LEED for Homes Project Snapshot

GreenPath Homes
House on Elm St.
Indianapolis, IN
LEED PLATINUM

47% Expected Energy Savings Based on HERS Score
69% Monthly Water Savings as a % of Total Water Use

STRATEGIES AND RESULTS
This home, built in 1910 served as a way for local green building contractor & consultant William Wagnon of GreenPath Homes to demonstrate a LEED Platinum redevelopment. He sought to prove that this type of project can be economically viable and provide a better living environment for the homeowners. The formerly abandoned home now features healthy and

EXEMPLARY PERFORMANCE
The floor plan was changed to allow for a contemporary living style. Raised ceilings and other space improvements provide for maximum storage in the home. A rain garden now sits at the front of the house fed by a drain pipe from the roof. The backyard deck looks out onto a single-car garage, raised planters for growing vegetables, and a patch of lawn. The management of roof run-off and the site’s permeable lot earned this project more points toward its platinum certification. The homes exceptional energy efficiency was also a large contributor to its prestigious Platinum score.

PROJECT BASICS
Project Type: Single Family
Conditioned Space: 960 sq ft
Bedrooms: 2
Bathrooms: 1
Lot Type: Infill
Construction Type: Gut Rehab

KEYS TO SUCCESS
Flooring: 90% Hardwood
High Lot Density: 1 unit/0.1 acre
Insulation: on Hot Water Pipes
HVAC Type: Dehumidification Mode
Installed plants are 100% drought tolerant
Access to outstanding community resources
Team used the project for educating contractors

THE LEED FOR HOMES DIFFERENCE
✔ Construction Waste Management Plan
✔ On-Site Performance Tests
✔ Custom Durability Planning Checklist
✔ Third-Party Verified Documentation

About the Project Team
Green Path Homes
- William Wagnon
- James Poisel
- Jason Schafer
- Amy Forbush: Forbush Design, INC
- Christine Freiman: Silver Leaf Studios
- Parker Williams: Green Design Consultant
- Doug Pond: Land Planning

LEED for Homes Provider
AES

About LEED for Homes
LEED for Homes is a voluntary, third-party certification program developed by residential experts and experienced builders. LEED promotes the design and construction of high-performance green homes, and encourages the adoption of sustainable practices throughout the building industry.

www.usgbc.org/homes
Use this calculator to determine if your building uses less water than the requirements of WE Credit Total Water Use. Note: This calculator is a relative measure of water use based on how the products are designed and not how they actually perform in the field. Therefore, please use values/rates from the product specifications. Measurements from field testing should not be used in this calculator, but may be used to identify improperly installed or malfunctioning products.

**Daily Use**

<table>
<thead>
<tr>
<th>Number of bedrooms</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of homes or units</td>
<td>1</td>
</tr>
<tr>
<td>Occupants</td>
<td>3</td>
</tr>
</tbody>
</table>

**Outdoor Water Use**

*Numbers from WaterSense Water Budget Calculator*

| Baseline for the site (gal/peak month) | 9,513.00 |
| Landscape water requirement for site (gal/month) | 1,448.00 |
| Rainwater or graywater (gal/month) | 0.00 |

**Indoor Water Use**

Enter the water use of each shower, faucet, clothes washer, dishwasher, and toilet. For Showers

<table>
<thead>
<tr>
<th>Shower Name</th>
<th>Flow Rate (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shower 1</td>
<td>1.75</td>
</tr>
<tr>
<td>Shower 2</td>
<td>1.75</td>
</tr>
<tr>
<td>Average shower flow rate</td>
<td>1.75</td>
</tr>
</tbody>
</table>

**Faucets**

<table>
<thead>
<tr>
<th>Faucet Name</th>
<th>Flow Rate (gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathroom 1 Faucet</td>
<td>1.15</td>
</tr>
<tr>
<td>Bathroom 2 Faucet</td>
<td>1.15</td>
</tr>
<tr>
<td>Average faucet flow rate (gpm)</td>
<td>1.15</td>
</tr>
</tbody>
</table>

**Toilets**

<table>
<thead>
<tr>
<th>Toilet Name</th>
<th>Flush Rate (gpf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard House Toilet</td>
<td>1.30</td>
</tr>
<tr>
<td>Bathroom 2 Toilet</td>
<td></td>
</tr>
<tr>
<td>Average toilet flush rate (gpf)</td>
<td>1.30</td>
</tr>
</tbody>
</table>
### Clothes Washers

<table>
<thead>
<tr>
<th>Clothes Washer Name</th>
<th>Water Factor (WF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothes washer 1</td>
<td>6.00</td>
</tr>
<tr>
<td>Clothes washer 2</td>
<td></td>
</tr>
<tr>
<td>Average clothes washer flow rate (WF)</td>
<td>6.00</td>
</tr>
</tbody>
</table>

### Dishwashers

<table>
<thead>
<tr>
<th>Dishwasher Name</th>
<th>Gallons per Cycle (gpc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dishwasher 1</td>
<td>4.25</td>
</tr>
<tr>
<td>Dishwasher 2</td>
<td></td>
</tr>
<tr>
<td>Average dishwasher flow rate (gpc)</td>
<td>4.25</td>
</tr>
</tbody>
</table>

### Results

#### Daily Use

<table>
<thead>
<tr>
<th>Fixture</th>
<th>Baseline (gal/month)</th>
<th>House (gal/month)</th>
<th>Savings (gal/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Showers (gpm)</td>
<td>15.38</td>
<td>10.76</td>
<td>4.61</td>
</tr>
<tr>
<td>Faucets (gpm)</td>
<td>11.00</td>
<td>5.75</td>
<td>5.25</td>
</tr>
<tr>
<td>Toilets (gpf)</td>
<td>8.08</td>
<td>6.57</td>
<td>1.52</td>
</tr>
<tr>
<td>Clothes washers (WF)</td>
<td>12.21</td>
<td>7.77</td>
<td>4.44</td>
</tr>
<tr>
<td>Dishwashers (gpc)</td>
<td>0.65</td>
<td>0.43</td>
<td>0.23</td>
</tr>
<tr>
<td>Monthly indoor water use</td>
<td>4,258.35</td>
<td>2,814.53</td>
<td>1,443.83</td>
</tr>
<tr>
<td>Monthly outdoor water</td>
<td>9,513.00</td>
<td>1,448.00</td>
<td>8,065.00</td>
</tr>
<tr>
<td>Total</td>
<td>13,771.35</td>
<td>4,262.53</td>
<td>9,508.83</td>
</tr>
</tbody>
</table>

#### Baseline

- Monthly baseline indoor water use (gal/month) | 4,258.35
- Monthly baseline outdoor water use (gal/month) | 9,513.00
- Monthly baseline total water use (gal/month) | 13,771.35

#### Calculated

- Monthly calculated indoor water use (gal/month) | 2,814.53
- Monthly calculated outdoor water use (gal/month) | 1,448.00
- Monthly calculated total water use (gal/month) | 4,262.53

#### Savings

- Total monthly water savings (gal/month) | 9,508.83
- Total monthly water savings as a percentage of total water use (%) | 69.05%
<table>
<thead>
<tr>
<th>Fixture</th>
<th>Daily Usage</th>
<th>Units</th>
<th>Code</th>
<th>WaterSense</th>
<th>Super Efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Req't</td>
<td>Units</td>
<td>Daily Water Use (gal)</td>
</tr>
<tr>
<td>Showers</td>
<td>6.15</td>
<td>minutes</td>
<td>2.5</td>
<td>gal/minute</td>
<td>15.38</td>
</tr>
<tr>
<td>Faucets</td>
<td>5</td>
<td>minutes</td>
<td>2.2</td>
<td>gal/minute</td>
<td>11.00</td>
</tr>
<tr>
<td>Toilets</td>
<td>5.05</td>
<td>flushes</td>
<td>1.6</td>
<td>gal/flush</td>
<td>8.08</td>
</tr>
<tr>
<td>Clothes wash</td>
<td>0.37</td>
<td>loads</td>
<td>33</td>
<td>gal/load</td>
<td>12.21</td>
</tr>
<tr>
<td>Dishwasher</td>
<td>0.1</td>
<td>cycles</td>
<td>6.5</td>
<td>gal/cycle</td>
<td>0.65</td>
</tr>
</tbody>
</table>
Water Budget Tool Report

P. Mesler | GreenPath Construction
1055 Elm St. Indianapolis, IN 46203

Your landscape is 89% below the baseline for this site.

Single Site or Development? Single Site

Landscape Area 3396.0 sq.ft

Irrigation? No

Total Area of Turfgrass, Pools/Spas, and Water Features 0 sq. ft

Landscape Water Allowance 9513 gal/month

Landscape Water Requirement 1448 gal/month

Potential Peak Watering Savings 8065 gal/month

Summary of Hydrozones

<table>
<thead>
<tr>
<th>Zone</th>
<th>Area (sq. ft)</th>
<th>Plant Type / Landscape Feature</th>
<th>Water Demand</th>
<th>Irrigation Type</th>
<th>Required Water (gal/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3396</td>
<td>Groundcover</td>
<td>Low</td>
<td>None</td>
<td>1448</td>
</tr>
</tbody>
</table>