

390 FW Hartford Dr.

Patio Proposal

Project Proposal

We are proposing removing our deck (some has already been cut away due to structural rot on the foundation on the house that needed to be addressed urgently) and adding a patio of a smaller square footage than the deck along with a rain garden and some additional native plants. The patio will be made of water permeable material.

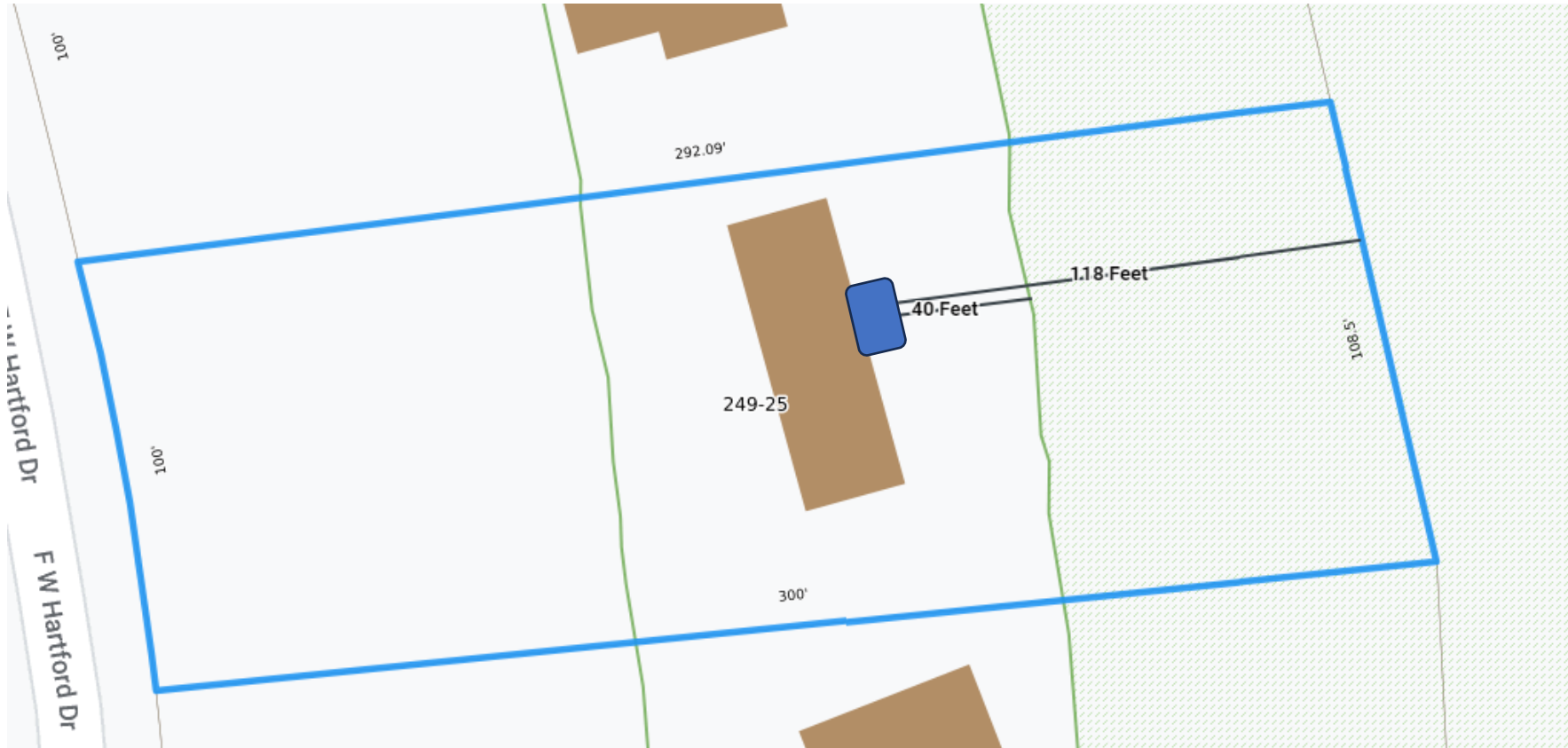
No trees or existing native vegetation will be disturbed.

Lot Information



- Lot includes 8,340 sqft of wetlands (mostly dense forest).
- Lot includes 10,337 sqft of buffer zone.
- The buffer zone is made up of some trees, native shrubs, native ferns and some grassy patches.
- None of the buffer zone vegetation will be disturbed.

Site Information



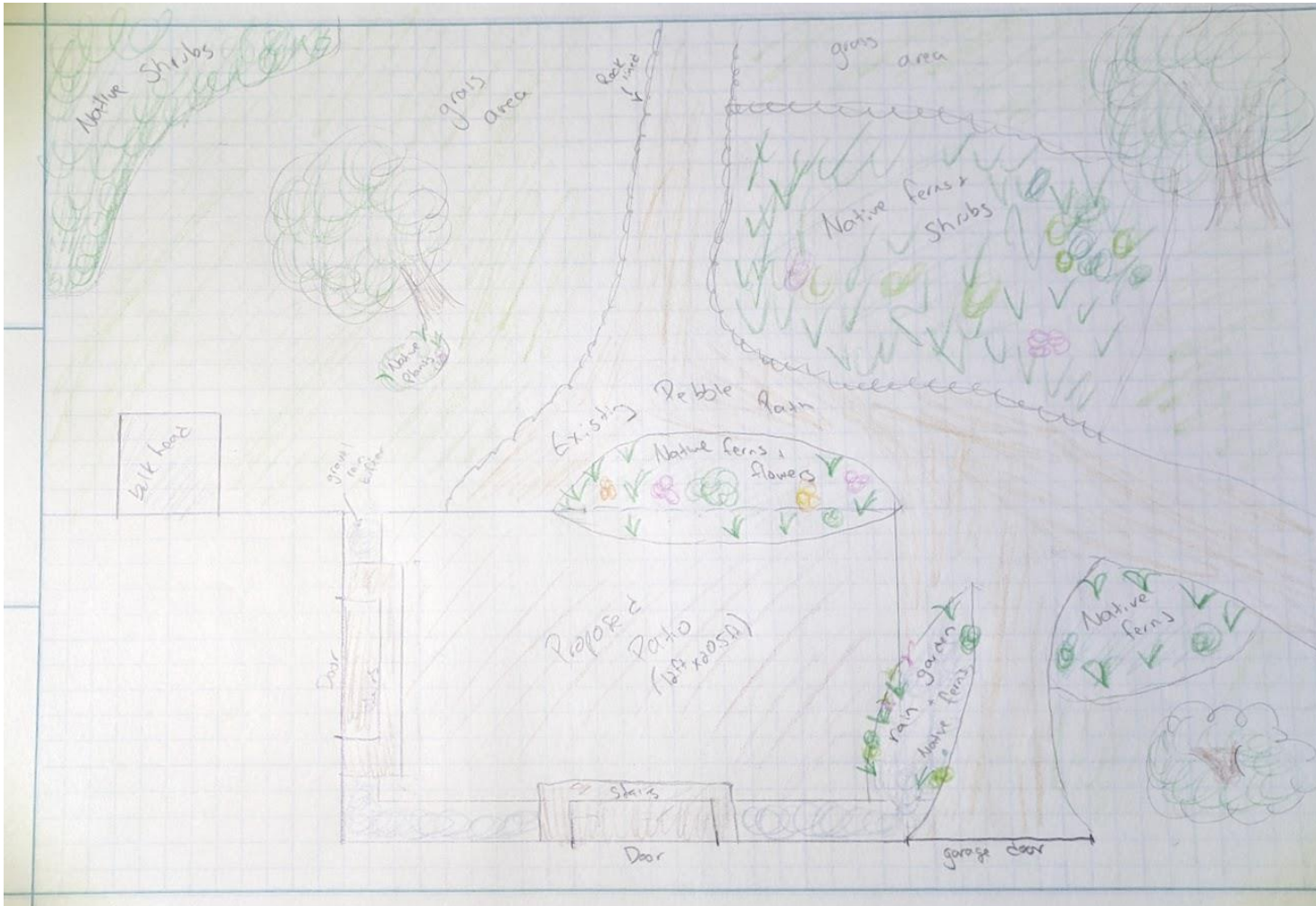
- Proposed Patio is located completely within the buffer zone
- It is 26.5ft from the edge of the wetlands and the start of the buffer zone
- Total area within the buffer zone to be disturbed is 246 sqft

Existing Deck



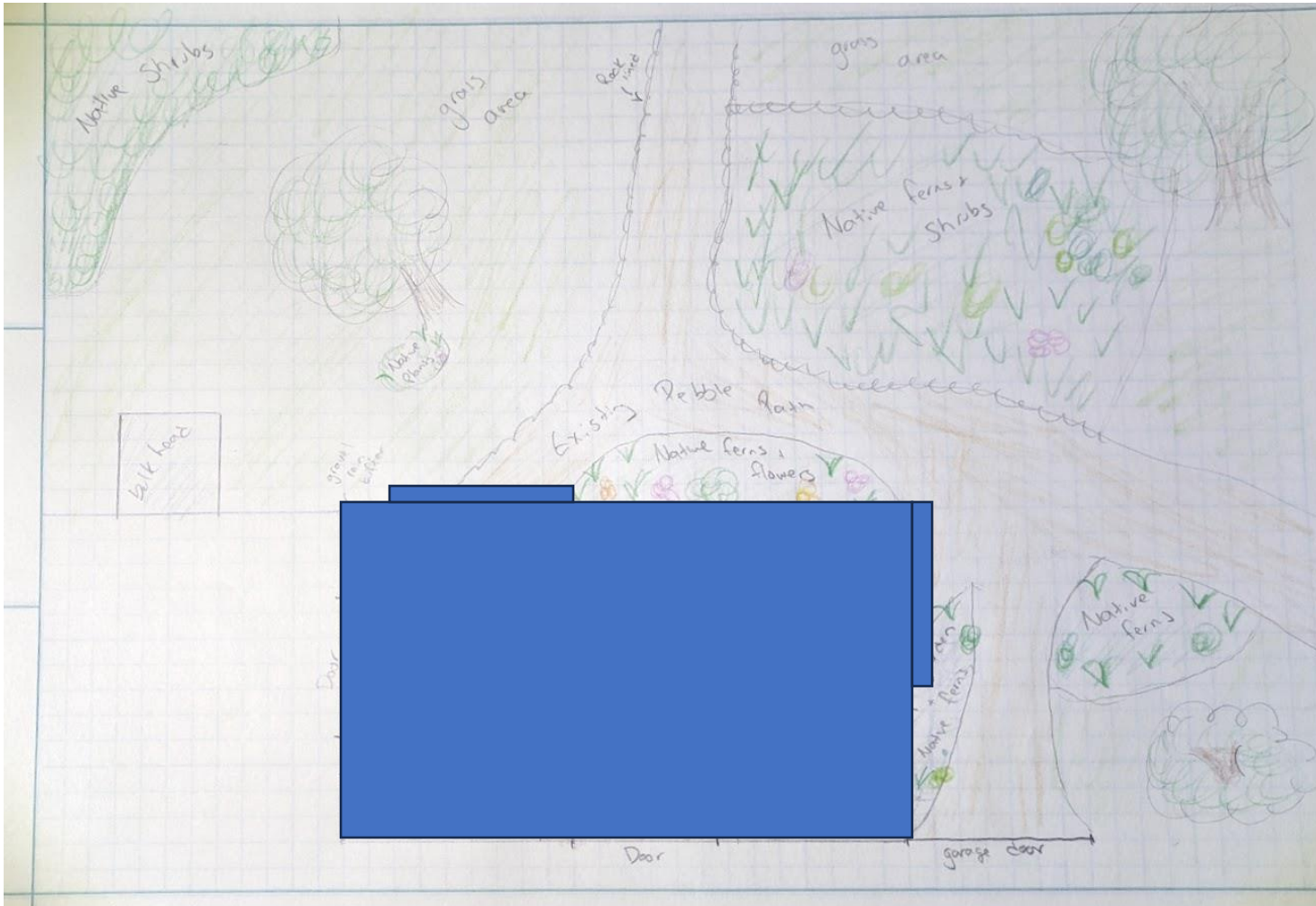
- Existing deck is 14ft by 22.5ft, 315sqft.
- The deck is made of wood (impermeable) and will be completely removed.
- Deck is a safety concern, supported by a car jack and rotting away in many places.
- Deck had to be cut away in sections to repair structural wood rot along the foundation of the house.

Proposed plan



- Includes replacing the deck area with 12ft by 20.5ft of permeable brick patio (246 sqft)
- Includes 1.5ft perimeter of gravel rain buffer along the house (which was previously covered by the deck)
- Proposed plan also includes installation of a rain garden and increasing the area of native ferns and flowers

Proposed Plan compared to Deck



- Box represents deck's footprint



Proposed Material

Rumbled StormPave - 4x8 Tumbled Permeable Clay Pavers - Pine Hall Brick



Material Description:

Rumbled StormPave™ is an amazing breakthrough in water permeable paving. Rumbled StormPave is a Permeable Clay Paver that looks like the classic *English Edge* Clay Paver but with rumpled texture. It has spacers that enable rainwater to go in between the pavers. And instead of being installed atop gravel and sand like conventional pavers, Rumbled StormPave is installed in a best-practices system atop layers of differently sized aggregates. Rainwater goes in between the pavers to the aggregates below, where it is held until it is absorbed into the ground, where it is naturally filtered. Rumbled StormPave pavers are often used to fulfill regulatory requirements of storm drainage in commercial applications. Increasingly, as regulations are being tightened, they are being used in residential areas. Here, they provide an aesthetically pleasing driveway and parking pad, while addressing persistent drainage issues and fulfilling local regulations for residential runoff.

Rumbled StormPave 4x8 clay pavers feature beveled edges for crisp clean lines and large spacer bars to provide spacing for washed aggregate filled joints that allow water to drain freely between the paving units. The water then dissipates naturally into the native soils. Less than 1/8" gaps for ADA Compliance. Initial rate of infiltration of over 500 inches per hour. The dimensions are standard 4"x8" by 2.25" and Heavy Duty 2.75" thickness. The paver complies with ASTM C902, Class SX, Type I, Application PX and ASTM C67 for Freeze/Thaw. All Heavy Vehicular pavers comply with ASTM C1272.

<https://paveroutlet.com/pine-hall-brick-rumbled-stormpave-permeable-clay-pavers>

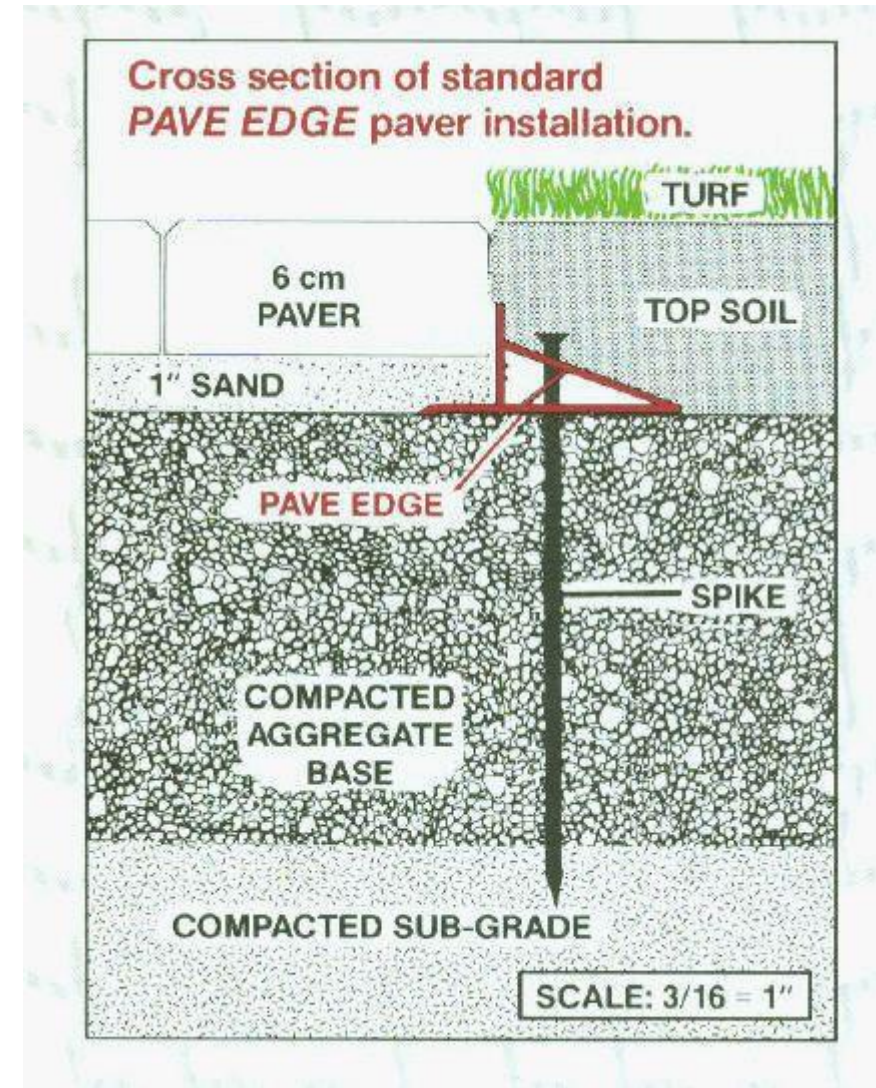
Patio Cross Section

The patio will have 4" of crushed gravel and 1" of concrete sand with the pavers on top as shown by the diagram to the right. We will use an edge restraint to keep the patio pavers from shifting.

Q. Can I lay my pavers just on a layer of sand ?

A. We recommend a base layer of 4" of compacted crusher run gravel (8" minimum for a driveway) and then a setting bed of 1" of concrete sand (not masonry sand). This should provide a long lasting stable base for your pavers. Laying pavers directly on the ground or on a layer of sand is not recommended because the pavement will become uneven within the first year and worsen over time.

<https://paveroutlet.com/pine-hall-brick-rumbled-stormpave-permeable-clay-pavers>



Maintenance Plan - Patio

- Paver supplier recommends cleaning pavers with a stiff brush and a garden hose with normal pressure.

Q. How should I clean my pavers ?

A. Pressure washers are not recommended for use on flexible base applications. The pressure washer tends to remove joint sand which compromises interlock. We suggest using a stiff application brush and a normal pressured garden hose.

Q. What if I get stains on my pavers ?

A. For general cleaning, we would recommend EaCo Chem's NMD 80 or Prosoco's SureKlean 600. Do not use muriatic acid as the acid concentrations can vary from container to container and higher acid content can produce more stains. The cardinal rules for cleaning brick are to always pre-test a small area first (preferably in a hidden area), pre-wet the area with water and follow directions carefully.

Maintenance Plan – Rain Garden

MAINTENANCE

Rain garden maintenance is similar to the maintenance of any perennial garden, with a few extra tasks:

INSPECT: Check after storms to verify the inlet and outlet are stable, no channels have formed, that plants are healthy and that it is draining. Adjust and repair if needed.

PLANT CARE: Weed and water as needed. Replace dead plants as needed. Cut back, prune or divide plants when appropriate to encourage growth.

CLEAN: If the rain garden is receiving runoff that contains sand or debris, such as from a driveway or roadway, clean out accumulated materials as needed.

From NH State website: <https://www4.des.state.nh.us/SoakNH/wp-content/uploads/2020/03/rain-garden.pdf>

Project Representative/Homeowner

Sarah Cook

845-797-3136

scook26@gmail.com