

LAND SURVEYORS BOARD EXAMINATION

INSTRUCTIONS TO CANDIDATE FOR PRACTICAL SUBJECTS

- 1 Candidates shall acquaint themselves thoroughly with the practical experience and knowledge before they sit for the practical examinations. They must have their own assistants and equipment for the purpose of sitting for the practical examinations. The assistants cannot be registered surveyors. All works (field and office) for the practical examination **must be done independently** by the candidate.
- 2 Each candidate shall be allotted an Index number. The candidate shall mark each page of his answer scripts (including field records, sketches, computation sheets, printouts, plans and softcopy documents) with the index number. Any **candidate shall be liable to disqualification for writing his name on the answer scripts.**
- 3 Candidates shall personally obtain data for the cadastral surveys. Where necessary, the Board will issue them the letter to carry out the cadastral surveys.
- 4 EDM instruments must be calibrated and GPS receivers must be tested for gross-error by candidates before being brought into use. The calibration / testing can be conducted before the commencement date of the examination. Candidates need to apply for account with SLA (email to: julita_ibrahim@sla.gov.sg) to book for calibration online and to inform the examiner the date of calibration. Candidates are required to check the EDM test data themselves using the relevant approved proven software.
- 5(a) The practical subjects for cadastral surveys are Land Lot Survey and Strata Survey. The time frame for completing the practical subjects shall be **8 weeks starting from the commencement date of the examination irrespective of the number of subjects taken.**
- 5(b) Candidates must submit a field schedule (date and time) to the examiner before commencement of the subjects. The field schedule is fixed and the examiner may conduct field inspection during this period. Hence, the candidate shall be on site at all times during that period. He/she must inform the examiner in advance should he/she need to be away from the site or there is a change of the field schedule. If the examiner finds the candidate not on site, he will immediately inform the Registrar in writing. The candidate shall submit a written explanation for his/her absence to the Assistant Registrar (email to: mitsy_ng@sla.gov.sg). The Board may bar such candidate from sitting for that particular subject for a period of up to one year from the date of the Board's decision if the candidate's explanation is not acceptable to the Board.
- 5(c) If the candidate is found to be lacking in practical experience and knowledge during the field inspection, the examiner will immediately submit a report to the Registrar.
- 5(d) Candidates can carry-out the computations and drafting work at their own premises.
- 6 Candidates are required to digitally record field data for the surveys. The raw data and processed data have to be submitted.
- 7 Each of the completed Practical Subjects survey, together with a Survey & Examination Reports, is to be submitted **directly to the Assistant Registrar by the due date.** The submission will be deemed incomplete if any of the 4 components viz. field work; computation (except for strata survey), drafting and report are not fully completed according to requirements.
- 8 Candidates shall be subjected to an Oral Examination during which he/she is required to deliver a formal presentation of his/her work to the examiner. The Oral Examination may include a proficiency test in data processing. The examiner will notify the candidate as to the date and venue of the oral examination. The LSB Examination Committee may sit in for the oral examination.

9 The passing mark is 60% for each subject. The marking scheme is as follows:

a. Field work:	40 %
b. Office Processing:	40 %
c. Examination Report:	10 %
d. Oral Examination:	10 %
<hr/>	
Total:	100 %

10 Practical Examination Site Selection, Preparation and Submission:

- (a) Candidates shall select and submit at least 1 site for each practical examination they are registered in.
- (b) A list of past examination sites shall be issued to the candidate. Candidates shall not select any sites on the list for the current practical examination.
- (c) The selected site/s shall be prepared according to the prescribed format and submitted to the Assistant Registrar (email to: mitsy_ng@sla.gov.sg). See attached Annex A for Strata Survey subject, and Annex B for Land Lot Survey subject as samples
- (d) For Land Lot Survey, a minimum of 4 party walls shall be selected. 3 of the party walls shall be used for the examination purposes, and the other one as reserve party wall.
- (e) For Strata Survey, a minimum of 4 units shall be selected. 3 of the units shall be used for the examination purposes, and the other one as reserve unit.
- (f) Candidates shall submit the selected sites to the Assistant Registrar (email to: mitsy_ng@sla.gov.sg) within 4 weeks after the registration deadline of the practical examination.
- (g) Candidates who fail to select and submit a site within 4 weeks after the registration deadline or fail to obtain acceptance from the Board's Examination Committee of the selected site 2 weeks before the commencement date of the practical examination may not be allowed to take the practical examination.
- (h) The Land Surveyors Board shall compile all the approved sites and issue them to the candidates during the day of the practical examination through "draw lots".
- (i) Candidates shall select the sites diligently to ensure that the selected sites are accessible and the measurements to the walls are practically possible.
- (j) Candidates may refer to the "Recommended Procedure To Select An Examination Site" attached for reference.

11 For Land Lot Survey:

- (a) Candidate shall install and carry out GPS survey of at least one new ISN marker. He must occupy or connect his traverse to the new ISN markers and at least one of the new ISN markers must be accepted and used in the computation. Candidates shall liaise with Ms Julita Ibrahim (email to: julita_ibrahim@sla.gov.sg) for ISN marker matters.
- (b) Verification or refinement of lot boundary coordinates shall be carried out before adoption. Candidate shall liaise with Ms Sharon Chua (email to: chua_ah_eng@sla.gov.sg) for refinement matters. The relevant LandXML file shall be submitted to the Assistant Registrar as part of the examination completion submission.
- (c) The Examination Report shall include the "Checklist for Job Submission" forms. (See Annex C)
- (d) The candidate shall prepare a subdivision plan [similar to submission to URA under the Planning Act (Chap 232)] for the land lots under survey.
- (e) Any other relevant letter/forms/documents necessary for the submission.

12 For Strata Survey:

- (a) The survey plan shall follow the STP format.
 - (b) The candidate shall carry out a verification survey of the land lot where the building is subdivided into separate strata lots.
 - (c) The Examination Report shall include the "Checklist for Job Submission" forms. (See Annexes C and D)
 - (d) The candidate shall prepare a strata subdivision plan [similar to submission to URA under the Planning Act (Chap 232)] for the strata lots under survey.
 - (e) The candidate shall prepare the schedule of strata units for share value acceptance by the Commissioner of Buildings.
 - (f) Any other relevant letter/forms/documents necessary for the submission.
 - (g) The mark allocations shall be in the ratio of 70:30 for Strata Survey and Verification Survey respectively.
- 13 The Practical Subjects survey must comply with the prevailing Land Surveyors Rules, Boundaries and Survey Maps Act and BSM (Conduct of Cadastral Surveys) Rules governing the conduct of cadastral surveys and conform to the LSB Circulars, CS Circulars, Guidelines and Specifications for GPS Surveys of ISN markers, latest CS Directive on Cadastral Survey Practices, Instructions to Candidate for Practical Subjects, any instructions given by the Examiner during the period of the examination, and the established procedures and practices in use at the time of examination.
- 14 The survey and submission for the Practical Subjects shall follow closely to the requirements of the current cadastral practices.
- (a) The candidate is permitted to use any available commercial or private software to process field data.
 - (b) The candidate shall prepare and submit the relevant LandXML file (in digital and hardcopy) for the survey. The format and structure of the LandXML file shall strictly follow the "Singapore LandXML Mapping and Structure" dated 11th October 2017, which is available in the SLA corporate webpage.
 - (c) The candidate **shall not submit the final LandXML file through RS Portal**.
 - (d) The candidate shall submit the final LandXML file to Ms Juliana Goh (email to: juliana_goh@sla.gov.sg) for schema checking any time during the period of the examination. The checking report will be returned to the candidate as soon as it is generated (around 2 working days). The candidate shall amend/revise the final LandXML file accordingly and re-submit for schema checking again. The candidate will be given a maximum of **three (3) times only** for the schema checking submission. Therefore, the candidate is strongly advised to double check the final LandXML file before any submission.
 - (e) In addition, the candidate shall prepare all relevant sketches and plans (in **PDF & DWG** format and hardcopy) for submission to the Assistant Registrar at the end of the examination period. For example, traverse sketches, demarcation sketches, party-wall and detail/encroachment sketches, Certified Plan (CP), Strata Certified Plan (CPST) and any other sketches/plans that are deemed relevant for the examination.
- 15 Candidates shall accept full liability in the event of claims arising from any damage, injury or other eventualities caused while doing the practical examination. Also, candidates and their assistants must maintain proper conduct and behaviour in performing the practical examination.
- 16 Candidates shall follow strictly any prevailing health protocol and restriction by any competent authority. Candidates shall also follow strictly any local or house rules imposed by the owner or occupants of the property they are entering for purpose of the practical examination.

- 17 Candidates must use the materials issued for the purpose of the examination. All materials issued shall remain the property of the Board and must be returned to the Assistant Registrar by the due date of the examination.
- 18 Candidate who, without valid reasons, fails to start work, fails to complete or submit an incomplete work for any practical subject by the closing date shall be deemed to have sat and failed the examination. He shall be allotted zero score.
- 19 Under Section 24(1) and 24(2) of Land Surveyors Rules, candidate is not allowed to withdraw from the examination after collecting the Practical Subjects paper on the first day of examination.

**LAND SURVEYORS BOARD EXAMINATIONS
NOVEMBER 2019**

**PRACTICAL EXAMINATION
STRATA SURVEY**

Candidate Index No:

COMMENCEMENT DATE

29th November 2019, 11:00am

CLOSING DATE

24th January 2020, 11.00am

EXAMINATION SITE 1

Lot No. : MK24-09971P

Block No. : 68

Road Name : Geylang Bahru

INSTRUCTION TO SURVEY

- a) Candidates are required to carry out a verification survey of land lot where the building is sub-divided into separate strata units.

Building Block 68 on land lot MK24-09971P is to be strata sub-divided into 3 strata lots. With respect to the records as listed in SUPPLEMENTARY ATTACHMENTS below, you are required to carry-out the strata survey of the 3 unit, viz #01-3233, #01-3223 & #01-3209 on the 1st storey as shown edged on Building Plan SS-BLK68-09971P.

- b) The other parts of the building including the 2nd storey are to be treated as common properties.
- c) For record identification purposes, you are to allocate fictitious numbers to the new sub-divided strata lots, Field Detail sketches and Plan.

SUPPLEMENTARY ATTACHMENTS

- a) Site Plan
b) Building Plan SS-BLK68-09971P
c) SVY21 data of lot MK24-09971P

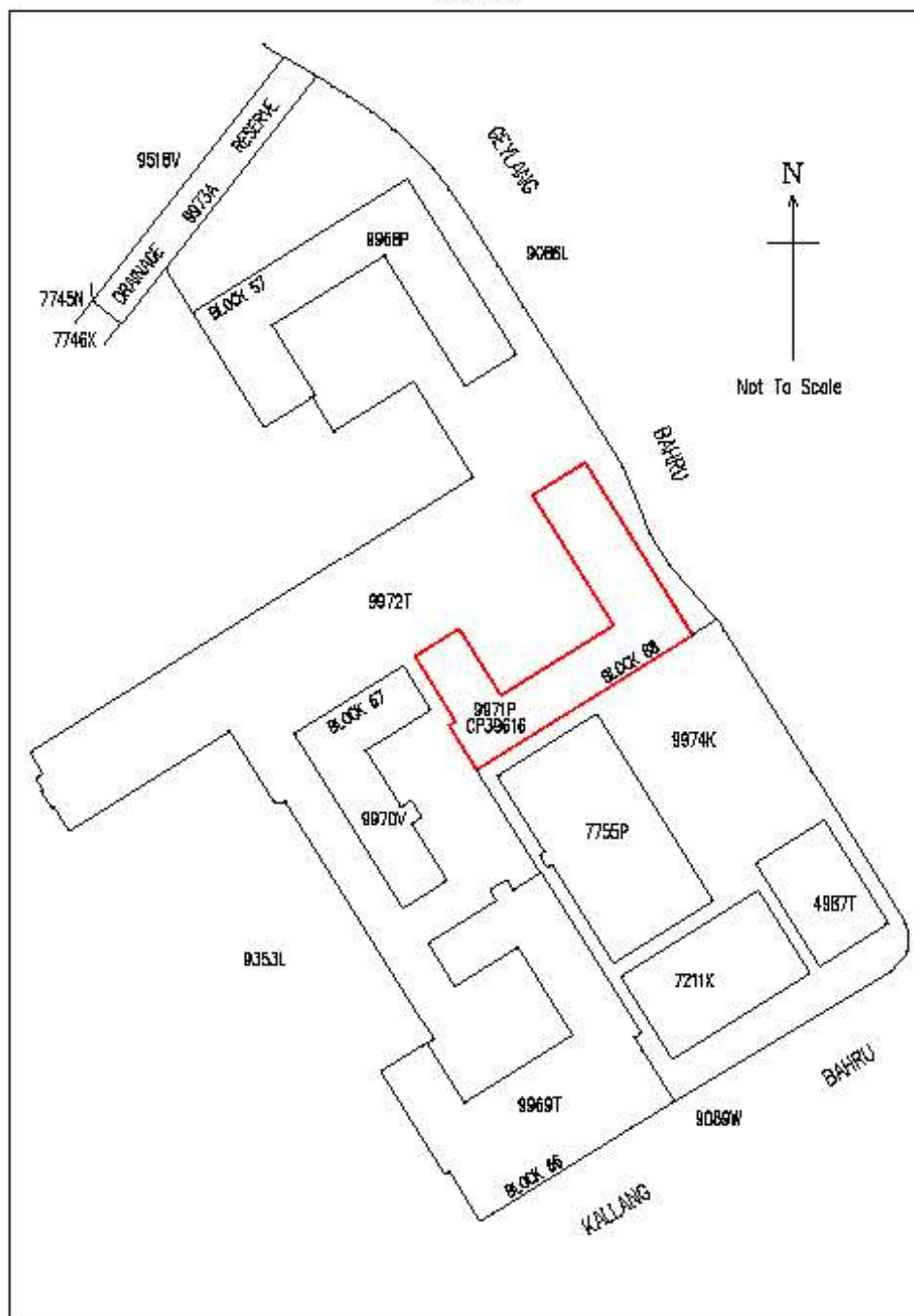
Candidate's Acknowledgement

I, Candidate index No. _____, acknowledge receipt of the Practical Examination Paper and all documents as listed in the Supplementary Attachments.

Signature

Date

SITE PLAN
SITE 1



LAND SURVEYORS BOARD EXAMINATION 2019

LAND SURVEYORS BOARD EXAMINATIONS
NOVEMBER 2019

PRACTICAL EXAMINATION
LAND LOT SURVEY

Candidate Index No:

COMMENCEMENT DATE

29th November 2019, 11:00am

CLOSING DATE

24th January 2020, 11.00am

EXAMINATION SITE 1

Lot No. : MK01-01458N

Block No. : 164-165

Road Name : Bukit Merah Central

INSTRUCTION TO SURVEY

- a) You are required to sub-divide land lot MK01-01458N into 5 plots, namely Plot (1) to (5) as shown edged on Plan LLS-164-165-1458N. The common boundaries from Plot (1) to Plot (5) are to be surveyed based on party walls.
- c) For record identification purposes, you are to allocate fictitious numbers to the new sub-divided lots, Plans & Sketches.

SUPPLEMENTARY ATTACHMENTS

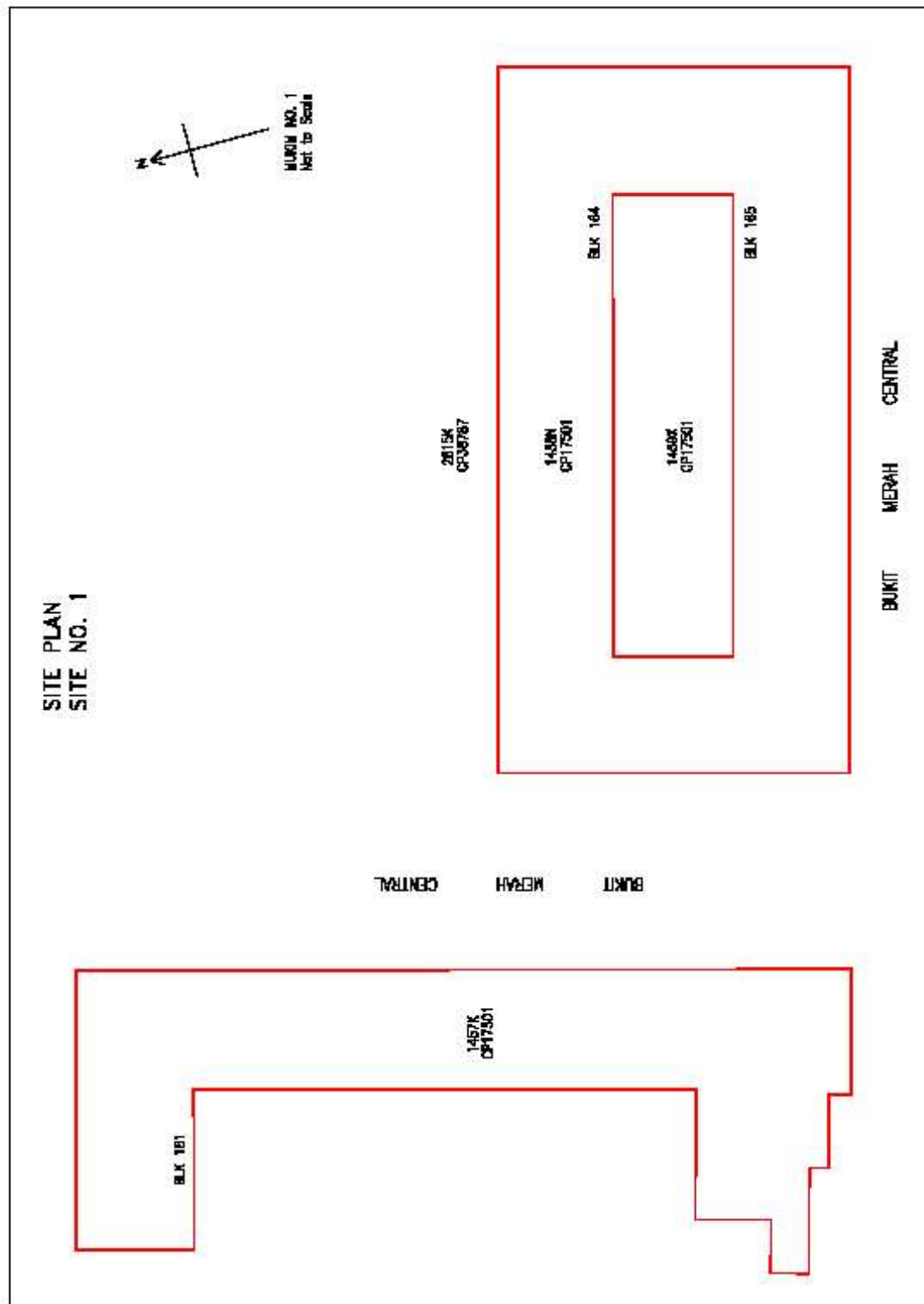
- a) Site Plan
- b) Plan LLS-164-165-1458N
- c) SVY21 data of lot MK01-01458N

Candidate's Acknowledgement

I, Candidate index No. _____, acknowledge receipt of the Practical Examination Paper and all documents as listed in the Supplementary Attachments.

Signature

Date



Land Surveyors Board Examinations 2019

Page 10 of 11

RECOMMENDED PROCEDURE TO SELECT AN EXAMINATION SITE

- a) The selected site must be an existing building with own approved land lot.
- b) The site shall be in the form of existing HDB block for both Land Lot Survey and Strata Survey.
- c) Make sure that the building selected has existing shop units at the first story.
- d) Suggested areas to search are old HDB town centers and its surroundings.
- e) To begin, select a few sites through websites like INLIS and OneMap.
- f) Make sure that the selected site is not on the list of past examination sites for the last 5 years.
- g) Visit the site to select the units to be used for the examination.
- h) For Land Lot Survey, a minimum of 4 party walls shall be selected. 3 of the party walls shall be used for the examination purposes, and the other one as reserve party wall.
- i) Make sure that for the selected walls, access is possible at **both sides** of the walls.
- j) For Strata Survey, a minimum of 4 units shall be selected. 3 of the units shall be used for the examination purposes, and the other one as reserve unit.
- k) Do not select units where access is impossible. For example:- banks, pawn shops, money changers, clinics, massage parlours, tuition/education centers etc.
- l) From past records, shop units selling fruits, furniture, praying items, convenient shops, coffee shops are easier to get permission for access.
- m) Once the units are selected, prepare the site plan and approved plans (for Land Lot Survey subject) / Building Plans (for Strata Survey subject) in pdf format and CAD format.
- n) Submit the plans to the Assistant Registrar (email to: mitsy_ng@sla.gov.sg) for checking and acceptance.
- o) Sites should be selected carefully and diligently to satisfy the requirements of the practical examinations.
- p) Once the selected site is accepted by the Land Surveyors Board without comments, the candidate will be informed.