Eastman-Fenwick House Site Renovations

DRC Submission #1

February 20th, 2024

Address:

6733 Langston Blvd Arlington, VA 22205

Homeowners:

Charles and Kathleen Chandler

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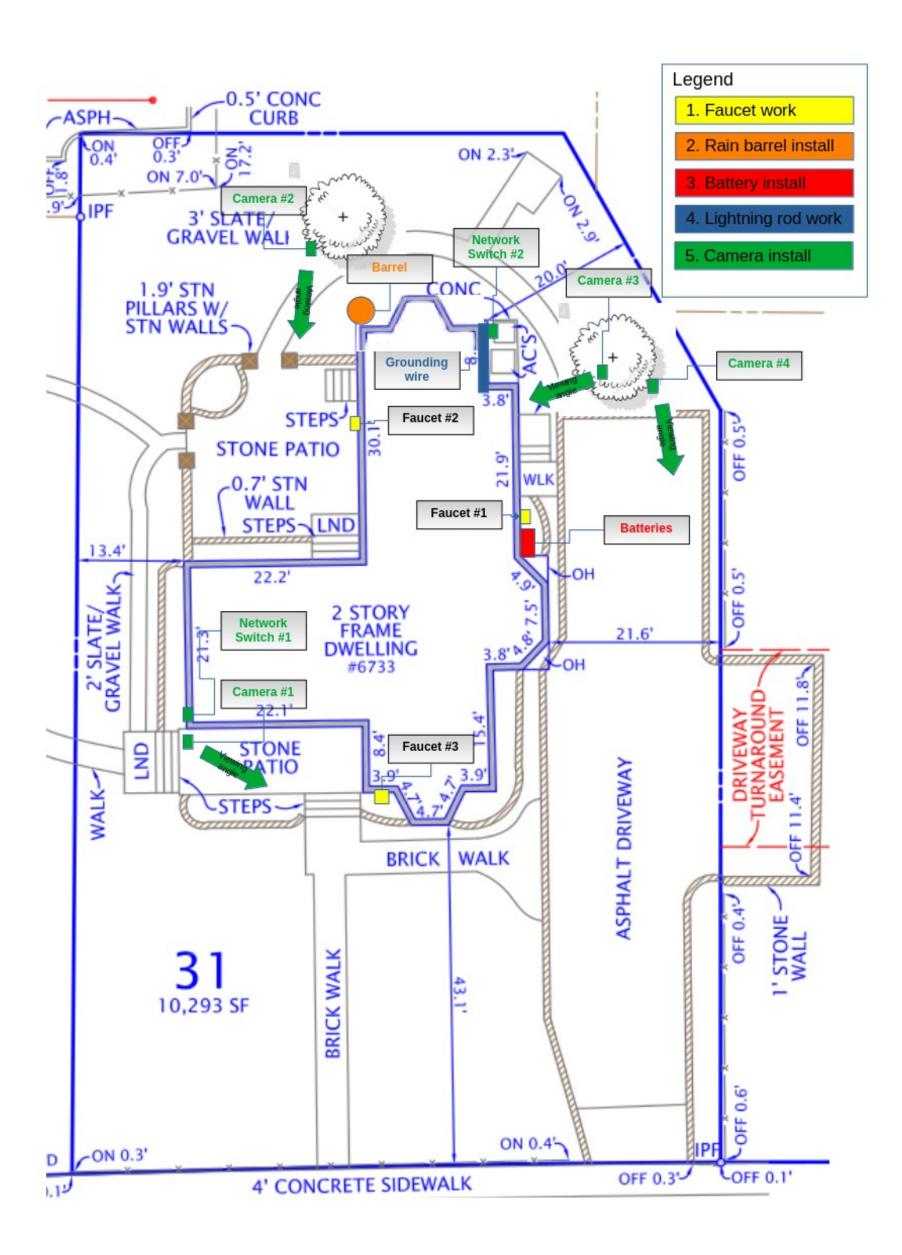
Scope of Work

The proposed project involves renovation of several parts of the house's exterior and surrounding site.

The project scope of work includes:

- 1. Replacement of the three exterior water faucets with discrete, frost-free wall hydrants and removable faucets in the same location
- 2. Installation of a rain barrel to help manage stormwater runoff from the roof and take advantage of the new Arlington County stormwater tax incentives; there would be one 100-gallon wooden wine barrel integrated with the downspout of the northwestern gutter system
- 3. Installation of a whole-home battery; there would be two Tesla Powerwall batteries installed along the driveway-side exterior next to where the electrical and gas come into the home now
- 4. Grounding of a lightning rod; the northern roofline lightnight rod system needs to be connected to ground, and the grounding cable needs to be rerouted and extended along the exterior of the house to reach a safe grounding point
- 5. Installation of security cameras; four discrete, wired security cameras would be mounted to provide coverage of the exterior of the house and the grounds; one on the front porch, one on a tree overlooking the patio, and two on a tree overlooking the driveway; cable wiring would exit the house via two new penetrations near the foundation line and be attached to a new weatherized/outdoor network switch at each location.

Site Plan



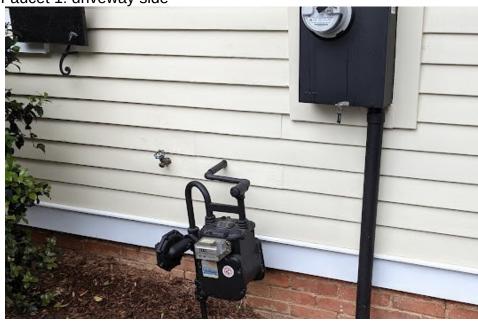
Detailed Description of Work

1. Exterior faucet replacement

Rationale: The three exterior water faucets are hard to access due to the orientation and location of the spouts, one of which is also leaky. **Scope**: The existing faucets would be replaced with discrete, frost-free wall hydrants with removable faucets in the same location.

Current state:

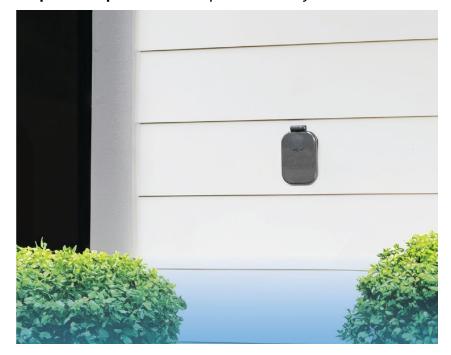
Faucet 1: driveway side







Proposed replacement: Aquor House Hydrant V2+ Frost Free Wall Hydrant with Quick-Connect and Anti-Siphon:













2. 100-gallon rain barrel installation

Current state of north face, looking south:



Proposed addition of 100 gallon rain barrel to NW corner downspout:



Rationale: a rain barrel would help manage rainwater runoff from the roof by collecting water for later use in the garden and align with available incentives from Arlington County's new Stormwater Utility Fee Credit Program

Scope: install a 100 gallon rain barrel with internal electric pump and attach it to the northwest corner gutter downspout with a leaf guard. The barrel would be made from a used wine/spirits barrel in order to match the aesthetics of the period farm house.

Close-up of rain barrel and leaf guard:





3. Whole-home battery installation

Current driveway side view:



Proposed driveway side, with bush removed and whole-home battery installed (approximate location and scale):



Rationale: a whole home battery would allow better energy management for the house and act as a backup source of power in case of an electrical outage

Scope: install two Tesla Powerwall batteries on a small concrete pad in place of the bush on the driveway / East side of the house, in the lee of the bay window so that it is minimally-visible from the street. Wire the batteries into the house through a new exterior wall penetration.

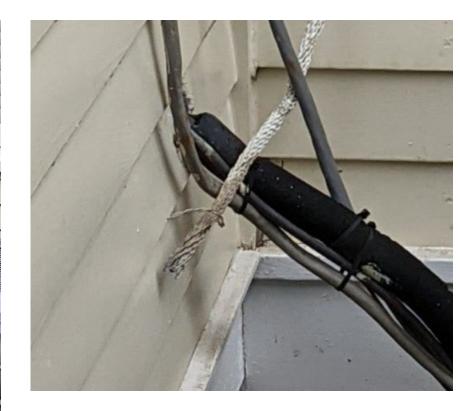
4. Lightning rod grounding

Rationale: It appears as if the lightning rods on the northern part of the roofline used to be grounded near where the AC compressors sit now, but sometime before we purchased the house (perhaps many years ago) the externally mounted grounding wire was detached from the ground and left dangling. There is no obvious location where it would have been grounded, but perhaps it was obscured when the addition to the house was made in 2010, since it was on the same side of the house.

Scope: In order for the grounding wire to reach the ground, it would need to be extended with additional braided wire matching the existing wire; and in order for it to reach the ground safely without passing near the compressors or other wiring, it would need to be rerouted along a different path to the ground farther north on the exterior wall (illustrated with green in the picture)

Current state:





Proposed routing vs. existing:





5. Security camera installation

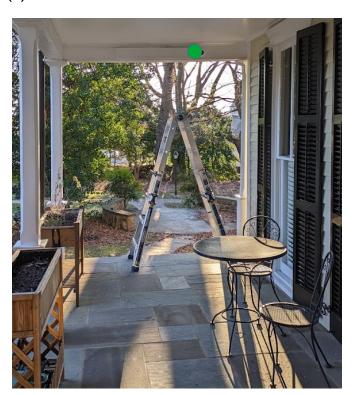
Location of network switches and new exterior wall penetrations at the foundation line:

(a) West side of Front Porch, in the lee of the stone steps

(b) Behind the AC compressors on the northeast corner



Proposed camera locations: (1) Front Porch





(2) Overlooking the patio



(3) Overlooking the driveway side door



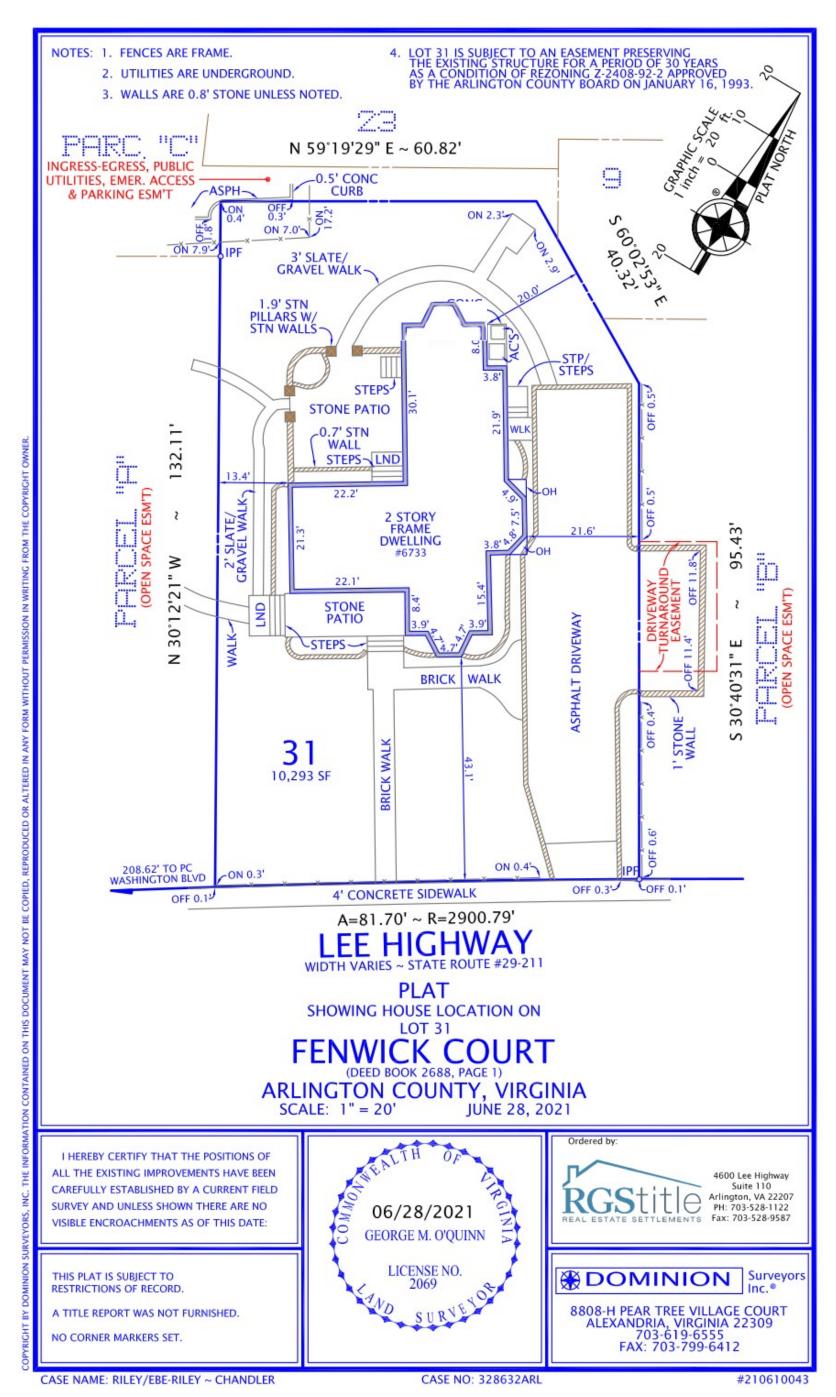
Proposed cameras: #1 – white, #2-4 – black





(4) Overlooking the parking lot





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