



# Avangrid

*Commonwealth Wind*

September 2022

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# Goals for Tonight

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- Introduction to Avangrid and the Project Team
  - Onshore Cable Route
  - Proposed Landing at Dowses Beach and Construction Schedule
  - Permitting Process
  - Project and Community Benefits
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- We'll present on these topics, take questions, and have a conversation.

# Team

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Ken Kimmell, Vice President of Development - Offshore Wind, Avangrid Renewables

Christina Hoffman, Director, Offshore Wind Project Management, Avangrid Renewables

Todd Monson, Project Manager, Commonwealth Wind

Justice Ansah Nyarko, Lead – Offshore Wind Interconnections Manager, Avangrid Renewables

Erin Harizi, Permitting Manager, Commonwealth Wind

Pat Johnson, Manager of External Affairs- Offshore Wind, Avangrid Renewables

Rachel Lake, Massachusetts Outreach Coordinator - Offshore Wind, Avangrid Renewables

Ken Fitzgerald, Senior Principal / Engineering Manager, Stantec

Marc Bergeron, Principal, Epsilon Associates, Inc.

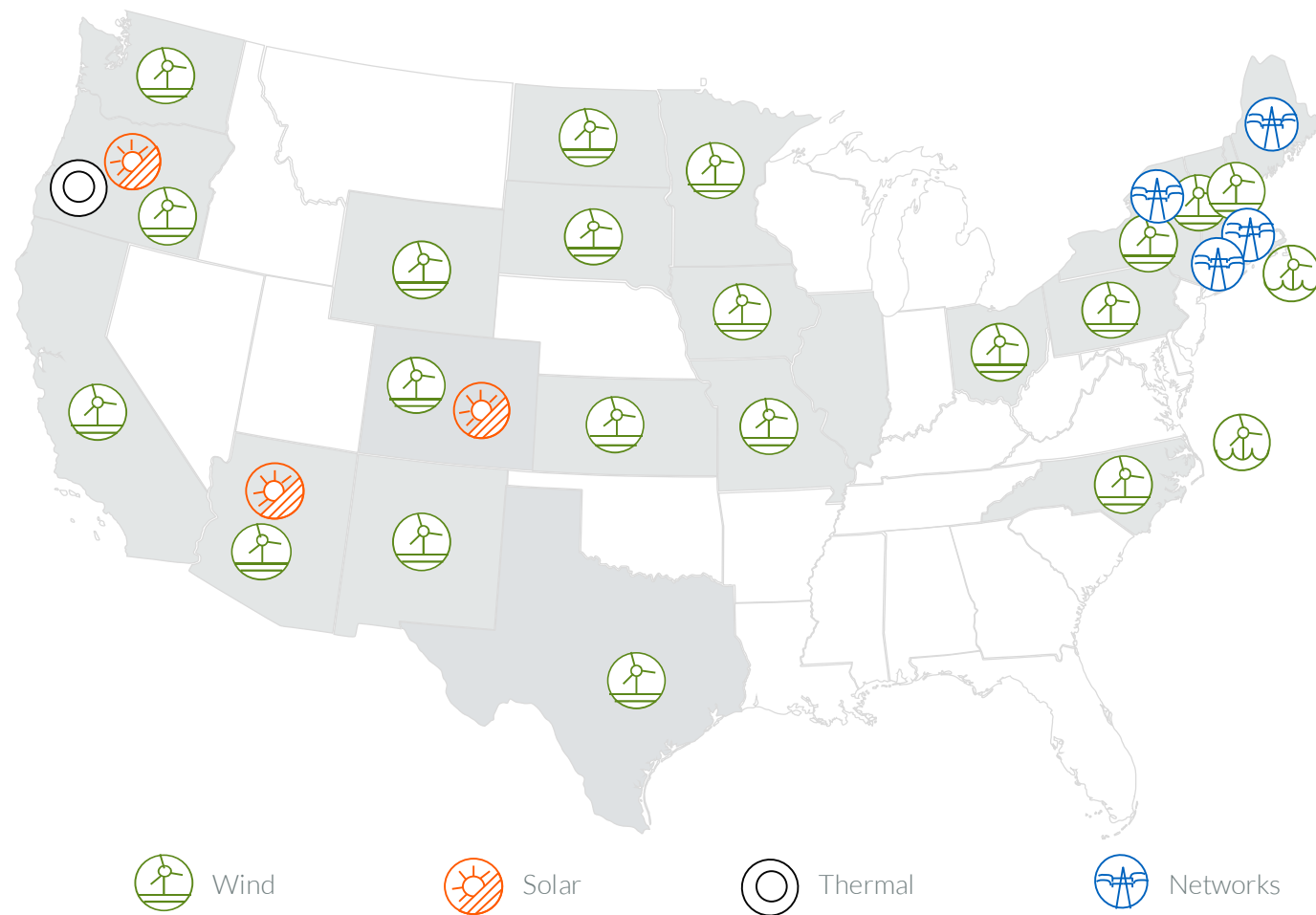
# Avangrid Renewables – Onshore & Offshore

 **3rd largest wind operator in U.S.**

 **8 GW**  
Wind & Solar in Operation

 **5 GW**  
Total offshore wind lease capacity

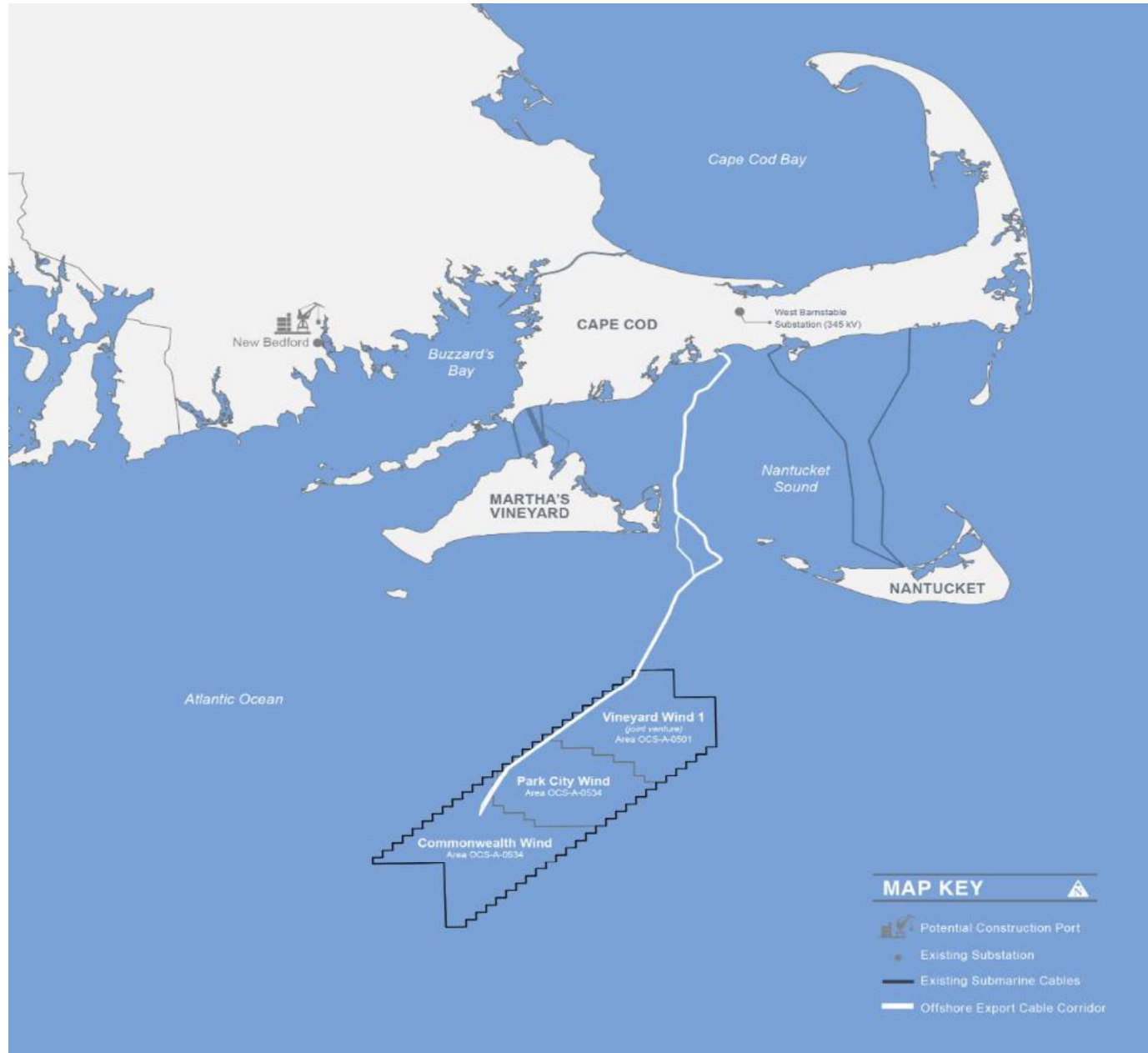
 **800+ Employees**  
in the U.S.



# Avangrid – Offshore

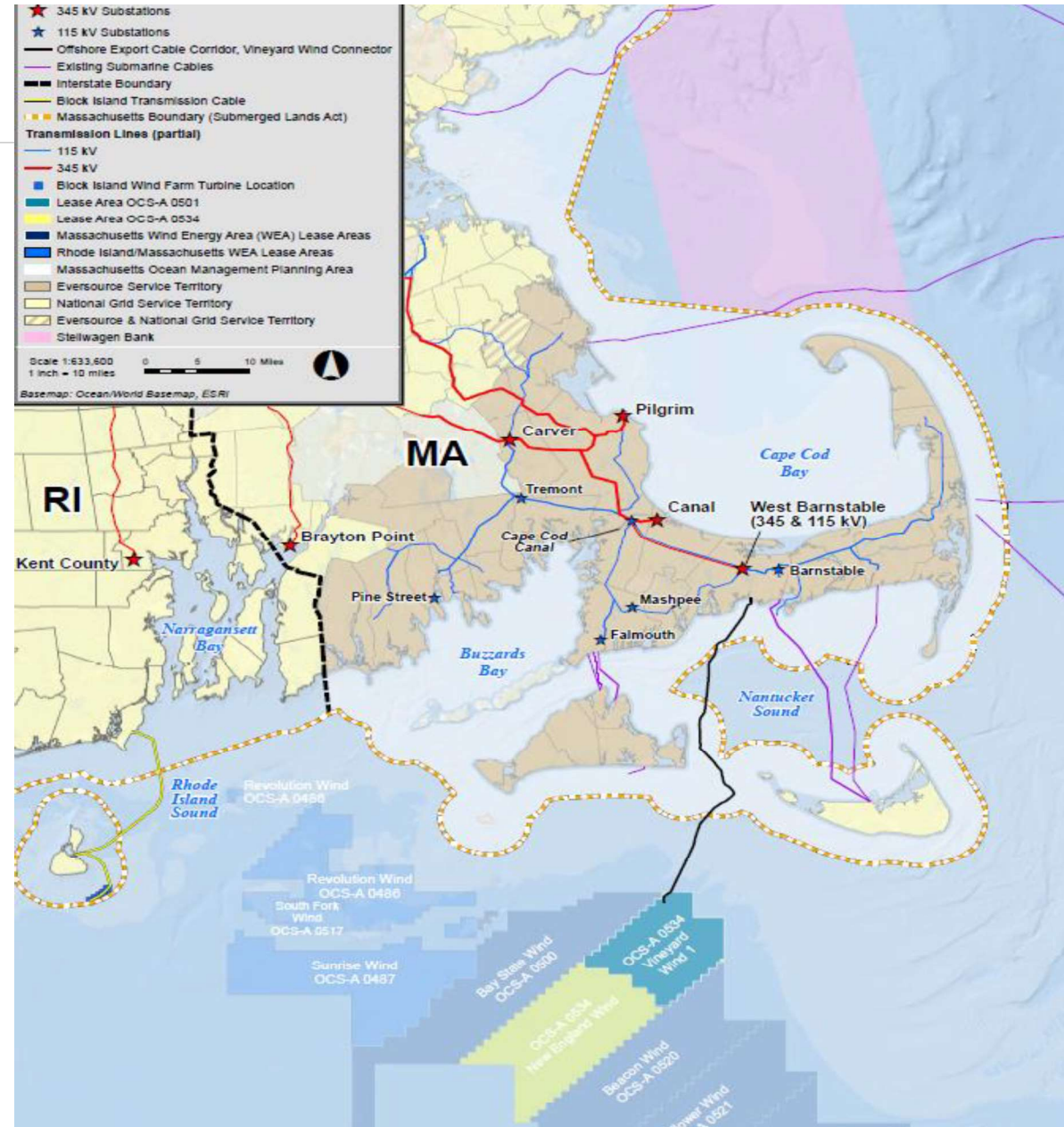
## OVERVIEW

- Vineyard Wind 1: 50% owned
- Park City Wind: 100% owned
- Commonwealth Wind: 100% owned
  - Almost 3 GW of power, enough for 1.55 million homes
- Kitty Hawk Wind: 100% owned (Virginia/North Carolina)



# Factors In Our Landing Decisions

- Grid interconnection options
- Accreting beach with paved parking area
- Adequate room for construction activities and Horizontal Directional Drilling (HDD)
- Distance from residences & businesses



# Project Landings & Routes



# Commonwealth Wind— Project Benefits



- Clean, renewable, homegrown energy
- Reduce winter energy price spikes
- Improve reliability of the electrical grid in Cape Cod and southeastern Massachusetts
- Reduces greenhouse gas emissions by 1.6 million tons per year, the equivalent of taking over 800,000 cars off the road
- 750,000 homes powered annually in Massachusetts through power purchase agreements with Massachusetts utilities
- Significant job creation – creates 11,000 direct job-years



# Town of Barnstable—Community Benefits



Ground-breaking ceremony at Covell's Beach for Vineyard Wind 1 Project

## Host Agreement and Tax Revenue

- Host community agreements with the Town of Barnstable for each project which include host community fees; all three offshore wind projects will make Avangrid one of the largest taxpayers in Barnstable, with little demand for town services.

## Coordination on Sewer Work

- Continued coordination with Barnstable DPW for the Vineyard Wind 1 and Park City Wind projects to install underground electric cables with the Town's sewer lines to minimize disruption and help town defray costs.
- Potential opportunity to collaborate with DPW for CWW if Main Street option moves forward

## Minimize Disruption

- Beach and road work during the non-summer months

## Environmental Stewardship

- Build and operate equipment to highest environmental standards to protect Cape Cod's precious resources

# Commonwealth Wind – Onshore Route Options

## Landfall:

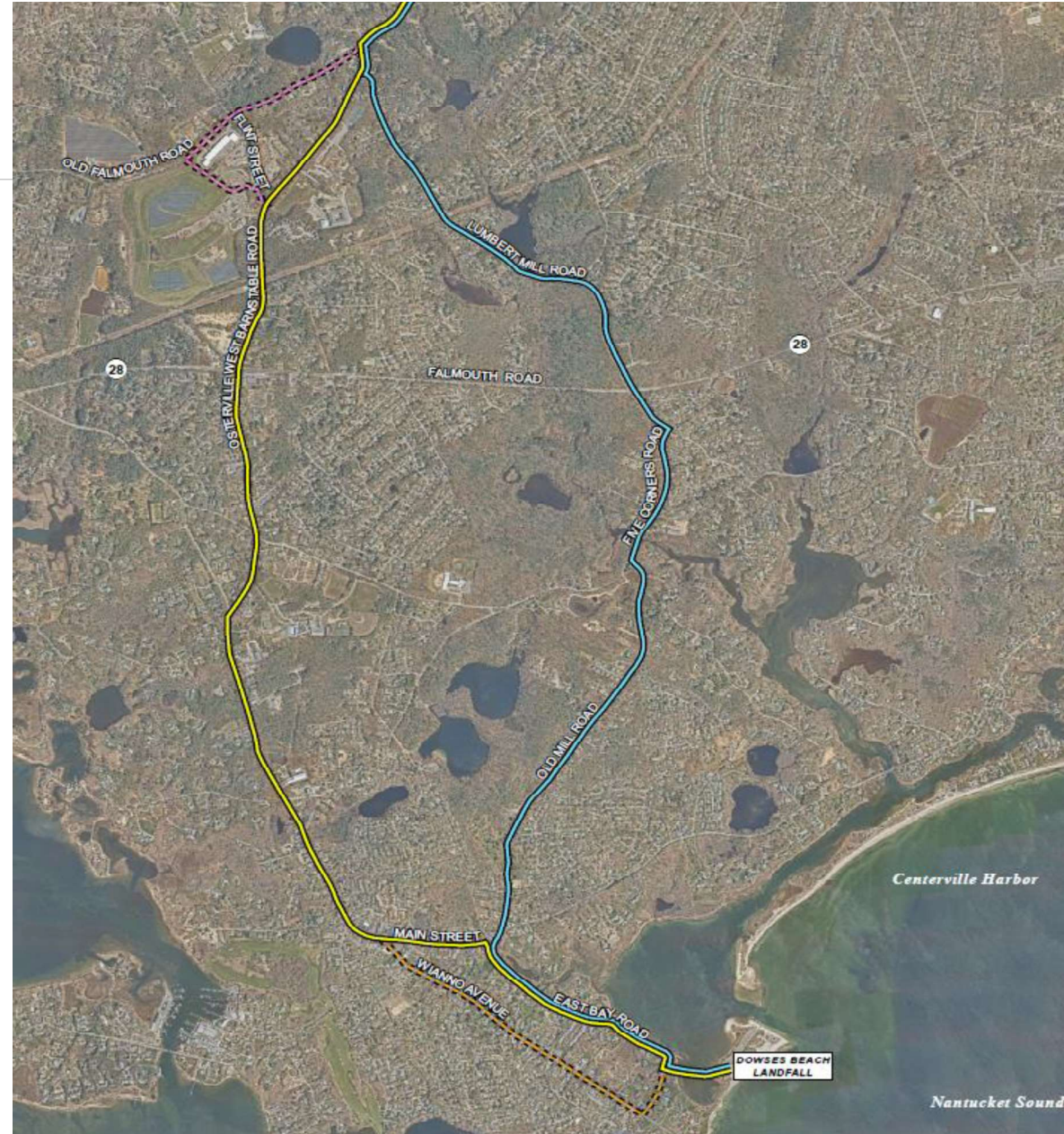
- Dowses Beach Parking Lot

## "Main Street":

- Dowses Beach Causeway
- East Bay Road or Wianno Avenue
- Main Street
- Osterville/West Barnstable Road
- Old Falmouth Road
- Old Stage Road
- Oak Street
- Service Road

## "Old Mill Road":

- Dowses Beach Causeway
- East Bay Road
- Old Mill Road
- Bumps River Road
- Lumbert Mill Rd where it converges with the Preferred route at Old Falmouth Rd.

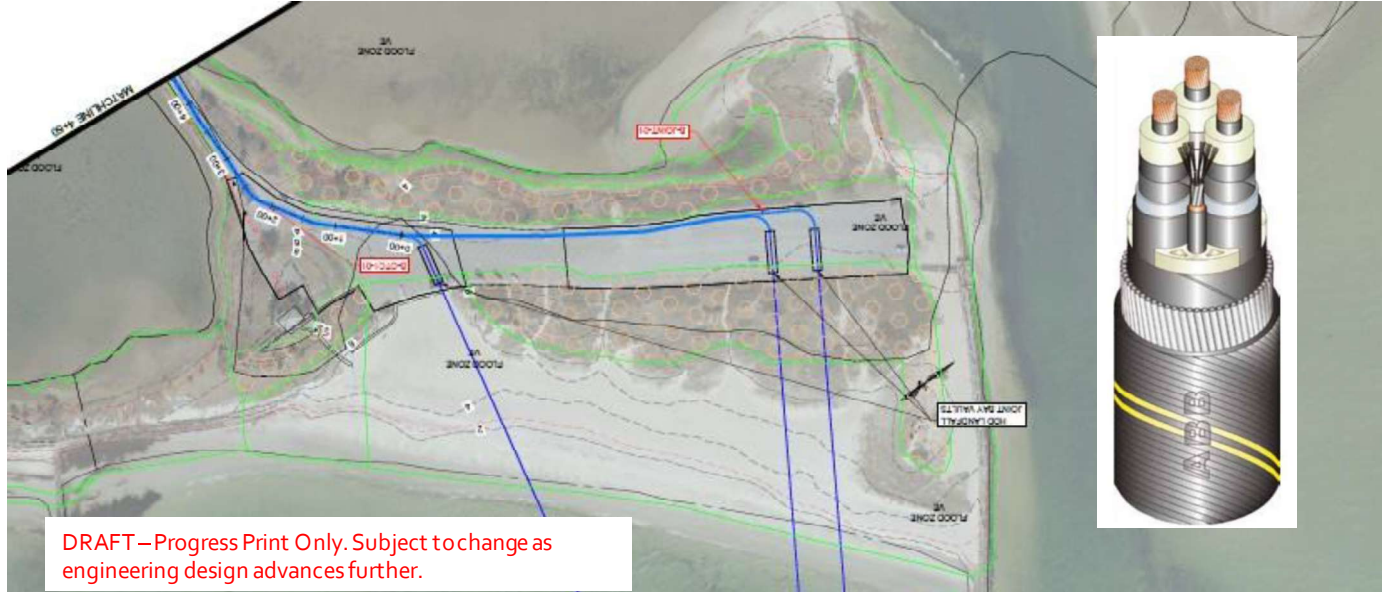


# Onshore Overview

- Three Subsea Cable Landfalls in Dowses Beach Parking Lot by "Horizontal Directional Drilling" (HDD)
- Subsea Cables splice with Onshore Cables in Joint Vaults located in the parking lot
- Onshore Cables combine into a single Underground Electrical "Duct Bank" – from parking lot to East Bay Road to "point of interconnection"
- All infrastructure located within existing paved areas in parking lot and roadways
- Work will take place during the off-season
- Will work with Town of Barnstable to identify restoration requirements
- Identical to recent construction at Covell's Beach parking lot for Vineyard Wind 1 Project (below)



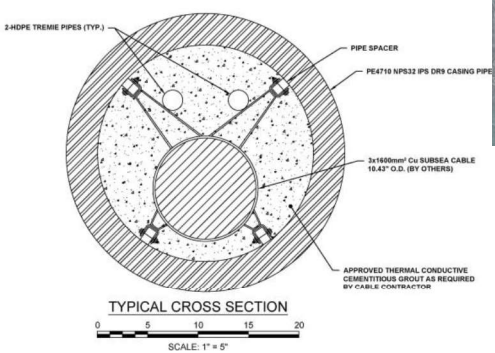
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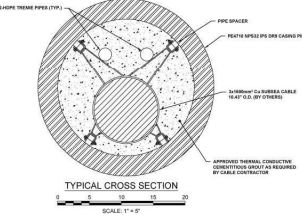
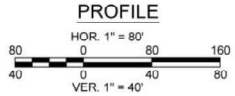
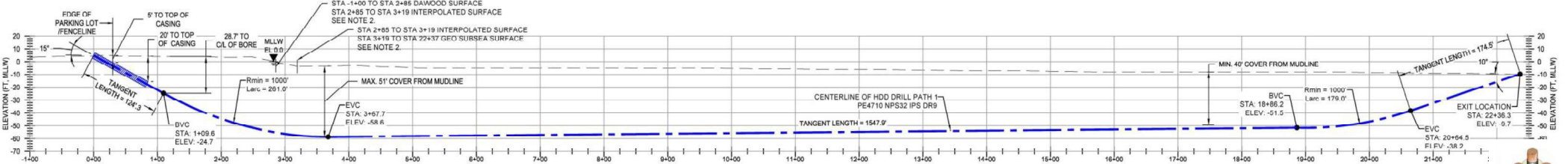
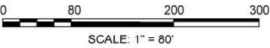


# Dowises Beach Landfall Site – Conceptual Design



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# Horizontal Directional Drilling – Conceptual Design

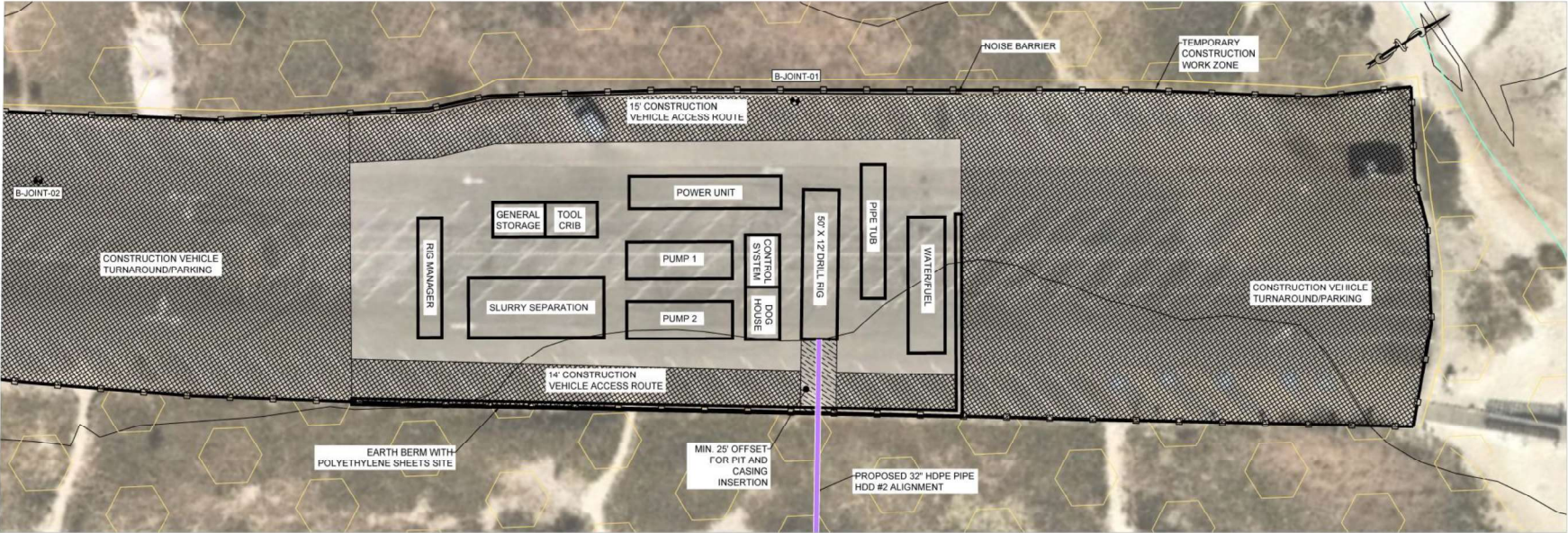


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# Horizontal Directional Drilling – Potential Construction Staging



# Horizontal Directional Drilling – Potential Construction Staging







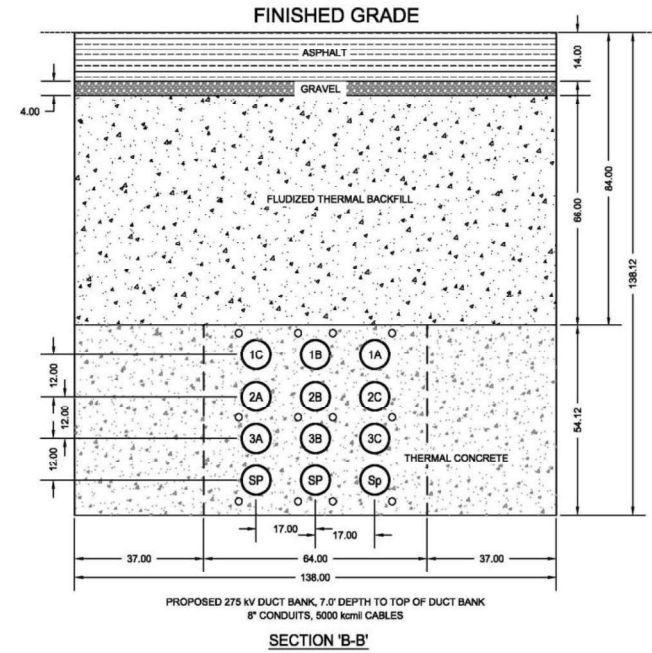
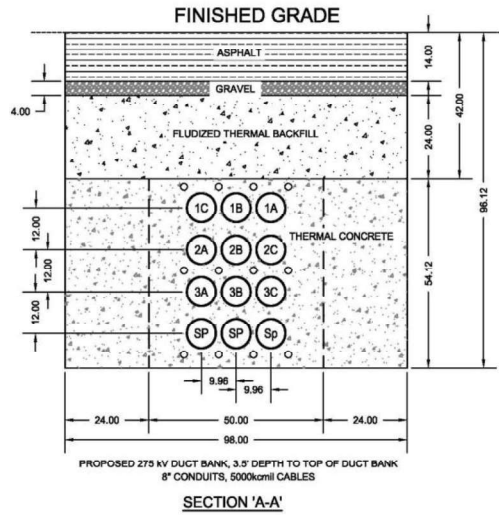




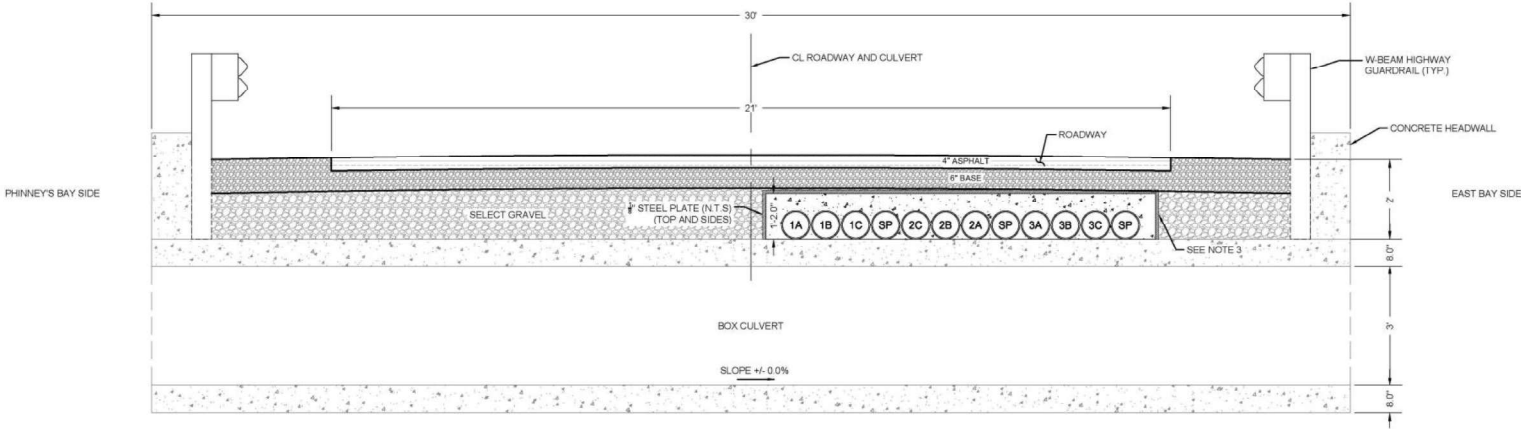


# Duct Bank – Conceptual Design

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# Dowse Beach Road Culvert Crossing – Conceptual Design



LONGITUDINAL SECTION - BOX CULVERT

# Overview of State/Regional/Local Permits and Reviews

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- EFSB – Energy Facilities Siting Board
- MEPA (ENF, DEIR and FEIR) Certificate
- MADEP
- 401 Water Quality Certification
- Chapter 91 Waterways License
- MassDOT
- Access and/or Crossing Permits, Licenses or Easements
- Massachusetts Historical Commission Review
- Massachusetts Bureau of Underwater Archaeological Resources Review
- MNHESP Review under Massachusetts Endangered Species Act
- Article 97 Disposition
- Cape Cod Commission Development of Regional Impact
- Martha’s Vineyard Commission Development of Regional Impact
- Orders of Conditions from local Conservation Commissions (Barnstable, Nantucket, Edgartown, and Mashpee)
- Other local permits (building permits, access permits, etc.)

## What's to come

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- September/October: Avangrid will be filing our Energy Facilities Siting Board petition and state Environmental Notification Form. We will share those with the OVA Board once posted online, as we previously committed to.
- Avangrid hosted 'Open Houses' planned this fall here at the library and on zoom.
- Our team will be available for one-on-one meetings, additional meetings with the OVA, and other groups as requested.

## Potential Localized Benefits/Projects in Osterville

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- Prior precedent of the Vineyard Wind project replacing the Covell's Beach bathhouse as part of their project.
- We'd like to do something similar in Osterville as part of this project. An investment in one or more local projects:
  - Osterville Recreation Building/James H. Crocker Jr. Park area?
  - Dowses Beach Bathhouse?
  - E Bay Road sidewalks
  - E Bay Fishing Piers
  - Joshuas Pond projects?
- What projects do you find the most compelling? Which projects are the priority?





# Pat Johnson

## Manager of External Affairs

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We are happy and available to meet with any Barnstable residents or organizations who have questions, concerns, or are simply curious.

Learn more at [www.ParkCityWind.com](http://www.ParkCityWind.com) or [www.CommonwealthWind.com](http://www.CommonwealthWind.com)

Thank you



AVANGRID



Offshore  
Wind