



DEEPWATERWIND

Clean energy is just over the horizon.



Goals for Today

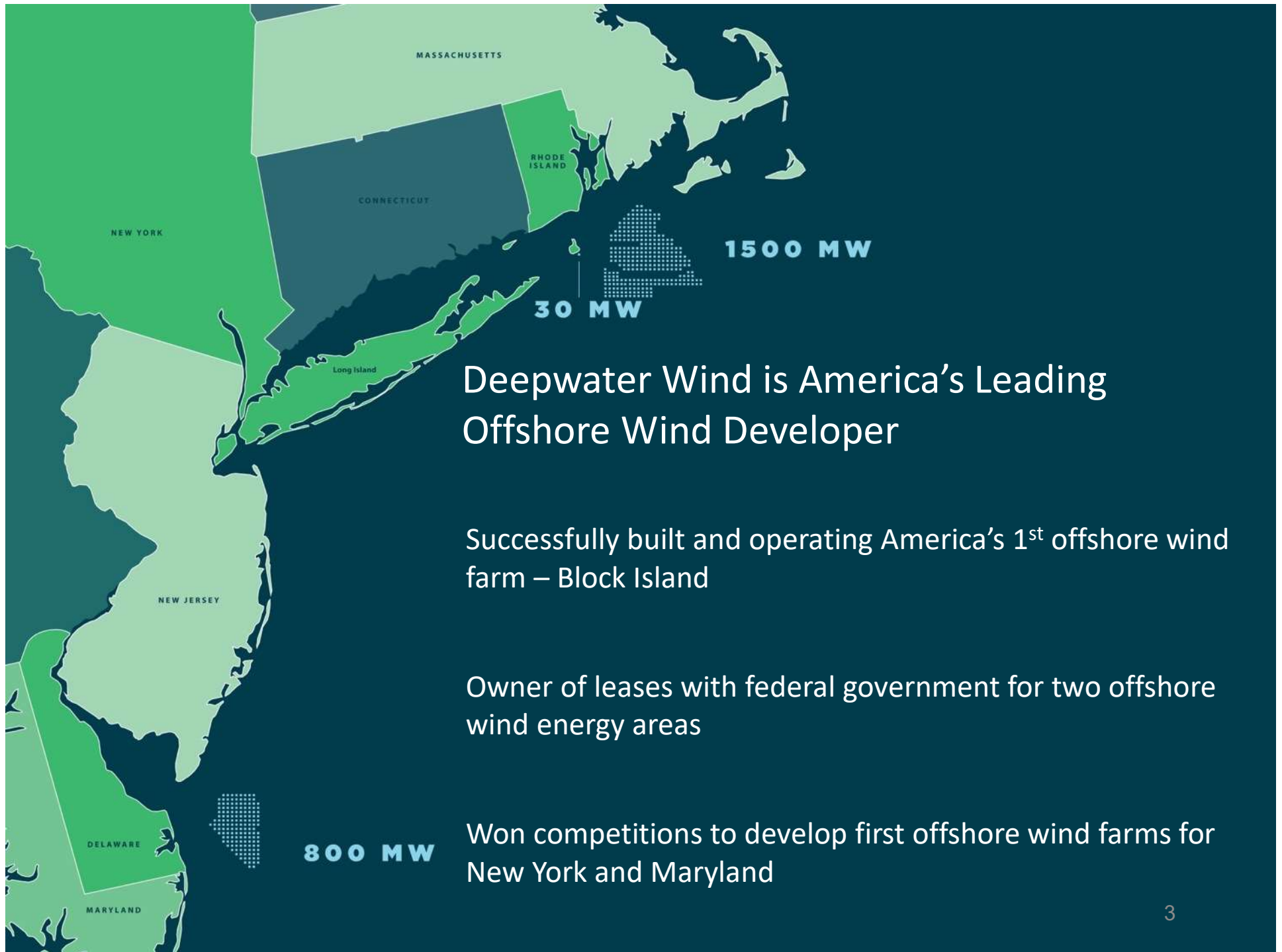
Introduce Deepwater Wind

Describe the South Fork Wind Farm

Explain our development timeline

Discuss how power is delivered

Answer your questions



A map showing the location of the Block Island Wind Farm. It features a dark blue background representing the ocean. In the top left, a small portion of a landmass is shown in light blue and labeled 'RHODE ISLAND'. Further down and to the left, a larger landmass is shown in light blue and labeled 'BLOCK ISLAND'. A thin white line represents the power transmission cable, starting from Block Island and extending northeast towards the mainland. At the end of this line, a series of small white circles connected by a line represent the offshore wind turbines.

America's 1st Offshore Wind Farm is Operating

Five Wind Turbines

Enough Power for 17,000 Homes

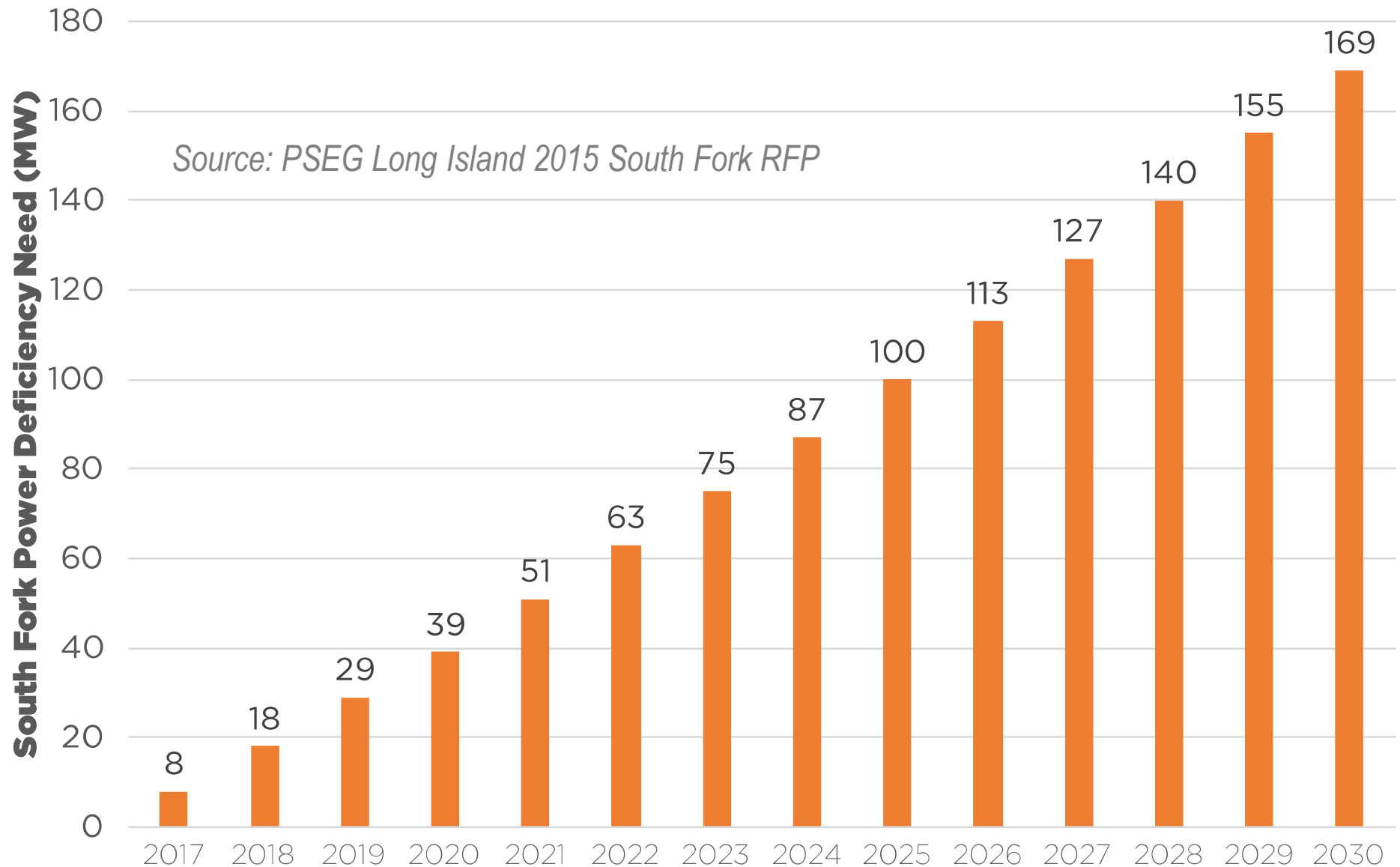
First ever electric connection
between Block Island and the Rhode
Island mainland

BLOCK ISLAND WIND FARM
America's First Offshore Wind Farm



The South Fork needs new power sources

In 2015, PSEG ran a technology-neutral competitive solicitation seeking new energy sources for the South Fork





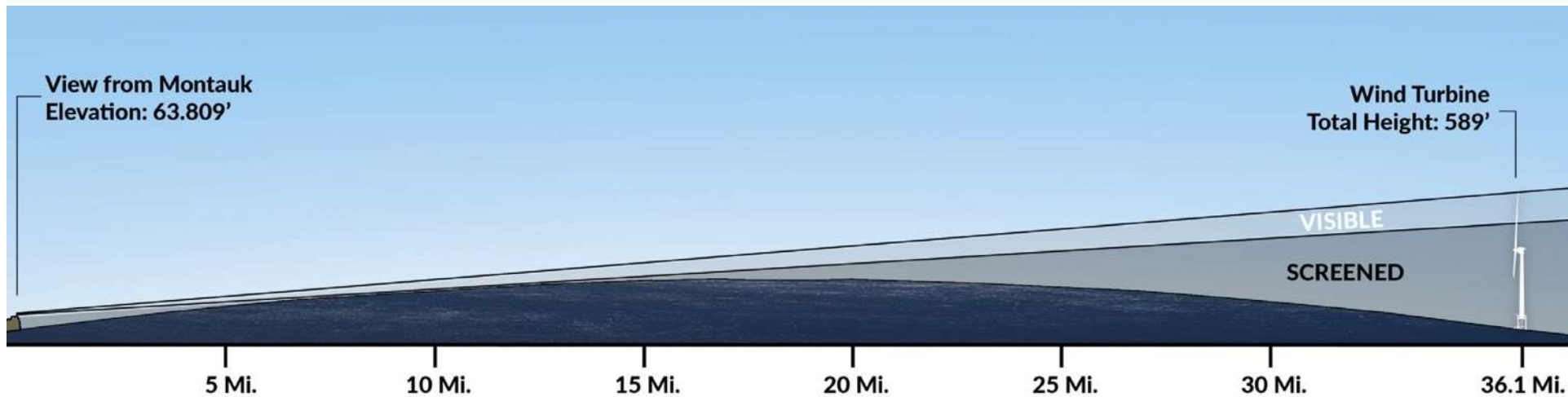
SOUTH FORK WIND FARM

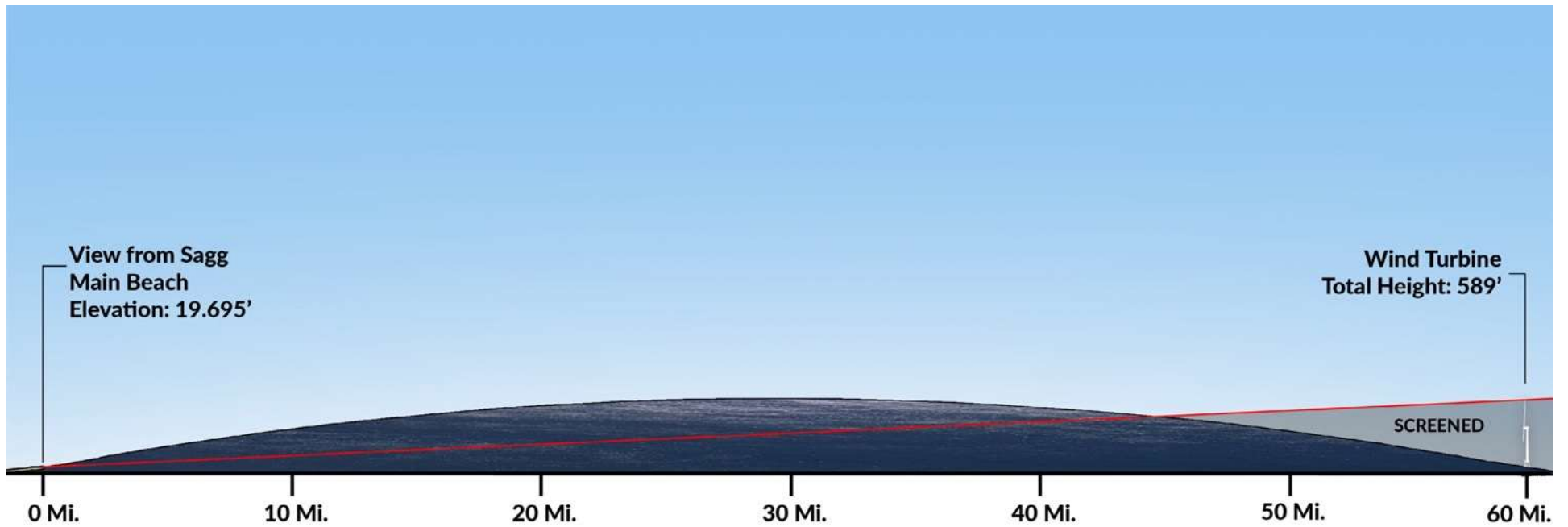
Deepwater Wind was awarded a 20 year contract to supply power to LIPA in East Hampton

90 MW wind farm located 30 miles east of Montauk

Will power 50,000 typical homes

Allows LIPA to defer construction of fossil-fired generation in East Hampton

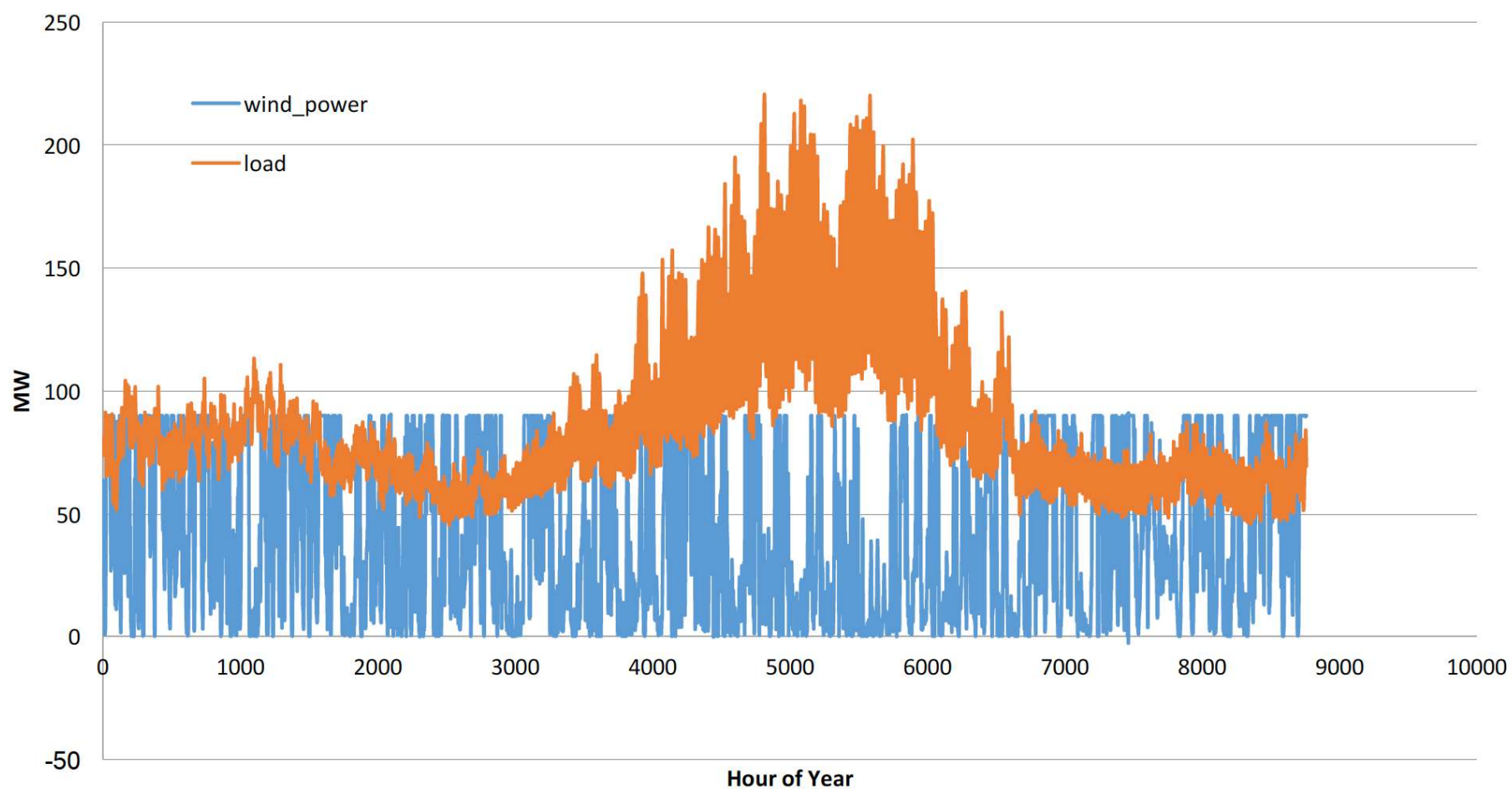






The Wind Farm will be a major source of local energy for the South Fork

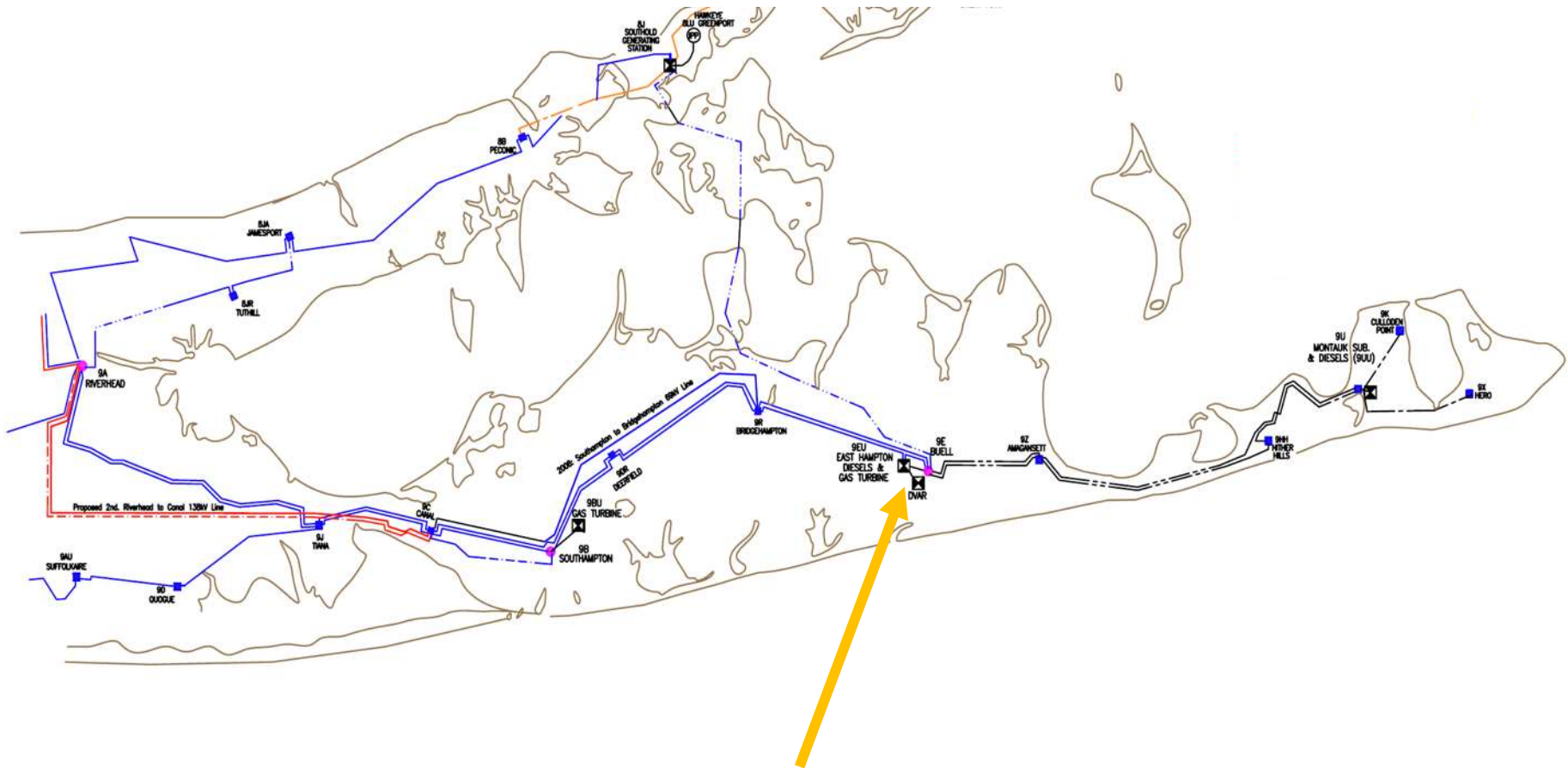
Hourly Electrical Load and 90 MW Wind Farm



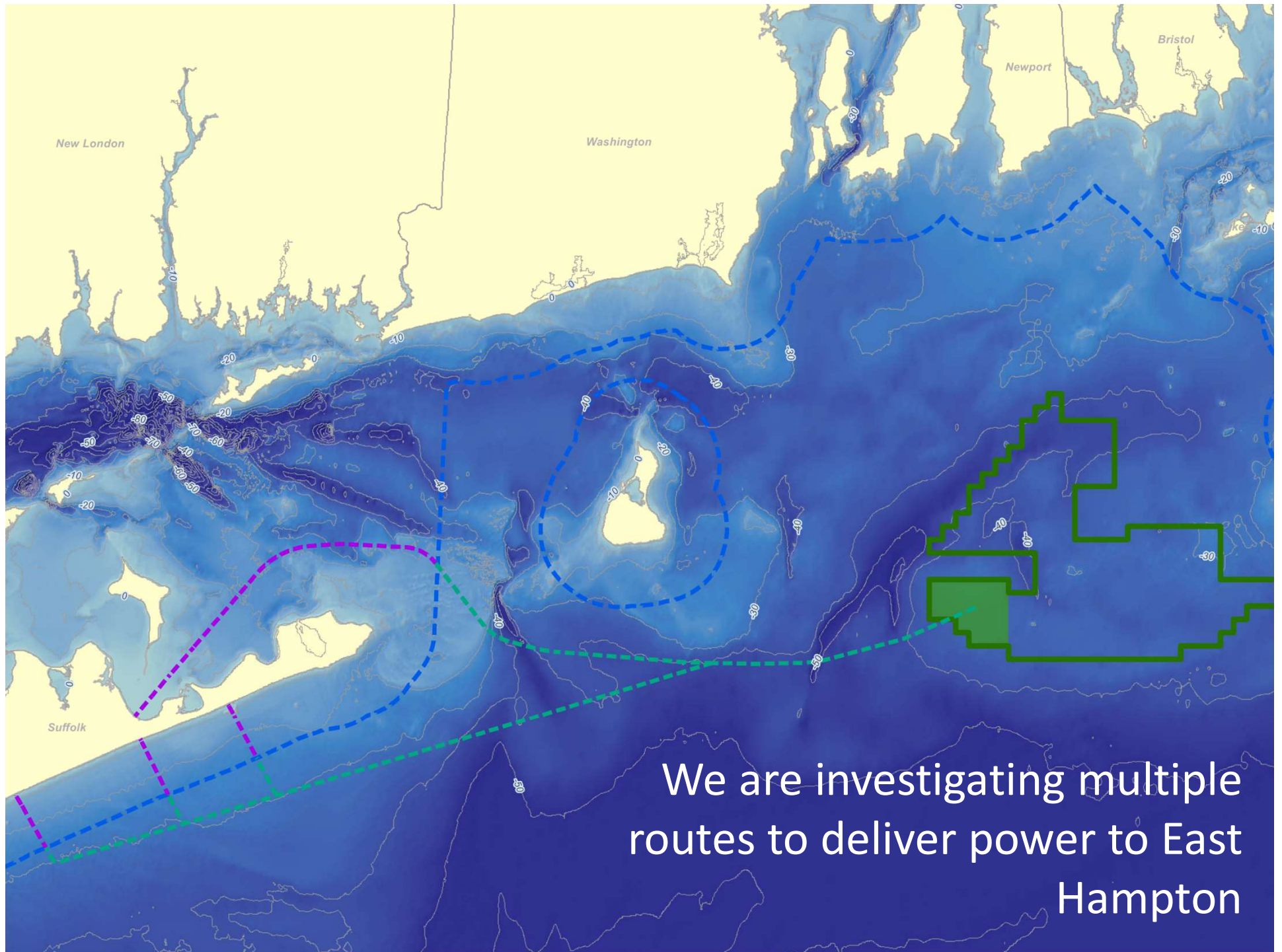
Source: Independent study by Dr. James Manwell of the University of Massachusetts conducted on behalf of Newsday



We must deliver power to LIPA's East Hampton substation



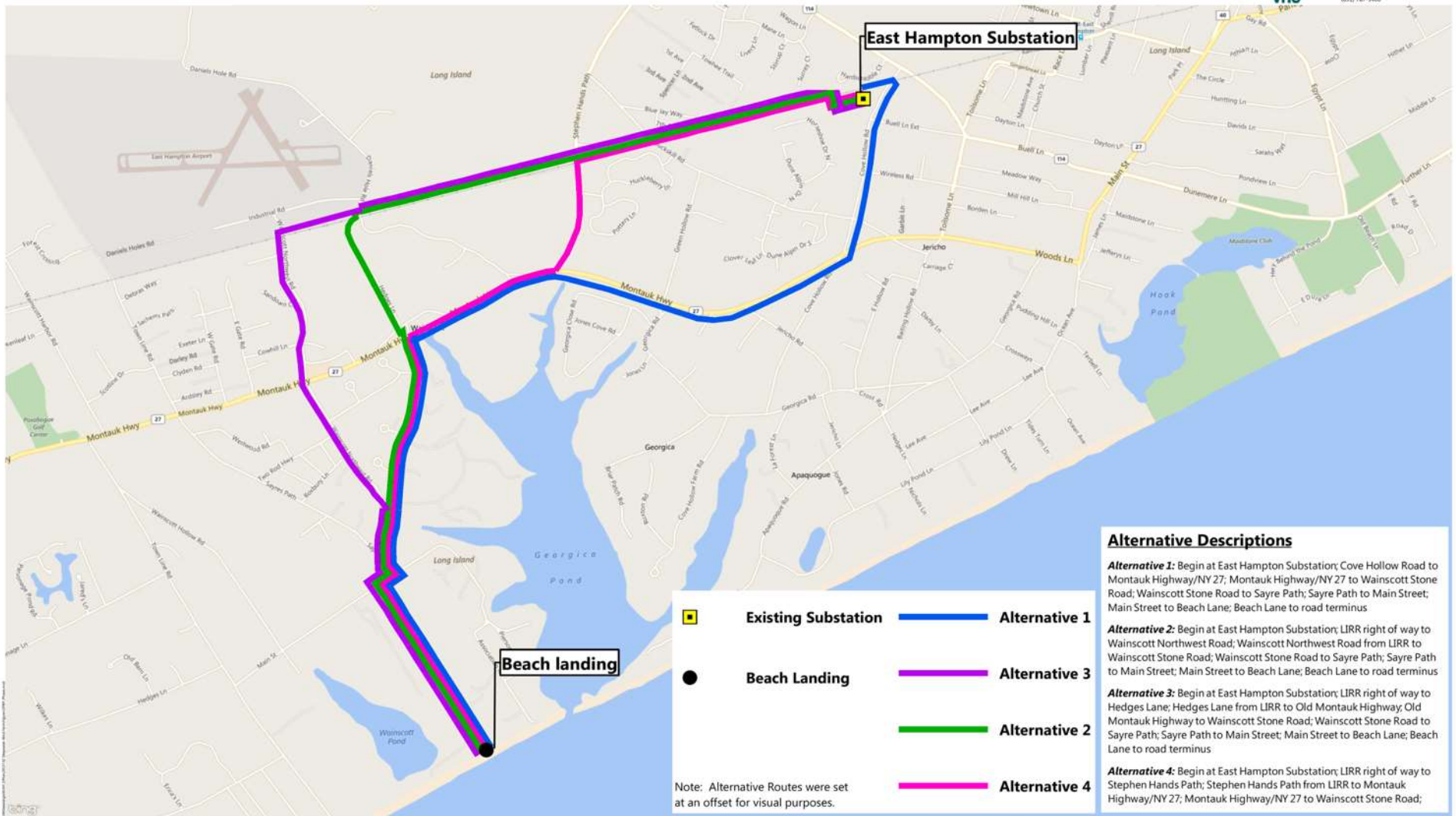
LIPA's East Hampton substation is located on Cove Hollow Road, just South of the LIRR Tracks





Wainscott is an excellent potential landing

Technical conditions and proximity to substation allow for easy installation with minimal disturbance



0 0.125 0.25 0.5 Miles

South Fork Wind Farm
Wainscott Landfall Alternative Routes

East Hampton, New York
Date: 8/3/2017

Sources: 1. Bing Maps Road, 2017; 2. Village boundary, NYS GIS; 3. LIRR, Suffolk County GIS



Permitting will involve many Municipal, State, and Federal Agencies



**US Army Corps
of Engineers®**





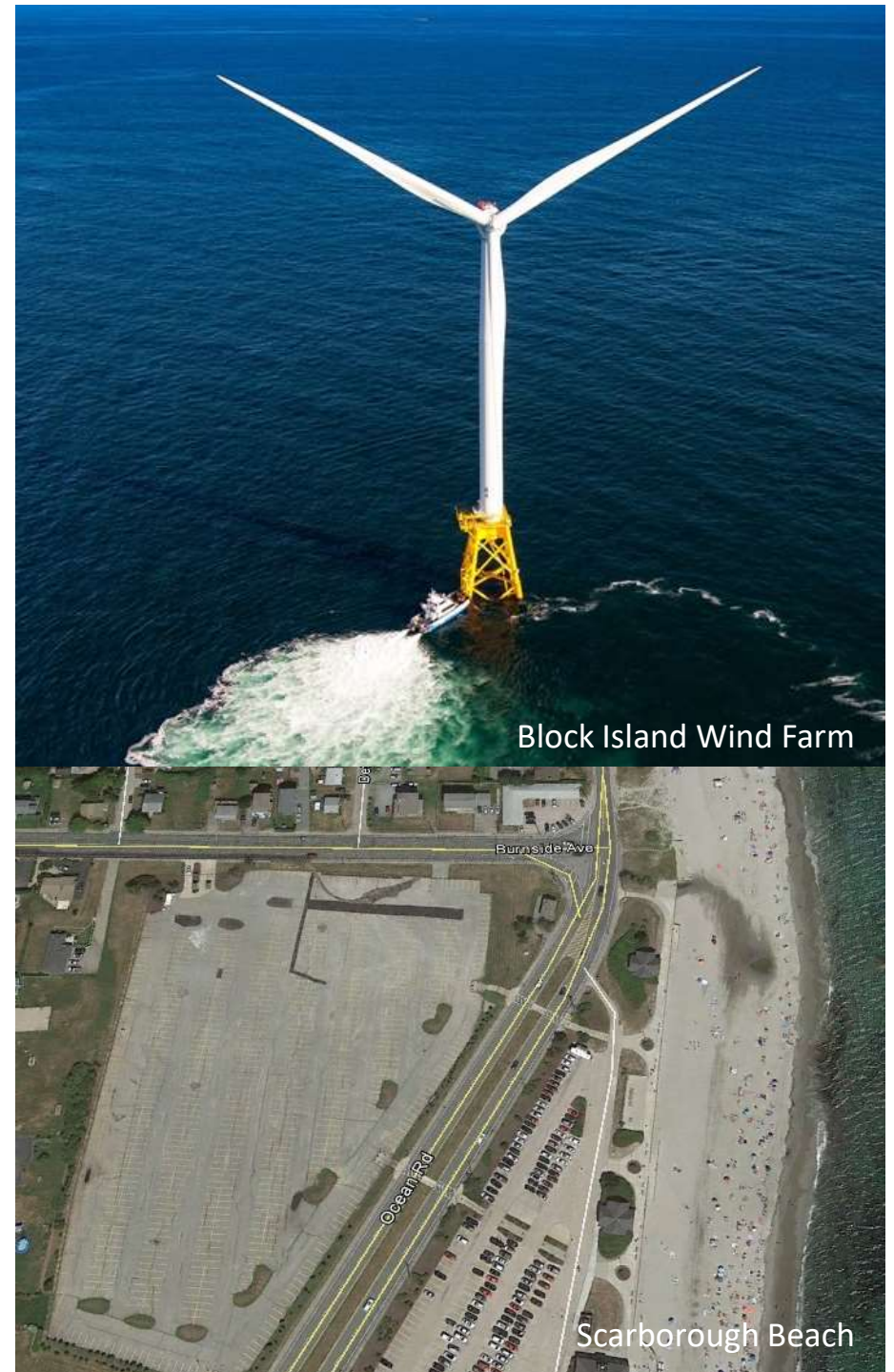
Project Development Timeline

SUMMER 2017	STAKEHOLDER MEETINGS (IN PROCESS)
SPRING 2018	APPLY FOR PERMITS
SUMMER 2020	PERMIT APPROVALS
SUMMER 2021	FOUNDATION INSTALLATION OFFSHORE
WINTER 2021 - 2022	CABLE LANDFALL CONSTRUCTION ONSHORE
SPRING 2022	CABLE INSTALLATION OFFSHORE AND PULL-IN
SUMMER 2022	WIND TURBINE INSTALLATION OFFSHORE
DECEMBER 2022	COMMERCIAL OPERATIONS



Delivering Offshore Wind to East Hampton Cable Shore Landing

1. Overview of cable shore landing process
2. Review current design considerations
 - a. Minimize community disturbance
 - b. Account for site specific conditions
3. Discuss opportunities to improve proposed design and answer any questions



Overview of Proposed Cable Shore Landing Process

PHASE 1: CONDUIT

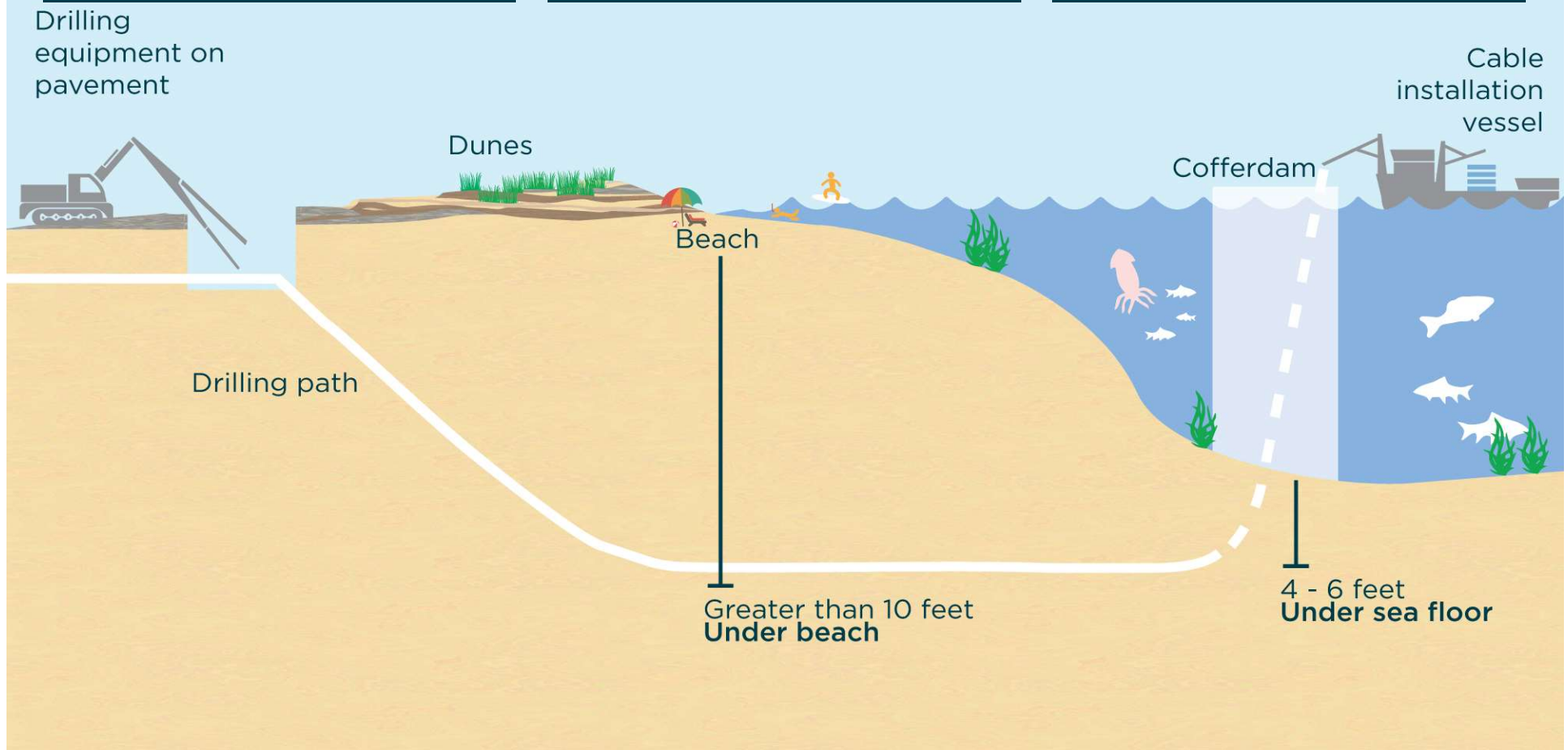
Install a conduit – a plastic pipe – from beach parking lot, deep under beach, to distance offshore

PHASE 2: RESTORE

Restore beach parking lot to condition better than we found it.

PHASE 3: CABLE

Pull submarine cable from offshore through previously installed conduit.





Location:
Parking lot at the end
of Beach Lane



Design Considerations

Beach is enjoyed 365 days per year and is heavily used in summer

1. Must maintain access to beach
2. Focus work that impacts parking lot from November to May
3. No intrusive activities on beach
4. Noise from construction to comply with local noise ordinances
5. Cable depth below beach must account for seasonal and storm induced erosion
6. Leave area in better condition than we found it

PHASE 1: CONDUIT

Install a conduit – a plastic pipe – from beach parking lot, deep under beach, to distance offshore



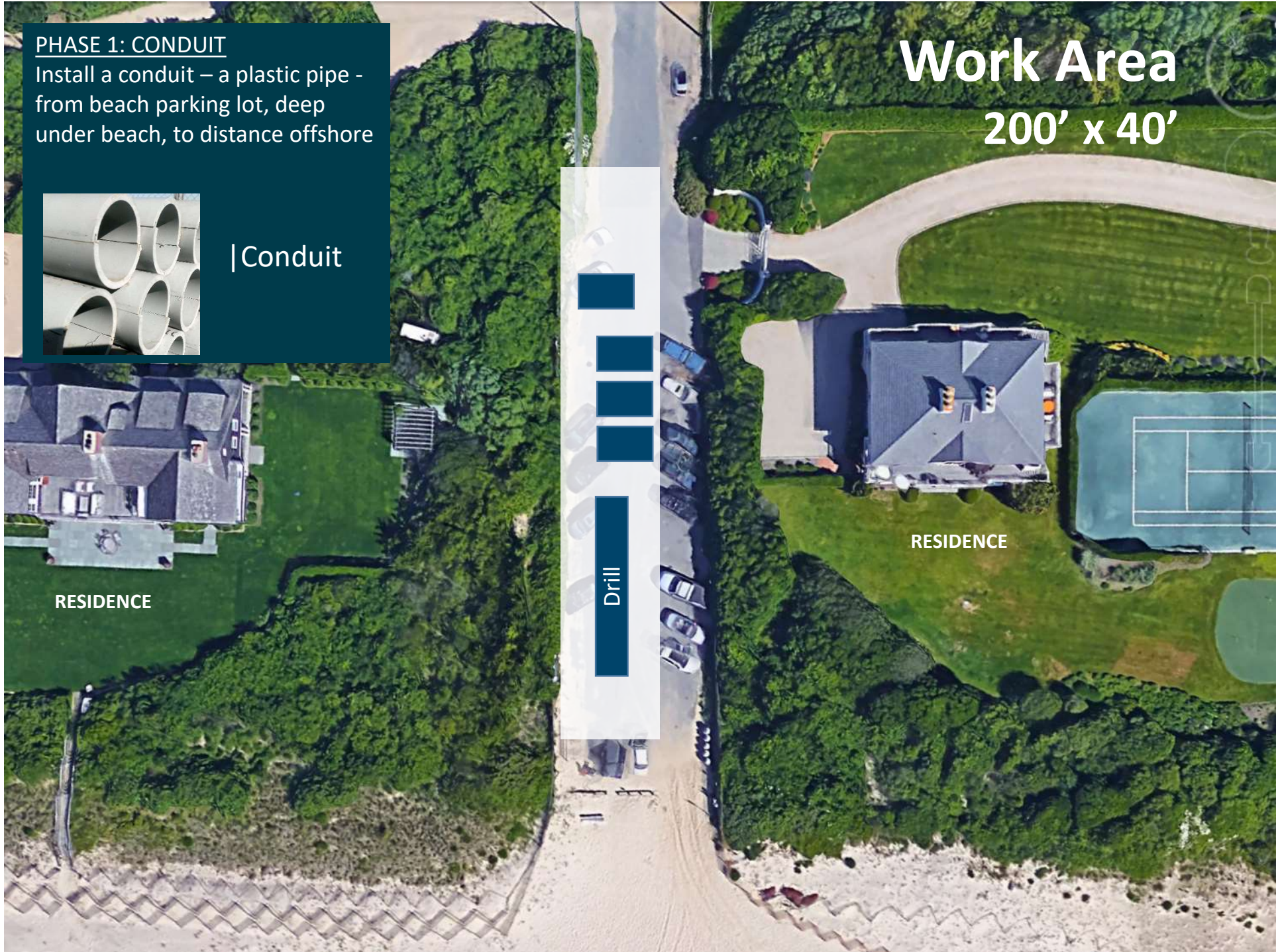
| Conduit

Drill

Work Area
200' x 40'

RESIDENCE

RESIDENCE



Additional Phase 1 Design Considerations

- Duration: ~ 14 weeks
- Assumes 12 hours/day
- Schedule at time with least impact to parking lot: Assumed November to May
- Construction noise to comply with local noise ordinance
- Cable depth greater than 10 feet below beach to account for seasonal and storm induced erosion



NO INTRUSIVE ACTIVITIES ON BEACH

PHASE 2: RESTORE

Restore parking lot to condition better than we found it

Only permanent visible infrastructure will be man hole covers.



Source: Google Earth Image

PHASE 3: CABLE

Pull submarine cable from offshore through previously installed conduit.

Work Area
200' x 30'

RESIDENCE

RESIDENCE

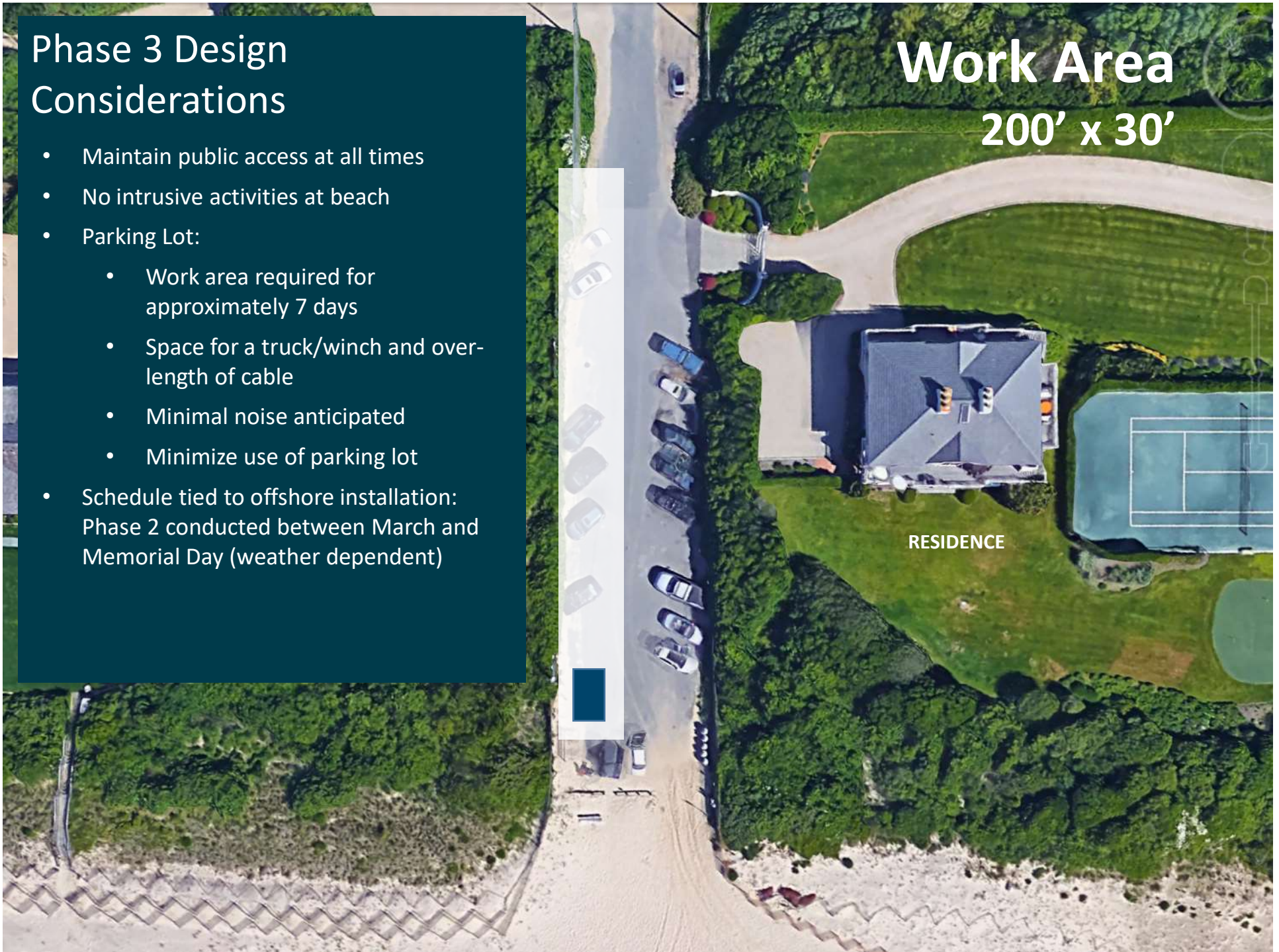


Phase 3 Design Considerations

- Maintain public access at all times
- No intrusive activities at beach
- Parking Lot:
 - Work area required for approximately 7 days
 - Space for a truck/winch and over-length of cable
 - Minimal noise anticipated
 - Minimize use of parking lot
- Schedule tied to offshore installation: Phase 2 conducted between March and Memorial Day (weather dependent)

Work Area
200' x 30'

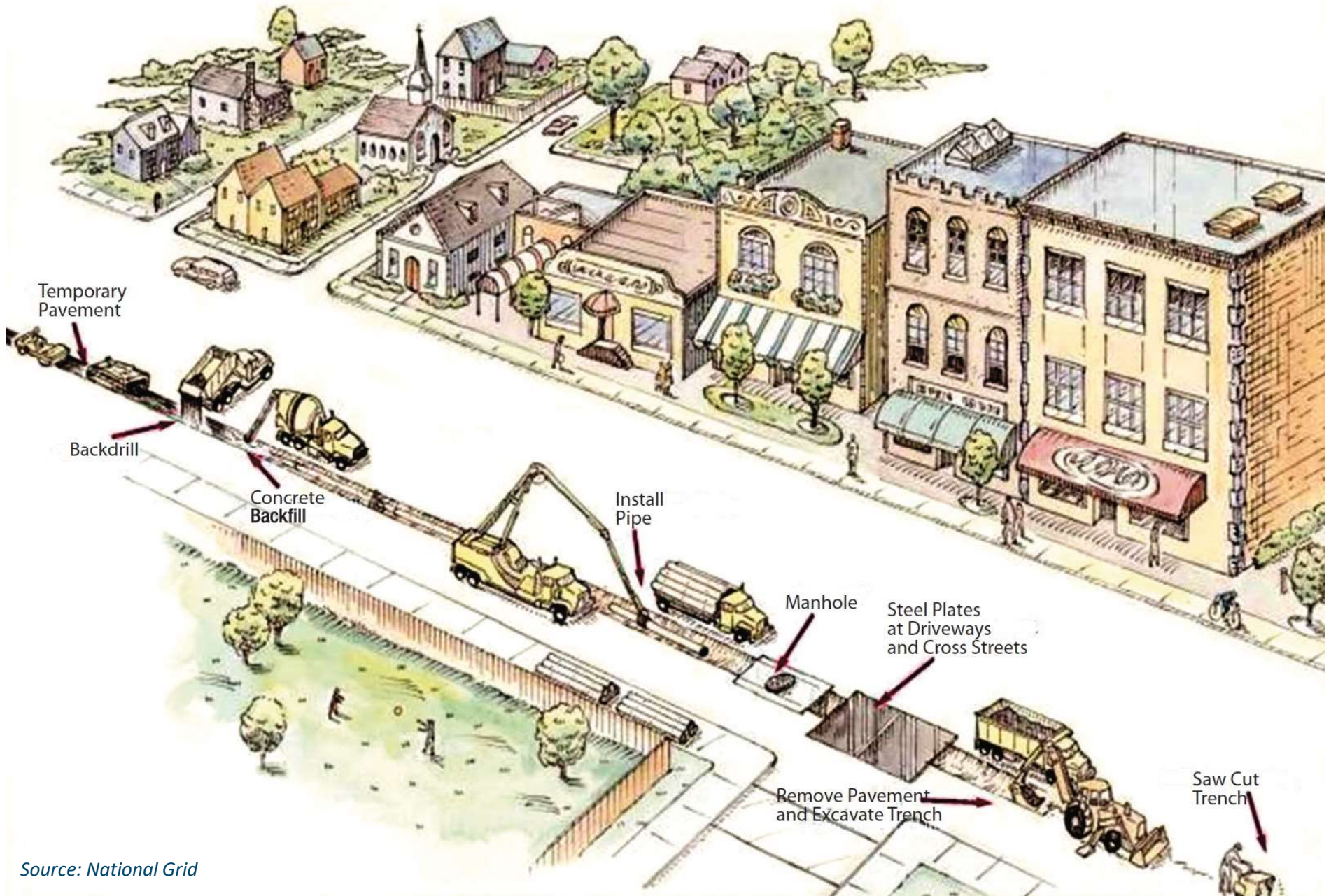
RESIDENCE





Manhole covers are the only visible sign
of shore landing at Block Island Town
Beach.

Cable will be buried along route.



Source: National Grid



Questions?

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