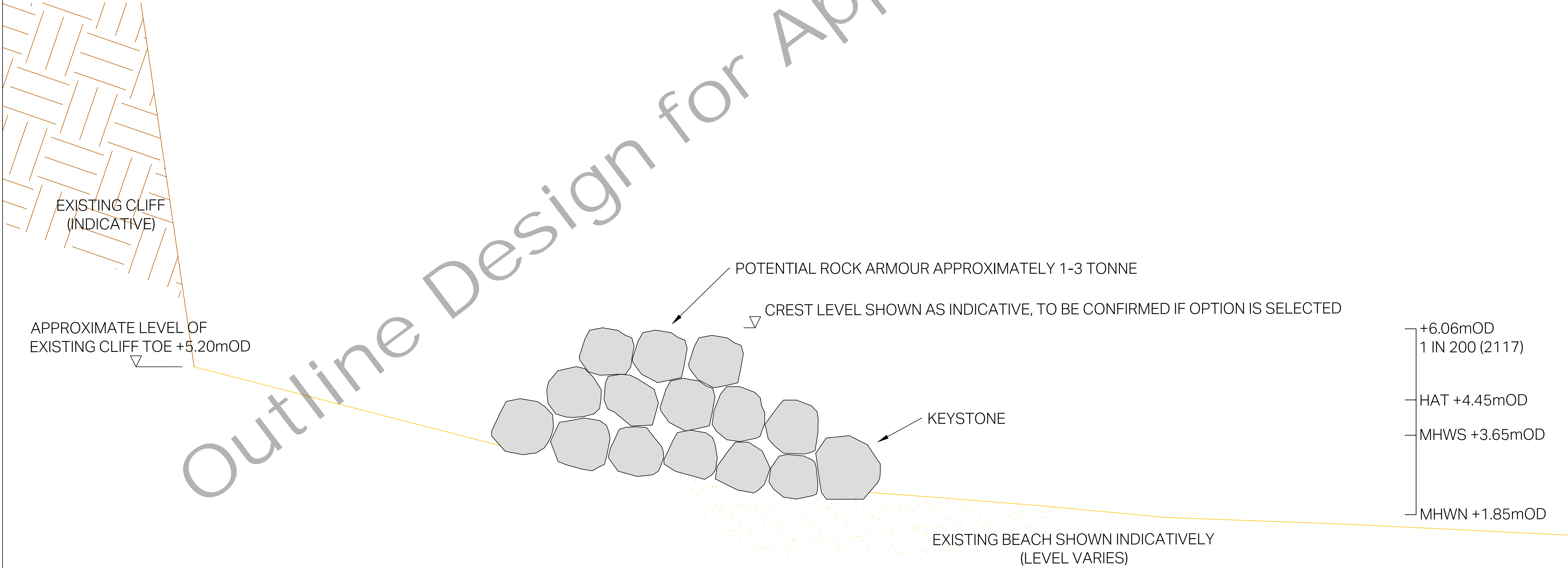




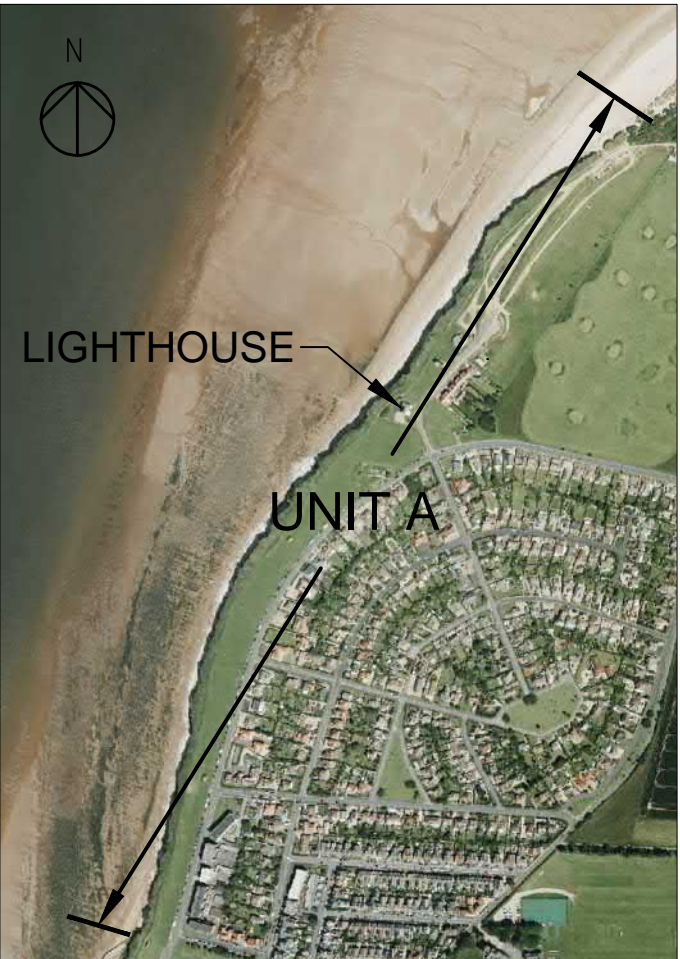
PLAN
SCALE 1:2000



TYPICAL CROSS SECTION
SCALE 1:50

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LOCATION MAP

Revision Details

Purpose of Issue

OUTLINE DESIGN - FOR APPRAISAL

Client
BOROUGH COUNCIL OF KING'S
LYNN & WEST NORFOLK

Project Title
HUNSTANTON
COASTAL MANAGEMENT PLAN

Drawing Title
SHORT-LISTED OPTIONS
OPTION 1
ROCK ARMOUR
REVTMENT / SILL

Designed CP	Drawn CP	Checked DG	Approved PN	Date 20/04/18
AECOM Internal Project No. 60552153			Suitability FOR INFORMATION	
Scale @ A1			Zone	

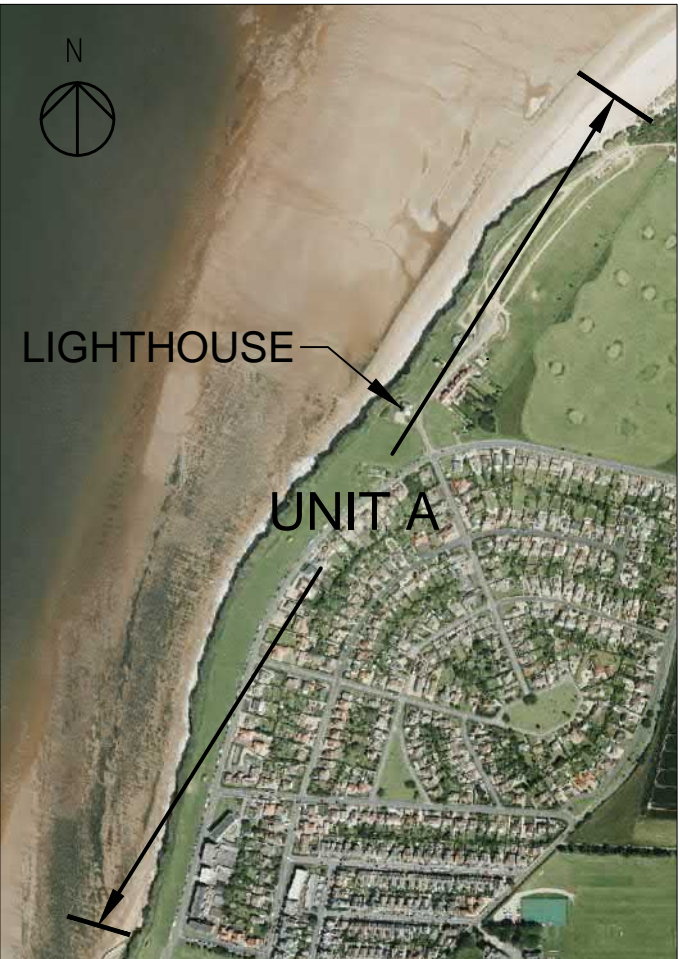
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LOCATION MAP



PLAN
SCALE 1:2000

EXISTING CLIFF
(INDICATIVE)

APPROXIMATE LEVEL OF
EXISTING CLIFF TOE +5.20mOD

CREST LEVEL SHOWN AS INDICATIVE, TO BE CONFIRMED IF OPTION IS SELECTED

10 ROWS 225x100mm PLANKS 6m LENGTHS

225 X 225 mm CROSS STRUTS
3M LONG AT 3m C/C

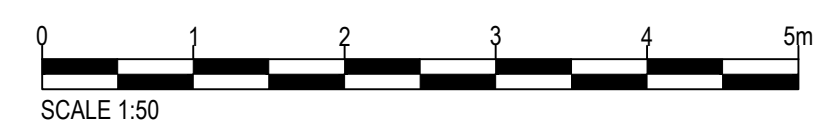
225 X 225 mm REAR PILES 7.5m LONG,
FRONT PILES 5m AT 3m C/C

EXISTING BEACH SHOWN INDICATIVELY
(LEVEL VARIES)

TIMBER SHEETERS BETWEEN PILES (IF REQUIRED)

+6.06mOD
1 IN 200 (2117)
HAT +4.45mOD
MHWS +3.65mOD
MHWN +1.85mOD

TYPICAL CROSS SECTION
SCALE 1:50



Revision Details

By
Check
Date
Suffix

Purpose of issue

OUTLINE DESIGN - FOR APPRAISAL

Client
**BOROUGH COUNCIL OF KING'S
LYNN & WEST NORFOLK**

Project Title
**HUNSTANTON
COASTAL MANAGEMENT PLAN**

Drawing Title
**SHORT-LISTED OPTIONS
OPTION 2
TIMBER REVETMENT**

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AECOM Internal Project No. 60552153			Suitability FOR INFORMATION	
Scale @ A1			Zone	

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Rev
P01

NOTES

-
- An aerial photograph of a coastal area. A road, labeled 'Lighthouse' with an arrow, runs along the shoreline. A large area of land, labeled 'UNIT A' with an arrow, is situated inland from the road. The map shows a residential development with streets and buildings. A compass rose in the top left corner indicates North (N). A scale bar in the bottom right corner shows distances in meters (0, 100, 200).

INDICATIVE LOCATION OF
POTENTIAL PILOT STUDY AREA

POTENTIAL GEOTUBES / SANDBAGS

250m

LIGHTHOUSE

0 20 40 60 80 100 120 140 160 180 200m
SCALE 1:2000

AERIAL IMAGERY DATA (2015) COURTESY OF CHANNEL COASTAL OBSERVATORY

EXISTING CLIFF (INDICATIVE)

APPROXIMATE LEVEL OF EXISTING CLIFF TOE +5.20mOD

4m NOM. DIAMETER GEOTUBE (GT 1000 M)

CREST LEVEL SHOWN AS INDICATIVE, TO BE CONFIRMED IF OPTION IS SELECTED

EXISTING BEACH SHOWN INDICATIVELY (LEVEL VARIES)

A horizontal graphic scale bar with alternating black and white segments. It is marked with numbers 0, 1, 2, 3, 4, and 5m. Below the bar, the text "SCALE 1:50" is written.

Purpose of issue	
<h1>OUTLINE DESIGN - FOR APPRAISAL</h1>	

Project Title

HUNSTANTON
COASTAL MANAGEMENT PLAN

Designed CP	Drawn CP	Checked DG	Approved PN	Date 20/04/18
AECOM Internal Project No. 60552153			Suitability FOR INFORMATION	
Scale @ A1			Zone	

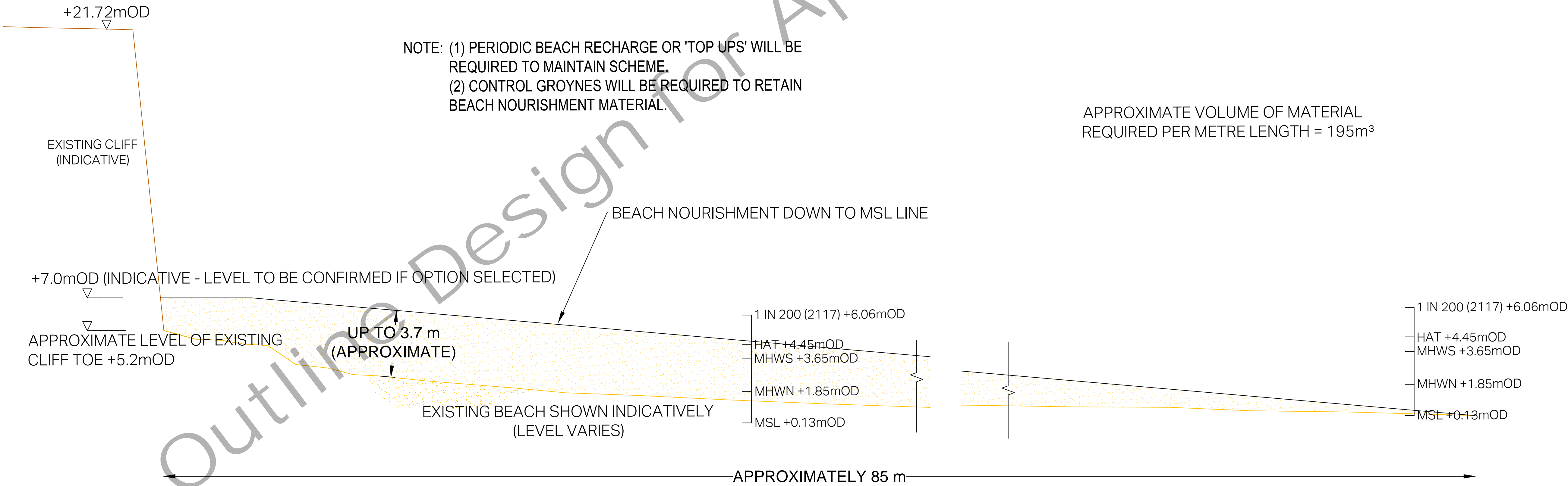
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PLAN
SCALE 1:2000



TYPICAL CROSS SECTION
SCALE 1:80

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LOCATION MAP

Revision Details	By	Check	Date	Suffix
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Purpose of Issue
OUTLINE DESIGN - FOR APPRAISAL

Client
BOROUGH COUNCIL OF KING'S LYNN & WEST NORFOLK

Project Title
HUNSTANTON COASTAL MANAGEMENT PLAN

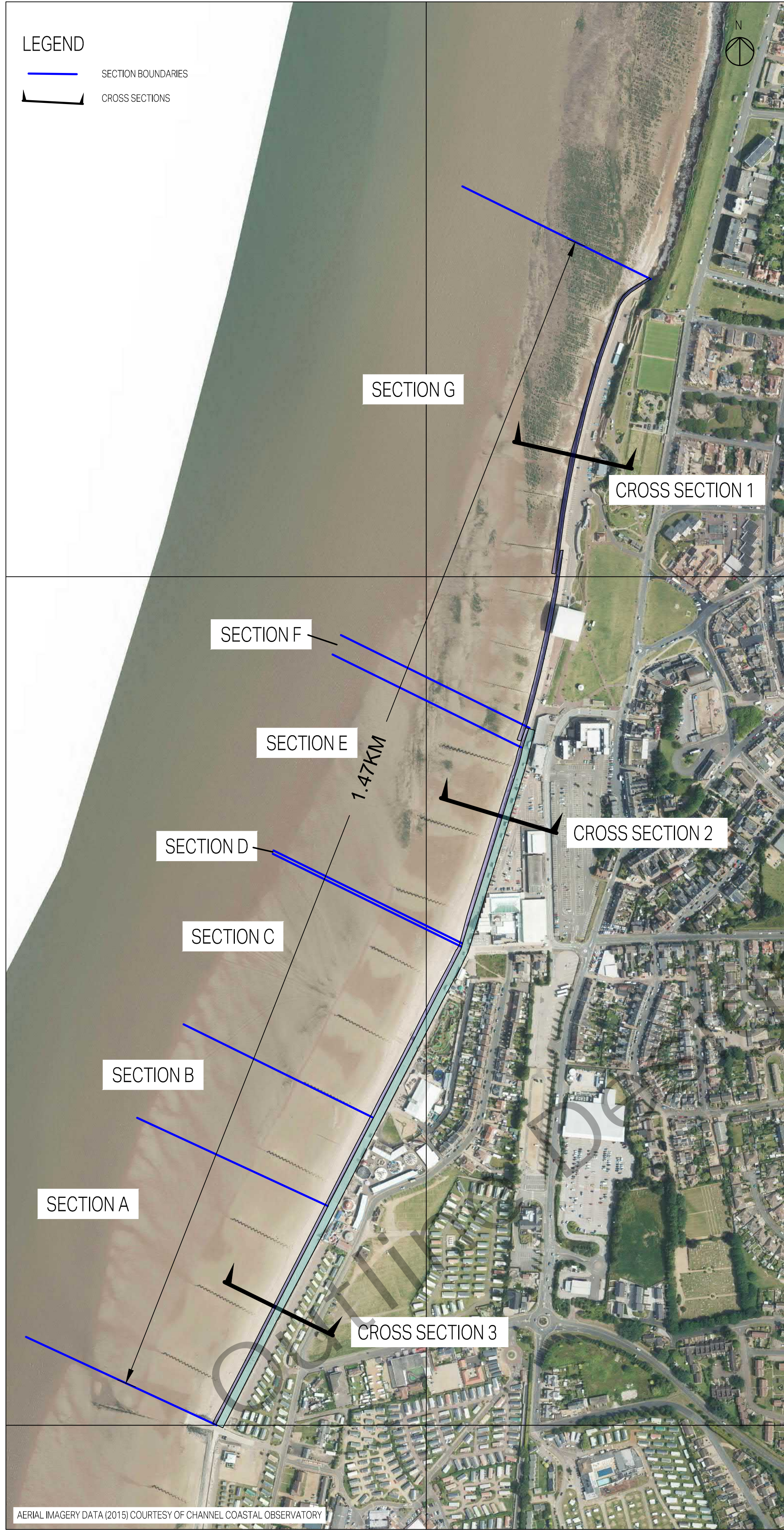
Drawing Title
**SHORT-LISTED OPTIONS
OPTION 4
BEACH NOURISHMENT**

Designed CP	Drawn CP	Checked DG	Approved PN	Date 20/04/18
AECOM Internal Project No. 60552153			Suitability FOR INFORMATION	
Scale @ A1			Zone	

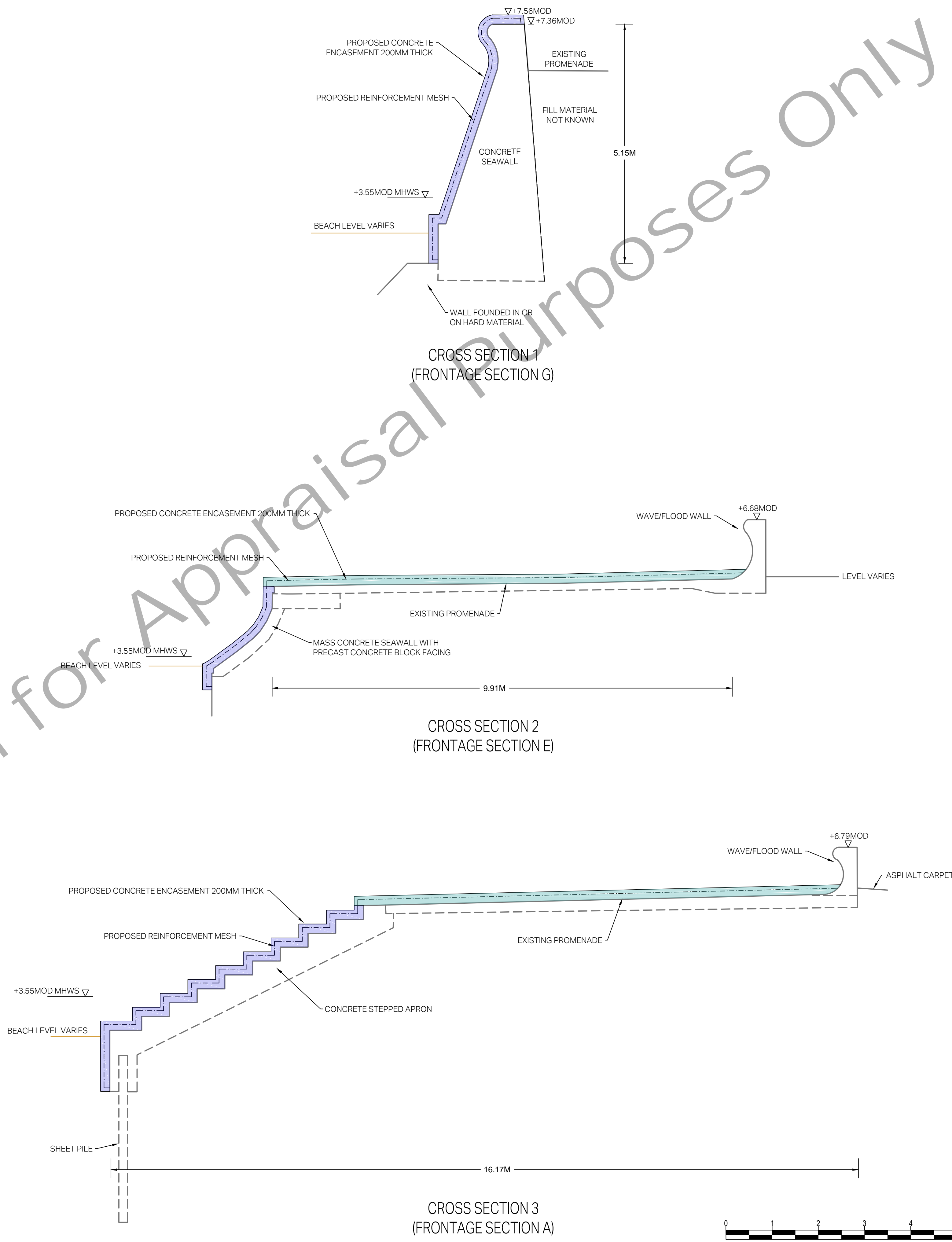
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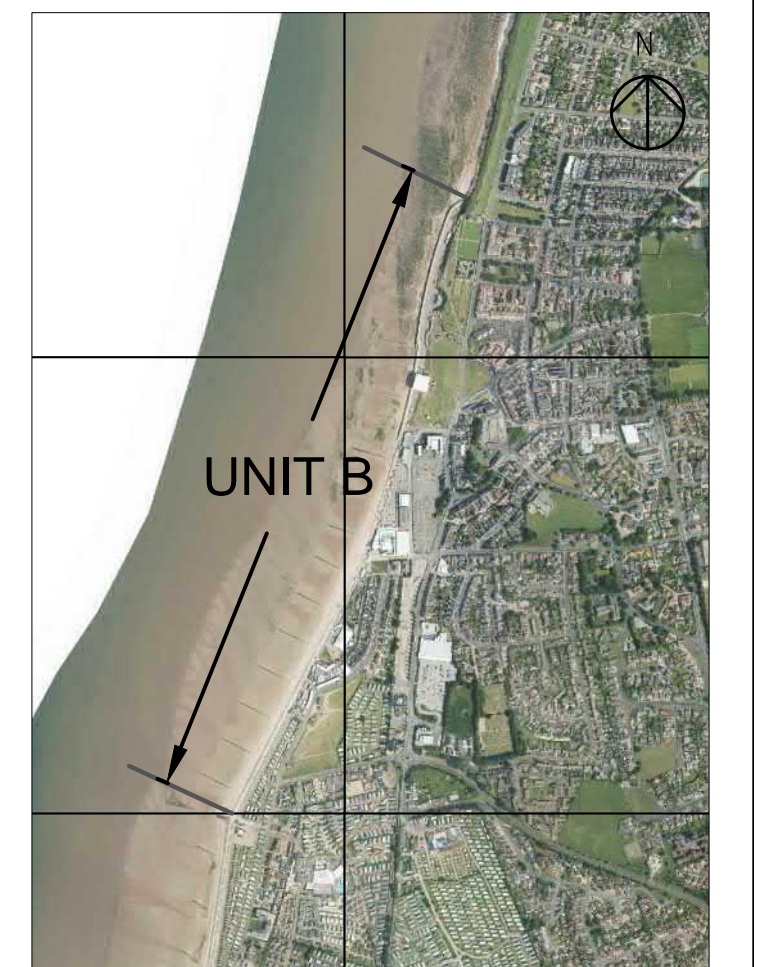


MAP OF UNIT B
(NOT TO SCALE)



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 - DIMENSIONS OF EXISTING STRUCTURE TAKEN FROM MOTT MACDONALD INVESTIGATION CROSS SECTIONS (1996)



LOCATION MAP

- LEGEND
- PROPOSED CONCRETE ENCASEMENT FOR SEAWALL
 - PROPOSED CONCRETE ENCASEMENT FOR PROMENADE
- (OPTION COULD INCLUDE ENCASEMENT OF SEAWALL OR PROMENADE OR BOTH TOGETHER)

Revision Details	By	Check	Date	Suffix
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OUTLINE DESIGN - FOR APPRAISAL

Client
BOROUGH COUNCIL OF KING'S LYNN & WEST NORFOLK

Project Title
HUNSTANTON COASTAL MANAGEMENT PLAN

Drawing Title
**SHORT-LISTED OPTIONS
UNIT B
MAINTAIN
CONCRETE ENCASEMENT**

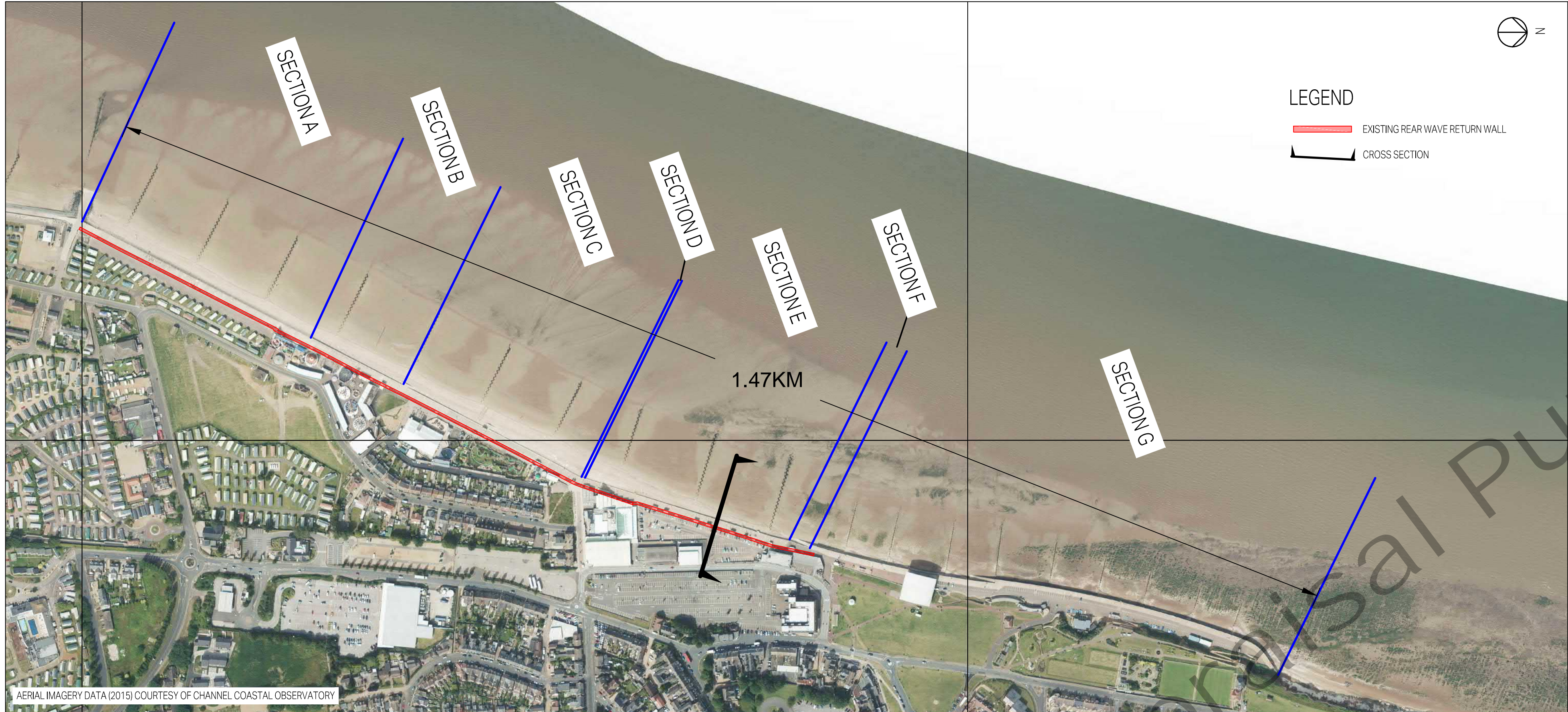
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AERIAL IMAGERY DATA (2015) COURTESY OF CHANNEL COASTAL OBSERVATORY

MAP OF UNIT B
(NOT TO SCALE)

LEGEND

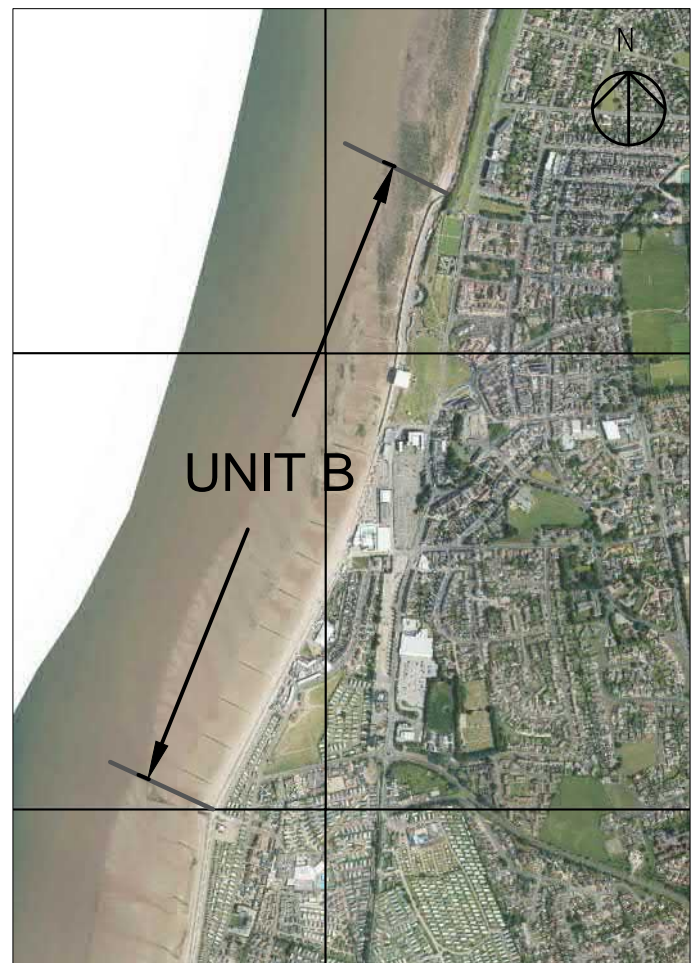
- EXISTING REAR WAVE RETURN WALL
- CROSS SECTION

- 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 WALL IS STRUCTURAL CAPABLE OF INCORPORATING THE EXTRA WEIGHT AND ASSOCIATED LOADS OF THE LEVEL INCREASE.

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NOTES

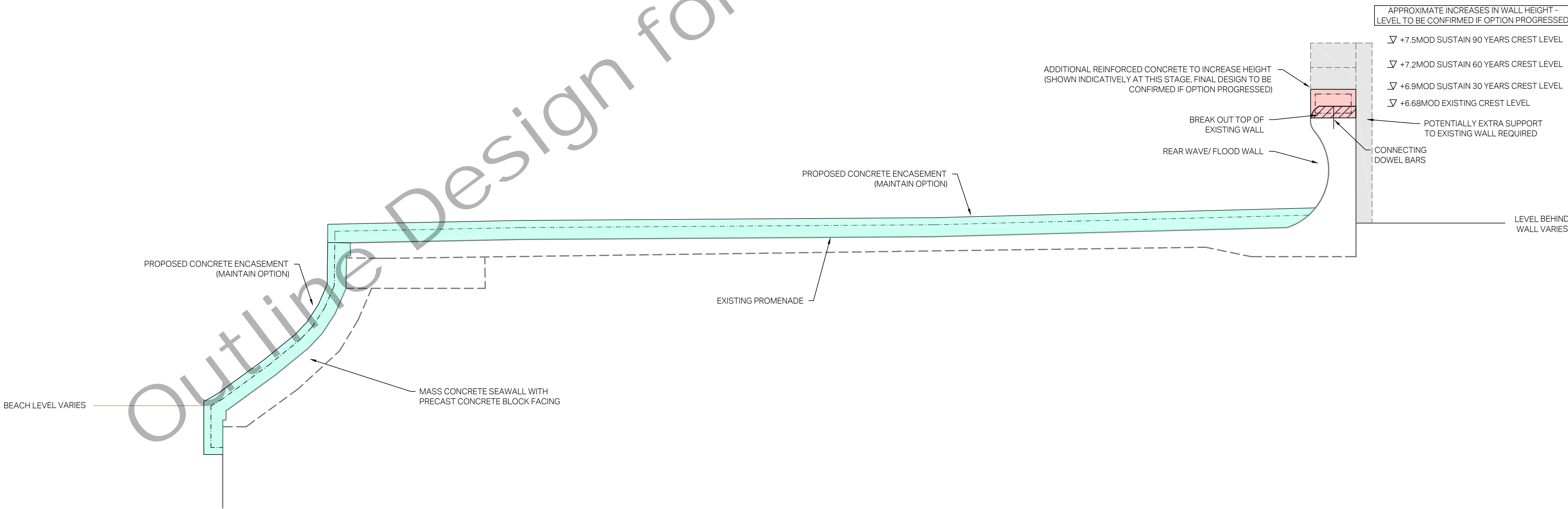
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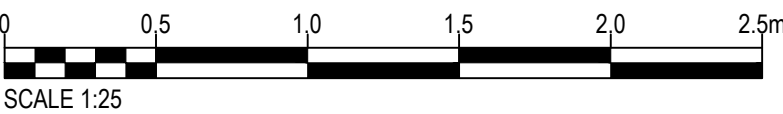
LOCATION MAP

LEGEND

- EXISTING WALL TO BE BROKEN OUT
- PROPOSED REINFORCED CONCRETE TO RAISE HEIGHT OF EXISTING WALL
- PROPOSED CONCRETE ENCASEMENT (MAINTAIN OPTION)
- FUTURE CREST RAISING



INDICATIVE CROSS SECTION
(FRONTAGE SECTION E)



Revision Details	By	Check	Date	Suffix
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Purpose of issue
OUTLINE DESIGN - FOR APPRAISAL

Client
BOROUGH COUNCIL OF KING'S LYNN & WEST NORFOLK

Project Title
HUNSTANTON COASTAL MANAGEMENT PLAN

Drawing Title
SHORT-LISTED OPTIONS UNIT B SUSTAIN (CREST RAISING)

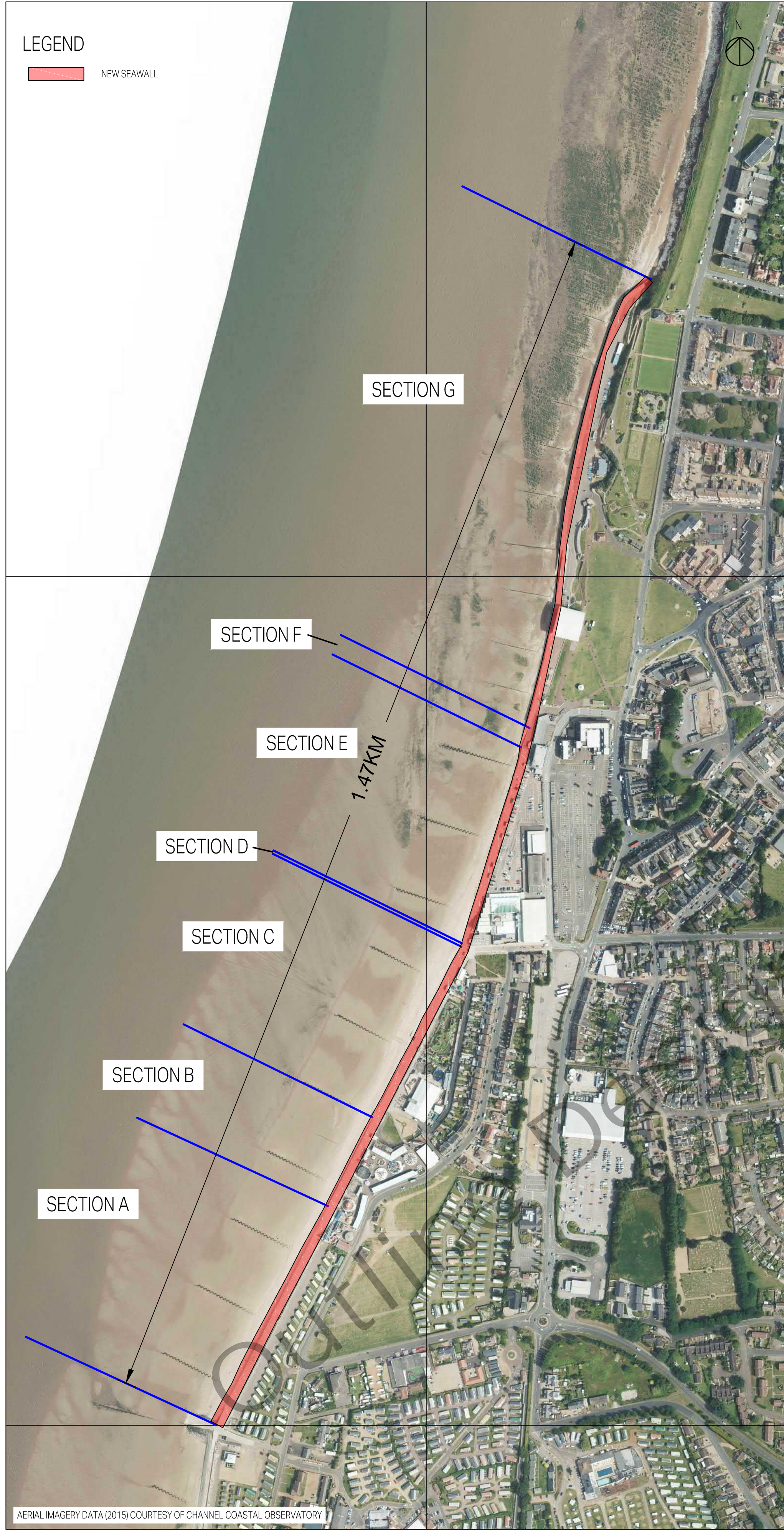
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MAP OF UNIT B
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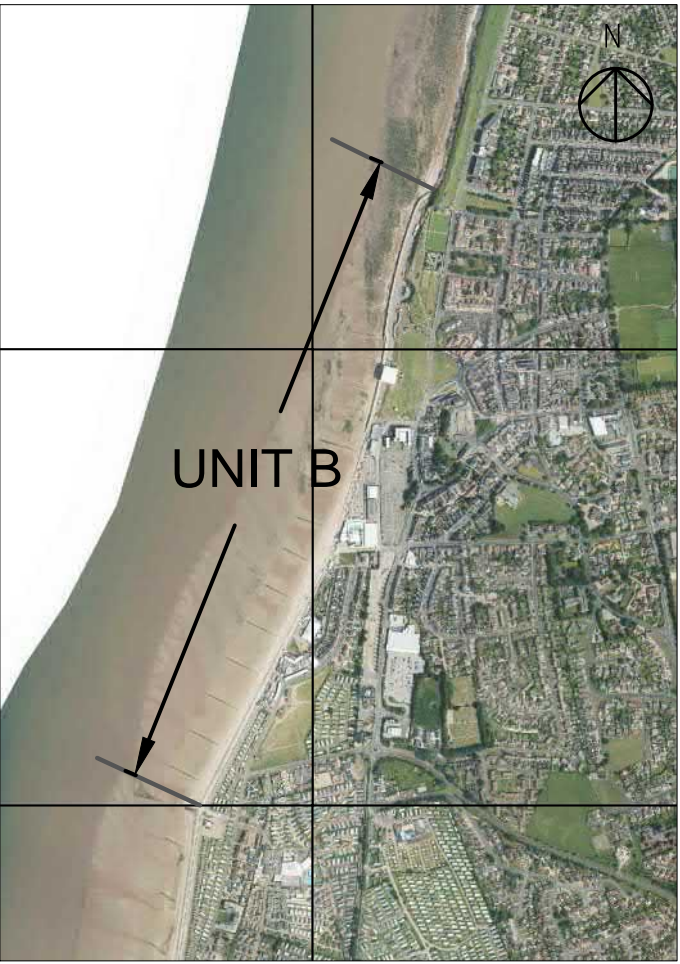


EXAMPLES OF NEW SEAWALLS

- THE PHOTOGRAPHS SHOW RECENT EXAMPLES OF DIFFERENT SEAWALLS THAT HAVE BEEN CONSTRUCTED IN THE PUBLIC REALM TO IMPROVE THE STANDARD OF COASTAL PROTECTION.
- AT THIS STAGE OF THE OPTION DEVELOPMENT PROCESS THE SIZE, SCALE AND NATURE OF A NEW ENHANCED SEAWALL ALONG THE UNIT B FRONTAGE IN HUNSTANTON HAS NOT YET BEEN FULLY DETERMINED.
- THEREFORE, FOR COST ESTIMATION AND COMPARISON PURPOSES THE ENVIRONMENT AGENCY'S COST ESTIMATION FOR COASTAL PROTECTION GUIDANCE (REPORT - SC080039/R7) HAS BEEN USED.

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 - DIMENSIONS OF EXISTING STRUCTURE TAKEN FROM MOTT MACDONALD INVESTIGATION CROSS SECTIONS (1996)



LOCATION MAP

Revision Details	By	Date	Suffix
	Check		

Purpose of issue
OUTLINE DESIGN - FOR APPRAISAL

Client
BOROUGH COUNCIL OF KING'S LYNN & WEST NORFOLK

Project Title
HUNSTANTON COASTAL MANAGEMENT PLAN

Drawing Title
**SHORT-LISTED OPTIONS
UNIT B
IMPROVE
NEW SEAWALL**

Designed -	Drawn GB	Checked DG	Approved PN	Date 20/04/18
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