



To: Pete Pavao

Date: March 30, 2020
Project #: 72800.00

Memorandum

From: Genevieve Burke
Stephen Pereira
Wayne St. Vincent

Re: Potential Solar Sites

VHB filled in the following items in the GIS for the list of sites below.

<https://gisstage.dot.ri.gov/portal/home/webmap/viewer.html?webmap=fa9e41469425422185830b6757e81b2a>.

1. **Comments**- identified design constraints such as ledge, FEMA, what type of Natural Resource area (Wetlands, Natural Heritage Area (NHA), etc.) – Name of Substation based on NGRID'S Distribution Assets Overview map on this website: <https://ngrid.apps.esri.com/NGSysDataPortal/RI/index.html>
2. **Municipality**- based on RIDOT GIS.
3. **Acres**- area based on measure tool in RIDOT GIS.
4. **FEMA_Zone**- 'yes, no' response based on FEMA mapping in GIS.
5. **Clearing required**- 'yes, no' response based on aerial base map in GIS website
6. **EnvirResourceArea**- 'yes, no' response is based on RIDEM's GIS website with Natural Heritage, Wetlands, and Surface Water features turned on.
<https://ridemgis.maps.arcgis.com/apps/webappviewer/index.html?id=87e104c8adb449eb9f905e5f18020de5>
7. **Dist 2 interconnect**- miles based on combination of NGRID's (to find location) and RIDOT's (to use measure tool) GIS sites.

The following is a list of sites have been identified as land owned by RIDOT based on their GIS website or are site assumed to be within RIDOT ROW.

	Location	City/Town
1	Rt 2 N north of the Rt 37 East exit	Cranston
2	37 E west of exit 2B off-ramp to Rt 2 North	Cranston
3	Intersection of 122 S and 99 N (3 Sites)	Cumberland
4	2 nd Ave at Rt 99	Cumberland
5	Intersection of 122 S and Manville Hill Rd	Cumberland
6	Located between Old Diamond Hill Rd and Diamond Hill Rd	Cumberland
7	Intersection of RT-4 S and RT-2 S	East Greenwich
8	Intersection of RT-4 N and RT-2 S	East Greenwich
9	Intersection of RT-4 N and RT-2 N	East Greenwich
10	North and Rt 2 South @ exit 8A	East Greenwich
11	Rt 4 N north of Exit 8A off-ramp	East Greenwich

1 Cedar Street
Suite 400
Providence, RI 02903-1023
P 401.272.8100

From: Genevieve Burke



Ref: 72800.00

March 5, 2020

Page 2

Memorandum

12	Rt 4 N south of Exit 8A off-ramp	East Greenwich
13	Intersection of I-295 S and RT-44 E	Johnston
14	295 N and Rt 6 W north of Exit 9B	Johnston
15	Intersection of I-295 S and RI-146 S	Lincoln
16	Intersection of I-295 S and RI-146 N (two sites)	Lincoln
17	Intersection of 146 S and Twin River Rd	Lincoln
18	Intersection of 146 N and Twin River Rd	Lincoln
19	Intersection of 146 S and 116 E	Lincoln
20	South of Pine River Dr and Newcomb Rd	North Kingston
21	Between 146 S and Ivan Street Park	North Providence
22	Intersection of 146 N and 104 N	North Smithfield
23	Intersection of 146 S and Sayles Hill Rd	North Smithfield
24	146S south of Admiral Street	Providence
25	I-95 S just after the border of Exeter and Richmond	Richmond
26	In between I-95 N and the New London Turnpike	Richmond
27	I-295 S in the vicinity of Ryan Court and Harris Pond	Smithfield
28	South of intersection of I-295 S and 104 S	Smithfield
29	Intersection of I-295 S and Mountindale Road	Smithfield
30	I-295 N north of Mountindale Road	Smithfield
31	Intersection of 116 N and 7 W	Smithfield
32	Intersection of I-95 S and RT-115 S	Warwick
33	Rt 115N and 95 S	Warwick
34	Rt 95 north of Rt 115	Warwick
35	Intersection of I-95 N and RT-115 S	Warwick
36	Rt 95N north of Exit 3B Rt 138	Richmond

From: Genevieve Burke



Ref: 72800.00

March 5, 2020

Page 3

Memorandum

37	Rt95N & S cloverleaf at Exit 6 Rt 3 – four sites	West Greenwich
38	Rt 95N at Exit 6A Hopkins Hill Rd offramp and one clover leaf	West Greenwich
39	Rt 95 S at Exit 7 New London Turnpike	West Greenwich

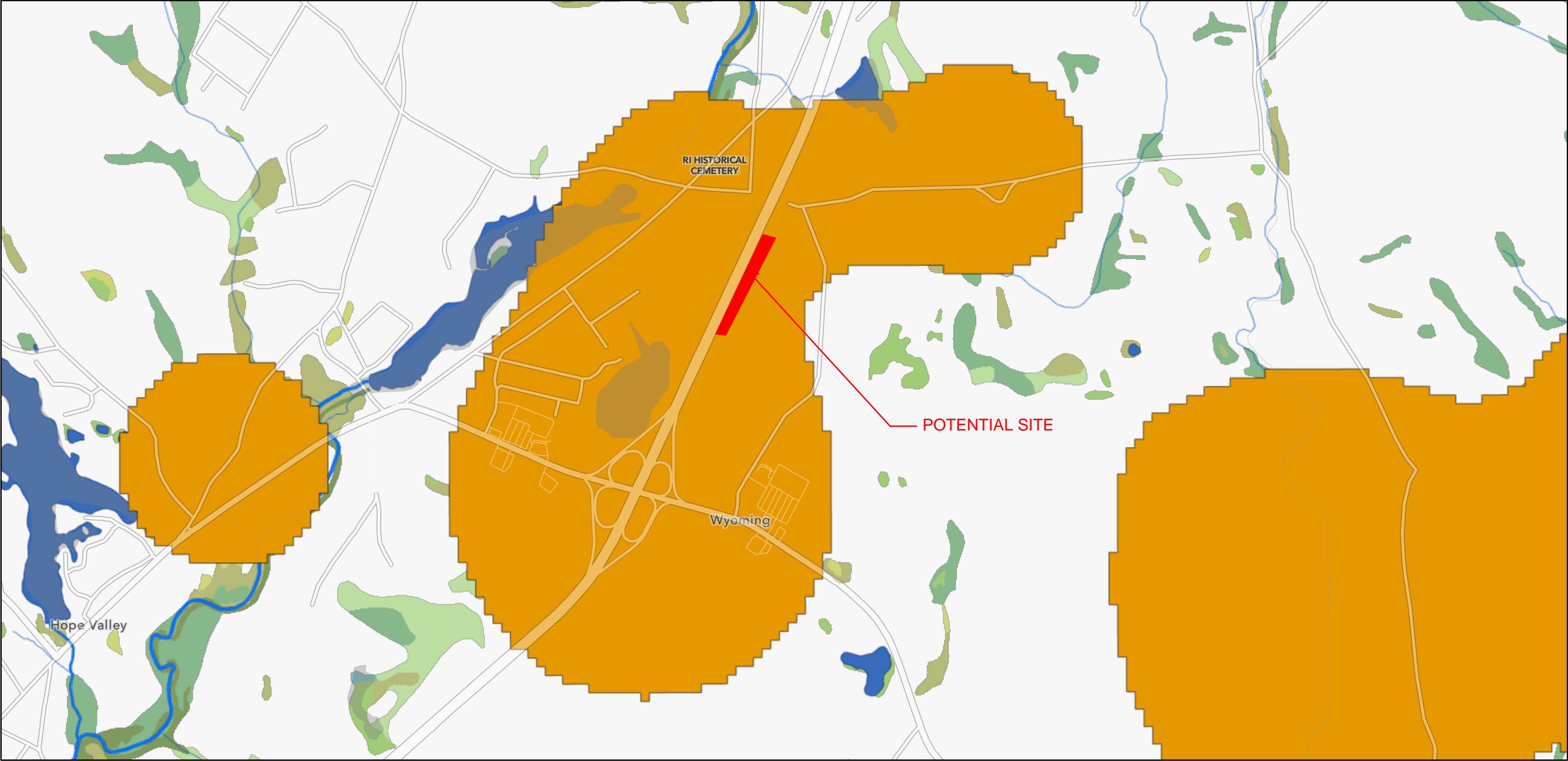
VHB recommends the following locations be further investigated further as potential solar locations.

- Rt 95N north of Exit 3B Rt 138 in Richmond. This site is adjacent to an existing solar farm possible indicating an existing interconnect is nearby to tie into.
- Rt95 the four cloverleaves at Exit 6 Rt 3 – four sites in West Greenwich. The northwest and southwest cloverleaves are mapped as part of the Big River Management Area. Further investigation into development limitations is required.
- Rt 95N at Exit 6A Hopkins Hill Rd offramp and one clover leaf in West Greenwich.
- Rt 95 S at Exit 7 New London Turnpike in West Greenwich.

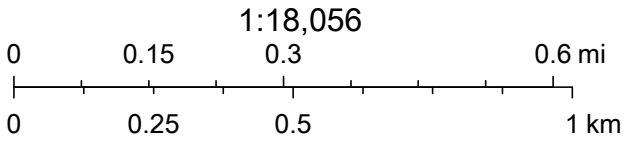
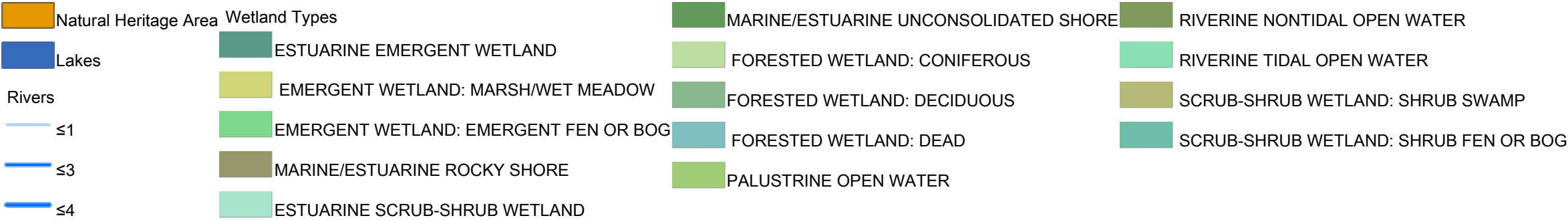
All these sites are within the NHA. Further coordination with RIDEM will be required to understand the limits of development. Any potential limits are anticipated to be minimal given the sites are developed on all sides. A copy of each site's environmental resource map is attached.

The West Greenwich locations are 7 small sites that are within 3 miles of each and they all connect to the same Substation. These seven sites may have the potential to designed, permitted with state and local agencies and with NGRID as one project and then strategically phased during construction.

RIDEM Environmental Resource Map

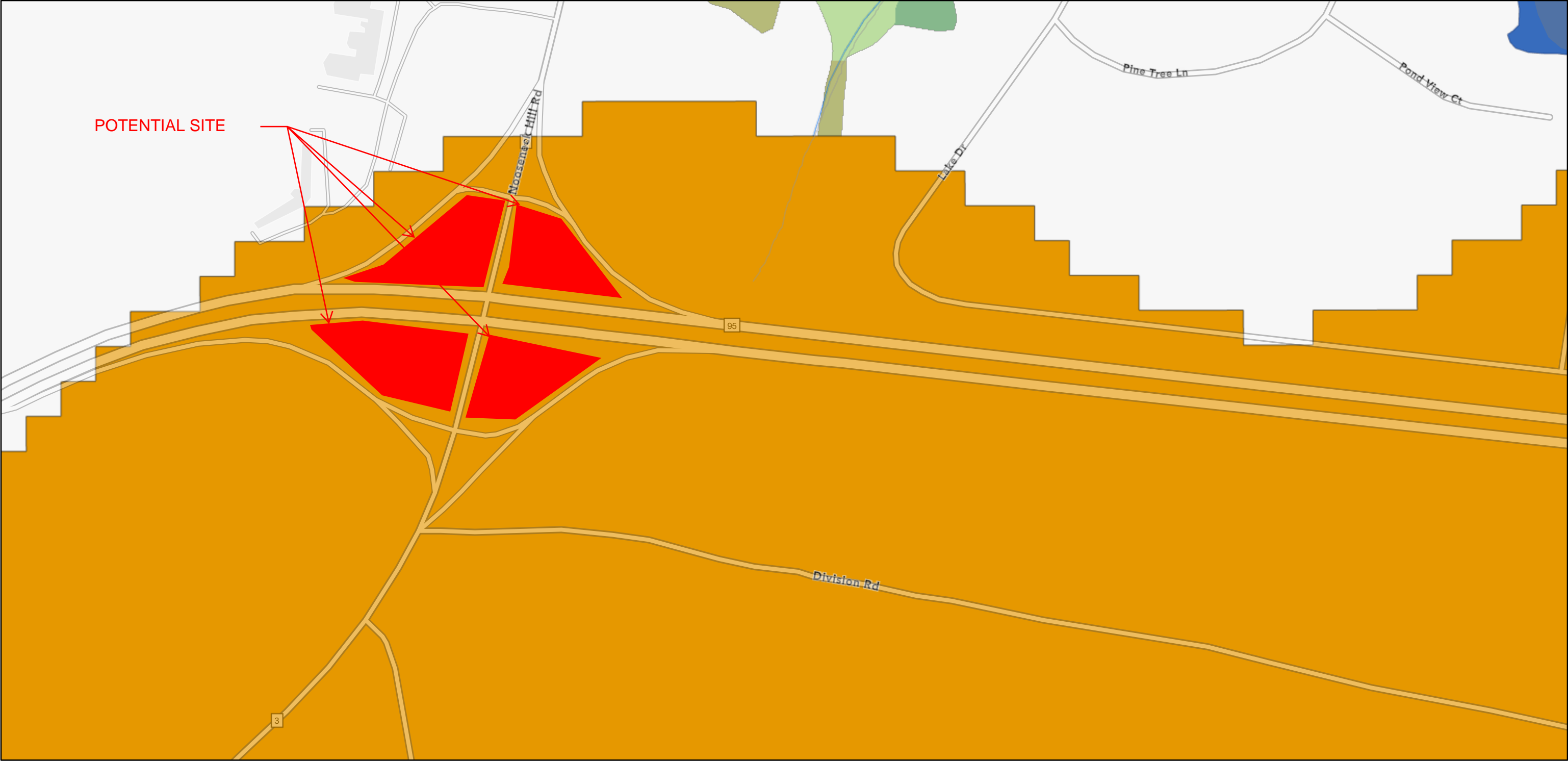


3/29/2020, 8:13:23 PM

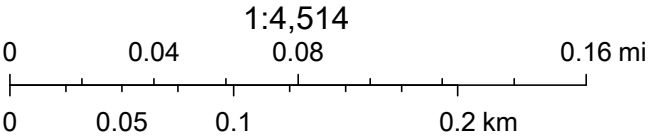
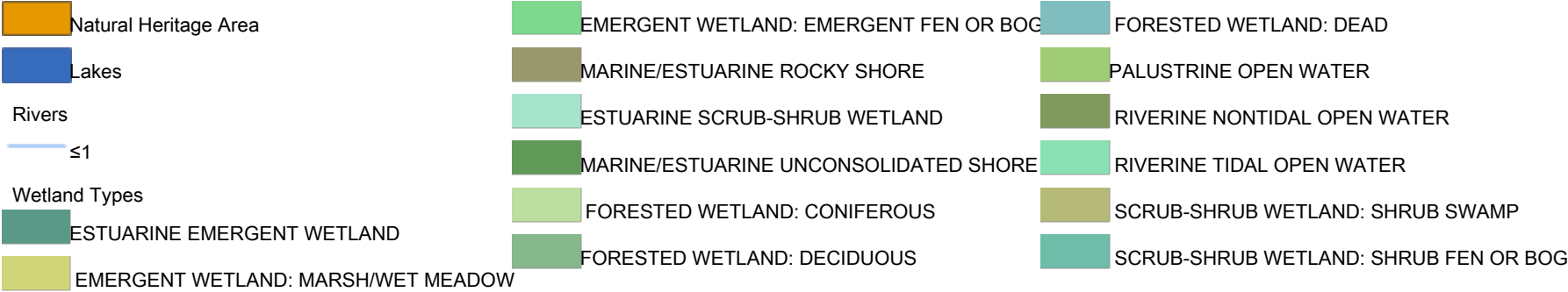


RIDEM, RIGIS, University of Rhode Island Environmental Data Center (URI EDC), Rhode Island Department of Environmental Management (RIDEM), Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User

RIDEM Environmental Resource Map

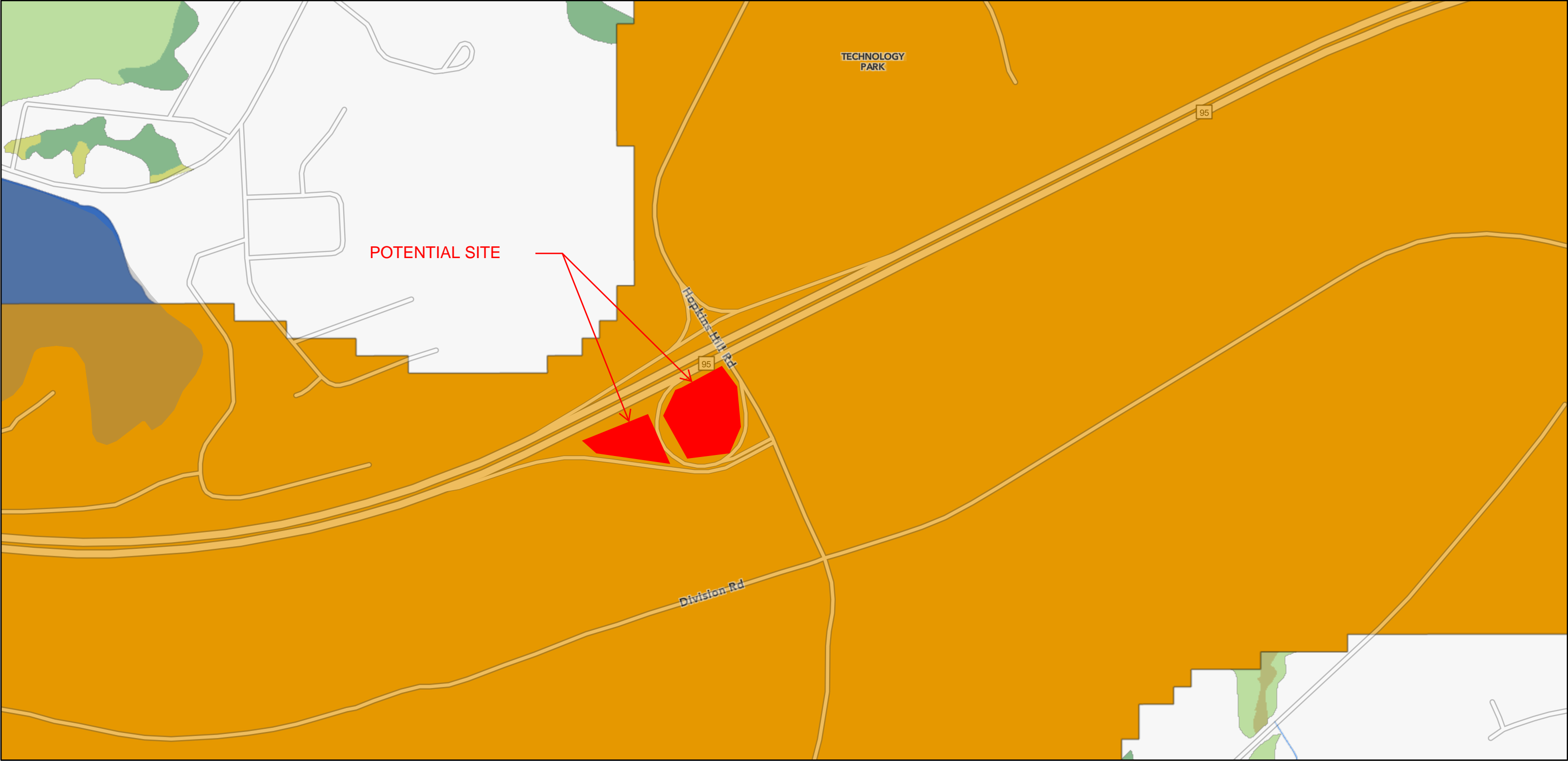


3/29/2020, 1:12:11 PM



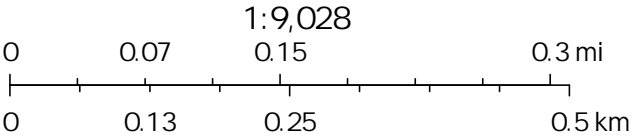
RIDEM, RIDEM, RIGIS, RIGIS, University of Rhode Island Environmental Data Center (URIEDC), Rhode Island Department of Environmental Management (RIDEM), Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and

RIDE M E nvironmental Resource Map



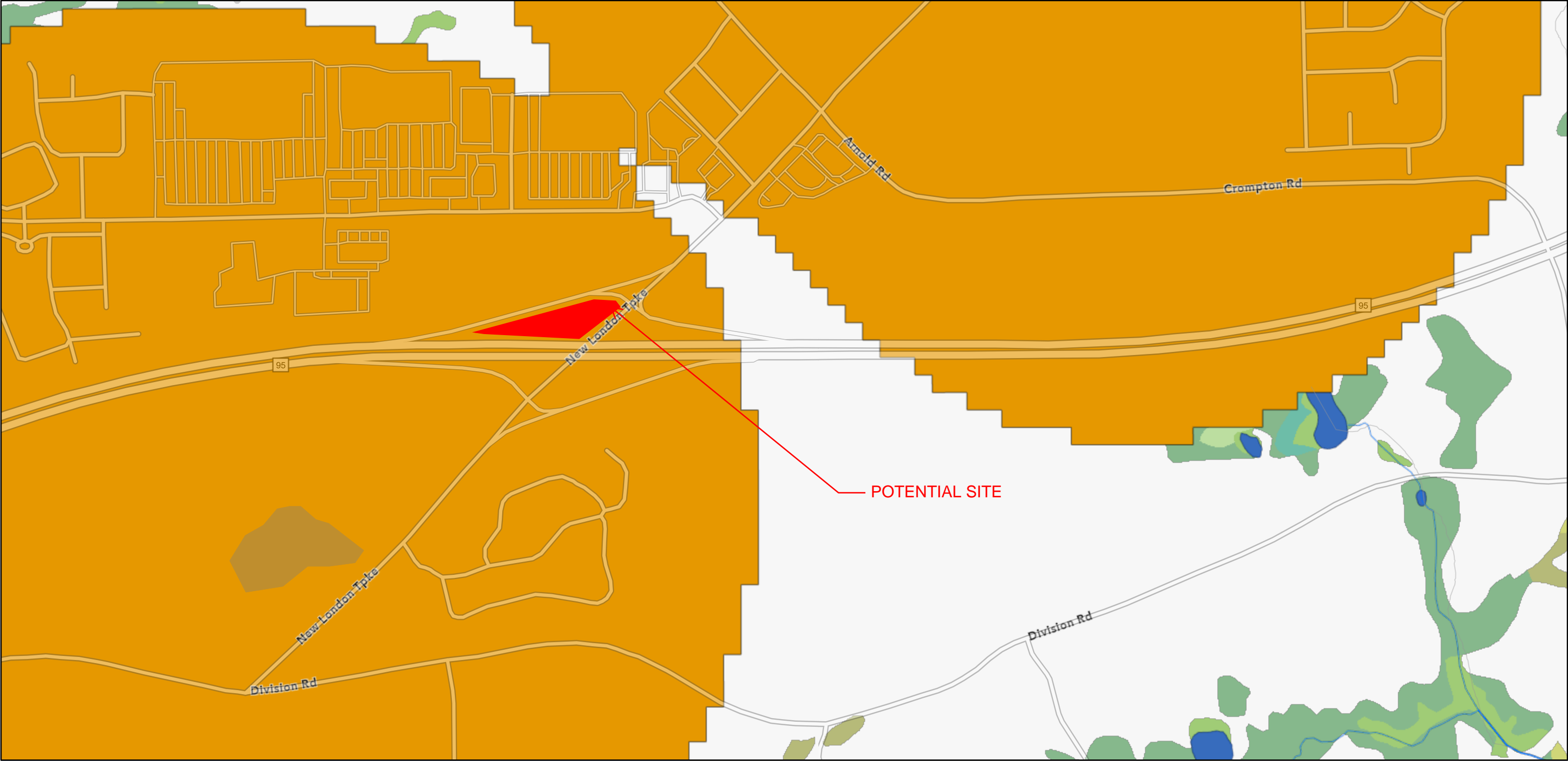
3/29/2020, 1:16:06 PM

<div></div> Natural Heritage Area	<div></div> EMERGENT WETLAND: EMERGENT FEN OR BOG	<div></div> FORESTED WETLAND: DEAD
<div></div> Lakes	<div></div> MARINE/ESTUARINE ROCKY SHORE	<div></div> PALUSTRINE OPEN WATER
Rivers	<div></div> ESTUARINE SCRUB-SHRUB WETLAND	<div></div> RIVERINE NONTIDAL OPEN WATER
<div></div> 1	<div></div> MARINE/ESTUARINE UNCONSOLIDATED SHORE	<div></div> RIVERINE TIDAL OPEN WATER
Wetland Types	<div></div> FORESTED WETLAND: CONIFEROUS	<div></div> SCRUB-SHRUB WETLAND: SHRUB SWAMP
<div></div> ESTUARINE EMERGENT WETLAND	<div></div> FORESTED WETLAND: DECIDUOUS	<div></div> SCRUB-SHRUB WETLAND: SHRUB FEN OR BOG
<div></div> EMERGENT WETLAND: MARSH/WET MEADOW		



RIDEM, RIDEM, RIGIS, RIGIS, University of Rhode Island Environmental Data Center (URIEDC), Rhode Island Department of Environmental Management (RIDEM), Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and

RIDEM Environmental Resource Map



3/29/2020, 1:38:49 PM

Natural Heritage Area

Lakes

Rivers

≤1

≤2

Wetland Types

ESTUARINE EMERGENT WETLAND

EMERGENT WETLAND: MARSH/WET MEADOW

EMERGENT WETLAND: EMERGENT FEN OR BOG

MARINE/ESTUARINE ROCKY SHORE

ESTUARINE SCRUB-SHRUB WETLAND

MARINE/ESTUARINE UNCONSOLIDATED SHORE

FORESTED WETLAND: CONIFEROUS

FORESTED WETLAND: DECIDUOUS

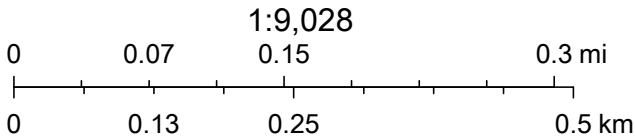
FORESTED WETLAND: DEAD

PALUSTRINE OPEN WATER

RIVERINE NONTIDAL OPEN WATER

RIVERINE TIDAL OPEN WATER

SCRUB-SHRUB WETLAND: SHRUB SWAMP



RIDEM, RIDEM, RIGIS, RIGIS, University of Rhode Island Environmental Data Center (URIEDC), Rhode Island Department of Environmental Management (RIDEM), Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and