SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

CITY OF AUBURN
DEVELOPMENT REVIEW APPLICATION
AMENDMENT

For:

Auburn-Lewiston Municipal Airport Hangars
Flightline Drive and Aviation Avenue
Auburn, Maine 04210

Applicant:

Fielding Properties, LLC
PO Box 6951
Scarborough, Maine 04074

Prepared by:

Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine 04106

August 2024

230887

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August 9, 2024
230887

Mr. Eric Cousens, Director of Planning & Permitting
City of Auburn
Chair LeBlanc, City of Auburn Planning Board
60 Court Street
Auburn, Maine 04210

RE: Development Review Application Amendment
Auburn-Lewiston Municipal Airport New Hangars
Applicant: Fielding Properties, LLC
Allowed Use: (11) Airports
p/o Tax Map 143/Lot 007

Dear Mr. Cousens, Ms. LeBlanc, and Planning Board members:

Sebago Technics, on behalf of our client Fielding Properties, LLC, working in conjunction with Jonathan P. LaBonte, Airport Director, Auburn-Lewiston Municipal Airport and Transportation Systems Director, City of Auburn, is pleased to offer a Development Review Application Amendment in accordance with the Auburn Zoning Ordinance Division 15-Industrial District, Sec.60-578(a)(11) Airports that will occupy 2.44±-acre portion of the overall airport property. The development proposal for Board consideration includes the phased buildout of four(4) new 6,400 square-foot one-story hangars (overall 25,600 SF building footprint) in close proximity to the existing hangar at the intersection of Flight Line Drive and Aviation Avenue in the Industrial (ID) District. Vegetation removal is extremely limited as the proposed development occurs in an area adjacent to an existing building, pavement, and an open area currently maintained as a clearing.

Existing Conditions/Use: The existing use of the overall property is improved for use at the Auburn-Lewiston Municipal Airport. The airport is a public facility jointly owned and operated by the Cities of Auburn and Lewiston. The proposed hangars are located in a maintained open portion of the site adjacent to an existing hangar. The proposed new buildings will be centrally located on the property at the westerly portion of the airport. No portion of the proposed development area fall within the Shoreland Zone per the City of Auburn GIS mapping available to the public.

Development Overview: The proposed hangar development is designed to meet the space and operational requirements of the applicant and future tenants in the remaining three hangars. The applicant intends to permit four (4) hangars and will construct one (Phase 1) for personal use. Others will build and utilize the remaining three hangar pad sites in accordance with the approval documents for the

overall phased project. The hangars will be pre-engineered metal buildings for ease and speed of installation, straightforward maintenance, and anticipated structure longevity.

Hangar Access extends from the existing public streets of Lewiston Junction Road and Kittyhawk Drive to the roadway within the airport. New roadways and drives are not proposed as part of this project.

Parking: The design includes three dedicated parking spaces at each hangar. Overflow parking, if necessary, will be available within the existing Lot A lot for customers and tenants parking in excess of 72 hours.

Other Permits: We note that the Maine Department of Environmental Protection (MDEP) has reviewed the site, and the airport development is subject to Site Location of Development (SLODA, Site Law) approval order (L-6634-39-A-X, June 25, 1980), numerous condition compliances, revisions, amendments, and modifications have occurred since the original approval was issued. This project will require a modification to the existing permit. MDEP authorizes the City of Auburn Delegated Review Authority for Site Law projects, which provides for stormwater management (Sec. 12) review. A full stormwater report written in accordance with MDEP Ch. 500 standards is included in this application submittal. MDEP will review a Maine Construction General Permit (MCGP) Notice of Intent (NOI) for the work concurrently with the City's delegated Site Law review. A Federal Aviation Administration (FAA) Notice of Proposed Construction or Alteration is also required for this project and will be submitted directly to the FAA.

Buffering/Landscaping: The applicant respectfully requests a waiver from buffering and landscaping standards due to the use and location of the project. Excessive mature vegetation is a safety concern due to airport use. The neighborhood is not adjacent to residential uses, requiring good-neighbor visual buffering.

Operations/Staffing: Phase 1 of the project (building one) does not include employees. The hangar is proposed for personal use by the applicant.

Schedule:

- Proposed commencement: Upon receipt of all permits, anticipating autumn 2024
- Proposed occupancy, Phase I: Upon completion, spring 2025
- The anticipated lifetime of the facility: Fifty years± (2074)

A general construction sequence, with many activities occurring, some concurrently, is as follows:

Tasks

1. Mobilization and installation of erosion controls
2. Commence earthwork operations
3. Commence utility installation
4. Construct stormwater management features
5. As earthwork is completed, all associated side slopes, berms, and finished surfaces shall be stabilized in accordance with the development plans.
6. Building, Phase I structure
7. Complete utility connections
8. Complete stormwater management features
9. Complete installation of final surface finishes

10. Stabilize non-paved areas
11. Once 90% catch of vegetation is established, remove all temporary erosion and sedimentation control measures.
12. Final Clean Up, Phase I

We are hopeful that the enclosed information adequately addresses the request. Please contact me with any questions or if you require additional information. We appreciate your consideration.

Sincerely,

SEBAGO TECHNICS, INC.

Robert McSorley, P.E.
Senior Project Manager

enc.

cc: B. Fielding, Fielding Development, LLC
J. LaBonte, Auburn-Lewiston Municipal Airport

A

Site Development Review Application / Site Development Checklist

City of Auburn, Maine
Office of Planning & Permitting
Eric J. Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Application

PROJECT NAME: Auburn-Lewiston Municipal Airport Hangars

PROPOSED DEVELOPMENT ADDRESS: Flightline Drive and Aviation Avenue, Auburn, Maine 04210

PARCEL ID #: p/o 143-007

REVIEW TYPE: Site Plan □ Site Plan Amendment X
Subdivision □ Subdivision Amendment □

PROJECT DESCRIPTION: The applicant proposes the phased construction of four (4) 6,544 square foot 1-story hangars (Gross 26,176 square feet), utilities, parking, stormwater management features and other associated improvements as shown on the drawings. Phase I activities include the construction of Hangar 1 and p/o associated taxiway, apron and extension of utilities by the applicant for personal use.

CONTACT INFORMATION:

Applicant

Name: Fielding Properties, LLC
Address: PO Box 6951
City / State Scarborough, Maine
Zip Code 04074
Work #: (207) 883-3194
Cell #:
Fax #:
Home #:
Email: bfielding@fieldingsoil.com

Property Owner

Name: City of Auburn, City of Lewiston
Address: 60 Court Street
City / State Auburn, Maine
Zip Code 04210
Work #: (207) 333-6601, ext. 110, Deputy Assessor
Cell #:
Fax #:
Home #:
Email:

Surveyors, Engineers, Environmental, Traffic, Permitting & Project Representative

Name: Sebago Technics, c/o Robert McSorley, P.E.
Address: 75 John Roberts Road, Suite 4A
City / State South Portland, Maine
Zip Code 04106
Work #: (207) 200-2074
Cell #:
Fax #: (207) 856-2206
Home #:
Email: rmcsorley@sebagotechnics.com

Other professional representatives for the project (surveyors, engineers, etc.),

Name: Marc Blais General Contractor
Address: 1993 Lisbon Street
City / State Lewiston, Maine
Zip Code 04240
Work #:
Cell #:
Fax #:
Home #:
Email:

PROJECT DATA

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

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	1,916,640±	sq. ft.	(44 Ac.±) Existing Impervious
Proposed Total Paved Area	30,945	sq. ft.	
Proposed Total Impervious Area	57,120	sq. ft.	
Proposed Impervious Net Change	57,120	sq. ft.	(44 Ac.±) Ex Impervious/
Impervious surface ratio existing	12.74	% of lot area	(345.24 Ac.±) Site Area
Impervious surface ratio proposed	13.12	% of lot area	

BUILDING AREA/LOT COVERAGE

Existing Building Footprint	135,000±	sq. ft.	
Proposed Building Footprint	26,176	sq. ft.	Full buildout (6,544 SF x 4, 1-Story)
Proposed Building Footprint Net change	+26,176	sq. ft.	
Existing Total Building Floor Area	135,000±	sq. ft.	
Proposed Total Building Floor Area	+26,176	sq. ft.	
Proposed Building Floor Area Net Change	+26,176	sq. ft	
New Building	Yes	(yes or no)	
Building Area/Lot coverage existing	0.90	% of lot area	
Building Area/Lot coverage proposed	1.07	% of lot area	

ZONING

Existing	ID - Industrial	
Proposed, if applicable	n/a	
		25,600

LAND USE

Existing	Airport (11)
Proposed	Airport, No change

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units	n/a
Proposed Number of Residential Units	
Subdivision, Proposed Number of Lots	

PARKING SPACES

Existing Number of Parking Spaces	0 at Proposed Improvement Location
Proposed Number of Parking Spaces	12 (3 per Hangar)
Number of Handicapped Parking Spaces	4 (1 per Hangar)
Proposed Total Parking Spaces	12

ESTIMATED COST OF PROJECT: Phase 1: $615,000.00 - Overall Estimate of Probable Cost: $955,000.00

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	1,916,640±	sq. ft.	(44 Acres±)
Proposed Disturbed Area	153,000±	sq. ft.	
Proposed Impervious Area	57,120	sq. ft.	

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

This project requires an amendment to MDEP Site Location of Development Permit #L-6634-39-A-X originally issued June 25, 1980.

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing (Since July 1, 1997) 0 passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) <10 passenger car equivalents (PCE)

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

Zoning Summary

1. Property is located in the ID - Industrial zoning district.
2. Parcel Area: 345.25 +/- acres / 15,039,090± square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	Min. 150'w x 250'd (37,500 SF)	/ 2.2± Acres (95,832 SF) Project Area
Street Frontage	Exceeds Requirement	/
Min Front Yard	35' or 15% of Avg. Lot Depth	/ NA - Interior lot of airport
Min Rear Yard	50' or 20% Avg Lot Depth	/ NA - Interior lot of airport
Min Side Yard	*5' between every bldg. and property line	/ NA - Interior lot of airport
Max. Building Height	75'	/ 25±'
Use Designation	Hangars, Airport (11)	/ No change
Parking Requirement	1 space/ per square feet of floor area	
Total Parking:	12 (3 spaces per hangar)	/
Overlay zoning districts (if any):	Airport Overlay Influence Zone	/ /
Urban impaired stream watershed?	YES/NO If yes, watershed name	

DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

1. 5 Full size plans and 10 smaller (no larger than 11" x 17") plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed by the property owner or designated representative. (NOTE: All applications will be reviewed by staff and any incomplete application will not be accepted until all deficiencies are corrected.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

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

To view the City of Auburn Zoning Ordinance, go to:
www.auburnmaine.gov under City Departments / Planning, Permitting & Code / Subdivisions / Land Use /Zoning Ordinance

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

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

Signature of Applicant:	**Date:**
	August 9, 2024

City of Auburn, Maine
Office of Planning & Permitting
Eric J. Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Checklist

The following information is required where applicable to be submitted for an application to be complete

PROJECT NAME: Auburn-Lewiston Municipal Airport Hangars
PROPOSED DEVELOPMENT ADDRESS: Each Building to be Assigned a Street Address
PARCEL #: p/o 143/007

Required Information		*Check when Submitted*		*Applicable Ordinance*
Site Plan		*Applicant*	*Staff*	
	Owner's Names/Address	X		
	Names of Development	X		
	Professionally Prepared Plan	X		
	Tax Map or Street/Parcel Number	X		
	Zoning of Property	X		
	Distance to Property Lines	X		
	Boundaries of Abutting land	X		
	Show Setbacks, Yards and Buffers	X		
	Airport Area of Influence	X		
	Parking Space Calcs	n/a		
	Drive Openings/Locations	n/a		
	Subdivision Restrictions	n/a		
	Proposed Use	X		
	PB/BOA/Other Restrictions	n/a		
	Fire Department Review	Pending		
	Open Space/Lot Coverage	n/a		

Required Information		*Check when Submitted*		*Applicable Ordinance*
Landscape Plan		*Applicant*	*Staff*	
	Greenspace Requirements	n/a		
	Setbacks to Parking	n/a		
	Buffer Requirements	n/a		
	Street Tree Requirements	n/a		
	Screened Dumpsters	n/a		
	Additional Design Guidelines	n/a		
	Planting Schedule	n/a		

Stormwater & Erosion Control Plan		*Applicant*	*Staff*	
See Section 12	Compliance w/ chapter 500	X		
	Show Existing Surface Drainage	X		
	Direction of Flow	X		
	Location of Catch Basins, etc.	X		
	Drainage Calculations	X		
	Erosion Control Measures	X		
	Maine Construction General Permit	X		
	Bonding and Inspection Fees	TBD		
	Post-Construction Stormwater Plan	X		
	Inspection/monitoring requirements	X		
Lighting Plan		*Applicant*	*Staff*	
See Section 9	Full cut-off fixtures	X		
	Meets Parking Lot Requirements	n/a		
Traffic Information		*Applicant*	*Staff*	
See Section 6	Access Management	n/a		
	Signage	n/a		
	PCE - Trips in Peak Hour	X		

Required Information		*Check when Submitted*		*Applicable Ordinance*
	Vehicular Movements			
	Safety Concerns			
	Pedestrian Circulation			
	Police Traffic			
	Engineering Traffic			
Utility Plan		*Applicant*	*Staff*	
See Section 10	Water	X		
	Adequacy of Water Supply	X		
	Water main extension agreement	X		
	Sewer	X		
	Available city capacity	X		
	Electric	X		
	Natural Gas	X		
	Cable/Phone	X		
Natural Resources		*Applicant*	*Staff*	
See Sections 2, 13, and Site Plans	Shoreland Zone	n/a		
	Flood Plain	n/a		
	Wetlands or Streams	n/a		
	Urban Impaired Stream	n/a		
	Phosphorus Check	n/a		
	Aquifer/Groundwater Protection	n/a		
	Applicable State Permits	X		
	Lake Auburn Watershed	n/a		
	Taylor Pond Watershed	n/a		
Right, Title or Interest		*Applicant*	*Staff*	
See Sections 4	Verify			
	Document Existing Easements, Covenants, etc.	X		

Required Information		*Check when Submitted*		*Applicable Ordinance*
Technical & Financial Capacity		*Applicant*	*Staff*	
	Cost Est./Financial Capacity	X		
After Final Approval	Performance Guarantee			
State Subdivision Law		*Applicant*	*Staff*	
Not Applicable	Verify/Check			
	Covenants/Deed Restrictions			
	Offers of Conveyance to City			
	Association Documents			
	Location of Proposed Streets & Sidewalks			
	Proposed Lot Lines, etc.			
	Data to Determine Lots, etc.			
	Subdivision Lots/Blocks			
	Specified Dedication of Land			
Additional Subdivision Standards		*Applicant*	*Staff*	
	Mobile Home Parks	n/a		
	PUD	n/a		
A JPEG or PDF of the proposed site plan		*Applicant*	*Staff*	
		X		
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving	Acknowledged			

B

Fee Calculation/ Agent Authorization/ Corporate Status

ZONING & LAND USE FEE SCHEDULE CONTINUED

Type of Review	Development Review Fee	Required Advertising Fee	Total Fee
Site Plan Review			
Minor Projects Interdepartmental / Staff review	$200	N/A	$200
Major Projects & Subdivision of Existing Structures: PB Review / Special Exceptions	$500	$200	$700
Site Plan Amendment			
Staff Approved Amend De Minimis Change	$100	N/A	$100
Planning Board Approved Amendment	$500	$200	$700
Subdivision Review			
Major & Minor New Lots / Structures	$750 per 1st 3 lots & $100 per unit thereafter	$200.00	Depends on # of lots or units + PRA (see below)
Delegated Review (*in addition to site plan or subdivision fee when required)* ~~Includes one or all areas~~ (Stormwater, TMP, Site Law, etc.)	25% of MDEP Published Fee, See Next Page $1,000* *plus applicable site plan review fee	~~N/A~~	~~$1,000~~
Zoning Conformance/ Rebuild Letter	$50	N/A	$50

Independent Professional Review Fees

Staff may determine, due to the size and nature of the project, that a peer review is necessary to generate facts sufficient to warrant a finding that certain applicable criteria

Engineering Inspection Fees

Inspections required by the City Engineer for projects that directly impact municipal infrastructure or for proposed city streets shall be paid for by the developer / applicant.

Enclosed Fee:
$700 + $468.50 = $1,168.50

Land Resources – Small-Scale Wind Energy Developments

Code	Description	Processing Fee	Licensing Fee
ES[6]	certification of small scale wind development	$1,441	$667

[6]The department may use "outside reviewers" pursuant to 38 M.R.S. §344-A for which the applicant must pay all costs in addition to the processing fee.

The fee for a small-scale wind energy development **minor revision, amendment, condition compliance, or transfer** is $205. If the Commissioner determines that an application, by virtue of its size, uniqueness, complexity or other relevant factors, is likely to require significantly more costs than those listed on this table, the Commissioner may designate that application as subject to special fees per 38 M.R.S. §352.c

Land Resources – Site Location of Development Act

Code	Description	Processing Fee	Licensing Fee
06	delegation of authority	-	-
18	airport	$8,685	$4,342
19	medical facility	$8,685	$4,342
20	paper mill	$8,685	$4,342
21	sawmill, lumber products	$8,685	$4,342
22	school	$8,685	$4,342
23	shopping center	$8,685	$4,342
24	utilities, not hydro	$8,685[7]	$4,342
25	warehouse	$8,685	$4,342
26	other structure, not residential	$8,685	$4,342
27	pipeline	$8,685	$4,342
28	recreational site	$8,685	$4,342
39	industrial park/commercial	$998[8]	$998[8]
85	transient lodging	$8,685	$4,342
87	multi-family/condominium	$8,685	$4,342
L0	great american neighborhood	$107[8]	$107[8]
L1	res. Subdiv./afford. housing	$107[8]	$107[8]
L2	res. Subdiv./pub. water & sewer	$379[8]	$379[8]
L3	res. Subdiv./all others	$542[8]	$542[8]
MX	mixed use:		
	residential/condo	(see below[9])	(see below[9])
	residential/non-residential	(see below[10])	(see below[10])
L7	metallic mineral mining[11]	-	-
PS	Solar Projects	$8,685	$4,342
TP	MDOT/MTA	-	-
-	planning permit (pertains to any site type project except subdivisions)	$8,685	$4,342
-	notice of intent to comply, roundwood	-	$250

[7]Grid-scale wind energy developments are typically subject to the special fee provisions of 38 M.R.S. §352.

[8]Fee per lot; res. Subdiv./afford. housing capped at $30,000.

[9]Processing and licensing fee for types L1, L2, L3, and 87.

[10]Processing and licensing fee for types L1, L2, L3, and 39.

[11]Metallic mineral mining is subject to the fee provisions of 38 M.R.S. §352.4-A.

The fee for a **minor revision, condition compliance, renewal,** or **transfer** is $205. The fee for an **amendment** is one half the processing fee, plus one half the licensing fee; the **minor amendment** fee is $1,874. If the Commissioner determines

25% = local review

AGENT AUTHORIZATION

APPLICANT/ OWNER	**Name**	Fielding Properties, LLC c/o Bill Fielding	PO Box 6951 Scarborough, ME 04074		p/o Auburn
PROPERTY DESCRIPTION	**Physical Address**	Auburn-Lewiston Municipal Airport Intersection of Flightline Dr. and Aviation Ave.		**Map** **Lot**	143 007
APPLICANT'S AGENT INFORMATION	**Name**	Robert McSorley, P.E.			
	Phone	(207) 200-2074	**Business Name & Mailing Address**	Sebago Technics, Inc. 75 John Roberts Road, Suite 4A South Portland, ME 04106	

William J Fielding IV 06/24/2024

APPLICANT SIGNATURE DATE

William J Fielding IV Fielding Properties LLC

August 8, 2024

APPLICANT'S AGENT SIGNATURE DATE

230887

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Mon Jun 24 2024 13:45:12. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
FIELDING PROPERTIES, LLC	20100191DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
07/20/2009	N/A	MAINE

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

Principal Home Office Address

Physical	Mailing
420 U. S. ROUTE ONE SCARBOROUGH, ME 04074	420 U. S. ROUTE ONE P. O. BOX 6951 SCARBOROUGH, ME 04070

Clerk/Registered Agent

Physical	Mailing
CRAIG J. RANCOURT 180 POOL STREET STE. 337 BIDDEFORD, ME 04005	CRAIG J. RANCOURT 180 POOL STREET STE. 337 BIDDEFORD, ME 04005

New Search

Click on a link to obtain additional information.

List of Filings — View list of filings

Obtain additional information:

Section 1

Performance Standards Responses

SECTION 1: STANDARDS

Comprehensive Plan Consideration

Per the *Future Land Use Classification*, in the 2021 Comprehensive Plan update, the parcel in the Industrial District (ID) is unchanged from its current designation. Per City Zoning, the facility is appropriately sited, and the use (Airport, 11) is existing and allowed.

Division 15-Industrial District

Sec. 60-579-Dimensional Regulations

(1) The minimum lot width and depth is met

(2) Density does not exceed 40% building coverage

(3) Yard requirements

a. *Rear- the minimum depth of 50 feet*, met

b. *Side-35',* n/a, the project is located within an extensive property and is not closer to the property line than existing hangars.

c. *Front-35',* n/a, the project is located interior to an extensive property

d. *Principal Buildings-*The buildings meet yard setback requirements. The project layout is optimized by clustering and providing a taxiway that meets FAA standards. We note that per structural steel plans, the Phase I hanger is 25'± tall.

e. *Railroad tracks*

Not applicable

f. Open and unbuilt spaces-Open and unbuilt may be used, if otherwise lawful, for outdoor storage of articles, supplies, and materials…

Acknowledged

g. Landscaping

1. *Within a parking lot, landscaping shall be provided in an amount equal to 10% of the area of the parking lot.*

   Response: Not applicabe; a dedicated parking lot is not proposed. The applicant respectfully requests a full waiver of landscaping standards based on the location and use of the project.

2. *The perimeter of a principal building, except for entrances and loading doors, shall be landscaped in an amount equal to 20% of the building footprint. Emphasis shall be given to the front and sides of the building.*

   Response: A waiver from the standard requiring new vegetation along the building front is proposed. The front of the buildings is paved for full and uninterrupted aircraft access.

3. All lots which abut the side or rear lot line in a residential district…
   Response: Not Applicable. The 2.2±-acre project area does not abut a residential district.

4. Side and rear lot lines between non-residential uses shall be planted with an evergreen tree line planted in staggered rows having the base of the trees not more than 10 feet apart. The minimum width of the buffer shall be 30 feet.
   Response: The applicant respectfully requests a variance from this standard. Additional vegetation within the airport creates sightline interruption and potential hazard to aircraft.

5. Landscaping is considered to be vegetative treatment with trees, shrubs and flowering plants and grass and/or bark mulch. Grass only is not deemed to satisfy this requirement. Evergreen trees shall be used as required in subsections (3)g3 and (3)g4 of this section Trees shall be a minimum of six feet at the time of planting. Where possible, existing trees shall be preserved, building shall be oriented with respect to natural landscape feature, topography and natural drainage areas.
   Response: The applicant respectfully requests a full waiver of vegetative treatment for the hangar project. Mature vegetation, especially trees, is detrimental to operations.

(4) Height.
Response: The proposed hangars will not exceed 75 feet in height. Proposed Hangar 1 (Phase 1) is 25'± high. See Plans.

(5) Off-street parking.
Response: The design provides three spaces per hangar. Overflow parking with advance notice will be available in Lot A if necessary. Loading space is provided in accordance with the requirements set forth in Sec. 60-607(3), below.

Article V. Off-Street Parking & Loading Requirements:
Response: Sec. 60-607(3) requires a 25 x 20-foot loading space for buildings having a gross floor area of less than 10,000 square feet. Each of the four (4) buildings is 6,400 SF with a large shared apron/taxiway between the building faces that allows ample space for loading access. Additional parking beyond the proposed three spaces per hangar, if necessary, is available in Lot A.

Exterior Lighting Sec. 60-607(11)
Response: This section requires exterior lighting to be shielded and not impact adjacent residential uses or public highways. The hangars will utilize shielded wall packs. Reference is made to Exhibit 9 regarding light cut sheets and a professionally prepared photometric plan by Swaney Lighting Associates.

Parking Requirements Sec. 60-608

Response: We understand that formal parking based on on-site use is not required. The design provides three parking spaces per hangar (12 total). Lot A, located at the intersection of Aviation and Flight Line, will be utilized to meet parking overflow, if necessary.

Safe Sight Distance Sec. 60-700(4)

Response: The development area is located within the airport and is fenced. New drives and roadways are not proposed.

Noise Sec. 60-1037

Response: Post-construction sound levels will comply with the sound level limits defined by MDEP and the City of Auburn. The new hangars are consistent with existing site use and do not exceed allowed noise levels.

Chapter 60 Article XVI. Administration and Enforcement

Division 2.-Site Plan Review, Section 60-1277.-Objective. In considering a site plan, the planning board shall make findings that the development has made provisions for:

(1) Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust, and vibration; and preservation of light and air;

Response: No detrimental effects, including offensive use on the site, are anticipated. The design provides for adequate surface water drainage, buffering from light, sightlines, sound, dust, and vibration with the preservation of light and air to the greatest extent practicable. Reference is made to Exhibit 12 for specifics regarding stormwater management.

(2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;

Response: The site design and existing access provide for safe vehicular movement and pedestrian movement within the site and in relation to adjacent areas. The layout is similar to other hangar facilities on the site, where the flow pattern is known to accommodate the proposed use and operations safely.

(3) Adequacy of the methods of disposal for wastes; and

Response: Municipal solid waste (MSW), and Construction Debris (CDD) are addressed in Exhibit 7. The MSW will be recycled to the greatest extent practicable and removed by a private contract with a licensed non-hazardous waste hauler. Solid waste disposal will not affect municipal collection or disposal.

(4) Protection of environmental features on the site and in adjacent areas

Response: Modification to the existing Maine Department of Environmental Protection Site Location Development Approval will be facilitated by the City. A Maine Construction General Permit NOI will be issued by MDEP. Direct environmental impacts are not associated with the proposed phased hangar project. A written Erosion and Sedimentation Control (ESC) Plan, as well as locations and details, are included in the site plans. The proposed stormwater management features, with proper installation, monitoring, and maintenance, will protect downstream waters.

Division 3.-Special Exception, Section 60-1336.-Conditions

Response: This section is not applicable to the hangar project.

Section 2

Location Maps

SECTION 2: LOCATION MAPS

USGS Site Location Map: This map exhibit shows the site located on a portion of the latest topographical mapping available for Auburn, Androscoggin County, Maine.

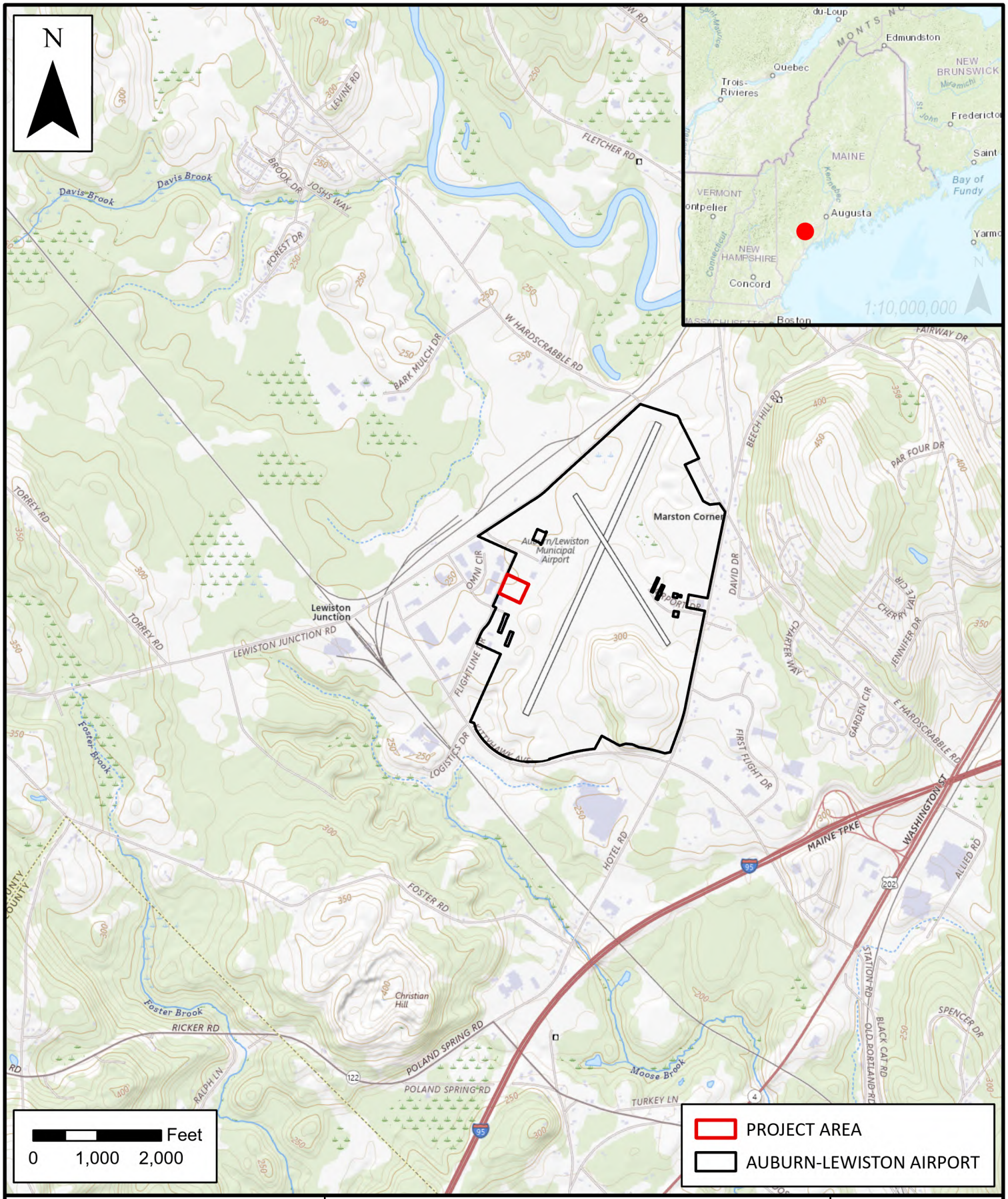
Aerial Image: A copy of 2018 ortho imagery showing the existing building and proposed location of the additional hangars without the overall airport property is enclosed in this section.

Tax Map: The proposed development is located on a portion of Map 143/Lot 7. A reduced-size copy of the City of Auburn Tax Map showing a 500' radius offset is enclosed in this section.

NRCS Medium-Intensity Soils: Reference is made to the project area identified on the USDA/Web Soil Survey included in this section. The soils identified in the project area are Wa-Walpole fine sandy loam and AaB-Adams loamy sand, which generally do not include limiting soil characteristics.

MGS Sand & Gravel Aquifer Map. Per available mapping, the project site is not located over significant sand and gravel aquifers. The site is over an area of surficial deposits with less favorable aquifer characteristics of less than 10 gallons per minute.

FEMA FIRM Map: The proposed project is located in Zone X, which is identified as an area with minimal flood hazards (outside 0.2% annual chance). Refer to the enclosed FEMA map exhibit, Community Panel 23001C0316E, effective date of 7/8/2013.



SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

LOCATION MAP

AUBURN-LEWISTON AIRPORT HANGARS

SCALE: 1:24,000

DATE: 5/14/2024

LOCATION:
FLIGHTLINE DR & AVIATION AVE
AUBURN, MAINE

INFORMATION:
MAINE GEOLIBRARY
USGS QUADRANGLE

SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

AERIAL IMAGERY MAP

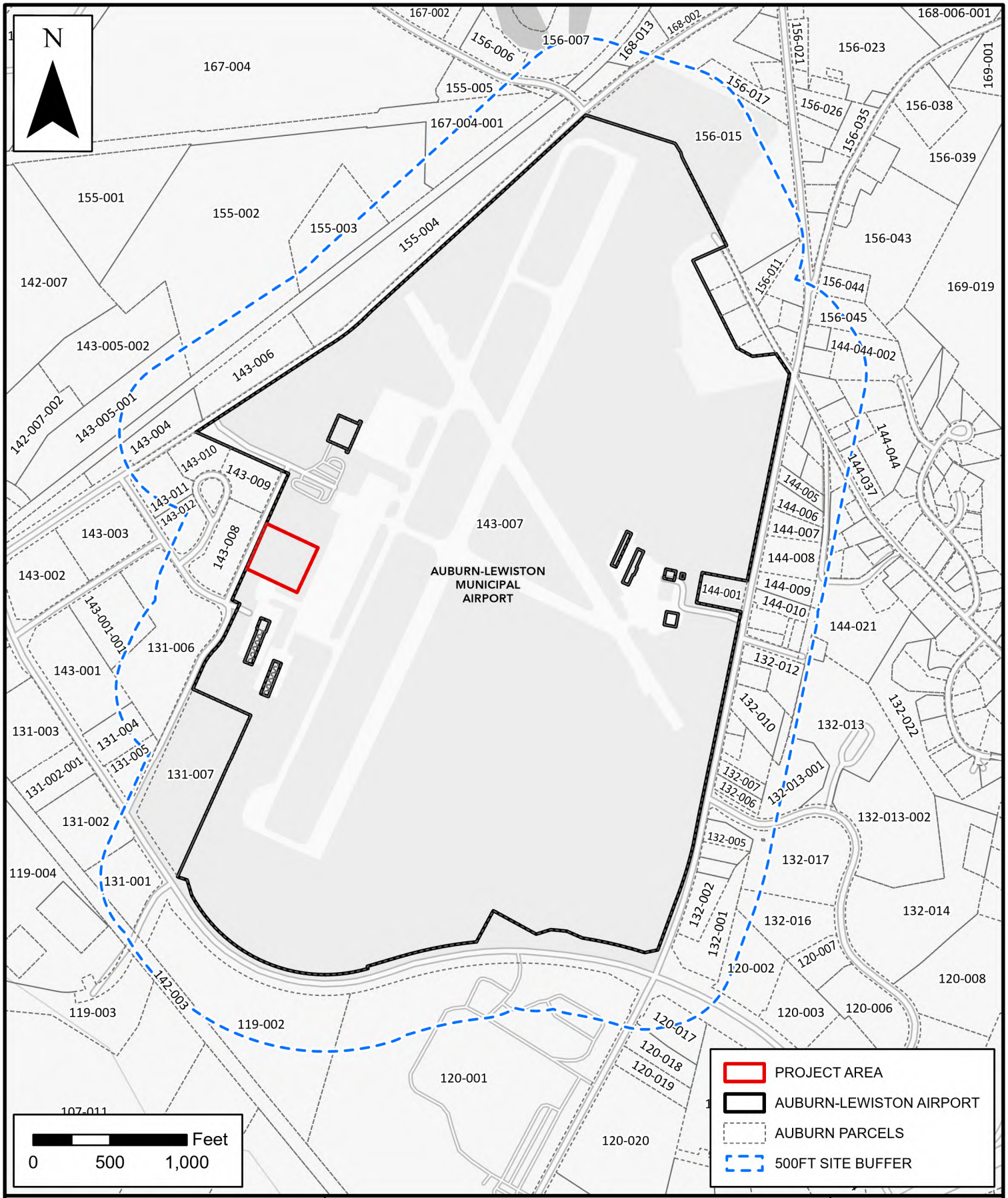
AUBURN-LEWISTON AIRPORT HANGARS

SCALE: 1:2,400

DATE: 5/14/2024

LOCATION:
FLIGHTLINE DR & AVIATION AVE
AUBURN, MAINE

INFORMATION:
MAINE GEOLIBRARY
2018 ORTHOREGIONAL IMAGERY



SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

TAX PARCEL MAP

AUBURN-LEWISTON AIRPORT HANGAR MASTER PLAN

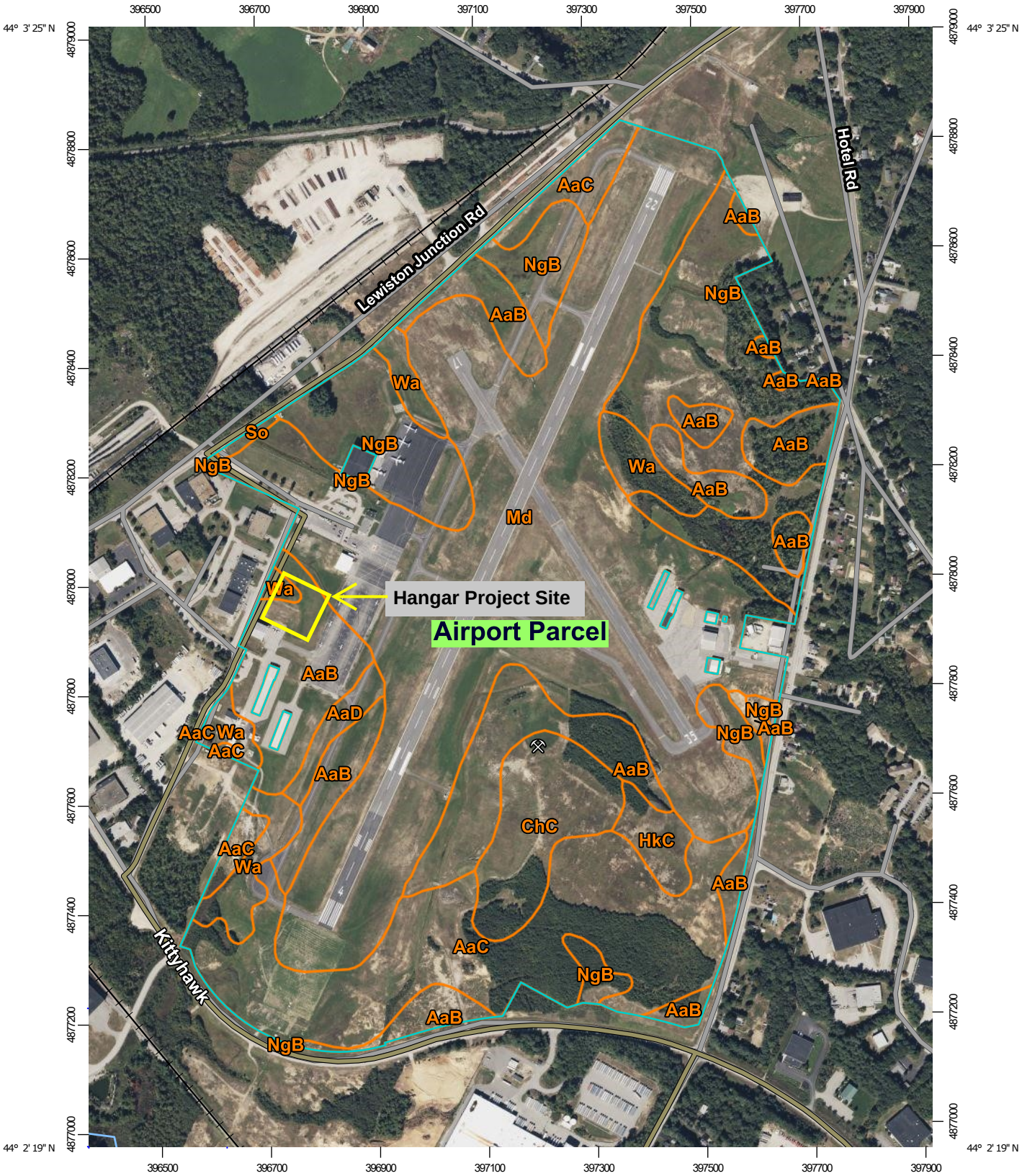
SCALE: 1:10,000

DATE: 6/6/2024

LOCATION:
FLIGHTLINE DR & AVIATION AVE
AUBURN, MAINE

INFORMATION:
CITY OF AUBURN, ME
MAPAUBURN FEATURE SERVER

Soil Map—Androscoggin and Sagadahoc Counties, Maine
(Lewiston-Auburn Airport Soils)



Map Scale: 1:9,970 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 450 900 1800 2700

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

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 24, Sep 5, 2023

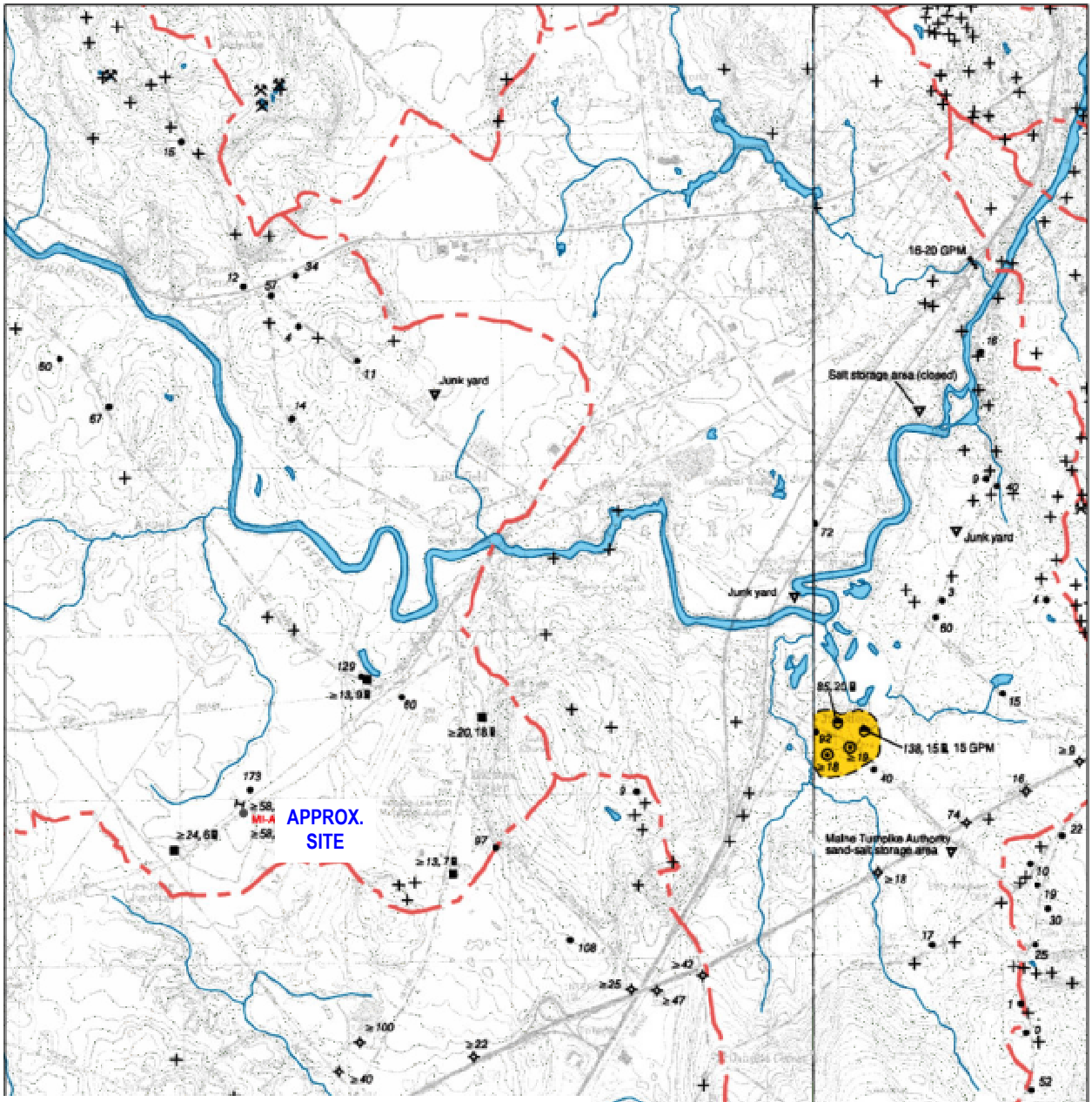
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

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

Map Unit Legend

Map Unit Symbol	Map Unit Name
AaB	Adams loamy sand, 0 to 8 percent slopes
AaC	Adams loamy sand, 8 to 15 percent slopes
AaD	Adams loamy sand, 15 to 30 percent slopes
ChC	Charlton very stony fine sandy loam, 8 to 15 percent slopes
HkC	Hinckley gravelly sandy loam, 8 to 15 percent slopes
Md	Made land, loamy materials
NgB	Ninigret fine sandy loam, 0 to 8 percent slopes
So	Scarboro fine sandy loam
Wa	Walpole fine sandy loam



SIGNIFICANT SAND AND GRAVEL AQUIFERS
(yields greater than 10 gallons per minute)

Approximate boundary of surficial deposits with significant saturated thickness where potential ground-water yield is moderate to excellent.

Surficial deposits with good to excellent potential ground-water yield; yields generally greater than 50 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yield zones are based on subsurface data where available, and may vary from mapped extent in areas where data are unavailable.

Surficial deposits with moderate to good potential ground-water yield; yields generally greater than 10 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yields may exceed 50 gallons per minute in deposits hydraulically connected with surface-water bodies, or in extensive deposits where subsurface data are available.

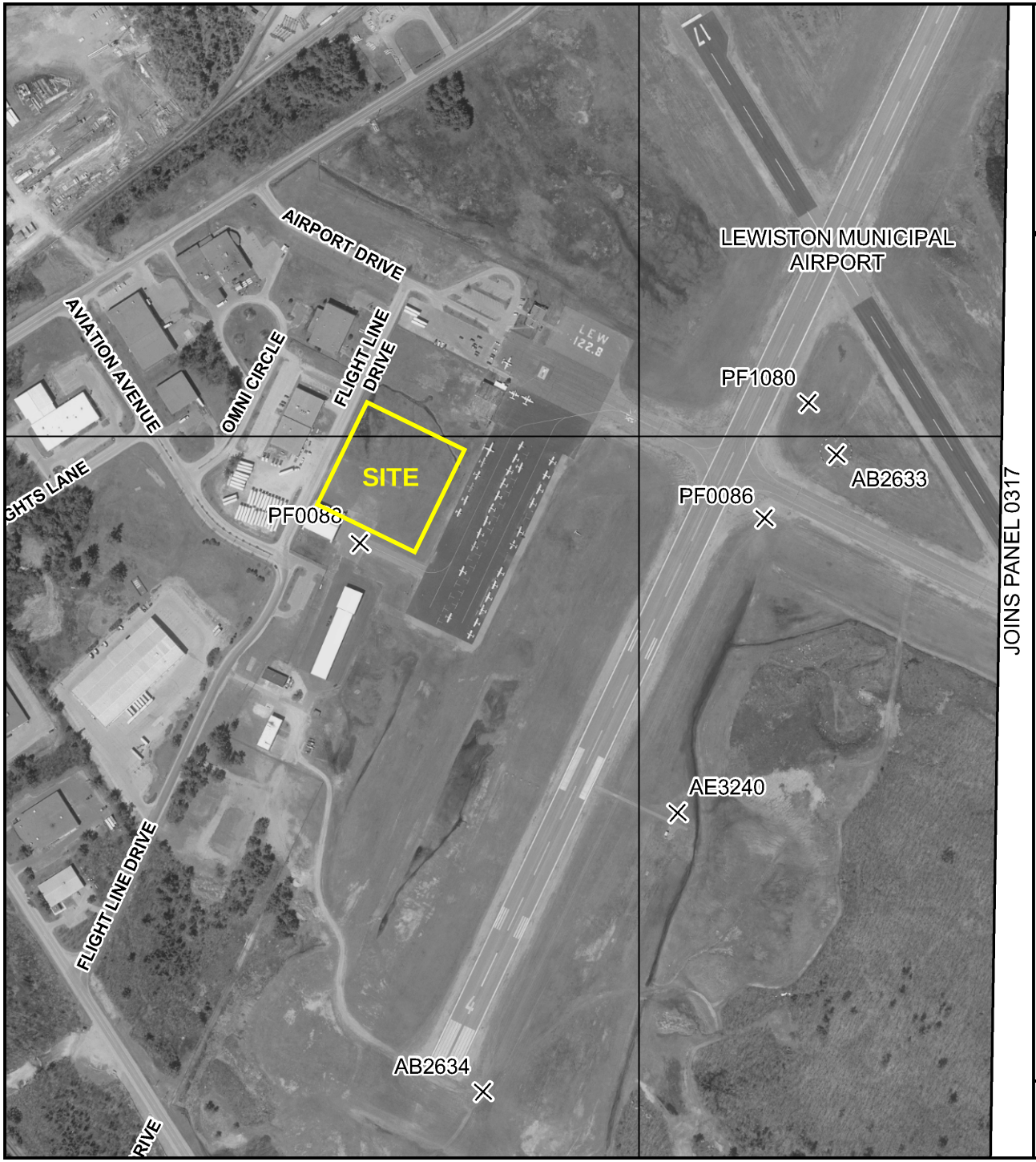
SURFICIAL DEPOSITS WITH
LESS FAVORABLE AQUIFER CHARACTERISTICS
(yields less than 10 gallons per minute)

Areas with moderate to low or no potential ground-water yield (includes areas underlain by till, marine deposits, eolian deposits, alluvium, swamps, thin glacial sand and gravel deposits, or bedrock); yields in surficial deposits generally less than 10 gallons per minute to a properly constructed well.

1:36,112
0 0.28 0.55 1.1 mi
0 0.42 0.85 1.7 km

Maine Geological Survey
Maxar

Significant Sand and Gravel Aquifers Exhibit
Maine Geological Survey



MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 M

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0316E

FIRM

FLOOD INSURANCE RATE MAP

ANDROSCOGGIN COUNTY, MAINE (ALL JURISDICTIONS)

PANEL 316 OF 470

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
AUBURN, CITY OF	230001	0316	E
POLAND, TOWN OF	230009	0316	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 23001C0316E

EFFECTIVE DATE JULY 8, 2013

Federal Emergency Management Agency

Section 3

Abutters

SECTION 3: ABUTTERS

A list of abutters within a 500’ radius of the airport property and a corresponding map are enclosed in this section.

Auburn 144/031
Rachel Haines, James Haines
374 East Hardscrabble Road
Auburn, ME 04210

Auburn 156/Lot 014
Walks Tall Keith, Colleen Keith
2040 Oro Verde Road
Escondido, CA 92027

Auburn 155/005
George Field, Jr., Glen Field
George Field Sr Irrevocable Trust
116 West Hardscrabble Road
Auburn, ME 04210

Auburn 132/003
Sandra Holt, Brian Keene
2714 Hotel Road
Auburn, ME 04210

Auburn 144/044-002
Debra Deschaine, Pamela Rietschel
41 Infinity Way
Auburn, ME 04210

Auburn 144/032
Benjamin Page, Casey Wade
2446 Hotel Road
Auburn, ME 04210

Auburn 143/010; 143/012
Management Controls LLC
PO Box 2058
Auburn, ME 04211

Auburn 144/003
Thomas Tieman
2480 Hotel Road
Auburn, ME 04210

Auburn 132/005
Kerry Purvis, Randolph Purvis
2696 Hotel Road
Auburn, ME 04210

Auburn 143/008
Omni Associates
PO Box 1915
Lewiston, ME 04241

Auburn 144/035
Lorraine Sawyer
PO Box 3486
Auburn, ME 04210

Auburn 143/007-001-004
Devisees of John Dewitt
c/o Gary John Light, PR
2359 Montserrat Lane, #202
Naples, FL 34120

Auburn 143/007-002-028
Chase Donaldson, Judy Donaldson
67 Hampton Meadows
Hampton, NH 03842

Auburn 143/007-002-021
Storage Solutions, LLC
15 Ru-Bee Ridge Road
Windham, ME 04062

Auburn 144/010-001
Bruce Lefleur
PO Box 396
Alfred, ME 04002

Auburn 144/005
Jennifer Rhuda, Francis Macdonald
2510 Hotel Road
Auburn, ME 04210

Auburn 143/011
Carl E Damon Exemption Equiv
Linda Swallow, Trustee
7 Colony Lane
S. Portland, ME 04106

Auburn 132/017-000-001
New England Telephone Company
c/o Fairpoint Communications
770 Elm Street
Manchester, NH 03101

Auburn 143/007-001-001; 143/007-001-008
Sta-Kel Corp
716 Bridgton Road
Westbrook, ME 04092

Auburn 156/046
Cole Quirion, Nicole Quirion
2440 Hotel Road
Auburn, ME 04210

Auburn 144/010
MCY Properties LLC
6 Hope Street
Lisbon Falls, ME 04252

Auburn 144/013
Mark Barry, Sr.
36 Turcotte Lane
Auburn, ME 04210

Auburn 143/001
Thomas Moser
72 Wrights Landing
Auburn, ME 04210

Auburn 144/007
Julie Staires, Alice Staires
2530 Hotel Road
Auburn, ME 04210

Auburn 143/005-001
Savage Services Corporation
901 W Legacy Center Way
Midvale, UT 84047

Auburn 156/017
Kevin Cain, Debra Cain
2309 Hotel Road
Auburn, ME 04210

Auburn 144/031
Rachel Haines, James Haines
374 East Hardscrabble Road
Auburn, ME 04210

Auburn 144/018
Edward Reynolds, Cherie Asselin
35 David Drive
Auburn, ME 04210

Auburn 156/005-001; 143/013;142-007-000-003; 155/004; 131/007; 143/007; 119/002; 131/002; 155/003; 156/048; 132/007; 156/005;
City of Auburn, City of Lewiston
60 Court Street
Auburn, ME 04210

500' Radius Abutter List
230887

Auburn 144/036
Ralph Sawyer
PO Box 3486
Auburn, ME 04210

Auburn 131/005
Paine Realty LLC
PO Box 1056
Auburn, ME 04210

Auburn 120/018
Ayesha Hall, Malik Hall
52 Ware Street
Lewiston, ME 04240

Auburn 143/007-002-029
Kevin Rouillard, Monique Rouillard
204 Gayton Road
Lewiston, ME 04240

Auburn 143/007-002-025
Erik Langenbach, Rebecca Frein
108 Village Brook Road
Yarmouth, ME 04096

Auburn 144/037
William Humphrey
385 East Hardscrabble Road
Auburn, ME 04210

Auburn 143/007-000-004
Auburn Hangar Company, LLC
2 Great Falls Plaza, Suite 7
Auburn, ME 04240

Auburn 143/006
Dead River Company
177 Turner Street
Auburn, ME 04210

Auburn 156/004
Derrick Teti, Melissa St. Pierre
6 Spring Valley Lane
New Gloucester, ME 04259

Auburn 167/004-001
Lewiston & Auburn Railroad Company
415 Lisbon Street, Suite 400
Lewiston, ME 04240

Auburn 144/009
Daniel Johnston, Debra Johnston
537 Fish Street
Leeds, ME 04263

Auburn 132/017
J and A Properties LLC
PO Box 1970
Auburn, ME 04210

Auburn 144/004
Normand Nadeau, Tina Nadeau
2500 Hoel Road
Auburn, ME 04210

Auburn 143/007-002-024
David Rogers
19 Country Lane
Windham, ME 04062

Auburn 143/007-002-022
David Leonard
8 Misty Way
Falmouth, ME 04105

Auburn 143/007-001-010
Klew LLC
200 Mountain Road
Falmouth, ME 04105

Auburn 142/003
St Lawrence & Atlantic Railway
Accounts Payable
225 First Flight Drive, Suite 201
Auburn, ME 04210

Auburn 156/045
Stanley Brothers Construction
399 Picket Lane
Camden Wyoming, DE 19934

Auburn 120/002
Hayden Brothers Co, LLC
PO Box 1030
Auburn, ME 04211

Auburn 132/008; 132/013; 132/008-002, 132/013-001
Gail Sasseville, Paul Sasseville
Sasseville Management LLC
PO Box 152
Minot, ME 04258

Auburn 144/006
George Tibbetts
2520 Hotel Road
Auburn, ME 04210

Auburn 132/002
Douglas Burdick
8 Hancock Street
Gray, ME 04039

Auburn 144/008
Cynthia Chessey
2550 Hotel Road
Auburn, ME 04210

Auburn 143/007-001-002
Jacki-Lyn Rogers
595 Pond Road
Standish, ME 04084

Auburn 143/001-001
Giles Property Management LLC
82 Nadines Way
Bangor, ME 04401

Auburn 156/007
Gary Brooks
33 Buckfield Road
Turner, ME 04282

Auburn 143/007-002-020
Hawks Nest LLC
65 Aquamarine Court
Auburn, ME 04210

Auburn 168/013
City of Auburn, City of Lewiston
c/o Auburn Lewiston Municipal
80 Airport Drive
Auburn, ME 04210

Auburn 143/007-001-007
James Timoney
158 East Shore Road
Auburn, ME 04210

Auburn 132/011
Valerie Wagg
2616 Hotel Road
Auburn, ME 04210

Auburn 156/011
Robert Mcleod, Cynthia Mcleod
51 Constellation Drive
Auburn, ME 04210

Auburn 155/002; 156/015; 144/015
City of Auburn
60 Court Street
Auburn, ME 04210

Auburn 144/014; 132/009
Central Maine Power Company
c/o Avangrid Mngmt Co -Local Tax
One City Center, 5th Floor
Portland, ME 04101

Auburn 131/001
Auburn Business Development Co
PO Box 642
Auburn, ME 04210

Auburn 144/017
Rachel Doherty
45 David Drive
Auburn, ME 04210

Auburn 144/022
Timothy Herman
41 Turcotte LM
Auburn, ME 04210

Auburn 143/007-002-023
James Evers
14 Rockaway Road
Falmouth, ME 04105

Auburn 144/033
Mark Benton, Kathi Benton
427 E Hardscrabble Road
Auburn, ME 04210

Auburn 143/007-000-002
Lifeflight of Maine LLC
PO Box 811
Bangor, ME 04402

Auburn 144/001
Bruce Tisdale
2589 Hotel Road
Auburn, ME 04210

Auburn 132/008-001
Diana Bernier, Robert Bernier
7 Coachman Avenue
Auburn, ME 04210

Auburn 120/001
Tambrands Incorporated, Proctor & Gamble
c/o JLLValuation and Advisory
700 East Campbell Rd., Suite 265
Richardson, TX 75081

Auburn 156/002
Brian Carrier, Candice Carrier
32 Constellation Drive
Auburn, ME 04210

Auburn 142/005; 168/003
Lewiston Auburn Railroad Company
c/o Jonathan Labonte
PO Box 501
Auburn, ME 04210

Auburn 131/004
John D Haynes Living Trust
153 Beechwoods Road
Oxford, ME 04270

Auburn 132/012
Jean Oligny
48 Center Court Drive
New Gloucester, ME 04260

Auburn 143/004
Otis South LLC
c/o Karen & Ford Reiche
54 Bartol Island Road
Freeport, ME 04032

Auburn 156/001
Teague Adams
24 Constellation Drive
Auburn, ME 04210

Auburn 143/007-001-005; 143/007-001-009
Dorothy Betz, John Betz, Jr.
PO Box 1737
Naples, ME 04055

Auburn 132/016
MYR Real Estate Holdings LLC
1701 Golf Road, Suite 3-1012
Rolling Meadows, IL 60008

Auburn 143/007-001-011
Belair Services Inc.
Attn: Beth Humphrey
PO Box 2
Gray, ME 04039

Auburn 143/007-000-001
Tim Corporation
2 Great Falls Plaza
Auburn, ME 04210

Auburn 156/003
Lisa Dumont
50 Constellation Drive
Auburn, ME 04210

Auburn 144/034
Scott Marquis
411 East Hardscrabble Road
Auburn, ME 04210

Auburn 144/011
Martin Verrill, Rachel Verrill
12 Turcotte Lane
Auburn, ME 04210

Auburn 144/016
Jesse Beaulieu
400 East Hardscrabble Road
Auburn, ME 04210

Auburn 156/044
Marstons Corner Baptist Church
752 Beech Hill Road
Auburn, ME 04210

Auburn 144/021
Donna Leblond, Richard Leblond, Sr.
32 David Drive
Auburn, ME 04210

Auburn 143/007-001-006
Northeastern Financial LLC
18 Peacock Hill Road
New Gloucester, ME 04260

Auburn 156/012
Joh Waisanen, III
33 Constellation Drive
Auburn, ME 04210

Auburn 120/017
Brigitte Whiting
2800 Hotel Road
Auburn, ME 04210

Auburn 132/004
David Corriveau, Kelly Corriveau
2706 Hotel Road
Auburn, ME 04210

Auburn 143/007-002-027
Sebago Hanger 27 LLC
PO Box 337
Yarmouth, ME 04096

Auburn 143/007-001-003
James Weigand, Linda Weigand
150 Beech Hill Road
Auburn, ME 04210

Auburn 132/001
Scott Riccio
2760 Hotel Road
Auburn, ME 04210

Auburn 144/030
Gary Ufkin
364 East Hardscrabble Road
Auburn, ME 04210

Auburn 156/013
Roger Chabot, Martha Chabot
2431 Hotel Road
Auburn, ME 04210

Auburn 143/007-002-026
Marc Blais
353 Randall Road
Lewiston, ME 04240

Auburn 144/004-001
Dominic Ross
90 David Drive
Auburn, ME 04210

Auburn 131/006
BT NEWYO LLC
Attn: Corp Real Estate Tax Dept
55 Glenlake Parkway NE
Atlanta, GA 30328

Auburn 143/009
E S Chapman Properties, LLC
497 Washington Street
Auburn, ME 04210

Auburn 144/012
Kayci Mero
24 Turcotte Lane
Auburn, ME 04210

Auburn 144/044-001
Adam Schaff, Rebecca Schafer
32 Infinity Way
Auburn, ME 04210

Auburn 132/010
George Lyon, III
2626 Hotel Road
Auburn, ME 04210

Auburn 156/006
Micaela Holland
31 West Hardscrabble Road
Auburn, ME 04210

Section 4

Title, Right, or Interest

SECTION 4: TITLE, RIGHT, OR INTEREST

The Cities of Auburn and Lewiston own the Auburn-Lewiston Municipal Airport. The deed referenced by the Auburn Assessor's Office was recorded in the Androscoggin County Registry Deeds in Book 611 on Page 459 on March 1, 1948.

KNOW ALL MEN BY THESE PRESENTS:

THAT, THE UNITED STATES OF AMERICA, acting by and through the WAR ASSETS ADMINISTRATOR, under and pursuant to Reorganization Plan One of 1947 (12 Fed. Reg. 4534), and the powers and authority contained in the provisions of the Surplus Property Act of 1944, as amended, and applicable rules, regulations and orders, party of the first part, in consideration of the assumption by the CITY OF AUBURN AND CITY OF LEWISTON, both being municipal corporations, in the State of Maine, party of the second part, of all the obligations and its taking subject to certain reservations, restrictions and conditions and its covenant to abide by and agree to certain other reservations, restrictions and conditions, all as set out hereinafter, does hereby remise, release, and forever quitclaim to the said CITIES OF AUBURN AND LEWISTON, their successors and assigns, under and subject to the reservations, restrictions and conditions, exceptions and reservation of fissionable materials and rights hereinafter set out, all right, title, interest and claim in and to the following described real, personal or mixed property situated in the County of Androscoggin, State of Maine, to wit:

Parcel One:

A certain parcel of land containing 436 acres more or less situated in said Androscoggin County bounded and described as follows:

Beginning at a point in the westerly line of the Hotel Road, so-called, 1642.98 ft. N. 11° 35' E. from the angle at station 97+ 53.44 ft. as defined by the Androscoggin (Maine) County Commissioners in a survey made by George H. Barron, June 2, 1933, minutes of which are recorded in the Clerk of the Courts Office, Commissioner Records. Said point being the same monument that marks the southeast corner of the right-of-way to the hangar as shown on a plan of the Lewiston-Auburn Airport made by George H. Barron and recorded in the Androscoggin County (Maine) Registry of Deeds, Book of Plans, Volume 2, Page 354; thence N. 11° 35' E. by said westerly line of the Hotel Road, 1496.19 ft. to an angle in said line; thence N. 11° 17' E. by the said westerly line of the Hotel Road 195.12 ft. to a point in said line marked by a concrete monument; said point being the intersection of the said westerly line of the Hotel road and the southerly line of Hardscrabble Road, so-called; thence N. 28° 7' W. by the said southerly line of Hardscrabble Road 125.42 feet; thence by land of Lucy A. Poland the following courses and distances, S. 82° 43' W. 159.65 ft. and N. 54° W. 113.38 ft; thence by lands of the City of Auburn, Alfred E. Pease and Ernest E. Pease, N. 25° 17' W. 625.45 ft; thence continuing by land of Ernest E. Pease, N. 64° 43' E. 200 ft. to a point in the southerly line of Hardscrabble Road; thence N. 26° 6' W. by the said southerly line of Hardscrabble Road 510.75 ft.

to an angle in said line; thence N. 35° 43' W. by the said southerly line of Hardscrabble Road 60.4 ft. to an angle in said line; thence N. 47° 30' W. by said southerly line of Hardscrabble Road 95.84 ft. to an angle in said line; thence N. 55° 6' W. by the said southerly line of Hardscrabble Road 96.66 ft. to an angle in said line; thence N. 63° 1' W. by the said southerly line of Hardscrabble Road 95.92 ft. to an angle in said line; thence N. 74° 2' W. by the said southerly line of Hardscrabble Road 175.34 ft. to an angle in said line; thence N. 68° 49' W. by the said southerly line of the Hardscrabble Road thru and crossing Lewiston Junction Road, so-called, 472.57 ft. to a point that marks the intersection of the said southerly line of the Hardscrabble Road and the southeast line of the Lewiston and Auburn Railroad operated by the Grand Trunk Railway Company of Canada; thence S. 51° 28' W. by the said southeasterly line of the Lewiston-Auburn Railroad 4376.4 ft. to a point in said southeasterly line, the point of a curve; thence by said curve of 1113 ft. radius 5222.22 ft. to an angle in said southeasterly line; thence S. 64° 32' E. 16.5 ft. to an angle in said southeasterly line; thence by said line southerly on a curve of 1096.5 ft. radius 1292.3 ft to the northerly line of the Grand Trunk Railway; thence S. 39° 20' E. by said northerly line 3985.21 ft. to the point of curve in said line; thence following said curve southeasterly on a 5680.5 ft. radius 352.2 ft. to a point in said northerly line at the end of said curve; thence S. 43° 13' E. by said northerly line of the Grand Trunk Railway 406.47 ft. to the said westerly line of Hotel Road; thence N. 28° 43' East by said westerly line of Hotel Road 2497.9 ft. to an angle in said line; thence N. 21° 18' E. by the said westerly line of Hotel Road 757.44 ft. to an angle in said line; thence N. 11° 35' E. by said westerly line of Hotel Road 1642.98 ft. to first described monument and to the place of beginning.

Excepting therefrom; (1) a parcel containing 5.5 acres more or less, located at the northeast corner of the subject premises as used for an Air Base, and bounded northeast by Hardscrabble Road, and southeast by Hotel Road; (2) a parcel containing 29 acres more or less, located at the southeast end of said Air Base, being a parallelogram approximately 2000 ft. by 750 ft. and bounded southeasterly by Hotel Road, (neither of said parcels having been surveyed to date); and (3) a parcel of land containg 111 acres more or less, being formerly the Municipal Airport, presently under lease to the Government by the Cities of Auburn and Lewiston.

There is included in this conveyance appurtenant avigation and sewer (outfall and/or otherwise) easements; all runways, taxiways, aprons, field lighting system field markers, drainage system, fencing, water system, sanitary and storm sewer system, fuel and oil storage distribution system; electric power distribution system; telephone distribution plant system; buildings and structures, together with heating systems installed therein, numbered as follows: Nos. 1, 2, 3, 6, 9-14 incl., 24, 26-33 incl., and 35, 22 and 101.

Necessary Operating Equipment

Item No.	Description	Unit
9	Lights, Runway, contact, snow country	Two (2)
14	Desk, double pedestal, oak typist	Two (2)
15	Desk, double pedestal, oak executive	One (1)
16	Desk, double pedestal, walnut executive	One (1)
19	Desk, single pedestal, oak typist (installed in tower)	One (1)
21	Chair, executive, oak, swivel without arms	Two (2)
22	Chair, swivel, oak, typist	Four (4)
24	Chair, straight back maple	Six (6)
25	Chair, straight back, oak	Nine (9)
28	Clock, wall type, electric telchron, 12" dia. face	One (1)
29	Compressor air electric driven (installed in garage, Building 10)	One (1)
30	Compressor, portable, on 2 wheeled rubber tired trailer, gasoline driven, Schramm, 20 cu. ft. Capac. at 1800 R.P.M.	One (1)
31	Shovel Dozer, Engine #TDCBBM-99154-T4, Serial TDCB29021T4, BNAS #256	One (1)
32	Extinguisher, Fire, Hand, C02, 15 pound	Fourteen (14)
33	Extinguisher, fire hand, C02, 4 pound	Thirteen (13)
35	Extinguisher, fire hand, Floatfome, 3 gal.	Two (2)
37	Fountain, drinking, electrically refrigerated 110V, Halsey-Taylor	Three (3)
38	Fountain, drinking, electrically refrigerated 110V, Halsey-Taylor (installed in Administration Building)	One (1)

Item No.	Description	Unit
39	Grader, Adams gasoline powered, Model 201, Serial 724, BNAS #457	One (1)
40	Snow Loader, Nelson, Model KR5, Serial 44557, Motor D140-P5, BNAS # 422	One (1)
42	Pumper, trailer mounted fire gas engine driven Bean USN 78152	One (1)
43	Sander, for attaching to dump truck 2 wheel, rubber tired, trailer type, Burch Model T.S. Serial 463	One (1)
44	Stoves, heating, oil burning Duo Therm. large square type	Six (6)
46	Tetrahedron (Installed on field)	One (1)

47	Tractor, farm type, rubber tired, International Model 1-6, Serial IBK-5611 BNAS 237	One (1)
48	Tractor, plane handling, International, shop mule type, Serial H5381, BNAS 448	One (1)
49	International Fire and Rescue Truck, USN 54600	One (1)
52	Truck, Ford, equipped with Sno-So rotary plow BNAS 393	One (1)
54	Welder, electric, 200 amp. 220V, Westinghouse Navy #628125	One (1)
55	Welder, portable, oxy-acetylene, with 2 cylinders and gages, shop type ARCO	One (1)
56	Truck, dump, Chevrolet USN 12103, 1½ ton, with Baker Model 271A plow with hand operated hydraulic lift.	One (1)
57	Truck, dump, Chevrolet, USN 121201, 1½ ton with Baker Model 271A plow with hand operated hydraulic lift.	One (1)
58	Jeep, ¼ton, USN 20360986	One (1)
140	Kettle, 2gal. Tar (Metal)	One (1)
141	Ladder, 12' Carpenter's made for Elec. Maintenance	One (1)
152	Mattocks	Four (4)
154	Mowers, Lawn, hand	Two (2)
160	Parts, tractor & truck-bolts, springs, etc. misc.	100 lb.
161	Pump, Drum, hand Rotary	One (1)
162	Pump, Hydrant, Rotary	One (1)
164	Rakes, iron	Sixteen (16)
173	Scoops, Hopper, Snow	Six (6)
177	Shovel, Scoop	Two (2)
178	Shovels, D. Handles, Sq. Point	Thirteen (13)

Item No.	Description	Unit
179	Shovels, D. handles, Coal	Four (4)
180	Shovels, Long Handle, Sq. Point	Five (5)
190	Wrench, Rim Tire	Two (2)
191	Wrench, Special, Sq. F. Hex	One (1)
192	Wrench, Sleeve, Tractor	Eighteen (18)
210	Wrench, Airco 3/4, 11/16, 7/16, 1-1/8	One (1)
213	Basket, file, wood	One (1)
221	Cabinet, first aid (equipped)	One (1)
235	Truck, Two wheel, hand	One (1)
237	Lights, runway, contact, snow area type, white	Fourteen (14)
238	Lights, runway, contact, snow area type, green	Twenty-four (24)

239	Lights, runway, contact, snow area type, yellow & White	Eighty-three (83)
240	Lights, boundary, CH(APB) type H, white	Sixty-nine (69)
241	Lights, boundary, CH (APB) type H. green	Eighteen (18)
242	Beacon, 36" rotating	One (1)
243	Projector, ceiling	One (1)
244	Lights, obstruction, red	Thirty-one (31)
245	Lens, green	Four (4)
246	Lens, yellow-white	Twenty (20)
247	Lens, white	Eight (8)
248	Assembly, cable, complete	Twelve (12)
249	Assembly, light	Twelve (12)
250	Lamps	Twenty-five (25)
251	Columns, fibre, 20"	Fifty (50)
252	Transformer, S/17, 6.6 amp.	Six (6)
253	Plates, base	Four (4)
254	Deep Pots	Three (3)
255	Lens, green	Two (2)
256	Lens, white	Six (6)
257	Units, complete	Four (4)
258	Cones	Three (3)
259	Cones mounted tip over units	Two (2)
260	1000 Watt 32 U. Beacon Lamps	Two (2)
Item No.	Description	Unit
261	Lens, red	Three (3)
262	Units, complete	Two (2)
263	Power Plant	One (1)
264	Cable, 2/2 #16, with outlets every 400' AN-S-2 type	12000 ft.
265	Units, complete, with green lens	Four (4)
266	Units, complete with yellow-white	Sixteen (16)
267	Units, complete with white	Twelve (12)
268	Trunks, for equipment storage	Three (3)
269	Cable carriage	One (1)
270	Vulcanizing Kit (less small tools)	One (1)
271	Cone Rack	One (1)
272	Lens, green	Two (2)

273	Lens, yellow-white	Six (6)
274	Lens, white	Six (6)
275	Assembly, light	Six (6)
276	Cones	Twenty-five (25)
277	Lamps	Twenty-five (25)
278	Pump sump 110 V. for Adm. Building	One (1)
279	Transceiver, SCR624	One (1)
280	Transmitter, BC329	One (1)
281	Receiver, Model RAL	Two (2)
41	Mower, 30 inch, gang type Worthington, Serials A11669, A11662, A11670, A11664, A11667	One (1)
50	Sterling Crane, Model DDE, Motor #573894, Serial #235DDS-6106, BNAS 336	One (1)
51	Truck, Runway lighting, International Flat Bed 1½ Ton with J4 lighting unit	One (1)
224	24 Lockers, double, wood	Twenty-four (24)

The above-described premises are subject to existing easements for roads, highways, public utilites, railways and pipe lines.

EXCEPTING HOWEVER, from this conveyance all right, title and interest in and to all property in the nature of equipment, furnishings and other personal property located on Parcel One or the land leased from the party of the second part, as hereinafter set out, which can be removed from the land without material injury to the land or structures located thereon, other than property of such nature located on such premises which is required for the efficient operation for airport purposes of the structures and improvements specifically listed hereinabove as being transferred hereby; and further excepting from this conveyance all structures on such premises other than structures specifically described or enumerated above as being conveyed hereunder, and reserving to the party of the first part the right of removal from the premises of the property and structures excepted hereby within a reasonable period of time after the date hereof, which shall not be construed to mean any period less than one (1) year after the date of this instrument. The party of the second part hereby agrees to furnish, without any cost or charge to the party of the first part, the same security and protection for the property and structures excepted from this conveyance, hereinabove referred to, as it

will provide for its own property at this airport.

Further, the party of the first part, for the considerations hereinabove expressed, does hereby surrender, subject to the terms and conditions of this instrument, to the party of the second part the former's leasehold interest in and to the premises set forth and described in a lease from the party of the second part to the United States of America, dated October 15, 1943, said lease known as Lease No. NOy(R)-33671, and any and all currently effective supplements thereto, including one hundred and eleven (111) acres, more or less, of land situated in the said County of Androscoggin, State of Maine.

The party of the second part does hereby release the party of the first part from any and all claims which exist or may arise under the provisions of the aforesaid lease, as so modified, except claims which may be submitted under Section 17 of the Federal Airport Act.

Said property transferred hereby was duly declared surplus and was assigned to the War Assets Administrator for disposal, acting pursuant to the provisions of the above mentioned Act, as amended, said Reorganization Plan One of 1947, and applicable rules, regulations and orders.

That by the acceptance of this instrument or any rights hereunder, the said party of the second part, for itself, its successors and assigns, agrees that the aforesaid surrender of leasehold interest and transfer of other property shall be subject to the following restrictions, set forth in subpargraphs (1) and (2) of this paragraph, which shall run with the land, imposed pursuant to the authority of Article 4, Section 3, Clause 2 of the Constitution of the United States of America, the Surplus Property Act of 1944, as amended, said Reorganization Plan One of 1947, and applicable rules, regulations and orders:

(1) That the aforesaid leased premises and all property in this instrument described above which together shall hereinafter be called the "airport", shall be used for public airport purposes, and only for such purposes, on reasonable terms and without unjust discrimination and without grant or exercise of any exclusive right for use of the airport within the meaning of Section 303 of the Civil Aeronautics Act of 1938. As used herein, "public airport purposes" shall be deemed to exclude use of the structures conveyed hereby, or any portion thereof, for manufacturing or industrial purposes. However, until, in the opinion of the Civil Aeronautics Administration or its successor Government agency, it is needed for public airport purposes, any particular structure transferred hereby may be utilized for non-manufacturing or non-industrial purposes in such manner as the

party of the second party deems advisable, provided that such use does not interfere with operation of the remainder of the airport as a public airport.

(2) That the entire landing area, as defined in WAA Regulation 16, dated June 26, 1946, and all structures, improvements, facilities and equipment of the airport shall be maintained at all times in good and serviceable condition to assure its efficient operation: provided, however, that such maintenance shall be required as to structures, improvements, facilities and equipment only during the remainder of their estimated life as determined by the Civil Aeronautics Administration or its successor Government agency. In the event materials are required to rehabilitate or repair certain of the aforementioned structures, improvements, facilities or equipment, they may be procured by demolition of other structures, improvements, facilities or equipment transferred hereby and located on the above described premises, which have outlived their use as airport property in the opinion of the Civil Aeronautics Administration or its successor Government agency.

That by the acceptance of this instrument, or any rights hereunder, the party of the second part, for itself, its successors and assigns, also assumes the obligations of, covenants to abide by and agrees to, and this surrender and transfer is made subject to, the following reservations and restrictions set forth in subparagraphs (1) to (6) of this paragraph, which shall run with the land, imposed pursuant to the authority of Article 4, Section 3, Clause 2 of the Constitution of the United States of America, the Surplus Property Act of 1944, as amended, said Reorganization Plan One of 1947, and applicable rules, regulations and orders.

(1) That insofar as is within its powers and reasonably possible, the party of the second part, and all subsequent transferrees, shall prevent any use of land either within or outside the boundaries of the airport, including the construction, erection, alteration, or growth of any structure or other object thereon, which use would be a hazard to the landing, taking-off, or maneuvering of the aircraft at the airport, or otherwise limit its usefulness as an airport.

(2) That the building areas and non-aviation facilities, as such terms are defined in WAA Regulation 16, dated June 26, 1946, of or on the airport shall be used, altered, modified, or improved only in a manner which does not interfere with the efficient operation of the landing area and of the airport facilities, as defined in WAA Regulation 16, dated June 26, 1946.

(3) That itinerant aircraft owned by the United States of America (hereinafter sometimes referred to as the "Government"), or operated by any of its employees or agents on Government business, shall at all times have the right to use the airport in common with others; provided, however, that such use may be limited as may be determined at any time by the Civil Aeronautics Administration or the successor Government agency to be necessary to prevent interference with use by other authorized aircraft, so long as such limitation does not restrict the Government's use to less than fifteen (15) per centum of capacity of the landing area of the airport. Government use of the airport by virtue of the provisions of this sub-paragraph shall be without charge of any nature other than payment for damage caused by such itinerant aircraft.

(4) That during the existence of any emergency declared by the President of the United States of America, or the Congress thereof, the Government shall have the right without charge, except as indicated below, to the full, unrestricted possession, control and use of the landing area, building areas, and airport facilities, as such terms are defined in WAA Regulation 16, as above referred to, or any part thereof, including any additions or improvements thereto made subsequent to the declaration of any part of the airport as surplus; provided, however, that the Government shall be responsible during the period of such use for the entire cost of maintaining all such areas, facilities and improvements, or the portions used, and shall pay a fair rental for the use of any installations or structures which have been added thereto without Federal aid.

(5) That no exclusive right for the use of any landing area or air navigation facilities, as such terms are defined in WAA Regulation 16, as above referred to, included in or on the airport shall be granted or exercised.

(6) That the airport may be successively transferred only with the approval of the Civil Aeronautics Administration or the successor Government agency, and with the proviso that such subsequent transferee assumes all the obligations imposed upon the party of the second part by the provisions of this instrument.

By acceptance of this instrument, or any right hereunder, the party of the second part further agrees with the party of the first part as follows:

(1) That upon a breach of any of the aforesaid reservations or restrictions by the party of the second part of any subsequent transferee, whether caused by the legal inability of said party of the second part or subsequent transferee to perform any of the obligations herein set out, or otherwise, the title, right of possession and all other rights transferred to the party of the second part, or

any portion thereof, shall at the option of the party of the first part revert to the party of the first part upon demand made in writing by the War Assets Administration or its successor Government agency at least sixty (60) days prior to the date fixed for the revesting of such title, right of possession and other rights transferred or any portion thereof; Provided, that, as to installations or structures which have been added to the premises without Federal aid, the Government shall have the option to acquire title to or use of the same at the then fair market value of the rights therein to be acquired by the Government.

(2) That if the construction as covenants of any of the foregoing reservations and restrictions recited herein as covenants, or the application of the same as covenants in any particular instance is held invalid, the particular reservations or restrictions in question shall be construed instead merely as conditions upon the breach of which the Government may exercise its option to cause the title, right of possession and all other rights transferred to the party of the second part, or any portion thereof, to revert to it, and the application of such reservations or restrictions as covenants in any other instance and the construction of the remainder of such reservations and restrictions as covenants shall not be affected thereby.

To have and to hold the property transferred hereby, except the property and rights excepted and reserved above, and under and subject to the aforesaid reservations, restrictions, and conditions, unto the said party of the second part, its successors and assigns forever.

This instrument is intended to take effect as a sealed instrument.

In Witness Whereof, the United States of America, acting by and through the War Assets Administrator, has caused these presents to be executed in its name and on its behalf by Harry Milnes, Associate Deputy Zone Administrator for Real Property Disposal, New York City, War Assets Administration, and the City of Auburn and the City of Lewiston to evidence their complete acknowledgment of, accord with, acceptance of and agreement to be bound by the terms, conditions, reservations and restrictions set forth in this instrument, have caused these presents to be executed in its name and on its behalf by Louis P. Gagne, Mayor of the

City of Lewiston, and attested by Lucien Lebel, City Clerk of the City of Lewiston, and the City seal to be hereunto affixed, and in its name and behalf by Bernal B. Allen, City Manager of the City of Auburn, and attested by Leon H. Cole, City Clerk of the City of Auburn, and the City seal to be hereunto affixed, all on the 18th, day of December, 1947.

WITNESSES:
William J. Kelley
John F. Kenny

WITNESSES:
Katherine G. Learson
Rosaire L. Halle
Leon H. Cole

WITNESSES:
John F. Conway
Frank W. Linnell

UNITED STATES OF AMERICA
Acting by and through
WAR ASSETS ADMINISTRATOR

By Harry Milnes
Associate Deputy Zone Administrator
for Real Property Disposal,
New York City
War Assets Administration

CITY OF LEWISTON (a municipal corporation)
By Louis P. Gagne (corporate seal)
Mayor (corp. seal)

ATTEST:
Lucien Lebel City Clerk

CITY OF AUBURN (a municipal corporation)
By Bernal B. Allen (corporate seal)
City Manager (corp. seal)

ATTEST:
Leon H. Cole City Clerk

STATE OF NEW YORK)
COUNTY OF NEW YORK) SS.

On this 18 day of December, 1947, before me, appeared Harry Milnes, to me personally known, who, being by me duly sworn, did say that he is the Associate Deputy Zone Administrator for Real Property Disposal, New York City, War Assets Administration, and that the foregoing instrument was signed in behalf of the War Assets Administration, the War Assets Administrator and the United States of America by authority of law, and said Harry Milnes acknowledged said instrument to be the free act and deed of said War Assets Administration, War Assets Administrator and United States of America.

William J. Kelley
William J. Kelley Attorney and Counsellor-at-Law Residing in Queens Co.

Queens Co. Clk's No. 209, Reg. No. A-377-K-8

Kings Co. Clk's No. 66, Reg. No. A-562-K-8

N. Y. Co. Clk's No. 88 Reg. No. A-855-K-8

Commission Expires March 30, 1948.

State of New York
County of New York ss. No. 8390

I, Archibald R. Watson, County Clerk and Clerk of the Supreme Court, New York County, A Court of Record having by law a seal, Do Hereby Certify That William J. Kelley whose name is subscribed to the annexed affidavit, deposition

certificate of acknowledgment or proof, was at the time of taking the same an Attorney and Counsellor at law, duly commissioned and sworn and qualified to exercise the powers of a Notary Public throughout the State of New York that pursuant to law a commission, or a certificate of his appointment and qualifications, and his autograph signature, have been filed in my office; that as such officer he was duly authorized by the laws of the State of New York to Administer oaths and affirmations, to receive and certify the acknowledgment or proof of deeds, mortgages, powers of attorney and other written instruments for lands, tenements and hereditaments to be read in evidence or recorded in this State, to protest notes and to take and certify affidavits and depositions; and that I am well acquainted with the handwriting of such Attorney and Counsellor at Law or have compared the signature on the annexed instrument with his autograph signature deposited in my office and believe that the signature is genuine.

In Witness Whereof, I have hereunto set my hand and affixed my offieal seal this 31 day of Dec. 1947.

Fee Paid 25¢

Archibald R. Watson
County Clerk and Clerk of the Supreme Court, New York County.

State of Maine
County of Androscoggin ss.

On the 23rd day of January, 1948, before me, personally appeared Louis P. Gagne, Mayor of the City of Lewiston, State of Maine, to me known and known by me to be the party executing the foregoing instrument on behalf of the City of Lewiston, and acknowledged said instrument, by him duly executed to be the free act of the City of Lewiston, as his free act and deed individually and in his capacity as Mayor of the City of Lewiston.

Lucille M. Dingley
My Commission expires 12/16/49 Notary Public (seal)

State of Maine
County of Androscoggin ss.

On the 23rd day of January 1948, before me personally appeared Bernard B. Allen, City Manager of the City of Auburn, State of Maine, to me known and known by me to be the party executing the foregoing instrument on behalf of the City of Auburn, and acknowledged said instrument by him duly executed, to be the free act of the City of Auburn as his free act and deed individually and in his capacity as City Manager of the City of Auburn.

Lucille M. Dingley
My commission expires 12/16/49 Notary Public (seal)

C E R T I F I C A T E

I, the undersigned R. Whittet, Associate Deputy Administrator, Office of Real Property Disposal, War Assets Administration, in my official capacity as such Associate Deputy Administrator and duly authorized in the Delegation of Authority incident to the care, handling and conveyancing dated December 1, 1947, to make the following certification, do hereby certify:

1. That Harry Milnes is the Associate Deputy Zone Administrator, Real Property Disposal War Assets Administration, duly appointed, authorized and acting in such capacity at the time of the execution of the attached instrument.

2. That the attached Delegation of Authority incident to the care, handling, and conveyancing is a true and correct copy of the original of said Delegation of authority, dated December 1, 1947.

Given under my hand this 31st day of December, 1947

R. Whittet
Associate Deputy Administrator
Real Property Disposal
War Assets Administration
(Title)
(Office)

(NOTICE)

Delegation of Authority No. 11

Delegation of Authority Incident to the Care, Handling, and Conveyancing of Surplus Real Property and Personal Property Assigned for Disposal Therewith

The Deputy Administrator, Office of Real Property Disposal, and each Associate Deputy Aministrator, Office of Real Property Disposal, War Assets Administration; the Zone Administrator, the Deputy Zone Administrator for Real Property Disposal, the Associate Deputy Zone Administrator for Real Property Disposal, and the Assistant Deputy Zone Administrator for Real Property Disposal, in each and every War Assets Administration Zone Office; the Regional Director and the Deputy Regional Director for Real Property Disposal, in each and every War Assets Administration Regional Office; the District Director and Deputy District Director for Real Property Disposal, War Assets Administration District Office, Columbia, South Carolina; and any person or persons designated to act, and acting, in any of the foregoing capacities, are hereby authorized, individually (1) to execute, acknowledge and deliver any deed, lease, permit, contract, receipt, bill of sale, or other instruments in writing in connection with the care, handling and disposal of surplus real property, or personal property assigned for disposition with real property, located within the United States, its territories and possessions, (2) to accept any notes, bonds, mortgages, deeds of trust or other security instruments taken as consideration in whole or in part for the

disposition of such surplus real or personal property, and to do all acts necessary or proper to release and discharge any such instrument or any lien created by such instrument or otherwise created, and (3) to do or perform any other act necessary to effect the transfer of title to any such surplus real or personal property located as above provided; all pursuant to the provisions of the Surplus Property Act of 1944, as amended; (58 Stat. 765, 50 U.S.C. App. Supp. 1611); Pulbic Law 181, 79th Cong. (59 Stat. 533; 50 U. S. C. App. Supp. 1614a, 1614b); Reorganization Plan 1 of 1947 (12 F. R. 4534); Public Law 289, 80th Cong. (61 Stat. 678); and War Assets Administration Regulation No. 1 (12 F. R. 6661).

The Zone Administrator in each and every War Assets Administration Zone Office is hereby authorized to redelegate to such person or persons as he may designate the authority delegated to him by this instrument.

L. S. Wright, the Secretary of the Real Property Review Board and R. Whittet, Associate Deputy Administrator, Office of Real Property Disposal, War Assets Administration, are hereby authorized, individually, to certify true copies of this Delegation and provide such further certification as may be necessary to effectuate the intent of this Delegation in form for recording in any jurisdiction, as may be required.

This Delegation shall be effective as of the opening of business on Dec. 1, 1947.

This authority is in addition to, but shall not in any manner supersede delegations of authority previously granted under dates of May 17, 1946; May 29, 1946; July 30, 1946; September 16, 1946; October 31, 1946; November 22, 1946; January 13, 1947; and June 6, 1947; as do not conflict with the provisions of this Delegation.

Jess Larson
Jess Larson Acting Administrator

Dated: Dec. 1, 1947.

Received January 23, 1948 at 3H. 31M. P.M. and recorded from the original.

Attest:

Raymond J. Lenaghan
Register

Section 5

Technical Ability / Financial Capacity

SECTION 5: TECHNICAL ABILITY AND FINANCIAL CAPACITY

Technical Ability

The proposed new hangars are proposed by the applicant, Fielding Properties, LLC, who is authorized to conduct business in the State of Maine. Reference is made to Exhibit B for a copy of the Maine Secretary of State corporation status documentation.

1. Applicant / Design Team

   Fielding Properties LLC is managed by William Fielding of Fielding's Oil, who has six physical locations in Maine. Fielding's is a locally owned business with over 50 years of experience in the oil and propane gas industry. The applicant has previous site development and permitting experience managing business and other properties.

   Sebago Technics, Inc. provides design, engineering, and permitting support for the proposed hangar project development at the Auburn-Lewiston Municipal Airport. Sebago Technics is a multi-disciplinary professional firm with over forty years of experience in engineering, landscape architecture, land survey, transportation, CAD, GIS, regulatory permitting, environmental and geospatial services. In this section, we enclose a firm overview and the resume of the project manager, Robert McSorley, P.E., and additional project staff.

2. Construction Team

   Marc Blais, General Contractor of Lewiston, Maine, is contracted to provide the construction of the Phase 1 hangar. Marc Blais has extensive local construction experience. Reference is made to preliminary architectural plans prepared by Essex Structural Steel Co., Inc., enclosed in the plan set. Final architectural plans will be provided to the City as part of the Building Permit Application prepared by others.

Financial Capacity

A. Estimated Cost Phase I: $615,000.00
   Overall Estimate of Probable Cost: $955,000.00

B. Financing
   1. Phase I of the proposed project will be self-funded by Fielding Properties, LLC. The applicant's financial capacity to undertake the proposed project will be provided under separate cover.

ROBERT A. MCSORLEY, PE

Senior Project Manager

Mr. McSorley joined Sebago Technics, Inc. (STI) in 2006. He has worked in the Civil Engineering field since 1986 and is a Senior Project Manager specializing in project management for government, commercial and residential projects. He is responsible for client contact, proposals, financial aspects of projects, preparation of reports, bid documents, permitting issues, and construction coordination on a variety of public and private projects. He is also active in the community having served on the Portland Water District Board of Trustees and on the Scarborough Sanitary District Board of Trustees and currently serves as a Board member for Camp Scarborough.

EXPERIENCE

Mr. McSorley has completed and is working on several commercial and residential projects in New Hampshire and Massachusetts. In addition, he assists in QA/QC oversight of other projects, marketing of firm's services and technical guidance and training staff.

Rob has also performed peer reviews of projects and was the Assistant District Engineer for a 4,800 acre Special Services District. In that capacity, he was responsible for civil engineering and water management reviews for new projects. In addition, he was responsible for the design of the District's infrastructure including water, IQ and gravity sanitary, force mains, pump stations, drainage roadways and water management systems.

Some of his most notable work experience includes:

- Gorham Road Drainage Improvements – South Portland, ME
- Maine Mall Road Drainage Improvements – South Portland, ME
- Maine Mall Road Sanitary Sewer Replacement – South Portland, ME
- Maine Street Drainage & Sidewalk Improvements – Town of Kennebunkport, ME
- Bedford Street Sewer Separation Project & Portland Water District Main Project – Portland, ME
- Mast Road Culvert Replacement – Town of Waterboro, ME
- Pine Street Bridge Replacement (Box Culvert) – Porter, ME
- USPS FSS Building Expansion – North Reading, MA
- Sunbury Retirement Residence – Bangor, ME
- Derry Retirement Residence – Derry, NH
- Beverly Retirement Community – Beverly, MA
- Tewksbury Retirement Residence – Tewksbury, MA
- Portland Retirement Residence – Portland, ME
- Billerica Retirement Residence – Billerica, MA
- Mountain View Estates – North Conway, NH
- Veteran's Administration Medical Center Cogeneration Facility – Canandaigua, NY
- Synchronous Condenser, Green Mountain Power – Jay, VT
- Veterans Administration Hospital – Palm Beach County, FL

EDUCATION

Florida Atlantic University
Boca Raton, FL
Bachelor of Science,
Mechanical Engineering, 1995

University of Maine - Orono, ME
Majored in Mechanical Engineering
1980-1983

REGISTRATIONS

Professional Engineer: Maine, New Hampshire, Massachusetts, Vermont

National Council of Examiners for Engineering and Surveying

MEMBERSHIPS

American Society of Civil Engineers

CERTIFICATIONS

Maine DEP Maintenance & Inspection of Stormwater BMPs

SEBAGO TECHNICS

JAKE S. HUNNEWELL, EI

Civil Engineer

Mr. Hunnewell joined Sebago Technics, Inc., (STI) in May of 2021 as a Civil Engineer within the Project Delivery Group. Mr. Hunnewell graduated from the University of Rhode Island with a degree in Civil and Environmental Engineering. He has worked in construction, including performing inspection-quality control for paving. He previously shadowed with Sebago Technics. In his current role as a Civil Engineer, he is a key member of a multi-disciplinary site development team. His responsibilities include, but are not limited to, grading design, stormwater treatment and drainage design, utility coordination and design, and permitting.

EXPERIENCE

Jordan Bay Marina – Raymond, ME
This project included expanding landside facilities for Jordan Bay Marina, including outdoor boat parking and display, and a boat storage building. Jake's responsibilities as the civil engineer included pre- and post-development drainage analyses using HydroCAD, stormwater BMP sizing and design, grading design, and utility layout.

Grand Atlantic Hotel – Boothbay Harbor, ME
This project included two hotels constructed on the waterfront in Boothbay Harbor. Jake's responsibilities as the civil engineer included detailed grading design, utility layout and drainage design, and the preparation of construction specifications.

Belfast Convenient MD – Belfast, ME
This project included the construction of a Convenient MD facility on undeveloped land with significant wetland coverage. Jake's responsibilities as the civil engineer included pre- and post-development drainage analyses using HydroCAD, stormwater BMP sizing and design, grading design, utility layout and coordination, and conducting stormwater BMP inspections during construction.

Garbage to Garden – Portland, ME
This project involved expanding parking and material storage areas for the current operations to allow for this business to continue to grow. This site was particularly challenging due to steep slopes, an onsite stream, and unforeseen existing drainage conditions. Jake's responsibilities as the civil engineer included pre- and post-development drainage analyses using HydroCAD, stormwater BMP sizing and design, and grading and drainage design.

EDUCATION

University of Rhode Island,
Kingston, RI

B.S. Civil and Environmental Engineering, 2020

CERTIFICATIONS

Maine Engineer-Intern Certification

OSHA 10-Hour Construction Safety

SEBAGO TECHNICS

COLEN R. PETERS, CG, PWS

Environmental Services Manager

Mr. Peters joined Sebago Technics, Inc., (STI) in February of 2022. He is a well-recognized, experienced, environmental professional who has had his own firms and worked for large national and regional consulting firms. Cole is a Certified Geologist and Professional Wetlands Scientist. He is experienced in large scale environmental projects including utility corridors and projects, wind/solar power development, highway projects, wetlands delineations/mitigation, commercial projects, etc.

In his role as Environmental Services Manager, Cole oversees environmental services including wetlands/vernal pools delineations, environmental site assessments, soils analyses and related work. He also serves as liaison/strategist for strategic environmental permitting with the Maine Department of Environmental Protection (DEP), Maine Land Use Preservation Commission (LUPC), US Environmental Protection Agency and US Army Corps of Engineers.

EXPERIENCE

Wetland Delineation and Vernal Pool Surveys:

- Auburn - Industrial Park lot
- Bath - Bath Iron Works
- Belfast - Commercial property
- Boothbay - Middle & High School expansion, undeveloped 63-acre parcel
- Brunswick - BTWD wellfield
- Bridgton - Commercial and condominium properties
- Cape Elizabeth - Commercial, residential, and municipal properties
- Falmouth - Undeveloped 70-acre parcel, residential property
- Gorham - Residential developments
- Kennebunk - Undeveloped rural residential parcels
- Kennebunkport - Seashore Trolley Museum
- Lewiston - Undeveloped commercial property
- Lyman - Stonefield Quarry expansion
- Naples - Undeveloped rural property
- Portland - Martins Point Hospital, Cumberland County Jail, Jetport
- Saco - Commercial property
- Scarborough - Salvage yard, industrial park, residential subdivision
- Sidney - Rock quarry
- South Portland - Commercial properties
- Raymond - Port Harbor Marine (Functions & Values Assessment)
- Wells - Campground
- Windham - Municipal Sewer right-of-way

Coastal Bluff and Dune Assessments:

- Harpswell - Mill Cove residential property, Bowdoin College Schiller Campus boat ramp
- Scarborough - Pine point residential property
- Yarmouth - Cousins Island residential property

Water Supply Well Assessments:

- Acton - Camp Kita (Boy Scouts of America Wm Nutter)
- Bridgton - Condominium development
- Scarborough - Residential subdivision

Environmental Constraints and Developability Analysis:

- Lovell - 80-acre residential property on Kezar Lake

Environmental Permitting:

- Belfast - Belfast Solar I, LLC
- Carmel - Carmel Solar I, LLC
- Naples - Naples Solar I, LLC
- Readfield - Readfield Solar I
- Troy - Troy Solar I
- Wiscasset - Wiscasset Solar I, LLC

EDUCATION

University of Rhode Island, - Kingston, RI
M.S., Geology, 1981

Marine Science Consortium
Wallops Island, VA - 1978

Edinboro State College - Edinboro, PA
B.S. in Geology, 1978

CERTIFICATIONS

Professional Wetland Scientist #760
Maine Certified Geologist #220

MEMBERSHIPS

Maine Association of Wetland Scientists
(Founding Member)

Geological Society of Maine

PUBLICATIONS

Peters, C.R., 2019: *Mitigating Wetland Impacts (Loss) in the Anthropocene*, Northeast Section Meeting of the Geological Society of America, Portland, ME

Peters, C.R., 2017: *Dingley Estates Pooled Mitigation Site*, Northeast Chapter of Society of Wetland Scientists, Wetland Compensation Symposium, University of New England Biddeford, ME

Peters, C.R., 2017: *Maine Wetland Compensation: Some Regs. Some Plans, Some Results,* Maine Association of Wetland Scientists Winter Conference and Annual Meeting, Brunswick, ME

SEBAGO TECHNICS

SCOTT R. MORNEAU

Senior Surveyor/Field Systems Coordinator

Mr. Morneau rejoined Sebago Technics, Inc. (STI) in 2015 after previously working for Sebago Technics for nine years prior. He has over 20 years of survey experience doing all facets of surveying including construction, commercial and residential surveying. He has worked and helped manage a variety of assignments relating to boundary surveys, topographic surveys, and construction related projects. Scott has also taken on additional responsibilities and the important role as the Survey Field Systems Coordinator. In this role, Scott manages the maintenance, repair, and overall operational status of Sebago's extensive survey equipment and technologies. He aids the Survey-Geomatics team in evaluating, selecting, and applying new surveying-based technology into the surveying field and office techniques and procedures.

EXPERIENCE

Dry Dock #1, USS Constitution, Boston Naval Shipyard – Boston, MA: Provided layout and quality control for the retrofit of new inner and outer sill/seat areas for the new Dry Dock Caisson. The resultant geometry was used to compare the pre-existing dry dock surfaces to the completed retrofit.

Coast Guard Station Pier – Southwest Harbor, ME: Created existing condition mapping and layout for the new boat maintenance facility on the existing pier structure including hydrographic, shoring and crack study mapping.

Coast Guard Station Pier – Rockland, ME: Created existing condition mapping on the existing pier structure including hydrographic, shoring and crack study mapping.

Broadway Corridor Mapping – South Portland, ME: Created existing condition mapping data of streetscapes from High Definition Laser Scanning for engineering purposes. Data included the mapping of roadway surfaces, above ground utilities, buildings and signage.

Amtrak Rail Expansion, Northern New England Rail Authority: Provided layout and quality control for the replacement of rail lines as well as the layout for a $13 million train layover and maintenance facility.

Marine Terminal Pier – Searsport, ME: Created existing condition mapping of the existing pier, super structure, and hydrographic mapping.

Commercial Building Layout: While working alongside many of the premiere general contractors in Maine, Mr. Morneau has provided survey grade layout and building line control for many multiple-story commercial buildings in and around Maine.

EDUCATION

University of Maine, Orono, ME
Construction Management Technology

University of Maine, Augusta, ME
Architecture

CERTIFICATIONS

OSHA 10-hour Construction Safety

SEBAGO TECHNICS

STEFANIE K. NICHOLS

Permitting Specialist/Project Coordinator

Mrs. Nichols joined Sebago Technics, Inc. (STI) in 2018 as a Permitting Specialist/Project Coordinator and is a Regulatory Specialist with over 36 years of diverse experience. During this time, she has worked with many different disciplines in the various aspects of site permitting and site inventory, and associated reports and graphics. Other duties over the years include civil drafting-hand and ACAD, project bid tracking and construction submittal processing, sourcing landscape materials, livestock procurement/travel permits, and short-term fostering.

EXPERIENCE

Solar Array Projects
Locations: Berwick, Kenduskeag, Lewiston, Livermore Falls, Mechanic Falls, Minot, North Berwick, Orrington, Oxford, Prospect, Searsmont, Stockton Springs, etc.
Applications: MDEP Site Law, NRPA, Stormwater, Transfer, Extension, Decommissioning, USACE, MDOT Driveway, and Municipal.

Homestead Farms Subdivision - Falmouth, ME
Single-Family Clustered Development
Applications: MDEP Site Law, NRPA, ACOE, Municipal Subdivision/Site Plan Review

Copart of Connecticut - Windham, ME
Vehicle Auction Facility/Offices
Applications: MDEP Site Law, NRPA, Municipal Site, and Subdivision

Harborchase - South Portland, ME
Senior Housing/Memory Care
Applications: Municipal, MDEP and FAA

Maine Medical Center - Portland, ME
Large Medical Facility Expansion, Congress Street
Application: Municipal Level III Site Plan Application

Colby College - Waterville, ME (2003-2018)
Liberal Arts College modifications and expansions: Athletic Fieldhouse Complex, Grossman Hall Addition/Renovation, Oakland Solar Array, Baseball/Softball Facility, Johnson Pond Water Quality, Biomass Plant Expansion, Cotter Union Expansion, The Diamond Building, Roberts Row Elevator Towers, Colby Green, etc.
Applications: MDEP, USACE, Municipal

Sugarloaf - Carrabassett Valley, ME (2003-2016)
Ski Resort additions and modifications: Glades at Burnt Mountain, Golf Course, Snow Park, Bullwinkle's Expansion, Trail Widening, Parking, Sand and Salt Storage, etc.
Applications: MDEP, USACE, Municipal

Sebasco Harbor Resort and Harbor Island - Phippsburg, ME (2003-2018)
Resort permitting, building modification, golf course modifications, parking, utilities, subdivision projects
Applications: MDEP Site Location, NRPA, OBD Renewal, DEP Transfers & Extensions, Municipal Site, and Subdivision

100+ Private Residences
Locations: Maine, Massachusetts, New Hampshire, Connecticut, Montana
Applications: Municipal Site/Shoreland Review, MDEP NRPA, USACE, MDOT Driveway

EDUCATION

Northern Maine Technical College
Presque Isle, ME
Drafting Technology

Central Maine Technical College
Auburn, ME

Maine Technical Source (MTS)
Yarmouth, ME
AutoCAD I

SEBAGO TECHNICS

MARIA MORRIS, MS

GIS Specialist

Ms. Morris joined Sebago Technics, Inc. (STI) in February of 2022 as a GIS Specialist. Maria is a graduate from the University of Glasgow with a Master's Degree in Geoinformation Technology & Cartography. Maria worked on projects including site suitability mapping, web & mobile mapping, and building land information systems. For her Master's thesis she analyzed "Spatial Multi- Criteria Decision Making for Dam Removal Prioritization in Maine." She also holds a B.A. in Environmental Studies from Vassar College where she completed her Dissertation, "Natural Spaces as Sacred Places," and conducted local campus studies on Soil Suitability for Reforestation and Solar Suitability on Campus. Originally from Southern Maine, Maria has enjoyed coming home to the state to spend most of her free time in the woods or on the water.

At Sebago, Maria develops cartographic products such as existing conditions plans, natural resource plans, web-mapping applications, and earth surface models through land information analysis. Maria's work provides insight into site constraints and opportunities and promotes design decisions that ensure the safety of the community and responsible stewardship of natural resources.

EXPERIENCE

Bayside Tree Planting Project – Portland, Maine
Sebago Technics was retained by the City of Portland to identify suitable locations for a surge of tree plantings as part of the Bayside Tree Planting Project funded by the American Rescue Plan Act. In coordination with City staff, Ms. Morris developed a suitability matrix to identify priority planting locations based on existing tree canopy and infrastructure. As a result of her work, the City of Portland secured a Community Development Block Grant to fund a second surge of tree planting in Spring of 2024. Sebago and the City of Portland are proud of this collaborative effort to improve community health and happiness and strengthen Portland's urban ecology.

Casco Open Space Inventory
Ms. Morris worked closely with the Town of Casco Open Space Commission to update their Open Space & Conserved Land Map with new parcel data and topographic information. In the process of developing the map, the need for an Open Space Inventory became apparent. Maria designed a web-based inventory categorizing the different kinds of open space in Casco that included pertinent information about open space locations, and functions as a living database for collaboration between commission members and organizations. Along with the Open Space & Conserved Land Map and Inventory, Maria designed a web-based map of Casco Open Spaces to be embedded on the Town's website for the public.

Natural Resource Management
Ms. Morris works closely with Sebago's Natural Resource Department to produce maps for site evaluation, permitting, and natural resource management reports. The maps incorporate field survey data as well as public data sources. Maria also develops web-based Mobile Maps & Field Mapping applications for Sebago Field Workers to efficiently delineate natural resources and safely navigate sites.

EDUCATION

University of Glasgow, Scotland
M.S., Geoinformation Technology & Cartography (with Merit), 2022

Vassar College, Poughkeepsie, NY
B.A. in Environmental Studies (Honors), 2016

COMMUNITY ENGAGEMENT

Maine Outdoor Film Festival – Volunteer – Submission Screener, October 2022 to present.

Mahoosuc Land Trust – Volunteer – GIS consultant & Trail Map Designer, October 2022 to present.

SEBAGO TECHNICS

MICHELLE "SHELLY" R. STACEY

CAD Manager

Ms. Stacey joined Sebago Technics in 2018 as a Senior CAD Designer. She has more than 20 years of Civil CAD experience on local, regional, and national projects. She is experienced in the development of full civil site plan sets including utility, roadway, grading, profiles, sections and detail plans for local and national firms. She has diversified experience within various stages/design elements of a project.

In her role as CAD Manager, Shelly manages Sebago's CAD design teams to ensure project support and technical mentoring as the company continues to onboard new team members. Shelly is also responsible for the overall workload coordination for the CAD design team. Shelly is committed to deadlines and ensuring the company delivers clear, correct, and timely deliverables.

EXPERIENCE

TWIN FALLS SUBDEVELOPMENT – WESTBROOK, MAINE
Developed plan set to include, subdivision plan with roads, grading and drainage plans, sewer, storm drain and water plans, pipe networks, and erosion control plans and details.

NESG – MULTIPLE SOLAR DEVELOPMENT SITES, MAINE
Developed plan sets to include, solar arrays with roads, grading and drainage plans, and erosion control plans and details.

PIPER SHORES – SCARBOROUGH, MAINE
Developed plan set to include, roads, parking lots, grading and drainage plans, sewer, storm drain and water plans, pipe networks, and erosion control plans and details.

COASTAL RIPTIDE BASEBALL FACILITY – SANFORD, MAINE
Created Multi-phase grading and drainage plans with road and parking layouts. Pipe networks for drainage and sewer.

EDUCATION

Vermont Technical College
Randolph, Vermont
Associate of Engineering in Civil Engineering Technology, 1997

SKILLS

AutoCAD 2018 by AutoDesk

Civil 3D 2018 by AutoDesk

Corpscon

Bing Live Maps

Microsoft Office Suite

Blue Beam and Adobe Acrobat

Google Earth

SEBAGO TECHNICS

Section 6

Traffic

SECTION 6: TRAFFIC

The hangars are not located on a public right-of-way; access to the proposed new hangars is attained over existing private roads interior to the airport. No traffic generation rates have been established for individual hangars. Based upon the size of the hangars, it is assumed that each hangar can accommodate 4- 5 small personal type aircraft. Allowance has been made for three parking spaces per proposed hangars. It is anticipated, based upon the use and number of aircraft sheltered, that the peak hour generation of traffic would be in the single digits of trips.

Section 7

Solid Waste

SECTION 7: SOLID WASTE

Municipal Solid Waste (MSW) Post-construction MSW removal from the proposed new hangars from normal, daily household trash and/or recyclable material will be facilitated by private contracts. The generation of MSW is expected to be minimal for Phase I (Hangar 1) as the anticipated use is limited to aircraft storage without employees. MSW at the four hangars will vary by tenant but will not affect municipal facilities as the removal will be done by private service.

Off-site Disposal of Construction and Demolition Debris (CDD)[2]

Construction and demolition debris will be removed by licensed non-hazardous waste haulers[1] utilizing licensed disposal facilities. Construction period disposal may include metal, wood, packaging, cardboard, etc., and will be collected in temporary dumpsters placed on the site. Waste material should be separated into the following types: wood, metal, all other material, and possibly cardboard. We do not anticipate the generation of or disposal of hazardous waste during construction. We note that the first phase of the project (Hangar 1) will be built and occupied by the applicant.

Per available resources, the estimated CDD is 4.34 pounds per square foot, resulting in 111,104 pounds (27,776 lbs./building). Assuming that the average CDD waste is approximately 500 pounds per cubic yard[2], there will be approximately 222 cy of debris (55.5 cy/building) generated during the building construction. We note that the overall debris estimate has not been reduced to reflect the percentage of clean materials suitable for recycling, nor has the number been adjusted to reflect metal building construction that typically yields less CDD than a stick-built building of the same size.

Land Clearing Debris Not applicable; the project site is located in a maintained clearing that does not require the removal of trees.

Sources:

[1]Maine DEP Active Non Haz Transporters 6/1/2024 to 11/30/2026
https://www.maine.gov/dep/ftp/reports/nactive.pdf

[2]EPA Estimating 2003 Building-Related Construction and Demolition Material Amounts
https://www.epa.gov/smm/estimating-2003-building-related-construction-and-demolition-materials-amounts

Volume-to-Weight Conversion Factors US EPA Agency Office of Resource Conservation and Recovery April 2016
https://www.epa.gov/sites/production/files/2016-
04/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fnl.pdf

Northeast Recycling Hauler Terms and Waste Conversion Factors
https://nerc.org/documents/hauler_terms_and_waste_conversion_factors.pdf

Section 8

Signage

SECTION 8: SIGNAGE

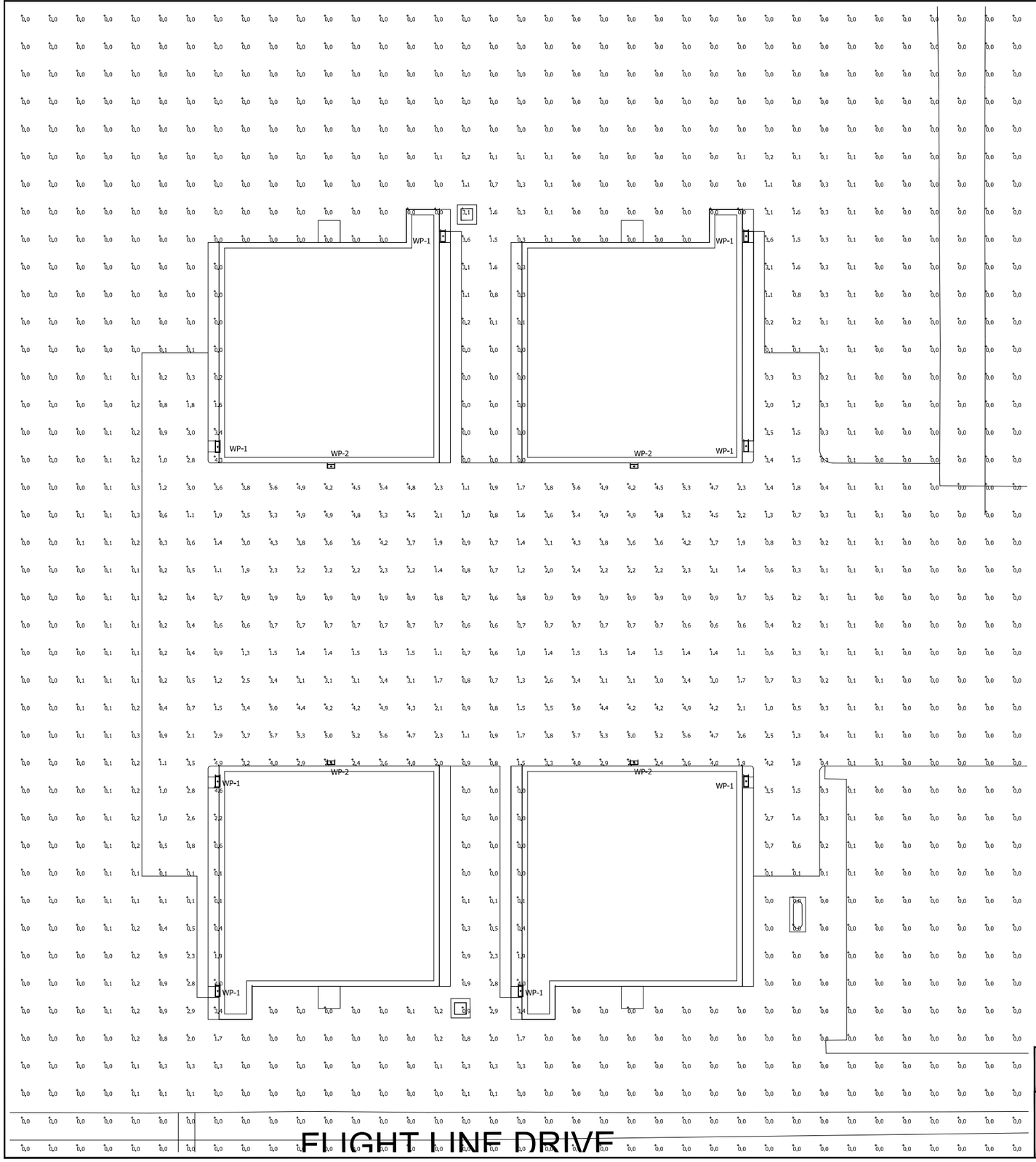
Additional signage is not proposed for Phase I (Hangar 1) project. Signage associated with future phases, if proposed, will be permitted by separate application by the applicant or tenant, as required.

Section 9

Lighting

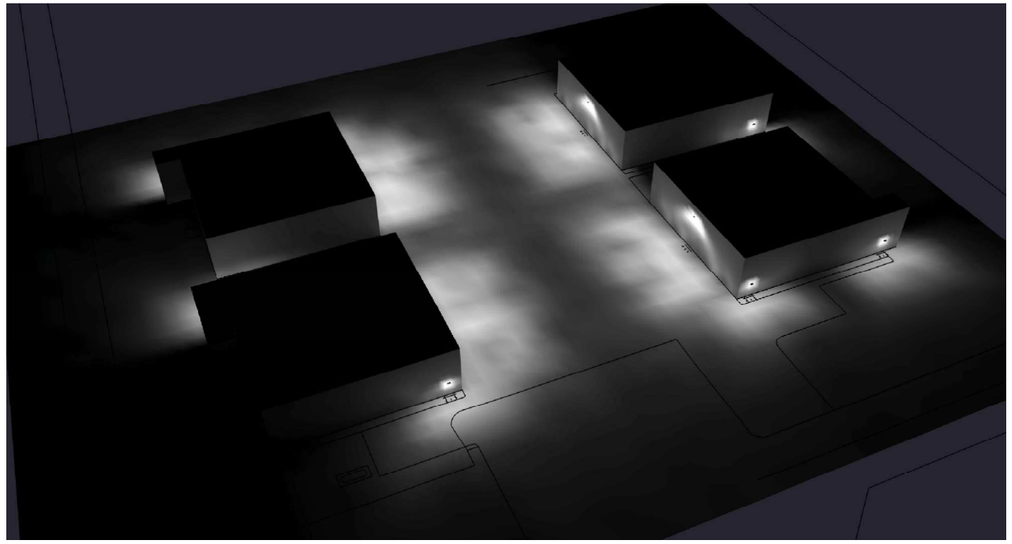
SECTION 9: LIGHTING

Exterior lighting is limited to shielded dark-sky-complaint LED wall packs at man doors and hangar doors. The illumination is shielded to avoid light spill and is contained to the common apron area. A copy of the professionally prepared photometric plan and light fixture cut sheets for project buildout by Swaney Lighting Associates are enclosed in this section.



Luminaire Schedule							
Symbol	Qty	Label	Mounting Height	LLF	Lum. Lumens	Lum. Watts	Description
	8	WP-1	8' - 0" AFG	0.900	3216	25	VPW2-18L-25-3K7-4W
	4	WP-2	20' - 0" AFG	0.900	18809	160	VPW3-160L-155-3K7-4

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Overall Area	Illuminance	Fc	0.68	5.6	0.0	N.A.	N.A.



1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO CURRENT. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.
2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

AURBURN-LEWISTON AIRPORT
AUBURN, ME
SITE PHOTOMETRIC PLAN

REVISED FROM DRAWING NUMBER(S):	
R1: 07/22/24	
R2: 08/06/24	

Current

DN BY: DHK	DATE: 07/18/24	CHK BY: N/A	
REV. BY: DHK	DATE: 08/06/24	SCALE: AS NOTED	
QUOTE: N/A	DRAWING / DESIGN NO.: A241539R2		

BEACON design . performance . technology

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

FEATURES

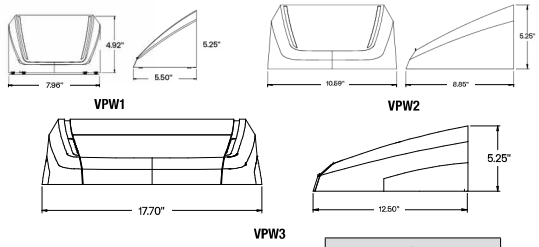
- Low profile LED wall luminaire with a variety of IES distributions for lighting applications such as retail, commercial and industrial building mount
- Featuring Strike and Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual Comfort - Option for Size 2 and Size 3
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, and LightGRID+.
- Battery Backup options available for emergency code compliance
- Quick-mount adapter allows easy installation/maintenance
- 347V and 480V versions for industrial applications and Canada

C US BAA TAA

CONTROL TECHNOLOGY

NX CONNECT NX WIRED NX WIRELESS LIGHTGRID+

MICRO STRIKE | OPTICS STRIKE



	Weight
VPW1	4.1 lbs / 1.86 kg
VPW2	7.15 lbs / 3.24 kg
VPW3	17.1 lbs / 7.80 kg

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating

OPTICS

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 2700K, 3000K, 3500K, 4000K and 5000K CCTs
- Zero uplight distributions
- LED optics provide IES type II, III and IV distributions.

INSTALLATION

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box)
- Designed for direct j-box mount.

ELECTRICAL

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V input is available in most wattage, 480V is available for 55W and above.
- Ambient operating temperature -40˚C to 40˚C
- Driver RoHS and IP66
- 10kV Surge Protector optional
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options can not be included in one same fixture.
- Dimming drivers are standard. Select CD (Customer Dimming) for the dimming wires to be extended outside the fixture.

CONTROLS

- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- Button photocontrol is suitable for 120-277V operation
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor

CONTROLS CONTINUED

- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Battery Backup suitable for operating temperatures -20˚C to 40˚C.
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application.
- LightGRID+ available with in fixture wireless control module, features dimming and occupancy sensor.

CERTIFICATIONS

- Certified to UL 1598 and CSA 22.2#250.0-24
- IP65 rated housing
- Emergency battery backup options are California Energy Commission (CEC) Title 20 Compliant
- This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) and Trade Agreements Act (FAR 52.225- 11). See Buy America(n) Solutions (link to https://http://www.currentlighting.com/resources/americasolutions).

WARRANTY

- 5 year limited warranty

BEACON design . performance . technology

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

ORDERING GUIDE

Example: VPW1–24L-10–3K7–2–UNV–BLS

CATALOG #

Series	# LEDs - Wattage	CCT/CRI	Distribution	Voltage	Color
VPW1 Viper Wall 1	**24L-10** 1,000 Lumens	**27K8** 2700K, 80 CRI	**FR** Auto Front Row[7]	**UNV** 120–277V	**BLT** Black Matte Textured
	24L-15 2,000 Lumens	**3K7** 3000K, 70 CRI	**2** IES TYPE 2	**120** 120V	**BLS** Black Gloss Smooth
	24L-25 3,000 Lumens	**4K7** 4000K, 70 CRI	**3** IES TYPE 3	**208** 208V	**DBT** Dark Bronze Matte Textured
VPW2 Viper Wall 2	**48L-15** 2,000 Lumens	**5K7** 5000K, 70 CRI	**4F** IES TYPE 4 Forward	**240** 240V	**DBS** Dark Bronze Gloss Smooth
	48L-20 3,000 Lumens	**3K8** 3000K, 80 CRI	**4W** IES TYPE 4W	**277** 277V	**GTT** Graphite Matte Textured
	48L-30 4,000 Lumens	**35K8** 3500K, 80 CRI		**347** 347V	**LGS** Light Grey Gloss Smooth
	48L-35 5,000 Lumens	**4K8** 4000K, 80 CRI		**480** 480V	**LGT** Light Grey Matte Textured
	48L-45 6,000 Lumens	**5K8** 5000K, 80 CRI			**PSS** Platinum Silver Smooth
	80L-20 3,000 Lumens	**AP** Phosphor Converted Amber[1]			**WHT** White Matte Textured
	80L-25 4,000 Lumens				**WHS** White Gloss Smooth
	80L-35 5,000 Lumens				**VGT** Verde Green Textured
	80L-45 6,000 Lumens				**Color Option**
	80L-55 7,000 Lumens				**CC** Custom Color
	80L-65 8,000 Lumens				
	80L-70 8,500 Lumens				
	18L-25 3,000 Lumens, Strike Optics				
	18L-30 4,000 Lumens, Strike Optics				
	18L-39 4,750 Lumens, Strike Optics				
	18L-50 6,000 Lumens, Strike Optics				
	18L-60 6,500 Lumens, Strike Optics				
VPW3 Viper Wall 3	**160L-45** 7,000 Lumens				
	160L-70 10,000 Lumens				
	160L-95 12,500 Lumens				
	160L-105 15,000 Lumens				
	160L-135 17,500 Lumens				
	160L-155 20,000 Lumens				
	36L-55 7,000 Lumens, Strike Optics				
	36L-80 9,500 Lumens, Strike Optics				
	36L-100 11,500 Lumens, Strike Optics				
	36L-120 13,000 Lumens, Strike Optics				

Control Options Network[3,7,11,13]	
NXWS12F	NX Networked Wireless Enabled Integral NXSMP2-OMNI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[14]
NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[9]
NXWS24F	NX Networked Wireless Enabled Integral NXSMP2-OMNI-HM PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[9]
NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[9]
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor
WIR	LightGRID+ In-Fixture Module[9]
WIRSC	LightGRID+ In-Fixture Moduel with BTS occupancy[9]
Stand Alone Sensors[7,11,13]	
BTS-14F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor[4,9]
BTS-40F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor[4,9]
BTSO-12F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height[14]
Photocontrol[13]	
PC	Button Photocontrol 120-277V

Options	
F	Fusing[5,7]
E	Battery[6,7,8]
EH	Battery with Heater[5,7,8]
CS	Comfort Shield[7,10]
SP	10kA Surge Protector
2PF	Dual Power Feed[2,7,8]
2DR	Dual Driver[2,7,8]
CD	Customer Dimming[12]
DTS	Dimming Transfer Switch[7]

Notes:
1. Available with Micro Strike Optics only
2. Not available with 480V in Size 1 and Size 2
3. Networked controls cannot be combined with other control options
4. Not available with VPW1 or with 2PF or 2DR options
5. Must specify voltage (VPW1 & VPW2: 120V, 277V or 347V; VPW3: 120V, 208V, 240V, 277V, 347V or 480V)
6. See page 10 for detail Battery configurations
7. Not available in VPW1
8. 2PF can't be combined with E or EH; 2DR can't be combined with E or EH in VPW2
9. Not available in VPW1 and VPW2
10. Not available with Micro Strike 24L and 48L. Not available with Strike 18L and 36L
11. Not available with 2PF
12. Not available with Network Control options or Stand Alone Sensors. Can be ordered with PC
13. Not available in 480V in VPW2; Only available in 480V in VPW3 in 80W, 100W, 120W, 135W and 155W
14. NXWS12F and BTSO-12F are the only sensors available in VPW2

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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

ACCESSORIES AND REPLACEMENT PARTS - MADE TO ORDER

	Catalog Number	Description
☐	**WP-BB-XXX**	Accessory for conduit entry[1]
☐	**CS**	Comfort Shield[2]

Notes:
1 replace "xxx" with color option
2 Not available with Micro Strike 24L and 48L or Strike 18L and 36L

CONTROLS FUNCTIONALITY

OUTDOOR LIGHTING CONTROLS OPTIONS

LIGHTGRID+

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
NX Wireless	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	✓	✓	✓	–	–	✓	✓	✓	–		NXRM2-H
NX Wireless	NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	16ft		NXSMP2-LMO
NX Wireless	NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	40ft		NXSMP2-HMO
LightGRID+	WIR	LightGRID+ In-Fixture Module	✓	–	✓	–	–	✓	✓	Gateway	–		WIR
Independent	BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	12ft		BTSMP-OMNI-O
Independent	BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	14ft		BTSMP-LMO
Independent	BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	40ft		BTSMP-HMO

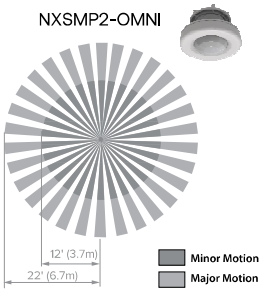
DEFAULT SETTINGS

NX Wireless	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	15 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	0%
Daylight Sensor	Disabled
Bluetooth	Enabled
2.4GHz Wireless Mesh	Off
"Passcode Factory Passcode: HubbN3T!"	Enabled

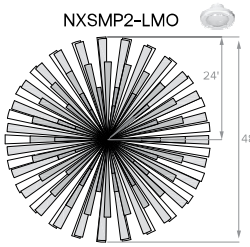
Stand Alone	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	8 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	0% (Off)
Daylight Sensor	Disabled

NX WIRELESS COVERAGE PATTERNS

NXSMP2-OMNI

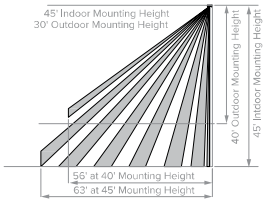


NXSMP2-LMO



Sensor Lens Coverage and Detection Patterns When Mounted at 8ft with Low Mount Lens

NXSMP2-HMO



Sensor Lens Coverage and Detection Patterns When Mounted at 40ft and 45ft with Standard Lens

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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

NX LIGHTING CONTROLS FREE APP

The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminiares and program NX system settings.

Apple App: https://apps.apple.com/us/app/nx-lighting-controls/id962112904

Google Play: https://play.google.com/store/apps/details?id=io.cordova.NXBTR&hl=en_US&gl=US

NX LIGHTING CONTROLS

Apple App Google Play

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98
50°C	122°F	0.97

Use these factors to determine relative lumen output for average ambient temperatures from 0–40 C (32–104 F).

PROJECTED LUMEN MAINTENANCE

	OPERATING HOURS		
Ambient Temp.	0	25,000	TM-21-22 60,000
25°C / 77°F	1.00	0.91	0.83
40°C / 104°F	0.99	0.90	0.82

Lumen maintenance values calculated per TM-21 using six times the LM-80 test time for the LED and in-situ thermal testing of the luminaire.

MULTIPLIER

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.710		

Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	0.9	0.81	0.62
3000K	0.933	0.853	0.659
3500K	0.959	0.894	0.711
4000K	1	0.9	0.732
5000K	1	0.9	0.732
Monochromatic Amber Multiplier			
Amber	See Amber Spec Sheet		

PERFORMANCE DATA: MICROSTRIKE

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW1	24L	10	6.6	2	888	134	0	0	0	883	134	0	0	0	850	129	0	0	0
				3	829	126	0	0	0	825	125	0	0	0	794	120	0	0	0
				4W	867	131	0	0	1	863	131	0	0	1	830	126	0	0	1
		15	14	2	1883	134	1	0	1	1873	134	1	0	1	1802	129	1	0	1
				3	1759	126	1	0	1	1750	125	1	0	1	1683	120	0	0	1
				4W	1839	131	0	0	1	1830	131	0	0	1	1761	126	0	0	1
		25	23.0	2	3116	135	1	0	1	3100	135	1	0	1	2982	130	1	0	1
				3	2910	127	1	0	1	2896	126	1	0	1	2785	121	1	0	1
				4W	3044	132	1	0	1	3029	132	1	0	1	2914	127	1	0	1

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

PERFORMANCE DATA: MICROSTRIKE CONT'D

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW2	48L	15	13.1	2	1866	142	1	0	1	1857	142	1	0	1	1786	136	1	0	1
				3	1743	133	1	0	1	1734	132	1	0	1	1668	127	0	0	1
				4F	1832	140	0	0	1	1823	139	0	0	1	1754	134	0	0	1
				4W	1823	139	0	0	1	1814	138	0	0	1	1745	133	0	0	1
		20	20.5	2	2791	136	1	0	1	2777	135	1	0	1	2671	130	1	0	1
				3	2606	127	1	0	1	2593	127	1	0	1	2495	122	1	0	1
				4F	2740	134	1	0	1	2726	133	1	0	1	2622	128	1	0	1
				4W	2726	133	1	0	1	2713	132	1	0	1	2610	127	1	0	1
		30	28.8	2	3766	131	1	0	1	3747	130	1	0	1	3605	125	1	0	1
				3	3517	122	1	0	1	3500	122	1	0	1	3367	117	1	0	1
				4F	3697	128	1	0	1	3678	128	1	0	1	3539	123	1	0	1
				4W	3679	128	1	0	1	3661	127	1	0	1	3522	122	1	0	1
		35	37.3	2	4707	126	1	0	1	4684	126	1	0	1	4506	121	1	0	1
				3	4396	118	1	0	1	4375	117	1	0	1	4208	113	1	0	1
				4F	4621	124	1	0	1	4598	123	1	0	1	4423	119	1	0	1
				4W	4599	123	1	0	2	4576	123	1	0	2	4402	118	1	0	2
		45	45.9	2	5604	121	1	0	1	5576	121	1	0	1	5364	116	1	0	1
				3	5234	114	1	0	2	5208	113	1	0	2	5010	109	1	0	2
				4F	5501	119	1	0	2	5474	118	1	0	2	5266	114	1	0	2
				4W	5475	116	1	0	2	5447	115	1	0	2	5240	111	1	0	2
	80L	20	19.4	2	2978	154	1	0	1	2963	153	1	0	1	2851	147	1	0	1
				3	3028	156	1	0	1	3013	155	1	0	1	2898	149	1	0	1
				4F	3039	157	1	0	1	3024	156	1	0	1	2909	150	1	0	1
				4W	2968	153	1	0	1	2953	152	1	0	1	2841	146	1	0	1
		25	26.7	2	3723	139	1	0	1	3704	139	1	0	1	3563	133	1	0	1
				3	3785	142	1	0	1	3766	141	1	0	1	3623	136	1	0	1
				4F	3799	142	1	0	1	3780	142	1	0	1	3636	136	1	0	1
				4W	3710	139	1	0	1	3692	138	1	0	1	3551	133	1	0	1
		35	34.2	2	4775	140	1	0	1	4751	139	1	0	1	4571	134	1	0	1
				3	4855	142	1	0	1	4831	141	1	0	1	4647	136	1	0	1
				4F	4872	142	1	0	1	4848	142	1	0	1	4664	136	1	0	1
				4W	4759	139	1	0	1	4735	138	1	0	1	4555	133	1	0	1
		45	41.7	2	6032	145	1	0	2	6002	144	1	0	2	5774	138	1	0	1
				3	6133	147	1	0	2	6102	146	1	0	2	5870	141	1	0	2
				4F	6155	148	1	0	2	6124	147	1	0	2	5891	141	1	0	2
				4W	6012	144	1	0	2	5982	143	1	0	2	5754	138	1	0	2
		55	50.6	2	6999	138	1	0	2	6964	138	1	0	2	6700	132	1	0	2
				3	7116	141	1	0	2	7081	140	1	0	2	6812	135	1	0	2
				4F	7142	141	1	0	2	7106	140	1	0	2	6836	135	1	0	2
				4W	6976	138	1	0	2	6941	137	1	0	2	6677	132	1	0	2
		65	58.3	2	7910	136	2	0	2	7871	135	2	0	2	7572	130	1	0	2
				3	8042	138	1	0	2	8002	137	1	0	2	7698	132	1	0	2
				4F	8071	138	2	0	2	8031	138	2	0	2	7726	133	1	0	2
				4W	7884	135	1	0	2	7844	135	1	0	2	7546	129	1	0	2
		70	63.5	2	8506	134	2	0	2	8463	133	2	0	2	8142	128	2	0	2
				3	8648	136	1	0	2	8605	136	1	0	2	8278	130	1	0	2
				4F	8679	137	2	0	2	8636	136	2	0	2	8308	131	2	0	2
				4W	8477	133	1	0	2	8435	133	1	0	2	8114	128	1	0	2

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

PERFORMANCE DATA: MICROSTRIKE CONT'D

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW3	160L	45	46.2	2	6702	145	1	0	2	6668	144	1	0	2	6415	139	1	0	2
				3	6814	147	1	0	2	6780	147	1	0	2	6522	141	1	0	2
				4F	6838	148	1	0	2	6804	147	1	0	2	6546	142	1	0	2
				4W	6679	145	1	0	2	6646	144	1	0	2	6393	138	1	0	2
		70	68.3	2	9550	140	2	0	2	9502	139	2	0	2	9141	134	2	0	2
				3	9710	142	2	0	2	9661	141	2	0	2	9294	136	2	0	2
				4F	9744	143	2	0	2	9696	142	2	0	2	9327	137	2	0	2
				4W	9518	139	2	0	2	9470	139	2	0	2	9111	133	2	0	2
		95	91	2	13202	145	2	0	2	13136	144	2	0	2	12637	139	2	0	2
				3	13423	148	2	0	2	13356	147	2	0	2	12849	141	2	0	2
				4F	13471	148	2	0	2	13404	147	2	0	2	12895	142	2	0	2
				4W	13158	145	2	0	2	13092	144	2	0	2	12595	138	2	0	2
		105	106.3	2	14073	132	2	0	2	14003	132	2	0	2	13471	127	2	0	2
				3	14309	135	2	0	2	14238	134	2	0	2	13697	129	2	0	2
				4F	14360	135	2	0	2	14289	134	2	0	2	13746	129	2	0	2
				4W	14026	132	2	0	3	13956	131	2	0	3	13426	126	2	0	2
		135	134.8	2	17223	128	3	0	3	17137	127	3	0	3	16486	122	3	0	3
				3	17511	130	2	0	3	17424	129	2	0	3	16762	124	2	0	3
				4F	17574	130	3	0	3	17487	130	3	0	3	16822	125	3	0	3
				4W	17165	127	2	0	3	17080	127	2	0	3	16431	122	2	0	3
		155	158.3	2	19716	125	3	0	3	19618	124	3	0	3	18872	119	3	0	3
				3	20046	127	3	0	3	19946	126	3	0	3	19188	121	3	0	3
				4F	20118	127	3	0	3	20018	126	3	0	3	19257	122	3	0	3
				4W	19650	124	3	0	3	19552	124	3	0	3	18809	119	3	0	3

PERFORMANCE DATA: STRIKE

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW2	18L	25	22.6	2	3314	147	1	0	1	3298	146	1	0	G1	3171	140	1	0	1
				3	3356	148	1	0	1	3340	148	1	0	G1	3212	142	1	0	1
				4F	3367	149	0	0	1	3351	148	0	0	G1	3222	143	0	0	1
				4W	3361	149	1	0	2	3345	148	1	0	G2	3216	142	1	0	2
		30	31.3	2	4124	132	1	0	1	4104	131	1	0	G1	3946	126	1	0	1
				3	4176	133	1	0	2	4156	133	1	0	G2	3996	128	1	0	1
				4F	4189	134	1	0	1	4169	133	1	0	G1	4009	128	1	0	1
				4W	4182	134	1	0	2	4162	133	1	0	G2	4002	128	1	0	2
		39	38.8	2	4894	126	1	0	1	4870	126	1	0	G1	4683	121	1	0	1
				3	4956	128	1	0	2	4932	127	1	0	G2	4742	122	1	0	2
				4F	4972	128	1	0	2	4948	128	1	0	G2	4758	123	1	0	2
				4W	4963	128	1	0	2	4939	127	1	0	G2	4749	122	1	0	2
		50	52.6	2	6325	120	1	0	1	6295	120	1	0	G1	6052	115	1	0	1
				3	6405	122	1	0	2	6374	121	1	0	G2	6129	117	1	0	2
				4F	6426	122	1	0	2	6395	122	1	0	G2	6149	117	1	0	2
				4W	6414	122	1	0	3	6384	121	1	0	G3	6138	117	1	0	3
		60	60.4	2	6865	114	1	0	2	6832	113	1	0	G2	6569	109	1	0	2
				3	6952	115	1	0	2	6919	115	1	0	G2	6652	110	1	0	2
				4F	6974	115	1	0	2	6941	115	1	0	G2	6674	110	1	0	2
				4W	6962	115	1	0	3	6929	115	1	0	G3	6662	110	1	0	3

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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PERFORMANCE DATA: STRIKE CONT'D

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW3	36L	55	63.1	2	7284	135	1	0	2	7249	134	1	0	G2	6970	129	1	0	2
				3	7376	137	1	0	2	7341	136	1	0	G2	7058	131	1	0	2
				4F	7400	137	1	0	2	7364	137	1	0	G2	7081	131	1	0	2
				4W	7387	137	1	0	3	7351	136	1	0	G3	7069	131	1	0	3
		80	77.6	2	9788	126	2	0	2	9741	126	2	0	G2	9366	121	2	0	2
				3	9912	128	1	0	3	9864	127	1	0	G3	9485	122	1	0	3
				4F	9944	128	1	0	2	9896	128	1	0	G2	9516	123	1	0	2
				4W	9926	128	1	0	3	9879	127	1	0	G3	9499	122	1	0	3
		105	108.2	2	12650	128	2	0	2	12589	127	2	0	G2	12105	122	2	0	2
				3	12810	130	2	0	3	12748	129	2	0	G3	12258	124	2	0	3
				4F	12851	130	1	0	3	12790	129	1	0	G3	12298	124	1	0	3
				4W	12829	130	2	0	3	12767	129	2	0	G3	12276	124	2	0	3
		120	120.9	2	13730	114	2	0	2	13664	113	2	0	G2	13138	109	2	0	2
				3	13904	115	2	0	3	13837	114	2	0	G3	13305	110	2	0	3
				4F	13949	115	1	0	3	13882	115	1	0	G3	13348	110	1	0	3
				4W	13924	115	2	0	4	13857	115	2	0	G4	13324	110	2	0	3

ELECTRICAL DATA: STRIKE

# OF LEDS	18L				
NOMINAL WATTAGE	25	30	39	50	60
SYSTEM POWER (W)	22.6	31.3	38.8	52.6	60.4
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.21	0.26	0.32	0.44	0.50
208	0.12	0.15	0.19	0.25	0.29
240	0.10	0.13	0.16	0.22	0.25
277	0.09	0.11	0.14	0.19	0.22
347	0.07	0.09	0.11	0.15	0.17
480	0.05	0.07	0.08	0.11	0.13

# OF LEDS	36L			
NOMINAL WATTAGE	55	80	100	120
SYSTEM POWER (W)	53.9	77.6	98.9	120.9
INPUT VOLTAGE (V)	CURRENT (Amps)			
120	0.45	0.65	0.82	1.01
208	0.26	0.37	0.48	0.58
240	0.22	0.32	0.41	0.50
277	0.19	0.28	0.36	0.44
347	0.16	0.22	0.29	0.35
480	0.11	0.16	0.21	0.25

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

ELECTRICAL DATA: MICROSTRIKE

# OF LEDS	24L		
NOMINAL WATTAGE	10	15	25
SYSTEM POWER (W)	6.6	14.0	23.0
INPUT VOLTAGE (V)	CURRENT (Amps)		
120	0.06	0.12	0.19
208	0.03	0.07	0.11
240	0.03	0.06	0.10
277	0.02	0.05	0.08
347	0.02	0.04	0.07
480	0.01	0.03	0.05

# OF LEDS	48L				
NOMINAL WATTAGE	15	20	30	35	45
SYSTEM POWER (W)	13.1	20.5	28.8	37.3	45.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.11	0.17	0.24	0.31	0.38
208	0.06	0.10	0.14	0.18	0.22
240	0.05	0.09	0.12	0.16	0.19
277	0.05	0.07	0.10	0.13	0.17
347	0.04	0.06	0.08	0.11	0.13
480	0.03	0.04	0.06	0.08	0.10

# OF LEDS	80L						
NOMINAL WATTAGE	20	25	35	45	55	65	70
SYSTEM POWER (W)	19.4	26.7	34.2	41.7	50.6	58.3	63.5
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	0.16	0.22	0.29	0.35	0.42	0.49	0.53
208	0.10	0.13	0.18	0.22	0.27	0.28	0.31
240	0.08	0.12	0.15	0.19	0.24	0.24	0.26
277	0.07	0.10	0.13	0.17	0.21	0.21	0.23
347	0.06	0.08	0.11	0.13	0.16	0.17	0.18
480	0.04	0.06	0.08	0.10	0.12	0.12	0.13

# OF LEDS	160L					
NOMINAL WATTAGE	45	70	95	105	135	155
SYSTEM POWER (W)	46.2	68.3	91	106.3	134.8	158.3
INPUT VOLTAGE (V)	CURRENT (Amps)					
120	0.39	0.57	0.76	0.89	1.12	1.32
208	0.22	0.33	0.44	0.51	0.65	0.76
240	0.19	0.28	0.38	0.44	0.56	0.66
277	0.17	0.25	0.33	0.38	0.49	0.57
347	0.13	0.20	0.26	0.31	0.39	0.46
480	0.10	0.14	0.19	0.22	0.28	0.33

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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

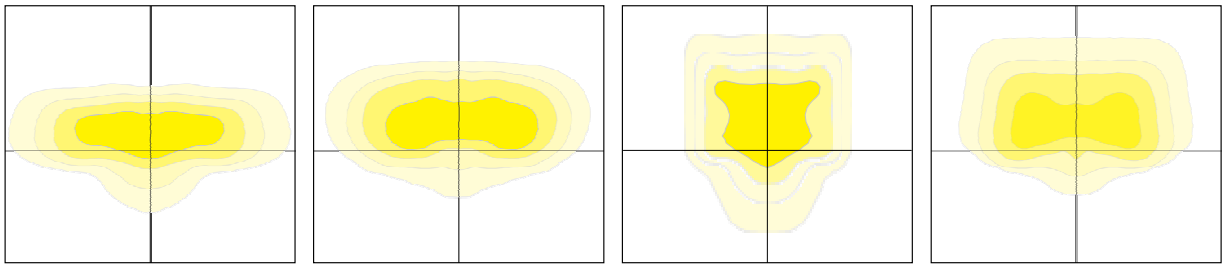
TYPE: PROJECT:

CATALOG #:

PHOTOMETRY

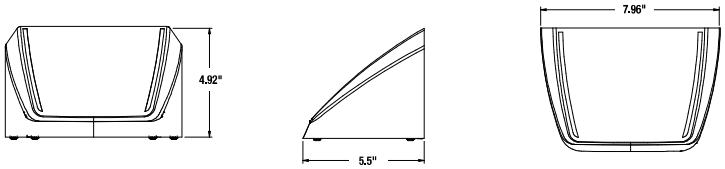
Mounting Height: 10ft

Type 2 **Type 3** **Type 4F** **Type 4W**

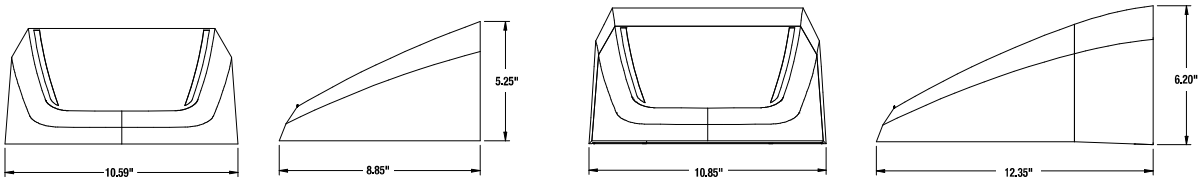


DIMENSIONS

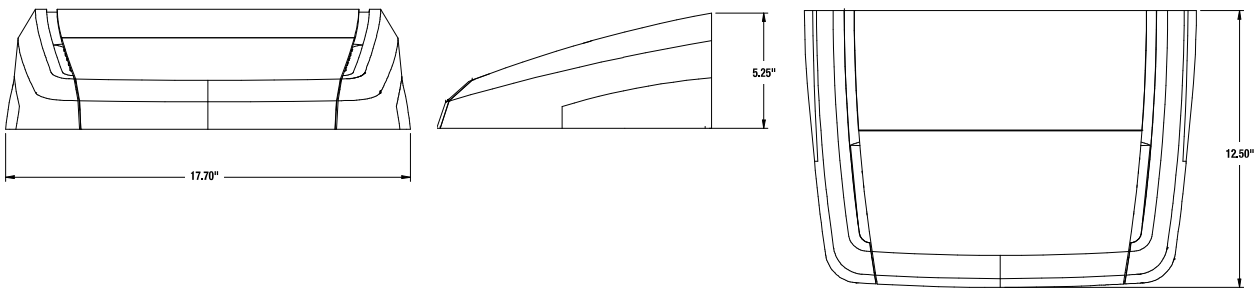
VPW1



VPW2 **VPW2 with Back Box**



VPW3



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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

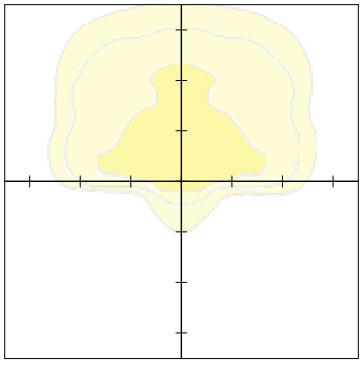
BATTERY OPTIONS & HOUSING SIZES

SIZE	OPTICS	OPTION	BATTERY WATTAGE	FIXTURE WATTAGES	HOUSING
VPW1	NO BATTERY OFFERED				
VPW2	Micro Strike	E	10W	20W, 25W, 35W	Standard
	Micro Strike	E	10W	45W, 55W, 65W, 70W	Not offered
	Micro Strike	EH	13W	20W, 25W, 35W, 45W, 55W, 65W, 70W	Housing with Backbox
	Strike	E	10W	15W, 20W, 25W, 35W, 39W	Standard
	Strike	E	10W	50W, 60W	Not offered
	Strike	EH	13W	15W, 20W, 25W, 30W, 39W, 50W, 60W	Housing with Backbox
VPW3	Micro Strike	E	10W	Not offered	
	Micro Strike	EH	13W	45W, 70W, 95W, 105W	Standard
	Micro Strike	EH	13W	135W, 155W	Not offered
	Strike	E	10W	Not offered	
	Strike	EH	13W	55W, 80W, 100W	Standard
	Strike	EH	13W	120W	Not offered

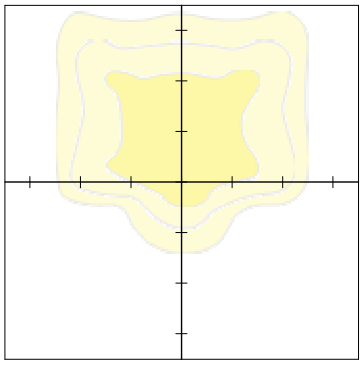
PHOTOMETRY - BATTERY

Mounting Height: 12ft
Scale: 10ft

18L BATTERY PHOTOMETRY



80L BATTERY PHOTOMETRY



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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: | LOCATION:

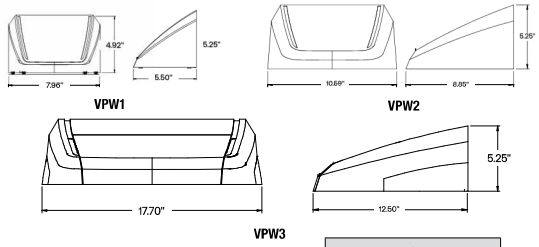
TYPE: | PROJECT:

CATALOG #:

FEATURES

- Low profile LED wall luminaire with a variety of IES distributions for lighting applications such as retail, commercial and industrial building mount
- Featuring Strike and Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual Comfort - Option for Size 2 and Size 3
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, and LightGRID+.
- Battery Backup options available for emergency code compliance
- Quick-mount adapter allows easy installation/maintenance
- 347V and 480V versions for industrial applications and Canada

MICRO STRIKE | OPTICS STRIKE



	Weight
VPW1	4.1 lbs / 1.86 kg
VPW2	7.15 lbs / 3.24 kg
VPW3	17.1 lbs / 7.80 kg

CONTROL TECHNOLOGY

NX CONNECT | NX WIRED | NX WIRELESS | LIGHTGRID+

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating

OPTICS

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 2700K, 3000K, 3500K, 4000K and 5000K CCTs
- Zero uplight distributions
- LED optics provide IES type II, III and IV distributions.

INSTALLATION

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box)
- Designed for direct j-box mount.

ELECTRICAL

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V input is available in most wattage, 480V is available for 55W and above.
- Ambient operating temperature -40˚C to 40˚C
- Driver RoHS and IP66
- 10kV Surge Protector optional
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options can not be included in one same fixture.
- Dimming drivers are standard. Select CD (Customer Dimming) for the dimming wires to be extended outside the fixture.

CONTROLS

- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- Button photocontrol is suitable for 120-277V operation
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor

CONTROLS CONTINUED

- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Battery Backup suitable for operating temperatures -20˚C to 40˚C.
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application.
- LightGRID+ available with in fixture wireless control module, features dimming and occupancy sensor.

CERTIFICATIONS

- Certified to UL 1598 and CSA 22.2#250.0-24
- IP65 rated housing
- Emergency battery backup options are California Energy Commission (CEC) Title 20 Compliant
- This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) and Trade Agreements Act (FAR 52.225- 11). See Buy America(n) Solutions (link to https://http://www.currentlighting.com/resources/americasolutions).

WARRANTY

- 5 year limited warranty

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

ORDERING GUIDE

Example: VPW1–24L-10–3K7–2–UNV–BLS

CATALOG #

Series	# LEDs - Wattage	CCT/CRI	Distribution	Voltage	Color
VPW1 Viper Wall 1	**24L-10** 1,000 Lumens	**27K8** 2700K, 80 CRI	**FR** Auto Front Row[7]	**UNV** 120–277V	**BLT** Black Matte Textured
	24L-15 2,000 Lumens	**3K7** 3000K, 70 CRI	**2** IES TYPE 2	**120** 120V	**BLS** Black Gloss Smooth
	24L-25 3,000 Lumens	**4K7** 4000K, 70 CRI	**3** IES TYPE 3	**208** 208V	**DBT** Dark Bronze Matte Textured
VPW2 Viper Wall 2	**48L-15** 2,000 Lumens	**5K7** 5000K, 70 CRI	**4F** IES TYPE 4 Forward	**240** 240V	**DBS** Dark Bronze Gloss Smooth
	48L-20 3,000 Lumens	**3K8** 3000K, 80 CRI	**4W** IES TYPE 4W	**277** 277V	**GTT** Graphite Matte Textured
	48L-30 4,000 Lumens	**35K8** 3500K, 80 CRI		**347** 347V	**LGS** Light Grey Gloss Smooth
	48L-35 5,000 Lumens	**4K8** 4000K, 80 CRI		**480** 480V	**LGT** Light Grey Matte Textured
	48L-45 6,000 Lumens	**5K8** 5000K, 80 CRI			**PSS** Platinum Silver Smooth
	80L-20 3,000 Lumens	**AP** Phosphor Converted Amber[1]			**WHT** White Matte Textured
	80L-25 4,000 Lumens				**WHS** White Gloss Smooth
	80L-35 5,000 Lumens				**VGT** Verde Green Textured
	80L-45 6,000 Lumens				**Color Option**
	80L-55 7,000 Lumens				**CC** Custom Color
	80L-65 8,000 Lumens				
	80L-70 8,500 Lumens				
	18L-25 3,000 Lumens, Strike Optics				
	18L-30 4,000 Lumens, Strike Optics				
	18L-39 4,750 Lumens, Strike Optics				
	18L-50 6,000 Lumens, Strike Optics				
	18L-60 6,500 Lumens, Strike Optics				
VPW3 Viper Wall 3	**160L-45** 7,000 Lumens				
	160L-70 10,000 Lumens				
	160L-95 12,500 Lumens				
	160L-105 15,000 Lumens				
	160L-135 17,500 Lumens				
	160L-155 20,000 Lumens				
	36L-55 7,000 Lumens, Strike Optics				
	36L-80 9,500 Lumens, Strike Optics				
	36L-100 11,500 Lumens, Strike Optics				
	36L-120 13,000 Lumens, Strike Optics				

Control Options Network[3,7,11,13]	
NXWS12F	NX Networked Wireless Enabled Integral NXSMP2-OMNI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[14]
NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[9]
NXWS24F	NX Networked Wireless Enabled Integral NXSMP2-OMNI-HM PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[9]
NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[9]
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor
WIR	LightGRID+ In-Fixture Module[9]
WIRSC	LightGRID+ In-Fixture Moduel with BTS occupancy[9]
Stand Alone Sensors[7,11,13]	
BTS-14F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor[4,9]
BTS-40F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor[4,9]
BTSO-12F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height[14]
Photocontrol[13]	
PC	Button Photocontrol 120-277V

Options	
F	Fusing[5,7]
E	Battery[6,7,8]
EH	Battery with Heater[5,7,8]
CS	Comfort Shield[7,10]
SP	10kA Surge Protector
2PF	Dual Power Feed[2,7,8]
2DR	Dual Driver[2,7,8]
CD	Customer Dimming[12]
DTS	Dimming Transfer Switch[7]

Notes:
1. Available with Micro Strike Optics only
2. Not available with 480V in Size 1 and Size 2
3. Networked controls cannot be combined with other control options
4. Not available with VPW1 or with 2PF or 2DR options
5. Must specify voltage (VPW1 & VPW2: 120V, 277V or 347V; VPW3: 120V, 208V, 240V, 277V, 347V or 480V)
6. See page 10 for detail Battery configurations
7. Not available in VPW1
8. 2PF can't be combined with E or EH; 2DR can't be combined with E or EH in VPW2
9. Not available in VPW1 and VPW2
10. Not available with Micro Strike 24L and 48L. Not available with Strike 18L and 36L
11. Not available with 2PF
12. Not available with Network Control options or Stand Alone Sensors. Can be ordered with PC
13. Not available in 480V in VPW2; Only available in 480V in VPW3 in 80W, 100W, 120W, 135W and 155W
14. NXWS12F and BTSO-12F are the only sensors available in VPW2

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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

ACCESSORIES AND REPLACEMENT PARTS - MADE TO ORDER

	Catalog Number	Description
☐	**WP-BB-XXX**	Accessory for conduit entry[1]
☐	**CS**	Comfort Shield[2]

Notes:
1 replace "xxx" with color option
2 Not available with Micro Strike 24L and 48L or Strike 18L and 36L

CONTROLS FUNCTIONALITY

OUTDOOR LIGHTING CONTROLS OPTIONS

LIGHTGRID+

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
NX Wireless	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	✓	✓	✓	–	–	✓	✓	✓	–		NXRM2-H
NX Wireless	NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	16ft		NXSMP2-LMO
NX Wireless	NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	40ft		NXSMP2-HMO
LightGRID+	WIR	LightGRID+ In-Fixture Module	✓	–	✓	–	–	✓	✓	Gateway	–		WIR
Independent	BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	12ft		BTSMP-OMNI-O
Independent	BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	14ft		BTSMP-LMO
Independent	BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	40ft		BTSMP-HMO

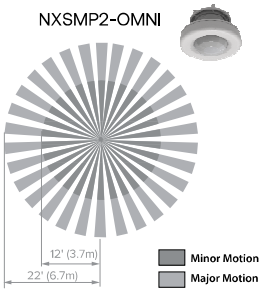
DEFAULT SETTINGS

NX Wireless	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	15 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	0%
Daylight Sensor	Disabled
Bluetooth	Enabled
2.4GHz Wireless Mesh	Off
"Passcode Factory Passcode: HubbN3T!"	Enabled

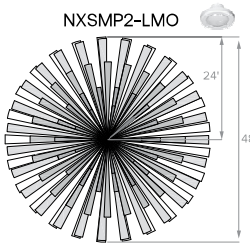
Stand Alone	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	8 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	0% (Off)
Daylight Sensor	Disabled

NX WIRELESS COVERAGE PATTERNS

NXSMP2-OMNI

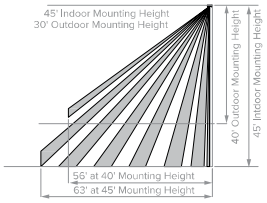


NXSMP2-LMO



Sensor Lens Coverage and Detection Patterns When Mounted at 8ft with Low Mount Lens

NXSMP2-HMO



Sensor Lens Coverage and Detection Patterns When Mounted at 40ft and 45ft with Standard Lens

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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

NX LIGHTING CONTROLS FREE APP

The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminiares and program NX system settings.

Apple App: https://apps.apple.com/us/app/nx-lighting-controls/id962112904

Google Play: https://play.google.com/store/apps/details?id=io.cordova.NXBTR&hl=en_US&gl=US

NX LIGHTING CONTROLS

Apple App Google Play

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98
50°C	122°F	0.97

Use these factors to determine relative lumen output for average ambient temperatures from 0–40 C (32–104 F).

PROJECTED LUMEN MAINTENANCE

	OPERATING HOURS		
Ambient Temp.	0	25,000	TM-21-22 60,000
25°C / 77°F	1.00	0.91	0.83
40°C / 104°F	0.99	0.90	0.82

Lumen maintenance values calculated per TM-21 using six times the LM-80 test time for the LED and in-situ thermal testing of the luminaire.

MULTIPLIER

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.710		

Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	0.9	0.81	0.62
3000K	0.933	0.853	0.659
3500K	0.959	0.894	0.711
4000K	1	0.9	0.732
5000K	1	0.9	0.732
Monochromatic Amber Multiplier			
Amber	See Amber Spec Sheet		

PERFORMANCE DATA: MICROSTRIKE

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW1	24L	10	6.6	2	888	134	0	0	0	883	134	0	0	0	850	129	0	0	0
				3	829	126	0	0	0	825	125	0	0	0	794	120	0	0	0
				4W	867	131	0	0	1	863	131	0	0	1	830	126	0	0	1
		15	14	2	1883	134	1	0	1	1873	134	1	0	1	1802	129	1	0	1
				3	1759	126	1	0	1	1750	125	1	0	1	1683	120	0	0	1
				4W	1839	131	0	0	1	1830	131	0	0	1	1761	126	0	0	1
		25	23.0	2	3116	135	1	0	1	3100	135	1	0	1	2982	130	1	0	1
				3	2910	127	1	0	1	2896	126	1	0	1	2785	121	1	0	1
				4W	3044	132	1	0	1	3029	132	1	0	1	2914	127	1	0	1

BEACON design . performance . technology

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

PERFORMANCE DATA: MICROSTRIKE CONT'D

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW2	48L	15	13.1	2	1866	142	1	0	1	1857	142	1	0	1	1786	136	1	0	1
				3	1743	133	1	0	1	1734	132	1	0	1	1668	127	0	0	1
				4F	1832	140	0	0	1	1823	139	0	0	1	1754	134	0	0	1
				4W	1823	139	0	0	1	1814	138	0	0	1	1745	133	0	0	1
		20	20.5	2	2791	136	1	0	1	2777	135	1	0	1	2671	130	1	0	1
				3	2606	127	1	0	1	2593	127	1	0	1	2495	122	1	0	1
				4F	2740	134	1	0	1	2726	133	1	0	1	2622	128	1	0	1
				4W	2726	133	1	0	1	2713	132	1	0	1	2610	127	1	0	1
		30	28.8	2	3766	131	1	0	1	3747	130	1	0	1	3605	125	1	0	1
				3	3517	122	1	0	1	3500	122	1	0	1	3367	117	1	0	1
				4F	3697	128	1	0	1	3678	128	1	0	1	3539	123	1	0	1
				4W	3679	128	1	0	1	3661	127	1	0	1	3522	122	1	0	1
		35	37.3	2	4707	126	1	0	1	4684	126	1	0	1	4506	121	1	0	1
				3	4396	118	1	0	1	4375	117	1	0	1	4208	113	1	0	1
				4F	4621	124	1	0	1	4598	123	1	0	1	4423	119	1	0	1
				4W	4599	123	1	0	2	4576	123	1	0	2	4402	118	1	0	2
		45	45.9	2	5604	121	1	0	1	5576	121	1	0	1	5364	116	1	0	1
				3	5234	114	1	0	2	5208	113	1	0	2	5010	109	1	0	2
				4F	5501	119	1	0	2	5474	118	1	0	2	5266	114	1	0	2
				4W	5475	116	1	0	2	5447	115	1	0	2	5240	111	1	0	2
	80L	20	19.4	2	2978	154	1	0	1	2963	153	1	0	1	2851	147	1	0	1
				3	3028	156	1	0	1	3013	155	1	0	1	2898	149	1	0	1
				4F	3039	157	1	0	1	3024	156	1	0	1	2909	150	1	0	1
				4W	2968	153	1	0	1	2953	152	1	0	1	2841	146	1	0	1
		25	26.7	2	3723	139	1	0	1	3704	139	1	0	1	3563	133	1	0	1
				3	3785	142	1	0	1	3766	141	1	0	1	3623	136	1	0	1
				4F	3799	142	1	0	1	3780	142	1	0	1	3636	136	1	0	1
				4W	3710	139	1	0	1	3692	138	1	0	1	3551	133	1	0	1
		35	34.2	2	4775	140	1	0	1	4751	139	1	0	1	4571	134	1	0	1
				3	4855	142	1	0	1	4831	141	1	0	1	4647	136	1	0	1
				4F	4872	142	1	0	1	4848	142	1	0	1	4664	136	1	0	1
				4W	4759	139	1	0	1	4735	138	1	0	1	4555	133	1	0	1
		45	41.7	2	6032	145	1	0	2	6002	144	1	0	2	5774	138	1	0	1
				3	6133	147	1	0	2	6102	146	1	0	2	5870	141	1	0	2
				4F	6155	148	1	0	2	6124	147	1	0	2	5891	141	1	0	2
				4W	6012	144	1	0	2	5982	143	1	0	2	5754	138	1	0	2
		55	50.6	2	6999	138	1	0	2	6964	138	1	0	2	6700	132	1	0	2
				3	7116	141	1	0	2	7081	140	1	0	2	6812	135	1	0	2
				4F	7142	141	1	0	2	7106	140	1	0	2	6836	135	1	0	2
				4W	6976	138	1	0	2	6941	137	1	0	2	6677	132	1	0	2
		65	58.3	2	7910	136	2	0	2	7871	135	2	0	2	7572	130	1	0	2
				3	8042	138	1	0	2	8002	137	1	0	2	7698	132	1	0	2
				4F	8071	138	2	0	2	8031	138	2	0	2	7726	133	1	0	2
				4W	7884	135	1	0	2	7844	135	1	0	2	7546	129	1	0	2
		70	63.5	2	8506	134	2	0	2	8463	133	2	0	2	8142	128	2	0	2
				3	8648	136	1	0	2	8605	136	1	0	2	8278	130	1	0	2
				4F	8679	137	2	0	2	8636	136	2	0	2	8308	131	2	0	2
				4W	8477	133	1	0	2	8435	133	1	0	2	8114	128	1	0	2

BEACON design . performance . technology

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

PERFORMANCE DATA: MICROSTRIKE CONT'D

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW3	160L	45	46.2	2	6702	145	1	0	2	6668	144	1	0	2	6415	139	1	0	2
				3	6814	147	1	0	2	6780	147	1	0	2	6522	141	1	0	2
				4F	6838	148	1	0	2	6804	147	1	0	2	6546	142	1	0	2
				4W	6679	145	1	0	2	6646	144	1	0	2	6393	138	1	0	2
		70	68.3	2	9550	140	2	0	2	9502	139	2	0	2	9141	134	2	0	2
				3	9710	142	2	0	2	9661	141	2	0	2	9294	136	2	0	2
				4F	9744	143	2	0	2	9696	142	2	0	2	9327	137	2	0	2
				4W	9518	139	2	0	2	9470	139	2	0	2	9111	133	2	0	2
		95	91	2	13202	145	2	0	2	13136	144	2	0	2	12637	139	2	0	2
				3	13423	148	2	0	2	13356	147	2	0	2	12849	141	2	0	2
				4F	13471	148	2	0	2	13404	147	2	0	2	12895	142	2	0	2
				4W	13158	145	2	0	2	13092	144	2	0	2	12595	138	2	0	2
		105	106.3	2	14073	132	2	0	2	14003	132	2	0	2	13471	127	2	0	2
				3	14309	135	2	0	2	14238	134	2	0	2	13697	129	2	0	2
				4F	14360	135	2	0	2	14289	134	2	0	2	13746	129	2	0	2
				4W	14026	132	2	0	3	13956	131	2	0	3	13426	126	2	0	2
		135	134.8	2	17223	128	3	0	3	17137	127	3	0	3	16486	122	3	0	3
				3	17511	130	2	0	3	17424	129	2	0	3	16762	124	2	0	3
				4F	17574	130	3	0	3	17487	130	3	0	3	16822	125	3	0	3
				4W	17165	127	2	0	3	17080	127	2	0	3	16431	122	2	0	3
		155	158.3	2	19716	125	3	0	3	19618	124	3	0	3	18872	119	3	0	3
				3	20046	127	3	0	3	19946	126	3	0	3	19188	121	3	0	3
				4F	20118	127	3	0	3	20018	126	3	0	3	19257	122	3	0	3
				4W	19650	124	3	0	3	19552	124	3	0	3	18809	119	3	0	3

PERFORMANCE DATA: STRIKE

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW2	18L	25	22.6	2	3314	147	1	0	1	3298	146	1	0	G1	3171	140	1	0	1
				3	3356	148	1	0	1	3340	148	1	0	G1	3212	142	1	0	1
				4F	3367	149	0	0	1	3351	148	0	0	G1	3222	143	0	0	1
				4W	3361	149	1	0	2	3345	148	1	0	G2	3216	142	1	0	2
		30	31.3	2	4124	132	1	0	1	4104	131	1	0	G1	3946	126	1	0	1
				3	4176	133	1	0	2	4156	133	1	0	G2	3996	128	1	0	1
				4F	4189	134	1	0	1	4169	133	1	0	G1	4009	128	1	0	1
				4W	4182	134	1	0	2	4162	133	1	0	G2	4002	128	1	0	2
		39	38.8	2	4894	126	1	0	1	4870	126	1	0	G1	4683	121	1	0	1
				3	4956	128	1	0	2	4932	127	1	0	G2	4742	122	1	0	2
				4F	4972	128	1	0	2	4948	128	1	0	G2	4758	123	1	0	2
				4W	4963	128	1	0	2	4939	127	1	0	G2	4749	122	1	0	2
		50	52.6	2	6325	120	1	0	1	6295	120	1	0	G1	6052	115	1	0	1
				3	6405	122	1	0	2	6374	121	1	0	G2	6129	117	1	0	2
				4F	6426	122	1	0	2	6395	122	1	0	G2	6149	117	1	0	2
				4W	6414	122	1	0	3	6384	121	1	0	G3	6138	117	1	0	3
		60	60.4	2	6865	114	1	0	2	6832	113	1	0	G2	6569	109	1	0	2
				3	6952	115	1	0	2	6919	115	1	0	G2	6652	110	1	0	2
				4F	6974	115	1	0	2	6941	115	1	0	G2	6674	110	1	0	2
				4W	6962	115	1	0	3	6929	115	1	0	G3	6662	110	1	0	3

BEACON design . performance . technology

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PERFORMANCE DATA: STRIKE CONT'D

Description	# of LEDs	Nominal Wattage	System Watts	Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
					Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
VPW3	36L	55	63.1	2	7284	135	1	0	2	7249	134	1	0	G2	6970	129	1	0	2
				3	7376	137	1	0	2	7341	136	1	0	G2	7058	131	1	0	2
				4F	7400	137	1	0	2	7364	137	1	0	G2	7081	131	1	0	2
				4W	7387	137	1	0	3	7351	136	1	0	G3	7069	131	1	0	3
		80	77.6	2	9788	126	2	0	2	9741	126	2	0	G2	9366	121	2	0	2
				3	9912	128	1	0	3	9864	127	1	0	G3	9485	122	1	0	3
				4F	9944	128	1	0	2	9896	128	1	0	G2	9516	123	1	0	2
				4W	9926	128	1	0	3	9879	127	1	0	G3	9499	122	1	0	3
		105	108.2	2	12650	128	2	0	2	12589	127	2	0	G2	12105	122	2	0	2
				3	12810	130	2	0	3	12748	129	2	0	G3	12258	124	2	0	3
				4F	12851	130	1	0	3	12790	129	1	0	G3	12298	124	1	0	3
				4W	12829	130	2	0	3	12767	129	2	0	G3	12276	124	2	0	3
		120	120.9	2	13730	114	2	0	2	13664	113	2	0	G2	13138	109	2	0	2
				3	13904	115	2	0	3	13837	114	2	0	G3	13305	110	2	0	3
				4F	13949	115	1	0	3	13882	115	1	0	G3	13348	110	1	0	3
				4W	13924	115	2	0	4	13857	115	2	0	G4	13324	110	2	0	3

ELECTRICAL DATA: STRIKE

# OF LEDS	18L				
NOMINAL WATTAGE	25	30	39	50	60
SYSTEM POWER (W)	22.6	31.3	38.8	52.6	60.4
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.21	0.26	0.32	0.44	0.50
208	0.12	0.15	0.19	0.25	0.29
240	0.10	0.13	0.16	0.22	0.25
277	0.09	0.11	0.14	0.19	0.22
347	0.07	0.09	0.11	0.15	0.17
480	0.05	0.07	0.08	0.11	0.13

# OF LEDS	36L			
NOMINAL WATTAGE	55	80	100	120
SYSTEM POWER (W)	53.9	77.6	98.9	120.9
INPUT VOLTAGE (V)	CURRENT (Amps)			
120	0.45	0.65	0.82	1.01
208	0.26	0.37	0.48	0.58
240	0.22	0.32	0.41	0.50
277	0.19	0.28	0.36	0.44
347	0.16	0.22	0.29	0.35
480	0.11	0.16	0.21	0.25

BEACON design . performance . technology

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

ELECTRICAL DATA: MICROSTRIKE

# OF LEDS	24L		
NOMINAL WATTAGE	10	15	25
SYSTEM POWER (W)	6.6	14.0	23.0
INPUT VOLTAGE (V)	CURRENT (Amps)		
120	0.06	0.12	0.19
208	0.03	0.07	0.11
240	0.03	0.06	0.10
277	0.02	0.05	0.08
347	0.02	0.04	0.07
480	0.01	0.03	0.05

# OF LEDS	48L				
NOMINAL WATTAGE	15	20	30	35	45
SYSTEM POWER (W)	13.1	20.5	28.8	37.3	45.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.11	0.17	0.24	0.31	0.38
208	0.06	0.10	0.14	0.18	0.22
240	0.05	0.09	0.12	0.16	0.19
277	0.05	0.07	0.10	0.13	0.17
347	0.04	0.06	0.08	0.11	0.13
480	0.03	0.04	0.06	0.08	0.10

# OF LEDS	80L						
NOMINAL WATTAGE	20	25	35	45	55	65	70
SYSTEM POWER (W)	19.4	26.7	34.2	41.7	50.6	58.3	63.5
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	0.16	0.22	0.29	0.35	0.42	0.49	0.53
208	0.10	0.13	0.18	0.22	0.27	0.28	0.31
240	0.08	0.12	0.15	0.19	0.24	0.24	0.26
277	0.07	0.10	0.13	0.17	0.21	0.21	0.23
347	0.06	0.08	0.11	0.13	0.16	0.17	0.18
480	0.04	0.06	0.08	0.10	0.12	0.12	0.13

# OF LEDS	160L					
NOMINAL WATTAGE	45	70	95	105	135	155
SYSTEM POWER (W)	46.2	68.3	91	106.3	134.8	158.3
INPUT VOLTAGE (V)	CURRENT (Amps)					
120	0.39	0.57	0.76	0.89	1.12	1.32
208	0.22	0.33	0.44	0.51	0.65	0.76
240	0.19	0.28	0.38	0.44	0.56	0.66
277	0.17	0.25	0.33	0.38	0.49	0.57
347	0.13	0.20	0.26	0.31	0.39	0.46
480	0.10	0.14	0.19	0.22	0.28	0.33

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VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

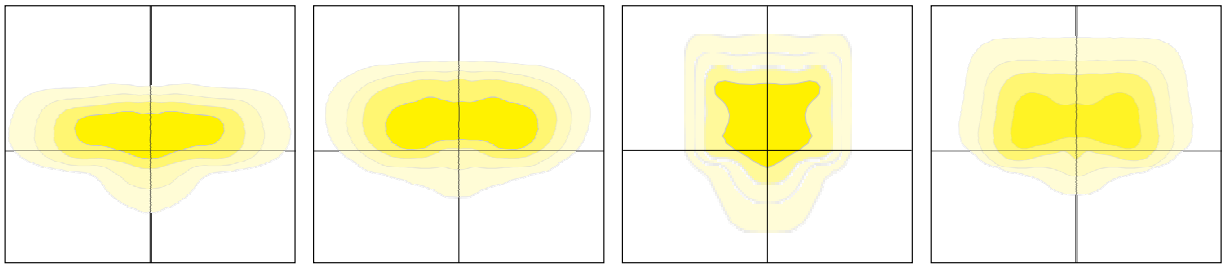
TYPE: PROJECT:

CATALOG #:

PHOTOMETRY

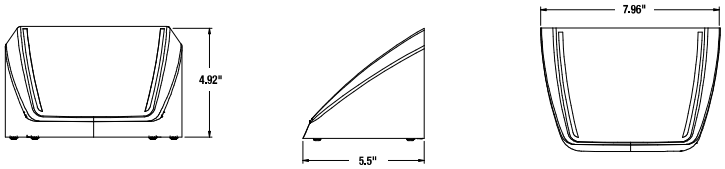
Mounting Height: 10ft

Type 2 **Type 3** **Type 4F** **Type 4W**

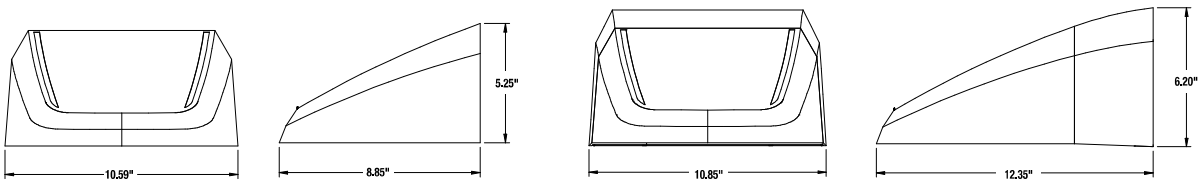


DIMENSIONS

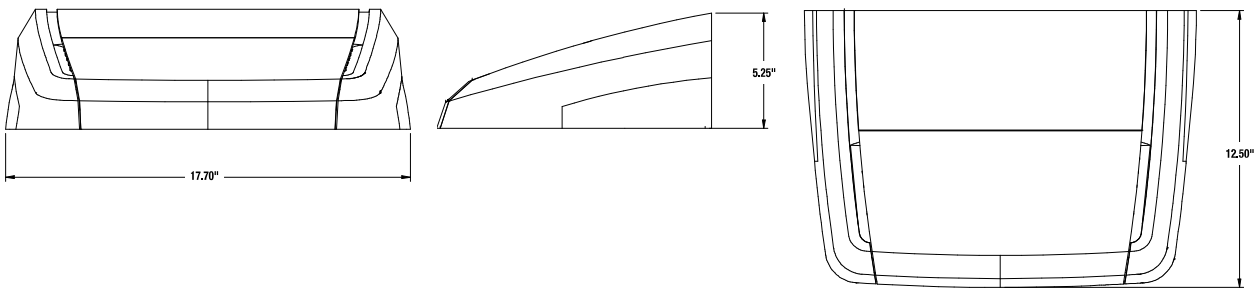
VPW1



VPW2 **VPW2 with Back Box**



VPW3



BEACON design . performance . technology

VIPER Wall

VPW1/VPW2/VPW3 LED WALLPACK

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

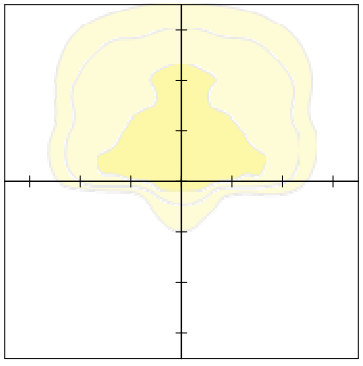
BATTERY OPTIONS & HOUSING SIZES

SIZE	OPTICS	OPTION	BATTERY WATTAGE	FIXTURE WATTAGES	HOUSING
VPW1	NO BATTERY OFFERED				
VPW2	Micro Strike	E	10W	20W, 25W, 35W	Standard
	Micro Strike	E	10W	45W, 55W, 65W, 70W	Not offered
	Micro Strike	EH	13W	20W, 25W, 35W, 45W, 55W, 65W, 70W	Housing with Backbox
	Strike	E	10W	15W, 20W, 25W, 35W, 39W	Standard
	Strike	E	10W	50W, 60W	Not offered
	Strike	EH	13W	15W, 20W, 25W, 30W, 39W, 50W, 60W	Housing with Backbox
VPW3	Micro Strike	E	10W	Not offered	
	Micro Strike	EH	13W	45W, 70W, 95W, 105W	Standard
	Micro Strike	EH	13W	135W, 155W	Not offered
	Strike	E	10W	Not offered	
	Strike	EH	13W	55W, 80W, 100W	Standard
	Strike	EH	13W	120W	Not offered

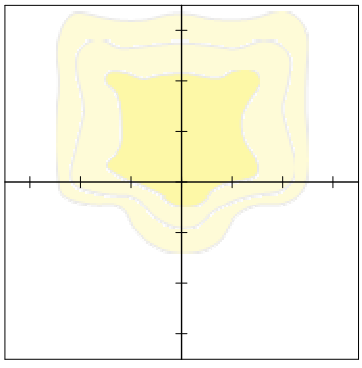
PHOTOMETRY - BATTERY

Mounting Height: 12ft
Scale: 10ft

18L BATTERY PHOTOMETRY



80L BATTERY PHOTOMETRY



Section 10

Utilities

SECTION 10: UTILITIES

Water service and wastewater disposal to the new hangars will occur by extension of available municipal water service. Water service capacity and ability are being coordinated with the Auburn Water and Sewerage Districts. A copy of the letter of inquiry to the District is provided in this section.

Electrical and communications services will be extended to the proposed hangars, as shown on the appended site plans. The installation will be coordinated with respective companies, as necessary, to provide suitable connections in compliance with applicable standards and regulations.

Gas: The applicant intends to utilize propane gas for Phase I (Hangar 1). The overall project is located adjacent to an existing natural gas main in Aviation Avenue. Provision has been made for gas service connections for the remaining three hangars if desired. Reference is made to the appended Grading and Utilities Plan showing the proposed natural and propane gas service locations.

SEBAGO TECHNICS

COPY

August 06, 2024
230887

Micahel Broadbent, Superintendent
Matt Waite, Assistant Superintendent
Auburn Water and Sewerage Districts
PO Box 414
Auburn, ME 04212-0414

Email submittal: mbroadbent@awsd.org
mwaite@awsd.org

Request for Water and Sewer Letters of Ability/Capacity
Auburn-Lewiston Municipal Airport
Four (4) Proposed Hangars
Location: Adjacent to the Existing Structure at Flight Line Drive and Aviation Avenue Intersection

Dear Michael and Matt:

Sebago Technics, Inc. has been retained to prepare plans and permit applications for the phased construction of four (4) new 6,544 S.F. hangars at the Auburn-Lewiston Municipal Airport. The hangars will be constructed adjacent to the existing hangar at the intersection of Flight Line Drive and Aviation Avenue, as shown on the enclosed plans.

The applicant proposes an extension of the existing water service to serve each building. More specifically, the applicant proposes a 1.5" meter for a 1.5" diameter domestic water service to each building. We note that fire suppression lines to each building will need to be sized by the mechanical engineer or mechincal contractor.

Each building will include a sewer service for 1 restroom and a proposed oil water separator for the hangar floor drains. The restrooms will not be open to the public however each restroom is being analyzed as a "Public Restroom" per the State of Maine Subsurface Wastewater Disposal Rules, Chapter 241 because this is the closest facility type. An additional 50 GPD has been added for each hangar for the anticipated water depand for washing the planes. The anticipated sewer flows from the hangars is as follows:

4 toilets x 325 GPD/toilet = 1,300 GPD
4 hangars x 50 GPD = 200 GPD

We are requesting a letter of capacity for the Site Plan application for water services and 1,500 GPD of sanitary sewer service. Upon your review of this letter and attachments, please let us know if you require additional information in this regard. Thank you for your consideration.

Sincerely,
SEBAGO TECHNICS, INC.

Jake Hunnewell, EI
Civil Engineer

enc.

Section 11

Waivers

SECTION 11: WAIVERS

The applicant respectfully requests a full waiver from landscaping requirements and standards. The request is based on the location and use requiring clear sightlines. Mature vegetation is hazardous to operations and aircraft storage.

Division 15-Industrial District
Sec. 60-579-Dimensional Regulations
g. Landscaping

2. The perimeter of a principal building, except for entrances and loading doors, shall be landscaped in an amount equal to 20% of the building footprint. Emphasis shall be given to the front and sides of the building.

4. Side and rear lot lines between non-residential uses shall be planted with an evergreen tree line planted in staggered rows having the base of the trees not more than 10 feet apart. The minimum width of the buffer shall be 30 feet.

5. Landscaping is considered to be vegetative treatment with trees, shrubs and, flowering plants and grass and/or bark mulch. Grass only is not deemed to satisfy this requirement. Evergreen trees shall be used as required in subsections (3)g3 and (3)g4 of this section Trees shall be a minimum of six feet at the time of planting. Where possible, existing trees shall be preserved, building shall be oriented with respect to natural landscape feature, topography and natural drainage areas.

Section 12

Stormwater

SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

STORMWATER MANAGEMENT REPORT

For

AUBURN-LEWISTON MUNICIPAL AIRPORT HANGARS AUBURN, ME

Prepared for:

Bill Fielding
420 US Route One
Scarborough, ME 04074

Prepared by:

Sebago Technics, Inc.
75 John Roberts Rd, Suite 4A
South Portland, ME 04106

August, 2024

Table of Contents

Contents

Appendices

STORMWATER MANAGEMENT REPORT
AUBURN-LEWISON MUNICIPAL AIRPORT HANGARS
AUBURN, ME

1. Introduction

This Stormwater Management Report has been prepared to present analyses performed to address the potential impacts associated with the project due to proposed modification in stormwater runoff characteristics and land cover changes. The stormwater management controls that are outlined in this report have been designed to suit the proposed development and to comply with applicable regulatory requirements.

2. Existing Conditions

The project site is located in Auburn at the west side of the Auburn-Lewiston Municipal Airport, directly adjacent to Flightline Drive. The parcel containing the airport is approximately 345 acres in size and is bounded by Hotel Road to the east, Kittyhawk Avenue to the south, Flightline Drive to the southwest, and Lewiston Junction Road to the northwest.

Slopes on the site generally range from 1% to 15%, sloping down from the large paved airplane parking area to the southeast to the drainage ditch and culvert under Flightline Drive to the northwest.

The site is tributary to Davis Brook and Little Androscoggin River. These are not listed in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations as Urban Impaired Streams. The proposed development area of the site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map for the City of Auburn, community panel number 23001C0316E.

3. Soils

Soil characteristics were obtained from the United States Department of Agriculture and Natural Resources Conservation Service's (NRCS) Web Soil Survey. The Hydrologic Soil Groups (HSG) are classified by Technical Release TR-55 of the Soil Conservation Service as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
AaB	Adams Loamy Sand	0-3	A
Md	Made Land, Loamy Materials	8-15	A/D
Wa	Walpole	0-3	A/D

A copy of the Class medium Intensity Soil Survey is included as Appendix 4.

4. Proposed Site Improvements

The proposed development will consist of four (4) airplane hangars each with a footprint of 6,544 S.F. Each building will consist of a paved area with enough space for three vehicles. Additionally, the site will include a paved taxilane that is 110' wide for airplane traffic to and from the hangars. The project will result in the creation of 1.21 acres of non-vegetated area and 1.51 acres of developed area.

5. Existing Conditions Model

The existing conditions watershed plan consists of one subcatchment labeled 1S in the HydroCAD model. One location was identified as a Point of Analyses (POA) for comparing peak runoff rates.

POA-1 is located in the northwesterly corner of the project area at the outlet of an existing 18" cross culvert that crosses beneath Flight Line Drive. Runoff from the project area drains across the existing grassed field and to an existing drainage ditch that connects to a depressed area (pond node 1P) that then drains through the 18" cross culvert. Based upon the upstream ditch, the 30" discharge to the ditch, and the 18" outfall pipe under Flight Line Drive it appears that this depressed area was created as part of the stormwater system for the airport. Subcatchment 1S contributes runoff to this study point with an overall runoff area of approximately 14.68 acres. POA-1 and the associated drainage area are tributary to Davis Brook and Little Androscoggin River.

6. Proposed Conditions Model

The proposed conditions watershed area consists of the same overall area as the existing conditions plan, however, the existing conditions subcatchment has been broken into two smaller watersheds as a result of the proposed development.

POA-1: Proposed conditions subcatchment 1.1S represents most of the area outside of the proposed development consisting of the existing aircraft tiedown area, an existing airplane hangar, existing gravel parking area, existing grassed areas, and a small portion of the proposed taxilane. Subcatchment 1.1S directly drains to the depressed area 1P that has been modified through proposed grading to accommodate the installation of the gravel wetland. Subcatchment 1.2S represents most of the proposed project area including the 4 hangars, taxilane, gravel wetland, and associated grassed areas. Subcatchment 1.2S drains directly to the proposed gravel wetland (pond node 2P) before draining to the adjacent low point 1P. The overall tributary area associated with POA-1 is 14.68 acres.

The Best Management Practice (gravel wetland) has been designed and sized in accordance with DEP BMP standards contained within Chapter 500 and the BMP Manual. Sizing calculations can be found in Appendix 1.

7. Stormwater Management

Basic Standard - Chapter 500, Section 4(B)

Since the project will disturb more than one (1) acre of land area, MDEP Basic Standards apply, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. We have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 3) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines.

General Standard - Chapter 500, Section 4(C)

The project will not create more than one (1) acre of impervious surface, however the project site is within the existing Airport SLODA permit and any additional development is required to meet the MDEP General Standards, which require a project's stormwater management system to include treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. The General Standards require treatment of no less than 95% of the site's created impervious area and no less than 80% of the site's created developed area (landscaped area and impervious area combined). To mitigate the changes in hydrologic patterns due to the development of this project, a gravel wetland has been implemented into the stormwater management infrastructure.

BMP sizing and treatment calculations are provided as Appendix 1. Note the proposed hangars are to have non-asphalt roofs which only need to be treated for thermal impact and channel protection only (Chapter 500 Section 4.C.5.f). The non-asphalt roof area has been removed from the gravel wetland footprint sizing calculation, however, the gravel wetland has been oversized to help mitigate against peak rates in larger storms.

Through the use of the aforementioned BMP 134.24% of the new impervious area requiring treatment impervious and 105.74% of the new developed area requiring treatment will be receiving treatment. This meets the requirements for the Maine DEP General Standards.

Flooding Standard - Chapter 500, Section 4(F)

The project will not create more than three (3) acres of impervious surface, however the project site is within the existing Airport SLODA permit and any additional development is required to meet the MDEP Flooding Standards. The Flooding Standard requires a project's stormwater management system detain, retain, or result in the infiltration of stormwater from 24-hour storms of the 2, 10, and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to

undertaking the project. As such, a runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

HydroCAD Stormwater Analysis

Runoff curve numbers were determined for each of the watersheds by measuring the area of each hydrologic soil group within each type of land cover. The type of land cover was determined based on survey data, field reconnaissance and aerial photography. Times of concentration were determined from site topographic maps in accordance with SCS procedures.

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for York County are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Androscoggin County	
2-year	3.0
10-year	4.3
25-year	5.4

The following table presents the results of the peak runoff calculations at the point of analysis for the existing and proposed conditions.

Peak Runoff Rate Summary Table			
Analysis Point	**Storm Event**	**Existing Conditions (cfs)**	**Proposed Conditions (cfs)**
POA-1	2-year	7.8	7.4
	10-year	9.6	9.2
	25-year	10.7	10.6

The HydroCAD Data output sheets from this analysis are appended to this report (Appendix 2) along with the Stormwater Management Plans (Appendix 5). The model predicts that the peak runoff rates in the post-development condition at the Point of Analysis is at or below pre-development runoff rates for the 2, 10, and 25-year storm events with implementation of the proposed stormwater management practices.

8. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP. The proposed stormwater BMP provides treatment to 134.24% (95% required) of the impervious area requiring treatment, and 105.74% (80% required) of the total developed area requiring treatment. Runoff discharging from the site will be at or below pre-development conditions for the 2, 10, and 25-year storm events at the Point of Analysis. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

Prepared by:

SEBAGO TECHNICS, INC.

Jake S. Hunnewell, EI
Civil Engineer

JSH

Robert A. McSorley, P.E.
Senior Project Manager

RAM

Robert A. McSorley, P.E.
Maine PE No. 8588
August 8, 2024

Appendix 1

Stormwater Quality Calculations

Table 1: MDEP GENERAL STANDARD CALCULATIONS

Job #

AREA ID	WATERSHED SIZE (S.F.)	EXISTING ONSITE IMPERVIOUS AREA TO REMAIN (S.F.)	NEW ONSITE IMPERVIOUS AREA (S.F.)	EXISTING ONSITE LANDSCAPED AREA TO REMAIN (S.F.)	NEW ONSITE LANDSCAPED AREA (S.F.)	NET NEW DEVELOPED AREA (S.F.)	NET EXISTING DEVELOPED AREAS (S.F.)	TREATMENT PROVIDED?	IMPERVIOUS AREA TREATED (S.F.)	LANDSCAPED AREA TREATED (S.F.)	DEVELOPED AREA TREATED (S.F.)	TREATMENT BMP
1.1	543,475	309,315	4,365	229,795	0	4,365	539,110	NO	0	0	0	
1.2	96,060	14,960	52,755	19,365	8,800	61,555	34,325	YES	41,540	28,165	69,705	GW
TOTAL (S.F.)	**639,535**	**324,275**	**57,120**	**249,160**	**8,800**	**65,920**	**573,435**		**41,540**	**28,165**	**69,705**	

TOTAL NEW IMPERVIOUS AREA REQUIRING TREATMENT (S.F.)	**30,945**	**TOTAL NEW DEVELOPED AREA (S.F.)**	**65,920**
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT (S.F.)	**41,540**	**TOTAL AREA RECEIVING TREATMENT (S.F.)**	**69,705**
% OF IMPERVIOUS AREA RECEIVING TREATMENT	**134.24%**	**% OF AREA RECEIVING TREATMENT**	**105.74%**

*Hangar roofs are proposed to be non-asphalt (26,175 S.F. total area) Area is counted in new impervious area but removed from area requiring treatment.

SEBAGO TECHNICS, INC.
75 John Roberts Road Suite 4A
South Portland, Maine 04106
Tel. (207) 200-2100

JOB
SHEET NO. 1 OF 1
CALCULATED BY DATE 3/2/2017
FILE NAME PRNT DATE 8/5/2024

GRAVEL WETLAND

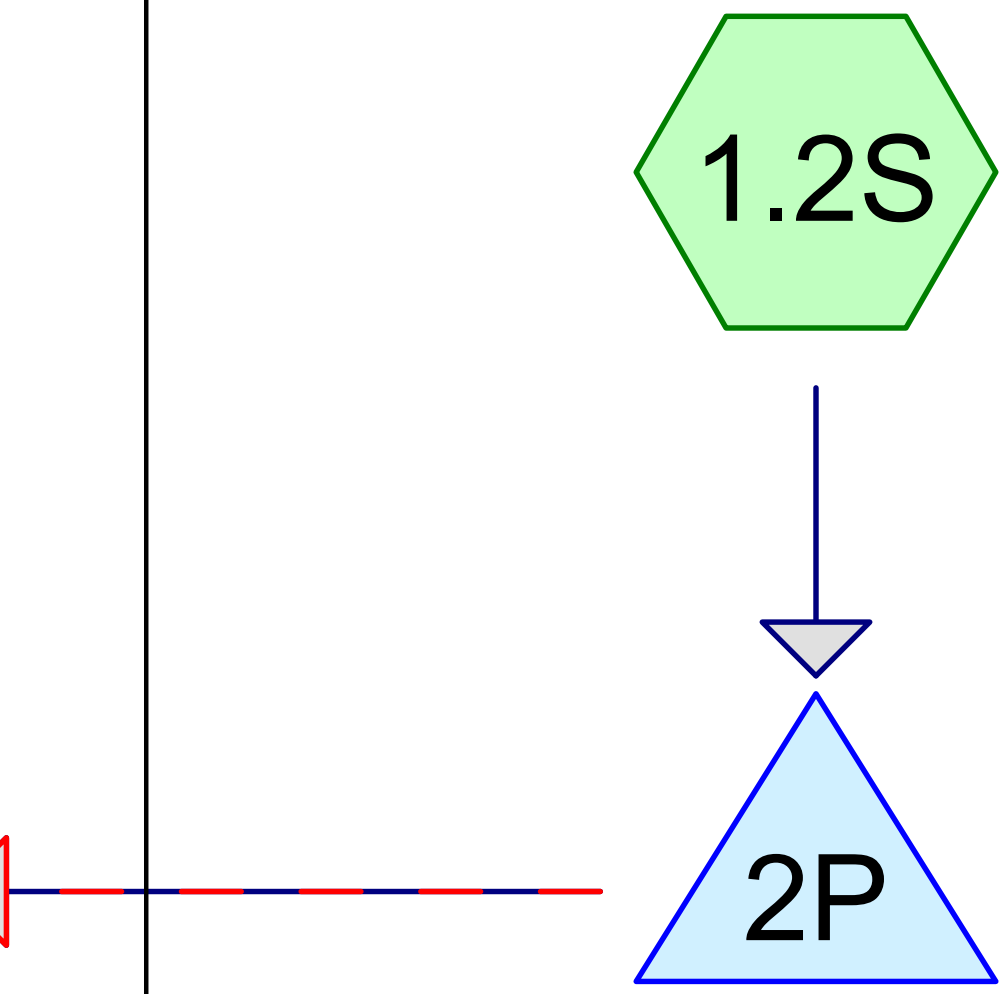
Task: Calculate water quality volume per MDEP chapter 500 regulations

References
1. Maine DEP Chapter 500, Section 4.C.(3)(b)
   "must detain a runoff volume equal to 1.0 inch times the subcatchment's impervious area plus 0.4 inch times the subcatchment's landscaped area"
2. Maine DEP Best Management Practices Stormwater Manual, Section 7.4
   a. "two wetland cells must be capable of holding 45% of the water quality volume each."
   b. "forebay and any swale or discharge pipe to the system….holding 10% of the water quality volume"
   c. "surface should represent 5% of impervious area and 2% of landscaped area"

Tributary to Gravel Wetland: GW

Landscaped Area	28,165.00	SF				
Impervious Area	41,540.00	SF				
Minimum Surface Area						
Required	(2% X Landscaped + 5%" X Impervious)					
Total Landscaped Area	28,165.00	SF	Area	563.3	SF	
Total Impervious Area	41,540.00	SF	Area	2,077.0	SF	
Required Minimum Surface Area				2,640.3	SF	
Provided Surface Area				3,075.0	SF	
Treatment Volume						
Required	(0.4" X Landscaped + 1.0" X Impervious)					
Landscaped Area	28,165.00	SF	Volume	938.8		
Impervious Area	41,540.00	SF	Volume	3,461.7		
Treatment Volume Required				4,400.5	CF	0.101 AF, Elev. 246.50 to 248.00
Minimum Treatment Cell Volume (45%)				1,980.2	CF	0.045 AF
Provided Treatment Volume (Bay 1)				2,240.0	CF	Elev. 246.50 to 248.00
Provided Treatment Volume (Bay 2)				3,425.0	CF	Elev. 246.50 to 248.00
Minimum "Forebay" Cell Volume (10%)				440.1	CF	
Provided Treatment Volume (Forebay)				470.0	CF	

GRAVEL WETLAND 24-HOUR DRAWDOWN REPORT



Gravel Wetland

Subcat Reach Pond Link

Routing Diagram for 230887 Proposed Conditions
Prepared by Sebago Technics, Printed 8/7/2024
HydroCAD® 10.20-5a s/n 00643 © 2023 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
15,750	39	>75% Grass cover, Good, HSG A (1.2S)
12,595	80	>75% Grass cover, Good, HSG D (1.2S)
14,960	98	Existing Pavement (1.2S)
26,580	98	New Pavement (1.2S)
26,175	98	Roof Area (1.2S)
96,060	**86**	**TOTAL AREA**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.2S: Runoff Area=96,060 sf 70.49% Impervious Runoff Depth=0.56"
Tc=6.0 min CN=WQ Runoff=1.4 cfs 4,493 cf

Pond 2P: Gravel Wetland Peak Elev=246.96' Storage=2,336 cf Inflow=1.4 cfs 4,493 cf
Primary=0.1 cfs 4,489 cf Secondary=0.0 cfs 0 cf Outflow=0.1 cfs 4,489 cf

Total Runoff Area = 96,060 sf Runoff Volume = 4,493 cf Average Runoff Depth = 0.56"
29.51% Pervious = 28,345 sf 70.49% Impervious = 67,715 sf

Summary for Subcatchment 1.2S:

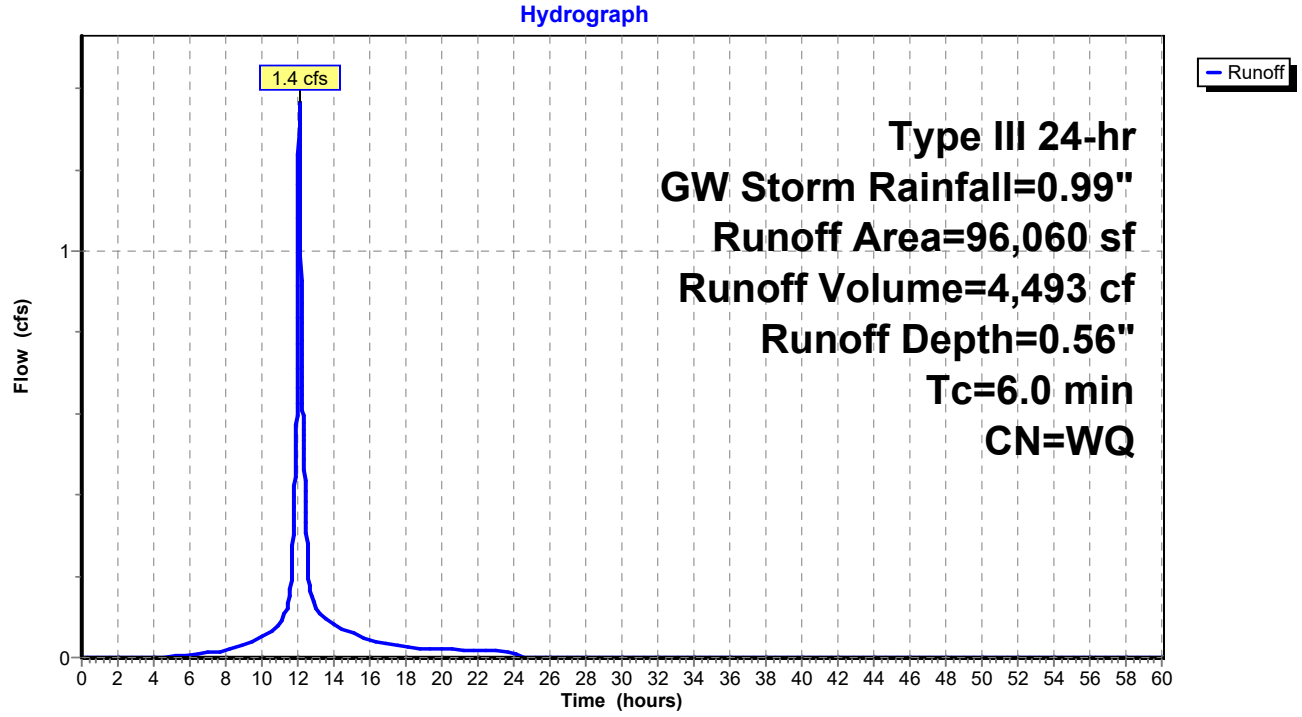
Runoff = 1.4 cfs @ 12.09 hrs, Volume= 4,493 cf, Depth= 0.56"
Routed to Pond 2P : Gravel Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr GW Storm Rainfall=0.99"

	Area (sf)	CN	Description
	15,750	39	>75% Grass cover, Good, HSG A
	12,595	80	>75% Grass cover, Good, HSG D
*	26,175	98	Roof Area
*	26,580	98	New Pavement
*	14,960	98	Existing Pavement
	96,060		Weighted Average
	28,345		29.51% Pervious Area
	67,715		70.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1.2S:



Summary for Pond 2P: Gravel Wetland

Inflow Area = 96,060 sf, 70.49% Impervious, Inflow Depth = 0.56" for GW Storm event
Inflow = 1.4 cfs @ 12.09 hrs, Volume= 4,493 cf
Outflow = 0.1 cfs @ 13.76 hrs, Volume= 4,489 cf, Atten= 94%, Lag= 100.4 min
Primary = 0.1 cfs @ 13.76 hrs, Volume= 4,489 cf
Routed to Pond 1P :
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond 1P :

INFLOW VOLUME EQUAL TO WATER QUALITY VOLUME (TREATMENT VOLUME REQUIRED) NOTED ON THE GRAVEL WETLAND SIZING TABLE

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 246.96' @ 13.76 hrs Surf.Area= 7,064 sf Storage= 2,336 cf

Plug-Flow detention time= 296.5 min calculated for 4,489 cf (100% of inflow)
Center-of-Mass det. time= 295.9 min (1,087.2 - 791.3)

Volume	Invert	Avail.Storage	Storage Description
#1	246.50'	20,369 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)
#2	245.83'	617 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,056 cf Overall x 30.0% Voids
		20,986 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
246.50	3,405	0	0
247.00	4,040	1,861	1,861
248.00	5,470	4,755	6,616
249.00	6,820	6,145	12,761
250.00	8,395	7,608	20,369

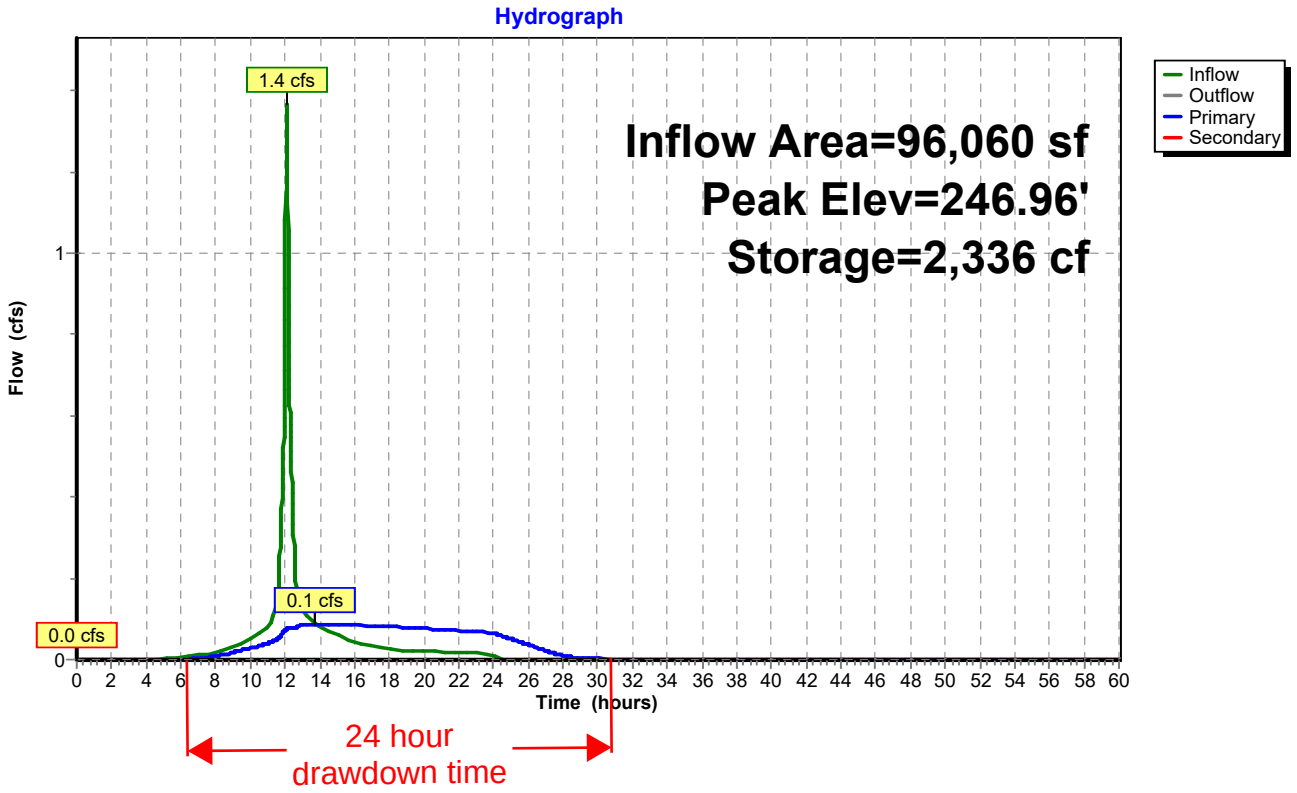
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
245.83	3,069	0	0
246.50	3,069	2,056	2,056

Device	Routing	Invert	Outlet Devices
#1	Primary	245.80'	**12.0" Round Outfall Pipe** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 245.80' / 245.50' S= 0.0115 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	245.83'	**1.8" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	246.50'	**4.3' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Device 3	248.00'	**4.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	249.35'	**10.0' long x 6.0' breadth Emergency Spillway** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.1 cfs @ 13.76 hrs HW=246.96' TW=245.69' (Dynamic Tailwater)
└─**1=Outfall Pipe** (Passes 0.1 cfs of 3.1 cfs potential flow)
  └─**2=Orifice/Grate** (Orifice Controls 0.1 cfs @ 4.96 fps)
  └─**3=Broad-Crested Rectangular Weir** (Passes 0.0 cfs of 4.0 cfs potential flow)
    └─**4=Orifice/Grate** (Controls 0.0 cfs)

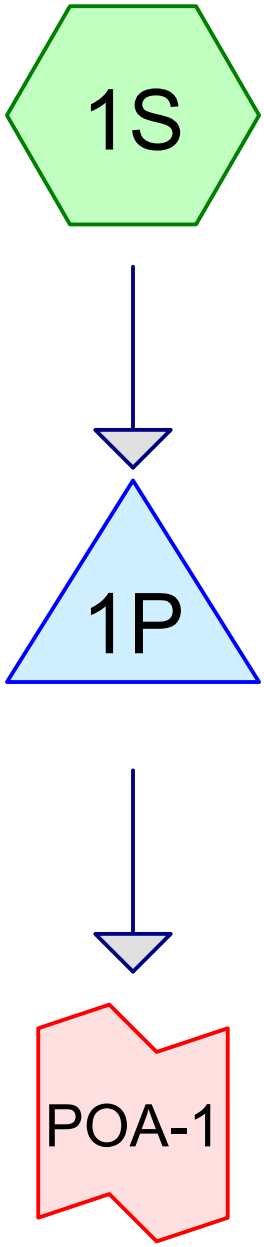
Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=245.83' TW=245.25' (Dynamic Tailwater)
└─**5=Emergency Spillway** (Controls 0.0 cfs)

Pond 2P: Gravel Wetland



Appendix 2A

Existing Conditions HydroCAD Summary



Subcat Reach Pond Link

Routing Diagram for 230887 Existing Conditions
Prepared by Sebago Technics, Printed 8/8/2024
HydroCAD® 10.20-5a s/n 00643 © 2023 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
165,200	39	>75% Grass cover, Good, HSG A (1S)
149,985	80	>75% Grass cover, Good, HSG D (1S)
29,545	96	Gravel (1S)
294,805	98	Impervious Area (1S)
639,535	**78**	**TOTAL AREA**

Summary for Subcatchment 1S:

Runoff = 41.4 cfs @ 12.18 hrs, Volume= 183,488 cf, Depth= 3.44"
Routed to Pond 1P :

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

	Area (sf)	CN	Description
*	294,805	98	Impervious Area
	165,200	39	>75% Grass cover, Good, HSG A
	149,985	80	>75% Grass cover, Good, HSG D
*	29,545	96	Gravel
	639,535		Weighted Average
	344,730		53.90% Pervious Area
	294,805		46.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	85	0.0680	0.18		**Sheet Flow, A to B** Grass: Dense n= 0.240 P2= 3.00"
4.2	446	0.0140	1.77		**Shallow Concentrated Flow, B to C** Grassed Waterway Kv= 15.0 fps
1.5	140	0.0110	1.57		**Shallow Concentrated Flow, C to D** Grassed Waterway Kv= 15.0 fps
13.6	671	Total			

Summary for Pond 1P:

Inflow Area = 639,535 sf, 46.10% Impervious, Inflow Depth = 3.44" for 25-YR event
Inflow = 41.4 cfs @ 12.18 hrs, Volume= 183,488 cf
Outflow = 10.7 cfs @ 12.64 hrs, Volume= 183,438 cf, Atten= 74%, Lag= 27.8 min
Primary = 10.7 cfs @ 12.64 hrs, Volume= 183,438 cf
Routed to Link POA-1 :

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 248.55' @ 12.64 hrs Surf.Area= 33,800 sf Storage= 55,677 cf

Plug-Flow detention time= 54.6 min calculated for 183,407 cf (100% of inflow)
Center-of-Mass det. time= 54.6 min (830.4 - 775.8)

Volume	Invert	Avail.Storage	Storage Description
#1	245.25'	72,319 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
245.25	3,000	0	0
246.00	8,321	4,245	4,245
247.00	17,262	12,792	17,037
248.00	26,875	22,069	39,105
249.00	39,553	33,214	72,319

Device	Routing	Invert	Outlet Devices
#1	Primary	245.26'	**18.0" Round Culvert** L= 86.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 245.26' / 244.50' S= 0.0088 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=10.7 cfs @ 12.64 hrs HW=248.55' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 10.7 cfs @ 6.05 fps)

Summary for Link POA-1:

Inflow Area = 639,535 sf, 46.10% Impervious, Inflow Depth = 3.44" for 25-YR event
Inflow = 10.7 cfs @ 12.64 hrs, Volume= 183,438 cf
Primary = 10.7 cfs @ 12.64 hrs, Volume= 183,438 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Runoff Area=639,535 sf 46.10% Impervious Runoff Depth=1.69"
Flow Length=671' Tc=13.6 min CN=WQ Runoff=20.9 cfs 89,915 cf

Pond 1P: Peak Elev=247.35' Storage=23,662 cf Inflow=20.9 cfs 89,915 cf
18.0" Round Culvert n=0.012 L=86.0' S=0.0088 '/' Outflow=7.8 cfs 89,865 cf

Link POA-1: Inflow=7.8 cfs 89,865 cf
Primary=7.8 cfs 89,865 cf

Total Runoff Area = 639,535 sf Runoff Volume = 89,915 cf Average Runoff Depth = 1.69"
53.90% Pervious = 344,730 sf 46.10% Impervious = 294,805 sf

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Runoff Area=639,535 sf 46.10% Impervious Runoff Depth=2.61"
Flow Length=671' Tc=13.6 min CN=WQ Runoff=31.9 cfs 139,072 cf

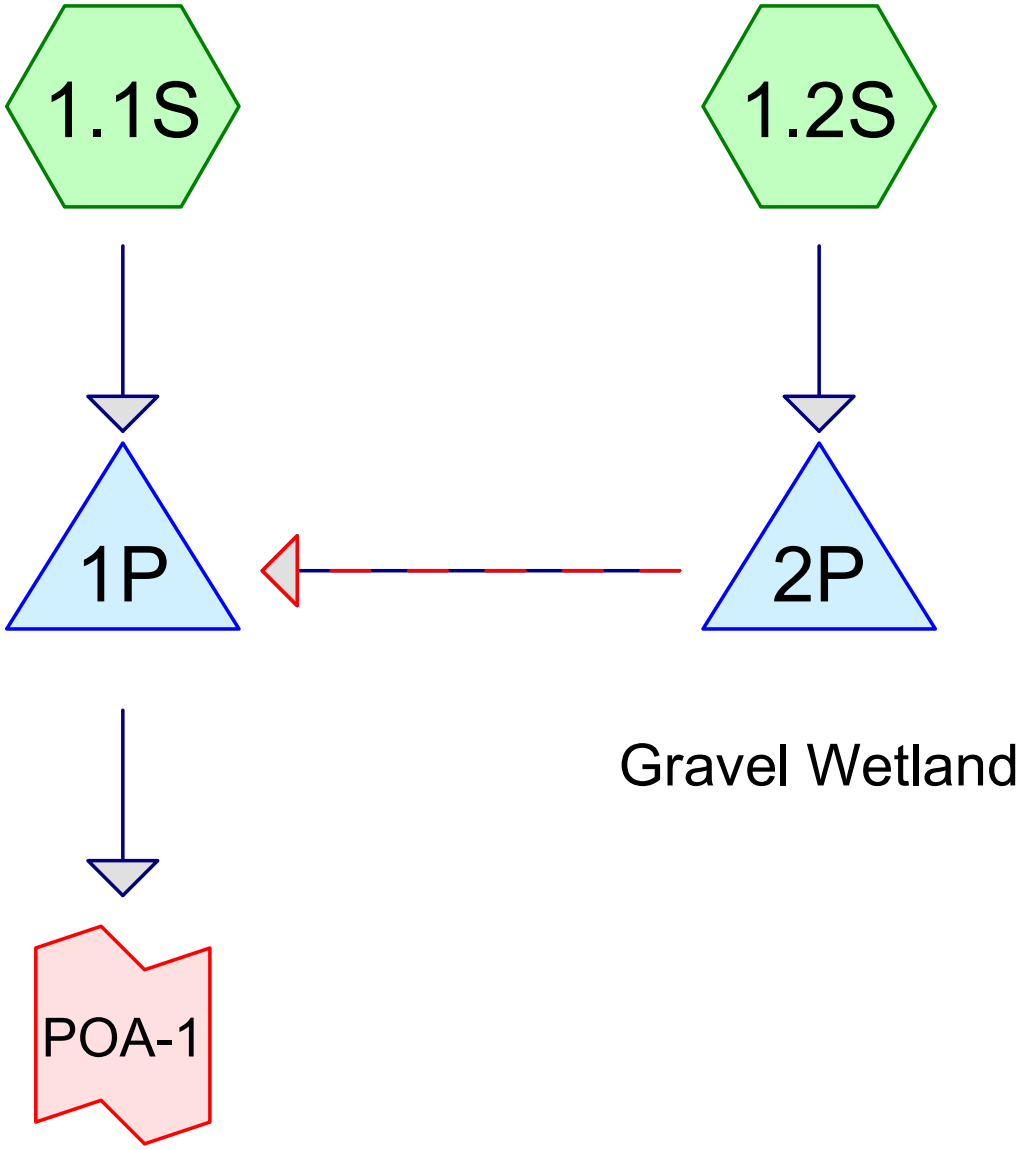
Pond 1P: Peak Elev=248.03' Storage=39,987 cf Inflow=31.9 cfs 139,072 cf
18.0" Round Culvert n=0.012 L=86.0' S=0.0088 '/' Outflow=9.6 cfs 139,021 cf

Link POA-1: Inflow=9.6 cfs 139,021 cf
Primary=9.6 cfs 139,021 cf

Total Runoff Area = 639,535 sf Runoff Volume = 139,072 cf Average Runoff Depth = 2.61"
53.90% Pervious = 344,730 sf 46.10% Impervious = 294,805 sf

Appendix 2B

Proposed Conditions
HydroCAD Summary



Subcat Reach Pond Link

Routing Diagram for 230887 Proposed Conditions
Prepared by Sebago Technics, Printed 8/8/2024
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Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
121,910	39	>75% Grass cover, Good, HSG A (1.1S, 1.2S)
136,230	80	>75% Grass cover, Good, HSG D (1.1S, 1.2S)
14,960	98	Existing Pavement (1.2S)
29,545	96	Gravel (1.1S)
284,135	98	Impervious Area (1.1S)
26,580	98	New Pavement (1.2S)
26,175	98	Roof Area (1.2S)
639,535	**83**	**TOTAL AREA**

Summary for Subcatchment 1.1S:

Runoff = 37.6 cfs @ 12.19 hrs, Volume= 170,356 cf, Depth= 3.76"
Routed to Pond 1P :

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

	Area (sf)	CN	Description
	106,160	39	>75% Grass cover, Good, HSG A
	123,635	80	>75% Grass cover, Good, HSG D
*	284,135	98	Impervious Area
*	29,545	96	Gravel
	543,475		Weighted Average
	259,340		47.72% Pervious Area
	284,135		52.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	82	0.0750	0.18		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
0.0	6	0.3330	4.04		**Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps
7.2	645	0.0100	1.50		**Shallow Concentrated Flow, C-D** Grassed Waterway Kv= 15.0 fps
14.6	733	Total			

Summary for Subcatchment 1.2S:

Runoff = 9.3 cfs @ 12.08 hrs, Volume= 32,916 cf, Depth= 4.11"
Routed to Pond 2P : Gravel Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

	Area (sf)	CN	Description
	15,750	39	>75% Grass cover, Good, HSG A
	12,595	80	>75% Grass cover, Good, HSG D
*	26,175	98	Roof Area
*	26,580	98	New Pavement
*	14,960	98	Existing Pavement
	96,060		Weighted Average
	28,345		29.51% Pervious Area
	67,715		70.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Summary for Pond 1P:

Inflow Area = 639,535 sf, 55.02% Impervious, Inflow Depth = 3.81" for 25-YR event
Inflow = 38.2 cfs @ 12.19 hrs, Volume= 203,261 cf
Outflow = 10.6 cfs @ 12.69 hrs, Volume= 203,176 cf, Atten= 72%, Lag= 29.8 min
Primary = 10.6 cfs @ 12.69 hrs, Volume= 203,176 cf
Routed to Link POA-1 :

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 248.48' @ 12.69 hrs Surf.Area= 30,421 sf Storage= 54,042 cf

Plug-Flow detention time= 54.8 min calculated for 203,176 cf (100% of inflow)
Center-of-Mass det. time= 53.9 min (893.2 - 839.3)

Volume	Invert	Avail.Storage	Storage Description
#1	245.25'	71,079 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
245.25	3,000	0	0
246.00	7,850	4,069	4,069
247.00	19,780	13,815	17,884
248.00	25,455	22,618	40,501
249.00	35,700	30,578	71,079

Device	Routing	Invert	Outlet Devices
#1	Primary	245.26'	**18.0" Round Culvert** L= 86.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 245.26' / 244.50' S= 0.0088 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=10.6 cfs @ 12.69 hrs HW=248.48' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 10.6 cfs @ 5.98 fps)

Summary for Pond 2P: Gravel Wetland

Inflow Area = 96,060 sf, 70.49% Impervious, Inflow Depth = 4.11" for 25-YR event
Inflow = 9.3 cfs @ 12.08 hrs, Volume= 32,916 cf
Outflow = 2.1 cfs @ 12.47 hrs, Volume= 32,905 cf, Atten= 77%, Lag= 23.4 min
Primary = 0.7 cfs @ 12.34 hrs, Volume= 30,054 cf
Routed to Pond 1P :
Secondary = 1.5 cfs @ 12.48 hrs, Volume= 2,851 cf
Routed to Pond 1P :

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 249.51' @ 12.48 hrs Surf.Area= 10,688 sf Storage= 17,041 cf

Plug-Flow detention time= 423.3 min calculated for 32,900 cf (100% of inflow)
Center-of-Mass det. time= 423.3 min (1,180.3 - 756.9)

Volume	Invert	Avail.Storage	Storage Description
#1	246.50'	20,369 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)
#2	245.83'	617 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)
			2,056 cf Overall x 30.0% Voids
		20,986 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
246.50	3,405	0	0
247.00	4,040	1,861	1,861
248.00	5,470	4,755	6,616
249.00	6,820	6,145	12,761
250.00	8,395	7,608	20,369

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
245.83	3,069	0	0
246.50	3,069	2,056	2,056

Device	Routing	Invert	Outlet Devices
#1	Primary	245.80'	**12.0" Round Outfall Pipe** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 245.80' / 245.50' S= 0.0115 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	245.83'	**1.8" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	246.50'	**4.3' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Device 3	248.00'	**4.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	249.35'	**10.0' long x 6.0' breadth Emergency Spillway** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.7 cfs @ 12.34 hrs HW=249.45' TW=248.11' (Dynamic Tailwater)
- **1=Outfall Pipe** (Passes 0.7 cfs of 4.4 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.1 cfs @ 5.58 fps)
  - **3=Broad-Crested Rectangular Weir** (Passes 0.6 cfs of 59.4 cfs potential flow)
    - **4=Orifice/Grate** (Orifice Controls 0.6 cfs @ 5.42 fps)

Secondary OutFlow Max=1.5 cfs @ 12.48 hrs HW=249.51' TW=248.37' (Dynamic Tailwater)
- **5=Emergency Spillway** (Weir Controls 1.5 cfs @ 0.94 fps)

Summary for Link POA-1:

Inflow Area = 639,535 sf, 55.02% Impervious, Inflow Depth > 3.81" for 25-YR event
Inflow = 10.6 cfs @ 12.69 hrs, Volume= 203,176 cf
Primary = 10.6 cfs @ 12.69 hrs, Volume= 203,176 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Runoff Area=543,475 sf 52.28% Impervious Runoff Depth=1.87"
Flow Length=733' Tc=14.6 min CN=WQ Runoff=19.2 cfs 84,709 cf

Subcatchment 1.2S: Runoff Area=96,060 sf 70.49% Impervious Runoff Depth=2.12"
Tc=6.0 min CN=WQ Runoff=4.9 cfs 16,933 cf

Pond 1P: Peak Elev=247.22' Storage=22,395 cf Inflow=19.3 cfs 101,633 cf
18.0" Round Culvert n=0.012 L=86.0' S=0.0088 '/' Outflow=7.4 cfs 101,556 cf

Pond 2P: Gravel Wetland Peak Elev=248.41' Storage=9,582 cf Inflow=4.9 cfs 16,933 cf
Primary=0.4 cfs 16,925 cf Secondary=0.0 cfs 0 cf Outflow=0.4 cfs 16,925 cf

Link POA-1: Inflow=7.4 cfs 101,556 cf
Primary=7.4 cfs 101,556 cf

Total Runoff Area = 639,535 sf Runoff Volume = 101,642 cf Average Runoff Depth = 1.91"
44.98% Pervious = 287,685 sf 55.02% Impervious = 351,850 sf

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Runoff Area=543,475 sf 52.28% Impervious Runoff Depth=2.87"
Flow Length=733' Tc=14.6 min CN=WQ Runoff=29.1 cfs 130,023 cf

Subcatchment 1.2S: Runoff Area=96,060 sf 70.49% Impervious Runoff Depth=3.18"
Tc=6.0 min CN=WQ Runoff=7.3 cfs 25,448 cf

Pond 1P: Peak Elev=247.90' Storage=37,957 cf Inflow=29.6 cfs 155,461 cf
18.0" Round Culvert n=0.012 L=86.0' S=0.0088 '/' Outflow=9.2 cfs 155,379 cf

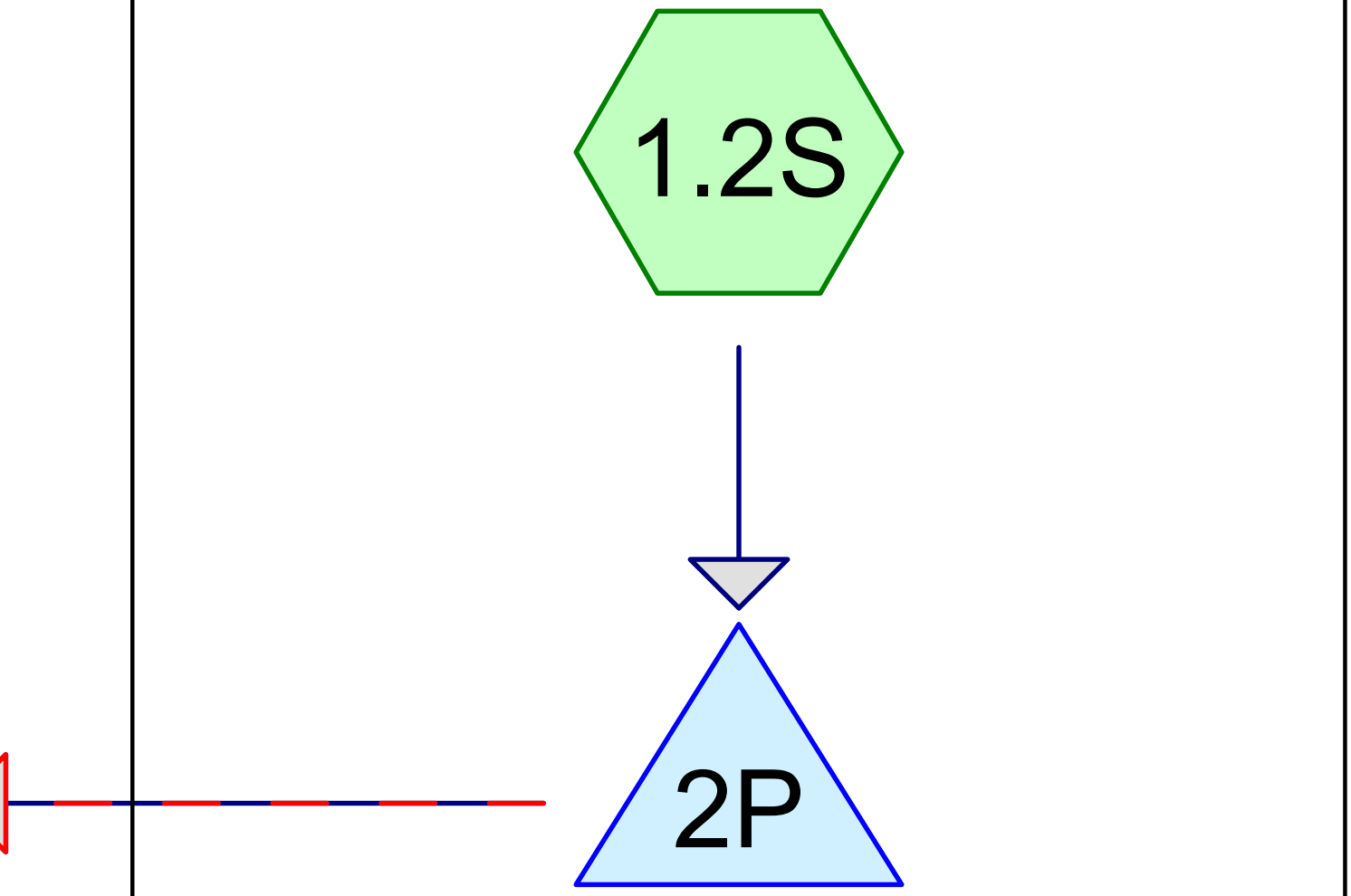
Pond 2P: Gravel Wetland Peak Elev=249.11' Storage=14,164 cf Inflow=7.3 cfs 25,448 cf
Primary=0.6 cfs 25,439 cf Secondary=0.0 cfs 0 cf Outflow=0.6 cfs 25,439 cf

Link POA-1: Inflow=9.2 cfs 155,379 cf
Primary=9.2 cfs 155,379 cf

Total Runoff Area = 639,535 sf Runoff Volume = 155,471 cf Average Runoff Depth = 2.92"
44.98% Pervious = 287,685 sf 55.02% Impervious = 351,850 sf

Appendix 2C

Hydrologic Modeling
Freeboard Report



Gravel Wetland

Subcat Reach Pond Link

Routing Diagram for 230887 Proposed Conditions
Prepared by Sebago Technics, Printed 8/7/2024
HydroCAD® 10.20-5a s/n 00643 © 2023 HydroCAD Software Solutions LLC

Summary for Subcatchment 1.2S:

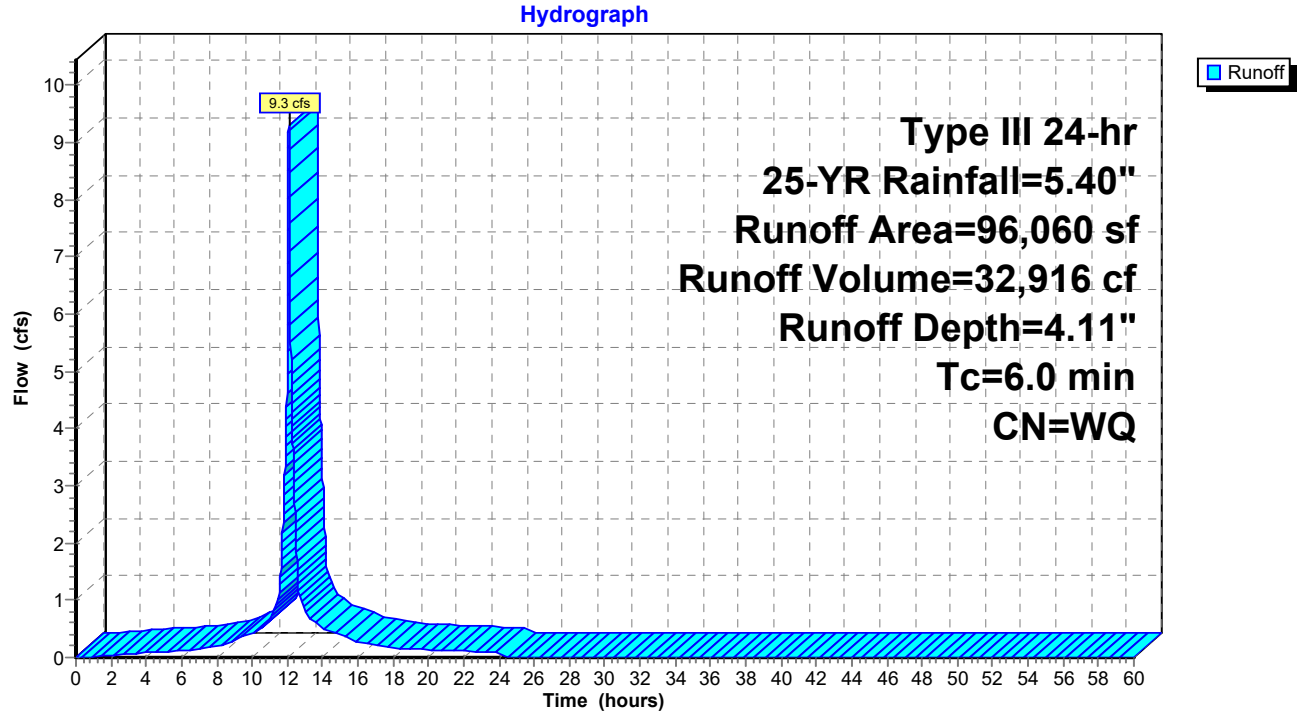
Runoff = 9.3 cfs @ 12.08 hrs, Volume= 32,916 cf, Depth= 4.11"
Routed to Pond 2P : Gravel Wetland

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.40"

	Area (sf)	CN	Description
	15,750	39	>75% Grass cover, Good, HSG A
	12,595	80	>75% Grass cover, Good, HSG D
*	26,175	98	Roof Area
*	26,580	98	New Pavement
*	14,960	98	Existing Pavement
	96,060		Weighted Average
	28,345		29.51% Pervious Area
	67,715		70.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1.2S:



Summary for Pond 2P: Gravel Wetland

Inflow Area = 96,060 sf, 70.49% Impervious, Inflow Depth = 4.11" for 25-YR event
Inflow = 9.3 cfs @ 12.08 hrs, Volume= 32,916 cf
Outflow = 3.5 cfs @ 12.32 hrs, Volume= 17,054 cf, Atten= 62%, Lag= 14.2 min
Primary = 0.0 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond 1P :
Secondary = 3.5 cfs @ 12.32 hrs, Volume= 17,054 cf
Routed to Pond 1P :

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 249.63' @ 12.32 hrs Surf.Area= 10,876 sf Storage= 17,964 cf

Plug-Flow detention time= 269.8 min calculated for 17,051 cf (52% of inflow)
Center-of-Mass det. time= 143.3 min (900.3 - 756.9)

Volume	Invert	Avail.Storage	Storage Description
#1	246.50'	20,369 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)
#2	245.83'	617 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,056 cf Overall x 30.0% Voids
		20,986 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
246.50	3,405	0	0
247.00	4,040	1,861	1,861
248.00	5,470	4,755	6,616
249.00	6,820	6,145	12,761
250.00	8,395	7,608	20,369

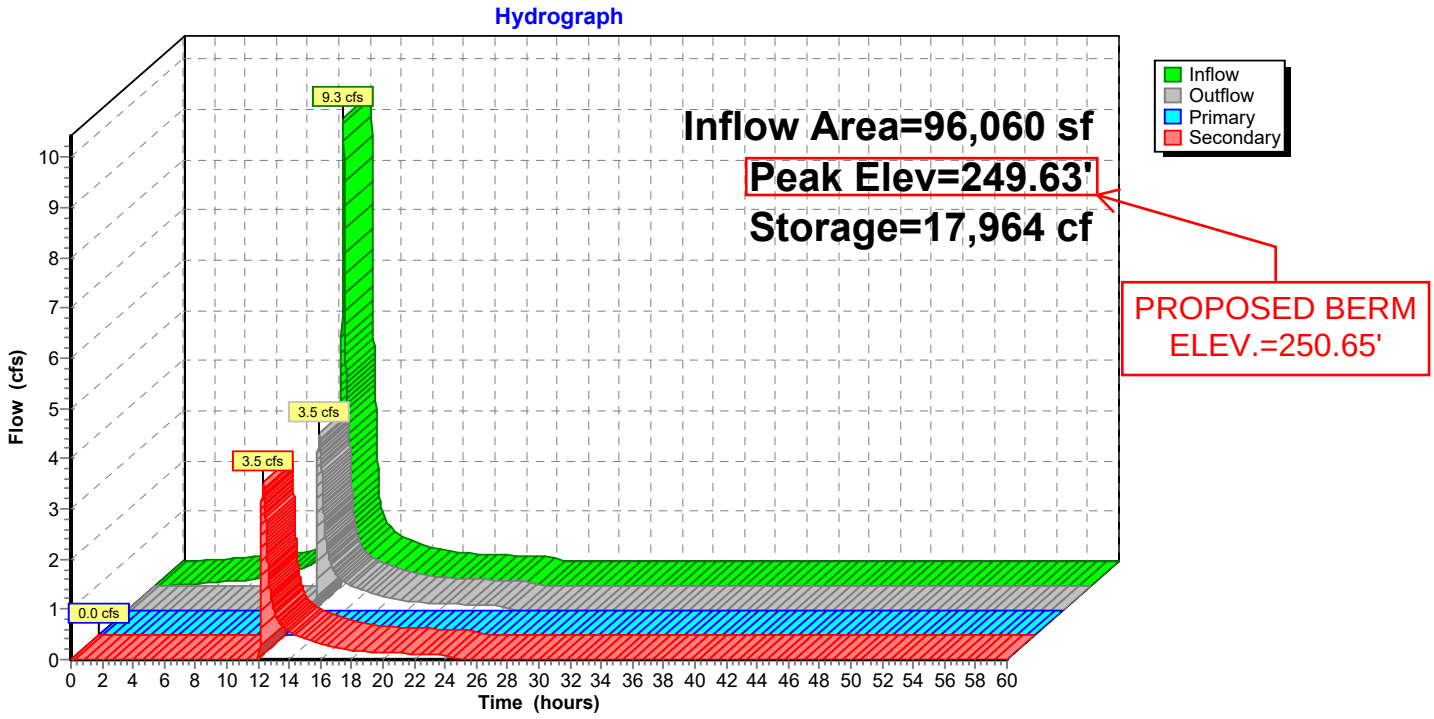
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
245.83	3,069	0	0
246.50	3,069	2,056	2,056

Device	Routing	Invert	Outlet Devices
#1	Primary	245.80'	**12.0" Round Outfall Pipe X 0.00** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 245.80' / 245.50' S= 0.0115 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	245.83'	**1.8" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	246.50'	**4.3' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#4	Device 3	248.00'	**4.0" W x 4.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	249.35'	**10.0' long x 6.0' breadth Emergency Spillway** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.0 cfs @ 0.00 hrs HW=245.83' TW=245.25' (Dynamic Tailwater)
└─**1=Outfall Pipe** (Controls 0.0 cfs)
└─**2=Orifice/Grate** (Controls 0.0 cfs)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)
└─**4=Orifice/Grate** (Controls 0.0 cfs)

Secondary OutFlow Max=3.5 cfs @ 12.32 hrs HW=249.63' TW=247.86' (Dynamic Tailwater)
└─**5=Emergency Spillway** (Weir Controls 3.5 cfs @ 1.28 fps)

Pond 2P: Gravel Wetland



Appendix 3

Inspection, Maintenance and Housekeeping Plan

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

For:
Auburn-Lewiston Municipal Airport Hangars
Auburn, Maine

By:
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures as well as stormwater management facilities for the project. This plan also outlines several housekeeping requirements that shall be followed during and after construction. These procedures shall be followed in order to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event (0.5" of rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (0.5" of rainfall).

3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed

to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event (0.5" of rainfall). They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Stone Check Dams:

- Inspect the center of the dam to make sure it is lower than the edges. Erosion caused by high flows around the edges of the dam must be corrected.
- Sediment accumulation shall be removed prior to reaching half of the original design height.
- Areas beneath stone check dams must be seeded and mulched upon removal.

C. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

D. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

E. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

F. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

G. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

A. Spill prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

B. Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

C. Fugitive sediment and dust: Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

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

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

Post-Construction

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner shall inspect and maintain the BMPs, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the local municipality in the annual report.

   A. Vegetated Areas:

   - Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains (>0.5") to identify active or potential erosion problems.
   - Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

   B. Ditches, Swales and Other Open Channels:

   - Inspect ditches, swales, level spreaders and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative

growth that could obstruct flow, and repair any erosion of the ditch lining.

- Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
- Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
- If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged.

C. Culverts:

- Inspect culverts in the spring, in the late fall, and after heavy rains (>0.5") to remove any obstructions to flow.
- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.

D. Removal of Winter Sand:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

E. Catch Basins:

- Inspect and, if required, clean-out catch basins at least once a year, preferably in early spring.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.

F. Gravel Wetland:

- During the first year, the basin shall be inspected semi-annually and following major storm events.
- Debris and sediment buildup shall be removed from the forebay and basin as needed. Any bare area or erosion rills shall be repaired with new filter media or sandy loam then seeded and mulched. Maintaining good vegetative cover will minimize clogging with fine sediments and if ponding exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil's filtration capacity.
- The gravel wetland should be inspected after every major storm in the first year to be sure it is functioning properly. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining within 48 hours following a 0.5" storm or greater. Following storms that fill the system and overflow is observed, the soil filter should drain in no less than 24 to 48 hours. If the system drains too fast, an orifice may need to be added on the underdrain

outlet or, if already present, may need to be modified.

- Sediment Removal: Sediment and plant debris should be removed from the pretreatment structure at least annually.
- Check and clean the risers if there is evidence of standing water, discolored water or accumulated sediments in the cells.
- Removal any decaying vegetation, litter, and debris that may be found.
- Check for foreign species. Particular care must be used to avoid the unintended introduction of invasive species such as purple loosestrife (Lythrum salicaria) and common reed (Phragmites australis). It is recommended that a qualified wetland biologist be consulted when these are found in the area of the gravel wetland.
- Plant biomass shall be harvested annually.

G. Outlet Control Structures:

- Inspect outlet structures two times per year (preferably in spring and fall) to ensure that the outlet structures are working in their intended fashion and that they are free of debris.
- Clean structures when sediment depths reach 12 inches from invert of outlet.
- At a minimum, remove floating debris and hydrocarbons at the time of the inspection.

H. Roof Drip Edges:

- These structures may not be paved over or altered in anyway. No gutter may be installed on the roof line.
- Debris and sediment buildup shall be removed as needed. Any bare area or erosion rills shall be repaired with new stone.
- See inspection log within Attachment 1 of this document for the inspection requirements of this BMP.

3. Documentation:

A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, as required by the local municipality, provide a completed and signed certification on a form provided by the local municipality, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.

B. A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

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

ATTACHMENT 1 – STORMWATER INSPECTION AND MAINTENANCE LOG

Auburn-Lewiston Municipal Airport Hangars
Auburn, Maine

This log is intended to accompany the Inspection, Maintenance, and Housekeeping Plan for the Hangar Development. The following items shall be checked, cleaned, and maintained on a regular basis as specified in the Maintenance Plan and as described in the sections below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the City of Auburn and the Maine DEP. Qualified personnel familiar with the drainage systems and soils shall perform all inspections. A copy of the construction and post-construction maintenance logs are provided.

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

Site Element	Suggested Maintenance (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Vegetated Areas	Inspect Slopes/Embankments for erosion (annually)		
	Replant bare areas or areas of sparse growth (annually)		
Paved Surfaces	Clear accumulated winter sand (annually)		
	Remove sediment along edges of parking and within low spots/pockets (annually)		
Ditches/Swales	Remove obstructions/debris/sediment (monthly)		
	Inspect for erosion/repair as needed (annually)		
	Remove woody vegetation (annually)		
	Mow vegetated ditches (annually)		
Catch Basins	Remove sediment/debris from sump (annually)		
Culverts	Remove sediment/debris from inlet/outlet aprons (annually)		
	Inspect inlet/outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		
Pipe Outlets	Remove sediment/debris from outlet aprons (annually)		
	Inspect outlet aprons for erosion, repair as needed (annually)		
	Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually)		

Additional Notes/Observations:

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

BMP Element	Suggested Maintenance (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Forebay/Pretreatment	Sediment/Debris Removal (Twice Annually)		
	Inspect for bare areas or rill erosion (Twice Annually)		
Outlet Control Structure	Sediment Depth (Twice Annually)		
	Floatables/Debris (Twice Annually)		
Riser Pipes	Review for signs of erosion, sediment accumulation or discolored water (> 0.5" rain, Twice Annually)		
Discharge Pipe	Ground Stabilized (>0.5" rain, Twice Annually)		
Emergency Spillway	Review for signs of erosion (Twice Annually)		
	Review for signs of discharge (>0.5" rain, Twice Annually)		
Embankments	Review for signs of erosion (Twice Annually)		
Treatment Cells	Review for dense root mat establishment (>0.5" rain, Twice Annually)		
	Review for decaying vegetation, litter and debris (Twice Annually)		
	Confirm system drains in 24-48 hours for water quality volume (>0.5" rain, Twice Annually)		

Additional Notes/Observations:

INSPECTION MAINTENANCE AND HOUSEKEEPING FORM			
General Information			
Project Name:		**Inspection Date:**	
Project Location:		**Current Weather:**	
		Date / Amount Last Precip:	
BMP Owner:		**Company conducting inspection:**	
Owner Mailing Address:		**Company Mailing Address**	
Owner Phone #:		**Company Phone #:**	
Owner Email:		**Inspector Name:**	
		Inspector Email:	

BMP Element	Suggested Maintenance (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Pretreatment	Sediment/Debris Removal (Annually)		
	Inspect for bare areas or rill erosion (Annually)		
Downstream Structure	Sediment Depth (Annually)		
	Floatables/Debris (Annually)		
Discharge Pipe	Ground Stabilized (>1" rain, Annually)		
Embankments	Review for signs of erosion (Twice Annually)		
Stone	Trim overgrown vegetation with string trimmer (annually)		
	Review trench for evidence of vehicular traffic or storage of snow within footprint (annually)		
	Confirm no excessive ponding of water (annually)		

Additional Notes/Observations:

Appendix 4

Subsurface Investigations

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Androscoggin and Sagadahoc Counties, Maine

July 25, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Map Scale: 1:1,780 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 25 50 100 150

Feet
0 50 100 200 300

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

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 24, Sep 5, 2023

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

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND	MAP INFORMATION
	imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AaB	Adams loamy sand, 0 to 8 percent slopes	5.0	60.0%
Md	Made land, loamy materials	2.5	30.1%
Wa	Walpole fine sandy loam	0.8	9.9%
Totals for Area of Interest		**8.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Androscoggin and Sagadahoc Counties, Maine

AaB—Adams loamy sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wqn9
Elevation: 10 to 2,000 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Adams and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Adams

Setting

Landform: Outwash terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: loamy sand
Bs - 7 to 21 inches: sand
BC - 21 to 27 inches: sand
C - 27 to 65 inches: sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

Md—Made land, loamy materials

Map Unit Composition

Made land: 91 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Made Land

Typical profile

H1 - 0 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 35 percent
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 20.00 in/hr)
Depth to water table: About 24 to 72 inches
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

Wa—Walpole fine sandy loam

Map Unit Setting

National map unit symbol: 9kfq
Elevation: 0 to 540 feet
Mean annual precipitation: 47 to 49 inches
Mean annual air temperature: 45 degrees F
Frost-free period: 150 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Walpole and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Walpole

Setting

Landform: Outwash plains
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy glaciofluvial deposits

Typical profile

H1 - 0 to 6 inches: fine sandy loam

H2 - 6 to 15 inches: loamy sand
H3 - 15 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F144BY303ME - Acidic Swamp
Hydric soil rating: Yes

Appendix 5

Stormwater Management Plans

EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A — B)
- REACH
- 1.0S — SUBCATCHMENT LABEL
- 1R — REACH
- POA-1 — POINT OF ANALYSIS
- 1P — STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # — SOILS BOUNDARY

GRID

N

Aad (HSG A)
Aab (HSG A)

CB 1354
RIM=255.33'
PRECAST CONCRETE
NO VISIBLE PIPES
SUMP = 246.53'

CB 1172
RIM=256.53'
INV. OUT 18" HDPE @ 7=250.80'
SUMP =247.73'

CB 1688
RIM=257.96'
INV. IN 18" HDPE @ 1 =250.21'
INV. IN 18" HDPE @ 1 =249.96'
INV. IN 24" HDPE @ 7 =251.16'
INV. OUT 30" HDPE @ 10 =249.75'
SUMP = 247.76'

AIRCRAFT TIE DOWN AREA

CB 1166
RIM=258.44
INV. IN 24" HDPE @ 7 =251.69'
INV. OUT 24" HDPE @ 1 =251.59'
SUMP = 248.89'

CB 1683
RIM=258.96
INV. IN 18" HDPE @ 7 =253.36'
INV. OUT 24" HDPE @ 1 =252.76'
SUMP = 249.91'

CB 1680
RIM=259.43'
INV. IN 12" HDPE @ 7=253.9'
INV. OUT 18" HDPE @ 1= 253.88'
SUMP = 250.73'

SD

PAVED

FFE=256.84'
HANGER
MH 1100
RIM=255.95'

30" HDPE
INV.=249.25'

1S

USED OIL TANK UNDERGROUND

SUSPECTED UNDERDRAIN PIPE

GRASSED

PAVED

Md (HSG A/D)
Aab (HSG A)

Aab (HSG A)
Wa (HSG A/D)

PAVED
PARKING AREA

GRAVEL
PARKING AREA

CB 1148
RIM=252.38'
INV. OUT 6" ASBESTOS @10= 249.86'
UNKNOWN DESTINATION
SUMP =249.86' (NO STRUCTURE)

PIPE BURIED
6" RCP DAMAGED
UNKNOWN ORIGIN

FFE=252.89

HANGAR

SIGNAL IN WATER
PIPE NOT FOUND

18" PIPE
UNKNOWN TYPE
INV.=245.26'

1P

OHU

CB-1723
RIM=248.72'

CB 1725
RIM=249.04'

Aab (HSG A)
Wa (HSG A/D)

CB 1002
RIM=248.51'
INV. OUT- 245.57'

FLIGHT LINE DRIVE
50' WIDE PER PLAN REF. 4A

18" PIPE
UNKNOWN TYPE
IN POOR CONDITION
INV.=244.20'

POA-1

CB 1727
RIM=247.90'
INV. IN=244.69'

'ON AVENUE

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 INCH = 50 FT.

ROBERT A. MCSORLEY, PE # 8588

08/06/2024

REV.	BY	DATE	STATUS
B	RAM	08/06/2024	PLANS ISSUED FOR INTERNAL REVIEW
A	JLG	07/02/2024	PRELIMINARY PLANS ISSUED TO CLIENT FOR REVIEW

SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite A
South Portland, ME 04106
207-200-2100

South Portland, Bridgton, Sanford and Bath

EXISTING CONDITIONS STORMWATER PLAN
OF:
AUBURN-LEWISTON MUNICIPAL AIRPORT HANGAR
80 WHITE HANGAR DRIVE
AUBURN, ME 04210
FOR:
FIELDING PROPERTIES, LLC
PO BOX 6951
SCARBOROUGH, ME 04074

DESIGNED	JSH
DRAWN	RGL
CHECKED	RAM
DATE	04-22-2024
SCALE	1" = 50'
PROJECT	230887

SHEET 1 OF 2

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230887 SWP EXISTING.dwg - TAB:EXISTING CONDITIONS STORMWATER PLAN

PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A → B)
- REACH
- 10.0S — SUBCATCHMENT LABEL
- 10R — REACH
- POA-1 — POINT OF ANALYSIS
- 10P — STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # — SOILS BOUNDARY

GRID N

CB 1354
RIM=255.33'
PRECAST CONCRETE
NO VISIBLE PIPES
SUMP = 246.53'

CB 1172
RIM=256.53'
INV. OUT 18" HDPE @ 7=250.80'
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RIM=257.96'
INV. IN 18" HDPE @ 1 =250.21'
INV. IN 18" HDPE @ 4 =249.96'
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INV. OUT 30" HDPE @ 10 =249.75'
SUMP = 247.76'

CB 1166
RIM=258.44
INV. IN 24" HDPE @ 7 =251.69'
INV. OUT 24" HDPE @ 1 =251.59'
SUMP = 248.89'

AIRCRAFT TIE DOWN AREA

CB 1683
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CB 1680
RIM=259.43'
INV. IN 12" HDPE @ 7=253.9'
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SUMP = 250.73'

Aad (HSG A)
Aab (HSG A)

PAVED
SD
FFE=256.84'
HANGER
MH 1100
RIM=255.95'
BM-1
30" HDPE
INV.=248.25'
USED OIL TANK UNDERGROUND
1.1S
SUSPECTED UNDERDRAIN PIPE
DI
PAVED
PARKING AREA
GRAVEL
PARKING AREA
Md (HSG A/D)
Aab (HSG A)
Aab (HSG A)
Wa (HSG A/D)
1.2S
2P
1P
18" PIPE
UNKNOWN-TYPE
INV.=245.26'
D
FFE=252.89
HANGAR
PAVED
GRASSED
A
B
C
OHU
18" PIPE
UNKNOWN TYPE
IN POOR CONDITION
INV.=244.20'
POA-1
FLIGHT LINE DRIVE
50' WIDE PER PLAN REF. 4A
CB 1002
RIM=249.51'
INV. OUT=245.57'
CB-1723
RIM=248.72'
CB 1725
RIM=249.04'
CB 1727
RIM=247.90'
INV. IN=244.69'
'ON AVENUE
Aab (HSG A)
Wa (HSG A/D)

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 INCH = 50 FT.

ROBERT A. MCSORLEY, PE # 8588

08/06/2024

REV.	BY	DATE	STATUS
B	RAM	08/06/2024	PLANS ISSUED FOR INTERNAL REVIEW
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SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Road, Suite 4A
South Portland, ME 04106
207-200-2100
South Portland, Bridgton, Sanford and Bath

PROPOSED CONDITIONS STORMWATER PLAN
OF:
AUBURN-LEWISTON MUNICIPAL AIRPORT HANGAR
80 WHITE HANGAR DRIVE
AUBURN, ME 04210
FOR:
FIELDING PROPERTIES, LLC
PO BOX 6951
SCARBOROUGH, ME 04074

DESIGNED	JSH
DRAWN	RGL
CHECKED	RAM
DATE	04-22-2024
SCALE	1" = 50'
PROJECT	230887

SHEET 2 OF 2

F:\Projects\2300\230887\DWG\Design\230887 SWP PROPOSED.dwg 8/8/2024 1:16 PM JAKE S. HUNNEWELL

230887 SWP PROPOSED.dwg, TAB:PROPOSED CONDITIONS STORMWATER PLAN

Section 13

Resources and Other Reviews

Maine DEP a.

Maine Historic Preservation Commission b.

Maine Natural Areas Program c.

Maine Department of Inland Fisheries & Wildlife d.

Wetland Field Review Report e.

FAA Notice of Proposed Construction or Alteration f.

SECTION 13: RESOURCES AND OTHER REVIEWS

a. We note that the project is part of an approved Maine Department of Environmental Protection (MDEP) Site Location of Development project (L-6634-39-A-X, June 25, 1980) that was subject to agency review and comment when permitted initially. The City of Auburn has delegated review of site and stormwater projects. MDEP will review a Maine Construction General Permit Notice of Intent (MCGP) for the additional impervious area proposed for the overall hangar project concurrently with the municipal review. MGCP is automatically accepted 14 days after submittal, and municipalities receive notice of acceptance directly from MDEP.

b. A letter of inquiry was sent to the Maine Historic Preservation Commission (MHPC) requesting site review and determination that the project will not affect structures or sites of historic, architectural, or archaeological significance as defined by the the National Historic Preservation Act. The response dated June 5, 2024, concludes that the project will not affect historic properties as defined by Section 106 of the National Historic Preservation Act, and further consultation is not required unless additional resources are discovered during project implementation. The response letter is enclosed in this section.

c. The Maine Natural Areas Program (MNAP) was contacted regarding a record of the presence or absence of rare or unique botanical features on the project site. The response letter dated May 14, 2024, states that there are no rare botanical features documented within the project site, and based on the information in their files, the landscape context of the hangar project, there is a low probability that rare or significant botanical features occur at this project location. Reference is made to the enclosed MNAP response in this section.

d. The Maine Department of Inland Fisheries and Wildlife (MDIFW) also received a site review request on behalf of the applicant, which is included in this section. The response dated August 8, 2024, indicates that essential or significant wildlife habitats and fisheries habitats will not be directly affected by the project. MDIFW also indicates that minimal impact to the documented Inland sandpiper is anticipated. Reference is made to the enclosed MDIFW response.

e. A Wetland Field Review Report prepared by Cole Peters, Professional Wetland Scientist of Sebago Technics, Inc., dated August 7, 2024, is enclosed in this section. The memo concludes that the proposed hangar project area is not subject to freshwater wetland regulatory jurisdiction.

f. A Federal Aviation Administration (FAA) Notice of Proposed Construction or Alteration (Form 7460-1) will be reviewed concurrently with the local review.

b

SEBAGO TECHNICS

RECEIVED
MAY 16 2024
By 0952-24

May 16, 2024
230887

Mr. Kirk F. Mohney, Director, and State Historic Preservation Officer
Maine Historic Preservation Commission
65 State House Station
Augusta, Maine 04333

Email submittal: mhpcprojectreview@maine.gov

Site Improvements: Auburn-Lewiston Municipal Airport Hangars
Aviation Avenue
Auburn, Maine 04210
Tax Map 143/Lot 7

Dear Mr. Mohney:

On behalf of our client, Sebago Technics respectfully requests a site-specific review for the proposed site improvements at the Auburn-Lewiston Municipal Airport in the City of Auburn. The applicant intends to construct four (4) new 6,400 square-foot (overall 25,600 SF) hangers in close proximity to the existing hangar at the intersection of Flight Line Drive and Aviation Avenue. The site is located adjacent to the Lewiston Junction Road/Kittyhawk Avenue commercial development area. Residential development is not located in close proximity to the proposed hangar development area interior to the overall airport parcel. Throughout the years, the site has been improved with structures, including lease space, stormwater management features, and airport-associated development and infrastructure. Other proposed improvements include extending utilities to the proposed new buildings, additional impervious areas, and stormwater management features. The hangar project will be privately funded without federal nexus.

A Maine DEP Site Location of Development Approval is associated with the overall airport, and MHPC has subsequent projects on the overall property since approval in 1980. We understand that MHPC has reviewed numerous projects since the initial approval order #L-6634-39-A-X in June 1980. We know Phase I and Phase II archaeological work was performed on the airport property in the past, and the Native American archaeological site, 23.39 ME, was identified at that time.

We ask that you please review the available material at your earliest convenience and let me know your findings. If you have any questions or require additional information, please do not hesitate to contact me at snichols@sebagotechnics.com or directly by phone at (207) 200-2120. I look forward to hearing from you.

Sincerely,
SEBAGO TECHNICS, INC.

Stefanie Nichols

Stefanie Nichols
Permitting Specialist/Project Coordinator

enc. Location Map, Aerial Image

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

Kirk F. Mohney

Kirk F. Mohney,
State Historic Preservation Officer
Maine Historic Preservation Commission

6/5/24
Date

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

May 14, 2024

Stefanie Nichols
Sebago Technics
75 John Roberts Road, Suite 4A
South Portland, ME 04106

Via email: snichols@sebagotechnics.com

Re: Rare and exemplary botanical features in proximity to: #230887, Auburn-Lewiston Municipal Airport Hangars, Aviation Avenue, Auburn, Maine

Dear Stefanie Nichols:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received May 14, 2024 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Auburn, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. Based on the information in our files and the landscape context of this project, there is a low probability that rare or significant botanical features occur at this project location.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
90 BLOSSOM LANE, DEERING BUILDING

PHONE: (207) 287-8044
WWW.MAINE.GOV/DACF/MNAP

The Maine Natural Areas Program has instituted a fee structure of $75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for $150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Lisa St. Hilaire

Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
353 WATER STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

JUDITH CAMUSO
COMMISSIONER

August 08, 2024

Stefanie Nichols
Sebago Technics
75 John Roberts Road, Suite 1A
Portland, ME 04101

RE: Information Request - Auburn, Auburn-Lewiston Airport Project (ERID 2789)

Dear Stefanie:

Per your request, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information sources for known locations of Endangered, Threatened, and Special Concern (Rare) species; designated Essential and Significant Wildlife Habitats; inland fisheries and aquatic habitats; and other protected natural resource concerns within the vicinity of the ***Auburn, Auburn-Lewiston Airport*** project, pursuant to MDIFW's authority.

Our Department has not mapped any Essential or Significant Wildlife Habitats or inland fisheries habitats that would be directly affected by your project.

ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES

Upland Sandpiper

Upland sandpipers, a State Threatened species, have been historically documented in the vicinity of the project area. However, based on the project location, minimal impacts are anticipated.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance, we recommend additional consultation with the municipality, and other state resource and regulatory agencies including the Maine Natural Areas Program and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance. For information on federally listed species, contact the U.S. Fish and Wildlife Service's Maine Field Office (207-469-7300, mainefieldoffice@fws.gov).

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

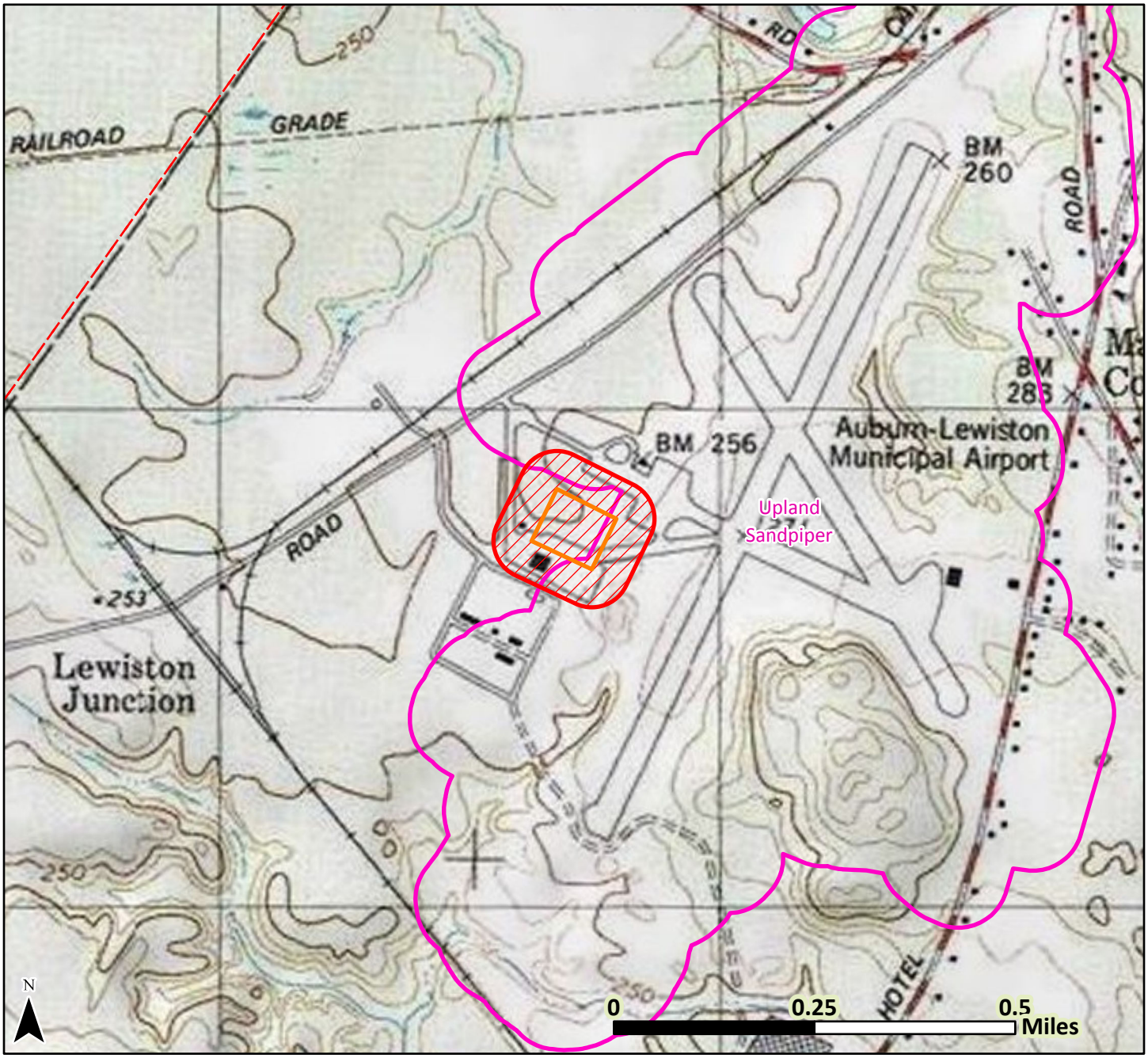
Best regards,

Ciara Wentworth
Resource Biologist

Maine Department of Inland Fisheries and Wildlife
Project Area Review of Fish and Wildlife Observations and Priority Habitats

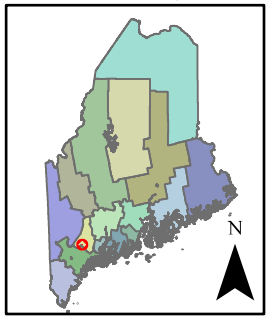
Auburn, Auburn-Lewiston Airport project

Project ID 2789_9428



County Boundary
Township Boundary
Project Footprint (Polygon)
Search Area
E, T, & SC Species

Date: 5/21/2024
Projection:
UTM Zone 19N, NAD83



Legend only lists resources visible in the map; see response letter for all resources that were evaluated.

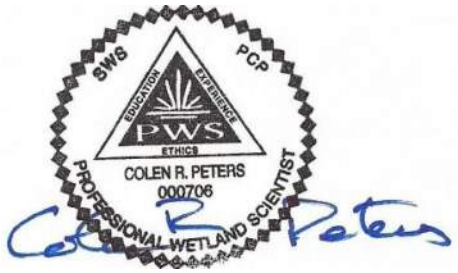
Field Review Report

To: **Robert McSorley, P.E., Project Manager**

From: **Cole Peters, PWS**

Date: **August 7, 2024**

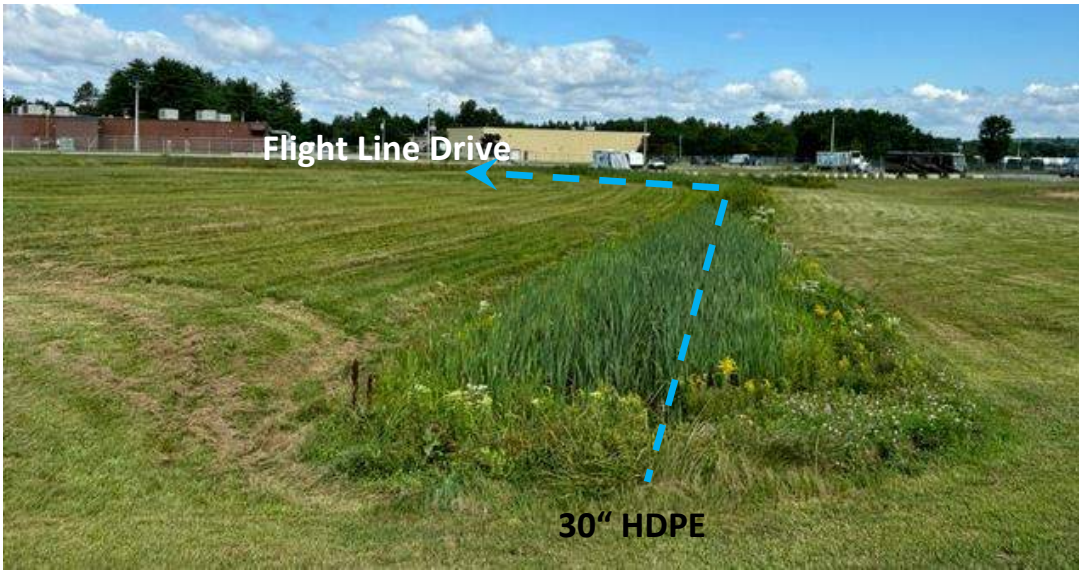
Project: 230887 – Auburn-Lewiston Airport Hangers, Auburn



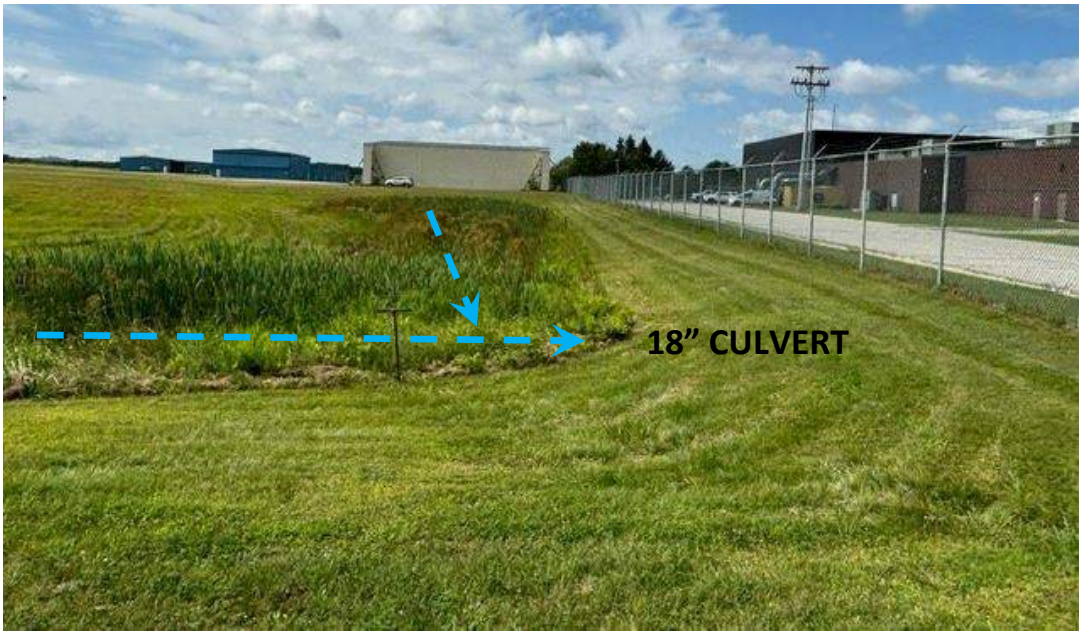
On August 1, 2024, I conducted a field review at the Auburn-Lewiston Airport in the area where four new hangers are to constructed between Fight Line Drive and the aircraft tie down area to the east (Figure 1). The purpose of the field review was to determine whether jurisdictional freshwater wetlands occur in the area that receives drainage from a 30-inch HDPE outfall from a catch basin network for the tie down area (Photos 1 and 2) and adjoining airfield, that then discharges through an 18-inch pipe to the opposite side (west) of Flight Drive (Photos 3, 4).

Herbaceous vegetation including narrow-leaf cattail (*Typha angustifolia*), wool grass (*Scirpus cyperinus*), jewel weed (*Impatiens capensis*), and beaked sedge (*Carex utriculata*), along with occasional scattered meadowsweet (*Spirea latifolia*), and small willow (*Salix* spp.) shrubs and invasive purple loosestrife (*Lythrum salicaria*) occur along the drainage ditch and throughout an unmown area along Flight Line Drive where surrounding slopes have been graded to direct surface drainage toward the 18-inch culvert. These plant species are hydrophytes adapted to wet conditions and can therefore be indicative of wetlands. However. many of these plants, particularly cattail, establish from small windblown seeds that can readily colonize bare soil in damp areas. Based on the uniformity of surrounding slopes graded or sculpted toward the culvert under Flight Line Drive, which is substantially smaller in diameter than the outfall that discharges tarmac drainage into the excavated ditch, the flat broader area to the south that adjoins the ditch appears to have been constructed to detain surface flow for drainage management and has been opportunistically colonized by wetland vegetation. As a result of this origin, role, location, and distance upstream of other wetlands the ditch and related drainage management in the area reviewed would not be subject to freshwater wetland regulatory jurisdiction.

Photograph 1: Westward from aircraft tie down area where the tarmac is drained by a network of catch basins that outfall into a ditch leading to culvert (arrow) crossing under Flight Line Drive.



Photograph 2: Downstream view from 30” HDPE culvert catch basin outfall along the drainage ditch leading to an 18” culvert beneath Flight Line Drive.



Photograph 3: Southward view where the drainage ditch flows into an 18” culvert under Flight Line Drive. Surrounding slopes have been graded toward the culvert to also capture drainage from the south.

Photograph 4: Northeast overview of the area along Flight Line Drive where surrounding slopes have been graded toward the 18” culvert to capture drainage from the south.

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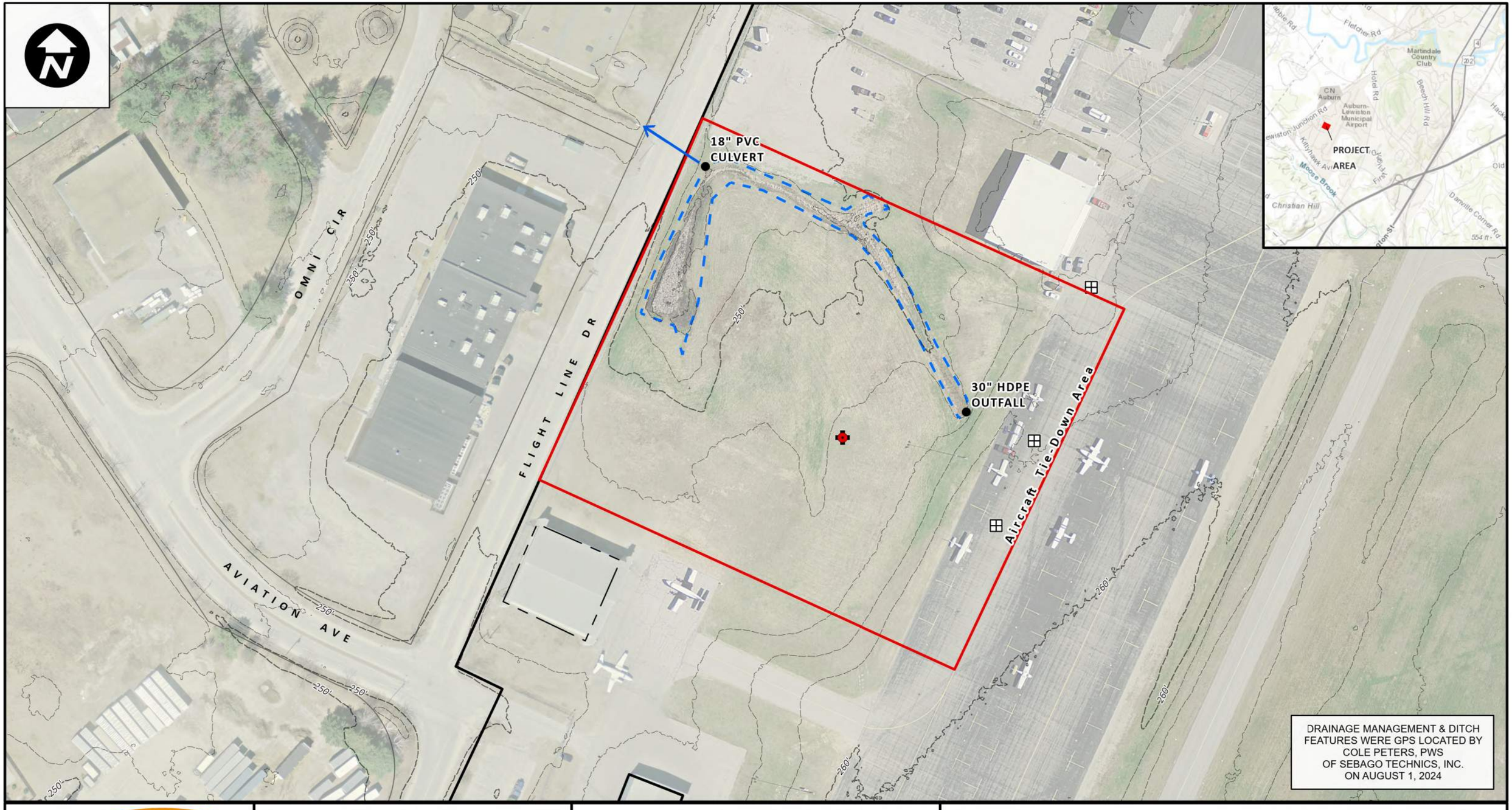


DRAINAGE MANAGEMENT & DITCH FEATURES WERE GPS LOCATED BY COLE PETERS, PWS OF SEBAGO TECHNICS, INC. ON AUGUST 1, 2024

SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

0 100 200 300
Feet
1" = 100' when printed at 11 x 17

INFORMATION: MAINE GEOLIBRARY
CITY OF AUBURN, ME
2020 USGS LIDAR TOPOGRAPHY
2018 ORTHOREGIONAL IMAGERY

THIS IS NOT A BOUNDARY SURVEY.
DRAINAGE FEATURES WERE DELINEATED
USING GPS TECHNOLOGY CAPABLE OF SUB-METER ACCURACY.

FIGURE 1: NATURAL RESOURCES MAP

AUBURN-LEWISTON AIRPORT

LOCATION:
FLIGHTLINE DRIVE
AUBURN, MAINE

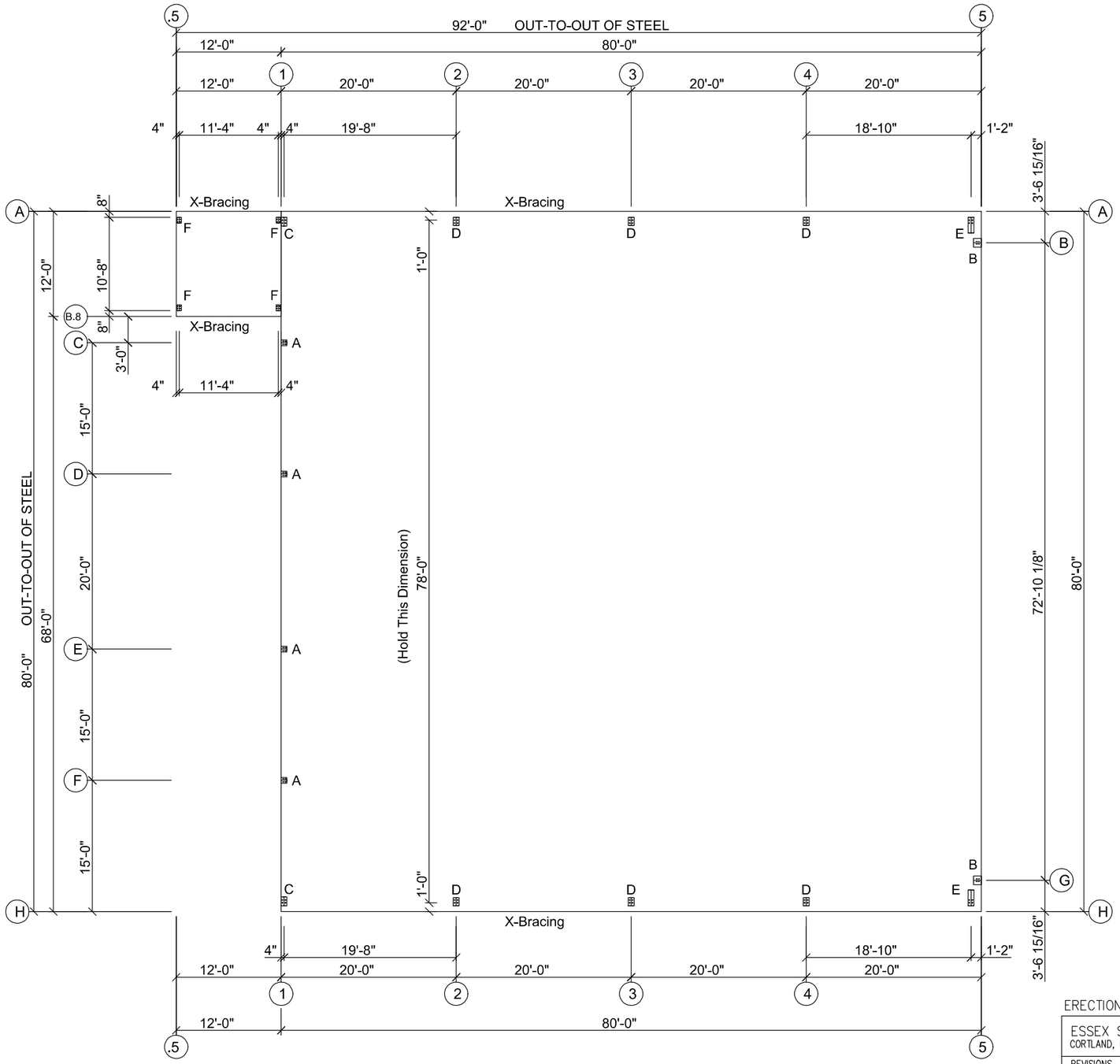
DATE: 8/7/2024
PROJECT NUMBER: 230887

230887.aprx

- AREA OF INTEREST (AOI)
- EXISTING HANGAR
- AUBURN-LEWISTON AIRPORT
- AUBURN PARCELS
- DRAINAGE MANAGEMENT & DITCH
- CULVERT
- CATCHBASIN
- HYDRANT
- 2' CONTOUR
- 10' CONTOUR

Map Projection : NAD 1983 StatePlane Maine West FIPS 1802 Feet

APPENDIX



ERECTION REQUIRES MINOR ADJUSTMENTS

ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

TITLE: ANCHOR BOLT LAYOUT
SHEET: 1

DRAWN BY: JCK
DATE: 7/11/24
SCALE: D.N.S.

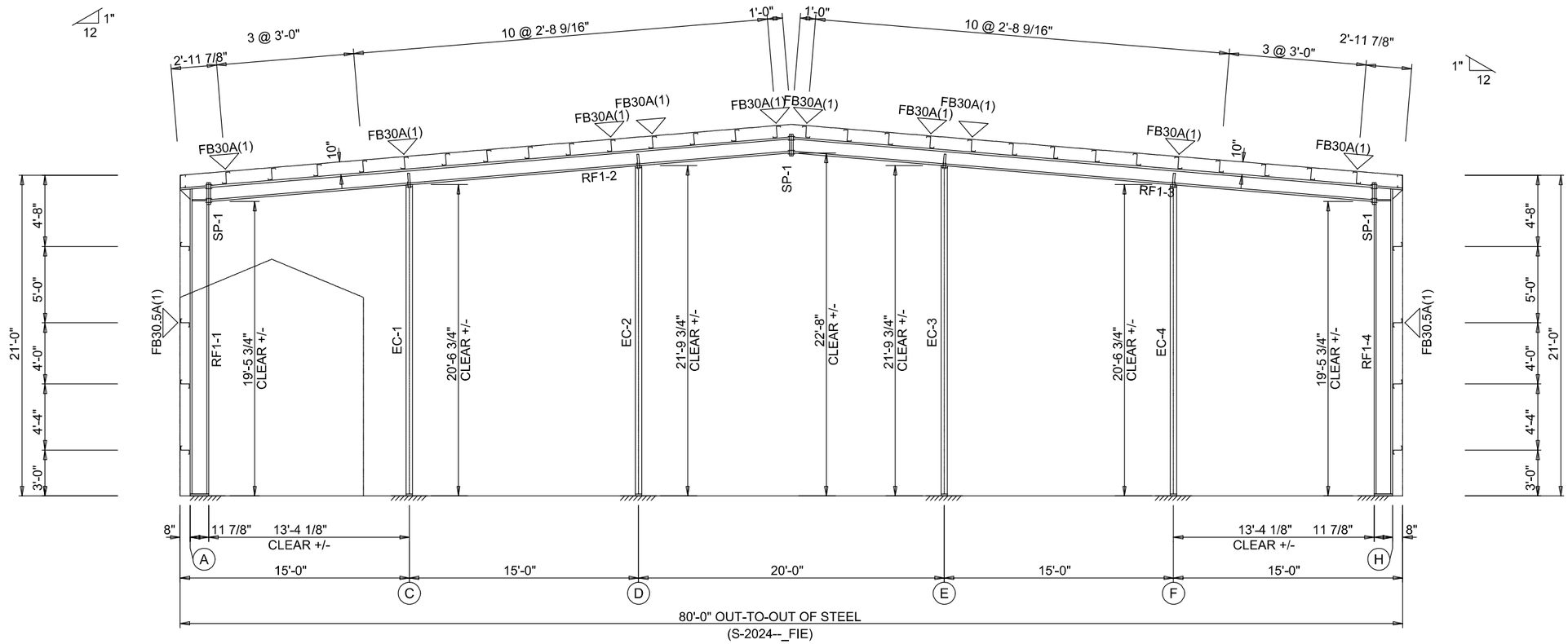
PRELIMINARY

SPLICE BOLT TABLE						
Mark	Qty Top	Bot	Int	Type	Dia	Length
SP-1	4	4	0	A325	0.750	2.00

CAP PLATE BOLTS				
Mark	Qty	Type	Dia	Length
EC-1	4	A325	0.750	2.00
EC-2	4	A325	0.750	2.00
EC-3	4	A325	0.750	2.00
EC-4	4	A325	0.750	2.00

▽FLANGE BRACES: FBxx (1 or 2)
xx=length(in)
(1) One Side; (2) Two Sides
A - FB2X1/8

MEMBER SIZE TABLE			
MARK	MEMBER	LENGTH	WEIGHT
RF1-1	W12X14	20'-2 5/8"	341
RF1-2	W10X12	38'-5 11/16"	560
RF1-3	W10X12	38'-5 11/16"	560
RF1-4	W12X14	20'-2 5/8"	341
EC-1	W8X10	20'-6 7/8"	237
EC-2	W8X10	21'-9 7/8"	252
EC-3	W8X10	21'-9 7/8"	252
EC-4	W8X10	20'-6 7/8"	237



RIGID FRAME ELEVATION: FRAME LINE 1

ERECTION REQUIRES MINOR ADJUSTMENTS

ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

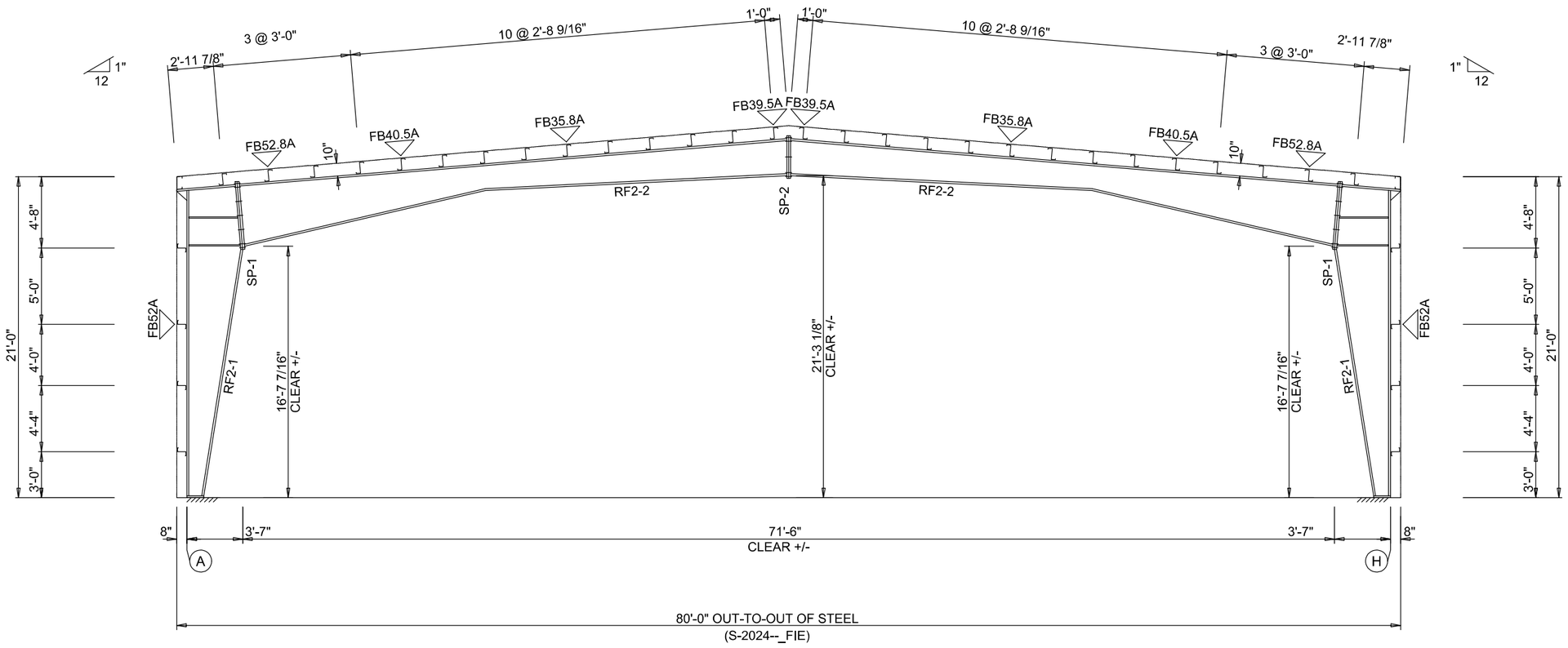
TITLE: FRAME CROSS SECTION
SHEET: 3
DRAWN BY: JCK
DATE: 7/11/24
SCALE: D.N.S.

PRELIMINARY

SPLICE BOLT TABLE						
Mark	Qty Top	Bot	Int	Type	Dia	Length
SP-1	4	4	6	A325	1.000	3.25
SP-2	4	4	2	A325	0.875	2.50

▽FLANGE BRACES: FBxx (1 or 2)
xx=length(in)
(1) One Side; (2) Two Sides
A - FB2X1/8

MEMBER TABLE							
Mark	Weight	Length	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF2-1	1026	20'-2 5/8"	10.0/42.0 42.0/37.8	0.250 0.250	16'-2 13/16" 4'-2 3/16"	6 x 1/4" x 18'-1 13/16" 6 x 1/4" x 2'-0" 6 x 5/16" x 3'-9 15/16"	6 x 3/4" x 16'-5 5/16"
RF2-2	1588	36'-2 1/2"	46.0/18.0 18.0/26.0	0.313 0.188	16'-0 13/16" 20'-0"	6 x 5/16" x 15'-8 13/16" 6 x 1/2" x 18'-4" 6 x 1/2" x 2'-0"	6 x 3/8" x 16'-2 13/16" 6 x 3/8" x 19'-9 15/16"



RIGID FRAME ELEVATION: FRAME LINE 2 3

ERECTION REQUIRES MINOR ADJUSTMENTS

ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

TITLE: FRAME CROSS SECTION
SHEET: 3A

DRAWN BY: JCK
DATE: 7/11/24
SCALE: D.N.S.

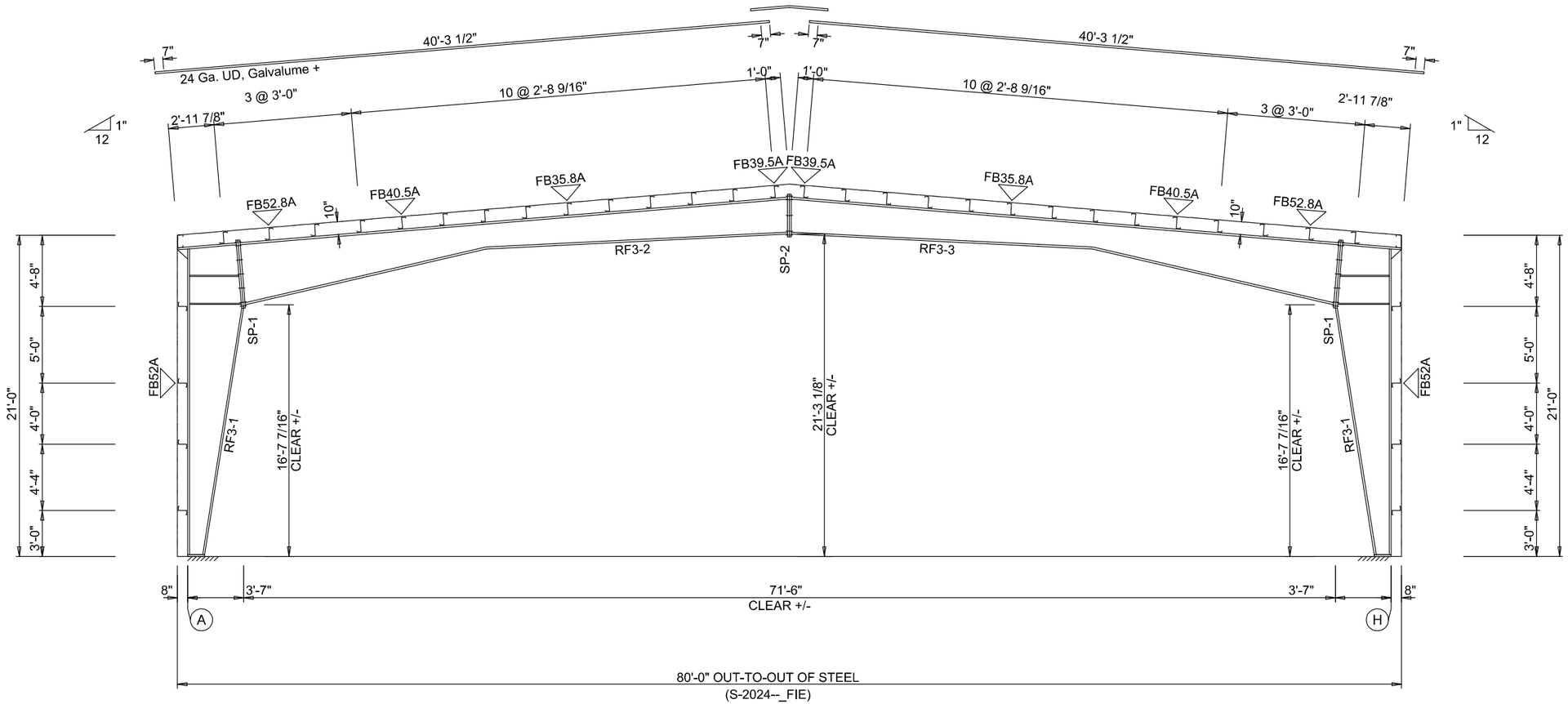
PRELIMINARY

SPLICE BOLT TABLE						
Mark	Qty Top	Bot	Int	Type	Dia	Length
SP-1	4	4	6	A325	1.000	3.25
SP-2	4	4	2	A325	0.875	2.50

▽FLANGE BRACES: FBxx (1 or 2)
xx=length(in)
(1) One Side; (2) Two Sides

A - FB2X1/8

MEMBER TABLE							
Mark	Weight	Length	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF3-1	1026	20'-2 5/8"	10.0/42.0 42.0/37.8	0.250 0.250	16'-2 13/16" 4'-2 3/16"	6 x 1/4" x 18'-1 13/16" 6 x 1/4" x 2'-0" 6 x 5/16" x 3'-9 15/16"	6 x 3/4" x 16'-5 5/16"
RF3-2	1591	36'-2 1/2"	46.0/18.0 18.0/26.0	0.313 0.188	16'-0 13/16" 20'-0"	6 x 5/16" x 15'-8 13/16" 6 x 1/2" x 18'-4" 6 x 1/2" x 2'-0"	6 x 3/8" x 16'-2 13/16" 6 x 3/8" x 19'-9 15/16"
RF3-3	1591	36'-2 1/2"	26.0/18.0 18.0/46.0	0.188 0.313	20'-0" 16'-0 13/16"	6 x 1/2" x 2'-0" 6 x 1/2" x 18'-4" 6 x 5/16" x 15'-8 13/16"	6 x 3/8" x 19'-9 15/16" 6 x 3/8" x 16'-2 13/16"



RIGID FRAME ELEVATION: FRAME LINE 4

ERECTION REQUIRES MINOR ADJUSTMENTS

ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

TITLE: FRAME CROSS SECTION

SHEET: 3B

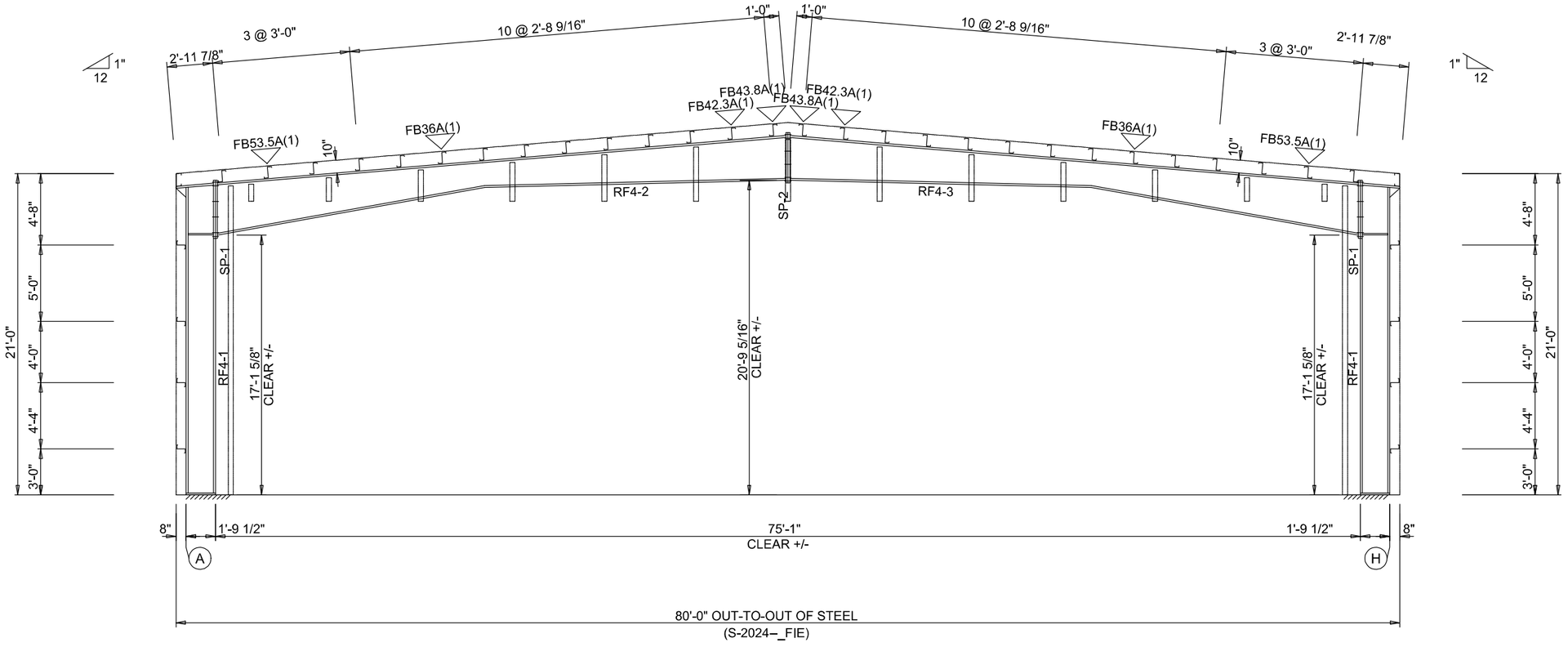
DRAWN BY: JCK | DATE: 7/11/24 | SCALE: D.N.S.

PRELIMINARY

SPLICE BOLT TABLE						
	Qty					
Mark	Top	Bot	Int	Type	Dia	Length
SP-1	4	4	4	A325	1.000	3.25
SP-2	4	4	4	A325	0.750	2.00

▽FLANGE BRACES: FBxx (1 or 2)
xx=length(in)
(1) One Side; (2) Two Sides
A - FB2X1/8

MEMBER TABLE							
			Web Depth	Web Plate		Outside Flange	Inside Flange
Mark	Weight	Length	Start/End	Thick	Length	W x Thk x Length	W x Thk x Length
RF4-1	1256	20'-2 5/8"	20.0/20.0	0.250	16'-3 9/16"	8 x 1/2" x 18'-1 7/8"	8 x 1" x 18'-7 3/4"
			20.0/20.0	0.313	4'-0"	8 x 1/2" x 2'-0"	8 x 1" x 2'-0"
						6 x 1/4" x 2'-4 5/16"	
RF4-2	1518	37'-8 1/16"	38.0/18.0	0.250	17'-9 3/4"	6 x 1/4" x 17'-2 9/16"	6 x 1/2" x 17'-10 5/8"
			18.0/32.0	0.188	20'-0"	6 x 5/16" x 18'-4"	6 x 1/4" x 19'-9 3/4"
						6 x 5/16" x 2'-0"	
RF4-3	1518	37'-8 1/16"	32.0/18.0	0.188	20'-0"	6 x 5/16" x 2'-0"	6 x 1/4" x 19'-9 3/4"
			18.0/38.0	0,250	17'-9 3/4"	6 x 5/16" x 18'-4"	6 x 1/2" x 17'-10 5/8"
						6 x 1/4" x 17'-2 9/16"	



RIGID FRAME ELEVATION: FRAME LINE 5

ERECTION REQUIRES MINOR ADJUSTMENTS

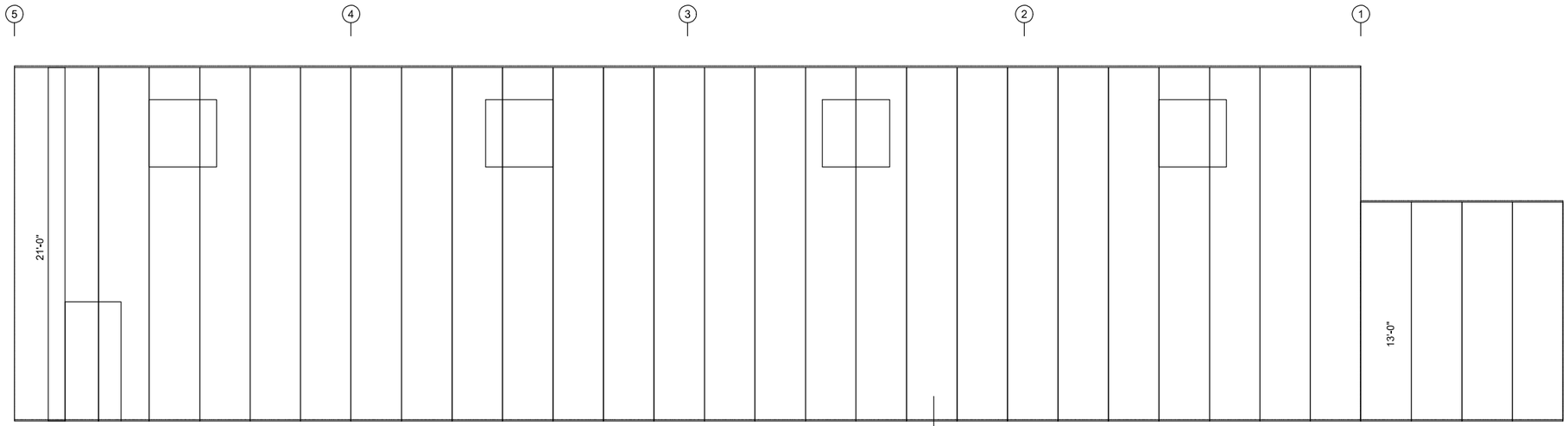
ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

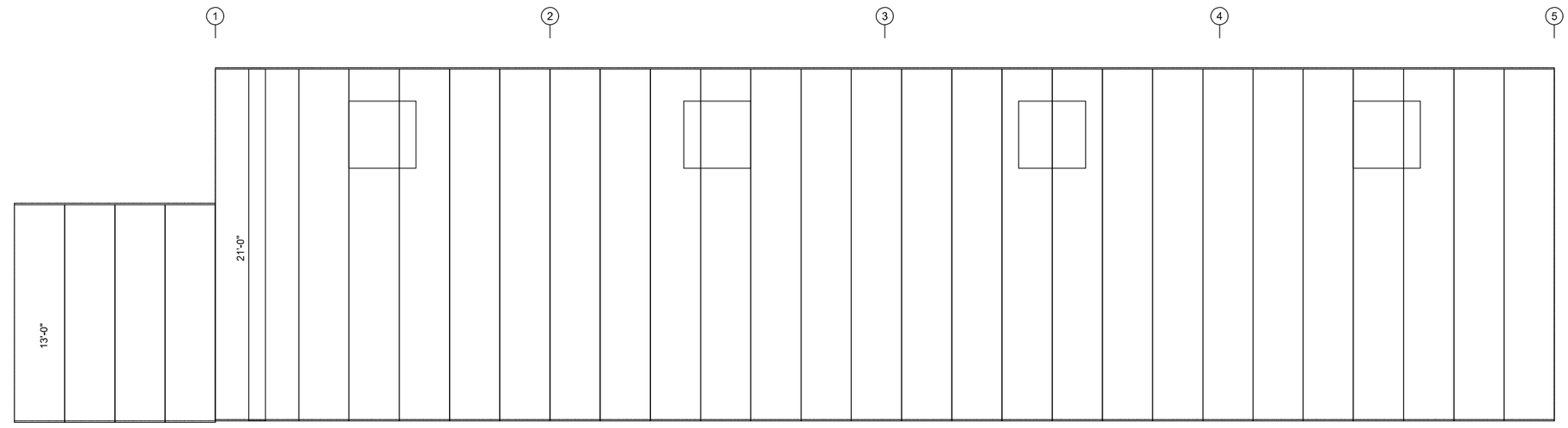
TITLE: FRAME CROSS SECTION
SHEET: 3C
DRAWN BY: JCK
DATE: 7/11/24
SCALE: D.N.S.

PRELIMINARY



SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 Ga. RPR - NEED SIG 200
INSULATION: R-30 OPTI-LINER SYSTEM



FRAME LINE B.8

SIDEWALL SHEETING & TRIM: FRAME LINE H

PANELS: 26 Ga. RPR - NEED SIG 200
INSULATION: R-30 OPTI-LINER SYSTEM

ERECTION REQUIRES MINOR ADJUSTMENTS

PRELIMINARY

ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

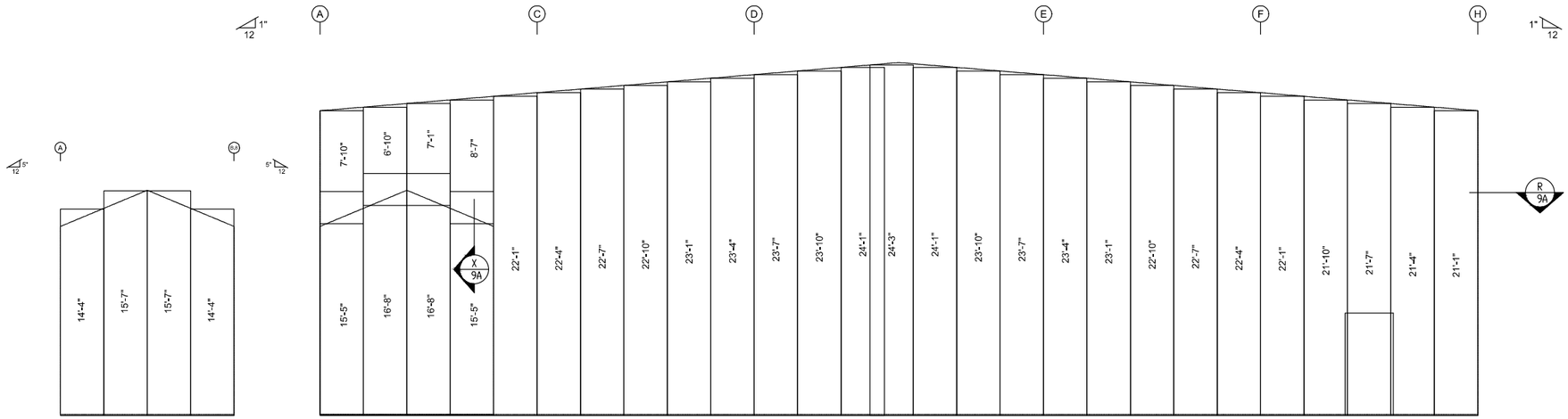
REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

TITLE: WALL PANEL AND INSULATION PLAN

SHEET: 7

DRAWN BY: JCK | DATE: 7/11/24 | SCALE: D.N.S.

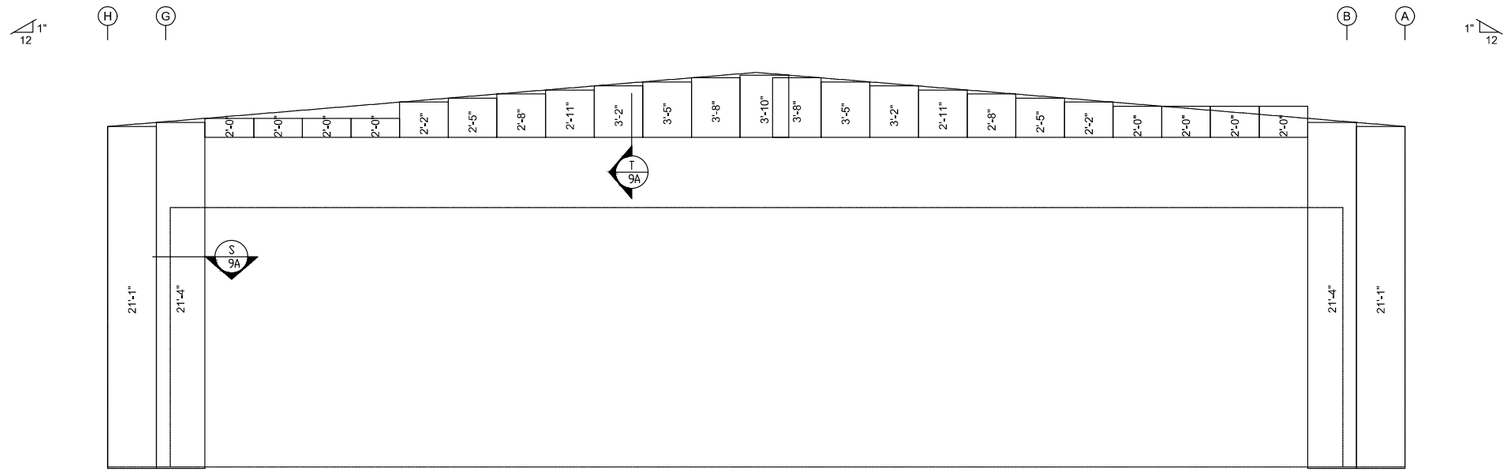


ENDWALL SHEETING & TRIM: FRAME LINE .5

PANELS: 26 Ga, RPR - NEED SIG 200
INSULATION: R-30 OPTI-LINER SYSTEM

ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga, RPR - NEED SIG 200
INSULATION: R-30 OPTI-LINER SYSTEM



ENDWALL SHEETING & TRIM: FRAME LINE 5

PANELS: 26 Ga. RPR - NEED SIG 200
INSULATION: R-30 OPTI-LINER SYSTEM

DOOR SHEETING

PANELS: 26 Ga. RPR
NEED SIG 200

ERECTION REQUIRES MINOR ADJUSTMENTS

PRELIMINARY

ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

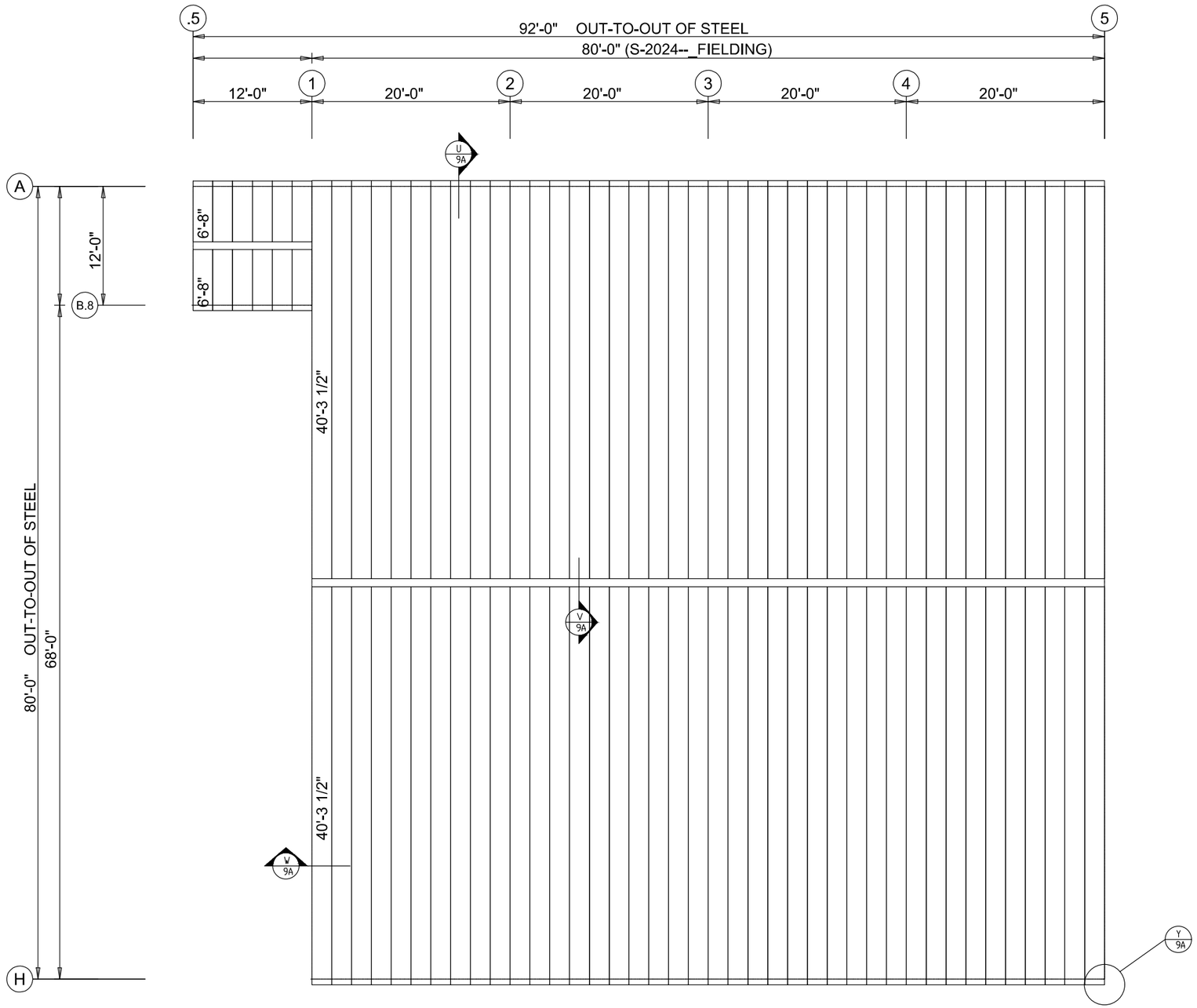
REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

TITLE: WALL PANEL AND INSULATION PLAN

SHEET: 7A

DRAWN BY: JCK | DATE: 7/11/24 | SCALE: D.N.S.



ROOF SHEETING PLAN

PANELS: 24 Ga. UD - Galvalume +
INSULATION: R-38 OPTI-LINER SYSTEM

ERECTION REQUIRES MINOR ADJUSTMENTS

PRELIMINARY

ESSEX STRUCTURAL STEEL CO., INC.
CORTLAND, NEW YORK 13045

REVISIONS

PROJECT: FIELDING JOB
80 Airport Drive
AUBURN, ME 04210
CONTRACTOR: MARC BLAIS GENERAL CONTRACTING
PROJECT NO.: S-202497

TITLE: ROOF PANEL AND INSULATION PLAN

SHEET: 8

DRAWN BY: JCK | DATE: 7/11/24 | SCALE: D.N.S.