

**MAJOR SITE PLAN APPLICATION  
TO TOWN OF WINDHAM**

**FOR**

**RETAIL & SELF-STORAGE FACILITY**

**968 ROOSEVELT TRAIL  
WINDHAM, MAINE**

**PREPARED FOR**

**LITTLE MOUNTAIN, LLC  
3 OLD FORT ROAD  
CAPE ELIZABETH, MAINE 04107**

**PREPARED BY**

**DM ROMA**  
CONSULTING ENGINEERS

**59 HARVEST HILL ROAD  
WINDHAM, ME 04062**

**AUGUST 22, 2016**

August 22, 2016

Amanda Lessard, Town Planner  
Town of Windham  
8 School Road  
Windham, ME 04062

**Re: Site Plan Application – Little Mountain Storage & Retail Development  
Little Mountain, LLC – Applicant**

Dear Amanda:

On behalf of our client, Little Mountain LLC, we have prepared the enclosed application and plans for Site Plan review for a proposed retail and public warehousing project located on Roosevelt Trail. The project was before the Planning Board as a sketch plan on July 25 and a Site Walk was held on August 6. The proposed plans have been modified from the sketch plan proposal, and the project now includes 2 climate-controlled buildings and 4 smaller drive-up storage buildings. The retail building has been designed for up to 4 tenants and will include architectural elements that will greatly improve the property. The proposed drive aisles to access the storage buildings have been expanded significantly from the 18-foot wide driveways proposed on the sketch plan, and improved provisions for snow removal have been addressed with the revised plan. The existing building on the property is scheduled for demolition within the coming months.

Upon your review of the enclosed information please contact me if you have any questions or if you require any additional information.

Sincerely,

DM ROMA CONSULTING ENGINEERS

*Dustin M Roma*

Dustin M. Roma, P.E.  
President

Cc: Kevin Bosworth, Little Mountain LLC

**Project Name:** LITTLE MOUNTAIN RETAIL AND SELF STORAGE

**Tax Map:** 21 **Lot:** 2A

**Estimated square footage of building(s):** 4,445 SF RETAIL/OFFICE AND 21,200 SF PUBLIC WAREHOUSING

**If no buildings proposed, estimated square footage of total development/disturbance:**

**Contact Information**

1. Applicant

Name: LITTLE MOUNTAIN, LLC

Mailing Address: 3 OLD FORT RD, CAPE ELIZABETH, ME 04107

Telephone: 653-6339

Fax:

E-mail: KMBOSWORTH@GMAIL.COM

2. Record owner of property

  X   (Check here if same as applicant)

Name:

Mailing Address:

Telephone:

Fax:

E-mail:

3. Contact Person/Agent (if completed and signed by applicant's agent, provide written documentation of authority to act on behalf of applicant)

Name: DUSTIN ROMA

Company Name: DM ROMA CONSULTING ENGINEERS

Mailing Address: 59 HARVEST HILL RD, WINDHAM, ME 04062

Telephone: 310 - 0506

Fax:

E-mail: DUSTIN@DMROMA.COM

I certify all the information in this application form and accompanying materials is true and accurate to the best of my knowledge.

Dustin M Roma

Signature

AUGUST 22, 2016

Date

Final Plan - Major Site Plan: Submission Requirements		Applicant	Staff
a.	Complete Sketch Plan Application form	x	
b.	Evidence of payment of application and escrow fees	X	
c.	Written information - submitted in bound report		
1	A narrative describing the proposed use or activity	X	
2	Name, address, & phone number of record owner, and applicant if different	X	
3	Names and addresses of all abutting property owners	X	
4	Documentation demonstrating right, title, or interest in property	X	
5	Copies of existing proposed covenants or deed restrictions	X	
6	Copies of existing or proposed easements on the property	X	
7	Name, registration number, and seal of the licensed professional who prepared the plan, if applicable	X	
8	Evidence of applicant's technical capability to carry out the project	X	
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	X	
10	Estimated demand for water supply and sewage disposal	X	
11	Provisions for handling all solid wastes, including hazardous and special wastes	X	
12	Detail sheets of proposed light fixtures	X	
13	Listing of proposed trees or shrubs to be used for landscaping	X	
14	Estimate weekday AM and PM and Saturday peak hour and daily traffic to be generated by the project	X	
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 animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archeological resources	x	
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:	X	
	stormwater calculations	x	
	erosion and sedimentation control measures	x	
	water quality and/or phosphorous export management provisions	x	
17	If public water or sewerage will be utilized, provide statement from 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.	PENDING	
18	Financial Capacity	X	
	i. Estimated costs of development and itemize estimated major expenses	X	
	ii. Financing (submit one of the following)	X	
	a. Letter of commitment to fund		
	b. Self-financing		
	1. Annual corporate report		

	2. Bank Statement		
	c. Other		
	1. Cash equity commitment of 20% of total cost of development		
	2. Financial plan for remaining financing		
	3. Letter from institution indicating intent to finance	X	
	iii. If a registered corporation a Certificate of Good Standing from:	X	
	Secretary of State, or	X	
	statement signed by corporate officer		
19	Technical Capacity (address both)	X	
	i. Prior experience	X	
	ii. Personnel	X	
d.	<b>Plan Requirements - Existing Conditions</b>		
i.	Location Map adequate to locate project within the municipality	X	
ii.	Vicinity Plan. Drawn to scale of not over 400 feet to the inch, and showing area within 250 feet of the property line, and shall show the following:	X	
	a. Approximate location of all property lines and acreage of parcels	X	
	b. Locations, widths and names of existing, filed or proposed streets, easements or building footprints	X	
	c. Location and designations of any public spaces	N/A	
	d. Outline of proposed subdivision, together with its street system and an indication of the future probable street system of the remaining portion of the tract	X	
iii.	North Arrow identifying Grid North; Magnetic North with the declination between Grid and Magnetic; and whether Magnetic or Grid bearings were used	X	
iv.	Location of all required building setbacks, yards, and buffers	X	
v.	Boundaries of all contiguous property under the total or partial control of the owner or applicant	X	
vi.	Tax map and lot number of the parcel or parcels on which the project is located	X	
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.	X	
viii.	Bearings and lengths of all property lines of the property to be developed, and the stamp of the surveyor that performed the survey.	X	
ix.	Existing topography of the site at 2-foot contour intervals	X	
x.	Location and size of any existing sewer and water mains, culvers 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.	X	
xi.	Location, names, and present widths of existing public and/or private streets and rights-of way within or adjacent to the proposed development	X	
xii.	Location, dimensions, and ground floor elevation of all existing buildings	X	
xiii.	Location and dimensions of existing driveways, parking and loading areas, walkways, and sidewalks on or adjacent to the site.	X	
xiv.	Location of intersecting roads or driveways within 200 feet of the site.	X	

xv.	Location of the following:	X	
	a. Open drainage courses	X	
	b. Wetlands	N/A	
	c. Stone walls	X	
	d. Graveyards	N/A	
	e. Fences	X	
	f. Stands of trees or treeline, and	X	
	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	X	
xvi.	Direction of existing surface water drainage across the site	X	
xvii.	Location, front view, dimensions, and lighting of existing signs	X	
xviii.	Location & dimensions of existing easements that encumber or benefit the site	X	
xix.	Location of the nearest fire hydrant, dry hydrant, or other water supply	X	
<b>Plan Requirements - Proposed Development Activity</b>			
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	X	
ii.	Grading plan showing the proposed topography of the site at 2-foot contour intervals	X	
iii.	Direction of proposed surface water drainage across the site and from the site, with an assessment of impacts on downstream properties.	X	
iv.	Location and proposed screening of any on-site collection or storage facilities	X	
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	X	
vi.	Proposed landscaping and buffering	X	
vii.	Location, dimensions, and ground floor elevation of all buildings or expansions	X	
viii.	Location, front view, materials and dimensions of proposed signs together with method for securing sign		
ix.	Location and type of exterior lighting. Photometric plan to demonstrate coverage area of all lighting may be required by Planning Board.	X	
x.	Location of all utilities, including fire protection systems	X	
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	X	
<b>2. Major Final Site Plan Requirements</b>			
a.	Narrative and/or plan describing how the proposed development plan relates to the sketch plan	X	
b.	Stormwater drainage and erosion control program showing:	X	

	1. Existing and proposed method of handling stormwater runoff	X	
	2. 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.)	X	
	3. Location, elevation, and size of all catch basins, dry wells, drainage ditches, swales, retention basins, and storm sewers	X	
	4. Engineering calculations used to determine drainage requirements based on the 25-year, 24-hour storm frequency.	X	
	5. Methods of minimizing erosion and controlling sedimentation during and after construction.	X	
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	N/A	
d.	Name, registration number, and seal of the Maine Licensed Professional Architect, Engineer, Surveyor, Landscape Architect and/or similar professional who prepared the plan	X	
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	X	
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 pertaining to provisions that will be made to retain and protect existing trees, shrubs, and other vegetation	X	
g.	Digital transfer of any site plan data to the town (GIS format)	x	
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	X	

## PROJECT NARRATIVE

### SECTION 1 – PROPOSED USE NARRATIVE

The property is a 2.1-acre parcel identified as Lot A on the Subdivision Plan approved by the Windham Planning Board on January 11, 2016. The site includes an existing commercial building with a footprint of approximately 4,000 square feet, which was previously a bottle redemption center and is currently vacant. According to the Town's tax assessment records, the building was constructed in 1935. Approximately half of the remaining land is either gravel or paved and relatively flat. The rear portion of the property is sloped to the abutting pipeline property.

The proposed project includes the demolition and removal of the existing building and pavement areas and the construction of a total of seven (7) buildings totaling 25,645 square feet. A 4,445 SF building will be constructed along the Route 302 frontage for retail, office or other similar commercial use. The remaining 21,200 square feet of building space will be for Public Warehousing use and will have a mixture of drive-up cold storage units and internally-accessed units with climate control.

The project will result in the net increase of approximately 21,570 square feet of new impervious area on the property for a site total of approximately 57,565 square feet. The entire 2-acre parcel will be disturbed to construct the proposed project, which requires a Stormwater Management Permit-By-Rule from the Maine Department of Environmental Protection.

### SECTION 2 – RECORD OWNER INFORMATION

See Application Form

### SECTION 3 – ABUTTING PROPERTY OWNERS

TM 21 L 2-A01	McNulty Enterprises Inc., 824 Roosevelt Trail #263, Windham, ME 04062
TM 21 L 2-A03	DEW, LLC, 976 Roosevelt Trail, Windham, ME 04062
TM 21 L 2-B	Faith Lutheran Church, PO Box 1465, Windham, ME 04062
TM 21 L 19-A01	RR & JP Properties, LLC, PO Box 404, Standish, ME 04084
TM 21 L 19-A02-1	MGM Builders, Inc., 76 Tandberg Trail, Windham, ME 04062
TM 21 L 19-A02-3	Black Dog Properties, LLC, 161 Albion Road, Windham, ME 04062
TM 21 L 19-A02-4	Rae Ann Gordon, 11 Storm Drive, Windham, ME 04062
TM 21 L 19-A02-5	Douglas A & Tricia P Zwirner, 19 Rocklinn Drive, Windham, ME 04062
TM 21 L 19-A02-6	Diane Fortin & Kevin Johnson, 225 Valley Road, Raymond, ME 04071



TM 21 L 19-A03	Blackacre, LLC, PO Box 1177, Windham, ME 04062
TM 21 L 19-A04	Firstborn Property Management, LLC, C/O Stephen Emma 17 Barbara Avenue, Scarborough, ME 04074
TM 21 L 19-A05	Schafer Enterprises, LLC, PO Box 1512, Windham, ME 04062
TM 21 L 19-A06	Andrew Coppersmith, 8 Storm Drive, Windham, ME 04062
TM 21 L-19-A1	Windham Hotel Holdings, LLC, PO Box 407, Moody, ME 04054

#### **SECTION 4 – TITLE, RIGHT, OR INTEREST**

See attached deed of Little Mountain, LLC

#### **SECTION 5 – COVENANTS OR DEED RESTRICTIONS**

None known

#### **SECTION 6 – EASEMENTS**

- 40' wide access easement benefiting Little Mountain, LLC and 968 Roosevelt Trail, LLC.
- 15' wide utility easement to 968 Roosevelt Trail, LLC
- 20' wide drainage easement to Maine Department of Transportation

#### **SECTION 7 – LICENSED PROFESSIONALS**

The plans and applications were prepared by DM Roma Consulting Engineers. Dustin Roma is a Maine Licensed Professional Engineer PE#12131.

#### **SECTION 8 – TECHNICAL ABILITY**

Dustin Roma has been performing similar consulting and design work in Southern Maine since 2004, including many projects in Windham and the surrounding communities. Kevin Bosworth, d/b/a Little Mountain LLC, also owns and operates the adjacent JMC Storage Facility as Big Mountain, LLC.

#### **SECTION 9 – UTILITIES**

The project will be served by public water from the Portland Water District, private on-site wastewater disposal, underground electrical & data utilities.

#### **SECTION 10 – WATER SUPPLY AND SEWAGE DISPOSAL DEMAND**

The existing building has public water service from the Portland Water District. The service line will be repurposed to supply water to Building 1 (Retail/office building). The storage buildings do not require water service. The existing septic system will need

to be removed and a new septic system will be installed as an H-20 load rated concrete chamber system under the new parking lot. Since the existing septic system is located lower in grade than the location where the new system will be located, we are relatively confident that adequate conditions exist to replace the leach bed in the proposed location. The leach field will be designed for less than 1,000 gallons per day, which will accommodate a variety of potential uses for the building. We do not anticipate that pumping will be required.

#### **SECTION 11 – SOLID WASTES**

The proposed retail/commercial building will have an enclosed dumpster located behind the structure. The building owner will contract with a waste management company for removal. There is no dumpster proposed for the self-storage facility.

#### **SECTION 12 – LIGHTING**

The building will include security lighting over the doorways. There are no proposed pole mounted lights. Lights on the building will be LED and equal to the catalog cut sheets attached.

#### **SECTION 13 –LANDSCAPING**

A landscaping plan has been prepared for the project and is included in the plan set.

#### **SECTION 14 – VEHICLE TRAFFIC**

Vehicle sight distance at the proposed driveway looking right is approximately 520 feet in the current condition, but will be greatly improved following demolition of the existing building. Vehicle sight distance looking left is over 700 feet. Based on the Institute of Transportation Engineers Trip Generation Manual, 9<sup>th</sup> edition, the proposed 4,445 SF retail use building is expected to generate 12 peak hour trip-ends and the 21,200 SF of mini warehousing use is expected to generate 6 peak hour trip-ends for a site total of 18 peak hour trips. The net increase in vehicle trips is likely even less after accounting for existing and historical use of the property. The project does not require a traffic movement permit from the Maine Department of Environmental Protection.

#### **SECTION 15 – UNIQUE NATURAL AREAS**

There are no known unique natural areas within the project vicinity.

#### **SECTION 16 – STORMWATER MANAGEMENT**

Two infiltration basins will be constructed to provide stormwater quality and peak flow attenuation from the property to be below pre-development conditions. A stormwater

management report and stormwater maintenance plan is included as an attachment. The project requires a Stormwater Permit-By-Rule from the Maine Department of Environmental Protection.

## **SECTION 17 – PUBLIC WATER SUPPLY**

The project site is already served by the Portland Water District. The water service will be reconfigured to serve the proposed retail use building.

## **SECTION 18 – FINANCIAL CAPACITY**

A letter from Bangor Savings has been included indicating the applicant has the financial capacity to complete the project with an expected budget of \$600,000. The applicant already owns the land, so land costs were not included in the project budget.

## **SECTION 19 – TECHNICAL CAPACITY**

The applicant owns and operates the adjacent JMC Storage property, and he has a long history of owning and operating similar facilities.

## **COMMERCIAL DISTRICT DESIGN STANDARDS**

The project has been designed to meet the following required and optional standards outlined in section 813 of the Land Use Code.

### Required Design Standards: C-1 Zone

- A-1: Building Style. See sections below for specific requirements. The buildings are not a form of advertising.
- A-2: Materials. The proposed materials for the steel buildings are high quality and will require minimal maintenance to retain the high level of quality. The retail building will be wood frame construction with vinyl siding, vinyl windows and architectural style asphalt shingles on the roof.
- A-3: Color. The paint used for building and door finishes will be low-reflectance and non-fluorescent.
- A-4: Roofline. The rooflines have been broken with architectural elements so that the horizontal line of the roof does not exceed 50 feet.
- A-5: Façade. Sections 5a and 5b do not apply to the portion of the project that is Private Warehousing use. There are no proposed vending machines. The retail building contains a covered porch element and doors/windows for a multi-tenant arrangement to break up the façade.
- A-6: Building style coordination (multi-building). The intent is to construct buildings 2, 3, 4, 5 and 6 as an initial phase. Construction of Buildings 1 and 7 will be market driven.

- A-7: Entrance. Standard “a” is not applicable for buildings under 20,000 square feet. The linear retail use building has clearly defined entrances incorporated into the design.
- A-8: Architectural Details. The architectural detailing and trim are proportional to the scale and design of the building.
- B-6: Screening Utilities & Service Areas. The dumpster area is located behind the building, out of view from the public, and will be appropriately screened with fencing.
- C-1: Lighting/Photometric Plan. Photometric data is presented on the catalog cut sheets for the proposed LED lighting to be installed on the buildings. There are no proposed free-standing pole lights.
- C-2: Lighting Coordinated With Architecture. The proposed lighting will bring attention to the doorway entrance elements without creating glare or distraction.
- C-3: Lighting Coordinated with Landscaping. The proposed lighting over the doorway entrances will not be negatively impacted by the mature growth of landscaping on the property, and will not result in eventual dark spots.
- C-5: Snow Storage Areas Designated. The site has been designed to allow snow to be pushed over the embankments without damaging the landscaped areas or conflict with the stormwater drainage.
- D-1: Internal Walkways. An internal walkway is provided along the building front. There is no adjacent public walkway to connect to. It is not appropriate to connect the storage buildings with the retail buildings by sidewalk, since they will be separated by a private-access gate.
- D-2: Links to Community. The project includes a shared driveway with the adjacent commercial lot to create a pedestrian and vehicle link between the properties.
- D-4: Sidewalks. The required sidewalk impact fee will be paid by the applicant.
- D-5: Crosswalks. There are no circumstances where a sidewalk crosses a driveway or roadway.
- D-6: Bike parking/racks. The covered porch area in front of the retail buildings will provide sufficient space to park bicycles.

#### Optional Design Standards (8 Minimum)

- B-2: Internal Traffic Flow. The parking lot will be paved and striped with white reflective pavement marking so that parking spaces and drive aisles are clearly identified.
- B-3: Interconnected Parking Lots. The project connects abutting properties with a shared driveway that is located within a reciprocal easement.
- B-7: Parking Lot Landscaping. Landscaped islands and parking lot perimeter landscaping are proposed so that at least 10% of the parking lot will include landscaped areas.
- B-8: Low-Impact Design Stormwater. The stormwater basins have been designed utilizing low impact development techniques to infiltrate runoff on-site and provide water quality treatment.
- B-9: Shared Stormwater Treatment. The lower stormwater infiltration basin is located on two properties and is intended to be a shared system.

- C-6: Planting Variety. The proposed plant materials strikes a balance between monoculture and too much variety through utilization of clumps of mass plantings between shade trees.
- C-7: Planting suitability. The proposed landscaping requires a relatively low degree of maintenance, and the plantings are resistant to impacting factors and are hardy to Maine winters.
- C-8: Mass Plantings. The plantings are arranged in clumps of mass plantings that will be mulched to have a larger impact on the visual character of the street front.
- C-9: Illumination Levels. The light fixtures installed on the building are in scale with the site and building development. There are no pole mounted fixtures proposed. The illumination levels are appropriate for the site and use.

# STORMWATER MANAGEMENT REPORT

## RETAIL & SELF-STORAGE FACILITY 968 ROOSEVELT TRAIL, WINDHAM

### A. Narrative

Little Mountain, LLC is proposing to develop property located at 968 Roosevelt Trail in Windham as a retail and self-storage facility. The Public Warehouse use development consists of the construction of six buildings totaling 21,250 square feet with associated access aisles, utilities and stormwater infrastructure. The project also includes the construction of an approximately 4,445 square foot retail/commercial building with associated parking and utilities. The property is approximately 2.1 acres, is located in the Commercial District 1 zoning district and is identified as lot 2A on the Town of Windham Assessors Map 21. The property is currently developed consisting of a building with associated paved parking and areas of gravel which will be demolished as part of the development. The project will be served by the existing building's public water, a new on-site private subsurface septic system and underground electrical, telephone and data service. In general, the site drains to the southeast along Roosevelt Trail.

### B. Alterations to Land Cover

The property currently consists of approximately 35,995 square feet of impervious surfaces. The proposed development will remove approximately 12,275 square of that impervious area while the remaining 23,720 square feet will remain impervious. The project in the post development condition will consist of approximately 57,565 total impervious surface resulting in a net increase of 21,570 square feet. The project will also consist of 32,920 square feet of new landscaped/disturbed areas resulting in a total new developed area of 54,490 square feet. The site is relatively flat along Roosevelt Trail but steepens to the rear of the site and at the property line along the abutting storage facility. Soils on the property are primarily Hermon extremely stony sandy loam and Peru fine sandy loam as identified on the Medium Intensity Soil Maps for Cumberland County, Maine published by the Natural Resources Conservation Service. The two soils within the proposed development are in the hydrologic soil groups "A" and "C" respectively, as indicated on the attached watershed maps.

### C. Methodology and Modeling Assumptions

The proposed stormwater management system has been designed utilizing Best Management Practices to maintain existing drainage patterns while providing stormwater quality improvement measures. The goal of the storm drainage system design is to remove potential stormwater pollutants while attenuating the post-development peak runoff rates. The method utilized to predict the surface water runoff rates in this analysis is a computer program entitled HydroCAD, which is based on the same methods that were originally developed by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, and utilized in the TR-20 modeling program. Peak rates of runoff are forecasted based upon land use, hydrologic soil conditions, vegetative cover, contributing watershed area, time of concentration, rainfall

data, storage volumes of detention basins and the hydraulic capacity of structures. The computer model predicts the amount of runoff as a function of time, with the ability to include the attenuation effect due to dams, lakes, large wetlands, floodplains and constructed stormwater management basins. The input data for rainfalls with statistical recurrence frequencies of 2-, 10- and 25 years was obtained from Table 12-2.8 of the Maine Department of Transportation Drainage Design Manual, Chapter 12, Dated January 2005. The National Weather Service developed four synthetic storm types to simulate rainfall patterns around the country. For analysis in Cumberland County, Maine, the type III rainfall pattern with a 24-hour duration is appropriate.

D. Basic Standards

The project is required by the Town and the Maine Department of Environmental Protection (MDEP) to provide permanent and temporary Erosion Control Best Management Practices. These methods are outlined in detail in the plan set.

E. Flooding Standard

The Windham Land Use Ordinance requires that projects requiring Site Plan Review shall detain, retain or result in the infiltration of stormwater from the 24-hour storms of the 2-year, 10-year and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. The proposed stormwater infrastructure includes the construction of two infiltration basins. The study point chosen for the analysis is where the runoff discharges under the existing storage facility's driveway and leaves the overall study area. The following tables summarize the analysis:

<b>Table 1 – Peak Rates of Stormwater Runoff</b>						
<b>Study Point</b>	<b>2-Year (cfs)</b>		<b>10-Year (cfs)</b>		<b>25-Year (cfs)</b>	
	Pre	Post	Pre	Post	Pre	Post
SP-1	2.20	1.42	5.17	4.64	6.60	6.37

The installation of the infiltration basins reduces the peak rates of runoff at the Study Point. The watershed maps showing pre-development and post-development drainage patterns are included in the plan set and the offsite watershed map and the computations performed with the HydroCAD software program are included as an attachment to this report.

F. General Standard

The Windham Land Use Ordinance requires that projects requiring Major Site Plan Review shall comply with Section 4B(2) and Section 4B(3) of the General Standards of the MDEP Chapter 500 Stormwater Management. This document outlines the requirement of the project to provide stormwater quality treatment for no less than 95% of the new impervious surface and 80% of the total new developed area associated with the project. Water quality treatment will exceed the treatment requirements for the new impervious and developed areas in order to provide quantity control for the project. Calculations can be found on the Watershed Maps and enclosed in this report.

G. Maintenance of common facilities or property

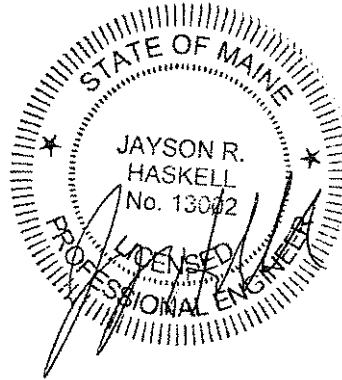
The owner of the facility will be responsible for the maintenance of the stormwater facilities.  
Enclosed is an Inspection, Maintenance and Housekeeping Plan for the project.

Prepared by:

DM ROMA CONSULTING ENGINEERS



Jayson R. Haskell, P.E.  
Project Manager





# INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

## Retail & Self Storage Facility Windham, Maine

### Responsible Party

Owner: Little Mountain, LLC  
3 Old Fort Road  
Cape Elizabeth

The owner is responsible for the maintenance of all stormwater management structures and related site components and the keeping of a maintenance log book with service records. Records of all inspections and maintenance work performed must be kept on file with the owner and retained for a minimum of five years. The maintenance log will be made available to the Town and Maine Department of Environmental Protection (MDEP) upon request. At a minimum, the maintenance of stormwater management systems will be performed on the prescribed schedule.

The procedures outlined in this plan are provided as a general overview of the anticipated practices to be utilized on this site. In some instances, additional measures may be required due to unexpected conditions. *The Maine Erosion and Sedimentation Control BMP* and *Stormwater Management for Maine: Best Management Practices* Manuals published by the MDEP should be referenced for additional information.

### During Construction

- 1. Inspection and Corrective Action:** It is the contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. Inspection shall occur on all disturbed and impervious areas, erosion control measures, material storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as 24 hours before and after a storm event and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.
- 2. Maintenance:** Erosion controls shall be maintained in effective operating condition until areas are permanently stabilized. If best management practices (BMPs) need to be repaired, the repair work should be initiated upon discovery of the problem but no later than the end of the next workday. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven calendar days and prior to any rainfall event.
- 3. Documentation:** A report summarizing the inspections and any corrective action taken must be maintained on site. The log must include the name(s) and qualifications of the

person making the inspections; the date(s) of the inspections; and the major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to MDEP staff, and a copy must be provided upon request. The owner shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

### **Houskeeping**

1. **Spill prevention:** Controls must be used to prevent pollutants from construction and waste materials on site to enter stormwater, which includes storage practices to minimize exposure of the materials to stormwater. The site contractor or operator must develop, and implement as necessary, appropriate spill prevention, containment, and response planning measures.
2. **Groundwater protection:** During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials. Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide for treatment within the infiltration area, in order to prevent the accumulation of fines, reduction in infiltration rate, and consequent flooding and destabilization.
3. **Fugitive sediment and dust:** Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control, but other water additives may be considered as needed. A stabilized construction entrance (SCE) should be included to minimize tracking of mud and sediment. If off-site tracking occurs, public roads should be swept immediately and no less than once a week and prior to significant storm events. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.
4. **Debris and other materials:** Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source.

- 5. Excavation de-watering:** Excavation de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water removed from the ponded area, either through gravity or pumping, must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the Department.
- 6. Authorized Non-stormwater discharges:** Identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:
- (a) Discharges from firefighting activity;
  - (b) Fire hydrant flushings;
  - (c) Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);
  - (d) Dust control runoff in accordance with permit conditions and Appendix (C)(3);
  - (e) Routine external building washdown, not including surface paint removal, that does not involve detergents;
  - (f) Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;
  - (g) Uncontaminated air conditioning or compressor condensate;
  - (h) Uncontaminated groundwater or spring water;
  - (i) Foundation or footer drain-water where flows are not contaminated;
  - (j) Uncontaminated excavation dewatering (see requirements in Appendix C(5));
  - (k) Potable water sources including waterline flushings; and
  - (l) Landscape irrigation.
- 7. Unauthorized non-stormwater discharges:** Approval from the MDEP does not authorize a discharge that is mixed with a source of non-stormwater, other than those discharges in compliance with Section 6 above. Specifically, the MDEP's approval does not authorize discharges of the following:
- (a) Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;
  - (b) Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
  - (c) Soaps, solvents, or detergents used in vehicle and equipment washing; and
  - (d) Toxic or hazardous substances from a spill or other release.

## **Post construction**

- 1. Inspection and Corrective Action:** All measures must be maintained by the owner in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions of the permit, shall conduct the inspections. The following areas, facilities, and measures must be inspected, and identified deficiencies must be corrected. Areas, facilities, and measures other than those listed below may also require inspection on a specific site.
  - A. Vegetated Areas:** Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems. Replant bare areas or areas with sparse growth. Where rill is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.
  - B. Ditches, Swales, and Open Channels:** Inspect ditches, swales, and other open channels in the spring, late fall, and after heavy rains to remove any obstructions to flow, remove accumulated sediments and debris, control vegetative growth that could obstruct flow, and repair any erosion of the ditch lining. Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. The channel must receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side slopes.
  - C. Culverts:** Inspect culverts in the spring, late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet.
  - D. Catch Basins:** Inspect and, if required, clean out catch basins at least once a year, preferably in early spring. Clean out must include the removal and legal disposal of any accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins. If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads).
  - E. Infiltration Basin:** Basin should be inspected several times and following major storm events for the first year and once a year thereafter. The basin should drain within 72 hours following a one-inch storm. Sediment must be removed from the system at least annually to prevent deterioration of system performance. Mow drainage swales discharging to the infiltration basins regularly to prevent the

uncontrolled growth of briar and weeds. Any bare areas or erosion rills within the basin shall be repaired with new filter media or sandy loam then seeded and mulched. The basin should also be inspected annually for destabilization of side slopes, embankment settling and other signs of structural failure.

- F. Regular Maintenance:** Clear accumulations of winter sand along parking areas at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along pavement shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.
- G. Documentation:** Keep a log (report) summarizing inspections, maintenance, and any corrective actions taken. The log must include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal. The log must be made accessible to Town staff upon request. The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization. Attached is a sample log.

### **Duration of Maintenance**

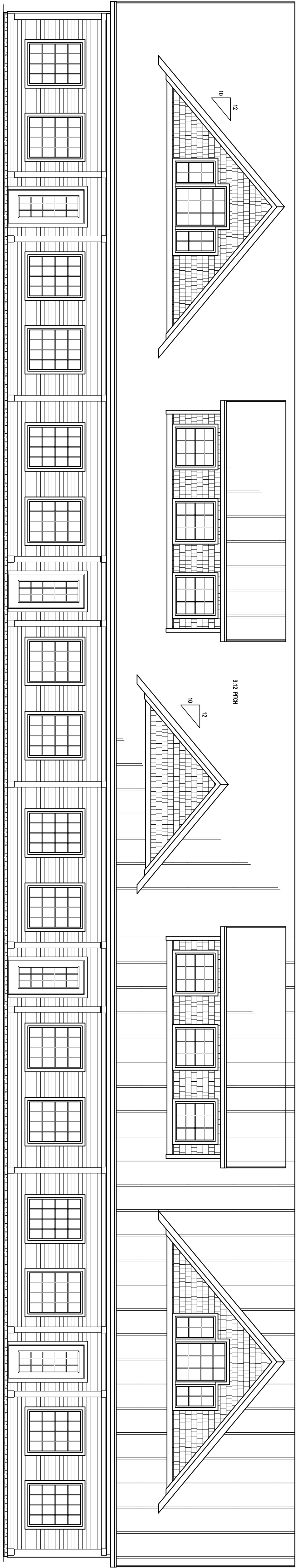
Perform maintenance as described.

## MAINTENANCE LOG

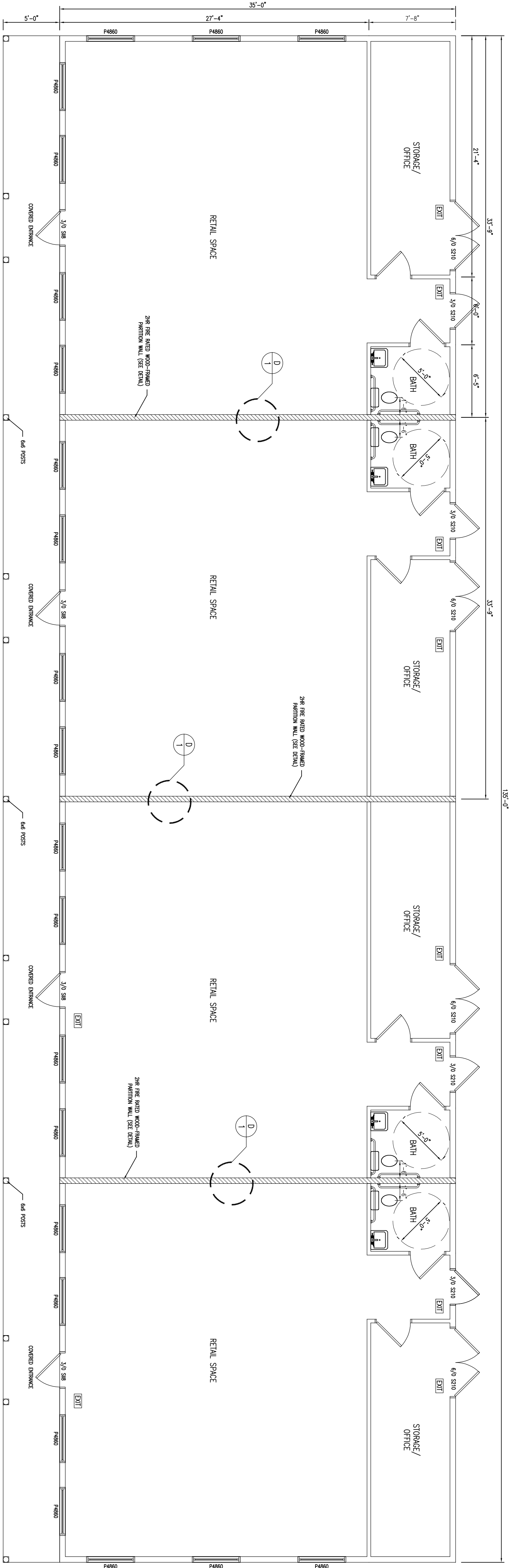
### RETAIL AND SELF STORAGE FACILITY Windham, Maine

The following stormwater management and erosion control items shall be inspected and maintained as prescribed in the Maintenance Plan with recommended frequencies as identified below. The owner is responsible for keeping this maintenance log on file for a minimum of five years and shall provide a copy to the Town upon request. Inspections and corrective actions shall be performed by qualified personnel familiar with stormwater management systems and erosion controls.

Maintenance Item	Maintenance Event	Date Performed	Responsible Personnel	Comments
Vegetated Areas	Inspect slopes and embankments early in Spring.			
Ditches, swales, and other open channels	Inspect after major rainfall event producing 1" of rain in two hours.			
	Inspect for erosion or slumping & repair			
	Mowed at least annually.			
Culverts	Inspect semiannually and after major rainfall.			
	Repair erosion at inlet or outlet of pipe.			
	Repair displaced riprap.			
	Clean accumulated sediment in culverts when >20% full.			
Catch Basins	Inspect to ensure that structure is properly draining.			
	Remove accumulated sediment semiannually.			
	Inspect grates/inlets and remove debris as needed.			
Infiltration Basins	Check after each rainfall event to ensure that pond drains within 72 hours.			
	Sediment to be removed from basin annually			
	Inspect semi-annually for erosion or sediment accumulation and repair as necessary.			



FRONT ELEVATION  
3/16" = 1'-0"



FLOOR PLAN  
3/16" = 1'-0"

Bosworth, Building  
PRELIMINARY DRAWINGS  
Windham, ME



DRAWINGS ARE PROVIDED FOR INFORMATIONAL/PERMITTING PURPOSES ONLY. IF USED FOR CONSTRUCTION, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR LOCAL CODE COMPLIANCE. ALL DRAWINGS, PLANS, SKETCHES ECT. ARE PROVIDED TO OUR CLIENTS BASED UPON INFORMATION PROVIDED BY THE CLIENT AND DRAWN IN ACCORDANCE WITH COMMON BUILDING PRACTICES AND LOCAL CODES. NONE OF THE EMPLOYEES OF DRAFTING & DESIGN ME, LLC ARE REGISTERED ARCHITECTS, ENGINEERS OR LAND SURVEYORS. ALL DIMENSIONS AND SPECIFICATIONS SHOULD BE VERIFIED BY CLIENT, CONTRACTOR, ARCHITECT AND/OR CODE OFFICER BEFORE ACTUAL CONSTRUCTION BEGINS. IF DIMENSIONS AND SPECIFICATIONS ARE NOT VERIFIED BY CLIENT AND/OR CONTRACTOR BEFORE ACTUAL CONSTRUCTION BEGINS DRAFTING & DESIGN ME, LLC WILL BE HELD HARMLESS. DRAFTING & DESIGN ME, LLC ASSUMES NO LIABILITY FOR CHANGES AND/OR REVISIONS MADE TO PLAN BY CLIENT AND/OR CONTRACTOR

REVISIONS:

00/00/00

Date : 08/09/16  
Scale : 3/16"=1'-0"

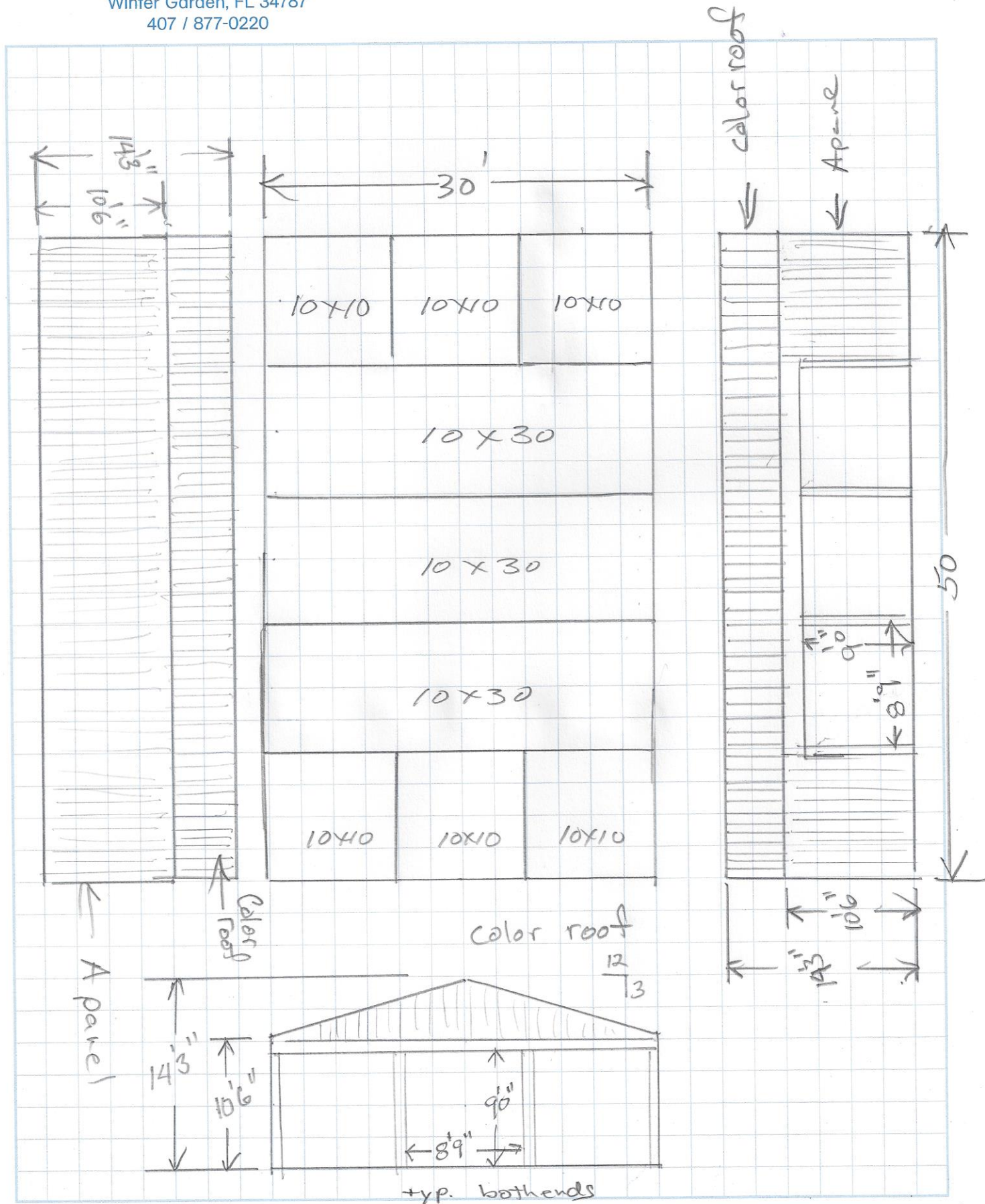
Drawn By: JTM

Project: 8080316

Sheet Number:

1041 Crown Park Circle  
 Winter Garden, FL 34787  
 407 / 877-0220

JOB NAME Kevin Basworth  
 JOB NO. \_\_\_\_\_ PAGE 1 OF 3  
 VERIFIED BY \_\_\_\_\_ DATE 8-19-16  
 SCALE \_\_\_\_\_



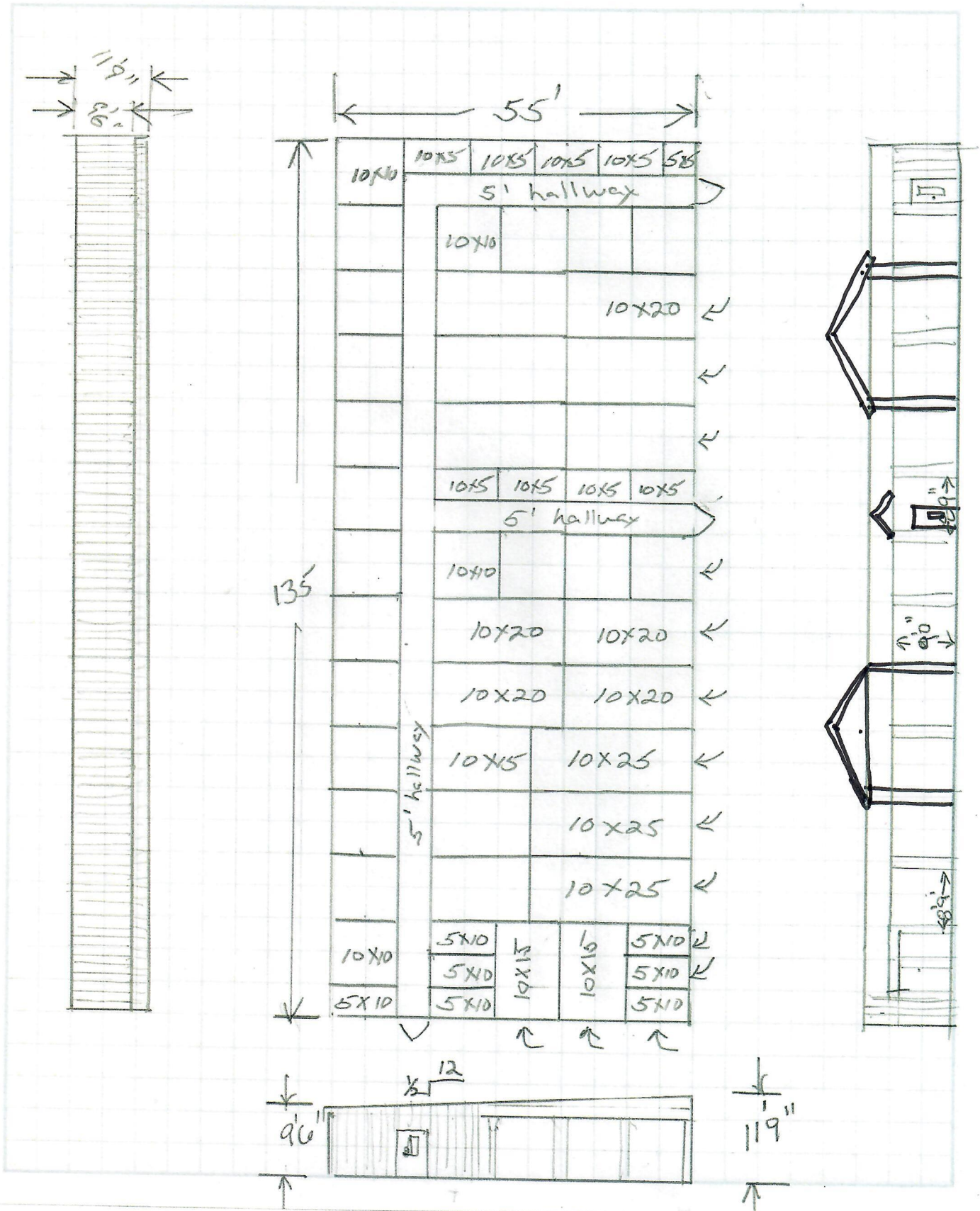




INNOVATIVE SELF STORAGE BUILDING SYSTEMS

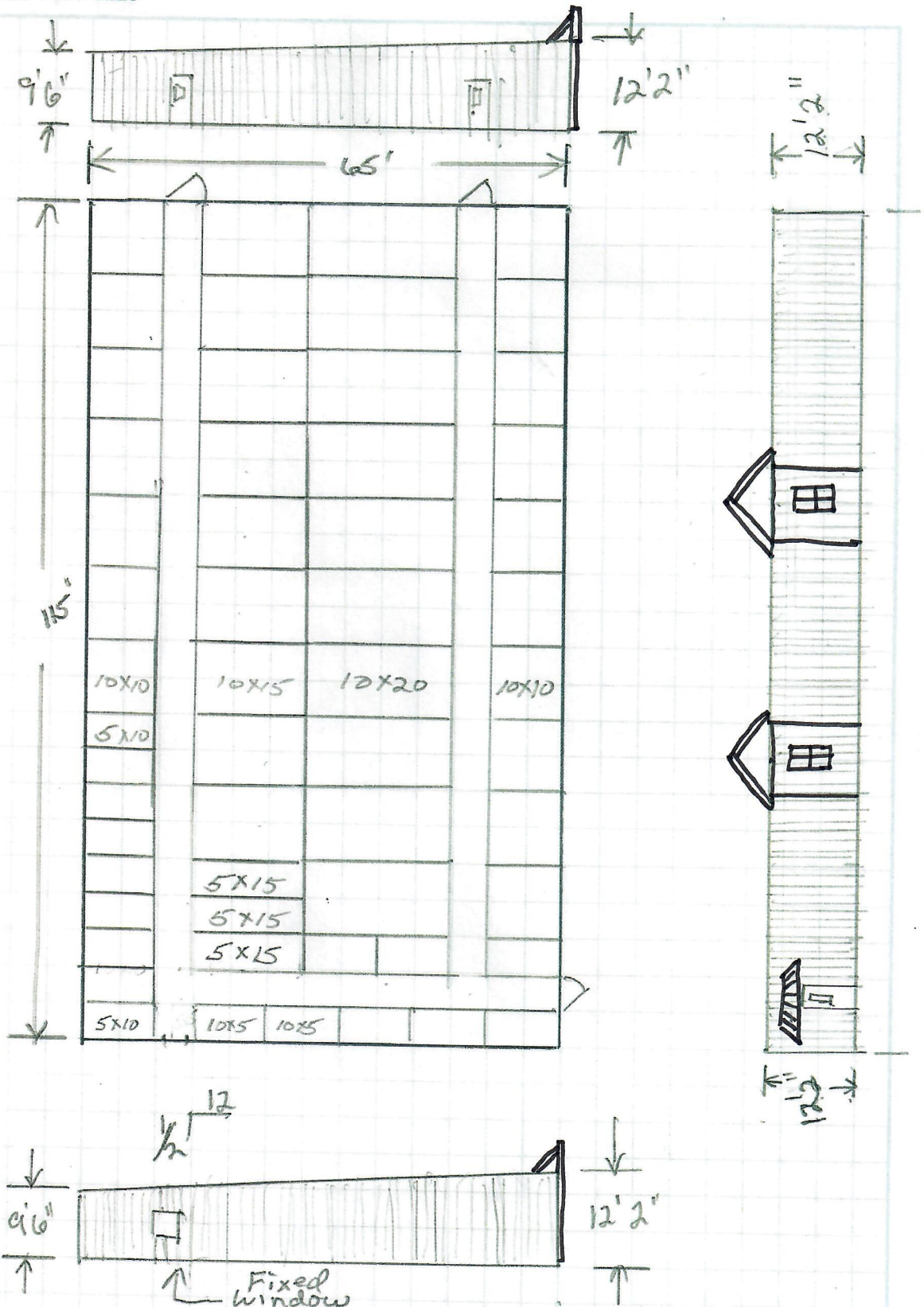
1041 Crown Park Circle  
Winter Garden, FL 34787  
407 / 877-0220

JOB NAME Kevin Bosworth  
JOB NO. \_\_\_\_\_ PAGE 3 OF 3  
VERIFIED BY \_\_\_\_\_ DATE \_\_\_\_\_  
SCALE \_\_\_\_\_



1041 Crown Park Circle  
 Winter Garden, FL 34787  
 407 / 877-0220

JOB NAME Kevin Bosworth  
 JOB NO. \_\_\_\_\_ PAGE 2 OF 3  
 VERIFIED BY \_\_\_\_\_ DATE 8-19-16  
 SCALE \_\_\_\_\_





# ArcheType X™ Wall

ARWX09, ARWX16, ARWX25

VARIABLE DISTRIBUTION



ARWX16

## FEATURES

- First outdoor LED luminaires with factory or field, infinitely adjustable Type "X" Distribution
- 3 Wall Mount Housing Sizes – 9 (3x3), 16 (4x4) or 25 (5x5) LEAR Module Configurations
- LEAR Module adjustable with 0-70° Tilt and 355° Rotation
- Up or down orientation, 10° housing adjustment -5° to +5°
- 54, 96 or 150 LED options, 10,500+, 19,000+ and 30,000+ lumen packages
- 3,000, 4,200 and 5,100k color temperatures



3000K and warmer CCTs only

## ORDERING INFORMATION (Example)

ARWX25	D	2	5K60UV	BL	A30	SF	NFO	WIR-RML-IO	EM
<b>FIXTURE</b>		<b>ELECTRICAL MODULE</b>		<b>PHOTOCELL OPTIONS</b>		<b>CONTROLS</b>			
ARWX09 54 LEDs		<u>Color Temperature</u> <u>Drive Current</u> <u>Voltage</u>		A25-7 7-pin Photocell Receptacle		<u>Wireless</u>			
ARWX16 96 LEDs		3K 3000K 35 350mA UV 120-277V		A30 120V Button Photocell		WIR-RML-IO 120 - 347V 1000' range WiScape RF mesh control system with off/on/dim, motion, photo, GPS location, alert, monitoring and metering capabilities.			
ARWX25 150 LEDs		4K 4000K 40 400mA 347 347V		A31 208V Button Photocell		<u>Motion/Occupancy Sensor</u>			
<b>MOUNT DIRECTION</b>		5K 5000K 45 450mA 480 480V		A32 240V Button Photocell		SCL <sup>4</sup> Fixture Mounted Occupancy Sensor up to 16'			
D Down		50 500mA		A33 277V Button Photocell		SCH <sup>4</sup> Fixture Mounted Occupancy Sensor from 16' to 30'			
U Up		55 550mA		A34 480V Button Photocell		<b>BATTERY BACKUP</b>			
<b>DISTRIBUTION</b>		60 600mA		<b>FIXTURE FINISH</b>		EM Integral Emergency Battery Backup <sup>5</sup>			
1 Type I		65 650mA <sup>2</sup>		BL Black		<b>NFO OPTION</b>			
2 Type II		70 700mA <sup>2</sup>		DB Dark Bronze		NFO Neighbor Friendly Optic			
3 Type III				SG Stealth Gray					
4 Type IV				PS Platinum Silver					
G Grazer				TT Titanium					
W Wall Wash				WH White					
X Type X Custom <sup>1</sup>				CC Custom Color <sup>3</sup>					

<sup>1</sup> Custom distributions must include IES# file where indicated.

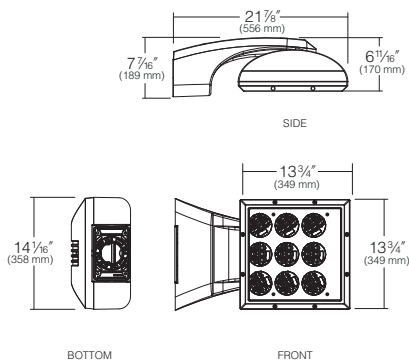
<sup>2</sup> 650mA and 700mA drive current not available on ARWX25.

<sup>3</sup> Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative.

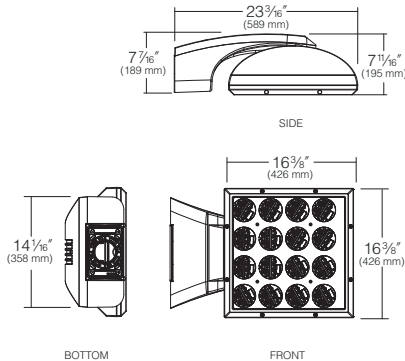
<sup>4</sup> Only applies when mounted in down position.

<sup>5</sup> Battery backup is rated at -45 to 85°C.

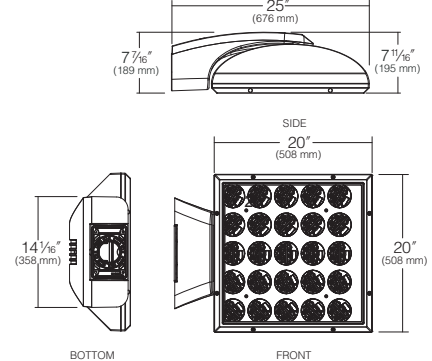
ARFX09



ARFX16



ARFX25



# Bangor Savings Bank

You matter more.

August 17, 2016

Town of Windham  
Attn: Amanda Lessard  
8 School Rd.  
Windham, ME 04062

RE: Kevin Bosworth dba Little Mountain LLC

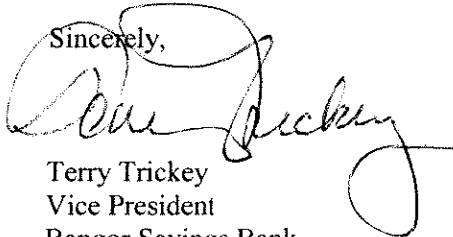
To Whom It May Concern:

Bangor Savings Bank understands that Kevin Bosworth is developing a commercial project in Windham, ME. We have had a satisfactory working relationship with him. We also understand that development costs may be in the vicinity of \$600,000.

While the Bank is not yet at a point where a commitment can be issued I am supportive of the request and feel the Mr. Bosworth has the financial capacity and wherewithal to successfully complete the proposed project.

Should you have any questions feel free to contact me at 207-541-2711.

Sincerely,



Terry Trickey  
Vice President  
Bangor Savings Bank

cc: Kevin Bosworth