# **TEAM2100**



## Will the works have any impact upon the beaches? (1/2)

### Beach material positioning on the new revetment

It is fully recognised that the amenity value of the beaches between Fisherman's Corner & the tidal pools is important to the local community.

We will temporarily remove the existing beach material for the relevant phase of the works, construct the new revetment and then replace the beach material to the same average level and profile.

As the new revetment is placed at a shallower angle than the current revetment, we will move the beach material 4-5 metres further seaward from its current position.

Immediately following construction, the exact level and slopes may vary along the frontage but the overall beach area at mid-tide is expected to be similar as the same amount of material will be retained. The relocated beach level will return to similar levels and footprint as natural processes will re-distribute the beach material.

The beach profile will behave in a very similar way and provide similar levels of amenity benefit.

### Do the beach levels currently vary each year?

Beaches along the southern shoreline are very mobile and do naturally, constantly, change position and shape.

A good example is Concorde beach where beach levels next to the café can change by nearly 1metre.

Those natural changes will be no different for a beach in the slightly advanced new position.



# **TEAM2100**



## Will the works have any impact upon the beaches? (2/2)

### Interaction with existing groynes

We will not be replacing, improving or interfering with the existing groynes in any way. The new revetment will be sealed around the existing structures.

The existing groynes do not appear to retain beach material for more than 15-30 metres alongshore. This is seen as the beach between Fisherman's Corner and the western tidal pool is holding a reasonably straight line, width and level - suggesting that the groynes are not important for its overall stability.

As the existing groynes extend seaward of the existing beach material and are up to 1m higher than the existing beach material, they do currently have some additional capacity to retain more beach material. This means they could accommodate a beach seaward and higher than the present profile.

#### Influence of waves on beach material

The scheme is fronted by wide and relatively flat mudflats which extend more than 200m seaward from the toe of the revetment. Therefore, the regular waves capable of moving beach material are unchanged over such a short distance between the current beach position and the new beach position. Effects on beach movement and profile should also remain the same.

The new revetment and beach configuration are not expected to alter or exacerbate the effects of larger waves generated by passing ships.

### Who have you worked with regarding the beach?

We have discussed how the new revetment would interact with retained beach material with Castle Point Borough Council during the initial development of the scheme's design. The new revetment will provide an opportunity for any future amenity feature changes led by partners.