



**Land Surveyors Board Examination**

**14<sup>th</sup> September 2020**

**WRITTEN EXAMINATION**

**CADASTRAL LAW**

**Instructions to Candidates**

1. This paper consists of five (5) questions and you are to answer ALL five (5) questions.
2. Write legibly on one side of the paper.
3. Begin each answer on a fresh page and write the question number at the top of each page.
4. Read the question paper thoroughly. 10 minutes will be allowed for this purpose.

Commence writing only when the invigilator tells you to do so.

5. Marks allocated are shown at the end of each part/question.
6. Answers will be graded for content and appropriate presentation.
7. The attention of candidates is drawn to the Land Surveyors Board Rules of Conduct of Examination.

### **Question 1**

Illustrate on what you understand for the following;

- a) True North and grid North with reference to SVY 21 Datum?  
(2 marks)
- b) What is grid convergence and how is it defined? Show how you can derive the result for different location within Singapore and its territorial island.  
(8 marks)
- c) Why and how do we carry out all the necessary equipment for a cadastral survey to be carried out efficiently and within the specification accurately?  
(5 marks)
- d) Why are areas important in cadastral survey and write short notes on what you understand for the following terms;
  - i. Surveyed Area
  - ii. True Area
  - iii. Grid Area
  - iv. P.O. Area
  - v. Build on Area
  - vi. Build up Area
  - vii. Lease Area
  - viii. Net Area (NLA)
  - ix. Gross Floor Area
  - x. Strata Area  
(5 marks)

## **Question 2**

- a) Draw a simple sketch to illustrate and how it is derive for the term 0.960m SHD in cadastral survey?  
(5 marks)
- b) What do you understand by the term foreshore and seabed with reference to the relevant acts and rules for the regularisation of any development and the issuance of Title?  
(5 marks)
- c) A 10 HA sea space within our territorial water had been designated as a floating fish farming area. This is to be leased to the private sector. Describe all the necessary procedure and requirement for final issuance of Title on a short and long term lease. Note, there is no island nearby.  
(8 marks)
- d) Do you need to carry out a proclamation survey for such a project as per item (c) above?  
(2 marks)

## **Question 3**

- a) Under the Land Titles (Strata) Act, share value shown in the subsidiary strata land-register shall not be altered upon the registration of the strata title. List the conditions in which the Act allows otherwise (i.e. the share value can be altered).  
(3 marks)
- b) Under the Building Maintenance and Strata Management Act, what does the share value determine for a condominium development?  
(3 marks)
- c) In a Mixed-Use Development, the allotment of share value to each unit is based on the use of weight factors determined for each type of strata units. Other than the strata area, list the factors that may be considered in determining the weight factors.  
(4 marks)
- d) Describe in detail, the samples and calculation if necessary , how would you prepare the share value of a block 5 storey building which contain 5 shops on the 1<sup>st</sup> storey and 18 residential units at 2<sup>nd</sup> to 5<sup>th</sup> storey.  
(10 marks)

#### **Question 4**

- a) Two (2) brothers inherited Lot 1000L which has an existing bungalow straddling across the lot. They wish to subdivide the lot into 2 plots to separate the ownership. There is no plan for joint development. The existing garden walls at the entrance/exit encroach substantially into the road. The common wall between Lot 1000 and Lot 1001 may have encroachment issues. **With reference to attached sketch Q.4**

- i. In deciding the subdivision line, what are the points of consideration?
- ii. How could you submit the Subdivision proposal to URA for approval?
- iii. Explain the process in (ii).
- iv. How do you resolve the encroachment at the entrance/exit & with adjacent lot 1001W?
- v. If COL cannot accept the SL encroachment on submission of final survey, what need to be done?

(15 marks)

- b) Write what you understand by coordinates refinement for cadastral survey in SVY 21 datum.

(5 marks)

#### **Question 5**

- a) A survey of the land lot is required when a Strata Survey is conducted to subdivide the building within into strata lots and where there is no subdivision of the land lot consequent to the development. For such a strata development the registered surveyor when submitting the Strata Certified Plans to the chief surveyor will include the submission for the CP for the resurvey. However such resurvey is not required if the Strata Survey is for other Strata subdivision.

There are 8 types of such conditions. List out and explain in short notes for each condition.

(10 marks)

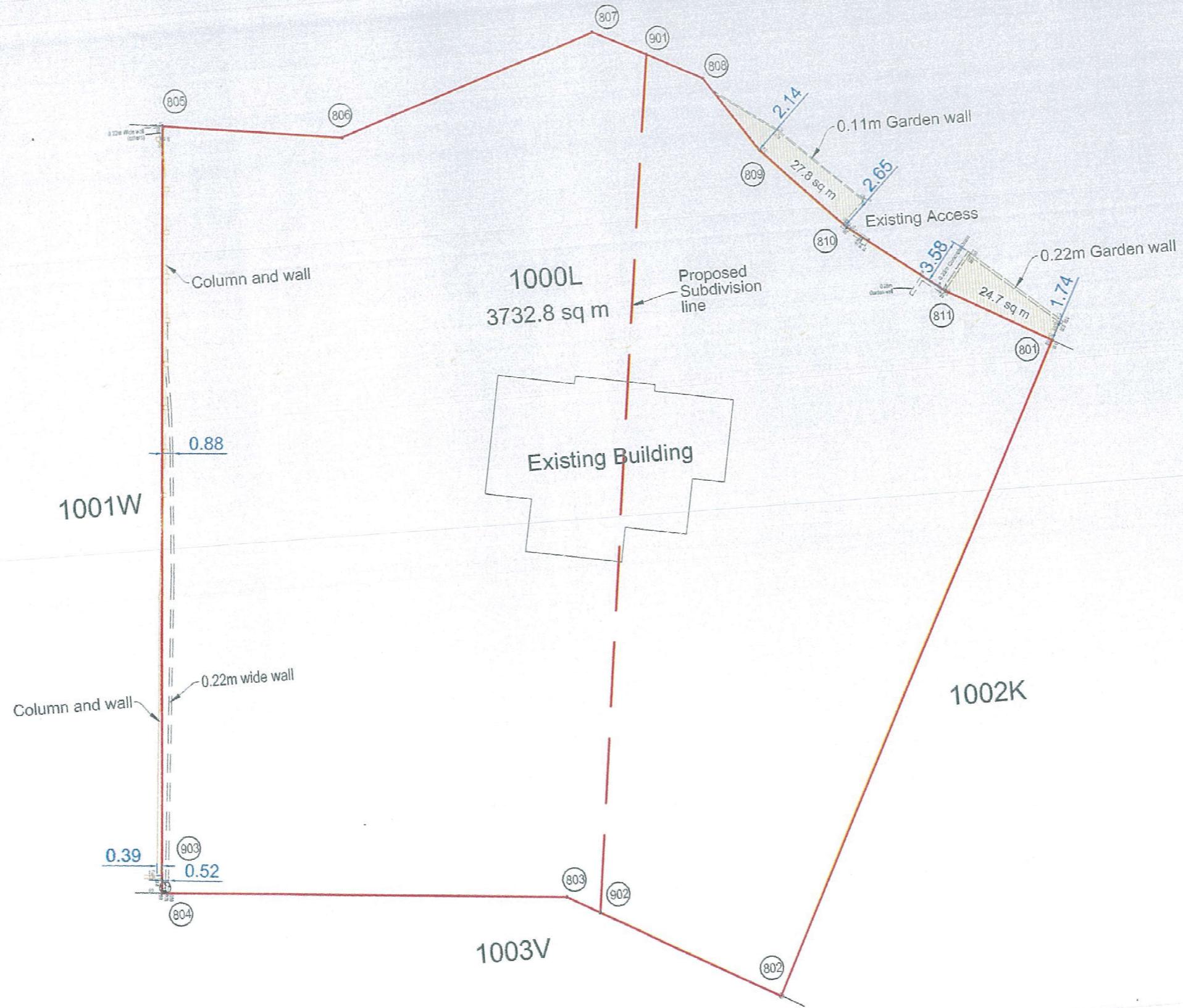
- b) A proposed A/A works to add additional Strata Space on each and every units rooftop for unit No 157 to 177 at Ubi Avenue 4, which is sitting on lot 2773VMK23 as shown on CP 89030 and CP 20109. The current rooftop is common area. These owners and the MCST had approached you as a registered surveyor for advice prior to engaging other allied professional such as Architects and Engineers.

Outline the upfront foreseeable issue, problem and constraints. Suggest solution for each possible constraint for follow up advice and action.

**With reference to sketch Q.5b and CP's attached.**

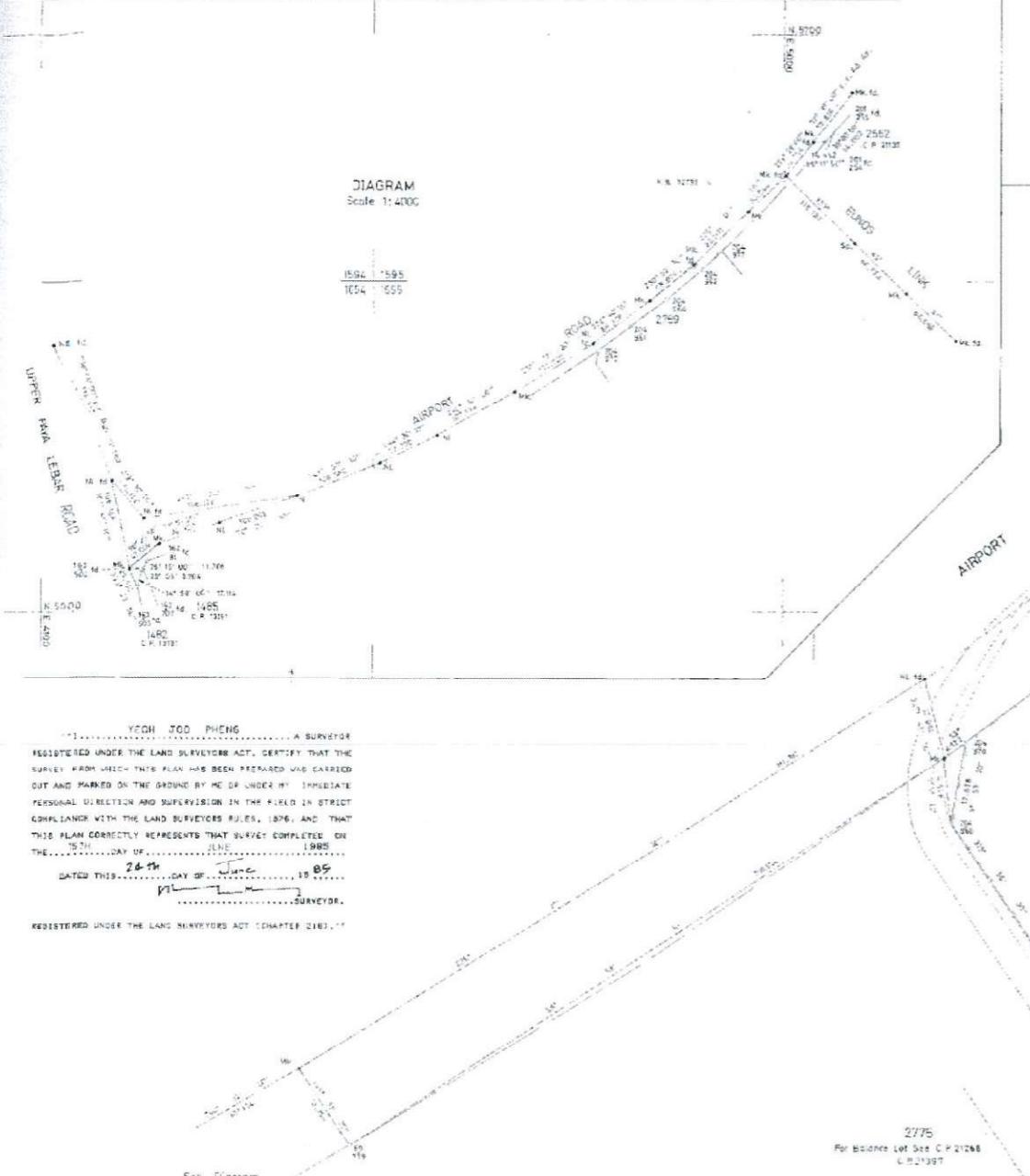
(10 marks)

Question (4)/Sketch Q.4



# Question 5b/CP

LOT NO.	ON PLAN	HERE SUBDIVIDED INTO LOTS	AREA	S.D.S.	L.O.	REMARKS
		2769 2770 2771 2772 2773 2774 2775		260/83	CA751.G.10	
2764	20100					



AZIMUTH ADOPTED FROM C.P. 2137

SURVEYED BY KHIEW SAY YUEN  
S.S.B.

F.B. Nos. 22232...1-A7 & 22268...1-B

CAL. VOL. NO. 720 139-148

DRAWN BY *[Signature]* [Scale 1:500]

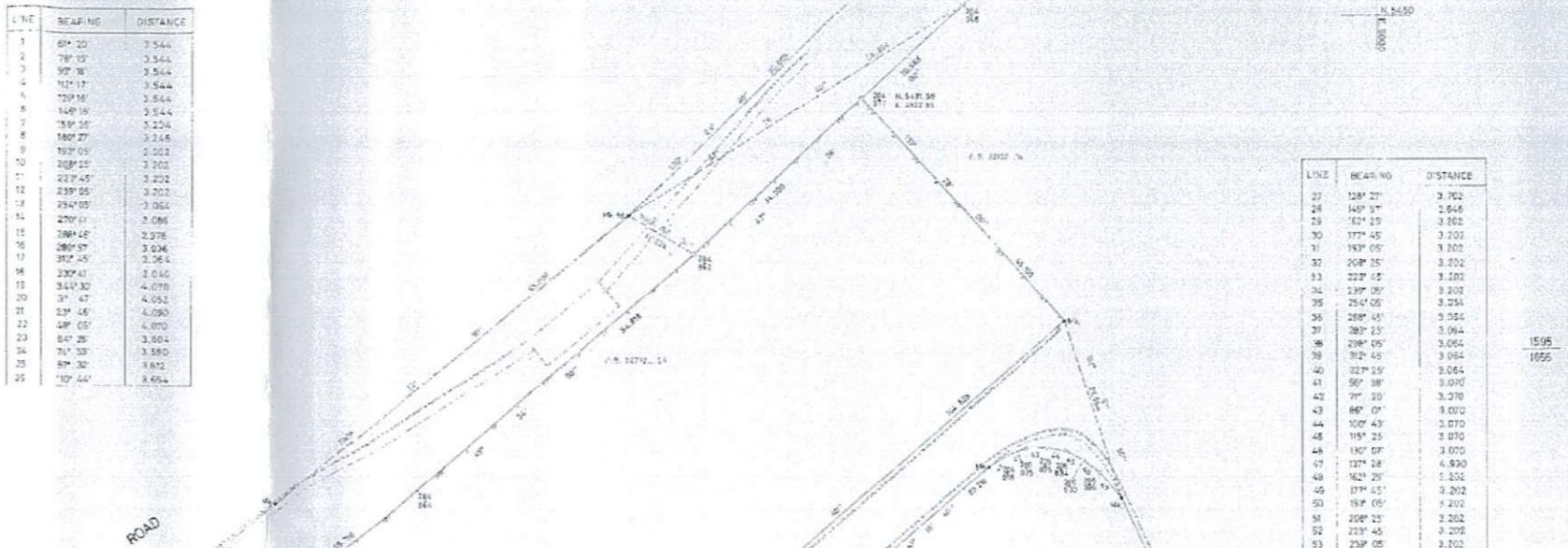
EXAMINED BY *[Signature]* 26.6.85

APPROVED

*[Signature]* 26.6.85

MUKIM NO. 23  
PAYA LEBAR  
CHIEF SURVEYOR

SCALE 1:500



N 5450  
200800

LINE	BEARING	DISTANCE
27	128° 21'	3.702
28	140° 04'	3.648
29	141° 19'	3.648
30	177° 45'	3.202
31	187° 05'	3.202
32	208° 35'	3.202
33	222° 45'	3.202
34	237° 05'	3.202
35	254° 05'	3.202
36	268° 05'	3.202
37	283° 15'	3.064
38	298° 05'	3.064
39	312° 45'	3.064
40	327° 25'	3.064
41	56° 38'	3.070
42	71° 20'	3.270
43	86° 01'	3.070
44	107° 43'	3.070
45	119° 25'	3.070
46	157° 05'	3.070
47	177° 28'	3.820
48	182° 25'	3.252
49	177° 05'	3.202
50	197° 05'	3.202
51	208° 25'	3.202
52	227° 45'	3.202
53	239° 05'	3.202

1595

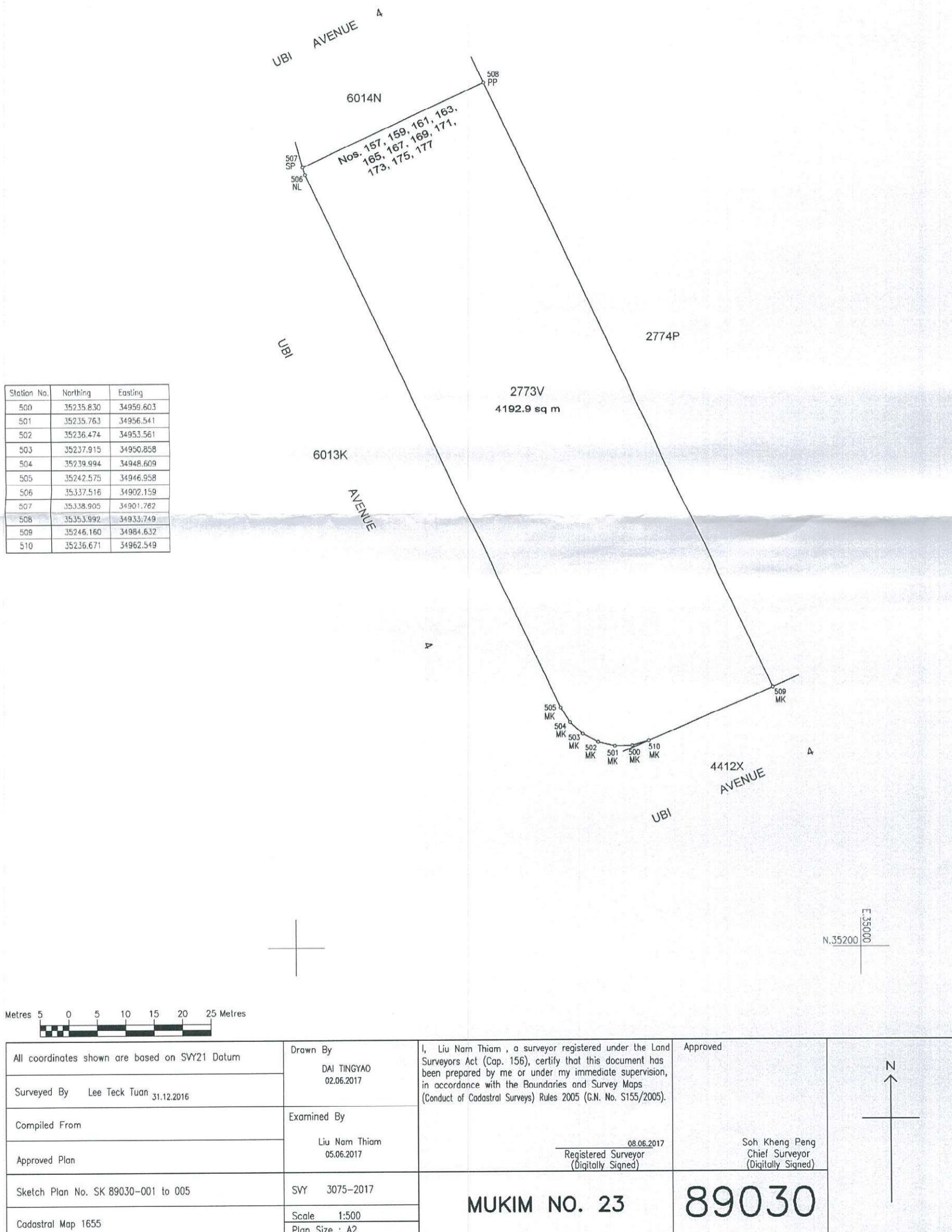
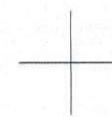
STANDARD SHEETS 1595 & 1655

20109

## Question 5b/CP

Lot No.	On Plan
2773V	20109

N.35400  
E.34900



## Question (5) (b)/Sketch Q.5(b)

