**GrOwING GREEN, a mobile greenhouse**

<table>
<thead>
<tr>
<th>Project Type:</th>
<th>Prototype Facility for Urban Farming</th>
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<tbody>
<tr>
<td>Project Address:</td>
<td>Butler University Center for Urban Ecology</td>
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<tr>
<td>Substantial Completion:</td>
<td>May 2016</td>
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<tr>
<td>AIA Submission Category:</td>
<td>Buildings less than 5 million dollars</td>
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GrOwING GREEN is a prototype for a fully automated mobile greenhouse designed to address the unique conditions of the urban farm and is the fifth in a series of projects in support of urban farming operations in Indianapolis over the course of the last six years. The project, funded with a grant from the Butler University Innovation Fund and built at a cost of $40,000, is designed to function year round and can be reconfigured to grow starts for a wide variety of crops. Mobility allows the facility to be shared between farming operations which are often small in scale, and mobility also amplifies the potential for community engagement and outreach by actually taking the farm to the community. The project incorporates automated heating, cooling and ventilation systems as well as a four zone irrigation system. All building components were rigorously researched, prototyped and fabricated to maximize durability, flexibility and efficiency while minimizing cost.

The mobile structure is well suited to the legal constraints of marginal properties, such as flood prone areas, where farming operations often exist. Mobile structures navigate within the seams of the building codes which distinguish between the temporary and the permanent, allowing structures to be installed legally on properties where more conventional facilities might not be allowed. Mobile structures also lend themselves to the temporal nature of the urban farm which can be subject to frequent dislocation through shifting patterns of urban development - when the farm moves the facilities move with the farm!

GrOwING GREEN is the first fully automated fully mobile greenhouse. The project was designed and built to address the needs of a specific client, but simultaneously offers an innovative prototype for a unique and emerging building typology.
Irrigation Diagram

3/4 x 16mm Iso Valve

14 3/4" Ball Valve
3/4" Pressure Regulator
3/4" Filter

16mm PE Tubing (.520x.630)
24" Aluminium Brench riber
support bracket cap with
hook at 12" O.C.

JetRain Low pressure Nozzle
at 2-1/2" O.C.