

## Long Wind Farm

82 Wilson Rd

East Thetford VT 05043

Tel: 802-785-4642

Fax: 802-785-2730

email: [longwindfarm@gmail.com](mailto:longwindfarm@gmail.com)

Contacts: Jesse Pacht, Dave Chapman

# Proposed Greenhouse Relocation Plan

Long Wind Farm is an organic farm specializing in the production and sale of premium organic greenhouse tomatoes. We exclusively grow tomatoes as a crop in our two glass greenhouses and have been strictly a greenhouse operation for over twenty years.

Included with this document are an existing site plan, a proposed site plan, a plan for automatic flow-through (wet flood proofing), and a description of the construction plan to include how the greenhouse will meet current requirements.

We are applying for a permit to remove a non-flood vented, wood frame greenhouse to be replaced by a larger, metal frame flood vented greenhouse in the same area. This will not require any grading or movement of soil at the site. We will remove 450 cu.ft. of concrete slab from the two dismantled greenhouses and pour 150 cu. ft. of slab for the new greenhouse. This will be a net removal of around 300 cu. ft. of concrete.

The new greenhouse will meet the current requirements by:

1. having all mechanical and electrical equipment (pumps, circulators, outlets, electrical panels, mixing valves, etc.) installed above the flood water level (3' above the current concrete slab elevation).
2. having an appropriately sized automatic flow-through or wet floodproofing system certified by a qualified engineer (previously approved by SVE Associates).
3. contacting the town clerk and all adjoining landowners concerning our application.
4. confirming that the setback from the top of the river bank is at least 50'.
5. having the site plan certified by a qualified engineer (design and site plan previously approved by SVE Associates).

## **1.**

We will design and build all mechanical and electrical equipment to be installed a minimum of 3' above the existing slab. This will put them above the flood stage indicated by the state.

## **2.**

The proposed greenhouse will be 30' x 80' for an area of 2400 sq. ft. We will need a total flood vent area of 2400 sq. in. We will install two (2) flood vents at each end of the greenhouse (4 total) having an area of 612 sq. in. each (17" x 36") for a total flood vent area of 2448 sq. in. They will be top hinged and arranged to allow flow from the north. The bottoms of the vents will be held closed by screen door latches sufficient to prevent wind from blowing them open but light enough to allow flood water to easily push the vent open.

This flood vent design has been previously approved by Steven Tarbox of SVE Associates.

## **3.**

I have a list of all the abutters and will contact them with our plans to relocate this greenhouse. In addition, the application and plans will be filed with the town clerk.

## **4.**

We have measured the footprint of the proposed greenhouse and it is far more than 50' from the top of the Connecticut River bank.

## **5.**

This site plan was previously approved by Peter Boemig of SVE Associates.



**AGENCY OF AGRICULTURE, FOOD & MARKETS**  
116 State Street  
Montpelier, VT 05620-2901  
Vermontagriculture.com

---

February 1, 2016

Jesse Pacht  
Via email: [Jesse.longwind@gmail.com](mailto:Jesse.longwind@gmail.com)

Ned Swanberg  
Mapping and Planning Coordinator, CFM  
Vermont Rivers Program - Watershed Management Division  
1 National Life Drive,  
Montpelier, VT 05620-3522  
Via email: [ned.swanberg@vermont.gov](mailto:ned.swanberg@vermont.gov)

Dear Ned and Jesse,

Thank you for sharing information regard the proposal to construct a 30' x 80' greenhouse at Long Wind Farm, Inc., 82 Wilson Road, East Thetford, Vt. The proposed structure is a "farm structure" and therefore the Agency regulates its construction and its use under the Required Agricultural Practice Regulations (RAP). It is also subject to the Flood Hazard Area and River Corridor Rule administered by the Vermont Watershed Management Division in the Department of Environmental Conservation.

Long Wind Farm, Inc. is a farming operation. The property is used for "the cultivation or other use of land for growing food...," "operation of greenhouses," and "the on-site storage, preparation and sale of agricultural products principally produced on the farm[.]" RAP Section 2.05 (a), (c) and (e). Required agricultural practices are used on the farm including "the preparation, tilling, fertilization, planting, protection, irrigation and harvesting of crops," "the construction and maintenance of farm structures...," and "the on-site storage, preparation and sale of agricultural products principally produced on the farm[.]" RAP Section 3.2 (d),(g) and (i). The greenhouse will be setback in excess of 50' from top of bank in compliance with RAP section 4.07 (e).

Specifically, the greenhouse will primarily be used for propagation in the late summer and fall winter crop of tomatoes, and may be used for for other low or ground crops during the spring and summer to maximize our growing opportunities at Long Wind Farm.

The proposed greenhouse is a "farm structure" because it will be used in connection with the sale of \$1,000 or more of agricultural products in a normal year." RAP Section 2.06 (a).

This letter outlines the Agency's position based on the information provided to the Agency in an email from Jesse Pacht dated 1/28/16, and observed at the site visit on 6/30/15. Although the Agency's position on whether this is "farming," and the activities are required agricultural practices, and the structure is a "farm structure" may carry some weight, ultimately the application and enforcement of municipal zoning law and the exemption in 24 V.S.A. §4413(d) rests with the town.

Please also be aware of the following.

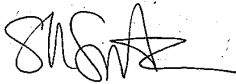
Public Drinking Water Supplies: Nutrients, sediment, organic matter and microorganisms may also impact drinking water supplies derived from surface waters. Agricultural operations should be aware of the locations of surface drinking water source intakes and appropriately manage agricultural activities to reduce potential negative impacts.

Wetlands: Although wetlands are not mentioned in the RAPs, landowners need to be aware of existing rules pertaining to wetlands under state and federal jurisdiction. The Natural Resources Conservation Service, U.S. Army Corps of Engineers, and the Vermont Department of Environmental Conservation coordinate all agriculture/wetland issues in Vermont. It is strongly suggested that landowners contact the U.S. Army Corps of Engineers at 802-872-2893 and the Vermont Department of Environmental Conservation at 802-241-3760 before initiating farm related projects in or near wetlands.

Construction of New Farm Structures Construction of new farm structures, specifically buildings and other farm related structures that disturb one or more acres of land must obtain authorization from the ANR before commencing with land disturbance or construction activities. Approval will be issued by ANR upon receipt of a Notice of Intent (NOI) which certifies that adequate measures for the control of erosion and sedimentation will be used during land disturbance and construction efforts. Persons needing additional information about the Construction General Permit/NOI concerning one or more acres of land disturbance are advised to contact the Water Quality Division of the Department of Environmental Conservation at 802-241-3770 or visit the web site at [www.vtwaterquality.org/stormwater](http://www.vtwaterquality.org/stormwater). Authorization by ANR is not needed for construction or land disturbance related to cultivation, irrigation, drainage and fencing.

Solid and Hazardous Waste Management: Agricultural operations are advised to manage all wastes generated on the farm consistent with all applicable solid waste rules and hazardous waste rules. Information regarding the proper storage and disposal of waste oil, petroleum products and empty containers can be obtained from the Vermont Waste Management Division at 802-241-3888.

Regards,

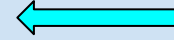


Stephanie Smith, AICP  
Chief Policy Enforcement Officer

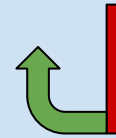
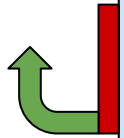
CC: [zoning@thetfordvermont.us](mailto:zoning@thetfordvermont.us)

\* NOTE – Act 64 is a law passed during the 2015 Legislative Session, and effective as of July 1, 2015, it has replaced the term “Accepted Agricultural Practices” with “Required Agricultural Practices”.

potential water flow hazard is from the river which will come in from the north



flood vents are hinged at the top, latched at the bottom, and swing the same direction



DETAIL 5

20°c/c

P.V.C. CLIP 2M050

RIB 2A115

SINGLE POLYETHYLENE  
NYLON ROPE IN1004 (OPTIONAL)  
3" BATTEN TAPE 2M05

1" x 2" WOOD LATH IDCO (SUPPLIED)  
2 HEADED NAIL IC3362 (OPTIONAL)  
5/16" x 6" EYE BOLT IC2942-1  
+ 5/16" NUT IC0787  
2" x 6" CCA TREATED (SUPPLIED BY)

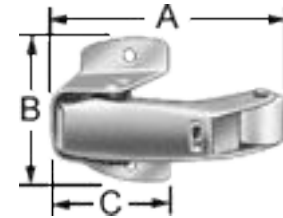
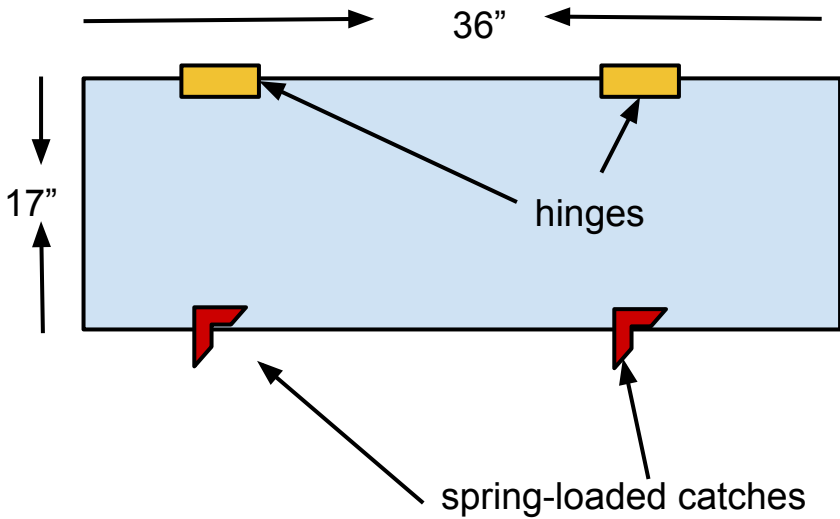
Anchor tube is 24" long  
Anchoring rod is 1/2" galvanized steel  
and is 36" long

OVAL ANCHOR TUBE 2A010  
ANCHORING ROD 2A012

# SECTION B-B

## REVISION

#	DESCRIPTION	DATE
1	CORRECTION	29
2	CORRECTION	00
3	MODIFICATION	13-



potential water flow direction

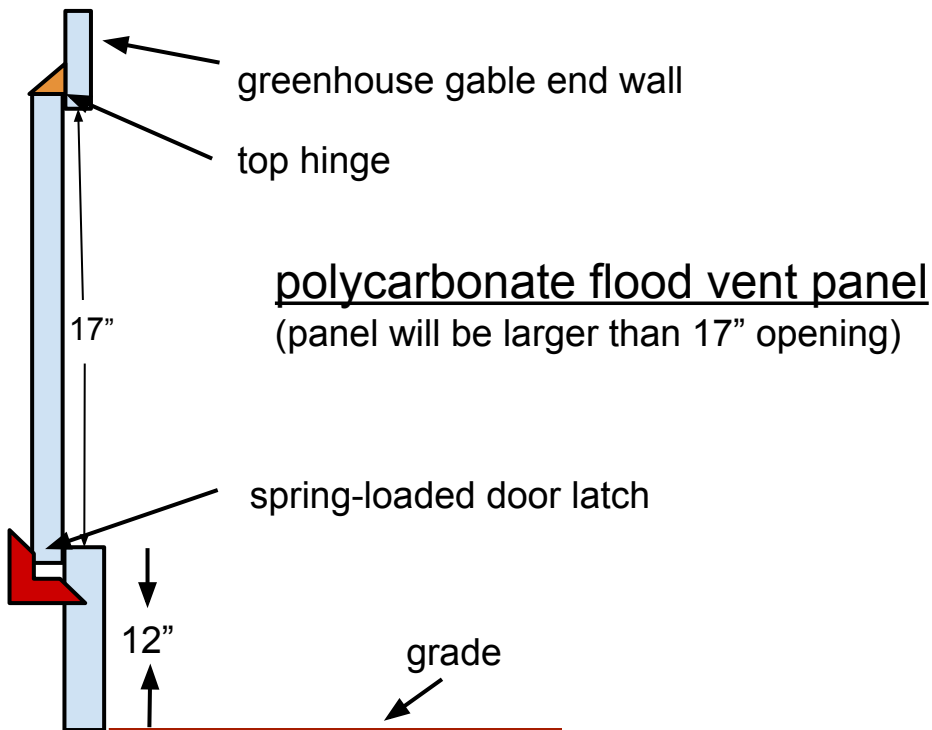


PLATE 2A013

1/2" x 2" CAR. BOLT IC0024 + 5/16" NUT IC0787

6" CCA TREATED (SUPPLIED BY CLIENT)

-proposed 30x80 requires 2400 in. sq.  
of flood vent - 1200 in each end wall  
-4 vents @ 612 in. sq. = 2448 in. sq.  
-vents to be installed no more than 12"  
above grade

SUGGESTED FOUNDATION: GROUND STAKE (AS SHOWN)  
CONCRETE PIER  
CONCRETE FOUNDATION

36x17=612

12"

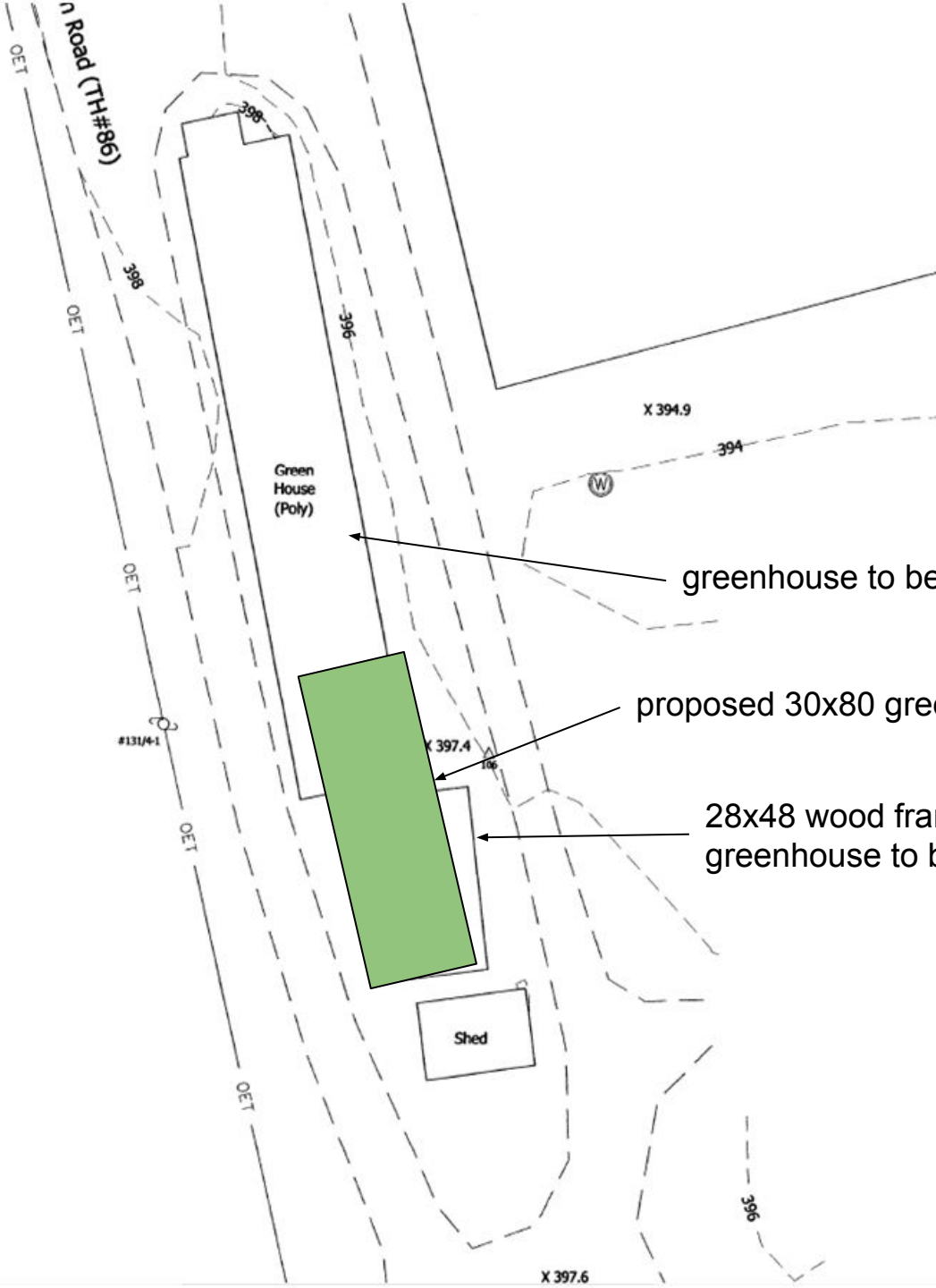
12"

grade

NOTE 1

DETAIL 4





Green House (Poly)

greenhouse to be removed spring '16

proposed 30x80 greenhouse @ 398' elevation

28x48 wood frame greenhouse to be removed

Shed

n Road (TH#86)

OET

OET

#131/4-1

OET

OET

X 394.9

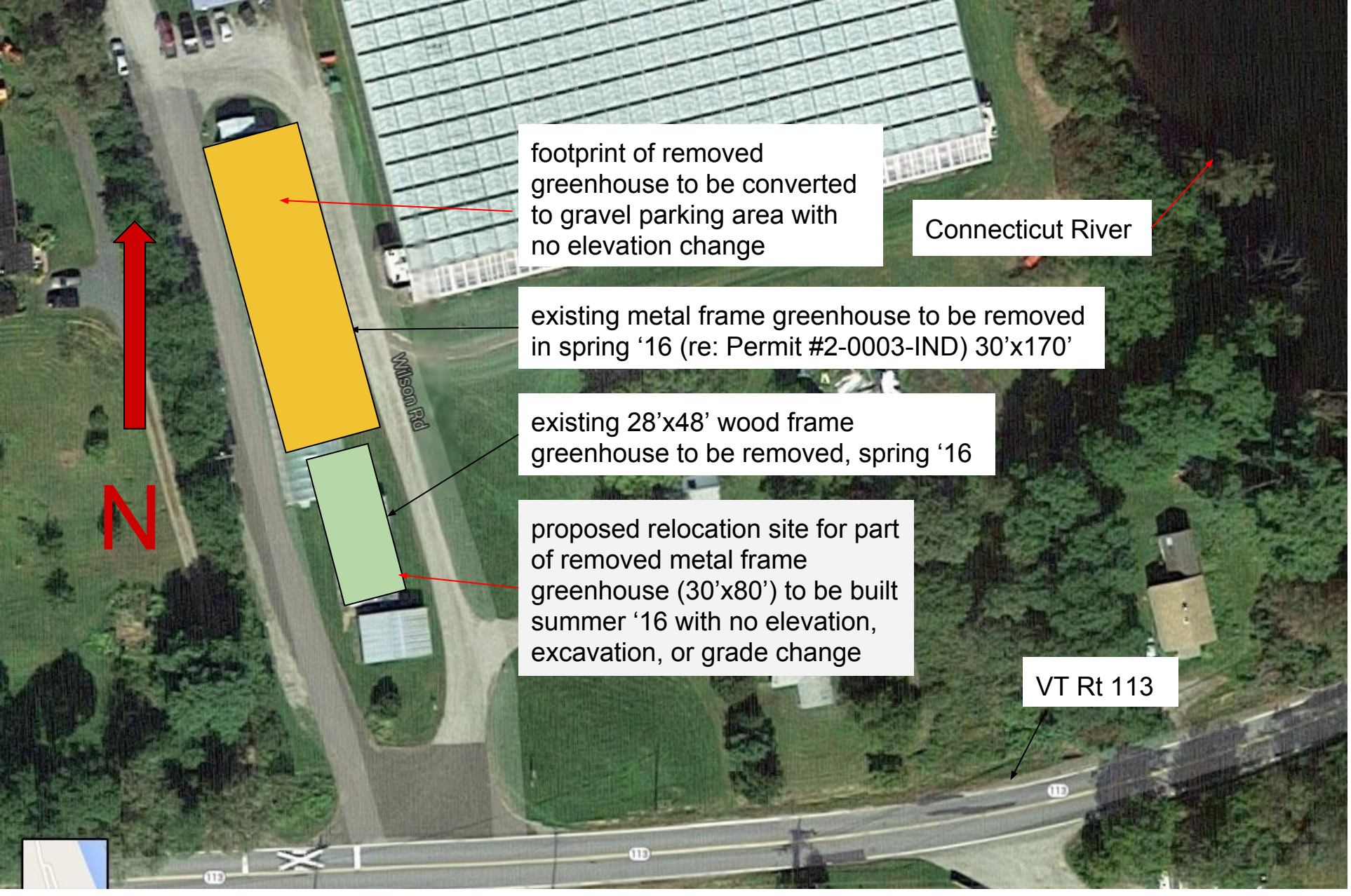
394

W

X 397.4

X 397.6

396



footprint of removed greenhouse to be converted to gravel parking area with no elevation change

Connecticut River

existing metal frame greenhouse to be removed in spring '16 (re: Permit #2-0003-IND) 30'x170'

existing 28'x48' wood frame greenhouse to be removed, spring '16

proposed relocation site for part of removed metal frame greenhouse (30'x80') to be built summer '16 with no elevation, excavation, or grade change

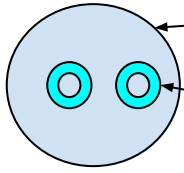
VT Rt 113

Wilson Rd



N



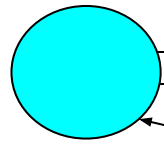


foam-filled outer plastic pipe (12" dia.)

supply and return hot water pipes are held in place and insulated

supply and return from heating plant

greenhouse north end wall



valves and circulator (mixing group)

grade (approx 398')

sleeved and insulated heat pipes underground

