PORT OF TILBURY LONDON

PLANNING ACT 2008
INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE)
RULES 2010

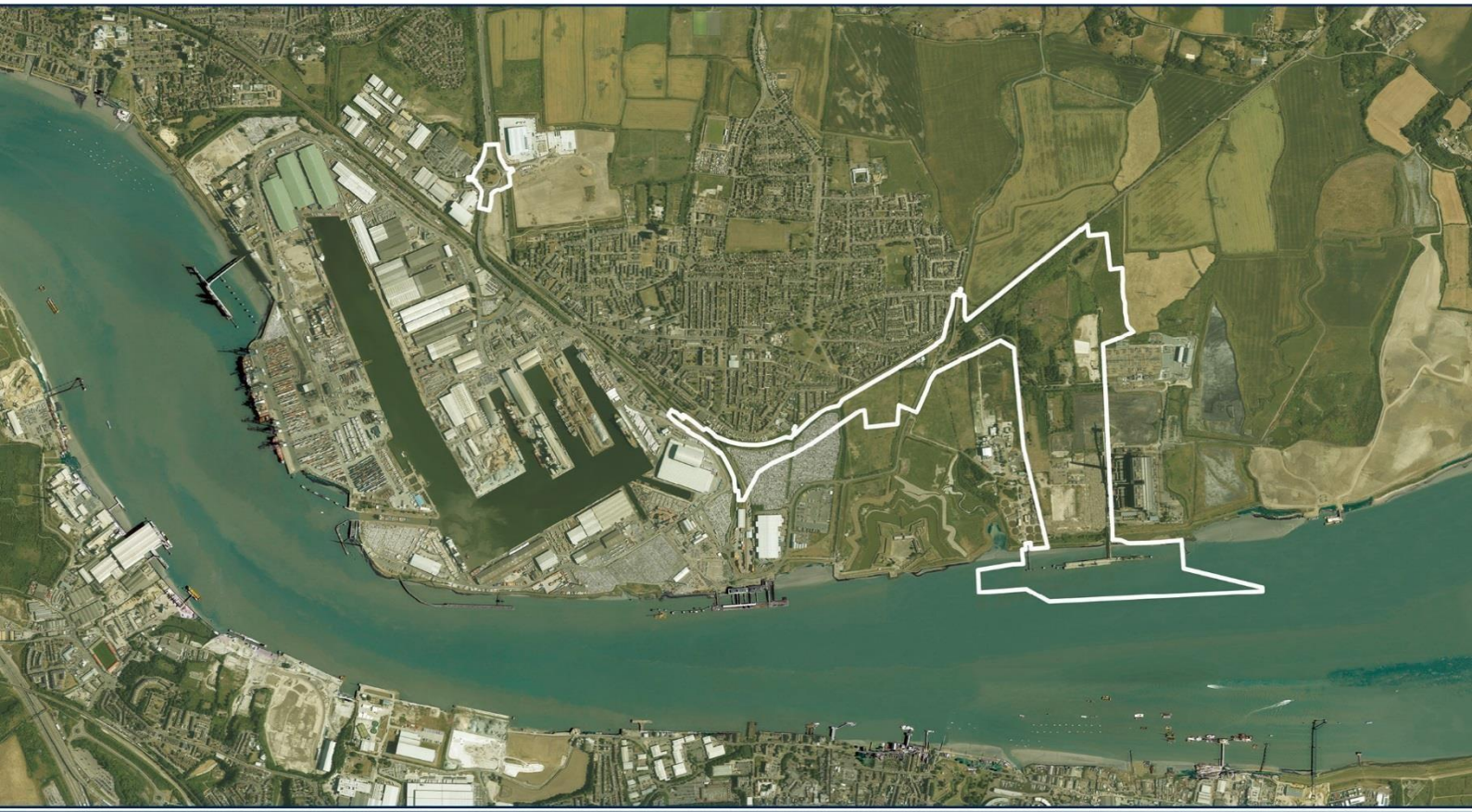
PROPOSED PORT TERMINAL AT FORMER TILBURY POWER STATION

TILBURY2

TR030003

INTERACTION OF TILBURY2 AND RIVER THAMES FLOOD DEFENCES

TILBURY2 DOCUMENT REF: PoTLL/T2/EX/89



TILBURY2

PORT OF TILBURY

PLANNING ACT 2008

PROPOSED PORT TERMINAL AT FORMER TILBURY POWER STATION 'TILBURY2'

INTERACTION OF TILBURY2 AND RIVER THAMES FLOOD DEFENCES

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TILBURY2 PROJECT TEAM
PORT OF TILBURY LONDON LIMITED
Leslie Ford House
Port of Tilbury
Tilbury
Essex
RM18 7EH

www.tilbury2.co.uk

1.0 INTRODUCTION

1.1 The existing flood defences run along the southern boundary of the Tilbury2 site. The defences, as stated in the Environment Agency's (EA) response to First Written Question 1.19.2 [REP1-046], are '*considered to be in very poor condition, have ceased to function effectively, and require significant remedial works or replacement within 3 years to which the Applicant is expected to contribute'.*

1.2 In line with the TE2100 Plan, there is the future requirement to raise the flood defences to either 7.40 m AOD or 8 m AOD in the Tilbury reach.

1.3 It is agreed that the EA would not expect the flood wall to be raised to 8 mAOD along the entire frontage or where the flood defence is being replaced/altered as part of theTilbury2 proposals, but that the proposed design for any replaced/altered flood defence is sufficient to provide for future raising should this is required.

1.4 The text below summarises how the proposed Tilbury2 works interact with the River Thames Flood Defences.

2.0 SCHEME PROPOSALS

2.1 There are four main elements of the proposed scheme that interact, to varying degrees, with the existing flood defences :-

I. RoRo approach bridge (and associated abutment)
II. Surface water outfall
III. RoRo terminal operational area
IV. S106 - Active Travel Study footpath replacement

2.2 The proposed works for each of these elements is summarised below and their location is shown in Figure 1.

RORO APPROACH BRIDGE AND ASSOCIATED ABUTMENT

2.3 It is proposed that the existing flood defence will be removed at this location and a new bridge abutment structure will be constructed on the alignment of the existing defence. The new bridge abutment structure (which includes a flood gate) will act as the flood defence at this location.

2.4 It has been agreed with the EA that some of the existing flood defence panels either side of the proposed bridge abutment may need to be replaced as part of the proposed works to address possible future differential settlement where the new structure is tied in with the existing defence. This would be considered as part of the approval of the detailed design of the works, pursuant to the EAs protective provisions.

2.5 Where the existing flood defence is being replaced as part of the scheme proposals, the level of these defences will be raised to take into account future climate change predictions. For example, the existing defence is at a level of

6.70 mOD. Where PoTLL is proposing to replace the defence it is proposed to provide a defence level of 7.40 mOD and also include provision for the defence to be further raised in the future to 8.0 mOD should this be required.

2.6 This will negate the need for this section of the defence to be raised and/or replaced as part of the EAs TE2100 plans. This is shown on drawing titled "Engineering Section & Plans, Illustrative Cross Section, Bridge Abutment / Flood Defence" [AS-010].

SURFACE WATER OUTFALL

2.7 The requirement for, and the design of, any surface water outfall will be determined during detailed design. Impact on the existing flood defence will be dealt with at the detailed design stage through the EA's proposed plan approval role under protective provisions in the DCO.

RORO TERMINAL OPERATIONAL AREA

2.8 Under the Environmental Permitting Regulations 2010, no permanent structures should be developed within 16 m of the tidal defence without permit.

2.9 It has been agreed between the EA and PoTLL that moveable aspects of the proposals (such as fencing) can be located less than 16 m away from the landward toe of the flood defences. These aspects should be able to be deconstructed or moved to allow access when required. It has been agreed that the proposed fence line will be offset from the existing flood wall to facilitate inspection of the landward face of the flood defence.

2.10 Detailed agreement of the proposed works within 16 m of the flood defence will be dealt with at the detailed design stage through the EA's proposed plan approval role under protective provisions in the DCO.

S106 - ACTIVE TRAVEL STUDY FOOTPATH REPLACEMENT

2.11 As part of the Active Travel Study, which will be secured through a Section 106 agreement with Thurrock Council, it is proposed to undertake improvements to the Thames Estuary Path. This will include resurfacing of the existing footpath adjacent to the Tilbury2 proposals to tie into resurfacing work being delivered by Thurrock Council.

2.12 Impact on the existing flood defence will be dealt with at the detailed design stage through the EA's proposed plan approval role under protective provisions in the DCO, however it is not expected that these works will impact on the effectiveness of the flood defences.

3.0 FUTURE RESPONSIBILITY

3.1 As noted above, it has been agreed with the EA that only moveable elements of the proposed scheme (e.g. temporary or dismountable structures) may be installed within 16 m of the flood defence. This will provide any required access for the EA for any future works to those parts of the flood defences not already identified as being impacted by the Tilbury2 proposals.

3.2 Other than the defences directly affected by the proposals PoTLL does not intend to replace, repair or strengthen any other length of the existing flood defence as part of the Tilbury 2 proposals, as the proposals do not impact upon them. Any works to these defences will instead form part of the EAs TE2100 plan.

3.3 The EA as part of the TE2100 plan has chosen to carry out maintenance of the flood defences in co-ordination with PoTLL (in its role as the riparian landowner) and a meeting has been arranged for the 22nd May 2018 to progress these matters.

4.0 SUMMARY

4.1 Where our works directly impact on the flood defence and requires replacement, the defence will be raised to meet the current climate change predictions, mitigating the need for the EA to undertake further raising works in the short term at this location.

4.2 Within the design we have assessed the impact that the proposal may have on the existing flood defence and identified it may be necessary to replace the immediately adjacent wall panels to address the impact of our works (e.g. differential settlement). Mitigation works to the specific panels will be agreed with the EA through the plan approval role under protective provisions in the DCO.

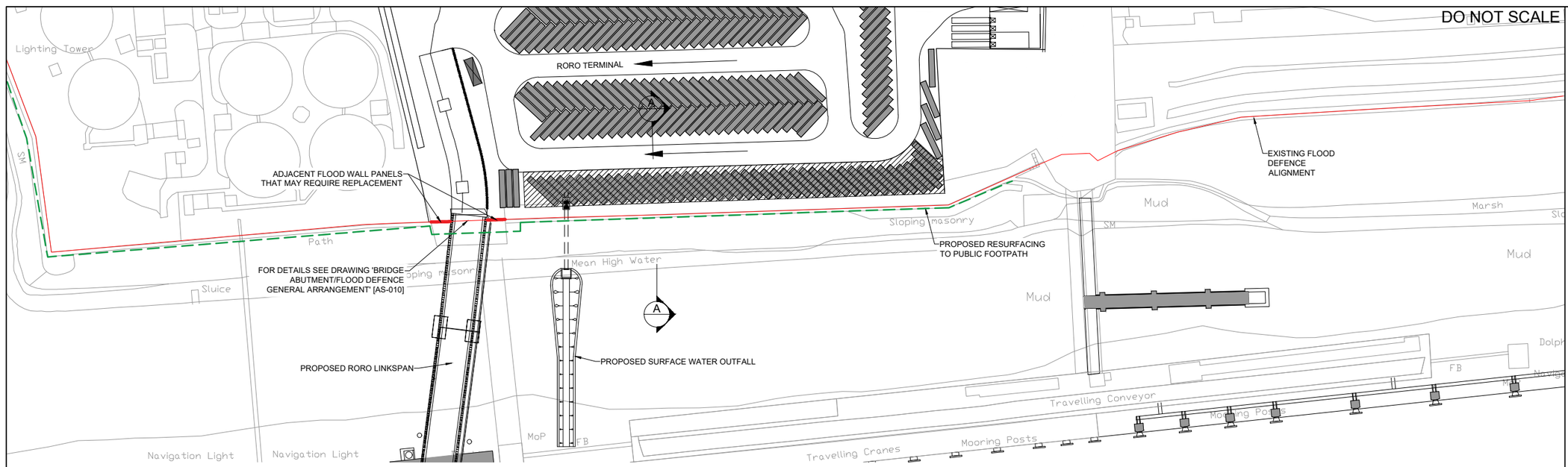
4.3 No permanent structures, except for the RoRo bridge, will be constructed within 16m of the flood defence. Moveable structures, such as fencing, are permitted. This will allow the EA to access the wall for works to any other flood defences if required.

4.4 Any agreed maintenance for the remaining length of flood defence that is not affected by the Tilbury2 proposal would be undertaken between the EA and PoTLL in its role as landowner and **not** in its role as the Developer of the Tilbury2 site.

APPENDIX 1 :

FIGURE 1 – INTERACTION WITH FLOOD DEFENCE

DO NOT SCALE



- PLAN
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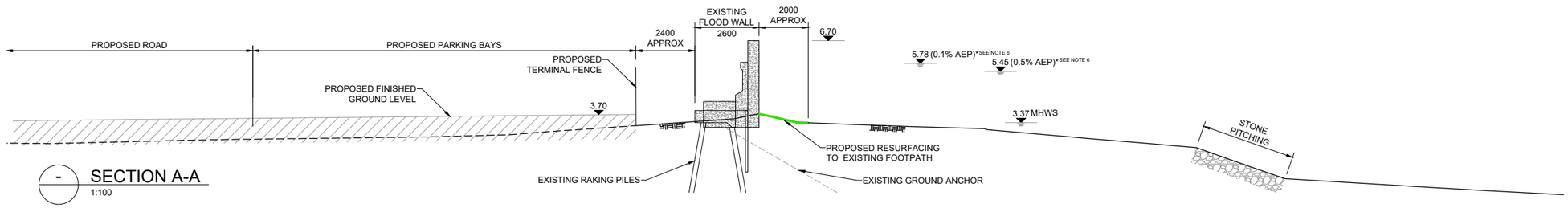

- SECTION A-A
1:100

NOTES:

1. ALL LEVELS ARE IN mAOD UNLESS STATED
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED
3. DESIGN AND LOCATION OF EACH ELEMENT OF THE SCHEME SHOWN HERE FOR ILLUSTRATIVE PURPOSES ONLY
4. FOOTPATH RESURFACING WORKS TO BE SECURED THROUGH THE SECTION 106 AGREEMENT
5. DETAILS OF EXISTING FLOOD DEFENCE BASED ON THAMES TIDAL DEFENCES RECORD DRAWING No. 15/55 (1041-15-R055)
6. EXTREME TIDE LEVEL DATA TAKEN FROM TILBURY PORT EXPANSION LEVEL 3 FLOOD RISK ASSESSMENT ADDENDUM TABLE 2-1 [REP1-014]

MHWS = MEAN HIGH WATER SPRINGS

AEP = ANNUAL EXCEEDENCE PROBABILITY

Rev.	Date	Description	By	Chk'd	App'd

Drawing Status: FOR INFORMATION

Suitability: S0

ATKINS
Western House (Block C)
Peterborough Business Park
Lynch Wood
Peterborough
PE2 6FZ
Tel: +44 (0)1733 366900
Fax: +44 (0)1733 366999
www.atkinsglobal.com

Client: PORT OF TILBURY LONDON

Project Title: TILBURY2

Drawing Title: FIGURE 1
INTERACTION WITH FLOOD DEFENCE

Scale	Designed	Drawn	Checked	Authorised
AS SHOWN	AH	BJH	SR	SR
Original Size	Date	Date	Date	Date
A1	01/11/17	01/11/17	26/04/18	30/04/18

Drawing Number: 5153187-ATK-Z3-XX-SK-RL-1380

Revision: P 1

USER: MARSB28 Date: 30/4/18 13:44:40 Filename: P:\GBEMCW3\SE Projects\Tilbury2\261714 PGTIL RoRo Terminal Design\7 WIP\Drawings\71 WIP\TO005 RoRo Terminal Design\Sketches\5153187-ATK-Z3-XX-SK-RL-1380.dwg