

MEMORANDUM OF UNDERSTANDING BETWEEN GREENBELT HOMES INCORPORATED  
AND  
THE NAHB RESEARCH CENTER, INC.

This Memorandum of Understanding ("MOU") is made and entered into as of \_\_\_\_\_, 2010, by and between NAHB Research Center, Inc. (the "Research Center" or "NAHB-RC"), a Maryland Corporation with offices at 400 Prince George's Boulevard, Upper Marlboro, MD 20774-8731, and Greenbelt Homes, Incorporated ("GHI"), a Maryland privately-owned cooperative development located at One Hamilton Place, Greenbelt, MD 20770 (collectively, the "Parties").

WHEREAS, GHI desires to engage the Research Center to provide energy efficiency consulting services through the U.S. Department of Energy's Building America program (the "Work");

WHEREAS, the Research Center represents that it has the necessary capability in the area of residential energy efficiency to perform the Work; and

WHEREAS, the Research Center agrees that it will furnish the personnel, services, and all other necessary and related items for the performance of services as set forth in this MOU.

NOW, THEREFORE, in consideration of the obligations herein made and undertaken, the Parties covenant and agree as follows:

**I. Background**

GHI Pilot Program for Eventual Capital Improvements to All Units

Greenbelt Homes, Incorporated (GHI) is a privately-owned cooperative housing development in Greenbelt, MD with 1,600 housing units, comprised primarily of two-story townhomes constructed using wood frame, block masonry and concrete construction. The majority of the homes are over 70 years old. At the present time the homes are expensive to heat and do not have central cooling. Residents report high energy bills – particularly in Winter – and difficulty in maintaining comfort. In response, and in combination with the need to upgrade certain home components, GHI has proposed a three-phase pilot program of 28 units to test cost-effective improvements to the building envelopes and mechanical systems, in order to decide upon those particular building envelope and mechanical system improvements that will be made to the different types of homes in the cooperative. The participating units will be in four-unit rows, with three rows of cinderblock units, two rows of frame homes, and two rows of brick homes.

The first phase of the pilot involves a year-long effort to establish baseline data on the 28 pilot homes. Unobtrusive measuring devices will be installed in each pilot unit to measure,

measurements; analysis of test results and selecting upgrades; design and specifications for upgrades and construction to be done in phases 2 and 3; project management; construction; information synthesis and reporting; pilot program participant coordination; GHI member outreach and education; procurement of vendors; and financing of the GHI-wide upgrades. The discussion will also enumerate principles that will guide GHI and NAHB-RC in communicating with each other during the study and in reporting of measurements, findings and recommendations to all stakeholders in this pilot program.

## **II. Guiding Principles of This MOU**

### II.A. Communication Process between GHI and NAHB-RC

II.A.1. The process for written and verbal communication between NAHB-RC and GHI staff, committee members, Board of Directors, and GHI members (stakeholders) will be clearly stated at the onset of the pilot project. In general, NAHB-RC will work directly with Eldon Ralph and GHI staff.

II.A.2. The process for accommodating change between stakeholders in project scope or implementation activities will be clearly identified and communicated.

II.A.3. Roles and responsibilities for different aspects of this project will be clearly identified and agreed upon.

II.A.4. Potential conflicts of interests should be avoided or clearly identified.

### II.B. Reporting of Measurements, Findings and Recommendations

II.B.1. GHI and NAHB-RC will clearly state the goals for measurements and how goals will be achieved. For example, "comfort" is a goal, GHI and NAHB-RC will agree on how to measure it. The same is true for other goals such "system performance" and "energy savings".

II.B.2. GHI and NAHB-RC will clearly identify what measurements are being made and how the measurements address agreed-upon goals.

II.B.3. GHI and NAHB-RC will clearly state the assumptions behind modeling and recommendations.

II.B.4. GHI and NAHB-RC will standardize terminology. For example, measurement units for heating will be agreed upon -- not kilowatts for one system, BTUs for a second system, and therms for another system.

II.B.5. GHI and NAHB-RC will carefully document the inputs for the models used.

II.B.6. GHI and NAHB-RC will agree upon definitions of all technical terms to be used in the measurements, reporting and recommendations. To fullest extent possible, definitions will be written so that they can be understood by laypeople.

### III.G. Construction

III.G.1. GHI will finalize and announce the RFP; award contracts, and approve final work.

III.G.2. GHI will provide the overall quality assurance for the products selected and the installation.

### III.H. Information Synthesis and Reporting

(No GHI responsibilities)

### III.I. Participant Coordination

III.I.1. GHI will establish protocol for communication with participants.

### III.J. GHI Member Outreach and Education

III.J.1. GHI will do member outreach and education.

### III.K. Financing of GHI-wide Upgrades

III.K.1. GHI will be responsible for all financial aspects of the project and obtain financing for the phases of work, except for those services provided by NAHB-RC.

### III.L. GHI Warranties

III.L.1. GHI warrants that it owns all right, title, and interest in and to any programs, systems, data, or materials furnished to NAHB-RC hereunder.

III.L.2. GHI agrees to provide appropriate information and assistance as may be reasonably requested by NAHB-RC in connection with the Work.

III.L.3. GHI agrees that it will not at any time state in advertising or printed material or in any way represent that NAHB-RC endorses or recommends any product or materials, or that NAHB-RC implies endorsement of a product or material by virtue of performing this MOU.

III.L.4. NAHB-RC does not assume any responsibility to GHI or to any other person or entity with respect to performance of products, materials, or systems.

## **IV. Roles and Responsibilities of NAHB-RC**

### IV.A. Energy Audits

IV.A.1. NAHB-RC will develop/propose the energy audit design.

IV.A.2. NAHB-RC will conduct energy audits.

### IV.B. Measurements

IV.B.1. NAHB-RC will provide recommendations on measurements and the methodology to determine the energy performance characterization of the base and retrofit homes.

IV.B.2. NAHB-RC will develop/propose a plan for data collection, including protocol and quality assurance.

IV.B.3. NAHB-RC will develop/propose a data management plan.

IV.B.4. NAHB-RC will install measurement devices.

IV.K. Financing of GHI-wide Upgrades

IV.K.1. NAHB-RC will provide information on potential sources of funding (e.g. grants) to help finance the upgrades.

**V. General Provisions**

V.A. Term

V.A.1. This MOU shall commence on the date first above written and shall terminate upon final completion of the Work, or may be terminated without cause by either Party with 60 days written notice, unless modified by mutual agreement of the Parties or terminated prior to such time pursuant to the terms of this MOU. This MOU in no case shall continue beyond 2014 but may be extended by mutual agreement of the Parties.

V.B. Standard of Care

V.B.1. In performing the Work, the Research Center agrees to exercise professional judgment, made on the basis of the information available to the Research Center, and to use the same degree of care and skill ordinarily exercised in similar circumstances by reputable consultants performing comparable services in the same geographic area. This standard of care shall be judged as of the time the services are rendered, and not according to later standards. NAHB-RC makes no other warranty or representation, either express or implied, with respect to its services. Estimates of costs, recommendations and opinions are made on the basis of the Research Center's experience and professional judgment; they are not guarantees. Reasonable people may disagree on matters involving professional judgment.

V.C. Termination for Default

V.C.1. In the event that either Party hereto shall default in the performance of any obligation specified herein, the non-defaulting Party shall notify the other Party of the default in writing, and if such default is not remedied within fifteen (15) days from the date of such notice, or if the other Party is diligently attempting to cure such default but is unable to cure such default within thirty (30) days from the date of such notice, then the non-defaulting Party shall have the right to terminate this MOU immediately. Termination under this section or under any other section of this MOU shall not relieve or release either Party from any rights, liabilities or obligations which it has accrued prior to the date of such termination.

V.D. Limitation of Liability

V.D.1. NAHB-RC shall not be liable for damages or for any cause of action relating to or arising out of this MOU, except in cases of negligence, fraud, willful misconduct, or criminal conduct.

V.E. Remedies; Waiver of Subrogation

V.E.1. Neither Party, nor their parent, affiliated or subsidiary companies, nor the officers, directors, agents, employees or contractors of any of the foregoing, shall be liable to the other in any action or claim by either of them for incidental, indirect, special, collateral,

If to GHI:

Greenbelt Homes, Incorporated  
One Hamilton Place  
Greenbelt, MD 20770  
Attn: Eldon Ralph  
Emaileralph@greenbelthomes.net

V.I. Benefit; Entire Agreement; Beneficiaries; Counterparts

V.I.1. This MOU is binding upon and shall inure to the benefit of the Parties, their representatives, successors and assigns.

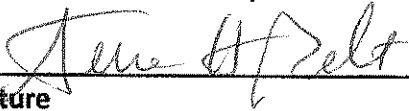
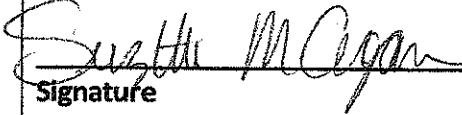
V.I.2. This MOU constitutes the entire Agreement of the Parties and supersedes all prior representations, proposals, discussions, and communications, whether oral or in writing. This MOU may be modified only by written instrument signed by both Parties hereto, and shall be enforceable in accordance with its terms when signed by the Party sought to be bound.

V.I.3. This MOU confers rights and obligations only on the parties hereto and is not intended, and shall not be construed, to confer any rights on any person or organization not a party hereto.

V.I.4. GHI shall have no rights as a third-party beneficiary or otherwise under any contract between the Research Center and any other person, organization, or government agency.

V.I.5. This MOU may be signed in two or more counterparts, each of which shall be an original.

IN WITNESS WHEREOF, the Parties have caused this MOU to be duly executed in person by their authorized officials on the dates set forth below:

NAHB RESEARCH CENTER, INC.	GREENBELT HOMES, INCORPORATED
 Signature	 Signature
Date: <u>10/21/10</u>	Date: <u>10/18/2010</u>
Name: <u>Terra H. Belt</u> (Printed or Typed)	Name: <u>Suzette M. Agans</u> (Printed or Typed)
Title: <u>VP + COO</u> (Printed or Typed)	Title: <u>President</u> (Printed or Typed)