

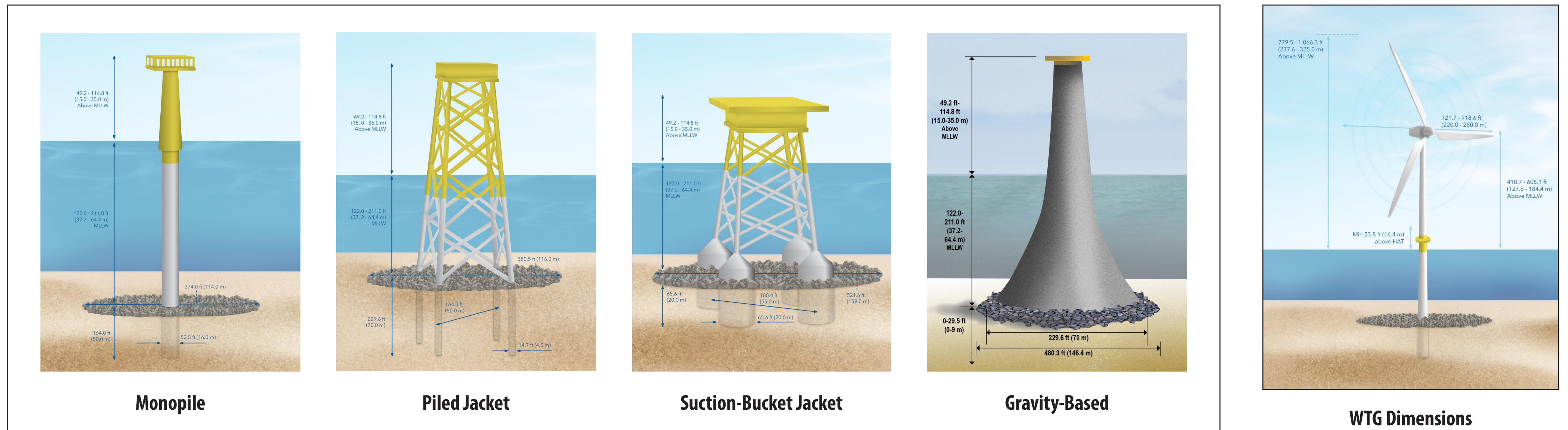


**Mayflower Offshore Wind Project**

# Project Design Envelope

A project design envelope is a permitting approach that allows a lessee to define a range of design parameters within a Construction and Operations Plan. BOEM then analyzes the maximum impacts that could occur within the range of the design parameters — referred to as the “maximum design scenario.”

Representative design parameters for the Mayflower Project are outlined below. Refer to Mayflower Wind’s Construction and Operations Plan for a detailed explanation of the project design envelope.



Project Component	Representative Project Design Parameters
Foundations	<ul style="list-style-type: none"> <li>Monopile, piled jacket, suction-bucket jacket, and/or gravity-based structure (up to two different concepts will be installed)</li> <li>Installation using hammered pile driving (for monopiles and/or piled jacket foundations)</li> <li>Scour protection may be installed around all foundation types</li> </ul>
Wind Turbine Generators (WTGs)	<ul style="list-style-type: none"> <li>Up to 147 WTGs</li> <li>Rotor diameter up to 918.6 feet (280 meters)</li> <li>Hub height up to 605.1 feet (184.4 meters) above mean lower low water (MLLW)</li> <li>Tip height up to 1,066.3 feet (325 meters) above MLLW</li> <li>Tip clearance above highest tide - 53.8 feet (16.4 meters)</li> </ul>
Inter-Array Cables	<ul style="list-style-type: none"> <li>Up to 72.5 kilovolt, 3-core cables buried up to 3.2 feet to 8.2 feet (1 meter to 2.5 meters) beneath the seabed</li> <li>Maximum total cable length 497.1 miles (800 kilometers)</li> <li>Jetting remotely operating vessel (ROV), pre-cut plow, mechanical plow, and mechanical cutting ROV system</li> <li>Proposed protection if target cable burial depth is not achieved includes rock berm, concrete mattress placement, rock placement, fronded mattresses, and half shells</li> </ul>
Offshore Export Cables	<ul style="list-style-type: none"> <li>Two offshore export cable corridors - Falmouth and Brayton Point</li> <li>Up to five 345 kV (Falmouth) and six 320 kV (Brayton Point) export cables buried up to 13.1 feet (4 meters)</li> <li>Maximum total corridor length is 87 miles (140 kilometers) for Falmouth and 124 miles (200 kilometers) for Brayton Point</li> <li>Vertical jetting, jetting sled, jetting ROV, pre-cut plow, mechanical plowing, mechanical cutting ROV system</li> <li>Proposed protection if target cable burial depth is not achieved includes rock berm, concrete mattress placement, rock placement, fronded mattresses, and half shells</li> </ul>
Offshore Substation Platform (OSP)	<ul style="list-style-type: none"> <li>Up to five OSPs installed atop monopile, piled jacket, suction-bucket jacket, or gravity-based structure</li> </ul>
Onshore Facilities	<ul style="list-style-type: none"> <li>Landfall of export cables will be completed via horizontal directional drilling</li> <li>One onshore substation at two possible locations to disturb up to 26 acres (10.5 hectares)</li> <li>One HVDC converter station to disturb up to 7.5 acres (3 hectares)</li> <li>Onshore transmission and interconnection cables with total maximum cable length of 7 miles (11.3 kilometers)</li> <li>Up to twelve 345 kV onshore export cables and five communication cables to substation and four 320 kV onshore export cables and 2 communication cables to converter station</li> <li>Up to 19.11 acres (7.7 hectares) of disturbed area for onshore export cables</li> </ul>
Operations & Maintenance (O&M) Facilities	<ul style="list-style-type: none"> <li>Potential O&amp;M Ports include Brayton Point, Borden &amp; Remington Port, New Bedford State Pier, Eversource Energy and Sprague Oil, New Bedford Marine Commerce Terminal, MA Maritime Academy, Woods Hole SSA, Hyannis Marina, and Sandwich Marina</li> </ul>