

ADDENDUM

4-Season Storage application to build third storage building

at

1400 Dryden Road Ithaca NY

Applicant reviewed and commented on the Tompkins County Energy Recommendations for New Construction (2018). See attached.

The exterior lighting will be no higher than 3000K total. Lighting will be night sky compliant and will be on sensors.

Landscaping: The original landscaping that was proposed was upgraded to the planting of Cherry Trees. The cherry trees grew very well for the first three years but were infested with Japanese beetles last year and all but one of the trees died. I intend on planting the ornamental grasses as was originally designed this spring. See attached plant information.

6 for TREES ALONG Highway — IN ADDITION PLANTING



Michael Moore

4-Season Storage Tompkins LLC

November 6, 2020



Tompkins County Energy Recommendations for New Construction (2018)

The Tompkins County Energy Roadmap is intended to help inspire immediate action to reduce energy use and transition to renewable energy as a way to help meet our County's goal of reducing greenhouse gas emissions by at least 80% compared to 2008 by 2050. Constructing buildings at higher energy efficiency standards and incorporating renewable energy systems are essential to attaining that goal. For more information on these recommendations, please see the Green Energy Incentives Assessment Project Final Report (2016), <http://www.tompkinscountyny.gov/planning/energy-greenhouse-gas#incentives>

New Construction Projects

Applicants should address how they will support this goal, including documenting that they have considered each of the following four energy elements.

- 1) ENERGY STAR® products include a wide range of **equipment and appliances** that are independently certified to save energy without sacrificing features or functionality. Water saving fixtures can reduce energy needed for hot water. Recommendations:
 - Require that water fixtures meet EPA's Water Sense requirements. *THERE WILL BE NO WATER USE at the facility.*
 - Require that permanent appliances (apartment refrigerators, restaurant cooking equipment, etc.) be ENERGY STAR rated. *THERE WILL BE NO APPLIANCES at facility.*
- 2) Recent advances in **heat pump** design have reduced installation costs and made them more cost-effective than electric resistance heat, propane, and oil, and close in life cycle costs to natural gas. Use of electric heat pumps allows elimination of fossil fuels as they can be powered by renewable energy sources such as solar photovoltaic. Recommendations:
 - Utilize electrically-powered heat pump systems (ground- or air-source heat pumps); avoid boiler-assisted heat pump systems, avoid systems that burn fossil fuels. *Incorporating heat pump into HVAC system.*
 - Utilize air-source heat pump hot water heaters. *THERE WILL BE NO HOT WATER HEATERS at facility.*
- 3) The state has a goal that 50% of NYS electricity will be generated by **renewables** (solar, wind, hydropower, and biomass) by the year 2030. Recommendations:
 - Design roofs to be "solar receptive": Maximize area available for solar collection systems. For pitched roofs, place roof-mounted components (plumbing vents, exhaust fans, etc.) on north-facing roof surfaces, to keep south-facing surfaces available for solar collection systems. Orient one roof surface to the south, plus/minus 30 degrees, to maximize potential for solar energy.
 - Maximize solar collection systems on available roof areas, and consider using high-production solar panels to maximize solar production for a given roof area, especially for medium-rise and high-rise buildings. *SOLAR PANELS CURRENTLY IN OPERATION at facility -*
- 4) Energy-efficient building design begins with the **building envelope** – the walls, windows, foundations, and roof. Recommendations:

Tompkins County Energy Recommendations for New Construction (2018), cont.

- Design to window-to-wall ratio less than 25% (the new energy code requires 30% or less). Keep large windows on south-facing surfaces and important facades; minimize windows on north-facing surfaces and in spaces that see low occupancy (stairwells, corridors, utility rooms, etc.).
- Avoid unusually complex building shapes. *NOWINDOWS in building. Buildings is totally Rectangular.*
- Use 20% more insulation R-value than required by the energy code. *Using foam.*
- Use best practices for minimizing infiltration and stack effect, and require inspection/commissioning of these elements: vestibules at entrance doors, air sealing around window and door frames, sealing at exterior wall/floor junctions, and guarded blower door testing of individual spaces or entire building floors. *Building only has ONE ENTRANCE DOOR. DOOR CLOSURE WILL BE USED.*

Greater than 20 Units - New Construction Projects

In addition to the above, applicants should also document that they have considered each of the following three additional energy elements.

- 5) Lighting controls and high-efficiency **lighting technology** (such as LED or induction) offer significant benefits including greatly reduced energy use and cost, sophisticated controls, simplified maintenance, and longer life. Recommendations: *Will be programmable. All lighting will be LED. Thermostats*
 - Perform lighting design on a space-by-space basis, using the space-by-space lighting power density method (not the whole-building method). Use LED lighting where possible. Design to lighting power density of 15% less than required by the energy code. *All lighting will be LED.*
 - Require occupancy sensors where possible, for both indoor and outdoor lighting. Require short off-delay (1 minute or less), and commissioning of lighting controls. *All lighting will be on sensors.*
- 6) High-efficiency **heating and cooling systems** may cost incrementally more than standard-efficiency but have a positive payback over their useful life. Recommendations: *HEAT PUMP WILL BE INCORPORATED INTO HVAC.*
 - Select high-efficiency heating and cooling plants with rated efficiencies at least 15% higher than required by the NYS Energy Conservation Construction Code.
 - Select high-efficiency domestic hot water (DHW) plants with rated efficiencies at least 15% higher than required by the NYS Energy Conservation Construction Code. *NO HOT WATER at facility.*
 - Avoid placing heating and cooling distribution systems in unheated spaces, such as attics, basements, etc. Give preference to systems that have efficient distribution systems and low distribution losses (for example, room-by-room fan coils). *ALL HVAC WILL BE INSTALLED ON THE INTERIOR OF BUILDING.*
 - Use energy-recovery ventilation systems in air-conditioned buildings, and heat-recovery ventilation systems in buildings that do not have air-conditioning. Design ventilation systems to be separate from heating and cooling systems. *INCLUDED IN HVAC SYSTEM.*
 - Assess ductwork for heating, cooling and ventilation. If leakage is greater than 10%, seal chases and shafts with aerosol duct-sealing process. *ALL DUCTWORK WILL BE SEALED at every joint.*
 - Select heating/cooling systems that allow thermal zoning on a space-by-space basis. *NOT APPLICABLE*
- 7) **Whole-building energy modeling** can allow you to dramatically reduce energy costs, reduce carbon emissions, and even reduce some construction costs. Recommendation:
 - Employ whole-building energy modeling to optimize building energy performance. *Entire building energy modeling will be engineered in to design.*

Mitchell Moore
4-SEASON STORAGE

4-SEASON Storage

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1400 DRYDEN ROAD (2020)

Miscanthus

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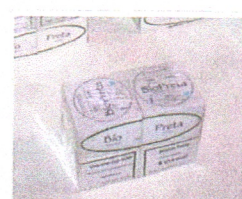
Golden Sweet Flag Orna...
hollyhillfarms \$6.67 USD



GARDEN BONBONS. Or...
FloresEnTu... \$15.27 USD



Miscanthus Gracillimus, O...
PerfectPlant... \$51.64 USD



4 cups of biochar and ver...
BioPreta \$15.00 USD



American Bittersweet 12 -...
bluffviewnursery \$2.00 USD



hollyhillfarms

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Q zoom

Fountain Grass Ornamental Grass Plants

\$9.86 USD

Ask a Question

Quantity

1

Overview

- Handmade item
- Feedback: [385 reviews](#)
- Only ships within United States.

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11

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Item Details

★★★★★ (385)

Shipping & Policies

These are grown in quart containers. Easily grown in average, medium to wet soils in full sun to part shade. Best in full sun. Tolerates part shade, but may not flower in too much shade. Cut foliage to the ground in late winter before new shoots appear. May be grown from seed and self-seeds in optimum growing conditions. May not be reliably winter hardy throughout USDA Zone 5 where it is best sited in a protected location.

Fountain grass is a warm season ornamental grass which typically grows in graceful, spreading clumps from 2-3' tall and as wide. Features narrow, medium to deep green leaves (to 1/2" wide) in summer, changing to golden yellow in fall and fading to beige in late fall. Foliage usually remains attractive throughout the winter. Showy, silvery to pinkish-white, bristly,



hollyhillfarms
in United States



Ice Dance Sedge Orname...
\$6.67 USD



Carex Toffee Twist Orna...
\$3.15 USD

bottle brush-like flower spikes arch outward from the clump in late summer like water spraying from a fountain (hence the common name). Flower spikes turn brownish as the seeds form, and spikes usually persist until late fall or early winter before shattering. Many excellent fountain grass cultivars are available in commerce, ranging in height from 1-5' and featuring a variety of different flower colors (purples, pinks or whites) and autumn foliage. Zones 6 to 9.



Silver Seple Sedge Orna...
\$7.71 USD



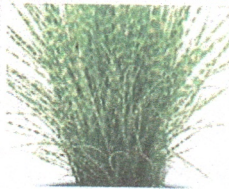
CAREX appalachica plants
\$6.09 USD



Heavy Metal Switch Grass
\$10.15 USD



Pure Dwarf mMondo Grass
\$4.93 USD



Miscanthus. s. Strictus Or...
\$2.19 USD



Sorghastrum Indian Steel...
\$1.99 USD

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2 Domestic Nandina Plants
plantsandthings
\$10.99 USD



Maiden Variegated Ornamental Grass ON SALE 2...
SeedGenie
\$1.79 USD



Fargesia nitida 'Blue Fountain'; hardy clumpin...
MayaGardensInc
\$19.99 USD





Along ROADWAY + ENTRANCE

Along Roadway + ENTRANCE

Types of Ornamental Grasses

Japanese Silver Grass *Miscanthus sinensis*

Zone: 5-9

Height: 3-6 feet

Japanese Silver Grass is one of the most often used grasses containing a large number of individual cultivars. Japanese silver grass is a robust, upright, dense grass growing in very tight clumps. Foliage is green, coarse in texture with some varieties having variegated foliage. Flowers are white, pinkish or reddish in color blooming from late August until frost. 'Autumn Light' and 'November Sunset' are two excellent varieties for Zone 4 climates. Japanese silver grass can be used as specimens or accent plants or as a medium screen. The plants will grow in a wide variety of soils but require ample fertility, moisture and full sun. Some plants will get large and so should be given ample room to grow. Japanese silver grass has outstanding fall color and in combination with flowers offer a nice display. *Miscanthus* must be cut back in early spring before growth starts. Cultivars to look for: 'Adagio', 'Autumn Light', 'Blondo', 'Dixieland', 'Flamingo', 'Kaskade', 'Little Nicky', 'Malepartus', 'November Sunset', 'Puenktchen' and 'Variegataus'.



◀ [Return to Ornamental Grasses Directory](#)

Along Roadway + ENTRANCE

Miscanthus sinensis 'Silberfeder'



Ornamental Grass Photos and Identification

Along ROADWAY + ENTRANCE



Miscanthus s. 'Zebrinus' Zebra Grass

