

APPENDIX B

Drawings and Calculations

Internal Drainage Board Plan
20-206-60-300-03 Site Topography
20-206-60-301-02 Recorded Flood Outlines
20-206-60-004-05 Design Event Flood Depths Sheet 1 of 2
20-206-60-005-05 Design Event Flood Depths Sheet 2 of 2
20-206-60-302-03 Breach Locations and Land Area Names
20-206-60-250-03 Combined Breach Maximum Depths Sheet 1 of 2
20-206-60-251-03 Combined Breach Maximum Depths Sheet 2 of 2
20-206-60-260-03 Maximum Credible Scenario Level Change 1 of 2
20-206-60-261-03 Maximum Credible Scenario Level Change 2 of 2
20-206-60-253-03 Monk Dike Bank Removal West (NB1) 100yr + 17% Maximum Depth
20-206-60-254-03 Monk Dike Bank Removal East (NB2) 100yr + 17% Maximum Depth
20-206-60-309-01 RoFSW 1 in 1,000 yr Depths (1 of 2)
20-206-60-310-01 RoFSW 1 in 1,000 yr Depths (2 of 2)
20-206-60-315-01 1 in 20 year and 1 in 50 year Flood Outlines (Sheet 1 of 2)
20-206-60-316-01 1 in 20 year and 1 in 50 year Flood Outlines (Sheet 2 of 2)
20-206-60-235-02 Flow Sensitivity (Sheet 1 of 2)
20-206-60-236-02 Flow Sensitivity (Sheet 2 of 2)
Microdrainage Source Control Calculations
20-206-60-500-02 Substation Compound West Drainage Strategy
20-206-60-501-02 Substation Compound East Drainage Strategy
20-206-60-602-00 Mitigation Levels Parcels B1 – B4
20-206-60-602-00 Mitigation Levels Land Areas C1 - C3
20-206-60-602-00 Mitigation Levels Land Areas C1 - C3
20-206-60-603-00 Mitigation Levels Land Areas C4 - C6
20-206-60-604-00 Mitigation Levels Land Areas C7 - C9
20-206-60-605-00 Mitigation Levels Land Areas D1 - D6, D14, E1, E2 & E5
20-206-60-606-00 Mitigation Levels Land Areas E7 - E12
20-206-60-607-00 Mitigation Levels Land Areas E13 - E14
20-206-60-608-00 Mitigation Levels Land Areas E15 - E17
20-206-60-609-00 Mitigation Levels Land Areas F1 - F4
20-206-60-610-00 Mitigation Levels Land Areas F12 - F13



York Consortium of Drainage Boards

Beverley and North Holderness IDB

Map produced by
York Consortium of Drainage Boards
Derwent House
Crockey Hill
York
YO19 4SR

www.yorkconsort.gov.uk

Legend

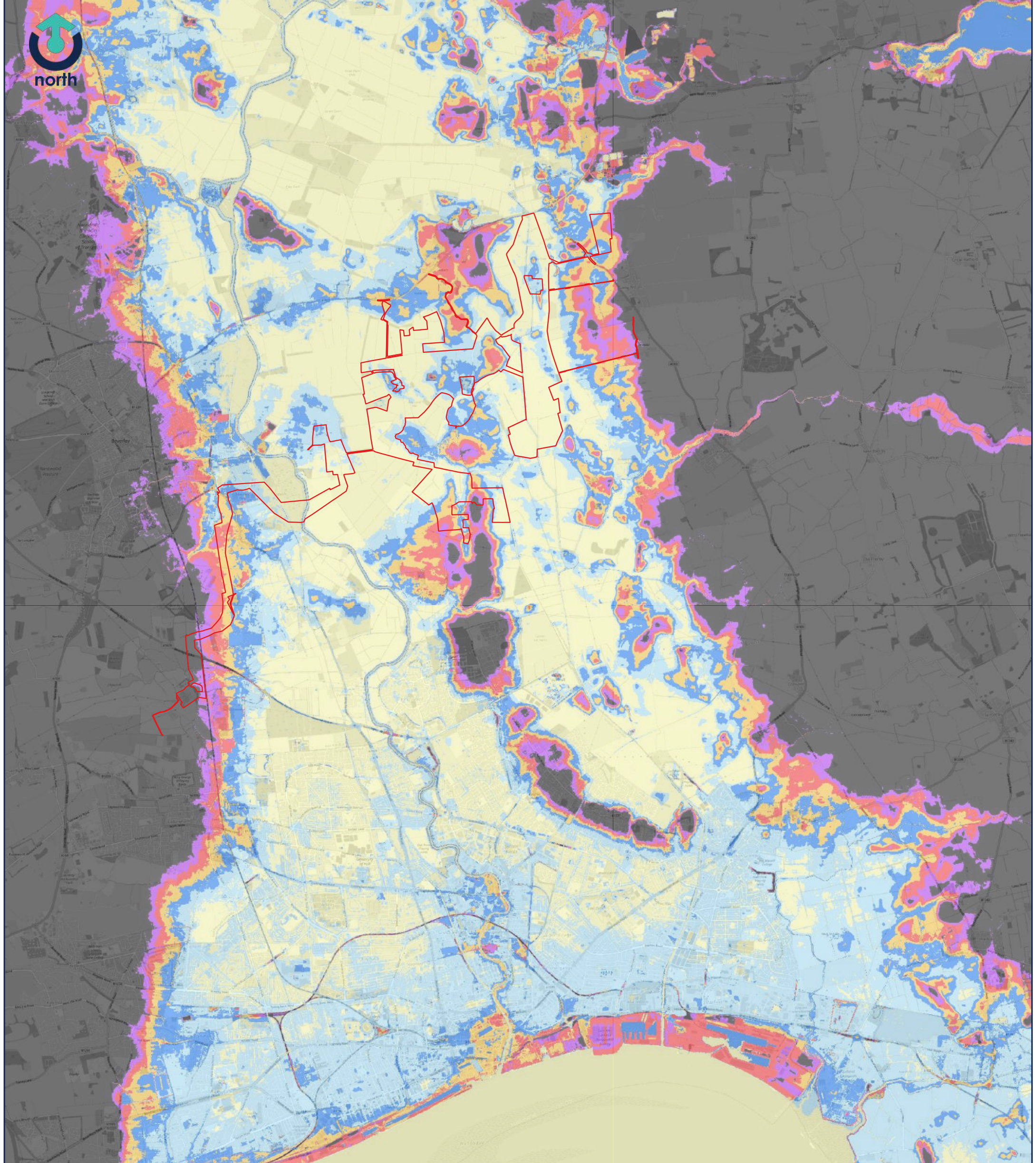
- IDB Maintained Watercourse
- IDB Boundary



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Watercourses

- | | | | | |
|---------------------------------|---------------------------------|---|---|--|
| BH 1 South Bullock | BH 36 Wetton Beck | BH 72 Wilow Lane Drain | BH 119 Branch of Kelwell Drain (North) | BH 150 Turf Gutter |
| BH 2 South Bullock North Branch | BH 37 Decoy House Drain | BH 73 Beverley Park Sewer | BH 120 Kelwell Lowlands Continuation | BH 157 Parting Dyke |
| BH 3 South Bullock South Branch | BH 38 South Dyke | BH 74 Riley Drain | BH 121 Kelwell Lowlands Drain | BH 158 Eek Plantation |
| BH 4 North Bullock | BH 39 Holmes Dyke | BH 75 Throldness Drain | BH 122 Branch of SB and Arnold Ings | BH 159 Tickton Carr Lane Drain |
| BH 5 White Dyke | BH 40 Gosportale Dyke | BH 76 Kalk Beck Soak Dyke | BH 123 Cowbyke Drain | BH 160 Leven Cross Drain |
| BH 6 Whitewater Drain | BH 41 Northfield Beck | BH 77 Skippes Branch | BH 124 Benningholme West Side | BH 161 Leven Town Drain |
| BH 7 Sootborough Boundary | BH 42 Knotka Dyke | BH 78 Skippes | BH 125 Old Main Drain | BH 162 Firth Drain |
| BH 8 Coal Dyke | BH 43 Wanless Drain | BH 79 Barnston Sea End | BH 126 Wayne Croft | BH 164 Jackson & Sampson Low Ground |
| BH 9 Black Dyke | BH 44 Croyke Dyke | BH 80 Dringthoe | BH 127 West Stone Carr Drain | BH 165 Bowllams Dyke |
| BH 10 Boswick New Cut | BH 45 Towns Drain | BH 81 Yew Dyke | BH 128 Stone Carr | BH 166 Leven Canal Side Drain |
| BH 11 Kilnwick Arm | BH 46 Dunnington Sewer | BH 82 Garsmoor Drain | BH 129 Wawne Garage Drain | BH 167 Leven South Carr Drain |
| BH 12 Kirby Drain | BH 47 Inholmes | BH 83 Harde Covert | BH 130 North Wray | BH 168 Leven North Carr Drain |
| BH 13 Potter Drain | BH 48 Waterloo | BH 84 Burton Agnes | BH 131 Bu dike Drain | BH 169 Baswick Steep Drain |
| BH 14 Decoy Drain | BH 49 White Dyke Branch | BH 85 Nutholmes Dyke | BH 132 Dreyer's Soak Dyke | BH 170 Inn Carr Drain |
| BH 15 South Old Rivers | BH 50 White Dyke | BH 86 Burton Drain | BH 133 Wise and Holberstons Drain | BH 171 He ghholme Drain |
| BH 16 North Old Rivers | BH 51 Warren Hill Drain | BH 87 Stonehills Drain | BH 134 Swine Benningholme & Arnold Ings | BH 172 Burhill and Barff Branch Drain |
| BH 17 Rotsea Drain | BH 52 Lingholms Drain | BH 88 Earles Dyke | BH 135 Benningholme Ings | BH 173 Slam Carr Dyke |
| BH 18 Nafferton Lowlands Drain | BH 53 Beverley Parks Sewer | BH 89 Demming Drain | BH 137 Lambwith Branch | BH 174 Slam Carr South Branch |
| BH 19 Bingham Drain | BH 54 Fox Drain | BH 90 Harthope Beck | BH 138 Jackson Low Side | BH 175 Mill Dam Beck |
| BH 20 Foston Side Dyke | BH 55 Fox Drain Tributary | BH 91 Thornholme Drain | BH 139 Arnold Green Lane | BH 176 Stream Dyke |
| BH 21 Frodingham Side | BH 56 Western Drain | BH 92 Burton Carr Drain | BH 140 Arnold West Carr | BH 177 Slam Carr New Road Drain |
| BH 22 Constable Drain | BH 57 Hull Road East Side Drain | BH 93 Huddermess Drain | BH 141 Riston Drain | BH 178 Slam Carr & Barff Hill Drain |
| BH 23 Frodingham Church Drain | BH 58 Hull Road West Side Drain | BH 94 Garswood Drain | BH 142 Arnold and Riston | BH 179 Burhill and Barff |
| BH 24 Andrew Hall Drain | BH 59 Beverley and Skidby | BH 95 Stoneyall Goad Dyke | BH 143 Stoneyall Goad Dyke | BH 180 Holystree Holme Farm Drain |
| BH 25 Frodingham Mill Drain | BH 60 Soley Lane | BH 96 Continuation of Garswood Drain | BH 144 Tributary of Stoneyall Goad Dyke | BH 181 Burhill Park Drain |
| BH 26 New Cross Drain | BH 61 Figham | BH 97 Garswood Branch Drain | BH 145 Routh Road Side | BH 182 Unstans Drain |
| BH 27 Harrison's | BH 62 North Carr | BH 98 Branch of Swine South Side Drain | BH 147 Routh Road Side Branch | BH 184 Continuation of Lambwith Stream |
| BH 28 Hotts Drain | BH 63 Osgang Drain | BH 99 Swine South Side Drain | BH 148 Meaux and Routh | BH 185 'L' Dyke |
| BH 29 Halls Drain | BH 64 Church Drain | BH 100 Swine Church Continuation | BH 149 Meaux West | BH 186 Bliton Drain |
| BH 30 Roam Drain | BH 65 Storkhill Drain | BH 101 Swine Church Continuation | BH 150 West Towns Drain | BH 187 Hal Farm Drain |
| BH 31 Kilnwick New Cut | BH 66 Swinemoor North Boundary | BH 102 Engine Drain | BH 151 Causeway Dale | BH 188 Nicholson Dyke |
| BH 32 Mill Dam Drain | BH 67 Swinemoor | BH 103 Swine and Castle Hill | BH 152 New Holland | BH 189 Garswood New Drain |
| BH 33 Moor Drain | BH 68 Fisholmes Drain | BH 104 Turner Hall Drain | BH 153 Turf Gutter and Eak River Side | |
| BH 34 Ella Dyke | BH 69 Watson Drain | BH 105 Continuation of Garswood Drain | BH 154 Tickton Carr | |
| BH 35 Bryan Mill Beck | BH 70 Model Farm | BH 106 Garswood Branch Drain | BH 155 Tickton Sewer | |
| | | BH 107 Branch of Swine South Side Drain | | |
| | | BH 108 Swine South Side Drain | | |
| | | BH 109 Swine church Drain | | |
| | | BH 110 Swine Church Continuation | | |
| | | BH 111 Engine Drain | | |
| | | BH 112 Swine and Castle Hill | | |
| | | BH 113 Newlands | | |
| | | BH 114 Tickton Carr | | |
| | | BH 115 Branch of Kelwell Drain (South) | | |



Legend

Order Limits

Ground Levels (mAOD)

<2.0

2.0 to 3.0

3.0 to 4.0

4.0 to 5.0

5.0 to 6.0

6.0 to 7.0

>7.0

STATUS:

FOR INFORMATION

CLIENT:

RWE

SITE:

PEARTREE HILL SOLAR

04	FOR INFO	ORDER LIMITS UPDATED	CF	19.11.25
REV:	DESCRIPTION:	AMENDMENTS:	BY:	DATE:
TITLE: TOPOGRAPHY				
SCALE AT A3: 1:65,000		DRAWN: CF	CHECKED: AB	REVISION: 04
PROJECT NO: 20-206			DRAWING NO: 60-300	DATE: 07.07.2024

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Transport Planning | Flood Risk & Hydrology | Infrastructure & Drainage

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E hello@calibro-consultants.com | W www.calibro-consultants.com

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Legend

- Site Boundary
- June 25th 2007
- 15th Febrary 2020
- 31st March 2018
- 7th November 2019
- 8th February 2020
- Flood Outlines Jan69

03	FOR INFORMATION	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:
STATUS: FOR INFORMATION			
CLIENT: RWE			
SITE: Peartree Hill Solar Farm			
TITLE: Recorded Flood Outlines			



Transport Planning | Flood Risk & Hydrology | Infrastructure & Drainage
33 Colston Avenue | Bristol | BS1 4AU | T 0117 2441 970
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SCALE AT A3: 1:50,000	DATE: 05.06.24	DRAWN: AB	CHECKED: PG
PROJECT NO: 20-206	DRAWING NO: 60-302		REVISION: 03

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Legend

- Order Limits
- Parcel Names
- Substations
- Hybrid Inverters
- Inverters
- Switchgear
- Spares Container
- Depths (m)
 - 0 - 0.1
 - 0.1 - 0.3
 - 0.3 - 0.5
 - 0.5 - 0.7
 - 0.7 - 0.9
 - 0.9 - 1.1
 - 1.1 - 1.5
 - 1.5 - 1.8
 - >1.8

06	UPDATED ORDER LIMITS	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
Design Event (2066) Flood
Depths
Sheet 1 of 2



SCALE AT A3: 1:20,000	DATE: 4.11.24	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-004	REVISION: 06	

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Legend

- Order Limits 
- Parcel Names 
- Substations 
- Hybrid Inverters 
- Inverters 
- Switchgear 
- Spares Container 
- Depths (m)
- 0 - 0.1 
- 0.1 - 0.3 
- 0.3 - 0.5 
- 0.5 - 0.7 
- 0.7 - 0.9 
- 0.9 - 1.1 
- 1.1 - 1.5 
- 1.5 - 1.8 
- >1.8 

06	UPDATED ORDER LIMITS	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

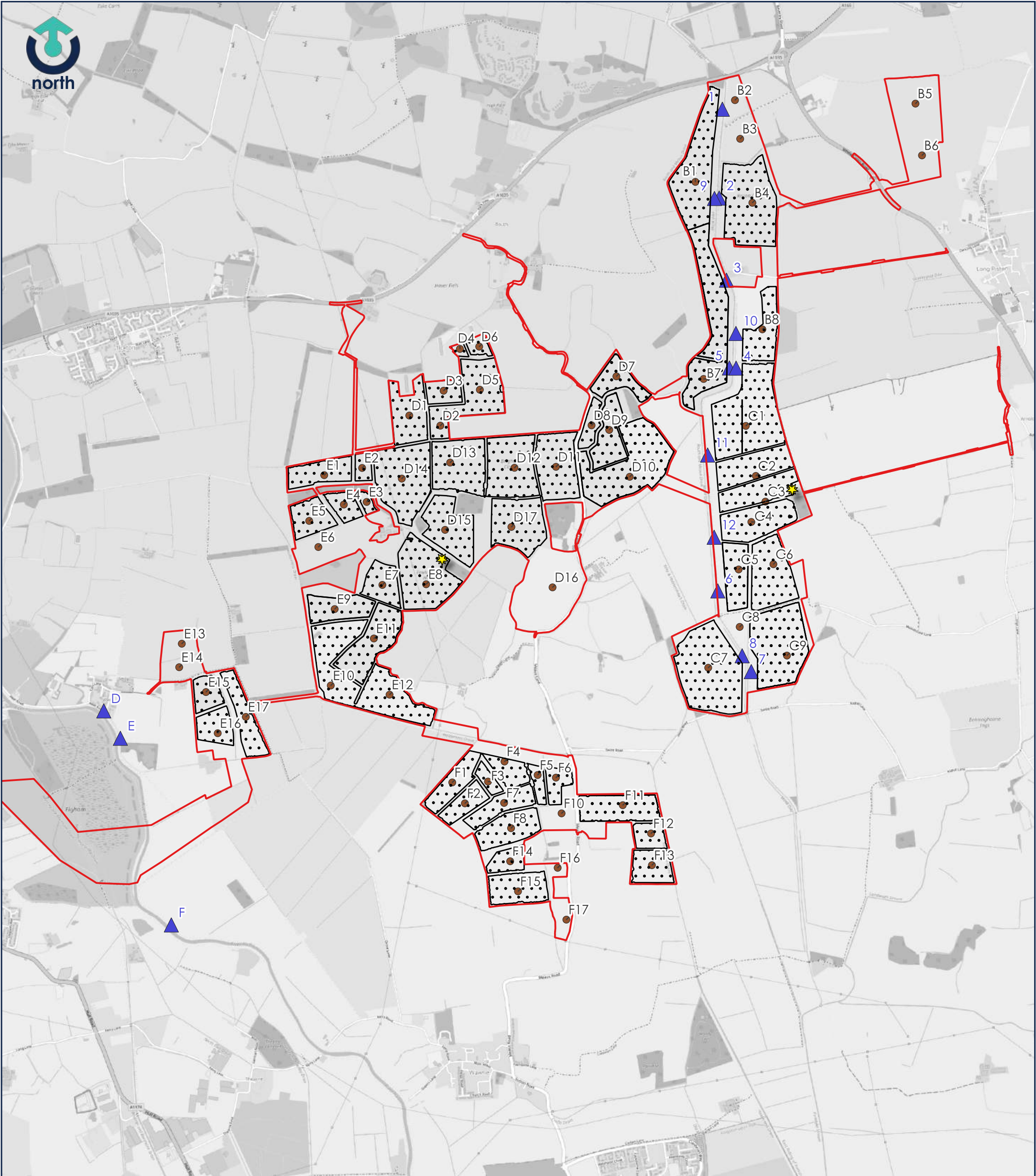
CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
Design Event (2066) Flood
Depths
Sheet 2 of 2



SCALE AT A3: 1:20,000	DATE: 4.11.24	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-005	REVISION: 06	



Legend

Order Limits

Breach Locations

Generation Areas

Parcel Names

Substations

STATUS:

FOR INFORMATION

CLIENT:

RWE

SITE:

PEARTREE HILL SOLAR

04	FOURTH ISSUE	UPDATED ORDER LIMITS	CF	19.11.25
REV:	DESCRIPTION:	AMENDMENTS:	BY:	DATE:
TITLE: BREACH LOCATIONS AND PARCEL NAMES				
SCALE AT A3: 1:25,000		DRAWN: CF	CHECKED: AB	REVISION: 04
PROJECT NO: 20-206			DRAWING NO: 60-302	DATE: 26.11.2024



Legend

- Order Limits
- Sensitive Infrastructure
- Parcel Names
- Breach Locations
- Substations
- Hybrid Inverters
- Spares Container
- Switchgear
- Depths (m)
 - 0 - 0.1
 - 0.1 - 0.3
 - 0.3 - 0.5
 - 0.5 - 0.7
 - 0.7 - 0.9
 - 0.9 - 1.1
 - 1.1 - 1.5
 - 1.5 - 1.8
 - >1.8

Notes

Sensitive infrastructure areas encompass the coverage of solar panels, substations, inverters, battery storage etc, but do not include access or cable routes.

04	FIFTH ISSUE	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
Combined Breach Flood Depths
Sheet 1 of 2



SCALE AT A3: 1:20,000	DATE: 07.07.25	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-250	REVISION: 04	

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Legend

- Order Limits
- Sensitive Infrastructure
- Parcel Names
- Breach Locations
- Substations
- Hybrid Inverters
- Spares Container
- Switchgear
- Depths (m)
 - 0 - 0.1
 - 0.1 - 0.3
 - 0.3 - 0.5
 - 0.5 - 0.7
 - 0.7 - 0.9
 - 0.9 - 1.1
 - 1.1 - 1.5
 - 1.5 - 1.8
 - >1.8

Notes

Sensitive infrastructure areas encompass the coverage of solar panels, substations, inverters, battery storage etc, but do not include access or cable routes.

04	FIFTH ISSUE	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
Combined Breach Flood Depths
Sheet 2 of 2



SCALE AT A3: 1:15,000	DATE: 07.07.25	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-251	REVISION: 04	



Legend

- Order Limits
- Generation Areas
- Land Areas
- Substations
- Hybrid Inverters
- Switch Gear
- Spares Container
- Combined Breach Extent
- Increase (m)
 - < -0.3
 - 0.3 to -0.2
 - 0.2 to -0.1
 - 0.1 to -0.005
 - 0.005 to 0.005
 - 0.005 to 0.1
 - 0.1 to 0.2
 - 0.2 to 0.3
 - > 0.3
- Was wet now dry
- Was dry now wet

04	FIFTH ISSUE	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
Maximum Credible Scenario level
increase from Design Event (Sheet 1 of 2)



SCALE AT A3: 1:20,000	DATE: 10.07.2025	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-260	REVISION: 04	

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Legend

Order Limits



Generation Areas



Land Areas



Substations



Hybrid Inverters



Switch Gear



Spares Container



Combined Breach Extent



Increase (m)

< -0.3



-0.3 to -0.2



-0.2 to -0.1



-0.1 to -0.005



-0.005 to 0.005



0.005 to 0.1



0.1 to 0.2



0.2 to 0.3



> 0.3



Was wet now dry



Was dry now wet



04	FIFTH ISSUE	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:
RWE

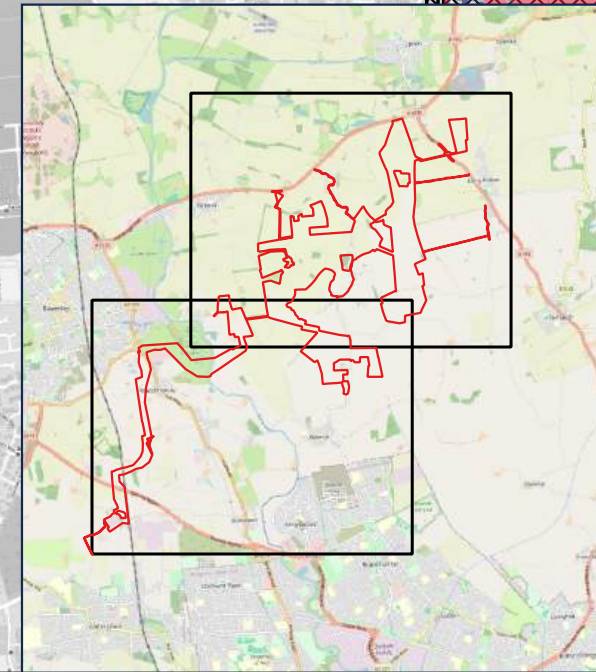
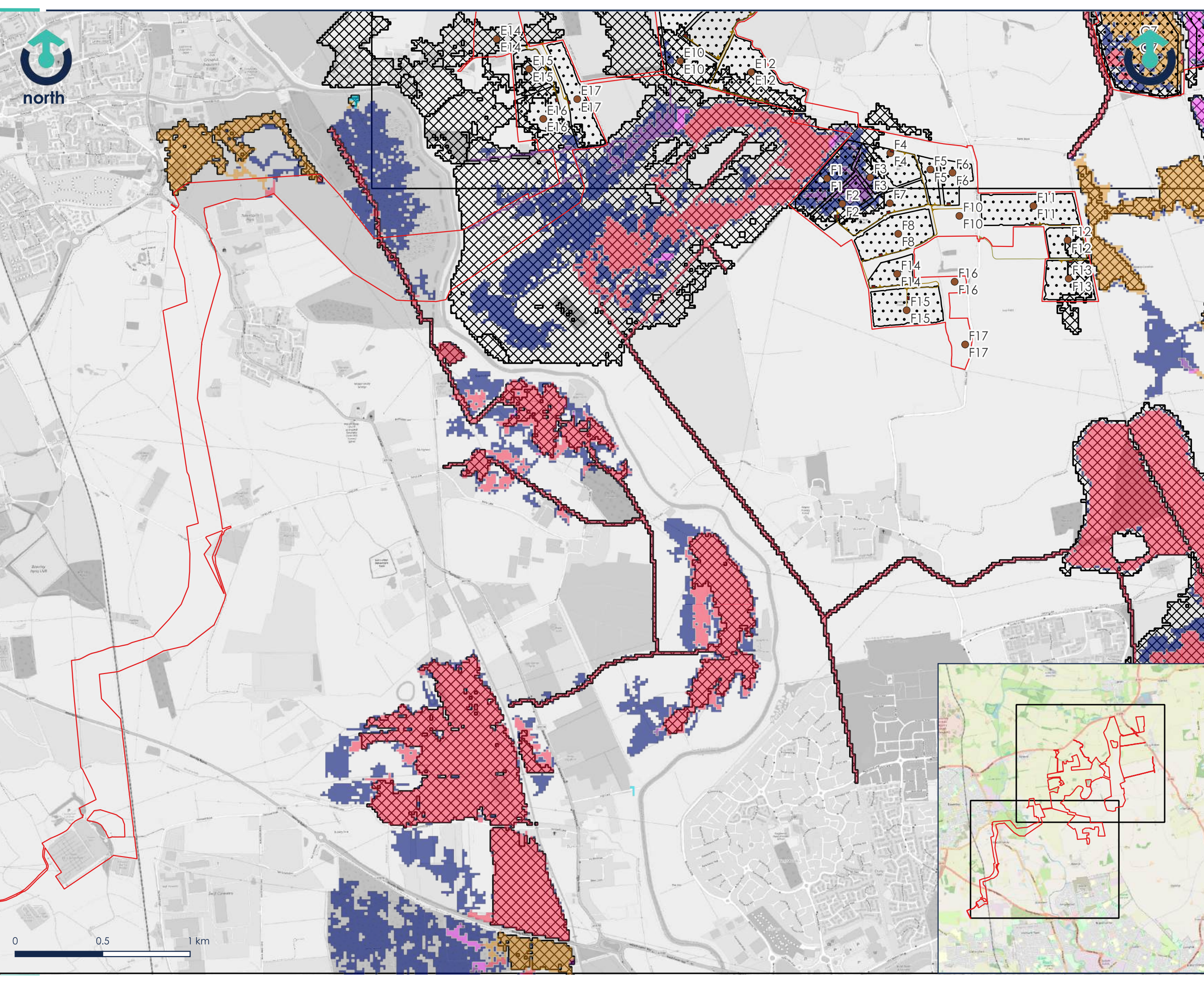
SITE:
Peartree Hill Solar Farm

TITLE:
Maximum Credible Scenario level
increase from Design Event (Sheet 2 of 2)



SCALE AT A3: 1:20,000	DATE: 10.07.2025	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-261	REVISION: 04	

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0 0.25 0.5 km

Legend

- Order Limits 
- Combined Breach Extents 
- Defence Section Removed 
- Depth (m)
- 0 - 0.1 
 - 0.1 - 0.3 
 - 0.3 - 0.5 
 - 0.5 - 0.7 
 - 0.7 - 0.9 
 - 0.9 - 1.1 
 - 1.2 - 1.5 
 - 1.5 - 1.8 
 - >1.8 

03	UPDATED ORDER LIMITS	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: FOR INFORMATION

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
Monk Dike Bank Removal West (NB1)
100yr + 17% Maximum Depth



SCALE AT A3: 1:10,000	DATE: 26.11.2024	DRAWN: AB	CHECKED: PG
PROJECT NO: 20-206	DRAWING NO: 60-253	REVISION: 03	

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Legend

- Combined Breach Extents
- Defence Section Removed
- Depth (m)
- 0 - 0.1
 - 0.1 - 0.3
 - 0.3 - 0.5
 - 0.5 - 0.7
 - 0.7 - 0.9
 - 0.9 - 1.1
 - 1.2 - 1.5
 - 1.5 - 1.8
 - >1.8

03	UPDATED ORDER LIMITS	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
Monk Dike Bank Removal East (NB2)
100yr + 17% Maximum Depth



SCALE AT A3: 1:5,000	DATE: 25.11.2024	DRAWN: AB	CHECKED: PG
PROJECT NO: 20-206	DRAWING NO: 60-254	REVISION: 03	

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0 0.1 0.2 km



Legend

- Order Limits
- Surface Water Depth (m)
 - 0.30 - 0.60
 - 0.60 - 0.90
 - 0.90 - 1.20
 - > 1.20
- Parcel Names
- Generation Areas
- Substations
- Max Breach Extents
- Spares Container
- Hybrid Inverter
- Switchgear

Notes

The RoFSW data was downloaded from the Defra Data Services Platform on April 1st 2025

02	THIRD ISSUE	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
RoFSW 1 in 1,000yr Depths
Sheet 1 of 2



SCALE AT A3: 1:20,000	DATE: 07.07.25	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-309	REVISION: 02	

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Legend

- Order Limits
- Surface Water Depth (m)
 - 0.30 - 0.60
 - 0.60 - 0.90
 - 0.90 - 1.20
 - > 1.20
- Parcel Names
- Generation Areas
- Substations
- Max Breach Extents
- Spares Container
- Hybrid Inverter
- Switchgear

Notes

The RoFSW data was downloaded from the Defra Data Services Platform on April 1st 2025

02	THIRD ISSUE	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
RoFSW 1 in 1,000 yr Depths
Sheet 2 of 2



SCALE AT A3: 1:20,000	DATE: 07.07.25	DRAWN: CF	CHECKED: AB
PROJECT NO: 20-206	DRAWING NO: 60-310	REVISION: 02	



- Legend
- Flood Outlines
 - 1 in 50 year
 - 1 in 20 year
 - Order Limits
 - Generation Areas
 - Land Areas
 - Substations
 - Hybrid Inverters
 - Switch Gear
 - Spares Container

02	UPDATED ORDER LIMITS	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:

RWE

SITE:

Peartree Hill Solar Farm

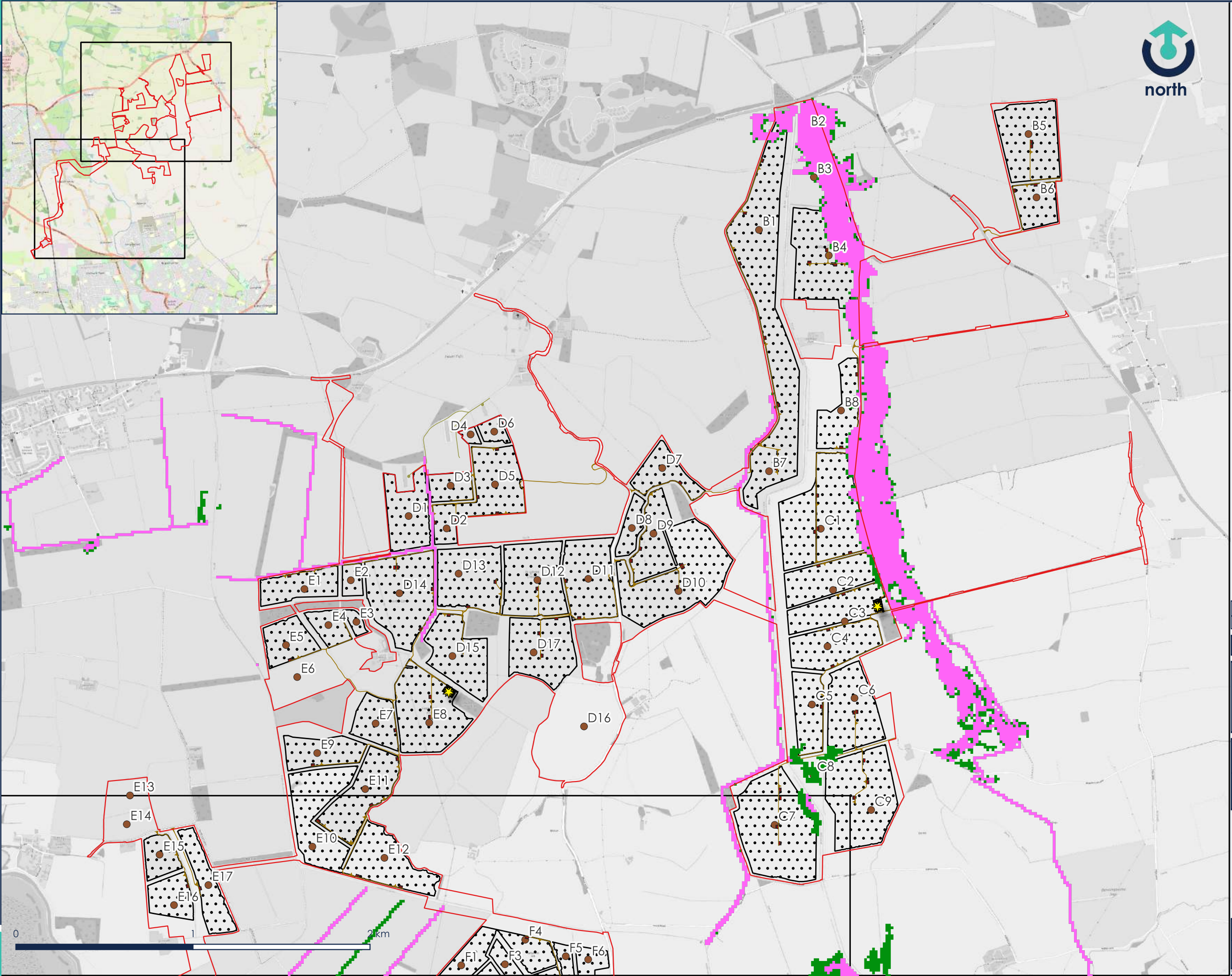
TITLE:

1 in 20 year and 1 in 50 year
Flood Outlines (Sheet 1 of 2)



SCALE AT A3: 1:20,000	DATE: 03.07.25	DRAWN: AB	CHECKED: PG
PROJECT NO: 20-206	DRAWING NO: 60-315	REVISION: 02	

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Legend

- Order Limits
- Generation Areas
- Land Areas
- Substations
- Hybrid Inverters
- Switch Gear
- Spares Container
- Flood Outlines
 - 1 in 50 year
 - 1 in 20 year

02	UPDATED ORDER LIMITS	CF	19.11.25
REV:	DESCRIPTION:	BY:	DATE:

STATUS: INTERNAL USE ONLY

CLIENT:
RWE

SITE:
Peartree Hill Solar Farm

TITLE:
1 in 20 year and 1 in 50 year
Flood Outlines (Sheet 2 of 2)



SCALE AT A3: 1:20,000	DATE: 03.07.25	DRAWN: AB	CHECKED: PG
PROJECT NO: 20-206	DRAWING NO: 60-316	REVISION: 02	

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