 03° 34' 40" W along said USN land a distance of 1867.64 feet to a point; thence N 12° 03' 00" E along said USN land a distance of 263.44 feet to a point; thence N 03° 34' 40" W along said USN land a distance of 868.54 feet to a point; thence N 37° 52' 30" W along said USN land a distance of 62.69 feet to a point on a line which is 615.00 feet offset west of, and parallel to, the westerly sideline of Runway 01 Left located on the parcel described herein; thence N 05° 19' 28" W along said USN land and along said line offset from Runway 01 Left, a distance of 1663.98 feet to a point; thence N 84° 40' 32" E along said USN land a distance of 406.36 feet to a point on a line which is 208.64 feet offset west of, and parallel to, said westerly sideline of Runway 01 Left; thence N 05° 19' 28" W along said USN land and along said line offset 208.64 feet from Runway 01 Left, a distance of 1896.85 feet to a point; thence S 84° 40' 32" W along said USN land a distance of 406.36 feet to a point on said line which is 615.00 feet offset westerly of the sideline of Runway 01 Left; thence N 05° 19' 28" W along said USN land and along said line offset 615.00 feet from Runway 01 Left, a distance of 5597.16 feet to a point; thence N 00° 53' 01" E along said USN land a distance of 109.53 feet to a survey pin to be set; thence N 89° 24' 56" E along said USN land a distance of 12.37 feet to a survey pin to be set; thence N 13° 26' 57" W along said USN land a distance of 319.08 feet to a survey pin to be set on said line of Bath Road; thence S 80° 10' 16" E along said line of Bath Road a distance of 903.08 feet to the granite monument found at the point of beginning.

Containing 31,125,100 sq. ft. or 714.53 ac. ±

Airport PBC-1a

A certain parcel of land located within the former Brunswick Naval Air Station, located in the Town of Brunswick, County of Cumberland, State of Maine, and being more particularly described as follows:

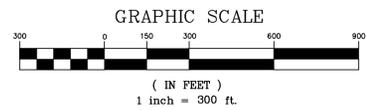


EXISTING

- PROPERTY/ROW LINE
- EDGE OF PAVEMENT
- ▨ BUILDING

LEGEND

- PROPERTY TRANSFERRED IN SEPTEMBER 2011
- PROPERTY TRANSFERRED IN MARCH 2012
- PROPERTY TRANSFERRED IN JUNE 2012
- EASEMENTS RECORDED IN SEPTEMBER 2011
- AIRPORT PROPERTY
- AFFORDABLE MIDCOAST HOUSING, LLC PROPERTY

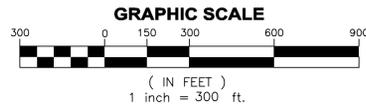


<p>BRUNSWICK LANDING BRUNSWICK, MAINE PROPERTY TRANSFER SKETCH</p>		
<p>PROJ NO: 12218</p>	<p>DATE: JULY 2012</p>	<p>FIGURE:</p>
<p>WRIGHT-PIERCE Engineering a Better Environment</p>		<p>2</p>



LEGEND

- PROPERTY/ROW LINE
- - - PROPERTY ABUTTER
- EDGE OF PAVEMENT
- - - EDGE OF GRAVEL
- - - EDGE OF CONCRETE
- - - CONTOUR
- 122---
- ▨ BUILDING
- CHAIN LINK FENCE
- STOCKADE FENCE
- ×××× BARB WIRE FENCE
- IRON PIPE/REBAR
- MONUMENT
- - - EDGE OF WETLANDS
- ▨ WETLANDS



DESIGNED BY: JBW		NO.	NO.	NO.	NO.
C&M COORD: RPB		DATE	DATE	DATE	DATE
CHECKED BY: JBW		SUBMISSIONS/REVISIONS			
DATE: 8/19/12		NO.			
APPROVED BY: JBW		NO.			
PROJECT NO: 12218A		NO.			
WRIGHT-PIERCE Engineering a Better Environment Offices Throughout New England www.wright-pierce.com 888.621.8156					
BRUNSWICK LANDING MIDCOAST REGIONAL REDEVELOPMENT AUTHORITY SUBDIVISION - PHASE I BRUNSWICK, MAINE			EXISTING CONDITIONS PLAN		
DRAWING C-1					

Staff Present: Jeff Emerson, Leonard Blanchette, Jeff Hutchinson, Cathy Donovan, Anna Breinich, Marc Hagan

Applicants Present: Curt Neufeld, Steve Levesque, Dave Markovich, Jan Wiegman, Robert Clumie

Case No. 12-030 Brunswick Police Station: The Committee will review and comment on a **Final Plan** application submitted by the Town of Brunswick to construct a police station at 1 & 3 Stanwood Street and 81 & 85 Pleasant St (**Assessor's Map U15, Lots 74,75,76,77**) in the **Town Residential 1 Zoning District**.

Project overview by Curt Neufeld of Sitelines, applicant representative

- Two story structure with basement
- Slab may be slightly different than pictured which could delay bidding
- Will meet draft ordinance requirements on water quality
- Will meet impervious surface requirements with pervious pavement
- Traffic report showed no significant impact
- Bids open next week

Staff Comments:

Public Safety: No comments.

Town Assessor: No comments.

Town Sewer: No comments.

Codes Enforcement: No comments.

Planning:

- Anna – Will review water and landscaping and include in findings. Village Review Board has approved design.

Curt questioned whether issues were resolved with communication tower which he still has as separate from the building. Jeff Hutchinson to look into as tower should be connected to building for height exception.

Case Number: 12-031 Brunswick Landing Subdivision: The Committee will review and comment on a **Sketch Plan** application submitted by the Midcoast Regional Redevelopment Authority to create 42 lots at Brunswick Landing (**Assessor's Map 40, Lot 2**) in the **BNAS Reuse Zoning District**.

Project overview by Jan Wiegman of Wright Pierce, applicant representative.

- This is a functional subdivision, memorializing what is on the ground

- MRRA does not own ALL of Phase 1 yet, map shows what has been conveyed
- MRRA has their own utilities and tenants are billed for these as part of lease agreement.
- Purchase and Sales Agreement included as well as deed references for transfers that have taken place
- Assigned ROW widths to streets are based on anticipated travel requirements. All will be private roads, no roads will be removed. MRRA will own roads and infrastructure and maintain roadways until Town is able to take over
- Vernal pools and wildlife habitat identified on several parcels and open space will be a part of such parcels to accommodate them
- Archeological resources have been identified
- Will rely on existing storm water system with intent that each lot utilize low impact development to address storm water

Staff Comments:

Public Safety: No comments.

Town Assessor: No comments.

Town Sewer: No comments.

Planning:

- Anna – After final approval from Planning Board a lot of the parcels will have to come back for site plan review. Steve – There may be a deal to sell lots 40, 41 & 42 prior to subdivision. Anna – We will have to discuss to see if this is possible.

Code Enforcement:

- Jeff H – Zoning lines should be adjusted if possible to match up with property lines. This is a great opportunity to pin lines down and avoid confusion in the future.
- Jeff H – Have setbacks been checked? Dimensional standards must be met. Steve – Buildings and roads are existing and we have to work with what we have.

Anna noted that submission by Wednesday morning is necessary for Planning Board – 8 copies. She asked applicant to include why this is coming up now (so that the lots can be sold) and noted that there will not be much detail but it will be picked up in site plan review. Final review will probably be the 4th Wednesday in October. The zoning amendment can be noticed for the meeting on the 2nd Wednesday in October. The final plan may have to go through the consulting engineer. Anna commented that would be good to hear in final plan how the conservation land on Lots 9 and 43 are being handled. The Recreation Commission will make the final decision as to what will count towards open space requirements in regard to residential property only.



TOWN OF BRUNSWICK, MAINE

INCORPORATED 1739

DEPARTMENT OF PLANNING AND DEVELOPMENT
28 FEDERAL STREET
BRUNSWICK, ME 04011

ANNA M. BREINICH, AICP
DIRECTOR OF PLANNING & DEVELOPMENT

PHONE: 207-725-6660
FAX: 207-725-6663

September 24, 2012

To: Brunswick Planning Board
From: Anna Breinich, AICP
Subject: Zoning Ordinance/Map Amendments Request by Midcoast Regional
Redevelopment Authority for Brunswick Landing.

The Midcoast Regional Redevelopment Authority (MRRA) has filed a zoning amendment request, attached, for the following:

- 1. Rezone a portion of the R-R (Residential) subdistrict to R-CMU (Community Mixed Use) subdistrict (see attached map), approximately 27 acres.** This request is for an area acquired by MRRA as part of the land transaction with Affordable Midcoast Housing, LLC and abuts lands presently zoned R-CMU.
- 2. Provide for interim uses in the R-PO (Professional-Office) subdistrict.** MRRA has requested the reuse of what is known as the "Seabees" buildings, on an interim basis for Industry Class I uses, now listed as a prohibited use in the R-PO subdistrict. Town staff has worked with MRRA in developing this concept with the understanding that the proposed interim uses would be restricted to internal operations within existing structures, until such time that the buildings are demolished or for no more than five (5) years, whichever comes first. MRRA could request a five-year extension if market conditions do not improve.
- 3. Allow for a new use in the R-CMU subdistrict, Light Industrial Business, and provide definition for said use.** Light Industrial Business currently is not a listed use in the Zoning Ordinance, thereby necessitating a definition as well. Staff is in agreement with this addition to the R-CMU permitted uses with the understanding that all activities are conducted in an enclosed building.

MRRA proposed the following definition of **Light Industrial Business**. Town staff suggested revisions are bolded:

*"**Light Industry Use: A use engaged in research and development activities, the processing, fabricating, assembly, disassembly or treatment of finished or semi-finished products from previously prepared material, which activities are wholly conducted in an enclosed building.**"*

Staff further recommends deletion of the last sentence of the proposed definition:
"Goods or products produced may be consumer goods and products, component subassembly or finished valued added products."

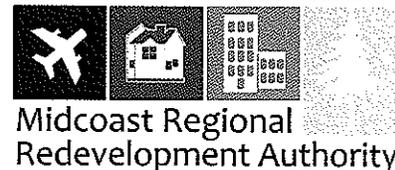
- 4. Allow for a new use in all subdistricts excluding R-R, Special Event Use, and provide definition for said use.** This request is made at the suggestion of Town staff due to the number of requests for special events at Brunswick Landing. The new use would be permitted in all but the R-Residential subdistrict.

MRRA proposed the following definition of **Special Event Facility**. Town staff suggested revisions are bolded:

“Special Event Use: A temporary outdoor or indoor activity that extends beyond the normal uses and standards allowed by the zoning ordinance, sponsored by a for-profit, non-profit or government entity, lasting 14 consecutive calendar days or less for each event held. Activities include, but are limited to, auto, boat and air shows, trade shows, fairs, exhibitions, or other assembly-type event for 200 or more people.

- 5. Amend definitions of “Industry Classifications I and II” in a portion of the R-AR (Aviation-Related) subdistrict. Staff response:** Table of uses was previously amended to allow for non-aviation related Industry Class I and II uses on January 24, 2011.

Staff will prepare the specific zoning ordinance amendments following Planning Board workshop discussion. I will be available for questions at the meeting.



July 16, 2012

Mr. Kris Hultgren
 Town Planner
 Town Planning Office
 28 Federal Street
 Brunswick, ME 04011

Dear Kris,

Attached please find the following documents in support of the Midcoast Regional Development Authority's ("MRRA") request for several zoning amendments:

- Town of Brunswick Zoning Amendment Request application
- Supporting attachments delineating the amendment requests
- Supporting maps

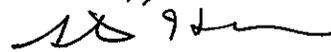
The requested amendments involve:

- A. Changing a portion of sub-district R-R to sub-district R-CMU
- B. Creating and interim use variance for sub-district R-PO
- C. Creating a new definition entitled "Light Industrial Business" for sub-district R-CMU
- D. Per Planning staff recommendation, the establishment of a "Special Events Designation" for all non-R-R sub-districts
- E. Amending the definition of "Industry Classification I and II" in a portion of sub-district R-AR

Should you require any additional information, clarification or find MRRA's application deficient so as not to permit it to proceed through the Planning Board review in a timely manner please feel free to contact Dave Markovchick at a 789.6512.

Thank you for your assistance with this process, MRRA looks forward to working with you and Planning Board on gaining approval and the implementation of the requested amendments.

Sincerely,


 Steven H. Levesque
 Executive Director





Town of Brunswick, Maine

INCORPORATED 1739

DEPARTMENT OF PLANNING AND DEVELOPMENT

28 FEDERAL STREET

BRUNSWICK, MAINE 04011-1583

TELEPHONE 207-725-6660

FAX 207-725-6663

TOWN OF BRUNSWICK ZONING AMENDMENT REQUEST

A request to amend the Zoning Ordinance may be made to the Department of Planning and Development. Once the application is received and the fee is paid, staff shall include the request on a Planning Board agenda for a workshop. The Planning Board may schedule a public hearing on the zoning amendment request. After a public hearing, the Planning Board may choose to forward a recommendation to the Town Council for consideration. The Town Council is the decision making authority with rezoning requests.

The application and any supporting documentation shall be submitted to the Department of Planning and Development and the fee paid at least two (2) weeks prior to it being scheduled on a Planning Board agenda.

Application Fee

A \$200.00 application fees shall be paid for requests to amend the Zoning Ordinance.

1. Applicant

Name: Midcoast Regional Redevelopment Authority
Address: 2 Pegasus Street Suite 1 Unit 200

Phone Number: 207.798.6512

2. Authorized Representative

Name: David Markovchick
Address: Same as above

Phone Number: 207.798.6512 x211

3. **Physical location of applicant's property being affected:** Brunswick Landing, the former Brunswick Naval Air Station

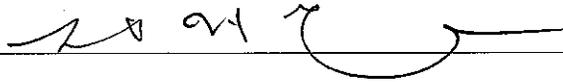
4. **Lot Size:** Please refer to attached materials

5. **Zoning District:** R-R, R-PO, R-CMU, R-AR

6. **Assessor's Tax Map** Currently being assessed and delineated **Lot Number** _____
of subject property.

7. **Summarize the reason for the zoning amendment request:**

Owner Signature:

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end, positioned above a solid horizontal line.

Applicant Signature (*if different*):

7. Summarize the reason for the zoning amendment request:

The primary reason for the zoning amendments are specifically detailed below. The guiding principles behind MRRA's original Town of Brunswick Zoning and MRRA's redevelopment efforts are the well thought out Reuse Master Plan for Brunswick Landing. This Plan was approximately six years in the making with broad based community input. While the plan is directed by current Town zoning, economic conditions on local and statewide levels have dramatically changed since the development of the plan. This has necessitated some strategic repositioning regarding redevelopment efforts designed to capture emerging interim uses and long-term economic opportunities.

The zoning amendment requests being presented will affect the following sub-districts: Residential (R-R), Community Mixed Use (R-CMU), Aviation Related (R-AR), and Professional Office (R-PO).

- A. MRRA is requesting a zoning change to a portion of sub-district R-R consisting of approximately 27 acres. This change will rezone the acreage from the Sub-district (R-R) to a Sub-District R-CMU. The parcel referenced on the Map label "Proposed CMU was a former residential trailer park and is currently abandoned. The parcel abuts a current sub-district R-CMU parcel. This triangular parcel is bordered by Admiral Fitch Avenue, on the west, Neptune Avenue on the east and Anchor Drive on the south.

This 27 acre parcel was acquired by MRRA as part of the land transaction when it closed its land sale to AMH for the land beneath former base housing owned by AMH. Since MRRA's primary redevelopment efforts are not directed at housing under the Reuse Master Plan a zoning change that is low impact and adds future economic value to the Town of Brunswick is a practical amendment. The transition to a R-CMU designation will allow the full economic redevelopment potential of the property be realized, while not affecting the abutting R-R Sub-district, due to existing natural buffers of tree lines and roadways. The parcel currently is serviced by water, sewer, power, natural gas, and roadways. The park like atmosphere is ideally suited low impact development of those designations permitted in R-CMU designation.

- B. The second part of MRRA's zoning amendment request is to receive an interim use variance for five (5) years in the Sub-district of Brunswick Landing zoned as R-PO. A number of the buildings in this area of the former base are scheduled for demolition, however MRRA has identified at least four buildings worth retaining for an interim use.

The purpose of this request is to capitalize on the current soft office market that inhibits short term redevelopment efforts. MRRA has spoken with several developers that support the premise that the

office market will continue to be soft for some time to come. This past year MRRA has been approached by business entities seeking to either perform light manufacturing, processing or assembly (Industry Class I use) or have storage and warehousing need in one or more of the identified buildings. Permitted interim use designation for these activities will produce rental income for MRRA and taxable property and jobs for the Town. Otherwise the property will sit fallow and untaxed for an indeterminate time. MRRA is only proposing an interim use for existing buildings excluding raw land from its amendment request.

Once the five year term of the variance expires, it is contemplated that MRRA will either seek an extension should the office market remain soft or tenants will be relocated and the demolition of the remaining three structures would occur as originally planned and the full parcel be made available for the planned R-PO use.

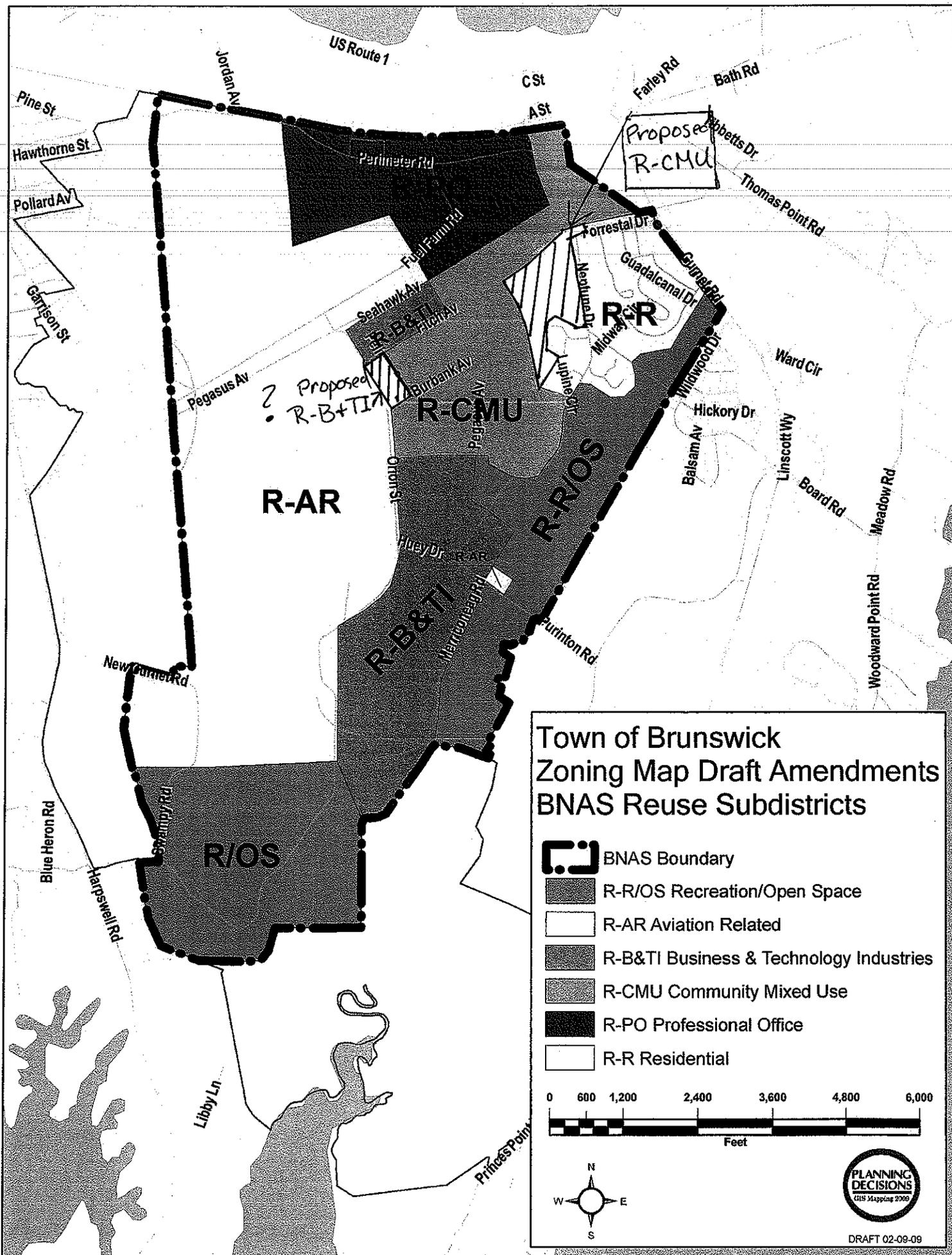
- C. The third component of MRRA's request is to create a new definition "Light Industrial Business" (LIB) in the R-CMU. With the creation of the Maine Advanced Technology and Engineering Center (MATEC) and the Composite Engineering and Research Laboratory (CERL) on Southern Maine Community College's Brunswick Landing Campus the R-CUM surrounds the Campus and become a logical location for the development of facilities engaged in Light Industrial Business. MRRA proposes the following definition of a Light Industrial Business:

"A Light Industrial Business involves all processing, fabricating, assembly, or disassembly of items taking place wholly within an enclosed building. Goods or products produced may be consumer goods and products, component subassembly or finished value added product."

- D. The fourth component of the amendment request is to establish in all non-R-R sub-districts a "Special Event Facility" use definition. This would apply to all land and buildings in the R-CUM, R-PO, R-AR and R-B&TT zones. To accomplish this MRRA proposes the following Special Event Facility definition:

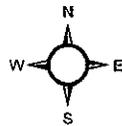
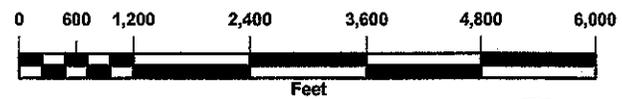
"Special Event Facility means any land or building used by a profit or non-profit business or organization hosting an assembly, exhibition, open house, demonstration, or event that is permitted under Town fire and code"

- E. The final amendment request is to permit the parcel, refer to Map noted as Industry I & II, to have as a permitted use an industry use classification of "Industry Classification I and II without the restriction of "Allow only in conjunction with aviation related activity or use". This request will conform the use to those uses permitted in the Airport Zone by the FAA for a non-aeronautical use.



Town of Brunswick Zoning Map Draft Amendments BNAS Reuse Subdistricts

-  BNAS Boundary
-  R-R/OS Recreation/Open Space
-  R-AR Aviation Related
-  R-B&TI Business & Technology Industries
-  R-CMU Community Mixed Use
-  R-PO Professional Office
-  R-R Residential



**BRUNSWICK PLANNING BOARD
TUESDAY, JUNE 26, 2012**

MEMBERS PRESENT: Chairman Charlie Frizzle, Vice Chair Margaret Wilson, Dann Lewis, Dana Totman, Richard Visser and Steve Walker

STAFF PRESENT: Anna Breinich and Kris Hultgren

A meeting of the Brunswick Planning Board was held on Tuesday June 26, 2012 at the Municipal Meeting Facility at Brunswick Station, 16 Station Ave. Chairman Charlie Frizzle called the meeting to order at 7:00 P.M.

Case Number: 12-020 Medical Office Building: The Board will review a sketch plan application submitted by Priority Group, LLC to construct a medical office building at 14 Thomas Point Road (**Assessor's Map CC1, Lots 26 & 42**) in the **Cooks Corner (CC) Zoning District.**

Kris Hultgren introduced the project by reviewing his Memo to the Planning Board dated June 21, 2012 and stated that this proposal was for a medical office building. He stated that the current building is 5,000 square feet and the applicant proposes to add an additional 5,000 square feet of office space with an additional 10,000 square foot field house all to be connected. Kris stated that this development is in the Cooks Corner Zoning District.

MOTION BY MARGARET WILSON TO DEEM THE SKETCH PLAN COMPLETE. SECONDED BY DANN LEWIS, APPROVED UNANIMOUSLY.

Charles Wiercinski, of Sitelines, stated that the current building used to be Radio City then a tattoo parlor and now they propose to create a medical office building. Mr. Wiercinski stated that the proposal involves 78 parking spaces 4 of which are handicapped; this will meet the need of the 10,000 square foot field house as well as what is needed for the office space. Mr. Wiercinski reviewed the landscape plan and stated that what is being proposed is an iron fence along the street frontage of Thomas point road, large street trees and understory plantings as well as foundation planting around the building. There will be trees and bushes in the various islands. Mr. Wiercinski explained that the requirements a sidewalk of placed up against the building could change due to the proximity of Thomas Point road to the building and suggested a 5 (five) foot sidewalk. Sewer and stormwater will come from the existing building. Mr. Wiercinski reviewed elevations and stated that the idea would be brick along the bottom and the roofline would be metal; they have been speaking with the Codes office about doors. Charlie Frizzle asked staff if they had run the calculations to confirm that impervious surface is under the 80% requirement; Kris Hultgren replied that they had run the calculation and it is just under the net increase for a DEP permit and noted that it does trigger a Permit By Rule but it does meet the Cooks Corner requirement.

Margaret Wilson asked if the facility was going to be 2 (two) story or 1 (one) story; Charles Wiercinski replied that it was going to be a 1 (one) story building. Margaret Wilson suggested that they take another look at breaking up the façade and Mr. Wiercinski agreed. Anna Breinich replied that they have spoken about this and she suggested they take a look at colors of the larger building.

Dana Totman asked staff if the proposed parking is compliant with the Cooks Corner standards; Kris Hultgren replied that the parking is compliant since both the addition and the field house will be attached to the existing building; the front that is set back serves as the front façade of the development.

Margaret Wilson asked if the applicant prefers the sidewalk up against the iron fence or following Thomas Point Road. Charles Wiercinski replied that since they are unsure what will happen to Thomas point road, it would make sense to have the sidewalk up against the fence and property line. Charlie Frizzle suggested making it a condition that if Thomas Point road is realigned and settled someday that the sidewalk be finished to the end of the building; Mr. Wiercinski agreed.

Richard Visser stated that he was concerned about the traffic flow from Thomas Point Road to Bath Road. He asked if there is a way to get an exit from Gurnet Road. Mr. Wiercinski replied that they have done a traffic study. He stated that before the addition, the level of traffic would be Level “C” and after the addition, the level of service wouldn’t change. He noted that customers can turn around and exit using the movie theater exit/entrance.

Charlie Frizzle opened the meeting to public comment. No public was present and the public comment period was closed.

Margaret Wilson asked for a layout of the Thomas Point intersection for the final plan.

MOTION BY STEVE WALKER TO APPROVE THE SKETCH PLAN AS PROPOSED. SECONDED BY DANA TOTMAN, APPROVED UNANIMOUSLY.

Workshop: The Board will review a proposal to increase the maximum footprint of structures in the Residential 3, 4, 5, 6 and 7 Zoning Districts.

Anna Breinich reviewed her Memo to the Planning Board dated June 21, 2012 and stated that she recommends adding an additional note to Section 203.3 of the Brunswick Zoning Ordinance allowing for the maximum footprints of 3 or more dwelling units not to exceed 8,000 square feet with an individual unit not to exceed 2,500 square feet. Anna stated that the maximum building footprint would include the first floor, decks and additions and garage. Charlie Frizzle asked why have any limit on 1(one) unit when you have already limited the units to 8,000 square feet total? Scott Howard reviewed the history of how the 5,000 square foot dwelling was established and reviewed what they have had to do terms of building 4 (four) units; detached decks and garages are expensive and not what todays buyer is looking for. Mr. Howard stated that the 2,500 square foot per unit

consisted of roughly 1,500 square feet to 1,700 square feet of living space and a 2 car garage and possibly a deck; they feel that 2,500 square feet was reasonable on a single unit basis to meet the basic criteria of what the buyer wants. Charlie stated that he was comfortable with the 8,000 square feet but stated that his preference would be to leave the individual unit maximum out. Dana Totman agreed with Charlie. Margaret Wilson replied that she would want to be more expansive and include all the districts in the Growth Zone and include MU3, MU6, CU4 and CU6 since they must meet the same criteria; if 8,000 square feet is appropriate for one residential zone in the Growth Zone then it should be applied to these 4 (four) as well. Charlie agreed.

Dann Lewis asked if the market is looking for 4 (four) units, why not go with 10,000 square feet? Anna Breinch replied that 10,000 square feet would be double what the maximum is now. Scott Howard stated that they already have some homes built at 10,000 square feet but they have be detached in order to meet the requirements. Charlie Frizzle stated that he would feel comfortable with a 10,000 square foot maximum since it is only referring to residential dwelling units of 3(three) or more and making maximum use of density. Anna replied that if Planning Board decides to set a public hearing they can advertise as 10,000 square feet and if the Board decides to at the hearing to settle on less then they may do so. Anna asked if they wanted to include town residential zones. Charlie suggested leaving them alone at this time and only adding what Margaret suggested. Kris confirmed that they were adding MU3, MU6, CU4 and CU6.

Other

- 7/10 Agenda to include Sketch Plan for Crestview subdivision.
- 7/24 Agenda to include a Public Hearing on a zoning amendment and Final Plan application for Cooks Corner development.
- 7/31 Crestview Final Plan, and possibly 1 other item.

Minutes

No minutes were reviewed at this meeting.

Adjourned

This meeting was adjourned at 7:55 P.M.

Attest

Tonya D. Jenusaitis
Recording Secretary

**BRUNSWICK PLANNING BOARD
TUESDAY, JULY 10, 2012**

MEMBERS PRESENT: Chairman Charlie Frizzle, Vice Chair Margaret Wilson, Dann Lewis, Richard Visser and Steve Walker

STAFF PRESENT: Kris Hultgren

A meeting of the Brunswick Planning Board was held on Tuesday July 10, 2012 at the Municipal Meeting Facility at Brunswick Station, 16 Station Ave. Chairman Charlie Frizzle called the meeting to order at 7:00 P.M.

Case Number: 12-014, Crestview Subdivision Amendment: The Board will review and take action on a **Sketch Plan** application submitted by John Gordon to create a three lot subdivision at 74 Crestview Lane (**assessor's Map 27 Lot 27**) in the **Coastal Protection (CP1) Zoning District**.

Kris Hultgren began by reviewing his Memo to the Planning Board dated July 6, 2012 and stated that the Sketch Plan is to amend the previously approved Crestview Subdivision by dividing one (1) lot into three (3). Kris reviewed the location of the lot and noted that there are a few issues at hand. The first issue is that this is an Open Space Subdivision approved by the Planning Board in 1996; the subject lot was created prior to this in 1994 but approved as part of the Crestview Subdivision by the Planning Board in 1996. Kris stated that the Open Space subdivision had roughly 100 acres of gross land which was included; 53 acres were set aside and permanently protected with a conservation easement. Kris stated that in the Coastal Protection Zone there is a four (4) acre minimum lot size; this standard is allowed to be reduced if the project conforms to the Open Space subdivision standards and sets enough land aside. After calculation, the Open Space subdivision is allowed to have 22 units; in 1996 the subdivision was approved to include 10 units and the two (2) requested would be a total of 12 which will meet the density of the Open Space subdivision. Kris noted that the conservation land is monitored by the Town and the Conservation Commission.

Kris Hultgren stated that another issue is that the subdivision is located within the Brunswick Rural Smart Growth (BRSg) and noted that the subject lot is located 100% within the Wildlife Corridor and subject to these standards. Kris stated that there are mitigation requirements that are based on the amount of disturbed land that is proposed for each of the lots and noted that the applicant has delineated these disturbances on the Sketch Plan application and still has enough land left over which must remain permanently protected; the Sketch Plan meets the requirements of the BRSg. Kris noted that the Conservation Commission reviewed this project at their June 13, 2012 meeting and that a copy of their minutes were included in the Planning Board packet.

Kris Hultgren address the deed conveyance that was included in the Planning Board packet and correspondence between the applicant, his attorney and abutter. Kris reviewed the history and stated that there was a deed restriction placed on the subject lot

in 1994 when it was created by Don Burgess. In 2011 Mr. Burgess released the restriction. Kris pointed out that there was a question from an abutter over the legality of the conveyance release because one (1) of the restrictions was to preclude subdivision for 20 years from the creation of the lot. Kris stated that it is the opinion of the Town Attorney that the conveyance restrictions were released in a lawful manner and does not restrict this lot from being subdivided.

Kris Hultgren noted that the Staff Review Committee reviewed this project at their June 25, 2012 meeting. One issue raised by Public Works was the location for the driveway for the middle lot; the driveway opening permit is still under review by Public Works.

The applicant, John Gordon, reviewed the lot, disturbed area and calculations and noted that the driveway in the proposed lot 1A has been moved further from the corner after discussions with Jim Higgins from Public Works. Mr. Gordon stated that most of the lots in the subdivision are roughly two (2) acre lots.

MOTION BY DANN LEWIS THAT THE SKETCH PLAN APPLICATION BE DEEMED COMPLETE. SECONDED BY MARGARET WILSON, APPROVED UNANIMOUSLY.

Steve Walker asked Kris Hultgren how one (1) owner of a lot in a subdivision can apply for a subdivision amendment. Kris replied that this subdivision is tricky and stated that in 1994 when this lot was created by a much larger lot, prior to the creation of the subdivision, the conveyance restrictions for the subject lot were created and recorded. Kris went on to state that in 1996 Don Burgess created another subdivision and at this time the subject lot was included in and treated as part of the new subdivision. Steve asked why the history from 1994 mattered and Kris replied that there was some question as to why the subject lot was included; after discussion with the Town Attorney, it was felt that the subject lot should not have been included. Kris noted that no homeowners association was ever created for this subdivision. Steve replied that he does not understand how one lot owner in a subdivision, who isn't the original developer, can apply for an amendment to a larger subdivision. Kris replied that the Planning Board has seen multiple subdivision amendments; Steve stated that in this instance it is an owner who bought into a small piece of the subdivision and is now changing the lot density and conditions for the other residences within the subdivision. Kris and Steve discussed how the applicant can subdivide this lot within the subdivision; Charlie Frizzle stated that before proceeding to the Final Application, that the Town Attorney was the most appropriate person review the issue of standing that Steve has raised.

Margaret Wilson asked if the subject lot was outside the originally conserved land and Mr. Gordon replied that it was. Margaret asked Mr. Gordon to illustrate where on the property that they plan to mitigate the disturbed area on the proposed lots. Steve McConnell, land surveyor, showed on the drawings that it is the area not shaded.

Chairman Charlie Frizzle opened the meeting to public comment.

John Sperzel of 61 Crestview Lane stated that he believes that the release of the deed conveyance that was obtained was not legal and provided to the Planning Board and the applicant a letter stating why he believes this with case law notation. Mr. Sperzel asked for a written letter from the Town Attorney stating the determination.

Chairman Charlie Frizzle closed the meeting to public comment.

Margaret Wilson stated that for purposes of the Sketch Plan, she believes that the Town Attorney has seen and deliberated on some of the issues brought forth that the Planning Board can move forward and ask for determinations to be included in the final plan.

MOTION BY RICHARD VISSER THAT THE SKETCH PLAN BE APPROVED AS PROPOSED. SECONDED BY DANN LEWIS, APPROVED UNANIMOUSLY.

Other

- July 24, 2012 agenda to include Public Hearing on Zoning Ordinance amendment from June 26th meeting.
- July 31, 2012 agenda to include Final Application for Cook's Corner Medical Office Building, joint Sketch and Final for Mine Woolens to construct a 7,886 square foot addition and Final for Crestview Subdivision Amendment.

Minutes

MOTION BY STEVE WALKER TO APPROVE THE MINUTES OF MAY 22, 2012. SECONDED BY MARGARET WILSON, APPROVED UNANIMOUSLY AMONG THOSE PRESENT.

Adjourned

This meeting was adjourned at 7:30 P.M.

Attest

Tonya D. Jenusaitis
Recording Secretary

**BRUNSWICK PLANNING BOARD
TUESDAY, JULY 24, 2012**

MEMBERS PRESENT: Chairman Charlie Frizzle, Vice Chair Margaret Wilson, Dana Totman, and Richard Visser

STAFF PRESENT: Anna Breinich and Kris Hultgren

A meeting of the Brunswick Planning Board was held on Tuesday July 24, 2012 at the Municipal Meeting Facility at Brunswick Station, 16 Station Ave. Chairman Charlie Frizzle called the meeting to order at 7:00 P.M.

Public Hearing: The Board will hold a public hearing to increase the maximum footprint of structures in the Residential 3, 4, 5, 6 and 7 zones and the College Use 4 and 6 zones from 5,000 square feet to 10,000 square feet.

Charlie Frizzle noted that the agenda talks about an increase of maximum footprint from 5,000 square feet to 10,000 square feet and the Memo to the Planning Board talks about an increase to 8,000 square feet with a maximum for an individual unit of 2,500 square feet; Margaret Wilson replied that the Memo was dated June 21, 2012 before their last discussion on June 26, 2012. Charlie stated that he is still stuck on the individual unit maximum. Kris Hultgren replied that the Memo was included as background and noted that it was clear from the June 26th meeting that the maximum be 10,000 square feet and that the individual limit originally proposed be excluded. Kris stated that the proposal now is that Residential 3 through 7 and College Use 4 and 6 be increased from 5,000 square feet to 10,000 square feet with no minimum.

Chairman Charlie Frizzle opened the public hearing.

Scott Howard spoke about Botany Place located in the Residential 4 Zoning District and stated that this project has a density of approved 96 units; 42 units have been built. Scott stated that they have tried to illustrate that they have built the units completed to date in four (4) different quads/town homes. As requested he has provided pictures for review. Scott stated that they have had to use different tactics in order to build the four (4) units and stay within the 5,000 square feet footprint. Scott stated that they have done things such as detach the garage by as little as two (2) feet. He stated that it is his hopes that they can reduce the complexity, cost and better meet the density requirements and customer demand by having a 10,000 square foot maximum. Margaret Wilson asked if they have been able to build a structure close to 10,000 square feet when the limit is 5,000 square feet what is there to prevent the construction of a structure close to 15,000 square feet. Scott replied that they are seeking the increase because it is not cost effective or desirable for the buyer to have a detached garage which many are looking for. Margaret stated that the increase density in the growth zone and the way that Botany Place is laid out as approved is excellent, she stated that the Planning Board will have to deal with a project by projects basis and worry only if they see a 10,000 square foot structure with detached garage units and at that time talk about mass.

Margaret Wilson noted that at the June 26th meeting the Planning Board discussed adding Mixed Use 3 and 6; Anna Breinich stated that it would be appropriate to ask that Town Council to consider adding MU3 and MU6 to the request. Charlie Frizzle agreed. Kris Hultgren asked if the Planning Board wished to add TR2, TR3, TR4, TR5 and TC3 which are also in the Growth area with maximum footprints of 5,000 square feet; Charlie replied that they do not wish to include those at this time. Charlie reiterated that they are advising that the Town Council include MU3 and MU6 in addition to the original request.

Chairman Charlie Frizzle closed the public hearing.

Dana Totman stated that he is in agreement with these changes as they are more in line with the Brunswick Comprehensive Plan; Charlie Frizzle agreed.

MOTION BY RICHARD VISSER THAT THE PLANNING BOARD RECOMMENDS TO THE TOWN COUNCIL THAT THE MAXIMUM FOOTPRINT OF STRUCTURES IN THE RESIDENTIAL ZONES 3, 4, 5, 6, AND 7 AND THE COLLEGE USE ZONES 4 AND 6 MAXIMUM FOOTPRINT BE INCREASED FROM 5,000 SQUARE FEET TO 10,000 SQUARE FEET. SECONDED BY MARGARET WILSON, APPROVED UNANIMOUSLY.

Other

- Anna Breinich reminded the Planning board of the Moving Downtown Forward workshop scheduled for July 30, 2012 from 5:30 to 7:30 at the former Hawthorne Elementary School.
- Anna Breinich stated that the Board will see a request from the Town Council to consider rezoning 28 Federal Street and the Recreation Center for uses other than municipal facilities at their next scheduled meeting of July 31, 2012.

Minutes

No minutes were reviewed at this meeting.

Adjourned

This meeting was adjourned at 7:21 P.M.

Attest

Tonya D. Jenusaitis
Recording Secretary

**BRUNSWICK PLANNING BOARD
TUESDAY, JULY 31, 2012**

MEMBERS PRESENT: Chairman Charlie Frizzle, Vice Chair Margaret Wilson, Dann Lewis (dismissed at 20:23, Richard Visser and Steve Walker (arrived at 19:10)

STAFF PRESENT: Anna Breinich, Kris Hultgren and Town Attorney, Pat Scully

Case Number: 12-020 Medical Office Building: The Board will review and take action on a **Final Plan** application submitted by Priority Group, LLC to construct a medical office building at 14 Thomas Point Road (**Assessor's Map CC1, Lots 26 & 42**) in the **Cooks Corner Zoning District**.

Kris Hultgren reviewed his Memo to the Board dated July, 27, 2012 and stated that this is a Final Plan application for a medical office building at 14 Thomas Point Road with plans to construct a field house. Kris stated that the existing on site building is 5,000 square feet and the applicant proposes to add an additional 5,000 square feet of office space with an additional 10,000 square foot field house. Kris noted the Planning Board approved the Sketch Plan at the June 26th meeting and the Staff Review Committee reviewed the project for their final approval at their July 23rd meeting.

The applicant, Kurt Neufeld with Sitelines, reviewed the project and stated that the existing site has a single entrance and is a story and a half. Kurt stated that the adjacent lot will be combined to make a larger lot, about 1.8 acres. The office will be primarily used for physical therapy and the field house will be available during the weekends for sports. Kurt stated that the building will have a peaked roof and there will be a granite post and black metal fence adjacent to Thomas Point Road as well as ample parking lot plantings. The site plan has remained unchanged with two entrances, the main entrance at Thomas point road. The sidewalk will be parallel to Thomas point road and will be five feet as discussed at the June 26th meeting. Kurt stated that the project does not require any state permits for the drainage system and the system itself meets the Town of Brunswick requirements. Traffic has been analyzed by Diane Morabito, of Maine Traffic Resources and Kurt reviewed formalizing the left and right turn striping pattern improvements on Thomas Point Road. Kurt stated that in reviewing this with John Foster, the Town Engineer, he stated that he would like to see the striping improved to 11 foot lanes and for the applicant to modify the island and curbing as necessary.

**MOTION BY DANN LEWIS THE FINAL PLAN BE DEEMED COMPLETE.
SECONDED BY STEVE WALKER, APPROVED UNANIMOUSLY.**

Charlie frizzle, referring to correspondence from the Town contractor, Sebago Technics, suggested that instead of constructing a sidewalk now, that the applicant place money in escrow towards the sidewalk for a time when and if Thomas Point Road is improved. The applicant is open to this so long as there is a time limit and the funds are not tied up indefinitely. Charlie asked Anna Breinich if this was a viable alternative and Anna replied that they have the ability to put it into escrow account dedicated for that purpose. Steve Walker asked what the priority level was for improvements for Thomas Point Road; Kris Hultgren replied that he did not know and

stated that the Cooks Corner Master Plan alludes to improvements on Thomas point road with no specific timeline. Charlie replied that there needs to be a time limit and if that time limit is reached with no plans to improve Thomas point then the applicant builds the sidewalk as proposed; Steve suggested 10 years and Charlie agreed. Kurt stated that the applicant would prefer a five year timeframe; Charlie agreed and suggested adding a phrase that if improvements for Thomas Point road are not on the capital improvements list by this point the applicant will go forward and construct the sidewalk.

Chairman Charlie Frizzle opened the meeting to the public hearing. No public comment and the public hearing was closed.

Charlie Frizzle asked staff where the number of parking spaces was derived from; Kris Hultgren replied that the 60 parking space number because the warehousing use is based on square feet at two spaces for 20,000 square feet; he stated that it was a little tricky since the field house use does not fit into any category in the ordinance but staff felt there was ample parking on site. Charlie noted that that peak hours for the field house and the medical office building will be at different times and suggested that the applicant apply for minor modification review to reduce parking spaces if the applicant feels that they can get along without it.

Margaret Wilson, in reference to the finding for the stormwater provided by Summit Environmental dated July 23, 2010, that she is concerned that there is no conclusion in the finding that the soil is appropriate for infiltration. She asked that a conclusion be requested; staff agreed.

MOTION BY MARGARET TO APPROVE THE FOLLOWING WAIVERS:

1. Section 412.2.B.8-Name, location and width of paving for proposed roads
2. Section 412.B.14-Location of proposed cross section of sanitary sewers
3. Section 412.2.B.16-Class A Soil Survey
4. Cooks Corner Sidewalk Standard.

SECONDED BY DANN LEWIS, APPROVED UNANIMOUSLY.

MOTION BY STEVE WALKER THAT THE FINAL PLAN IS APPROVED WITH THE FOLLOWING CONDITIONS:

1. That the Board's review and approval does hereby refer to these findings of fact, the plans and materials submitted by the applicant and the written and oral comments of the applicant, his representatives, reviewing officials, and members of the public as reflected in the public record. Any changes to the approved plan not called for in these conditions of approval or otherwise approved by the Director of Planning and Development as a minor modification shall require a review and approval in accordance with the Brunswick Zoning Ordinance.
2. That prior to receiving a building permit, the applicant submits an updated stormwater management plan implementing those recommendations detailed in Sebago Technics peer review as required by Staff.

3. That prior to receiving a building permit, the applicant pays a solid waste impact fee of \$2,018.
4. That prior to receiving a building permit, the applicant pays the peer review fee of \$450.00.
5. That prior to receiving a Certificate of Occupancy, the applicant shall coordinate with the Public Works Director to construct adjustments to the curb and/or island and place pavement markings to define 11' wide left and right turn lanes at the exit of Thomas Point Road at Bath Road.
6. The applicant shall set aside funds in escrow to construct a 5' bituminous sidewalk along the front of the parcel on Thomas Point Road. The funds set aside shall be based on an estimate by Public Works Director John Foster. If after 5 years Thomas Point Road is not realigned, or the realignment of Thomas Point Road is not part of the town's Capital Improvement Plan, the escrow funds shall be released and the applicant shall construct the 5' bituminous sidewalk. The applicant may choose to leave the funds in escrow for more than 5 years.

SECONDED BY RICHARD VISSER, APPROVED UNANIMOUSLY.

Case Number: 12-014, Crestview Subdivision Amendment: The Board will review and take action on a **Final Plan** application submitted by John Gordon to create a three lot subdivision at 74 Crestview Lane (**assessor's Map 27 Lot 27**) in the **Coastal Protection (CP1) Zoning District**.

Kris Hultgren reviewed his Memo to the Board dated July, 27, 2012 and stated that the applicant wishes to subdivide a 7.39 acre lot into three lots on Crestview Lane. Kris stated that the application was before the Staff Review Committee on July 23rd and the Sketch Plan was approved by the Board on July 10th.

The applicant, John Gordon, stated that his proposal is to split the lot into three and would include his existing home. Mr. Gordon stated that one lot would be two acres and the other would be 2.2 acres. Since the last meeting Mr. Gordon stated that he has been asked if he would take into consideration the view easement that was in place when his house was originally built. It was asked that he bring the cut line back to the view line another 25 feet to the 50 foot setback from the conservation easement; he has agreed and the line has been brought back to the 50 foot mark. Mr. Gordon stated that they are still waiting for DOT (Department of Transportation) posting in regards to the curb cut.

MOTION BY DANN LEWIS THAT THE FINAL PLAN BE DEEMED COMPLETE.
SECONDED BY RICHARD VISSER, APPROVED UNANIMOUSLY.

Charlie Frizzle asked the Town Attorney, Pat Scully to address the issue of standing for the applicant as discussed at the July 10th meeting. Mr. Scully clarified that question and stated that this lot is one part of a previously approved subdivision and the applicant is not the original

developer of the subdivision but is asking for a subdivision of his lot. He stated that as he understands the question, since the applicant is not the original developer of the subdivision, does he have standing to come before the Planning Board and ask for an amendment; Mr. Scully responded that the applicant does have standing. He stated that in some cases a subdivision or some other development may not have been fully developed and the original developer may still control the property; in this case you would expect the original developer to come back and request an amendment. In other cases all of the lots may have sold and the original sub divider no longer has an interest in the development or is not in a position to seek a modification because he/she no longer has control of the property; in this case the original lot owner, such as this request, is the only person who can seek an amendment of this plan as it effects that lot. Mr. Scully stated that if the amendment affected more owners than you would need to have the owners of the larger effected properties. Mr. Scully reiterated that the applicant does have standing and is probably the only one who does. Steve Walker stated that he understands the standing over the 7.39 acres as a clean option for a lot split, but given that that Burgess still has ownership of the open space, wouldn't he need to approve an amendment beyond a single lot split? Mr. Scully replied "no" and stated that the reason is because the impact of this change is falling entirely on the applicant's lot. Steve replied that due to the separation of the Burgess ownership and the 7.39 acres, is there any issue with Mr. Gordon requesting his lot be split three times based on actions that he did not take in terms of setting conservation lands aside. Mr. Scully replied that what is being sought is an amendment to what was the original plan and in reviewing the original plan this is to be treated as an amendment and in doing so you must look at the larger parcel. The Planning Board must make sure that the impact for the conservation land is met as a whole and that they do not cross a point where the original density of the conservation area would have supported.

Charlie Frizzle stated that with respect to other legal issues which have been raised and may affect their decision, Pat Scully has addressed in his letter dated July 26, 2012; the Planning Board will not discuss these issues any further.

Margaret Wilson asked for clarification on the area of disturbance and Steve McLellum, Land Surveyor, stated that the area for disturbance has been moved 25 feet closer to the house. Steve Walker asked in terms of monitoring the disturbances, would it make more sense to make the building envelopes more consistent with those limits? Kris Hultgren replied that this project has gone through Staff Review and the Conservation Commission and the boundaries for disturbed area and mitigation have remained the same. Steve suggested showing the building windows more consistent with the limits of disturbances on the plans; make the disturbed area the building window, outside the disturbed area do not show setbacks. Margaret and Charlie agreed.

Chairman Charlie Frizzle opened the meeting to the public hearing. Charlie reminded those wishing to speak that the Planning Board that it is not a court of law and asked that they only address issues pertaining to the Town's Zoning Ordinance.

John Sperzel, resident of 61 Crestview Lane and abutter stated that has opposed this application based on release of covenants which has been pointed out to be a legal issue. He stated that he provided to the Planning Board at the meeting of June 26, 2012 a letter that addressed issues dealing with Maine real estate law and case law that address the issue at hand. Mr. Sperzel

stated that he asked Mr. Scully for an interpretation and what he got was a response to Anna's Question. Mr. Sperzle asked if Mr. Scully had read his letter and if he has any comments. Pat Scully replied that there may be some question between the two owners whether release of this covenants is effective against other lot owners and whether other lot owners would have any complaint about the lease and whether or not a court would entertain and what they would do about it. He stated that this would require a factual investigation at a court level, legal investigation and for a judge to decide. He stated that it is not a decision that the Planning Board would make; the Planning Board does not litigate legal matters. Mr. Sperzel asked if Pat Scully was willing to go on record and say that, based on the removal of the restriction of the subdivision of that property, "that it is OK for somebody to get a change in a covenant on a piece of property that they don't own without the knowledge of the owners of that property"? Charlie replied that the Planning Board has reviewed this issue and that is as far as it is going to go. Mr. Sperzel stated that he had an issue from the last Staff Review meeting and the curb cut for Lot 1A. He stated that he spoke to Jim Higgins and John Foster with Public Works and neither seemed to have an issue with moving the curb cut back to the original position. He stated that he wishes for the cut to be located at the original position.

Mr. Sperzle stated that his last issue pertains to the remaining covenants and the covenants that got with the lots run with the land and must be included in any deeds or transfer of the property.

Chairman Charlie Frizzle closed the public hearing.

MOTION BY STEVE WALKER TO APPROVE THE FOLLOWING WAIVERS.

1. 412.2.B.11 – Kind, location, cross section of all drainage facilities, etc.
2. 412.2.B.17 – Location of trees over 10 inches in diameter
3. 412.2.B.25 – Wetlands Map
4. 412.2.C.17 – Landscaping Plan

SECONDED BY MARGARET WILSON, APPROVED UNANIMOUSLY.

MOTION BY DANN LEWIS THAT THE FINAL PLAN IS APPROVED WITH THE FOLLOWING CONDITIONS:

1. That the Board's review and approval does hereby refer to these findings of fact, the plans and materials submitted by the applicant and the written and oral comments of the applicant, his representatives, reviewing officials, and members of the public as reflected in the public record. Any changes to the approved plan not called for in these conditions of approval or otherwise approved by the Director of Planning and Development as a minor modification shall require a review and approval in accordance with the Brunswick Zoning Ordinance.
2. That prior to receiving a building permit, the applicant shall receive a Driveway Entrance Permit from the Department of Public Works and update the final plan, if necessary, in accordance with the permit.
3. That prior to receiving a building permit, the applicant shall pay a solid waste impact fee in the amount of \$258.56 for lots 1A and 1B.

4. That prior to receiving a building permit, the applicant shall submit an updated plan showing building setbacks only within the proposed limits of disturbance.

SECONDED BY MARGARET WILSON, APPROVED UNANIMOUSLY.

Case Number: 12-022 Maine Woolens: The Board will review and take action on a joint sketch and Final Plan application submitted by Maine Woolens to construct a 7,886 square foot addition at 15 Paul Street (**Assessor's Map U26, Lot 12**) in the **Mixed Use 2 (MU2) Zoning District**.

Kris Hultgren reviewed his Memo to the Board dated July, 27, 2012 and stated that the application is to expand Maine Woolens existing manufacturing operations at 15 Paul Street. Kris stated that there is an existing building of approximately 8,668 square feet and the applicant wishes to extend this another 7,886 square feet; Staff Review Committee reviewed this application at their July 23rd meeting.

Curt Neufeld with Sitelines reviewed the location and stated that it is set back far from the road. He stated that the facility is for light manufacturing and the existing building is non conforming with regards to the rear setback and the proposed building will be no more non-conforming then that. The proposed building will extend out to the side and will have an overhead. They employee four to five people at any given time and the expansion is not going to change this much. The site plan provides parking up to 11 but based on use they will only use five to eight. Kurt stated that there are no state permits required and the new building will be sprinklered as required by the Fire Chief.

Charlie Frizzle asked Anna if her request that the application be updated with specifications to HVAC had been met; Anna replied that according to the additional information they received, the HVAC unit is not to be located on the roof and they are all set.

Margaret Wilson asked if the Planning Board could waive parking requirements; Kris Hultgren replied that the Planning Board has the ability to waive the requirements under Section 512 and noted that Planning Staff would support this based on the use of this site and very little traffic to this site. Margaret asked how a big truck will access the site; Kurt replied that a large truck will need to back in. Richard Visser asked where the additional parking will be located. Curt replied that it is along the side and envisions that if needed the applicant can ask their employees to move their vehicles.

Chairman Charlie Frizzle opened the meeting to the public hearing.

Town Councilor, John Perrault, stated that he is excited that there is a business expanding in Brunswick and encouraged by this. Councilor Perrault asked about access if NEPRA was to come in and is there a possible driveway access this way. Margaret Wilson and Charlie Frizzle stated that they haven't been given any information in regards to NEPRA; Councilor Perrault stated that he understood and noted that he has been present at many of the NEPRA meetings and this is the direction that they are talking about bring their road in. Charlie replied that this will have to be addressed when NEPRA submits their formal plans.

Chairman Charlie Frizzle closed the public hearing.

MOTION BY STEVE WALKER TO DEEM THE SKETCH/FINAL PLAN COMPLETE. SECONDED BY DANN LEWIS, APPROVED UNANIMOUSLY.

MOTION BY STEVE WALKER TO APPROVE THE FOLLOWING WAIVERS.

1. Section 412.2.B.8 – Name, location and width of paving for proposed roads
2. Section 412.2.B.14 – Location of proposed cross section of sanitary sewers
3. Section 412.2.B.16 – Class A Soil Survey
4. Parking Space Requirements

SECONDED BY MARGARET WILSON, APPROVED UNANIMOUSLY.

MOTION BY STEVE WALKER THAT THE SKETCH AND FINAL PLAN IS APPROVED WITH THE FOLLOWING CONDITION.

1. That the Board’s review and approval does hereby refer to these findings of fact, the plans and material submitted by the applicant and the written and oral comments of the applicant, his representatives, reviewing official, and members of the public as reflected in the public record. Any changes to the approved plan not called for in these conditions of approval or otherwise approved by the Director of Planning and Development as a minor modification shall require a review and approval in accordance with the Brunswick Zoning Ordinance.

SECONDED BY RICHARD VISSER, APPROVED UNANIMOUSLY.

Workshop: At the request of Town Council, the Board will discuss options to amend the zoning ordinance to allow other uses at 28 Federal Street (Town Hall and Recreation Facility), once the buildings are no longer a municipal facility and schedule a public hearing.

Anna Breinich stated that this was a workshop at the Town Council’s request that the Board discuss options to amend the zoning ordinance to allow other uses at 28 Federal Street, once the buildings are no longer a municipal facility. Anna reviewed her letter to the Board dated July 27, 2012 and asked the Town Attorney, Pat Scully to discuss zoning by ownership. He replied that “if you are using land or a building for a municipal purpose then you are a municipal facility and if it is permitted as a municipal facility then fine”, however, if you are grandfathered as a municipal facility then once that ownership ceases it is no longer a municipal facility. He stated that this building was created under a different ordinance when it was permitted but later in time it became no longer allowed to use as an office building. If an office building were to move into this building it would become non-conforming. Margaret Wilson asked what would be allowed and Anna replied that TR2, Town Residential 2, only allows two uses; single family and multi-family duplex. She stated that there are a number of uses by permit such as greenhouses, florists, religious institutions and such. Anna reviewed the history of Federal Street and non-conforming buildings that were established uses. She stated that all non-municipal uses that are in place are considered non-conforming; once the Town gives up ownership of the municipal building, it will be non-conforming only as a municipal facility not as the use of an office and recreational facility. Anna reviewed the potential options as reflected in her letter. Charlie Frizzle asked what the functional use was of the recreational building; Anna replied that it would remain the

same as a gym, office and daycare. Charlie suggested taking a liberal approach to see what direction the Town wishes to go with respects to Public Hearing. Steve Walker agreed with Charlie and stated that it would be best to start with a broader approach. Richard Visser asked if these changes would inhibit the possibility of using the space as a parking lot. Anna replied that the only way a parking facility could be legally established under the current TR2 was if it was municipally owned and would have to follow the dimensional requirements. Charlie stated that going to TC1 would alleviate some of the requirements. Pat Scully stated that he disliked the second option of amending the existing municipal facilities standards; he stated that the first option leaves flexibility.

Chairman Charlie Frizzle opened the meeting to public comment; hearing none, the public comment period was closed.

It was decided that planning staff set public hearing to consider rezoning the west side of Federal Street from Mason to Center Street to TC1 Zone.

Other

Minutes

MOTION BY MARGARET WILSON TO APPROVE THE MINUTES OF JUNE 12, 2012. SECONDED BY RICHARD VISSER, APPROVED UNANIMOUSLY.

Adjourned

This meeting was adjourned at 8:45 P.M.

Attest

Tonya D. Jenusaitis
Recording Secretary