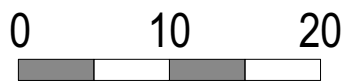
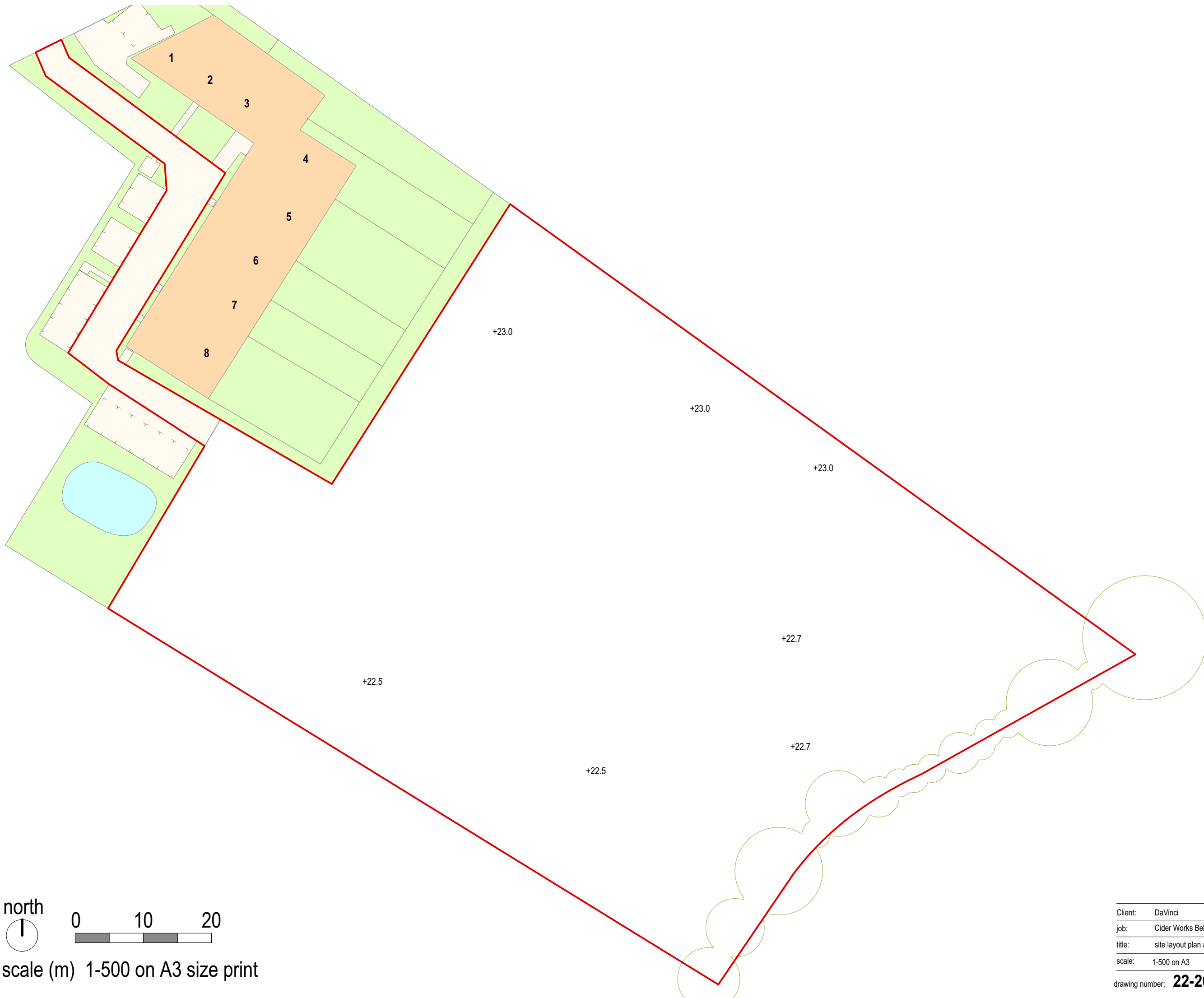




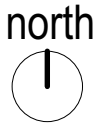
north  
0 20 40  
scale (m) 1-1250 on A3 size print



scale (m) 1-500 on A3 size print

Client:	DaVinci		
job:	Cider Works Bell Lane TN27 8NT		
title:	site layout plan as existing		
scale:	1-500 on A3	date	July 2022
		dwn.	GB
drawing number;	<b>22-20-02</b>		
		rev.	-





scale (m) 1-500 on A3 size print

Client:	DaVinci		
job:	Cider Works Bell Lane TN27 8NT		
title:	site layout plan as proposed		
scale:	1-500 on A3	date July 2022	dwn. GB
drawing number;	<b>22-20-03</b>		
	rev. -		





### U value of thermal elements

#### ground floor

perimetre / area =  $92.2m / 260 \text{ sqm} = 0.35$

150mm Europhane GP below 100mm concrete slab.  $U = 0.12 \text{ W/m}^2\text{K}$

walls (NE & NW) 176 sqm

Beco Wallform 438.  $U = 0.11 \text{ W/m}^2\text{K}$  (ignoring earth covering)

walls (SE & SW & monopitch gable ends) 36 sqm

100mm rendered block, 50mm clear cavity, 100mm Eurowall, 100mm rendered block.  $U = 0.14 \text{ W/m}^2\text{K}$

roof (flat roof earth covered) 90 sqm

concrete deck, 150mm Europhane Powerdeck F, single ply membrane.

$U = 0.15 \text{ W/m}^2\text{K}$  (ignoring earth covering)

roof (pitched at 20 degrees) 204 sqm

PV panels on framing, upvc membrane, 18mm ply, 150mm Europhane GP over rafters, 50mm between rafters, plasterboard finish internally.  $U = 0.11 \text{ W/m}^2\text{K}$

### Photovoltaic electricity generation

94 x 400W panels (21.8% efficiency) = 37,600 W



scale (m) 1-100 on A3 size print

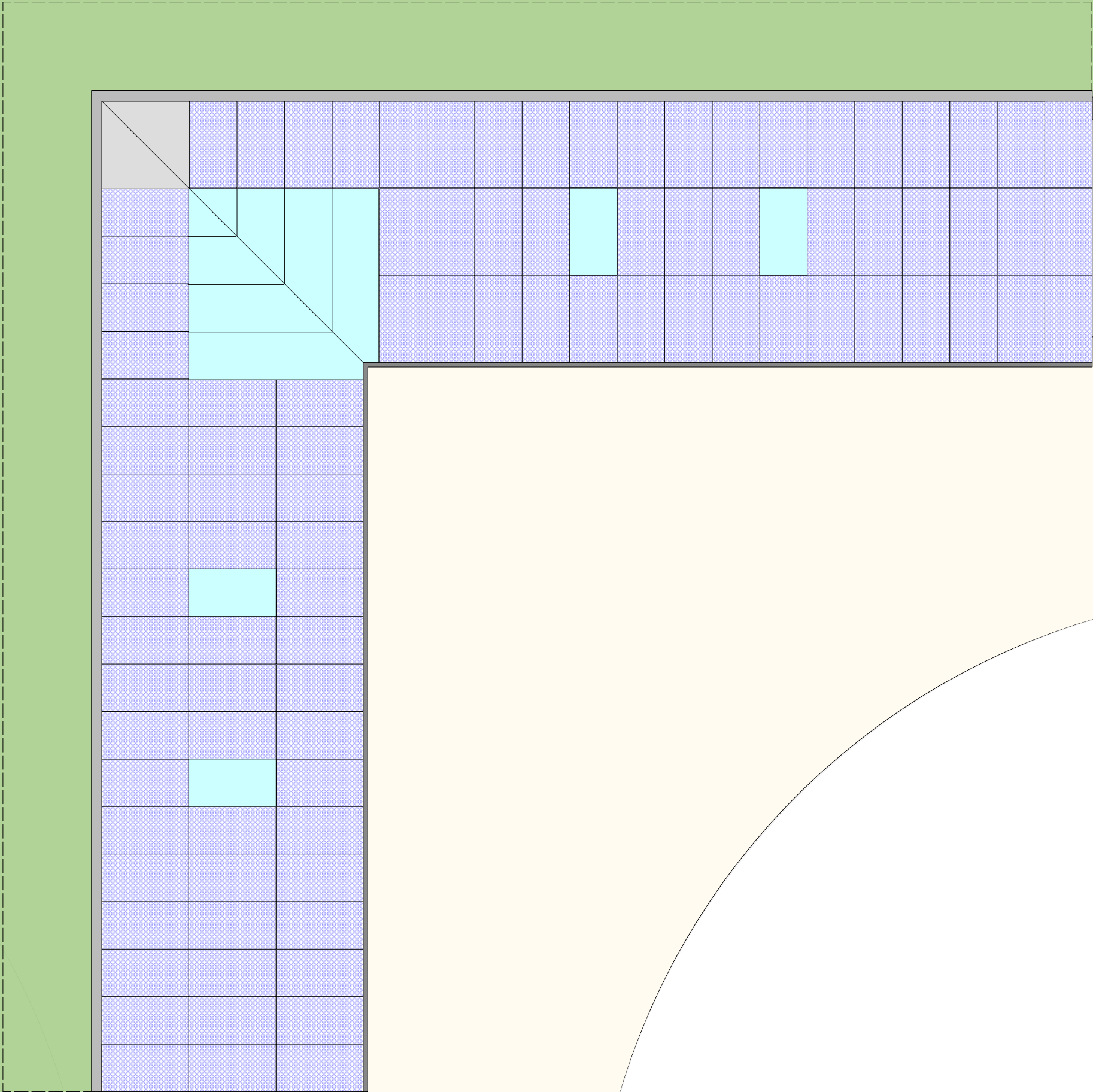
Client:	DaVinci		
job:	Cider Works Orchard, Bell Lane TN27 8NT		
title:	ground floor as proposed		
scale:	1-100 on A3	date July 2022	dwn. GB
drawing number:	<b>22-20-04</b>		
	rev.-		

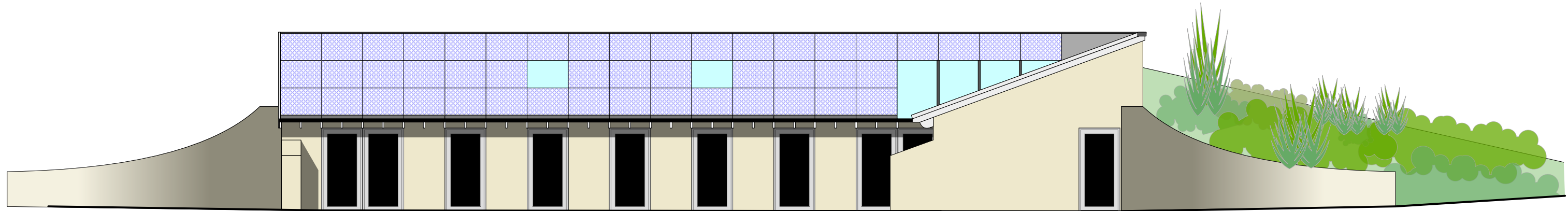
WEST SOUTH EAST

	90°	75°	60°	45°	30°	15°	0°	15°	30°	45°	60°	75°	90°
90°	56	60	64	67	69	71	71	71	71	69	65	62	58
80°	63	68	72	75	77	79	80	80	79	77	74	69	65
70°	69	74	78	82	85	86	87	87	86	84	80	76	70
60°	74	79	84	87	90	91	93	93	92	89	86	81	76
50°	78	84	88	92	95	96	97	97	96	93	89	85	80
40°	82	86	90	95	97	99	100	99	98	96	92	88	84
30°	86	89	93	96	98	99	100	100	98	96	94	90	86
20°	87	90	93	96	97	98	98	98	97	96	94	91	88
10°	89	91	92	94	95	95	96	95	95	94	93	91	90
0°	90	90	90	90	90	90	90	90	90	90	90	90	90

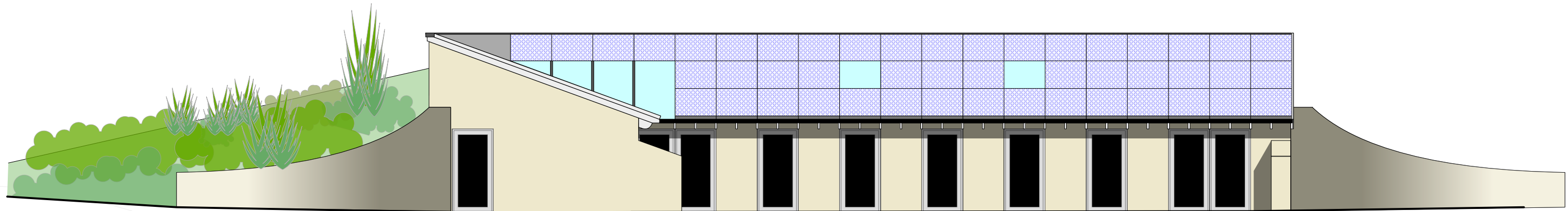
ROOF ANGLE

94 x 400W panels (21.8% efficiency) = 37,600 W

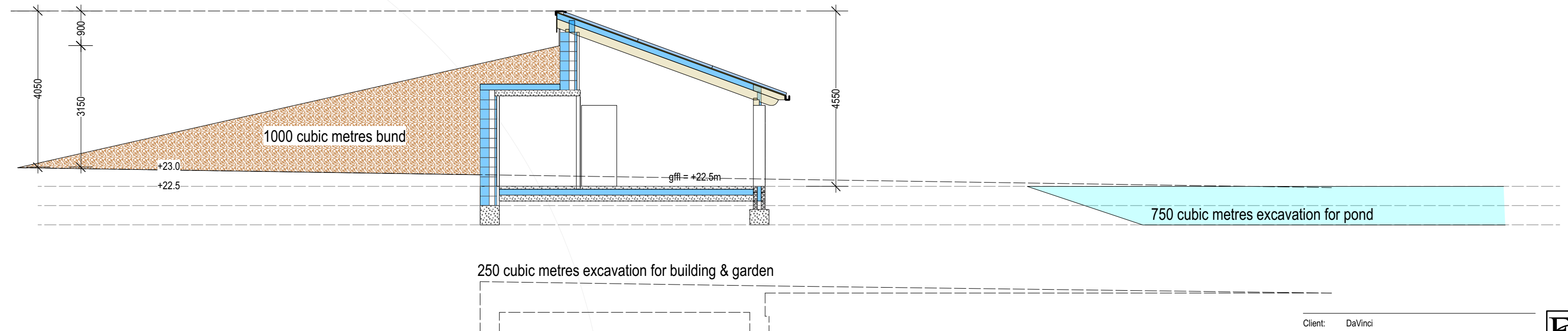




south east elevation



south west elevation

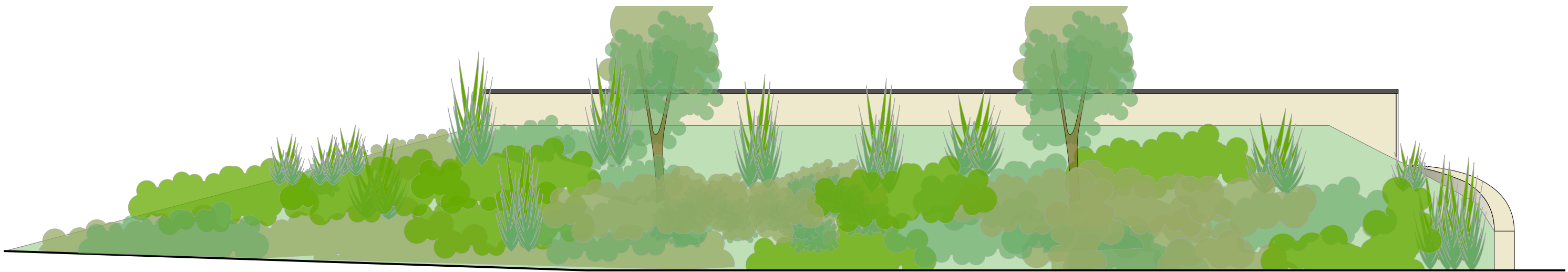


0 2 4

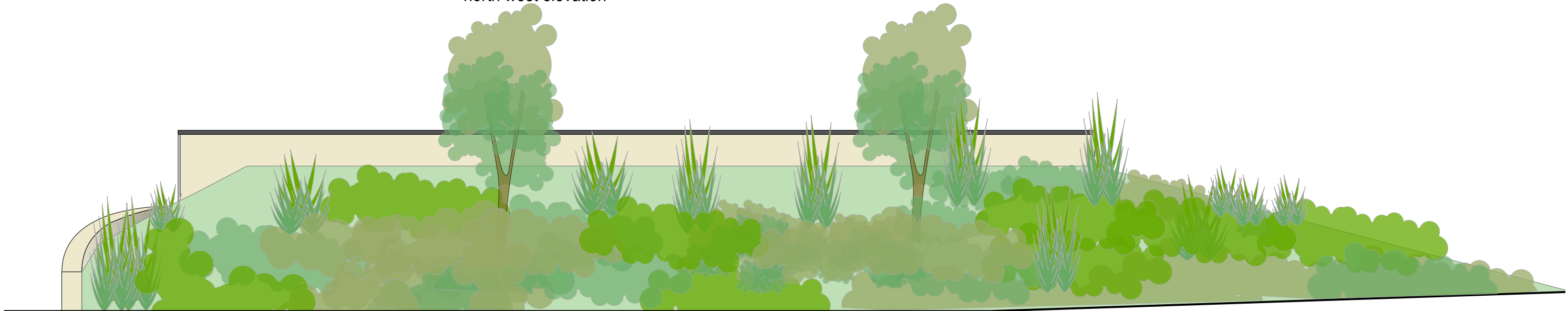
scale (m) 1-100 on A3 size print

Client: DaVinci  
 job: Cider Works Orchard, Bell Lane TN27 8NT  
 title: section & elevations as proposed  
 scale: 1-100 on A3 date July 2022 dwn. GB  
 drawing number; **22-20-06** rev.-

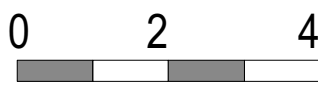




north west elevation



north east elevation



scale (m) 1-100 on A3 size print

Client:	DaVinci		
job:	Cider Works Orchard, Bell Lane TN27 8NT		
title:	elevations as proposed		
scale:	1-100 on A3	date	July 2022
		dwn.	GB
drawing number;	<b>22-20-07</b>		
		rev.	-

