

DESIGN FOR RAFT

FOUNDATIONS

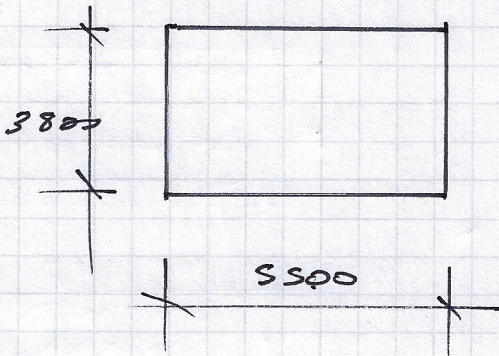
11 WORLDS ROAD

WEST KINGSLOW

1.0 DIAGRAM

See attached A3 sketches

2.0 DESIGN



Loadings

	D.L.	L.L.
ROOF	0.75	0.75
WALLS	3.50	-
FLOOR	6.0	1.5

Total load.

slab. — $3.8 \times 5.5 \times 7.5 = 157$

walls — $(10 \times 3.5 \times 2.4) = 84$

roof — $3.8 \times 5.5 \times 1.5 = 31$

272 kN

ground stress = $\frac{272 \times 1}{3.8 \times 5.5} = 130 \text{ kN/m}^2$
∴ o.k.

upward forces on slab

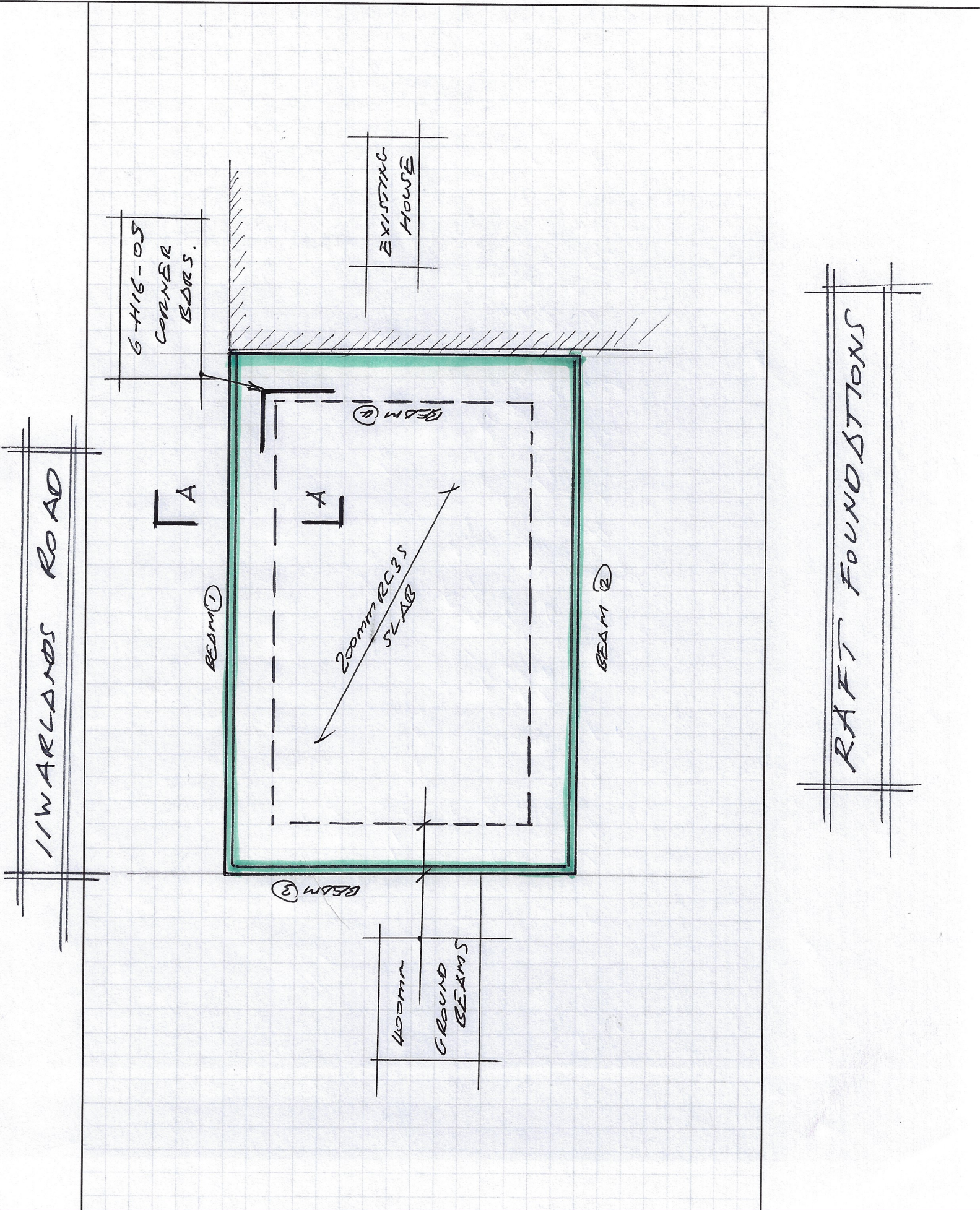
$$= 13 - 7.5 = 5.5 \text{ kN/m}$$

slab

$$M = \frac{5.5 \times 3.8^2}{8} = 10 \text{ kNm}$$

max de Ast = $\frac{10 \times 12 \times 10^6}{0.87 \times 460 \times 0.9 \times 160} = 260 \text{ mm}^2$

USE A393 MESH



11 WARLANDS ROAD

6-H16-05
CORNER
BARS.

EXISTING
HOUSE

200MM RCBS
SLAB

BEAM 1

BEAM 2

BEAM 3

400MM
GROUND
BEAMS

RAFT FOUNDATIONS

A

A

NOTES

Mark	Date	By	Chkd	Rev

Job Title

11 WAKLANDS ROAD
WEST KINGSDOWN

Drawing Title

RAFT FOUNDATION
DETAILS

Client

ROO DORRINGTON

TSC

CONSULTING
ENGINEERS

Scales 1:10

A1 A3

Dim. 7C

Chkd. 7C

Appd. 7C

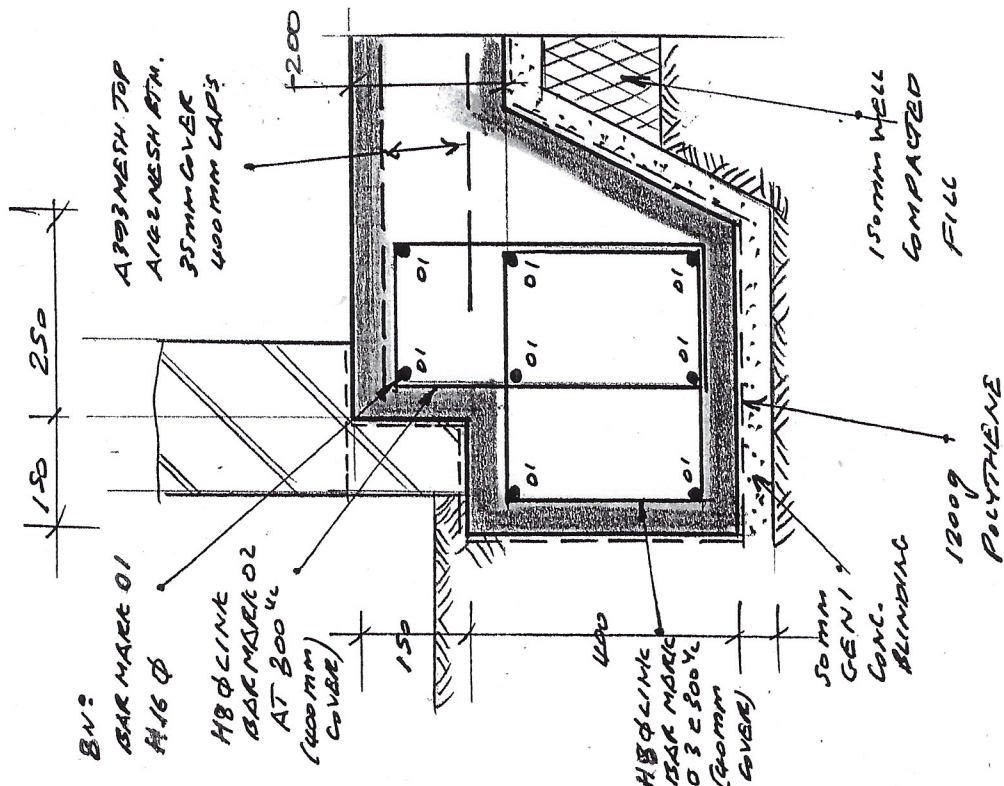
Date 6/12

Job No. 1757

Drawing No.

5K2

Rev.



SECTION A-A