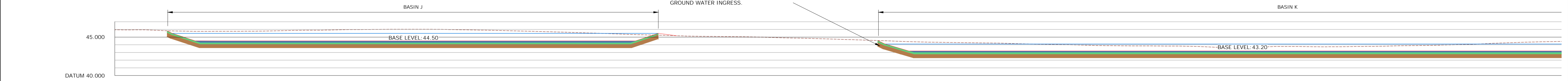


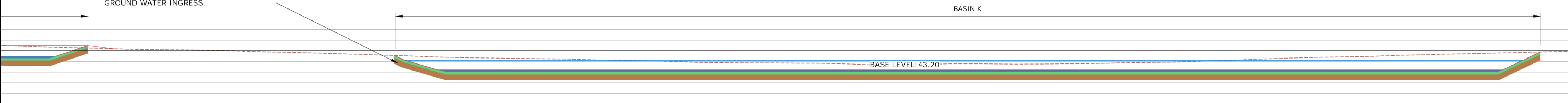
DO NOT SCALE

CONTRACTOR TO ALLOW FOR PLACEMENT OF 500mm THICK PUDDLE CLAY LAYER (SHOWN THUS) BENEATH BASE OF BASINS AND POOLS TO RESIST GROUNDWATER GROUND WATER INGRESS. PLACEMENT OF PUDDLE CLAY TO BE UNDERTAKEN IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS AND PUDDLED TO RESIST GROUND WATER INGRESS.



CHAINAGE	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000
EXISTING GROUND LEVEL	45.957	45.759	45.796	45.967	46.025	45.869	45.607	45.281	45.072	44.853	44.554	44.295	44.098	43.888	43.820	43.709	43.750	43.898	44.174
FINAL PROPOSED GROUND LEVEL	45.957	44.683	44.500	44.500	44.500	44.500	44.500	45.116	45.072	44.853	44.498	43.200	43.200	43.200	43.200	43.200	43.200	43.200	43.200

CONTRACTOR TO ALLOW FOR PLACEMENT OF 500mm THICK PUDDLE CLAY LAYER (SHOWN THUS) BENEATH BASE OF BASINS AND POOLS TO RESIST GROUNDWATER GROUND WATER INGRESS. PLACEMENT OF PUDDLE CLAY TO BE UNDERTAKEN IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS AND PUDDLED TO RESIST GROUND WATER INGRESS.



CHAINAGE	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000
EXISTING GROUND LEVEL	45.281	45.072	44.853	44.554	44.295	44.098	43.888	43.820	43.709	43.750	43.898	44.174	44.448	44.715	44.966
FINAL PROPOSED GROUND LEVEL	45.116	45.072	44.853	44.498	43.200	43.200	43.200	43.200	43.200	43.200	43.200	43.200	43.200	43.200	44.966

REV	DATE	DESCRIPTION	DRAWN	CHKD

REVISIONS
This drawing is to be read in conjunction with all other Engineer's drawings and all other project information. Any discrepancy between the Engineer's drawings and other project information is to be reported to the Engineer immediately.



Project
**BROAD OAK FARM
STURRY
CANTERBURY**

Title
**SECTIONS THROUGH SURFACE
WATER BASINS AND
CONSTRUCTED WETLANDS**



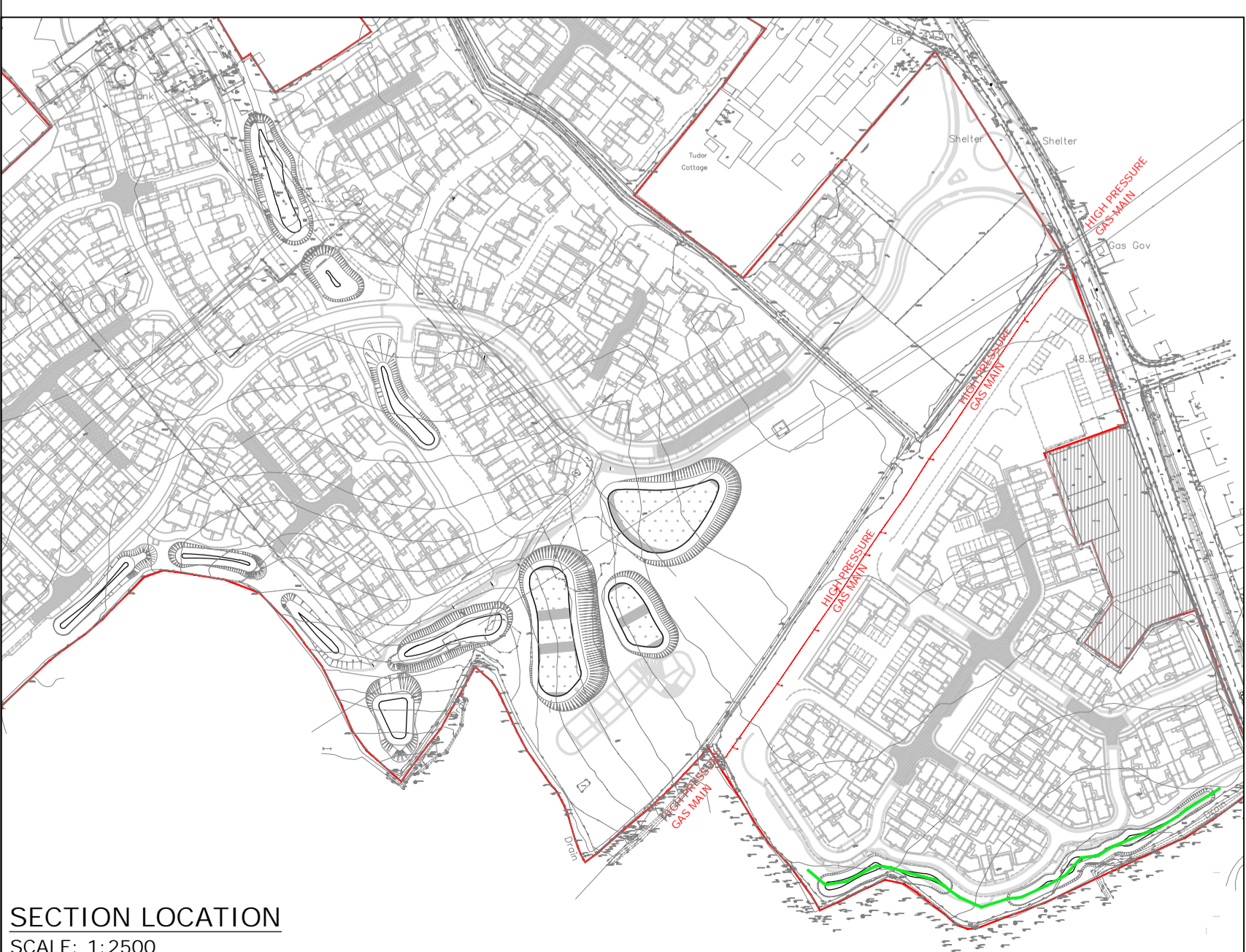
Richard Jackson
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Scale 1:250 @ A1	Drawn KRT	Date FEBRUARY 2022
Project Manager K. TOSH	Checked JIT	Approved KRT
Status D2	Suitability Description FOR TENDER	RJL Project No : 61109
project code H8398	discipline CIV	phase X
client BDW	number 4182	revision

PUDDLE CLAY SPECIFICATION

- 1) General
Material to be used as puddle clay shall be naturally occurring homogeneous plastic material. It shall be free from deleterious matter such as sand, stones and organic material. The use of lime-stabilised clays shall not be allowed.
- 2) Properties
 - a) More than 65% of the natural material shall be finer than 0.06mm and more than 40% shall be finer than 0.002mm
 - b) The natural material shall be defined as firm clay in accordance with BS5930: 1981 Table 8 (Cu 40-75 kPa).
 - c) The natural material shall be defined as clay of intermediate to extremely high plasticity in accordance with BS5930: 1981, figure 31 and the liquid limit shall not be less than 35%.
 - d) The coefficient of permeability (k) of the remoulded material shall not be greater than 10⁻⁹ m/s.
 - e) The remoulded material shall be defined as Non-dispersive (ND1) in accordance with BS1377: Part 5: 1990, Table 2.
- 3) Identification
An indication of a material's suitability may be obtained from the following empirical tests, at the moisture content agreed for placement.
 - a) Tenacity Test
A 300mm long, 25mm diameter cylinder of clay is held vertically for 15 seconds so that at least 200mm is unsupported and in tension under its weight. If the cylinder breaks the clay will be rejected as unsuitable.
 - b) Pinch Test
A 75mm diameter ball of remoulded clay is squeezed into a 25mm thick flat disc. If any cracks appear the clay may be rejected as unsuitable.
 - c) Slaking Test
A 50mm diameter ball of remoulded clay is placed in a 600ml beaker and covered with water. If the ball disintegrates within 24 hours the clay may be rejected as unsuitable.
 - d) Permeability Test
A sample of remoulded clay shall be formed into a tray to hold 20 litres of water and the loss measured after 24 hours. This shall be compared with the water loss from a metal tray of the same surface area holding the same quantity of water. If the difference is greater than 1% the clay may be rejected.



SECTION LOCATION
SCALE: 1:2500

NOTE: REFER TO DRAINAGE GENERAL ARRANGEMENT AND LONG SECTION DRAWINGS FOR DETAILS OF ALL PIPE WORK AND MANHOLES, ETC. WHICH HAVE BEEN OMITTED FROM THIS DRAWING

KEY	
	PROPOSED FINISHED GROUND PROFILE (BASE LEVEL GIVEN IS THE BOTTOM OF THE DESIGNED SURFACE WATER ATTENUATION STORAGE)
	EXISTING GROUND PROFILE
	DESIGN WATER LEVEL FOR 1:100 YEAR + 40% DESIGN RAINFALL EVENT
	0.2m DEPTH OF PERMANENT WATER WITH LEVEL CONTROL TO SUIT BIOMATRIX TREATMENT DESIGNS
	0.2m THICK PLANTING SUBSTRATE (BY OTHERS)
	0.5m THICK PUDDLE CLAY TO RESIST GROUND WATER INGRESS