MINUTES OF THE HALF CROWN-MARSH NEIGHBORHOOD CONSERVATION DISTRICT COMMISSION Approved at the 05-08-2023 Meeting

April 10, 2023. Meeting conducted online via Zoom Webinar- 6:00 P.M.

Commissioners present: James Van Sickle, Chair; Marie-Pierre Dillenseger, Vice-Chair; Jo Solet, Peter

Schur, members; Adrian Catalano, alternate Commissioners Absent: Rory O'Connor

Staff present: Eric Hill; Sarah Burks

Due to statewide emergency actions limiting the size of public gatherings in response to COVID-19, this meeting was held online with remote participation and was closed to in-person attendance. The public was able to participate online via the Zoom webinar platform.

With a quorum of commissioners and the applicant present, James Van Sickle, Chair, called the meeting to order at 6:03 P.M. He explained the online meeting instructions and public hearing procedures then introduced the commissioners and staff.

Chair Van Sickle noted that the two design review cases on the agenda were for two sides of the same building, and due to the shared scope of work, they would be reviewed together.

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Eric Hill, staff, shared slides and explained a brief history of the site and the double-house at 157-159 Mt. Auburn Street.

After Eric's presentation, Blake Allison, applicant and owner of 159 Mt. Auburn Street, introduced himself to the commission. He explained that he has owned the building since 1983 and for this case, is a co-applicant with his neighbors Mike and Margaret Rorick of 157 Mt. Auburn Street, who have owned their unit for about 15 years.

Mr. Allison added to Mr. Hill's presentation stating that the front chimney had never been in use as it had been closed for decades inside. The rear chimney is only used on the #157 side. All owners in the building hope to remove all gas appliances and convert the building to all-electric, along with the solar roof. From an energy-saving standpoint, the intent was to remove both chimneys as cold air presently gets pulled into the attic spaces by the chimneys. Their removal would also provide a better location of

solar panels near the crest of the roof and reduce issues with shadows onto panels. The unit at #157 Mt. Auburn Street already has an electric car charging station.

During Mr. Allison's brief explanation of the project, Dr. Schur joined the meeting. Dr. Schur was audible and stated that he had already reviewed the case material prior to the hearing.

Mr. Van Sickle opened the meeting up to questions by the Commission.

Marie-Pierre Dillenseger, Vice-Chair, first asked for clarification as to what was the main reason for the removal of the two chimneys.

Blake Allison stated that there were many factors, but the heat loss and concerns with shadows onto the new panels would not be ideal for the project.

Ms. Dillenseger then asked if the panel configuration (locations and number of panels) would change if the chimneys were to remain.

Blake explained that the submitted schematic as part of the application was not dimensional and was more of an example than what would be the final installation. He stated that the owners had not yet selected a solar panel company to furnish true dimensioned plans with panel sizes. He did note that most companies have large, rectangular panels and the removal of the chimneys would make for a cleaner installation, especially near the most visible part of the roof, near the crest.

Ms. Dillenseger then asked if the chimneys were to remain, would there be a need for substantial work to repair and stabilize them.

Blake elaborated that the front chimney had never been repaired and was not in good condition. The rear chimney was recently repaired from the roofline down through the building. From this, the front chimney would likely need to be torn down and rebuilt by a mason.

Lastly, Ms. Dillenseger asked if the Roricks had ever gotten approval for their vehicle charging station.

Margaret Rorick, owner of #157 Mt. Auburn St., stated that she did not know they needed approval at the time for such equipment.

Mr. Hill added that these types of projects are rarely flagged by the Inspectional Services Department in the permitting system as they are classified as electrical permits, with most electrical projects not being visible from a public way.

Dr. Schur asked if the chimneys were to remain, would they both cast shadows onto the panels. He also asked if the proposed panels were to be flat in plane with the roof or angled.

Blake Allison answered that the front chimney would cast shadows onto the panels, but the rear chimney is on the northern section of the roof and likely would not. He added that the panels would be flush with the roof.

Dr. Solet asked if there was a sample of the proposed solar panel finish, noting concerns about reflectivity of them at the roof.

Blake explained that as he had not hired a company yet, he did not have any sample. He did note that Gerry Street and Story Street have examples of recent solar paneled roofs and they are basically a semi-gloss finish, which is not too reflective.

Mr. Van Sickle asked if there was any idea as to what percentage of power needed would be met on each side of the building every year.

Blake described that some days, there would be sufficient supply, and others there would not. Winters would be much less productive, and summers would be gaining a lot more energy. The house would still be tied to the grid, so whenever solar energy was not being produced, the house would tap into the grid for electric energy. He estimated that about 80% of energy for the year would be covered by the panels through the net metering system in place with Eversource.

Mr. Van Sickle asked why there were fewer panels at the rear vs. the front of the house.

Blake affirmed that this drawing was a sort of composite of three companies, as the southern exposure would be strongest and near Mt. Auburn Street, while the north has less sunlight, tree canopy, and dormers to deal with.

Mr. Van Sickle asked if there was any chance the equipment could be located toward the rear of the building, rather than the front.

Mr. Allison stated that the solar system must be tied to the electric panel. He is anticipating that solar panel companies will want a conduit from the roof down to a panel in the basement.

Ms. Dillenseger asked a follow-up question on the conduit for more information regarding the need, size, and location of it.

Mr. Allison explained that the conduit would be necessary and would run from the roof to the basement. It would be metal, painted to match the clapboards on the house, and would be about 1" in diameter.

Mr. Catalano stated that 1" seems like that is small for such a system. He added that it may be a good idea to run the conduit down the rear of the house and across the foundation to the front, or at the interior, from back to front, to mitigate the visibility.

Margaret Rorick added that she agrees that anything to make it the least visible would be a huge benefit.

Dr. Schur suggested that the owners look into lightning rods for the panels.

Mr. Van Sickle and Ms. Dillenseger explained how these are new issues and the commission is going to be grappling with such deliberations many times in the future, they want to get this right. Both commissioners asked the applicants if they would be willing to do more investigating to locate the panels and conduit in the least obtrusive way possible.

Mr. Allison said that he would be glad to do more investigating.

Mr. Van Sickle opened the meeting up to questions or comments from members of the public. There were none. He then opened the meeting to comments by commissioners.

Ms. Dillenseger opened by stating that she did not feel that the commission had the full picture and was missing details. She went on to state that she understands the need for the solar equipment installation on the side of the house but is uncomfortable having them all visible from the street. She said that if they were to approve these, maybe it would be best on the façade with proper screening than on the side next to the driveways without screening. She was not comfortable with the proposal at this time, due to the lack of clarity.

Dr. Solet stated that she understands the chimney shadows are a factor and they are important and would be missed.

Dr. Schur thought the project was appropriate and felt that staff could handle the details on the location of the mechanical panels and conduit.

Mr. Catalano stated that he wished that the applicant had already selected a solar company as the representative to be present to answer specific questions on the location and accessibility of the solar systems. He would like to see a better solution with it screened either by locating it on the inside or at the exterior with visual screens.

Mr. Van Sickle added that in this period of change, there is a lot to review and keep up with. These types of projects have a big impact on the visuals of the houses. He explained that he puts chimneys into two categories: character-defining chimneys and utilitarian chimneys. If a chimney is integral to a building's design or style, then it should be retained always, but the smaller, less significant chimneys could likely go. The idea of locating the conduit inside where the chimneys were to be demolished seemed like a good idea to him.

Peter Schur made a motion to approve the project with the condition that the applicant work with staff and the solar company to find a solution that mitigates the visibility of any new exterior solar mechanical panels and conduit at the exterior. Jo Solet seconded the motion.

Mr. Van Sickle began a voice vote with a vote of 2-1 in favor of the motion with JS and AC abstaining. Approved.

Mr. Hill said that he would work with the owners and relay the selected outcome back to the commission at the next available meeting.

Adrian Catalano left the meeting at 7:30.

"Policy Governing the Installation of HVAC Equipment at Historically Designated Sites in Cambridge." Hearing to consider adoption of policy.

Mr. Van Sickle asked Mr. Hill to explain if there is any additional information he could provide on this policy.

Mr. Hill added that the *Policy Governing the Installation of HVAC Equipment at Historically Designated Sites in Cambridge* is similar to the Guidelines for Preservation and Replacement of

Historic Wood Windows in Cambridge, which was approved first in 2010 and updated a few times since that year. These policies are generated by staff and are informative tools for owners in districts to understand what a commission looks for on common preservation issues. They are typically used as best practices for applicants and owners and help staff guide applications through the review process.

The meeting was opened to a general discussion between the commissioners and staff regarding the policy.

Ms. Dillenseger stated that while it's a very technical document, it is a pleasant read and understandable to the typical resident.

Dr. Solet stated that she would like a link to the noise ordinance/violation affidavit for the city to be included in the document.

Mr. Hill and Ms. Burks explained that this could be incorporated into the final version.

Mr. Van Sickle liked the report but noted much of the information is a description of types of systems, without enough information on screening and clearances required. He would like to see something on the height of equipment in relation to snow load heights, the requirement for any metal frames to elevate equipment, how to screen equipment at the foundation level.

Ms. Dillenseger added that it would be helpful to see some examples of "do's and don'ts" for visual depictions of what is appropriate vs. what is unacceptable to the commissions.

Mr. Hill explained that these policies are typically left a little vague as each mechanical company has their own requirements on distance between units, from screens, dimensions, and other requirements. Due to the many variables, staff likes to make these types of policies clear enough to allow clarity to owners, while open to allow commissions leeway in reviewing projects. As technology continues to change, the guidelines may be less and less relevant if they are too specific.

Mr. Hill stated that he and the other staff members of the Cambridge Historical Commission would look to make these updates and present the new draft at an upcoming meeting.

Approval of minutes for 10/11/22 and 03/13/23 public meetings.

Jo Solet made a motion to approve the minutes from the October 11, 2022 and March 13, 2023 meetings pending minor edits. Marie-Pierre Dillenseger seconded the motion. The vote was unanimous to approve the minutes, 4-0.

The meeting adjourned at 7:50 PM.

Respectfully submitted, Eric Hill, Survey Director, Cambridge Historical Commission