



FLOYD COUNTY BOARD OF EDUCATION
Danny Adkins, Superintendent
442 KY RT 550
Eastern, KY 41622
Telephone (606) 886-2354 Fax (606) 886-4550
www.floyd.kyschools.us

Linda C. Gearheart - Chair - District 1
William Newsome, Jr., Vice-Chair - District 3
Dr. Chandra Varia, Member - District 2
Keith Smalwood, Member - District 4
Steve Stone, Member - District 5

Date: May 31, 2021

Consent Agenda Item (Action Item): Approve partnership with AppHarvest for instructional use with Floyd County School District beginning 2021-2022 school year.

Applicable Statute or Regulation: BOE Policy 01.11 General Powers and Duties of the Board.

Fiscal/Budgetary Impact: ESSER II

History/Background: AppHarvest: Cultivating the Next Generation of Farming Now. Joined by the shared belief that we will need the next generation to invest in controlled-environment agriculture. AppHarvest is working with their partners in education to support an Ag Tech ecosystem in our Appalachian region. The program brings cutting-edge agricultural practices into the classroom of Eastern Kentucky high schools, providing the students a foothold into one of the fastest growing business segments in the US and the world.

Recommended Action: Approve as presented.

Contact Person(s):


Director


Superintendent



Floyd County School District - Greenery S

Quote created on June 3, 2021 - Reference: 20210603-101846687

Anna Shepherd

Superintendent

anna.shepherd@floyd.kyschools.us

606-886-2354

Comments

Set forth below are the terms of a binding Sales & Purchase Agreement (the "Sales & Purchase Agreement"), made by and between Freight Farms, Inc. (the "Supplier"), with offices at 46 Plympton Street, Boston, MA 02118, and the undersigned Anna Shepherd (the "Buyer"), with offices at 442 Ky Rt 550

Eastern, KY 41622, regarding the purchase of certain Supplier products and/or services by Buyer as specified in this Sales & Purchase Agreement. Buyer agrees to purchase, and Supplier agrees to sell, the following product(s) and/or service(s) on the following terms:

David Turina - Account Executive at Freight Farms



Products & Services

Greenery™ S 2021 - Domestic

1 x \$139,000.00

Fully Equipped Greenery™ S 2021

Onsite Training & Launch

1 x \$10,000.00

Hands-on training at your location for your team to become certified Freight Farmers. Training will cover all farming and maintenance activities for up to 8 operators.

\$10,000.00 discount **\$0.00**

farmhand® Enterprise License

1 x \$2,400.00

farmhand® Subscription - annual license for 1 user and 1 farm

\$1,200.00 discount **\$1,200.00**



One-time discount	\$11,200.00
One-time subtotal	\$140,200.00
Total	\$140,200.00

This quote expires on July 15, 2021.

Purchase Terms

Greenery™ Payment Schedule

25% Due Upon Signing.....	\$34,750.00
65% Due 60 Days After Signing.....	\$90,350.00
10% Due 30 Days Before Expected Delivery.....	\$13,900.00

farmhand® Billing

Billing information is registered upon activating an online farmhand® account. Payment for farmhand® Subscriptions and services are required upon account activation. The annual payment cycle begins on the date of activation. Account activation required for additional users and farms. \$1,000.00 of farmhand® credit will be automatically applied to your account upon activation.

Shipping & Delivery: EXW Supplier's Dock Incoterms 2020

Unless otherwise specified, Products are shipped ExWork's Supplier's Dock Incoterms 2020. Buyer shall pay all freight, handling, delivery, special packaging and insurance charges for shipment of Products prior to delivery. Choice of carrier and shipping method and route shall be at Supplier's election unless otherwise specified. Supplier shall have the right to deliver all Products covered by an Order at one time or in partial shipments from time to time, within the agreed time for delivery. Supplier shall not be liable for delays in delivery or for failure to perform due to causes beyond the reasonable control of the Supplier, including but not limited to force majeure, acts or omission of Buyer, quarantine restrictions, delays in transportation or inability to obtain necessary labor, materials or supplies.

Terms & Conditions

Buyer acknowledges that the specific Terms and Conditions of Sale will be agreed upon at signing of each individual Sales and Purchase Agreement (SPA). Those terms and conditions govern this SPA and any other orders submitted by Buyer for additional Products from Supplier in the future. Any applicable sales and use and/or import/custom taxes are the responsibility of Buyer and may be added by Supplier to the invoice. Buyer acknowledges that the payment and delivery schedule are linked to the company's manufacturing process, and a delay in Buyer adhering to schedule will result in delays in receipt of the farm.

[View Terms & Conditions of Sale](#)



Questions? Contact me



David Turina

Account Executive

david.turina@freightfarms.com

+1 (877) 687-4326



Freight Farms

46 Plympton Street, Fl 1

Boston, MA 02118

United States





AppHarvest High School AgTech Program

Questions? Contact me



David Turina

Account Executive

david.turina@freightfarms.com

+1 (877) 687-4326



Freight Farms

46 Plympton Street, Fl 1

Boston, MA 02118

United States



Cultivating the Next Generation of Farming Now

Farming Now

Joined by the shared belief that we will need the next generation to invest in controlled-environment agriculture, we are working with our partners in education to support an AgTech ecosystem in our Appalachian region. The program brings cutting-edge agricultural practices into the classroom of Eastern Kentucky high schools, providing the students a foothold into one the fastest growing business segments in the US and the world.



AppHarvest High School AgTech Educational Program

Investing in Next Generation Appalachia

AppHarvest is investing in the next generation of Eastern Kentuckians by providing opportunities to specialize in entrepreneurship and high-tech agriculture. These educational programs will create new opportunities from within the region, setting participants up for success and establishing Central Appalachia as a hub for AgTech.

The AppHarvest AgTech high school curriculum, developed by leaders in the field, includes information ranging from plant physiology to taking product to market. The inaugural Spring 2019 class is led by Community Director [Ramel Smooth Bradley](#). Students completing the high school program will have the opportunity to then pursue AppHarvest-supported university-level programs, including an AgTech certificate and degree program, apply for a position with AppHarvest, or pursue a new path with the benefit of having experienced our dynamic program.

Program Objectives



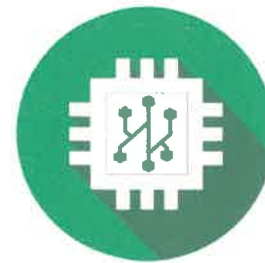
Promote health, wellness and nutrition



Grow transparent, hyperlocal fresh produce



Develop entrepreneurial skills



Create advocates for innovative technology



Build a pipeline of talent in modern farming industry



Cultivate a new generation of farmers: Farming Now



Support community development and leadership



Pave a pathway to university



Provide interdisciplinary training and hands-on experience



Establish food cultivation as an avenue to empowerment, civic engagement, and social justice

AgTech Program Structure

Classroom Learning

AppHarvest partnered with [AgTech X](#) and industry innovators to develop a curriculum and facility to bring AgTech to life for high school students.



AgTech X, an organization focused on education and entrepreneurship for the future of food and agriculture, developed the core curriculum for AppHarvest.

Our interdisciplinary course engages students through the power of growing food, beginning with basic plant science, understanding the global food supply, local food systems, modern farming techniques, and understanding modern farming as a business. The program ultimately instills in the students how exciting it is to be an entrepreneur and expands their technical skills.

AgTech and Food Resiliency Curriculum Themes

1. Basics of plant science.

Plant parts, photosynthesis, the water and carbon cycle plus taste and texture are key concepts for students in learning plant science and growing fresh leafy greens.

2. Understanding the global food supply.

From hunter-gatherers and the birth of agriculture, to the Columbian exchange and the Green Revolution, students are educated on the global food supply, crop types, supply chain, and food waste.

3. Introduction to local food systems.

Local food builds communities and supports local economies. Students learn about “food miles” and the impact of transportation on the environment, weighing the costs and benefits of what we eat.

4. What is food resiliency?

The security of our food supply is threatened by many factors (e.g., climate change, population increase, and natural disasters). Students explore ways to use modern technology to create better ways to feed ourselves and protect our environment.

5. Introduction to modern farming techniques.

Students learn how to cultivate crops without soil by studying the primary soil-less farming techniques.

6. Understanding modern farming as a business.

Students learn business plan basics, organizational types, and operations before creating their own business model in a final project.

The Container Farm

Hands-on Experience for Students

AppHarvest invested in a high-tech controlled environment hydroponic growing system housed in a retrofitted shipping container. What was once a 40-foot steel shell is now a vertical hydroponic growing system complete with efficient LED lighting, closed-loop irrigation, and vertical growing columns together capable of growing 4,500 plants at one time. A cloud-based mobile app tracks temperature, nutrients, pH, and more to create ideal growing conditions.

This high-tech container farm provides a living lab within which students gain hands-on experience, complementing their classroom-based course work.



Pilot Program: Shelby Valley High School AgTech Program

Location: Shelby Valley High School in Pikeville, KY

Course Capacity: 33 students with support from faculty, administration, and Farm Manager/Course Instructor

Timing: January - May 2019

In 2018, AppHarvest established a partnership with Pike County Public Schools to build AgTech programming, educating students about growing, local career paths in this field. In early 2019, an initial team of student farmers was identified. From 80 applicants, 33 students were chosen to join the inaugural AppHarvest AgTech Course. These students exhibit impressive motivation, as the pilot phase was crafted as an elective course, with students adding the elective to their existing course load and volunteering additional hours for farm management outside of regular school hours.

Students meet once a week for classroom instruction and activities; this includes a 50-minute class period plus volunteered time in the container farm outside of school hours.

Of the 33 participants, six team leads were identified to provide a small-group structure for assigning shifts in the container farm. Students meet in these small groups to maintain and run the container farm, with leadership from the farm manager. Student obligations include planting and harvesting of greens, monitoring and calibration of system settings, maintenance, and procedural considerations for food safety.

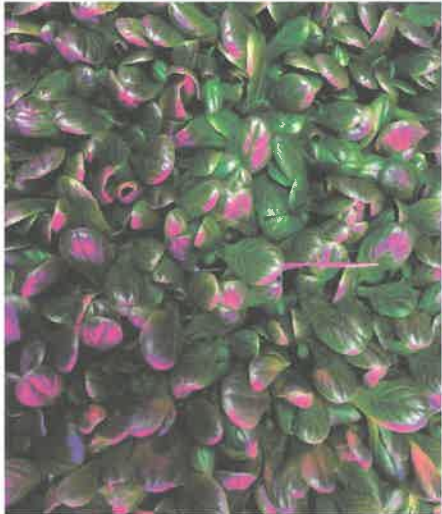
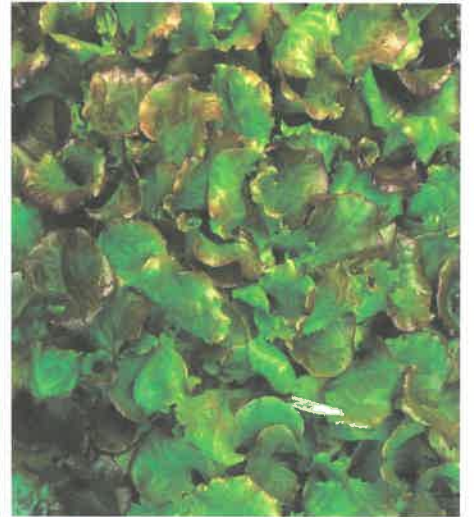
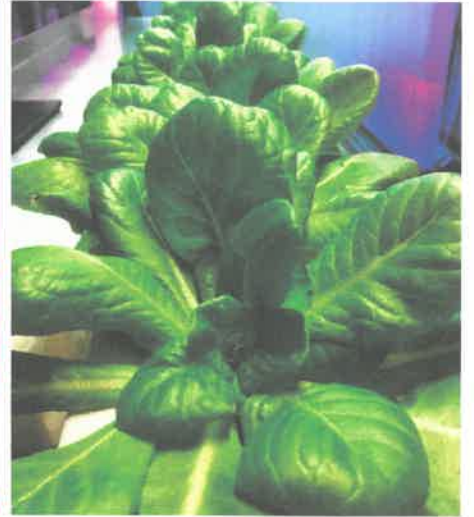
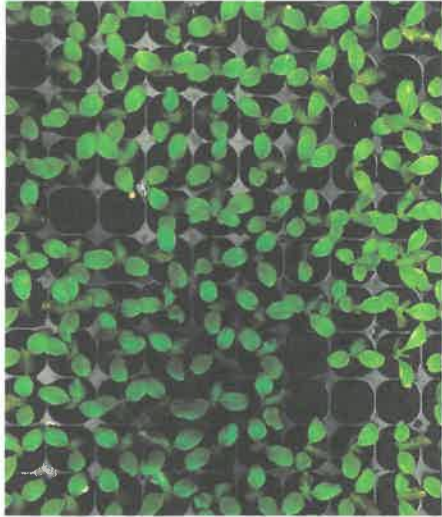
The planting process is completed in phases, with fresh greens harvested on a continual basis. With variation for plant variety, the process typically takes 8 to 12 weeks, beginning with seed germination and on through sprouting, transplant, and harvest.





What's Growing

Student farmers are growing leafy greens, including red leaf lettuce, butterhead lettuce, romaine lettuce, salanova lettuce, wasabi arugula, kale, Swiss chard, and herbs including mint and basil.



Product Placement

Students will explore models for distribution of crops. Options include donation to community events and local food banks, farm-to-table opportunities, and transfer to school cafeteria. Additional options include taking the greens to market, including direct sales to area restaurants. All proceeds from any potential sale will be infused directly back into the school program. Along the way, students will gain real-world experience in exploring requirements needed to take their product to consumers, with marketing and logistics being areas of practical focus.

Community Ties

Students in the inaugural class were invited as guests to TEDxCorbin, the first of the independently organized events touting "ideas worth spreading" to be held in Eastern Kentucky.

The student farmers collaborated with The Blue Raven, a popular restaurant in Pikeville, as Chef Matt Corbin used their harvest to craft a butterhead lettuce cup that was enjoyed by TEDxCorbin workshop participants.



Future Directions

We are combining conventional agriculture techniques with today's technology to build the **#FarmingNow** movement in Appalachia.

The Farming Now movement is about the future of agriculture. To advance the movement and create an AgTech hub, AppHarvest envisions additional container farms and high-tech agriculture programs in Appalachian high schools. To grow the program, a regional farm manager will be engaged to provide local leadership and farm supervision, in collaboration with school administration.

After completing the high school AgTech program, students will have the benefit of experiencing—and adding to their resume—a practical, interdisciplinary, and real-world experience in tying together academics, community engagement, and business principles. This enrichment opportunity prepares students for a variety of futures. A select group of our program graduates will seize the opportunity to continue their AgTech education with a certificate or degree in the field. Others will be well-positioned to apply for employment at an AppHarvest greenhouse. All will have been a part of the Farming Now movement.



 AppHarvest