

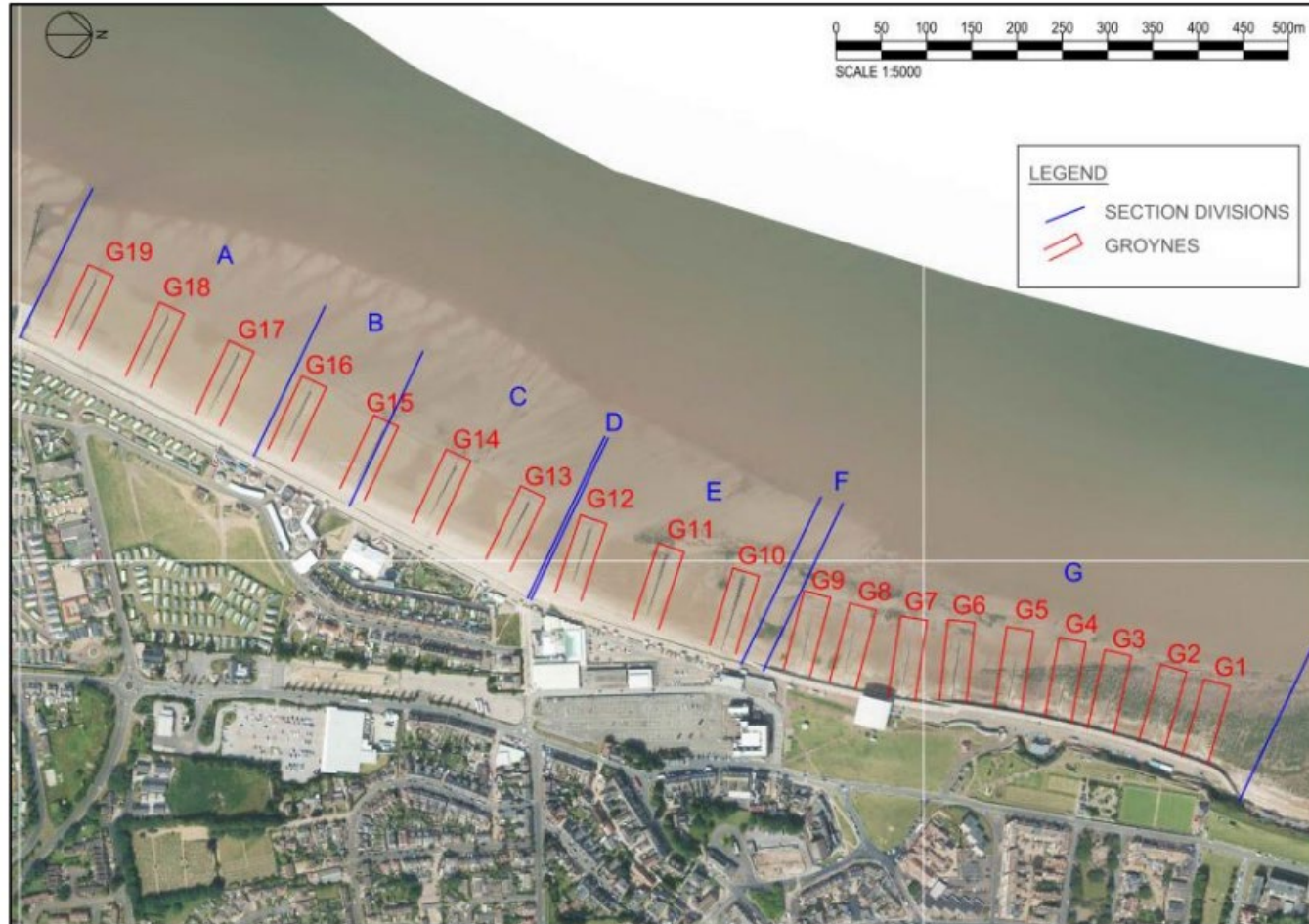
Hunstanton Coastal Defences Member Major Project Board Update

Jade Kite & Stuart Ashworth
Friday 9 October 2026

Borough Council of
King's Lynn &
West Norfolk



Hunstanton Town Coastal Defences



Workstreams

Borough Council of
**King's Lynn &
West Norfolk**



Concurrent Work Streams

Wash East Coastal
Management Strategy
(WECMS) review

Hunstanton routine
repairs works

Hunstanton monitoring
and surveying

Hunstanton Interim
Works

Hunstanton Capital
Works

Tie in with Hunstanton
Masterplan



Wash East Coastal Management Strategy (WECMS) Review

Borough Council of
King's Lynn &
West Norfolk



WECMS Review (2025-2028)

- WECMS 2015 sets out a strategy for managing the three frontages:
 - Unit A – Hunstanton Cliffs
 - Unit B – Hunstanton Town
 - Unit C – South Hunstanton to Wolferton Creek
- An initial assessment for Unit C in 2024 confirmed that a full review of WECMS was required. The review would consider:



The standard of protection provided by the defences



Stakeholder engagement



Coastal processes



Environmental impact assessments



Computational modelling



Funding calculations



Consideration of a wide range of options and their potential technical feasibility



Climate Change Allowances



Outcomes of WECMS

The outcomes of the WECMS Review will inform the medium- to long-term management of the coast between Hunstanton and Snettisham by the Environment Agency and the Borough Council.

The WECMS Review will consider:

- How the Shoreline Management Plan will be delivered over the medium to long term
- The impact of changes in coastal processes (e.g. longshore drift) and how they influence coastal management measures, such as groynes and beach management
- The impact of climate change and sea-level rise on coastal management
- Alignment with the Local Plan



Outcomes of WECMS



Outcomes of the WECMS Review will replace the existing Hunstanton Coastal Management Plan, informing what medium to long term coastal management measures are required and potential costs.



Outputs will inform future investment required to maintain the standard of protection provided by the Hunstanton Coastal Defences for the medium to long term following completion of the Hunstanton Capital Works.

Coastal Trends

Borough Council of
**King's Lynn &
West Norfolk**



Cause? Nearshore channel moving north

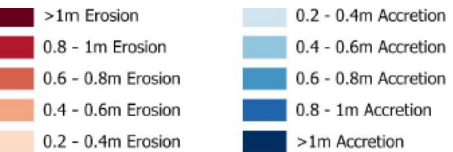
Two processes meet and act as a barrier to sediment movement towards Hunstanton through longshore drift



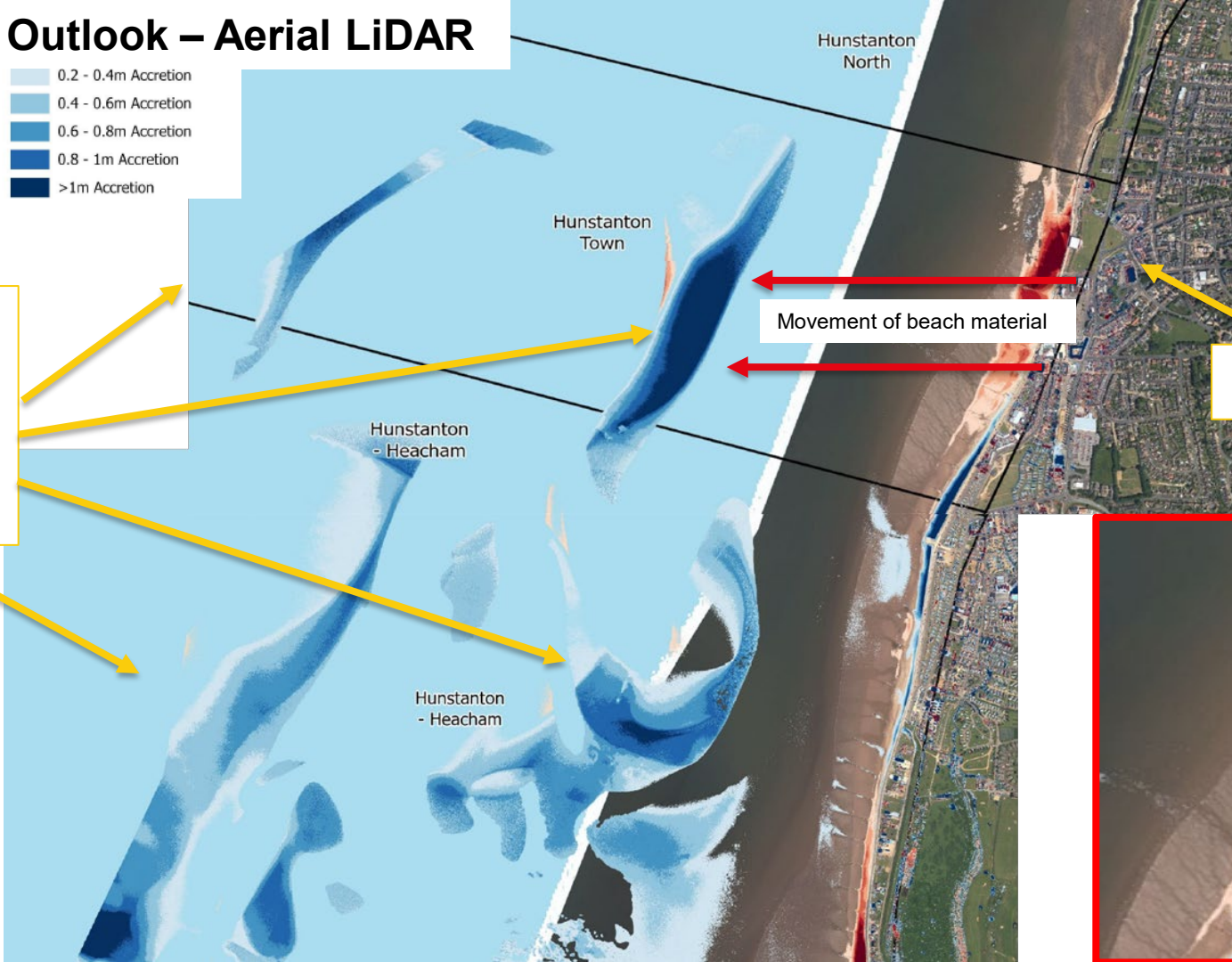
Longshore drift: sediment moves parallel to the coast

Cross-shore movement: sediment moves up and down the beach with incoming and outgoing tides

2025 Data Outlook – Aerial LiDAR



Significant new sandbanks are growing offshore from Hunstanton as a result of cross-shore sediment movement

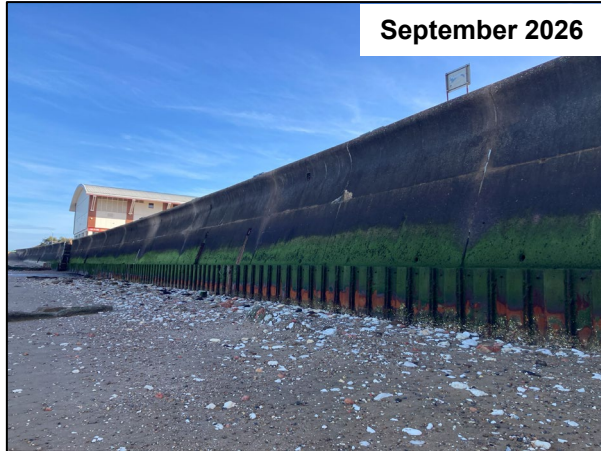


Movement of beach material

Erosion of Hunstanton beach material



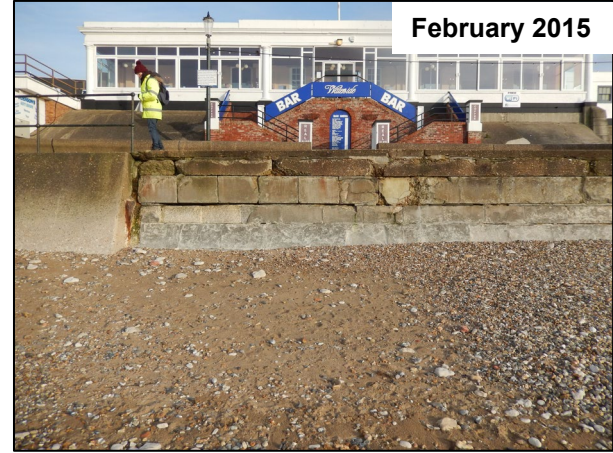
Section G (2015 vs 2026)



Section F (2015 vs 2026)



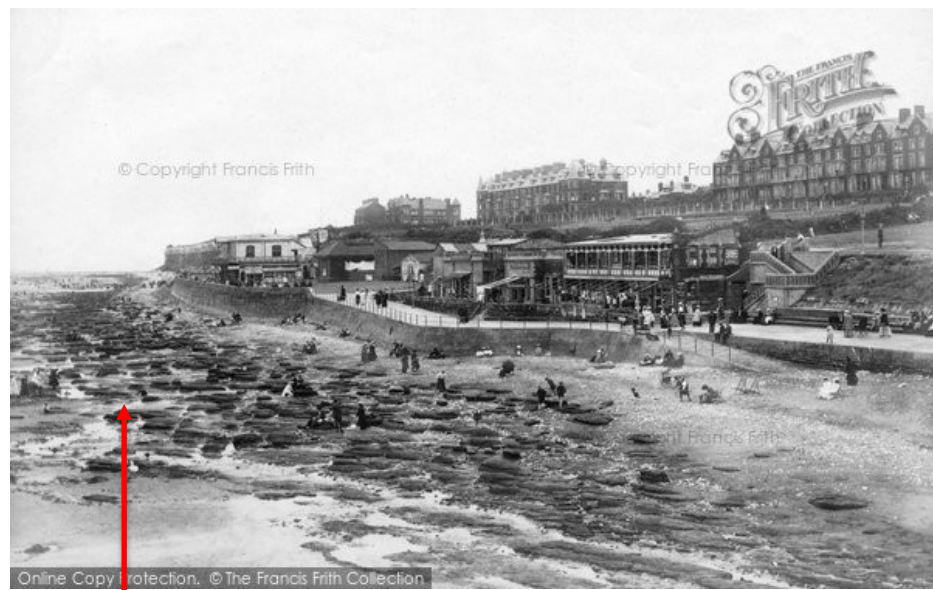
Section E (2015 vs 2026)



Hunstanton in 1893 and 1907 – similar beach conditions to today



Hunstanton in 1893



Hunstanton in 1907

Widespread Carstone exposure and limited beach cover are evident

Beach conditions between 1893 and 1907 look very similar to those today

Routine Repairs



Routine Repairs

Routine repairs and maintenance to defects on concrete coastal defences, floodgates and H&S works to groynes are completed on an annual basis.

Annual budget £180k

Works completed or scheduled this financial year include: -

- Summer 2026 repair package £81.8k
- Floodgate health check £6.2k
- Autumn 2026 repair package £156.6k



Monitoring & Surveying

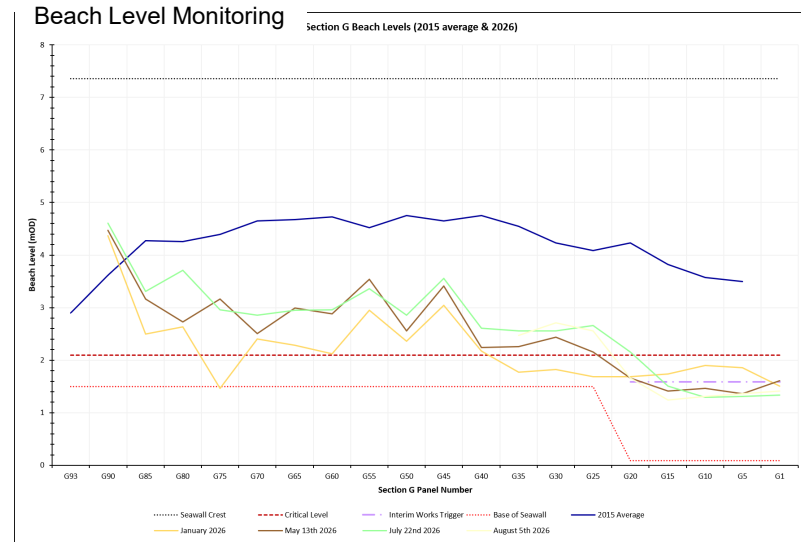
Borough Council of
**King's Lynn &
West Norfolk**



Monitoring & Surveying

Various forms of repeat and ad hoc monitoring of the coastal defences are undertaken to support all workstreams, including:

- Weekly visual inspections
- 2-weekly beach level monitoring
- Monthly structural stability monitoring
- Quarterly ground penetrating radar surveys
- One-off window (core) sampling was completed in May 2026



Ground Penetrating Radar Survey



Window (core) Sampling



Structural Stability Monitoring



Interim Works

Borough Council of
**King's Lynn &
West Norfolk**



Location



Summary

- Interim works are required in Sections F and G to prevent structural failure of the coastal defences
- Structural stability monitoring in June 2026 detected movement in the sea wall and promenade deck
- Beach erosion has continued over the summer, and at least 1 m of sheet piling is now exposed along its entire length — a trigger point for structural instability
- Recent visual signs of cracking in the sea wall and concrete pads show that movement is occurring



Interim Works Required – Rock Armour

Temporary installation of **granite rock armour at the base of the sea wall toe** to provide sufficient mass to prevent further structural movement and failure until a permanent solution can be designed and constructed as part of the Hunstanton Coastal Defence capital works project.

Rock armour dimensions: 200 m (L) × 9 m (W) × 2–3 m (H)
The primary rock layer will comprise 3-tonne rocks

10,000 tonnes of rock will be required

HGVs will deliver 300 tonnes of rock per day to the site compound

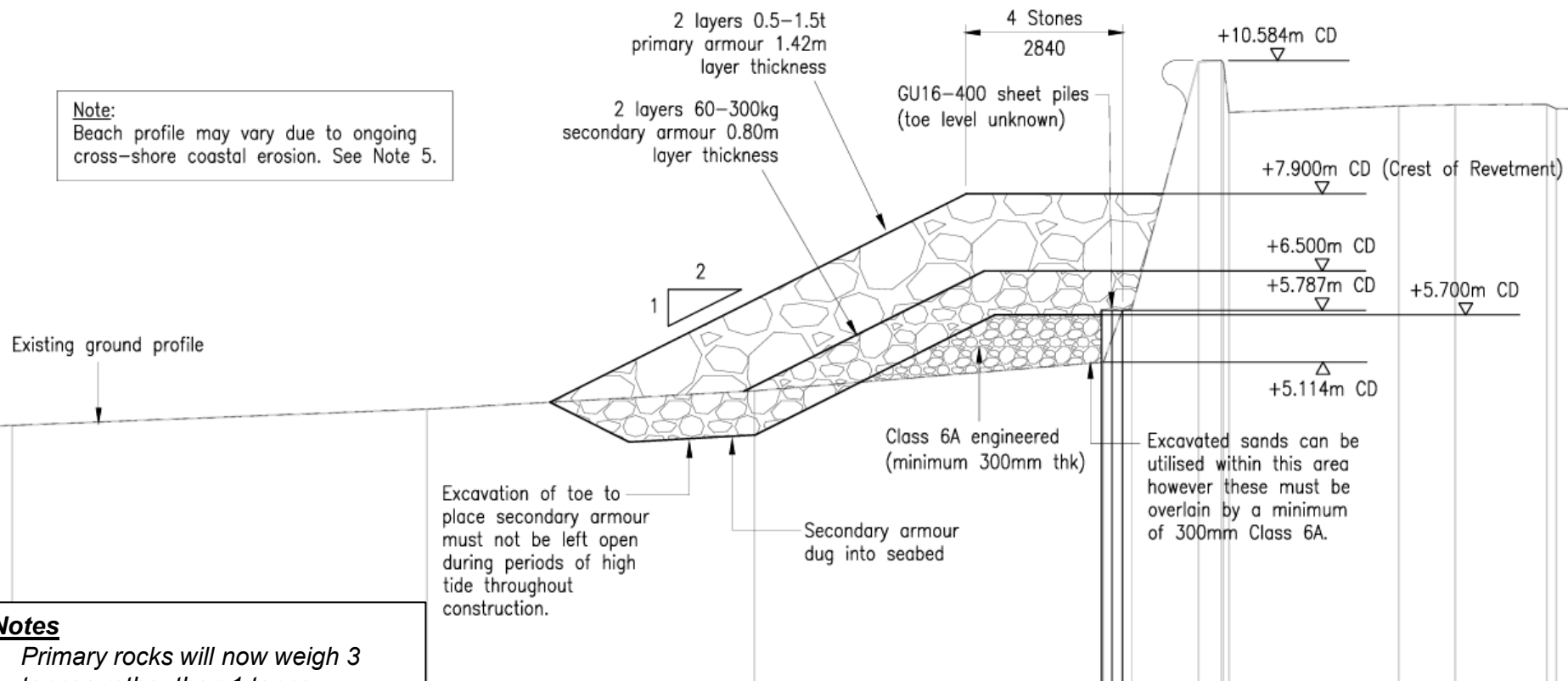
Estimated works programme: 10–12 weeks

Construction to be completed by Southbay Civil Engineering Ltd
Structural engineering and design by Fairhurst UK Ltd



Rock Armour Design

Note:
Beach profile may vary due to ongoing cross-shore coastal erosion. See Note 5.



Notes

- Primary rocks will now weigh 3 tonnes rather than 1 tonne
- Increased Class 6A engineering fill will be needed due to the lower beach levels on site



Next Steps

- Work has started with Fairhurst to prepare the planning permission and marine licence applications.
- Habitat and intertidal surveys required to support the applications have started.
- The timeline for preparing and submitting the applications is Q3 2026-27
- The works start date will depend on permissions but is likely to be in late Q4 2026-27 or early Q1 2027-28
- Estimated cost: approximately £2m, plus a risk contingency



Hunstanton Capital Works

Borough Council of
**King's Lynn &
West Norfolk**



Geotechnical Investigation

- Excavation of 25 trial pits along the base of the sea wall to expose the condition of the sea wall foundations, which are normally buried beneath beach material.
- A ground-penetrating radar survey to assess the internal condition of the promenade deck
- A falling-weight deflectometer to test the material strength of the concrete promenade deck
- On-site investigations were completed in autumn 2024, and the final report was received in July 2025



Geotechnical Investigations – Outcomes

Final report received on 31 July 2025.

Outcomes: -

- The concrete promenade deck is in poor structural condition, has voids beneath it and requires replacement.
- Sea wall Section E is at risk of being undermined if beach levels fall further. It requires the installation of toe protection (sheet piling) and refacing to mitigate the future risk of undermining.
- Sea wall Sections F and G are at risk of structural failure if beach levels fall further. They require the installation of toe protection (sheet piling) and refacing to mitigate the future risk of structural failure.

We now need to move away from a ‘patch and mend’ approach towards a capital rebuild of parts of the coastal defences to ensure that they continue to provide their intended standard of protection.



Indicative Costs (detailed design & build)

- Capital rebuild (like for like) = £22.6m + risk £18.4m = total £41.1m (current estimate)
- The first £3m will be 100% funded through Flood Defence Grant in Aid (GiA) if the bid is successful.
- Up to 90% of the remaining costs over £3m will be funded by GiA if the bid is successful. BCKLWN will need to contribute an estimated minimum of 10% of those costs
- BCKLWN's minimum 10% contribution towards costs over £3m = £3.81m

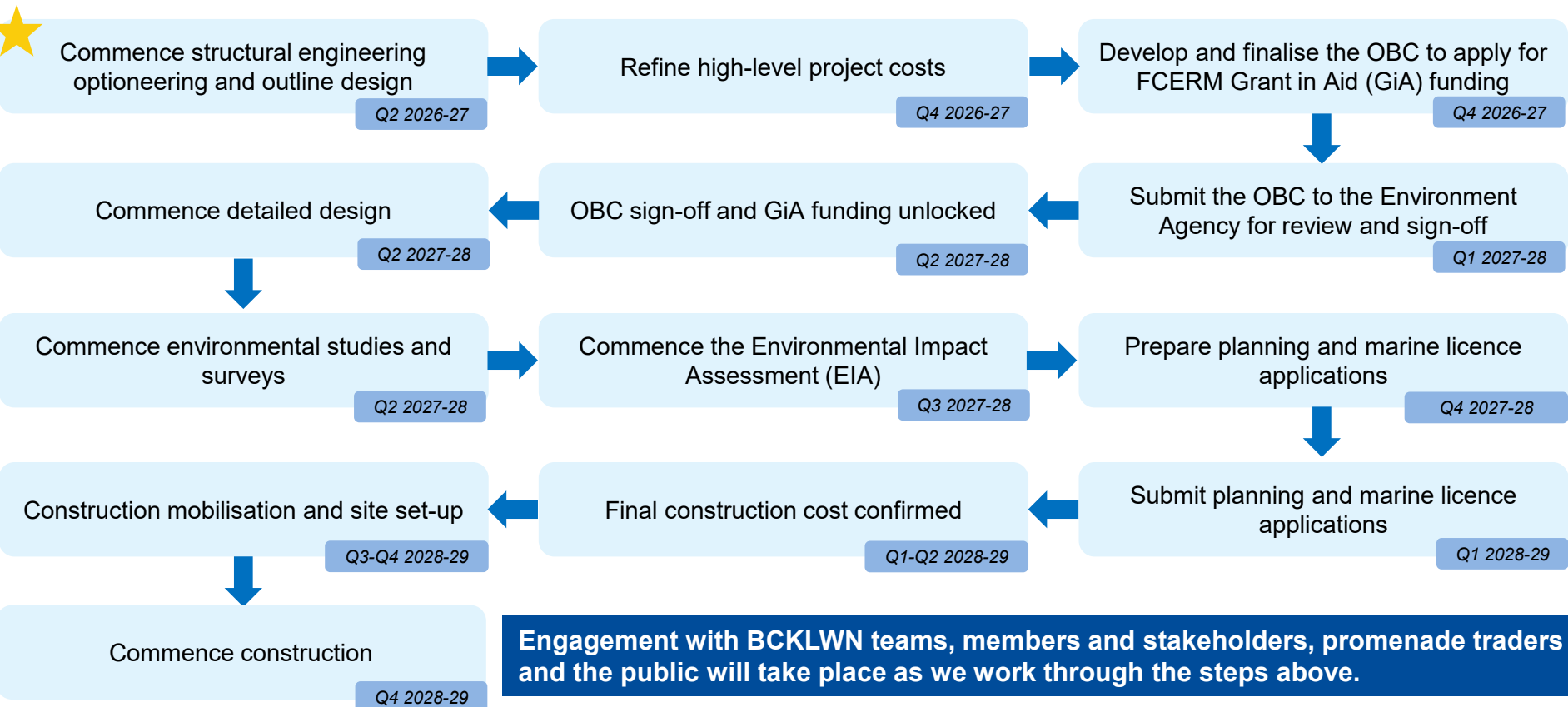
Costs are estimates and will be updated when the Outline and Detailed Designs have been completed (March 2026)

£2.08m has been secured from CIL towards BCKLWN's contribution to the capital works



Project Planning – Next Steps & Timeline

The project planning phase is anticipated to take 12–18 months to complete and will include the following high-level steps:



Phase 1 – March 2026 to July 2026

The initial works phase of the capital works project was completed between March 2026 and July 2026 and included the following high-level workstreams:



Completion of window
(core) sampling



Economic assessment
to support outline
business case (OBC)



Procurement of a
design contractor



Lessons learnt and
knowledge sharing
from other schemes



Engagement with key
stakeholders



Phase 2 – August 2026 to March 2027

Phase 2 of the capital works project is now under way and will include the following high-level workstreams:

- Optioneering
- High-level outline designs
- Production of an Outline Business Case for submission to the Regional Flood and Coastal Committee (RFCC) to secure GiA funding

Outcomes of Phase 2 will include:

- ✓ Preferred option identified and high-level design completed
- ✓ Updated cost estimates
- ✓ Submission of an OBC to the RFCC
- ✓ GiA funding bid for the next phases of the project



Phase 3 – Summer 2027 onwards

Phase 3 of the capital works project will commence following approval of the OBC. Phase 3 is anticipated to commence in late summer 2027 and will include the following high-level workstreams:

- Production of a detailed design
- Application for planning permission and a marine licence, with associated environmental impact assessments
- Construction delivery planning

Outcomes of Phase 3 will include:

- ✓ Completion of a final detailed design for construction
- ✓ Final construction cost
- ✓ Submission of permissions required for construction
- ✓ Construction-ready project



Outline Design vs Detailed Design

OUTLINE DESIGN (phase 2)

- Focuses on the coastal defence structure — its performance, form, alignment, footprint and standard of protection.
- The chosen coastal defence structure must demonstrate feasibility and flood/erosion risk benefits.
- Produces outline drawings, a programme and indicative whole-life costs needed to support the business case and GiA funding.
- Wider public-realm elements that do not provide flood/erosion protection sit outside the scope of outline design.

DETAILED DESIGN (phase 3)

- Turns the approved coastal defence option into a coordinated, construction-ready solution.
- Enables the preparation and submission of applications for the required permissions
- This is the point where wider aspirations can be integrated — access, street furniture, public realm and regeneration, subject to funding being secured.
- The Flood Defence GiA sought for detailed design and construction will fund only elements that deliver flood and erosion defence benefits; wider enhancements require separate funding to be identified.



Summary



Summary

- **Urgent action is required.** Ongoing coastal erosion is now affecting the structural stability of parts of the Hunstanton coastal defences. Interim works must progress at pace to reduce the risk of structural failure before the capital works commence.
- **Capital works must follow without delay.** The defences are at the end of their design life. Interim rock armour buys time; it does not replace the permanent works, which must also progress at pace to rebuild the defences.
- **Significant investment is under way—but it is not the end.** The Hunstanton capital works are an initial step in a wider coastal programme, not a one-off intervention. Further Borough Council investment will be required.
- **The WECMS Review will define the next phase.** Its outputs will shape the medium- to long-term approach and priorities for coastal management, requiring sustained external funding and future BCKLWN contributions.



Any Questions?

