Littleton

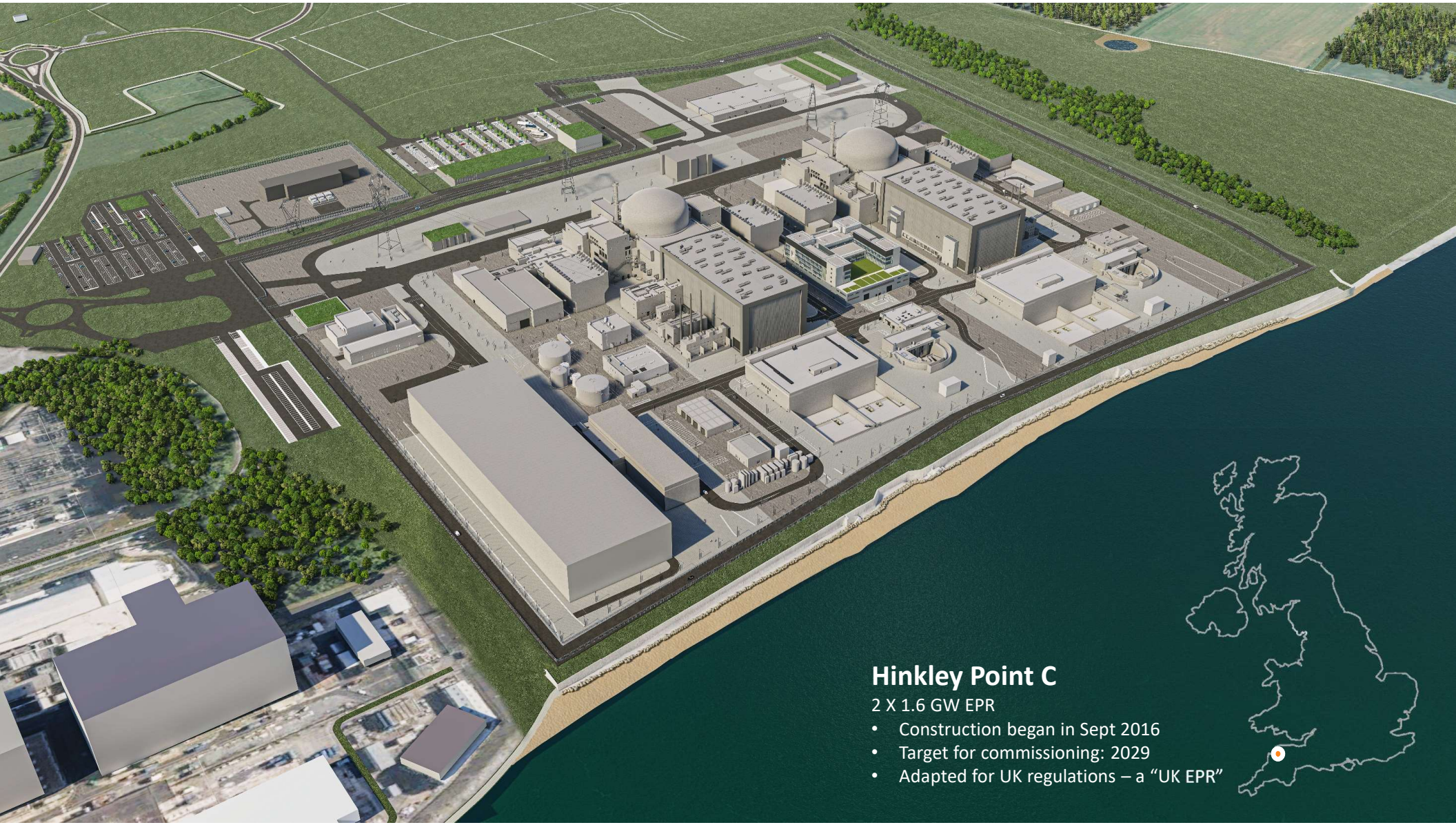
Exploring the Concept of New Saltmarsh Habitat

HinkleyPointC
Helping Britain Achieve Net Zero
EDF CGN

Why Saltmarsh?

Hinkley Point C

- First new nuclear power station **in a generation**
- **Essential in the fight against climate change** and to build a **secure, resilient system.**
- Will provide **Six million homes with low carbon energy** – **7% of UK demand**
- **£18billion investment** in Britain.
- **25,000 job opportunities** – thousands with local people


Hinkley Point C
2 X 1.6 GW EPR
• Construction began in Sept 2016
• Target for commissioning: 2029
• Adapted for UK regulations – a “UK EPR”

Changes to HPCs Development Consent Order

INTERIM SPENT FUEL STORE

A change from a 'wet' interim spent fuel store to a 'dry' interim spent fuel store and associated increase to the building's size.

EQUIPMENT STORAGE BUILDING

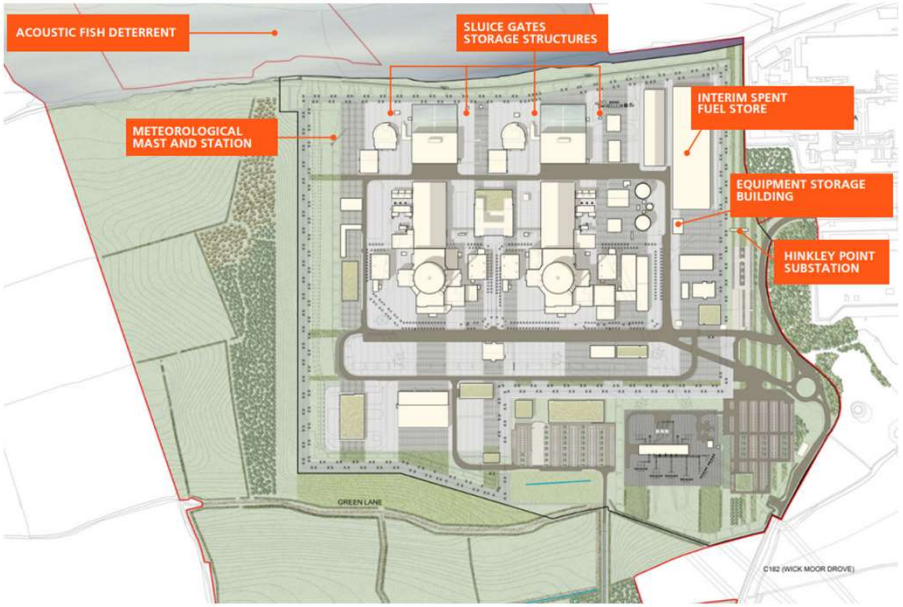
Linked to the storage of interim spent fuel, the replacement of the previously proposed Access Control Building with a new, larger, Equipment Storage Building.

METEOROLOGICAL MAST AND STATION

Relocation and redesign of the meteorological mast. Removal of the meteorological station and replacement with an equipment compound.

HINKLEY POINT SUBSTATION

Retention of the existing temporary Hinkley Point Substation as a permanent building to supply electricity to Hinkley Point A and Hinkey Point B power stations.



Location of the on-site changes proposed at Hinkley Point C

SLUICE GATE STORAGE STRUCTURES

Addition of four new storage racks to hold sluice gates and lifting beams that would be used during maintenance periods.

ACOUSTIC FISH DETERRENT

Removal of the requirement to install an acoustic fish deterrent system associated with the power station's cooling water system.

HABITAT CREATION AND ENHANCEMENT

Proposals for large scale habitat creation that would include new areas of saltmarsh and associated habitats, the planting of seagrass and kelp and the development of native oyster beds. We also propose some changes to weirs in rivers, helping the migration of fish.

Compensation Measures – Marine

Creation or Enhancement of Native Oyster Beds

We are proposing to create or enhance around 1-2 hectares of native oyster beds. Suitable areas around the coast of the Severn Estuary will be assessed.

Native oyster beds were once common around the UK coastline, however 95% of them have now been lost. Oysters are an important species that support the wider ecosystem, including reef formation, erosion control, improvement of water quality, raw material supply and food provision.

Discussions on the location and potential approach to the development are ongoing.

Karen Vanstaen – Crown copyright.

Creation or enhancement of Kelp Forest

We are proposing to create or enhance around 15 hectares of Kelp Forest.

Kelp is a brown seaweed which can form dense submerged forests and is found across the UK.

Kelp is an important species that supports the wider ecosystem, aids coastal defence and plays a vital role in the maintenance of fish stocks. Kelp habitats are also important for a range of recreational activities, such as diving and angling.

Discussions on the location and potential approach to the development are ongoing.

Image is for illustrative purposes only.

Creation or enhancement of Seagrass Habitat

We are proposing to create or enhance around 5 hectares of seagrass habitat. Seagrass is a marine plant that grows in shallow waters. In addition to supporting a diverse ecosystem, seagrass meadows would also have numerous wider benefits including coastal protection and improved water quality.

Discussions on the location and potential approach to the development are ongoing.

Image is for illustrative purposes only.

Compensation Measures – Weirs

Osbaston Weir – River Monnow

- We plan to improve a total of 4 weirs on tributaries to the Severn to help migratory fish reach further upstream.
  - Osbaston
  - Trostrey
  - Upper-Lode
  - Maisemore

Benefits of Saltmarsh

Reducing Flood Risk

Carbon Storage and Sequestration

Improving Water Quality

Creating Productive Ecosystems including benefits to fish

Other Successful Schemes

Steart Marshes – Severn Estuary

Hesketh Outmarsh – River Ribble, Lancashire

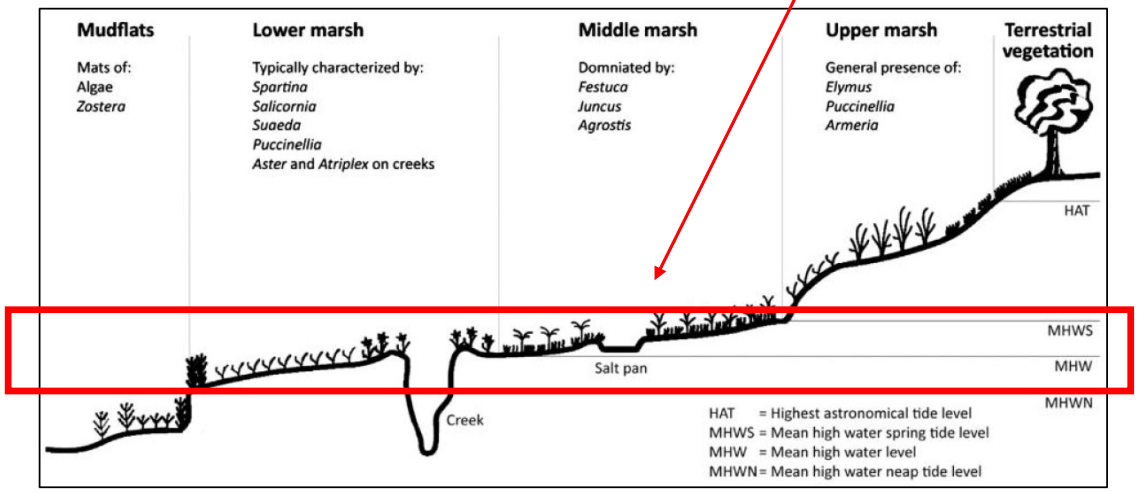
Material Change Application

Why Littleton?

Intertidal habitat formation

- Intertidal habitats form in sheltered areas along the coastline.
- Tidal flats and saltmarsh form at an elevation where the tide temporarily covers the site.
- When the tide covers the site, this causes mud and silt to accumulate on the site.
- The mud and silt build up overtime, providing a suitable environment for salt marsh species to grow and live in.

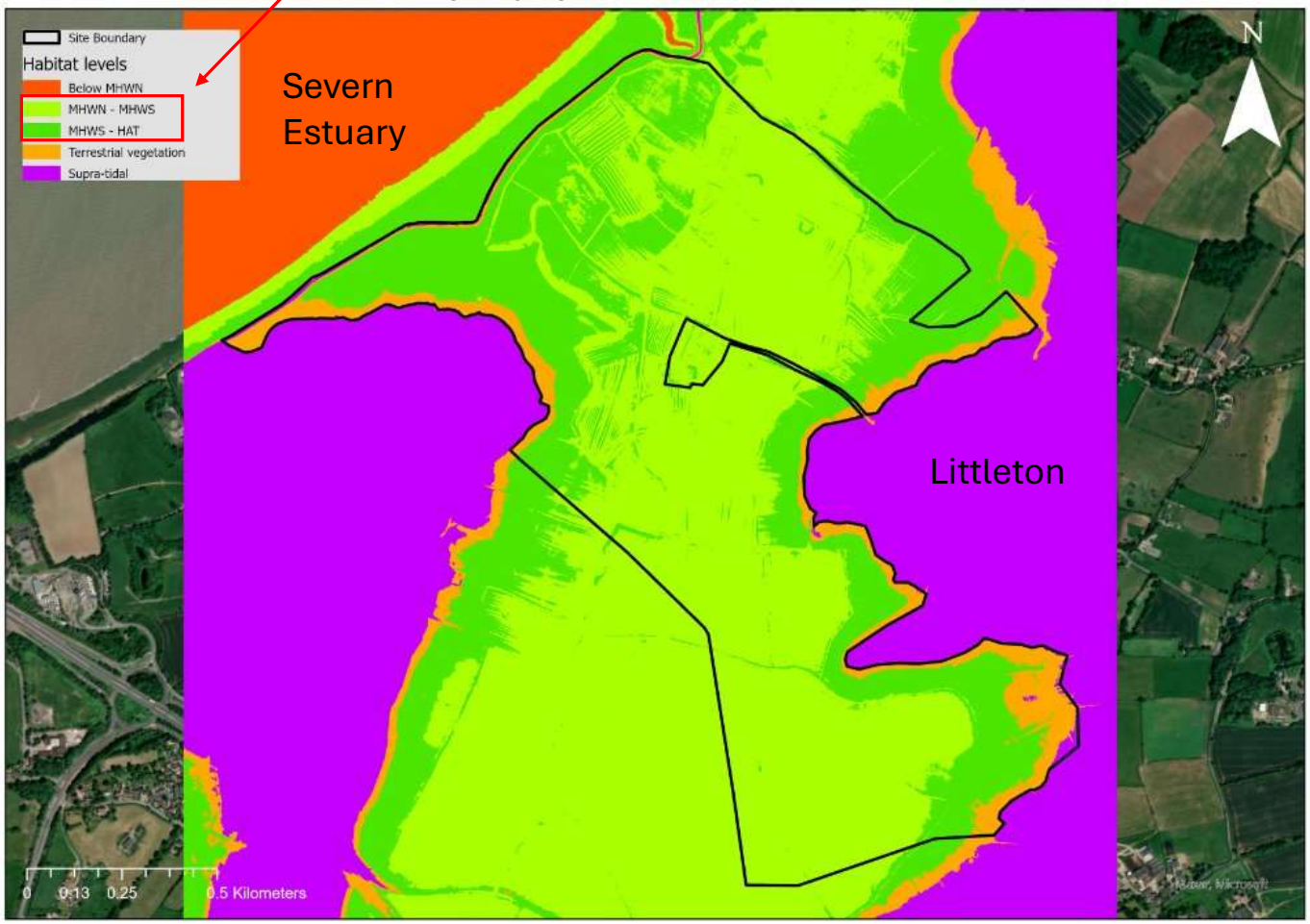
The elevations at which the projects preferred saltmarsh type forms



Mature tidal flat and saltmarsh zonation within the tidal frame (Image taken from David et al. 2018)

Elevation

Tidal levels suitable for intertidal habitat formation



92 % of the proposed site at Littleton is at an elevation suitable for intertidal habitat formation.


New tidal defences and high ground around the site boundary will be used to manage the risk of tidal flooding to an appropriate level.
N
0 0.25 0.5 1 Kilometers
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Next Steps

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Further **local engagement** and **formal consultation** *IF* a decision is made to progress

Questions and discussion