FSILG Facilities Renewal : Background

• **FSILG Facilities Renewal Committee** - Joint AILG/DSL committee approved as AILG ad-hoc committee in November 2018.
  • Committee Charge: To promote and support implementation of the physical renewal of the FSILGs to ensure they remain vital and vibrant resources to MIT students by implementing the recommendations of the 2018 facilities assessments.

• **Our goal:** To make it easy and affordable for organizations to make their houses safer for students.

• Identified potential life-safety systems for community-wide projects (same model as CNUP program)
FSILG Facilities Renewal Committee

- Pam Gannon ’84, Chair, Director of FSILG Alumni Programs, DSL, IRDF Grant Advisory Board
- Eric Cigan ‘83, AILG Treasurer
- Tom Stohlman ’76, ’77, MAR ’78, AILG Facilities Committee Chair
- Bob Ferrara ’67, AILG IT Committee Co-Chair, former Senior Director, DSL
- Scott Klemm, Executive Director, FSILG Cooperative, Inc. (FCI)
- Josh Schuler SM’ ‘00, AILG Building Safety Facilitator, FCI Director of Facilities
- Brad Badgley, Associate Dean and Director of FSILGs, DSL
- David Friedrich, Sr. Associate Dean, Housing and Residential Services, DSL
FSILG Life-Safety Improvement Program (FLIP)

- Identified life-safety systems improvement opportunities common to all houses:
  - Phase 1: Doors and Egress
  - Phase 2: Fire alarm upgrades
  - Phase 3: Sprinkler system upgrades
- Program concept endorsed by AILG Board and IRDF Grant Advisory Board, and approved by the MIT Treasurer
- AILG hired consultant to complete detailed survey of each house and oversee Phase 1 program.
Funding for FLIP Phase 1

• FLIP Phase 1 is a safety improvement program, so qualifies for support from the IRDF
• IRDF is covering 100% expense of project manager + surveys of each house
• IRDF is covering project cost at standard safety percentage: 75% IRDF, 25% house
  -> Houses will be invoiced after completion of work
Review of Pilot Reports

Celeste Hynick, RA, LEED GA, MCPPO
Coast & Harbor Associates, Inc.
www.coastandharbor.com
LIFE SAFETY RENOVATIONS
Phase I – Repair/Replace Egress Doors and Hardware
Phase I – Repair/Replace Egress Doors and Hardware

Includes:

- Entrances and exit doors
- Stair doors
- Hallway doors
- Doors to rooms where window egress is required

Does not include:

- Doors unrelated to egress
- Windows required for egress
- Pathways, stairs, and landings
Looking at...

- Number of doors in each opening
- Door fire ratings
- Hardware types (handle, lock and lock type, deadbolt, magnetic hold, finish)
- Closer locations
- Accessibility compliance
- Door materials, trims, directions of swing, and conditions
- Threshold conditions (cracked, beveled, and height)
## Existing Conditions Survey

**FSILG Facilities Renewal Committee**  
**LIFE SAFETY RENOVATIONS**  
**Phase I - Repair/Replace Egress Doors and Hardware**  
**APPENDIX A: Existing Conditions Survey**

<table>
<thead>
<tr>
<th>House</th>
<th>Door No.</th>
<th>No. Drs.</th>
<th>Door Type</th>
<th>Room Name</th>
<th>Rating</th>
<th>Knob Type</th>
<th>Keyed</th>
<th>Lock Type</th>
<th>Dead bolt</th>
<th>Mag. Hold</th>
<th>Closer</th>
<th>Accessible</th>
<th>Finish</th>
<th>Swing</th>
<th>Trim</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>001a</td>
<td>1</td>
<td>Solid Core</td>
<td>Hallway</td>
<td>None</td>
<td>Handle</td>
<td>No</td>
<td>None</td>
<td>No</td>
<td>No</td>
<td>Closer</td>
<td>No</td>
<td>Steel</td>
<td>Impractical to Change</td>
<td>Metal</td>
<td>replace handle with lever</td>
<td></td>
</tr>
<tr>
<td>001b</td>
<td>1</td>
<td>Metal</td>
<td>Boiler/Mechanical</td>
<td>A: 3 Hour</td>
<td>Lever</td>
<td>Yes</td>
<td>None</td>
<td>No</td>
<td>No</td>
<td>Closer</td>
<td>No</td>
<td>Satin Nickel</td>
<td>In Direction of Travel</td>
<td>Metal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>003</td>
<td>1</td>
<td>Metal</td>
<td>Storage</td>
<td>None</td>
<td>Lever</td>
<td>No</td>
<td>None</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>None</td>
<td>Satin Nickel</td>
<td>In Direction of Travel</td>
<td>Wood</td>
<td>needs closer or reverse swing</td>
<td></td>
</tr>
<tr>
<td>004</td>
<td>1</td>
<td>Metal</td>
<td>Hallway</td>
<td>B: 1 1/2 Hour</td>
<td>Lever</td>
<td>No</td>
<td>None</td>
<td>No</td>
<td>Yes</td>
<td>Closer</td>
<td>No</td>
<td>Satin Nickel</td>
<td>Not in Direction of Travel</td>
<td>Metal</td>
<td>in wrong direction but on holdback</td>
<td></td>
</tr>
<tr>
<td>005 ext</td>
<td>1</td>
<td>Metal</td>
<td>Entrance/Exit</td>
<td>None</td>
<td>Lever</td>
<td>Yes</td>
<td>Push Button</td>
<td>No</td>
<td>No</td>
<td>Close</td>
<td>No</td>
<td>Satin Nickel</td>
<td>In Direction of Travel</td>
<td>Metal</td>
<td>tighten lockset, patch holes, replace weatherstripping, paint</td>
<td></td>
</tr>
<tr>
<td>006</td>
<td>1</td>
<td>Metal</td>
<td>Food Service</td>
<td>B: 1 1/2 Hour</td>
<td>Lever</td>
<td>No</td>
<td>None</td>
<td>No</td>
<td>Yes</td>
<td>Closer</td>
<td>No</td>
<td>Satin Nickel</td>
<td>In Allowed Direction</td>
<td>Metal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>008</td>
<td>1</td>
<td>Wood - Solid Core</td>
<td>Bath</td>
<td>None</td>
<td>Knob</td>
<td>Yes</td>
<td>Turn Button</td>
<td>No</td>
<td>No</td>
<td>None</td>
<td>No</td>
<td>Brass</td>
<td>In Allowed Direction</td>
<td>Wood</td>
<td>loose knob, needs closer</td>
<td></td>
</tr>
</tbody>
</table>
What the codes say

Built in the 1800s as single-family houses, “grandfathered” with today’s code.

- As lawfully existing, non-conforming structures, do not need to meet today’s code requirements.
- Per IEBC, the residences must be maintained, at a minimum, to their current level of compliance or improved to meet basic safety levels.
- “Basic Safety Levels” arguably include remediation of issues that impede egress and safety to the extent feasible.
- Maintaining a facility to its “current level of compliance” implies that existing egress doors should maintain their level of fire resistance and safety.
What do we do first?

I – Most Urgent/Necessary
Issues with the egress doors and hardware that pose a threat to safety and security that should be addressed as soon as possible (i.e., within three months to a year).

II – Less Urgent/Optional
Issues that pose a less significant threat to safety and security, which have less or no urgency.
**Most Urgent/Necessary**
- Doors that do not close or open, are missing, or remain open in a direction that blocks egress travel
- Locks on egress doors (excluding sleeping rooms) or any inoperable locks on sleeping rooms
- Deadbolts on any door except sleeping rooms and closets
- Latches and hasps on any doors on the push side except closet doors
- Thresholds that a tripping hazard, such as those that are broken or not beveled
- Doors that have minor damage that impact fire resistance
- Missing closers
- Magnetic Holdback hardware where required
- Locks on doors to sleeping rooms that require repair or replacement
- Operable doors that require adjustment, repair, or replacement
- Operable doorknobs and levers that require tightening, adjusting, or replacement

**Less Urgent/Optional**
- Grandfathered doors that do not swing in the direction of egress travel that can be reversed
- Magnetic Holdback hardware where desired but not required
- Cosmetic Improvements
- Minor threshold repairs
<table>
<thead>
<tr>
<th>Room Type</th>
<th>Notes</th>
<th>Priority I - Most Urgent</th>
<th>Priority II - Necessary</th>
<th>Priority III - Less Urgent</th>
<th>Total Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>x05 ext</td>
<td>Tighten lockset, patch holes, replace weatherstripping, paint</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 720</td>
</tr>
<tr>
<td>x04 Hallway</td>
<td>In wrong direction but on holdback</td>
<td>$ 1 $ 582</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x03 Storage</td>
<td>Needs closer or reverse swing</td>
<td>$ -</td>
<td>$ 1 $ 309</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x08 Bath</td>
<td>Loose knob, needs closer</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x09 Storage</td>
<td>0</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x01a Hallway</td>
<td>Replace handle with lever</td>
<td>$ -</td>
<td>$ 1 $ 438</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x01b Boiler/Mechanical</td>
<td>0</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x11 Study/Living</td>
<td>Cannot be locked, needs closer</td>
<td>$ 1 $ 303</td>
<td>$ 1 $ 309</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x11 ext Entrance/Exit</td>
<td>Cannot change door swing, remove deadbolt, cannot be locked from inside, needs closer</td>
<td>$ 1 $ 493</td>
<td>$ 1 $ 309</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>x06 Food Service</td>
<td>0</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>100LA ext Entrance/Exit</td>
<td>Historic, patch wood trim, weatherstrip</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
</tbody>
</table>

Note: Estimates are based on current pricing and are subject to change.
Example: Total Costs

Costs
Refer to APPENDIX B: Prioritized Recommended Improvements with Costs for details on the improvement costs summarized by priority. The cost of the prioritized items:

<table>
<thead>
<tr>
<th>Priority I: Most Urgent/Necessary</th>
<th>$ 14,906</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority II: Less Urgent/Optional</td>
<td>$ 4,881</td>
</tr>
<tr>
<td>Total Recommended Improvements</td>
<td>$ 19,787</td>
</tr>
<tr>
<td>Potential Cost</td>
<td>$ 4,947</td>
</tr>
</tbody>
</table>

Note: Costs may vary from this estimate due to inflation, supply issues, and/or further development of the scope of work at each door location.
Moving forward

- Existing conditions allowed to remain so long as they are maintained, at a minimum, to their current level of compliance, not made less in compliance, or improved to meet basic safety levels.

- Improvements must meet current IBC code standards to the extent feasible
Next Steps

Pilot houses: Beta Theta Pi, Sigma Kappa, Theta Chi

• Review reports with organizations
• Bid projects
• Complete work
What are your questions/concerns?