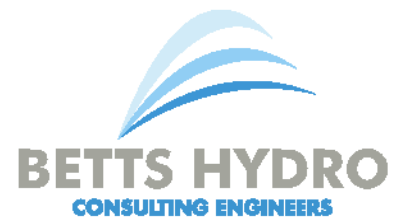


1st September 2022

SEP Construction Services Ltd
The Mezzanine
Royal Liver Building
Liverpool Waterfront
L3 1HU



DYE HOUSE, PRESCOT

HYDRAULIC MODELLING ASSESSMENT NOTE

Outline Assessment

This assessment analyses flood risk to the site at Dye House, which is accessed off Liverpool Road in Prescot. A Flood Risk and Hydraulic Modelling Scoping Exercise has been undertaken previously for the site and has reviewed the relevant hydraulic model for the site provided by the Environment Agency (EA).

This assessment has utilised the fluvial Logwood Mill Brook, which is a 1D – 2D ISIS-TUFLOW model. The model was created by JBA in 2012 to refine the Flood Zones in the area, and since the creation of this model there have been changes to the fluvial allowances for climate change. The Logwood Mill Brook model therefore required updating to meet these new standards. The most up to date LiDAR information has been used to more accurately model ground levels onsite.

Site Information

The site is located at Dye House in Prescot, the nearest Ordnance Survey National Grid Reference is E: 345816, N: 392765 and the nearest postcode is L34 3LX (see the Location Plan in **Appendix A**).



Figure 1: Site Location and Features (Betts Hydro, 2022)

Page 1 of 5



Old Marsh Farm Barns
Welsh Road, Sealand
Flintshire CH5 2LY
Telephone: 01244 289 041

LiDAR data has been used to identify existing ground levels. An elevation plan has been created and included within **Appendix B**. The onsite ground levels fall from 54.00mAOD adjacent to the south-western boundary of the site, down toward the Main River (Prescot Brook) at 50.25mAOD. The arrows shown on **Figure 1** give a general indication of the fall across the site.

Peak River Climate Change Allowances

Peak river flow allowances show the anticipated changes to peak flow by management catchment. Management catchments are sub-catchments of river basin districts.

The range of allowances is based on percentiles. A percentile describes the proportion of possible scenarios that fall below an allowance level. The 50th percentile is the point at which half of the possible scenarios for peak flow fall below it, and half fall above it.

The:

- Central allowance is based on the 50th percentile.
- Higher central allowance is based on the 70th percentile.
- Upper end allowance is based on the 95th percentile

An allowance based on the 50th percentile is exceeded by 50% of the projections in the range. At the 70th percentile it is exceeded by 30%. At the 95th percentile it is exceeded by 5%.

For the Lower Mersey Management Catchment, the peak river allowances are shown in **Table 1**.

Table 1: Peak Climate Change River Allowances Lower Mersey Management Catchment (EA 2022)

Year	Central	Higher	Upper
2020s	18%	22%	32%
2050s	27%	35%	55%
2080s	44%	57%	90%

The Environment Agency guidance for "more vulnerable" development is to use the Central allowance, thus an increase of 44% has been applied to the peak 1 in 100 year flow in the Logwood Mill Brook model. The previous allowances used within the model were 30%, 35% and 70%.

Hydraulic Modelling Assessment

The model inflow boundaries were updated to meet latest climate change standards. The following simulations have been undertaken:

- 1 in 100 year fluvial event
- 1 in 100 year fluvial event plus 44% climate change
- 1 in 1000 year fluvial event
- 95% blockage 1 in 100 year fluvial event plus 44% climate change

Fluvial Results

100 Year Event – 1% AEP

The predicted flood depth for the fluvial 1 in 100 year event is shown on **Drawing No. HYD730/102/A**, the predicted flood level is shown in **Drawing no. HYD695/103/A**, and the predicted flood velocity is shown in **Drawing no. HYD730/104/A**. The site is shown to remain dry, safe, and flood free in the fluvial 1 in 100 year event with no predicted flooding in close proximity to the site. The nearest flooding to the site is located 550m south-east of the site, and west of Cables Way.

100 Year Event Plus 44% Climate Change – 1% AEP plus 44% CC

The predicted flood depth for the 1 in 100 year plus 44% climate change fluvial event is shown on **Drawing No. HYD730/105/A**. The northern portion of the site is shown to be inundated, in the 1 in 100 year plus 44% climate change event with flood depths up to 0.51m. The peak water level onsite is 50.85mAOD as shown on **Drawing no. HYD730/106/A**. The maximum flood velocity is 0.11m/s as shown on **Drawing no. HYD730/107/A**.



Figure 2: Fluvial 1 in 100yr plus 44% Climate Change Flood Depth Extract (Betts Hydro, 2022)

1000 Year Event – 0.1% AEP

The predicted flood depth for the 1 in 1000 year fluvial event is shown on **Drawing No. HYD730/108/A**. The site is shown to be inundated along the eastern boundary, with a maximum flood depth of up to 0.82m onsite. The peak water level onsite is 51.27mAOD as

shown on **Drawing No. HYD730/109/A**. The maximum flood velocity onsite is 0.17m/s adjacent to the channel, as shown on **Drawing No. HYD730/110/A**.

95% Blockage 100 Year Event Plus 44% Climate Change – 1% AEP plus 44% CC

The predicted flood depth for the 95% blockage scenario in the 1 in 100 year plus 44% climate change fluvial event is shown on **Drawing No. HYD730/111/A**. The site is shown to be inundated, in the 1 in 100 year plus 44% climate change event with flood depths up to 0.76m. Flows travel around the blockage to the north before returning to the channel adjacent to Liverpool Road. The peak water level onsite is 51.42mAOD as shown on **Drawing no. HYD730/112/A**. The maximum flood velocity is 0.76m/s as shown on **Drawing no. HYD730/113/A**.

Proposed 100 Year Event Plus 44% Climate Change – 1% AEP plus 44% CC

A proposed run has been simulated to evidence the proposed development will remain flood free in the design event. The predicted flood depth for the 1 in 100 year plus 44% climate change fluvial event is shown on **Drawing No. HYD730/114/A**. Flooding is shown to remain in the channel corridor and not in the area of proposed development due to levels raising. The peak water level onsite is 50.86mAOD as shown on **Drawing no. HYD730/115/A**. The Finished Floor Level of the apartment building is shown to be elevated more than 600mm above the peak design event at 53.15mAOD. The maximum flood velocity in-channel is 0.12m/s as shown on **Drawing no. HYD730/116/A**.

The proposed scenario has been compared against the existing scenario. There is shown to be minor increases in top water level within the main channel upstream and downstream of the site. This increase is reduced to the same top water level 200m to the south of the site.

Conclusions and Recommendations

The predicted results show that the site is only impacted by the fluvial 1 in 100 year event plus 44% climate change and the 1000 year event, the maximum flood level for these events is 50.85mAOD and 51.27mAOD.

The EA typically require that finished floor levels be set 600mm above the top water level in the fluvial 1 in 100 year plus 44% climate change event. It is therefore recommended the FFLs on site are raised above the in-channel TWL in the fluvial 1 in 100 year plus 44% climate change event, review of the proposed FFL of the apartment block shows the proposed finished floor level is elevated above this and also shown to be above the residual blockage event.

It is recommended these findings are incorporated into a Flood Risk Assessment (FRA) in order to support any planning applications on the site. Details on emergency access and egress should also be included within an FRA.

I trust you will find the above of assistance, however, if you have any queries or require further information, please do not hesitate to contact me.

Yours sincerely,



Hannah Buchanan BSc (Hons) MSc GradCIWEM
Graduate Flood Risk Analyst
BETTS HYDRO

Enc.	HYD730/102/B	1 in 100 year fluvial flood depth plan
	HYD730/103/B	1 in 100 year fluvial flood level plan
	HYD730/104/B	1 in 100 year fluvial flood velocity plan
	HYD730/105/B	1 in 100 year climate change fluvial flood depth plan
	HYD730/106/B	1 in 100 year climate change fluvial flood level plan
	HYD730/107/B	1 in 100 year climate change fluvial flood velocity plan
	HYD730/108/B	1 in 1000 year fluvial flood depth plan
	HYD730/109/B	1 in 1000 year fluvial flood level plan
	HYD730/110/B	1 in 1000 year fluvial flood velocity plan
	HYD730/111/A	95% Blockage 1 in 100 year climate change fluvial flood depth plan
	HYD730/112/A	95% Blockage 1 in 100 year climate change fluvial flood level plan
	HYD730/113/A	95% Blockage 1 in 100 year climate change fluvial flood velocity plan
	HYD730/114/B	Proposed 1 in 100 year climate change fluvial flood depth plan
	HYD730/115/B	Proposed 1 in 100 year climate change fluvial flood level plan
	HYD730/116/B	Proposed 1 in 100 year climate change fluvial flood velocity plan
	HYD730/117/B	Proposed 95% Blockage 1 in 100 year climate change fluvial flood depth plan
	HYD730/118/B	Proposed 95% Blockage 1 in 100 year climate change fluvial flood level plan
	HYD730/119/B	Proposed 95% Blockage 1 in 100 year climate change fluvial flood velocity plan

* Note - No onsite flooding is identified during the fluvial 1 in 100yr event. *

DO NOT SCALE

Legend:

Planning Application Boundary

Flood Depth (m)

- | |
|-------------|
| 0.01 - 0.20 |
| 0.21 - 0.40 |
| 0.41 - 0.60 |
| 0.61 - 0.80 |
| 0.81 - 1.00 |
| 1.01 - 1.20 |
| 1.21 - 1.40 |
| 1.41 - 1.60 |
| 1.61 - 1.80 |
| 1.81 - 2.00 |
| 2.00 + |

REV	DATE	BY	DESCRIPTION	CHK
B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



BETTS HYDRO
CONSULTING ENGINEERS

Unit 6, Old Marsh Farm Barns, Welsh Road, Sealand, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



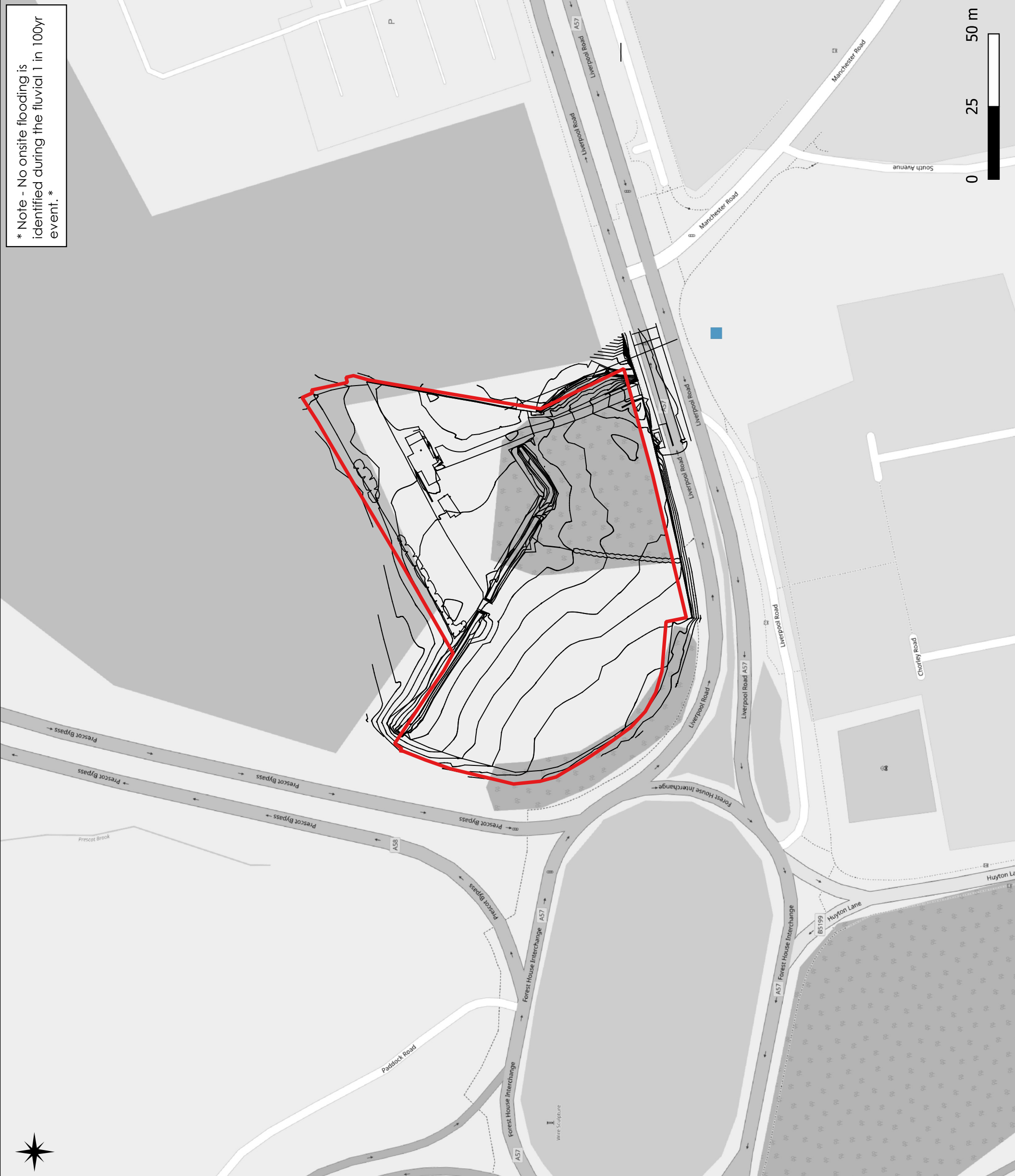
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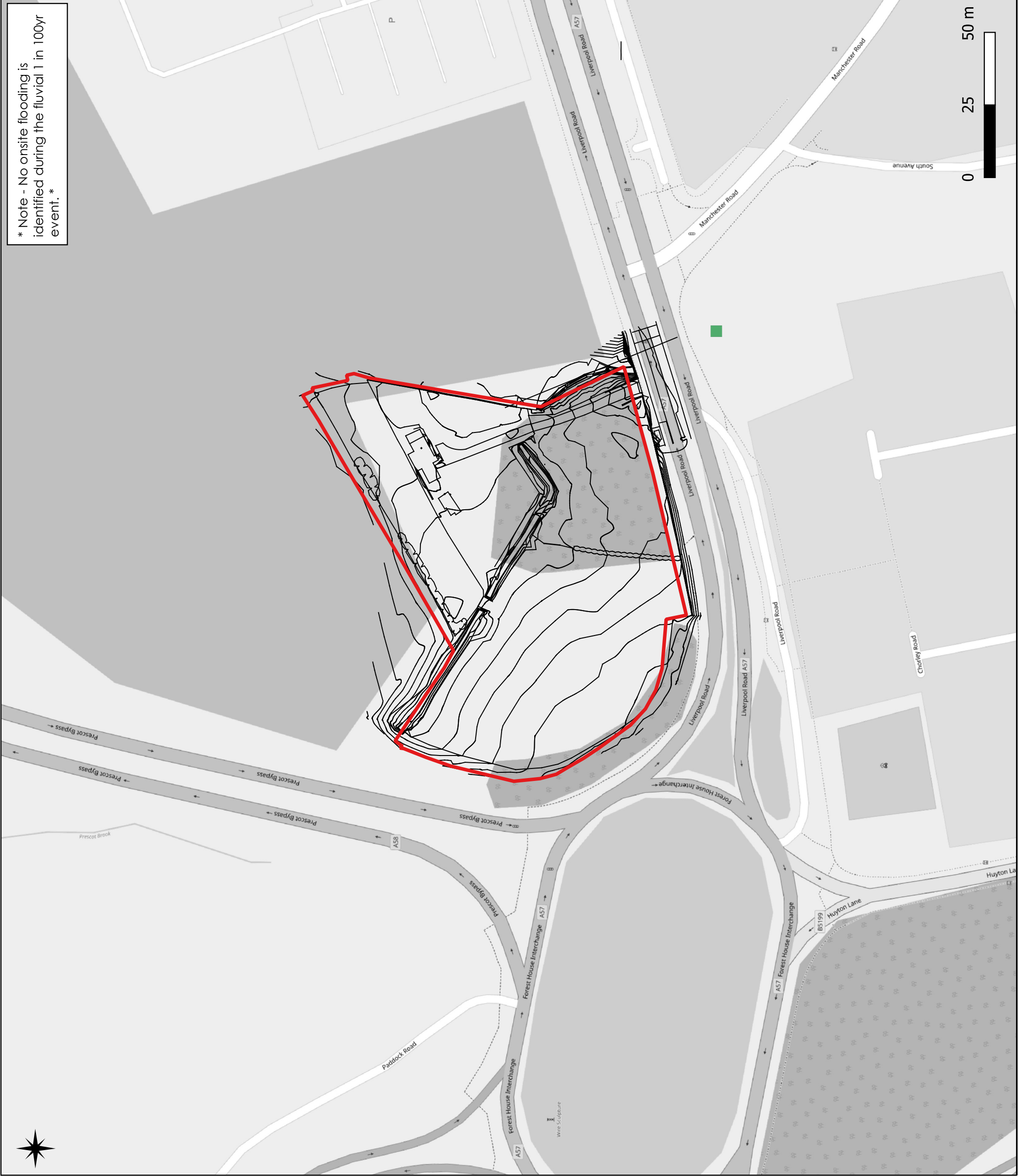
DYE HOUSE
PRESCOT

FILE:	

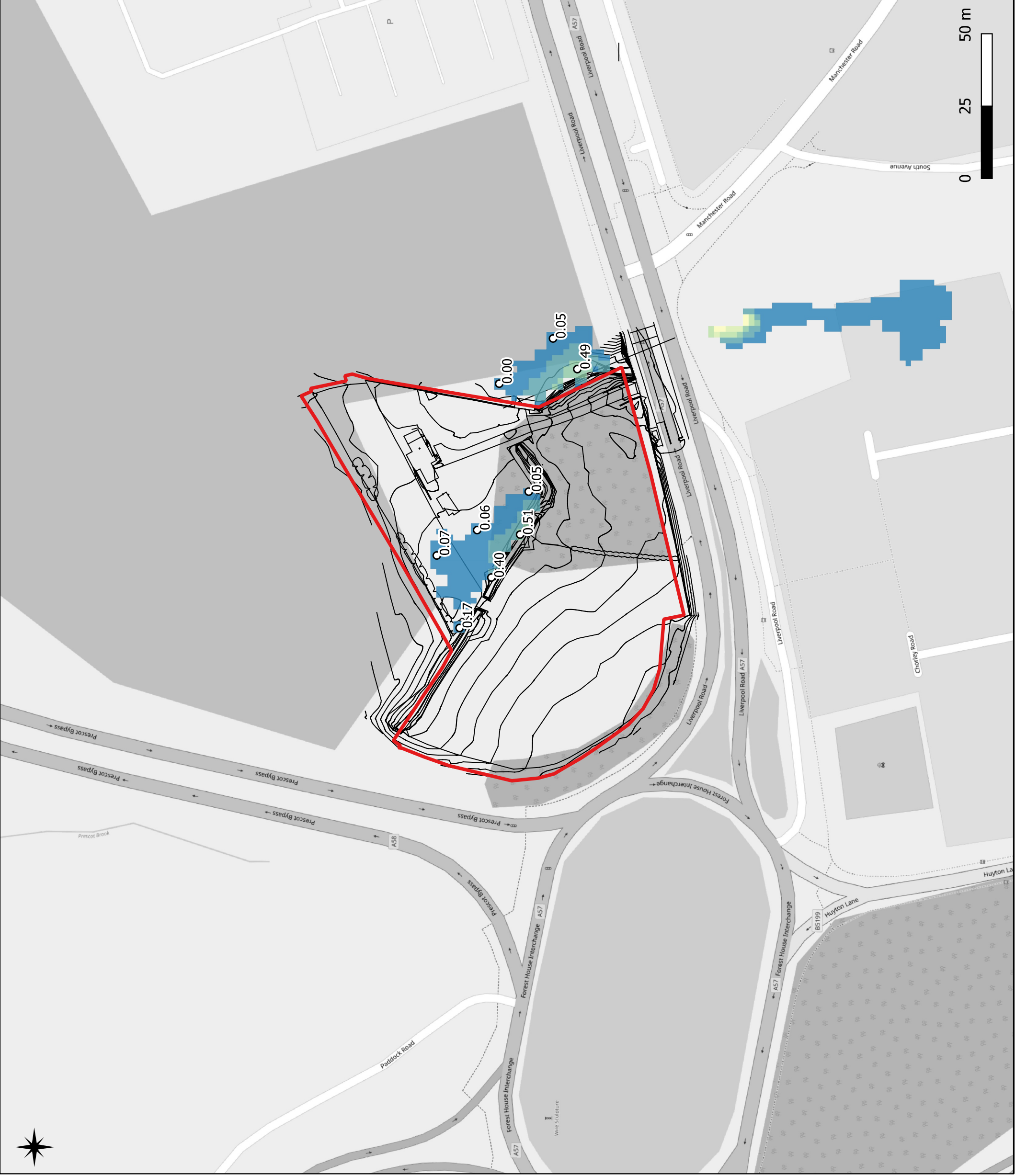
PRESCOT BROOK
1 IN 100 YEAR (Q100)
FLOOD DEPTH PLAN

DATE:	AUG 22	SCALE @ SIZE:	1:1250@A3	DRAWN:	HB	CHECKED:	PT
PROJECT NO:		HYD730		DRAWING NO:		102	
				REV:		B	





DO NOT SCALE				
Legend:				
Planning Application Boundary				
Flood Velocity (m/s)				
<= 0.1				
0.1 - 0.2				
0.2 - 0.5				
0.5 - 1.0				
1.0 - 1.5				
1.5 - 2.0				
2.0 - 2.5				
2.5 - 3.0				
3.0 - 3.5				
> 3.5				



Legend:

- o Spot Depth

 0.01 - 0.20 0.41 - 0.60

0.81 - 1.00

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
--	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



Unit 6, Old Marsh Farm Bams, Welsh Road, Sealand, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk

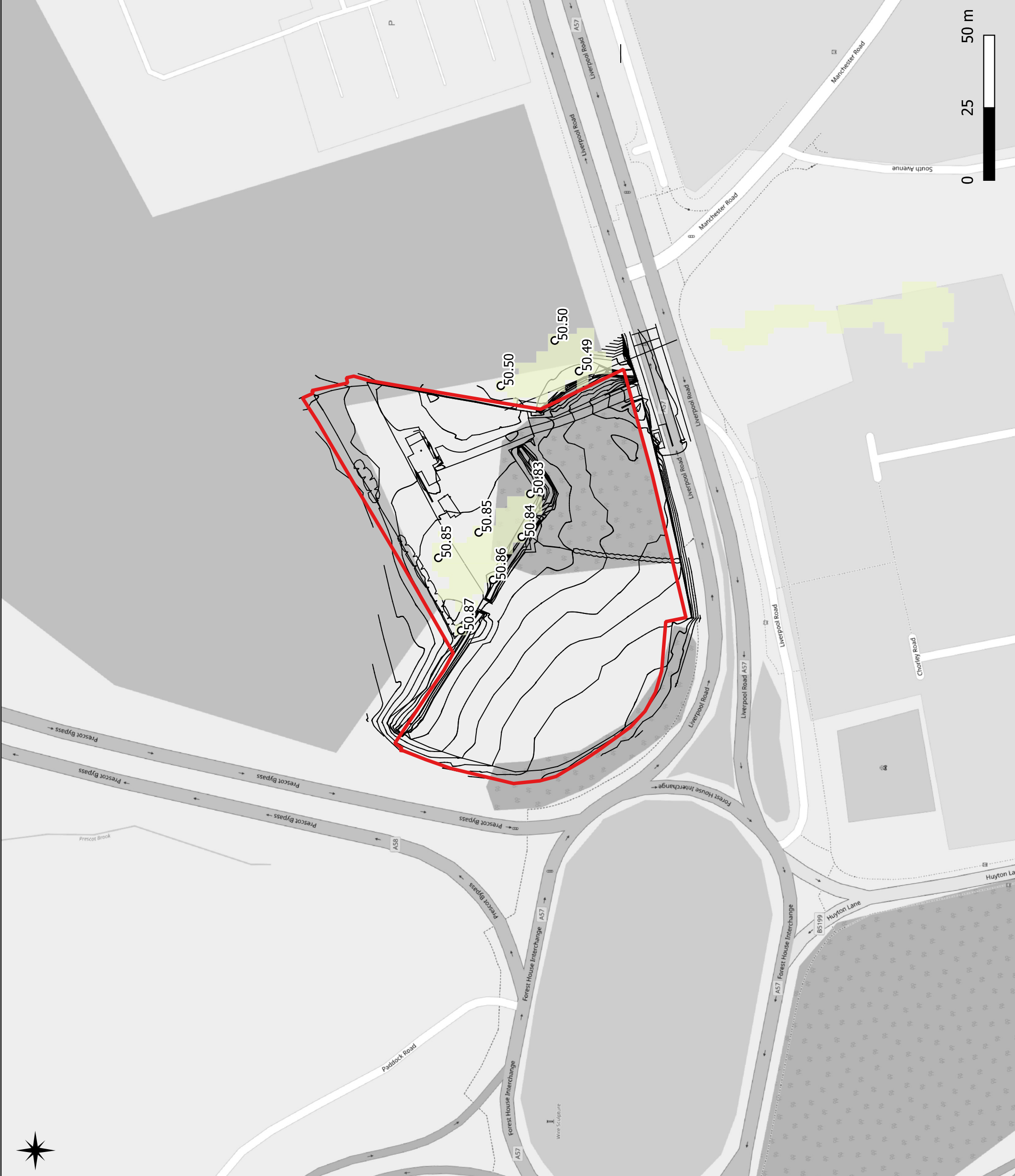


PROJECT:

DYE HOUSE
PRESCOT

PRESCOT BROOK
1 IN 100 YEAR PLUS 44% CC
(Q100 CC 44%)
FLOOD DEPTH PLAN

DATE:	AUG 22	SCALE @ SIZE:	1:1250@A3	DRAWN:	HB	CHECKED:	PT
PROJECT NO:		HYD730		DRAWING NO:		105	
				REV:		B	



Legend:

Planning Application Boundary

Flood Level (mAOD)

43.00 - 45.00

47.00 - 49.00

51.00 - 53.00

55.00 - 57.00

> 59.00

REV	DATE	BY	DESCRIPTION	CHK
B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



Unit 6, Old Marsh Farm Barns, Welsh Road, Sealand, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



DYE HOUSE
PRESCOT

TITLE:

PRESCOT BROOK
1 IN 100 YEAR PLUS 44% CC
(Q100 CC 44%)

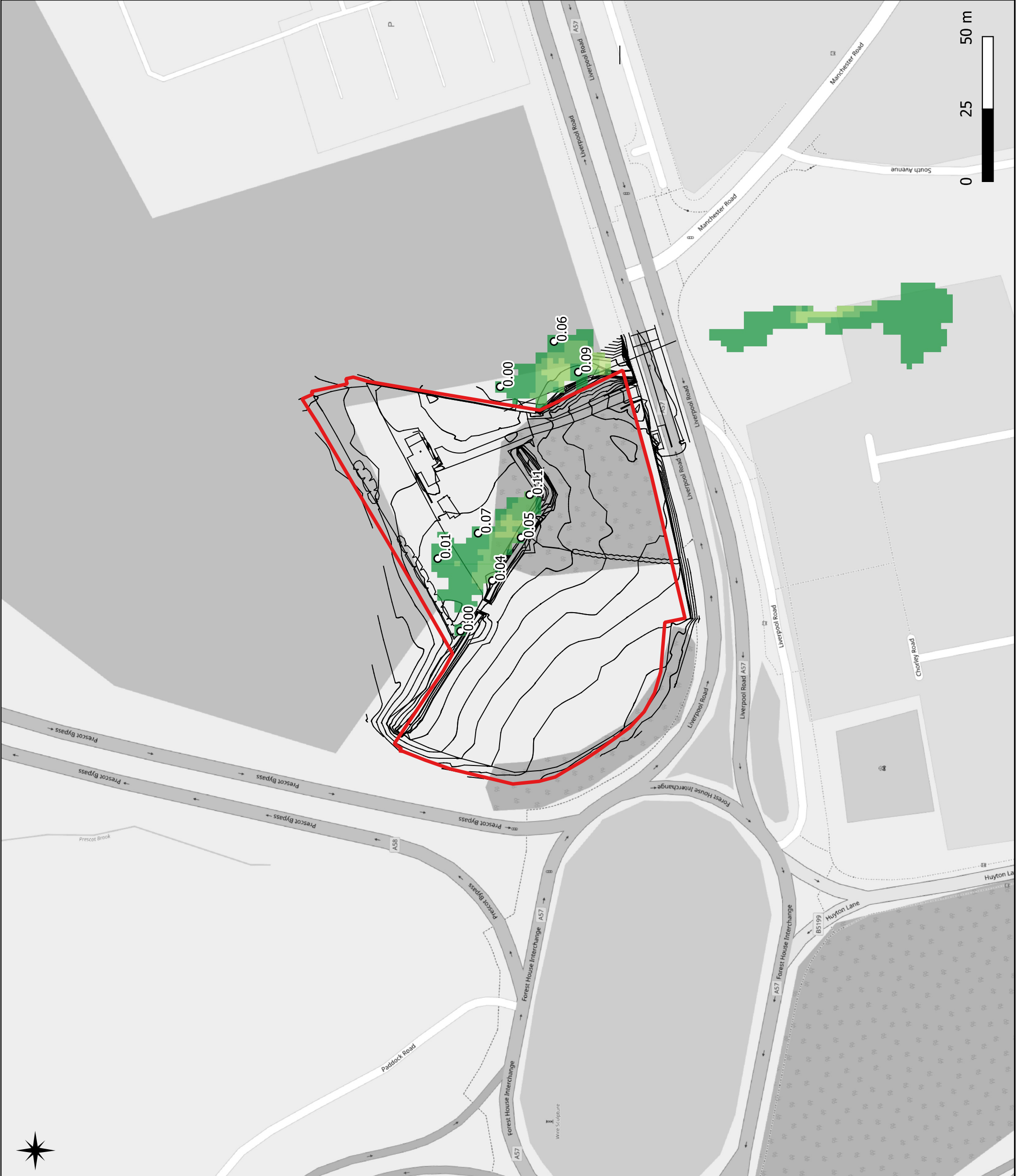
FLOOD LEVEL PLAN

DATE:	SCALE @ SIZE:	DRAWN:	CHECKED:
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AUG 22 1:12 PM '03

PROJECT NO. _____ DRAWING NO. _____

HYD730 106



Legend:

- Spot Velocity

$$v = 0.1$$

0.2 - 0.5

 1.0-1.5

2.0 - 2.5

3.0-3.5

3.5

Bill Number	Effective Date	Committee	Status
B 26/08/22	HB	RERUNS	PT
A 27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



Unit 6, Old Marsh Farm Bams, Welsh Road, Sealand, Flintshire CH5 2LY
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PROJECT:

DYE HOUSE
PRESCOT

PRESCOT BROOK
1 IN 100 YEAR PLUS 44% CC
(Q100 CC 44%)
FLOOD VELOCITY PLAN

DATE:	SCALE @ SIZE:	DRAWN:	CHECKED:
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AUG 22 1:12 PM '03

PROJECT No:	DRAWING No:	REV:
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DO NOT SCALE

Legend:

Planning Application Boundary

- Spot Depth

Flood Depth (m)

0.01 - 0.20

$$0.21 - 0.40$$

$$0.41 - 0.60$$

$$0.61 - 0.80$$

0.81 - 1.00

$$1.01 - 1.20$$

$$1.21 - 1.40$$

$$1.41 - 1.60$$

$$1.61 - 1.80$$

$$1.81 - 2.00$$

2.00 +

REV	DATE	BY	DESCRIPTION	CHK
B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



BETTS HYDRO
CONSULTING ENGINEERS

Unit 6, Old Marsh Farm Bams, Welsh Road, Sealand, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



PROJECT:

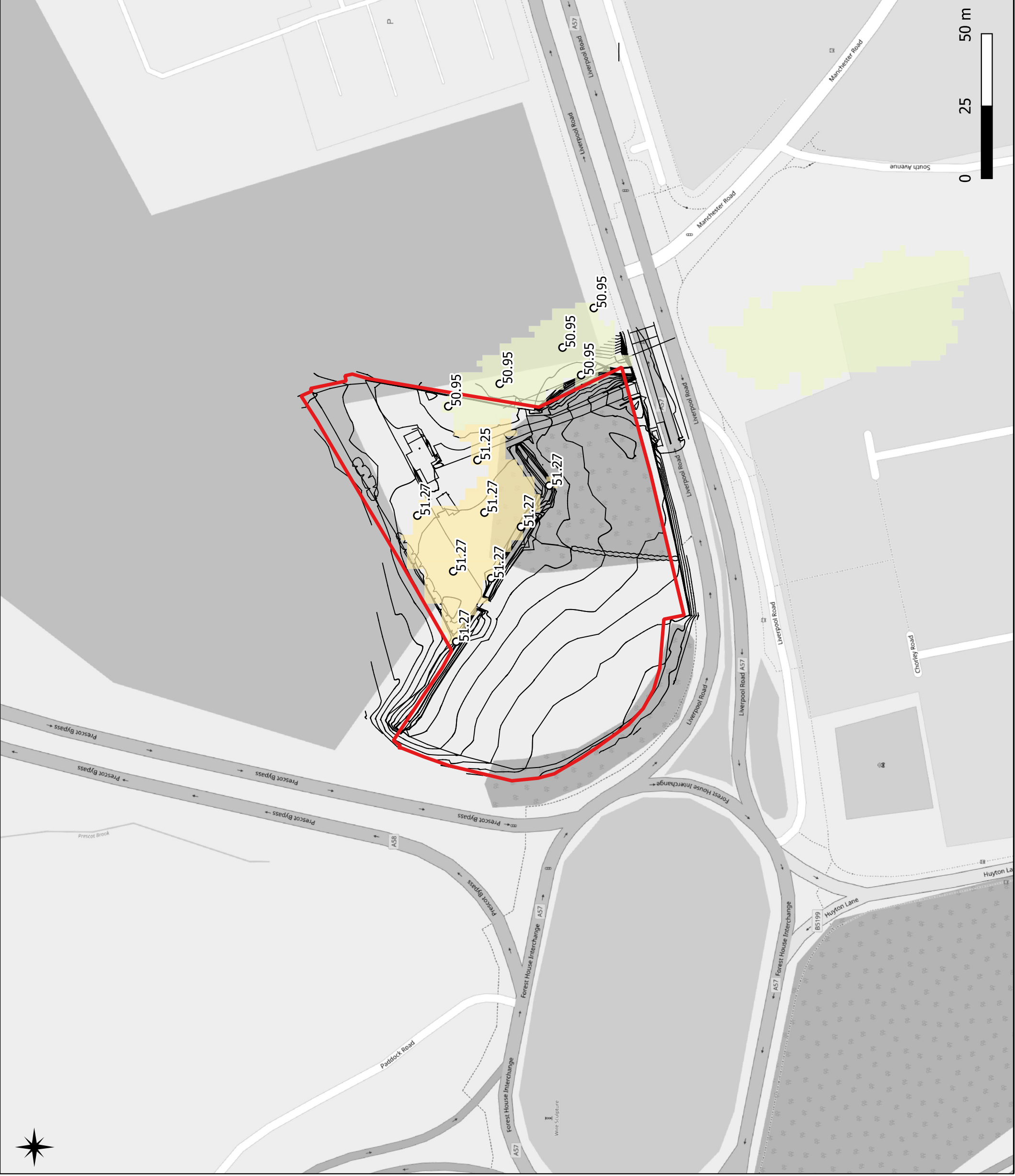
DYE HOUSE
PRESCOT

TITLE:

PRESCOT BROOK
1 IN 1000 YEAR (Q1000)
FLOOD DEPTH PLAN

DATE: AUG 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730		DRAWING NO: 108	REV: B





Legend:

- Spot Level

<= 43.00

45.00 - 47.00

49.00 - 51.00

53.00 - 55.00

57.00 - 59.00

> 59.00

B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



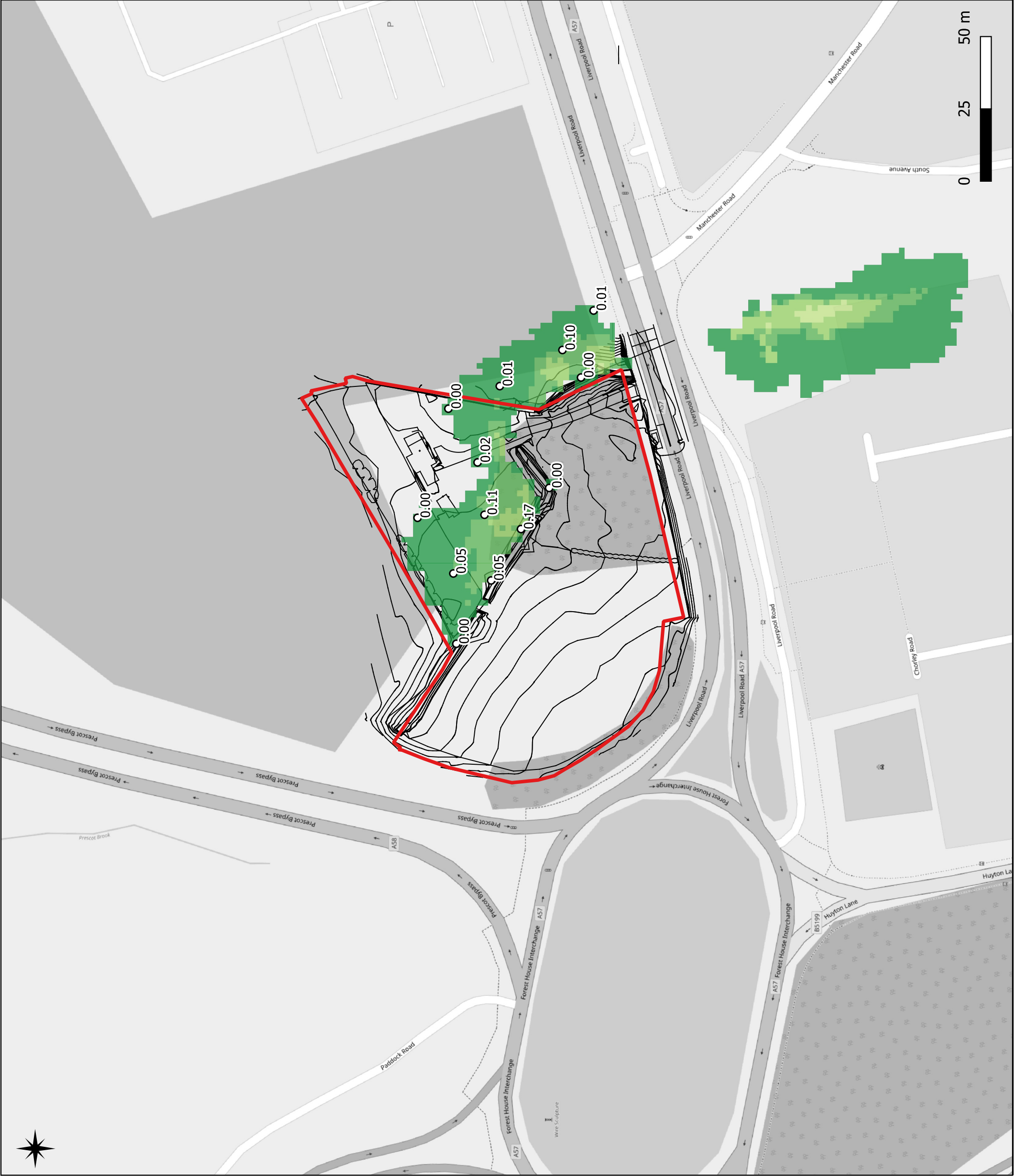
Unit 6, Old Marsh Farm Barns, Welsh Road, Sealand, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



TITLE:

PRESCOT BROOK
1 IN 1000 YEAR (Q1000)
FLOOD LEVEL PLAN

DATE: AUG 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730		DRAWING NO: 109	REV: B



DO NOT SCALE

Legend:

Planning Application Boundary

Spot Velocity

Flood Velocity (m/s)

<= 0.1

0.1 - 0.2

0.2 - 0.5

0.5 - 1.0

1.0 - 1.5

1.5 - 2.0

2.0 - 2.5

2.5 - 3.0

3.0 - 3.5

> 3.5

REV	DATE	BY	DESCRIPTION	CHK
B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:

BETTS HYDRO
CONSULTING ENGINEERS

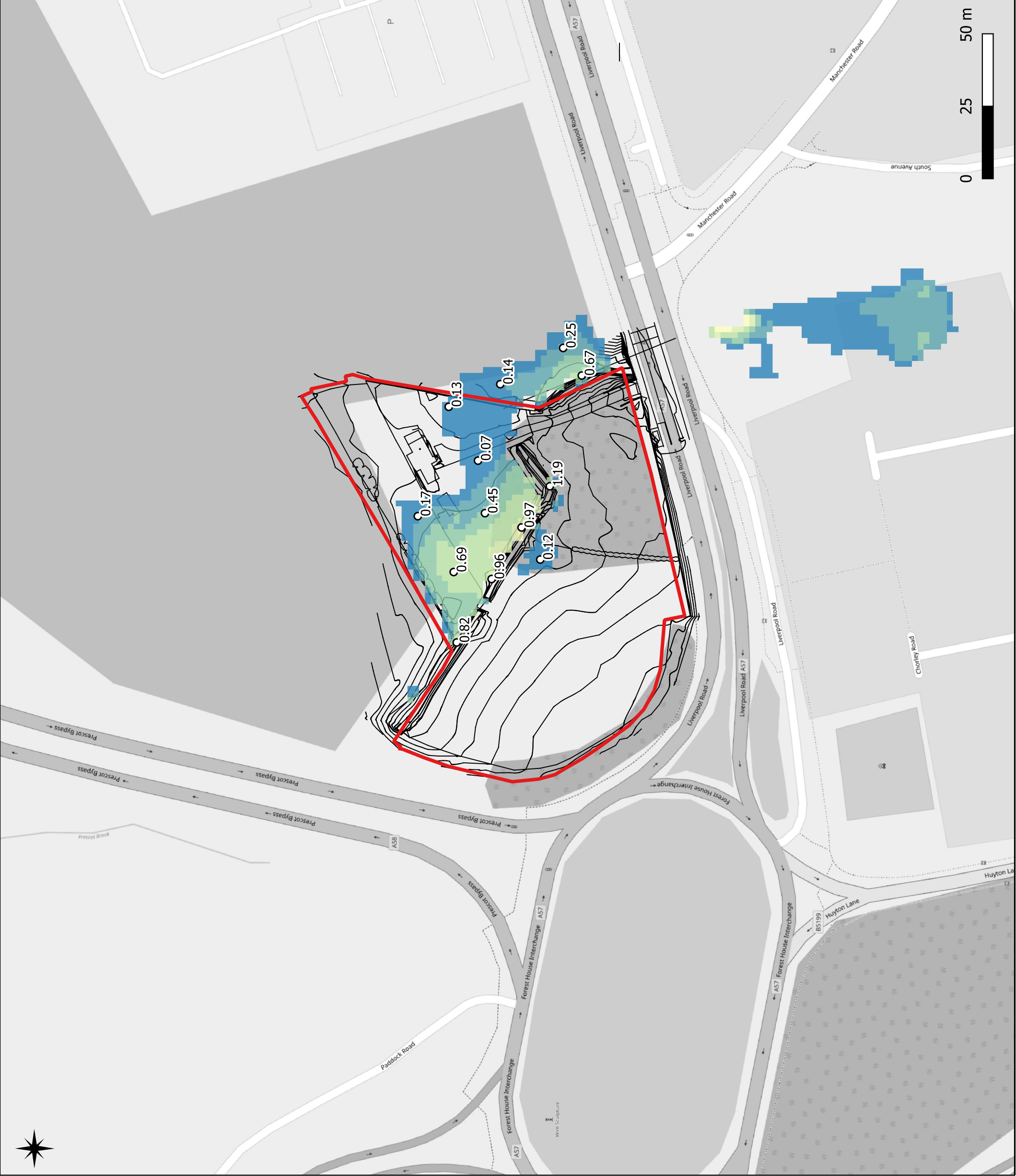
Unit 6, Old Marsh Farm Barns, Welsh Road, Sedland, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



PROJECT:
**DYE HOUSE
PRESCOT**

TITLE:
**PRESCOT BROOK
1 IN 1000 YEAR (Q1000)
FLOOD VELOCITY PLAN**

DATE:	SCALE @ SIZE:	DRAWN:	CHECKED:
AUG 22	1:1250@A3	HB	PT
PROJECT NO:	DRAWING NO:	REV:	
HYD730	110	B	



DO NOT SCALE

Legend:

Planning Application Boundary

Spot Depth

Flood Depth (m)

0.01 - 0.20

0.21 - 0.40

0.41 - 0.60

0.61 - 0.80

0.81 - 1.00

1.01 - 1.20

1.21 - 1.40

1.41 - 1.60

1.61 - 1.80

1.81 - 2.00

2.00 +

REV	DATE	BY	DESCRIPTION	CHK
A	26/08/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:

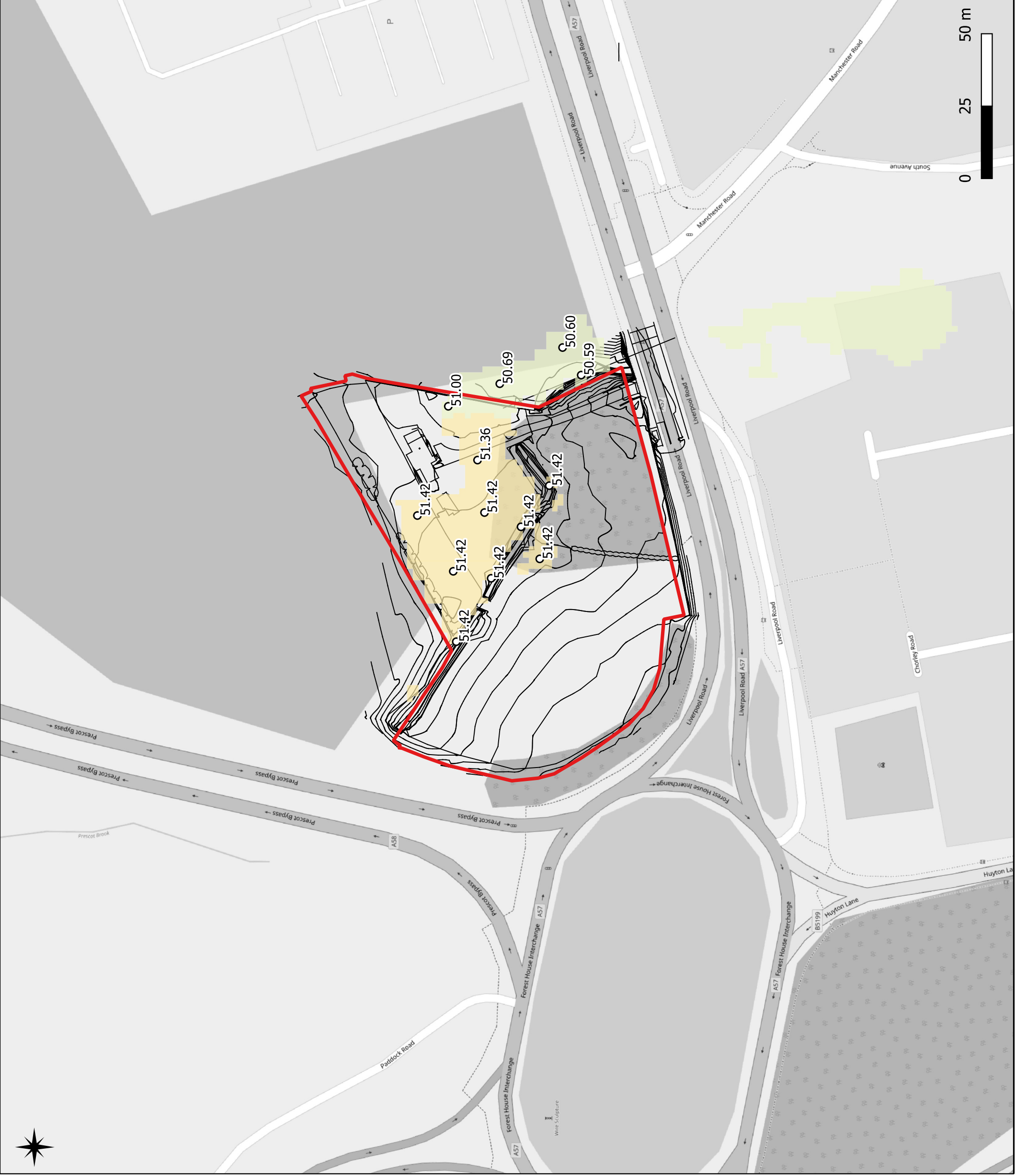
Unit 6, Old Marsh Farm Barns, Welsh Road, Sedland, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



PROJECT:
**DYE HOUSE
PRESCOT**

TITLE:
**PRESCOT BROOK
1 IN 100 YEAR PLUS 44% CC WITH 9.5%
BLOCKAGE (Q100 CC 44% WITH 9.5% BL)
FLOOD DEPTH PLAN**

DATE: AUG 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730	DRAWING NO: 111	REV: A	



Legend:

○ Spot Level

$$\leq 43.00$$

45.00 - 47.00

49.00 - 51.00

$$53.00 - 55.00$$

57.00	59.00
-------	-------

CC
FC
/

REV	DATE	BY	DESCRIPTION	CHK
A	26/08/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



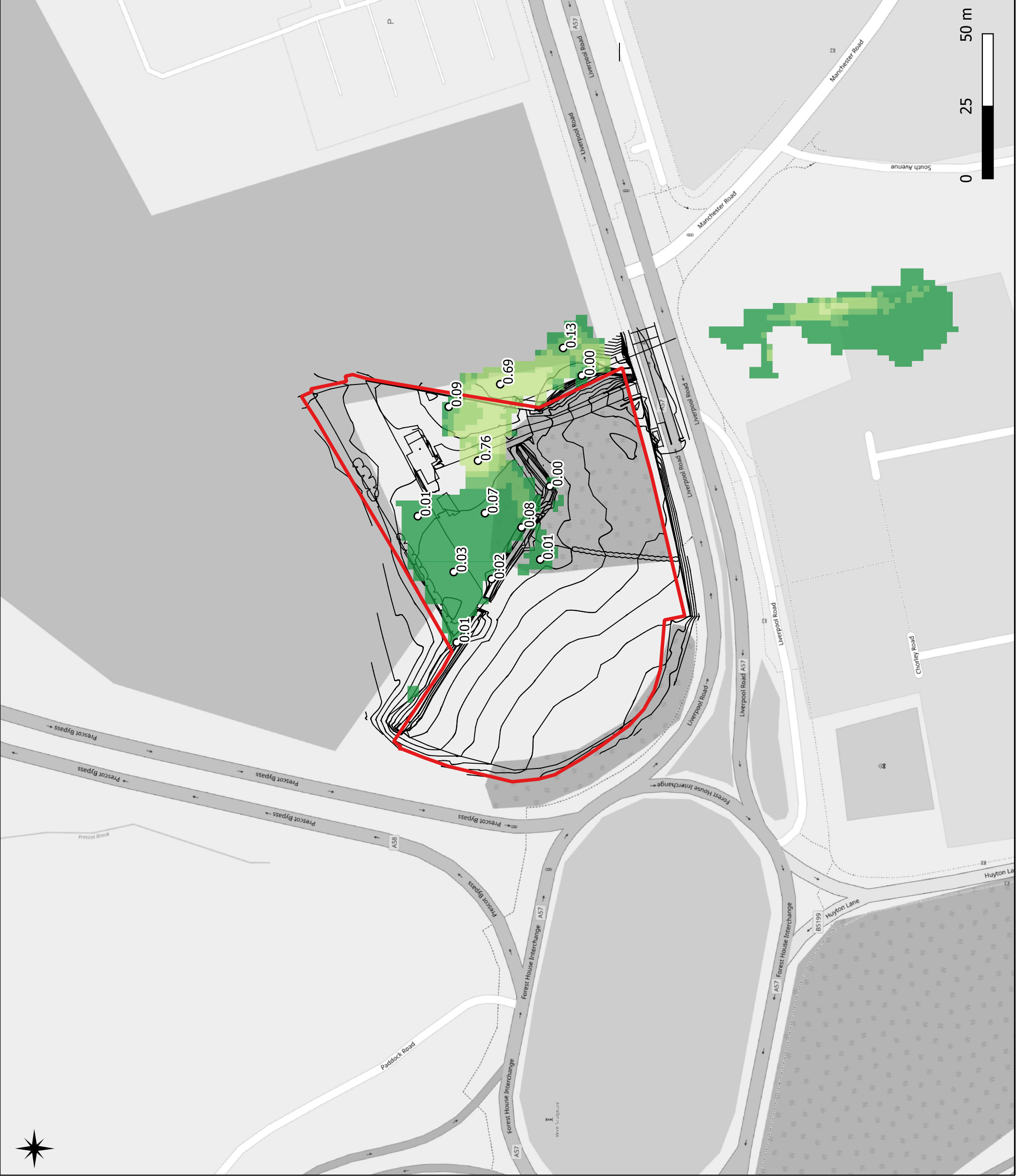
Unit 6, Old Marsh Farm Bams, Welsh Road, Sealand, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



TITLE:

PRESCOT BROOK
1 IN 100 YEAR PLUS 44% CC WITH 95%
BLOCKAGE (Q100 CC 44% WITH 95% BL)
FLOOD LEVEL PLAN

DATE: AUG 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730		DRAWING NO: 112	REV: A



DO NOT SCALE

Legend:

 Planning Application Boundary

 Spot Velocity

Flood Velocity (m/s)

 <= 0.1

 0.1 - 0.2

 0.2 - 0.5

 0.5 - 1.0

 1.0 - 1.5

 1.5 - 2.0

 2.0 - 2.5

 2.5 - 3.0

 3.0 - 3.5

 > 3.5

REV	DATE	BY	DESCRIPTION	PT	CHK
A	26/08/22	HB	PRELIMINARY FOR ISSUE		

DRAWING STATUS:



BETTS HYDRO
CONSULTING ENGINEERS

Unit 6, Old Marsh Farm Barns, Welsh Road, Sedland, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk

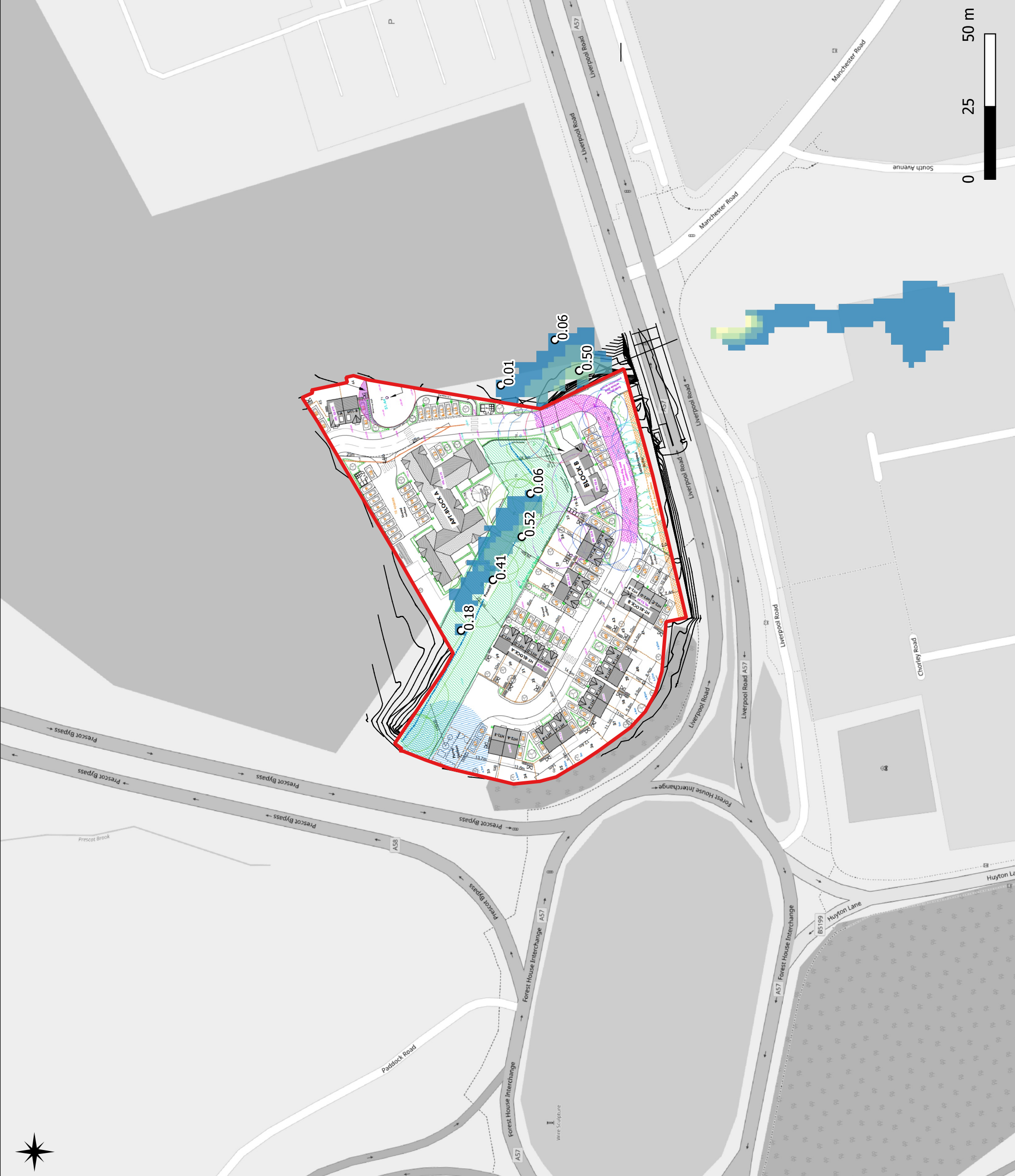


SEP
CONSTRUCTION

PROJECT:
**DYE HOUSE
PRESCOT**

TITLE:
**PRESCOT BROOK
1 IN 100 YEAR PLUS 44% CC WITH 9.5%
BLOCKAGE (Q100 CC 44% WITH 9.5% BL)
FLOOD VELOCITY PLAN**

DATE:	SCALE @ SIZE:	DRAWN:	CHECKED:
AUG 22	1:1250@A3	HB	PT
PROJECT NO:	DRAWING NO:	REV:	
HYD730	113		A



Legend:

0

Planning Application Boundary

- Spot Depth

0.01 - 0.20

$$0.21 - 0.40$$

$$0.61 - 0.80$$

101	100
100	100

04:17:1

08.1 - 19.1

$$2.00 +$$

B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



Unit 6, Old Marsh Farm Bams, Welsh Road, Sealand, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



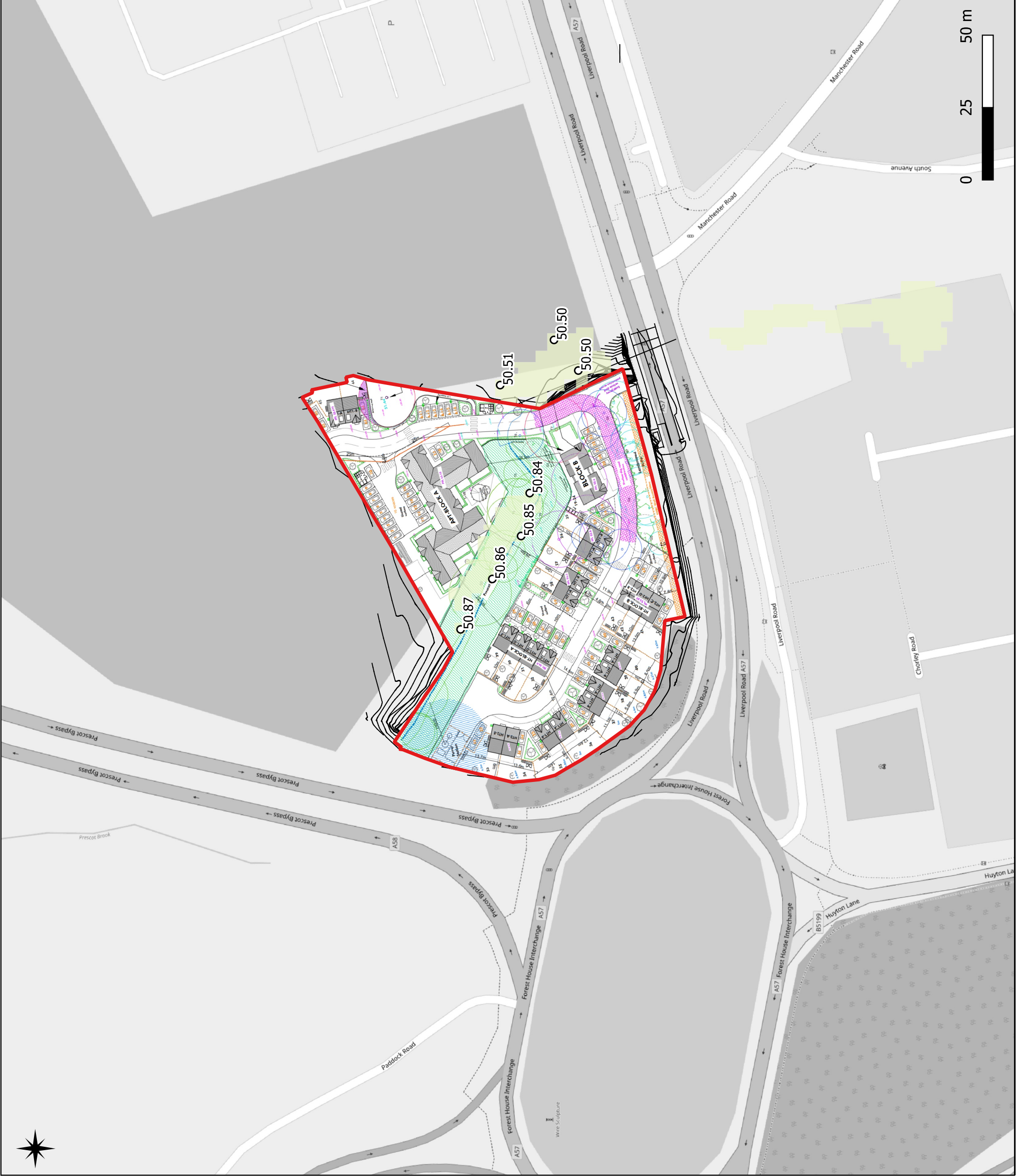
DYE HOUSE
PRESCOT

TITLE: PRESCOT BROOK

PROPOSED
1 IN 100 YEAR PLUS 44% CC
(Q100 CC 44%)

FLOOD DEPTH PLAN

DATE: AUG 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730		DRAWING NO: 114	REV: B



DO NOT SCALE

Legend:

Planning Application Boundary

Spot Level

Flood Level (mAO)

<= 43.00

43.00 - 45.00

45.00 - 47.00

47.00 - 49.00

49.00 - 51.00

51.00 - 53.00

53.00 - 55.00

55.00 - 57.00

57.00 - 59.00

> 59.00

REV	DATE	BY	DESCRIPTION	CHK
B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:

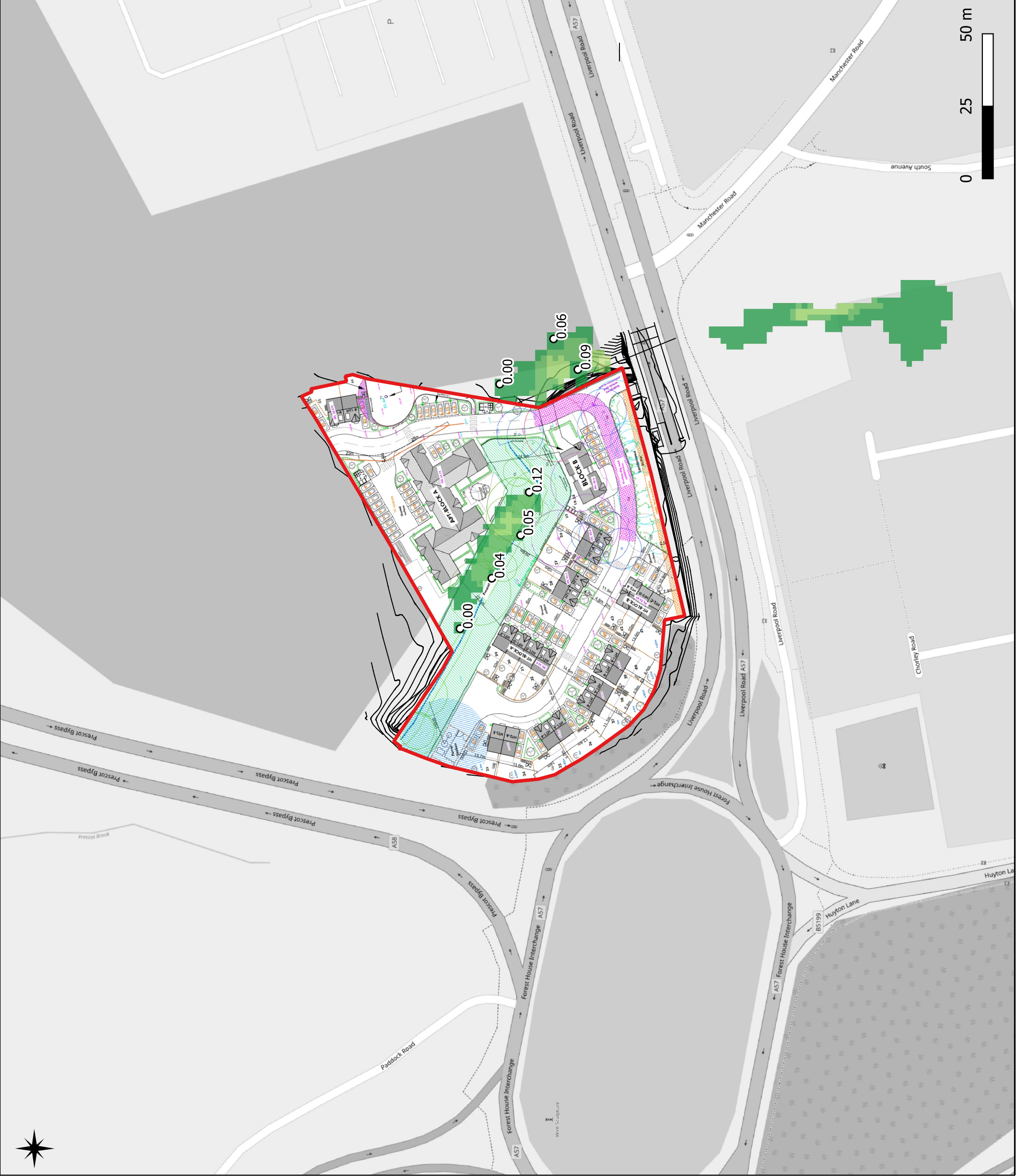
Unit 6, Old Marsh Farm Barns, Welsh Road, Sedland, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk



PROJECT: DYE HOUSE PRESCOT

TITLE: PRESCOT BROOK PROPOSED 1 IN 100 YEAR PLUS 44% CC (Q100 CC 44%) FLOOD LEVEL PLAN

DATE: AUG 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730	DRAWING NO: 115	REV: B	



DO NOT SCALE

Legend:

 Planning Application Boundary

 Spot Velocity

Flood Velocity (m/s)

 <= 0.1

 0.1 - 0.2

 0.2 - 0.5

 0.5 - 1.0

 1.0 - 1.5

 1.5 - 2.0

 2.0 - 2.5

 2.5 - 3.0

 3.0 - 3.5

 > 3.5

REV	DATE	BY	DESCRIPTION	CHK
B	26/08/22	HB	RERUNS	PT
A	27/07/22	HB	PRELIMINARY FOR ISSUE	PT

DRAWING STATUS:



BETTS HYDRO
CONSULTING ENGINEERS

Unit 6, Old Marsh Farm Barns, Welsh Road, Sedland, Flintshire CH5 2LY
Tel: 01244 288178 enquiries@betts-associates.co.uk

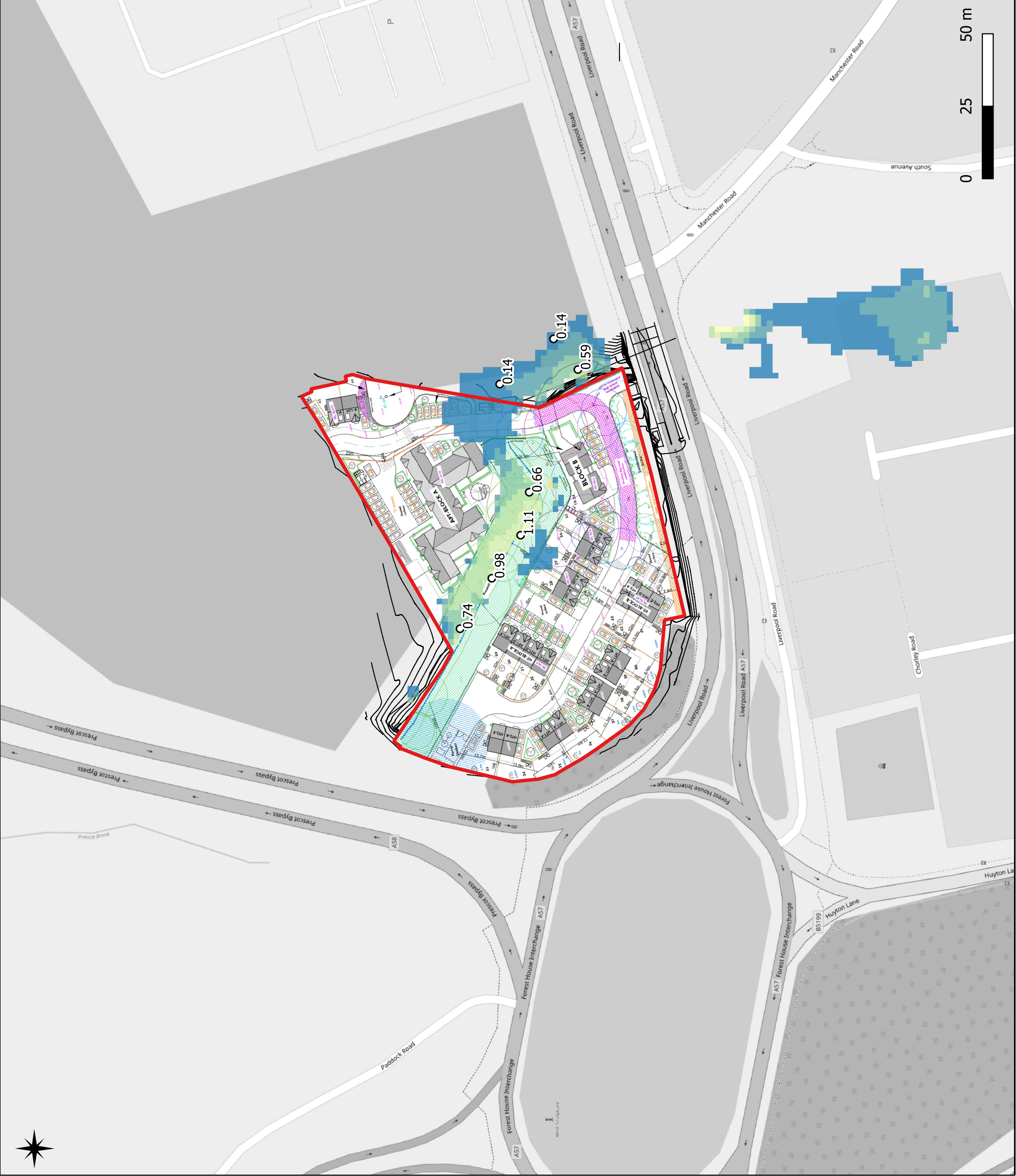


SEP
CONSTRUCTION

PROJECT: DYE HOUSE
PRESCOT

TITLE: PRESCOT BROOK
PROPOSED
1 IN 100 YEAR PLUS 44% CC
(Q 100 CC 44%)
FLOOD VELOCITY PLAN

DATE:	AUG 22	SCALE @ SIZE:	1:1250@A3	DRAWN:	HB	CHECKED:	PT
PROJECT NO:	HYD730	DRAWING NO:	116	REV:	B		



DO NOT SCALE

Legend:

 Planning Application Boundary

 Spot Depth

Flood Depth (m)

 0.01 - 0.20

 0.21 - 0.40

 0.41 - 0.60

 0.61 - 0.80

 0.81 - 1.00

 1.01 - 1.20

 1.21 - 1.40

 1.41 - 1.60

 1.61 - 1.80

 1.81 - 2.00

 2.00 +

REV	DATE	BY	DESCRIPTION	PT	CHK
A	05/09/22	HB	PRELIMINARY FOR ISSUE		

DRAWING STATUS:



BETTS HYDRO
CONSULTING ENGINEERS

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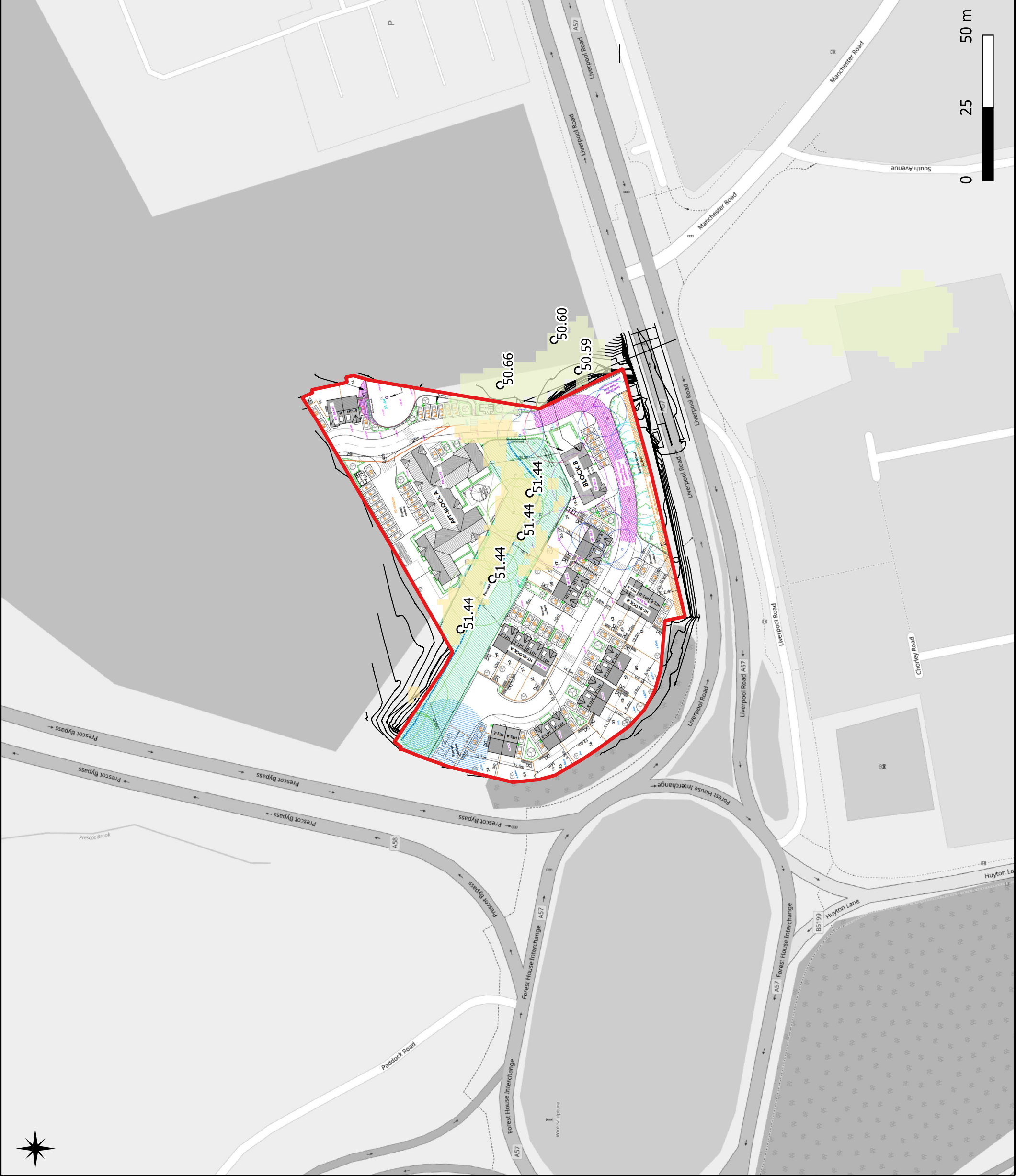


SEP
CONSTRUCTION

PROJECT:
**DYE HOUSE
PRESCOT**

TITLE:
PRESCOT BROOK
PROPOSED SCENARIO
1 IN 100 YEAR PLUS 44% CC WITH 95%
BLOCKAGE (Q100 CC 44% WITH 95% BL)
FLOOD DEPTH PLAN

DATE: SEPT 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730	DRAWING NO: 117	REV: A	



DO NOT SCALE

Legend:

 Planning Application Boundary

 Spot Level

Flood Level (mAOD)

 <= 43.00

 43.00 - 45.00

 45.00 - 47.00

 47.00 - 49.00

 49.00 - 51.00

 51.00 - 53.00

 53.00 - 55.00

 55.00 - 57.00

 57.00 - 59.00

 > 59.00

REV	DATE	BY	DESCRIPTION	PT	CHK
A	05/09/22	HB	PRELIMINARY FOR ISSUE		

DRAWING STATUS:



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CONSULTING ENGINEERS

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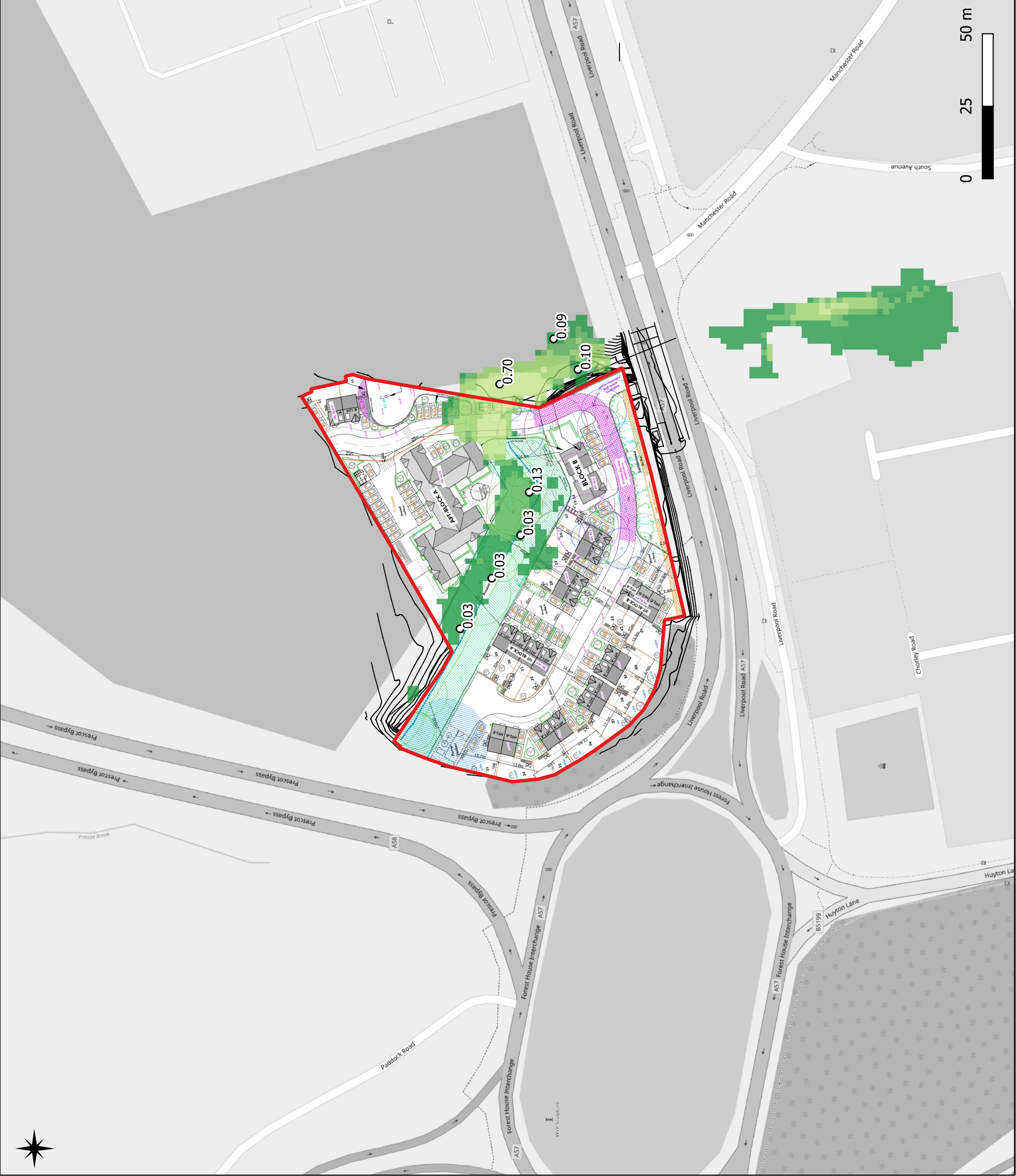


SEP
CONSTRUCTION

PROJECT:
**DYE HOUSE
PRESCOT**

TITLE:
PRESCOT BROOK
PROPOSED SCENARIO
1 IN 100 YEAR PLUS 44% CC WITH 95%
BLOCKAGE (Q100 CC 44% WITH 95% BL)
FLOOD LEVEL PLAN

DATE: SEPT 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730	DRAWING NO: 118	REV: A	



DO NOT SCALE

Legend:

 Planning Application Boundary

 Spot Velocity

Flood Velocity (m/s)

 <= 0.1

 0.1 - 0.2

 0.2 - 0.5

 0.5 - 1.0

 1.0 - 1.5

 1.5 - 2.0

 2.0 - 2.5

 2.5 - 3.0

 3.0 - 3.5

 > 3.5

REV	DATE	BY	DESCRIPTION	PT	CHK
A	05/09/22	HB	PRELIMINARY FOR ISSUE		

DRAWING STATUS:



BETTS HYDRO
CONSULTING ENGINEERS

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SEP
CONSTRUCTION

PROJECT:
**DYE HOUSE
PRESCOT**

TITLE:
PRESCOT BROOK
PROPOSED SCENARIO
1 IN 100 YEAR PLUS 44% CC WITH 95%
BLOCKAGE (Q100 CC 44% WITH 95% BL)
FLOOD VELOCITY PLAN

DATE: SEPT 22	SCALE @ SIZE: 1:1250@A3	DRAWN: HB	CHECKED: PT
PROJECT NO: HYD730	DRAWING NO: 119	REV: A	