



Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: _____

Permit No. B17003189

Building Address: 3374 Denmark Dr
 City: Beltsville State: MD Zip Code: 21738
 Suite/Apt. # _____ SDP/WP/BA #: _____
 Census Tract: _____ Subdivision: Cherry Hill
 Section: _____ Area: _____ Lot: 2002A
 Tax Map: 1004 Parcel: 116 Grid: 0024
 Zoning: _____ Map Coordinates: _____ Lot Size: 10000

Existing Use: _____
 Proposed Use: _____
 Estimated Construction Cost: \$ _____
 Description of Work: _____
 Occupant/Tenant Name: John G Skarulis House
 Was tenant space previously occupied? Yes No
 Contact Name: John G Skarulis
 Address: 3374 Denmark Dr
 City: Beltsville State: MD Zip Code: 21738
 Phone: 410 337 7882 Fax: _____
 Email: jskarul@att.net

Property Owner's Name: John G Skarulis
 Address: 3374 Denmark Dr
 City: Beltsville State: MD Zip Code: 21738
 Phone: 410 337 7882 Fax: _____
 Email: _____

Applicant's Name & Mailing Address, (If other than stated herein)
 Applicant's Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Contractor Company: ARK Electric
 Contact Person: John Dooly
 Address: 7300 Annapolis Ave
 City: Annapolis State: MD Zip Code: 21061
 License No.: 7294
 Phone: 410 271 1021 Fax: 410 271 353
 Email: john.dooly@ark-electric.com

Engineer/Architect Company: SKA Engineering
 Responsible Design Prof.: John G Skarulis
 Address: 7520 Parkway Dr
 City: Annapolis State: MD Zip Code: 21076
 Phone: 410 271 5449 Fax: _____
 Email: jskarul@ska-engineering.com

Commercial Building Characteristics	Residential Building Characteristics
Height: _____	<input type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse
No. of stories: _____	Depth Width
Gross area, sq. ft./floor: _____	1 st floor: _____
	2 nd floor: _____
Area of construction (sq. ft.): _____	Basement: _____
	<input type="checkbox"/> Finished Basement
Use group: _____	<input checked="" type="checkbox"/> Unfinished Basement
	<input type="checkbox"/> Crawl Space
Construction type:	<input type="checkbox"/> Slab on Grade
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms: _____
<input type="checkbox"/> Structural Steel	Multi-family Dwelling
<input type="checkbox"/> Masonry	No. of efficiency units: _____
<input type="checkbox"/> Wood Frame	No. of 1 BR units: _____
<input type="checkbox"/> State Certified Modular	No. of 2 BR units: _____
	No. of 3 BR units: _____
	Other Structure: _____
	Dimensions: _____
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings: _____
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof: _____
Roadside Tree Project Permit # _____	<input type="checkbox"/> State Certified Modular
	<input type="checkbox"/> Manufactured Home

Utilities	
Electric:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Gas:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Water Supply	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Sewage Disposal	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Heating System	
<input checked="" type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other:	
Sprinkler System:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Grading Permit Number: _____	
Building Shell Permit Number: _____	

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature: [Signature]
 Email Address: jskarul@att.net
 Title/Company: Owner

Print Name: John G Skarulis
 Date: 2/16/2017

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY & LEGIBLY
 -FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health	<u>2/12/17</u>	<u>W. Oswald</u>

DPZ SETBACK INFORMATION	
Front:	
Rear:	
Side:	
Side St.:	
All minimum setbacks met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:	
SDP/Red-line approval date:	

Filing Fee	\$ <u>25</u>
Permit Fee	\$ _____
Tech Fee	\$ _____
Excise Tax	\$ _____
PSFS	\$ _____
Guaranty Fund	\$ _____
Add'l per Fee	\$ _____
Total Fees	\$ _____
Sub- Total Paid	\$ _____
Balance Due	\$ _____
Check	# <u>1258</u>

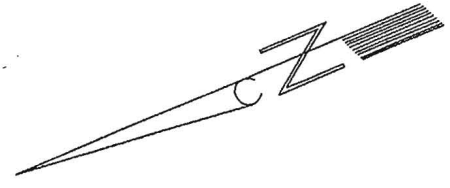
Distribution of Copies: White: Building Officials Green: PSZA,Zoning Yellow: PSZA,Engineering Pink: Health Gold: SHA

CONSUMER INFORMATION NOTES

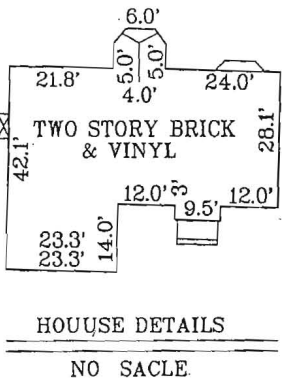
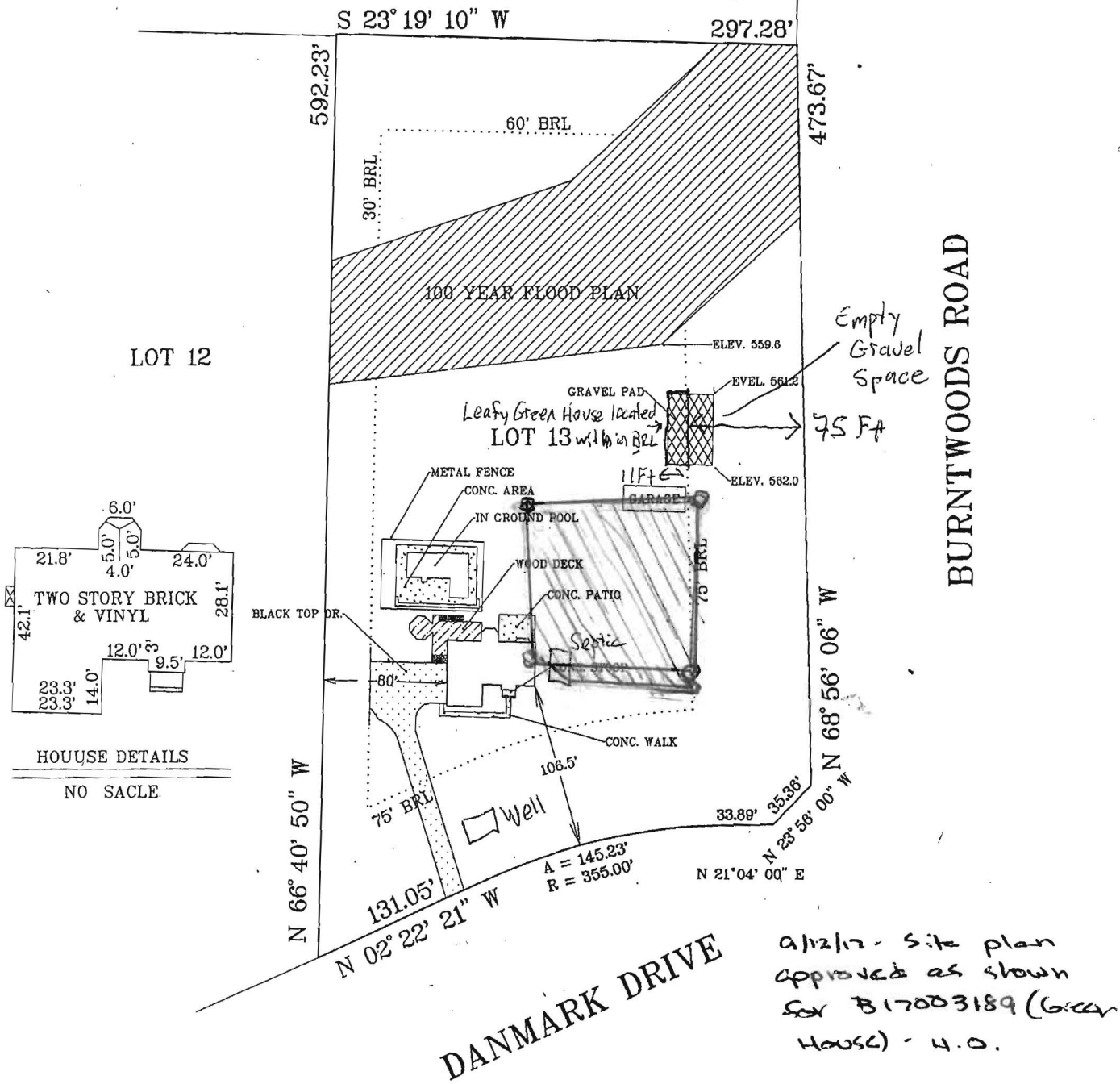
1. THIS PLAN IS A BENEFIT TO A CONSUMER INSOFAR AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE COMPANY OR ITS AGENT IN CONNECTION WITH CONTEMPLATED TRANSFER, FINANCING OR RE-FINANCING.
2. THIS PLAN IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT, OR LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER EXISTING OR FUTURE IMPROVEMENTS.
3. THIS PLAN DOES NOT PROVIDE FOR THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR RE-FINANCING.

3377 DANMARK DRIVE
 LOT: 13
 CHOI PROPERTY
 HOWARD COUNTY
 MARYLAND

REVISED
 Date: 8/30/17
 Comments: B17003189
 STRUCTURE LOCATED, SETBACKS SHOWN



HOLLY HILL ESTATES



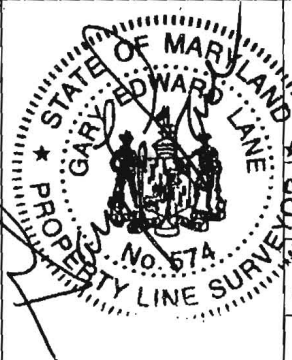
9/12/17 - Site plan approved as shown for B17003189 (Green House) - 4.0.

NOTE: LICENSE NO. 574
 EXPIRATION DATE 03/21/19

HOUSE LOCATION DRAWING

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THE PROPERTY DELINEATED HEREON IS IN ACCORDANCE WITH THE PLAT OF SUBDIVISION AND DEED OF RECORD AND THAT THE IMPROVEMENTS SHOWN WERE LOCATED BY ACCEPTED FIELD PRACTICES. THIS HOUSE LOCATION SURVEY IS NOT FOR THE DETERMINING PROPERTY LINES, AND NO TITLE REPORT WAS FURNISHED TO THIS SURVEYOR, AND LOT CORNERS HAVE NOT BEEN SET BY THIS SURVEY



MARYLAND LAND SURVEYING
 CONSULTING LAND SURVEYORS AND PLANNERS
 9890 LYON AVENUE
 LAUREL, MARYLAND 20723
 (301) 206-2258

SCALE 1" = 100'	DWG. BY G.E.L.	CASE No.
LIBER 15626	ELECTION DISTRICT 04	COUNTY HOWARD
FOLIO 97		DATE 08/21/17
PLAT BOOK 10631		

**COMPLETE THIS FORM WHEN DROPPING OFF ANY
CORRESPONDENCE AND/OR PLANS TO THE HOWARD COUNTY
DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS COUNTER:**

Date: 8-30-17

To: JOHN ANNETTE MERSON, DPZ
(Person's Name and Division)

From: JOHN G. SKARVELIS (410) 903 2882
(Your Name, Company Name and Telephone Number)

Subject: Project name Leafy Green House
Project site address 3377 Danmark Dr Glenwood MD 21732
Permit # 617003189 SDP # _____
Other information pertinent to this project _____

Please check the attachments below that you are submitting with this transmittal:

- Letter of response to address plan review comment letter
- Revised plans and/or revised details: When submitting for a complete re-review, duplicate sets shall be submitted.
- Letter Summarizing Changes
- Energy conservation calculations
- Copies of REVISED PLOT PLAN (be specific). * SETBACKS SHOWN
+ STRUCTURE LOCATED
- Health Department Request
- DPZ/DED Request
- Applicant's Request
- Two sets of single family dwelling model plans to be placed on permanent file: Model name and/or # _____
- Other _____

Contact Person Information: (Required)

John G. Skarvelis
Please Print Name

Telephone No: 410 903 2882

E-Mail Address: jskarvel@adl.com

PLEASE ASSURE ALL DOCUMENTS AND/OR REVISIONS ARE APPROPRIATELY SIGNED AND SEALED, IF NECESSARY, BY A LICENSED ARCHITECT OR ENGINEER. PLEASE BE ADVISED THAT INSUFFICIENT INFORMATION MAY RESULT IN THE DELAY OF REVIEW BY THE PLANS EXAMINER. THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS WILL CONTACT YOU IF THERE IS A PROBLEM. IN ADDITION, ONCE THE BUILDING PERMIT IS APPROVED BY THE PLAN REVIEW DIVISION AND ALL OTHER REQUIRED SIGNATORY AGENCIES, AND THE BUILDING PERMIT IS READY FOR ISSUANCE, THE PERMIT DIVISION WILL NOTIFY THE APPROPRIATE CONTACT PERSON FOR PERMIT PICK UP. ALL PERMIT STATUS INQUIRIES SHALL BE DIRECTED TO THE PERMIT DIVISION AT 410-313-2455. CODE RELATED QUESTIONS AND PLAN REVIEW INQUIRIES SHALL BE DIRECTED TO THE PLAN REVIEW DIVISION AT 410-313-2436. PLEASE ALLOW A MINIMUM OF FIVE (5) WORKING DAYS FOR ANY PLAN SUBMITTALS TO BE REVIEWED. THANK YOU.

Received by AKH

PER DPZ
CC: Bldg
Heather

LGM

Leafy Green Machine



 **FREIGHT
FARMS**
Grow Food Anywhere


READY SET GROW

A Complete Farm-to-Table System

The Freight Farms system enables you to supply local food at the scale you need today while providing you the infrastructure to easily expand in the future. So whether you're building your own local produce business or looking for a cost-effective way to supply your campus, restaurant, or hotel with fresh and sustainable greens and herbs, Freight Farms has the tools you need.

The Leafy Green Machine is a complete hydroponic growing system built entirely inside a shipping container with all the components needed for commercial food production. The system is designed and engineered for easy operation, allowing users of all backgrounds to immediately start growing.





The farmhand™ suite of apps allows users to stay connected to their operation from any location, and purchase all of their growing supplies directly from their smartphone. Remote monitoring and management capabilities take the heavy lifting out of farming.

The Freight Farms two day in-farm training, also known as "Farm Camp", paired with our launch assistance, ensures the success of each of our farmers.

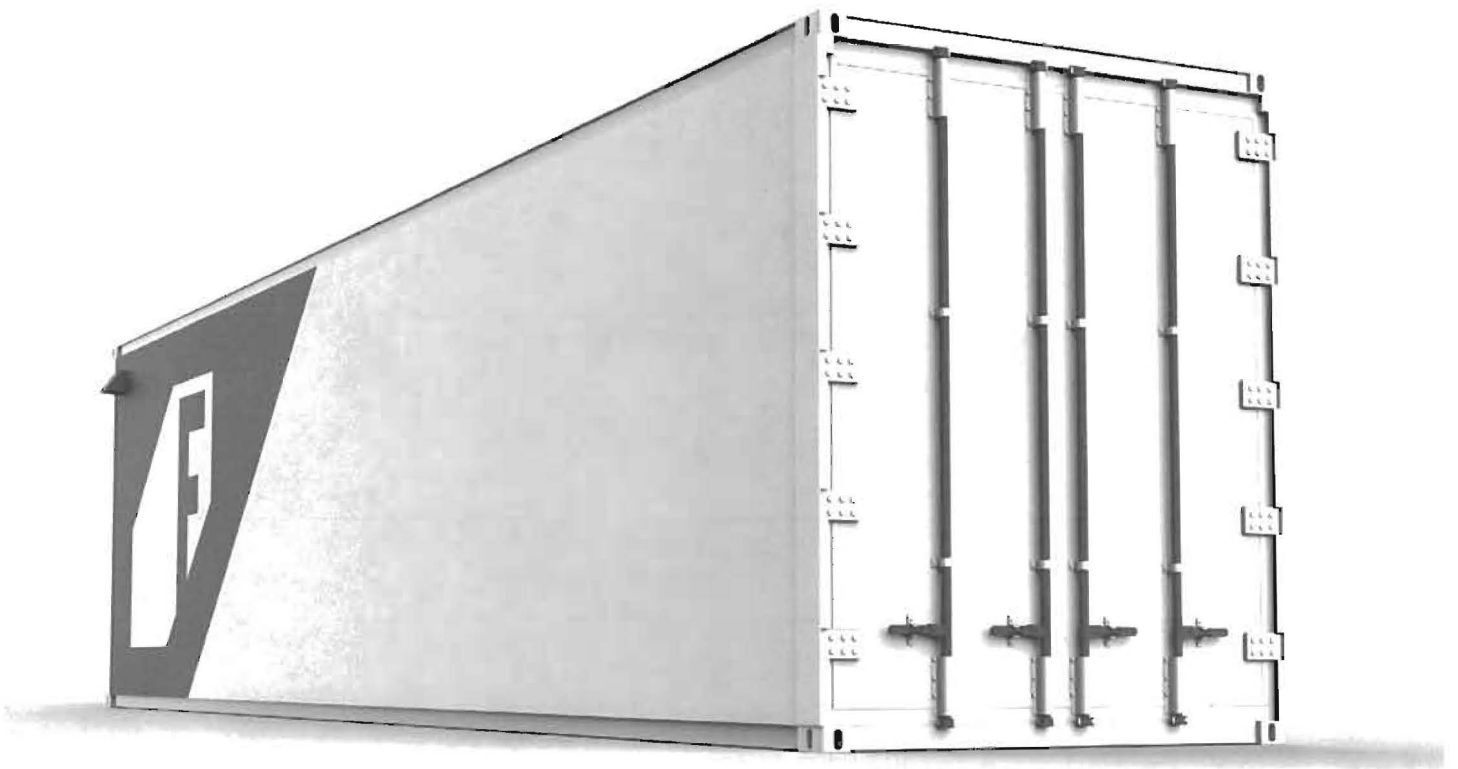
What you'll find inside:

- 1 Leafy Green Machine - product specifications
- 3 Crop Guide - what can you grow in the LGM
- 9 Operating Requirements - sample of average monthly expenses
- 13 farmhand Connect™ and Shop™ - how our tools will help monitor and manage farm operations
- 15 Training - what to expect from the two day in-farm training
- 17 Timeline - what to expect from deposit to first harvest

LGM

Leafy Green Machine

Built from upcycled shipping containers, the modular and stackable design of the LGM makes it easy to integrate it into any operation. Each farm acts as an immediate solution to shorten the food supply chain and bring local, fresh product to any environment.



Leafy Green Machine MSRP \$82,000

International availability upon request

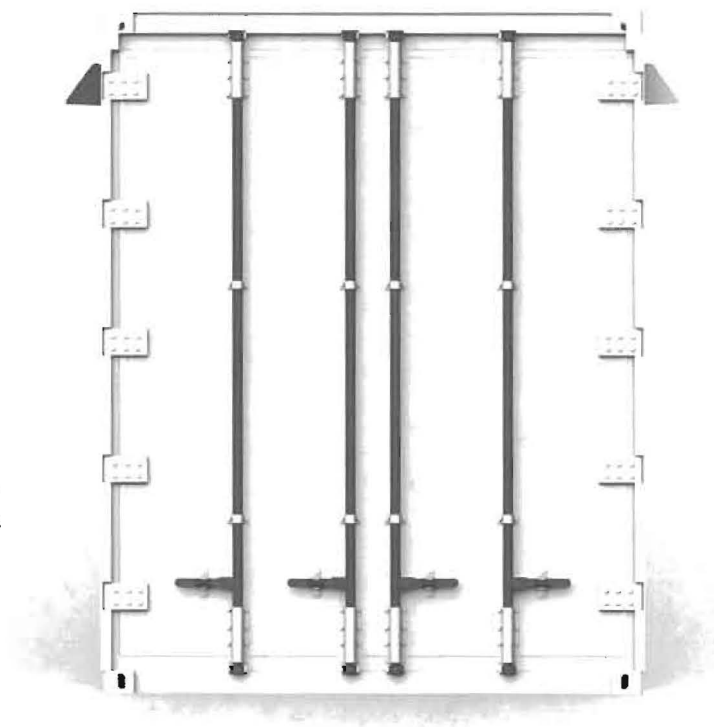
Set up and delivery costs are separate and based on location. Freight Farms can handle delivery logistics on your behalf; estimate \$2.25 per mile from zip code 01581 in MA.

The highest standard in controlled environment agriculture

Turnkey system designed to maximize operational efficiency and streamline workflow.

Perfect environment is achievable 365 days a year, regardless of geographic location.

Automated scheduling reduces the amount of labor required to operate.



Environmental sensors measure and record temperature, CO₂ levels, and nutrient levels.

Climate controls automatically respond to sensors and adjust to maintain optimal conditions.

The Leafy Green Machine brings consistent access to high quality, locally grown produce year round to any market. This fully assembled system allows users to immediately start growing upon delivery, and scale operations by adding more farms as the market demands.

Crop GUIDE

What can you grow?

The LGM is built and optimized for the growth of a wide variety of lettuces, herbs, and hearty greens.



Lettuce

- *Full head 500
- Mini Head 1,000

- Bibb Lettuce
- Butterhead
- Green Leaf
- Lolla Rosa
- Oakleaf
- Red Leaf
- Romaine
- Summer Crisp

Hearty Greens

- *50-55 lbs

- Cabbage Leaves
- Endive
- Kale
- Mustard Greens
- Swiss Chard

Herbs

- *35-45 lbs

- Basil
- Cilantro
- Dill
- Mint
- Oregano
- Thyme

*Numbers are based on average weekly yields.



After 3 weeks of growing in the seedling station, seedlings are ready to be transplanted into the vertical towers where they will grow until they're ready to be harvested.

Nursery Stage

Multi-function aluminum workstation integrates an ebb and flow irrigation system with an LED lighting array for seed germination and early-stage growth. There are up to 2,500 plant sites compatible with compostable peat moss.

Growth Stage

Vertical towers create a high-density growing environment inside the farm with four rows of 7' Zipgrow™ towers providing space for over 4,500 plants in 256 towers. An overhead drop irrigation system and strip LED lighting support crop growth from transplant to harvest.



Climate Optimization

Inside each farm is a series of environmental sensors that measure climate conditions (temperature, humidity, CO₂, and nutrient levels) and communicate with the in-farm controller. The controller then responds to air and water sensors to maintain optimal growing conditions. The multi-planed airflow and intercrop aeration system keeps

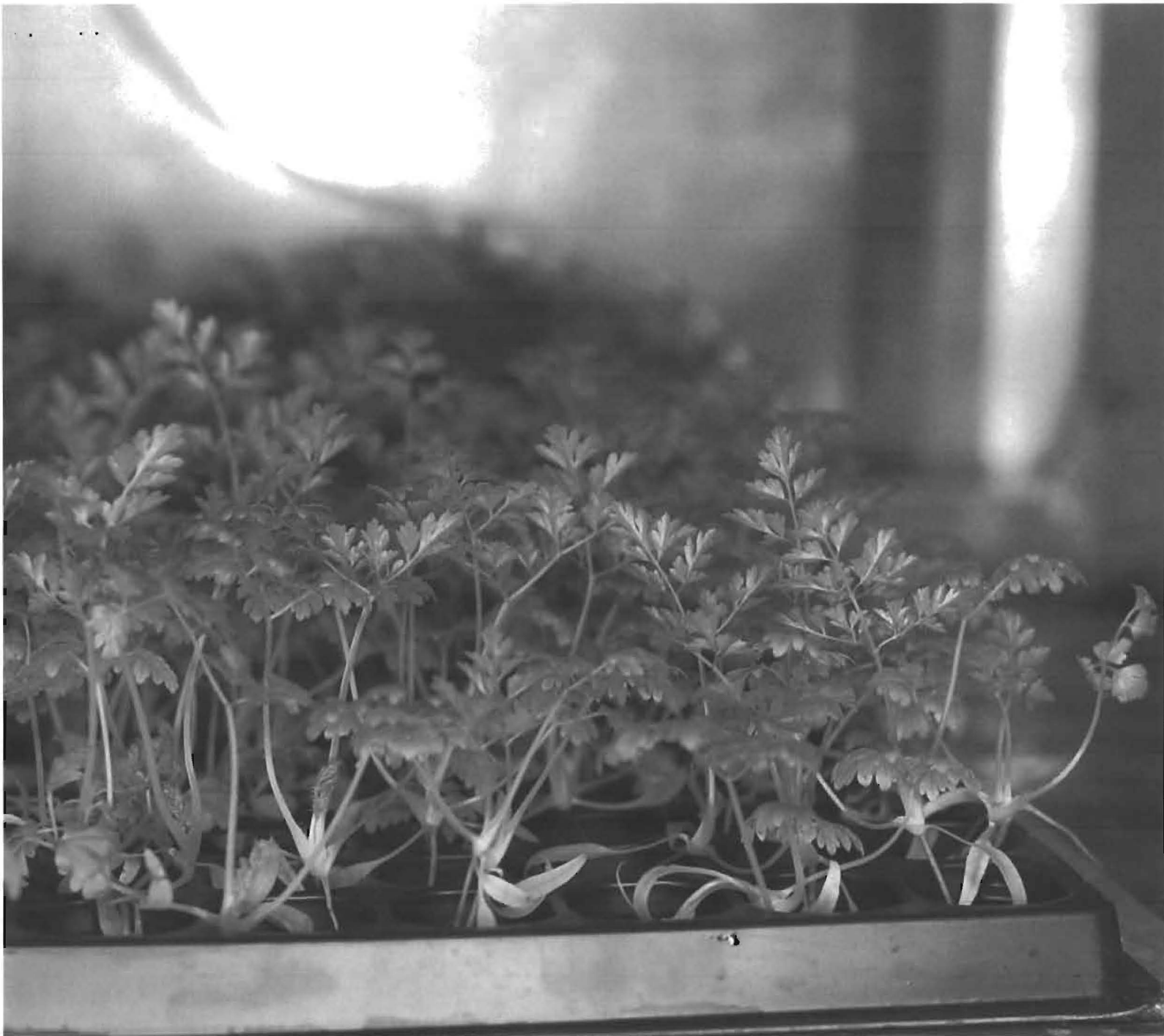
air circulating through the dense growing environment inside the container. This automated smart ventilation system controls temperature and humidity with a 24,000 BTU air conditioner in addition to balancing internal and external temperature.



The LEDs emit deep red and blue hues to mimic sunlight, providing plants with just the right spectrum for photosynthesis.

Lighting

Patented vertical, high-efficiency LED lighting system mimics sunlight and delivers growth-optimized spectrums of red and blue, required for photosynthesis and uniform plant development. The 128 lighting strips run approximately 18 hours per day to maximize the growth cycle. They are off during the day to avoid using electricity at peak demand hours and to give the plants time to rest.

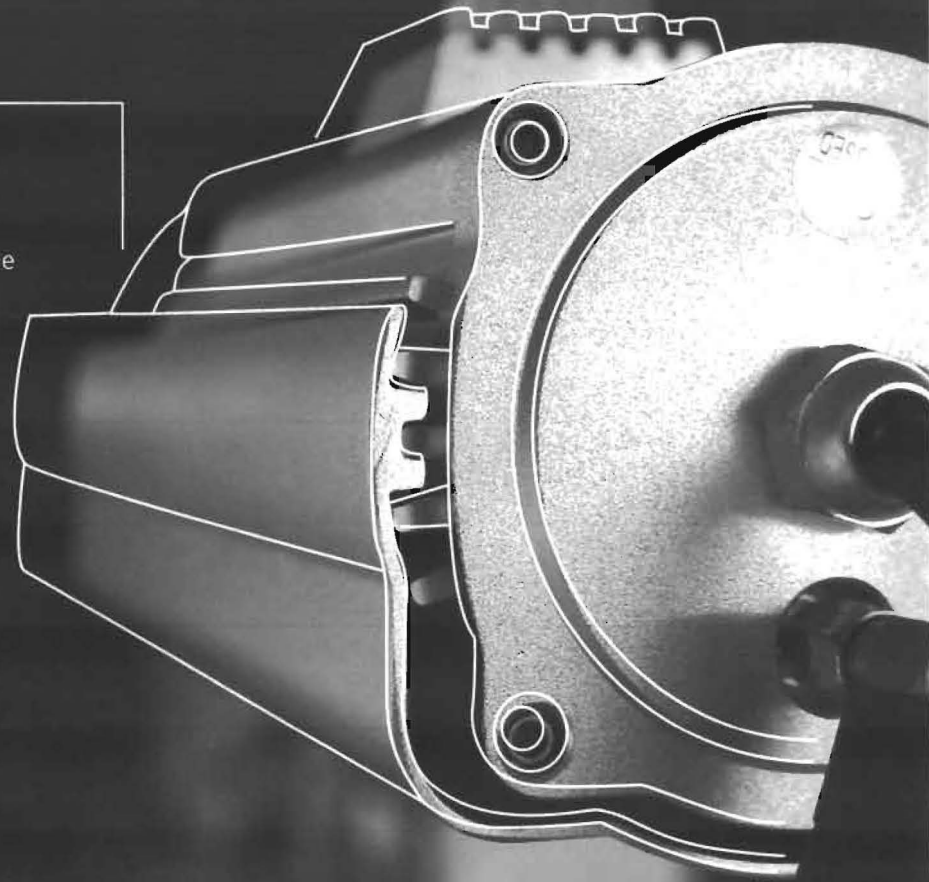


Hydro Control

A responsive, recirculating irrigation system delivers a consistent nutrient-rich water solution directly to plant roots, ensuring strong and uniform growth. Water conditions are measured and controlled through temperature, pH and EC sensors. The nutrient dosing panel responds to sensors to ensure the water has optimal levels of nutrients for plant growth.



Access to in-farm cameras allows growers to keep tabs on their operation even when they're not there, giving them the confidence that crops are growing strong.



In-farm Controls and Camera

A weatherproof touchscreen displays farm data and provides quick access to all components inside the farm. Easily monitor and manage timers and set environmental parameters to always achieve the ideal growing climate. The farm comes equipped with a camera to enable remote monitoring via farmhand Connect™ on your smartphone.


Site REQUIREMENTS

Space

The LGM dimensions are 40' x 8' x 9.5'. Allow for 2 feet around the perimeter and a minimum of 5 feet at the back of the container to access electrical panel, condenser and propane cage.

Farms can go in alleyways on rooftops and other under-utilized spaces. We suggest putting the farm on either trap rock or a 45' x 10' concrete pad.

Image: 2014 Leafy Green Machine



Farm site tips:
if using a standard hose
hookup, it should be
within 40 feet (12 meters)
of the farm



Electrical

60 amp, 120/240-volt single phase connection with plug-in configuration for easy setup (120/208 volt is also acceptable.) Most farmers use a 4 prong straight blade plug, similar to what you need for an RV or a dryer. If you choose to hardwire we recommend hiring a licensed electrician for installation at the time of delivery.

Water

Access to water is all you need. The LGM is capable of automatic tank level management. A designated water source is suggested, but it can be achieved with a common garden hose feed as well.

Operating REQUIREMENTS

To help future freight farmers, we've broken out the monthly expense that can be expected when operating a Leafy Green Machine (LGM) in the United States. It is important to note that each farm will vary slightly, as electricity and water rates are specific to a location.





Power 80 kWh/day

Each farm uses an average of 80 kWh per day. We estimate the national average cost of electricity to be approximately \$0.15 per kWh. Based on these rates the average monthly electrical expense for a farm is \$350.

More details on regional pricing can be found [here](#) and local utility providers can give exact information based on location.



Supply \$200-250/month

To keep operations running smoothly and to ensure successful harvests, a freight farmer will need the following items: seeds, nutrient solutions, and supplies. All of these items and more can be purchased directly from the farmhand Shop App.

Organic nutrients and seeds are available.



Water 10 Gallons/day

The LGM uses an average of 10 gallons of water per day, and both municipal and well water will work in the system. Water rates can vary by location. For comparison: 10 gallons a day is less water than what is used in the average 5 minute shower.



Other

A few additional monthly expenses that should be considered are insurance, packaging, marketing materials, internet connectivity, hired labor and site rent.

MONTHLY OPERATING COSTS

Sample based on average operating costs of Boston freight farmers

Power	\$350
Supplies	\$225
Water	\$25
fh connect Subscription	\$10
Other	\$400

Average monthly operating costs	\$1010
----------------------------------------	---------------

fh Connect™

fh Connect™ allows you to keep tabs on your operation at all times with real-time data from sensors inside the farm. That means you can rest assured that your farm is running smoothly. Whenever you are in the world.

Receive secure cloud storage of all farm data, including climate and alarm history, equipment run-times, user access records and system settings backup.



Grow with confidence

Monitor and track climate conditions inside the farm and set parameters for ideal growing conditions from the palm of your hand. What exactly are you monitoring? All the key components of your farm: temperature, humidity and CO₂, leaves in the air, and nutrient and pH levels of the water.

Access in-farm cameras and the real-time status of each component inside the unit so you always know how things are operating.

fh Shop™

fh Shop™ app makes it easy and convenient to shop for all the growing supplies you'll need to run a successful operation.



One stop shop

Browse through a collection of seeds, nutrients and farm supplies that we've curated from top brands in hydroponics and indoor gardening. Restock your entire growing operation from one location and have all your supplies shipped directly to your door.

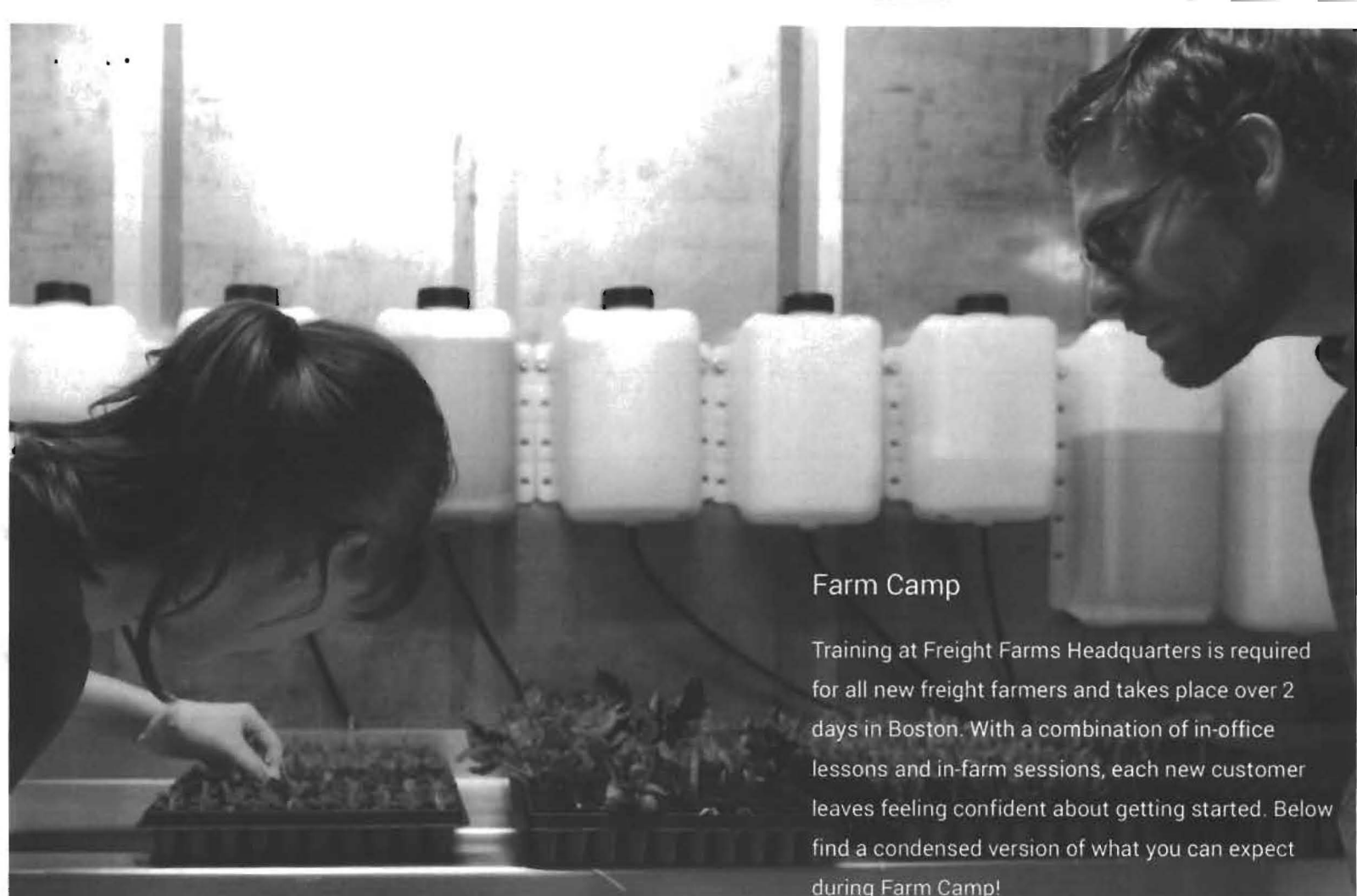
*Organic nutrients and GMO-free seeds are available

Training & Launch

FARM CAMP

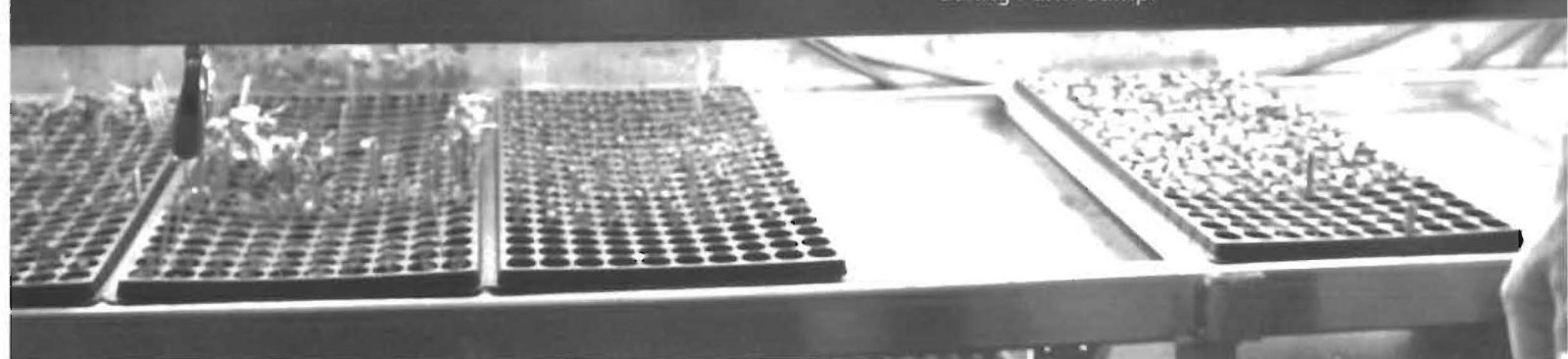
Freight Farms is here to ensure every new farmer has all the tools and training needed to run a successful and smooth operation. Freight farmers are supported through onsite training as well as assistance launching the farm upon delivery.





Farm Camp

Training at Freight Farms Headquarters is required for all new freight farmers and takes place over 2 days in Boston. With a combination of in-office lessons and in-farm sessions, each new customer leaves feeling confident about getting started. Below find a condensed version of what you can expect during Farm Camp!



Training Session

- Farm operation breakdown
- Crop selection and scheduling
- Optimizing growing conditions
- farmhand connect™ and shop™
- Business strategy and marketing

Workshop

- Operating and maintaining the farm
- Food Safety procedures
- Seeding and transplanting
- Harvesting and packaging
- Software and scheduling
- Maintenance and troubleshooting

Optional Launch Visit

Upon delivery of your farm, and included in the training and support package, a Freight Farms Master Farmer will come meet you at your farm location to support you in getting your farm up and running.

From DEPOSIT to harvest

To ensure a successful journey from first deposit to delivery, these are key action items and events that each farmer should plan for! It's important to keep in mind that the sequence and timeframe of these events may vary depending on financing and delivery options.



Step One

- Deposit kicks off farm build*
- Identify and evaluate future farm location
- Determine your market and business strategy
- Receive estimated timeframe for farm delivery



Step Two

- Second payment
- Schedule Farm Camp
- Receive pre-training packet for Farm Camp
- Confirm shipping preferences



Step Three

- Prep for Farm Camp
- Suggestion: get your marketing and business plans ready!
- Work with Freight Farms on site logistics for farm delivery



Step Four

- Farm Camp!
- Get hands-on farm training from our Master Farmers
- Meet and greet with Freight Farms staff at our office HQ



Step Five

- Final payment due plus delivery costs
- Receive delivery date and shipping quote!
- Schedule electrician for installation
- Order startup growing kit supplies



Step Six

- Farm delivery!
- Master Farmer on site at the time of delivery to assist in setup
- Get growing!
- First harvest within 6-8 weeks depending on crop type

*additional information available for institutional customers



Freight farms are covered with a 1 year warranty.

The information in this brochure is correct as of the published date listed here.

Availability, specifications, features and colors are subject to change without notice. Images shown may vary slightly from actual applications.

Any previous publications, pricing, and descriptions may no longer be valid.

FreightFarms.com

January 2016

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