## GHI Member Information Meeting Part I: Frame Homes April 25, 2015 11:00a.m. – 1:00p.m.

#### **STEVE SKOLNIK**

OK, let's get started! Good morning and welcome, everyone! My name is Steve Skolnik. I currently serve as President of your Board of Directors. Let's start with TWO announcements: If you have a question about the Homes Improvement Program, the Pilot Program, the Replacement Reserves Program, or other matter regarding your *frame home*, I invite you to write your question on a card, available at the table near the entry to this hall, and hand it to one of our volunteers. Throughout this meeting we are collecting cards, sorting and collating, so we can do our best to respond quickly and effectively to answer your questions. One question per card, please, for sorting purposes ...

We have prepared 3 handouts for you today, which were placed on your seats: there's a GHI map of where the Pilot Program homes are located, and what improvements were made to each; there's a table of ESTIMATED costs for H.I.P. member option improvements; and there's a sheet giving the motions that the Board of Directors will present for membership approval at the May 14 annual meeting (which I'm sure you all will attend with enthusiasm!)

Let me introduce some folks who are on the podium with me. First, though, how many of you are new to GHI, raise your hands ... OK, and now let's see hands of those for whom this is your first meeting about the Homes Improvement Program. Great!

- Board of Directors members who are present are:
  - Patricia Novinski
  - Bill Jones
  - Diana McFadden
- Jim Cohen, Buildings Committee Chair
- GHI staff members present are:
  - Eldon Ralph, General Manager
  - Joe Perry, Director of Finance
  - George Bachman, Director of Maintenance
  - Joan Krob, Director of Member Services
  - Tom Sporney, Director of Technical Services
  - Sheri Swaim, Special Assistant to the Manager & Communications Coordinator
  - Maesha McNeill, Human Resources Manager
  - Christine Gyemfi, Leasing Coordinator
  - Monica Johnson, Member Services Administrative Assistant

I would like to thank our volunteers collecting your question cards. (RAISE YOUR HANDS AND SMILE!)

I also want to thank Greenbelt City Council for their continued interest in and support of GHI: [ANNOUNCE NAMES OF MEMBERS WHO ARE PRESENT]

And of course, thanks to the Greenbelt Volunteer Fire Department and Emergency Medical Service for making this hall available for our use today.

I need to mention a few housekeeping items: First, our meeting needs to end promptly at 1:00pm, so we can prepare for this afternoon's session about our masonry homes. During the question/comment period, those who wish to speak should approach the microphone and line up; limit your remarks to 2 minutes or less, so everyone has a chance. If you've already spoken, please do not get up to speak again until all who wish to speak have had one opportunity. And while we may have differences of opinion, let us express our thoughts respectfully, and avoid any personal comments about others.

Our agenda today includes:

- H.I.P. work items that are funded through the Replacement Reserves Program (RRP)
- H.I.P. work relating to the crawlspaces
- H.I.P. work items that the Board has recommended to improve our homes, to be selected by individual members for their own homes
- General timeline for the Homes Improvement Program.
- The rest of our meeting will be dedicated to your questions and comments.
- Adjourn at 1pm sharp.

Now it is my pleasure to introduce Jim Cohen, our wonderful and long-time chair of the Buildings Committee, who will talk you through the Homes Improvement Program work items that are funded through our Replacement Reserves Program.

## JIM COHEN, CHAIR OF BUILDINGS COMMITTEE

## Scope of Reserve Funded Improvements to FRAME Units and Their Estimated Costs

GHI created the replacement reserves program in the early 1980s to facilitate the generation of funds needed to replace various components of our coop homes' infrastructure, including such items as roofs, doors, windows, siding on frame units, baseboard heaters, water heaters, underground piping, etc. These components have different lifespans, so the replacements of building components don't all occur at the same time. For example, our electric baseboard heaters have about a 25 year lifetime of use before they need replacement. The intent is that, for each component covered, its replacement is done coop-wide once its service life has been reached, without members having to wait for it to actually break down.

All of us GHI members pay into the Replacement Reserve Fund through our monthly fees. To save costs and promote ease of repair and replacement, the same style and brand of the infrastructure item is selected for installation in each type of unit. For example, in the last rehab in the 1980s, new windows in brick units were all planned to be "sliders". However, members wishing to have casement

windows – which open outward with the use of a crank – could do so by paying the *difference* in price between the sliders covered by replacement reserves and the casement windows.

Many of the components to be included in the Homes Improvement Program – for all units -- consist of items already included under Replacement Reserves.

For **frame** homes, these items include baseboard heaters, windows, doors and siding. Let's look at the estimated replacement reserve cost for each of these items. Of course, our homes vary in size and layout, so the actual cost of replacements varies as well; the RRP averages all of these and shows a single 'conglomerate' cost for each type of component. Individual member contributions to the RRP are proportional to the home size, so all members pay in their fair share. Estimated installed cost for an *electric baseboard heater* for frame homes is \$130 each. Many frame

units have 7 baseboard heaters, so the total cost for heater replacement in this example will be \$910, paid totally out of Replacement Reserves Funds.

For *windows* for frame homes, the total amount in replacement reserves for each home is \$3,852. For *doors*, RRP allocation for each of the two doors is \$695, for a total of \$1,390 per unit. For *siding*, the replacement cost RRP allocation is \$3,528 per unit.

This results in an estimated total cost – for replacement of a 'typical' frame unit's baseboard heaters, windows, doors, and siding -- of \$9,680 of Replacement Reserves funds for *each* frame unit. To repeat, these are funds that frame unit members have already contributed through monthly fees. The actual cost for your unit may be different; end units have more siding and more windows than middle units; one bedroom units have less of both, fewer heaters, and so forth.

Additional components for improving the energy efficiency of the frame units – such as insulation under the new siding – are NOT covered with Replacement Reserve funds. However, the insulation can be installed at extra cost if a member chooses to do so. Steve Skolnik will illustrate and describe what these optional components are for frame units and indicate their estimated costs. And now, I turn the program over to Eldon Ralph, who will discuss the proposed scope of crawlspace improvements, the benefits that members can expect for those improvements, their estimated construction costs, proposed funding method, and the likely impact on monthly fees.

**STEVE SKOLNIK**: Now we turn to one of our favorite topics, the crawlspaces beneath most of our homes. Our esteemed General Manager, Mr. Eldon Ralph, has agreed to present the latest information on work the coop will be addressing under our floorboards.

#### **ELDON RALPH, GENERAL MANAGER**

#### **Proposed Crawlspace Improvements for Frame Homes**

#### Current Features of Crawlspaces

Let's begin by reviewing the current features of the crawlspaces for frame homes:

• Frame crawlspaces are vented, i.e. air enters the crawlspaces through rectangular vents in the foundation walls during spring and summer months.

- Floor decks are wood. Fiberglass batt-insulation is installed between the floor joists. A significant portion of the insulation has failed.
- Polyethylene vapor barrier sheets on the earth floor do not consistently cover the ground; they are not sealed at the seams between sheets or attached to the foundation walls.
- Underground French drains are installed around the perimeter of the foundation walls. They collect and discharge water into sump pits. Sump pumps discharge the water from the pits to the outdoors. There are approximately two sump pumps in the crawlspace of every building row. Last year, a random survey of 20 crawlspaces revealed that a large number of the pumps were not working. All of the sump pumps in the (189) frame home crawlspaces have since been inspected by the maintenance staff. One hundred and ninety seven (197) sump pumps or 51.5 % of the 382 total pumps were replaced.
- In some situations, negative gradients around buildings, damaged downspouts, blocked swales or defective storm drain systems allow water intrusion into some crawlspaces. Last winter staff began a survey to identify drainage problems around frame buildings. The survey will be completed before the end of April. This year, underground drainage systems will be installed in the yards of 3 rows of frame buildings to mitigate water intrusion into crawlspaces.
- As you know, GHI's homes were once heated by steam boilers. Some buildings had attached boiler rooms. Heating pipes from those boiler rooms were encased in large 1-2 feet diameter concrete conduits or tunnels and routed underground to crawlspaces in other buildings. Over the years, some of these tunnels became a habitat for animals that entered the crawlspaces through loose vents. This year, the maintenance staff began sealing the tunnel openings in each crawlspace with bricks and mortar. To date, this has been completed in 105 or 55% of the 189 buildings. We hope to complete the project this year.
- Holes and penetrations at the base of shared plumbing walls and other locations need to be sealed.
- Bilco steel doors at crawlspace entrances are neither insulated nor water-tight.

## Crawlspace Improvements Done During the Pilot Program

During the Pilot Program, the Homes Innovation Research Labs identified an improvement plan for the vented crawlspaces within two rows of frame homes, which included the following remediations:

- Correction of a water intrusion problem into the crawlspace at one of the buildings.
- Ensuring that sump pumps were operational.
- Removal of the failed fiberglass batt- insulation.
- Replacement of the polyethylene vapor barrier sheets with new sheets anchored to the crawlspace walls.
- Application of spray foam insulation to the underside of flooring.
- Insulation of the Bilco entrance doors with spray foam.

## Alternative Frame Crawlspace Configuration for the Homes Improvement Program

After the pilot program, several concerns arose about the use of spray foam insulation such as - its potential toxicity; its application is very expensive; it encapsulates pipes and wires that might need servicing in future, making repairs more difficult and time consuming; it might be possibly hazardous if foam must be cut out of the way. A Buildings Committee special task force on crawlspaces, identified

an alternative solution whereby the crawlspaces can be configured as 'partially-conditioned' spaces. A partially conditioned crawlspace is controlled for humidity and temperature as the exhaust fan draws air down from the homes into the crawlspace. This also has the effect of warming the wood floor deck. Since the air pressure in the crawlspace is slightly reduced by the fan, it is very important that the foundation is sealed, to prevent cold outside air from entering. This crawlspace configuration does not require the use of any spray foam insulation.

The Board of Directors subsequently approved the installation of a partially conditioned crawlspace configuration (that was recommended by the Buildings committee task force and vetted by HIRL) in two rows of frame homes. HIRL prepared the specification for the work which includes the following components:

- Ensuring that there is no ground water incursion into the crawlspaces.
- Removing failing fiberglass batt- insulation.
- Replacing plastic sheeting vapor barrier on the earth floor, extending up onto foundation walls and securing to the walls.
- Installing rigid foam board insulation on the inside of foundation walls.
- Sealing all vent openings.
- Sealing holes and penetrations at base of shared plumbing walls and in other locations with a silicone sealant.
- Installing an insulated door at the crawlspace entrance that is separate from the Bilco steel door.
- Installing a low-capacity ventilation fan with enthalpy controller.
- Providing a monitoring system for sump pump(s).
- Considering need for and possibly installing dehumidifier

The two buildings selected for the test project are 9J-R Laurel Hill Rd and 54A-F Ridge Rd. We hope to receive bids from contractors for the work by May 21<sup>st</sup> and have it completed this summer. HIRL will monitor the air leakage between the units and crawlspaces as well as temperatures and humidity levels in the units and crawlspaces before the construction work begins on the test project and after it is completed.

## Benefits of Crawlspace Improvements

The Board of Directors has determined that crawlspace improvements should be a mandatory item that is included in the Homes Improvement Program. During 2016 to 2020, GHI proposes to install a partially vented crawlspace configuration discussed earlier in all other frame crawlspaces. Remediation of the crawlspaces will ensure the following benefits:

- Preserve the building foundation's durability.
- Restrict animals from entering.
- Improved moisture control in the crawlspaces.
- Reduced heat losses from the crawlspaces.
- Improved indoor air quality within the homes.

## Estimated Costs of Crawlspace Improvements

Based on the costs obtained during the pilot program, further discussions with a crawlspace

improvement contractor, and cost estimates from the Means Construction catalog, staff has estimated that it may cost a total of \$4.2 million to undertake all the crawlspace improvements that are needed in frame, brick and block buildings. The estimated cost of improvements for frame buildings is \$2.7 million.

#### Sources of Funds for Crawlspace Improvements and Impact on Coop Fees

The Board plans to utilize \$1.2 million from GHI's unreserved operating fund for crawlspace improvements. Hence, GHI may need to borrow up to \$3.0 million to fund all of the crawlspace work for frame and masonry homes. During the annual membership meeting on May 14<sup>th</sup>, the Board of Directors will request the membership to vote on a motion to authorize the borrowing of up to \$3.0 million for a period of 10-15 years, at the most advantageous terms available, in order to fund crawlspace improvements in frame, brick and block rows.

\$1.9 million of the \$3.0 million to borrowed funds may be needed for frame home crawlspace improvements. One of the handouts that you have been given shows the estimated monthly fee payments that members would make towards repayments of the loan over different interest rate and repayment term scenarios. Let us review the handout.

#### **Conclusion**

In conclusion, I thank everyone who has been involved in getting us to this point where we have developed a plan to begin undertaking the crawlspace improvements in 2016. It has been a very thorough and collaborative process involving the Board of Directors, Buildings Committee, Finance Committee, Staff, the Homes Innovation Research Labs, pilot members, and members who offered valuable comments and feedback throughout the process which began in 2008 when the Buildings Committee was formed. I encourage you to come to the Annual Meeting on May 14<sup>th</sup> to discuss and vote on the proposed motion the Board will submit to the membership regarding a loan for financing crawlspace improvements.

#### **STEVE SKOLNIK**

# Optional Improvements to be Offered to GHI Members, and the Estimated Costs Individual Members Would Pay for Those Improvements

During our Pilot Program, and based on recommendations from the building science consultants at H.I.R.L., GHI has installed and tested a number of improvements in the frame homes; some but not all of these have been selected by the Board of Directors as appropriate (useful, advantageous?) for incorporation in our homes. In order to afford members the greatest possible flexibility of choice, the Board voted to recommend that members be allowed to select from this list the improvements that each wishes to incorporate, at his or her individual cost, to upgrade that home.

Member-selected options for frame homes:

- 1. Install additional attic insulation to increase from r-16 to approximately r-38 insulation value; this item includes construction of insulated floor storage area in center portion of the attic.
- 2. Provide attic top plate/ perimeter sealing and insulate attic hatch/pull-down stair.

- 3. Install bath ventilation fan with time controller.
- 4. Install bath fan automatic controller for programmable fan operation throughout the day.
- 5. Install kitchen ventilation fan with manual switch control.
- 6. Install new storm doors at time entry doors are replaced (entry doors themselves are paid for under replacement reserves program, and are not part of this item.)
- 7. Install exterior insulation at the time replacement vinyl siding is installed (siding itself is paid for under replacement reserves, and is not part of this item.)
- 8. Install split system ductless heat pump system.
- 9. Install digital wall thermostats for control of baseboard heaters at time replacement heaters are installed (heaters are paid for under replacement reserves, and are not part of this item.) Downstairs thermostat shall be programmable, setback and will control all downstairs heaters. Upstairs thermostats will be in each bedroom and in hallway, for control of the individual heater in that area.
- 10. Install ceiling radiant heater in bathroom.
- 11. Install ceiling radiant heater in kitchen.

Cost estimates for each work item are on your handout; you will note these vary for different home sizes and layouts, e.g., a split-system heat pump for a 2-bedroom, 2-level frame home will have 3 indoor air handler units, while a 1-bedroom, 1-level unit with smaller living area would have 2 indoor units and a smaller capacity overall – therefore less expensive.

Provided we (the member-owners) vote to approve the H.I.P. plan next month at our May 14, 2015 annual meeting, each member will select from the list which improvements are desired. There will be lots of time for this, no need at all to make the selections before next month's vote. You will also note that a member who chooses none, will incur no debt for these work items at all.

There are 3 choices each member will have to pay for the optional H.I.P. work items: first, a member can simply pay the full cost when the work is installed; second, a member can finance the work through a GHI program that is currently being developed (GHI will borrow funds at the most advantageous terms we can, in order to offer smaller loans to individual members); third, a member can finance the work privately by securing your own loan (from a bank, a rich uncle, your in-laws ...)

Now I would like to introduce Mr. Tom Sporney, our Director of Technical Services and now our Homes Improvement Program Director, to tell you a bit about time line and scheduling matters.

#### TOM SPORNEY, HOMES IMPROVEMENT PROGRAM DIRECTOR General Timeline and Scheduling

I'm Tom Sporney, your contact for the Homes Improvement Program (H.I.P.). We've already begun the planning for the rollout of HIP. ARC has chosen a recommended color palette for vinyl siding, staff is speaking to vendors about windows, doors, and siding, and we're working on a crawl space test project. Here's how we see things going:

In the 3rd quarter 2015, GHI staff will prepare the bidding specification for the project. This will include the replacement reserve items for HIP, and the opt-ins. In order to do this, we will ask the participating members which opt-ins they are interested in. In the 4th quarter we'll send out the RFP, and expect to receive bids back by the end of the year.

At that time, we'll evaluate the prices received, and inform participating members of the contractor pricing for opt-ins. We'll have members sign contracts for their opt-ins, and finalize choices. Then with the contractor, we will execute a contract, and prepare a schedule.

This is what one cycle looks like:

		Q3	Q4	Q1	Q2	Q3	Q4		
185 frame	reserve items opt-ins	member survey	RFP	member contract	C	onstructio	n		

and when you lay it out over 5 years:

		2015		2016			2017			2018			2019				2020						
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
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GHI has decided to organize the project ourselves, acting as our own General Contractor. We'll be bidding out and hiring separate contractors for different aspects of the work:

- crawlspace work
- windows, doors, siding replacements, outside wall insulation
- attic work (sealing, insulation)
- HVAC work (heat pumps)
- electrical work (baseboard heaters, thermostat systems, exhaust fans, radiant heaters)

Various types of work will be going on in the community simultaneously, and schedules will be developed to coordinate so contractors work efficiently, not jumping around too much, but that contractors are not getting in each other's way.

## **STEVE SKOLNIK**

One other thing I want to tell you about: There is a program, EmPower Maryland, that may benefit some GHI members; funded by the Maryland Energy Administration and delivered by contractors, individual homes can get an inexpensive energy audit that qualifies the owner for 50% rebate on the cost of contractor-installed, energy-saving improvements, up to total savings of \$2,000. There are strings and caveats, and we are currently in conversation with program providers to see whether this program can work in GHI. There are also direct member rebates for purchase of split-system heat pumps; more on this to come in the coming months.

OK, we have time now for questions and comments from members. Again, those who wish to speak should approach the microphone and line up; limit your remarks to 2 minutes or less, so everyone has a chance. If you've already spoken, please do not get up to speak again until all who wish to speak have had one opportunity. And while we may have differences of opinion, let us express our thoughts respectfully, and avoid any personal comments about others.

## [Steve facilitates Q&A from podium, interspersing speaker questions with card questions.]

OK, we need to bring this to a close ... I want to thank you all for coming today, and for taking an interest in your (well, OUR) cooperative. And, I will look forward to seeing you all, and the neighbors you invite along, at next month's annual meeting – May 14<sup>th</sup>!