



# **TOWN OF WINDHAM MAJOR SITE PLAN AND SUBDIVISION AMENDMENT APPLICATION**

Prepared for:

**Franklin Drive Subdivision  
Amended Subdivision for  
Multi-Family & Solar Development  
Franklin Drive, Windham, ME 04062**

Prepared for:

**New Gen Estates, LLC  
50 Maine Mall Road  
South Portland, ME 04106**

Prepared by:

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

**June 2025**

**230411**

**Franklin Drive Subdivision**  
**Major Site Plan & Subdivision Amendment Application**  
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June 23, 2025  
230411

Steve Puleo, *Planning Director*  
Amanda Lessard, *Senior Planner/Project Manager*  
Town of Windham, Planning Department  
8 School Rd., Windham ME 04062

**RE: Major Site Plan & Subdivision Amendment Application**  
**Franklin Drive, Windham ME; Map 18, Lot 26-2-A**

Dear Steve, Amanda, & Members of the Planning Board,

On behalf of New Gen Estates, LLC, Sebago Technics, Inc., is pleased to submit this letter, the enclosed application materials, and supplementary plans for a proposed Major Site Plan and Subdivision Amendment Application. This application is for a proposed multi-family residential development and large-scale solar energy system development on a lot located at the terminus of Franklin Drive in the Town of Windham, and can further be identified on the Town's Tax Map 18 as Lot 26-2-A.

**Existing Conditions:** The property subject to this application is an undeveloped tract of land containing forested areas and freshwater wetlands. The site is approximately 38.59 acres in size, and is wholly zoned under the Commercial 1 (C-1) zoning district classification. The site is largely surrounded to the north and west by undeveloped, forested areas and wetlands, residential development to the east, and commercial development including Home Depot and Hannaford to the south. Adjacent zoning reflects these uses, as the site is bound by Farm (F) zoning to the north, east, and west, and Commercial 1 (C-1) to the south.

**Project Description:** There are two (2) primary components of this application, consisting of a proposed multi-family development and solar energy system component. The multi-family development will contain a total of 306 units, with a mix of 1-bedroom and 2-bedroom apartments. This development will occur on "Lot 2", as identified within the subdivision, which is approximately 7.88 acres in size. The solar development qualifies as a large-scale solar energy system under the Town of Windham's definition in the Land Use Ordinance. The development of the solar energy system will be on the open space lot, "Lot 3" which is approximately 23.94 acres in size. Project work also associated with this application includes the construction of parking areas, internal vehicular drive aisles, pedestrian pathways, subsurface stormwater treatment measures, and the construction of an adjacent public trail system. The project will not impact any of the on-site wetlands and will obtain a Maine Department of Environmental Protection (MDEP) Natural Resources Protection Act (NRPA) Permit-by-Rule for minimal impacts to the Critical Terrestrial Habitat (CTB) of a vernal pool in the open space tract.

**Stormwater:** Stormwater management design has been prepared for the proposed projects of the commercial parcel (“Lot 1”), and the multi-family parcel (“Lot 2”). Most of the site is located within the Sebago Lake Watershed, which is listed in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations as a Lake Most at Risk from new development, but is not severely blooming. The project’s overall stormwater design has been completed to address the Basic, General, Phosphorous, and Flooding Standards of Chapter 500 of the MDEP regulations.

**Utilities:** The proposed multi-family component of this application will be serviced by public water and sewer from the Portland Water District (PWD) by the extension of Franklin Drive. Electrical service will be brought into the multi-family site via underground connections also provided under the Franklin Drive extension. The solar component of this application includes the connection to existing electrical service by Central Maine Power (CMP) via the interconnect as detailed within the enclosed Plan Set.

We appreciate your attention to this project, and look forward to its successful completion. Upon your review, please contact me at [rmcsorley@sebagotechnics.com](mailto:rmcsorley@sebagotechnics.com) or by phone at (207) 200-2074 if you have any questions or require additional information. Thank you for your time and consideration.

Sincerely,

SEBAGO TECHNICS, INC.



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

# **Section 1**

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## **Application Forms & Agent Authorization**



## MAJOR SITE PLAN REVIEW APPLICATION

<b>FEES FOR MAJOR SITE PLAN REVIEW</b>		<b>APPLICATION FEE:</b> (No Bldg.) (W/Bldg.: \$25/1,000 SF up to 5,000 SF) <b>REVIEW ESCROW:</b> (GFA) 2,000 SF - 5,000 SF = \$2,000 5,000 SF - 15,000 SF = \$3,000 15,000 SF - 35,000 SF = \$4,000 Over 35,000 SF = \$5,000 No Building = \$2,000		<input type="checkbox"/> \$1,3000.00 <input type="checkbox"/> \$_____ <input type="checkbox"/> \$_____ <input type="checkbox"/> \$_____ <input type="checkbox"/> \$_____ <input checked="" type="checkbox"/> <b>\$ 5,000.00</b> <input type="checkbox"/> \$_____		<b>TOTAL AMOUNT PAID:</b> <b>\$6,300.00 Total</b> *to be paid for Final Site <b>DATE:</b> <u>06/23/2025</u>		<i>Office Use:</i>		
		<input type="checkbox"/> Amended Site Plan – (Each Revision)		AMENDED APPLICATION FEE: AMENDED REVIEW ESCROW:		<input type="checkbox"/> \$350.00 <input type="checkbox"/> \$250.00				<i>Office Stamp:</i>
<b>PROPERTY DESCRIPTION</b>	Parcel Information:	Map(s):	18		Lot(s):	26-2-A	Zoning District(s):	Commercial 1 (C-1)	Size of the Parcel in SF:	
	Total Disturbance. >1Ac	X	Y	<input type="checkbox"/>	N	Estimated Building SF:	41,600 sf. (MF footprint)	IF NO BUILDING; Estimated SF of Total Development:		
	Physical Address:	Franklin Drive, Windham					Watershed:	Sebago Lake		
<b>PROPERTY OWNER'S INFORMATION</b>	Name:	New Gen Estates, LLC c/o Suresh Gali					Name of the Business:	New Gen Estates, LLC		
	Phone:	(207) 371-0070					Mailing Address:	675 Main Street		
	Fax or Cell:							South Portland, ME 04106		
	Email:	sgali@nghmllc.com								
<b>APPLICANT'S INFORMATION (IF DIFFERENT FROM OWNER)</b>	Name:	Same As Property Owner					Name of Business:			
	Phone						Mailing Address:			
	Fax or Cell									
	Email:									
<b>APPLICANT'S AGENT INFORMATION</b>	Name:	Robert A. McSorley, PE					Name of Business:	Sebago Technics, Inc.		
	Phone:	(207) 200-2074					Mailing Address:	75 John Roberts Rd. Ste. 4A		
	Fax or Cell:	(207) 856-2206						South Portland, ME 04106		
	Email:	rmcsorley@sebagotechnics.com								
<b>PROJECT INFORMATION</b>	Existing Land Use ( <i>Use extra paper, if necessary</i> ):  Please see the Cover Letter attached with this application for information regarding the proposed changes to the approved subdivision.									
	Provide a narrative description of the Proposed Project ( <i>Use extra paper, if necessary</i> ):  Please see the Cover Letter attached with this application for information regarding the proposed project.									
	Provide a narrative description of construction constraints (wetlands, shoreland zone, flood plain, non-conformance, etc.):  Please see the Cover Letter attached with this application for a description of development and construction constraints.									



## MAJOR SITE PLAN REVIEW APPLICATION REQUIREMENTS

### Section 120-811 of the Land Use Ordinance

The submission shall contain five (5) copies of the following information, including full plan sets. Along with one (1) electronic version of the entire submission, unless waiver of a submission requirement is granted, and one (1) complete plan set.

<p><b>The Major Plan document/map:</b></p> <p>A) Plan size: 24" X 36" B) Plan Scale: No greater 1":100' C) Title block: Applicant's name, project name, and address</p> <ul style="list-style-type: none"> <li>• Name of the preparer of plans with professional information</li> <li>• Parcel's tax map identification (map and lot) and street address, if available</li> </ul>	<ul style="list-style-type: none"> <li>• Complete application submission deadline: three (3) weeks (21-days) before the desired Planning Board meeting.             <ul style="list-style-type: none"> <li>- Five copies of the application and plans</li> <li>- Application Payment and Review Escrow</li> </ul> </li> <li>• A pre-submission meeting with the Town staff is required.</li> <li>• Contact information:             <p>Windham Planning Department (207) 894-5960, ext. 2 Steve Puleo, Town Planner <a href="mailto:sipuleo@windhammaine.us">sipuleo@windhammaine.us</a> Amanda Lessard, Planning Director <a href="mailto:allessard@windhammaine.us">allessard@windhammaine.us</a></p> </li> </ul>
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## APPLICANT/PLANNER'S CHECKLIST FOR MAJOR SITE PLAN REVIEW

<u>SUBMITTALS THAT THE TOWN PLANNER DEEMS SUFFICIENTLY LACKING IN CONTENT WILL NOT BE SCHEDULED FOR PLANNING BOARD REVIEW.</u>	<u>IT IS THE RESPONSIBILITY OF THE APPLICANT TO PRESENT A CLEAR UNDERSTANDING OF THE PROJECT.</u>
<p><i>The following checklist includes items generally required for development by the Town of Windham's LAND USE ORDINANCE, Sections 120-811, 120-812, 120-813 &amp; 120-814. Due to projects specifics, the applicant is required to provide a complete and accurate set of plans, reports, and supporting documentation (as listed in the checklist below).</i></p>	

Column #1.	Column #2.				
1. Final Plan -Major Site Plan: Submission Requirements	Applicant	Staff	Plan Requirements – Existing Conditions (Continued):	Applicant	Staff
A. Completed Major Site Plan Application form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	vii. Zoning classification(s), including overlay and/or subdistricts, of the property and the location of zoning district boundaries if the property is located in 2 or more districts or abuts a different district	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Evidence of Payment of application & escrow fees	<input checked="" type="checkbox"/>	<input type="checkbox"/>	viii. Bearings and lengths of all property lines of the property to be developed, and the stamp of the surveyor that performed the survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Written information – submitted in a <b>bounded and tabbed</b> report			ix. Existing topography of the site at 2-foot contour intervals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1. A narrative describing the proposed use or activity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	x. Location and size of any existing sewer and water mains, culverts and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property and on abutting streets or land that may serve the development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Name, address, & phone number of record owner, and applicant if different (see Agent Autorotation form).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xi. Location, names, and present widths of existing public and/or private streets and rights-of-way within or adjacent to the proposed development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Names and addresses of all abutting property owners	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xii. Location, dimensions, and ground floor elevation of all existing buildings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Documentation demonstrating right, title, or interest in the property	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xiii. Location and dimensions of existing driveways, parking and loading areas, walkways, and sidewalks on or adjacent to the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Copies of existing proposed covenants or deed restrictions.	<input type="checkbox"/>	<input type="checkbox"/>	xiv. Location of intersecting roads or driveways within 200 feet of the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Copies of existing or proposed easements on the property.	<input type="checkbox"/>	<input type="checkbox"/>	xv. Location of the following		
7. Name, registration number, and seal of the licensed professional who prepared the plan, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Open drainage courses	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Evidence of applicant's technical capability to carry out the project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			c. Stone walls	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Assessment of the adequacy of any existing sewer and water mains, culverts and drains, on-site sewage disposal systems, wells, underground tanks or installations, and power and telephone lines and poles on the property.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Graveyards	<input type="checkbox"/>	<input checked="" type="checkbox"/>



Continued from Column #1. (Page 2)			Continued from Column #2. (Page 2)		
10. Estimated demands for water and sewage disposal.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Fences	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			f. Stands of trees or treeline, and	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			g. Other important or unique natural areas and site features, including but not limited to, floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archaeological resources.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Provisions for handling all solid wastes, including hazardous and special wastes.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xvi. Direction of existing surface water drainage across the site	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Detail sheets of proposed light fixtures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xvii. Location, front view, dimensions, & lighting of existing signs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Listing of proposed trees or shrubs to be used for landscaping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xviii. Location & dimensions of existing easements that encumber or benefit the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Estimate weekday AM and PM and Saturday peak hours and daily traffic to be generated by the project.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xix. Location of the nearest fire hydrant, dry hydrant, or other water supply.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. Description of important or unique natural areas and site features, including floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and	<input checked="" type="checkbox"/>	<input type="checkbox"/>	E. Plan Requirements - Proposed Development Activity		
16. If the project requires a stormwater permit from MaineDEP or if the Planning Board or if the Staff Review Committee determines that such information is required, submit the following.			i. Location and dimensions of all provisions for water supply and wastewater disposal, and evidence of their adequacy for the proposed use, including soils test pit data if on-site sewage disposal is proposed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. stormwater calculations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ii. Grading plan showing the proposed topography of the site at 2-foot contour intervals	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. erosion and sedimentation control measures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	iii. The direction of proposed surface water drainage across the site and from the site, with an assessment of impacts on downstream properties.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. water quality and/or phosphorous export management provisions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	iv. Location and proposed screening of any on-site collection or storage facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. If public water or sewerage will be utilized, provide a statement from the utility district regarding the adequacy of water supply in terms of quantity and pressure for both domestic and fire flows, and the capacity of the sewer system to accommodate additional wastewater.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	v. Location, dimensions, and materials to be used in the construction of proposed driveways, parking, and loading areas, and walkways, and any changes in traffic flow onto or off-site	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. Financial Capacity			vi. Proposed landscaping and buffering	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Estimated costs of development and itemize estimated major expenses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	vii. Location, dimensions, and ground floor elevation of all buildings or expansions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Financing (submit one of the following)			viii. Location, front view, materials, and dimensions of proposed signs together with a method for securing sign	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. Letter of commitment to fund	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ix. Location and type of exterior lighting. Photometric plan to demonstrate the coverage area of all lighting may be required by the Planning Board.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Self-financing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	x. Location of all utilities, including fire protection systems	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1. Annual corporate report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	xi. Approval block: Provide space on the plan drawing for the following words, "Approved: Town of Windham Planning Board" along with space for signatures and date	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Bank Statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Major Final Site Plan Requirements as Exhibits to the Application		
c. Other			a. Narrative and/or plan describing how the proposed development plan relates to the sketch plan.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1. Cash equity commitment of 20% of the total cost of development	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Stormwater drainage and erosion control program shows:		
2. Financial plan for remaining financing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. The existing and proposed method of handling stormwater runoff	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Continued from Column #1. (Page 3)			Continued from Column #2. (Page 3)		
3. Letter from institution indicating intent to finance.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. The direction of the flow of the runoff, through the use of arrows and a description of the type of flow (e.g., sheet flow, concentrated flow, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. If a registered corporation a Certificate of Good Standing from:			3. Location, elevation, and size of all catch basins, dry wells, drainage ditches, swales, retention basins, and storm sewers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- Secretary of State, or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Engineering calculations were used to determine drainage requirements based on the 25-year, 24-hour storm frequency.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
- the statement signed by a corporate officer	<input type="checkbox"/>	<input type="checkbox"/>	5. Methods of minimizing erosion and controlling sedimentation during and after construction.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Technical Capacity (address both).			c. A groundwater impact analysis prepared by a groundwater hydrologist for projects involving on-site water supply or sewage disposal facilities with a capacity of 2,000 gallons or more per day	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Prior experience relating to developments in the Town.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Name, registration number, and seal of the Maine Licensed Professional Architect, Engineer, Surveyor, Landscape Architect, and/or similar professional who prepared the plan.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Personnel resumes or documents showing experience and qualification of development designers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. A utility plan showing, in addition to provisions for water supply and wastewater disposal, the location and nature of electrical, telephone, cable TV, and any other utility services to be installed on the site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>D. Plan Requirements – Existing Conditions</b>			f. A planting schedule keyed to the site plan indicating the general varieties and sizes of trees, shrubs, and other vegetation to be planted on the site, as well as information of provisions that will be made to retain and protect existing trees, shrubs, and other vegetation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Location Map adequate to locate project within the municipality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. Digital transfer of any site plan data to the town (GIS format)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Vicinity Plan. Drawn to a scale of not over 400 feet to the inch, and showing area within 250 feet of the property line, and shall show the following:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
a. Approximate location of all property lines and acreage of the parcel(s).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	h. A traffic impact study if the project expansion will generate 50 or more trips during the AM or PM peak hour, or if required by the Planning Board)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Locations, widths, and names of existing, filed, or proposed streets, easements, or building footprints.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
c. Location and designations of any public spaces.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
d. Outline of the proposed site plan, together with its street system and an indication of the future probable street system of the remaining portion of the tract.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
iii. North Arrow identifying Grid North; Magnetic North with the declination between Grid and Magnetic; and whether Magnetic or Grid bearings were used.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
iv. Location of all required building setbacks, yards, and buffers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
v. Boundaries of all contiguous property under the total or partial control of the owner or applicant.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
vi. Tax map and lot number of the parcel(s) on which the project is located	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
			PDF\Electronic Submission.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The undersigned hereby makes an application to the Town of Windham for approval of the proposed project and declares the foregoing to be true and accurate to the best of his/her knowledge.



6/20/2025

DATE

Robert McSorley, PE of Sebago Technics, Inc.

PLEASE TYPE OR PRINT NAME



**Town of Windham**  
**Planning Department:**  
 8 School Road  
 Windham, Maine 04062  
 Tel: (207) 894-5960 ext. 2  
 Fax: (207) 892-1916 -  
[www.windhammaine.us](http://www.windhammaine.us)

## MAJOR SUBDIVISION - PRELIMINARY PLAN - REVIEW APPLICATION

<b>FEES FOR MAJOR SUBDIVISION PRELIMINARY PLAN REVIEW</b>		<b>APPLICATION FEE:</b> + EACH LOT > 10 = \$300/LOT		<input checked="" type="checkbox"/> \$1,300.00 <input checked="" type="checkbox"/> \$88,800.00		<b>AMOUNT PAID:</b>  <b>\$95,100.00 Total</b>				
		<b>REVIEW ESCROW:</b> Up to 10 Lots = \$2,500 11 - 15 Lots = \$3,000 16 - 30 Lots = \$4,000 30 + Lots = \$5,000		<input checked="" type="checkbox"/> \$ 5,000.00						
						<b>DATE:</b> _____		<b>Office Use:</b> _____		<b>Office Stamp:</b> _____
<b>PROPERTY DESCRIPTION</b>		Parcel ID	Map(s) #	18	Lot(s) #	26-2-A	Zoning District(s)	Comm. 1 (C-1)	Total Land Area SF:	+/- 38.59 ac.
		# Lots/dwelling units:		306	Total Distr. >1Ac.		<input checked="" type="checkbox"/> Y <input type="checkbox"/> <input type="checkbox"/> N			Est. Road Length(ft):
		Physical Address	Franklin Drive, Windham				Watershed:	Sebago Lake		
<b>PROPERTY OWNER'S INFORMATION</b>		Name	New Gen Estates, LLC c/o Suresh Gali				Name of Business	New Gen Estates, LLC		
		Phone	(207) 371-0070				Mailing Address:	675 Main Street		
		Fax or Cell						South Portland, ME 04106		
		Email	sgali@nghmllc.com							
<b>APPLICANT'S INFORMATION (IF DIFFERENT FROM OWNER)</b>		Name	SAME AS PROPERTY OWNER				Name of Business			
		Phone					Mailing Address			
		Fax or Cell								
		Email								
<b>APPLICANT'S AGENT INFORMATION</b>		Name	Robert A. McSorley, PE				Name of Business	Sebago Technics, Inc.		
		Phone	(207) 200-2074				Mailing Address	75 John Roberts Rd. Ste. 4A		
		Fax or Cell	(207) 856-2206					South Portland, ME 04106		
		Email	rmcsorley@sebagotechnics.com							
<b>PROJECT INFORMATION</b>	<b>Existing Land Use (Use extra paper, if necessary):</b> <b>Please see the Cover Letter attached with this application for information regarding the proposed changes to the approved subdivision.</b>									
	<b>Provide a narrative description of the Proposed Project (Use extra paper, if necessary):</b> <b>Please see the Cover Letter attached with this application for information regarding the proposed project.</b>									
	<b>Provide a narrative description of construction constraints (wetlands, shoreland zone, flood plain, non-conformance, etc.):</b> <b>Please see the Cover Letter attached with this application for a description of development and construction constraints.</b>									

# MAJOR SUBDIVISION - PRELIMINARY PLAN - REVIEW APPLICATION REQUIREMENTS

## Section 910 of the Land Use Ordinance

The submission shall contain, five (5) copies of the following information, including full plan sets. Along with one (1) electronic version of the entire submission unless a waiver of a submission requirement is granted.

### The Major Plan document/map:

- A) Plan size: 24" X 36"
- B) Plan Scale: No greater 1":100'
- C) Title block: Applicant's name and address
  - Name of the preparer of plans with professional information
  - Parcel's tax map identification (map and lot) and street address, if available

- Complete application submission deadline: three (3) weeks before the desired Staff Review Committee meeting.
  - Five copies of the application and plans
  - Application Payment and Review Escrow
- A pre-submission meeting with the Town staff is required.
- Contact information:
 

Windham Planning Department (207) 894-5960, ext. 2  
 Steve Puleo, Town Planner [sipuleo@windhammaine.us](mailto:sipuleo@windhammaine.us)  
 Amanda Lessard, Planning Director [allessard@windhammaine.us](mailto:allessard@windhammaine.us)

## APPLICANT/PLANNER'S CHECKLIST FOR MAJOR SUBDIVISION REVIEW

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

### IT IS THE RESPONSIBILITY OF THE APPLICANT TO PRESENT A CLEAR UNDERSTANDING OF THE PROJECT.

*The following checklist includes items generally required for development by the Town of Windham's LAND USE ORDINANCE, Sections 907.B., 910.C., & 911. Due to projects specifics, are required to provide a complete and accurate set of plans, reports, and supporting documentation (as listed in the checklist below).*

*Staff recommends the applicant provide a proposed construction schedule, a draft Homeowner's Association (HOA) documentation, public open space to be provided, and written offers of cession to the Town, and/or road maintenance agreement with at the Preliminary Plan application submission.*

Major Subdivision Preliminary Plan Submission Requirements:			Major Subdivision Preliminary Plan Submission Requirements (Continued):	Applicant	Staff
A. Mandatory Written Information submitted in a bound format:	Applicant	Staff	6. Vicinity plan showing the area within 250 feet, to include:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1. A fully executed application form, signed by a person with right, title, or interest in the property or Authorized Agent.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. approximate location of all property lines and acreage of parcels.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Evidence of payment of the application and escrow fees.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ii. locations, widths, and names of existing, filed, or proposed streets, easements, or building footprints.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Proposed name of the Subdivision.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	iii. location and designations of any public spaces.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Verification of right, title, or interest in the property, and any abutting property, by deed, purchase and sales agreement, option to purchase, or some other proof of interest.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	iv. outline of the proposed subdivision, together with its street system and an indication of future probably street system, if the proposed subdivision encompasses only part of the applicant's entire property.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Copy(ies) of the most recently recorded deed for the parcel, along with a copy(ies) of all existing deed restrictions, easements, rights-of-way, or some other proof of interest.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. Standard boundary survey of the parcel, including all contiguous land in common ownership within the last 5 years.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Copy(ies) of any existing and/or proposed covenants, deed restrictions intended to cover all or part of the lots or dwellings in the subdivision.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Existing and proposed street names, pedestrian ways, lot easements, and areas to be reserved or dedicated to public use.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Copy(ies) of any existing or proposed easements on the property	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Contour lines at 2-foot intervals, or intervals required by the Board, showing elevations to the required datum.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Name, registration number, and seal of Maine Licensed Professional Land Surveyor who conducted the survey.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. Typical cross-sections of the proposed grading for roadways, sidewalks, etc., including width, type of pavement, elevations, and grades.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Name, registration number, and seal of the licensed professional who prepared the plan (if applicable).	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
10. An indication of the type of sewage disposal to be used in the subdivision.			11. Wetland areas shall be delineated on the survey. If none, please note.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. If connecting to the public sewer, provide a letter from Portland Water District stating the District can collect and treat the wastewater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. The number of acres within the proposed subdivision, location of property lines, existing buildings, vegetative cover type, specimen trees, if present, and other essential existing physical features.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>Mandatory Written Information submitted in a bound format (continued):</b>	<b>Applicant</b>	<b>Staff</b>	13. Rivers, streams, and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is in the direct watershed of a great pond, note which great pond.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. If using subsurface wastewater disposal systems (septic), submit test pit analyses prepared by a Maine Licensed Site Evaluator or Certified Soil Scientist. Test pit locations must be shown on a map.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Rivers, streams, and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is in the direct watershed of a great pond, note which great pond.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Indicate the type of water supply system(s) to be used in the subdivision.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. Location & size of existing and proposed sewers, water mains, culverts, bridges, and drainage ways on or adjacent to the property to be subdivided. The Board may require this information to be depicted via cross-section, plan, or profile views.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. If connecting to public water, submit a written statement from the Portland Water District indicating there is adequate supply and pressure for the subdivision.	<input checked="" type="checkbox"/> Submitted to PWD	<input type="checkbox"/>	16. Location, names, and present width of existing streets, highways, easements, building lines, parks, and other open spaces on or adjacent to the subdivision.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Names and addresses of the record owner, applicant, and adjoining property owners.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Location and widths of any streets, public improvements, or open space within the subdivision (if any) are shown on the official map and the comprehensive plan.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. An acceptable title opinion proving the right of access to the proposed subdivision or site for any property proposed for development on or off a private way or private road.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. The name and contact information for the road association whose private way or road is used to access the subdivision.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Location of any open space to be preserved or common areas to be created, and general description of proposed ownership, improvement, and management	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Financial Capacity. Estimated costs of development, and an itemization of major costs.			20. Approximate location of treeline after development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Estimated costs of development, and an itemization of major costs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Delineate boundaries of any flood hazard areas and the 100-year flood elevation as depicted on the Town's Flood Insurance Rate Map.		
ii. Financing - provide one of the following:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Show any areas within or adjacent to the proposed subdivision which has been identified by the Maine Department of Inland Fisheries and Wildlife "Beginning with Habitat project maps or within the Comprehensive Plan.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a. Letter of commitment to funding from a financial institution, governmental agency, or other funding agency.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23. Show areas within or adjacent to the proposed subdivision which is either listed on or eligible for the National Register of Historic Places, or have been identified in the comprehensive plan or by the Maine Historic Preservation Commission as sensitive or likely to contain such sites.	<input type="checkbox"/> N/A	<input type="checkbox"/>
b. Annual corporate report with explanatory material showing the availability of liquid assets to finance development	<input type="checkbox"/>	<input type="checkbox"/>	24. Erosion & Sedimentation control plan, prepared by MDEP Stormwater Law Chapter 500 Basic Standards, and the MDEP Maine Erosion and Sediment Control Best Management Practices, published March 2003.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Bank statement showing the availability of funds if personally financing development	<input type="checkbox"/>	<input type="checkbox"/>	25. A stormwater management plan, prepared by a Maine licensed Professional Engineer by the most recent edition of Stormwater Management For Maine: BMPs Technical Design Manual, published by the MDEP 2006.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Cash equity commitment.	<input type="checkbox"/>	<input type="checkbox"/>	26. For Cluster Subdivisions that do not maximize the development potential of the property being subdivided, a conceptual master plan for the remaining land showing future roads, Open Space, and lot layout, consistent with the requirements of 911.K., Cluster Developments will be submitted.	<input type="checkbox"/>	<input type="checkbox"/>
e. Financial plan for remaining financing.	<input type="checkbox"/>	<input type="checkbox"/>	<b>C. Submission information for which a waiver may be granted.</b>	<b>Applicant</b>	<b>Staff</b>
f. Letter from financial institution indicating an intention to finance.	<input type="checkbox"/>	<input type="checkbox"/>	1. High-intensity soil survey by a Certified Soil Scientist	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. If a corporation, Certificate of Good Standing from the Secretary of State	<input type="checkbox"/>	<input type="checkbox"/>	2. Landscape Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Technical Capacity:			3. Hydrogeologic assessment - required if i) subdivision is not served by public sewer and either any part of the subdivision is over a sand and gravel aquifer or has an average density of more than one dwelling unit per 100,000 square feet, or ii) where site considerations or development design indicate the greater potential of adverse impacts on groundwater quality.	<input type="checkbox"/>	<input type="checkbox"/>

i. A statement of the applicant's experience and training related to the nature of the development, including developments receiving permits from the Town.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a) Map showing basic soil types.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Resumes or similar documents showing experience and qualifications of full-time, permanent, or temporary staff contracted with or employed by the applicant who will design the development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c) Drainage conditions throughout the subdivision.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			d) Data on existing groundwater quality.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			e) Analysis and evaluation of the effect of the subdivision on groundwater.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Name and contact information for the road association whose private way or road is used to access the subdivision (if applicable).	<input type="checkbox"/>	<input type="checkbox"/>	f) map showing the location of any subsurface wastewater disposal systems and drinking water wells within the subdivision & within 200 feet of the subdivision boundaries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			4. Estimate the amount and type of vehicular traffic to be generated on a daily basis and at peak hours.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>B. Mandatory Preliminary Plan Information</b>	<b>Applicant</b>	<b>Staff</b>	5. Traffic Impact Analysis for subdivisions involving 28 or more parking spaces or projected to generate more than 140 vehicle trips per day.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1. Name of subdivision, date, and scale.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. If any portion of the subdivision is in the direct watershed of a great pond.	<input type="checkbox"/>	<input type="checkbox"/>
2. Stamp of the Maine License Professional Land Surveyor that conducted the survey, including at least one copy of the original stamped seal that is embossed and signed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. phosphorous impact analysis and control plan.	<input type="checkbox"/>	<input type="checkbox"/>
3. Stamp with the date and signature of the Maine Licensed Professional Engineer that prepared the plans.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ii. long term maintenance plan for all phosphorous control measures.	<input type="checkbox"/>	<input type="checkbox"/>
4. North arrow identifying all of the following: Grid North, Magnetic North, declination between Grid and Magnetic, and whether Magnetic or Grid bearings were used in the plan design.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	iii. contour lines at an interval of 2 feet.	<input type="checkbox"/>	<input type="checkbox"/>
5. Location map showing the subdivision within the municipality.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	iv. delineate areas with sustained slopes greater than 25% covering more than one acre.	<input type="checkbox"/>	<input type="checkbox"/>
			<b>Electronic Submission</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The undersigned *hereby makes an application to the Town of Windham for approval of the proposed project and declares the foregoing to be true and accurate to the best of his/her knowledge.*

  **6/20/2025**  
IE  DATE

**Robert McSorley, PE of Sebago Technics, Inc.**

PLEASE TYPE OR PRINT THE NAME

## AGENT AUTHORIZATION

APPLICANT/ OWNER	Name	New Gen Estates, LLC		
PROPERTY DESCRIPTION	Physical Address	Franklin Drive		Map 18
				Lot 26-2-A
APPLICANT'S AGENT INFORMATION	Name	Robert A. McSorley, PE		
	Phone	207-200-2074	Business Name & Mailing Address	Sebago Technics, Inc. 75 John Roberts Road Suite 4A South Portland, ME 04106
	Fax/Cell			
	Email	rmcsorley@sebagotechnics.com		

***Said agent(s) may represent me/us before Windham Town officers and the Windham Planning Board to expedite and complete the approval of the proposed development for this parcel.***

  
\_\_\_\_\_  
APPLICANT SIGNATURE

12/16/24

\_\_\_\_\_  
DATE

Suresh Gali  
\_\_\_\_\_  
PLEASE TYPE OR PRINT NAME HERE

\_\_\_\_\_  
CO-APPLICANT SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
PLEASE TYPE OR PRINT NAME HERE

  
\_\_\_\_\_  
APPLICANT'S AGENT SIGNATURE

12/17/2024

\_\_\_\_\_  
DATE

Robert A. McSorley  
\_\_\_\_\_  
PLEASE TYPE OR PRINT NAME HERE

# **Section 2**

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## **Location & Resource Maps**

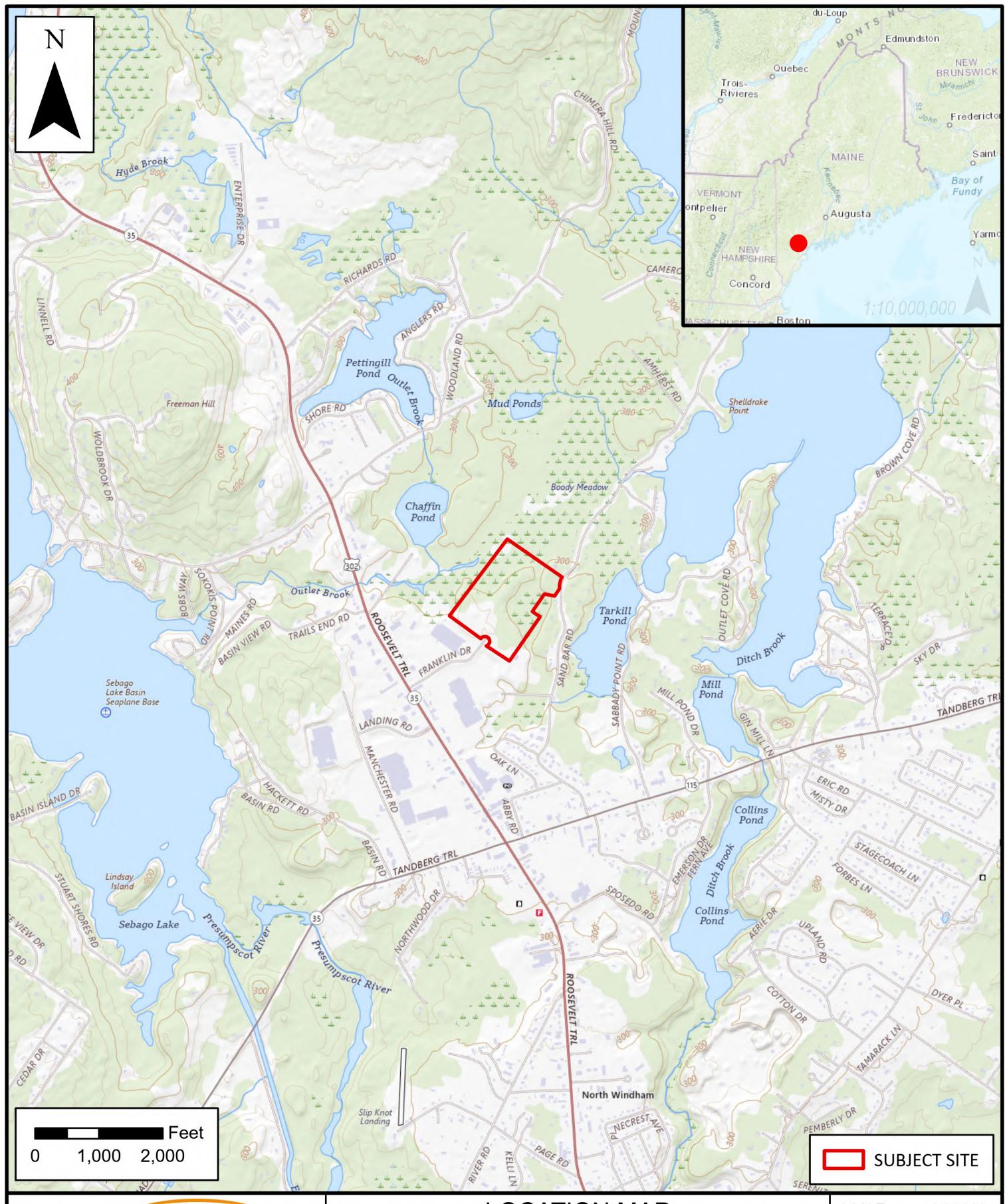
## Section 2 – Location & Resource Maps

**Location Map:** Enclosed within this Section is a Location Map, a mapped excerpt from the USGS quadrangle showing the site's location for identification purposes. The project site is located at the terminus of the existing Franklin Drive in the Town of Windham, Maine.

**Tax Map:** The site can further be identified on the Town of Windham's Tax Map 18 as Lot 26-2-A. The Tax Map is also enclosed within this Section with a leader identifying the site. The specific lots related to this application will be 26-2-A02 for the multi-family parcel and 26-2-A03 for the solar energy system project.

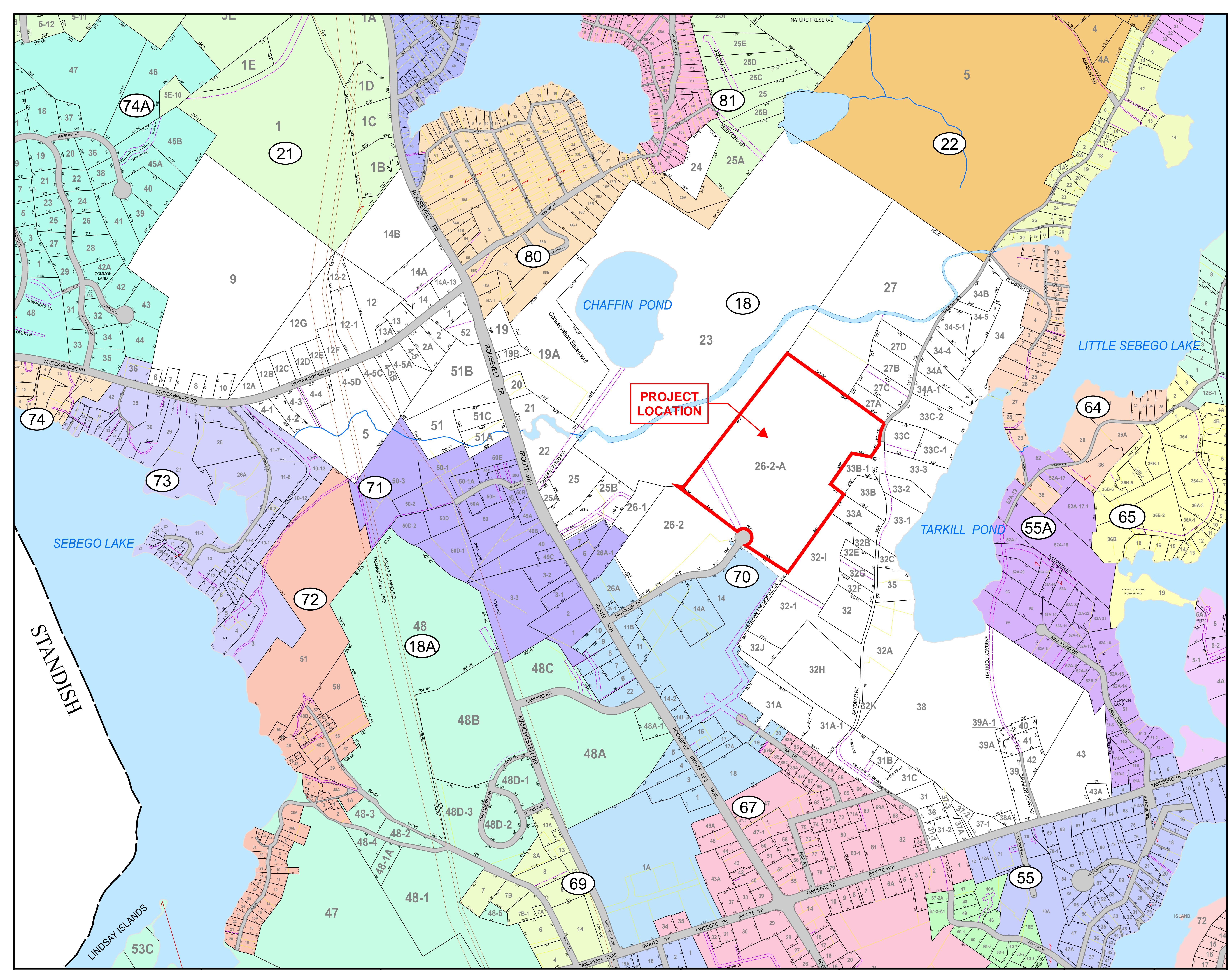
**Zoning Map:** For reference, a Zoning Map is also enclosed within this Section. This map details the subject property is wholly located within the Commercial 1 (C-1) zoning district, and abuts C-1 to the south, and Farm (F) zoning to the north, east, and west.

**Flood Map:** The property subject to this application is located at the intersection of four (4) Flood Insurance Rate Maps (FIRM) provided by the Federal Emergency Management Agency (FEMA). The Flood Map enclosed within this Section shows the boundary of the project site in proximity to the respective borders of each FIRM panel 23005C0477F, 23005C0479F, and 23005C0481F, all adopted on June 20, 2024. The project site is wholly located within an area of minimal flooding, with flood areas with a 1% annual chance for flooding adjacent to the property. Please see the above-referenced map enclosed within this Section.



**SEBAGO**  
TECHNICS

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



THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.

THE HORIZONTAL DATUM IS THE MAINE STATE PLANE COORDINATE SYSTEM, NAD 83.

ORIGINAL MAPPING BY JAMES W. SEWALL COMPANY, OLD TOWN, MAINE

REVISED & REPRINTED BY  
**CAI Technologies**  
 Precision Mapping. Geospatial Solutions.  
 11 Pleasant Street, Littleton, NH 03561  
 800.322.4540 | www.cai-tech.com

12D

100'

2

2

100'

CEMETERY

CONDOMINIUM

FARMSTEAD

OLD PROPERTY LINES

UTILITY LINES

ROW EASEMENT

ROW EASEMENT PWD

75

37.5

0

ROW EASEMENT

ROW EASEMENT PWD

75

37.5

0

150

0

75

150

225

300

0

300

600

900

FEET

METERS

SCALE: 1" = 300'

75

37.5

0

75

100'

37.5

0

75

150

225

75

150

225

450'

100'

250'

500'

750'

1000'

200'

400'

800'

1600'

2000'

400'

800'

1600'

3200'

3000'

600'

1200'

4000'

800'

1600'

5000'

1000'

2000'

6000'

1200'

2400'

7000'

1400'

2800'

8000'

1600'

3200'

9000'

1800'

3600'

10000'

2000'

4000'

11000'

2200'

4400'

12000'

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4800'

13000'

2600'

5200'

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6800'

18000'

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3800'

7600'

20000'

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21000'

4200'

8400'

22000'

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8800'

23000'

4600'

9200'

24000'

4800'

9600'

25000'

5000'

10000'

20000'

40000'

80000'

160000'

320000'

640000'

1280000'

2560000'

5120000'

10240000'

20480000'

40960000'

81920000'

163840000'

327680000'

655360000'

1310720000'

2621440000'

5242880000'

10485760000'

20971520000'

41943040000'

83886080000'

167772160000'

335544320000'

671088640000'

1342177280000'

2684354560000'

5368709120000'

10737418240000'

21474836480000'

42949672960000'

85899345920000'

171798691840000'

343597383680000'

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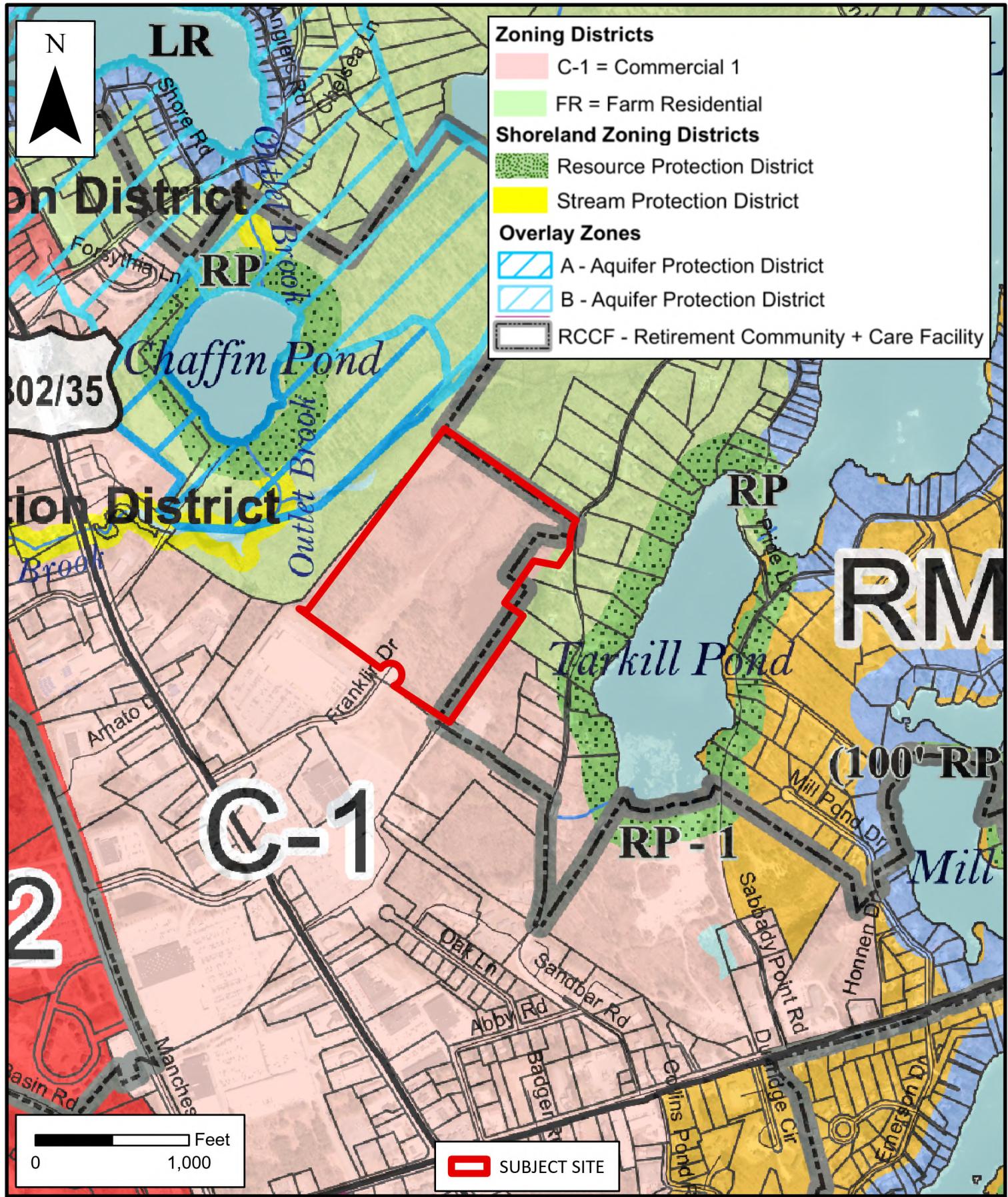
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1407374883553280000'

2814749767106560000'

5629499534213120000'

11258



**SEBAGO**  
TECHNIICS

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

**ZONING MAP**  
NEW GEN ESTATES, LLC

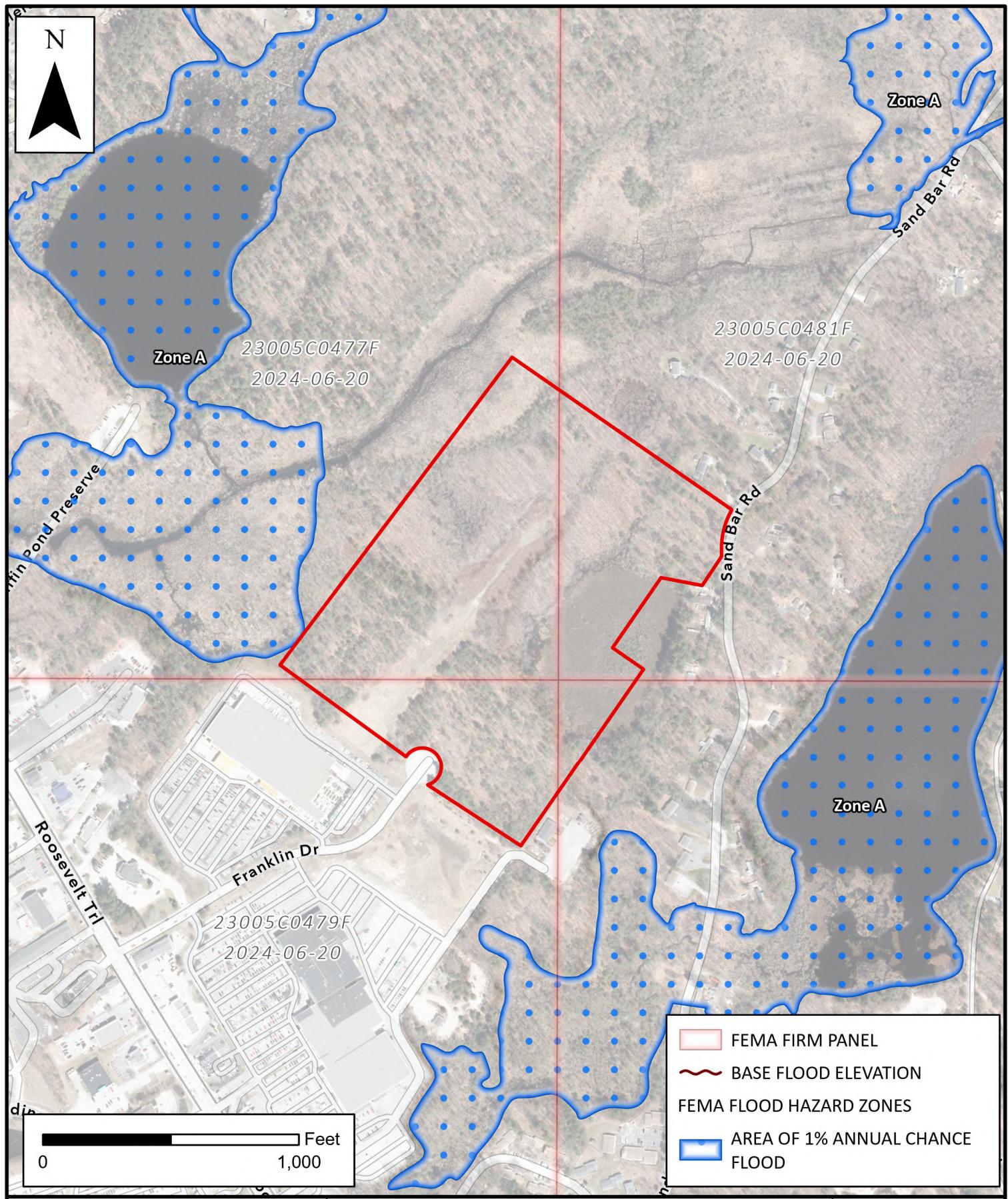
SCALE: 1:10,000  
DATE: 6/18/2025

LOCATION:

20 FRANKLIN DR  
WINDHAM, ME

INFORMATION:

TOWN OF WINDHAM, MAINE  
LAND USE MAP - DATED APRIL 9, 2024



# **Section 3**

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## **Abutters Information**

### **Section 3 – Abutters Information**

For reference, we have included information pertaining to the abutters within a two-hundred fifty (250) ft. buffer around the project site. This list includes the map-lot number, location, and property owner. Please see the referenced list enclosed within this Section.



# 250 feet Abutters List Report

Windham, ME

June 16, 2025

## Subject Property:

Parcel Number: 018026002A00  
CAMA Number: 018-026-002-A00  
Property Address: FRANKLIN DR

Mailing Address: NEW GEN ESTATES LLC  
50 MAINE MALL RD  
SO PORTLAND, ME 04106

## Abutters:

Parcel Number: 018023000000  
CAMA Number: 018-023-000-000  
Property Address: 18 CHAFFIN POND RD

Mailing Address: TOWN OF WINDHAM DONNABETH  
LIPPMAN PARK  
8 SCHOOL ROAD  
WINDHAM, ME 04062

Parcel Number: 018026001000  
CAMA Number: 018-026-001-000  
Property Address: ROOSEVELT TR REAR

Mailing Address: WOODBREY BRADLEY S & WOODBREY  
MITCHEL W  
30 AI ROAD  
RAYMOND, ME 04071

Parcel Number: 018026002000  
CAMA Number: 018-026-002-000  
Property Address: 20 FRANKLIN DR

Mailing Address: JLB WINDHAM LLC  
5050 BELMONT AVENUE  
YOUNGSTOWN, OH 44505

Parcel Number: 018027000000  
CAMA Number: 018-027-000-000  
Property Address: 94 SANDBAR RD

Mailing Address: UNGVARY FRANCIS L IV  
94 SANDBAR ROAD  
WINDHAM, ME 04062

Parcel Number: 018027A00000  
CAMA Number: 018-027-A00-000  
Property Address: 88 SANDBAR RD

Mailing Address: DESMOND MICHAEL J & DESMOND  
TERRY C  
88 SANDBAR ROAD  
WINDHAM, ME 04062

Parcel Number: 018027C00000  
CAMA Number: 018-027-C00-000  
Property Address: 92 SANDBAR RD

Mailing Address: CUMMINGS KEITH E & CUMMINGS  
KATHRYN F  
92 SANDBAR ROAD  
WINDHAM, ME 04062

Parcel Number: 018032001000  
CAMA Number: 018-032-001-000  
Property Address: SANDBAR RD

Mailing Address: MB PROPERTIES INC  
30 WINDHAM CENTER RD  
WINDHAM, ME 04062

Parcel Number: 018032B00000  
CAMA Number: 018-032-B00-000  
Property Address: 54 SANDBAR RD

Mailing Address: WONG CORINNE L  
54 SANDBAR RD  
WINDHAM, ME 04062

Parcel Number: 018032E00000  
CAMA Number: 018-032-E00-000  
Property Address: 50 SANDBAR RD

Mailing Address: MAYBERRY JACQUELINE REED  
247 TANDBERG TRAIL  
WINDHAM, ME 04062

Parcel Number: 018032I00000  
CAMA Number: 018-032-I00-000  
Property Address: 35 VETERANS MEMORIAL DR

Mailing Address: WINDHAM VETERANS' ASSOC INC  
35 VETERANS MEMORIAL DR  
WINDHAM, ME 04062



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are not responsible for any use for other purposes or misuse or misrepresentation of this report.



# 250 feet Abutters List Report

Windham, ME

June 16, 2025

Parcel Number: 018033002000  
CAMA Number: 018-033-002-000  
Property Address: 67 SANDBAR RD

Mailing Address: GILLIS MACAULAY  
67 SANDBAR RD  
WINDHAM, ME 04062

Parcel Number: 018033003000  
CAMA Number: 018-033-003-000  
Property Address: 73 SANDBAR RD

Mailing Address: GAUDET CRAIG JOSEPH & GAUDET  
JANNINE  
73 SANDBAR RD  
WINDHAM, ME 04062

Parcel Number: 018033A00000  
CAMA Number: 018-033-A00-000  
Property Address: 60 SANDBAR RD

Mailing Address: MAYBERRY MARVIN R  
60 SANDBAR ROAD  
WINDHAM, ME 04062

Parcel Number: 018033B00000  
CAMA Number: 018-033-B00-000  
Property Address: 64 SANDBAR RD

Mailing Address: VANVALKENBURGH SCOTT R  
64 SANDBAR ROAD  
WINDHAM, ME 04062

Parcel Number: 018033B01000  
CAMA Number: 018-033-B01-000  
Property Address: 70 SANDBAR RD

Mailing Address: LIBBY CLIFFORD W JR  
70 SANDBAR RD  
WINDHAM, ME 04062

Parcel Number: 018033C00000  
CAMA Number: 018-033-C00-000  
Property Address: 81 SANDBAR RD

Mailing Address: LACEY JESSIE  
81 SANDBAR RD  
WINDHAM, ME 04062

Parcel Number: 018033C02000  
CAMA Number: 018-033-C02-000  
Property Address: 85 SANDBAR RD

Mailing Address: GUSTAFSON KARLA M  
85 SANDBAR ROAD  
WINDHAM, ME 04062

Parcel Number: 070014000000  
CAMA Number: 070-014-000-000  
Property Address: 795 ROOSEVELT TR

Mailing Address: JONLEE WINDHAM LLC  
5050 BELMONT AVENUE  
YOUNGSTOWN, OH 44505



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6/16/2025

Page 2 of 2

# **Section 4**

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## **Right, Title, or Interest**

## **Section 4 – Right, Title, or Interest**

The record owner of the property subject to this application is New Gen Estates, LLC, in accordance with the deed recorded at the Cumberland County Registry of Deeds in Book 40556, Page 273, dated January 2, 2024. Please see the above-referenced deed enclosed within this Section.

After Recording Return to:  
 New Gen Estates, LLC  
 675 Main Street  
 South Portland, ME 04106

**QUITCLAIM DEED WITH COVENANT**

DLN: 1002440261357

KNOW ALL MEN BY THESE PRESENTS, that **JLB WINDHAM LLC**, a Maine limited liability company, with an address C/O Redstone Investments, of 5050 Belmont Avenue, Youngstown, Ohio 44505 ("Grantor"), for consideration paid, grants to **NEW GEN ESTATES, LLC**, a Maine Limited Liability Company with a mailing address of 675 Main Street, South Portland, ME 04106 ("Grantee"), with Quitclaim Covenant, all of its right, title and interest in that certain parcel of land situated in the Town of Windham, County of Cumberland, State of Maine, described as follows:

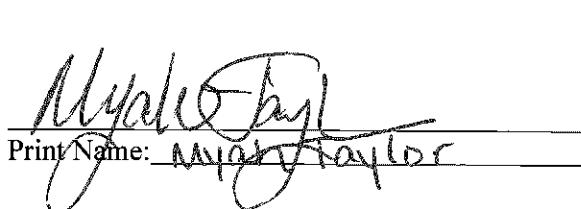
See Exhibit A attached hereto and incorporated herein by reference (the "Property").

TOGETHER with all the tenements, hereditaments and appurtenances, with every privilege, right, title, interest and estate, reversion, remainder and easement thereto belonging or in anywise appertaining.

Subject to taxes and assessments for the year 2024 and subsequent years, which are not yet due and payable and to all easements, covenants, restrictions, and other matters of record.

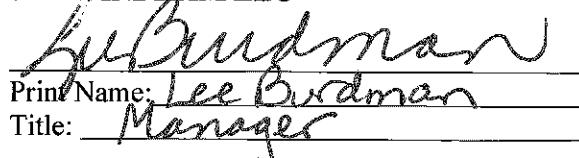
IN WITNESS WHEREOF, Grantor has caused this instrument to be executed this 2<sup>nd</sup> day of January, 2024.

WITNESS:

  
 Print Name: Myah Taylor

GRANTOR:

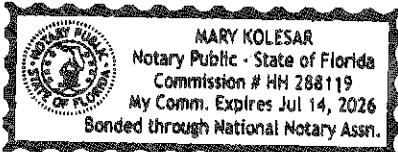
**JLB WINDHAM LLC**

  
 Print Name: Lee Budman  
 Title: Manager

STATE OF OHIO Florida )  
COUNTY OF Hillsborough ) SS:

The foregoing instrument was acknowledged before me on the 2<sup>nd</sup> day of January, 2024  
by Lee Budmanee, the Manager of JLB Windham LLC  
and that the same is his/her free deed in said capacity and the free act and deed of said Jonlee Windham  
LLC.

(Notary Seal)



Mary Kolesar  
Notary Public

**EXHIBIT A****Property**

A certain lot or parcel of land located on the westerly sideline of Sandbar Road, so-called, and at the terminus of Franklin Drive, so-called, in the Town of Windham, County of Cumberland and State of Maine and shown on the plan titled "Existing Conditions, Land of JLB Windham LLC, 20 Franklin Drive, Windham, Maine", dated November 2022 as revised through 6/7/23, by BH2M, Inc.; said parcel being more particularly described as follows:

Beginning at a 5/8" iron rod found on the westerly sideline of said Sandbar Road at the southeasterly corner of land now or formerly of Michael & Terry Desmond as shown on aforesaid plan;

thence in a general southerly direction along the westerly sideline of said Sandbar Road and along a circular curve to the left, circumscribed by a radius of 300.00 feet, an arc length of 157.72 feet to a capped iron rod found (PLS #586); said capped iron rod found being S 15°-08'-51" W a tie distance of 155.91 feet from said previous 5/8" iron rod found;

thence S 00°-05'-11" W along the westerly sideline of said Sandbar Road a distance of 32.39 feet to a capped iron rod found (PLS #586) and land now or formerly of Clifford Libby;

thence S 33°-43'-11" W along the land of said Libby a distance of 135.63 feet to a 1 1/4" iron pipe found;

thence N 79°-11'-33" W along the land of said Libby a distance of 163.77 feet to a capped iron rod found (PLS #1057);

thence S 34°-43'-02" W along the land of said Libby a distance of 332.75 feet to a capped iron rod found (PLS #1057);

thence S 55°-15'-48" E along the land of said Libby a distance of 147.03 feet to a point and land now or formerly of Scott Vanvalkenburgh;

thence S 34°-45'-17" W along the land of said Vanvalkenburgh, along land now or formerly of Marvin R. Mayberry and along land now or formerly of Windham Veterans Association Inc. a distance of 841.47 feet to a 5/8" iron rod found and land now or formerly of Jonlee Windham, LLC;

thence N 56°-48'-18" W along the land of Jonlee Windham, LLC a distance of 434.59 feet to a point and the easterly sideline of said Franklin Drive;

thence in a general circular direction along the terminus of said Franklin Drive and along a circular curve to the left (non-tangent to the last described line), circumscribed by a radius of 75.00 feet, an arc length of 287.81 feet to a point and land now or formerly of JLB Windham, LLC; said point being N 36°-48'-30" W a tie distance of 140.98 feet from said previous point;

thence N 53°-55'-00" W along the land of said JLB Windham, LLC a distance of 658.28 feet to a point and land now or formerly of Town of Windham known as Donnabeth Lippman Park;

thence S 77°-23'-09" E along the land of the Town of Windham a distance of 54.19 feet to a point;

thence N 37°-05'-59" E along the land of the Town of Windham a distance of 1482.78 feet to a 6"x 6" granite monument found and land now or formerly of Francis L. Ungvary IV;

thence S 55°-13'-49" E along the land of said Ungvary and along the land of Desmond a distance of 1044.01 feet to the point of beginning.

The above described parcel contains 38.59 acres. All bearings refer to grid north.

The premises conveyed hereby are also described as follows:

**PARCEL THREE ("Large Back Lot"):**

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

Beginning at the easterly corner of Lot #14 and the southerly corner of Lot #15 as appears on the Plan of Fourth and Last Division of Lots in Windham, Maine, recorded in the Cumberland County Registry of Deeds in Plan Book 6, Page 9. Also being the most southerly corner of land conveyed by Silas Jacobson to Clinton H. Philpot, et al., by deed recorded in the Cumberland County Registry of Deeds; thence North thirty-seven (37°) degrees forty-five (45') minutes west eleven hundred sixty-five (1,165') feet, more or less, to an iron pipe driven in the ground; thence south fifty-two (52°) degrees fifteen (15') minutes east (inadvertently stated as west in prior deeds) along the southeasterly line of land formerly of E.C. Maines, now of Portland Water District, fourteen hundred seventy-two (1,472') feet, more or less, to a stake and other land now or formerly owned by Veronica P. Smith; thence south thirty-seven (37°) degrees forty-five (45') minutes east along line of other land now or formerly of said Smith a distance of eleven hundred sixty-five (1,165') feet, more or less, to a stake; thence north fifty-two (52°) degrees fifteen (15') minutes west fourteen hundred seventy-two (1,472') feet, more or less, to the point of beginning. Meaning and intending to convey hereby a part of Lot #14 as appears in the Plan of Fourth and Last Division of Lots in Windham, Maine, above-referred to, and being a part of the same premises conveyed to Howard H. Boody by Orin P. Chaffin by deed dated August 8, 1895 and recorded in the Cumberland County Registry of Deeds on August 12, 1895 in Book 629, Page 11.

Excepting from the above-described premises the Sand Bar Road, so-called, formerly known as South Pond Road, as it is presently laid out, which runs across the above-described premises and which is a public way.

Also excepting from said Parcel Three, those lands described in the following instruments:

1. Deed from Lawrence E. Smith and Veronica P. Smith to Clinton L. Smith and Lois L. Smith dated May 27, 1997 and recorded in said Registry of Deeds in Book 13542, Page 46.
2. Deed from Lawrence E. Smith and Veronica P. Smith to Windham Mall Associates dated February 24, 1992 and recorded in said Registry of Deeds in Book 9919, Page 207.
3. Deed from Veronica P. Smith to Bradley S. Woodbrey and Mitchell W. Woodbury dated June 10, 2003 and recorded in said Registry of Deeds in Book 19532, Page 165.

Also conveying all rights and easements (if any) reserved in any of the above-described instruments.

Being a portion of those premises conveyed to Grantor by deed of Veronica P. Smith dated June 15, 2005, and recorded in the Cumberland County Registry of Deeds in Book 22854, Page 243.

**PARCEL FOUR ("Sand Bar Road Lot"):**

A certain lot or parcel of land with any buildings thereon situated on the westerly side of Sand Bar Road in the Town of Windham, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at 2' iron found on the westerly side of Sand Bar Road at the southeasterly corner of land now or formerly owned by Clinton L. Smith and Lois L. Smith (Book 8109, Page 188); thence N 16° 01' 26" East distance of 207.00 feet to the POINT OF BEGINNING: thence from said point of beginning N 62° 32' 56" W a distance of 77.91 feet to a point at the easterly corner of land to be conveyed to said Clinton L. Smith and Lois L. Smith by Lawrence E. Smith and Veronica P. Smith by deed dated May 27, 1997 and recorded in said Registry of Deeds in Book 13542, Page 46; thence N 51° 16' 19" E a distance of 73.90 feet to a 1 - 1/2" iron found; thence N 48° 56' 01" E a distance of 62.05 feet to a point on the westerly sideline of Sand Bar Road; thence southerly along the westerly sideline of said Sand Bar Road 127.87 feet more or less to the point of beginning.

Meaning and intending to convey a 4,789 square foot parcel of land shown on Standard Boundary Survey on Sand Bar Road, Windham, Maine, prepared by Owen Haskell, Inc., dated May 9, 1997, last revised May 27, 1997.

Being the same premises conveyed to Grantor by deed of the Lawrence E. Smith Revocable Trust dated June 15, 2005, and recorded in the Cumberland County Registry of Deeds in Book 22854, Page 241.

# **Section 5**

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## **Financial & Technical Capacity**

## Section 5 – Financial & Technical Capacity

### **Financial Capacity:**

Please see the letter from the Applicant's financial lender that describes that the Applicant, New Gen Estates, LLC, currently has sufficient cash positions and available lines of credit to support, construct, and successfully carry out this project.

### **Technical Capacity:**

The Applicant has retained Sebago Technics, Inc., to act as their technical representative for this Site Location of Development Act (SLODA) permit. The agent authorization information denotes that Robert McSorley, PE, of Sebago Technics, Inc., is the Project Manager for this application. Sebago Technics has also been retained to perform the survey, civil engineering design, landscape architecture, stormwater management design, and preparation of local and state permits for this proposed development. Resumes of personnel involved in this project are enclosed within this Section, and a firm description of Sebago Technics, Inc. is included below:

**Sebago Technics, Inc.** is a multi-disciplinary engineering firm that offers a wide range of services, specializing in land development, land use planning, permitting, and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general civil engineering, road and utility infrastructure design, construction management, permitting, landscape architecture, land surveying, soil sciences, wetlands science, and environmental services.



June 23, 2025

Town of Windham, Maine

RE: Mr. Suresh Gali and New Gen Estates Subdivision

To whom it may concern:

**Maine Community Bank** is pleased to entertain a request for financing by Mr. Suresh Gali and New Gen Estates, LLC on the development of subdivision for multi-family development, Windham, Maine. Mr. Suresh Gali and New Gen Estates, LLC are customers in good standing and have the track record to engage in a project of this size.

The Bank is currently entertaining financing of the above referenced project and based on the current information on the project and subject to completion of underwriting and approval I am supportive of the request, and it is my view that Mr. Suresh Gali and New Gen Estates, LLC have the financial capacity and wherewithal to complete the proposed project.

If you have any questions or comments regarding this letter, please call me at 571-5673, or send an e-mail to [djones@mainedcb.com](mailto:djones@mainedcb.com).

Sincerely,

A handwritten signature in dark blue ink. The signature is fluid and cursive, appearing to read "Doug Jones".

Doug Jones  
Senior Vice President  
Commercial Lender

OPINION OF PROBABLE COSTS

FRANKLIN DRIVE MULTIFAMILY - WINDHAM, ME

Notes:

1. The opinion of probable costs is based upon historic unit pricing, this opinion of probable cost is in no way, implied or expressed otherwise, as a warranty that the project can be constructed for the presented costs.
2. This opinion of probable cost excludes design and permitting fees, land acquisition costs, legal costs testing services and/or construction phase services.
3. This opinion of probable cost is based on no geotechnical data for the site. This opinion of probable cost does not reflect the actual earthwork associated with construction of the project and only quantifies earthwork items as part of the opinion of probable cost.
4. This opinion of probable cost does not include any costs associated with testing and/or mitigating for environmental and/or hazardous elements associated with the proposed development site or the existing structures contained thereon.
5. This opinion of probable cost excludes any and all costs associated with mobilizing to the site and/or contractor amenities for the site.
6. This opinion of probable cost does not include any primary electric conduit as directed by the Architect.

Item Description	U/M	Quantity	Unit Cost	Total Cost
<b>SITE PREPARATION</b>				
Clearing & Stump Removal	AC	7.1	\$ 4,500.00	\$ 31,950.00
Strip Topsoil/Grub	CY	5700	\$ 5.00	\$ 28,500.00
				<b>\$ 60,450.00</b>
<b>EARTHWORK</b>				
Structural Fill (Assume 4' Depth)	CY	4140	\$ 15.00	\$ 62,100.00
Site Earthwork *	CY	35000	\$ 25.00	\$ 875,000.00
				<b>\$ 937,100.00</b>
<b>EROSION CONTROL</b>				
Erosion & Sedimentation Control	ALLOW	1	\$ 80,000.00	\$ 80,000.00
				<b>\$ 80,000.00</b>
<b>ELECTRICAL SERVICE</b>				
Electrical/Telecomm Structures	EA	2	\$ 3,500.00	\$ 7,000.00
Secondary Underground Service	LF	370	\$ 45.00	\$ 16,650.00
Tele/Comm	LF	335	\$ 45.00	\$ 15,075.00
				<b>\$ 31,725.00</b>
<b>SANITARY SEWER SERVICE</b>				
8" SDR 35 Pipe	LF	230	\$ 65.00	\$ 14,950.00
Sewer Manholes	EA	2	\$ 5,000.00	\$ 10,000.00
Connection to Existing Sanitary	LS	2	\$ 10,000.00	\$ 20,000.00
				<b>\$ 44,950.00</b>
<b>WATER SERVICE - SITE</b>				
4" Domestic Service	LF	315	\$ 105.00	\$ 33,075.00
8" Fire Supply Service	LF	325	\$ 175.00	\$ 56,875.00
8" Valves	EA	4	\$ 1,500.00	\$ 6,000.00
Hydrants	EA	2	\$ 7,000.00	\$ 14,000.00
Connection for 8" Fire	LS	1	\$ 5,000.00	\$ 5,000.00
Connection for 4" Domestic	LS	1	\$ 5,000.00	\$ 5,000.00
				<b>\$ 119,950.00</b>
<b>STORM DRAINAGE</b>				
Subsurface Sand Filter #1	LS	1	\$ 275,000.00	\$ 275,000.00
Subsurface Sand Filter #2	LS	1	\$ 175,000.00	\$ 175,000.00
Subsurface Sand Filter #3	LS	1	\$ 250,000.00	\$ 250,000.00
Detention Chamber System	LS	1	\$ 350,000.00	\$ 350,000.00
Drainage Structures	EA	36	\$ 5,500.00	\$ 198,000.00
Outlet Control Structure	EA	4	\$ 10,000.00	\$ 40,000.00
Storm Drains	LF	2450	\$ 135.00	\$ 330,750.00
Foundation Drainage	LF	2245	\$ 45.00	\$ 101,039.98
				<b>\$ 1,719,789.98</b>

\*A placeholder value is being used for Site Earthwork - cost is to be determined. At this time, it is assumed that the Town of Windham will be responsible for costs of transporting excess donated fill.

OPINION OF PROBABLE COSTS

FRANKLIN DRIVE MULTIFAMILY - WINDHAM, ME

Notes:

1. The opinion of probable costs is based upon historic unit pricing, this opinion of probable cost is in no way, implied or expressed otherwise, as a warranty that the project can be constructed for the presented costs.
2. This opinion of probable cost excludes design and permitting fees, land acquisition costs, legal costs testing services and/or construction phase services.
3. This opinion of probable cost is based on no geotechnical data for the site. This opinion of probable cost does not reflect the actual earthwork associated with construction of the project and only quantifies earthwork items as part of the opinion of probable cost.
4. This opinion of probable cost does not include any costs associated with testing and/or mitigating for environmental and/or hazardous elements associated with the proposed development site or the existing structures contained thereon.
5. This opinion of probable cost excludes any and all costs associated with mobilizing to the site and/or contractor amenities for the site.
6. This opinion of probable cost does not include any primary electric conduit as directed by the Architect.

Item Description	U/M	Quantity	Unit Cost	Total Cost
<b>LIGHTING</b>				
New Site Lighting	EA	50	\$ 7,500.00	\$ 375,000.00
				<b>\$ 375,000.00</b>
<b>LANDSCAPING</b>				
Loam & Seed	SY	8590	\$ 10.00	\$ 85,900.00
Landscaping	ALLOW	1	\$ 120,000.00	\$ 120,000.00
				<b>\$ 205,900.00</b>
<b>ROADWAY/ PARKING</b>				
Standard Duty Pavement	SY	17300	\$ 60.00	\$ 1,038,000.00
Heated Concrete Sidewalk	SY	1270	\$ 205.00	\$ 260,350.00
Slip Form Concrete Curb	LF	9170	\$ 15.00	\$ 137,550.00
Striping/Signage Allowance	LS	1	\$ 20,000.00	\$ 20,000.00
				<b>\$ 1,455,900.00</b>
<b>CONCRETE</b>				
Gathering Patio	EA	2	\$ 5,000.00	\$ 10,000.00
Concrete Seat Wall	LF	100	\$ 250.00	\$ 25,000.00
Transformer Pad	EA	2	\$ 2,500.00	\$ 5,000.00
Bike Rack Pad - Per Bike Space	EA	160	\$ 250.00	\$ 40,000.00
Dumpster Pad	EA	2	\$ 15,000.00	\$ 30,000.00
				<b>\$ 110,000.00</b>
<b>SUB TOTAL</b>				<b>\$ 5,140,764.98</b>
<b>10% CONTINGENCY</b>				<b>\$ 514,076.50</b>
<b>ESTIMATED PROJECT COST</b>				<b>\$ 5,654,841.47</b>

Sebago Technics, Inc.  
23-Jun-25

OPINION OF PROBABLE COSTS

FRANKLIN DRIVE SOLAR - WINDHAM, ME

**Notes:**

1. The opinion of probable costs is based upon historic unit pricing, this opinion of probable cost is in no way, implied or expressed otherwise, as a warranty that the project can be constructed for the presented costs.
2. This opinion of probable cost excludes design and permitting fees, land acquisition costs, legal costs testing services and/or construction phase services.
3. This opinion of probable cost is based on no geotechnical data for the site. This opinion of probable cost does not reflect the actual earthwork associated with construction of the project and only quantifies earthwork items as part of the opinion of probable cost.
4. This opinion of probable cost does not include any costs associated with testing and/or mitigating for environmental and/or hazardous elements associated with the proposed development site or the existing structures contained thereon.
5. This opinion of probable cost excludes any and all costs associated with mobilizing to the site and/or contractor amenities for the site.
6. This opinion of probable cost does not include any primary electric conduit as directed by the Architect.

Item Description	U/M	Quantity	Unit Cost	Total Cost
<b>SITE PREPARATION</b>				
Clearing & Stump Removal	AC	2.1	\$ 4,500.00	\$ 9,450.00
Strip Topsoil/Grub	CY	1700	\$ 4.00	\$ 6,800.00
				<b>\$ 16,250.00</b>
<b>EARTHWORK</b>				
Structural Fill (Assume 1' for Footings)	CY	750	\$ 15.00	\$ 11,250.00
Rip Rap	CY	150	\$ 100.00	\$ 15,000.00
Site Earthwork *	CY	1200	\$ 25.00	\$ 30,000.00
				<b>\$ 56,250.00</b>
<b>EROSION CONTROL</b>				
Erosion & Sedimentation Control	ALLOW	1	\$ 20,000.00	\$ 20,000.00
				<b>\$ 20,000.00</b>
<b>ELECTRICAL SERVICE</b>				
Secondary Underground Service	LF	535	\$ 45.00	\$ 24,075.00
CMP Junction Box	EA	1	\$ 3,500.00	\$ 3,500.00
				<b>\$ 27,575.00</b>
<b>SANITARY SEWER SERVICE</b>				
Sewer Structures (Cleanouts/Air Release)	EA	2	\$ 5,000.00	\$ 10,000.00
Connection to Existing Sanitary	LS	1	\$ 5,500.00	\$ 5,500.00
2" Force Main	LF	1050	\$ 55.00	\$ 57,750.00
				<b>\$ 73,250.00</b>
<b>STORM DRAINAGE</b>				
Storm Drain pipe	LF	40	\$ 135.00	\$ 5,400.00
				<b>\$ 5,400.00</b>
<b>LANDSCAPING</b>				
Loam & Seed	SY	7180	\$ 10.00	\$ 71,800.00
				<b>\$ 71,800.00</b>
<b>ROADWAY/ PARKING</b>				
Gravel Path	SY	1400	\$ 25.00	\$ 35,000.00
				<b>\$ 35,000.00</b>
<b>CONCRETE</b>				
Transformer Pad	EA	1	\$ 2,500.00	\$ 2,500.00
				<b>\$ 2,500.00</b>
<b>GATES &amp; FENCING</b>				
Fence	LF	1120	\$ 25.00	\$ 28,000.00
Bollard	EA	4	\$ 350.00	\$ 1,400.00
Sliding Gate	EA	1	\$ 5,000.00	\$ 5,000.00
				<b>\$ 34,400.00</b>
<b>SUB TOTAL</b>				<b>\$ 342,425.00</b>
<b>10% CONTINGENCY</b>				<b>\$ 34,242.50</b>
<b>ESTIMATED PROJECT COST</b>				<b>\$ 376,667.50</b>

\*A placeholder value is being used for Site Earthwork - cost is to be determined. At this time, it is assumed that the Town of Windham will be responsible for costs of transporting excess donated fill.



[Corporate Name Search](#)

## Information Summary

[Subscriber activity report](#)

**This record contains information from the CEC database and is accurate as of: Mon Jun 09 2025 11:03:15. Please print or save for your records.**

Legal Name	Charter Number	Filing Type	Status
NEW GEN ESTATES, LLC	20142095DC	LIMITED LIABILITY COMPANY	GOOD STANDING
<b>Filing Date</b>	<b>Expiration Date</b>	<b>Jurisdiction</b>	
12/19/2013	N/A	MAINE	
<b>Other Names</b>	<b>(A=Assumed ; F=Former)</b>		
NONE			

### Principal Home Office Address

Physical	Mailing
50 MAINE MALL ROAD SOUTH PORTLAND, ME 04106	50 MAINE MALL ROAD SOUTH PORTLAND, ME 04106

### Clerk/Registered Agent

Physical	Mailing
BHUJANGARAO GALI 50 MAINE MALL ROAD SOUTH PORTLAND, ME 04106	BHUJANGARAO GALI 50 MAINE MALL ROAD SOUTH PORTLAND, ME 04106

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Certificate of Existence (Good Standing) ([more info](#))

[Short Form without amendments](#) [Long Form with amendments](#)  
(\$30.00) (\$30.00)



## Maine's Creative Engineering Collective

### EVERYTHING WE DO IS SHAPING

Sebago Technics is a creative engineering collective comprising 110+ design professionals and technical staff, with three offices across Southern and Western Maine. Our comprehensive services encompass all aspects of projects, from initial site assessment and design to navigating permitting and overseeing construction.

### THE WAY WE WORK

One of the defining features that set us apart is our structure as a 100% employee-owned company. The commitment and collaboration of our employees drive our success, and our team-based approach ensures that each client benefits from the expertise and insights of multiple specialties. Our diverse team of engineers, surveyors, landscape architects, and environmental scientists work together to deliver exceptional results on every project.

We welcome your vision and ideas. Beginning with a profound respect for people and processes, we actively listen to understand your goals. Leveraging our extensive experience and expertise, we work in tandem with you to uncover unseen opportunities and bring your vision to life.

#### FOUNDED

1981

#### TEAM MEMBERS

110+

#### STRUCTURE

100% EMPLOYEE-OWNED

#### SPECIALTIES

- CIVIL ENGINEERING
- SURVEY/GEOMATICS
- LANDSCAPE ARCHITECTURE
- TRANSPORTATION/TRAFFIC ENGINEERING
- ENVIRONMENTAL SERVICES
- PLANNING & PERMITTING
- GIS & CAD

#### SECTORS

- MUNICIPALITIES
- INSTITUTIONS
- HEALTHCARE
- RESIDENTIAL
- COMMERCIAL

### LET'S MEET TOGETHER

207.200.2100

75 John Roberts Road, Suite 4A  
South Portland, Maine 04106



2024  
Best Places to  
Work in ME

SHAPING  
TOGETHER

# 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 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



# BRIAN A. MCMAHON

Landscape Designer



Brian McMahon graduated from the University of Rhode Island with a degree in Landscape Architecture and a minor in Community Planning. His curiosity and eagerness to learn have shaped him into a critical lead designer on all of his projects. Brian excels in numerous skills including due diligence research, site inventory and analysis, conceptual site planning, graphic visualizations, site design development, and planting design.

## EXPERIENCE



**Lakeside Norway – Norway, ME:** Assisted with site design for a commercial project located along a lakefront property. Brian assisted with the design of the site's recreational amenities along the waterfront, detailed planting plans, and graphic visitations for the full master plan.

**Village Area Loop Trail – Gray, ME:** Collaborated directly with the Town of Gray to develop a new trail as part of a larger master plan effort. Brian designed the layout of the trail, as well as the associated amenities and planting plans.

**Dunes on the Waterfront – Ogunquit, ME:** Assisted with the site design for additional rental cottage units along the Ogunquit River. Brian also worked directly with the Town of Ogunquit to approve a zone change for the property, and co-managed the project throughout its entirety.

**Martin's Point Health Care Veranda Campus – Portland, ME:** Facilitated the site design for a 25,000-square-foot office building on an existing medical campus. Brian's design intent focused on pedestrian and vehicular connectivity throughout the existing campus, while also creating safe, accessible amenity areas for all users of the site.

**Portland International Jetport Parking Expansion - Portland ME:** Facilitated the site design for a long-term parking lot containing 650 spaces, adjacent to the Portland International Jetport Arrival and Departure Terminals. Brian's design concentrated around parking efficiencies, vehicular traffic flow, and pedestrian way-finding across the expansive site.

**Maine Health Medical Building - Waldoboro, ME:** Facilitated the site design for a 14,000-square-foot medical building on an undeveloped property. Brian also assisted in the production of construction documents.

**One Diamond Residential Development – Biddeford, ME:** Provided master planning efforts for a large-scale residential project along the Saco River. Brian assisted with site design, including a riverwalk trail and recreational amenities, detailing site elements, and landscape exhibits.

## EDUCATION



University of Rhode Island,  
Kingston, Rhode Island  
Bachelor of Landscape Architecture  
Minor: Community Planning  
2021

# BRANDON J. BLAKE

Senior Civil Engineer / Project Delivery Engineering & Design Manager



Mr. Blake joined Sebago Technics in 2015 and serves as Senior Civil Engineer with over 16 years of civil/site design, including stormwater site design, survey, CADD, stormwater BMP inspection, and construction inspection experience. Brandon has previously worked for civil engineering companies where he held roles as a Civil Engineer, Civil Drafter/Designer, CAD Technician, Surveyor, Construction Inspector, and Site Inspector.

In his role as Project Delivery Engineering & Design Manager, Brandon is responsible for the training and development of team members, the QA&QC process, and the advancement of design assignments through our teams. As a talented and creative engineer, Brandon continues to serve as the lead engineer on special projects, shaping challenging sites and developing creative solutions for clients. Brandon's willingness to explore alternatives and commitment to the growth and advancement of the team members that he manages is admirable. He is responsible for shaping the most successful and recognized projects our organization has completed.

## EXPERIENCE



**Maine Correctional Center – Windham, ME:** Senior Civil Engineer/Designer: Led the design team's effort for the redevelopment of the Maine Correctional Center in Windham, Maine. Redevelopment of the campus included the complete modernization of the facility. Work included new dormitories, and medical, vocational, and fitness facilities. Exterior improvements include a central promenade to facilitate movement between buildings, a softball field, exercise yards, and stormwater treatment BMPs.

**109 Capitol Street DHHS & MePERS Office Buildings Complex – Augusta, ME:** Lead design engineer for grading, utilities, and drainage design in the development of 125,000 square feet of office space supported by over 500 parking spaces on a 10 acre site with a grade change of 70 vertical feet. Designed an underground drainage chamber system to mitigate post-development runoff conditions while preserving valuable area for surface parking uses.

**Middle Road Reconstruction Improvements – Town of Falmouth, ME:** Civil Engineer/Designer: Led the design team's efforts in coordinating with the Public Works Director and Town Engineer on the full-depth reconstruction of a heavily traveled 3,200 linear foot roadway. The work consisted of significant realignment and curve superelevation improvements to bring the roadway into current geometric standards. Safety enhancements including introduction of 4-foot wide paved shoulders, large tree and obstacle removals, snow storage shelf creation, and an extensive upgrade to the road surface and subsurface drainage capabilities were also implemented. Brandon assisted the Town throughout the bidding and construction of the roadway.

**Hill Way and Scott Dyer Road – Town of Cape Elizabeth, ME:** Civil Engineer/Designer: Led the design team's efforts in developing the design plans for the reconstruction of the 700 linear foot Hill Way roadway which included a 1,300 linear foot water main renewal in Hill Way and along the Route 77 roadway corridor. This multi-phase project also includes improvements to the entire length of the 4,700 linear foot Scott Dyer Road. Brandon is leading the design and coordinating with the Town in providing sanitary sewer and drainage improvements, paved 4-foot shoulders, and sidewalk and curbing additions on this partial to full-depth roadway improvement project. The project also involves the close coordination with a commercial development construction project and a surface restoration partnership with the Town, PACTS, and MDOT.

**Morse High School (RSU 1) – Bath, ME:** Site grading, stormwater infrastructure design, stormwater BMP design and modeling for a new high school and regional technical center in the City of Bath.

## EDUCATION



University of Maine, Orono, ME  
Bachelor of Science, Civil Engineering  
2009

Southern Maine Technical College  
South Portland, ME  
Applied Associates of Science in  
Technical Graphics

## CERTIFICATIONS

Certification Maintenance and  
Inspection of Stormwater Best  
Management Practices #090

10-Hour OSHA Construction

# KENDALL P. WILLARD, EI

Civil Engineer



Kendall Willard is a Civil Engineer at Sebago Technics, where she has been working since 2022 after previously interning with the company. As a key member of a multi-disciplinary site development team, she specializes in stormwater management systems, erosion control, and site design across various municipal and private sector projects in Maine. Her experience includes development review, BMP inspections, and design work for facilities, shoreline stabilization, and stormwater systems throughout Southern Maine communities including Wells, South Portland, Brunswick, Cape Elizabeth, and Harpswell. Kendall brings practical field experience to her role, where she focuses on environmentally conscious solutions for complex site development challenges.

## EXPERIENCE



**Development Review and Construction Oversight - Wells, ME:** Provided third party erosion control inspections and construction oversight for projects approved by the Town of Wells. Attended pre-construction meetings, reviewed project conformance with approved plans, and monitored sites for erosion control issues throughout the progression of site construction.

**BMP Inspections - City of South Portland, ME:** Inspected several stormwater management features throughout the City of South Portland using municipal reporting software to communicate maintenance and repair needs.

**Bowdoin College Rowing (Smith House Rowing Facility) Sawyer Road - Brunswick, ME:** Designed stormwater facilities including permeable surfaces and building drip edges with subsurface treatment for a boathouse facility to be used by the Bowdoin College Rowing Team. Optimized impervious coverage and driveway maneuverability for project needs while complying with strict site constraints. Completed private utility layout to comply with the Town's Resource Protection Districts and shoreland zoning.

**Schiller Boat Ramp - Orr's Island, ME:** Design Engineer for a boat launch at Bowdoin College's Schiller Coastal Studies Center. Assisted in preparing local and state permitting. Design included multiple stormwater treatment options (wooded buffer and infiltration trench), plan and profile design, and turnaround layout and grading.

**Public Safety Building Expansion - Sebago, ME:** Provided site grading and utility design as well as prepared submission documents. Participated in Planning Board approval process.

**Shoreline Stabilization - Harpswell, ME:** Provided rip rap stabilization design for a single-family residence on Mill Cove in Harpswell. Assisted in preparing local and state permitting as well as project design documents and agency correspondence.

**Route 77 Stormwater Retrofit - Cape Elizabeth, ME:** Provided design insights for the retrofitting of tree filter stormwater systems to treat Route 77 and comply with the Town's MS4 Permit. Offered comparisons of different system models and their associated cost impacts to the Town budget, and prepared construction documents that aligned with the project scope.

## EDUCATION



University of Maine - Orono, ME  
M.E., Civil Engineering  
Concentration in Water and Environment  
2022

University of Maine - Orono, ME  
B.S., Civil Engineering  
Concentration in Water Resources  
Engineering and Math Minor.  
2021

## CERTIFICATIONS

Maine Engineer-Intern Certification

## SKILLS

AutoCAD Civil 3D, MATLAB,  
HydroCAD, Hydraflow, HEC-RAS,  
Bluebeam, Office

## PUBLICATIONS

Research Experience, 2019-2020. Wet lab and literary/technical research in anaerobic digestion of food waste and potential inhibitors. Part of an interdisciplinary researching food waste and the solid waste hierarchy. Presented at University Lightning Talks. Published in team article: <https://umaine.edu/spire/2020/04/08/sutton/>



# THARYN S. NEIN-LARGE, RLA

Maine Licensed Landscape Architect



Tharyn joined Sebago Technics in 2023 as a Landscape Architect. A graduate of the University of Massachusetts with a Master's Degree in Landscape Architecture, Tharyn has an impressive professional background spanning both Massachusetts and Maine. Proficient in 3D renderings, permitting processes, and construction oversight, he is a valuable asset to our multi-disciplinary team.

Tharyn is a licensed landscape architect in both Maine and Vermont, showcasing his commitment to maintaining the highest standards in his field. He is an active member of the Portland-South Portland Waterfront Alliance, further illustrating his dedication to community engagement and professional collaboration. Tharyn's passion for creating sustainable and aesthetically pleasing landscapes aligns seamlessly with Sebago Technics' vision.

## EXPERIENCE



*Prior to his employment at Sebago Technics, Tharyn's professional experience includes:*

**Minuteman Regional Vocational Technical High School, Lexington/Concord, MA:** Advanced conceptual site design and layout plans into construction documents. Performed Construction Administration.

**Attleboro High School – Attleboro, MA:** Worked with team to create conceptual site design and layout plans. Advance project construction documents.

**UNE IIPE-COM Building – Portland, ME:** Led conceptual site design and layout plans. Developed construction documents. Advanced project through permitting and on through to construction administration.

**Frank J. Wood Bridge – Topsham/Brunswick, ME: With TYLin Engineers.** Advanced design and construction documents of riverside parks on each side of the Androscoggin River for Maine DOT.

**NMMC (Northern Maine Medical Center) Assisted Living Facility – Fort Kent, ME:** Led conceptual site design and layout plans. Developed construction documents and facilitated construction administration.

**Tyler Technologies, Orono Campus – Orono, ME:** Developed conceptual Site design and layout plans. Advanced plans into construction documents. Facilitated construction administration for landscape design.

**Hannaford Cooperate Headquarters - Scarborough, ME:** Led conceptual site design and layout plans. Developed construction documents. Advanced project through permitting and construction administration.

**Harold Alfond Center for Cancer Care – (Augusta) Belgrade, ME:** Facilitated site design of hospital addition. Renovating existing and developing conceptual site and layout plans to match the existing design language. Advanced design into construction documents and construction administration.

**Sandwich Public Safety Complex – Sandwich, MA:** Led conceptual site design and layout for a new 5 apparatus bay fire station with police station. Advanced project through Town permitting and on through to construction phase.

## EDUCATION



University of Massachusetts, Amherst  
Master's Degree, Landscape Architecture, 2015

Graduate Certificate in  
Cultural Landscape Management, 2015  
A.S. in Turfgrass Management, 2001

University of Southern Maine, Portland  
Bachelor of Arts, History, 1998

## REGISTRATIONS

Landscape Architect  
ME: LAR5267; VT: 125.0133779

## CERTIFICATIONS

Waterfront Edge Design Guidelines  
Professionals Course

## MEMBERSHIPS

Waterfront Alliance Portland & South Portland  
Maine - Portland, ME (2023)

Waterfront Edge Design Guidelines Associate  
(WEDG) - New York, NY (2022)

Town of Palmer Conservation Commission,  
Chair - Palmer, MA (2015-16)

**SEBAGO**  
TECHNICS

# GRiffin R. Steinman, EI

## Traffic Engineer



Griffin Steinman joined Sebago Technics in 2022 as a Traffic Engineer within the Transportation Team. In this position, he conducts traffic studies and permitting for site development projects. He also provides support to our traffic signal design and operations practice. A Maine native, Griffin graduated from the University of Maine with a degree in Civil Engineering. He served in transportation intern roles with both the Maine Department of Transportation and City of Portland. In these roles, he gained experience in highway/bridge construction, parking inventory/demand, traffic counts and bike/ped planning. Since graduation, Griffin has worked as a Project Engineer/Estimator with a regional traffic signal equipment/services provider. In this role, he has gained technical knowledge regarding the design, operations, and installation of traffic signals and signal systems.

## EXPERIENCE



**186 Main Street – Auburn, Maine:** Served as the Lead Engineer to provide traffic engineering permitting services for new infill multi-use development in Downtown Auburn. Worked with the City of Auburn to obtain a traffic movement permit (TMP) for the site as the City has Delegated Review Authority for TMPs from MaineDOT. Analysis included trip generation and assignments, safety analysis, and review of pedestrian infrastructure. Additional planning level efforts were coordinated with the City for long-term downtown improvements as a part of the permitting coordination.

**Route 236 Traffic Study – South Berwick, Maine:** Project responsibilities included modeling existing conditions and over ten proposed alternatives in Synchro SimTraffic for a major planning study along Route 236/Route 4 (Main Street) in South Berwick. The study focused on improving vehicular and pedestrian mobility along a commuter-heavy corridor that had significant existing capacity constraints.

**Route 202 at Route 35 Traffic Signal Improvements – Hollis, Maine:** Part of the design team in the creation of a new traffic signal plan, including a span wire layout, advanced signage plan, and strain pole cross-section loadings at the intersection of Route 202 and 35 in Hollis. The project is in conjunction with the MaineDOT to improve intersection safety.

**Route 1 Traffic Signal Replacements – Kittery, Maine:** Part of the design team including existing conditions modeling and preliminary design efforts for the ongoing MaineDOT projects 25433.00 and 25435.00 that include replacing existing signalized intersections along Route 1 in Kittery.

**Rock Row Traffic Permitting and Off-Site Improvements – Westbrook/Portland, Maine:** Project responsibilities include traffic impact studies to assess and permit the phased build-out of mixed-use development. Design efforts include the simulation modeling of existing and proposed traffic conditions and the monitoring/optimization of traffic signal timings. Work also included the creation of mast arm cross-section plans for a concept traffic signal design.

**385 Congress Street – Portland, Maine:** Traffic Impact Study to assess and permit the hotel, residential, and commercial mixed-use development. The study included an alternative analysis of proposed traffic configurations using Synchro/SimTraffic modeling software.

**Bath Road Brunswick Apartments – Brunswick, Maine:** Creation of traffic signal plan set including traffic signal notes, pavement marking plans, and the traffic signal plan sheets.

## EDUCATION



University of Maine - Orono, ME  
B.S., Civil Engineering, 2019  
Concentration: Transportation  
Engineering

## CERTIFICATIONS

Engineering Intern #7821

MaineDOT  
Local Project Administration  
Certification

**SEBAGO**  
TECHNICS

# BRETT WIEMKEN

## Planning Consultant



Brett Wiemken joined Sebago Technics in September 2023 as Permitting Specialist/Project Coordinator. He holds a degree in City and Regional Planning from The Ohio State University, underscoring his profound understanding of zoning and development projects. As a member of our Entitlements Group within Project Delivery, Brett plays an important role in orchestrating seamless permitting processes and ensuring regulatory compliance for our diverse projects.

Brett is the lead planner for many projects, from leading policy research, to public engagement design, and document development. His mastery of Adobe Creative Suite and extensive graphic design background enables him to create compelling visual communications and enhance project presentations.

Having relocated from Central Ohio to Maine, Brett uses his prior educational background and public sector experience to produce visual graphics from public input, coordinate with external entities in gathering document data, and structure the document's overall strategy.

### EXPERIENCE



#### **Town of Raymond Planning Services**

Lead Planning Consultant managing Planning Board application reviews and site/subdivision project processing for the growing community. Coordinates comprehensive ordinance revisions and maintains regular office hours providing planning assistance to Town officials and residents. Analyzes development proposals, prepares detailed staff reports, and presents recommendations to the Planning Board. Works closely with developers and property owners to ensure compliance with local ordinances while facilitating project advancement.

#### **Bibber Memorial Land Use Text Amendment - Wells, ME**

Led successful text amendment process for non-conforming use expansion in a complex regulatory environment. Conducted extensive comparative analysis of municipal codes across multiple jurisdictions to establish benchmarks for definitions and parking standards. Developed comprehensive application materials presenting research findings to Planning Board, Board of Selectmen, and residents. Facilitated numerous public meetings and stakeholder engagement sessions throughout the amendment process, addressing community concerns and incorporating feedback into final recommendations.

*Prior to his employment at Sebago Technics, Brett's experiences includes the following:*

#### **Orange Township Zoning Department - Delaware County, OH**

Served as Senior Zoning Officer for rapidly growing community of 35,000 residents. Spearheaded implementation of innovative New Urbanism community development and transportation corridor overlay district. Led comprehensive Zoning Code rewrite initiative, including extensive public engagement and contemporary planning policy review. Managed Board of Zoning Appeals processes, overseeing variance requests and special permits while maintaining detailed documentation of decisions. Administered township GIS database, creating specialized maps and analyses for planning initiatives. Contributed significantly to Active Transportation Plan adoption and 10-year Parks Master Plan development, focusing on connectivity and accessibility. Coordinated Comprehensive Plan implementation with township staff while preserving 40% open space allocation, balancing development pressures with environmental conservation goals.

### EDUCATION



The Ohio State University  
Columbus, OH  
City & Regional Planning  
Minor: Architectural Studies  
2021

Columbus State Community College  
Columbus, OH  
Architectural CAD Drafting Certificate  
2022

### LEADERSHIP

Delaware Leadership, 2022  
Delaware County Chamber of  
Commerce

### SKILLS

Proficient in Adobe Creative Suite (InDesign, Illustrator, Photoshop),  
ArcGIS, SketchUp, & Microsoft  
Office Suite

### MEMBERSHIPS

American Planning Association (APA)



# EBEN P. ROBICHAUD

## CADD Technician



Eben, a skilled CADD Technician at Sebago Technics, possesses a natural talent for visualizing spatial concepts and aesthetics, showcased both through his free-hand skills and proficiency in CAD. His work reflects a strong attention to detail, consistently producing clean and balanced compositions. Eben stands out as an alternative problem solver, employing lateral thinking to discover creative solutions. His patient nature complements a thoughtful approach to work, emphasizing active listening for comprehensive understanding. Eben's commitment to excellence is evident in his excellent detail-oriented structured methodology, firmly believing in the mantra of working smarter, not harder. As a collaborative brainstormer, he thrives in small team settings, contributing to a dynamic and innovative work environment.

## EXPERIENCE



### 487 Shore Road – York Maine

Developed a plan set for a single residence.

Site plans feature:

- Stepped retaining walls, patios, pools, and fire pits, putting greens, rose gardens and extensive landscaping
- Grading and drainage plans
- Sewer and storm drain plans
- Erosion control plans and details

### Northern Light Acadia Hospital Courtyards – Bangor Maine

Developed a plan set for each child's, adolescent, and adult patient courtyards. Site plans feature:

- Playgrounds, basketball half court, walking paths and, extensive landscaping
- Grading and drainage plans
- Utilities plans and details

### Lakeside Norway – Norway Maine

Developed a plan set for the Town.

Site plans feature:

- Walking paths, marine docks, fire pit, exterior stage and parking lots and drive aisles
- Grading and drainage plan with consideration to shoreland zone areas
- Utilities plans for multiuse space and erosion control plans and details

## EDUCATION



University of Southern Maine  
Portland, Maine  
Bachelor of Arts  
2024

Maine Media Workshops  
Rockport, Maine  
Film Work Study Program  
2009

## SKILLS

AutoCAD 2022  
Land f/x  
Microsoft Office Suite  
Google Earth  
Blue Beam



# **Section 6**

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## **Traffic Information**

## Section 6 – Traffic Information

Based on the 11<sup>th</sup> Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, the multi-family residential component of this development is calculated to generate approximately 123 trips, 120 trips, and 123 trips during the AM, PM, and Saturday peak hours of the generator, respectively. Thus, a Traffic Movement Permit (TMP) from the Maine Department of Transportation (MaineDOT) is required. A TMP Application, Sections 1-6, containing development identified as common scheme on the adjacent parcels has been submitted to MaineDOT and the Town of Windham on April 1, 2025.

The Town of Windham's Subdivision Ordinance Section 120-910 Submission Requirement require developments that exceed 140 vehicular trips per day to provide a full Traffic Impact Analysis. MaineDOT has performed their initial review of the application materials, and a scoping meeting was held on May 19, 2025, with the Applicant, Applicant's agent, MaineDOT, and the Town of Windham. At the scoping meeting, the scope and study area for the traffic study was discussed and identified. Sebago Technics, Inc. will be submitting the next section of the TMP application to MaineDOT the week of June 30, 2025.

# **Section 7**

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## **Utility Information**

## Section 7 – Utility Information

### **Water:**

There is an existing water main located along Franklin Drive, operated by the Portland Water District (PWD). This project is proposing to connect to the available water main via extension, and draw water service interior to the site near the site's proposed entrance. An Ability to Serve letter request has been sent to PWD and is enclosed within this Section. Please also see the *Grading & Utility Plan* within the Plan Set.

### **Sewer:**

Similar to water service, there will be a sewer main located along Franklin Drive as part of the extension of sewer into the North Windham commercial area. This sewer will be owned by the Town of Windham and managed and operated by the Portland Water District (PWD). This development is proposing to connect to the available sewer main, and connect to the internal sewer infrastructure, as detailed on the *Grading & Utility Plan*. The proposed system is gravity-fed with no pumps. A request for an Ability to Serve letter for water and sewer is enclosed within this Section.

### **Electrical:**

Central Maine Power will provide electrical service through an underground connection from the Franklin Drive extension. Service for the multi-family component of this development will be extended into the site. Additionally, an interconnect will be installed under the solar component of this application for electrical service. Please see the *Grading & Utility Plan* enclosed within the Plan Set for additional information.



June 20, 2025  
230411-01

Portland Water District  
225 Douglass Street  
P.O. Box 3553  
Portland, Maine, 04104-3553

**Ability to Serve Request – Franklin Drive Multifamily**  
**Franklin Drive, Windham, ME**

Dear MEANS Division & Mr. Bartels:

Sebago Technics, Inc., as part of a design team, has been retained to prepare plans and permit applications for the proposed multi-unit residential development to be located off the extended Franklin Drive in Windham. The proposed development consists of two approximately 28,000 square-foot buildings as well as guest amenities, parking, landscaped areas, and subsurface stormwater management infrastructure. The project site is part of the recently approved subdivision of Map 18, Lot 26-2-A. MEANS previously supplied Sebago with an Infrastructure Map and service card for this parcel, dated 2019.

The approved subdivision included the extension of Franklin Drive; as part of that project, a 12" main will be extended from a valve located in the existing turnaround and brought along the length of the new frontage; utilities are shown to be stubbed off of this 12" main extension. As seen in the enclosed utility plans, 8-inch fire services and 4-inch domestic services are proposed to connect to the stubbed shutoff valves. One domestic service and one fire service are proposed for each multi-unit building. Fire hydrants and fire department connections are proposed in the vicinity of where the water services enter the buildings. Uses within these buildings are anticipated to be mostly by residents, as well as a small number of employees. The buildings will contain sprinkler systems for fire suppression. Copies of the District's Fixture Count worksheet are enclosed with the anticipated quantities for each building.

We are hopeful that we have provided sufficient information for you to review the proposed project and to provide comments on the proposed water service connections. If you have any questions or need additional information, please do not hesitate to contact me. I can be reached best by email at [rmcsorley@sebagotechnics.com](mailto:rmcsorley@sebagotechnics.com) or on my direct line at 207-200-2074.

Sincerely,  
SEBAGO TECHNICS, INC.

Robert McSorley, P.E.  
Senior Project Manager

## Peak Flow Based on Fixture Count

Adapted from 2009 Maine State Internal Plumbing Code

**Customer only needs to complete the cells highlighted in blue**

**Customer  
Street Address  
City**

New Gen Estates, LLC.

Franklin Drive

Windham, ME

### MULTIFAMILY BUILDING 1 - 4" DOMESTIC SERVICE

Fixture	Fixture Value 60 psi	No. of Fixtures	Fixture Value
Bathtub (with or without shower)	4	x 185	= 740
Bidet	1	x 0	= 0
Dental Unit	1	x 0	= 0
Drinking Fountain - Public	0.5	x 2	= 1
Kitchen Sink	1.5	x 158	= 237
Bathroom Sink	1	x 187	= 187
Showerhead (shower only)	2	x 0	= 0
Service Sink	3	x 0	= 0
Toilet -Flushometer(high pressure, tankless)	5	x 0	= 0
-Tank Type (usual in residential setting)	2.5	x 187	= 467.5
Urinal -Flushometer Valve	5	x 1	= 5
-Tank Type	2	x 0	= 0
Wash Sink (each set of faucets)	2	x 0	= 0
Dishwasher	1.5	x 153	= 229.5
Washing Machine	4	x 21	= 84
Hose (outdoor spigot)	<3/4 in.	x 0	= 0
Combined Fixture Value Total			<u>1951</u>

Fire Sprinkler System(Yes/No)? Yes

If yes, please provide information / plans from the sprinkler system designer that indicate the required gpm for the system.

Irrigation(Yes/No)? No

If yes, gpm required by  
irrigation designer: -

**Fields below this line to be completed by PWD staff**

Customer Peak Demand From Fig. 4-2 or 4-3


Pressure Factor From Table 4-1

**Total Fixed Demand (Peak Flow)**

revised 20221219

0
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## Peak Flow Based on Fixture Count

Adapted from 2009 Maine State Internal Plumbing Code

**Customer only needs to complete the cells highlighted in blue**

**Customer  
Street Address  
City**

New Gen Estates, LLC.

Franklin Drive

Windham, ME

### MULTIFAMILY BUILDING 2 - 4" DOMESTIC SERVICE

Fixture	Fixture Value 60 psi	No. of Fixtures	Fixture Value
Bathtub (with or without shower)	4	x 185	= 740
Bidet	1	x 0	= 0
Dental Unit	1	x 0	= 0
Drinking Fountain - Public	0.5	x 2	= 1
Kitchen Sink	1.5	x 158	= 237
Bathroom Sink	1	x 187	= 187
Showerhead (shower only)	2	x 0	= 0
Service Sink	3	x 0	= 0
Toilet -Flushometer(high pressure, tankless)	5	x 0	= 0
-Tank Type (usual in residential setting)	2.5	x 187	= 467.5
Urinal -Flushometer Valve	5	x 1	= 5
-Tank Type	2	x 0	= 0
Wash Sink (each set of faucets)	2	x 0	= 0
Dishwasher	1.5	x 153	= 229.5
Washing Machine	4	x 21	= 84
Hose (outdoor spigot)	<3/4 in.	x 0	= 0
Combined Fixture Value Total			<u>1951</u>

Fire Sprinkler System(Yes/No)? Yes

If yes, please provide information / plans from the sprinkler system designer that indicate the required gpm for the system.

Irrigation(Yes/No)? No

If yes, gpm required by  
irrigation designer: -

**Fields below this line to be completed by PWD staff**

Customer Peak Demand From Fig. 4-2 or 4-3


Pressure Factor From Table 4-1

**Total Fixed Demand (Peak Flow)**

revised 20221219

0
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June 23, 2025  
230411-01

Portland Water District  
225 Douglass Street  
P.O. Box 3553  
Portland, Maine, 04104-3553

**Ability to Serve Request – Sanitary Flows**

**Franklin Drive Multifamily and Solar**

**Franklin Drive, Windham, ME**

To Whom It May Concern:

Sebago Technics, Inc., as part of a design team, has been retained to prepare plans and permit applications for the proposed multi-unit residential development to be located off an extended Franklin Drive in Windham.

The project site is part of the recently approved subdivision of Map 18, Lot 26-2-A. With this subdivision approval, the lots have been split for their own individual development, and Franklin Drive will be extended approximately 525 feet. A copy of the approved plan set was provided to PWD on June 20, 2025, which shows the approved roadway and utility extensions that will support the development of the new lots. This project constitutes the proposed development on Lot 2 of the subdivision; the proposed development consists of two approximately 28,000 square-foot buildings as well as guest amenities, parking, landscaped areas, and subsurface stormwater management infrastructure. The development of Lot 3 is being permitted concurrently with this project and includes a proposed solar array with supplemental site features.

As seen in the enclosed utility plans, proposed 8" gravity sanitary services will run from the proposed multifamily buildings to the extended 8" sewer main within Franklin Drive. The proposed connections will consist of approximately 440 linear feet of pipe and two new manholes. A 2" force main, for a future phase that abuts Sandbar Road, is also proposed to be extended from the solar array parcel down to a manhole within the extended Franklin Drive.

Water demand/wastewater generation within the multifamily buildings is anticipated to be mostly by residents and a small number of employees. Fixtures within the buildings include kitchen sinks and restrooms within the units. The northernmost building will have a partial basement with laundry facilities, and common bathrooms serving a fitness center in each building.

Based on the proposed building and site use, the following is a summary of the assumed contributing flows (taken from the Maine Subsurface Wastewater Disposal Rules):

Number of Bedrooms	Number of Units	GPD per Unit	Total GPD
1-BED	186	120	22,320
2-BED	120	180	21,600
TOTAL			43,920

We are hopeful that we have provided sufficient information for you to review the proposed project and provide confirmation of sewer capacity for the proposed connections. If you have any questions or need additional information, please do not hesitate to contact me. I can be reached best by email at [rmcsorley@sebagotechnics.com](mailto:rmcsorley@sebagotechnics.com) or on my direct line at 207-200-2074.

Sincerely,  
SEBAGO TECHNICS, INC.



Robert McSorley, P.E.  
Senior Project Manager

RAM:kpw  
Enc.

# DRAFT

PROGRESS  
PRINT

ROBERT A. MCSCORLEY / PE 2358

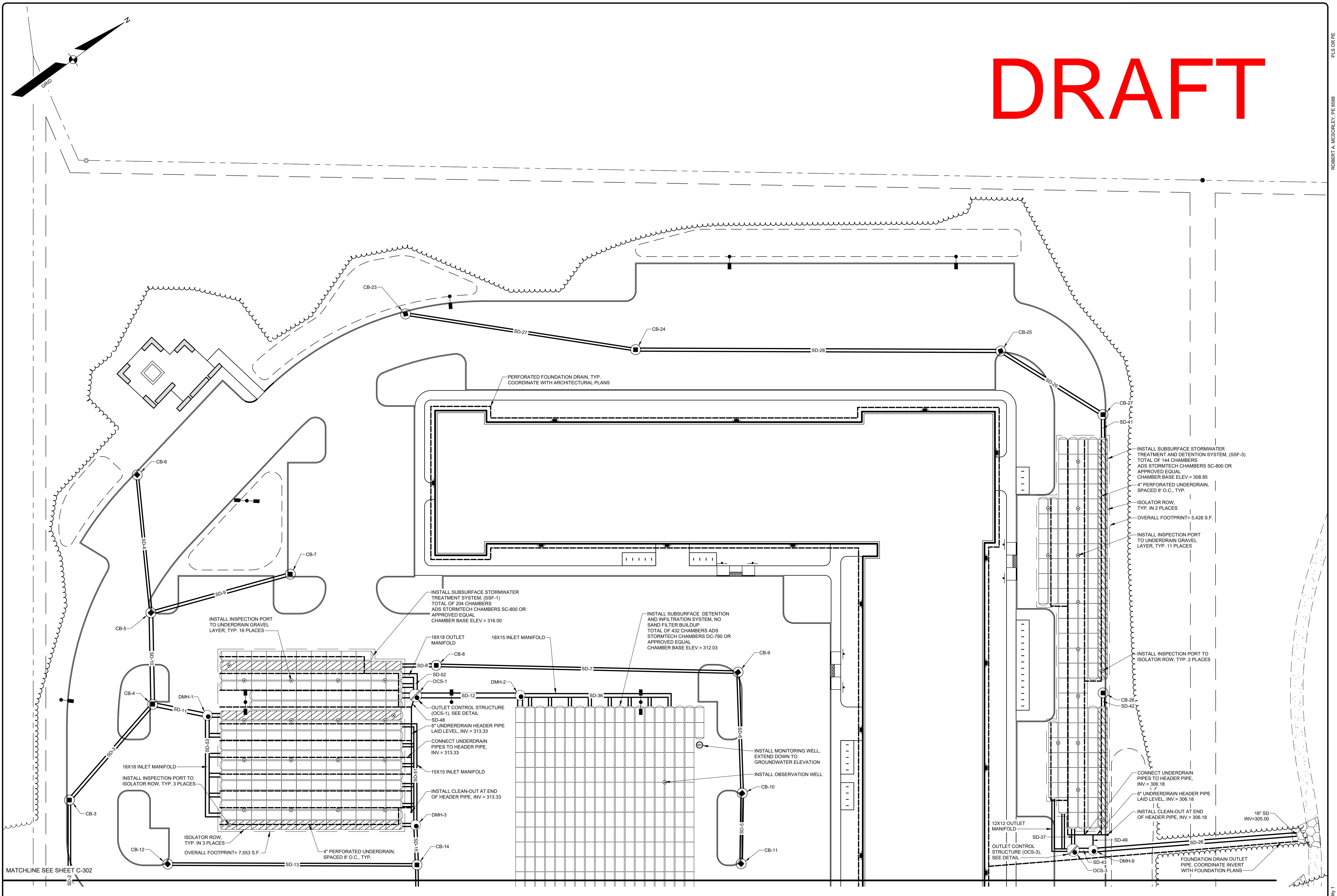
A. RAM 06/23/2025 LOCAL SUBMISSION TO THE TOWN OF WINDHAM  
REV. BY: DATE: STATUS:  
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS,  
AUTHORIZED OR OTHERWISE, SHALL BE THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

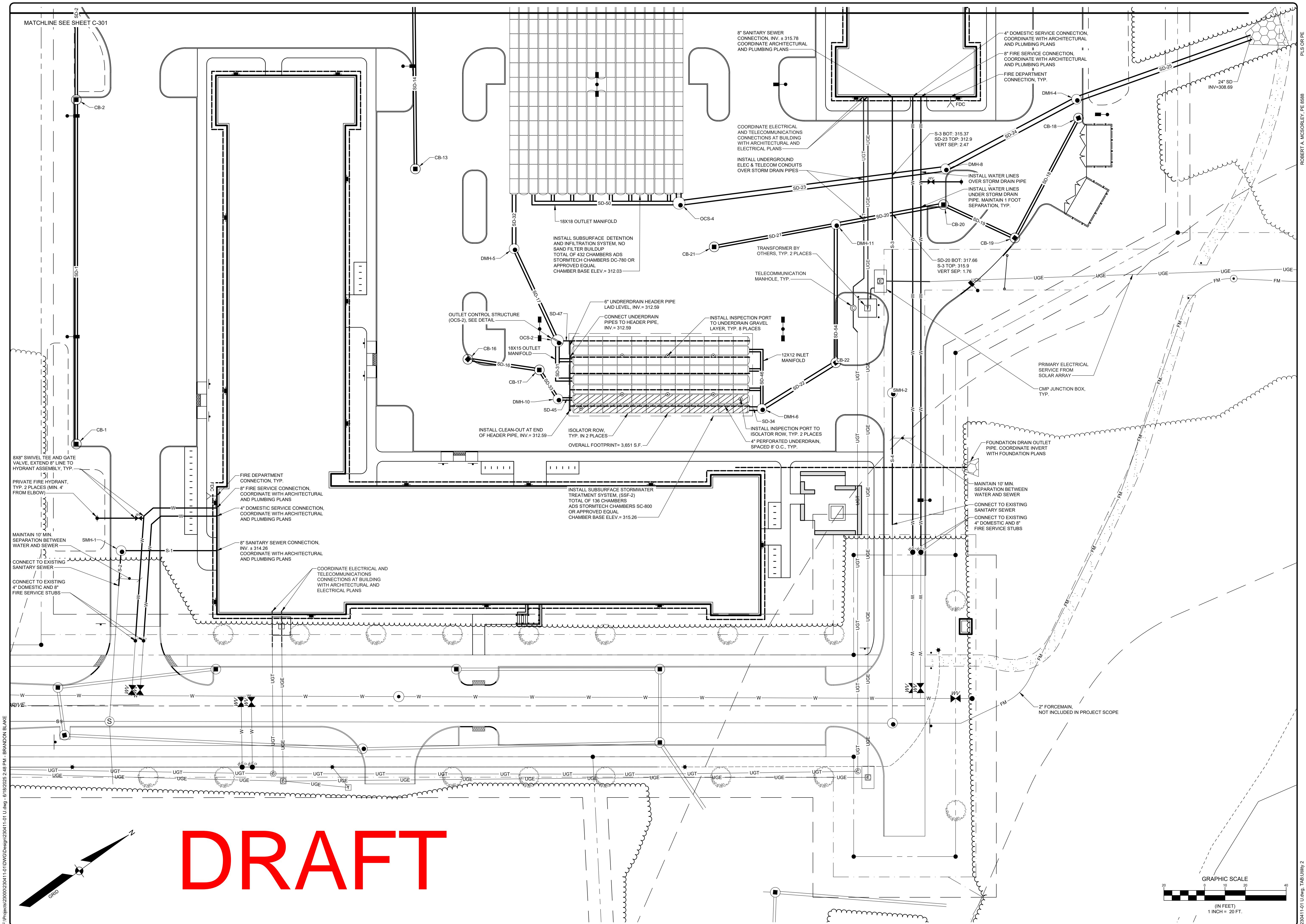
**SEBAGO**  
TECHNICS  
SEBAGOTECHNICS.COM  
75 John Roberts Rd, Suite 4A  
South Portland, ME 04106  
207-205-2100  
South Portland, Bridgton, Sanford and Bath

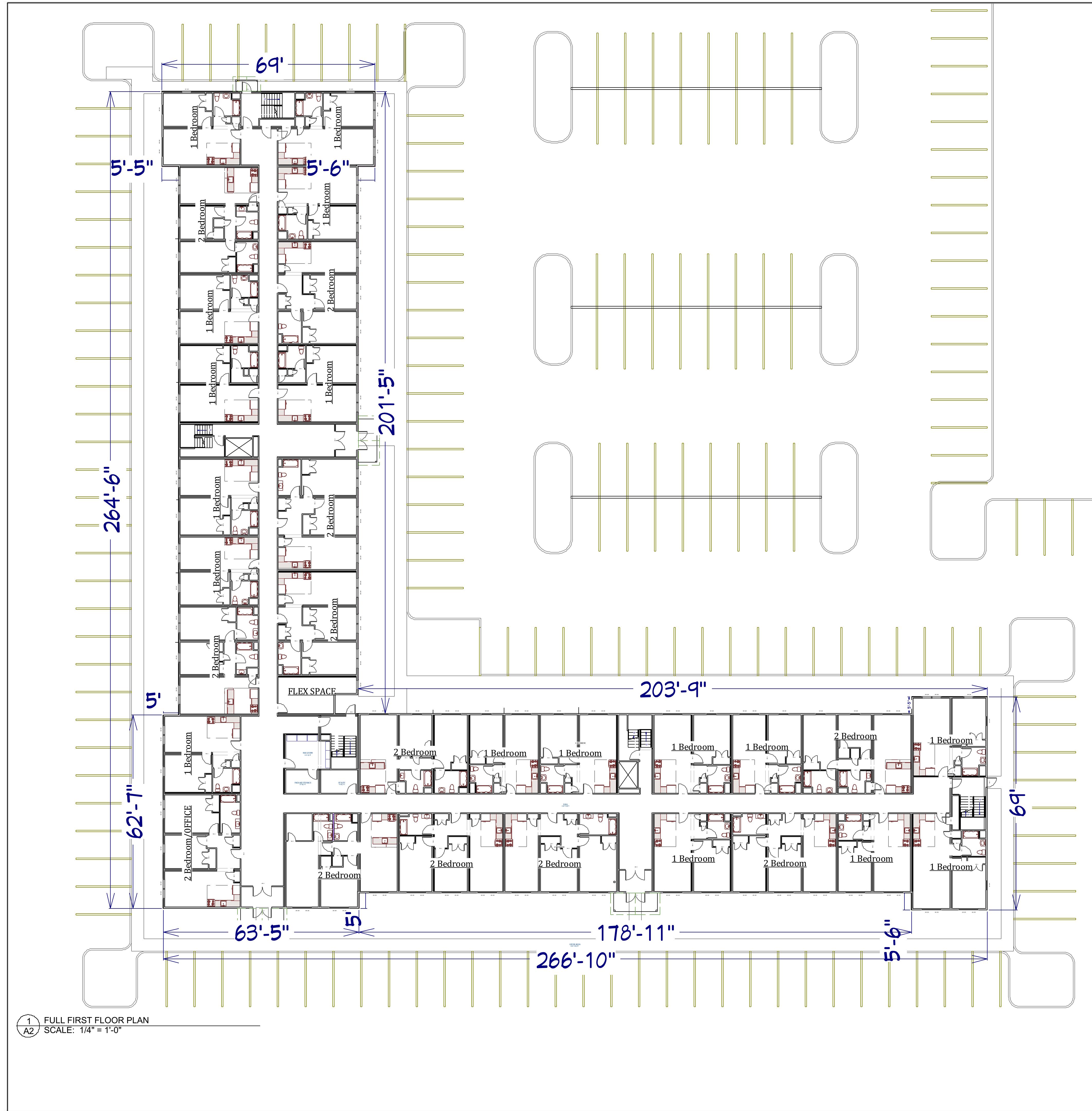
UTILITY PLAN  
OF: FRANKLIN DRIVE MULTI-FAMILY PARCEL  
FOR: NEW GEN HOSPITALITY MANAGEMENT, LLC  
50 MAINE MALL ROAD  
SOUTH PORTLAND, ME 04106  
FRANKLIN DRIVE  
WINDHAM, ME

DESIGNED	KPW
DRAWN	EPR
CHECKED	RAM
DATE	02/13/2025
SCALE	1" = 20'
PROJECT	230411-01

SHEET C-301







1ST FL:	1 BEDROOM UNIT: 17 2 BEDROOM UNIT: 12
2ND FL:	1 BEDROOM UNIT: 19 2 BEDROOM UNIT: 12
3RD FL:	1 BEDROOM UNIT: 19 2 BEDROOM UNIT: 12
4TH FL:	1 BEDROOM UNIT: 19 2 BEDROOM UNIT: 12
5TH FL:	1 BEDROOM UNIT: 19 2 BEDROOM UNIT: 12
<b>TOTAL UNITS:</b>	<b>153</b>

**Special Information:**

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DRAWING REVISIONS:

ADDRESS:  
20 Franklin Drive  
Windham, ME

WINDHAM

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<b>FITTANTE</b> <b>ARCHITECTURE P.C.</b> <b>ARCHITECTURE FOR YOU</b>		
MERCIAL * RESIDENTIAL * 3D RENDERINGS *		
PO BOX 3084 GARA FALLS, NY 14304		
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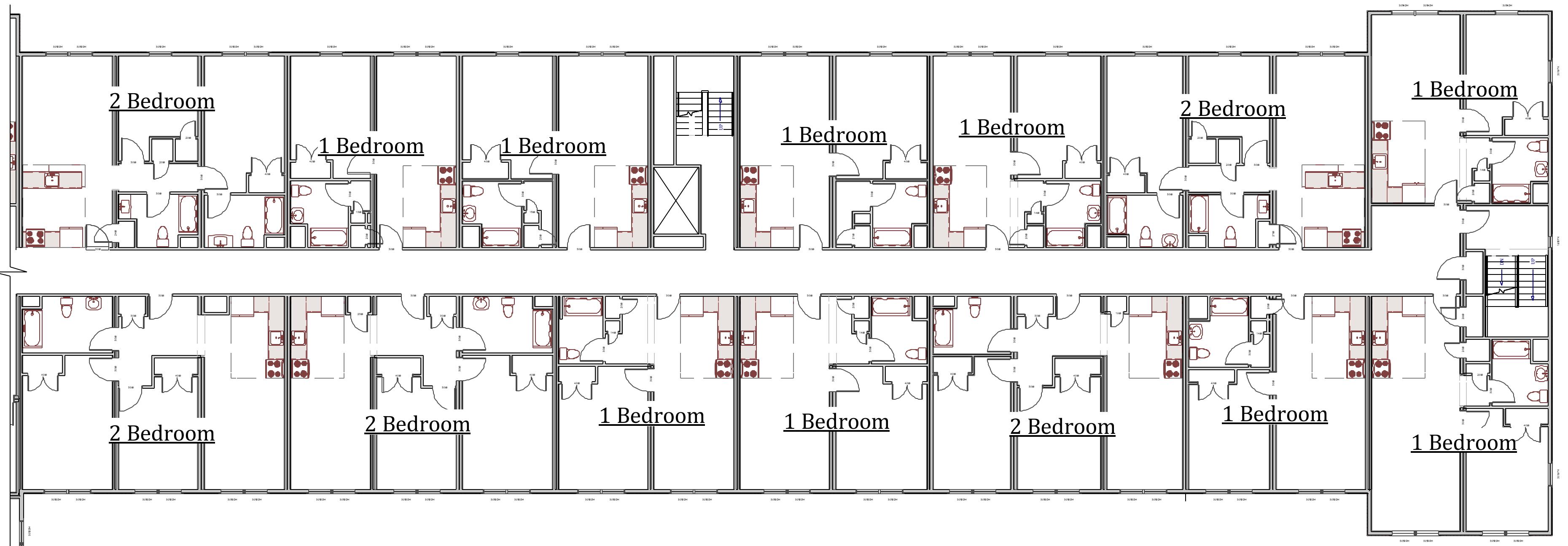


1 FIRST FLOOR PLAN-NORTH WING  
A3 SCALE: 3/32" = 1'-0"

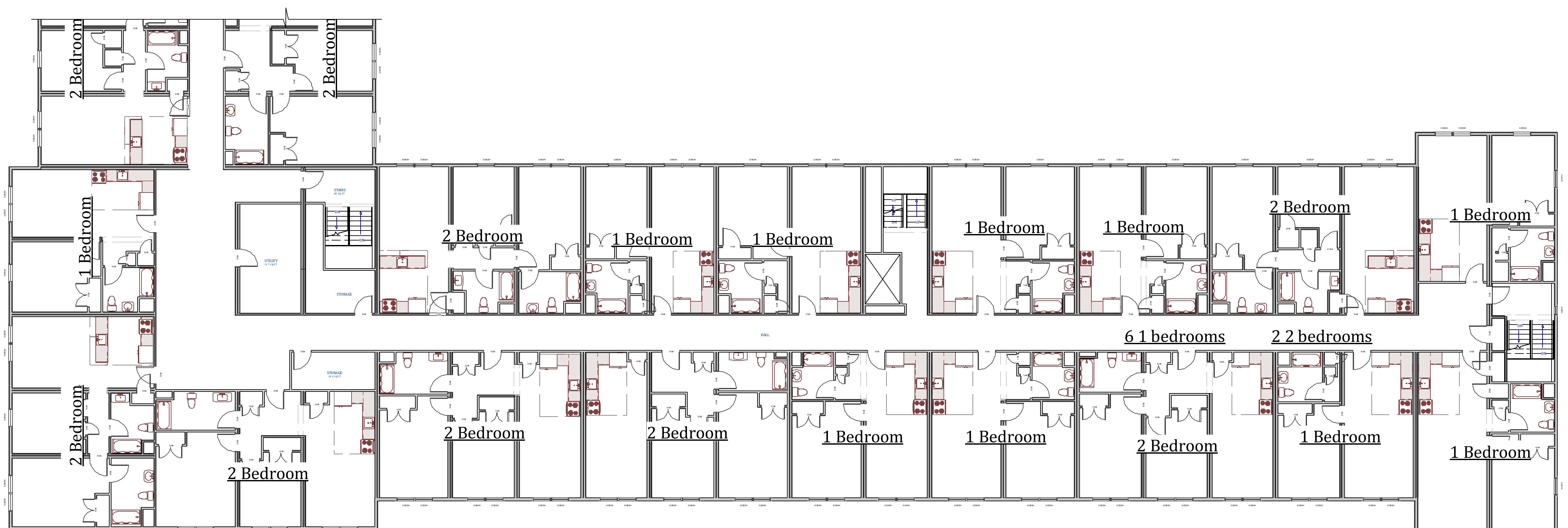


2 FIRST FLOOR PLAN-EAST WING  
A3 SCALE: 3/32" = 1'-0"

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<p>PO BOX 3084 NIAGARA FALLS, NY 14304</p>																																		
<p>Email: Jim@Fittantearchitecture.com</p>																																		
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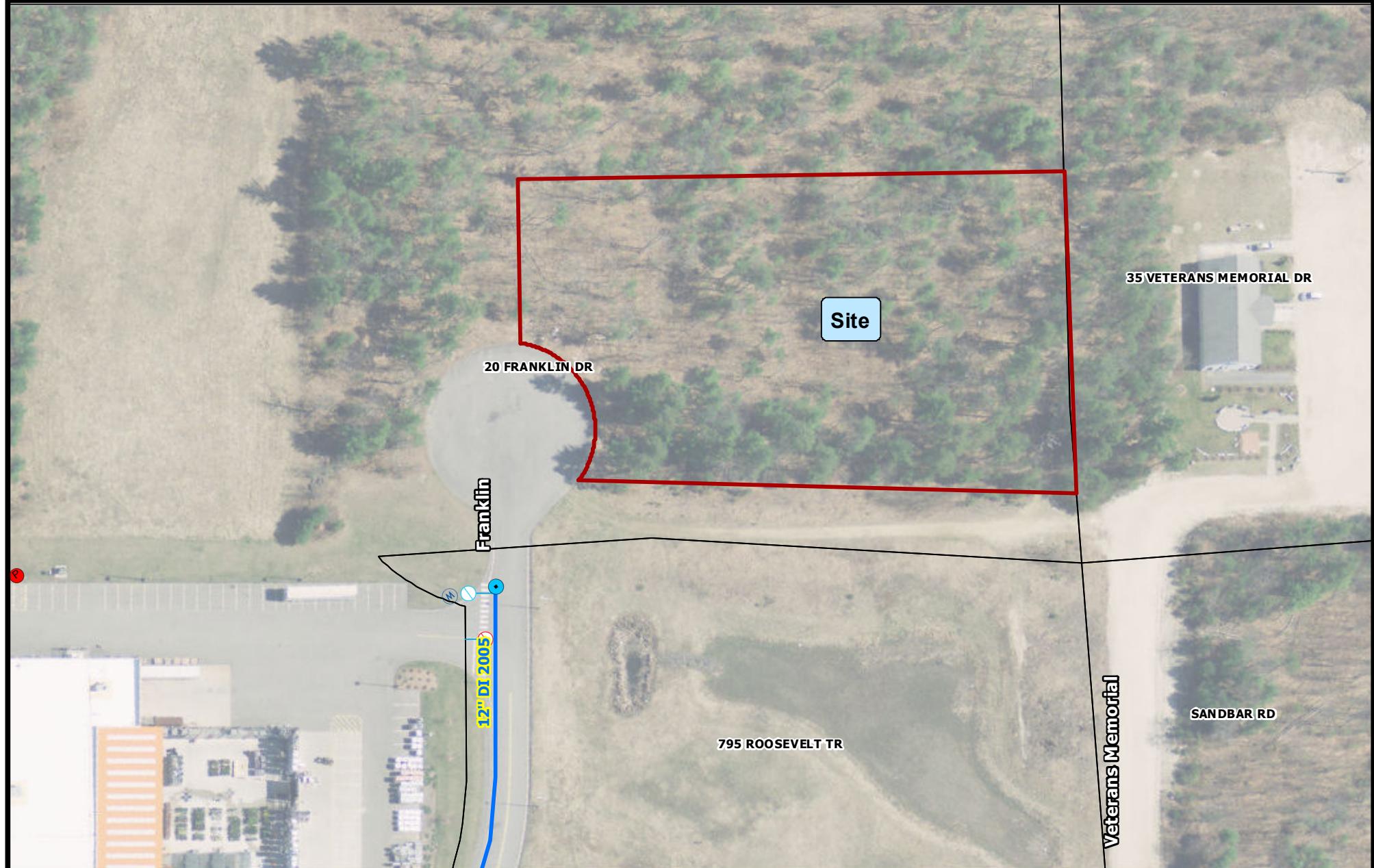


1 SECOND-FIFTH FLOOR PLAN-NORTH WING  
A4 SCALE: 3/32" = 1'-0"



2 SECOND -FIFTH FLOOR PLAN-EAST WING  
A4 SCALE: 3/32" = 1'-0"

<b>Special Information:</b>	
<p>ALL FEDERAL, STATE, AND LOCAL CODES, ORDINANCES, REGULATIONS FOR THIS BUILDING AND SHALL TAKE PREFERENCE OVER ANY OTHER DRAWINGS, SPECIFICATIONS, OR DRAWINGS PREPARED AS PART OF THIS DOCUMENT.</p> <p>WARNING: IN VIRTUE OF ARTICLE 14 SECTION 108, AND 701 OF THE STATE OF NEW YORK EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A REGISTERED ARCHITECT, IF ALTERED, CHANGED, OR DRAWN OVER, THIS DRAWING, OR ANY DRAWING IF ALTERED, CHANGED, OR DRAWN OVER, SHALL BE UNLAWFUL, AND THE SAME SHALL BE FORCED TO PAY A FINE AS PROVIDED IN THE LAW.</p> <p>ALL RIGHTS RESERVED BY JAMES D. FITTANTE, ARCHITECT. NOT TO BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION.</p>	
<b>NOTICE:</b>	
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<p>PROJECT TITLE: <b>Windham Apartments</b></p>	
DRAWN BY:	CDN
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ADDRESS: <b>20 Franklin Drive Windham, ME</b>	
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 <b>FITTANTE ARCHITECTURE P.C. ARCHITECTURE FOR YOU</b>	
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PO BOX 3084 NIAGARA FALLS, NY 14304	
Email: <a href="mailto:Jim@Fittantearchitecture.com">Jim@Fittantearchitecture.com</a>	
Phone: (716)622-8737	
<b>A4</b>	
SHEET NO.	
SUBMISSION DATE <b>1/29/2025</b>	
FILE NO. <b>24-100-C</b>	



## Franklin Drive

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

## Windham



**PORTLAND WATER DISTRICT**  
225 Douglass Street  
Portland, ME 04104

Legend		
● Air Valve	● Connection	● Combined Service
● Blow Off	● Attribute Change	● Domestic Service
● By Pass	● Hydrant Control	● Fire Service
● Distribution	▲ Reducer	● Gravity
● Transmission	● Hydrant	● Force
	● Meter Pits	● Shallow Water Main
		● Deep Water Main
		● Manhole
		● CSO
		— Proposed Water Main



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

Drawn By: BSJ

Scale: As Noted

Date: November 22, 2019

# **Section 8**

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## **Stormwater Management**

## **Section 8 – Stormwater Management**

Please see the *Stormwater Management Report* enclosed within this Section that has been prepared for this proposed development.

# **Section 9**

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## **Performance Standards & Approval Criteria**

## Section 9 – Performance Standards & Approval Criteria

This application is subject to review by several articles as defined within the Town of Windham's Land Use Ordinance (Chapter 120). Below, we offer the following narrative to directly address each applicable articles subject to this application:

### **ARTICLE 3 – DEFINITIONS:**

**Dwelling, Multifamily:** A building containing three or more dwelling units. A multifamily dwelling may be attached to a nonresidential use.

*A portion of the proposed project meets the definition of a multifamily dwelling development. There are a total of 306 units contained within two (2) buildings included within the scope of this application.*

**Solar Energy System:** A solar energy system, consisting of solar panels combined with other associated components such as mounting racks, transformers, inverters and/or batteries, whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means. It may be roof-mounted or ground-mounted, and may be of any size as follows:

**Large-scale solar energy system is one whose physical size based on total area projected over a roof or the ground is equal to or greater than 43,560 square feet.**

*The proposed solar component of this application has a footprint area that exceeds one (1) acre, or 43,560 sf., thus, meeting the qualifications for a large-scale solar energy system.*

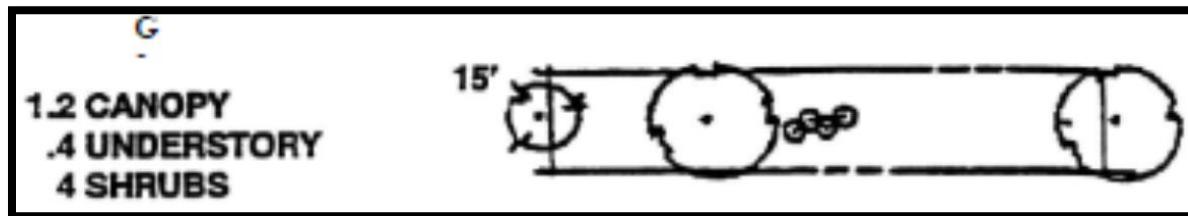
### **ARTICLE 4 – ZONING DISTRICTS:**

**§120-410. – Commercial District 1 (C-1): Permitted Uses – Dwelling, Multi-Family & Solar Energy System:**

*As defined above, the proposed multi-family and solar development components of this application are permitted uses within the Commercial 1 (C-1) zoning district. The project site can be identified on the Town's Tax Map 18 as Lots 26-2-A, and is also identified on the Town of Windham's Land Use map as being zoned within the C-1 District (Council approved, dated April 9, 2024).*

## **ARTICLE 5 – PERFORMANCE STANDARDS**

**§120-511.C.3.b. – Buffer Yard: Buffers Along Streets: Commercial Districts (C-1, C-2, C-3, C-4, VC, & WC Districts): Use Buffer Yard G.**



*The project site has approximately 193 linear feet of street frontage along the Franklin Drive extension. As such, calculated below are the applicable Buffer Yard "G" standards:*

<i>Required</i>	<i>Proposed</i>
$1.9 \text{ (frontage)} \times 1.2 = 2.28 \text{ Canopy Trees}$	<i>8 canopy trees (deciduous)</i>
$1.9 \text{ (frontage)} \times 0.4 = 0.76 \text{ Understory Trees}$	<i>0 understory trees</i>
$1.9 \text{ (frontage)} \times 4.0 = 7.6 \text{ Shrubs}$	<i>17 shrubs (12 deciduous and 5 evergreen)</i>

*The proposed trees and shrubs comply with the above standards, as the project is not required to round up from partial decimals. The proposed plantings use native species, as encouraged. The solar energy system component of this application will preserve existing natural buffers to meet this buffer standard.*

**§120-566. – Solar Energy Systems:** These standards apply to the solar component of this application, and the following narrative addresses the applicable standards within §120-566. The solar arrays do not exceed the maximum building height allowable within the Commercial 1 (C-1) zoning district. Similarly, the front, rear, and side setbacks requirements are all met, as the proposed solar energy system is located internal to the lot. Thus, the existing vegetation that will be retained from the project will serve as a sufficient visual screen/buffer from the solar energy system.

*A Decommissioning Plan has been developed for this project and is enclosed within this Section. The proposed solar energy system installation will be performed in compliance with the photovoltaic system standards in the latest edition of the National Fire Protection Association (NFPA) Fire Prevention Code. Further, the project minimizes the clearing of natural vegetation to the greatest extent practicable. All proposed plantings within the development contain native or non-invasive species.*

## **ARTICLE 8 – SITE PLAN REVIEW**

This application is subject to the Site Plan Review criteria, as defined within the Town of Windham's Land Use Ordinance, §120-812 Major Site Performance Standards & Approval Criteria. As such, listed below are each of the applicable standards and how they relate to this proposed project.

**§120-812.A. – Utilization of the Site:** *The property subject to this application is an undeveloped tract of land located at the terminus of the existing Franklin Drive. The proposed uses (multi-family and solar) are permitted uses within the Commercial 1 (C-1) zoning district. No wetland impacts are proposed under the scope of this application, and the proposed development reflects the natural capabilities of the site.*

**§120-812.B. – Vehicular Traffic:** *The site's design includes two (2) access points along the Franklin Drive extension. From there, internal private drives interconnect the proposed multi-family development with parking lots and pedestrian pathways. Please also see the enclosed Section 6 – Traffic Information, for specific narrative on estimated trip generations.*

**§120-812.C. – Parking & Loading Requirements:** *The proposed multi-family portion of this application provides one (1) space for each 1-Bedroom unit, and one and a half (1.5) spaces for each 2-Bedroom unit. Thus, a total of 390 parking spaces are provided, including twelve (12) ADA accessible spaces.*

**§120-812.D. – Pedestrian Traffic:** *The proposed development incorporates a network of sidewalks to provide both internal connectivity and link externally to the sidewalk along the Franklin Drive extension. Please see the plan information submitted for specific locations and details of the proposed layout.*

**§120-812.E. – Stormwater Management:** *A Stormwater Management Report has been prepared for this proposed project, and is included in the enclosed Section 8 – Stormwater Management.*

**§120-812.F. – Erosion Control:** *An Erosion & Sedimentation Control Plan has been prepared for this project and is enclosed within the Plan Set.*

**§120-812.G. – Water Supply Provisions:** *This proposed development will connect to existing public water infrastructure that will be provided from the Franklin Drive extension. Please see the enclosed Section 7 – Utilities for the Ability to Serve request correspondence with the Portland Water District (PWD).*

**§120-812.H. – Sewage Disposal Provisions:** *This proposed development will connect to proposed public sewer infrastructure that will be provided from the Franklin Drive extension. Please see the enclosed Section 7 – Utilities for the Ability to Serve request correspondence with the Portland Water District (PWD).*

**§120-812.I. – Utilities:** *This proposed development includes utility connections for electrical, water, and sewer services. There is also a natural gas service line existing along Franklin Drive. The applicant has not determined whether or not it will require connection to natural gas for any of its HVAC systems and reserves the right to do so as necessary in the future as construction plans are further refined. All proposed utilities are located underground, including the electrical service which is accomplished from connecting to the existing underground service provided by the Franklin Drive extension. Please see the Grading & Utility Plan within the Plan Set.*

**§120-812.J. – Groundwater Protection:** *This proposed development will connect to water and sewer supply provided to the site via the extension of Franklin Drive. The project includes a gravity-fed sewer, and contains a stormwater system and treatment before connecting to adjacent wetland areas. As such, this project is not anticipated to adversely affect the overall quality or quantity of available groundwater.*

**§120-812.K. – Water Quality Protection:** *The project site is located within the Sebago Lake Watershed. This project will utilize available public water supply from the Franklin Drive extension, and will incorporate adequate stormwater management systems to provide treatment for runoff. Day-to-day operations do not require the storage or use of hazardous substances such as fuels, industrial chemicals, or wastes.*

**§120-812.L. – Hazardous, Special, & Radioactive Materials:** *There are no anticipated sources or generators that may produce hazardous, special, or radioactive materials within the scope of the proposed development. Additionally, there are no flammable or explosive liquids, solids, or gases that will be stored in bulk above-ground within the project site.*

**§120-812.M. – Shoreland Relationship:** *The project site is not located within the Shoreland Zoning District. The successful completion of this proposed development will not result in any adverse impacts to available water quality or quantity.*

**§120-812.N. – Technical & Financial Capacity:** *Please see the enclosed Section 5 – Financial & Technical Capacity demonstrating that the Applicant has sufficient financial resources to construct, operate, and maintain all aspect of the proposed development. Additionally, Section 5 contains supplemental information related to the project team assembled and their history, qualifications, and evidence of prior experience.*

**§120-812.O. – Solid Waste Management:** *The proposed development will handle and process solid waste privately through a licensed solid waste contractor. Internally, the multi-family component of this application will be serviced by two (2) dumpsters that are expected to be hauled at a rate of twice per week. The proposed methods for solid waste management are screened, as shown on the plans submitted.*

**§120-812.P. – Historical & Archaeological Resources:** A response from the Maine Historic Preservation Commission (MHPC), dated December 31, 2024, was received regarding the property subject to this application. In their response, MHPC states that no historic properties will be affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. No further consultation is required at this time. Please see the above-referenced response enclosed within this Section. For reference, we have included this determination within this Section.

**§120-812.Q. – Floodplain Management:** Please see the information provided within the enclosed Section 2 – Location & Resource Maps. The project site is not located within the mapped Federal Emergency Management Agency (FEMA) 100-year Floodplain hazard area.

**§120-812.R. – Exterior Lighting:** Photometrics and supplementary lighting details are provided within Section 12 – Lighting Information.

**§120-812.S. – Noise:** The proposed development is not anticipated to generate an unreasonable amount of noise detectable at property lines. This project is subject to the limitations regarding the timing of construction activities and restrictions.

**§120-812.T. – Storage of Materials (Landscape Plan):** A Landscape Plan has been developed for this proposed development and is enclosed within the Plan Set. This project does not contain any exposed storage areas, machinery, or areas used for the storage or collection of automobile parts.

This application is also subject to the criteria defined within the Town of Windham's Land Use Ordinance, §120-814 Multifamily Development Standards. As such, listed below are each of the applicable standards and how they relate to this proposed project.

**§120-814.A. – Building Architecture:**

- 1. Architectural Variety:** Architectural renderings and designs for each structure are included within the enclosed Section 11. These renderings demonstrate that the proposed structures offer a variety in materials and design that satisfy the standards of this Section.
- 2. Façade:** Facades of the proposed multi-family buildings are included within the enclosed Section 11, including elevations that show each building contains horizontal and vertical elements with architectural articulation to create visual interest.
- 3. Orientation:** The proposed buildings are oriented in a way that provides their respective entrances facing towards the internal private parking areas, as required.

**§120-814.B. – Site Design:**

- 1. Parking:** The proposed development incorporates a total of 390 parking spaces for the 306 multi-family units, located directly off internal vehicular drives.

- 2. Screening:** *This proposed project includes the implementation of street trees along the Franklin Drive extension, which include deciduous overstory trees and a mix of deciduous and evergreen shrubs. Through the retention of existing vegetation, a landscaped buffer will exist between the proposed multi-family and solar projects from adjacent properties. Dumpsters for solid waste will also be screened via fencing and be set back farther from the limit of disturbance.*
- 3. Bicycle/Pedestrian:** *The proposed multi-family component of this application includes internal walkways that connect the entrances of the buildings to respective parking lots. Additionally, several bicycle parking spaces are provided via bike racks split between the two (2) buildings. The bicycle parking provided is about one (1) space for every two (2) units. Please see the Plan Set for the location of designated bicycle parking areas in respect to the multi-family buildings.*
- 4. Recreation & Open Space:** *The proposed multi-family component of this application includes designated outdoor seating and gathering areas for tenant use. As part of the Franklin Drive extension approval, a kiosk will also be installed at the entrance to the public trail adjacent to the project site. This overall project includes the construction of the public trail through the adjacent open space, and to have a width of six (6) ft.*
- 5. Landscape/Lighting:** *A Landscape Plan is included within this submission. The landscape design provides a mixture of hardy deciduous and evergreen species to promote seasonal interest, provide shade, and accent building entrances. A lighting Plan (Photometric Plan) and lighting specifications are also included within Section 12 of this application binder.*
- 6. Access Drive Standards:** *This proposed development will contain two (2) points of access off Franklin Drive, which provide a framework for internal circulation and pedestrian connectivity. This access drive will remain private and shall not be maintained by the Town of Windham.*

## **ARTICLE 9 – SUBDIVISION REVIEW**

This application is subject to the Subdivision regulations defined within the Town of Windham's Land Use Ordinance, §120-911 Performance & Design Standards. As such, listed below are each of the applicable standards and how they relate to this proposed project.

**§120-911.A. – Basic Subdivision Layout:** *This proposed subdivision includes the splitting of an existing lot of record into three (3) separate parcels. One (1) of the proposed parcels will contain a multi-family development consisting of a total of 306 units. One (1) parcel will be reserved for a small-scale solar energy system. The total amount of units conforms with the applicable density requirements of §120-541 Net Residential Area or Acreage. The proposed site will utilize subsurface utilities (water, sewer, electrical) that are located along Franklin Drive, as indicated on the Grading & Utility Plan. Proposed locations of monuments are also shown within the Plan Set.*

**§120-911.B. – Sufficient Water; Water Supply:** *This proposed residential development will connect to existing and available public water infrastructure along Franklin Drive. Please see*

*the enclosed Section 7 – Utilities for the Ability to Serve request correspondence with the Portland Water District (PWD). The overall scale of this development is not anticipated to adversely impact the overall quality or quantity of available water supply. Each proposed structure will also be sprinklered.*

**§120-911.C. – Erosion & Sedimentation Control:** *An Erosion & Sedimentation Control Plan has been developed for this project and is enclosed within the Plan Set.*

**§120-911.D. – Sewage Disposal:** *This proposed residential development will connect to proposed public sewer infrastructure that is available along Franklin Drive. Please see the enclosed Section 7 – Utilities for the Ability to Serve request correspondence with the Portland Water District (PWD).*

**§120-911.E. – Impact on Natural Beauty, Aesthetics, Historic Sites, Wildlife Habitat, Rare Natural Areas, or Public Access to the Shoreline:** *The Maine Natural Areas Program (MNAP), Maine Historic Preservation Commission (MHPC), and Maine Department of Inland Fisheries & Wildlife (MDIFW) have all been consulted regarding the proposed project. Please see their review responses enclosed within this Section. The Applicant is preparing a Maine Department of Environmental Protection (MDEP) Natural Resources Protection Act (NRPA) Permit-By-Rule (PBR) as portions of the project are located within the Critical Terrestrial Habitat (CTH) of a vernal pool. The proposed project meets MDEP standards, as the project is impacting less than 25% of the CTH. The solar component of this application is setback approximately seventy-five (75) ft. from adjacent wetlands, resulting in no wetland impacts for the entire project.*

**§120-911.F. – Conformance with Land Use Ordinances:** *The proposed project meets the goals of the Town of Windham’s 2017 Comprehensive Plan, as the project site is located within the North Windham Growth Area. The proposed development provides a mix of uses to the parcel, and also meets the applicable dimensional and performance standards within the Town of Windham’s Land Use Ordinance.*

**§120-911.G. – Financial & Technical Capacity:** *Please see the enclosed Section 5 – Financial & Technical Capacity demonstrating that the Applicant has sufficient financial resources to construct, operate, and maintain all aspect of the proposed development. Additionally, Section 5 contains supplemental information related to the project team assembled and their relevant history, prior experience, and qualifications for evidence that they have proficient technical knowledge to complete this project.*

**§120-911.H. – Impact on Groundwater Quality or Quantity:** *This proposed development will connect to available water supply provided by the Portland Water District (PWD) from the Franklin Drive extension. The proposed stormwater treatment systems treat runoff from the project site, as detailed within the Stormwater Report. As such, the proposed project is not anticipated to adversely impact the overall quality or quantity of available groundwater.*

**§120-911.I. – Floodplain Management:** Please see the information provided within the enclosed Section 2 – Location & Resource Maps. The project site is not located within a mapped special flood hazard area, as defined by the Federal Emergency Management Agency (FEMA).

**§120-911.J. – Stormwater Management:** A Stormwater Management Report has been prepared for this project and is included within the enclosed Section 8 - Stormwater Management. This project will require a Site Location of Development Act (SLODA) permit from the Maine Department of Environmental Protection (MDEP). The SLODA permit has been prepared and will be subsequently submitted to MDEP on or about July 2025.

**§120-911.K. – Conservation Subdivisions:** This Section is not applicable to this proposed project, as this development is not a conservation subdivision.

**§120-911.L. – Compliance with Timber Harvesting Rules:** There is not any timber harvesting activity proposed under the scope of this application. As such, this Section is not applicable to this proposed project.

**§120-911.M. – Traffic Conditions & Streets:** Please see the information contained within the enclosed Section 6 – Traffic Information. A Traffic Movement Permit (TMP) has been submitted to the Maine Department of Transportation (MaineDOT) for this proposed project and the common scheme surrounding the site. Based on the 11<sup>th</sup> Edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual, the multi-family residential component of this development is calculated to generate approximately 123 trips, 120 trips, and 123 trips during the AM, PM, and Saturday peak hours of the generator, respectively.

**§120-911.N. – Maintenance of Common Elements:** The proposed projects will remain under single ownership. The owner of the site will contract out property management and maintenance as needed to maintain common elements within the site.



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

JANET T. MILLS  
GOVERNOR

AMANDA E. BEAL  
COMMISSIONER

April 9, 2025

Jordan Gagnon  
Sebago Technics  
74 John Roberts Road, Suite 4A  
South Portland, ME 04106

Via email: [jgagnon@sebagotechnics.com](mailto:jgagnon@sebagotechnics.com)

Re: Rare and exemplary botanical features in proximity to: #230411, Franklin Drive Subdivision, New Gen Estates LLC, Map 18 Lot 26-2, Windham, Maine

Dear Jordan Gagnon:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received December 10, 2024, with clarifying site plans received December 18, 2024 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Windham. 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, a portion of the planned subdivision includes an exemplary Red Maple Swamp. Large and intact examples of this wetland type are uncommon in Maine and provide important habitat for a variety of plants and animals. Activities within 250 feet can adversely impact this exemplary wetland. MNAP recommends avoiding development activity and clearing within 250 feet of the Red Maple Swamp. Please see the table below, attached map, and attached factsheet for more information.

Feature	State Status	State Rank	Global Rank	Occurrence Rank	Site
Red Maple Swamp	--	S5	G3G5	B Good	Windham LMF Site

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if

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



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

suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

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.

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. MNAP invoiced Sebago in January for \$150.00 for two hours of services. There is no additional payment due.

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](mailto:lisa.st.hilaire@maine.gov)



## Franklin Drive Subdivision, Map 18 Lot 26-2, Windham, ME

Approximate Project Area

Red Maple Swamp



0 125 250 500 Feet

Maine Natural Areas Program, April 2025  
NAIP 2021 Imagery

# Red Maple Swamp



## State Rank S5

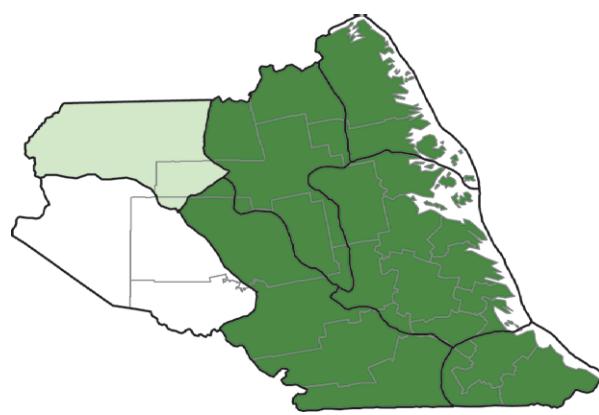
### Community Description

Red maple dominates the somewhat open to nearly closed canopy (20-90% closure), sometimes with a relatively large component (up to 40% cover) of balsam fir, red spruce, or northern white cedar. Green ash and yellow birch are common, but rarely abundant, associates. The maples may be widely spaced with multiple trunks and arching crowns. The shrub layer is patchy; winterberry is common and various other shrubs may be locally abundant. The herb layer is well developed and dominated by herbs, with dwarf shrubs <20% of herb cover. Bluejoint and sensitive fern are characteristic herbs. The bryoid layer is usually <35% cover; peat mosses are typical but do not form extensive, deep carpets as they do in peatlands.

### Similar Types

Red Maple Wooded Ferns are similar, but either occur in association with large peatlands or occupy small somewhat peaty basins; they do not occur on mineral soils. Some small Northern White Cedar Swamps and Spruce - Fir - Cinnamon Fern Forests, particularly along the coast, include a fair amount of red maple but have cedar or spruce/fir, respectively, as the most abundant canopy species. Silver Maple Floodplain Forests are dominated by silver maple and generally occur along larger rivers, with dwarf shrubs <20% of herb cover. Bluejoint and sensitive fern are characteristic herbs. The bryoid layer is usually <35% cover; peat mosses are typical but do not form extensive, deep carpets as they do in peatlands.

## Location Map



Community is known from this Ecoregion  
Community may occur in this Ecoregion  
Bailey's Ecoregion  
County

Red Maple Flowers



### Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

#### Canopy

Balsam fir  
Gray birch  
Northern white cedar  
Red maple\*  
Red spruce

#### Sapling/shrub

Arrowwood\*  
Balsam fir  
Gray birch\*  
Red spruce  
Speckled alder\*  
Winterberry\*

#### Red Maple Swamp

Bluejoint\*  
Flat-topped white aster\*  
Interrupted fern  
Tussock sedge  
Royal fern\*  
Sensitive fern\*

#### Bryoid

Sphagnum mosses\*

### Associated Rare Plants

Smooth winterberry holly  
Spicebush  
Swamp saxifrage  
Swamp white oak  
Sweet pepperbush

### Associated Rare Animals

Spotted turtle  
Wood turtle

## Examples on Conservation

### Lands You Can Visit

- Kennebunk Plains Preserve - York Co.
- Mt Agamenticus - York Co.
- Steep Falls Wildlife Management Area - Cumberland Co.
- Waterboro Barrens Preserve - York Co.

Landscape Pattern: Large Patch

Maine Natural Areas Program

**Rare and Exemplary Botanical Features within 4 miles of  
Project: #23041, Franklin Drive Subdivision, Map 18 Lot 26-2, Windham, Maine**

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
<b>Nodding Pogonia</b>	T	S2	G4?	2010-08-18	5	Hardwood to mixed forest (forest, upland)
	T	S2	G4?	2010-08-18	11	Hardwood to mixed forest (forest, upland)
<b>Pitch Pine Bog</b>		S2	G3G5	2004-06-21	10	
		S5	G3G5	2004-06-21	16	
<b>Red Maple Swamp</b>						
<b>Scarlet Oak</b>	E	S1	G5	1916-08	2	Hardwood to mixed forest (forest, upland)
	E	S2	G2G3	2018-06-15	18	Hardwood to mixed forest (forest, upland)
<b>Small Whorled Pogonia</b>						
<b>Spicebush</b>	SC	S3	G5	2006-06-11	11	Forested wetland
						Date Exported: 2024-12-18 11:05

## Conservation Status Ranks

**State and Global Ranks:** This ranking system facilitates a quick assessment of a species' or habitat type's rarity and is the primary tool used to develop conservation, protection, and restoration priorities for individual species and natural habitat types. Each species or habitat is assigned both a state (S) and global (G) rank on a scale of critically imperiled (1) to secure (5). Factors such as range extent, the number of occurrences, intensity of threats, etc., contribute to the assignment of state and global ranks. The definitions for state and global ranks are comparable but applied at different geographic scales; something that is state imperiled may be globally secure.

The information supporting these ranks is developed and maintained by the Maine Natural Areas Program (state ranks) and NatureServe (global ranks).

Rank	Definition
<b>S1</b> <b>G1</b>	<b>Critically Imperiled</b> – At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
<b>S2</b> <b>G2</b>	<b>Imperiled</b> – At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
<b>S3</b> <b>G3</b>	<b>Vulnerable</b> – At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
<b>S4</b> <b>G4</b>	<b>Apparently Secure</b> – At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
<b>S5</b> <b>G5</b>	<b>Secure</b> – At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
<b>SX</b> <b>GX</b>	<b>Presumed Extinct</b> – Not located despite intensive searches and virtually no likelihood of rediscovery.
<b>SH</b> <b>GH</b>	<b>Possibly Extinct</b> – Known from only historical occurrences but still some hope of rediscovery.
<b>S#S#</b> <b>G#G#</b>	<b>Range Rank</b> – A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem.
<b>SU</b> <b>GU</b>	<b>Unrankable</b> – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
<b>GNR</b> <b>SNR</b>	<b>Unranked</b> – Global or subnational conservation status not yet assessed.
<b>SNA</b> <b>GNA</b>	<b>Not Applicable</b> – A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities (e.g., non-native species or ecosystems).
Qualifier	Definition
<b>S#?</b> <b>G#?</b>	<b>Inexact Numeric Rank</b> – Denotes inexact numeric rank.
<b>Q</b>	<b>Questionable taxonomy that may reduce conservation priority</b> – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable. The “Q” modifier is only used at a global level.
<b>T#</b>	<b>Infraspecific Taxon (trinomial)</b> – The status of infraspecific taxa (subspecies or varieties) are indicated by a “T-rank” following the species' global rank.

**State Status:** Endangered and Threatened are legal status designations authorized by statute. Please refer to MRSA Title 12, §544 and §544-B.

Status	Definition
<b>E</b>	<b>Endangered</b> – Any native plant species in danger of extinction throughout all or a significant portion of its range within the State or Federally listed as Endangered.
<b>T</b>	<b>Threatened</b> – Any native plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range in the State or Federally listed as Threatened.
<b>SC</b>	<b>Special Concern</b> – A native plant species that is rare in the State, but not rare enough to be considered Threatened or Endangered.
<b>PE</b>	<b>Potentially Extirpated</b> – A native plant species that has not been documented in the State in over 20 years, or loss of the last known occurrence.

**Element Occurrence (EO) Ranks:** Quality assessments that designate viability of a population or integrity of habitat. These ranks are based on size, condition, and landscape context. Range ranks (e.g., AB, BC) and uncertainty ranks (e.g., B?) are allowed. The Maine Natural Areas Program tracks all occurrences of rare plants and natural communities/ecosystems (S1-S3) as well as exemplary common natural community types (S4-S5 with EO ranks A/B).

Rank	Definition
<b>A</b>	<b>Excellent</b> – Excellent estimated viability/ecological integrity.
<b>B</b>	<b>Good</b> – Good estimated viability/ecological integrity.
<b>C</b>	<b>Fair</b> – Fair estimated viability/ecological integrity.
<b>D</b>	<b>Poor</b> – Poor estimated viability/ecological integrity.
<b>E</b>	<b>Extant</b> – Verified extant, but viability/ecological integrity not assessed.
<b>H</b>	<b>Historical</b> – Lack of field information within past 20 years verifying continued existence of the occurrence, but not enough to document extirpation.
<b>X</b>	<b>Extirpated</b> – Documented loss of population/destruction of habitat.
<b>U</b>	<b>Unrankable</b> – Occurrence unable to be ranked due to lack of sufficient information (e.g., possible mistaken identification).
<b>NR</b>	<b>Not Ranked</b> – An occurrence rank has not been assigned.

Visit the Maine Natural Areas Program website for more information  
<http://www.maine.gov/dacf/mnap>



# Memorandum of Findings

**Date:** June 20, 2025

**To:** Robert McSorley, PE (Sebago Technics) and Suresh Gali (New Gen Estates)

**From:** Rodney Kelshaw (Flycatcher LLC)

**CC:** Jordan Gagnon and Brian McMahon (Sebago Technics), Erin Gilmore (Flycatcher LLC)

**Subject:** Red Maple Swamp Natural Community Survey – Franklin Drive Subdivision: Windham, Maine

We understand New Gen Estates is proposing a residential subdivision and associated solar energy project (Franklin Drive Subdivision, “the Project”), on an approximately 38.6-acre parcel in Windham, Maine (Figure 1). In a Maine Natural Areas Program (MNAP) response to an information request about the site they identified that a portion of the planned subdivision includes a Red Maple Swamp (RMS) exemplary natural community. Large, intact areas of this wetland type are uncommon in Maine. MNAP noted their findings are not a substitute for on-site surveys and suggested that a survey could provide additional detail to help them make a definitive statement for the presence/absence of this unusual natural community. Flycatcher is familiar with MNAP’s definition of Red Maple Swamp habitat and has experience performing natural community surveys.

In May 2025, while conducting other on-site fieldwork Flycatcher scientists traversed the area MNAP identified as a RMS Community, with the goal of developing the official survey plan. Once in the area, Flycatcher quickly recognized that a majority of the desktop mapped areas did not meet the criteria to qualify as a RMS community.

Although a formal delineation of the community boundary was not completed, points and photos were taken at areas within the MNAP mapped polygon to demonstrate that the RMS community criteria was not met. Photos and points were also taken in the small area that did meet the MNAP criteria to qualify as a RMS community. This memo report describes the assessment methods, details of findings, and recommendations.

## METHODS

### *Desktop Review*

Prior to performing fieldwork, Flycatcher reviewed the MNAP RMS Community habitat descriptions for vegetation assemblages and soil characteristics that could designate a red maple wetland as a rare natural community in Maine. Flycatcher also consulted the Natural Resources Conservation Service (NRCS) soil survey maps for Cumberland County to determine the soil characteristics within the Survey Area.

### *Field Survey*

Flycatcher scientists completed a meander assessment within the portion of the property identified by MNAP as a potential RMS community. In general, the assessment was conducted by walking transects across the site in relatively parallel lines. If RMS communities were observed, a general location was geolocated and observations were noted for canopy closure, plant species present and surrounding habitat characteristics. Representative photographs were taken as appropriate to document findings, including areas that do not classify as an RMS community.

## FINDINGS

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### *Desktop Review*

MNAP has organized community descriptions for each natural community of concern in Maine. The RMS Community is described below:

#### Red Maple Swamp

##### Scientific Name: Red Maple - Sensitive Fern Swamp; State Rank: S5

**Community Description:** *Red maple dominates the somewhat open to nearly closed canopy (20-90% closure), sometimes with a relatively large component (up to 40% cover) of balsam fir, red spruce, or northern white cedar. Green ash and yellow birch are common, but rarely abundant, associates. The maples may be widely spaced with multiple trunks and arching crowns. The shrub layer is patchy; winterberry is common and various other shrubs may be locally abundant. The herb layer is well developed and dominated by herbs, with dwarf shrubs <20% of herb cover. Bluejoint and sensitive fern are characteristic herbs. The bryoid layer is usually <35% cover; peat mosses are typical but do not form extensive, deep carpets as they do in peatlands*

**Soil and Site Characteristics:** *Sites occupy mineral soils or well decomposed organic material over mineral soil on flats or gentle slopes in small basins, often on floodplains of streams to small rivers. Soils are typically 30-60 cm deep, loamy to silty in texture, sometimes with well decomposed muck over the mineral fraction, and pH 4.8-5.4.*

**Diagnostics:** *These are mineral soil wetlands in which red maple dominates the canopy or is co-dominant with conifers other than black spruce or larch. The seasonally flooded soils usually remain saturated through the growing season.*

#### *Field Assessment Findings*

Flycatcher performed the on-site assessment on May 29, 2025, and identified one small community meeting the criteria for red maple swamp within the Survey Area, as described below.

**RMS 1:** The small community is located near the southwest boundary of the wetland mapped along the western site boundary. This RMS community is a relatively undisturbed habitat dominated by red maple (*Acer rubrum*) trees (70%) with a canopy cover of approximately 90%. Additional tree species include green ash (*Fraxinus pennsylvanica*), yellow birch (*Betula alleghaniensis*), balsam fir (*Abies balsamea*), eastern white pine (*Pinus strobus*), and red oak (*Quercus rubra*). The shrub layer is relatively sparse (35%) and dominated by saplings of the tree species observed, and some highbush blueberry (*Vaccinium corymbosum*) (15%) and common winterberry (*Ilex verticillata*) (5%). The herbaceous layer is dominated by cinnamon fern (*Osmunda cinnamomeum*) and tussock sedge (*Carex stricta*).

While in the area mapped as red maple swamp by MNAP, geolocated photos were taken to show when the area did not meet the MNAP criteria for the community. The photo points were labeled "Not Red Maple Swamp" or "Not RMS" and the photo number. Photos are located in the photo log below.

Reasonings for not meeting the red maple swamp natural community criteria:

**Not Red Maple Swamp 1:** Red maple trees were observed in this forested area, however the canopy was not dominated by such. Eastern white pine was present throughout the area and was the dominant tree species in patches throughout. The main reason for not meeting the criteria was the understory herbaceous layer being relatively devoid of vegetation. Only a few scattered cinnamon fern fronds were seen. Additionally portions of this area do not appear to classify as wetland.

**Not Red Maple Swamp 2:** This wetland area was primarily an open canopy emergent and scrub/shrub wetland. The Cowardin classification system describes the class of forested wetland as "characterized by

*woody vegetation that is 6 m tall or taller... with at least 30 percent areal cover*" (Cowardin et. al 1979). This area does not classify as forested wetland because the woody vegetation present in the canopy does not reach this height or this canopy cover. The few red maple trees present were not dominant, and the herbaceous layer was primarily grasses and sedges.

**Not Red Maple Swamp 3:** This forested area proximal to this photo location does not appear to classify as wetland. The area is dominated by eastern white pine which is not characteristic of a RMS.

**Not Red Maple Swamp 4:** This area is dominated by red maple but does not appear to classify as wetland. The understory is white pine saplings/shrubs and there is no characteristic herbaceous vegetation that would support a RMS community designation.

**Not Red Maple Swamp 5:** This wetland has a canopy cover that is mostly open and is not red maple dominant. The shrub layer is very dense with winterberry and highbush blueberry. The area opens up into a scrub/shrub and emergent wetland. Herbaceous layer is minimal due to shrub cover.

**Not Red Maple Swamp 6:** This area is a hillslope upland. Red maple is not dominant, and the area would not meet wetland classification.

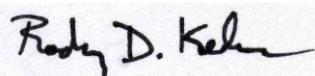
### **Conclusions and Recommendations**

Flycatcher scientists' opinion is that a majority of the MNAp mapped RMS area searched does not meet the criteria to be classified as a RMS natural community. As noted during the RMS assessment, portions of the mapped wetland do not appear to classify as wetland, thus it is not a swamp. Additionally, some areas are not forested wetlands since they do not meet the Cowardin classification for woody vegetation height and canopy cover. Other areas were not dominated by a red maple canopy or did not have the appropriate understory to classify as RMS. Flycatcher recommends these areas should not be mapped as RMS.

The one area Flycatcher determined to be RMS is very small relative to the MNAp mapped polygon that encompasses close to a third of the site. According to their natural community fact sheets, MNAp is particularly interested in any community ranked S1, S2, or S3, and outstanding examples (e.g., large, old growth stands) of S4 and S5 types.<sup>1</sup> Based on the RMS assessment findings, this area is not large and therefore Flycatcher recommends the area assessed on-site should not be considered exemplary RMS and should not have an associated setback. If there are questions or comments, we are happy to discuss our conclusion.

Thank you for the opportunity to assist you with natural resource identification for this project. If you have any questions regarding the results provided in this report, please do not hesitate to contact me.

Respectfully submitted,



Rodney Kelshaw, CWB/PWS/CPSS/CPESC/CESSWI/LSE/LSS

[rodney@flycatcherllc.com](mailto:rodney@flycatcherllc.com)

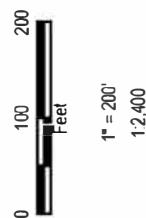
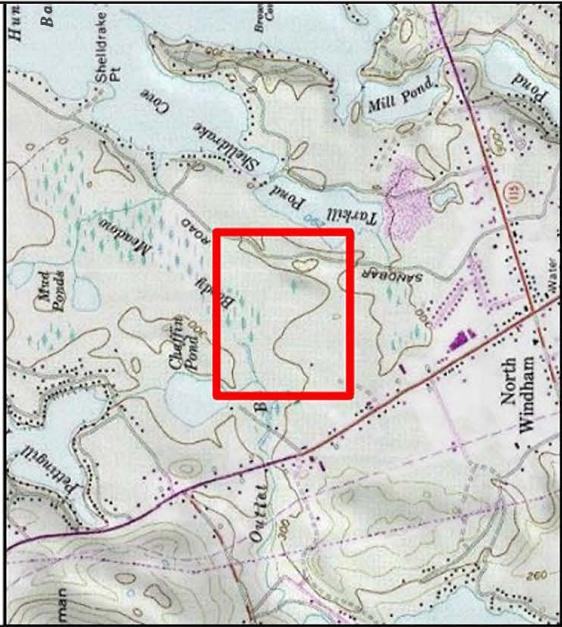
(207) 944-677

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<sup>1</sup> Gawler, S. C., & Cutko, A. (2010). *Natural landscapes of maine: A guide to natural communities and Ecosystems*. Maine Natural Areas Program, Dept. of Conservation.

**LEGEND**

- PROJECT AREA
- WETLAND
- VERNAL POOL
- APPROXIMATE RED MAPLE SWAMP HABITAT
- MNAP RED MAPLE SWAMP HABITAT
- PHOTO LOCATION



PROJECT: **NEW GEN ESTATES**  
**FRANKLIN DRIVE SUBDIVISION**  
**WINDHAM, CUMBERLAND COUNTY, MAINE**

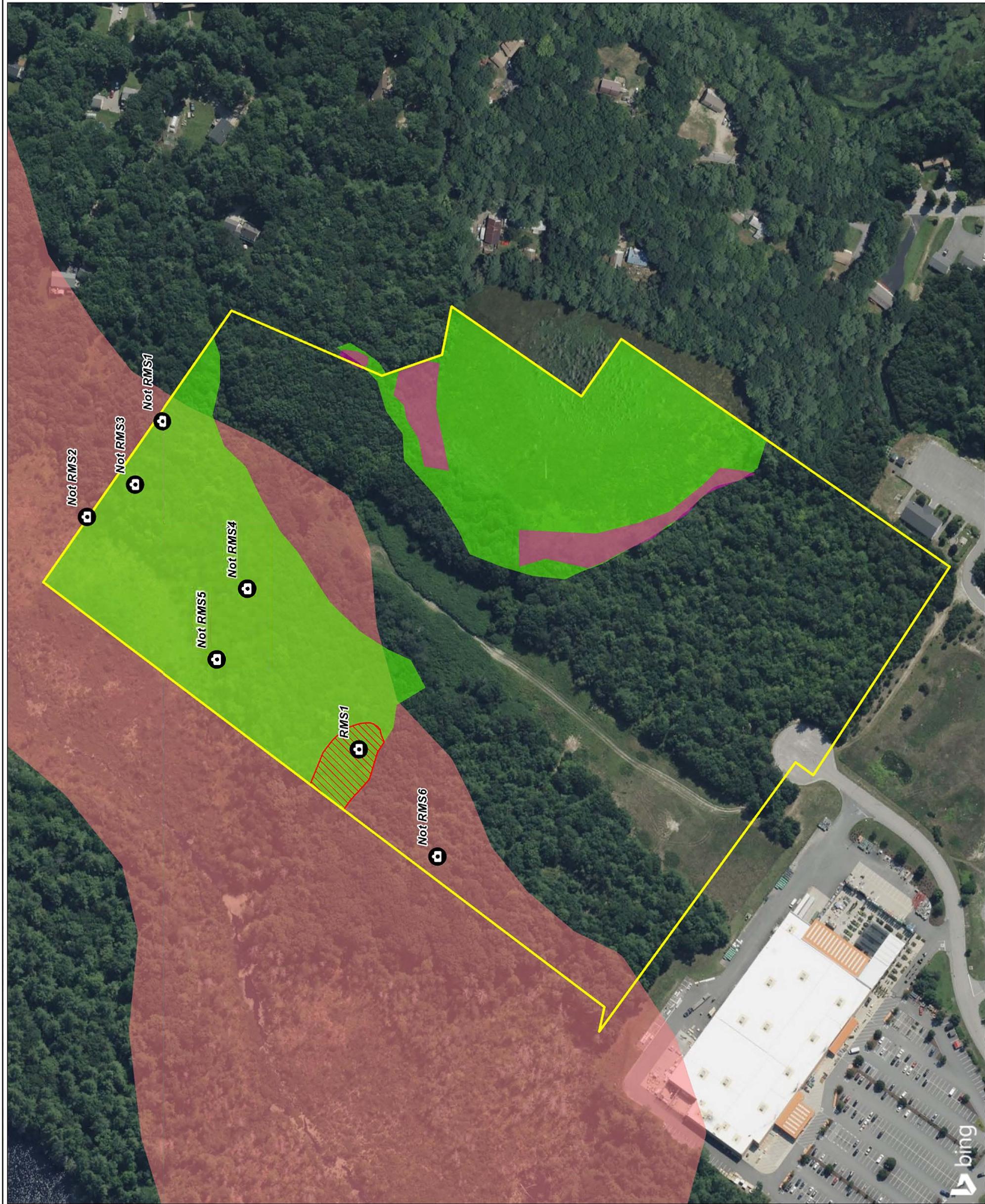
TITLE: **RED MAPLE SWAMP HABITAT MAP**

DRAWN BY: G. BOZEK PROJ NO.: 25Q-001  
 CHECKED BY: R. KELSHAW JUNE  
 MONTH: 2025 YEAR: 2025

**FIGURE 1**



FILE NO.: 25Q-001\_FRANKLIN-DR  
 LOWER FALLS LANDING  
 105 LAFAYETTE STREET,  
 SUITE 2A  
 VARMOUTH, MAINE 04066





**Photo 1. Red Maple Swamp 1. Only area observed meeting MNAP community criteria.**



**Photo 2. Not Red Maple Swamp 1. Not wetland. Red maple not dominant, little to no herbaceous cover.**



**Photo 3. Not Red Maple Swamp 2. Red maple is not dominant and the majority is not forested wetland. The area has little canopy cover. Opens into peatland.**



**Photo 4. Not Red Maple Swamp 3. Upland area not wetland.**



**Photo 5. Not Red Maple Swamp 4. Little to no herbaceous cover. Not dominated by wetland vegetation.**



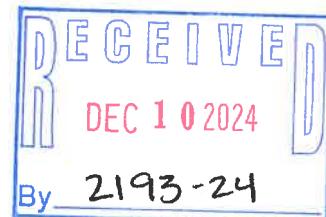
**Photo 6. Not Red Maple Swamp 5. Red maple is not dominant. The canopy is open. Very dense shrub layer.**



**Photo 7. Not Red Maple Swamp 6. Upland hillslope. Not dominated by red maple and not wetland.**



December 6, 2024  
230411



Mr. Kirk Mohney, Director and State Historic Preservation Officer  
Maine Historic Preservation Commission  
55 Capitol Street, 65 SHS  
Augusta, Maine 04333-0065

Email submittal: MHPProjectreview@maine.gov

Re: Site Review Request  
Re: Franklin Drive Subdivision, Windham - New Gen Estates, LLC  
Tax Map/Lot: 18/26-2

Dear Mr. Mohney:

Sebago Technics respectfully requests a project site review for a proposed 4-lot subdivision located off Franklin Drive in the Town of Windham. The development area is approximately 38.59-acres of mainly undeveloped area on a lot identified of the Town of Windham Tax Map 18 as Lot 26-2. The proposed development is located just east of the terminus of Franklin Drive. The proposed development is a subdivision project consisting of 4-lots and a proposed right of way extension from Franklin Drive that will be built to Town of Windham Standards with parking along the roadway. As part of the site development reconnaissance, we request a review by the Maine Historic Preservation Commission for any properties or structures of historical significance in the vicinity of the proposed site.

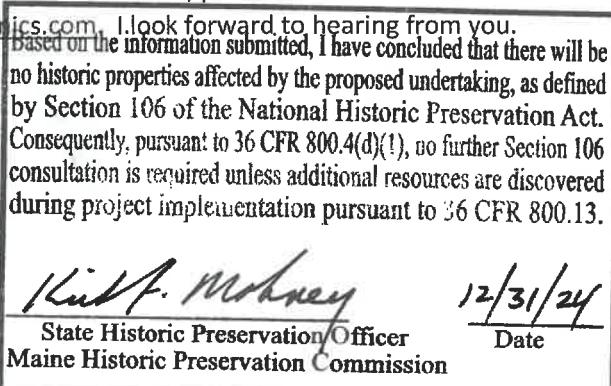
A review of the Town Comprehensive Plan and the National Register of Historic Places did not identify historic buildings or sites of historical significance. The applicant intends to maintain mature vegetation where feasible to provide natural buffering between the neighboring properties. We note that a review assessing property cards and street view photographs of direct abutting properties did not reveal any properties directly abutting the subject property that appear to be greater than fifty years of age. We have also attached a USGS Site Location Map and a concept plan of the overall property to assist in your review of historical resources.

At your earliest convenience, please review the material and let me know your findings. If you have any questions on this project or require additional information, please do not hesitate to contact me at (207) 200-2115 or by email at [jgagnon@sebagotechnics.com](mailto:jgagnon@sebagotechnics.com). I look forward to hearing from you.

Sincerely,  
SEBAGO TECHNICS, INC.

Jordan Gagnon  
Permitting Specialist

enc.





STATE OF MAINE  
DEPARTMENT OF  
INLAND FISHERIES & WILDLIFE  
353 WATER STREET  
41 STATE HOUSE STATION  
AUGUSTA ME 04333-0041



April 23, 2025

Jordan Gagnon  
Sebago Technics  
75 John Roberts Road, Suite 4A  
South Portland, ME 04106

**RE: Information Request - 20 Franklin Drive, Subdivision, Windham Project ID 8731-10094**

Dear Jordan:

Per your request received on December 10, 2024, 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 **20 Franklin Drive, Subdivision, Windham** project, pursuant to MDIFW's authority. MDIFW understands the project proposes a four-lot subdivision on approximately thirty-nine acres of land. Per a 4/23/2025 phone conversation, MDIFW understands three projects on these lands will collectively undergo Site Law review and will be permitted separately. For the purposes of this review, MDIFW presumes tree clearing would occur.

Our Department has not mapped any Essential Habitats that would be affected by this project.

***ENDANGERED, THREATENED, AND SPECIAL CONCERN SPECIES***

**Bat Species**

Of the eight species of bats that occur in Maine, four species are afforded protection under Maine's Endangered Species Act (MESA, 12 M.R.S 12801 et. seq.): little brown bat (State Endangered), northern long-eared bat (State Endangered), eastern small-footed bat (State Threatened), and tri-colored bat (State Threatened). The four remaining bat species are designated as Species of Special Concern: big brown bat, red bat, hoary bat, and silver-haired bat. While a comprehensive statewide inventory for bats has not been completed, based on historical evidence it is likely that several of these species occur within the project area during spring/fall migration, the summer breeding season, and/or for overwintering. However, our Department does not anticipate significant impacts to any of the bat species as a result of this project.

**Blanding's Turtle and Spotted Turtle**

Potential habitat is present onsite for Spotted turtle (State Threatened) and Blanding's turtle (State Endangered). Spotted and Blanding's turtles are most frequently associated with small, acidic wetlands and vernal pools located in large, intact landscapes. They also use small streams,

April 23, 2025

*Letter to Jordan Gagnon, Sebago Technics*

*Comments RE: 20 Franklin Drive, Subdivision, Windham*

shrub swamps, wet meadows, bogs, and forested swamps. As these habitats are present in the project area, MDIFW recommends the on-site peatland wetlands be avoided and buffered with a 250-foot undisturbed, intact vegetative cover. Alternatively, we recommend that surveys be conducted for these two species within the project area, conducted by qualified biologists with experience surveying for these species, following MDIFW's most recent survey protocols.

For additional information and survey protocols, contact Reptile and Amphibian Group Leader Derek Yorks ([Derek.Yorks@Maine.gov](mailto:Derek.Yorks@Maine.gov)) with Environmental Review Coordinator Andy Wood ([Andrew.J.Wood@Maine.gov](mailto:Andrew.J.Wood@Maine.gov)) copied on correspondence.

### **Eastern Ribbonsnake**

Potential habitat is present onsite for the Eastern ribbon snake, a State Species of Special Concern. This rare species is a slender, semiaquatic snake often observed near the edges of emergent marshes, wet meadows, scrub-shrub wetlands, beaver impoundments, bogs, river and stream floodplains, and vegetated shorelines of ponds and lakes. As these habitats are present in the project area, MDIFW recommends the on-site peatland wetlands be avoided and buffered with a 250-foot undisturbed, intact vegetative cover. Alternatively, we recommend that surveys be conducted for this species within the project area, conducted by qualified biologists with experience surveying for this species, following MDIFW's most recent survey protocols.

For additional information and survey protocols contact Reptile and Amphibian Group Leader Derek Yorks ([Derek.Yorks@Maine.gov](mailto:Derek.Yorks@Maine.gov)) with Environmental Review Coordinator Andy Wood ([Andrew.J.Wood@Maine.gov](mailto:Andrew.J.Wood@Maine.gov)) copied on correspondence.

## ***SIGNIFICANT WILDLIFE HABITAT***

### **Significant Vernal Pools**

Per a 4/23/2025 phone discussion, MDIFW understands that surveys for vernal pools have been conducted and one significant vernal pool and one non-significant vernal pool were found onsite. We ask that you send any vernal pool survey forms to [vernalpool.mdifw@maine.gov](mailto:vernalpool.mdifw@maine.gov) so that we can review the data associated with these pools. If project timing does not allow for verification of Significance, we recommend that each pool be protected with a 250-foot intact, undisturbed buffer. Please note that MDIFW's recommended buffers for these features may be considered in the context of their potential as habitat for threatened and endangered turtles and special concern snakes (described in the section above).

## ***AQUATIC RESOURCES***

### **Fish Habitat**

We recommend that 100-foot undisturbed vegetated buffers be maintained along streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it

April 23, 2025

Letter to Jordan Gagnon, Sebago Technics

Comments RE: 20 Franklin Drive, Subdivision, Windham

should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e., natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fisheries and aquatic habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

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 the 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](mailto: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.

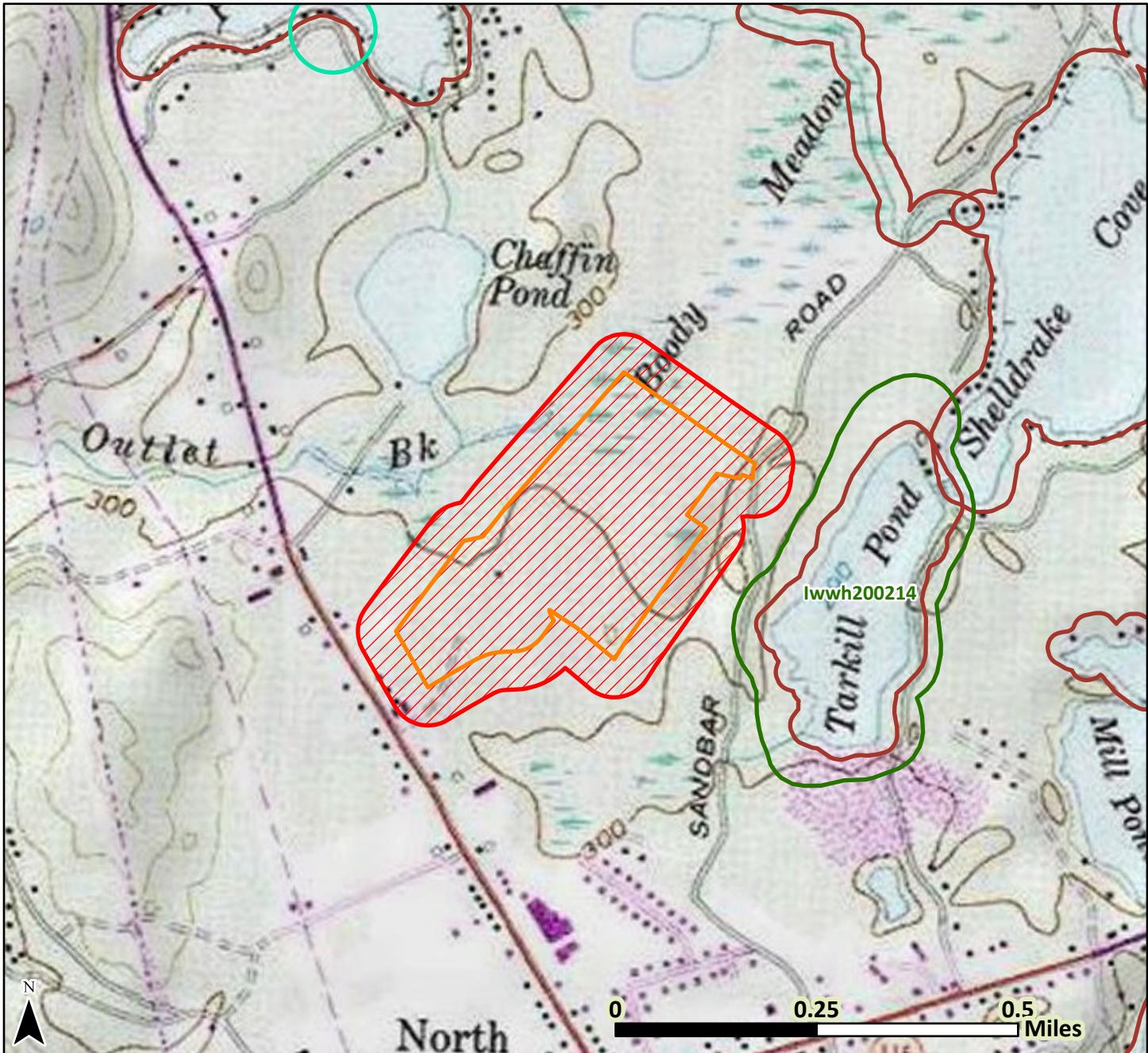
Best regards,



Andrew Wood  
Environmental Review Coordinator



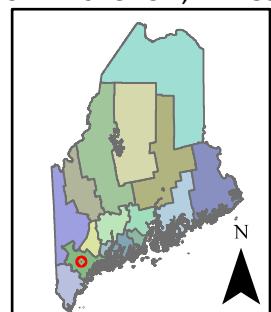
Maine Department of Inland Fisheries and Wildlife  
Project Area Review of Fish and Wildlife Observations and Priority Habitats  
**20 Franklin Drive, Subdivision, Windham**  
Project ID 8731, Version ID 10094



- County Boundary
- Township Boundary
- Project Footprint
- Search Area

- Inland Waterfowl/Wading Bird
- Significant Vernal Pool
- Special Concern Fish

Date: 12/11/2024  
Projection:  
UTM Zone 19N, NAD83



Legend only lists resources visible in the map; see response letter for all resources that were evaluated.



### **Decommissioning Plan and Cost Estimate: Windham Solar Array**

#### Sequence of disassembly

- 1 Disconnect the electrical feed to the transformer from transmission line. (16 man hours)
- 2 Disconnect inverters from the combines and switch gear/ transformers and remove all wire and conduit. Salvage all copper wire. (32 man hours)
- 3 Disconnect the solar strings from the inverters and Remove Inverters (x 4) (32 man hours)
- 4 Salvage copper from all strings between the inverter and the array (x 24 strings) (~10000 feet) (120 man hours)
- 5 Remove Solar Panels and place in Dumpsters
  - 100 modules a day -24 man hours/day for 6 days (144 man hours)
  - \$10 per module for transport of modules to recycle facility including dumpster cost: \$ 6420
- 6 Disassemble racking system and collect steel for salvage: 36 sections at 5 sections per day for 7 days with 24 man hours/day: (168 man hours)
- 7 Remove screws from the ground and collect steel for salvage: 36/ day with 16 man hours per day for 4 days. (64 man hours).
- 8 Remove transformer, switch gear and major electrical components.

One day with crane service with removal and disposal/salvage \$5000

### **Cost Estimate**

#### Labor:

- Estimated Total man hours: 580 hours
- Cost per man hour: \$45
- Total Labor Estimate: \$26,100

#### Removal and Disposal:

- Solar Panel disposal: \$6420
- Electrical Equipment Disposal: \$5000
- Dumpster Cost: \$3000
- Crane service and Rental equipment : \$9500

**Total Decommissioning Cost: \$62,700**

# PV Solar Site

## Commissioning Checklist

Site Name:			
System Designation:		Inverter Type:	
Commissioned Date:		Inverter SN:	
<b>Safety</b>		<b>Check</b>	<b>Note</b>
1	AC & DC disconnects are in the open position.		
2	All combiner fuses holders are open.		
3	No voltage is present at either the AC or DC Disconnects.		
4	If disconnects are not in sight during testing use LOTO.		
<b>Plan Review</b>		<b>Check</b>	<b>Note</b>
5	Review "As Built" Plan changes.		
6	Equipment locations, model #'s and specifications as per Plan.		
7	OCP amperage and voltage as per Plan.		
8	Conduit sizes and materials as per Plan.		
9	Current carrying conductor size and type as per Plan.		
10	Grounding and Bonding Conductor - Size and Type as per Plan.		
11	Equipment and Conduits Grounded or Bonded as per Plan.		
<b>Inverter Output and AC Disconnects</b>		<b>Check</b>	<b>Note</b>
12	Net Metered OCP is installed in the correct panel location and is properly labeled.		
13	All Code and PSS required labels are on the AC disconnect cover.		
14	AC disconnect terminations have been torqued and labeled.		
15	The AC disconnect is wired as per Plan.		
16	The AC disconnect is securely attached and neat.		
<b>Inverter</b>		<b>Check</b>	<b>Note</b>
17	The Inverter is properly sited and secured with all manufacturer's required clearances.		
18	Isolation transformer terminations are as per manufacturer's instructions and torqued.		
19	AC & DC terminations are as per manufacturer's instructions, torqued and labeled.		
20	Visually inspect the inverter enclosure for signs of damage in shipping or siting and that all doors open freely.		
21	Visually inspect the interior of the inverter and check for loose sub-assemblies and connections.		
22	Inverter ventilation fan moves freely and filters are in-place.		
23	All Code and PSS required labels are on the inverter doors.		
24	Bender RCMS Unit and combiner power supply is properly installed as per PSS's installation instructions.		

	<b>PV Output to Inverter</b>	<b>Check</b>	<b>Note</b>	<b>Photo</b>
25	Junction box terminations are torqued, cables are labeled and properly grounded.			
26	Cables routed through conduit bodies are neat and not damaging Cable insulation.			
27	Expansion joints are installed as per manufacture's instructions and per Plans.			
28	Conduit runs are per Plan, neat, supported properly and the conduit fittings are tight.			
29	The DC disconnect is securely attached and neat.			
30	The DC disconnect is wired as per manufacture's and PSS's instructions.			
31	DC disconnect terminations have been torqued and labeled.			
32	All Code and PSS required labels are on the DC disconnect cover.			
	<b>PV Array</b>			
33	Racking is complete and installed as per the manufacturer's instructions.			
34	The module's nameplate specification are as per the Plans.			
35	Modules are installed and mounted as per the manufacture's instructions.			
36	There are no damaged or misaligned modules in the array.			
37	PV connectors are installed as per the manufacture's instructions and fully engaged.			
38	PV Wiring is properly supported, neat and there are no point where the insulation could become damaged.			
39	Array combiners are terminated as per Plans and are neat.			
40	Combiner terminations have been torqued and labeled.			
41	All Code and PSS required labels are on the combiner cover.			
42	Review the String Open Circuit Voltage and Short Circuit Amperage Test Results.			
43	Review DC Array Megger Test results.			
	<b>Inverter Start-up</b>			
44	Close the inverter AC disconnects and power-up the inverter AC side, record the line voltages.			
45	Turn on the inverter and test all safety interlocks (door switches, Bender, Anti-Islanding, etc).			
46	Close all combiner fuse holders and any manual disconnects			
47	Confirm DC voltage and polarity at the DC disconnect and at the inverter.			
48	Confirm the AC and DC Surge Protection is operational.			
49	Close the inverter DC disconnects and put the inverter on line.			
50	Confirm inverter display voltages and check inverter output.			
51	Complete Performance Testing			

	<b>Monitoring Equipment</b>	<b>Check</b>	<b>Note</b>	<b>Photo</b>
52	Weather Station equipment is installed and wired as per the manufacture's instructions.			
53	Power Monitoring equipment is installed and wired as per the manufacture's instructions.			
54	Monitoring from the inverter and the Gateway is complete and operational.			
<b>Inspection Notes</b>				
<b>Readings</b>				
Irradiance - Watt/m2:		Ambient Temp. 0C.:		
AC Resistance Reading	Field Measured Readings			
AC Line Resistance:	AC Line Voltage			
Phase A to Grd:		Phase A to Grd:		
Phase B to Grd:		Phase B to Grd:		
Phase C to Grd:		Phase C to Grd:		
AC Line Current	AC Line Current			
Phase A:		Phase A:		
Phase B:		Phase B:		
Phase C:		Phase C:		
	DC Input Voltage:			
	DC String Voltage:			
	DC Input Current:			
	Control Power:			

Commissioner	
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# Untitled Preventive Maintenance

## Preventive Maintenance

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### Site Info

Site name	
Site Contact (name)	
Site Contact (phone)	
Site Contact (email)	
Street Address	
City	

State	
Zip code	
Asset Owner	
Field Service Provider	
Site Notes	

---

### System Info

System Size (kW-dc)	
System Installation Type	
Module Manufacturer	
Module Model	
Inverter Manufacturer	

Inverter Model	
# of Inverters	
Racking Manufacturer	
DAS/SCADA System Manufacturer	
DAS/SCADA login information	

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### Technician Info

Lead Technician	
Additional Technician(s)	

Date	
------	--

---

### Safety

Start time	
JHA	
Have all parties onsite reviewed and signed a Jobsite Hazard Analysis?	

LOTO	
------	--

Have all parties onsite reviewed the Lock Out-Tag Out procedure?

Stretch and flex	
Have all parties onsite performed a stretch and flex?	

PPE	
-----	--

Do all parties onsite possess and know how to use the appropriate personal protective equipment (PPE), including any tools and arc flash gear, needed to perform the tasks?

Dispatcher Notifications	
--------------------------	--

Have you notified all relevant parties (Sales Co, Monitoring agent, etc) that you're onsite and may turn off equipment today? Note the contact person in the comment.

## Recommended Repairs and General Notes

### Recommended Repairs and Additional notes

#### 1.0 Grounds, Access, Security

Site security: access point, locks, security system

General grounds/roof condition: erosion, drainage, easements, debris

Roof penetrations, damage, potential leaks, drains

Roadways: check for damage, erosion, drainage

Fencing: intact, post/footer condition, erosion, rust

Vegetation: height, shading of array, need for mitigation

Animals: pests/rodents, infestations, damage

#### 2.0 Inverters

Are inverters operational?

General condition: display screen operational, mounting intact, equipment clearance, animals/pests

Signage and labeling: legible, firmly attached

Integrity of the enclosure: penetrations, supports, fittings, door hinges, interior/exterior clean and free of debris, no moisture or rust

Pads: level, intact, free of debris

Thermal scan inside inverter, AC and DC connections

Signs of arcing, fuse failure, or overheating

Termination tightness and torque marks

Grounding and bonding: ground straps, ground fault fuse intact

Conductors: routing and wire management, labeling/color coding, protected from damage

Filters, fans, heat sinks: check condition, clean/replace as necessary

IV curve tracing

String testing (Voc and Imp)

Inverter and meter power readings: verify output with monitoring system

Insulation resistance testing

Any other manufacturer requirements from installation manual or warranty guideline (note in comments)

Other observations or notes regarding inverter condition

Confirm proper operation following PM; inverter output matches expected/calculated output

#### 3.0 DC Components (discos, combiners, recombiners, etc.)

Signage and labeling: legible, firmly attached

Mounting and Enclosure condition: secure, clean and free of debris/dirt/moisture/rust

Grounding and bonding intact

Termination tightness and torque marks

## Equipment clearance

Conduit penetrations, support, fittings

IR thermal imaging, note thermal anomalies

Free of signs of arcing

Conductors: routing and wire management, labeling/color coding, protected from damage

Switches, fuses, disconnects: test to ensure proper function

IV curve tracing, if required

Confirm proper operation following PM

## 4.0 AC Components (meters, discos, switch gear, transformers)

Signage and labeling: legible, firmly attached

Mounting and Enclosure condition: secure, clean and free of debris/dirt/moisture

Equipment clearance

Conduit penetrations, support, fittings

IR thermal imaging; note thermal anomalies

Free of signs of arcing

Grounding and bonding intact

Termination tightness and torque marks

Conductors: routing and wire management, labeling/color coding, protected from damage

Switches, fuses, disconnects: test to ensure proper function

Confirm proper operation following PM

## 5.0 Modules and Racking

Soiling, debris

Shading concerns: now or future

Modules: damage, delamination, discoloring

Wire management: secured, drip loops, metal ties

Backsheets: check for scratches, marks, burns

Leads, connectors, homeruns: damage, loose or failed connectors

Structural integrity: damage, rust, row shifting (frost heave, ground movement)

Condition of ballast blocks, slip sheets, wind deflector

Roof penetrations: sealed, intact, no ponding

Grounding and bonding intact: check continuity between module frames and racking

Torque: torque marks in place, properly tightened

Animals: pests/rodents, infestations, damage

Is this a tracking system?

## 6.0 Conduit, Raceways, BOS

Secured at proper intervals, fittings tight, gaskets intact

Expansion fittings functioning properly

Grounded as required

Signs of rusting, damage, degradation

Signs of water intrusion

## 7.0 DAS/SCADA and Weather Station

Signage and labeling: legible, firmly attached

Mounting and Enclosure condition: secure, clean and free of debris/dirt/moisture

Termination tightness and torque marks

Conductors: routing and wire management, labeling/color coding, protected from damage

Pyranometer: reference cell in POA confirmed, properly secured to mounting surface, clean

Pyranometer calibrated to irradiance sensor

Cell temp sensor properly installed

Compare temp on back of module with monitoring system reading

Compare ambient temp with monitoring system reading

Anemometer: mounting intact, mounting secure, functioning

Fans in equipment and modem enclosure: turn freely, functional, free of obstruction/debris

## 8.0 Storage

### Site Checkout

All equipment operational at end of visit?

End time

Monitoring system operational at end of visit?

Lead Technician Signature

Is the site clean and fully secured as you depart?

# **Section 10**

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## **Soils Information**

## Section 10 – Soils Information

A custom Soil Resource Report derived from the Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) online tool is enclosed within the *Stormwater Report* enclosed in Section 8. This report was generated by specifying an approximate area of interest that contains the entire subject parcel area. This report also includes a Soil Map, detailing the project boundary in accordance with the existing soil classifications within and around the property.

Additionally, a soils narrative report was performed by Mark Hampton Associates, Inc., on December 10, 2022. This Class-B High Intensity Soil Survey includes soil survey boundaries and test pit information, in accordance with the Maine Association of Professional Soil Scientists and the Maine Board of Certification of Geologists and Soil Scientists. The narrative report and map is also enclosed within this Section.

The Applicant has also retained S.W. Cole to provide geotechnical services. All field work has been conducted to gain subsurface information on the site, consisting of test borings explorations, soils laboratory testing, a geotechnical analysis of the subsurface findings, and the preparation of their report. Their report will be provided with the Final Plan submission for this project.

## **Legend for Soil Maps**

### **1. Drainage Class**

Excessively Well Drained	EWD
Well Drained	WD
Moderately Well Drained	MWD
Somewhat Poorly Drained	SPD
Poorly Drained	PD
Very Poorly Drained	VPD

### **2. Slope Designation**

0-3%	A
3-8%	B
8-15%	C
15-25%	D
>25%	E

**3. Note:** High Intensity Soil Survey has been prepared by Mark Hampton Associates, Inc. in accordance with the standards adopted by the Maine Association of Professional Soil Scientists, and the Maine Board of Certification of Geologists and Soil Scientists.



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SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7314

Franklin Drive  
Windham, ME  
Jay Wise

### **Soil Narrative Report**

DATE: Soil Profiles observed on December 10, 2022

BASE MAP: Base plan provided by BH2M Scale 1 inch equals 100 feet and one foot contours.

GROUND CONTROL: Soil survey boundaries located by Mark Hampton Associates, Inc. for Class B Soil Survey

#### **Class B-High Intensity Soil Survey (Minimum Standards)**

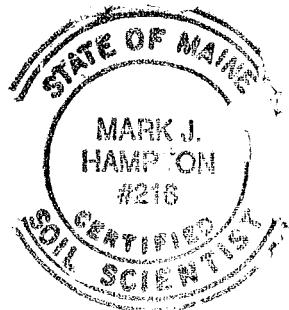
Mapping units of 1 acre or less.  
Scale of 1"= 200 feet or larger.  
Up to 25% inclusions in mapping units of which no more than 15% may be dissimilar soils.  
Ground Control – test pits located by means of compass by chaining, pacing, or taping from known survey control points  
Base Map – 5 foot contour intervals

#### **Provided:**

Mapping units of 1 acre or less  
Base map scale of 1"= 100 feet.  
Up to 25 percent inclusions in mapping units of which no more than 15 percent is dissimilar soils.  
Baseline information and test pits located by pacing and taping from known survey control points.  
Ground topographic survey with two foot contours and ground control provided.

The accompanying soil profile descriptions, soil map, and this soil narrative report were done in accordance with the standards adopted by the Maine Association of Professional Soil Scientists, and the Maine Board of Certification of Geologists and Soil Scientists.

  
\_\_\_\_\_  
Mark J. Hampton C.S.S. #216, L.S.E. #263 12/12/22  
\_\_\_\_\_  
Date





## M A R K   H A M P T O N   A S S O C I A T E S ,   I N C .

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7314

Franklin Dive  
Windham, ME  
Jay Wise

### Adams (Typic Haplorthods)

#### SETTING

PARENT MATERIAL: Derived from glacial-fluvial, glacio-lacustrine sand.  
LANDFORM: Outwash plains, deltas, and terraces  
POSITION IN LANDSCAPE: Sidehill, shoulders and plains  
SLOPE GRADIENT RANGES: (A) 0-3%

#### COMPOSITION AND SOIL CHARACTERISTICS

DRAINAGE CLASS: Well drained. Depth to seasonal high watertable greater than 4 feet throughout the year.

TYPICAL PROFILE:

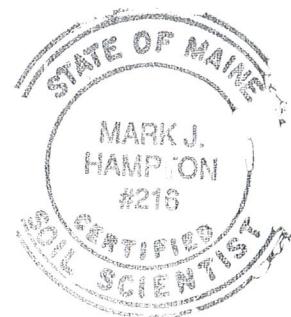
<u>Surface Layer:</u>	Dark Brown loamy sand, 0-8"
<u>Subsurface Layer:</u>	Red Brown loamy sand, 8-20"
<u>Subsoil Layer:</u>	Yellow-brown loamy sand, 20-30"
<u>Substratum:</u>	Gray-brown sand, 30-72"

HYDROLOGIC GROUP: Group A  
SURFACE RUNOFF: Very slow to medium  
PERMEABILITY: Rapid or very rapid  
DEPTH TO BEDROCK: Greater than 65 inches  
HAZARD TO FLOODING: None

**(Within Mapping Unit)**

#### INCLUSIONS

CONTRASTING: Croghan



#### USE AND MANAGEMENT

DEVELOPEMENT: There are no limiting factors for building site development.



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7314

Franklin Drive  
Windham, ME  
Jay Wise

**Croghan**  
(Aquic Haplorthods)

**SETTING**

PARENT MATERIAL: Derived from outwash and deltaic sandy deposits.  
LANDFORM: Outwash plains, deltas, and terraces  
POSITION IN LANDSCAPE: Sidehill, shoulders and plains  
SLOPE GRADIENT RANGES: (B) 3-8%, (E) >25%

**COMPOSITION AND SOIL CHARACTERISTICS**

DRAINAGE CLASS: Moderately well drained Depth to seasonal high watertable ranges from 1.5 to 2.0 feet below the surface at some time from November to May.

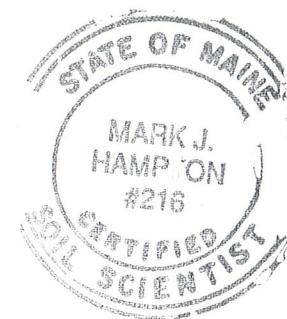
TYPICAL PROFILE:

<u>Surface Layer:</u>	Dark Brown fine sand, 0-7"
<u>Subsurface Layer:</u>	Reddish brown sand, 7-16"
<u>Subsoil Layer:</u>	Brown sand, 16-32"
<u>Substratum:</u>	Gray sand, 32-65"

HYDROLOGIC GROUP: Group B  
SURFACE RUNOFF: Moderately rapid to rapid  
PERMEABILITY: Rapid or very rapid  
DEPTH TO BEDROCK: Greater than 65 inches  
HAZARD TO FLOODING: None

**INCLUSIONS**  
(Within Mapping Unit)

CONTRASTING: Croghan, Sebago



**USE AND MANAGEMENT**

DEVELOPMENT: The limiting factor for building site development is wetness due to the presence of a high watertable for a portion of the year. Proper foundation drainage or site modification is recommended.



## MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7314

Franklin Drive  
Windham, ME  
Jay Wise

### Sebago (Fibric Haplohumists)

#### SETTING

PARENT MATERIAL: Derived in woody and organic deposits  
LANDFORM: Bogs and swamps  
POSITION IN LANDSCAPE: Lower positions on landform  
SLOPE GRADIENT RANGES: (A) 0-3%

#### COMPOSITION AND SOIL CHARACTERISTICS

DRAINAGE CLASS: Very poorly drained with an apparent watertable from 0.0 to 1.0 feet below the surface at some time from October to May or during periods of heavy precipitation.

TYPICAL PROFILE: Surface Layer: Black organic material, 0-50"  
Subsurface Layer: Gray sandy loam, firm  
Subsoil Layer:  
Substratum:

HYDROLOGIC GROUP: Group D  
SURFACE RUNOFF: Low or surface ponded  
PERMEABILITY: Moderately rapid in the organic horizons  
DEPTH TO BEDROCK: Greater than 65 inches  
HAZARD TO FLOODING: Possible to likely

(Within Mapping Unit)

CONTRASTING: Croghan

#### INCLUSIONS



#### USE AND MANAGEMENT

Development: The limiting factor for building site development is severe water due to the presence of a high watertable for a portion of the year. This soil is hydric and would be considered wetland.

## SOIL PROFILE / CLASSIFICATION INFORMATION

## SOIL SCIENTIST DESCRIPTION OF SOIL CONDITIONS AT PROJECT SITES

Project Name:  
Franklin Drive

Applicant Name: Jay Wise

Project Location (municipality):  
Windham

Exploration Symbol # SS-1  Test Pit  Boring  Probe  
0 " Organic horizon thickness Ground surface elev. \_\_\_\_\_  
\_\_\_\_\_" Depth:  of exploration, or  to refusal

Depth below mineral soil horizon (inches)	Horizon	Color	Texture	Structure	Consistence	Redox
0	O/E	Dark Brown	Loamy Sand	Weak Blocky	Very Friable	
10	Bh	Red Brown	Loamy Sand	Weak Sub Ang Blocky	Friable	
20	Bs	Yellow Brown	Sand	Fine Granular	Friable	
30						
40						
50	C1	Brown	Sand	Single Grain	Loose	None Noted

 <b>Soil Details</b>	Soil Series/Phase Name:		Limiting Factor	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
	<b>Adams</b>		<b>&gt;48 "</b>	
			<b>Depth</b>	
Drainage Class		Slope	Hydric Soil	Hydrologic
<input type="checkbox"/> ED <input type="checkbox"/> SED <input checked="" type="checkbox"/> WD <input type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD		<span style="font-size: 2em;">3</span> <small>Percent</small>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	<small>Soil Group</small>

Exploration Symbol # SS-2  Test Pit  Boring  Probe  
\_\_\_\_ " Organic horizon thickness Ground surface elev. \_\_\_\_\_  
\_\_\_\_ " Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0 O/E	Dark Brown	Fine Sand	Weak Angular	Very Friable	
10 Bh	Brown	Sand	Sub Ang Blocky	Friable	
20 Bs	Yellow Brown	Fine Sand	Weak Sub Ang Blocky	Friable	Common and Distinct
30					
40 C	Pale Brown	Sand	Single Grain	Friable	
50					

Soil Details 	Soil Series/Phase Name:		Limiting Factor	<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
	Croghan		17	"
			Depth	
Drainage Class		Slope	Hydric Soil	Hydrologic
<input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD		30	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Soil Group
		Percent		

Exploration Symbol # SS-3  Test Pit  Boring  Probe  
\_\_\_\_ "Organic horizon thickness" Ground surface elev. \_\_\_\_  
\_\_\_\_ "Depth:  of exploration, or  to refusal

Depth below mineral soil horizon (inches)	Horizon	Color	Texture	Structure	Consistence	Redox
0	O/E	Dark Brown	Loamy Sand	Fine Granul	Friable	
10	Bh	Red Brown	Fine Sand	Weak Sub Ang Blocky	Friable	
20	Bs		Fine Sand			Common and Distinct
30		Tan		Loose	Friable	
30	C	Brown	Fine Sand	Single Grain	Friable	
40						
50						
60						

Soil Details  ►	Soil Series/Phase Name:		Limiting Factor <b>16</b> Depth	Groundwater	
	<b>Croghan</b>			<input checked="" type="checkbox"/> Restrictive Layer	
				<input type="checkbox"/> Bedrock	
Drainage Class		Slope	Hydric Soil	Hydrologic	
<input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD		<b>32</b> <small>Percent</small>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Soil Group	

Exploration Symbol # SS-4  Test Pit  Boring  Probe  
\_\_\_\_ " Organic horizon thickness Ground surface elev. \_\_\_\_\_  
" Depth:  of exploration, or  to refusal

Horizon O/E	Color Dark Brown	Texture Loamy Sand	Structure Grand	Consistence Friable	Redox
0					
10	Bh	Red Brown	Loamy Sand	Fine Grandul	Friable
20	Bs	Tan	Fine Sand	Fine Grandul	Friable
30	C	Brown	Fine Sand	Grand	Friable Common and Distinct
40					
50					
60					

Soil Details ►	Soil Series/Phase Name: <b>Croghan</b>	Limiting Factor <b>18</b>	Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/>
	Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Slope 	Hydro Soil <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes

**SOIL SCIENTIST INFORMATION AND SIGNATURE**

 Signature  
Mark J. Hampton

Name Printed

12/10/2022

Date

216

SS License No.

A circular notary seal with a decorative border. The text "MARK J. HAMPTON" is at the top, followed by "NOTARY PUBLIC" and the number "#216". The date "APRIL 1, 2001" is at the bottom. A rectangular overlay with the text "affix professional seal" is placed over the bottom half of the seal.

## SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION  
OF SOIL CONDITIONS AT PROJECT SITESProject Name:  
Franklin DriveApplicant Name:  
Jay WiseProject Location (municipality):  
Windham

Exploration Symbol # SS-5  Test Pit  Boring  Probe  
0 " Organic horizon thickness Ground surface elev. \_\_\_\_\_  
" Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
O/E1	Black	Mucky Peat	Fibrous	Massive	Common and Distinct
O/E2	Black	Mucky Peat	Fibrous	Massive	
0					
10					
20					
30					
40					
50					
60					

Depth below mineral soil horizon (inches)

Soil Details

Soil Series/Phase Name: <b>Sebago</b>		Limiting Factor <input checked="" type="checkbox"/> Groundwater <u>0</u> " <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock	
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input checked="" type="checkbox"/> VPD		Slope <u>2</u> Percent	Hydric Soil <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Soil Group
		Hydrologic	

Exploration Symbol # SS-6  Test Pit  Boring  Probe  
" Organic horizon thickness Ground surface elev. \_\_\_\_\_  
" Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
O/E	Dark Brown	Fine Sand	Weak Angular	Very Friable	
Bh	Brown	Sand	Sub Ang Blocky	Friable	
Bs	Yellow Brown	Fine Sand	Weak Sub Ang Blocky	Friable	Common and Distinct
C	Pale Brown	Sand	Single Grain	Friable	
0					
10					
20					
30					
40					
50					
60					

Depth below mineral soil horizon (inches)

Soil Details

Soil Series/Phase Name: <b>Croghan</b>		Limiting Factor <input checked="" type="checkbox"/> Groundwater <u>17</u> " <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock	
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD		Slope <u>30</u> Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Soil Group
		Hydrologic	

Exploration Symbol # SS-7  Test Pit  Boring  Probe  
" Organic horizon thickness Ground surface elev. \_\_\_\_\_  
" Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
O/E	Dark Brown	Loamy Sand	Fine Grandul	Friable	
Bh	Red Brown	Fine Sand	Weak Sub Ang Blocky	Friable	
Bs	Tan	Fine Sand	Loose	Friable	Common and Distinct
C	Brown	Fine Sand	Single Grain	Friable	
0					
10					
20					
30					
40					
50					
60					

Depth below mineral soil horizon (inches)

Soil Details

Soil Series/Phase Name: <b>Croghan</b>		Limiting Factor <input checked="" type="checkbox"/> Groundwater <u>16</u> " <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock	
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD		Slope <u>8</u> Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Soil Group
		Hydrologic	

Exploration Symbol # SS-8  Test Pit  Boring  Probe  
" Organic horizon thickness Ground surface elev. \_\_\_\_\_  
" Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
O/E1	Black	Mucky Peat	Fibrous	Common and Distinct	
O/E2	Black	Mucky Peat	Fibrous	Massive	
0					
10					
20					
30					
40					
50					
60					

Depth below mineral soil horizon (inches)

Soil Details

Soil Series/Phase Name: <b>Sebago</b>		Limiting Factor <input checked="" type="checkbox"/> Groundwater <u>0</u> " <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock	
Drainage Class <input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input checked="" type="checkbox"/> VPD		Slope <u>0</u> Percent	Hydric Soil <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Soil Group
		Hydrologic	

## SOIL SCIENTIST INFORMATION AND SIGNATURE



Signature  
Mark J. Hampton

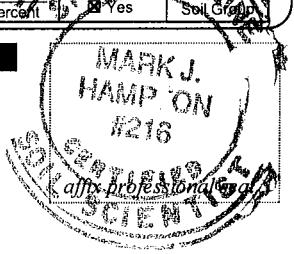
Name Printed

12/10/2022

Date

216

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MARK J.  
HAMPTON  
#216

affidavit professional

## SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION  
OF SOIL CONDITIONS AT PROJECT SITESProject Name:  
Franklin DriveApplicant Name:  
Jay WiseProject Location (municipality):  
Windham

Exploration Symbol # SS-9  Test Pit  Boring  Probe  
0 " Organic horizon thickness Ground surface elev.  
" Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0	Dark Brown	Fine Sand	Weak Ang	Very Friable	
10	Red Brown	Sub Ang	Blocky		
Bhs	Sand				
20	Yellow Brown	Fine Sand	Weak Sub Ang	Friable	Common and Distinct
30		Blocky			
40					
50	C Pale Brown	Sand	Single Grain	Friable	
60					

Soil Details	Soil Series/Phase Name:		Limiting Factor		Depth
	Croghan		<input checked="" type="checkbox"/> Groundwater	<input type="checkbox"/> Restrictive Layer	
►	Drainage Class	Slope	Hydric Soil	Hydrologic	
	<input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input checked="" type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	28 Percent	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Soil Group	

Exploration Symbol # \_\_\_\_\_  Test Pit  Boring  Probe  
" Organic horizon thickness Ground surface elev.  
" Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0					
10					
20					
30					
40					
50					
60					

Soil Details	Soil Series/Phase Name:		Limiting Factor		Depth
			<input type="checkbox"/> Groundwater	<input type="checkbox"/> Restrictive Layer	
►	Drainage Class	Slope	Hydric Soil	Hydrologic	
	<input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Percent	<input type="checkbox"/> No <input type="checkbox"/> Yes	Soil Group	

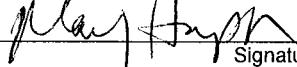
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" Organic horizon thickness Ground surface elev.  
" Depth:  of exploration, or  to refusal

Exploration Symbol # \_\_\_\_\_  Test Pit  Boring  Probe  
" Organic horizon thickness Ground surface elev.  
" Depth:  of exploration, or  to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
0					
10					
20					
30					
40					
50					
60					

Soil Details	Soil Series/Phase Name:		Limiting Factor		Depth
			<input type="checkbox"/> Groundwater	<input type="checkbox"/> Restrictive Layer	
►	Drainage Class	Slope	Hydric Soil	Hydrologic	
	<input type="checkbox"/> ED <input type="checkbox"/> SED <input type="checkbox"/> WD <input type="checkbox"/> MWD <input type="checkbox"/> SPD <input type="checkbox"/> PD <input type="checkbox"/> VPD	Percent	<input type="checkbox"/> No <input type="checkbox"/> Yes	Soil Group	

## SOIL SCIENTIST INFORMATION AND SIGNATURE

  
Signature  
Mark J. Hampton

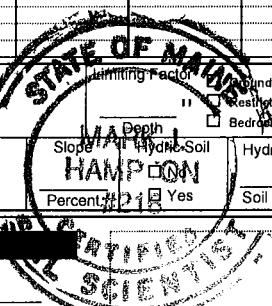
Name Printed

12/10/2022

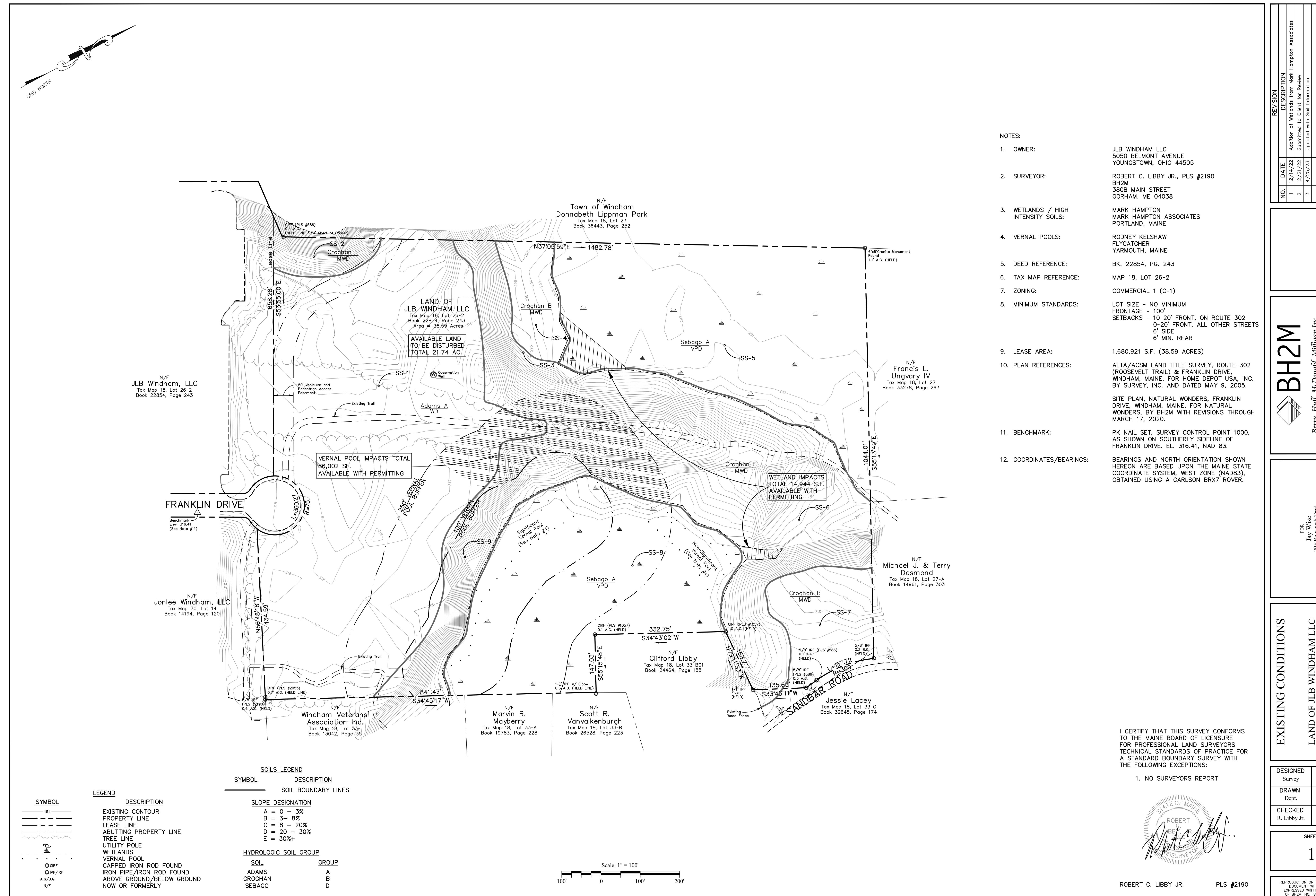
Date

216

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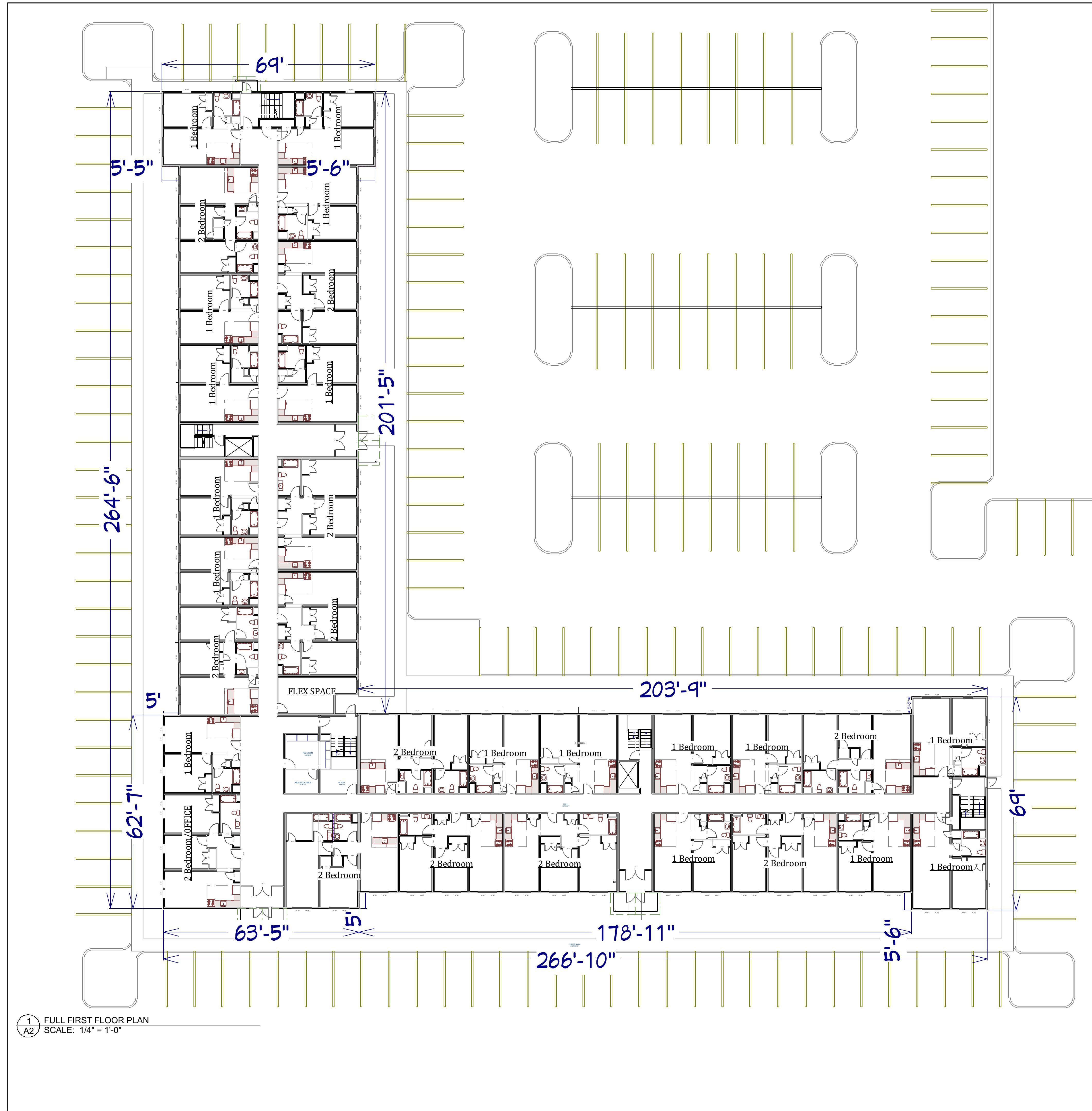
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# **Section 11**

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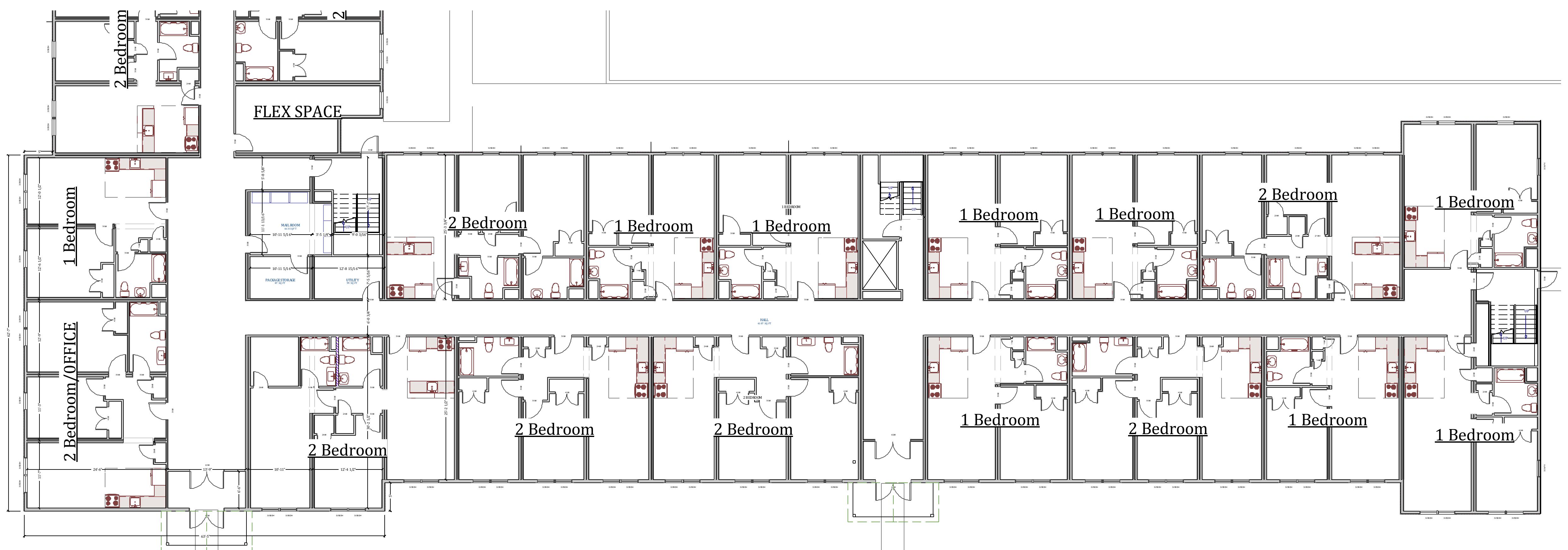
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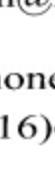
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DRAWN BY: <b>CDN</b>	NO. DATE BY <b>JDF</b>	REMARKS	
CHECKED BY: <b>JDF</b>			
ADDRESS: <b>20 Franklin Drive Windham, ME</b>			
ARCHITECTURAL SEAL			
FIRST FLOOR			
DRAWING TITLE			
 <b>FITTANTE</b> <b>ARCHITECTURE P.C.</b> <b>ARCHITECTURE FOR YOU</b>			
*COMMERCIAL*RESIDENTIAL*3D RENDERINGS*			
<b>PO BOX 3084</b> <b>NIAGARA FALLS, NY 14304</b> <b>Email:</b> <a href="mailto:jim@fittantearchitecture.com">jim@fittantearchitecture.com</a> <b>Phone:</b> 716)622-8737			
<b>A2</b> <b>HEET NO.</b> <b>UBMISSION DATE</b> <b>1/29/2025</b> <b>ILE NO.</b> <b>24-100-C</b>			

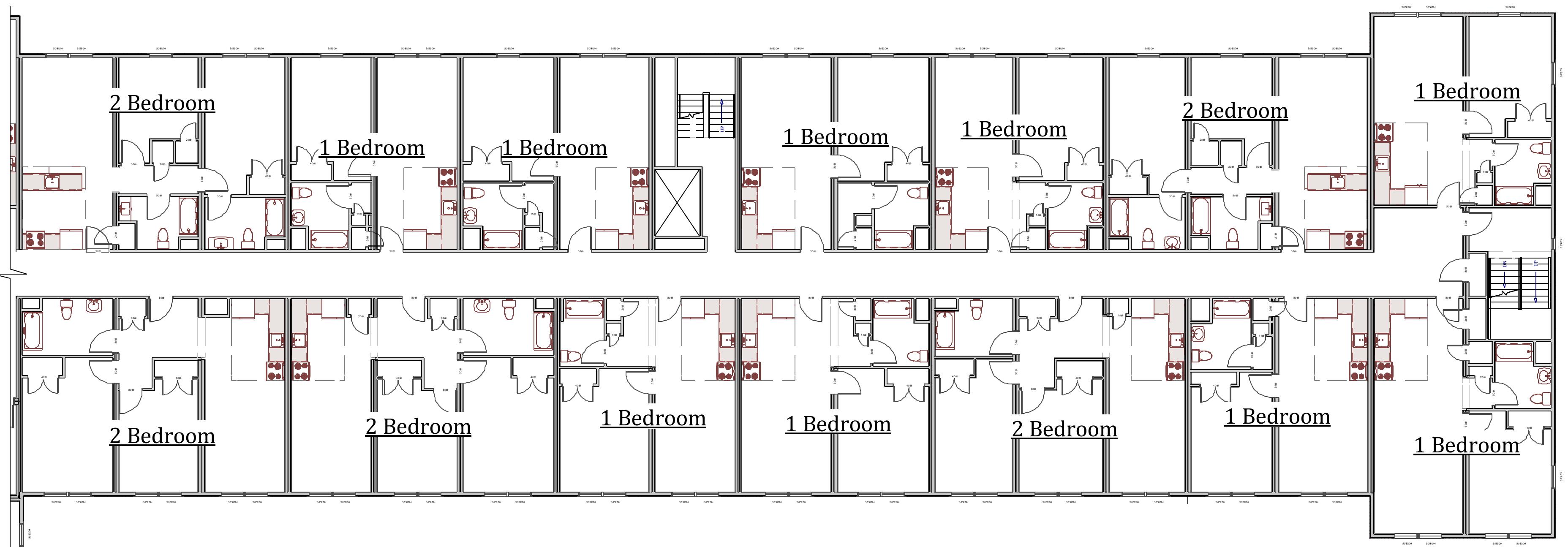


1  
A3 FIRST FLOOR PLAN-NORTH  
SCALE: 3/32" = 1'-0"

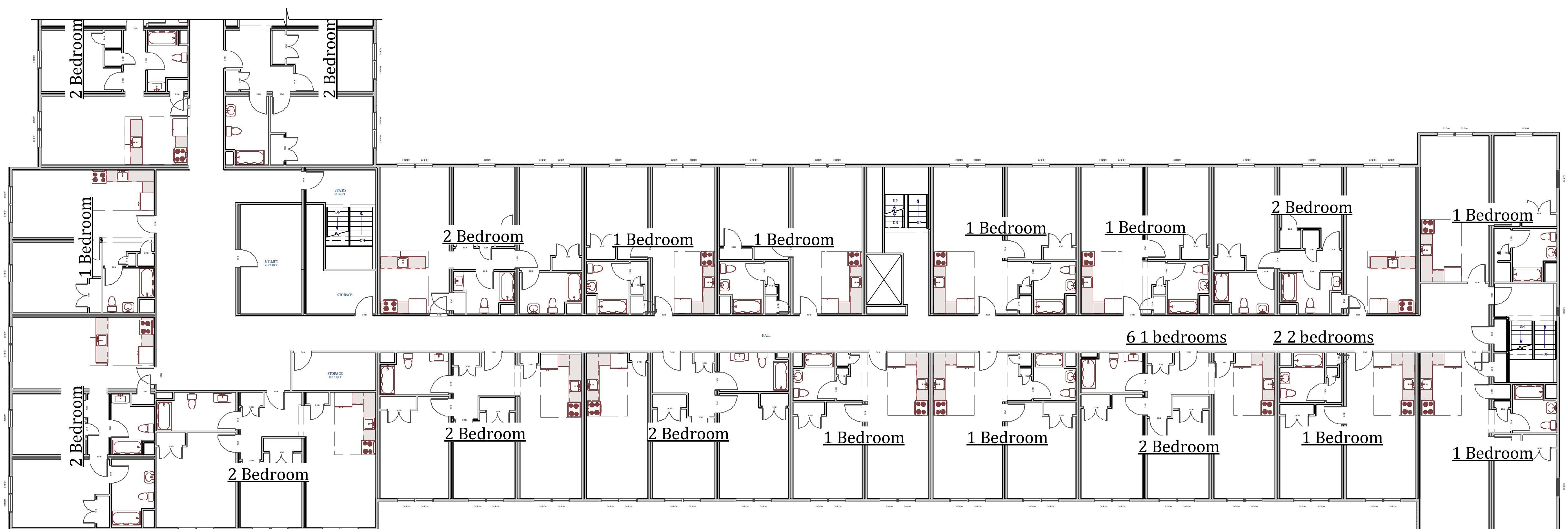


2  
A3 FIRST FLOOR PLAN-EAST WIN  
SCALE: 3/32" = 1'-0"

PROJECT TITLE: <b>Windham Apartments</b>		DRAWING REVISIONS:		
DRAWN BY: JDF	CDN	NO.	DATE	BY
REMARKS				
ADDRESS: <b>20 Franklin Drive Windham, ME</b>				
ARCHITECTURAL SEAL				
FIRST FLOOR ENLARGED				
DRAWING TITLE				
 <b>FITTANTE</b> <b>ARCHITECTURE P.C.</b> <b>ARCHITECTURE FOR YOU</b>				
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1 SECOND-FIFTH FLOOR PLAN-NORTH WING  
A4 SCALE: 3/32" = 1'-0"



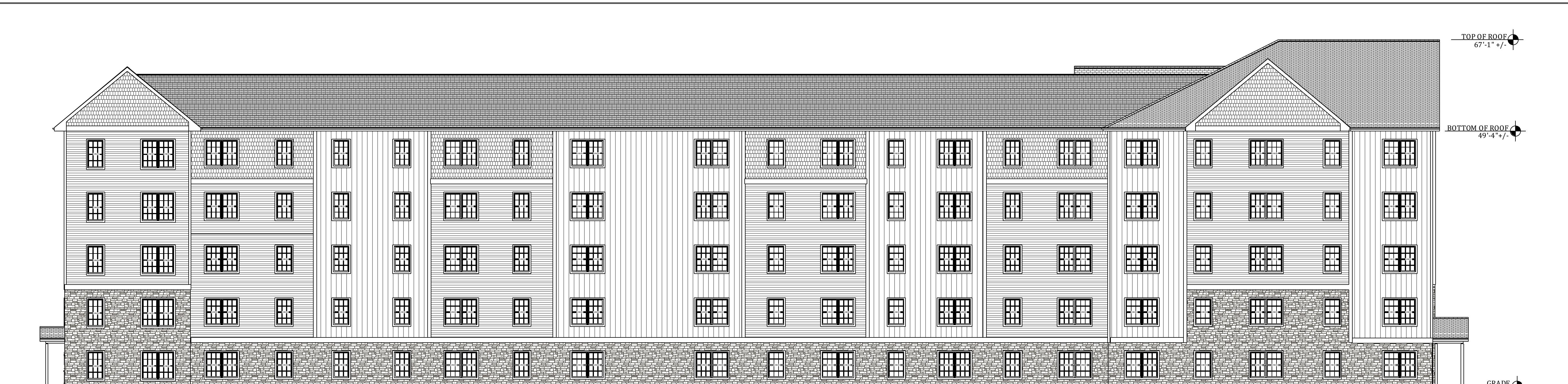
2 SECOND -FIFTH FLOOR PLAN-EAST WING  
A4 SCALE: 3/32" = 1'-0"

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NO.	DATE	BY
		REMARKS
<b>PROJECT TITLE:</b>		
Windham Apartments		
DRAWN BY:	CDN	IDF
CHECKED BY:		IDF
ARCHITECTURAL SEAL		
<b>SECOND FLOOR ENLARGED</b>		
<b>DRAWING TITLE</b>		
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Phone: (716)622-8737		
<b>A4</b>		
SHEET NO.		
SUBMISSION DATE 1/29/2025		
FILE NO. 24-100-C		

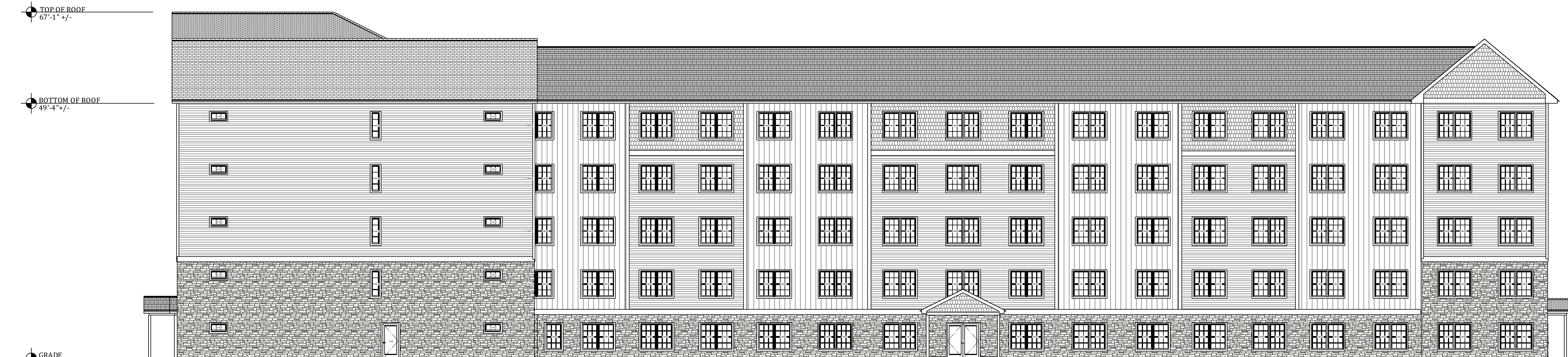


PROJECT TITLE: <b>Windham Apartments</b>		DRAWING REVISIONS:		
DRAWN BY:	CDN	NO.	DATE	BY
CHECKED BY:	JDF			REMARKS
ADDRESS:  <b>20 Franklin Drive Windham, ME</b>				
ARCHITECTURAL SEAL				
FIRST FLOOR HUB				
DRAWING TITLE				
 <b>FITTANTE</b> <b>ARCHITECTURE P.C.</b> <b>ARCHITECTURE FOR YOU</b>				
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<b>A5</b> <b>SHEET NO.</b> <b>SUBMISSION DATE</b> <b>1/29/2025</b> <b>FILE NO.</b> <b>24-100-C</b>				





1 ELEVATION-WEST  
A7 SCALE: 3/32" = 1'-0"



2 ELEVATION-EAST  
A7 SCALE: 3/32" = 1'-0"

**Special Information:**

<p>ALL FEDERAL, STATE, AND LOCAL CODES, ORDINANCES, REGULATIONS ETC. SHALL BE CONSIDERED AS PART OF SPECIFICATIONS FOR THIS BUILDING AND SHALL TAKE PREFERENCE OVER ANYTHING SHOWN, DESCRIBED, OR IMPLIED WHERE SAME ARE AT VARIANCE.</p>	<p>WARNING: IT IS VIOLATION OF ARTICLE 145 SECTIONS 7209N AND 7301 OF THE STATE OF NEW YORK EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A REGISTERED ARCHITECT, LICENSED ENGINEER OR LAND SURVEYOR TO ALTER THIS DRAWING. IF ALTERED SUCH R.A., P.E., OR L.L.S. SHALL AFFIX HIS OR HER SEAL, SIGNATURE, THE DATE, THE NOTATION "ALTERED BY" AND A SPECIFIC DESCRIPTION OF THE ALTERATION.</p>
---	--

# PROJECT TITLE: Windham Apartments

20 Franklin Drive  
Windham, VT  
ADDRESS:

CDN	JDF
ED BY:	ED BY:

DRAWING CHECK

## ELEVATIONS

DRAWING TITLE

**ARCHITECTURE P.C.**  
ARCHITECTURE FOR YOU

\*COMMERCIAL\*RESIDENTIAL\*3D RENDERINGS\*

PO BOX 3084  
NIAGARA FALLS, NY 14304

Email:  
Jim@Fittantearchitecture.com

Phone:  
(716) 622-8727

(716)622-8737

A7

SHEET NO. **1**

SUBMISSION DATE	1/29/2025
FILE NO.	24-100-C

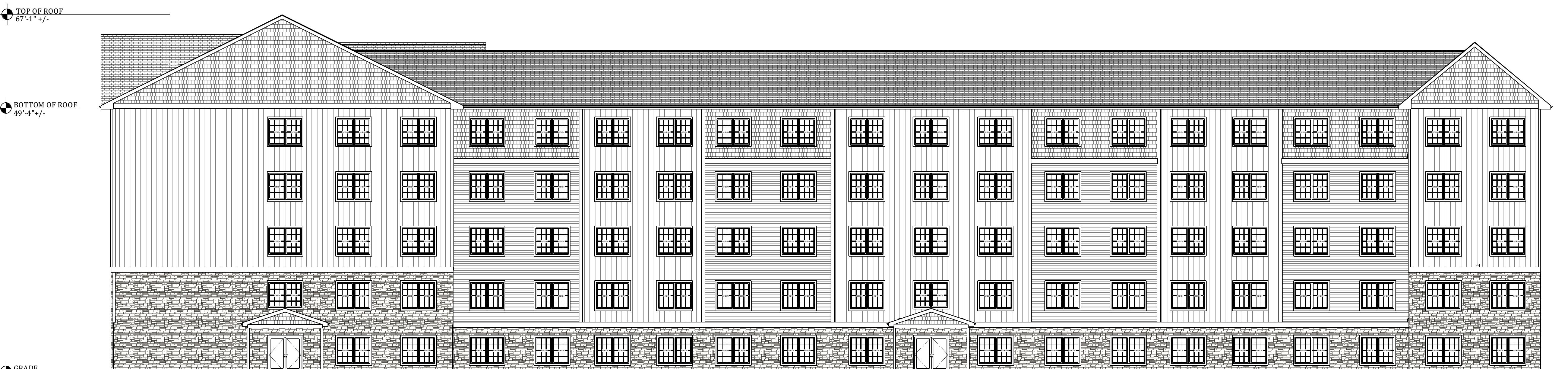
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A7

SHEET NO.



1 ELEVATION-NORTH  
A8 SCALE: 3/32" = 1'-0"



2 ELEVATION-SOUTH  
A8 SCALE: 3/32" = 1'-0"

<b>Special Information:</b>	
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ALL RIGHTS RESERVED BY JAMES D. FITTANTE, ARCHITECT. NOT TO BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION.	

DRAWING REVISIONS:		
NO.	DATE	BY
		REMARKS
PROJECT TITLE: Windham Apartments		
DRAWN BY:	CDN	ADDRESS:
CHECKED BY:	IDF	20 Franklin Drive Windham, ME
ELEVATIONS		
DRAWING TITLE		
 <b>FITTANTE</b> ARCHITECTURE P.C. ARCHITECTURE FOR YOU		
*COMMERCIAL*RESIDENTIAL*3D RENDERINGS*		
PO BOX 3084 NIAGARA FALLS, NY 14304		
Email: Jim@Fittantearchitecture.com		
Phone: (716)622-8737		
<b>A8</b>		
SHEET NO.	1/29/2025	
SUBMISSION DATE	24-100-C	
FILE NO.		



PROJECT TITLE: <b>Windham Apartments</b>		DRAWING REVISIONS:	
DRAWN BY:	CDN	NO. DATE	BY
CHECKED BY:	JDF	REMARKS	
ADDRESS: <b>20 Franklin Drive Windham, ME</b>			
DRAWING TITLE			
 <b>FITTANTE</b> <b>ARCHITECTURE P.C.</b> <b>ARCHITECTURE FOR YOU</b>			
*COMMERCIAL*RESIDENTIAL*3D RENDERINGS*			
<b>PO BOX 3084 NIAGARA FALLS, NY 14304</b>			
Email: <a href="mailto:Jim@Fittantearchitecture.com">Jim@Fittantearchitecture.com</a>			
Phone: (716)622-8737			
<b>A9</b>			
SHEET NO.			
SUBMISSION DATE		1/29/2025	
FILE NO.		24-100-C	

# **Section 12**

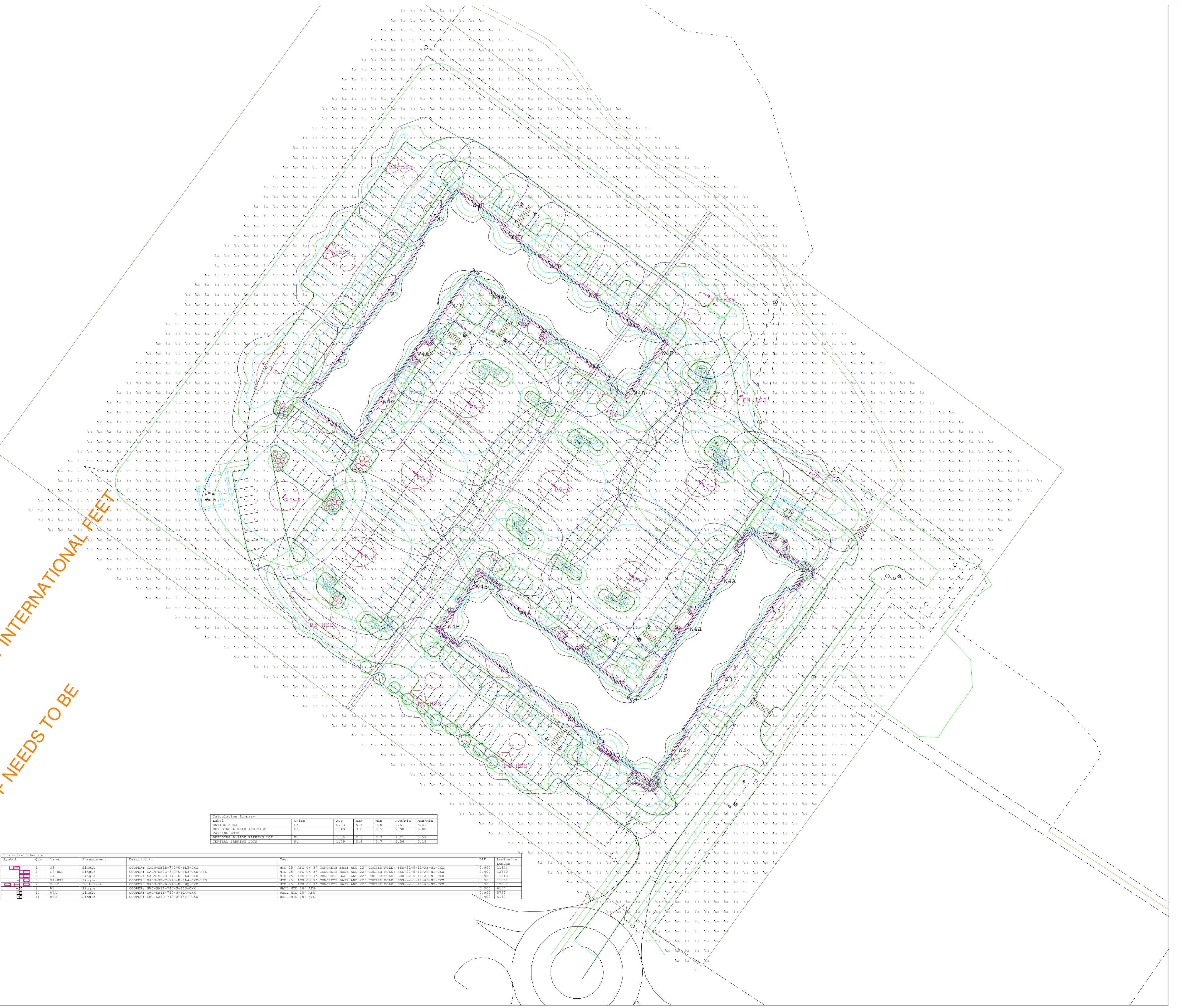
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## **Lighting Information**

## **Section 12 – Lighting Information**

The site lighting has been designed to provide safety and security by illuminating the driveway, parking lot, sidewalks, pedestrian areas, building entrances, and service areas. Please see the enclosed *Photometric Plan* within this Section, as well as associated cut sheets for all proposed lighting.

BEEN CHECKED AND THIS SHOULD BE ME83 -WEST INTERNATIONAL FEET  
LINEWORK DRAWN FROM PDF NEEDS TO BE



FRANKLIN DRIVE  
RESIDENTIAL DEVELOPMENT  
WINDHAM, ME

Drawn By: Michael O'Brien  
Checked By:  
Date: 6/4/2025  
Contact: mobrien@charroninc.com

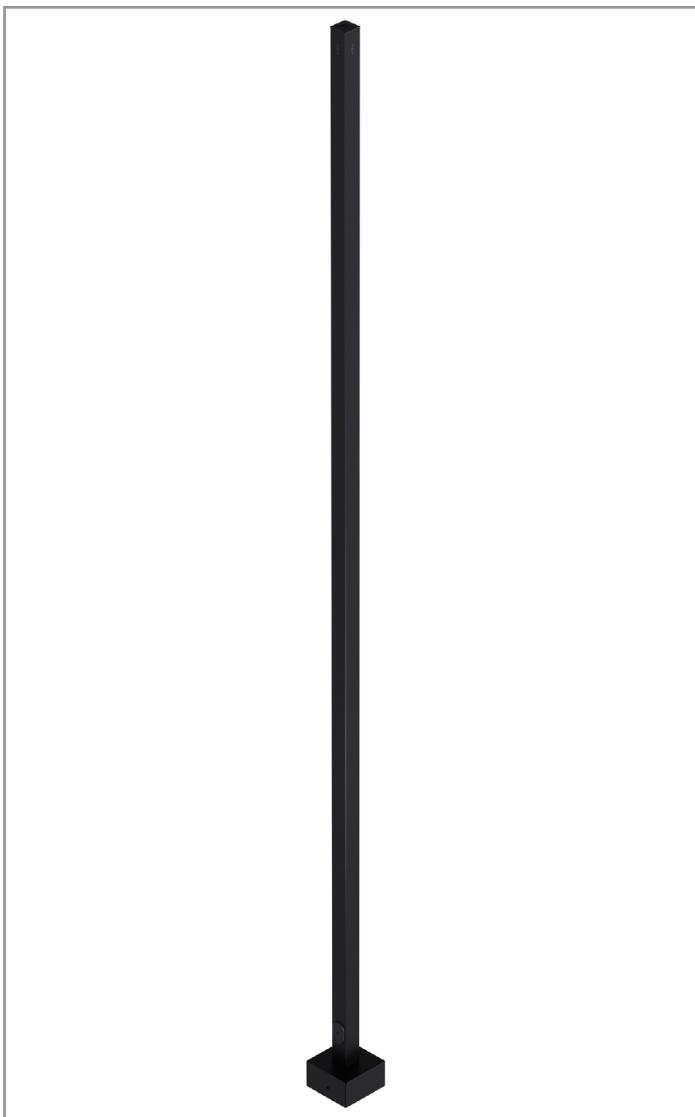
# Date Comments  
Revisions



Page 1 of 1

Scale: NTS

Project		Catalog #		Type	
Prepared by		Notes		Date	



## Cooper Poles

### Square Straight Steel - SSS

#### Anchor Base Installation

#### Product Certifications & Features



#### Base Cover



- 2-piece metal cover, painted to match pole
- Optional ABS cover, 3 basic finishes
- Corrosion resistant hardware

#### Handhole



- Handhole Assembly, 3"x5" for 4"+ shaft and 1.6" x 3.5" for 3" shaft. 14" minimum above base
- Grounding provision Included
- Extra handhole locations available
- Metal handhole cover, painted to match pole
- Optional ABS Handhole cover, 3 basic finishes
- Corrosion resistant hardware
- Optional vandal resistant mechanism

Finish	
BK - Black, Smooth	BZ - Bronze, Smooth
Featured Colors	

#### Domestic Preferences

BABA option supports both the USA Buy America (BAA) and Infrastructure Investment and Jobs Act (IIJA) domestic preference procurement requirements.

#### Quick Facts

- Weldable grade carbon steel
- One-year limited warranty
- Fully galvanized anchor bolts & template included

#### Interactive Menu

- Ordering Information [page 2](#)
- Base Plate Details [page 3](#)
- Mounting Type Details [page 4](#)
- Options Details [page 5](#)
- Certification & Additional Details [Page 7](#)
- EPA Data [page 8](#)
- Considerations [page 14](#)

# Cooper Poles

## Square Straight Steel Anchor Bolt Construction – SSS-AB

### Ordering Information

Sample Number: SSS-20-4-11-AB-N4-BK

Domestic Preference	Product Family	Mounting Height(ft) <sup>15</sup>	Shaft Size-Wall Thickness	Installation Type
<b>Blank</b> = None	<b>SSS</b> = Square Straight Steel	<b>5</b> = 5'	<b>28</b> = 28'	<b>AB</b> = Anchor Base Installation
<b>BABA</b> = Build America, Buy America funding <sup>1</sup>		<b>10</b> = 10'	<b>30</b> = 30'	
		<b>12</b> = 12'	<b>35</b> = 35'	
		<b>14</b> = 14'	<b>37</b> = 37'	
		<b>15</b> = 15'	<b>39</b> = 39'	
		<b>16</b> = 16'		
		<b>18</b> = 18'		
		<b>20</b> = 20'		
		<b>22</b> = 22'		
		<b>25</b> = 25'		
		<b>27</b> = 27'		
Mounting Types	Pre-Finish	Finish	Options (Add as Suffix)	
<p>[blank] = no mounting defined</p> <p><b>T23S</b> = 2-3/8" OD x 4" long tenon</p> <p><b>T23L</b> = 2-3/8" OD x 6" long tenon</p> <p><b>T300</b> = 3" OD x 4" long tenon</p> <p><b>T350</b> = 3-1/2" OD x 5" long tenon</p> <p><b>T40S</b> = 4" OD x 6" long tenon</p> <p><b>T40L</b> = 4" OD x 10" long tenon</p> <p><b>M1</b> = Single M-drilling<sup>16</sup></p> <p><b>M2</b> = M-drilling, 2 at 180°<sup>16</sup></p> <p><b>M3</b> = M-drilling, 3 at 90°<sup>16</sup></p> <p><b>M4</b> = M-drilling, 4 at 90°<sup>16</sup></p> <p><b>M5</b> = M-drilling, 2 at 90°<sup>16</sup></p> <p><b>N1</b> = Single N-drilling<sup>16</sup></p> <p><b>N2</b> = N-drilling, 2 at 180°<sup>16</sup></p> <p><b>N3</b> = N-drilling, 3 at 90°<sup>16</sup></p> <p><b>N4</b> = N-drilling, 4 at 90°<sup>16</sup></p> <p><b>N5</b> = N-drilling, 2 at 90°<sup>16</sup></p> <p><b>S13</b> = CLS Simplex fitting for 13" rise to support 2' arm<sup>8</sup></p> <p><b>S15</b> = CLS Simplex fitting for 15" rise to support 2.5' arm<sup>8</sup></p> <p><b>S19</b> = CLS Simplex fitting for 19" rise to support 4' arm<sup>8</sup></p> <p><b>S24</b> = CLS Simplex fitting for 24" rise to support 6' arm<sup>8</sup></p> <p><b>S30</b> = CLS Simplex fitting for 30" rise to support 7.5' arm<sup>8</sup></p>	<p>[blank] = none</p> <p><b>GV</b> = Galvanized<sup>10</sup></p>	<p>[Blank] = none<sup>9</sup></p> <p><b>WTS</b> = Summit White, smooth</p> <p><b>WHT</b> = New White, textured</p> <p><b>WH</b> = New White, smooth</p> <p><b>TWS</b> = True White, smooth</p> <p><b>BZ</b> = Bronze, smooth</p> <p><b>BZT</b> = Bronze, textured</p> <p><b>CB</b> = Carbon Bronze</p> <p><b>DP</b> = Dark Platinum</p> <p><b>GN</b> = Hartford Green</p> <p><b>VGS</b> = Verde Green, smooth</p> <p><b>VGT</b> = Verde Green, textured</p> <p><b>SY</b> = Silver</p> <p><b>GM</b> = Graphite Metallic</p> <p><b>AP</b> = Grey</p> <p><b>APT</b> = Grey, textured</p> <p><b>BK</b> = Black, smooth</p> <p><b>BT</b> = Black, textured</p> <p><b>XX</b> = Custom color<sup>10</sup></p> <p><b>RALxxxx</b> = RAL####, smooth or textured<sup>10</sup></p>	<p><b>CO/[ABCD][z]</b> = Convenience Outlet less electrical<sup>11, 12</sup></p> <p><b>ECO/[ABCD][z]</b> = Convenience Outlet with 20A GFCI plug 125V AC and in-use electrical cover (in hardware kit)<sup>11, 12</sup></p> <p><b>ITC050/[ABCD][z]</b> = 1/2" coupling - internal thread<sup>11, 13</sup></p> <p><b>ITC075/[ABCD][z]</b> = 3/4" coupling - internal thread<sup>11, 13</sup></p> <p><b>ITC100/[ABCD][z]</b> = 1" coupling - internal thread<sup>11, 13</sup></p> <p><b>ITC125/[ABCD][z]</b> = 1-1/4" coupling - internal thread<sup>11, 13</sup></p> <p><b>ITC150/[ABCD][z]</b> = 1-1/2" coupling - internal thread<sup>11, 13</sup></p> <p><b>ITC200/[ABCD][z]</b> = 2" coupling - internal thread<sup>11, 13</sup></p> <p><b>ETC050/[ABCD][z]</b> = 1/2" coupling - external thread<sup>11, 13</sup></p> <p><b>ETC075/[ABCD][z]</b> = 3/4" coupling - external thread<sup>11, 13</sup></p> <p><b>ETC100/[ABCD][z]</b> = 1" coupling - external thread<sup>11, 13</sup></p> <p><b>ETC125/[ABCD][z]</b> = 1-1/4" coupling - external thread<sup>11, 13</sup></p> <p><b>ETC150/[ABCD][z]</b> = 1-1/2" coupling - external thread<sup>11, 13</sup></p> <p><b>ETC200/[ABCD][z]</b> = 2" coupling - external thread<sup>11, 13</sup></p> <p><b>EHH/[ABCD][z]</b> = Extra Handhole with grounding provision<sup>11</sup></p> <p><b>VDF</b> = Vibration Dampener - Factory Installed for 2nd mode vibration</p> <p><b>INT</b> = Interior coating (8 feet from base inside pole; 3 mils of epoxy or "tar")</p> <p><b>BCP-ABS</b> = ABS Base Cover (black, bronze, or white - closest match to chosen finish)</p> <p><b>HCP-ABS</b> = ABS Handhole Cover (black, bronze, or white - closest match to chosen finish)</p> <p><b>TR</b> = Tamper Resistant handhole cover(s)</p> <p><b>CMB-A/[ABCD][z]</b> = Camera Mounting Bracket "A" with 1/2" hole<sup>11</sup></p> <p><b>BMODxxxx</b> = Base Modification (where xxxx is reference number)<sup>10</sup></p> <p><b>UL</b> = UL listed with label (includes NEC)</p> <p><b>CSA</b> = CSA listed with label</p> <p><b>DP1</b> = DuraPro Level 1 extended corrosion resistance premium finish</p> <p><b>DP3</b> = DuraPro Level 3 extended corrosion resistance premium pre-treatment &amp; finish<sup>14</sup></p> <p><b>L/AB</b> = Less Anchor Bolts and template</p> <p><b>EAB</b> = Anchor Bolts and Template Shipped Early (premium freight included)</p>	

**NOTES:**

- Only product configurations with this prefix are built to be compliant with the Buy America Build America Act (BABA). BABA is the minimum government compliance requirement for the Buy America Build America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual government agencies may have more stringent compliance standards. Please refer to the [DOMESTIC PREFERENCES](#) website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
- Up to 25' mounting height
- Up to 30' mounting height
- Up to 35' mounting height
- CLS Simplex arm ordered separately. Reference arm specification sheet, SMP arm
- Available only with galvanized pre-finish.
- Requires approval. Additional lead times may apply
- Specify quadrant A, B, C, or D using mounting details, pg. 3. Specify height [z] in inches (min = 12" above base. Max = 6" below pole mounting height). Consult factory for exceptions
- When location not specified by "/[ABCD][z]", the default location will be A48 (same side as handhole, 4-feet from base).
- Specify each one required, maximum of 4, with it's [ABCD][z] location.
- Requires -GV = Galvanization option.
- Refer to EPA tables for published size, lengths, and wall thicknesses. Shorter length available in 1/2-foot increments.
- Not available in 3-11.

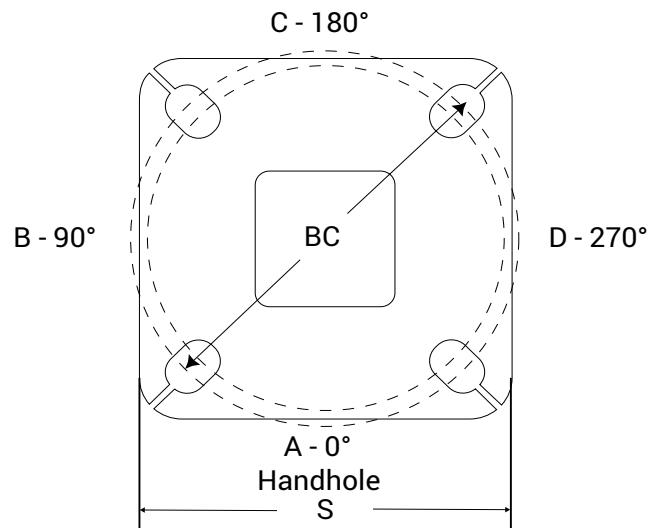
### Accessories (Order Separately)<sup>1</sup>

**BCP-SSS-xxxxxx** = premium 2pc metal base cover<sup>2</sup>  
**HCP-SSS-xxxxxx** = premium metal handhole cover<sup>2</sup>  
**BCABS-SSS-xxxxxx** = 2pc ABS base cover (BK, BZ, or WH finish)<sup>2</sup>  
**HCABS-SSS-xxxxxx** = ABS handhole cover (BK, BZ, or WH finish)<sup>2</sup>  
**VDF-SSS-xxxxxx** = vibration dampener<sup>3</sup>  
**ABKIT-SSS-xxxxx-STD** = Anchor Bolt Kit and template<sup>4</sup>  
**PTC-SSS-xxxxx** = Pole cap assembly, ABS smooth black<sup>4</sup>  
**GRD-KIT** = Electrical grounding kit  
**DRL-PLUG-KIT/N4/M4-STD** = N4/M4 drilling plugs - standard color (black)

**NOTES:**

- Add 'BABA-' as prefix for BABA-compliant accessories
- xxxxxx = shaft size, wall thickness, and finish (ex. BCP-SSS-3-11-GM or BCABS-SSS-3-11-BZ)
- xxxxxx = mounting height, shaft size, and wall thickness (ex. VDF-SSS-20-3-11)
- xxxx = shaft size and wall thickness (ex. ABKIT-SSS-3-11-STD, PTC-SSS-3-11)

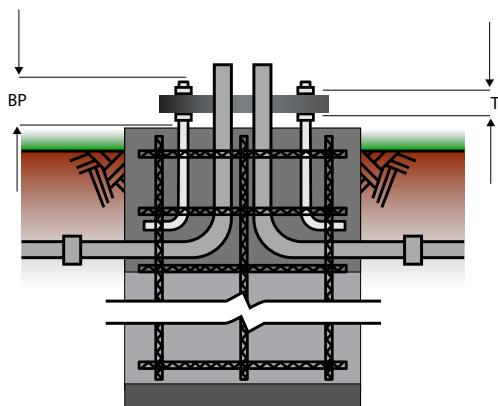
### Mounting Plate Details



A/B/C/D denote pole quadrants. Handhole always at 'A' or 0°

Shaft size & guage	Base Size		Anchor Bolt Details		
	Square Size (S)	Thickness (T)	Bolt Circle (BC)	Bolt Size	Bolt projection (BP)
3-11, 4-11, & 4-7	8	0.75	8 - 9	.75 x 17 x 3	3.0 - 3.5
5-11	11	0.75	10 - 12	.75 x 17 x 3	3.0 - 3.5
5-7 & 5-3	11	1	10 - 12	1 x 36 x 4	3.5 - 4.0
6-11, 6-7, & 6-3	11.5	1	11.5 - 12.5	1 x 36 x 4	3.5 - 4.0

Dimensions in inches

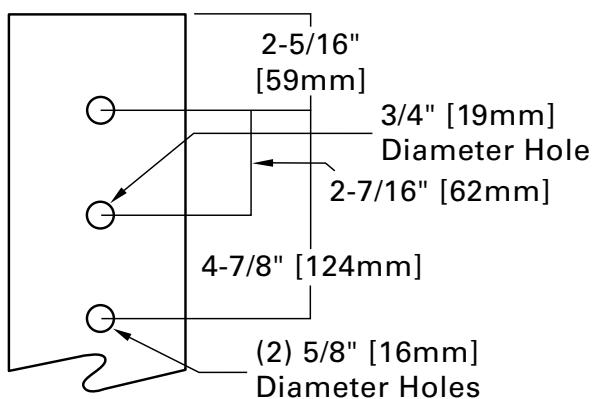


#### NOTE:

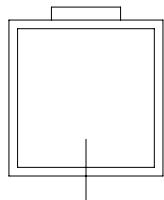
If custom base option required, please specify BMODxxxx option and provide drawing. Approval required, additional lead times may apply. Premium metal base cover included.

### Drill Pattern Details

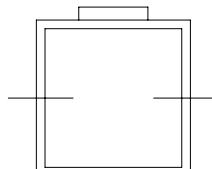
#### TYPE "M"



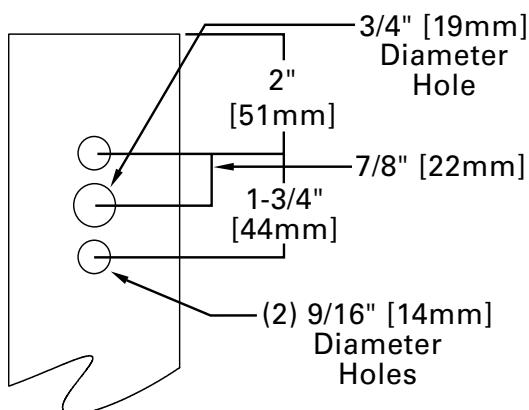
Single  
M1, N1



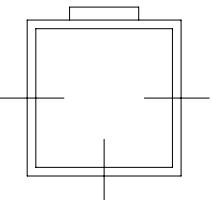
2 at 180°  
M2, N2



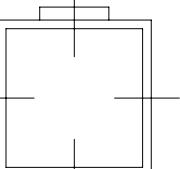
#### TYPE "N"



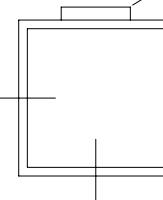
3 at 90°  
M3, N3



4 at 90°  
M4, N4

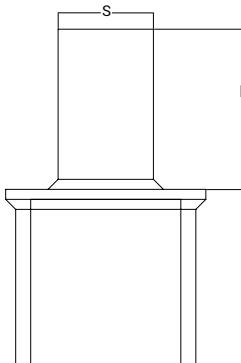
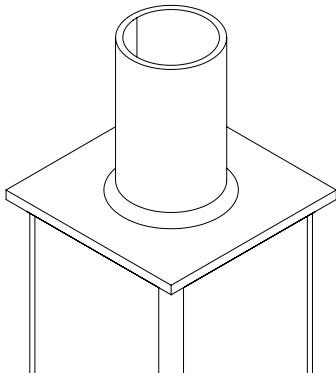


2 at 90°  
M5, N5



### Tenon Adapter Details

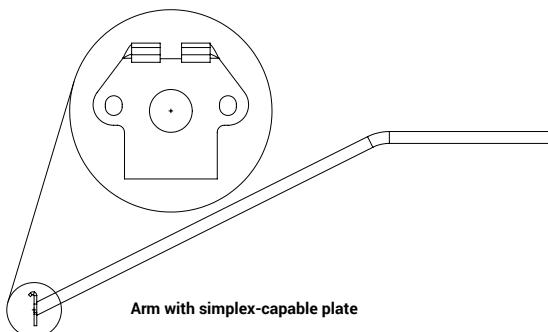
Welded to top of pole with .25" thick plate



Tenon Adapter	Shaft Size - S (in.)	Length - L (in.)
T23S	2-3/8"	4"
T23L	2-3/8"	6"
T300	3"	4"
T350	3.5"	5"
T40S	4"	6"
T40L	4"	10"

### CLS Simplex Fitting Details

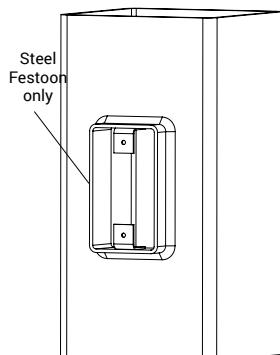
Simplex fitting welded to pole to match simplex-ready arms. Positioning on pole based on preferred arm length and rise.



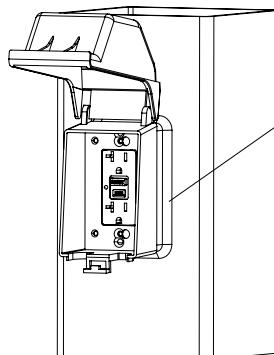
Simplex Option	Arm Length	Arm Rise
S13	2'	13"
S15	2.5'	15"
S19	4	19"
S24	6'	24"
S30	7.5'	30"

### Convenience Outlet Details

Steel provision welded to pole for use with GFCI, duplex, and single receptacles.



CO/[ABCD][z] - Convenience Outlet  
Less Electrical <sup>1,2</sup>



ECO/[ABCD][z] - Convenience Outlet  
with 20A GFCI <sup>1,2</sup>

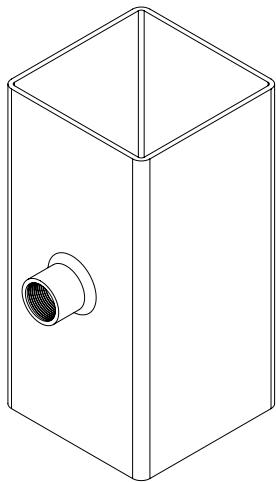
Lockable steel cover box with included  
20 AMP GFCI. Includes adapter plates  
and foam gasket.

#### NOTES:

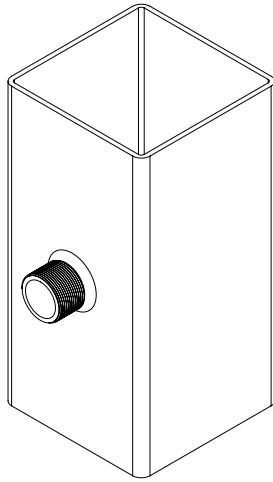
1. Specify quadrant A, B, C, or D using mounting details, pg. 3. Specify height [z] in inches (Min = 12" above base. Max = 6" below pole mounting height). Consult factory for exceptions
2. When location not specified by "[ABCD][z]", the default location will be A48 (same side as handhole, 4-feet from base).

### Couplings (Internal & External Threads) Details

Steel provision welded to pipe for additional luminaire/accessory mounting needs.



Internal thread coupling <sup>1,2</sup>



External thread coupling <sup>1,2</sup>

Internal Coupling	Length (in.)	OD (in.)	ID
ITC050	1.56"	1.07"	1/2" NPT
ITC075	1.63"	1.32"	3/4" NPT
ITC100	2.00"	1.59"	1" NPT
ITC125	2.06"	1.91"	1-1/4" NPT
ITC150	2.06"	2.21"	1-1/2" NPT
ITC200	3.13"	2.76"	2" NPT

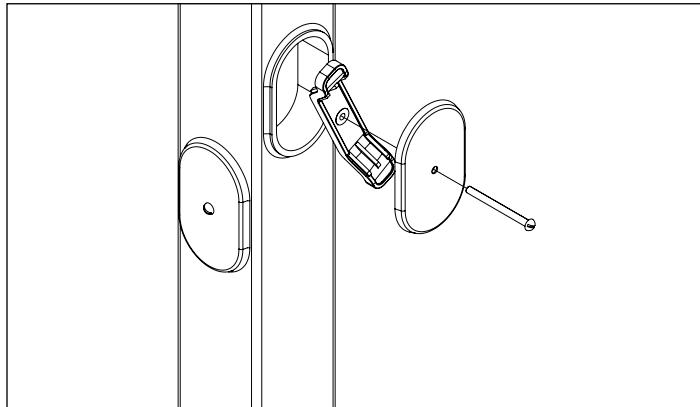
External Coupling	Length (in.)	OD	ID (in.)
ETC050	1.13"	1/2" NPT	.62"
ETC075	1.38"	3/4" NPT	.82"
ETC100	1.50"	1" NPT	1.05"
ETC125	1.63"	1-1/4" NPT	1.38"
ETC150	1.75"	1-1/2" NPT	1.61"
ETC200	2.00"	2" NPT	2.07"

#### NOTES:

1. Specify quadrant A, B, C, or D using mounting details, pg. 3. Specify height [z] in inches (Min = 12" above base. Max = 6" below pole mounting height). Consult factory for exceptions.
2. Specify each one required, maximum of 4, with its [ABCD][z] location.

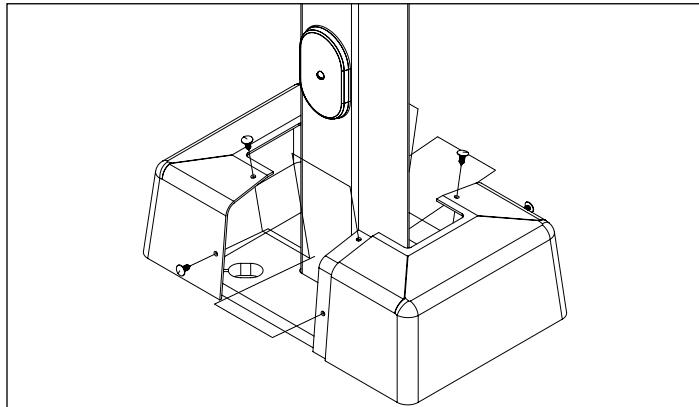
### Extra Handhole with Cover Details

Additional handhole and cover with hardware (specify pole quadrant and height in CAT logic selection)



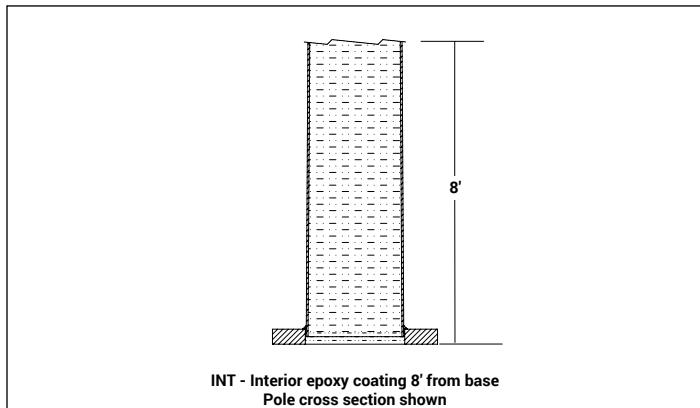
### 2-Piece Base Cover Details

2-Piece ABS Plastic Base Cover with Press-in ABS Hardware (offered in Bronze, Black, and White only – color may not exactly match the specified pole)



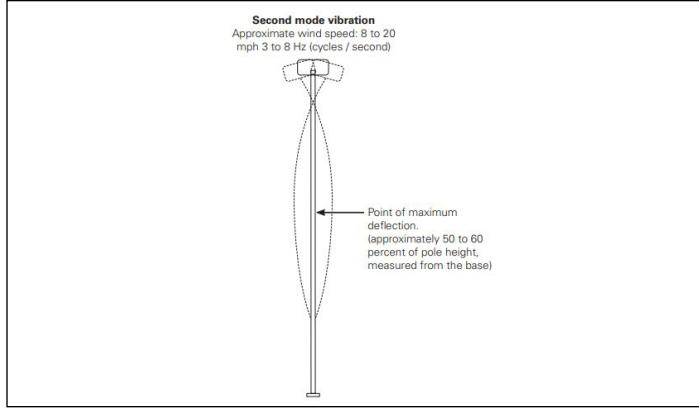
### Internal Coating Details

8 feet maximum from base inside pole; 3 mils of epoxy or "tar"



### Vibration Dampener Details

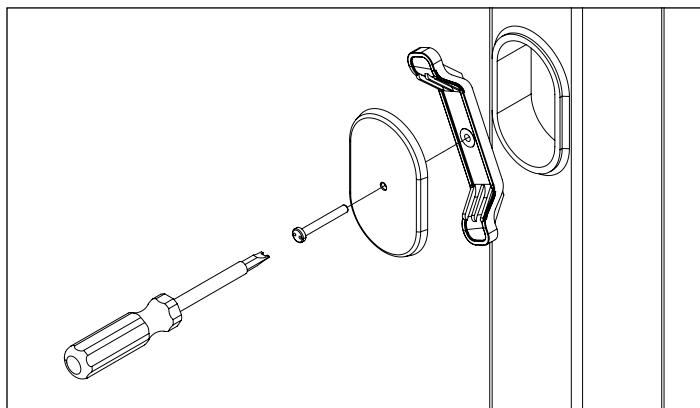
Factory installed for minimizing 2nd mode vibration <sup>1</sup>



**NOTES:**  
1. CLS employs a factory-installed chain dampener encased in plastic tubing. For details on vibration mitigation, please see CLS White Paper [WP513001EN](#)

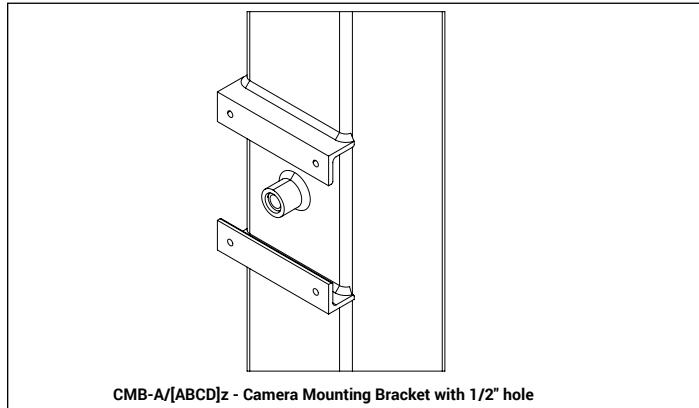
### Tamper Resistant Handhole Cover Details

Handhole cover with included tamper-resistant fastener and screwdriver



### Camera Mounting Bracket Details

Welded bracket provision for camera mounting



**NOTES:**  
1. Specify quadrant A, B, C, or D using mounting details, pg. 3. Specify height [z] in inches.  
2. Drill pattern matches Axis® TQ5001-E pole mount for M55, P56, and Q60 cameras. Stainless steel 1/4-20 bolts with nylon lock nut recommended.  
3. For any other camera application, please specify via drawing. Additional lead-times may apply.

### Certification Details

Certification	Description
	CSA: CSA® listed with label
	UL: UL® listed with label (includes NEC)

### Finish Options

Finish	Description
DP1	DuraPro Level 1 – Premium finish minimizes corrosion risk, extends finish life, and improves adhesion
DP3	DuraPro Level 3 – Galvanization after fabrication plus premium finish provides superior corrosion resistance, adhesion, and extended finish life

### Anchor Bolt Shipping Options (Add as suffix)

Standard Kits = 4 fully galvanized anchor bolts, 8 galvanized nuts & washers, and template

Option	Description
L/AB	Less Anchor Bolts and Template Kit
EAB	Anchor Bolts and Template Kit Shipped Early (Supports starting the foundation quickly, premium freight included)

### Additional Services Offered

Services are offered to support the engineering and design community when required.

Service	Description
DSGN-FOUNDATION-[XX] <sup>1</sup>	Foundation Design; per pole type, per revision
DSGN-PE-POLE-[XX] <sup>1</sup>	Professional Engineering Stamped Drawings; per pole type, per revision
DSGN-POLE-CALCULATIONS <sup>2</sup>	Pole Calculations; per pole type, per revision
DSGN-POLE-SUBMITTALS <sup>2</sup>	Pole submittal Drawings; per pole type per revision

NOTES:

1. XX to be replaced by state abbreviation (EX. DSGN-FOUNDATION-GA).

2. Original and first revision free of charge.

### AASHTO Certification Data

ASCE 7-93 EPA [SQ. FT] WITH 1.3 GUST (COMMONLY USED STANDARDS) <sup>1, 2, 3, 4</sup>

Catalog Number	80 MPH		90 MPH		100 MPH		110 MPH	
	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)
SSS-5-3-11-AB	36.78	919.5	28.9	722.5	23.27	581.75	19.1	477.5
SSS-5-4-11-AB	56.05	1401.25	44.07	1101.75	35.51	887.75	29.17	729.25
SSS-10-3-11-AB	17.23	430.75	13.29	332.25	10.48	262	8.4	210
SSS-10-4-11-AB	26.53	663.25	20.54	513.5	16.25	406.25	13.08	327
SSS-10-4-7-AB	37.15	928.75	28.93	723.25	23.05	576.25	18.7	467.5
SSS-10-5-11-AB	37.51	937.75	29.11	727.75	23.1	577.5	18.65	466.25
SSS-10-5-7-AB	72.19	1804.75	56.51	1412.75	45.28	1132	36.98	924.5
SSS-10-6-11-AB	51	1275	39.65	991.25	31.54	788.5	25.54	638.5
SSS-15-3-11-AB	8.01	200.25	5.92	148	4.43	110.75	3.32	83
SSS-15-4-11-AB	12.61	315.25	9.42	235.5	7.14	178.5	5.45	136.25
SSS-15-4-7-AB	18.33	458.25	13.94	348.5	10.8	270	8.48	212
SSS-15-5-11-AB	18.1	452.5	13.63	340.75	10.42	260.5	8.05	201.25
SSS-15-5-7-AB	36.66	916.5	28.29	707.25	22.3	557.5	17.86	446.5
SSS-15-5-3-AB	45.78	1144.5	35.49	887.25	28.13	703.25	22.69	567.25
SSS-15-6-11-AB	24.93	623.25	18.88	472	14.56	364	11.36	284
SSS-15-6-7-AB	47.35	1183.75	36.6	915	28.91	722.75	23.22	580.5
SSS-15-6-3-AB	49.61	1240.25	3838	95950	30.36	759	24.41	610.25
SSS-20-3-11-AB	4.35	108.75	2.8	70	1.69	42.25	0.87	21.75
SSS-20-4-11-AB	7.28	182	4.9	122.5	3.2	80	1.94	48.5
SSS-20-4-7-AB	11.65	291.25	8.36	209	6	150	4.25	106.25
SSS-20-5-11-AB	10.88	272	7.53	188.25	5.14	128.5	3.37	84.25
SSS-20-5-7-AB	24.77	619.25	18.51	462.75	14.03	350.75	10.71	267.75
SSS-20-5-3-AB	31.72	793	24	600	18.48	462	14.39	359.75
SSS-20-6-11-AB	15.48	387	10.95	273.75	7.72	193	5.32	133
SSS-20-6-7-AB	32.37	809.25	24.3	607.5	18.53	463.25	14.26	356.5
SSS-20-6-3-AB	32.41	810.25	24.33	608.25	18.55	463.75	14.28	357
SSS-25-3-11-AB	1.76	44	0.54	13.5	N/A	N/A	N/A	N/A
SSS-25-4-11-AB	3.57	89.25	1.68	42	0.34	8.5	N/A	N/A
SSS-25-4-7-AB	7.16	179	4.52	113	2.63	65.75	1.23	30.75
SSS-25-5-11-AB	5.91	147.75	3.25	81.25	1.35	33.75	N/A	N/A
SSS-25-5-7-AB	16.97	424.25	11.99	299.75	8.42	210.5	5.78	144.5
SSS-25-5-3-AB	22.69	567.25	16.5	412.5	12.08	302	8.81	220.25
SSS-25-6-11-AB	9.05	226.25	5.45	136.25	2.87	71.75	0.96	24
SSS-25-6-7-AB	22.66	566.5	16.2	405	11.58	289.5	8.16	204

\*Continued on next page

Catalog Number	80 MPH		90 MPH		100 MPH		110 MPH	
	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)
SSS-25-6-3-AB	22.7	567.5	16.23	405.75	11.6	290	8.18	204.5
SSS-30-4-11-AB	0.56	14	N/A	N/A	N/A	N/A	N/A	N/A
SSS-30-4-7-AB	3.37	84.25	1.37	34.25	N/A	N/A	N/A	N/A
SSS-30-5-11-AB	1.83	45.75	N/A	N/A	N/A	N/A	N/A	N/A
SSS-30-5-7-AB	10.14	253.5	6.39	159.75	3.71	92.75	1.73	43.25
SSS-30-5-3-AB	14.63	365.75	9.95	248.75	6.59	164.75	4.11	102.75
SSS-30-6-11-AB	3.7	92.5	0.98	24.5	N/A	N/A	N/A	N/A
SSS-30-6-7-AB	14.1	352.5	9.2	230	5.7	142.5	3.11	77.75
SSS-30-6-3-AB	14.13	353.25	9.23	230.75	13.63	340.75	3.12	78
SSS-35-4-7-AB	0.66	16.5	N/A	N/A	N/A	N/A	N/A	N/A
SSS-35-5-11-AB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SSS-35-5-7-AB	5.71	142.75	2.54	63.5	0.27	6.75	N/A	N/A
SSS-35-5-3-AB	9.75	243.75	5.73	143.25	2.86	71.5	N/A	N/A
SSS-35-6-11-AB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SSS-35-6-7-AB	8.74	218.5	4.53	113.25	1.53	38.25	N/A	N/A
SSS-35-6-3-AB	4.56	114	4.56	114	1.55	38.75	N/A	N/A
SSS-39-5-7-AB	2.67	66.75	N/A	N/A	N/A	N/A	N/A	N/A
SSS-39-5-3-AB	6.47	161.75	2.86	71.5	0.28	7	N/A	N/A
SSS-39-6-11-AB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SSS-39-6-7-AB	5.1	127.5	1.33	33.25	N/A	N/A	N/A	N/A
SSS-39-6-3-AB	5.13	128.25	1.35	33.75	N/A	N/A	N/A	N/A

**NOTES:**

1. Maximum weight based on 25 pounds per square foot of EPA. Weights lower than maximum will result in higher EPA values.
2. EPAs based on shaft properties with wind normal to flat. EPAs calculated using base wind velocity as indicated plus 30% gust factor.
3. For pole heights that are not shown, use the values for taller poles.
4. The Cooper Lighting Solutions on-line configurator has detailed maximum EPA and weight to refine the design.

LATEST FLORIDA BUILDING CODES & AASHTO STANDARDS EPA [SQ. FT] (WITH 3SEC GUST) - 100 LBS FIXTURE LOAD <sup>1, 2, 3, 4</sup>

Catalog Number	90 MPH		100 MPH		110 MPH		120 MPH		130 MPH		140 MPH		150 MPH		160 MPH		170 MPH		180 MPH	
	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)
SSS-5-3-11-AB	115.41	100	93.23	100	76.81	100	64.33	100	54.61	100	46.9	100	40.68	100	35.5	100	31.35	100	27.76	100
SSS-5-4-11-AB	127.02	100	102.58	100	84.49	100	70.74	100	60.03	100	51.54	100	44.69	100	39.08	100	34.43	100	30.53	100
SSS-10-3-11-AB	56.94	100	45.75	100	37.47	100	31.17	100	26.26	100	22.37	100	19.23	100	16.62	100	14.52	100	12.72	100
SSS-10-4-11-AB	61.63	100	49.38	100	40.32	100	33.43	100	28.07	100	23.81	100	20.38	100	17.57	100	15.24	100	13.29	100
SSS-10-4-7-AB	61.96	100	49.71	100	40.65	100	33.75	100	28.39	100	24.13	100	20.69	100	17.88	100	15.55	100	13.6	100
SSS-10-5-11-AB	78.71	100	62.86	100	51.13	100	42.22	100	35.28	100	29.77	100	25.33	100	21.69	100	18.68	100	16.15	100
SSS-10-5-7-AB	146.17	100	117.51	100	96.3	100	80.17	100	67.61	100	57.65	100	49.62	100	43.04	100	37.59	100	33.02	100
SSS-10-6-11-AB	159.23	100	127.97	100	104.84	100	87.25	100	73.56	100	62.7	100	53.93	100	46.76	100	40.82	100	35.83	100
SSS-15-3-11-AB	36.38	100	28.9	100	23.37	100	19.17	100	15.9	100	13.3	100	11.2	100	9.46	100	8.05	100	6.85	100
SSS-15-4-11-AB	38.77	100	30.6	100	24.56	100	19.96	100	16.38	100	13.54	100	11.25	100	9.38	100	7.82	100	6.52	100
SSS-15-4-7-AB	39.26	100	31.08	100	25.03	100	20.43	100	16.85	100	14.01	100	11.72	100	9.84	100	8.28	100	6.98	100
SSS-15-5-11-AB	50.16	100	39.58	100	31.76	100	25.8	100	21.17	100	17.5	100	14.53	100	12.1	100	10.09	100	8.41	100
SSS-15-5-7-AB	95.62	100	76.49	100	62.34	100	51.58	100	43.2	100	36.55	100	31.19	100	26.8	100	23.16	100	20.11	100
SSS-15-5-3-AB	96.13	100	76.98	100	62.82	100	52.05	100	43.67	100	37.02	100	31.65	100	27.26	100	23.62	100	20.57	100
SSS-15-6-11-AB	103	100	82.14	100	66.71	100	54.97	100	45.83	100	38.58	100	32.73	100	27.95	100	23.98	100	20.66	100
SSS-15-6-7-AB	98.96	100	78.95	100	64.15	100	52.89	100	44.13	100	37.18	100	31.57	100	26.98	100	23.17	100	19.98	100
SSS-15-6-3-AB	99.48	100	79.46	100	64.64	100	53.38	100	44.61	100	37.65	100	32.04	100	27.44	100	23.64	100	20.45	100
SSS-20-3-11-AB	24.08	100	18.8	100	14.89	100	11.92	100	9.6	100	7.77	100	6.29	100	5.05	100	4.05	100	3.21	100
SSS-20-4-11-AB	25.09	100	19.31	100	15.03	100	11.78	100	9.25	100	7.24	100	5.62	100	4.29	100	3.2	100	2.27	100
SSS-20-4-7-AB	25.69	100	19.9	100	15.62	100	12.37	100	9.83	100	7.82	100	6.2	100	4.87	100	3.77	100	2.85	100
SSS-20-5-11-AB	32.44	100	24.96	100	19.42	100	15.21	100	11.93	100	9.33	100	7.23	100	5.52	100	4.09	100	2.9	100
SSS-20-5-7-AB	64.85	100	51.31	100	41.3	100	33.69	100	27.76	100	23.06	100	19.26	100	16.16	100	13.58	100	11.43	100
SSS-20-5-3-AB	65.46	100	51.92	100	41.9	100	34.28	100	28.34	100	23.64	100	19.84	100	16.73	100	14.16	100	12	100
SSS-20-6-11-AB	69.1	100	54.35	100	43.43	100	35.12	100	28.66	100	23.53	100	19.4	100	16.01	100	13.21	100	10.85	100
SSS-20-6-7-AB	66.51	100	52.35	100	41.88	100	33.91	100	27.72	100	22.8	100	18.83	100	15.58	100	12.89	100	10.63	100
SSS-20-6-3-AB	67.14	100	52.97	100	42.49	100	34.51	100	28.31	100	23.38	100	19.41	100	16.16	100	13.47	100	11.21	100
SSS-25-3-11-AB	16.69	100	12.66	100	9.67	100	7.4	100	5.64	100	4.24	100	3.11	100	2.17	100	1.4	100	0.76	100
SSS-25-4-11-AB	16.74	100	12.33	100	9.06	100	6.58	100	4.64	100	3.11	100	1.87	100	0.86	100	0.02	100	N/A	100
SSS-25-4-7-AB	17.46	100	13.04	100	9.77	100	7.29	100	5.35	100	3.81	100	2.58	100	1.56	100	0.72	100	0.02	100
SSS-25-5-11-AB	21.63	100	15.91	100	11.68	100	8.47	100	5.96	100	3.98	100	2.37	100	1.06	100	N/A	100	N/A	100
SSS-25-5-7-AB	46.64	100	36.3	100	28.65	100	22.84	100	18.31	100	14.72	100	11.82	100	9.45	100	7.48	100	5.83	100
SSS-25-5-3-AB	47.37	100	37.02	100	29.37	100	23.54	100	19.01	100	15.42	100	12.52	100	10.14	100	8.18	100	6.53	100
SSS-25-6-11-AB	49.05	100	37.62	100	29.28	100	22.94	100	18	100	14.09	100	10.93	100	8.34	100	6.2	100	4.4	100
SSS-25-6-7-AB	47.18	100	36.37	100	28.37	100	22.28	100	17.55	100	13.79	100	10.76	100	8.27	100	6.22	100	4.5	100

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Catalog Number	90 MPH		100 MPH		110 MPH		120 MPH		130 MPH		140 MPH		150 MPH		160 MPH		170 MPH		180 MPH	
	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)
SSS-25-6-3-AB	47.93	100	37.1	100	29.09	100	23	100	18.26	100	14.5	100	11.46	100	8.98	100	6.92	100	5.19	100
SSS-30-4-11-AB	10.96	100	7.42	100	4.8	100	2.8	100	1.25	100	0.02	100	N/A	100	N/A	100	N/A	100	N/A	100
SSS-30-4-7-AB	11.81	100	8.26	100	5.64	100	3.64	100	2.09	100	0.85	100	N/A	100	N/A	100	N/A	100	N/A	100
SSS-30-5-11-AB	14.14	100	9.55	100	6.16	100	3.57	100	1.56	100	N/A	100								
SSS-30-5-7-AB	34.47	100	26.17	100	20.03	100	15.37	100	11.73	100	8.85	100	6.52	100	4.62	100	3.04	100	1.72	100
SSS-30-5-3-AB	35.32	100	27.02	100	20.87	100	16.2	100	12.56	100	9.68	100	7.35	100	5.44	100	3.86	100	2.54	100
SSS-30-6-11-AB	35.26	100	26.21	100	19.52	100	14.43	100	10.47	100	7.33	100	4.8	100	2.72	100	1	100	N/A	100
SSS-30-6-7-AB	34.16	100	25.48	100	19.06	100	14.18	100	10.37	100	7.36	100	4.93	100	2.93	100	1.28	100	N/A	100
SSS-30-6-3-AB	35.03	100	26.34	100	19.91	100	15.1	100	11.21	100	8.19	100	5.75	100	3.76	100	2.11	100	N/A	100
SSS-35-4-7-AB	3.7	100	1.2	100	N/A	100														
SSS-35-5-11-AB	8.47	100	4.66	100	1.84	100	N/A	100												
SSS-35-5-7-AB	25.61	100	18.72	100	13.63	100	9.75	100	6.74	100	4.34	100	2.41	100	0.83	100	N/A	100	N/A	100
SSS-35-5-3-AB	26.59	100	19.7	100	14.59	100	10.71	100	7.69	100	5.26	100	3.36	100	1.78	100	N/A	100	N/A	100
SSS-35-6-11-AB	25.24	100	17.73	100	12.17	100	7.95	100	4.66	100	2.05	100	N/A	100	N/A	100	N/A	100	N/A	100
SSS-35-6-7-AB	24.6	100	17.4	100	12.06	100	8.01	100	4.85	100	2.35	100	N/A	100	N/A	100	N/A	100	N/A	100
SSS-35-6-3-AB	25.6	100	18.38	100	13.04	100	8.97	100	5.81	100	3.3	100	1.28	100	N/A	100	N/A	100	N/A	100
SSS-39-5-7-AB	20.02	100	13.97	100	9.5	100	6.1	100	3.45	100	1.35	100	N/A	100	N/A	100	N/A	100	N/A	100
SSS-39-5-3-AB	13.81	100	8.53	100	4.73	100	1.91	100	N/A	100										
SSS-39-6-11-AB	18.83	100	12.24	100	7.37	100	3.66	100	N/A	100										
SSS-39-6-7-AB	18.51	100	12.18	100	7.5	100	3.94	100	1.17	100	N/A	100								
SSS-39-6-3-AB	19.6	100	13.27	100	8.58	100	5.01	100	2.23	100	0.03	100	N/A	100	N/A	100	N/A	100	N/A	100

**NOTES:**

1. The maximum EPA values are based upon the published maximum weight noted. Lower weights will result in higher EPA values.
2. Includes Florida Building Code 2023/2020, AASHTO LRFD-LTS-1, and ASCE-7 standards.
3. For pole heights that are not shown, use the values for taller poles.
4. The Cooper Lighting Solutions on-line configurator has detailed maximum EPA and weight to refine the design.

LATEST FLORIDA BUILDING CODES & AASHTO STANDARDS EPA [SQ. FT] (WITH 3SEC GUST) - 400 LBS FIXTURE LOAD <sup>1, 2, 3, 4</sup>

Catalog Number	90 MPH		100 MPH		110 MPH		120 MPH		130 MPH		140 MPH		150 MPH		160 MPH		170 MPH		180 MPH	
	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)
SSS-5-3-11-AB	114.24	400	92.27	400	76.02	400	63.67	400	54.05	400	46.41	400	40.26	400	35.22	400	31.04	400	27.54	400
SSS-5-4-11-AB	127.8	400	103.21	400	85.02	400	71.18	400	60.41	400	51.86	400	44.97	400	39.33	400	34.65	400	30.73	400
SSS-10-3-11-AB	56.35	400	45.26	400	37.07	400	30.83	400	25.98	400	22.13	400	19.02	400	16.48	400	14.37	400	12.6	400
SSS-10-4-11-AB	62.02	400	49.7	400	40.58	400	33.65	400	28.26	400	23.98	400	20.52	400	17.7	400	15.35	400	13.39	400
SSS-10-4-7-AB	62.36	400	50.03	400	40.91	400	33.97	400	28.57	400	24.29	400	20.84	400	18.01	400	15.66	400	13.7	400
SSS-10-5-11-AB	79.21	400	63.27	400	51.48	400	42.5	400	35.52	400	29.98	400	25.51	400	21.85	400	18.82	400	16.28	400
SSS-10-5-7-AB	146.68	400	117.92	400	96.64	400	80.45	400	67.86	400	57.86	400	49.8	400	43.2	400	37.73	400	33.15	400
SSS-10-6-11-AB	159.56	400	128.23	400	105.06	400	87.43	400	73.71	400	62.83	400	54.05	400	46.86	400	40.9	400	35.91	400
SSS-15-3-11-AB	35.98	400	28.58	400	23.11	400	18.94	400	15.7	400	13.13	400	11.06	400	9.36	400	7.96	400	6.78	400
SSS-15-4-11-AB	39.04	400	30.82	400	24.73	400	20.11	400	16.51	400	13.65	400	11.35	400	9.46	400	7.9	400	6.59	400
SSS-15-4-7-AB	39.52	400	31.3	400	25.21	400	20.58	400	16.98	400	14.12	400	11.81	400	9.92	400	8.36	400	7.05	400
SSS-15-5-11-AB	50.5	400	39.86	400	31.98	400	25.99	400	21.33	400	17.64	400	14.65	400	12.21	400	10.19	400	8.49	400
SSS-15-5-7-AB	95.96	400	76.77	400	62.57	400	51.77	400	43.36	400	36.69	400	31.31	400	26.91	400	23.26	400	20.2	400
SSS-15-5-3-AB	96.47	400	77.26	400	63.05	400	52.24	400	43.83	400	37.16	400	31.77	400	27.37	400	23.71	400	20.65	400
SSS-15-6-11-AB	103.13	400	82.24	400	66.79	400	55.04	400	45.89	400	38.63	400	32.78	400	27.99	400	24.02	400	20.69	400
SSS-15-6-7-AB	99.31	400	79.24	400	64.39	400	53.09	400	44.3	400	37.32	400	31.7	400	27.09	400	23.27	400	20.07	400
SSS-15-6-3-AB	99.83	400	79.74	400	64.88	400	53.58	400	44.78	400	37.8	400	32.17	400	27.56	400	23.74	400	20.53	400
SSS-20-3-11-AB	23.8	400	18.57	400	14.7	400	11.76	400	9.47	400	7.65	400	6.19	400	4.99	400	3.99	400	3.16	400
SSS-20-4-11-AB	25.27	400	19.46	400	15.16	400	11.88	400	9.34	400	7.32	400	5.69	400	4.35	400	3.25	400	2.32	400
SSS-20-4-7-AB	25.87	400	20.05	400	15.75	400	12.47	400	9.92	400	7.9	400	6.27	400	4.93	400	3.82	400	2.9	400
SSS-20-5-11-AB	32.68	400	25.15	400	19.58	400	15.34	400	12.05	400	9.43	400	7.32	400	5.59	400	4.16	400	2.96	400
SSS-20-5-7-AB	65.09	400	51.51	400	41.46	400	33.82	400	27.87	400	23.16	400	19.35	400	16.23	400	13.65	400	11.49	400
SSS-20-5-3-AB	65.7	400	52.11	400	42.06	400	34.41	400	28.46	400	23.74	400	19.93	400	16.81	400	14.23	400	12.06	400
SSS-20-6-11-AB	69.11	400	54.35	400	43.43	400	35.13	400	28.67	400	23.54	400	19.4	400	16.01	400	13.21	400	10.86	400
SSS-20-6-7-AB	66.76	400	52.56	400	42.05	400	34.06	400	27.84	400	22.9	400	18.92	400	15.66	400	12.96	400	10.7	400
SSS-20-6-3-AB	67.39	400	53.17	400	42.65	400	34.65	400	28.43	400	23.49	400	19.5	400	13.03	400	13.54	400	11.27	400
SSS-25-3-11-AB	16.47	400	12.48	400	9.53	400	7.28	400	5.53	400	4.15	400	3.03	400	2.11	400	1.35	400	0.72	400
SSS-25-4-11-AB	16.88	400	12.44	400	9.16	400	6.66	400	4.71	400	3.17	400	1.92	400	0.9	400	0.06	400	N/A	400
SSS-25-4-7-AB	17.61	400	13.16	400	9.87	400	7.37	400	5.42	400	3.87	400	2.63	400	1.61	400	0.76	400	0.05	400
SSS-25-5-11-AB	21.81	400	16.06	400	11.81	400	8.57	400	6.05	400	4.05	400	2.44	400	1.12	400	0.03	400	N/A	400
SSS-25-5-7-AB	46.82	400	36.45	400	28.77	400	22.94	400	18.4	400	14.79	400	11.88	400	9.5	400	7.53	400	5.88	400
SSS-25-5-3-AB	47.55	400	37.17	400	29.49	400	23.65	400	19.1	400	15.49	400	12.58	400	10.2	400	8.23	400	6.57	400
SSS-25-6-11-AB	48.83	400	37.57	400	29.24	400	22.91	400	17.98	400	14.06	400	10.91	400	8.32	400	6.18	400	4.39	400
SSS-25-6-7-AB	47.37	400	36.52	400	28.49	400	22.39	400	17.64	400	13.87	400	10.83	400	8.34	400	6.27	400	4.54	400

\*Continued on next page

Catalog Number	90 MPH		100 MPH		110 MPH		120 MPH		130 MPH		140 MPH		150 MPH		160 MPH		170 MPH		180 MPH	
	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)	Max EPA (sq. ft)	Max Fixture Load (lb)
SSS-25-6-3-AB	48.12	400	37.26	400	29.22	400	23.11	400	18.35	400	14.57	400	11.53	400	9.04	400	6.97	400	5.24	400
SSS-30-4-11-AB	11.07	400	7.51	400	4.87	400	2.87	400	1.31	400	0.07	400	N/A	400	N/A	400	N/A	400	N/A	400
SSS-30-4-7-AB	11.92	400	8.35	400	5.71	400	3.7	400	2.14	400	0.9	400	N/A	400	N/A	400	N/A	400	N/A	400
SSS-30-5-11-AB	14.29	400	9.67	400	6.25	400	3.66	400	1.63	400	0.03	400	N/A	400	N/A	400	N/A	400	N/A	400
SSS-30-5-7-AB	34.61	400	26.29	400	20.13	400	15.45	400	11.8	400	8.91	400	6.58	400	4.67	400	3.09	400	1.76	400
SSS-30-5-3-AB	35.47	400	27.14	400	20.97	400	16.28	400	12.63	400	9.74	400	7.4	400	5.49	400	3.9	400	2.58	400
SSS-30-6-11-AB	35.16	400	26.14	400	19.46	400	14.38	400	10.43	400	7.29	400	4.76	400	2.69	400	N/A	400	N/A	400
SSS-30-6-7-AB	34.31	400	25.61	400	19.16	400	14.26	400	10.45	400	7.42	400	4.98	400	2.98	400	1.33	400	N/A	400
SSS-30-6-3-AB	35	400	26.46	400	20.01	400	15.02	400	11.28	400	8.25	400	5.81	400	3.81	400	2.15	400	N/A	400
SSS-35-4-7-AB	3.77	400	1.25	400	N/A	400														
SSS-35-5-11-AB	8.59	400	4.76	400	1.92	400	N/A	400												
SSS-35-5-7-AB	25.73	400	18.82	400	13.71	400	9.82	400	6.8	400	4.39	400	2.46	400	0.87	400	N/A	400	N/A	400
SSS-35-5-3-AB	26.71	400	19.79	400	14.67	400	10.78	400	7.75	400	5.35	400	3.41	400	1.82	400	N/A	400	N/A	400
SSS-35-6-11-AB	25.11	400	17.63	400	12.09	400	7.88	400	4.6	400	2	400	N/A	400	N/A	400	N/A	400	N/A	400
SSS-35-6-7-AB	24.73	400	17.5	400	12.15	400	8.08	400	4.91	400	2.4	400	N/A	400	N/A	400	N/A	400	N/A	400
SSS-35-6-3-AB	25.72	400	18.48	400	13.12	400	9.05	400	5.87	400	3.36	400	1.33	400	N/A	400	N/A	400	N/A	400
SSS-39-5-7-AB	20.12	400	14.06	400	9.57	400	6.16	400	3.5	400	1.39	400	N/A	400	N/A	400	N/A	400	N/A	400
SSS-39-5-3-AB	13.89	400	8.59	400	4.78	400	1.96	400	N/A	400										
SSS-39-6-11-AB	18.7	400	12.14	400	7.28	400	3.59	400	N/A	400										
SSS-39-6-7-AB	18.62	400	12.27	400	7.58	400	4	400	N/A	400										
SSS-39-6-3-AB	84.95	400	13.36	400	8.65	400	5.07	400	2.29	400	0.08	400	N/A	400	N/A	400	N/A	400	N/A	400

**NOTES:**

1. The maximum EPA values are based upon the published maximum weight noted. Lower weights will result in higher EPA values.

2. Includes Florida Building Code 2023/2020, AASHTO LRFD-LTS-1, and ASCE-7 standards.

3. For pole heights that are not shown, use the values for taller poles.

4. The Cooper Lighting Solutions on-line configurator has detailed maximum EPA and weight to refine the design.

### Considerations

#### DESIGN CONSIDERATIONS - VIBRATIONS AND NON-GROUND MOUNTED INSTALLATIONS

The information contained herein is for general guidance only and is not a replacement for professional judgment. Design considerations for wind induced vibrations and non-ground mounted installations (e.g., installations on bridges or buildings) are not included in this document. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Refer to the Cooper Lighting Solutions Light Pole White Paper for risk factors and design considerations. [Learn more.](#)

**NOTE:** The [Limited warranty](#) for this product specifically excludes fatigue failure or similar damage resulting from vibration, harmonic oscillation or resonance.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Cooper Lighting Solutions or visit [www.cooperlighting.com](http://www.cooperlighting.com) for available options, accessories and ordering information.

#### VIBRATION

Vibrations may cause damage to structures, including poles. Vibrations are unpredictable, and there are many factors and variables that can cause damaging vibrations. Many wind conditions exist that can create damaging vibrations to poles and luminaires, such as constant winds between 10-30 mph. Although all pole types can experience vibration, straight square poles seem to be most prone. Vibration dampeners and/or a round tapered design may be used to mitigate damage from vibrations, but there is no guarantee damaging vibrations will be prevented. Vibration dampeners are not included with this pole but can be ordered separately. Consult with a professional, and local and federal standards, to ensure this pole is appropriate for the intended purpose and installation location. Refer to Cooper Lighting Solutions' Light Pole [White Paper](#) for risk factors and design considerations.

#### MAINTENANCE

Perform inspections periodically. A prudent inspection schedule would be: one week after installation, one month after installation, yearly after installation, and following any major wind event. During the inspection, check the poles for cracks. If cracks are detected, remedial action is required. Recheck anchor bolt torques and re-tighten according to the recommended torque values. Check for missing covers and pole caps and replace as necessary. Check the pole for corrosion and deterioration of the finish. Should there be corrosion or deterioration, take remedial action to correct.

**WARNING:** Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to pole white paper [WP513001EN](#) for additional support information. Before installing, make sure proper anchor bolts and templates are obtained. The use of unauthorized accessories such as banners, signs, cameras or pennants for which the pole was not designed voids the pole warranty and may result in pole failure causing serious injury or property damage. Information regarding total loading capacity can be supplied upon request. The pole warranty is void unless poles are used and installed as a complete pole and luminaire combination. This warranty specifically excludes failure as the result of a third party act or omission, misuse, unanticipated uses, fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the product.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Cooper Lighting Solutions or visit [www.cooperlighting.com](http://www.cooperlighting.com) for available options, accessories, and ordering information.

Project		Catalog #		Type	
Prepared by		Notes		Date	



## McGraw-Edison

### GWC Galleon Wall

#### Wall Mount Luminaire

#### Product Features



Light ARchitect™



COMPLIANT OPTIONS  
BUY AMERICAN ACT  
AVAILABLE



#### Product Certifications



1  
DLC  
LISTED



1  
DLC  
LISTED  
PREMIUM



E4911  
SYSTEMS  
CERTIFIED



UL  
CERTIFIED



FCC  
CLASS A



#### Interactive Menu

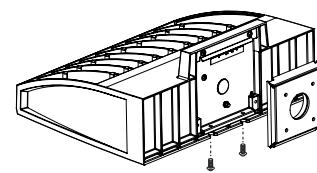
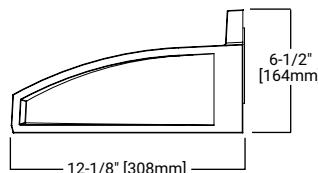
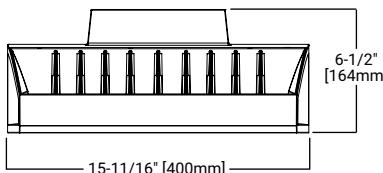
- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Optical Configurations [page 3](#)
- Energy and Performance Data [page 4](#)
- Control Options [page 6](#)

#### Quick Facts

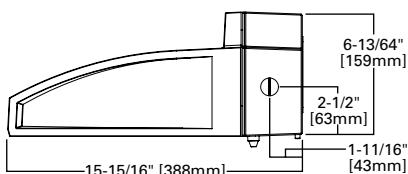
- Choice of thirteen high-efficiency, patented AccuLED Optics
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

#### Dimensional Details

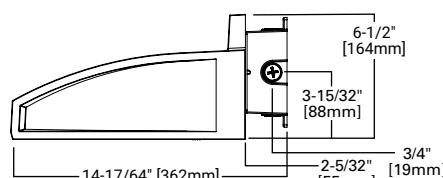
Net Weight: 17.0 lbs (7.7 kgs)



**GWC with CBP option installed**  
(Thru-Branch Back Box accessory MA1059XX)



**GWC with accessory BB/GWCXX Back Box installed**



**NOTES:**

1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

## Ordering Information

SAMPLE NUMBER: GWC-SA2C-740-U-T4FT-GM

Product Family <sup>1</sup>	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configuration	Drive Current				
<b>GWC</b> =Galleon Wall <b>BAA-GWC</b> =Galleon Wall, Buy American Act Compliant <sup>34</sup> <b>TAA-GWC</b> =Galleon Wall, Trade Agreements Act Compliant <sup>34</sup>	<b>SA1</b> =1 Square <b>SA2</b> =2 Squares <sup>2</sup>	<b>A</b> =615mA <b>B</b> =800mA <b>C</b> =1000mA <b>D</b> =1200mA <sup>4</sup> <b>Z</b> =Configured <sup>40</sup>	<b>722</b> =70CRI, 2200K <b>727</b> =70CRI, 2700K <b>730</b> =70CRI, 3000K <b>735</b> =70CRI, 3500K <b>740</b> =70CRI, 4000K <b>750</b> =70CRI, 5000K <b>760</b> =70CRI, 6000K <b>827</b> =80CRI, 2700K <b>830</b> =80CRI, 3000K <b>AMB</b> =Amber, 590nm <sup>3,4</sup>	<b>U</b> =120-277V <b>1</b> =120V <b>2</b> =208V <b>3</b> =240V <b>4</b> =277V <b>8</b> =480V <sup>6,7</sup> <b>9</b> =347V <sup>6</sup> <b>DV</b> =277-480V DuraVolt Drivers <sup>7,8,36</sup>	<b>T2</b> =Type II <b>T3</b> =Type III <b>T4FT</b> =Type IV Forward Throw <b>T4W</b> =Type IV Wide <b>SL2</b> =Type II w/Spill Control <b>SL3</b> =Type III w/Spill Control <b>SL4</b> =Type IV w/Spill Control <b>SLL</b> =90° Spill Light Eliminator Left <b>SLR</b> =90° Spill Light Eliminator Right <b>RW</b> =Rectangular Wide Type I <b>SNQ</b> =Type V Square Narrow <b>5MQ</b> =Type V Square Medium <b>5WQ</b> =Type V Square Wide	<b>AP</b> =Grey <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic <b>WH</b> =White
<b>Options (Add as Suffix)</b>	<b>Controls and Systems Options (Add as Suffix)</b>		<b>Accessories (Order Separately)<sup>35</sup></b>			
<b>F</b> =Single Fused (120, 277 or 347V. Must Specify Voltage) <b>FF</b> =Double Fused (208, 240 or 480V. Must Specify Voltage) <b>10K</b> =10kV Surge Module <b>20K</b> =Series 20kV UL 1449 Surge Protective Device <b>2L</b> =Two-Circuit Light Engine <sup>37</sup> <b>DIM</b> =External 0-10V Dimming Leads <sup>9,10</sup> <b>CBP</b> =Battery Pack with Back Box, Cold Weather Rated <sup>2,4,14,32</sup> <b>CBP-CEC</b> =Battery Pack with Back Box, Cold Weather Rated, CEC compliant <sup>3,4,14</sup> <b>BB</b> =Shipped with Back Box Accessory <sup>38</sup> <b>L90</b> =Optics Rotated 90° Left <b>R90</b> =Optics Rotated 90° Right <b>HSS</b> =Factory Installed House Side Shield <sup>23</sup> <b>GRSBK</b> =Factory Installed Glare Shield, BK <sup>4,27</sup> <b>GRSWH</b> =Factory Installed Glare Shield, WH <sup>4,27</sup> <b>UPL</b> =Uplight Housing <sup>13</sup> <b>HA</b> =50°C High Ambient <sup>12</sup> <b>LCF</b> =Light Square Trim Plate Painted to Match Housing <sup>22</sup> <b>MT</b> =Factory Installed Mesh Top <b>CC</b> =Coastal Construction finish <sup>5</sup> <b>CE</b> =CE Marking and Small Terminal Block <sup>24</sup> <b>AHD145</b> =After Hours Dim, 5 Hours <sup>16</sup> <b>AHD245</b> =After Hours Dim, 6 Hours <sup>16</sup> <b>AHD255</b> =After Hours Dim, 7 Hours <sup>16</sup> <b>AHD355</b> =After Hours Dim, 8 Hours <sup>16</sup> <b>DALI</b> =DALI Driver <sup>11</sup>	<b>BPC</b> =Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) <b>PR</b> =NEMA 3-PIN Twistlock Photocontrol Receptacle <b>PR7</b> =NEMA 7-PIN Twistlock Photocontrol Receptacle <sup>15</sup> <b>FADC</b> =Field Adjustable Dimming Controller <sup>39</sup> <b>SPB1</b> =Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting <sup>19,33</sup> <b>SPB2</b> =Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting <sup>19,33</sup> <b>SPB4</b> =Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting <sup>19,33</sup> <b>MS-LXX</b> =Motion Sensor for On/Off Operation <sup>17,18,19</sup> <b>MS/DIM-LXX</b> =Motion Sensor for Dimming Operation <sup>17,18,19</sup> <b>WPS2XX</b> =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'-15' Mounting <sup>30,31,41</sup> <b>WPS4XX</b> =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'-40' Mounting <sup>30,31,41</sup> <b>WLS2XX</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7'-15' Mounting <sup>31,41</sup> <b>WLS4XX</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'-40' Mounting <sup>31,41</sup> <b>LWR-LW</b> =Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height <sup>19,20,21</sup> <b>LWR-LN</b> =Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height <sup>19,20,21</sup>		<b>OA/RA1013</b> =Photocontrol Shorting Cap <b>OA/RA1016</b> =NEMA Photocontrol - Multi-Tap 105-285V <b>OA/RA1201</b> =NEMA Photocontrol - 347V <b>OA/RA1027</b> =NEMA Photocontrol - 480V <b>MA1252</b> =10kV Circuit Module Replacement <b>MA1059XX</b> =Thru-branch Back Box (Must Specify Color) <b>BB/GWCXX</b> =Back Box (Must Specify Color) <b>LS/HSS</b> =Field Installed House Side Shield <sup>23,25</sup> <b>LS/GRSBK-2PK</b> =Glare Shield, Black <sup>25,27</sup> <b>LS/GRSWH-2PK</b> =Glare Shield, White <sup>25,27</sup> <b>LS/PFS</b> =Perimeter Shield, Black <sup>28</sup> <b>FSIR-100</b> =Wireless Configuration Tool for Occupancy Sensor <sup>17</sup> <b>WOLC-7P-10A</b> =WaveLinx Outdoor Control Module (7-pin) <sup>26,29</sup>			
<b>NOTES:</b> 1. DesignLight Consortium® Qualified. Refer to <a href="http://www.designlights.org">www.designlights.org</a> . Qualified Products List under Family Models for details. 2. Two light squares with CBP options limited to 25°C. CBP not available in combination with sensor options at 1200mA. 3. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. 4. Not available with HA option. 5. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 6. Require the use of a step down transformer. Not available in combination with sensor options at 1200mA. 7. 480V not to be used with ungrounded or impedance grounded systems. 8. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit <a href="http://www.signify.com/duravolt">www.signify.com/duravolt</a> for more information. 9. Cannot be used with other control options. 10. Low voltage control leads extended 18' from fixture. 11. Not available at 1200mA. When used with CBP or HA options, only available with single light square. 12. Not available in 1200mA, UPL or CBP options. Available with single light square. 13. Not available with SL2, SL3, SL4, HA, CBP or PR7 options. 14. Operates a single light square only. Operates at -20°C to +40°C. Backbox is non-IP rated. 15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls. 16. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. 17. The FSIR-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information. 18. Replace LXX with L08 (8'-8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting). 19. Includes integral photosensor. 20. Enlighted wireless sensors are factory installed requiring network components in appropriate quantities. 21. White sensor shipped on all housing color options. 22. Not available with HSS or GRS options.	23. Not for use with 5NQ, 5MQ, 5WQ or RW optics. The light square trim plate is painted black when the HSS option is selected. 24. CE is not available with the 1200, DALI, LWR, MS, MS/DIM, BPC, PR or PR7 options. Available in 120-277V only. 25. One required for each light square. 26. Requires PR7. 27. Not for use with T4FT, T4W or SL4 optics. 28. Set of 4 pcs. Once set required per Light Square. 29. Cannot be used in conjunction with additional photocontrol or other controls systems (BPC, PR, PR7, MS, LWR). 30. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. 31. Replace XX with sensor color (WH, BZ, or BK). 32. Specify 120V or 277V. 33. Smart device with mobile application required to change system defaults. See controls section for details. 34. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="http://DOMESTIC PREFERENCES">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 35. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 36. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB. 37. 2L not available with FF, AHD or DALI options. Controls and/or battery packs operate only one of the two circuits when 2L is specified. 2L with controls options not available with 347V or 480V. 38. Not available with CBP or CBP-CEC options. 39. Cannot be used with PR7 or other motion response control options. 40. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc. 41. Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPBx).					

## Product Specifications

## Construction

- Driver enclosure thermally isolated from optics for optimal thermal performance
- Die-cast aluminum heat sinks
- IP66 rated housing
- 1.5G vibration rated

## Optics

- Patented, high-efficiency injection-molded AccuLED Optics technology
- 13 optical distributions
- IDA Certified (3000K CCT and warmer only)

## Electrical

- LED driver assembly mounted for ease of maintenance
- Standard with 0-10V dimming
- Optional 10kV or 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments; Optional 50°C high ambient (HA) configuration
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

## Mounting

- Gasketed and zinc plated rigid steel mounting attachment
- "Hook-N-Lock" mechanism for easy installation

## Finish

- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Heat sink is powder coated black
- RAL and custom color matches available
- Coastal Construction (CC) option available

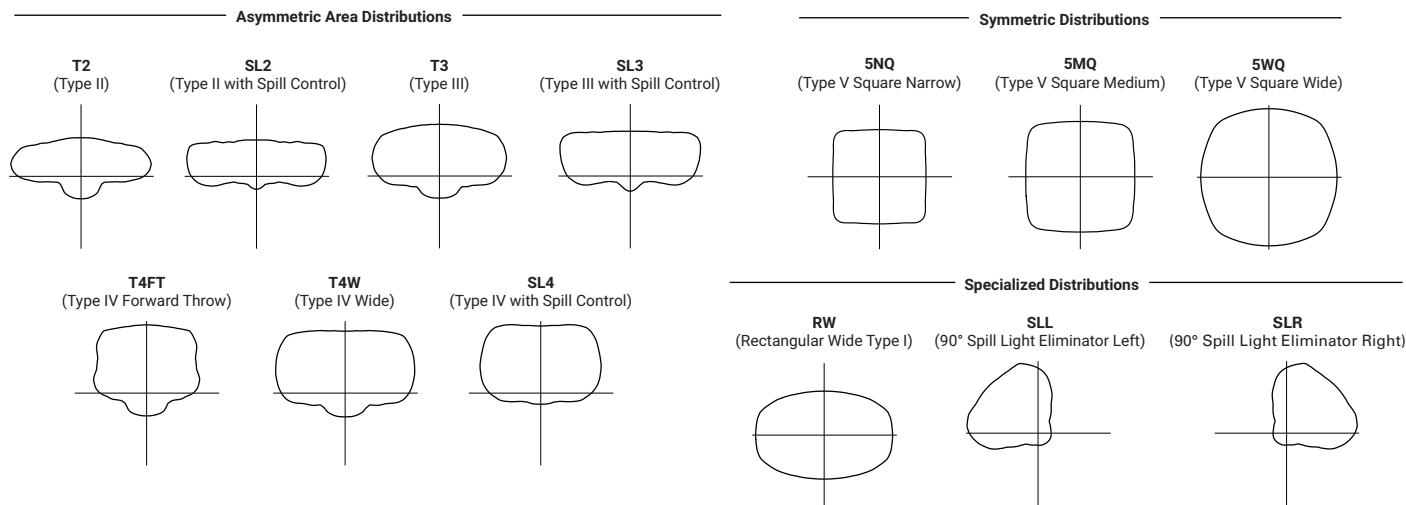
## Typical Applications

- Exterior Wall, Walkway

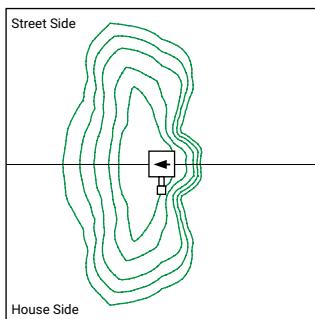
## Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

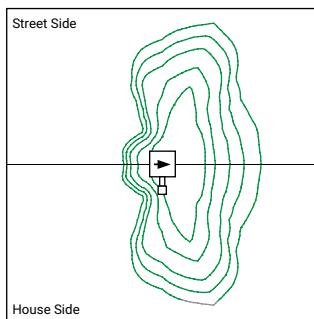
## Optical Distributions



## Optic Orientation



Optics Rotated Left @ 90° [L90]



Optics Rotated Right @ 90° [R90]

## Energy and Performance Data

### Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

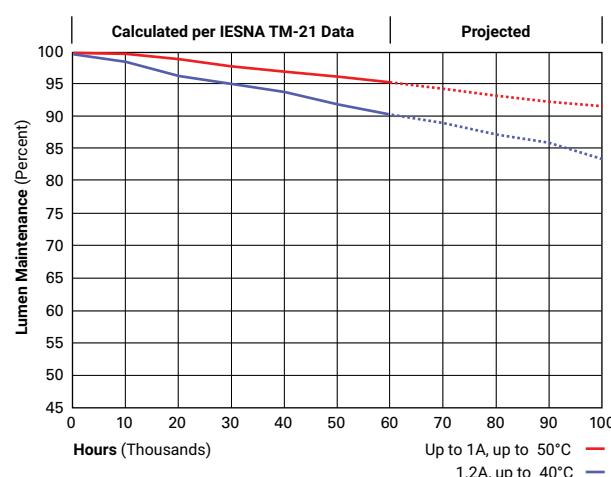
### FADC Settings

FADC Position	Lumen Multiplier
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value

### Lumen Maintenance

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	> 416,000
1.2A	Up to 40°C	> 90%	> 205,000



## Energy and Performance Data

[!\[\]\(1ea11c173a0d82e57c10bfaa9dd29f95\_img.jpg\) View GWC Galleon Wall IES files](#)

4000K/5000K/6000K CCT, 70 CRI

Number of Light Squares	1				2				
<b>Drive Current</b>	615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A	
<b>Nominal Power (Watts)</b>	34	44	59	67	66	86	113	129	
<b>Input Current @ 120V (A)</b>	0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.16	
<b>Input Current @ 208V (A)</b>	0.17	0.22	0.29	0.33	0.34	0.44	0.56	0.63	
<b>Input Current @ 240V (A)</b>	0.15	0.19	0.26	0.29	0.30	0.38	0.48	0.55	
<b>Input Current @ 277V (A)</b>	0.14	0.17	0.23	0.25	0.28	0.36	0.42	0.48	
<b>Input Current @ 347V (A)</b>	0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39	
<b>Input Current @ 480V (A)</b>	0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30	
<b>Optics</b>									
<b>T2</b>	Lumens	4,883	5,989	7,412	8,131	9,543	11,703	14,485	15,891
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens per Watt	144	136	126	121	145	136	128	123
<b>T3</b>	Lumens	4,978	6,105	7,556	8,288	9,729	11,929	14,764	16,196
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
<b>T4FT</b>	Lumens	5,008	6,140	7,599	8,337	9,783	11,998	14,850	16,290
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	147	140	129	124	148	140	131	126
<b>T4W</b>	Lumens	4,942	6,060	7,502	8,229	9,658	11,843	14,658	16,080
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3
	Lumens per Watt	145	138	127	123	146	138	130	125
<b>SL2</b>	Lumens	4,874	5,979	7,399	8,117	9,528	11,684	14,461	15,863
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3
	Lumens per Watt	143	136	125	121	144	136	128	123
<b>SL3</b>	Lumens	4,976	6,104	7,555	8,287	9,727	11,927	14,763	16,194
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
<b>SL4</b>	Lumens	4,729	5,799	7,178	7,873	9,239	11,333	14,025	15,387
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4
	Lumens per Watt	139	132	122	118	140	132	124	119
<b>5NQ</b>	Lumens	5,134	6,296	7,793	8,547	10,033	12,303	15,226	16,704
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	Lumens per Watt	151	143	132	128	152	143	135	129
<b>5MQ</b>	Lumens	5,228	6,412	7,935	8,705	10,216	12,529	15,508	17,011
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	134	130	155	146	137	132
<b>5WQ</b>	Lumens	5,242	6,428	7,956	8,728	10,244	12,563	15,548	17,056
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	135	130	155	146	138	132
<b>SLL/SLR</b>	Lumens	4,373	5,365	6,640	7,283	8,547	10,481	12,973	14,231
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	129	122	113	109	130	122	115	110
<b>RW</b>	Lumens	5,087	6,238	7,721	8,472	9,941	12,190	15,088	16,553
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	150	142	131	126	151	142	134	128

\* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

3000K CCT, 80 CRI

Number of Light Squares		1				2			
Drive Current		615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A
Nominal Power (Watts)		34	44	59	67	66	86	113	129
Input Current @ 120V (A)		0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.16
Input Current @ 208V (A)		0.17	0.22	0.29	0.33	0.34	0.44	0.56	0.63
Input Current @ 240V (A)		0.15	0.19	0.26	0.29	0.30	0.38	0.48	0.55
Input Current @ 277V (A)		0.14	0.17	0.23	0.25	0.28	0.36	0.42	0.48
Input Current @ 347V (A)		0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39
Input Current @ 480V (A)		0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30
Optics									
T2	Lumens	3,880	4,759	5,890	6,461	7,583	9,300	11,510	12,628
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	
	Lumens per Watt	114	108	100	96	115	108	102	98
T3	Lumens	3,956	4,851	6,004	6,586	7,731	9,479	11,732	12,870
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	
	Lumens per Watt	116	110	102	98	117	110	104	100
T4FT	Lumens	3,980	4,879	6,038	6,625	7,774	9,534	11,800	12,945
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	
	Lumens per Watt	117	111	102	99	118	111	104	100
T4W	Lumens	3,927	4,816	5,961	6,539	7,675	9,411	11,648	12,778
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	
	Lumens per Watt	116	109	101	98	116	109	103	99
SL2	Lumens	3,873	4,751	5,880	6,450	7,571	9,285	11,491	12,605
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	
	Lumens per Watt	114	108	100	96	115	108	102	98
SL3	Lumens	3,954	4,851	6,004	6,585	7,729	9,478	11,731	12,868
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	
	Lumens per Watt	116	110	102	98	117	110	104	100
SL4	Lumens	3,758	4,608	5,704	6,256	7,342	9,006	11,145	12,227
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3	
	Lumens per Watt	111	105	97	93	111	105	99	95
5NQ	Lumens	4,080	5,003	6,193	6,792	7,973	9,776	12,099	13,274
	BUG Rating	B2-U0-G0	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	
	Lumens per Watt	120	114	105	101	121	114	107	103
5MQ	Lumens	4,154	5,095	6,305	6,917	8,118	9,956	12,323	13,518
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	
	Lumens per Watt	122	116	107	103	123	116	109	105
5WQ	Lumens	4,166	5,108	6,322	6,936	8,140	9,983	12,355	13,553
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	
	Lumens per Watt	123	116	107	104	123	116	109	105
SLL/SLR	Lumens	3,475	4,263	5,276	5,787	6,792	8,329	10,309	11,309
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	102	97	89	86	103	97	91	88
RW	Lumens	4,042	4,957	6,135	6,732	7,900	9,687	11,990	13,154
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	
	Lumens per Watt	119	113	104	100	120	113	106	102

\* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

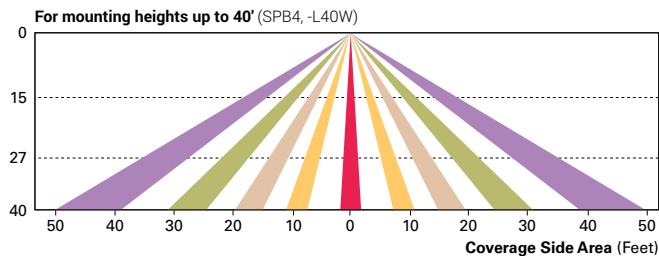
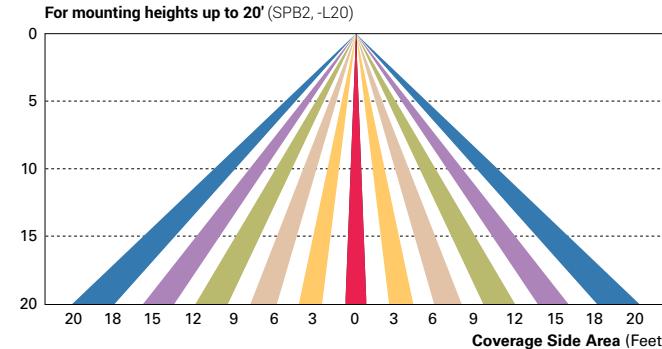
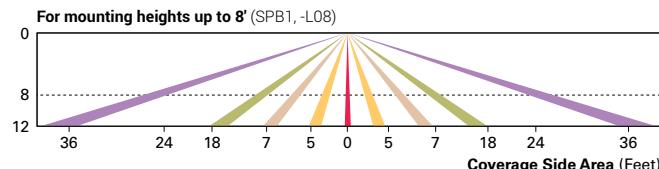
## Control Options

**0-10V** This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

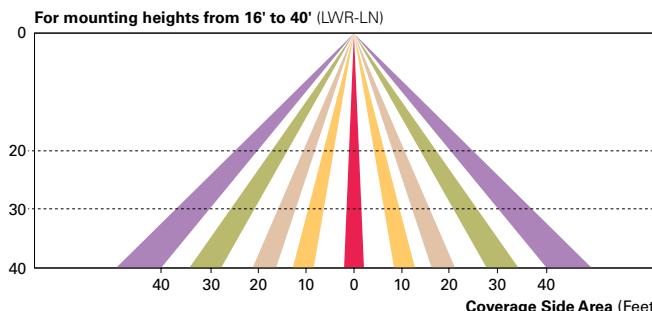
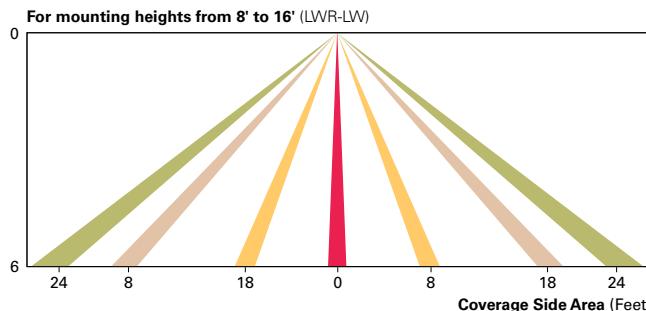
**Photocontrol** (BPC, PR, and PR7) Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

**After Hours Dim (AHD)** This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

**Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX)** These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10 percent power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.



**Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)** The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.



**WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)** The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

Project		Catalog #		Type	
Prepared by		Notes		Date	



## McGraw-Edison

### GWC Galleon Wall

#### Wall Mount Luminaire

#### Product Features



Light ARchitect™



COMPLIANT OPTIONS  
BUY AMERICAN ACT  
AVAILABLE



#### Product Certifications



1  
DLC  
LISTED



1  
DLC  
LISTED  
PREMIUM



SYSTEMS  
CERTIFIED



UL  
CERTIFIED



FCC  
CLASS A



#### Interactive Menu

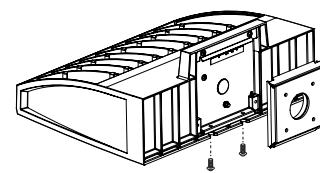
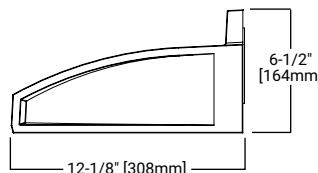
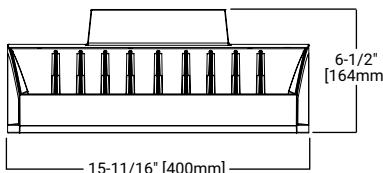
- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Optical Configurations [page 3](#)
- Energy and Performance Data [page 4](#)
- Control Options [page 6](#)

#### Quick Facts

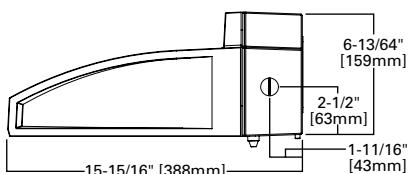
- Choice of thirteen high-efficiency, patented AccuLED Optics
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

#### Dimensional Details

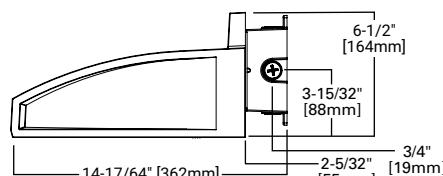
Net Weight: 17.0 lbs (7.7 kgs)



**GWC with CBP option installed**  
(Thru-Branch Back Box accessory MA1059XX)



**GWC with accessory BB/GWCXX Back Box installed**



**NOTES:**

1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

## Ordering Information

SAMPLE NUMBER: GWC-SA2C-740-U-T4FT-GM

Product Family <sup>1</sup>	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configuration	Drive Current				
<b>GWC</b> =Galleon Wall <b>BAA-GWC</b> =Galleon Wall, Buy American Act Compliant <sup>34</sup> <b>TAA-GWC</b> =Galleon Wall, Trade Agreements Act Compliant <sup>34</sup>	<b>SA1</b> =1 Square <b>SA2</b> =2 Squares <sup>2</sup>	<b>A</b> =615mA <b>B</b> =800mA <b>C</b> =1000mA <b>D</b> =1200mA <sup>4</sup> <b>Z</b> =Configured <sup>40</sup>	<b>722</b> =70CRI, 2200K <b>727</b> =70CRI, 2700K <b>730</b> =70CRI, 3000K <b>735</b> =70CRI, 3500K <b>740</b> =70CRI, 4000K <b>750</b> =70CRI, 5000K <b>760</b> =70CRI, 6000K <b>827</b> =80CRI, 2700K <b>830</b> =80CRI, 3000K <b>AMB</b> =Amber, 590nm <sup>3,4</sup>	<b>U</b> =120-277V <b>1</b> =120V <b>2</b> =208V <b>3</b> =240V <b>4</b> =277V <b>8</b> =480V <sup>6,7</sup> <b>9</b> =347V <sup>6</sup> <b>DV</b> =277-480V DuraVolt Drivers <sup>7,8,36</sup>	<b>T2</b> =Type II <b>T3</b> =Type III <b>T4FT</b> =Type IV Forward Throw <b>T4W</b> =Type IV Wide <b>SL2</b> =Type II w/Spill Control <b>SL3</b> =Type III w/Spill Control <b>SL4</b> =Type IV w/Spill Control <b>SLL</b> =90° Spill Light Eliminator Left <b>SLR</b> =90° Spill Light Eliminator Right <b>RW</b> =Rectangular Wide Type I <b>SNQ</b> =Type V Square Narrow <b>5MQ</b> =Type V Square Medium <b>5WQ</b> =Type V Square Wide	<b>AP</b> =Grey <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic <b>WH</b> =White
<b>Options (Add as Suffix)</b>	<b>Controls and Systems Options (Add as Suffix)</b>		<b>Accessories (Order Separately)<sup>35</sup></b>			
<b>F</b> =Single Fused (120, 277 or 347V. Must Specify Voltage) <b>FF</b> =Double Fused (208, 240 or 480V. Must Specify Voltage) <b>10K</b> =10kV Surge Module <b>20K</b> =Series 20kV UL 1449 Surge Protective Device <b>2L</b> =Two-Circuit Light Engine <sup>37</sup> <b>DIM</b> =External 0-10V Dimming Leads <sup>9,10</sup> <b>CBP</b> =Battery Pack with Back Box, Cold Weather Rated <sup>2,4,14,32</sup> <b>CBP-CEC</b> =Battery Pack with Back Box, Cold Weather Rated, CEC compliant <sup>3,4,14</sup> <b>BB</b> =Shipped with Back Box Accessory <sup>38</sup> <b>L90</b> =Optics Rotated 90° Left <b>R90</b> =Optics Rotated 90° Right <b>HSS</b> =Factory Installed House Side Shield <sup>23</sup> <b>GRSBK</b> =Factory Installed Glare Shield, BK <sup>4,27</sup> <b>GRSWH</b> =Factory Installed Glare Shield, WH <sup>4,27</sup> <b>UPL</b> =Uplight Housing <sup>13</sup> <b>HA</b> =50°C High Ambient <sup>12</sup> <b>LCF</b> =Light Square Trim Plate Painted to Match Housing <sup>22</sup> <b>MT</b> =Factory Installed Mesh Top <b>CC</b> =Coastal Construction finish <sup>5</sup> <b>CE</b> =CE Marking and Small Terminal Block <sup>24</sup> <b>AHD145</b> =After Hours Dim, 5 Hours <sup>16</sup> <b>AHD245</b> =After Hours Dim, 6 Hours <sup>16</sup> <b>AHD255</b> =After Hours Dim, 7 Hours <sup>16</sup> <b>AHD355</b> =After Hours Dim, 8 Hours <sup>16</sup> <b>DALI</b> =DALI Driver <sup>11</sup>	<b>BPC</b> =Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) <b>PR</b> =NEMA 3-PIN Twistlock Photocontrol Receptacle <b>PR7</b> =NEMA 7-PIN Twistlock Photocontrol Receptacle <sup>15</sup> <b>FADC</b> =Field Adjustable Dimming Controller <sup>39</sup> <b>SPB1</b> =Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting <sup>19,33</sup> <b>SPB2</b> =Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting <sup>19,33</sup> <b>SPB4</b> =Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting <sup>19,33</sup> <b>MS-LXX</b> =Motion Sensor for On/Off Operation <sup>17,18,19</sup> <b>MS/DIM-LXX</b> =Motion Sensor for Dimming Operation <sup>17,18,19</sup> <b>WPS2XX</b> =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'-15' Mounting <sup>30,31,41</sup> <b>WPS4XX</b> =WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'-40' Mounting <sup>30,31,41</sup> <b>WLS2XX</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7'-15' Mounting <sup>31,41</sup> <b>WLS4XX</b> =WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'-40' Mounting <sup>31,41</sup> <b>LWR-LW</b> =Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height <sup>19,20,21</sup> <b>LWR-LN</b> =Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height <sup>19,20,21</sup>		<b>OA/RA1013</b> =Photocontrol Shorting Cap <b>OA/RA1016</b> =NEMA Photocontrol - Multi-Tap 105-285V <b>OA/RA1201</b> =NEMA Photocontrol - 347V <b>OA/RA1027</b> =NEMA Photocontrol - 480V <b>MA1252</b> =10kV Circuit Module Replacement <b>MA1059XX</b> =Thru-branch Back Box (Must Specify Color) <b>BB/GWCXX</b> =Back Box (Must Specify Color) <b>LS/HSS</b> =Field Installed House Side Shield <sup>23,25</sup> <b>LS/GRSBK-2PK</b> =Glare Shield, Black <sup>25,27</sup> <b>LS/GRSWH-2PK</b> =Glare Shield, White <sup>25,27</sup> <b>LS/PFS</b> =Perimeter Shield, Black <sup>28</sup> <b>FSIR-100</b> =Wireless Configuration Tool for Occupancy Sensor <sup>17</sup> <b>WOLC-7P-10A</b> =WaveLinx Outdoor Control Module (7-pin) <sup>26,29</sup>			
<b>NOTES:</b> 1. DesignLight Consortium® Qualified. Refer to <a href="http://www.designlights.org">www.designlights.org</a> . Qualified Products List under Family Models for details. 2. Two light squares with CBP options limited to 25°C. CBP not available in combination with sensor options at 1200mA. 3. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. 4. Not available with HA option. 5. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 6. Require the use of a step down transformer. Not available in combination with sensor options at 1200mA. 7. 480V not to be used with ungrounded or impedance grounded systems. 8. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit <a href="http://www.signify.com/duravolt">www.signify.com/duravolt</a> for more information. 9. Cannot be used with other control options. 10. Low voltage control leads extended 18' from fixture. 11. Not available at 1200mA. When used with CBP or HA options, only available with single light square. 12. Not available in 1200mA, UPL or CBP options. Available with single light square. 13. Not available with SL2, SL3, SL4, HA, CBP or PR7 options. 14. Operates a single light square only. Operates at -20°C to +40°C. Backbox is non-IP rated. 15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls. 16. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. 17. The FSIR-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information. 18. Replace LXX with L08 (8'-8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting). 19. Includes integral photosensor. 20. Enlighted wireless sensors are factory installed requiring network components in appropriate quantities. 21. White sensor shipped on all housing color options. 22. Not available with HSS or GRS options.	23. Not for use with 5NQ, 5MQ, 5WQ or RW optics. The light square trim plate is painted black when the HSS option is selected. 24. CE is not available with the 1200, DALI, LWR, MS, MS/DIM, BPC, PR or PR7 options. Available in 120-277V only. 25. One required for each light square. 26. Requires PR7. 27. Not for use with T4FT, T4W or SL4 optics. 28. Set of 4 pcs. Once set required per Light Square. 29. Cannot be used in conjunction with additional photocontrol or other controls systems (BPC, PR, PR7, MS, LWR). 30. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. 31. Replace XX with sensor color (WH, BZ, or BK). 32. Specify 120V or 277V. 33. Smart device with mobile application required to change system defaults. See controls section for details. 34. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="http://DOMESTIC PREFERENCES">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 35. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 36. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB. 37. 2L not available with FF, AHD or DALI options. Controls and/or battery packs operate only one of the two circuits when 2L is specified. 2L with controls options not available with 347V or 480V. 38. Not available with CBP or CBP-CEC options. 39. Cannot be used with PR7 or other motion response control options. 40. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc. 41. Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPBx).					

## Product Specifications

## Construction

- Driver enclosure thermally isolated from optics for optimal thermal performance
- Die-cast aluminum heat sinks
- IP66 rated housing
- 1.5G vibration rated

## Optics

- Patented, high-efficiency injection-molded AccuLED Optics technology
- 13 optical distributions
- IDA Certified (3000K CCT and warmer only)

## Electrical

- LED driver assembly mounted for ease of maintenance
- Standard with 0-10V dimming
- Optional 10kV or 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments; Optional 50°C high ambient (HA) configuration
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

## Mounting

- Gasketed and zinc plated rigid steel mounting attachment
- "Hook-N-Lock" mechanism for easy installation

## Finish

- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Heat sink is powder coated black
- RAL and custom color matches available
- Coastal Construction (CC) option available

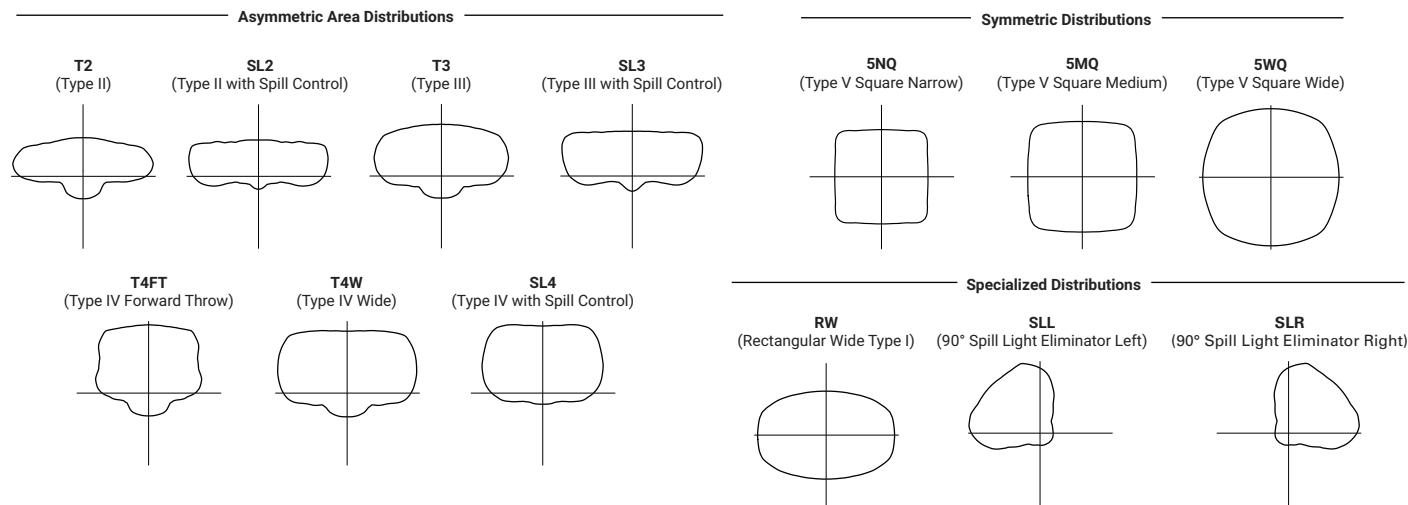
## Typical Applications

- Exterior Wall, Walkway

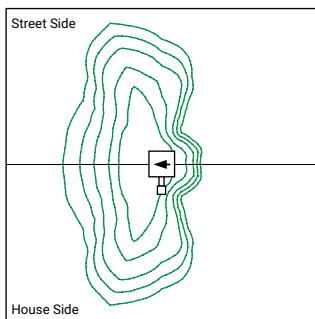
## Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

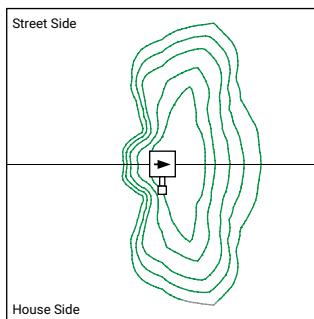
## Optical Distributions



## Optic Orientation



Optics Rotated Left @ 90° [L90]



Optics Rotated Right @ 90° [R90]

## Energy and Performance Data

### Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

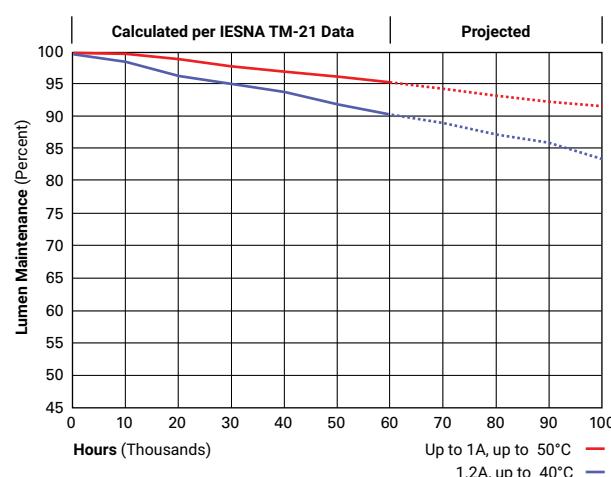
### FADC Settings

FADC Position	Lumen Multiplier
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value

### Lumen Maintenance

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	> 416,000
1.2A	Up to 40°C	> 90%	> 205,000



## Energy and Performance Data

[!\[\]\(d6ff5743f0fbcb51040cf90591fa22ac\_img.jpg\) View GWC Galleon Wall IES files](#)

4000K/5000K/6000K CCT, 70 CRI

Number of Light Squares	1				2				
<b>Drive Current</b>	615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A	
<b>Nominal Power (Watts)</b>	34	44	59	67	66	86	113	129	
<b>Input Current @ 120V (A)</b>	0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.16	
<b>Input Current @ 208V (A)</b>	0.17	0.22	0.29	0.33	0.34	0.44	0.56	0.63	
<b>Input Current @ 240V (A)</b>	0.15	0.19	0.26	0.29	0.30	0.38	0.48	0.55	
<b>Input Current @ 277V (A)</b>	0.14	0.17	0.23	0.25	0.28	0.36	0.42	0.48	
<b>Input Current @ 347V (A)</b>	0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39	
<b>Input Current @ 480V (A)</b>	0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30	
<b>Optics</b>									
<b>T2</b>	Lumens	4,883	5,989	7,412	8,131	9,543	11,703	14,485	15,891
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens per Watt	144	136	126	121	145	136	128	123
<b>T3</b>	Lumens	4,978	6,105	7,556	8,288	9,729	11,929	14,764	16,196
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
<b>T4FT</b>	Lumens	5,008	6,140	7,599	8,337	9,783	11,998	14,850	16,290
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	147	140	129	124	148	140	131	126
<b>T4W</b>	Lumens	4,942	6,060	7,502	8,229	9,658	11,843	14,658	16,080
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3
	Lumens per Watt	145	138	127	123	146	138	130	125
<b>SL2</b>	Lumens	4,874	5,979	7,399	8,117	9,528	11,684	14,461	15,863
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3
	Lumens per Watt	143	136	125	121	144	136	128	123
<b>SL3</b>	Lumens	4,976	6,104	7,555	8,287	9,727	11,927	14,763	16,194
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
<b>SL4</b>	Lumens	4,729	5,799	7,178	7,873	9,239	11,333	14,025	15,387
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4
	Lumens per Watt	139	132	122	118	140	132	124	119
<b>5NQ</b>	Lumens	5,134	6,296	7,793	8,547	10,033	12,303	15,226	16,704
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	Lumens per Watt	151	143	132	128	152	143	135	129
<b>5MQ</b>	Lumens	5,228	6,412	7,935	8,705	10,216	12,529	15,508	17,011
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	134	130	155	146	137	132
<b>5WQ</b>	Lumens	5,242	6,428	7,956	8,728	10,244	12,563	15,548	17,056
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	135	130	155	146	138	132
<b>SLL/SLR</b>	Lumens	4,373	5,365	6,640	7,283	8,547	10,481	12,973	14,231
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	129	122	113	109	130	122	115	110
<b>RW</b>	Lumens	5,087	6,238	7,721	8,472	9,941	12,190	15,088	16,553
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	150	142	131	126	151	142	134	128

\* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

3000K CCT, 80 CRI

Number of Light Squares		1				2			
Drive Current		615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A
Nominal Power (Watts)		34	44	59	67	66	86	113	129
Input Current @ 120V (A)		0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.16
Input Current @ 208V (A)		0.17	0.22	0.29	0.33	0.34	0.44	0.56	0.63
Input Current @ 240V (A)		0.15	0.19	0.26	0.29	0.30	0.38	0.48	0.55
Input Current @ 277V (A)		0.14	0.17	0.23	0.25	0.28	0.36	0.42	0.48
Input Current @ 347V (A)		0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39
Input Current @ 480V (A)		0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30
Optics									
T2	Lumens	3,880	4,759	5,890	6,461	7,583	9,300	11,510	12,628
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	
	Lumens per Watt	114	108	100	96	115	108	102	98
T3	Lumens	3,956	4,851	6,004	6,586	7,731	9,479	11,732	12,870
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	
	Lumens per Watt	116	110	102	98	117	110	104	100
T4FT	Lumens	3,980	4,879	6,038	6,625	7,774	9,534	11,800	12,945
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	
	Lumens per Watt	117	111	102	99	118	111	104	100
T4W	Lumens	3,927	4,816	5,961	6,539	7,675	9,411	11,648	12,778
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	
	Lumens per Watt	116	109	101	98	116	109	103	99
SL2	Lumens	3,873	4,751	5,880	6,450	7,571	9,285	11,491	12,605
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	
	Lumens per Watt	114	108	100	96	115	108	102	98
SL3	Lumens	3,954	4,851	6,004	6,585	7,729	9,478	11,731	12,868
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	
	Lumens per Watt	116	110	102	98	117	110	104	100
SL4	Lumens	3,758	4,608	5,704	6,256	7,342	9,006	11,145	12,227
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3	
	Lumens per Watt	111	105	97	93	111	105	99	95
5NQ	Lumens	4,080	5,003	6,193	6,792	7,973	9,776	12,099	13,274
	BUG Rating	B2-U0-G0	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	
	Lumens per Watt	120	114	105	101	121	114	107	103
5MQ	Lumens	4,154	5,095	6,305	6,917	8,118	9,956	12,323	13,518
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	
	Lumens per Watt	122	116	107	103	123	116	109	105
5WQ	Lumens	4,166	5,108	6,322	6,936	8,140	9,983	12,355	13,553
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	
	Lumens per Watt	123	116	107	104	123	116	109	105
SLL/SLR	Lumens	3,475	4,263	5,276	5,787	6,792	8,329	10,309	11,309
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	102	97	89	86	103	97	91	88
RW	Lumens	4,042	4,957	6,135	6,732	7,900	9,687	11,990	13,154
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	
	Lumens per Watt	119	113	104	100	120	113	106	102

\* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

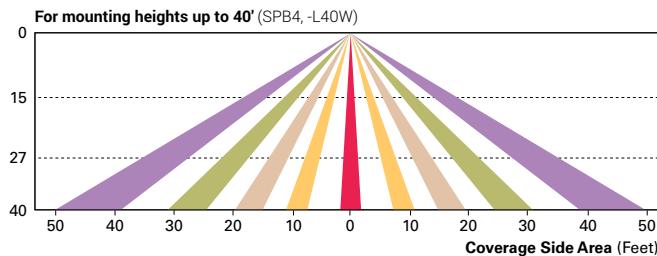
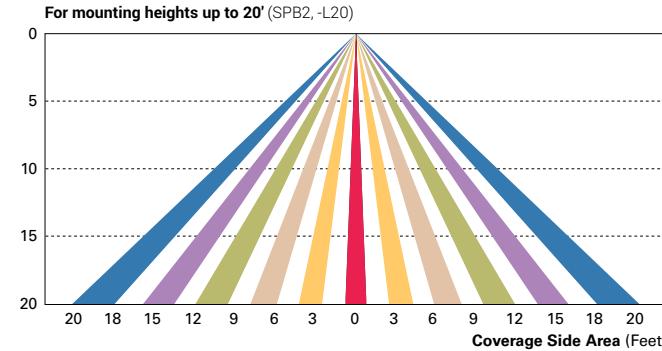
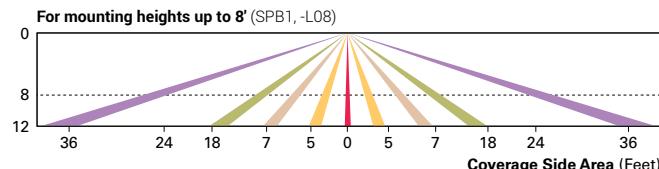
## Control Options

**0-10V** This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

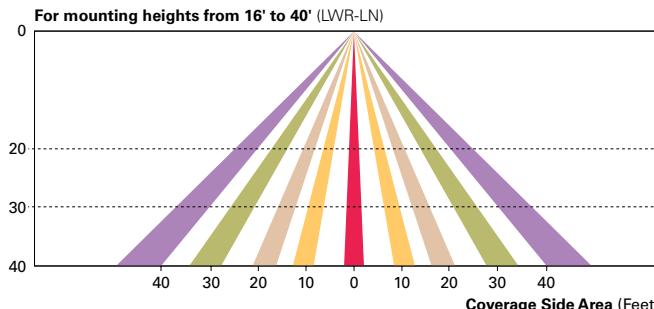
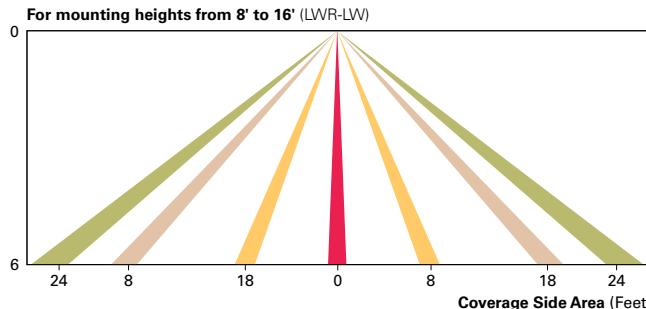
**Photocontrol** (BPC, PR, and PR7) Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

**After Hours Dim (AHD)** This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

**Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX)** These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10 percent power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.



**Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN)** The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.



**WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)** The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.