Greening Multifamily Affordable Housing in Rural Communities

Presented by Orlando Artze, COO, Community Housing Partners

Building Green In Rural America: A Symposium on Policy and Practice

June 9, 2010

Focus on Sustainability…

Why we build green:

Our values…

• Economic Sustainability
• Environmental Sustainability
• Social Sustainability

Our goals…

Build and preserve Communities of Choice, where sustainable, high quality, affordable housing and programs contribute to individual success and community improvement.
Benefits of Building Green

For our residents…
• Safer, healthier living environments
• Savings on their utility bills

For our communities…
• Conserves valuable natural resources
• Reduces use of fossil fuels that contribute to global warming
• Creates an attractive, quality product that provides affordable housing for the long-term

For our organization…
• Reduces operational expenses and capital expenditures
• Improves marketability of the property
• Attracts funders and investors
• Contributes to the success of CHP’s mission to create affordable, sustainable, housing opportunities and services for the people and communities we serve.

Yorktown Square II

2006 LIHTC Project
60 family units

Location: Yorktown, VA
York County

Yorktown Square II: Green Features

• The first multifamily preservation project in Virginia to receive Earthcraft Certification
• Energy efficient mechanical systems, appliances and lighting
• Extensive construction waste recycling
• Milling of trees into rough-hewn lumber
• Durable finishes
Yorktown Square II: Financing

- Tax Credit Equity: $2,425,000
- VHDA-VHF: $548,000
- RD: $595,160
- HOME: $375,000
- FHLBA-AHP: $125,000
- Deferred Developer Fee: $283,346
- NeighborWorks America: $100,000
- Total Sources: $4,451,506

Rutledge Hills

2009 LIHTC Project
48 family units

Location: Amherst, VA
Amherst County

Rutledge Hills: Green Features

- Site: land re-graded to slope away from the buildings; improvement of existing gutters to discharge water 5 feet away from foundation; landscaping with native and drought tolerant plants.
- Energy Efficient Building Envelope and Systems: Reduced air infiltration by 20% through performance of air sealing on utilites as well as attic, HVAC, plumbing and electrical penetrations; cellulose insulation to R-38 in the attic; sealed and insulated all attic access openings.
- Resource Efficient Building Materials: 30 year warranty shingles; Energy Star low-e double pane windows; 14 SEER HVAC units with HSPF of 9.0. Cooling and heating equipment sized within 6,000 btuh and 25,000 btuh of Manual J Heat traps and 2 feet of pipe insulation at water heater.
- Indoor Air Quality: kitchen range s vented to the exterior; low VOC paints, sealers and adhesives; installation of Carpet and Rug Institute certified low VOC carpet.
- Water Conservation: 1.6 galflush low flow toilets and 2.5 gallon low flow shower heads will be installed; Energy Star rated dishwashers will be installed.
- Waste Management: 50% of construction waste recycled.
Rutledge Hills: Financing

Tax Credit Equity: $2,026,613
VHDA-VHF: $540,000
RD: $1,404,769
HOME: $500,000
FHLBA-AHP: $245,000
Deferred Developer Fee: $114,625
NeighborWorks America: $384,000
Total Sources: $5,215,007

Rutledge Hills: Cost to Green

<table>
<thead>
<tr>
<th>Green/Sustainable Feature</th>
<th>Estimated Added Cost</th>
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<tbody>
<tr>
<td>Air Sealing to reduce air infiltration by 20%</td>
<td>$6,125</td>
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<tr>
<td>Double pane windows to upgrade and replace single pane windows</td>
<td>$9,250</td>
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<tr>
<td>Increase insulation from R-30 to R-38</td>
<td>$6,500</td>
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<tr>
<td>Upgrade from 13- to 14-SEER HVAC units with HSPF of 9.0</td>
<td>$48,000</td>
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<tr>
<td>Seal and insulate attic access openings</td>
<td>$2,000</td>
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<tr>
<td>Max 30-year versus 20-year roofing with installed roof edge</td>
<td>$500</td>
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<tr>
<td>Insulated Master bedroom window to reduce heat</td>
<td>$4,000</td>
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<tr>
<td>Downspout 2x3 gable Breast plate upgrades</td>
<td>$1,750</td>
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<tr>
<td>High efficiency water heaters with heat traps</td>
<td>$4,100</td>
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<tr>
<td>Outdoor lighting motion sensors to reduce unnecessary light trespass</td>
<td>$6,000</td>
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<tr>
<td>Upgrade to Energy Star dishwashers and refrigerations</td>
<td>$2,400</td>
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<tr>
<td>Add a roof to garage to reduce water damage</td>
<td>$1,000</td>
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<td>Test paint, audience and radon tested</td>
<td>$500</td>
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<tr>
<td>Re-grade site to slope away from building (not usually done in a typical rehab)</td>
<td>$11,400</td>
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<td>Landscape revisions to include native and drought tolerant plantings</td>
<td>$7,000</td>
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<td>Total Cost for Green Improvements</td>
<td>$128,455</td>
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Thoughtful, green, sustainable housing preservation is not only feasible, but is an ethical imperative…