The Sizewell C Project

5.6Ad Sizewell Link Road Flood Risk Assessment Addendum - Appendices B-D Part 4

Revision:	1.0
Applicable Regulation:	Regulation 5(2)(e)
PINS Reference Number:	EN010012

June 2021

Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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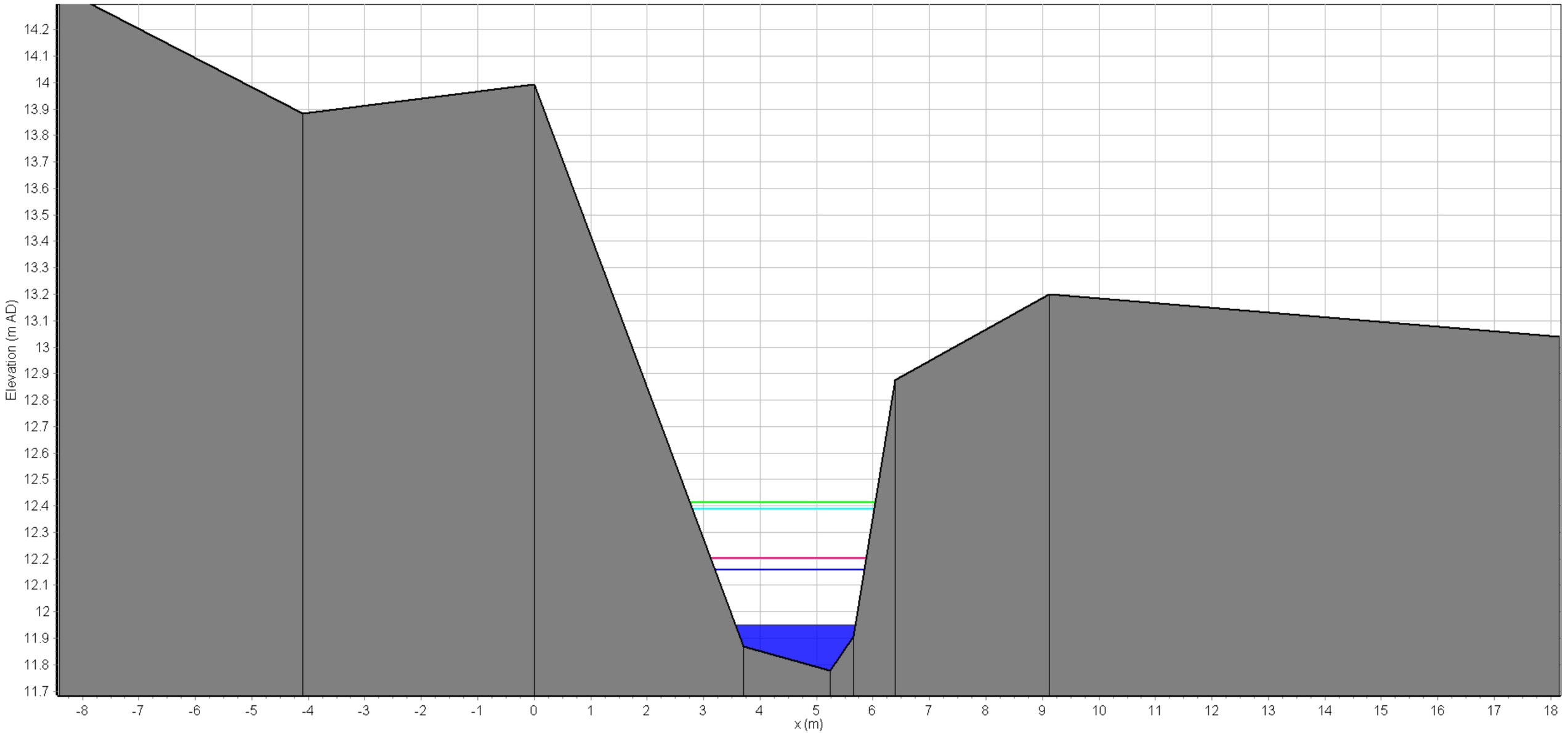
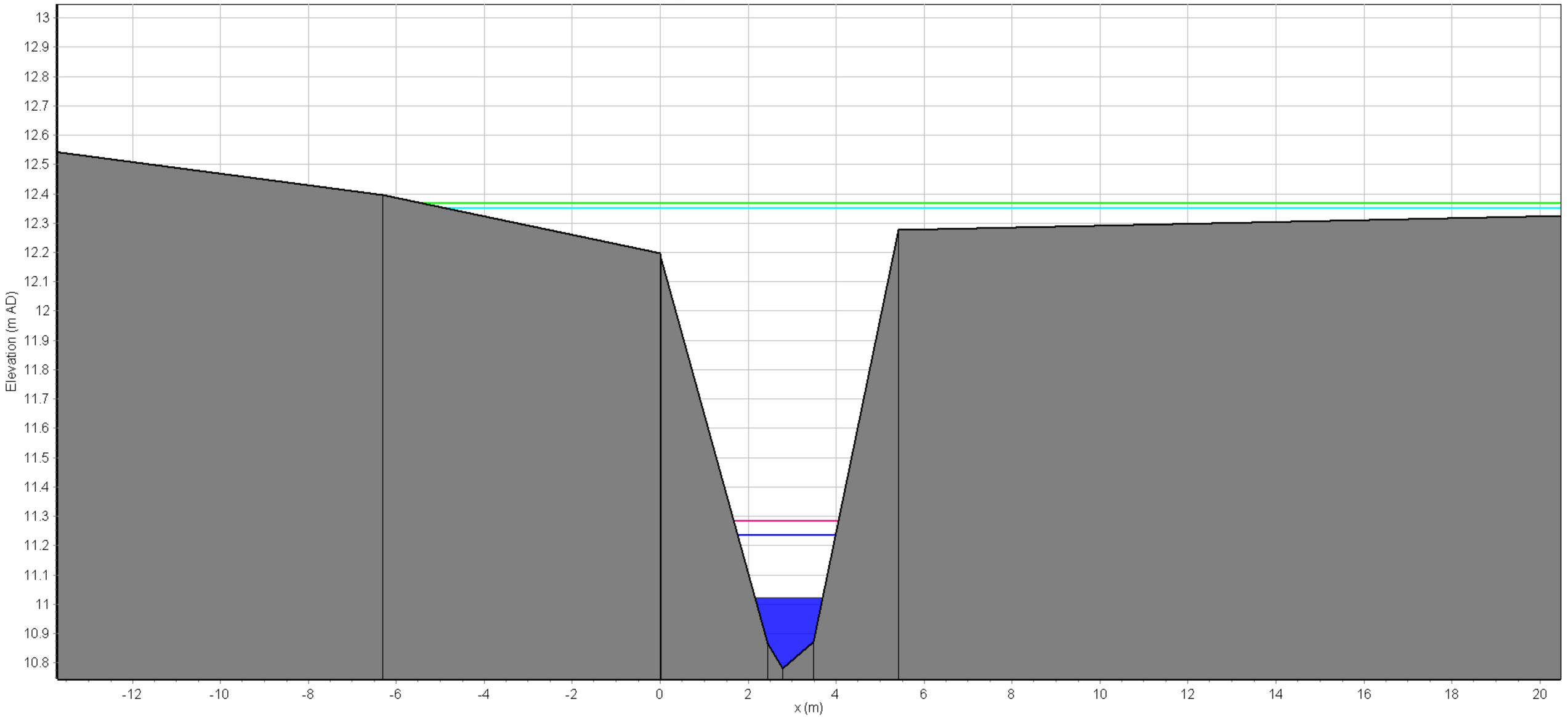
Sizewell C Sizewell Link Road Flood Risk Assessment Addendum – Appendix C: Modelling Report Addendum

APPENDIX C: SIZEWELL LINK ROAD FLUVIAL MODEL RESULTS – DIFFERENCE IN FLOOD DEPTH - CONTINUED

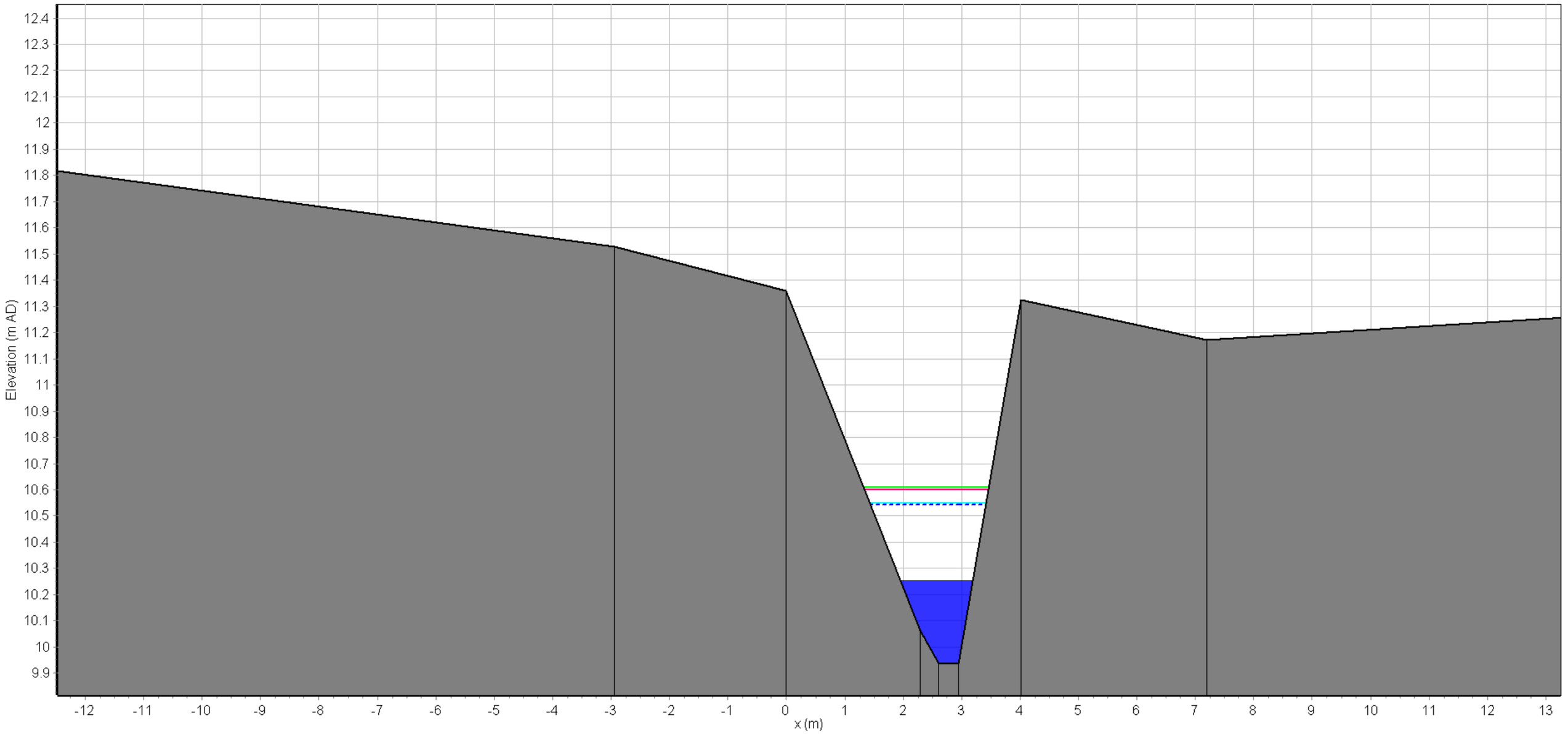
Crossing 5 - Cross-Section Data: SW5-2



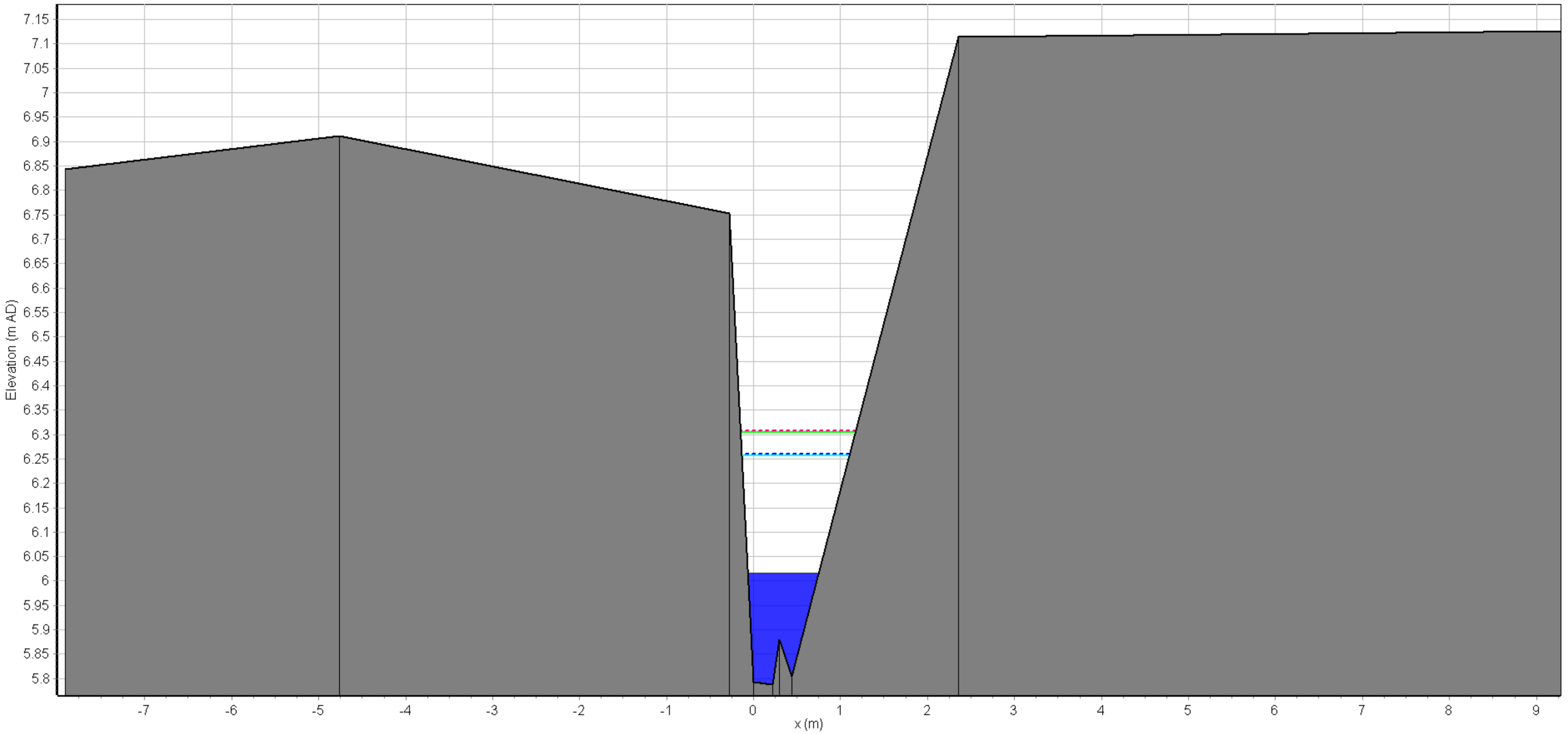
Crossing 5 - Cross-Section Data: SW5-3A



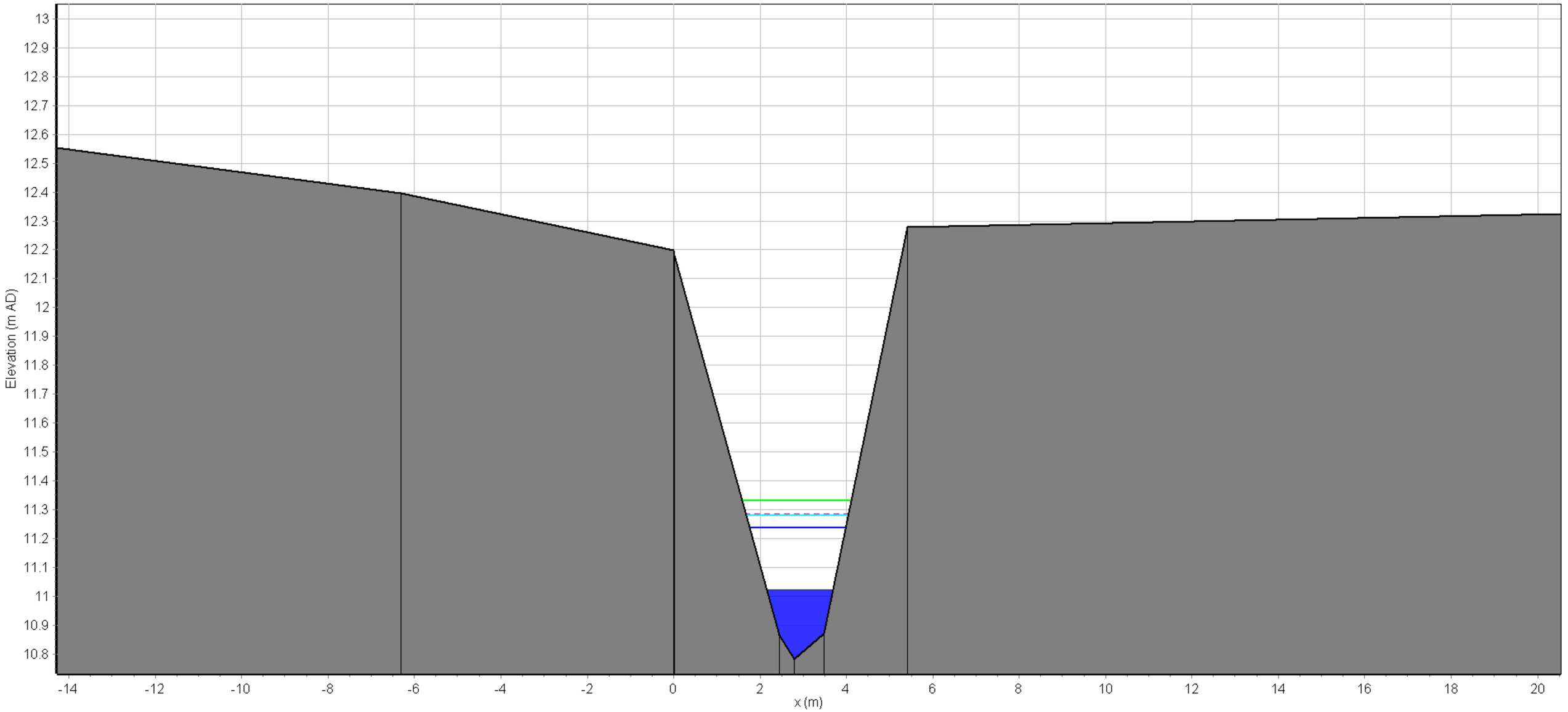
Crossing 5 - Cross-Section Data: SW5-4



Crossing 5 - Cross-Section Data: SW5-10



Crossing 5 - Cross-Section Data: SW5-3A



Stage (11.02 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

Maximum Stage (11.24 m AD): SW5-3A - SCHEME_SW5_100YR_35CC

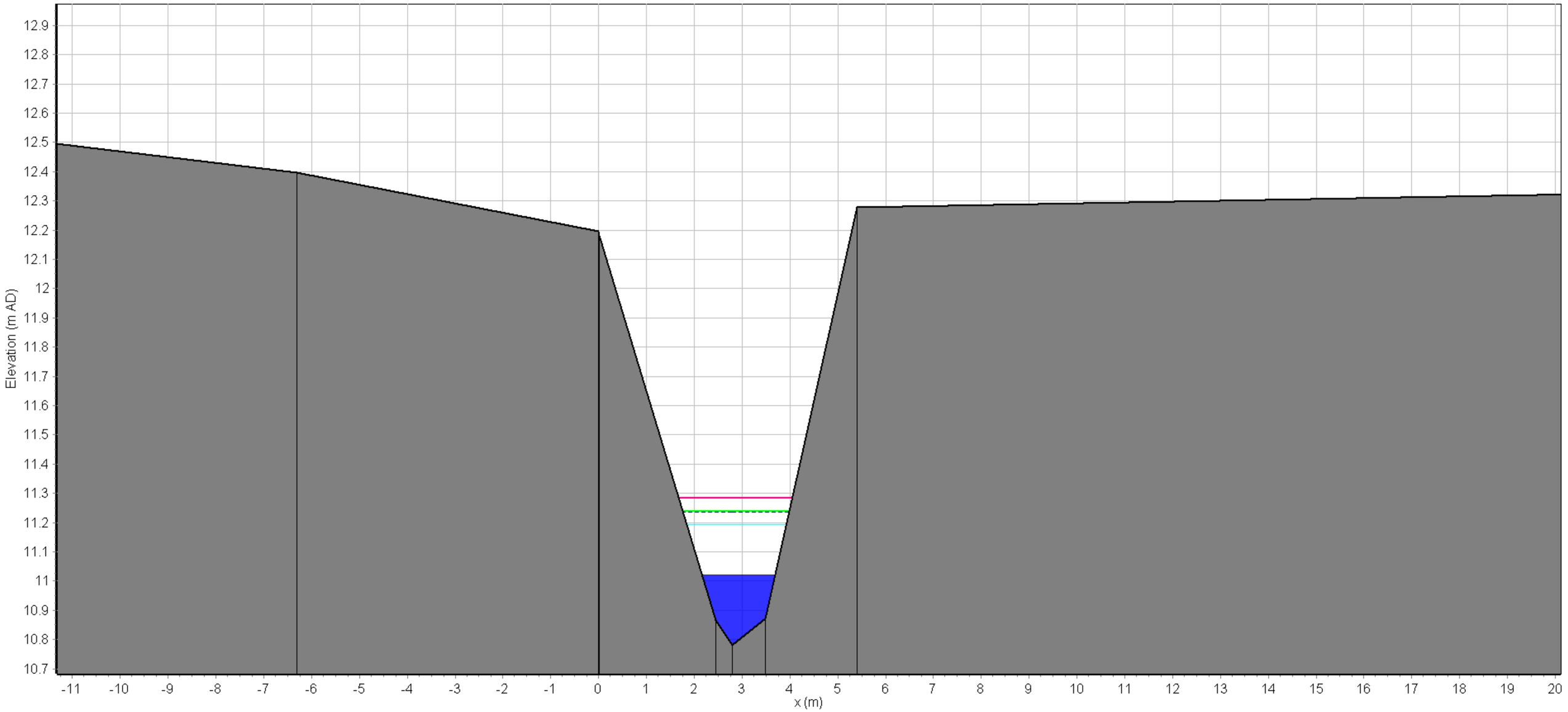
Maximum Stage (11.33 m AD): SW5-3A - SCHEME_SW5_100YR_65CC_+20%FLOW

Maximum Stage (11.28 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

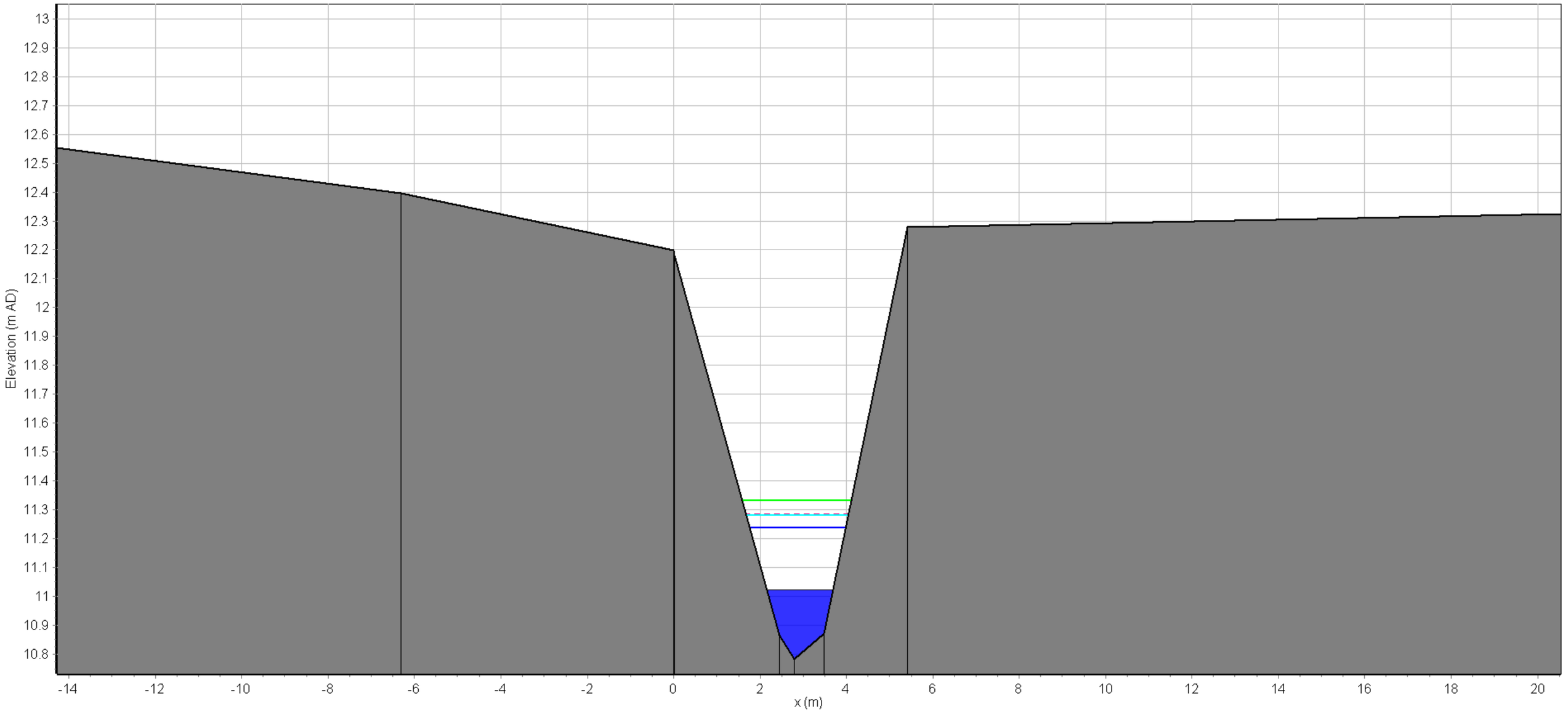
Maximum Stage (11.28 m AD): SW5-3A - SCHEME_SW5_100YR_35CC_+20%FLOW

Bed elevation: SW5-3A

Crossing 5 - Cross-Section Data: SW5-3A



Crossing 5 - Cross-Section Data: SW5-3A



Stage (11.02 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

Maximum Stage (11.24 m AD): SW5-3A - SCHEME_SW5_100YR_35CC

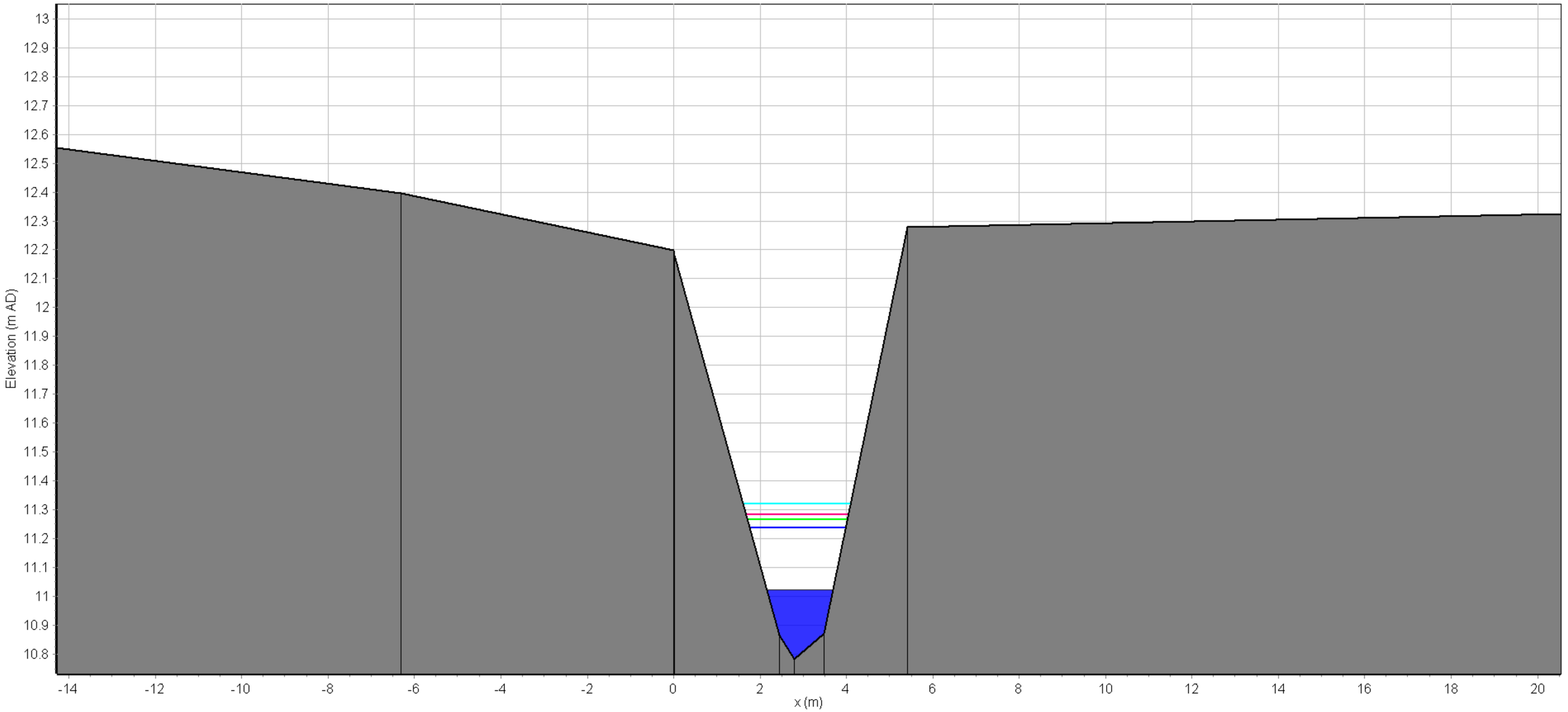
Maximum Stage (11.33 m AD): SW5-3A - SCHEME_SW5_100YR_65CC_+20%ROUGHNESS

Maximum Stage (11.28 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

Maximum Stage (11.28 m AD): SW5-3A - SCHEME_SW5_100YR_35CC_+20%ROUGHNESS

Bed elevation: SW5-3A

Crossing 5 - Cross-Section Data: SW5-3A



Stage (11.02 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

Maximum Stage (11.24 m AD): SW5-3A - SCHEME_SW5_100YR_35CC

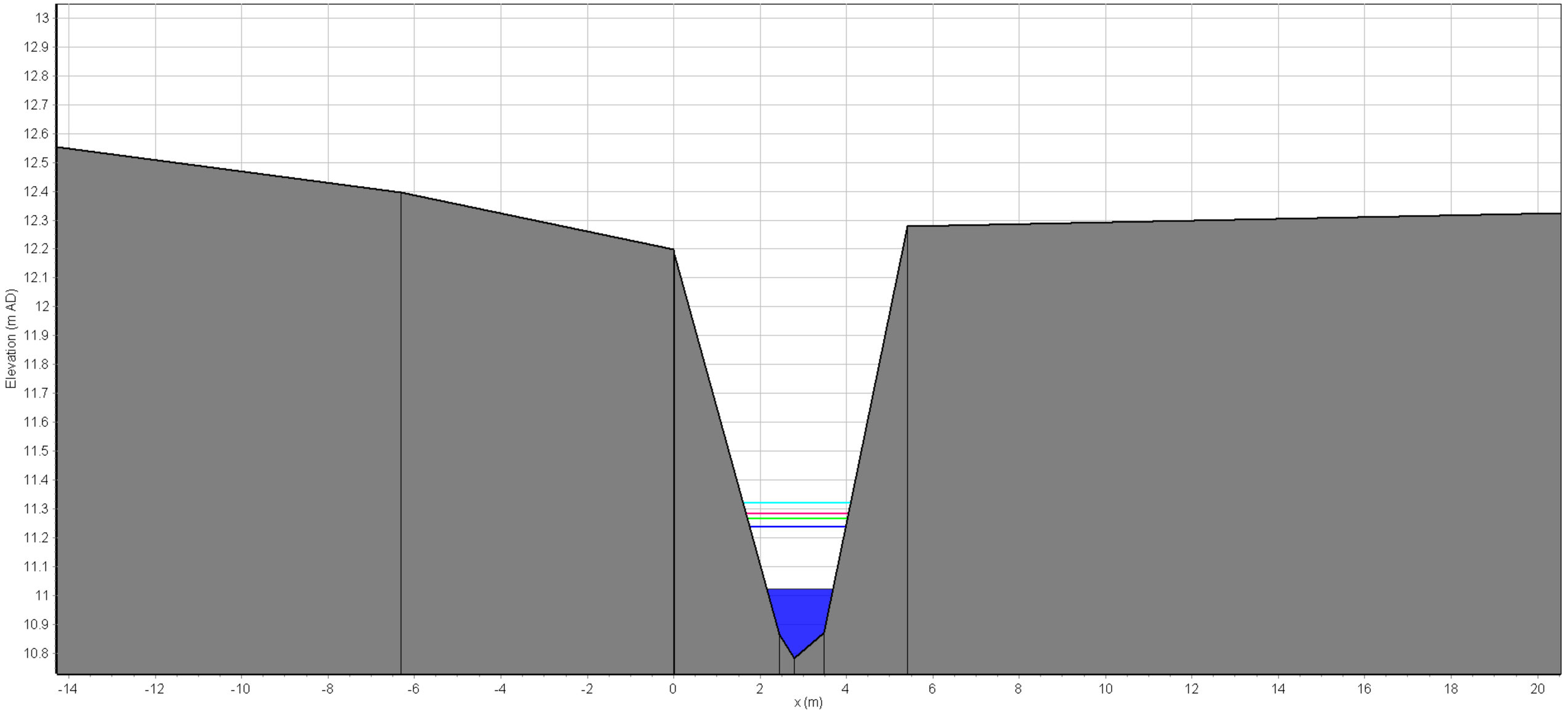
Maximum Stage (11.32 m AD): SW5-3A - SCHEME_SW5_100YR_65CC_33%BLOCKAGE

Maximum Stage (11.28 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

Maximum Stage (11.27 m AD): SW5-3A - SCHEME_SW5_100YR_35CC_33%BLOCKAGE

Bed elevation: SW5-3A

Crossing 5 - Cross-Section Data: SW5-3A



Stage (11.02 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

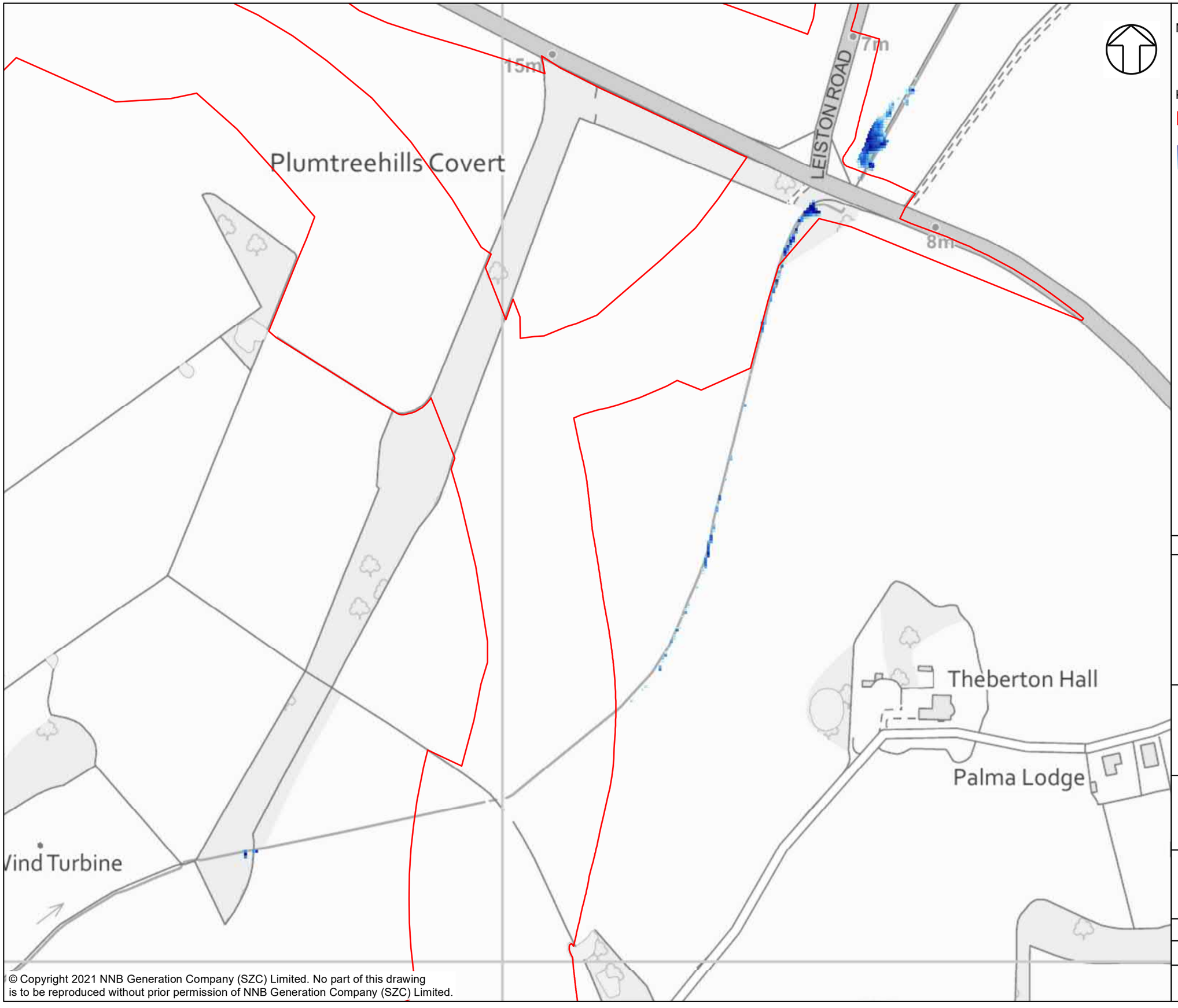
Maximum Stage (11.24 m AD): SW5-3A - SCHEME_SW5_100YR_35CC

Maximum Stage (11.32 m AD): SW5-3A - SCHEME_SW5_100YR_65CC_67%BLOCKAGE

Maximum Stage (11.28 m AD): SW5-3A - SCHEME_SW5_100YR_65CC

Maximum Stage (11.27 m AD): SW5-3A - SCHEME_SW5_100YR_35CC_67%BLOCKAGE

Bed elevation: SW5-3A



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

DEPTH (M)

High : 0.287

Low : 0

NOT PROTECTIVELY MARKED

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DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 5
67% BLOCKAGE SCENARIO
1 IN 100-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C5.10

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	F.C.	1:2,500 @A3	2.0

SCALE BAR

0 25 50 75 100 125 Metres

NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.4 - 0.3
- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.4

NOT PROTECTIVELY MARKED

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DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 6
DIFFERENCE
1 IN 100-YEAR + 35% CLIMATE CHANGE

DRAWING NO:
FIGURE C6.1

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres

NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.4 - 0.3
- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.6

NOT PROTECTIVELY MARKED

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DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 6
DIFFERENCE
1 IN 100-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C6.2

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres

NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.4 - 0.3
- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.7

NOT PROTECTIVELY MARKED

SizewellC
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DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 6
DIFFERENCE
1 IN 1000-YEAR

DRAWING NO:
FIGURE C6.3

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres

NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.4 - 0.3
- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.6

NOT PROTECTIVELY MARKED

SizewellC
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DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 6
DIFFERENCE
1 IN 1000-YEAR + 35% CLIMATE CHANGE

DRAWING NO:
FIGURE C6.4

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres

NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.4 - 0.3
- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.6

NOT PROTECTIVELY MARKED

SizewellC
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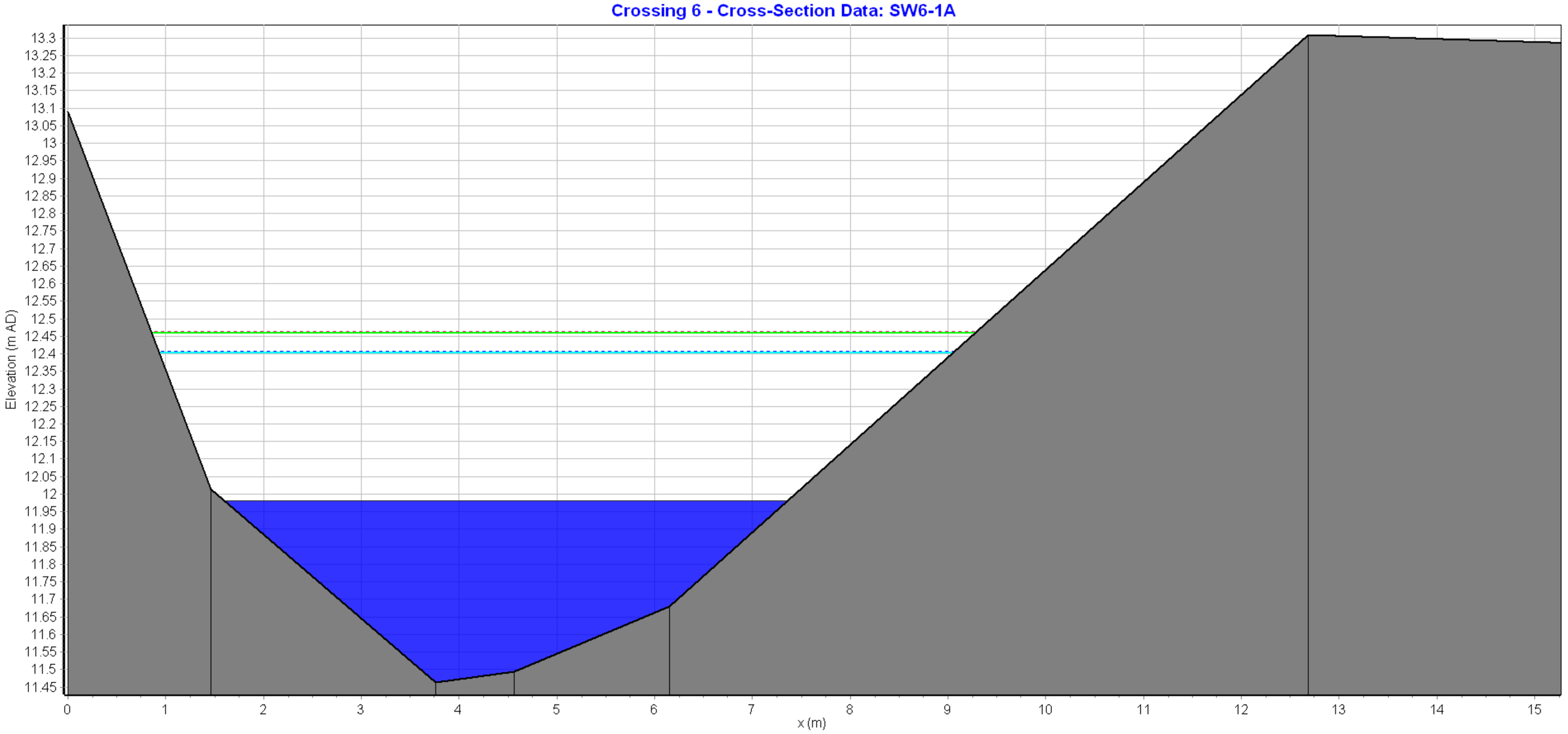
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

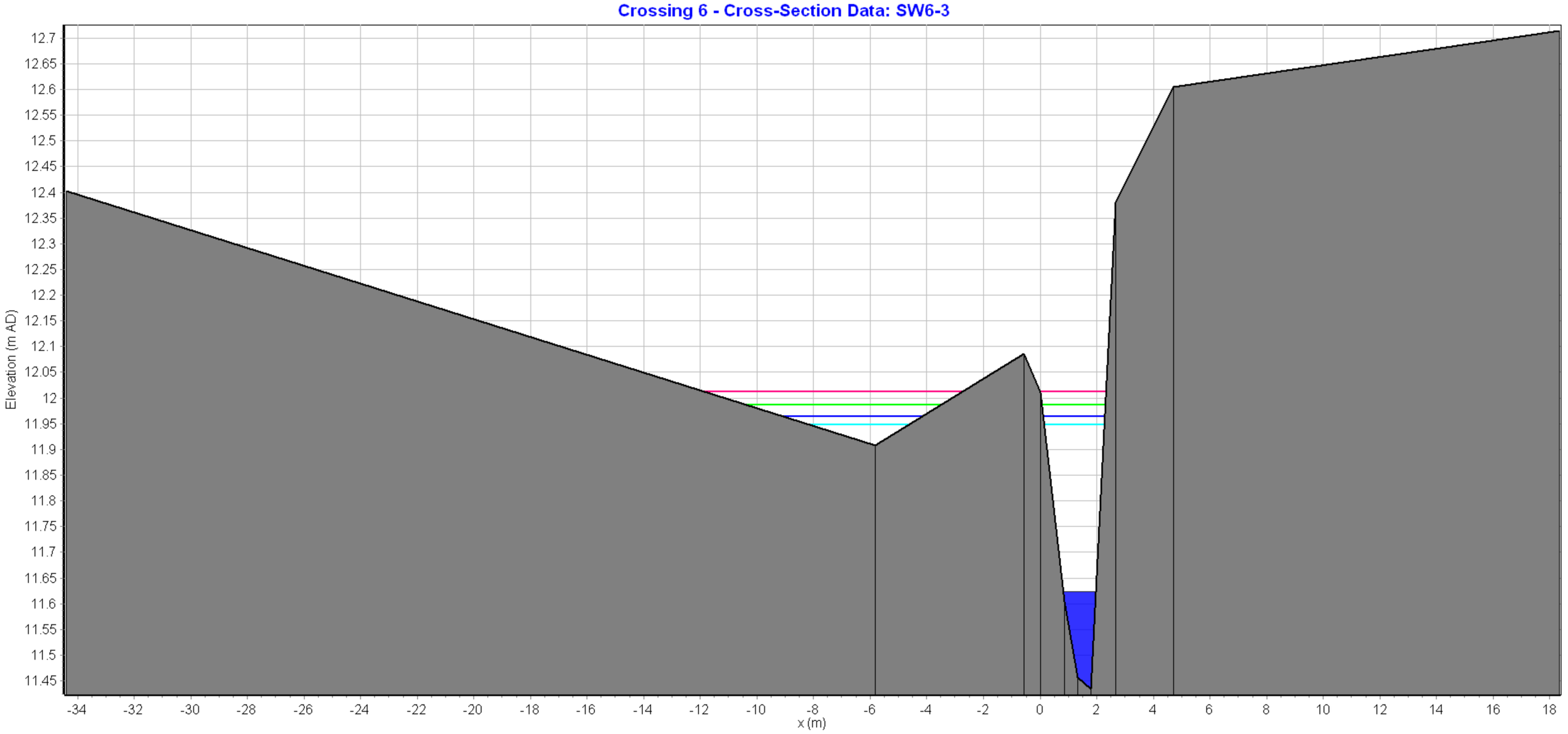
DRAWING TITLE:
CROSSING 6
DIFFERENCE
1 IN 1000-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C6.5

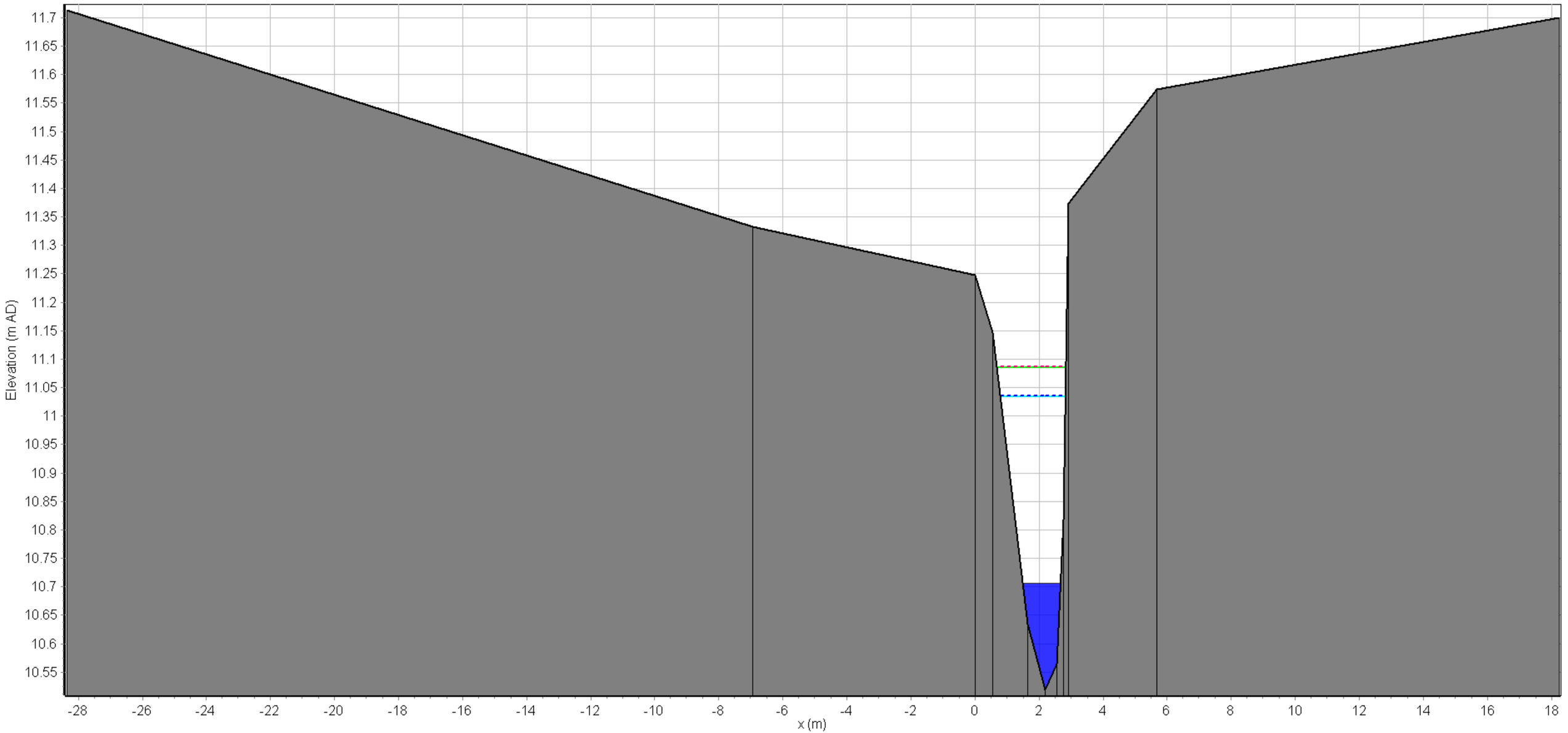
DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

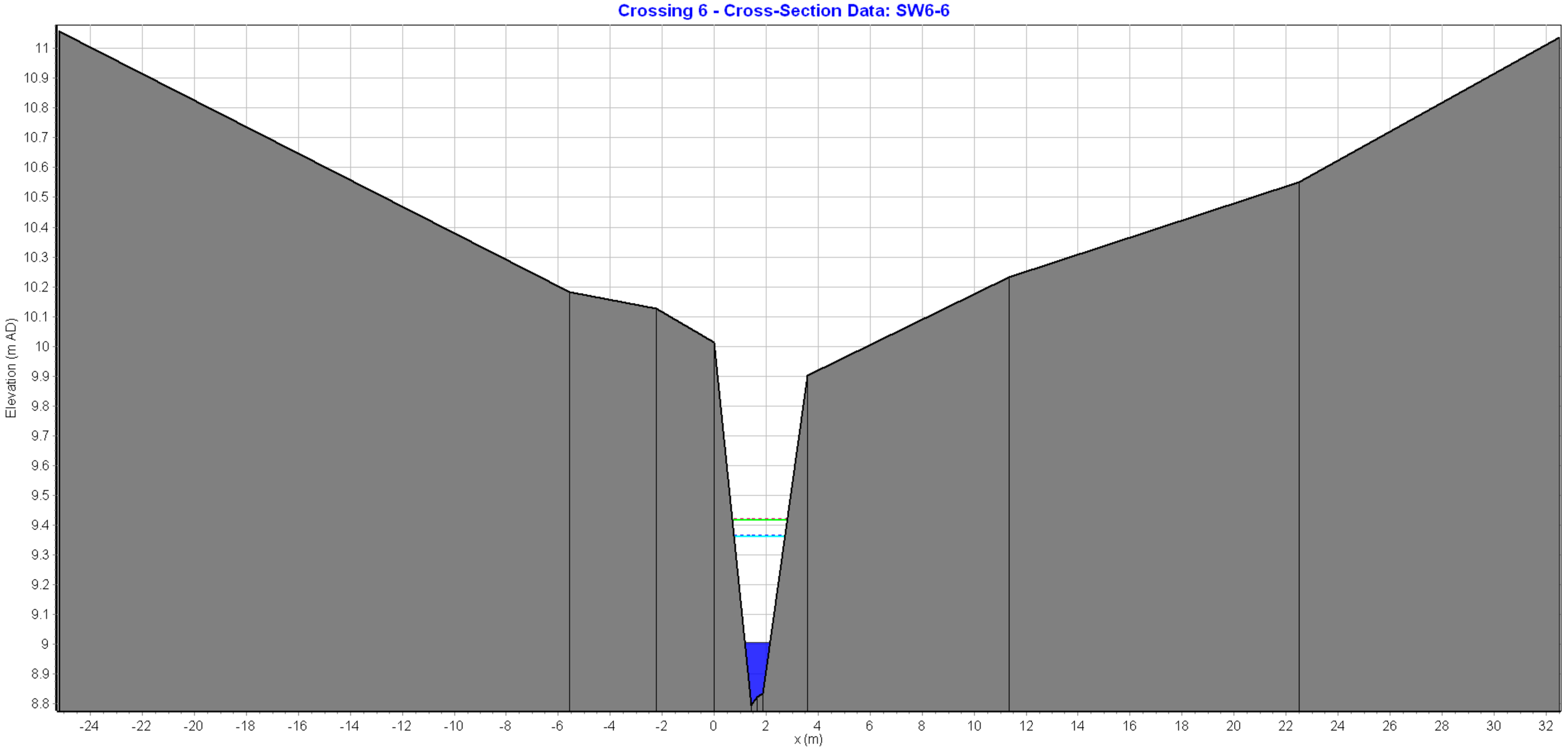
SCALE BAR
0 25 50 75 100 125 Metres

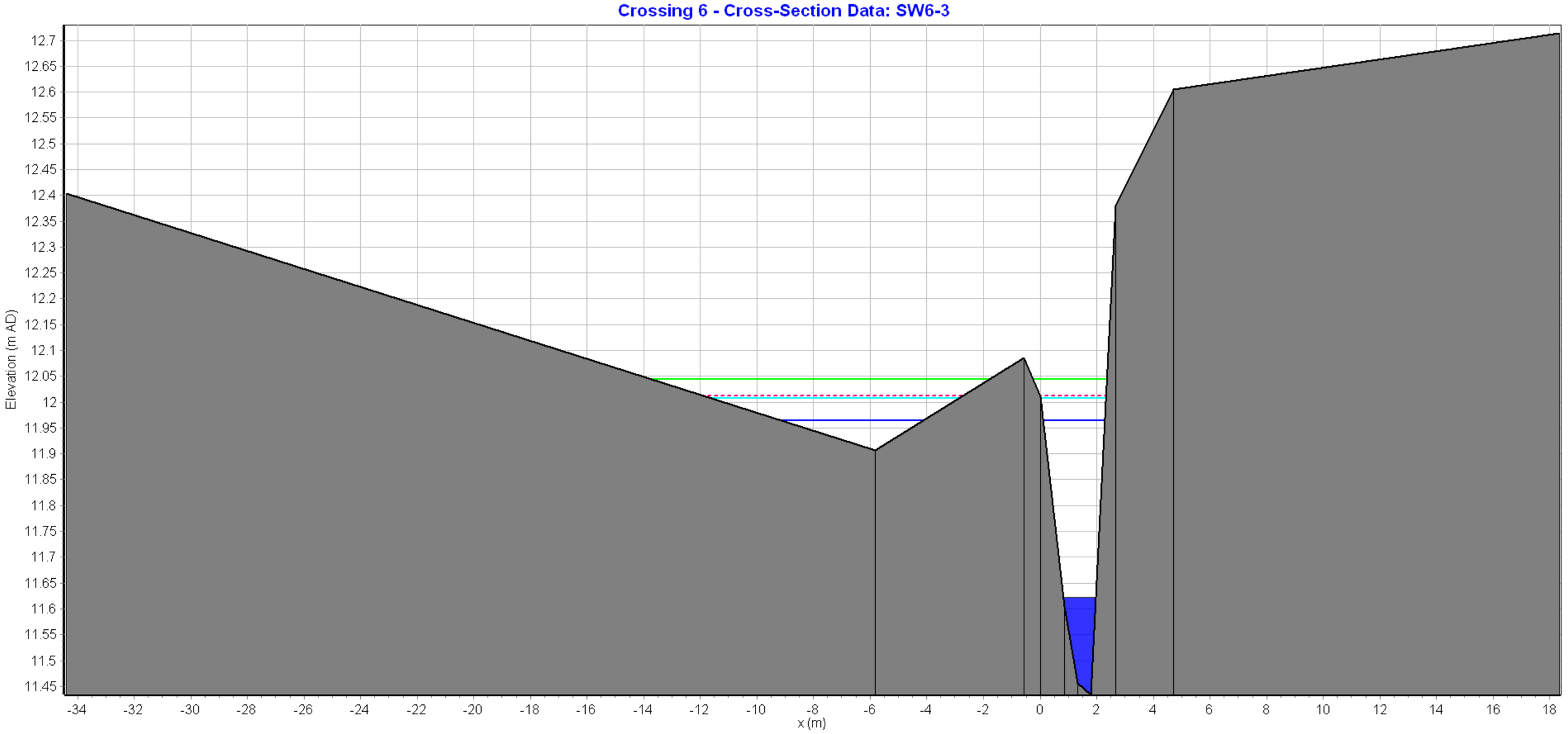

Crossing 6 - Cross-Section Data: SW6-1A
Elevation (m AD)
13.3
13.25
13.2
13.15
13.1
13.05
13
12.95
12.9
12.85
12.8
12.75
12.7
12.65
12.6
12.55
12.5
12.45
12.4
12.35
12.3
12.25
12.2
12.15
12.1
12.05
12
11.95
11.9
11.85
11.8
11.75
11.7
11.65
11.6
11.55
11.5
11.45
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
x (m)
Stage (11.98 m AD): SW6-1A - SCHEME_SW6_100YR_35CC
Maximum Stage (12.40 m AD): SW6-1A - SCHEME_SW6_100YR_35CC
Maximum Stage (12.46 m AD): SW6-1A - SCHEME_SW6_100YR_65CC
Maximum Stage (12.40 m AD): SW6-1A - BASELINE_SW6_100YR_35CC
Maximum Stage (12.46 m AD): SW6-1A - BASELINE_SW6_100YR_65CC
Bed elevation: SW6-1A

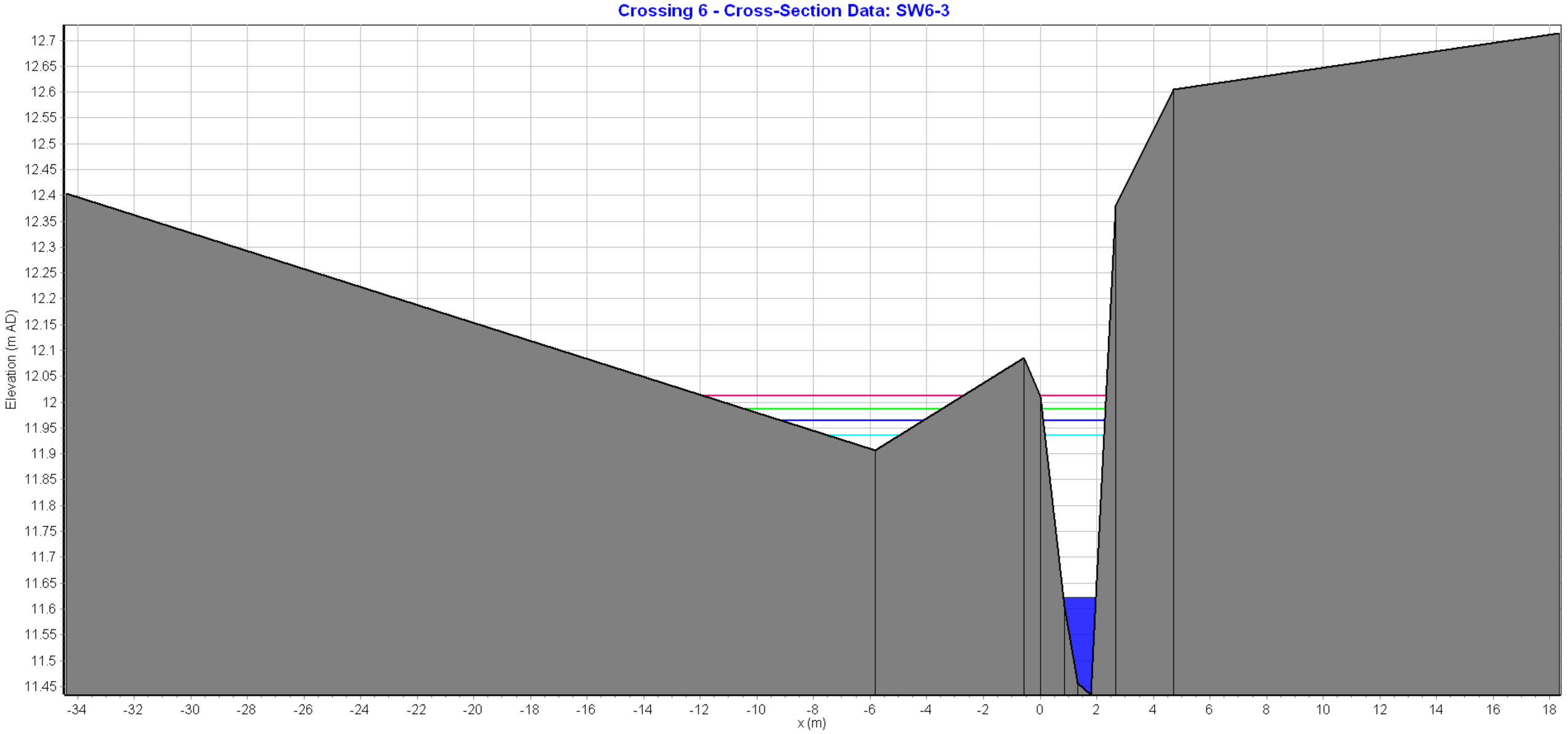

Crossing 6 - Cross-Section Data: SW6-3
Elevation (m AD)
12.7
12.65
12.6
12.55
12.5
12.45
12.4
12.35
12.3
12.25
12.2
12.15
12.1
12.05
12
11.95
11.9
11.85
11.8
11.75
11.7
11.65
11.6
11.55
11.5
11.45
-34
-32
-30
-28
-26
-24
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
14
16
18
x (m)
Stage (11.62 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.01 m AD): SW6-3 - SCHEME_SW6_100YR_65CC
Maximum Stage (11.99 m AD): SW6-3 - BASELINE_SW6_100YR_65CC
Maximum Stage (11.96 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (11.95 m AD): SW6-3 - BASELINE_SW6_100YR_35CC
Bed elevation: SW6-3

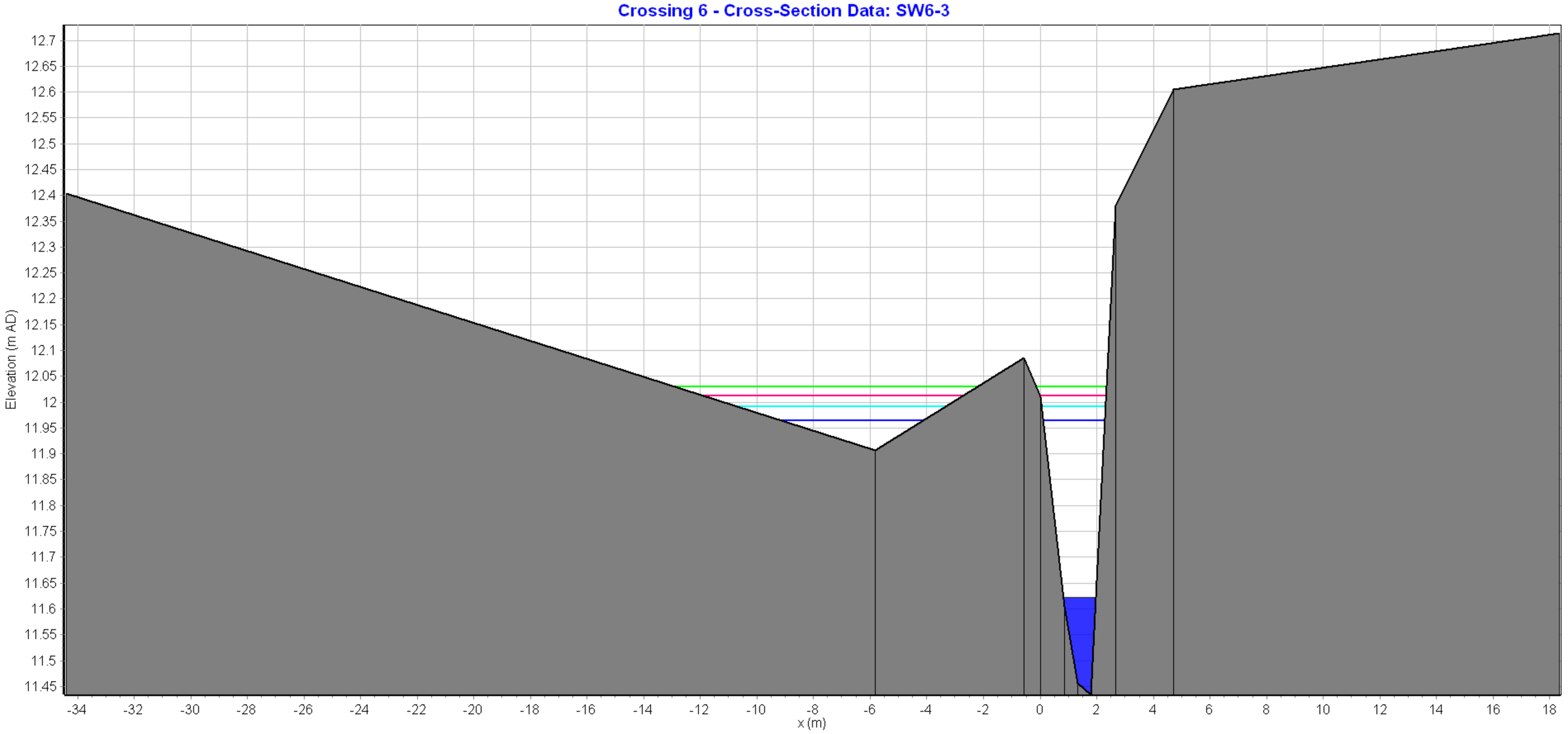
Crossing 6 - Cross-Section Data: SW6-5

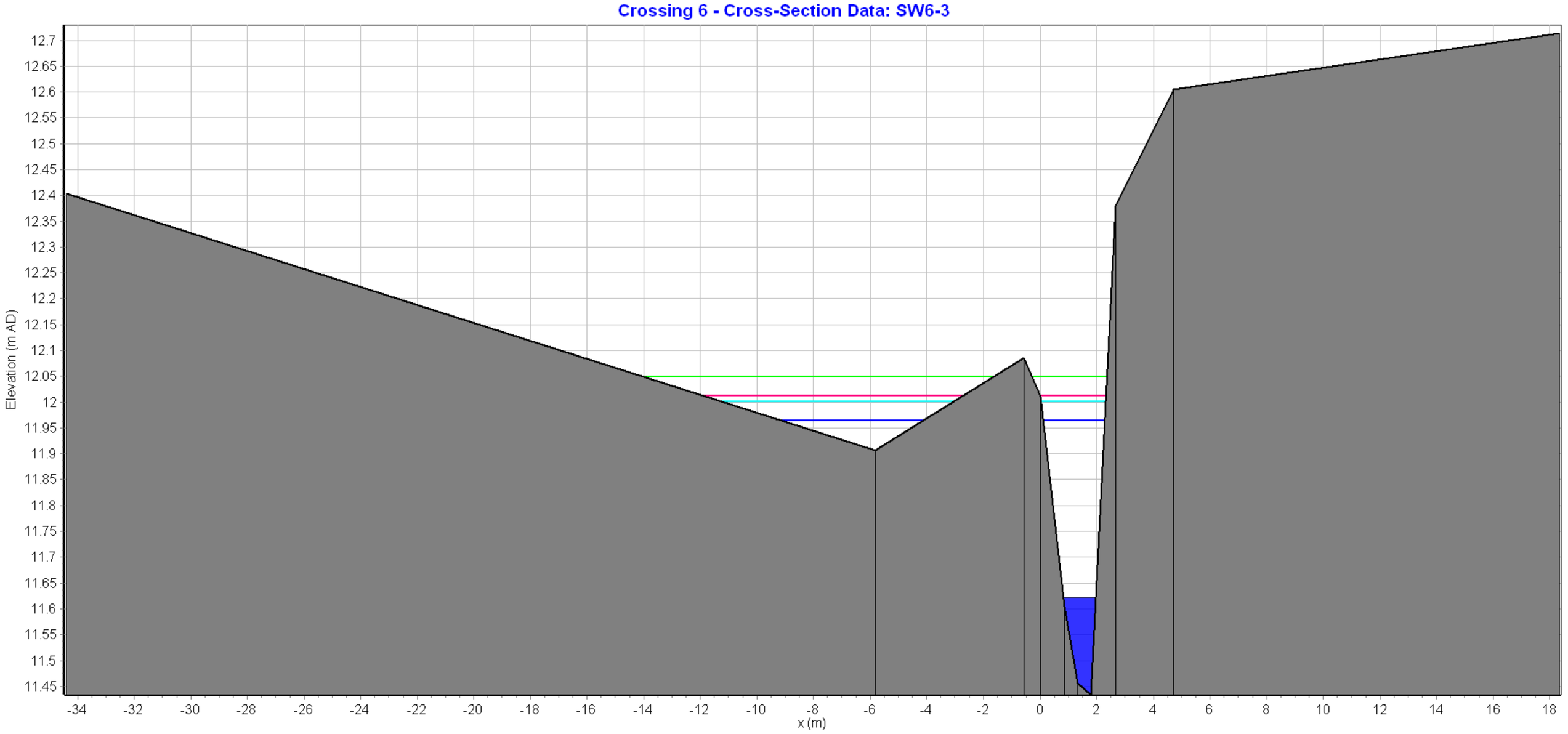


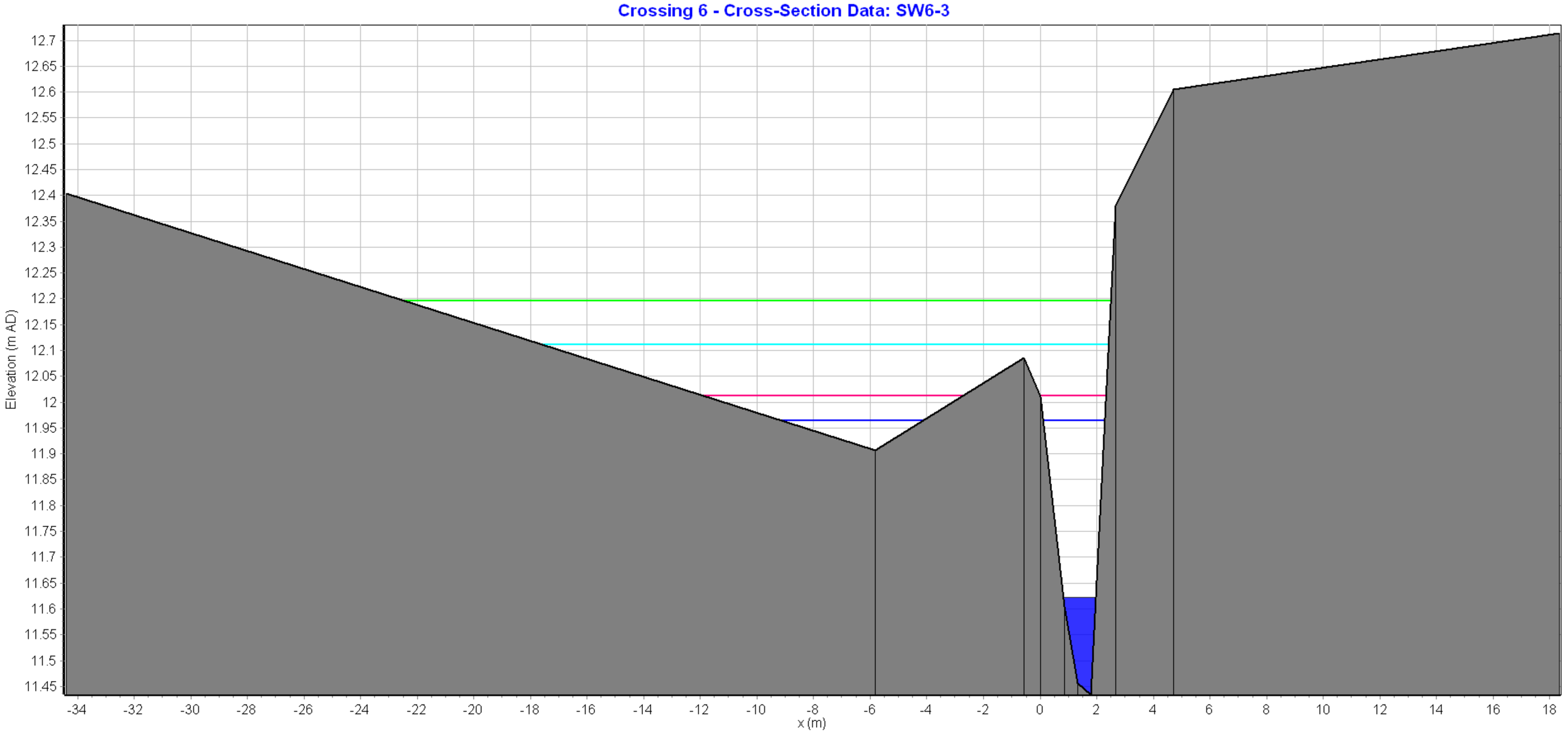

Crossing 6 - Cross-Section Data: SW6-6
Elevation (m AD)
11
10.9
10.8
10.7
10.6
10.5
10.4
10.3
10.2
10.1
10
9.9
9.8
9.7
9.6
9.5
9.4
9.3
9.2
9.1
9
8.9
8.8
-24
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
x (m)
Stage (9.01 m AD): SW6-6 - SCHEME_SW6_100YR_35CC
Maximum Stage (9.42 m AD): SW6-6 - SCHEME_SW6_100YR_65CC
Maximum Stage (9.36 m AD): SW6-6 - SCHEME_SW6_100YR_35CC
Maximum Stage (9.36 m AD): SW6-6 - BASELINE_SW6_100YR_35CC
Maximum Stage (9.42 m AD): SW6-6 - BASELINE_SW6_100YR_65CC
Bed elevation: SW6-6


Crossing 6 - Cross-Section Data: SW6-3
Elevation (m AD)
12.7
12.65
12.6
12.55
12.5
12.45
12.4
12.35
12.3
12.25
12.2
12.15
12.1
12.05
12
11.95
11.9
11.85
11.8
11.75
11.7
11.65
11.6
11.55
11.5
11.45
-34 -32 -30 -28 -26 -24 -22 -20 -18 -16 -14 -12 -10 -8 -6 -4 -2 0 2 4 6 8 10 12 14 16 18
x (m)
Stage (11.62 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.01 m AD): SW6-3 - SCHEME_SW6_100YR_35CC_+20%FLOW
Maximum Stage (11.96 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.05 m AD): SW6-3 - SCHEME_SW6_100YR_65CC_+20%FLOW
Maximum Stage (12.01 m AD): SW6-3 - SCHEME_SW6_100YR_65CC
Bed elevation: SW6-3


Crossing 6 - Cross-Section Data: SW6-3
Elevation (m AD)
x (m)
Stage (11.62 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (11.94 m AD): SW6-3 - SCHEME_SW6_100YR_35CC_-20%ROUGHNESS
Maximum Stage (11.96 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (11.99 m AD): SW6-3 - SCHEME_SW6_100YR_65CC_-20%ROUGHNESS
Maximum Stage (12.01 m AD): SW6-3 - SCHEME_SW6_100YR_65CC
Bed elevation: SW6-3


Crossing 6 - Cross-Section Data: SW6-3
Elevation (m AD)
x (m)
Stage (11.62 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (11.99 m AD): SW6-3 - SCHEME_SW6_100YR_35CC_+20%ROUGHNESS
Maximum Stage (11.96 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.03 m AD): SW6-3 - SCHEME_SW6_100YR_65CC_+20%ROUGHNESS
Maximum Stage (12.01 m AD): SW6-3 - SCHEME_SW6_100YR_65CC
Bed elevation: SW6-3


Crossing 6 - Cross-Section Data: SW6-3
Elevation (m AD)
12.7
12.65
12.6
12.55
12.5
12.45
12.4
12.35
12.3
12.25
12.2
12.15
12.1
12.05
12
11.95
11.9
11.85
11.8
11.75
11.7
11.65
11.6
11.55
11.5
11.45
-34
-32
-30
-28
-26
-24
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
14
16
18
x (m)
Stage (11.62 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.00 m AD): SW6-3 - SCHEME_SW6_100YR_35CC_33%BLOCKAGE
Maximum Stage (11.96 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.05 m AD): SW6-3 - SCHEME_SW6_100YR_65CC_33%BLOCKAGE
Maximum Stage (12.01 m AD): SW6-3 - SCHEME_SW6_100YR_65CC
Bed elevation: SW6-3


Crossing 6 - Cross-Section Data: SW6-3
Elevation (m AD)
12.7
12.65
12.6
12.55
12.5
12.45
12.4
12.35
12.3
12.25
12.2
12.15
12.1
12.05
12
11.95
11.9
11.85
11.8
11.75
11.7
11.65
11.6
11.55
11.5
11.45
-34
-32
-30
-28
-26
-24
-22
-20
-18
-16
-14
-12
-10
-8
-6
-4
-2
0
2
4
6
8
10
12
14
16
18
x (m)
Stage (11.62 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.11 m AD): SW6-3 - SCHEME_SW6_100YR_35CC_67%BLOCKAGE
Maximum Stage (11.96 m AD): SW6-3 - SCHEME_SW6_100YR_35CC
Maximum Stage (12.20 m AD): SW6-3 - SCHEME_SW6_100YR_65CC_67%BLOCKAGE
Maximum Stage (12.01 m AD): SW6-3 - SCHEME_SW6_100YR_65CC
Bed elevation: SW6-3

NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

DEPTH (M)

High : 0.732

Low : 0.004

NOT PROTECTIVELY MARKED

SizewellC
Doing the power of good for Britain
EDF CGN

DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

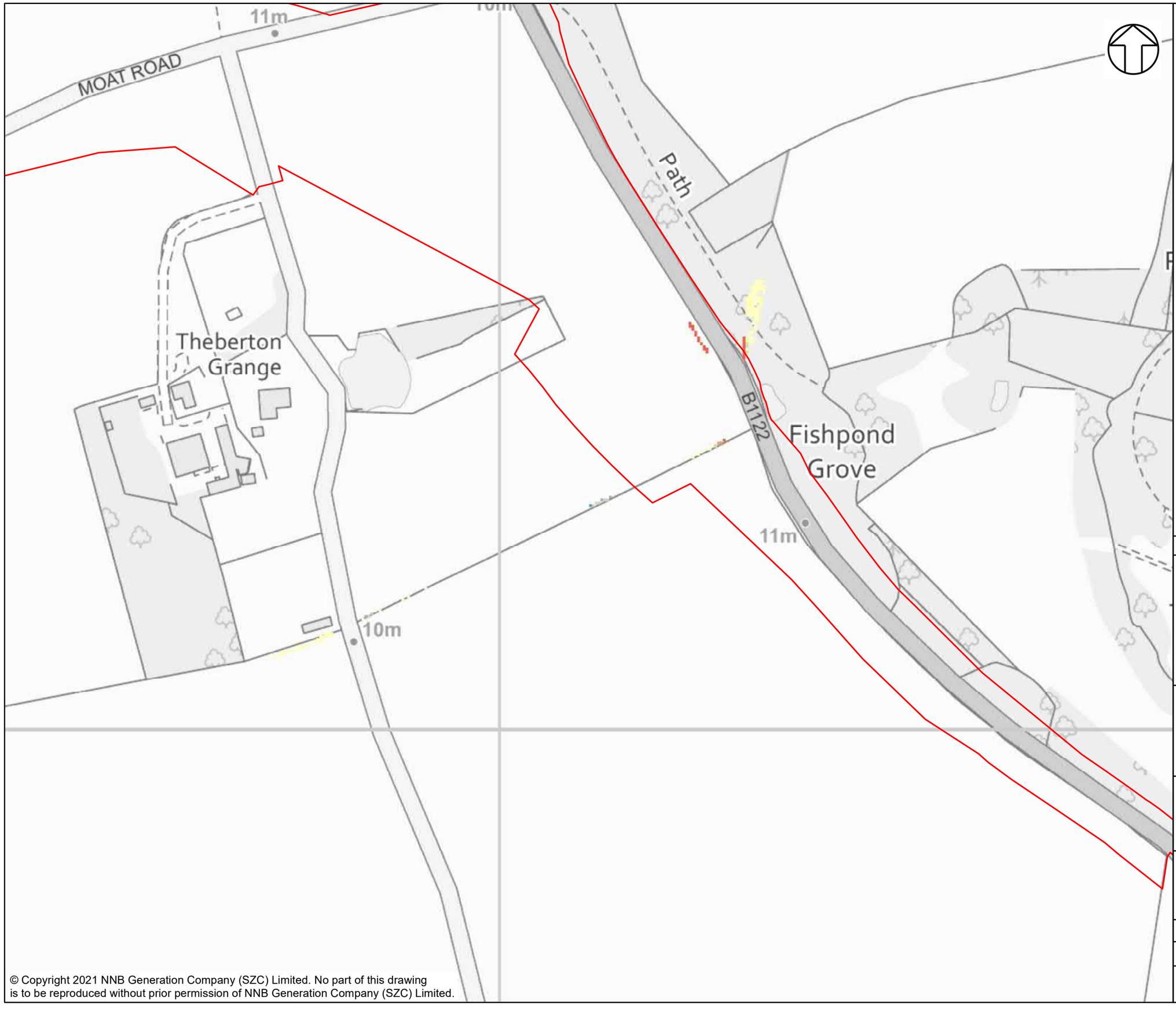
DRAWING TITLE:
CROSSING 6
67% BLOCKAGE SCENARIO
1 IN 100-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C6.15

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	F.C.	1:2,500 @A3	2.0

SCALE BAR

0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3

NOT PROTECTIVELY MARKED

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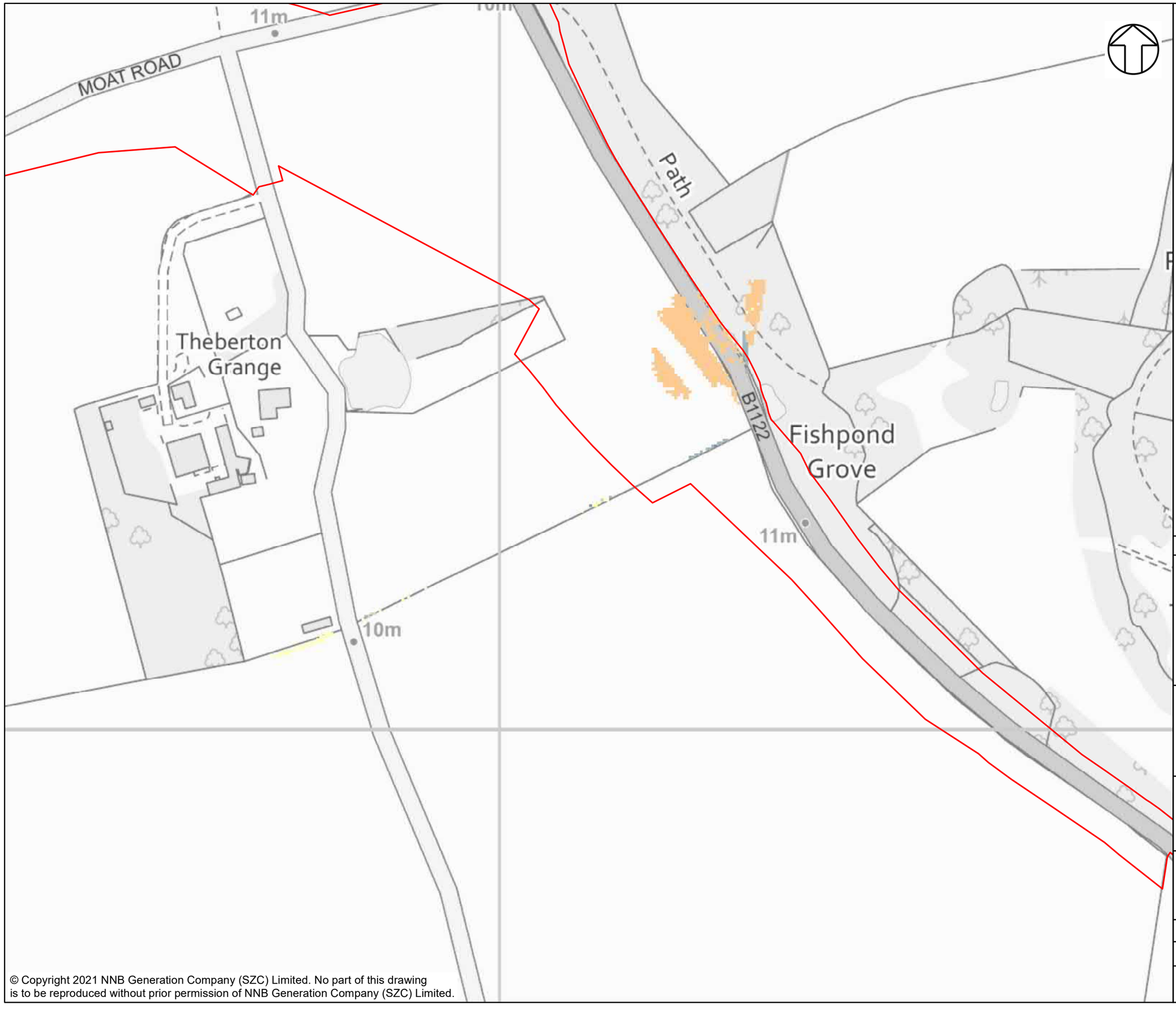
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 5-YEAR

DRAWING NO:
FIGURE C7.1

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3

NOT PROTECTIVELY MARKED

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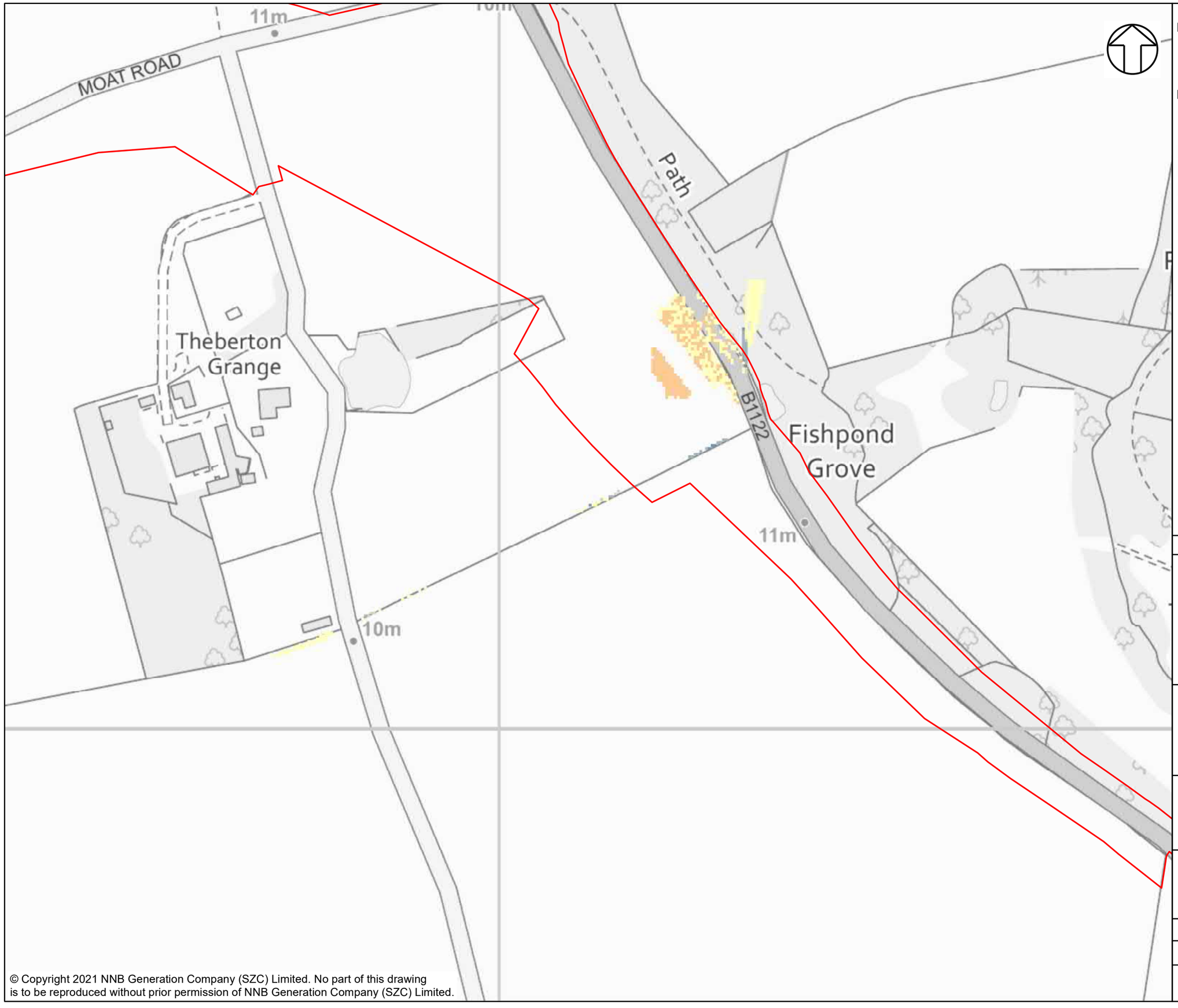
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 5-YEAR + 35% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.2

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3

NOT PROTECTIVELY MARKED

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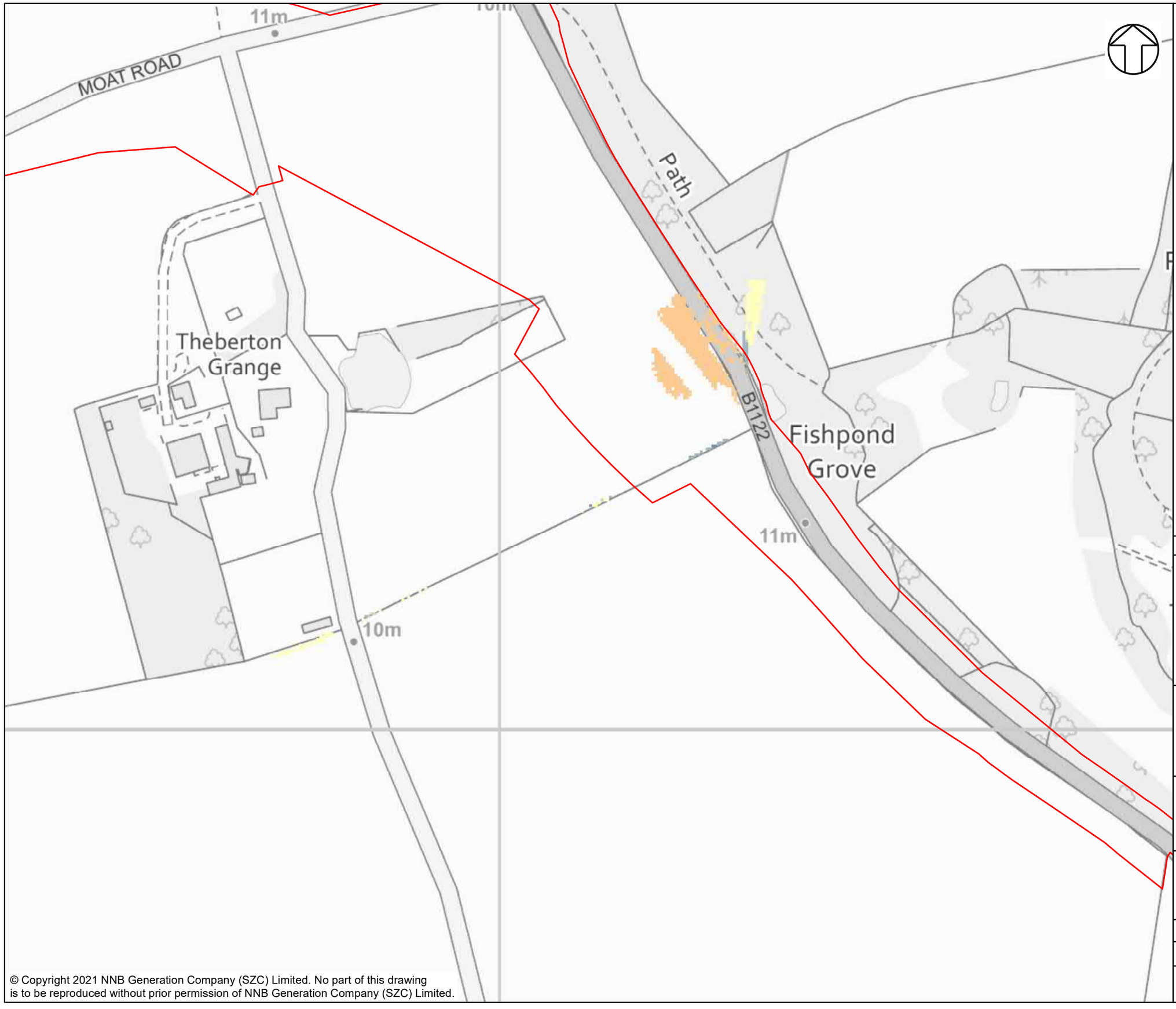
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 5-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.3

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3

NOT PROTECTIVELY MARKED

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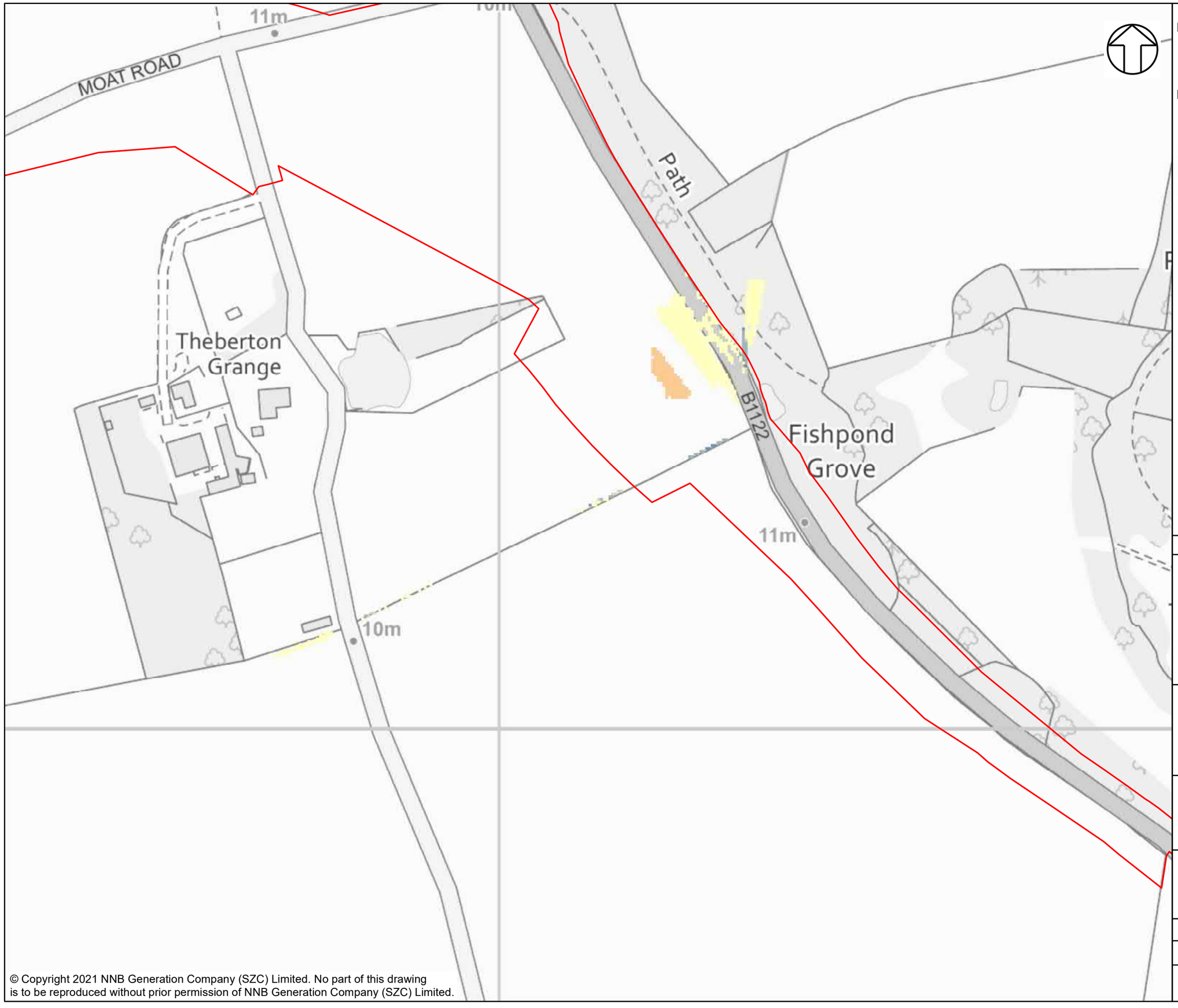
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 20-YEAR

DRAWING NO:
FIGURE C7.4

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3

NOT PROTECTIVELY MARKED

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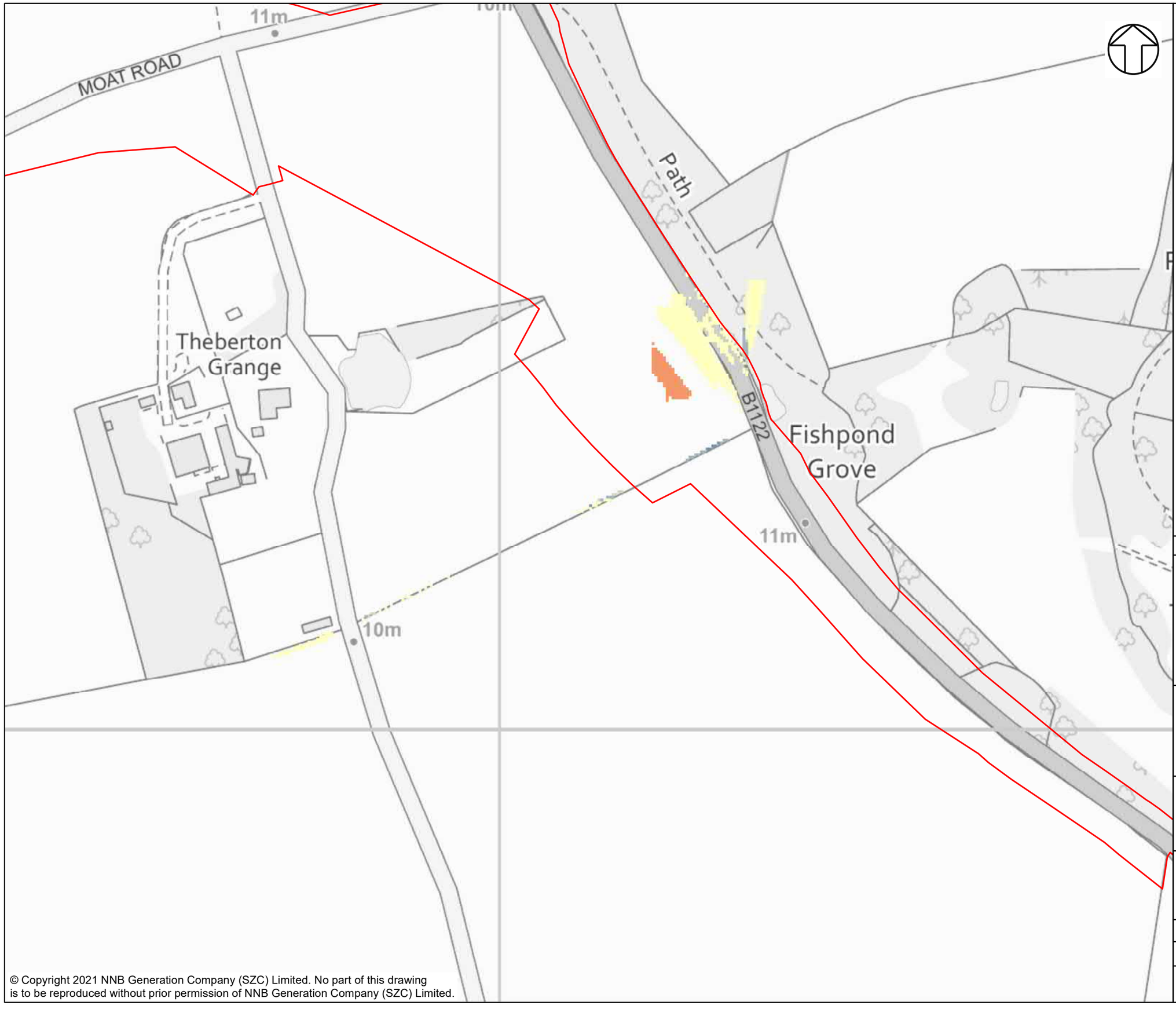
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 20-YEAR + 35% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.5

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.1 - 0.03
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3

NOT PROTECTIVELY MARKED

SizewellC
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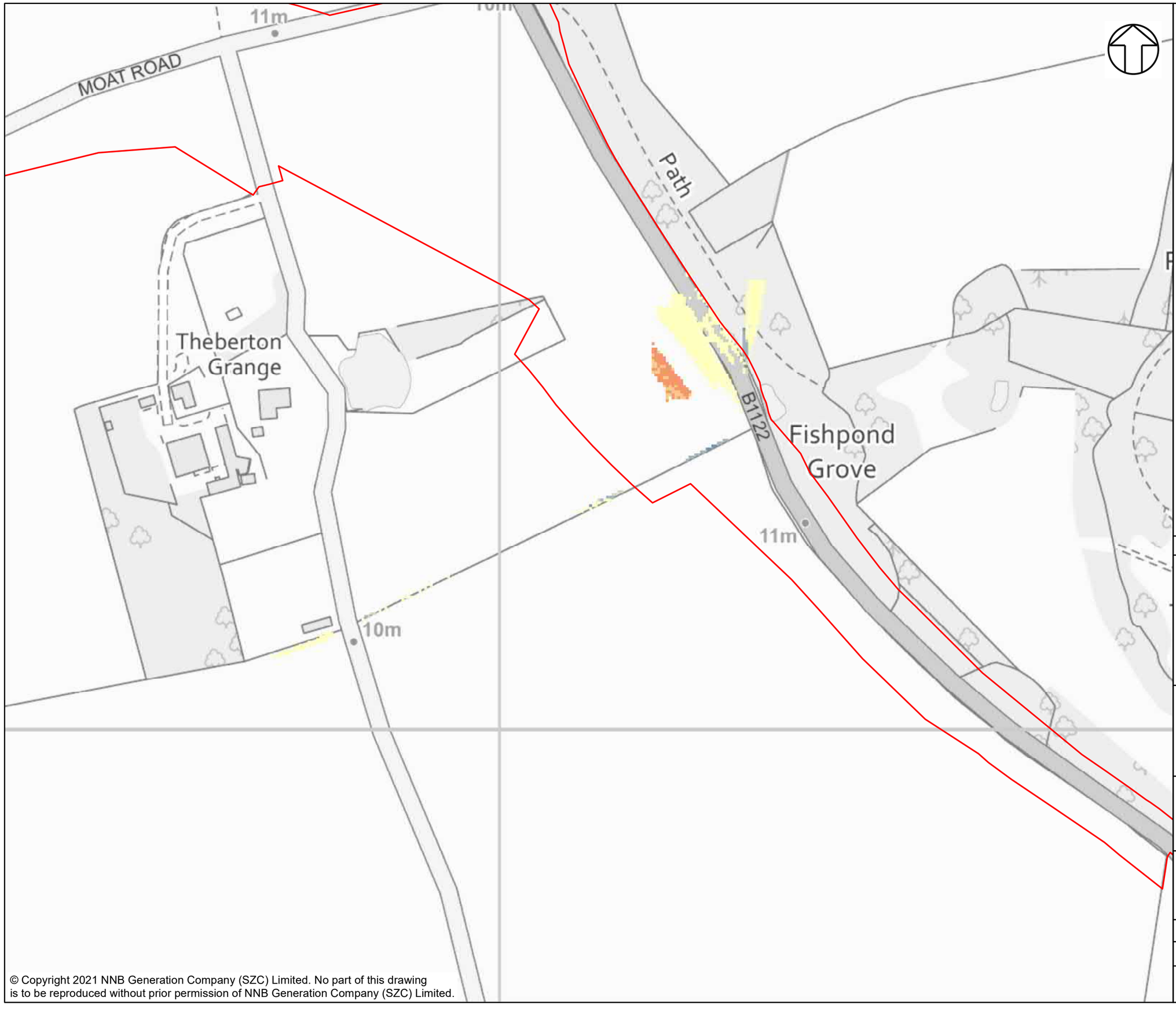
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 20-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.6

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3

NOT PROTECTIVELY MARKED

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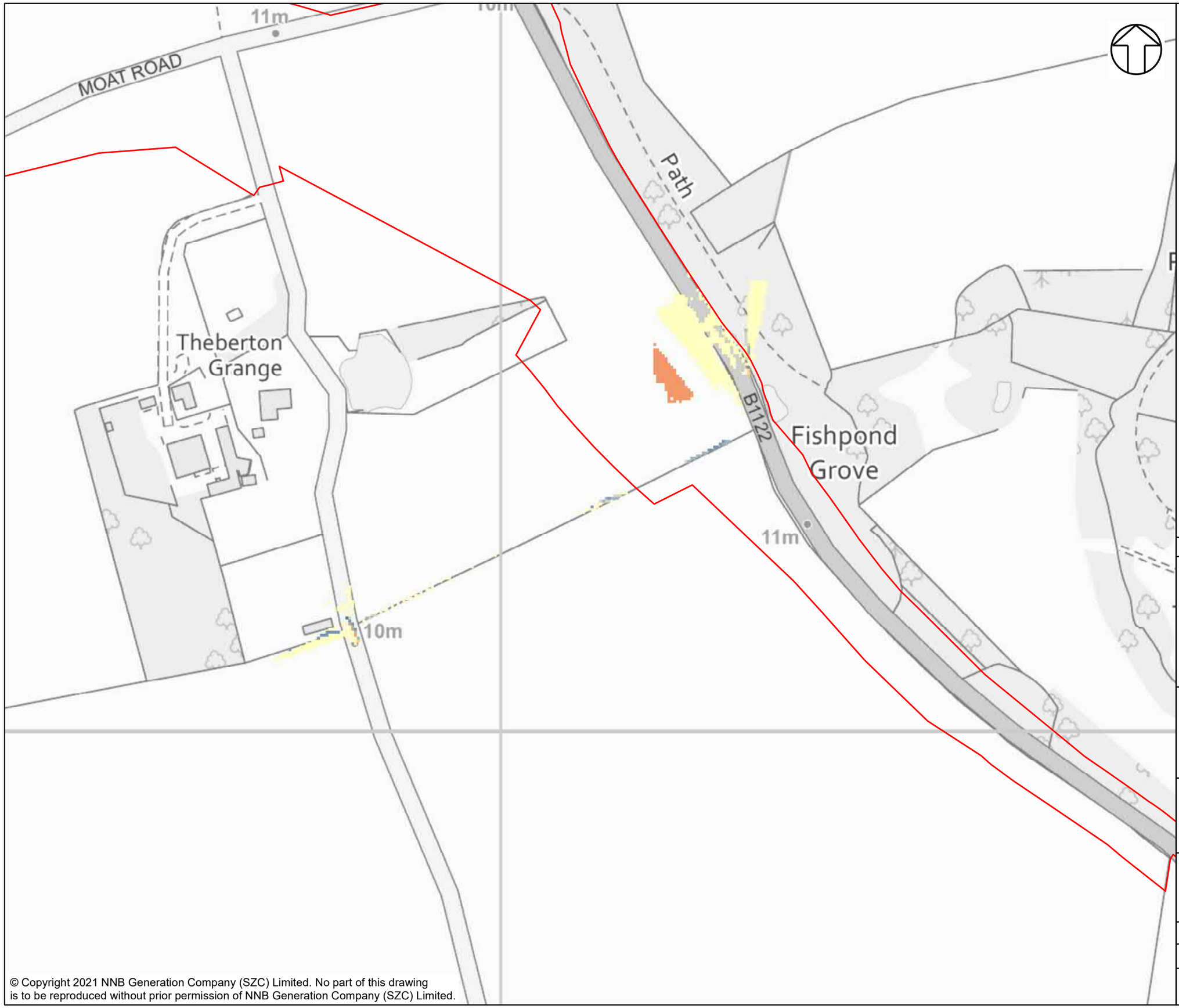
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 100-YEAR

DRAWING NO:
FIGURE C7.7

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.4

NOT PROTECTIVELY MARKED

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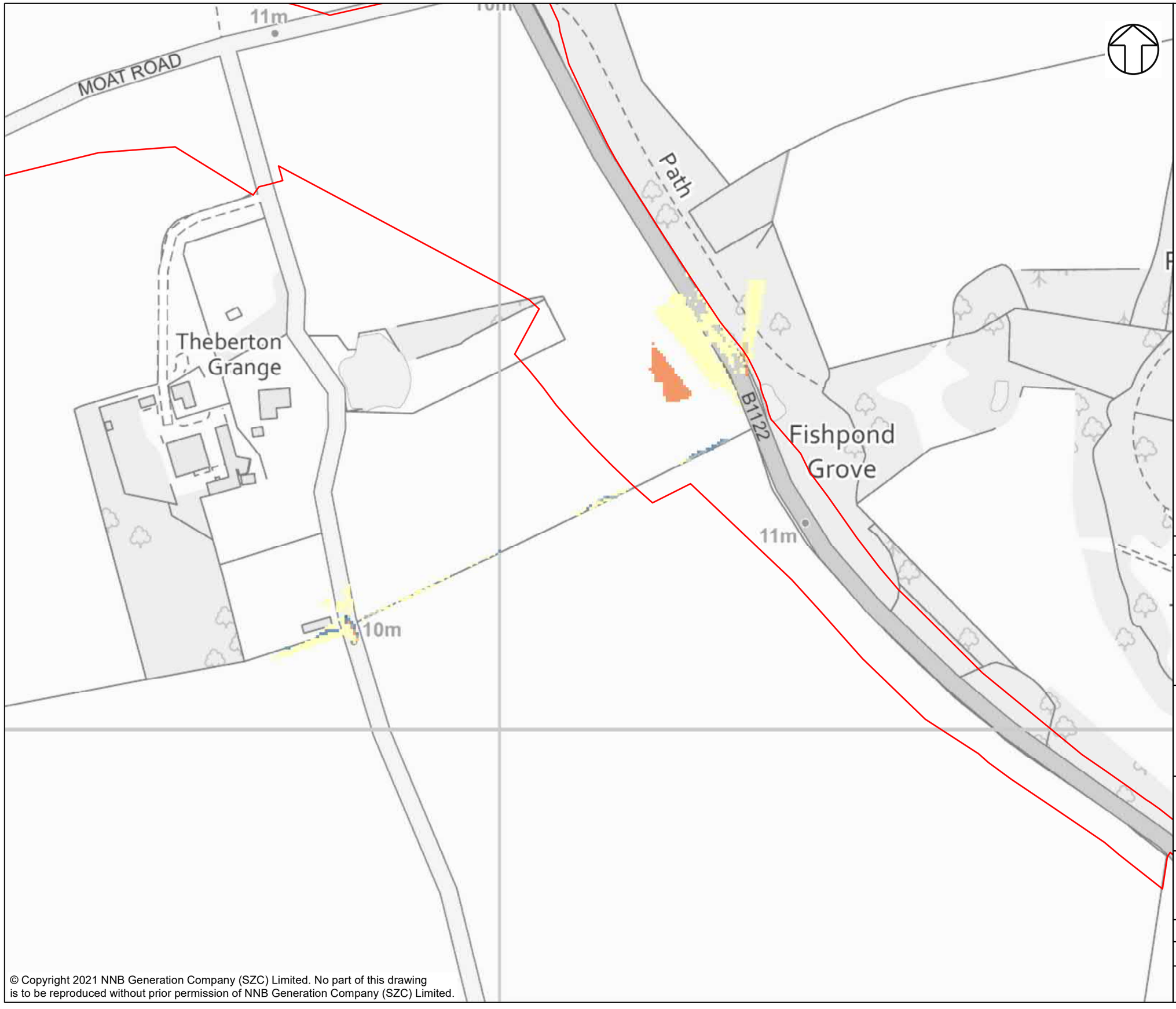
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 100-YEAR + 35% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.8

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.6

NOT PROTECTIVELY MARKED

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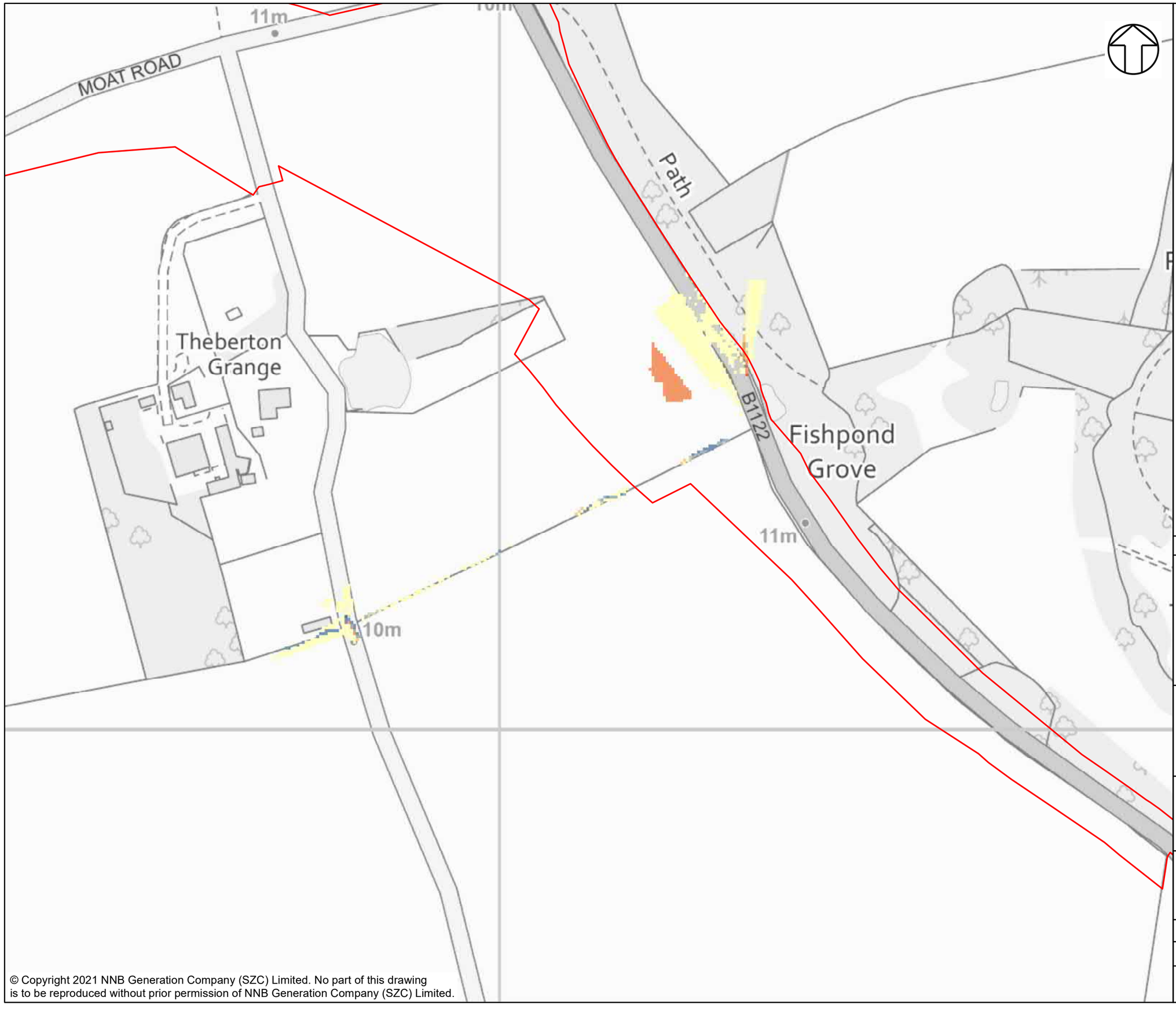
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 100-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.9

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.4

NOT PROTECTIVELY MARKED

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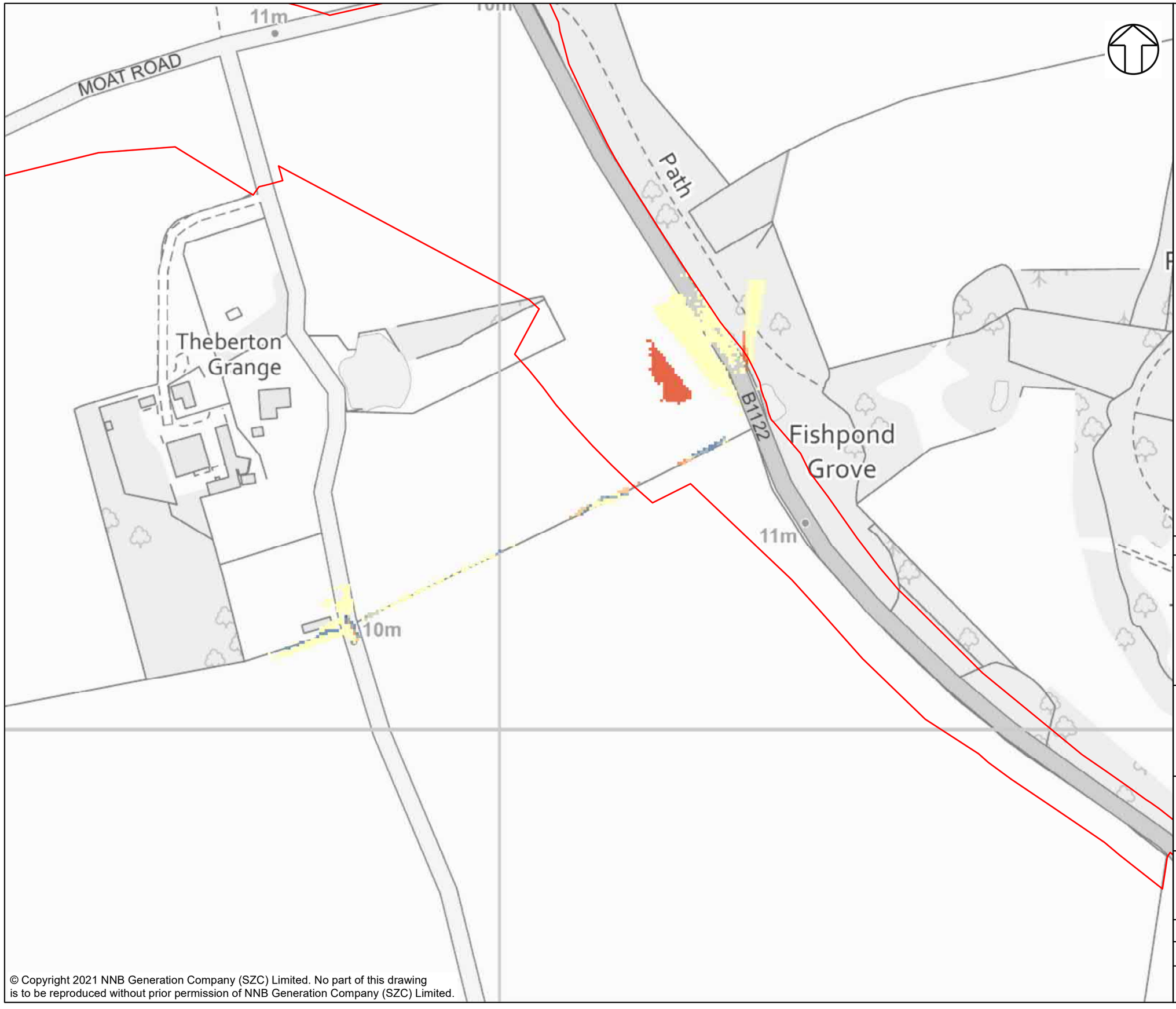
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 1000-YEAR

DRAWING NO:
FIGURE C7.10

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.4

NOT PROTECTIVELY MARKED

SizewellC
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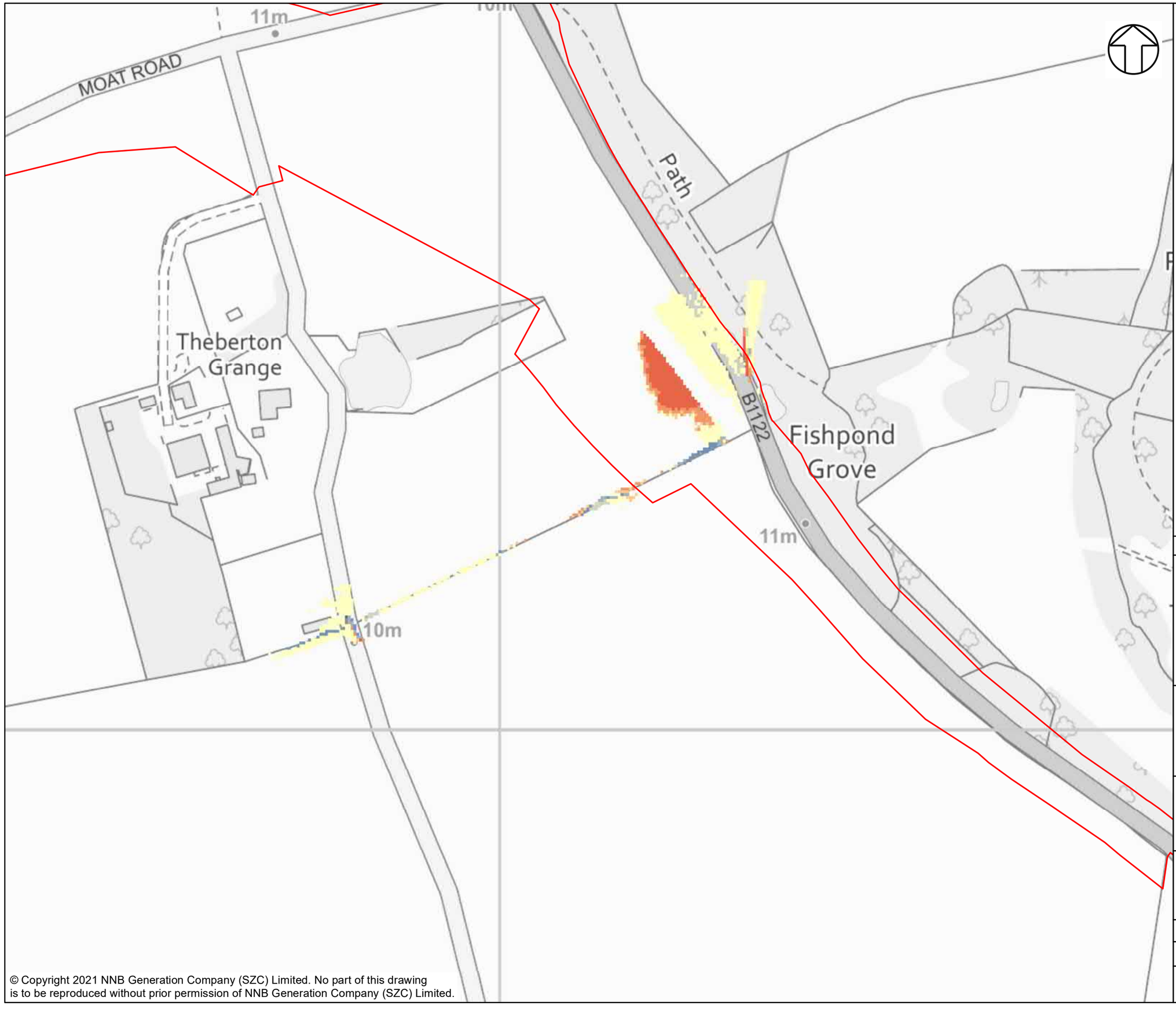
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 1000-YEAR + 35% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.11

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

FLOOD DEPTH DIFFERENCE (M)

- 0.3 - 0.1
- 0.1 - 0.03
- 0.03 - 0.01
- 0
- -0.01 - -0.03
- -0.03 - -0.1
- -0.1 - -0.3
- -0.3 - -0.4

NOT PROTECTIVELY MARKED

SizewellC
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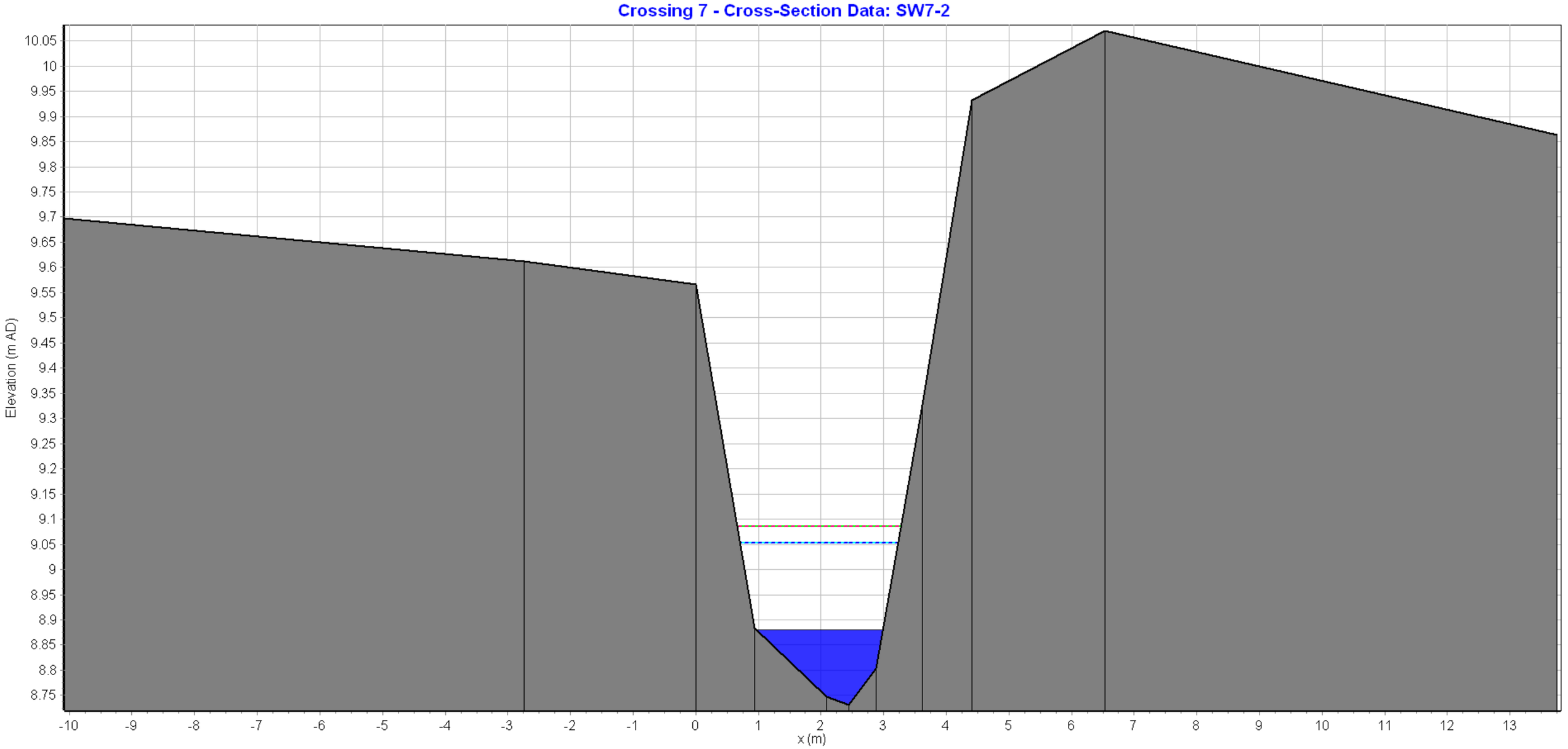
DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

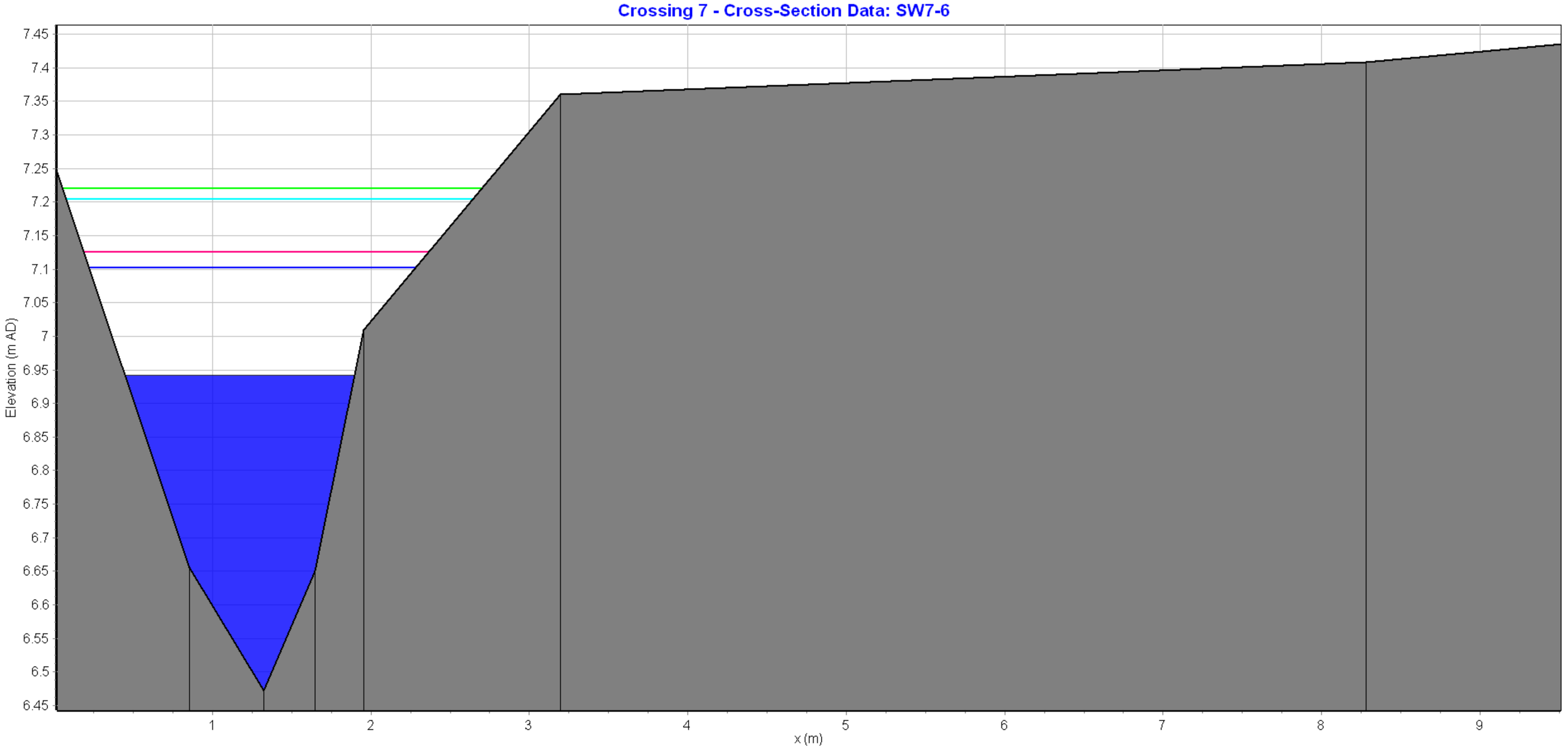
DRAWING TITLE:
CROSSING 7
DIFFERENCE
1 IN 1000-YEAR + 65% CLIMATE CHANGE

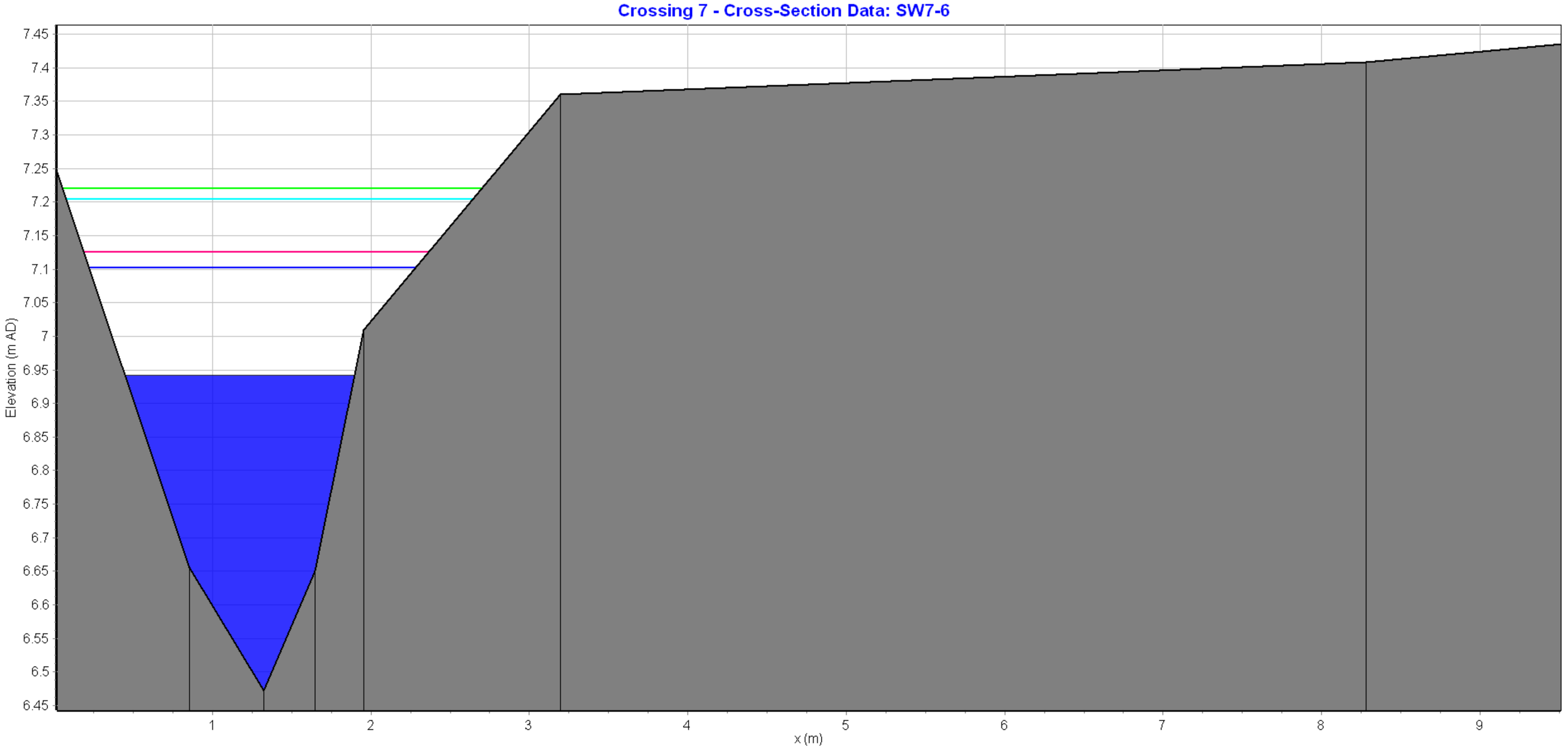
DRAWING NO:
FIGURE C7.12

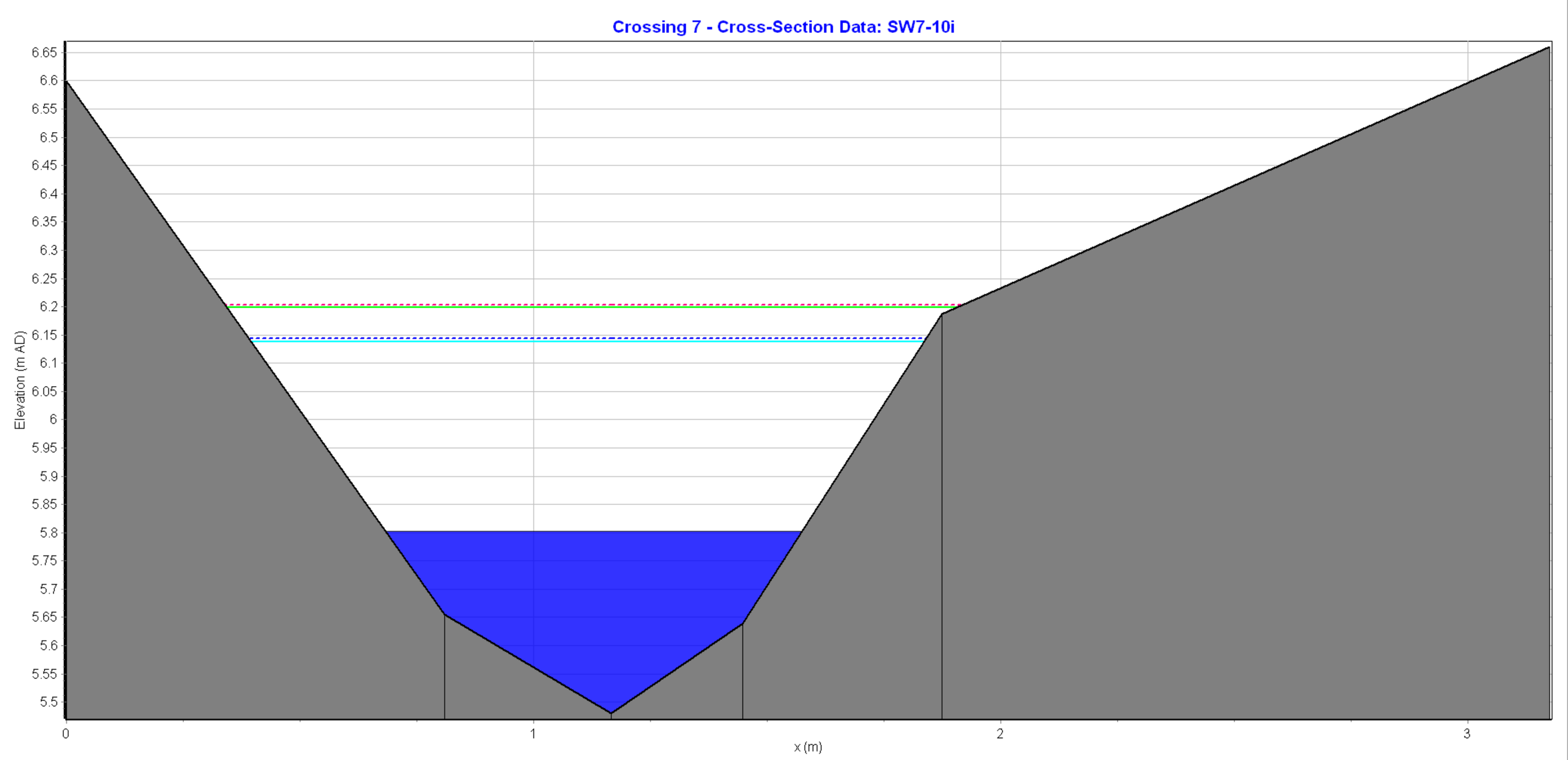
DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	J.T.	1:2,500 @A3	2.0

SCALE BAR
0 25 50 75 100 125 Metres

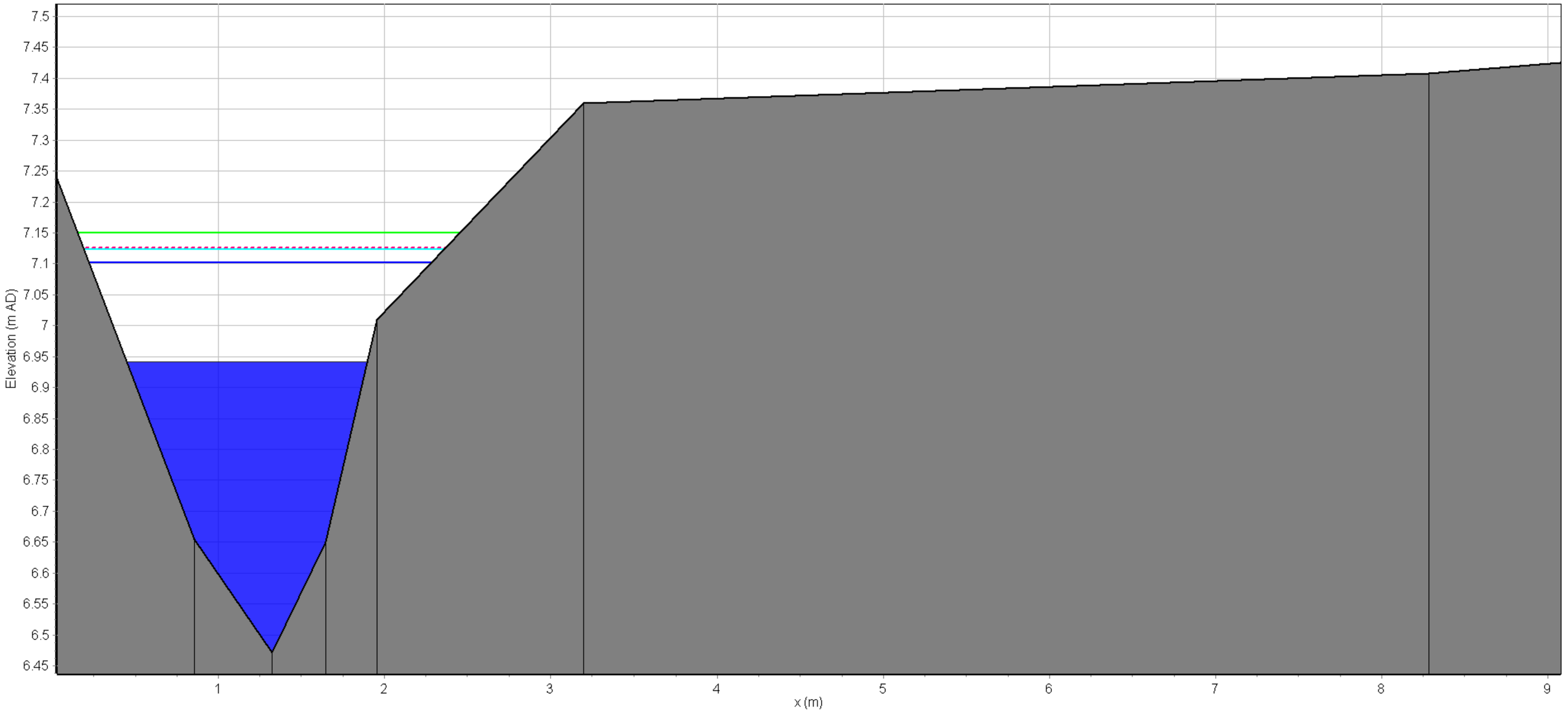

Crossing 7 - Cross-Section Data: SW7-2
Elevation (m AD)
10.05
10
9.95
9.9
9.85
9.8
9.75
9.7
9.65
9.6
9.55
9.5
9.45
9.4
9.35
9.3
9.25
9.2
9.15
9.1
9.05
9
8.95
8.9
8.85
8.8
8.75
-10
-9
-8
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
9
10
11
12
13
x (m)
Stage (8.88 m AD): SW7-2 - SCHEME_SW7_100YR_35CC
Maximum Stage (9.09 m AD): SW7-2 - BASELINE_SW7_100YR_65CC
Maximum Stage (9.05 m AD): SW7-2 - BASELINE_SW7_100YR_35CC
Maximum Stage (9.09 m AD): SW7-2 - SCHEME_SW7_100YR_65CC
Maximum Stage (9.05 m AD): SW7-2 - SCHEME_SW7_100YR_35CC
Bed elevation: SW7-2

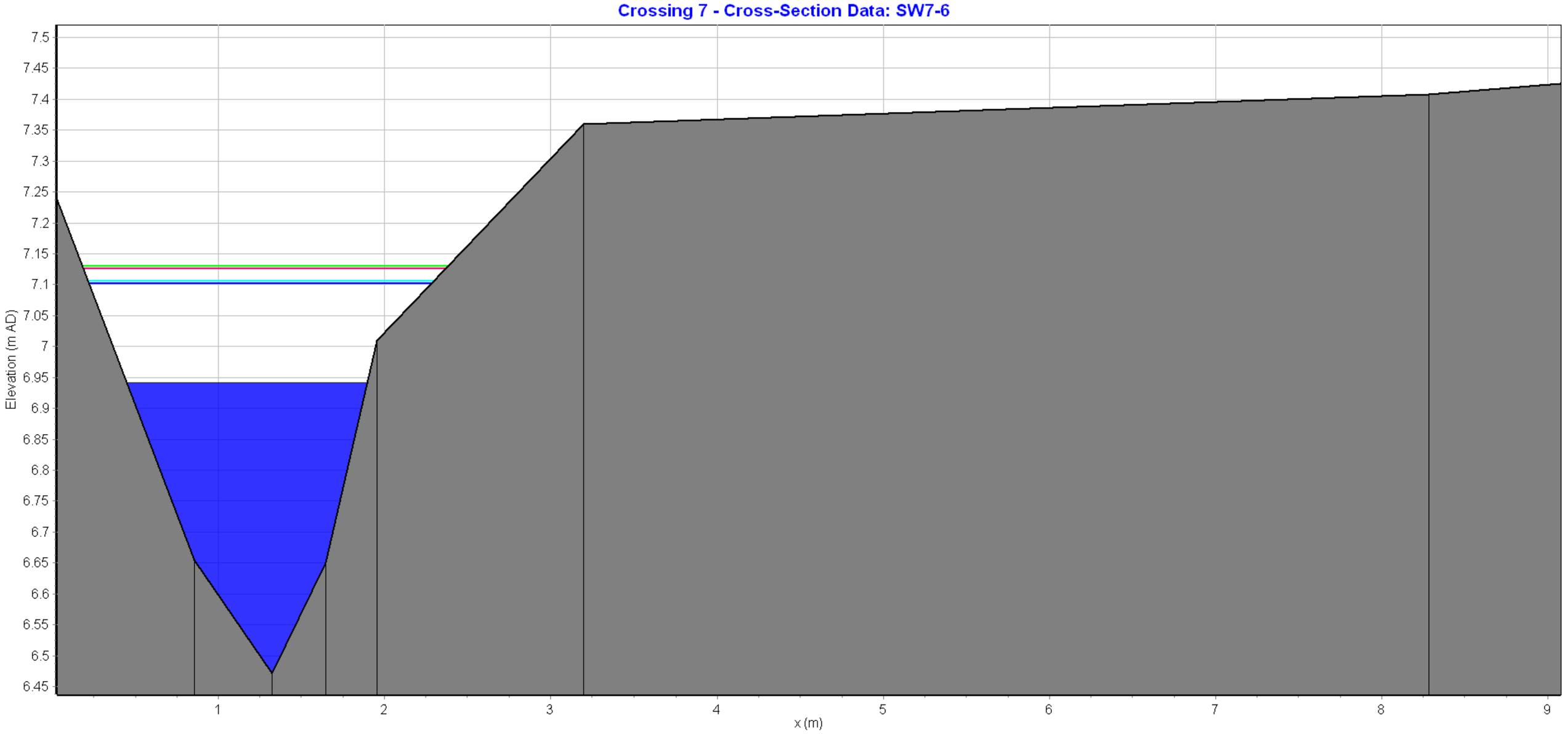

Crossing 7 - Cross-Section Data: SW7-6
Elevation (m AD)
7.45
7.4
7.35
7.3
7.25
7.2
7.15
7.1
7.05
7
6.95
6.9
6.85
6.8
6.75
6.7
6.65
6.6
6.55
6.5
6.45
1
2
3
4
5
6
7
8
9
x (m)
Stage (6.94 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Maximum Stage (7.22 m AD): SW7-6 - BASELINE_SW7_100YR_65CC
Maximum Stage (7.20 m AD): SW7-6 - BASELINE_SW7_100YR_35CC
Maximum Stage (7.13 m AD): SW7-6 - SCHEME_SW7_100YR_65CC
Maximum Stage (7.10 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Bed elevation: SW7-6

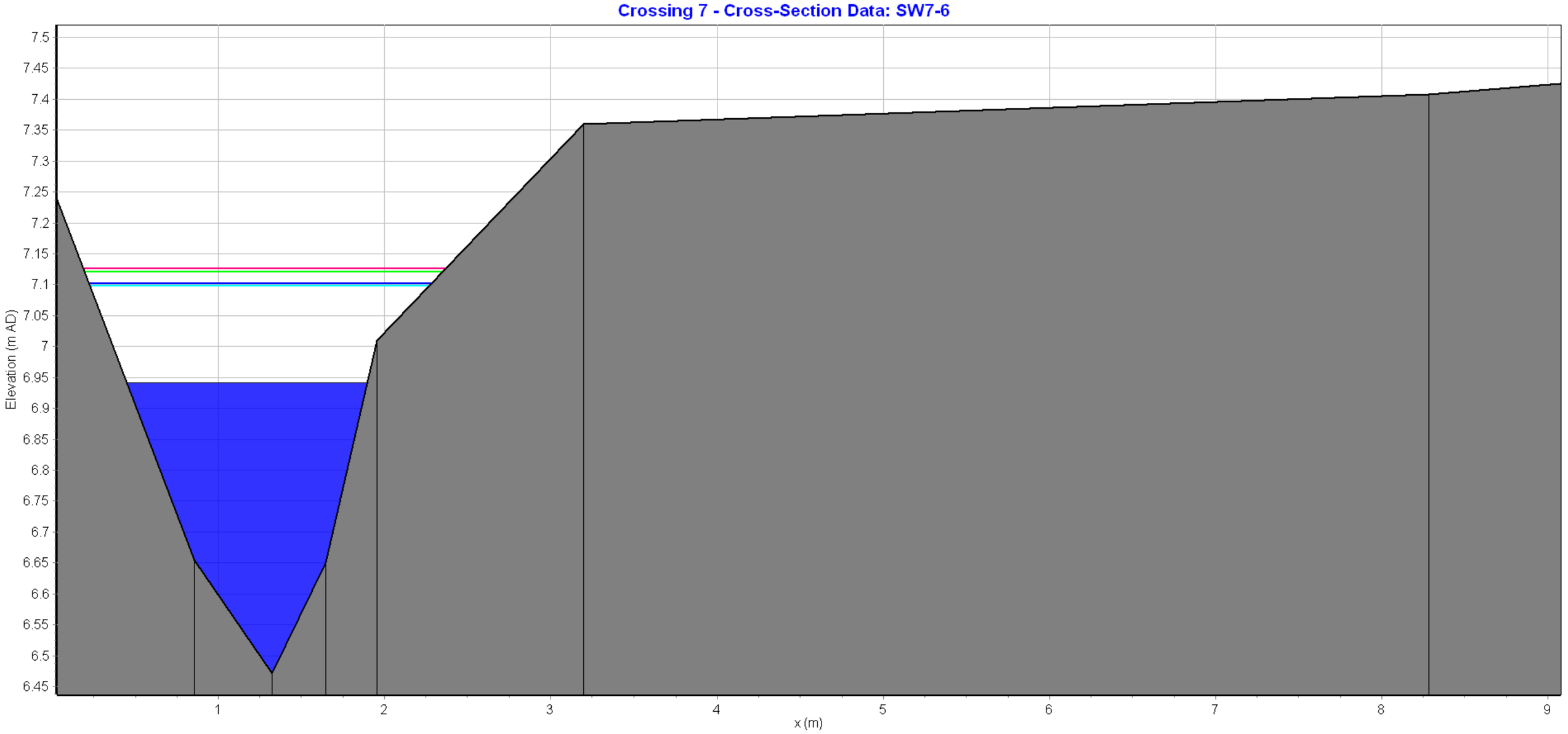

Crossing 7 - Cross-Section Data: SW7-6
Elevation (m AD)
7.45
7.4
7.35
7.3
7.25
7.2
7.15
7.1
7.05
7
6.95
6.9
6.85
6.8
6.75
6.7
6.65
6.6
6.55
6.5
6.45
1
2
3
4
5
6
7
8
9
x (m)
Stage (6.94 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Maximum Stage (7.22 m AD): SW7-6 - BASELINE_SW7_100YR_65CC
Maximum Stage (7.20 m AD): SW7-6 - BASELINE_SW7_100YR_35CC
Maximum Stage (7.13 m AD): SW7-6 - SCHEME_SW7_100YR_65CC
Maximum Stage (7.10 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Bed elevation: SW7-6


Crossing 7 - Cross-Section Data: SW7-10i
Elevation (m AD)
6.65
6.6
6.55
6.5
6.45
6.4
6.35
6.3
6.25
6.2
6.15
6.1
6.05
6
5.95
5.9
5.85
5.8
5.75
5.7
5.65
5.6
5.55
5.5
0
1
2
3
x (m)
Stage (5.80 m AD): SW7-10i - \SCHEME_SW7_100YR_35CC
Maximum Stage (6.20 m AD): SW7-10i - BASELINE_SW7_100YR_65CC
Maximum Stage (6.14 m AD): SW7-10i - BASELINE_SW7_100YR_35CC
Maximum Stage (6.20 m AD): SW7-10i - SCHEME_SW7_100YR_65CC
Maximum Stage (6.14 m AD): SW7-10i - SCHEME_SW7_100YR_35CC
Bed elevation: SW7-10i

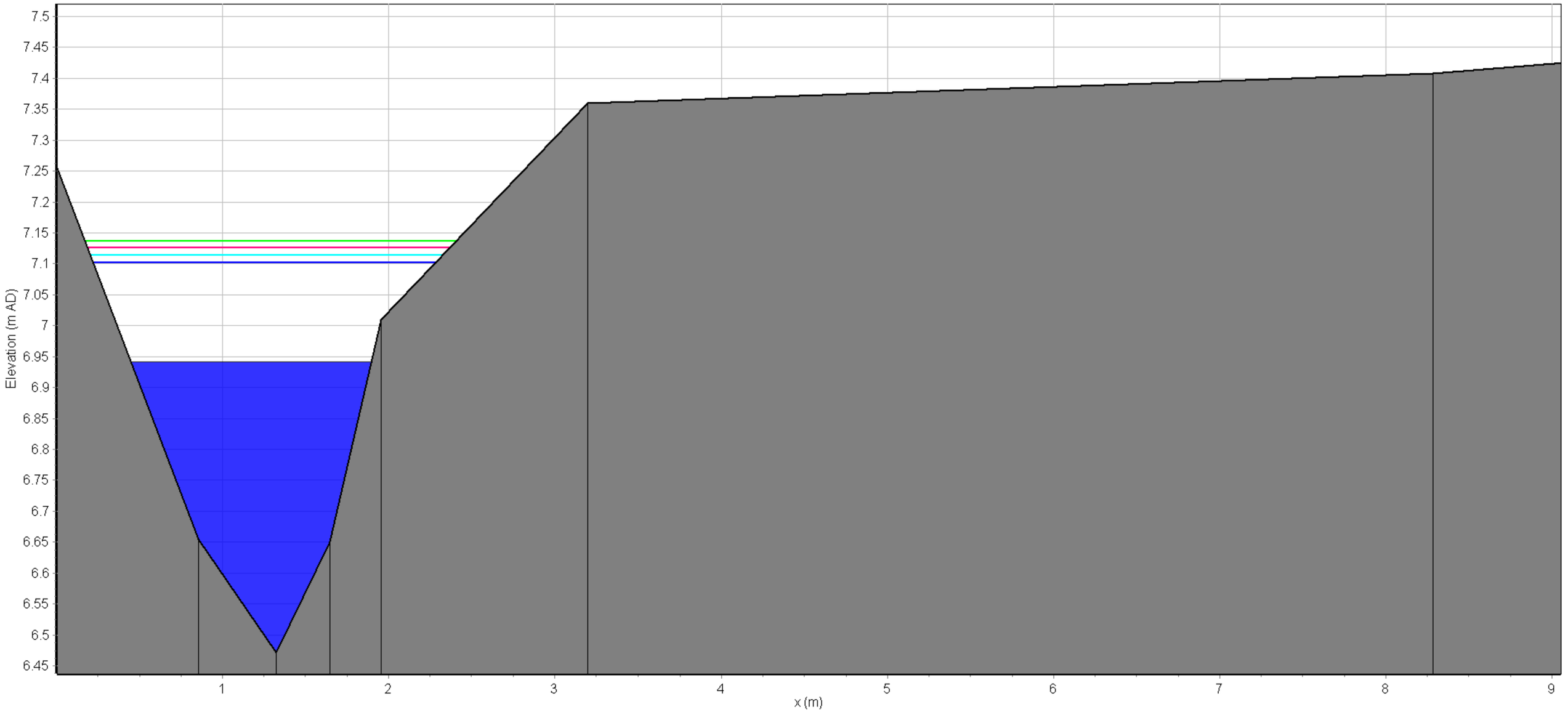
Crossing 7 - Cross-Section Data: SW7-6




Crossing 7 - Cross-Section Data: SW7-6
Elevation (m AD)
7.5
7.45
7.4
7.35
7.3
7.25
7.2
7.15
7.1
7.05
7
6.95
6.9
6.85
6.8
6.75
6.7
6.65
6.6
6.55
6.5
6.45
1
2
3
4
5
6
7
8
9
x (m)
Stage (6.94 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Maximum Stage (7.11 m AD): SW7-6 - SCHEME_SW7_100YR_35CC_-20%ROUGHNESS
Maximum Stage (7.10 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Maximum Stage (7.13 m AD): SW7-6 - SCHEME_SW7_100YR_65CC_-20%ROUGHNESS
Maximum Stage (7.13 m AD): SW7-6 - SCHEME_SW7_100YR_65CC
Bed elevation: SW7-6


Crossing 7 - Cross-Section Data: SW7-6
Elevation (m AD)
7.5
7.45
7.4
7.35
7.3
7.25
7.2
7.15
7.1
7.05
7
6.95
6.9
6.85
6.8
6.75
6.7
6.65
6.6
6.55
6.5
6.45
1
2
3
4
5
6
7
8
9
x (m)
Stage (6.94 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Maximum Stage (7.10 m AD): SW7-6 - SCHEME_SW7_100YR_35CC_+20%ROUGHNESS
Maximum Stage (7.10 m AD): SW7-6 - SCHEME_SW7_100YR_35CC
Maximum Stage (7.12 m AD): SW7-6 - SCHEME_SW7_100YR_65CC_+20%ROUGHNESS
Maximum Stage (7.13 m AD): SW7-6 - SCHEME_SW7_100YR_65CC
Bed elevation: SW7-6

Crossing 7 - Cross-Section Data: SW7-6



Stage (6.94 m AD): SW7-6 - SCHEME_SW7_100YR_35CC

Maximum Stage (7.11 m AD): SW7-6 - SCHEME_SW7_100YR_35CC_33%BLOCKAGE

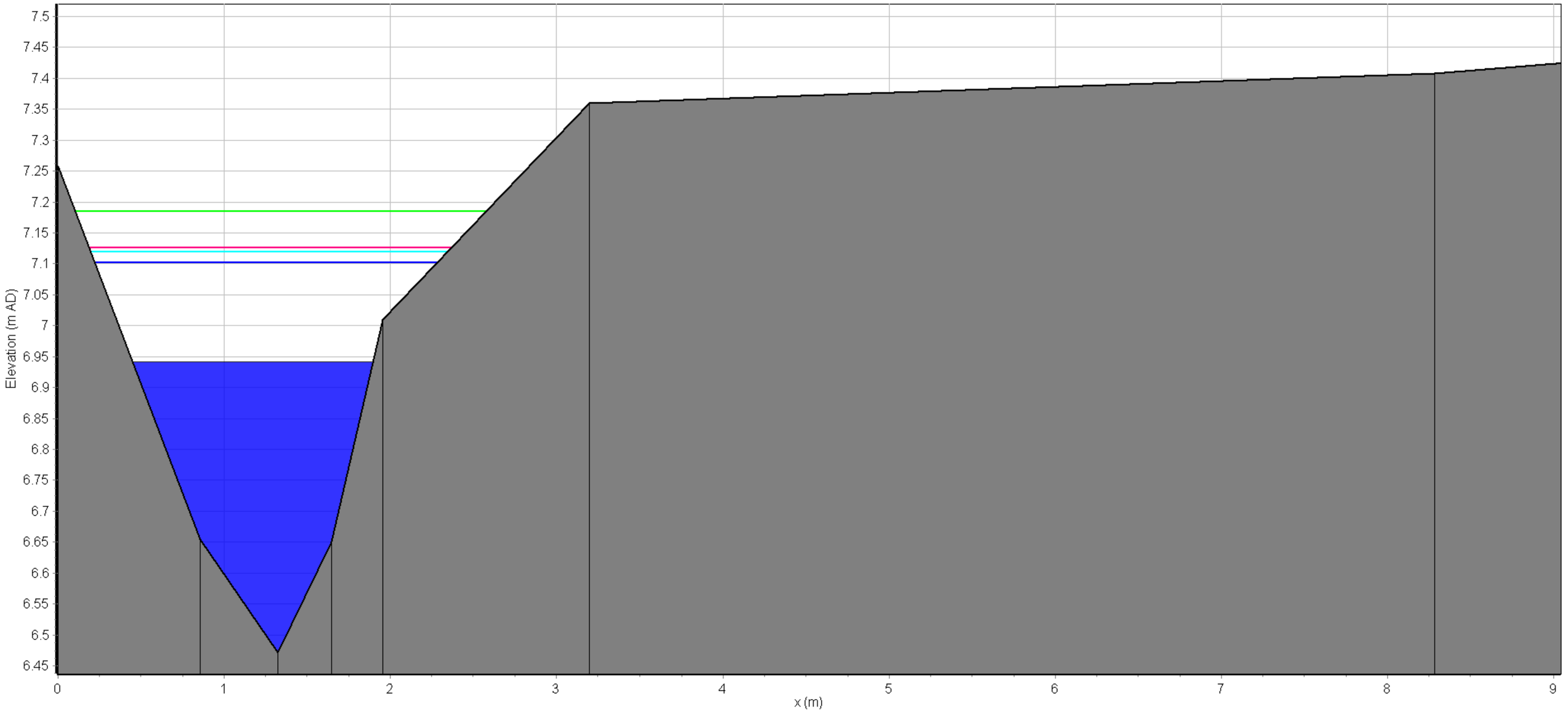
Maximum Stage (7.10 m AD): SW7-6 - SCHEME_SW7_100YR_35CC

Maximum Stage (7.14 m AD): SW7-6 - SCHEME_SW7_100YR_65CC_33%BLOCKAGE

Maximum Stage (7.13 m AD): SW7-6 - SCHEME_SW7_100YR_65CC

Bed elevation: SW7-6

Crossing 7 - Cross-Section Data: SW7-6



NOTES

KEY

SIZEWELL LINK ROAD DEVELOPMENT SITE BOUNDARY

DEPTH (M)

High : 0.867

Low : 0

NOT PROTECTIVELY MARKED

SizewellC
Doing the power of good for Britain
EDF CGN

DOCUMENT:
SIZEWELL C
SIZEWELL LINK ROAD
FLOOD RISK ASSESSMENT ADDENDUM
FLUVIAL MODELLING RESULTS

DRAWING TITLE:
CROSSING 7
67% BLOCKAGE SCENARIO
1 IN 100-YEAR + 65% CLIMATE CHANGE

DRAWING NO:
FIGURE C7.22

DATE:	DRAWN:	SCALE :	REVISION:
FEB 2021	F.C.	1:2,500 @A3	2.0

SCALE BAR

0 25 50 75 100 125 Metres

Sizewell C Sizewell Link Road Flood Risk Assessment Addendum – Appendix D: Flood Risk Emergency Plan

CONTENTS

TABLES

PLATES

1 INTRODUCTION

1.1 Background

1.1.1 The nature and scale of the Sizewell C Project (the 'Project') is such that the proposed development requires a number of associated development sites to facilitate the construction of the new nuclear power station.

1.1.2 One of the associated developments is the proposed Sizewell link road, which will be used during the construction phase of the Sizewell C main development site to facilitate the transport of construction workers and goods vehicles delivering freight to the Sizewell C main development site. The 'route' or 'route of the proposed Sizewell link road' refers to the proposed road alignment. Upon completion of the Sizewell link road it will also be open to the public for longer-term use.

1.1.3 The **Sizewell Link Road Flood Risk Assessment** (Doc Ref. 5.6) [APP-136] was submitted as part of the Development Consent Order application (the 'Application'). This assessment identified that, based on the Environment Agency Flood Map for Planning (Ref.1), parts of the proposed Sizewell link road are required to cross over Main Rivers as well as small areas of both Flood Zone 2 and Flood Zone 3 associated with these watercourses (**Plate 1.1**). In addition, the Sizewell link road is required to pass over a number of smaller ordinary watercourses, shown to be at risk of surface water flooding (**Plate 1.2**).

1.1.4 Hydraulic modelling has been completed as part of the **Sizewell Link Road Flood Risk Assessment Addendum** (Doc Ref. 5.6Ad) and this has provided further assessment of the flood risk associated with the above watercourses. It has confirmed where there is an existing and future flood risk along the proposed route, specifically in relation to each of the watercourse crossing locations.

Plate 1.1: Sizewell Link Road with Environment Agency Flood Zone Map

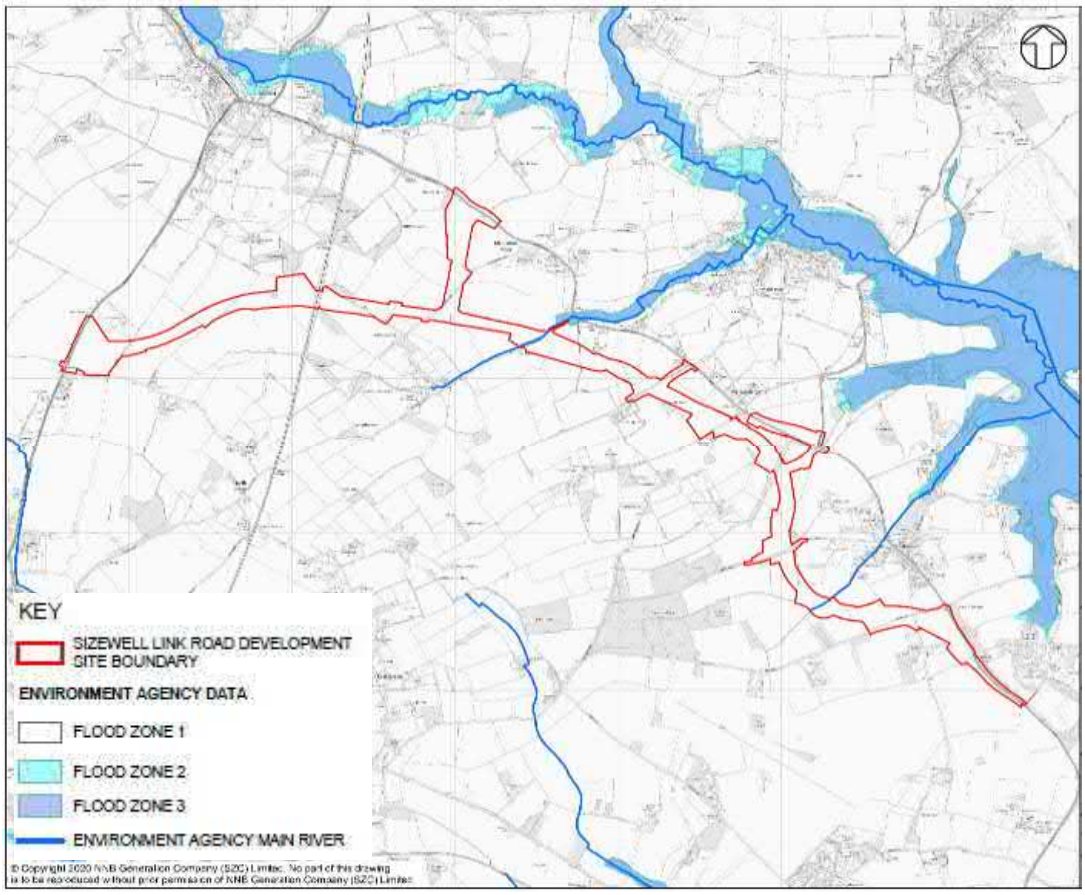
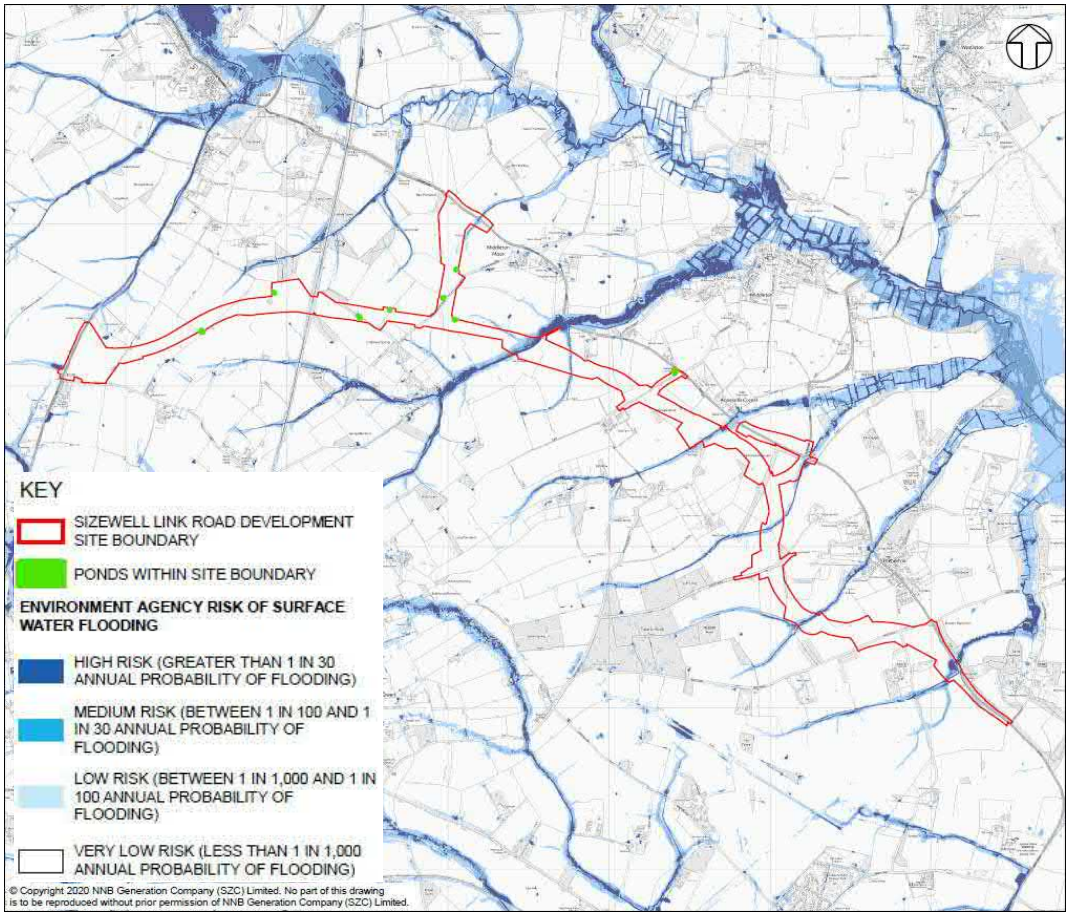


Plate 1.2: Sizewell Link Road with Environment Agency Risk of Surface Water Flooding Map



1.2 Requirement for a Flood Risk Emergency Plan

a) Policy Background

1.2.1 The National Planning Policy Framework (NPPF) (Ref.2) and associated Planning Practice Guidance (PPG) (Ref.3) note that there is a need for applicants to demonstrate that a proposed development will be safe, and that people will not be exposed to hazardous flooding from any source.

1.2.2 A flood risk emergency plan (FREP) should therefore be created where emergency response is an important component of the safety of the proposed development.

1.2.3 Guidance set out in the Environment Agency and Association of Directors of Environment, Economy, Planning & Transport (ADEPT) publication entitled “Flood risk emergency plans for new developments” (Ref.4) notes that a FREP should be provided as part of the FRA, or as a separate

document accompanying the FRA, if relevant pedestrian and / or vehicular access and escape routes from a proposed development would be affected during:

- a design flood from any source (with an appropriate allowance for climate change) with any existing flood risk management structures or features operating as intended; or
- a design flood from any source (with an appropriate allowance for climate change) with a failure of any relevant flood risk management structures or features.

b) Site-specific requirement for a FREP

1.2.4 During the construction works for the proposed Sizewell link road there will be a need to work within Flood Zones 2 and 3 to facilitate the construction of the raised embankments across the, relatively small, floodplain and crossings over a number of watercourses. As this work will be taking place in areas at increased flood risk, a FREP is therefore required to manage residual flood risk and ensure the preparedness of construction personnel in the event of a flood emergency.

1.2.5 The **Sizewell Link Road Flood Risk Assessment (FRA) Addendum** (Doc Ref. 5.6Ad) notes that the future fluvial modelled water levels vary for each of the crossing locations. A review of the maximum modelled water levels at each of the crossing locations has been undertaken.

1.2.6 A comparison of the maximum modelled water level, for the 1 in 1,000-year event with 35% and 65% climate change allowance, with the minimum carriageway levels at each of the proposed crossings has been carried out. The freeboard, for both the 1 in 1,000-year +35% climate change and 1 in 1,000-year +65% climate change scenarios, for crossing 7 is greater than 0.7m, the freeboard for crossing 1, 3 and 6 is greater than 2m and the freeboard at crossing 2 and 5 is greater than 3m (see **section 3.1** for further details).

1.2.7 Based on the above, it is noted that the proposed Sizewell link road has been designed such that it is elevated above each of the watercourses and the adjacent floodplain, ensuring safe and dry access can be provided during flood events that may occur once the road is operational.

1.2.8 Therefore, a FREP for the operational phase is not required as flooding is unlikely to impact the Sizewell link road once construction is complete. This FREP will therefore focus on the construction phase only.

1.3 Aim of the FREP

1.3.1 The key aim of the FREP is to provide both the regulators and the construction contractor with clear information to show that flood risk has been appropriately considered and to set out clear guidelines as to how the construction areas should be evacuated in the unlikely event of a flood emergency.

1.4 Approach and Future Updates

1.4.1 The FREP has been prepared in accordance with the guidance set out by the Environment Agency and ADEPT (Ref.4), which has been applied throughout the remainder of this document.

1.4.2 The FREP should be considered as a live document and is therefore subject to update / review:

- whenever there is a change to any of the contact numbers, names or roles set out within the FREP; and
- every three months, to confirm all the information is still relevant.

1.4.3 The initial FREP should be approved by the Local Planning Authority. All subsequent updates and reviews of the FREP shall be documented and recorded and it will be the responsibility of the construction contractor to ensure that an up-to-date version of the FREP is available at all times during the construction phase.

1.4.4 When the FREP is updated it should be recorded within a document control table setting out the changes that were made, when and why these changes were needed.

2 LOCATION AND PROPOSAL

2.1 Location

2.1.1 The proposed Sizewell link road comprises the construction of a new 6.8km single carriageway road that will bypass a section of the B1122 to the south-west.

2.1.2 The Sizewell link road would create a new route around the south of the villages of Yoxford, Middleton Moor and Theberton, helping to reduce the amount of traffic on the B1122 during the peak construction phase of the Sizewell C Project.

2.1.3 The road starts at the A12 south of Yoxford, bypasses Middleton Moor and Theberton before re-joining the existing B1122 to the west of the Sizewell C main development site, as shown on **Plate 1.1**. It would be located approximately 2.8km to the north-west of the main development site at its closest point.

2.2 Existing Environment

2.2.1 The proposed route of the Sizewell link road is predominately comprised of agricultural land, with several small areas of existing highway land and hardstanding.

2.2.2 The Sizewell link road would be located approximately 1.8km south of Yoxford, running a total of 6.8km in an easterly direction where it re-joins the B1122 to the east of Theberton. The proposed route for the Sizewell link road would need to cross six existing watercourses, two of these are classed as Main River and the remaining four are classed as ordinary watercourses.

2.2.3 The linear nature of the proposed route results in an undulating topography as the proposed Sizewell link road crosses multiple small watercourses and their catchments. Overall, the topography slopes from west to east and the highest elevations are found at the western extent at approximately 40m above ordnance datum (AOD).

2.2.4 Elevation remains at this level moving east between the A12 and the East Suffolk railway line. To the east of the East Suffolk railway line the topography becomes more varied, with six depressions passed before the eastern end of the site boundary is reached. The lowest elevations are found on the B1122 south of Theberton, where they are approximately 6.6m AOD.

2.3 Proposed Development

a) General Description

2.3.1 The Sizewell link road would create a new route around the south of the villages of Yoxford, Middleton Moor and Theberton. Once constructed and operational, it is proposed that the Sizewell link road would form a new permanent road for long-term public use.

2.3.2 The proposed Sizewell link road would comprise a new single carriageway, approximately 7.3m in width, with additional 1m hard strips and 2.5m wide verges. Along the route of the Sizewell link road, there would be swales approximately 3.5m wide for highway drainage.

2.3.3 The works will include a roundabout connecting the A12 to the Sizewell link road, single span railway bridge, Middleton Moor road connecting the Sizewell link road with Yoxford Road, B1125 link connecting the Sizewell link road to Leiston Road, Pretty Road Overbridge, side / access roads, landscaping features, drainage, crossings and Public Rights of Way (PRoWs) diversions.

2.3.4 The route of the proposed Sizewell link road would connect to the A12, via a new roundabout located approximately 180m north of The Red House Farm, south of Yoxford. The proposed road would continue in a north-easterly direction at existing ground level towards the East Suffolk railway line. This section of the proposed road would be approximately 1.5km in length.

2.3.5 The route would then continue in an easterly direction for approximately 1.2km, crossing over the existing East Suffolk railway line, intersecting Littlemore Road, and then continuing towards Middleton Moor and Fordley Road. With the exception of the East Suffolk railway line crossing, the proposed road would be at grade level until it meets the Middleton Moor link, after which it would be located on an embankment, approximately 3.5m high for approximately 200m.

2.3.6 South of Hawthorn Road, the route of the proposed Sizewell link road continues for 1.3km in a south-east direction intersecting Plumtreehills Covert in a 2m cutting to Pretty Road.

2.3.7 The route of the proposed Sizewell link road would continue from Pretty Road for approximately 1.5km, curving east and intersecting Moat Road before joining the B1122 south of Browns Plantation.

2.3.8 There are no permanent buildings other than the road infrastructure proposed as part of the Sizewell link road.

b) Temporary Contractor Compounds

2.3.9 It is proposed to establish 5 no. temporary contractor compounds for the construction of the Sizewell link road as shown in **Figure 6.2.2** in **Volume 2** of the **ES Addendum** (Doc Ref. 6.14) [AS-198]. The compounds will comprise of a canteen, office space, drying rooms, toilets, plant and materials store and staff car parking.

2.3.10 It is proposed that Site Compound No.1 will be located at the western end of the proposed development, adjacent to the existing A12 road (**Figure 6.2.3** in **Volume 2** of the **ES Addendum** (Doc Ref. 6.14) [AS-198]).

2.3.11 Site Compound No.2 will be located on both sides of the East Suffolk Line where it would be crossed by the proposed Sizewell link road (**Figure 6.2.4** in **Volume 2** of the **ES Addendum** (Doc Ref. 6.14) [AS-198]) and Site Compound No.3 will be located to the west side of the proposed Middleton Moor link (**Figure 6.2.5** in **Volume 2** of the **ES Addendum** (Doc Ref. 6.14) [AS-198]).

2.3.12 Site Compound No.4 will be located west of the Sizewell link road adjacent to Pretty Road (**Figure 6.2.7** in **Volume 2** of the **ES Addendum** (Doc Ref. 6.14) [AS-198]) and Site Compound No.5 will be to the eastern end of the Sizewell link road site (**Figure 6.2.8** in **Volume 2** of the **ES Addendum** (Doc Ref. 6.14) [AS-198]). These two compounds would comprise site welfare facilities and office space but would primarily be used for materials storage.

2.3.13 All proposed temporary contractor compounds will be used for the duration of the project.

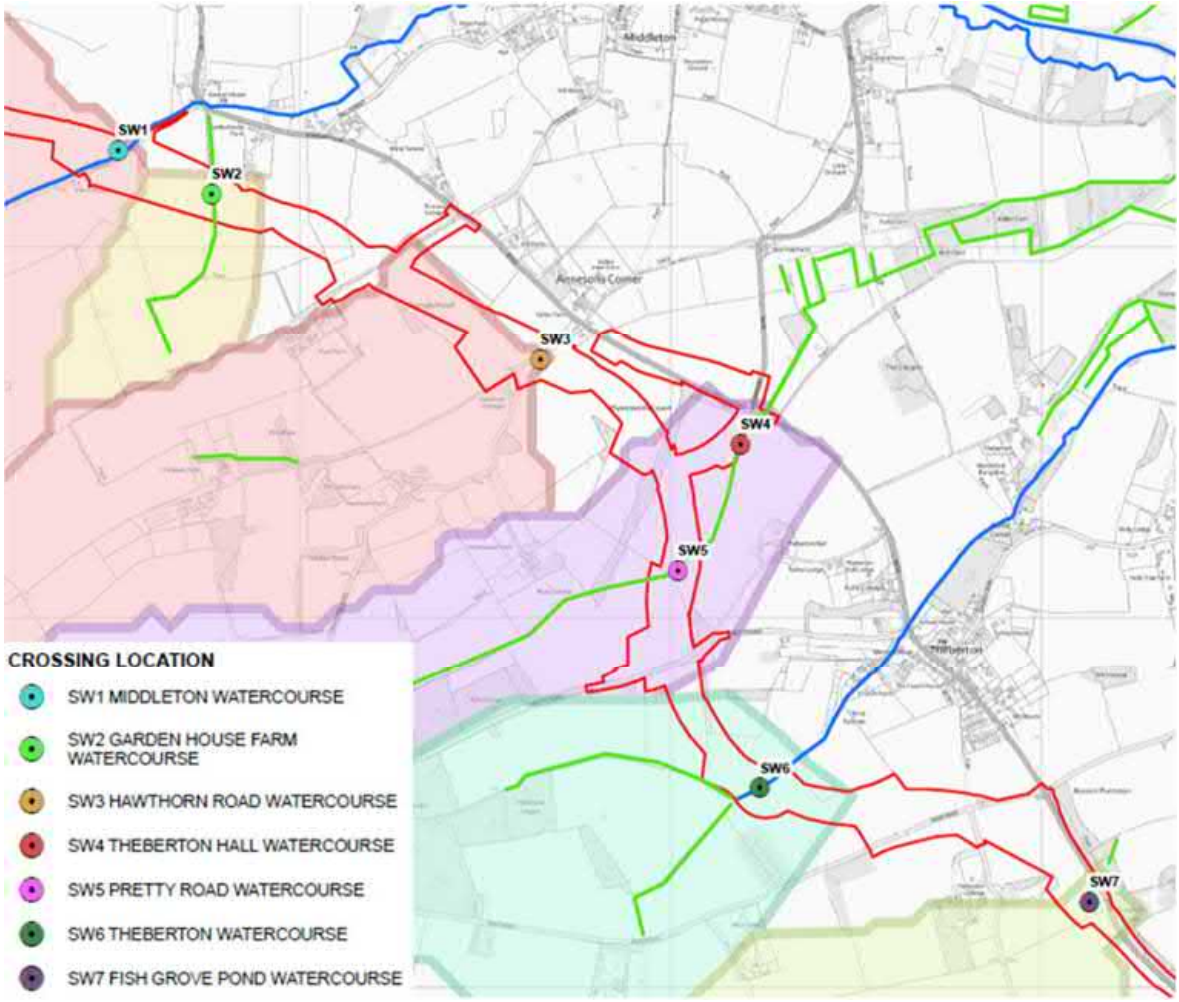
2.3.14 The locations for the 5 no. temporary contractor compounds are located in Flood Zone 1, when considering the Environment Agency flood zone maps and the flood extents obtained from the modelling undertaken as part the FRA. Therefore, the risk of them being impacted by fluvial flooding is low.

c) Watercourse Crossings

2.3.15 The proposed development will cross six watercourses west to east at seven locations along its route. The locations of these watercourse crossings are displayed in **Plate 2.1**. The name and classification of each watercourse is listed below:

- SW1: Middleton Watercourse at Fordley Road (main river);
- SW2: Garden House Farm Watercourse (ordinary watercourse);
- SW3: Hawthorn Road Watercourse (ordinary watercourse);
- SW4: Theberton Hall (ordinary watercourse) – same watercourse as SW5;
- SW5: Pretty Road Watercourse (ordinary watercourse);
- SW6: Theberton Watercourse at Moat Road (main river); and
- SW7: Fish Pond Grove Watercourse (ordinary watercourse).

Plate 2.1: Location of Sizewell Link Road watercourse crossings



2.3.16 The proposed design for the watercourse crossings (except Crossing 7) comprises a series of three-sided portal culverts, approximately 5.5m wide by 1.2m high.

2.3.17 Portal culverts were chosen over the more widely used box culverts as they are placed on top of the existing banks, allowing more height and removing the need for re-profiling of the natural river channel.

2.3.18 During the construction works there is likely to be a need to provide temporary crossings over the watercourses. Where access is required over the watercourse crossing prior to the installation of the permanent portal culvert the contractor will install temporary bailey bridges over the proposed crossing.

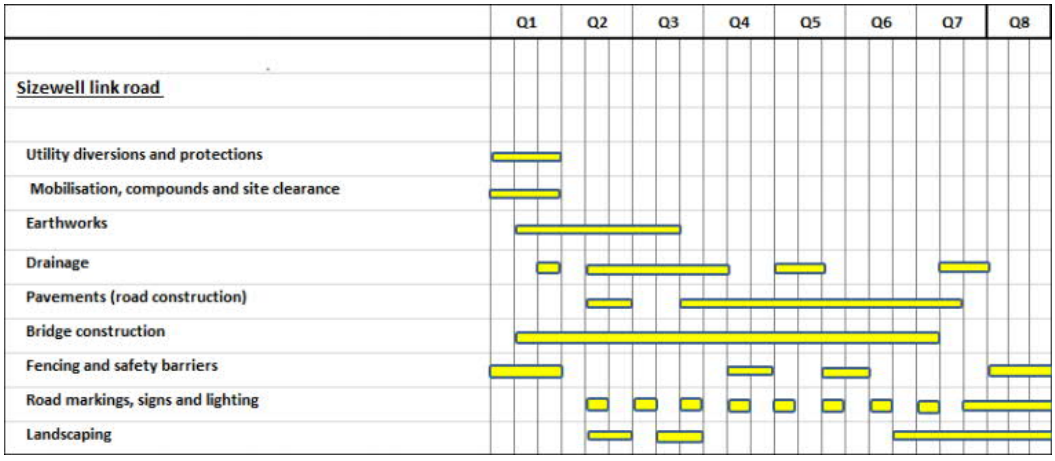
2.3.19 These temporary bailey bridges will facilitate ongoing construction works and will provide access over the existing river crossing during construction. They will not be located within the channel itself and as such, it is anticipated that there would be no requirement for construction workers to be within the channel of the watercourses.

d) Construction sequencing and duration

2.3.20 The Sizewell link road would be constructed in the early years of the construction phase of the Sizewell C Project. It is expected that construction work for the proposed Sizewell link road would take approximately 24 months to complete and that construction would occur in a west to east direction and off-line from existing roads. As the Sizewell link road must cross the East Suffolk line, an overbridge would be constructed early in the programme to enable access to the full length of the site from the A12. **Plate 2.2** illustrates the high-level construction sequence, as shown in the Description of Development in **Chapter 2** of **Volume 6** of the **ES** (Doc Ref. 6.7) [APP-448].

2.3.21 Once operational, it would be used during the construction phase of the Sizewell C main development site to transport construction workers, arriving by car, on buses from both the northern and the southern park and ride sites as well as goods vehicles delivering freight to the Sizewell C main development site.

Plate 2.2: Anticipated Construction Activity Sequencing (extract from Chapter 2 of Volume 6 of the ES (Doc Ref. 6.7) [APP-448])



2.3.22 It is anticipated that throughout the construction phase, access to the temporary contactor compounds would need to be maintained at all times. However, the construction working programme would be Monday – Friday with half day working on Saturdays. There may be some periods of varied

working patterns in order to deliver key activities within the construction programme.

3 CONSTRUCTION PHASE FREP

3.1 Construction Phase: Risk Summary

a) Risk of flooding

3.1.1 As previously noted, a Flood Risk Assessment (FRA) was prepared for the proposed Sizewell link road and submitted as part of the DCO Application. The **Sizewell Link Road Flood Risk Assessment** (Doc Ref. 5.6) [APP-136] confirmed that the proposed development was generally at low risk of flooding from all sources. However, where the road is required to pass over each of the watercourses, it is at risk of flooding from fluvial sources.

3.1.2 The **Sizewell Link Road FRA Addendum** (Doc Ref. 5.6Ad) presents additional information in relation to additional fluvial hydraulic modelling, which was carried out in response to further engagement with key stakeholders including the Environment Agency.

3.1.3 The Environment Agency Flood Map for Planning suggests the majority of the proposed development is in Flood Zone 1 and is at low risk of fluvial flooding.

3.1.4 Revised flood zone maps have been produced for each of the crossing locations based on the updated hydraulic modelling and presented in the **Sizewell Link Road FRA Addendum** (Doc Ref. 5.6Ad). The flood extent for the 1 in 100-year event was used to represent Flood Zone 3 and the 1 in 1,000-year event for Flood Zone 2. Areas outside of Flood Zone 2 or 3 are classed as being located within Flood Zone 1 (lowest flood risk).

3.1.5 The flood zone mapping shows that for crossing 1 the Flood Zone 3 extent is limited to flooding of Fordley Road. Within the red line boundary there is an approximately 70m long section of the site located within Flood Zone 2, on the northern side of Fordley Road within the most downstream part of the site, and another small area, approximately 30m long, at the upstream end, also on the northern side of Fordley Road.

3.1.6 Flood risk at the proposed crossing 2, along the ordinary watercourse, is low and the area is located within Flood Zone 1. Flooding is contained within the watercourse channel throughout the site boundary.

3.1.7 The updated flood zone mapping for crossing 3 shows only a very localised area within the site boundary would be at risk of flooding from fluvial

sources. Flood Zone 2 and Flood Zone 3 are generally confined to Hawthorn Road with small areas, approximately 70m long, on the southern side of Hawthorn Road at the downstream end of the site and an area, approximately 30m long, on the southern side of Hawthorn Road at the upstream end of the site.

3.1.8 Flood zone mapping for crossings 4 and 5, derived from the updated modelling, shows that there are only two very localised areas within Flood Zone 2 or Flood Zone 3 along this ordinary watercourse. There is an approximately 50m long section of the site located within Flood Zone 3 and a 70m long section within Flood Zone 2. This is limited to the area around existing culverts on a field crossing, at the location of the proposed crossing 5.

3.1.9 Updated flood zone mapping for crossing 6, shows that there is one area on the northern side of the watercourse floodplain located within either Flood Zone 2 or Flood Zone 3. This comprises an approximately 30m long section of the site located within Flood Zone 3 and an approximately 130m long section within Flood Zone 2.

3.1.10 Flood zone mapping for crossing 7 shows that the flood extent is limited to a low spot within the floodplain west of the B1122. An approximately 70m wide section of the site is in either Flood Zone 3 or 2.

3.1.11 Updated flood zone mapping has been included within the **Sizewell Link Road FRA Addendum** (Doc Ref. 5.6Ad) as **Figures 1 – 5**, for each crossing respectively and extracts are presented in **Plate 3.1** – **Plate 3.5,** for the modelled crossings respectively. Overall, flood risk is limited to the watercourse channels or areas immediately adjacent to the watercourse during the construction phase. It should be noted that the majority of construction work will take place outside of these areas with temporary compounds being located within Flood Zone 1.

Plate 3.1: Flood Zone Map for Crossings 1 and 2 (extract from Figure 1 of the Sizewell Link Road FRA Addendum (Doc Ref. 5.6Ad))

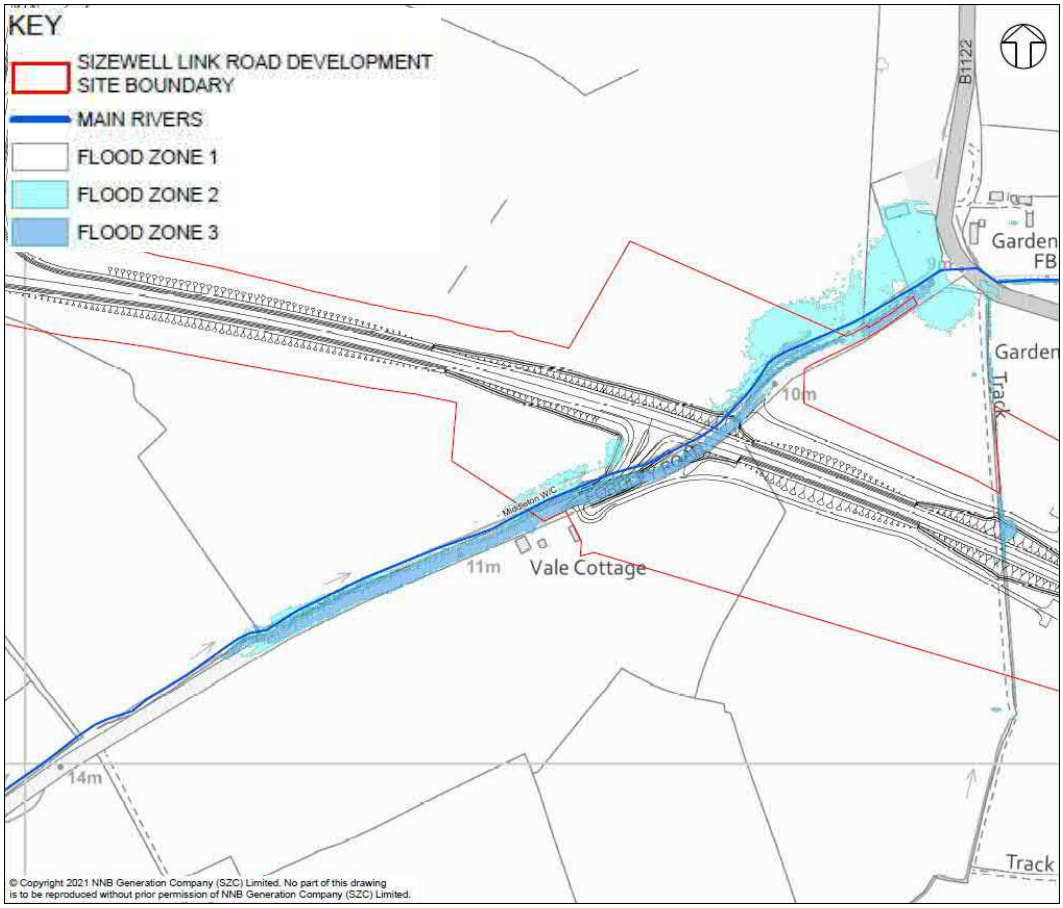


Plate 3.2: Flood Zone Map for Crossing 3 (extract from Figure 2 of the Sizewell Link Road FRA Addendum (Doc Ref. 5.6Ad))

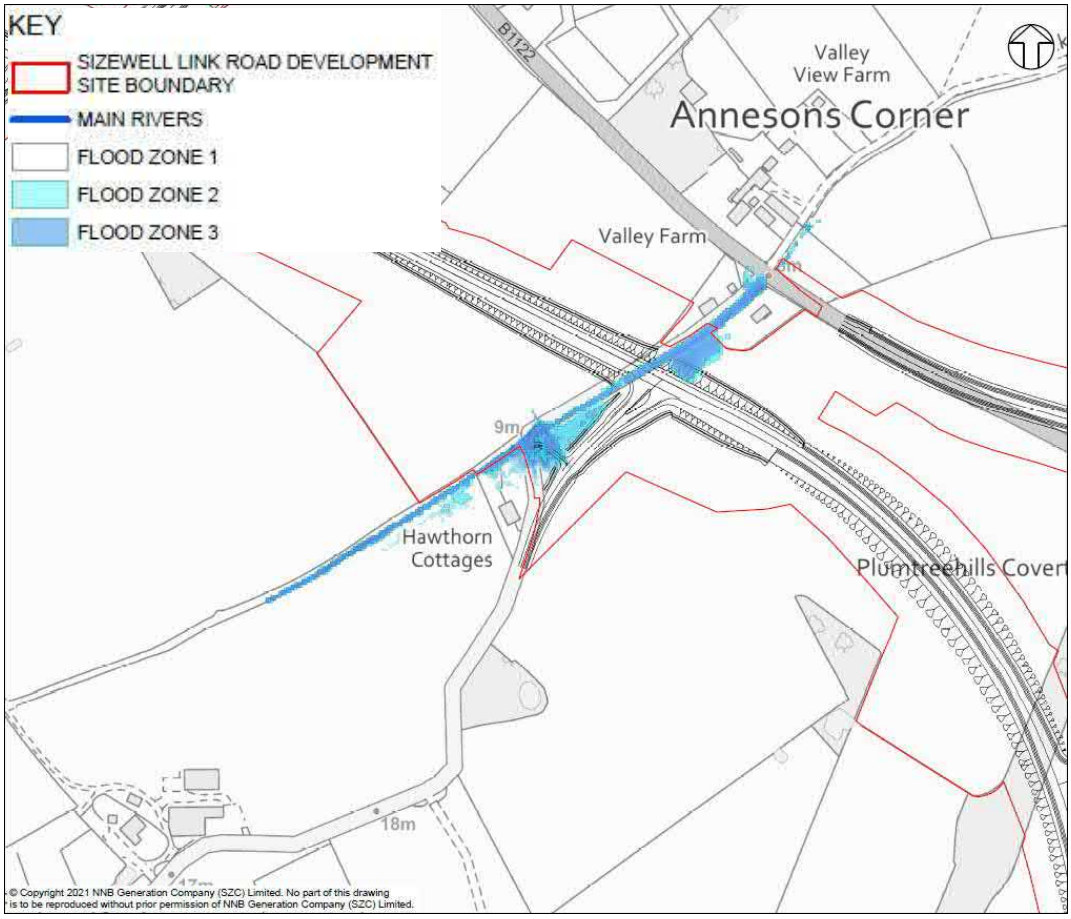


Plate 3.3: Flood Zone Map for Crossings 4 and 5 (extract from Figure 3 of the Sizewell Link Road FRA Addendum (Doc Ref. 5.6Ad))

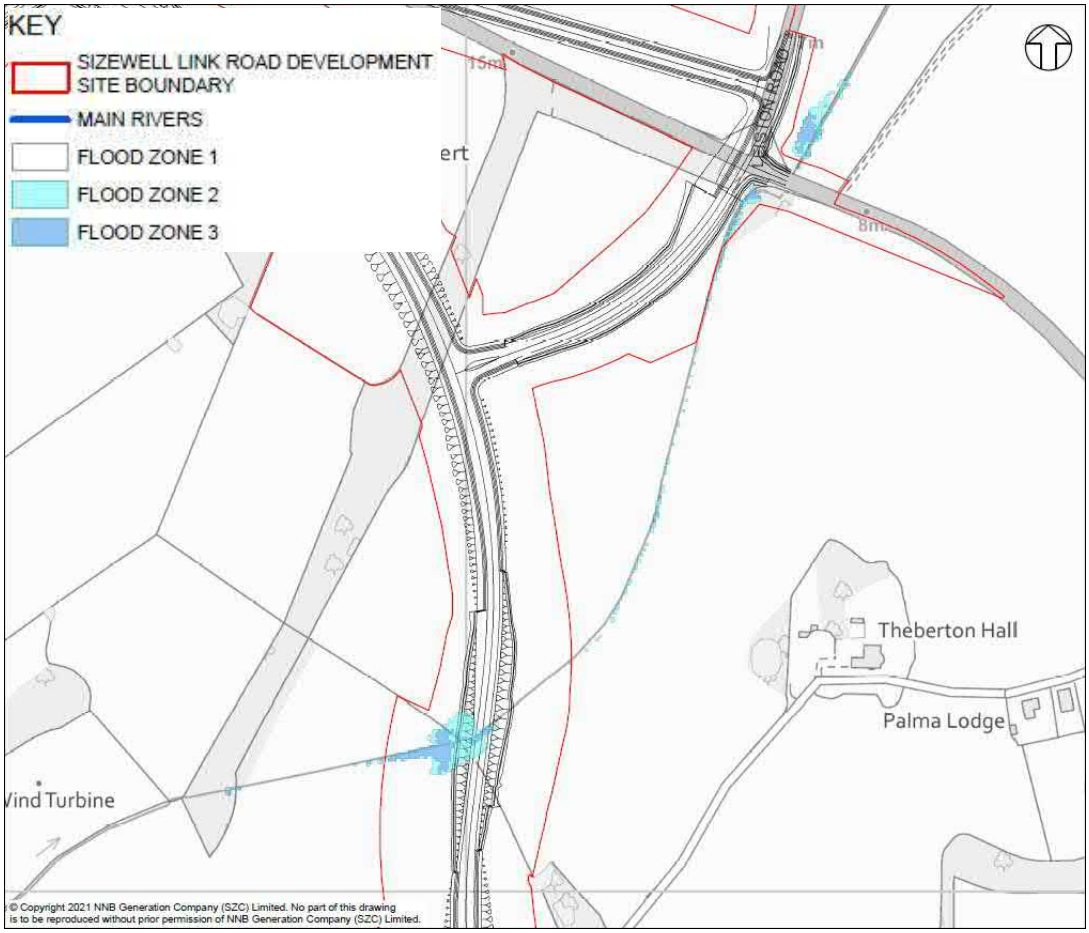


Plate 3.4: Flood Zone Map for Crossing 6 (extract from Figure 4 of the Sizewell Link Road FRA Addendum (Doc Ref. 5.6Ad))

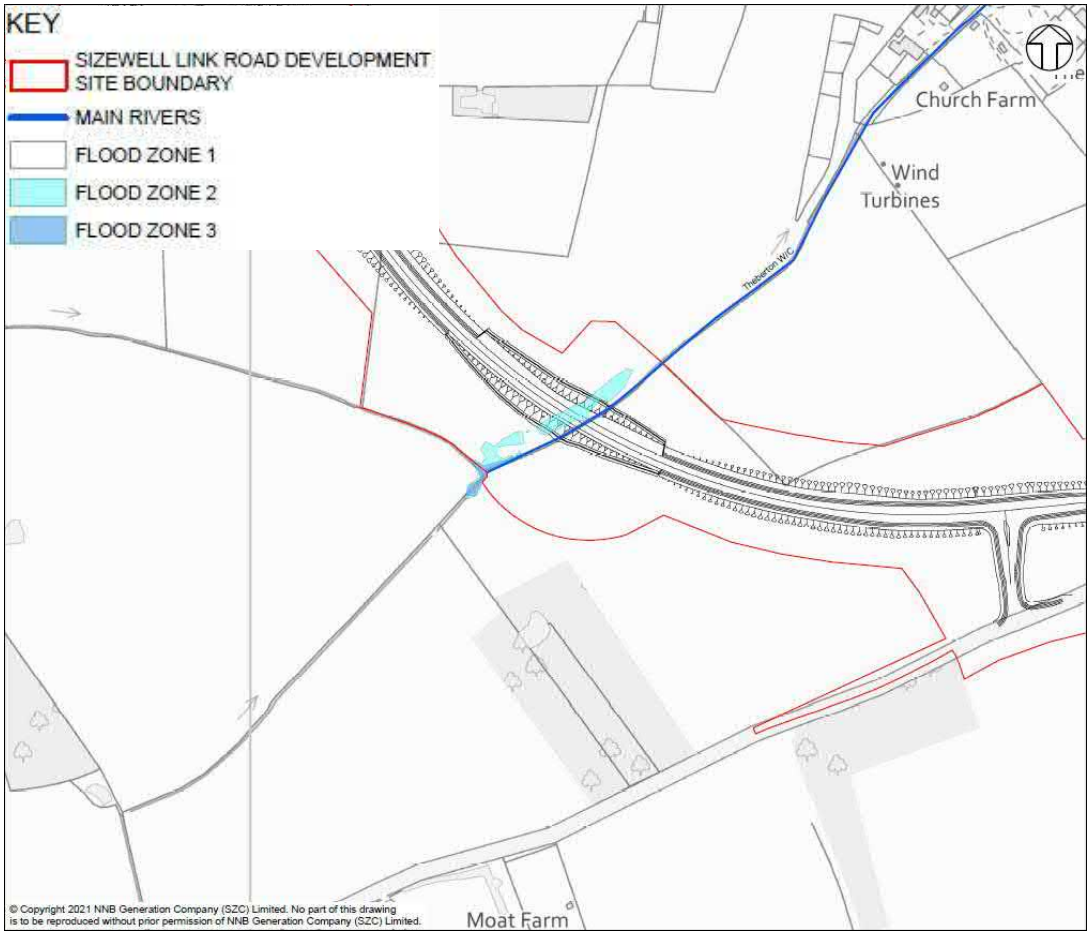
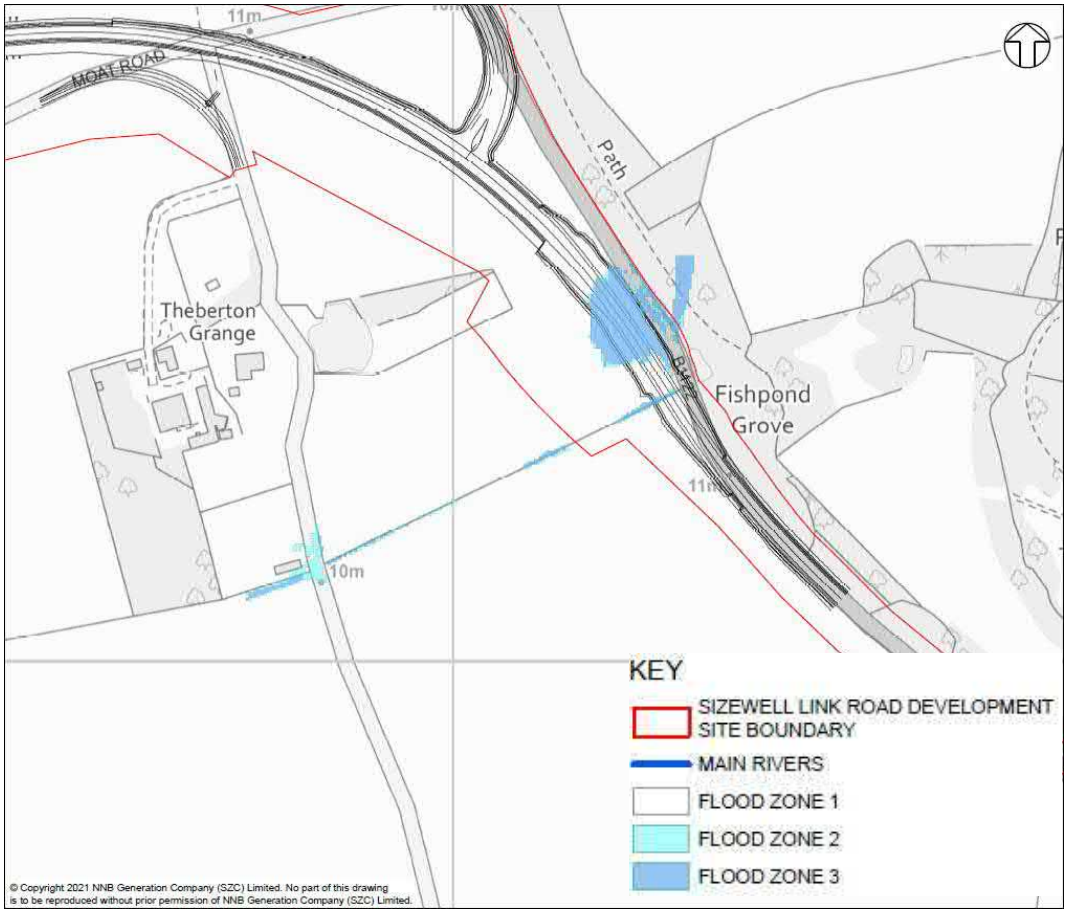


Plate 3.5: Flood Zone Map for Crossing 7 (extract from Figure 5 of the Sizewell Link Road FRA Addendum (Doc Ref. 5.6Ad))



b) Hazard mapping

i. Approach

3.1.12 A review of the flood risk in the vicinity of each of the watercourses and their associated floodplains are summarised in the previous section. The 1D nature of the hydraulic modelling, is such that flood hazard is difficult to identify, however, flood extent and depth has been defined for a number of key return period events.

3.1.13 The framework and guidance for assessing and managing flood risk for new development is set out in:

- Flood Risks to People, Phase 2, The Flood Risk to People Methodology Technical Report FD2321/TR1 (Ref. 5) carried out as part of the Defra and Environment Agency Research and Development programme; and

- Flood Risk Assessment Guidance for New Development, Phase 2, Framework and Guidance for Assessing and Managing Flood Risk for New Development – Full Documentation and Tools FD2320/TR2 (Ref. 6).

3.1.14 As previously discussed, overall, the areas at greatest risk of flooding are limited to the watercourse channels or areas immediately adjacent to the watercourse. Given the relatively small-scale nature of the watercourses and localised areas of flooding (i.e. no significant overland flow pathways or extensive areas of flooding have been identified) it is assumed that flooding is likely to be relatively slow moving or standing water.

3.1.15 Danger to people is assessed using flood hazard, which can be expressed as a combination of flood depth and velocity. Flood Risk Assessment Guidance for New Development, FD2320/TR2 (Ref. 6) sets out the following equation to assess hazard:

Flood Hazard Rating = ((v + 0.5) * D) + DF.

Where: v = velocity (m/s), D = depth (m), DF = debris factor

3.1.16 Where velocity data is not available and in the absence of detailed information, the FD2320/TR2 guidance identifies velocities that are appropriate depending on the nature of the floodplain. A 0.5m/s velocity is recommended for lowland flat floodplains.

3.1.17 The guidance also recommends a debris factor of 0.5 for fluvial and coastal flooding in rural catchments or coastal zones.

3.1.18 The risk to people based on flood hazard rating has been considered based on the guidance set out in Flood Risks to People, Phase 2, The Flood Risk to People Methodology Technical Report FD2321/TR1 (Ref. 5) with the hazard to people classification, as a function of velocity and depth classification, summarised in **Plate 3.6**.

Plate 3.6: Summary of Hazard to People Classification (Ref. 5)

Flood Hazard Rating (HR)	Colour Code	Hazard to People Classification
Less than 0.75		Very low hazard - Caution
0.75 to 1.25		Danger for some – includes children, the elderly and the infirm
1.25 to 2.0		Danger for most – includes the general public
More than 2.0		Danger for all – includes the emergency services

3.1.19 The modelled peak flood depths during the modelled 1 in 1,000-year +35% climate change baseline scenario for each crossing indicate that there is an

existing flood risk, without the proposed development, at all of the crossings except crossing 2 and 4, as illustrated in **Plate 3.7** – **Plate 3.11.**

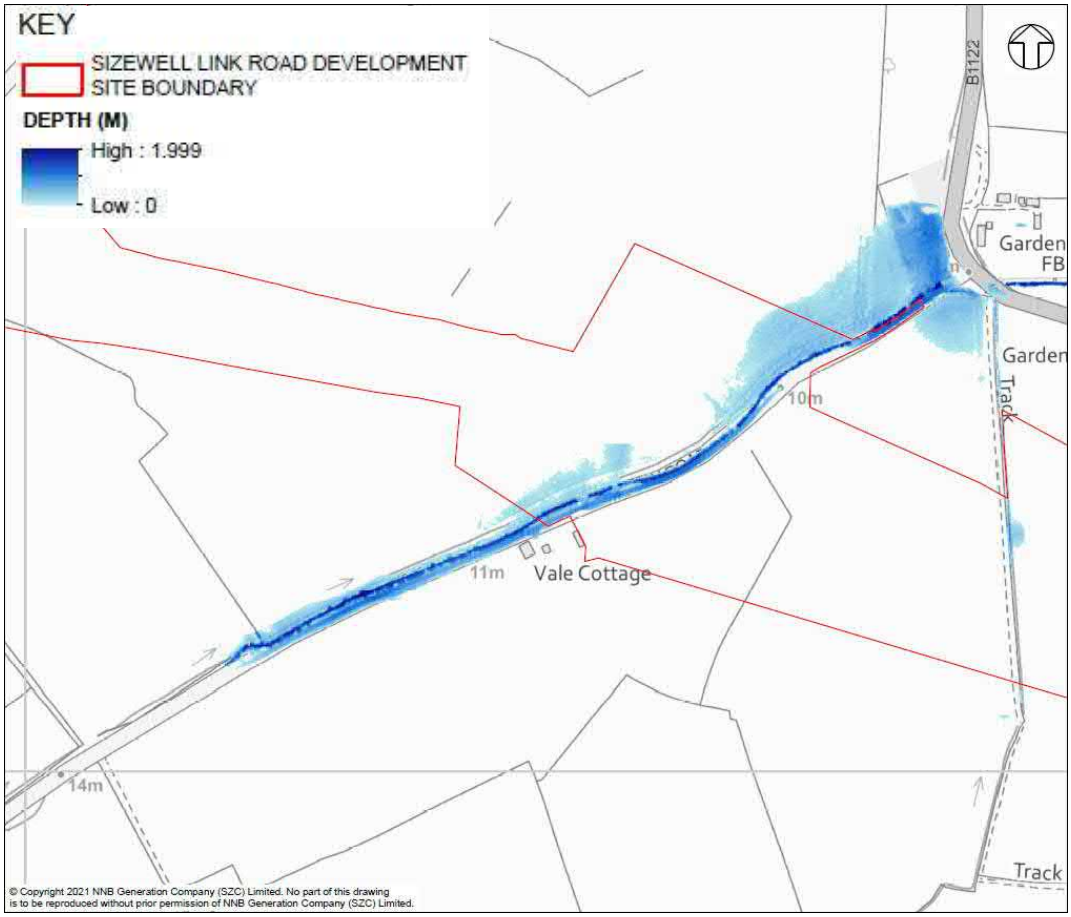
3.1.20 The 1 in 1,000-year +35% climate change baseline scenario has been used to assess the existing flood risk, without the proposed development, at each crossing. The inclusion of the 35% climate change allowance comprises a conservative approach to the assessment of flood risk as construction works are scheduled to take up to 24 months, commencing early in the construction programme.

ii. Crossings 1 and 2

3.1.21 Flood depth maps for crossing 1 indicate that the greatest flood depths, in the existing baseline scenario, are generally confined to the channel of the watercourse and the adjacent Fordley Road (**Plate 3.7**). Flooding does occur within the floodplain on the northern side of the Theberton watercourse, however, flood depths are between 0.0m and 0.5m. Flooding also occurs outside the site boundary at the junction of Fordley Road and the B1122.

3.1.22 As noted above, flood depths within the floodplain at crossing 1 for the 1 in 1,000-year +35% climate change event within the site boundary, do not exceed 0.5m. Assuming 0.5m/s velocity and a 0.5 debris factor, this would indicate the hazard rating for these areas would comprise a hazard rating of 1.0, and therefore would be considered ‘Danger for Some’.

Plate 3.7: Baseline 1 in 1,000-year +35% climate change flood depths at crossing 1 and 2

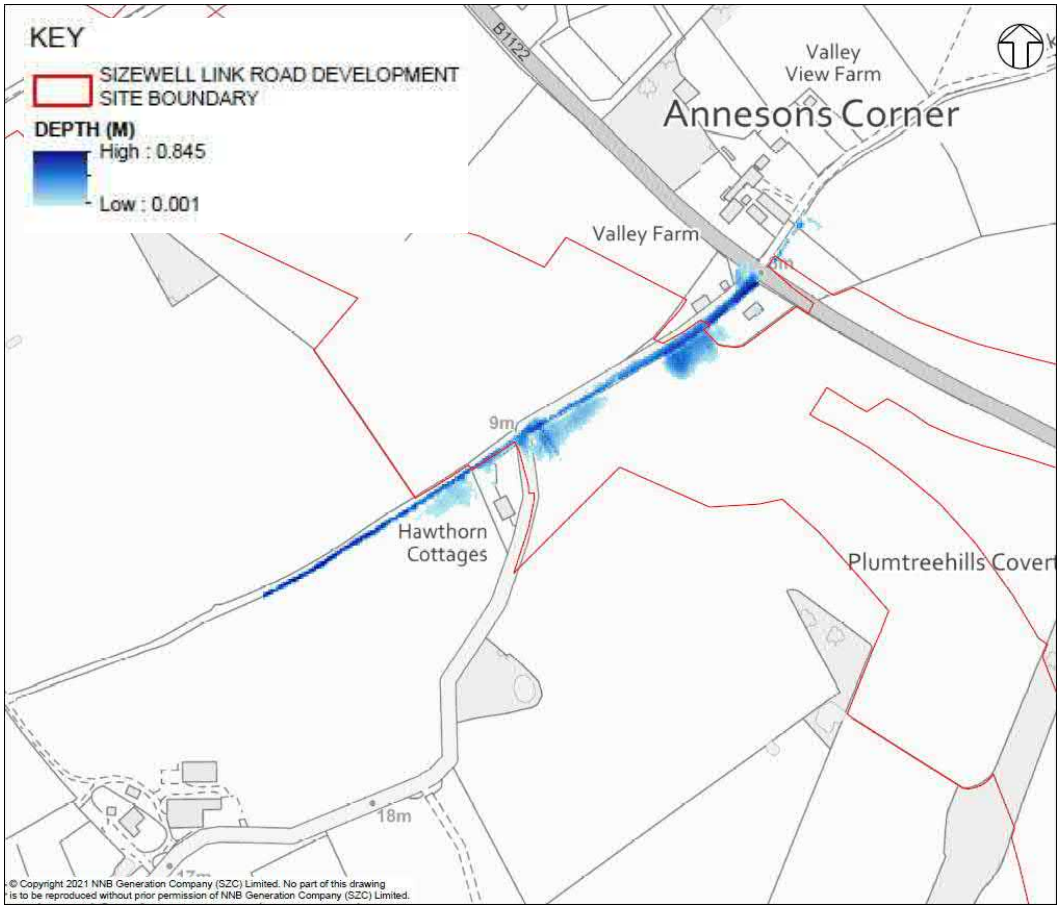


3.1.23 The flood risk at the proposed crossing 2, along the ordinary watercourse, is modelled as being low. All water is contained within the channel in the reach within the site boundary. Any water shown in the flood extent at crossing 2 comprises potential ponding of water in a topographical low spot and does not originate from the watercourse. Therefore, there is limited risk at both crossing 1 and crossing 2 to users of the site during construction.

iii. Crossing 3

3.1.24 Flood depth maps for crossing 3 (**Plate 3.8**) for the 1 in 1,000-year +35% climate change scenario indicate there is limited out of bank flooding along the watercourse with flood extents relatively small and localised. Flood depths along the southern side of the watercourse generally do not exceed 0.4m.

Plate 3.8: Baseline 1 in 1,000-year +35% climate change flood depths crossing 3



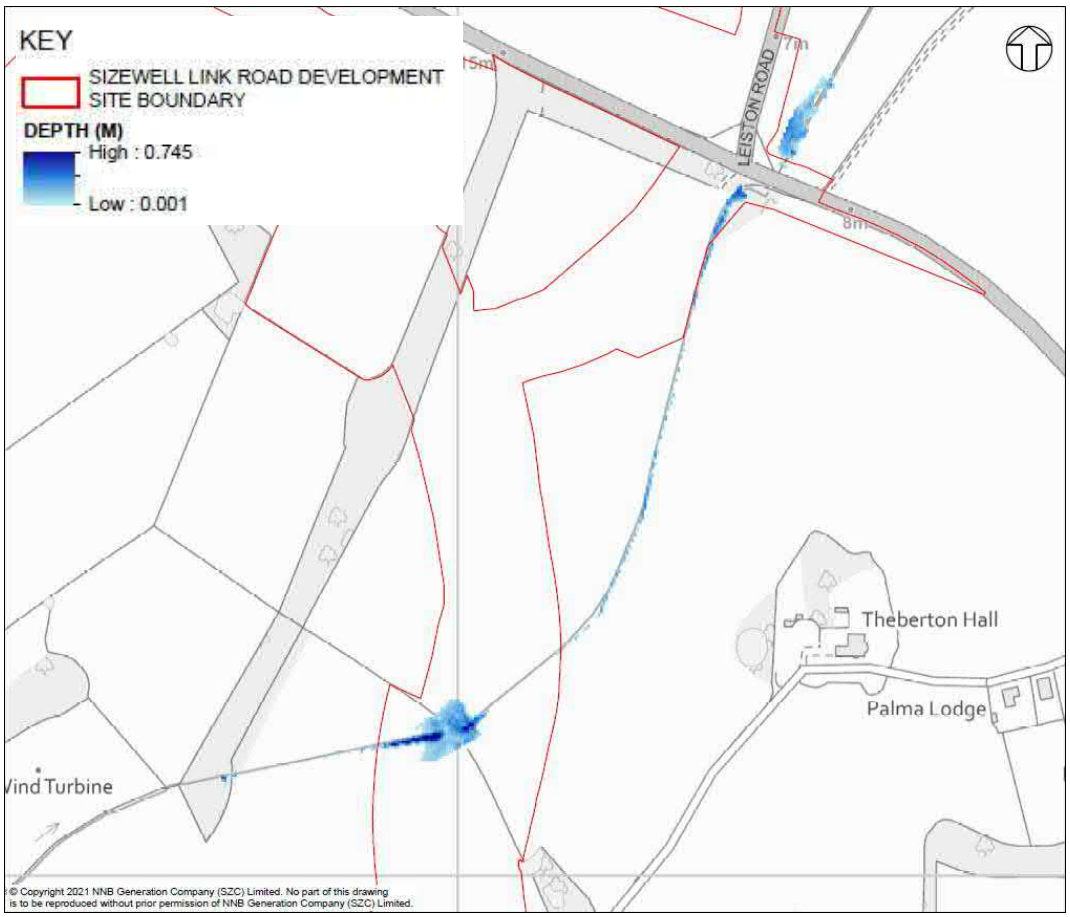
3.1.25 As noted above, flood depths within the floodplain at crossing 3 for the 1 in 1,000-year +35% climate change event within the site boundary, do not exceed 0.4m. Assuming 0.5m/s velocity and a 0.5 debris factor, this would indicate the hazard rating for these areas would comprise a hazard rating of 0.9, and therefore would be considered 'Danger for Some'.

iv. Crossings 4 and 5

3.1.26 Flood depth maps for crossings 4 and 5 for the existing baseline scenario for the 1 in 1000-year event with 35% climate change (**Plate 3.9**), show that the flood extent is very localised and limited to two areas, i.e., around the constriction at the existing culverts (crossing 5) and a small area downstream of B1122. It should be noted that the out of bank floodplain depths do not exceed 0.3m within the site boundary.

3.1.27 Additionally, the required road modifications will not extend to the existing culvert (at crossing 4) and thus the structure and the road levels will remain unchanged in this location.

Plate 3.9: Baseline 1 in 1,000-year +35% climate change flood depths crossing 4 and 5

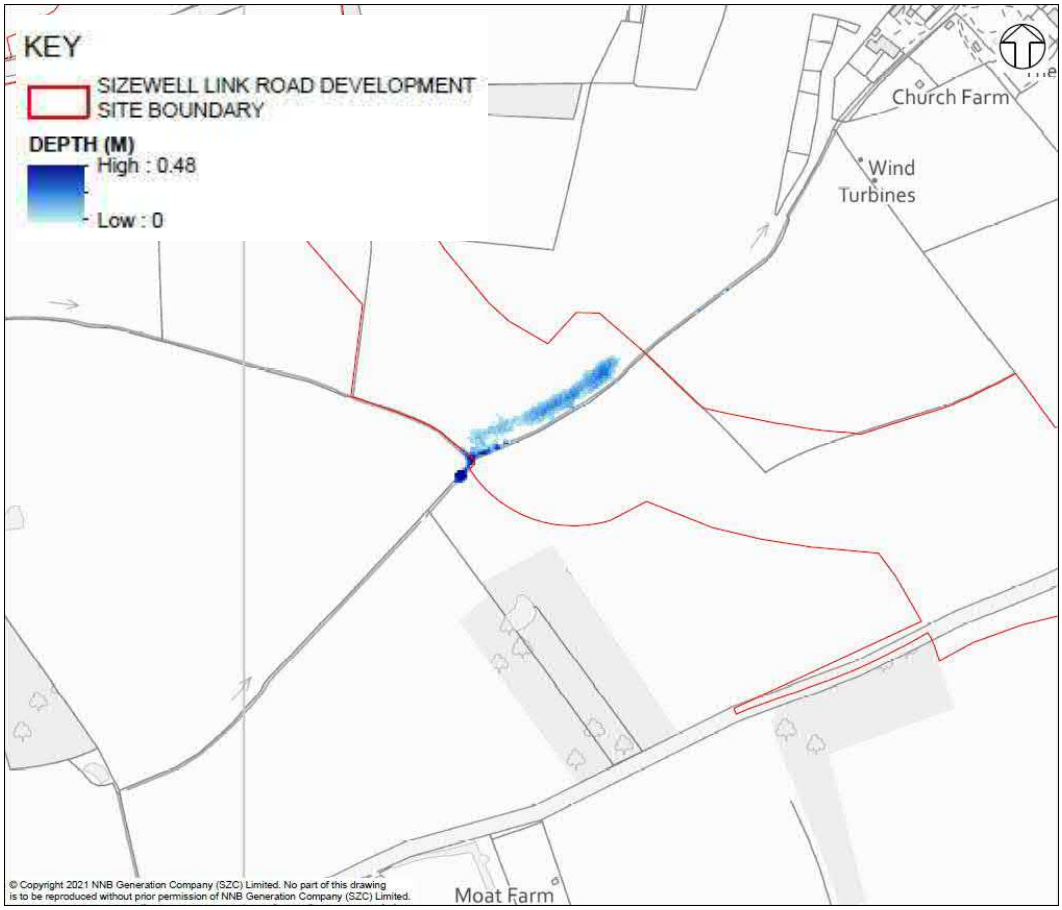


3.1.28 As noted above, flood depths within the floodplain at crossing 5 for the 1 in 1,000-year +35% climate change event within the site boundary, do not exceed 0.3m. Assuming 0.5m/s velocity and a 0.5 debris factor, this would indicate the hazard rating for these areas would comprise a hazard rating of 0.8, and therefore would be considered 'Danger for Some'.

v. Crossing 6

3.1.29 Flood depth maps for crossing 6 for the existing baseline scenario for the 1 in 1000-year event with 35% climate change show that flood extents are relatively small and localised with flood depths up to 0.3m, on the left bank of the watercourse (**Plate 3.10**).

Plate 3.10: Baseline 1 in 1,000-year +35% climate change flood depths crossing 6



3.1.30 As noted above, flood depths within the floodplain at crossing 6 for the 1 in 1,000-year +35% climate change event within the site boundary, do not exceed 0.3m. Assuming 0.5m/s velocity and a 0.5 debris factor, this would indicate the hazard rating for these areas would comprise a hazard rating of 0.8, and therefore would be considered 'Danger for Some'.

vi. Crossing 7

3.1.31 Flood depth maps for crossing 7 for the existing baseline scenario for the 1 in 1000-year event with 35% climate change (**Plate 3.11**) show the greatest flood depths (0.8m) occur on the eastern side of the B1122, outside of the site boundary. Flood depths within the site boundary generally do not exceed 0.6m and are limited to a small area on the western side of the B1122.

Plate 3.11: Baseline 1 in 1,000-year +35% climate change flood depths crossing 7

3.1.32 As noted above, flood depths within the floodplain at crossing 7 for the 1 in 1,000-year +35% climate change event within the site boundary, do not exceed 0.6m. Assuming 0.5m/s velocity and a 0.5 debris factor, this would indicate the hazard rating for these areas would comprise a hazard rating of 1.1, and therefore would be considered 'Danger for Some'.

vii. Summary

3.1.33 The updated modelling results show very localised and negligible flood risk to the areas around the existing watercourses; i.e. existing flood risk is primarily limited to the agricultural land immediately adjacent to the channel.

3.1.34 Analysis has shown that the hazard ratings for all of the crossings do not exceed 'Danger for Some'. Additionally, the flood risk in these locations is very localised and does not extend significantly beyond the watercourse or across the whole width of the proposed Sizewell link road.

3.1.35 As previously noted, during the 1 in 1,000-year +35% climate change event there would be no out bank flooding at either crossing 2 and crossing 4 and water levels would remain in-channel. Additionally, the required road modifications will not extend to the existing culvert (at crossing 4) and thus the structure and the road levels will remain unchanged in this location.

c) Embedded design measures

3.1.36 To avoid the potential risk of flooding to users in the future the design of the Sizewell link road has been developed such that it is elevated above the likely flood levels during an extreme flood event once operational.

3.1.37 In the absence of hazard mapping, the precautionary position would be to demonstrate that a development site has access and exit routes that are above flood levels for acceptable annual probability events.

3.1.38 During construction it is anticipated that works along the route of the Sizewell link road will be carried out primarily in Flood Zone 1. Where there is a requirement to work within areas at risk of flooding, associated with the crossing over the watercourses, the Sizewell link road will be raised above potential flood levels.

3.1.39 **Table 3.1** summarises the modelled peak water levels with the Sizewell link road levels post-construction. The freeboard, for both the 1 in 1,000-year +35% climate change and 1 in 1,000-year +65% climate change scenarios, for crossing 7 is greater than 0.7m, the freeboard for crossing 1, 3 and 6 is greater than 2m and the freeboard at crossing 2 and 5 is greater than 3m.

3.1.40 Upon completion of the Sizewell link road, the modelling indicates that it would not be at risk of flooding for the 1 in 1000-year event in the baseline and future scenarios.

Table 3.1: Modelled peak water levels and road crossing levels

Location	Return period (years)	Baseline level (mAOD)	With scheme level (mAOD)	Road level (mAOD)	Freeboard (m)
Crossing 1	1,000 + 35%CC	11.50	11.15	13.50	+2.35
	1,000 + 65%CC	11.55	11.30		+2.20
Crossing 2	1,000 + 35%CC	12.74	12.74	16.50	+3.76
	1,000 + 65%CC	12.78	12.78		+3.22
Crossing 3	1,000 + 35%CC	8.43	8.72	11.60	+2.88
	1,000 + 65%CC	8.49	8.78		+2.82
Crossing 5	1,000 + 35%CC	12.40	11.40	15.16	+3.76
	1,000 + 65%CC	12.42	11.48		+3.68
Crossing 6	1,000 + 35%CC	12.06	12.09	14.40	+2.31
	1,000 + 65%CC	12.10	12.15		+2.25
Crossing 7	1,000 + 35%CC	7.26	7.19	7.95	+0.76
	1,000 + 65%CC	7.28	7.23		+0.72

3.1.41 To manage the impact of flood risk on the proposed development during the construction phase, measures to work outside the channel of the watercourses and outside the floodplain, where possible, have been identified.

3.1.42 There remains the potential for there to be a flood risk to construction workers during the construction phase when constructing the crossings over each of the watercourses and their associated floodplains; however, this is likely to be relatively localised in nature.

3.1.43 The remainder of this FREP focuses on the measures and actions that will be put in place to minimise the impact of flooding during the construction phase.

3.2 Construction Phase: Pre-Construction Actions

3.2.1 Prior to the commencement of construction of the proposed Sizewell link road it shall be the responsibility of the construction contractor to ensure that all actions outlined in the FREP are implemented.

3.2.2 These actions are summarised as follows:

- Undertake a review of the FREP and make updates to take into account new or additional information;
- Register with the Met Office weather warning system and become familiar with the Environment Agency Flood Warnings – i.e. identify how, where and when to obtain this information and understand what they mean in terms of risk to the construction works.
- Ensure all construction personnel are aware of the FREP and are trained sufficiently to implement the procedures set out in the FREP;
- Construction contractor to develop an emergency access and egress plan for the works in the floodplain. During site inductions, all staff will need to be made aware of the emergency access and egress arrangements; and
- Construction contractors identify an appropriate designated evacuation point. The designated point should be located within Flood Zone 1.

3.3 Construction Phase: List of Roles

a) Key Personnel

3.3.1 **Table 3.2** summaries the key personnel that have significant roles during a flooding event. It should be reviewed and updated by the construction contractor before construction works begin, reviewed periodically and, where necessary, updated throughout the construction phase.

Table 3.2: Key Personnel / Agencies and their role

Title	Role
SZC Co. Project Team Manager	Ensure that the Flood Warning and Evacuation Plan has been put in place. Ensure sufficient resources (people, time and money) are provided to implement the FREP.
Contractor Construction Manager (prior to commencement of works)	This role is to ensure all the pre-occupation actions have been completed as well as to ensure that the FREP is reviewed and updated, ideally every three months.
Contractor Construction Manager (during construction)	Once flood warnings / alerts have been received it is the Construction Manager's responsibility to disseminate flood alerts to all members of staff. When severe weather or flood warnings have been issued it is the Construction Manger's responsibility to ensure that the construction work site and compounds are being closed due to potential flooding, and plant / materials moved, where appropriate. It is also the Construction Manager's responsibility to operate emergency electrical shut off switches that terminate electricity supply to the construction works. The Construction Manager should direct the evacuation of the construction works sites and help other members of staff to move to the designated evacuation point location in Flood Zone 1. The Construction Manager should take a register to ensure all staff are accounted for. The Construction Manager should then provide an update to any on-site emergency services confirming that the site has been evacuated.
Environment Agency	The Environment Agency issues flood warnings and alerts. The proposed development is not located within an automatic flood warning / alert area so the flood warnings in the local area must be monitored manually on a regular basis in association with relevant weather warnings. The Environment Agency information is available online and / or by contacting 0845 988 1188.
Met Office	The Met Office issues alerts for weather warnings which can be signed up to via email, mobile phone application or via Twitter. Email notifications can be subscribed to via the following link: https://service.govdelivery.com/accounts/UKMETOFFICE/subscriber/new

b) Emergency Services

3.3.2 **Table 3.3** provides contact numbers for relevant Emergency Services. In an emergency where there is a real and immediate threat to life or property always dial 999.

Table 3.3: Key Contact Numbers

Organisation	Contact Number
Suffolk Fire and Rescue	01473 260 588 (Mon -Thurs 9am – 5pm, Fri 9am – 4pm) 01480 444 500 (out of office hours)
Suffolk Constabulary	101
Environment Agency	0845 988 1188

3.3.3 If medical attention is required within the workplace, appropriately trained, First Aiders should be in attendance and a record of the individual affected and the circumstances relating to the incident should be kept.

3.3.4 The closest hospital with an Accident and Emergency Department to the proposed Sizewell link road is Ipswich Hospital. The hospital can be contacted on 01473 712233. The address is: Heath Road, Ipswich, Suffolk, IP4 5PD.

3.4 Construction Phase: Emergency Plan

a) Environment Agency Flood Warnings

3.4.1 The proposed Sizewell link road and, specifically, the watercourse crossings, are not covered by the automatic Environment Agency flood forecasting and flood warning / alert service. This means it is not possible to receive automatic flood warnings. However, the Environment Agency flood warnings should be manually monitored for warnings in the local area, and processes adopted as if the site were within a flood warning or flood alert area.

3.4.2 The Environment Agency flood warnings and flood alerts can be monitored using the online interactive map found at https://flood-warning-information.service.gov.uk/warnings and consist of the following levels:

- Flood Alert: Flooding is possible – be prepared;
- Flood Warning: Flooding is expected – immediate action is required; and
- Severe Flood Warning: Severe flooding – danger to life.

3.4.3 The Environment Agency also operate a 5 day county-wide forecast available at https://flood-warning-information.service.gov.uk/5-day-flood-risk in relation to flood risk. It is recommended that this service is regularly

checked by the Construction Manager to ensure that workers on site are aware of any possible risks.

3.4.4 The 5-day forecast is split into four warning categories associated with various flood risk levels:

- Very Low Risk (Green): Flooding is very unlikely;
- Low Risk (Yellow): Flooding is possible – be aware;
- Medium Risk (Amber): Flood is expected – be prepared; and
- High Risk (Red): Significant risk to life – take action.

3.4.5 In addition, the Environment Agency also provide information on river levels at a number of gauging stations around the country which is available at https://flood-warning-information.service.gov.uk/river-and-sea-levels. The nearest gauge to the proposed Sizewell link road is the River Fromus at Saxmundham and whilst the proposed development is not within the catchment for this watercourse, the river levels for this station may be reviewed as an indicator to potential flood risks in the area.

3.4.6 It is possible to obtain flood warnings and alert information from the Environment Agency Floodline, a 24-hour telephone service on 0845 988 1188 that provides frequently updated flood warnings and associated flood risk information.

3.4.7 It is important to note that the Environment Agency's flood warnings are only issued in relation to fluvial and tidal flooding and do not cover other sources of flooding such as surface water or groundwater flooding.

3.4.8 It is the responsibility of the Construction Manager to regularly monitor the above sources for flood warnings and alerts, and when a warning is issued, take appropriate action as necessary.

b) Met Office Weather Warnings

3.4.9 In addition to monitoring the Environment Agency flood warnings, it is recommended that the Construction Manager subscribes to weather warnings from the Met Office. These provide an indication of when weather warnings, i.e. extreme rainfall, is forecast and enables appropriate action to be taken.

3.4.10 During periods of bad weather, the Construction Manager should monitor the local weather reports and the Met Office UK weather warnings. Weather warnings can be monitored through an Apple / Android application for

Smartphones, Twitter or directly via emails. Further information can be found at https://www.metoffice.gov.uk/.

c) Evacuation triggers

3.4.11 Environment Agency flood warnings and Met Office weather warnings should be used to set evacuation triggers. Three trigger stages have been identified, namely, to implement a review of the FREP procedures, place staff on green alert (state of readiness) or issue a red alert (site evacuation).

d) Flood management and evacuation procedures

3.4.12 The proposed flood evacuation procedures are outlined in **Table 3.4**.

Table 3.4: Flood Evacuation Procedures

Warning Trigger	Trigger Stage	Procedures
Environment Agency Flood Alert or Met Office Yellow Rain Warning	Review FREP	Review FREP and emergency access and egress plans. Review current construction works and whether these are in proximity to the Middleton / Theberton Watercourse (Main River) or any of the other ordinary watercourses.
Environment Agency Flood Warning or Met Office Amber Rain Warning	Green Alert	Green Alert represents a state of readiness ahead of a potential flood situation. Check that all equipment can be accessed, is available and in good condition for use, with specific reference to –road closure signs, torches (check battery life / spares), high visibility jackets for all staff. Secure construction compounds and relocate vulnerable plant / machinery / stores, located in Flood Zone 3, to Flood Zone 1 if possible and cease work in Flood Zone 3. Review any temporary construction measures, both in the channel or on the floodplain e.g. cofferdams / sheet piles. Check the temporary flume pipes to ensure that flow can be maintained. Allow for handover should shift change occur before the warning is lowered. Check staff registers are complete and available to ensure all staff are accounted for post-evacuation.
Environment Agency Severe Flood Warning or Met Office Red Weather Warning	Red Alert	Immediately commence evacuation of construction work sites and compounds. Use allocated evacuation route to facilitate / direct the safe evacuation of all personnel. A register should be taken to ensure all staff are safe.

Warning Trigger	Trigger Stage	Procedures
		Contact the Emergency Services and Environment Agency to confirm that the Construction Compounds are being closed due to possible risk of flooding. The Construction Manager shall operate the emergency electrical shut off switches terminating the electricity supply and all power supplies to construction works sites / compounds, where necessary.

e) Evacuation routes and designated evacuation points

3.4.13 It is assumed that evacuation would be via the temporary access routes, along the route of the Sizewell link road, through the relatively narrow extents of Flood Zone 3 and 2 and into Flood Zone 1 away from the source of flooding.

3.4.14 Access and egress will be along the proposed carriageway, which will also act as the temporary access route, and is set above the modelled flood levels for the design event. Therefore, the road has been designed to provide safe and dry access.

3.4.15 Evacuation will be away from the watercourse towards designated evacuation points at either of the temporary contractor compounds in Flood Zone 1 or another appropriate location away from the watercourse and within Flood Zone 1.

3.4.16 It should be noted from **Plate 3.7** to **Plate 3.11** that the flood risk is generally confined to within the banks of the watercourses and the narrow strips of floodplain immediately adjacent to these. Therefore, evacuation away from the flood risk can be achieved relatively easily by moving away from the banks of the watercourse, either onto the Sizewell link road itself or towards the adjacent land in a generally north or south direction.

3.4.17 These details will be confirmed with the construction contractor for the proposed Sizewell link road prior to commencement of construction.

3.5 Construction Phase: Post-Event

3.5.1 In the event of a severe flood warning or a red weather warning and the construction works at the proposed Sizewell link road being put into Red Alert, the site will not be re-occupied until either the Environment Agency or other relevant emergency services confirm it is safe to do so.

3.5.2 Before the site can be reoccupied a full visual assessment of condition / stage of each of the watercourses will be undertaken by a suitably qualified

engineer, familiar with watercourse behaviour and bank stability. Any post-event clear up will be carried out, prior to construction works recommencing. Once it has been confirmed by the Contractor Construction Manager that the site has been made safe, any construction works, plant and material can return to the construction site.

3.5.3 As the temporary contractor compound(s) are to be located in Flood Zone 1 there are no proposed buildings located in either Flood Zones 2 or 3. On this basis, there is no post-event clear up needed for these elements.

3.6 Construction Phase: Training

3.6.1 During the construction phase a Flood Manager would be appointed by the construction contractor. The Flood Manager will ensure that all construction personnel are aware of the potential flood risk and of how to respond in the event of a flooding emergency. The training for construction personnel would, as a minimum, cover:

- Requirements of the Flood Warning and Evacuation Plan;
- Confirmation of key roles, identifying the positions held, individual responsibilities, communication and chain of command;
- Evacuation routes and evacuation points;
- Staff safety during a flood event;
- Electrical systems emergency shut off procedures, where appropriate; and
- Operation of communication / public address system, signage and traffic management systems.

3.6.2 Training will be provided to all construction staff as part of the site induction process and regularly reviewed throughout the construction process, as part of Tool Box talks and pre-task talks.

REFERENCES

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6. HR Wallingford. Flood Risk Assessment Guidance for New Development, Phase 2, FD2320/TR2 Framework and Guidance for Assessing and Managing Flood Risk for New Development – Full Documentation and Tools, Defra and Environment Agency Flood and Coastal Defence R&D Programme, October 2005.