Maggie Goodlander and Jake Sullivan 86 New Castle Avenue Portsmouth, New Hampshire 03801

March 26, 2019

To Whom It May Concern,

We hereby authorize West Environmental to act as our agent for this application.

Respectfully,

JALCA

Jake Sullivan

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Maggie Goodlander







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<complex-block>         Image: Section 1       1         Image: Section 1       1</complex-block>	Installation guide segmental permeable pavement A permeable paver from techo BI oc B. Jenn Hilling Coulds: 11/2 to 27 (40 to 50 mm)	Image:	solve scrength     50 MPa [ / 200 ps/] min.       on     -       iaw durability with use     25 g/m² at 28 cycles       ig salt     500 g/m² at 49 cycles       500 g/m² at 49 cycles     500 g/m² at 49 cycles       500 g/m² at 49 cycles     500 g/m² at 49 cycles       500 g/m² at 49 cycles     500 g/m² at 49 cycles       500 g/m² at 49 cycles     500 g/m² at 49 cycles       500 g/m² at 49 cycles     25 g/m² at 49 cycles       10 mm [0079 in.]     Length and Width ÷1.0 mm [0039 in.] to       +2.0 mm [0079 in.]     Thickness: ±3.0 mm [0.118 in.]       118 in.]     Thickness: ±3.0 mm [0.118 in.]
Image: State Stat		<ul> <li>Installation guide.</li> <li>Semental PERMEABLE PRVEMENT</li> <li>Surgerbala personal many month be required and then only ASTM No. 57 (CSA 2019) and bears or your and cload safe conditions, and cloader end of CSD (rms) can be used (are at the oright ASTM No. 57 (CSA 2019) and bears or your establic data safe conditions, and cloader end of CSD (rms) can be used (are at the oright ASTM No. 57 (CSA 2019) and bears or your establic data safe conditions, and cloader end of CSD (rms) can be used (are at the oright ASTM No. 57 (CSA 2019) and bears or your establishes any bears or your establishes any bears of the attemption.</li> <li>I can be used to according to the activity and the safe than 1.27 (CSO (rms) of basic or your establishes any bears or your of CSA 40.80) and the provide attemption.</li> <li>Set for the provide and compact the ASTM No. 27 (CSA 40.80) aggregate attablishes in minimum for (CSD mm) of basic or your attemption and basic or your attemption.</li> <li>Set for the provide or of the provide or depresent the ASTM No. 27 (CSA 40.80) aggregate attablishes.</li> <li>Set for the provide or of the origin the trans in which on exposed.</li> <li>Done allow the compact or can be negative than an be fit data for a worse, a fit attemption or the origin the top of the edge restraint acros of the origin the top of the edge restraint acros of the origin the top of the edge restraint acros of the ASTM No. 57 (CSA 5-26) aggregate base along the nort of (Cmm) hind it it. More any origin and a statution instation adverse, and a statution and the top or end the ASTM No. 57 (CSA 5-26) aggregate base.</li> <li>Set the compact or can the aggregate.</li> <li>Set the compact or can the aggregate.</li> <li>Set to active end the ASTM No. 57 (CSA 5-26) aggregate based or precess conditions or the provide or or the addition or exposed.</li> <li>Set to active end the</li></ul>	<ul> <li>Institutional)</li> <li>(ex. parking lots, spewarks)</li> <li>5. Pedestrian</li> <li>Pedestrian only and at all times, without cars or trucks or other mobile equipment (ex. terraces, parks, pedestrian walkways)</li> </ul>
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February 16, 2023

Jake Sullivan 86 New Castle Ave Portsmouth, NH o3801

### RE: Wetland Conditional Use Permit for 86 New Castle Ave Portsmouth, NH SUBJ: Wetland Impact Assessment Report

Dear Jake:

West Environmental, Inc. (WEI) reconfirmed the wetlands on the above referenced property on December 15, 2022. WEI originally flagged the inland and tidal wetland boundaries on your property on January 15, 2019. The wetlands were delineated according to the following standards:

- US Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1 (January 1987).
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (2012).
- National List of Plant Species That Occur in Wetlands: Northeast (Region 1). U.S. Fish and Wildlife Service (May 1988).
- Code of Administrative Rules. Wetlands Board, State of New Hampshire (Current).

We evaluated soil probes and plant communities to determine the edge of wetland. The inland wetland is a ditched wet meadow with areas of scrub-shrub that drains into the tidal wetland through a culvert under a berm. This area was dominated by wetland dependent plant species and hydric soils. There are paths with culverts through this wetland to the berm. There is some invasive purple loosestrife pants present but the wet meadow is dominated by grasses, sedges and wildflowers. Shrub species observed include silky dogwood, buttonbush, and northern arrowwood. There are a few invasive multiflora rose present in this wetland. The soils are silt loams under-laid by clay. There is a very small pond in the wetland that drains into the ditch system.

We have attached updated photo documentation of the wetlands and the inland upland buffer zone where the proposed addition and patio are planned.

#### Wetland Function

The wetland was evaluated utilizing a wetland assessment methodology developed by the US Army Corps of Engineers New England Divisions Highway Methodology Workbook Supplement. This evaluation is based on collection of data on the physical characteristics of the wetland through field inspections, research of existing information and best professional judgment. This methodology provides a better understanding of the physical characteristics of each wetland for both its functions and values.

#### Wetland Conditional Use Permit for 86 New Castle Ave Portsmouth, NH Page 2

The physical features were evaluated to determine if a function is present. The wetland is then evaluated to determine if the function present is a principal function of that wetland based on comparison to other wetlands in the region and using professional judgment. This assessment evaluated the following wetland functions:

 Groundwater Recharge/Discharge – This function includes the ability of a wetland to provide recharge of surface water into the ground and/or discharge groundwater into surface waters.

This wetland has dense soils that do not allow for groundwater recharge.

 Flood-flow Alteration – This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.

This wetland provides some flood storage, but the ditching reduces the effectiveness of this function.

**Sediment/Toxicant/Pathogen Retention** – The presence of this function reduces or prevents degradation of water quality because the wetland acts as a trap for sediments, toxicants or pathogens.

This wetland provides some of this function, but the ditching reduces the resident time of stormwater in this wetland.

 Nutrient Removal/Retention Transformation – This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering surface waters or aquifers.

The lack of organic soils and shallow or deep marsh habitat limit this function.

 Product Export – This function relates to the effectiveness of the wetland to produce food or usable products for human or other living organisms.

This function is provided to a small degree by the fruit bearing shrubs in this wetland

 Sediment/Shoreline Stabilization — This function relates to the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.

This function is present in the form of stable wet meadow banks along the ditched stream.

• Wildlife Habitat — This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with the wetland and the wetland edge (includes resident and migratory species).

Due to the location in a residential setting this function is moderate to low. The presence of the small stream and proximity to tidal wetlands prevent it from lower function.

#### Wetland Conditional Use Permit for 86 New Castle Ave Portsmouth, NH Page 3

#### **100-foot Wetland Buffer Impacts**

There are no direct wetland impacts associated with this project. The impacts to 100-foot inland wetland buffer include 405 SF of house addition most of which is located over an existing deck and 630 SF of pervious pavers for a patio and walkways located over lawn and landscaped areas. There are 1,729 SF of temporary impacts to lawn and landscaped areas most of which will be planted with native flowers and shrubs.

The closest temporary impacts are 39 feet away from the wetland. The closest permanent impacts are 59 feet away for the pervious patio and 63 feet for the addition. The proposed landscaping plan will re-establish a vegetated buffer to the wetland in addition to the trees and shrubs that will remain in the buffer. These activities will not have a significant impact to the functions of the wetland due to the nature of the landscaped impact areas, the distance to the resource area and the installation of a pervious patio.

This completes our report and we hope that it meets your needs. Please call our office if you have any questions or require additional information.

Sincerely, West Environmental, Inc.

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Mark C. West, NH Certified Wetland Scientist #10

Cc: Betty Tamposi Lafe Covill Preston Brown Photographic Documentation - 86 New Castle Ave Portsmouth



1. Looking south towards the wetland from the proposed terrace location with the studio on the right.



2. Looking north towards the house from the berm across the wet meadow.



Photographic Documentation - 86 New Castle Ave Portsmouth Photos Taken 12/15/23



3. Looking west at the deck where the addition is proposed. The temporary impacts will start on the far side of the landscape bed in the foreground.



4. A close up of the deck where the addition is proposed.



Photographic Documentation - 86 New Castle Ave Portsmouth

Photos Taken 12/15/23



5. Looking west at the front door where the new entrance is proposed and new landscaping.



6. Looking northeast at the proposed location of the new patio.



Photographic Documentation - 86 New Castle Ave Portsmouth



7. This is a view of the berm between the inland wetland and the tidal wetland on the left.



8. Looking south at the salt marsh at high tide. The proposed addition and patio area 260 feet from the tidal wetland.





86 Newcastle Avenue, Portsmouth, New Hampshire

### **CONCEPTUAL FIRST FLOOR PLAN** (OPTION #1)

### SULLIVAN / GOODLANDER - ADDITION / RENOVATION



SECOND FLOOR

333 sq. ft. 583 sq. ft.

916 sq. ft.



86 Newcastle Avenue, Portsmouth, New Hampshire

# SULLIVAN / GOODLANDER - ADDITION / RENOVATION

CONCEPTUAL SECOND FLOOR PLAN (OPTION #1)



NEW LIVING SPACE			
FIRST FLOOR	333 sq. ft.		
SECOND FLOOR	583 sq. ft.		
	916 sq. ft.		

<u>OPTION #1</u>





CONCEPTUAL ENTRY PERSPECTIVE (OPTION #2) NOT TO SCALE

# SULLIVAN / GOODLANDER - ADDITION / RENOVATION

