

Hunstanton Coastal Management Plan E&C Panel Briefing

Dave Robson

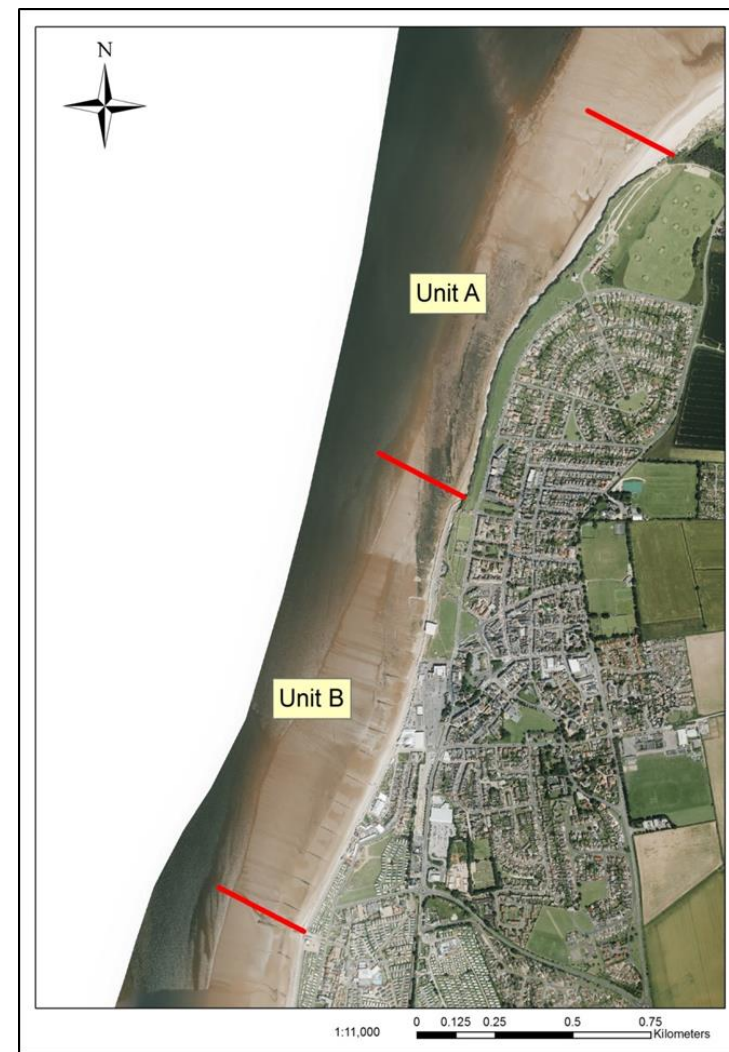
Borough Council of
King's Lynn &
West Norfolk



Unit A – Cliffs Options

Shortlisted Options

- Beach recharge
- Timber revetment
- Geotubes
- Rock sill
- Relocation of key assets



Beach Recharge



Timber Revetment



Geotubes



Relocation?



Unit A - Cliffs

- Preferred option Rock Armour at base of Cliffs
- Follow SMP 4 - No Active Intervention
- Implement Annual Monitoring Programme - £12K p.a.
- Use ground based LiDAR & Drone (aerial survey)
- Establish trigger point & implementation date
- Install Rock Armour likely around 2070+

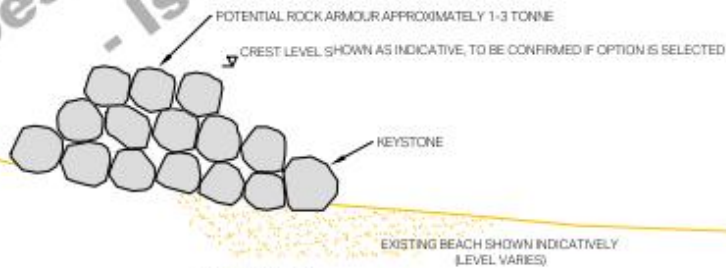




LOCATION MAP



APPROXIMATE LEVEL OF EXISTING CLIFF TOE +3.20mOD



+6.06mOD
1 IN 200 (2:1:17)

HAT +4.45mOD

MHWS +3.65mOD

MHWN +1.85mOD



OUTLINE DESIGN - FOR APPRAISAL

BOROUGH COUNCIL OF KING'S LYNN & WEST NORFOLK

HUNSTANTON COASTAL MANAGEMENT PLAN

SHORT-LISTED OPTIONS
OPTION 1
ROCK ARMOUR
REVETMENT / BILL

NO.	DESCRIPTION	DATE	BY	CHECKED

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AECOM

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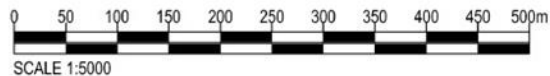
Unit B Prom Options

- Do nothing
- Do minimum
- Maintain
- Sustain
- Enhance



Unit B Recommended Options

- Short to Medium Term : Maintain –
 - Routine maintenance & reinforced at end of predicted residual life
 - Maintain 1 in 200 flood defence
- Medium to Long term : Sustain –
 - Raise the crest of the rear floodwall to sustain the existing standard of protection against climate change



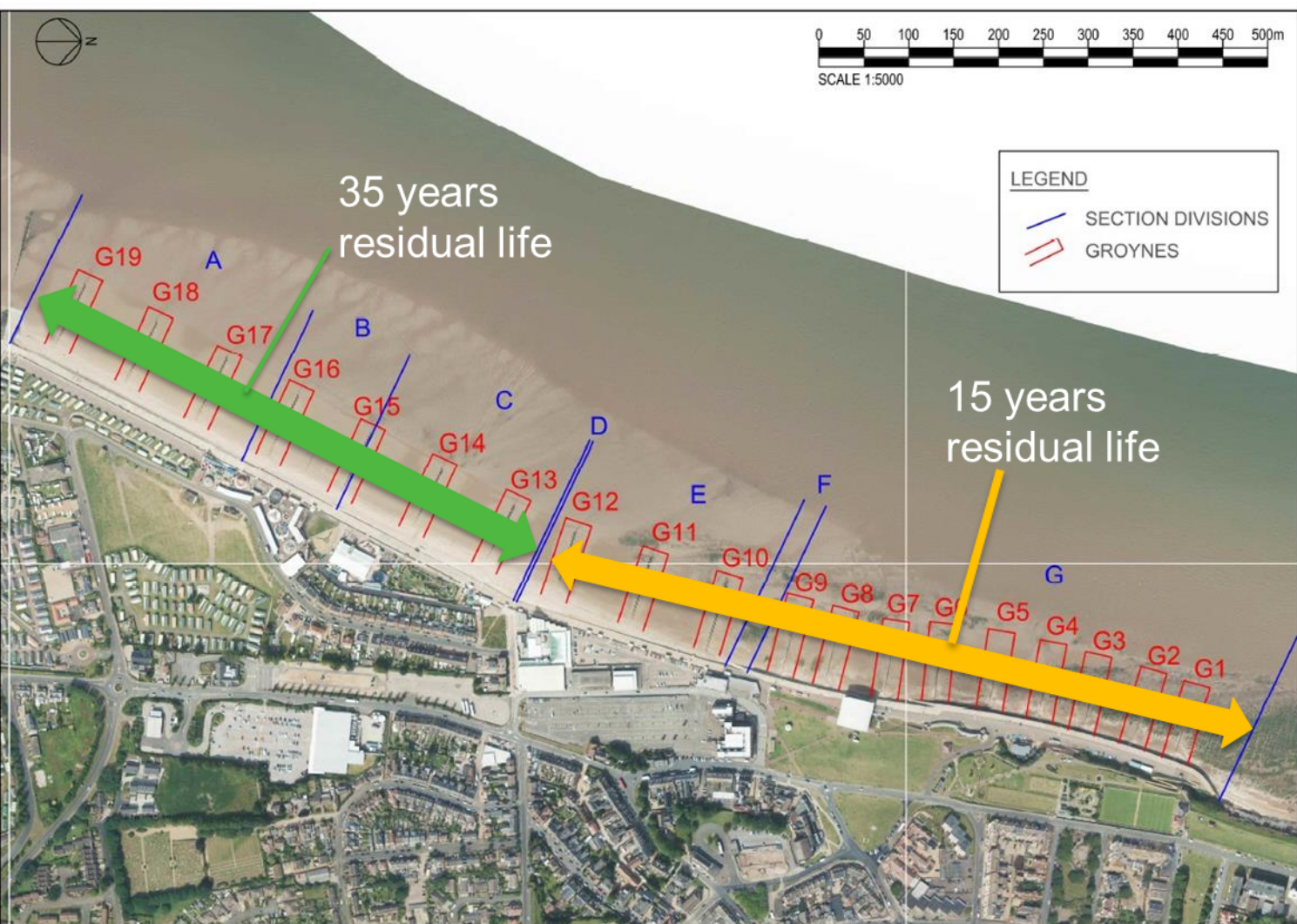


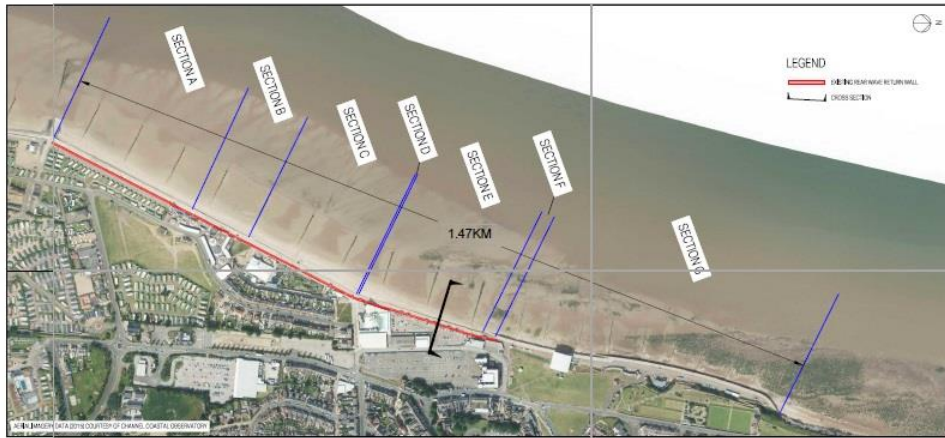
LEGEND

-  SECTION DIVISIONS
-  GROYNES

35 years
residual life

15 years
residual life



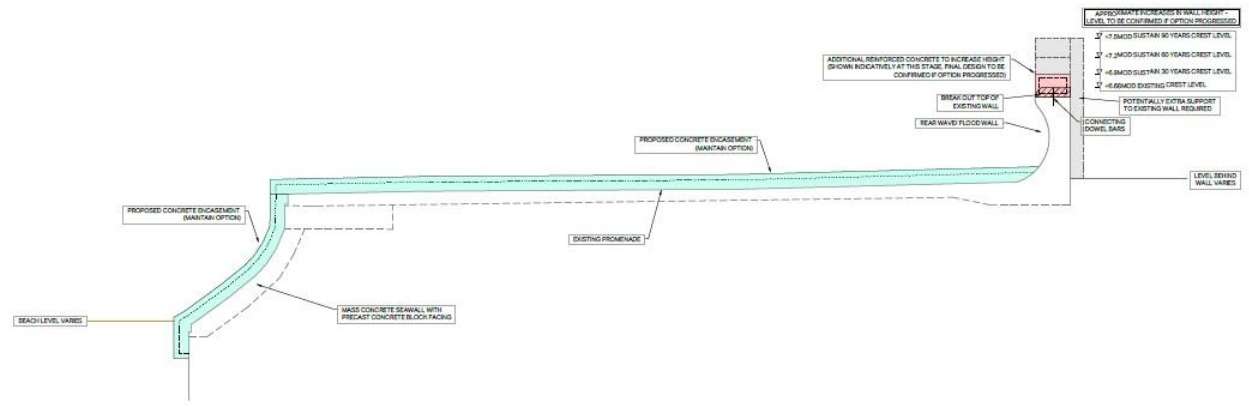


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MAP OF UNIT B
(NOT TO SCALE)

LEGEND

- CROSS SECTION SHOWN IS THE SECTION OF UNIT B WITH THE LOWEST EXISTING CREST HEIGHT OF REAR WAVE RETURN WALL (LOCATED IN SECTION E).
- OPTION ASSUMES THAT CREST LEVELS OF DEFENCES WILL BE RAISED IN 3 INTERVALS OVER THE APPRAISAL PERIOD, TO COINCIDE WITH THE TIMINGS OF REFURBISHING THE DEFENCES (MAINTAIN OPTION).
- CREST LEVEL INCREASES HAVE BEEN BROADLY ESTIMATED BASED ON PREDICTED SEA LEVEL RISE. LEVELS TO BE CONFIRMED IF THIS OPTION IS PROGRESSSED.
- IN SECTION G, THERE IS NO REAR WAVE RETURN WALL. IN THIS SECTION THE CREST HEIGHT IS 7.36MOD, THE MAINTAIN OPTION WOULD INCREASE THIS TO 7.56MOD AND THEREFORE SECTION G WILL NOT NEED TO BE RAISED.
- EXISTING FLOOD GATES ALONG THE REAR WAVE/FLOOD WALL WOULD HAVE TO BE MODIFIED OR REPLACED TO MATCH THE INCREASES IN CREST HEIGHT.
- THIS OPTION ASSUMES THAT THE EXISTING REAR WAVE/FLOOD WALL IS STRUCTURALLY CAPABLE OF INCORPORATING THE EXTRA WEIGHT AND ASSOCIATED LOADS OF THE LEVEL INCREASE.

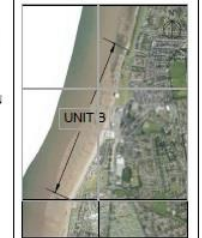


INDICATIVE CROSS SECTION
(FRONTAGE SECTION E)



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

- NOTES**
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 - NO GUARANTEE IS MADE IN CONNECTION WITH ALL OTHER MATTERS
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LOCATION MAP

- LEGEND**
- EXISTING WALL TO BE REINFORCED
 - PROPOSED REINFORCED CONCRETE TO INCREASE HEIGHT OF EXISTING WALL
 - PROPOSED CONCRETE ENCASEMENT (MAINTAIN OPTION)
 - FUTURE CREST WALLING



OUTLINE DESIGN - FOR APPRAISAL

BOROUGH COUNCIL OF KING'S LYNN & WEST NORFOLK

HUNSTANTON COASTAL MANAGEMENT PLAN

SHORT-LISTED OPTIONS
UNIT B
SUSTAIN (CREST RAISING)

Author	Drawn	Check	Rev	Scale	Date

FOR INFORMATION



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Unit B- Sustain Option

Borough Council of
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Unit B – Proposed Works

- Groynes – replace & repair (Year 1-4)
- Promenade – resurface 300m of concrete pads & joint reseal (Year 1-2)
- Seawall – reface (Sections D,E,F,G Year 15)
(Sections A,B,C Year 35)
- Rear Flood Wall (Inc. gates) – increase height/
gates replace (Year 35)



RFCC – Local Levy Funding Bids

Work	Timeline	BCKLWN Costs	RFCC Local Levy Application	Total
Groynes	1yr – 4yr	£50,000 p.a.	£50,000 p.a. match funding	Annual Cost £100,000 p.a. Total = £400,000 over 4 years
Cliff Monitoring	Annual Survey	£6,000 p.a.	£6,000 p.a. match funding	Annual Cost £12,000 p.a. Total = £48,000 over 4 years
Prom Resurface Sections D,E & F (300m) & Reseal Joints	1yr - 2yr	£215,000	£215,000 match funding	BCKLWN + LL = £430,000 Arts Council grant = £100,000 (Public Realm) Total = £530,000

Timeline 1/2

- RFCC agreed Local Levy bids Oct 2019
- MMO/ EA / NE sign off Dec 2019
- Baseline cliff regression report Dec 2019
- Cabinet / MT to confirm funding Jan 2020
- Implement design work from Jan 2020
- Tenders issued Jan to March 2020

Timeline 2/2

- Annual Cliff Survey
- Select Contractor
- EA National Appraisal Body
- Cabinet / MT update
- Groyne works start
- Prom resurface works

March 2020

April/ May tbc

May/ June tbc

Summer 2020

Autumn 2020 tbc

Autumn 2020 tbc

