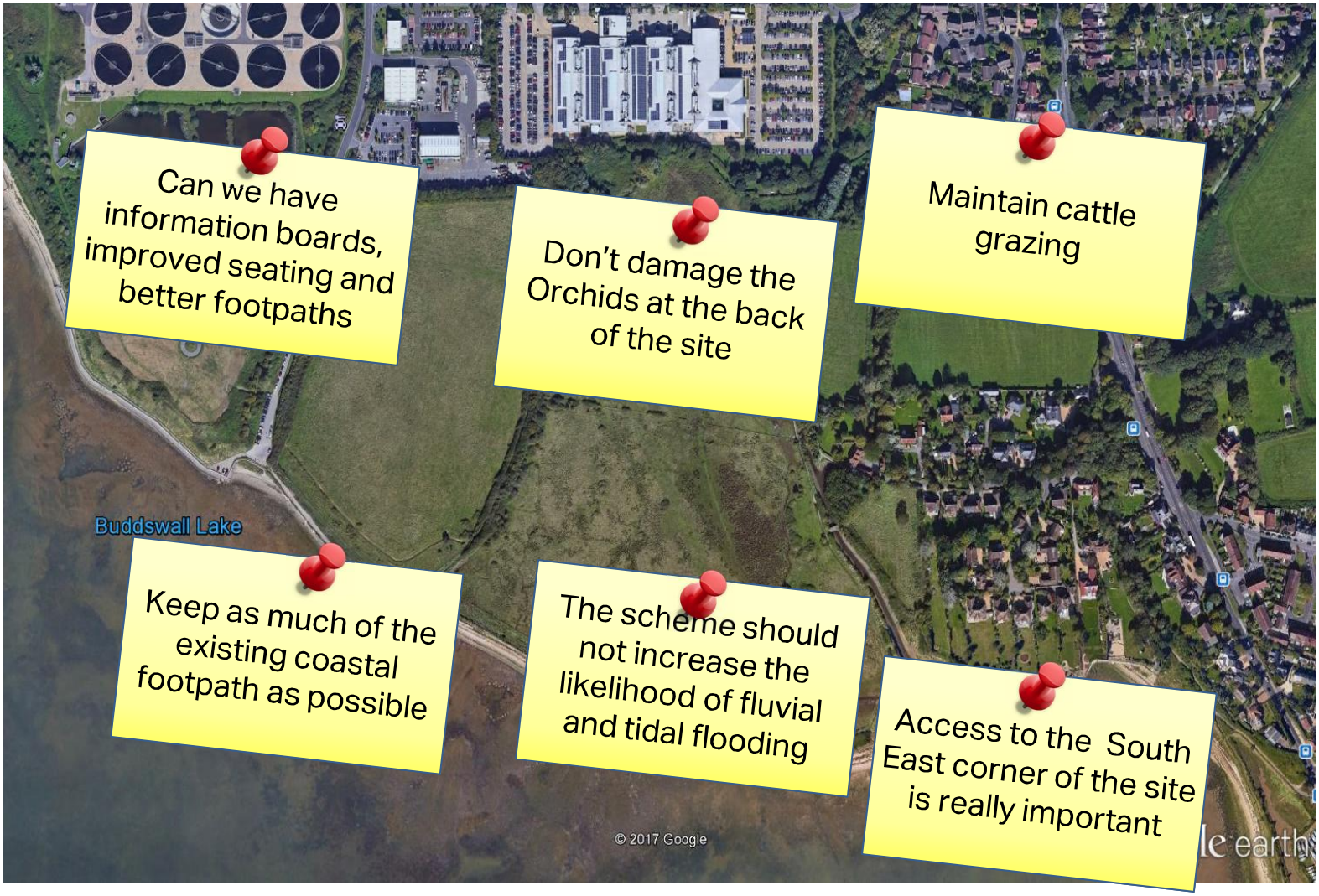
Southmoor Flood Alleviation Scheme
What's the problem?

The seawall at Southmoor is in a very poor condition and this needs to be addressed….

Therefore, a better and longer-term solution is proposed…

What you told us



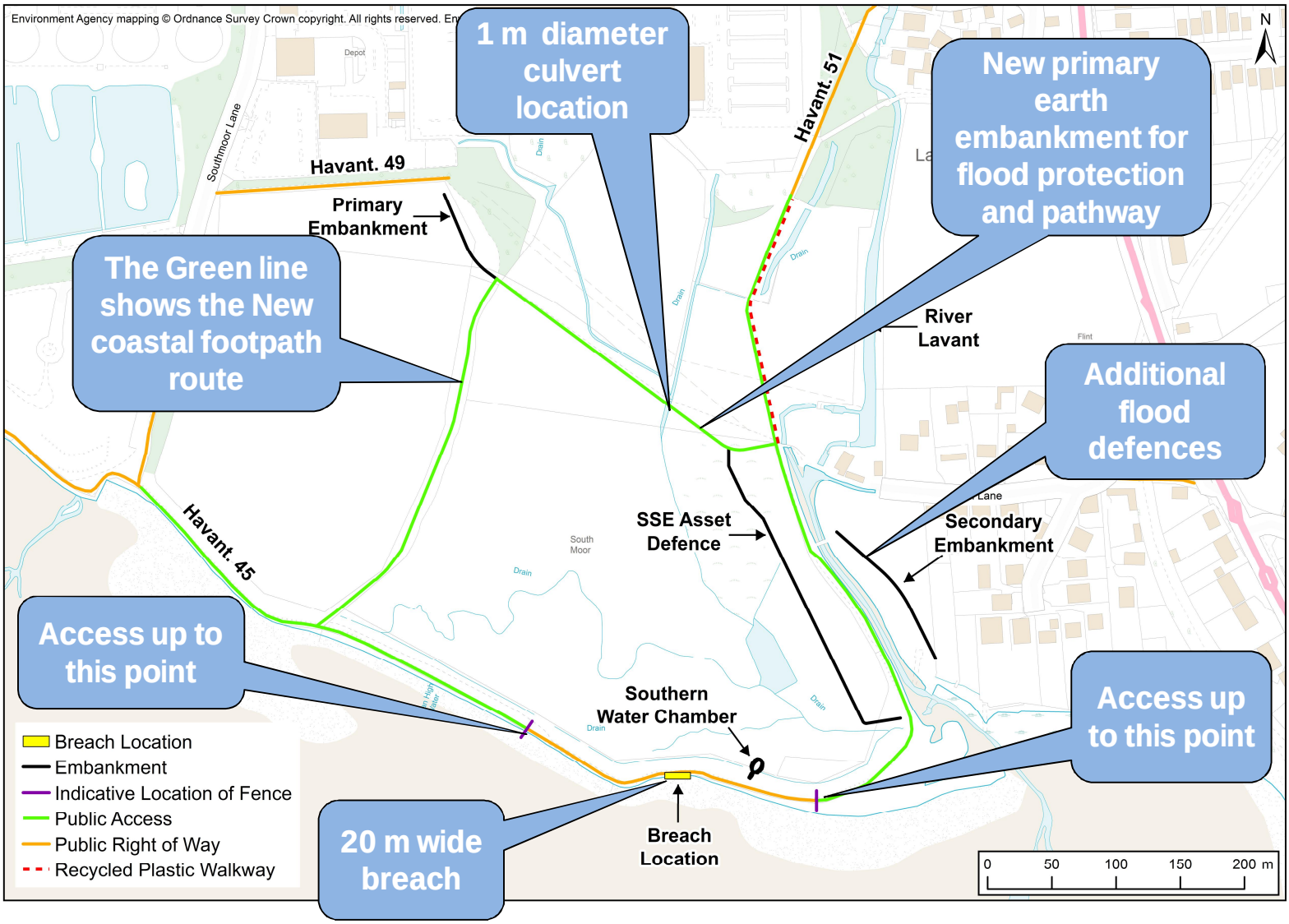
Outcomes from the first Stakeholder Meeting - May 2017

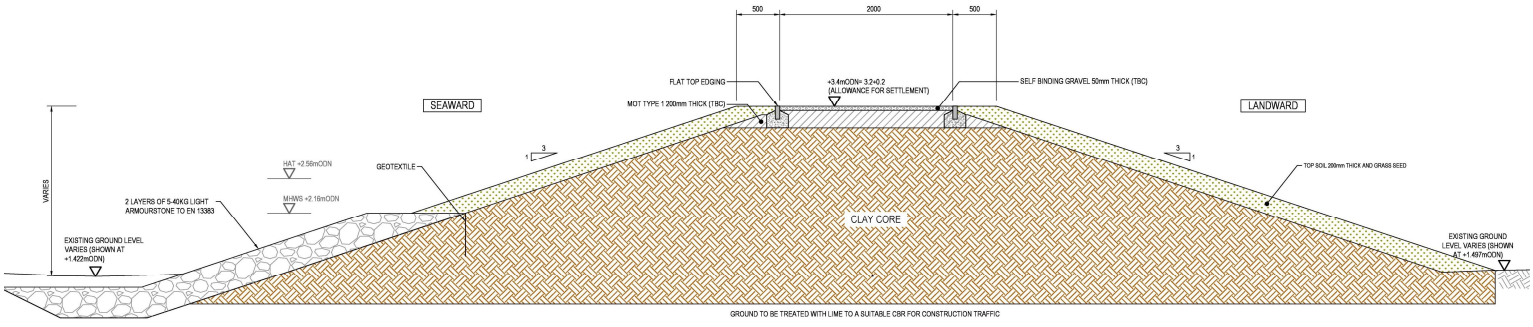
Over 100 people attended the first stakeholder engagement meeting.

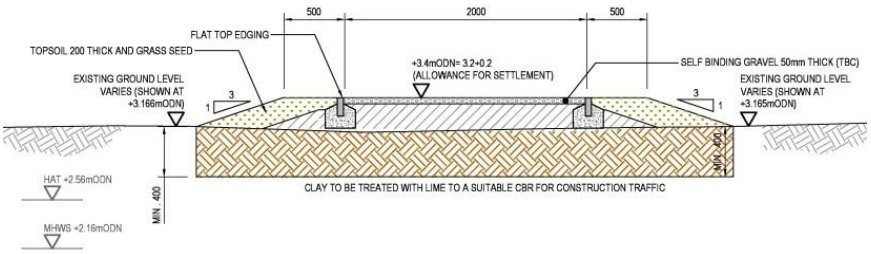
Excellent feedback from the local community, local council members, businesses and regulators.

The comments and feedback received from the first stakeholder meeting were assessed and incorporated into the scheme design and has informed the Environmental Assessment.

What are we proposing?







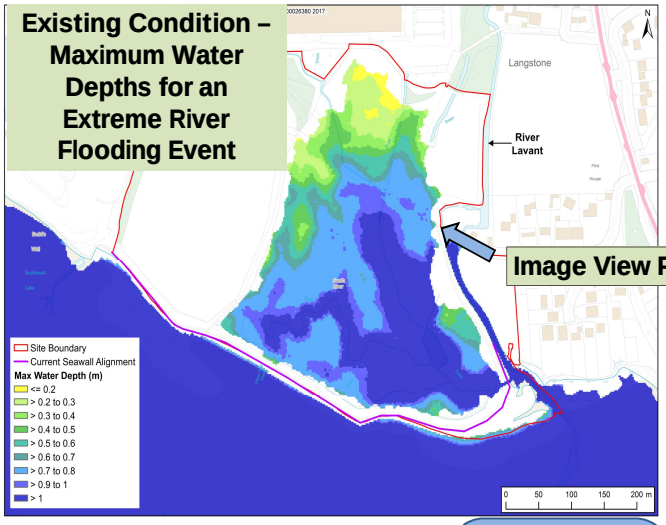
The design ensures that most of the material required to build the new flood defences and footpaths will be obtained onsite, this will significantly reduce the number of vehicle movements and costs.

The cost of constructing the scheme is estimated at about £800,000

How will the scheme work?

Numerical modelling has been undertaken to consider the tidal and fluvial impacts of the scheme for a range of typical and extreme conditions.

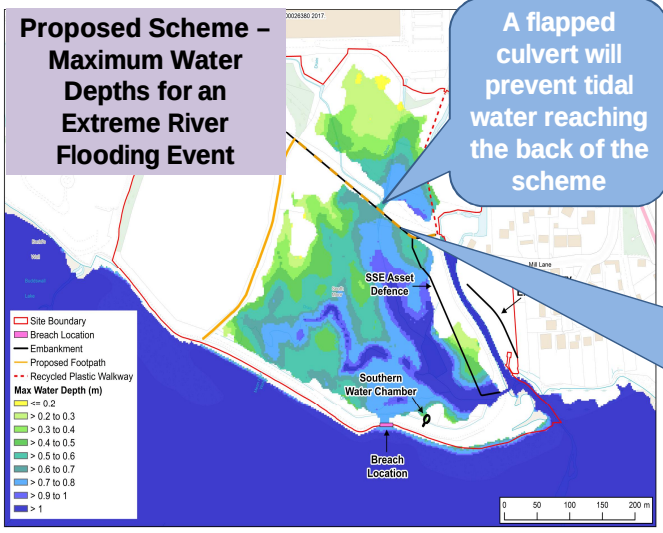
Existing Condition – Maximum Water Depths for an Extreme River Flooding Event



The storage capacity of the site is approximately 100,000 m³. Under an sever river flooding event the modelling accurately predicts the site full of water.

Image View Point

Proposed Scheme – Maximum Water Depths for an Extreme River Flooding Event



A flapped culvert will prevent tidal water reaching the back of the scheme

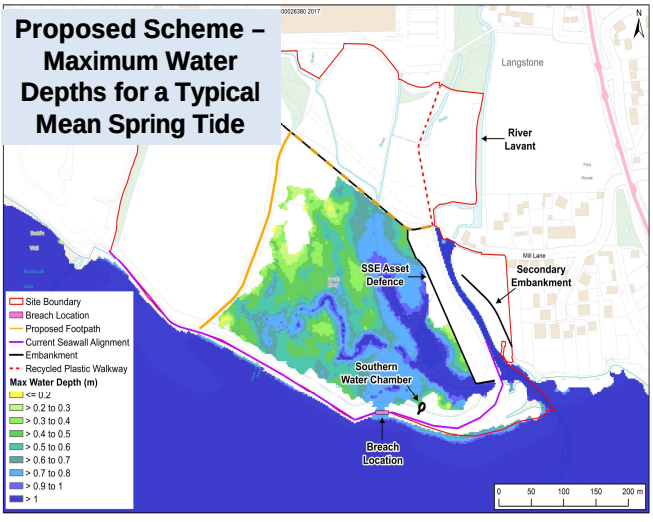
Modelling was undertaken for the same extreme river flooding event which also included the proposed scheme changes.

The results from this modelling showed that the scheme provides the following:

- **Improved flood defence;**
- **Smaller extent of flood storage (breach allows water to drain out); and**
- **Shallower water depths.**

The new coastal path will provides full access to the site with elevated views over the new wetland area

Proposed Scheme – Maximum Water Depths for a Typical Mean Spring Tide



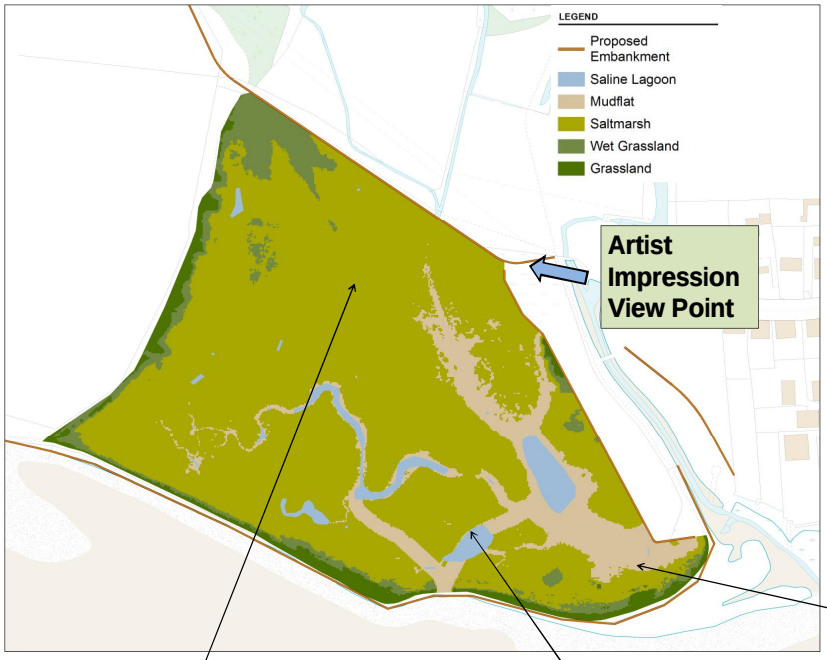
A mean spring tidal event was modelled to show how the scheme will work under typical conditions.

Around 70% of the managed realignment area will be inundated with tidal water during a typical mean spring tide;

Over a 12.5 hr tidal cycle, the site is only likely to be inundated for up to 4 hours, meaning that for much of the time, the scheme will be exposed allowing birds to feed and roost.

The findings from the modelling studies have shown that the proposed scheme will provide a better standard of flood protection.

What habitat are you creating?



New Habitat Formation

The 20 m wide breach along the existing seawall will allow the tide to inundate some 70 % of the scheme during spring tides. This will create internationally important habitats for birds and wildlife.

The expected habitat changes include:

- **1.0 ha of mudflat;**
- **6.9 ha of saltmarsh;**
- **0.3 ha of saline lagoons;**
- **0.6 ha of transitional wet grassland habitat.**

Saltmarsh

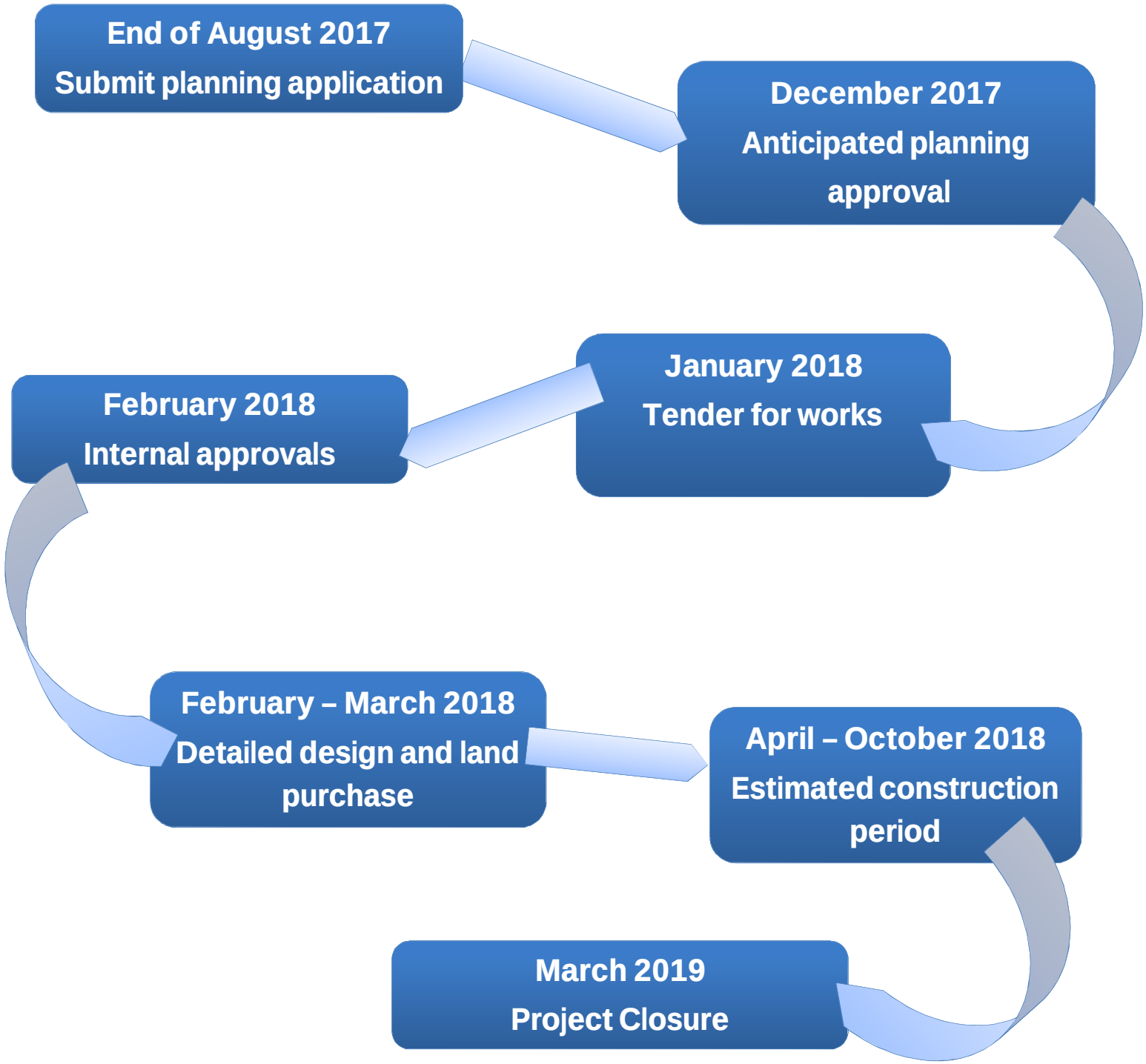
Saline Lagoon

Mudflat

How might the scheme look in the future?

This is an artist impression from the viewpoint shown in the map above of what the scheme may look like following the breach of the sea wall.

What happens next?



Tell us what you think or contact us for more information

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