

CADASTRE SURVEY PRACTICE (SBEU 3323)

WEEK 5 - CONDUCT CADASTRAL LAND SURVEYS (SARAWAK)

Sr DR. TAN LIAT CHOON

07-5543157

016-4975551

OUTLINE

- Preliminary
- Conduct of cadastral land surveys Rules 2003

PRELIMINARY

Interpretation

"**Department**" means the **Land and Survey Department**, Sarawak, or any person duly authorized by the Director to act for or represent the Department in respect of any matter pertaining to these Rules;

"**Director**" means the **Director of Lands and Surveys**, and includes his Deputy and any officer duly authorized by him to act for or on his behalf in regard to any matter under these Rules;

"mining" includes activities relating to the prospecting for minerals;

"sub-division" shall have the meaning assigned to that expression in Part X of the Land Code [Cap. 81 (1958 Ed)];

Interpretation

"Superintendent" means the Superintendent of Lands and Surveys for the Division where the land to be surveyed is located;

"survey fees" means fees for cadastral land surveys undertaken by a land surveyor which are prescribed in First Schedule;

"survey job" means any instruction or direction issued by the Director for the conduct and completion of any cadastral land survey.

CONDUCT OF CADASTRAL LAND SURVEYS

Personal Direction and Supervision of Surveys

3. Every cadastral land survey shall be undertaken by a **land surveyor registered** under Part III of the Ordinance or be 'conducted under the personal direction and supervision of the land surveyor and in strict accordance with these Rules.

Survey Job and Existing Survey Information to be Obtained

4. Before commencing any cadastral land survey, a land surveyor or his surveying assistant shall:

(a) **obtain** from the Department the **survey job** he is to carry out;

(b) **obtain** such **data**, maps or plans which he is entitled to have under section 21(2) of the Ordinance.

Notice of Intention to Survey

5. A land surveyor or his surveying assistant shall **give sufficient notice** of his intention to commence a survey **to the owners** or occupiers of any adjoining land and buildings and wherever appropriate, also to the Superintendent and other Government or statutory authorities.

Compliance with Land and Survey Department's Requirements

6. A land surveyor shall ensure that all the cadastral survey works undertaken by him comply with the instructions, standards and requirements as laid down in the survey job referred to in rule 4(a).

Compliance with Requisition by the Director or Any Officer Authorized by Him

7. (1) A land surveyor shall **comply promptly with any direction made by the Director** or any officer authorized by him in respect of any survey undertaken by him.

(2) If compliance with such a direction has not been made nor a satisfactory reason for non-compliance therewith given within the specified time period of a notification to the land surveyor, the matter may be reported to the Board.

(3) All survey matters requiring clarification or requisition by the Director shall be clarified or dealt with by the land surveyor personally.

Errors in Previous Surveys

8. A land surveyor **discovering an apparent error** in a previous survey which would materially affect its accuracy shall **submit to the Director a full report** and all available evidence, but shall not attempt to rectify the error until he has received a detailed requisition to do so from the Director or any officer authorized by him.

General Field Practice

9. **Methods** of survey and of recording results shall comply with good survey practice and in conformity with these **Rules**.

SECOND SCHEDULE
SURVEY SPECIFICATIONS
 (Rule 19)

Classification of surveys	Angular accuracy of instrument	No. of sets of H.A. observation	No. of sets of V. A. observation	No. of stations for bearing close	Length of surveyed line	Permissible angular misclosure	Permissible linear misclosure
STG Control	3" or better with direct reading to 1"	4 independent	2 reciprocal	15 or less	between 500m and 1000m	3" of arc per station or better	1 : 20,000 or better
SS Control	3" or better with direct reading to 1"	2 independent	2 reciprocal	15 or less	between 200m and 500m	60" or better; and such that the bearing of any line shown on the plan shall not differ from the true bearing expressed in terms of the origin of bearings of the survey by more than the following limits of error: (a) up to 200 m by 15" or less (b) over 200m by 10" or less	1 : 12,000 or better; and such that the length of any line shown on the plan shall not differ from its true length in terms of the standard of length by more than 0.005 m for each 100 m measured.
First Class Control	3" or better with direct reading to 1"	2 independent	1	25 or less	between 100m and 200m	60" or better and such that the bearing of any line shown on the plan shall not differ from the true bearing expressed in terms of the origin of bearings of the survey by more than the following limits of error: (a) up to 200 m by 1' or less (b) over 200m by 30" or less	1 : 8,000 or better; and such that the length of any line shown on the plan shall not differ from its true length in terms of the standard of length by more than 0.010 m plus 0.001m for each 10m measured.
First Class Cadastral	6" or better	1	1	25 or less	not more than 300m	60" or better and such that the bearing of any line shown on the plan shall not differ from the true bearing expressed in terms of the origin of bearings of the survey by more than the following limits of error: (a) up to 200 m by 1' or less (b) over 200m by 30" or less	1 : 8,000 or better; and such that the length of any line shown on the plan shall not differ from its true length in terms of the standard of length by more than 0.020 m plus 0.002m for each 10m measured.
Prismatic Compass	15' or better	1	1	-	not more than 100m	Reading between the forward and back bearings on the same line shall not differ by more than 1 degree.	1 : 250 or better

Submission on Completion of Surveys

10. On **completion** of a cadastral land survey, the requisite documents shall be submitted to the Department in accordance with **section 19** of the Ordinance.

Survey Equipment and Calibration Results

11. (1) Every land surveyor engaged in cadastral land surveys shall use the **equipment** that shall readily attain the standards of accuracy for the different classes of surveys as prescribed in the Second Schedule. Such equipment shall be of the type, standards and capabilities approved by the Board.

(2) All equipment used for the survey shall be **calibrated** before being brought into use when new, after repair or yearly against an official known base and the calibration results shall be included in every job submission.

Systems of Coordinates and Meridians of Reference

12. All cadastral land surveys shall be finalized in terms of the **Rectified Skew Orthomorphic (RSO) projection system** of rectangular co-ordinates. In exceptional cases, where it is impractical to connect the survey to the (RSO) survey marks, the coordinate system and the meridians of reference in force in the locality where the land under survey is situated may be used subject to the approval of the Director or any officer authorized by him.

Survey Datum

13. Every land surveyor or surveying assistant carrying out a cadastral land survey shall take all reasonable care to **verify the survey datum** adopted, and shall record full details of the measurements thereof in his field notes.

Origin of Coordinates and Bearings

14. (1) The origin of coordinates and bearings shall be obtained from a former survey approved by the Department and shall be:

(a) three survey marks of at least the same order as the present survey proven firm in their original positions;

or

(b) two survey marks of at least the same order as the present survey proven firm in their original positions and correct in its line's azimuth.

Origin of Coordinates and Bearings

(2) The reliability and firmness of the former survey marks as mentioned in paragraph (1) may be proven by:

- (a) angular and linear measurements; or
- (b) linear measurement and astronomical observations; or
- (c) trigonometrical observations; or
- (d) satellite observations; or
- (e) any other method acceptable to the Land and Survey Department.

(3) If it is impractical to carry out the methods mentioned in paragraphs (1) and (2), the origin of coordinates and bearings may also be established by resection from at least four favourably situated control survey stations that are part of a reliable survey control system.

Closing of Bearings

15. All bearings shall be closed at intervals of the appropriate number of stations for each class of survey as specified in the Second Schedule.

Angular Observations

16. Angles shall be measured in degrees, minutes, and seconds of arc in sexagesimal measurement and all angular observations shall be made by reading both faces of the Theodolite or Total Station.

The number of sets required for each class of survey is stipulated in the **Second Schedule**.

SECOND SCHEDULE
SURVEY SPECIFICATIONS
 (Rule 19)

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SS Control	3" or better with direct reading to 1"	2 independent	2 reciprocal	15 or less	between 200m and 500m	60" or better; and such that the bearing of any line shown on the plan shall not differ from the true bearing expressed in terms of the origin of bearings of the survey by more than the following limits of error: (a) up to 200 m by 15" or less (b) over 200m by 10" or less	1 : 12,000 or better; and such that the length of any line shown on the plan shall not differ from its true length in terms of the standard of length by more than 0.005 m for each 100 m measured.
First Class Control	3" or better with direct reading to 1"	2 independent	1	25 or less	between 100m and 200m	60" or better and such that the bearing of any line shown on the plan shall not differ from the true bearing expressed in terms of the origin of bearings of the survey by more than the following limits of error: (a) up to 200 m by 1' or less (b) over 200m by 30" or less	1 : 8,000 or better; and such that the length of any line shown on the plan shall not differ from its true length in terms of the standard of length by more than 0.010 m plus 0.001m for each 10m measured.
First Class Cadastral	6" or better	1	1	25 or less	not more than 300m	60" or better and such that the bearing of any line shown on the plan shall not differ from the true bearing expressed in terms of the origin of bearings of the survey by more than the following limits of error: (a) up to 200 m by 1' or less (b) over 200m by 30" or less	1 : 8,000 or better; and such that the length of any line shown on the plan shall not differ from its true length in terms of the standard of length by more than 0.020 m plus 0.002m for each 10m measured.
Prismatic Compass	15' or better	1	1	-	not more than 100m	Reading between the forward and back bearings on the same line shall not differ by more than 1 degree.	1 : 250 or better

Bearings

17. Every bearing recorded in any cadastral survey document shall be the bearing measured or calculated and expressed clockwise from the North in **degrees, minutes and seconds**.

Distances

18. (1) Every distance recorded in any cadastral survey document shall be the distance measured or calculated and rounded as follows:

(a) for **First Class Cadastral** and higher order controls, to the **nearest millimetre (0.001m)**;

(b) for Prismatic Compass Survey, to the nearest decimetre **(0.1m)**.

(2) Distances measured for **STG Control**, **SS Control** and higher order controls shall be reduced to the State's Datum Ellipsoid. TT - Tellurometer Traverse Point, STG - Standard Traverse Geodimeter Point, SS - Standard Survey Mark

(3) Distances measured for other lower classes of cadastral survey shall be reduced to the final horizontal distances.

Classification of Surveys

19. The classification of cadastral land surveys is based on the degree of accuracy required and is as follows:

(a) **STG Control** - comprising planimetric and height controls in the order of accuracy of **1:20,000** or better for further breakdown of Secondary and Tertiary Control Network to provide sufficient controls for SS Control, First Class Control and First Class Cadastral Survey.

(b) **SS Control** - comprising planimetric and height controls in the order of accuracy of **1: 12,000** or better for further breakdown of STG Control to provide sufficient controls for First Class Control and First Class Cadastral Survey.

Classification of Surveys

(c) **First Class Control** - comprising planimetric control in the order of accuracy of **1:8,000** or better for further breakdown of STG Control and SS Control to provide sufficient controls for First Class Cadastral Survey.

(d) **First Class Cadastral** - comprising title surveys, sub-division surveys, perimeter surveys, land acquisition surveys, settlement surveys or any boundary surveys in town lands, suburban lands, country lands or native customary lands in the order of accuracy of **1:8,000** or better.

(e) Prismatic Compass - comprising the survey of internal boundaries of groups of country lots, minor right-of-ways surveys, some sub-division surveys, etc. This class of survey shall be connected to higher order survey marks and all the surveyed marks shall be coordinated.

Angular and Linear Errors

20. (1) The permissible angular and linear errors for each class of survey are stipulated in the Second Schedule.

(2) The limit of the normal allowable angular and linear misclosure, the permissible number of survey stations for bearing close and the length of the surveyed lines may be relaxed at the discretion of the Director or any officer authorized by him.

Computations

21. (1) All computations shall be done in a logical sequence and in conformity with survey principles and guidelines set out by the Land and Survey Department. (Sarawak-Cadastral Processing System-SCS Comp) (ess – sabah). LS - eCPS (Cadastral Processing System, Sarawak) JTS - SCS (Survey Computation Section. JTS use ESS /Licensed surveyor use ISS. JTS Sabah – ISS, LS – ESS.

(2) In the cases of title surveys, computations shall also include:

- (a) computation of bearings and distances of boundaries which have been surveyed;
- (b) computation of bearings and distances of all new boundaries which have not been surveyed;
- (c) computation of the coordinates of all boundary points; and
- (d) computation of the area of each new lot.

(3) All final coordinates and bearings shall be computed in terms of the origin of coordinates and bearings.

Area Approximation

22. Areas of lots surveyed shall be computed in square metres and shall be shown according to the Table of Area Approximation as set out in the Third Schedule.

THIRD SCHEDULE

AREA APPROXIMATION

(Rule 22)

<i>Area not more than</i>	<i>But Exceeding</i>	<i>To be entered to the nearest</i>
First and Second Class Surveys		
0.11 hectare	—	0.1 square metre (m ²)
1 hectare	0.11 hectare	1 square metre (m ²)
2.1 hectares	1 hectare	0.0001 hectare (ha)
40.5 hectares	2.1 hectares	0.001 hectare (ha)
405 hectares	40.5 hectares	0.1 hectare (ha)
Prismatic Compass Survey		
1 hectare	—	10 square metres (m ²)
8.1 hectares	1 hectare	0.001 hectare

Remark: The above approximation shall be made by rounding down the determined area except in cases involving conversion of areas shown in acre or square foot on registered land titles into hectare or square metre, the approximation shall be made by rounding off the determined area (i.e. 5 and above shall be rounded up and below 5 shall be rounded down.)

Permanence of Boundaries

23. (1) The extent of the land alienated under title is defined as that marked on the ground at the time of survey for alienation, consequently:

(a) the extent must be adequately marked at the time of such survey; and

(b) marks found on the ground during the course of a subsequent survey may not be disturbed unless there is clear evidence that they are no longer in the position in which they were emplaced at the time of the original survey.

Permanence of Boundaries

(2) If there is any discrepancy between the dimensions of the boundaries on the ground and those on the cadastral record, the land surveyor shall obtain adequate data to determine whether the discrepancy is due to encroachments or movements of marks or defects in the previous survey.

(3) Before any attempt is made to replace missing marks or to refix disturbed marks, the relationship between the datum adopted for a previous survey and those adopted for the new survey shall be determined by the Director.

Demarcation of Boundaries

24. (1) **Boundary lines shall be measured direct wherever possible.** The survey of boundaries by long radiations shall be avoided. In any case, the length of radiations shall not exceed twenty metres.
- (2) **All boundary points shall be marked** unless they fall in inaccessible positions.
- (3) **Where boundary points cannot be marked** by reason of mine holes, structures or other causes, **reference points shall be emplaced nearby** to facilitate the determination of the actual boundary point, the best position for such marks being on the intersecting boundaries as near as possible to the obstructing feature.

Demarcation of Boundaries

(4) Building abutting on, overlapping or closely approaching boundaries shall be accurately fixed in relation to the boundary.

Where the wall of a building or structure is erected on or adjoining a boundary and such a wall is used as a party-wall or party-wall rights have been created by grant or prescription, the position and thickness of the wall shall be accurately fixed. Where possible the age of the building, structure or wall shall be noted in the field book.

(5) Every boundary mark emplaced shall be at a station on a closed survey loop, or else its position shall be determined by two independent sets of measurements from such station or stations.

Demarcation of Boundaries

(6) Not every boundary of every lot need be measured, providing that the extremities of every boundary are marked in conformity with paragraph (5) and sufficient boundaries are surveyed to ensure that an accumulation of minor errors shall not lead to the calculated values of the bearings and distances of the unsurveyed boundaries differing materially from their true values.

(7) In any sub-divisional survey, for every layout of five consecutive lots or less, at least one lot boundary connecting the other two sides of the boundaries of the lots, which normally have been surveyed by "on-line pegging", shall be surveyed through as a check.

Demarcation of Boundaries

(8) In a sub-divisional survey, the re-survey of boundaries not affected by the sub-division may be confined to the measurement of the lines required for datum. The other boundaries may, when required, be adopted without remeasurement provided the original survey had an adequate technical value.

(9) Consecutive marks on a straight boundary shall be inter visible and shall not be more than three hundred metres apart.

Demarcation of Boundaries

(10) Boundaries defined by a regular curve shall be marked by regulation marks on the curve in such a manner that the offset from the middle of the chord to the curve between adjacent marks shall not exceed twenty centimetres for urban areas nor shall the marks be at intervals of more than twenty metres apart.

In rural areas, the offset may be increased to forty centimetres. In every case, a curve shall be marked by at least one peg in addition to the marks at the tangent points.

Demarcation of Boundaries

(11) Boundaries shall normally follow straight lines except for curved boundaries.

(12) Physical features such as river-banks, edges of swamps, undefined road frontages, etc., are inadmissible as boundaries.

(13) Details of occupation in so far as it is determined by the alignment and position of fences, walls and eaves of buildings, cultivation or other evidence shall be recorded in field books.

Survey of Land Held Under Native Customary Rights for Approved Land Development Schemes

25. (1)(a) No land surveyor shall carry out the demarcation of perimeter boundaries of any land held under native customary rights without the written authorization of the Director.

(b) No such authorization shall be given unless the survey is required to implement, or for the purposes of, the development of land held under native customary rights under a scheme approved by the Government.

(2) All survey works carried out by a land surveyor in connection with native customary rights claims shall be limited to the marking and recording of survey measurements of the perimeter boundaries only.

Surveyors to Uphold Government Interests

26. In carrying out surveys for any new alienation of land, every land surveyor shall have regard to the interests of the Government and shall avoid effecting surveys in such manner as to render any portion of land to waste, or confer undue advantage of any party in a manner detrimental to the interests of the Government.

Statutory Reserves

27. Unless otherwise instructed by the Director where land to be surveyed adjoins the sea coast, foreshores, navigable rivers or roads, areas reserved to the Government in accordance with section 38(1) of the Land Code [Cap. 881 (1958 Ed.)] shall be provided for.

Road and Access Reserves

28. (1) The sides of road reserves and reserves for access should normally be parallel.

(2) For the survey of reserves for planned road projects, the Director shall issue particular instructions as to dimensions which shall include but not limiting to provision for embankments, cuttings, drains and abutments, and for constructional requirements such as borrow pits.

(3) If in the course of a survey for the alienation of State land, a well-used vehicle track or foot-path is found to pass through the land under survey, details shall be reported to the Director forthwith so that action can be taken to protect the track or path by the survey of a reserve.

Topographical Details

29. Measurements shall be made to determine, with sufficient precision for the purpose of plotting them accurately at the scale of the plan, the positions of such natural and artificial features and limits of cultivation adjacent to boundaries, which may affect title.

Survey and Boundary Marks

30. All survey marks emplaced for the purposes of defining boundaries or for control surveys shall conform to the specifications as set out by the Director.

Every precaution shall be taken to ensure that marks emplaced are permanent and stable.

Permanent Reference Marks

31. (1) Every cadastral survey shall be connected to at least 3 permanent reference marks.

(2) In this rule, "permanent reference marks" means:

(a) a trigonometric station; or

(b) a metal tube of not less than 13mm internal diameter and 0.5 metre long driven level with the ground; or

(c) any other concrete control survey marks; or

(d) such other mark as the Department, having regard to permanence, accepts.

Emplacement before Survey

32. All survey marks shall be emplaced prior to or simultaneously with but not after making of the measurements which determine their positions.

Field Survey Data

33. (1) All cadastral land surveys carried out shall be recorded in field books or in auto digital format as may be approved by the Director.

(2) When field books are used, the following rules shall apply:

(a) The first page of each field book shall show the survey job number, the title of the survey with particulars of the district, block, town or other reference as shall sufficiently identify the land surveyed, the name and signature of the land surveyor and the surveying assistant, the date of commencement and completion of the survey, and the type, make, model and serial number of the equipment used and its calibration result.

Field Survey Data

(b) All entries in field books shall be neatly and clearly recorded in permanent black ink in a professional manner.

(c) The original field notes shall not be obliterated or erased. Every alteration made by the land surveyor or his surveying assistant shall be clearly written and erroneous entries shall be clearly crossed out and initialled.

(d) All field books shall be numbered serially and each page shall be numbered consecutively.

(e) Measurements shall be recorded in the field book immediately after they are made.

Field Survey Data

(f) Each page of the field book shall be initialled by the land surveyor.

(g) Sufficient diagrams shall be drawn to make the measurements recorded in the field book readily interpretable.

(h) Diagrams shall show a North Point and shall be clearly referenced with respect to other diagrams.

(i) The nature of any survey mark found shall be concisely recorded in the field book.

Plans

34. (1) Survey plans shall be prepared for all cadastral land surveys undertaken in accordance with the specifications as laid out in the Fourth Schedule.

(2) Every plan shall bear a certificate corresponding to the type of survey undertaken in the applicable form prescribed in the Fifth Schedule.

(3) Unless some other written laws require or allow something different, the format and content of plans shall comply with the Fourth Schedule.

(4) All plans shall be drawn to a standard acceptable to the Department.

(5) All plans shall be approved by the Director prior to their acceptance as official records kept by the Department.

Deposited Plan (DP)

- Deposited Plan (DP) "A1" size is plans showing the details of Amalgamation and Sub-division of Lot/Parcel of land.
- This Plan normally involved engineering plan for development.
- This Plan need to be deposited by the Superintendent of Land and Survey Department.
- The information visible on this plan was the Bearing and Distances of the observed Lot/Parcel Boundary and the Peg number.
- Area of the survey Lot/Parcel was shown clearly on the Plan either in metric unit (new plan) or imperial unit (old plan). Also visible was the traverse line and the survey origin.



SURVEY DATA				
From Station	To Station	Bearing	Length	Distance
304	74	89° 57' 00"	1.617	1.617
304	102	114° 00'	1.600	1.600
304	101	67° 31'	1.500	1.500
302	101	112° 31' 30"	1.501	1.501
308	66	179° 30'	1.500	1.500
81	102	114° 00'	1.500	1.500
102	101	112° 31'	1.500	1.500
108	301	179° 30'	1.500	1.500
308	101	109° 31'	1.500	1.500
112	112	102° 40' 30"	1.500	1.500
112	301	179° 30'	1.500	1.500
201	202	102° 00'	1.500	1.500
108	205	107° 00'	1.500	1.500
205	201	107° 00'	1.500	1.500
205	88	107° 00'	1.500	1.500
88	81	107° 00'	1.500	1.500
304	81	107° 00'	1.500	1.500
88	11	107° 31'	1.500	1.500

I, the Surveyor, do hereby certify that the plan has been prepared from the survey conducted by me and that the same is true and correct and that both plan and survey are correct.

I hereby agree that I shall bear full responsibility as to the correctness of the survey, and that I am bound to the conditions of the Survey and that I am bound to the conditions of the Land Surveyors (Control of Geomatics Land Survey) Rules, 2000.

Dated at _____ this _____ day of _____ 20__.

Land Surveyor
(Digitalized in 20__)

Total Area: 1,880 ha.

Field Book: _____
 Traverse Volume: _____
 Reference Plan: _____
 Drawn by: _____ Date: _____
 Checked by: _____ Date: _____

Approved as to Survey

 Deputy Surveyor

Deposited this _____ day of _____ 20__.

Supt. of Land & Surveys, Sarawak, Sarawak, Sarawak
 No. JLN/2024/100
 Date: 2024/08/08
 Number of 2024/08/08

Small Deposited Plan (SDP)

- Small Deposited Plan (SDP) "A2" size is plans showing the details of Amalgamation and Sub-division of Lot/Parcel of land.
- This Plan normally involved engineering plan for development.
- This Plan need to be deposited by the Superintendent of Land and Survey Department.
- The information visible on this plan was the Bearing and Distances of the observed Lot/Parcel Boundary and the Peg number.
- Area of the survey Lot/Parcel was shown clearly on the Plan either in metric unit (new plan) or imperial unit (old plan).
- Also visible was the traverse line and the survey origin.



5164150 m. N

5164100 m. N

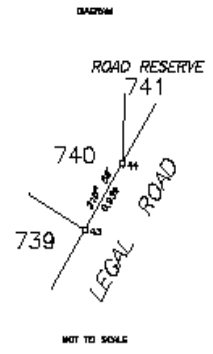
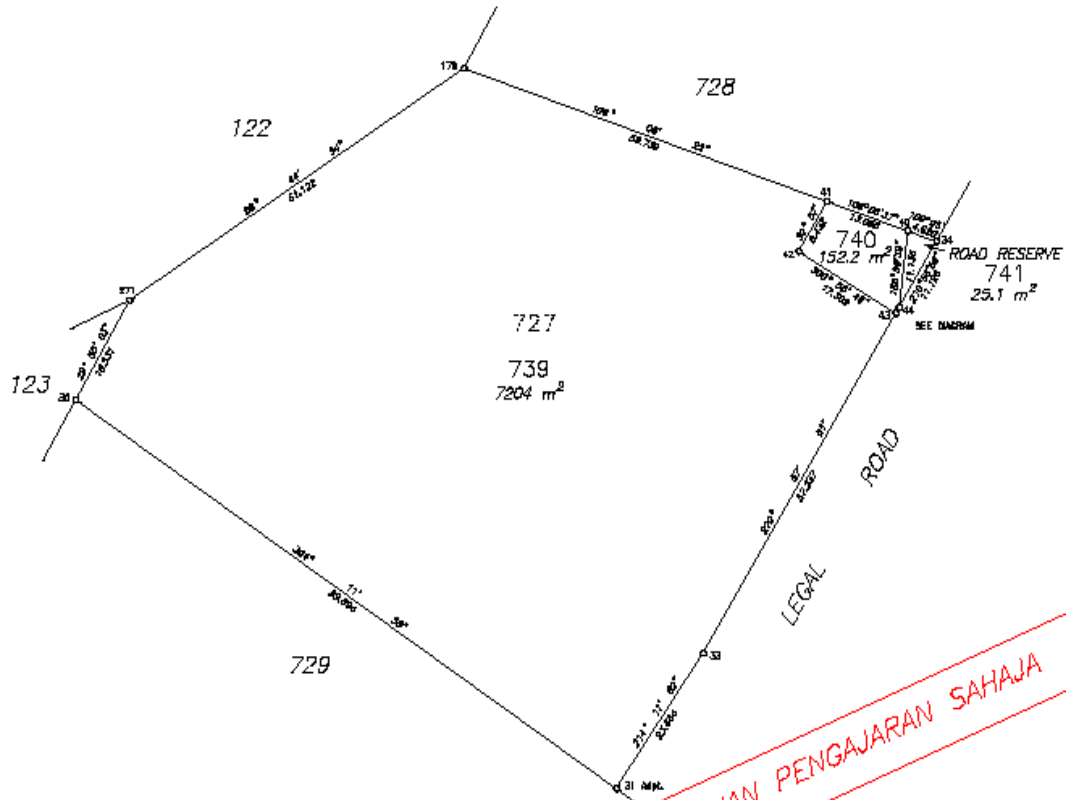
5164050 m. N

3277000 m. E

3277000 m. E

3277000 m. E

3277000 m. E



UNTUK TUJUAN PENGAJARAN SAHAJA

I, _____
 of _____
 a Land Surveyor licensed under the Land Surveyors Ordinance,
 2001, do hereby certify that this plan has been prepared
 from the survey undertaken by me/done under my supervision
 and that both plan and survey are correct.

I hereby agree that I shall bear full responsibility as
 to the correctness of the survey and that it has been made
 in strict accordance with the Land Surveyors (Docket of
 Certified Land Surveys) Rules, 2003.

Dated at _____ this _____ day
 of _____, 20_____

 Land Surveyor
 (Registration No. _____)

Total Area 7392 m²

Field Book _____

Traverse Volume _____

Reference Plans _____

Drawn by _____ Date _____

Examined by _____ Date _____

Approved as to Survey

_____/_____/_____ Staff Surveyor

Deposited this _____ day of _____, 20_____

Supt. of Land & Surveys, _____ Div.

File No. _____
 Job No. _____
 Received on _____

Ref : M4 - 10 - 2

Plan of Lots 739-741
 being subdivision of Lot 727
 Block 3
 Solak Land District

Surveyed by _____

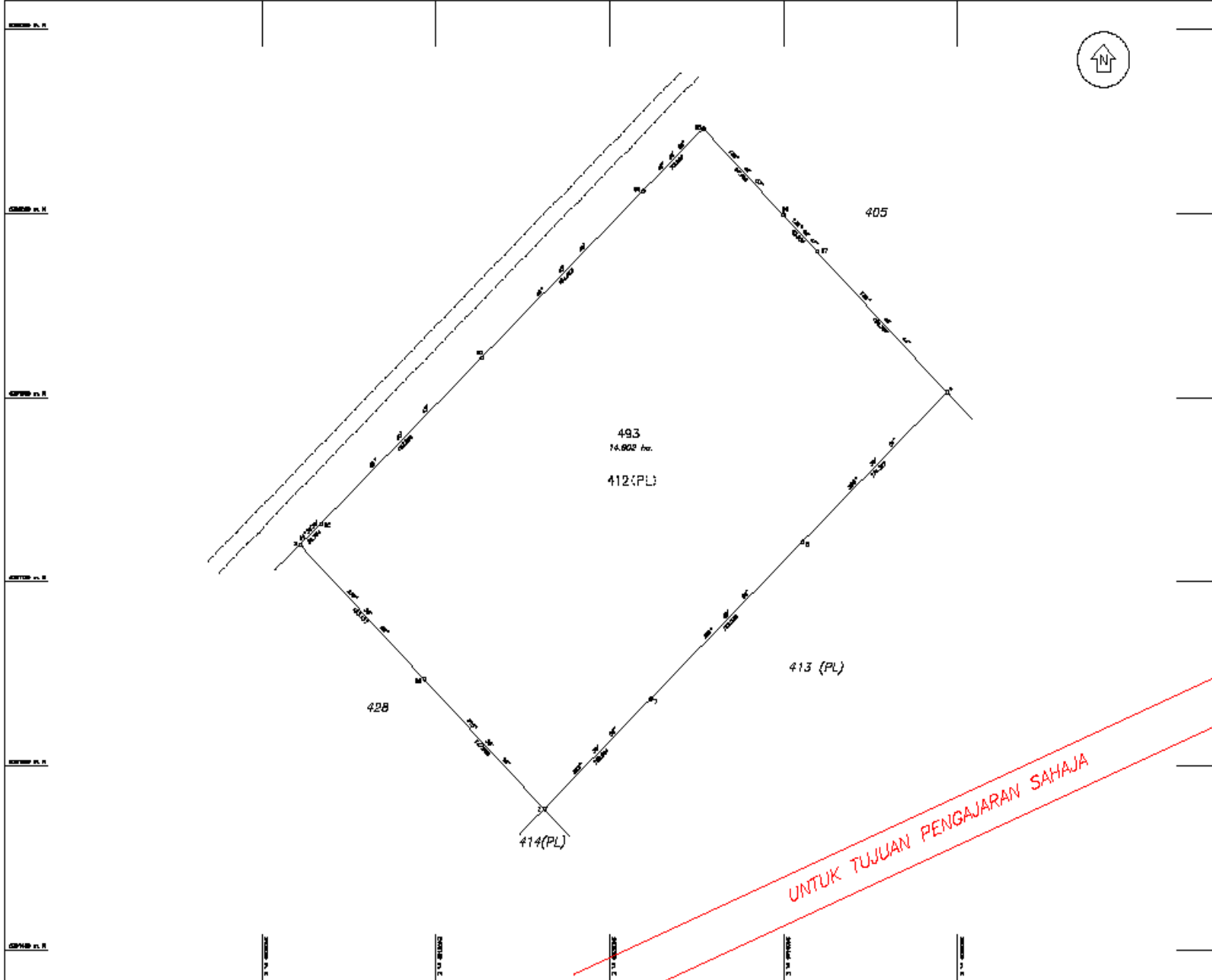
Date _____

Scale 1 : 500

SDP 1/3070

Big Plan (BP)

- Big Plan (BP) "A1" size is plan that similar to that in "DP" except that; This plan do not involve engineering plan.
- This plan showing the details of Amalgamation and Sub-division of Lot/Parcel of land for rural areas and Agriculture Lots.
- This plan does not need to be deposited by the Superintendent of Land and Survey Department.



I, _____ of _____ do hereby certify that this plan has been prepared from the survey conducted by me/ours under my supervision and that same plan and survey are correct.

I hereby certify that I bear full responsibility as to the accuracy of the survey and that it has been made in accordance with the Land Survey (Conduct of Certified Land Survey) Rules, 2020.

Dated at _____ this _____ day of _____, 20____.

Land Surveyor
(Registration No. _____)

Total Area ... 14.602 ha.

Field Book ...
Tape Measure ...
Reference Plan ...
Drawn by ... Date ...
Checked by ... Date ...

Approved as to Survey

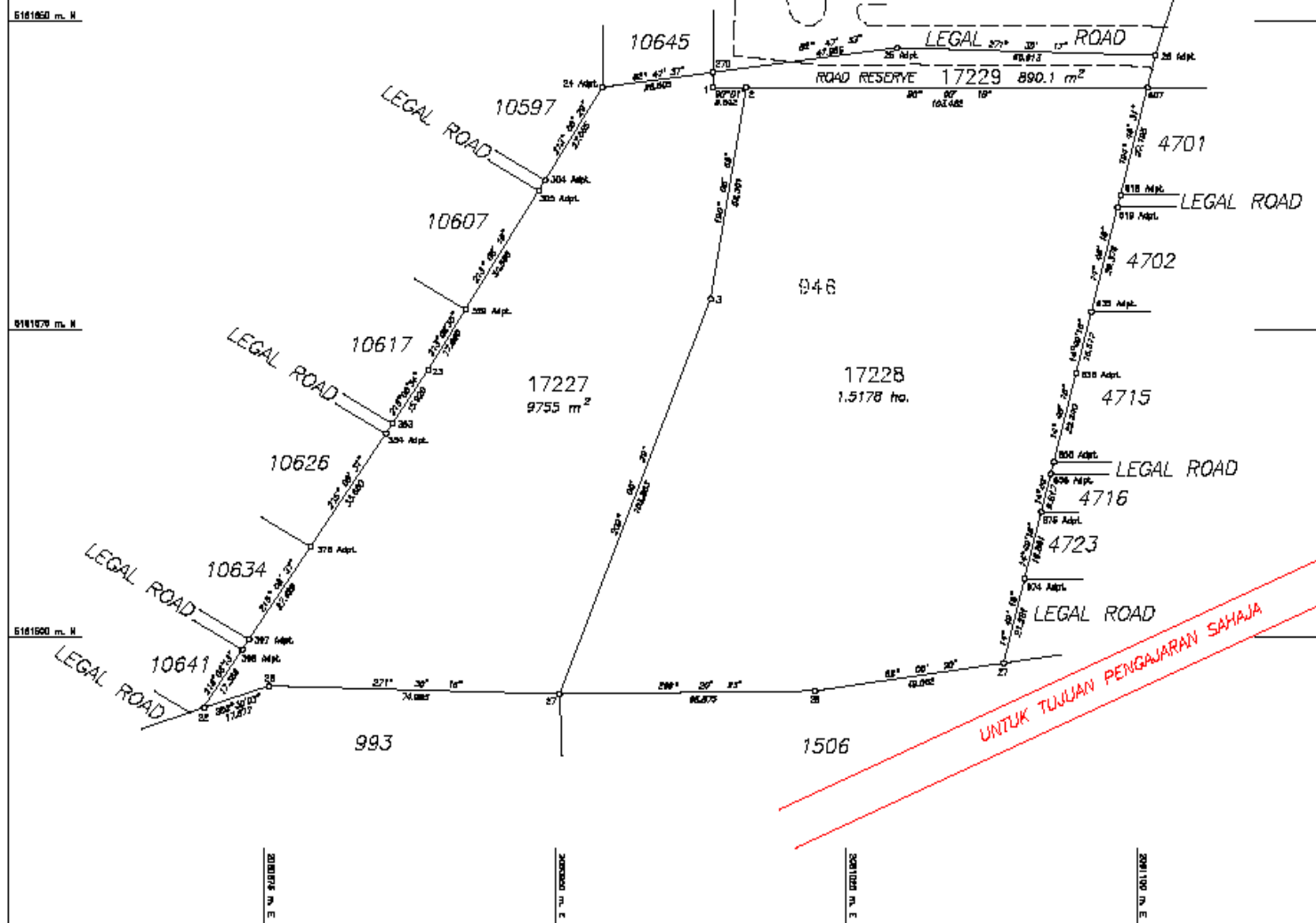
Chief Surveyor

Deposited this _____ day of _____, 20____.

UNTUK TUJUAN PENGAJARAN SAHAJA

Small Plan (SP)

- Small Plan (SP) "A2" size is plan that similar to that in "SDP" except that; This plan do not involve engineering plan.
- This plan showing the details of Amalgamation and Sub-division of Lot/Parcel of land for rural areas and Agriculture Lots.
- This plan does not need to be deposited by the Superintendent of Land and Survey Department.



SURVEY DATA			
From Station	To Station	Bearing	Distance
270	1	178° 30'	3.633
304	305	212° 08'	3.008
305	304	218° 06'	3.010
307	306	218° 08'	3.014
050	055	14° 48'	3.104
28	007	194° 44'	0.086
019	015	14° 49'	3.103

I, _____ of _____ a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that this plan has been prepared from the survey undertaken by me/done under my supervision and that both plan and survey are correct.

I hereby agree that I shall bear full responsibility as to the correctness of the survey and that it has been made in strict accordance with the Land Surveyors (Conduct of Conducted Land Surveys) Rules, 2003.

Dated at _____ this _____ day of _____, 20_____.

Land Surveyor
(Registration No. _____)

UNTUK TUJUAN PENGAJARAN SAHAJA

Total Area 2.582 ha.

Field Book _____

Transfer Volume _____

Reference Plans _____

Drawn by _____ Date _____

Examined by _____ Date _____

Approved as to Survey _____ Staff Surveyor

Deposited this _____ day of _____, 20_____.

Ref : M4 - 31 - 4

Plan of Lots 17227-17228
being subdivision of Lot 946
Block 26
Muara Tuang Land District

Surveyed by _____
Date _____
Scale 1 : 750

Supt. of Land & Surveys, Samarahan, Div.
File No. _____
Job No. _____
Received on _____
SP 8/865

Certified Plan (CP)

- Certified Plan (CP) was a plan prepared by Private License Surveyor's firm for 'Strata Title' units.
- This Plan is mostly in 'A3' size paper. Measurements units are in metric.
- This plan shows the layout of a 'Strata Title' building and the Locality plan.
- Also shown was the schedule of area and share unit.
- Floor Plan of 'Strata Title' building.
- Elevation of subdivided building.

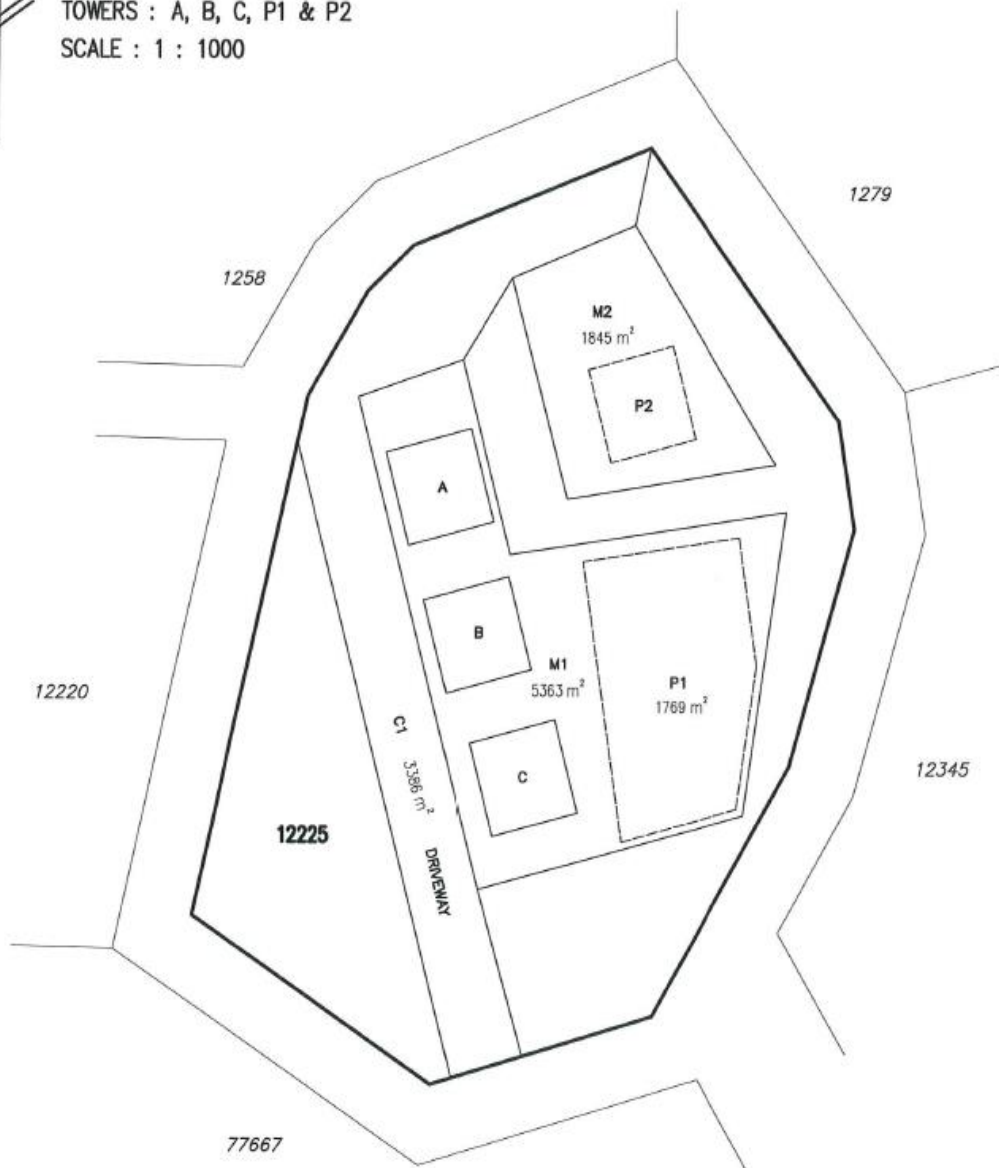


DELINEATION PLAN

BUILDINGS : M1 & M2

TOWERS : A, B, C, P1 & P2

SCALE : 1 : 1000



CERTIFIED STRATA PLAN
DIVISION KUCHING
KUCHING CENTRAL LAND DISTRICT
BLOCK 16
LOT 12225
LOT AREA = 1.3078 ha.

SPA Ref. No. : TP/1D/2008/42
 BP Ref. No. : BP/1D/2008/42
 STA Ref. No. : STA/01/2008/42
 Cad. Sheet No. : M4 - 26 - 3
 Survey Job No. : 0213-2014 (Type B)
 Field Book No. : 1M/ST 210/1 - 42
 Surveyed by : Wang Ah Seng Date: 30.09.2014
 Comp. by : Wang Ah Seng Date: 30.10.2014
 Drawn by : Wang Ah Seng Date: 03.12.2014
 Examined by : Siti Nurashima Date: 30.12.2014

Certification:

I, Land Surveyor Name of Firm Name

a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that the plan as shown herein is correct and prepared in accordance with Section 10(2), 10(3), 10(4) and 10(5), and Section 11 (1)(b) and 11(1)(c) of the Strata (Subsidiary Titles) Ordinance, 2019, and correctly represents the survey undertaken by me/done under my personal supervision, and that both plan and survey are correct.

I hereby agree that I shall bear full responsibility as to the correctness of the survey and that it has been made in strict accordance with The Land Surveyors (Conduct of Cadastral Land Surveys) Rules, 2003.

.....
Land Surveyor (Registration No.....)

.....
Approved by Staff Surveyor

.....
Filed by Supt. of Land & Survey Div.



STOREY PLAN

BUILDING : M1

STOREY : 1

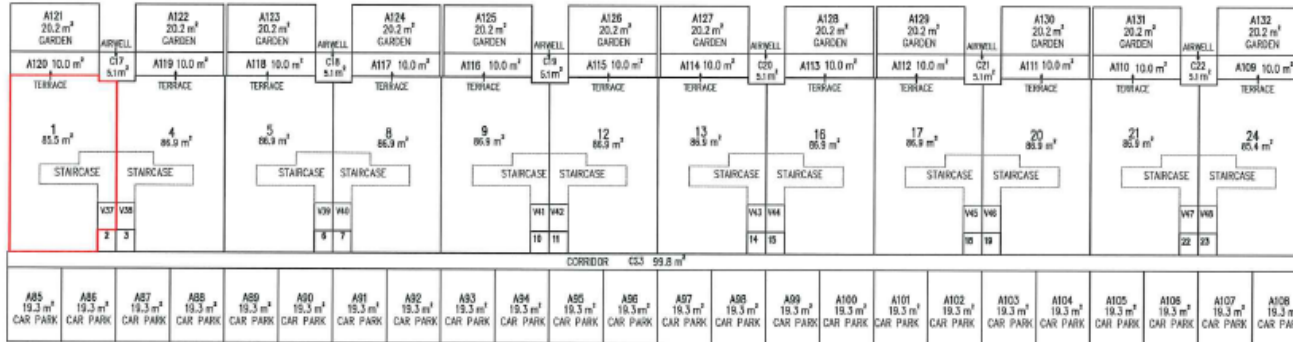
PARCELS : 1 - 24

ACCESSORY PARCELS : A85-A132

SCALE : 1 : 1000

Notes:

- 1) Schedule of Parcel: Please refer to Plan CP_01_1234_JSP3S.
- 2) The boundary of parcel is deduced to the middle of walls.
- 3) The area of parcel given includes area(s) occupied by pillar(s)/column(s) found within the parcel.
- 4) All shared common service(s)/utility line(s) within the parcel is/are common property.



CERTIFIED STRATA PLAN
DIVISION KUCHING
KUCHING CENTRAL LAND DISTRICT
BLOCK 16
LOT 12225
LOT AREA = 1.3078 ha.

SPA Ref. No. : TP/10/2008/42
 BP Ref. No. : BP/10/2008/42
 STA Ref. No. : STA/01/2008/42
 Cad. Sheet No. : M4 - 26 - 3
 Survey Job No. : 0213-2014 (Type B)
 Field Book No. : 1M/ST 210/1 - 42
 Surveyed by : Wong Ah Seng
 Comp. by : Wong Ah Seng
 Drawn by : Wong Ah Seng
 Examined by : Siti Nurashima

Date: 30.09.2014
 Date: 30.10.2014
 Date: 03.12.2014
 Date: 30.12.2014

Certification:

I, _____ Land Surveyor Name _____ of _____ Firm Name _____
 a land surveyor licensed under the Land Surveyors Ordinance, 2001,
 do hereby certify that the plan as shown herein is correct and prepared in
 accordance with Section 10(2), 10(3), 10(4) and 10(5), and Section 11 (1)(b)
 and 11(1)(c) of the Strata (Subsidiary Titles) Ordinance, 2019, and correctly
 represents the survey undertaken by me/done under my personal supervision,
 and that both plan and survey are correct.

I hereby agree that I shall bear full responsibility as to the correctness of
 the survey and that it has been made in strict accordance with The
 Land Surveyors (Conduct of Cadastral Land Surveys) Rules, 2003.

 Land Surveyor (Registration No.)

 Approved by Staff Surveyor

Filed by Supt. of Land & Survey ...Kuching... Div.

CP_01_1234_JSP3_1

FORMAT AND CONTENTS OF PLANS

(Rules 33 and 34)

1. **Survey Plans**

In these rules, survey plans shall include Deposited Plan (DP), Small Deposited Plan (SOP), Big Plan (BP), Small Plan (SP) and Miscellaneous Plan (MP). The format and contents of the survey plans shall be as follows:

(a) **Plan mediums**

Plans shall be drawn on durafilm of thickness not less than 125 micron or any other drawing medium approved by the Director.

(b) **Plan sizes**

The size of the plan shall be of International Standard Organization (ISO) size of either A1, A2 or any other size approved by the Director.

(c) **Plan scales**

The recommended scales to be used are: 1:50, 1:100, 1:150, 1: 200, 1:250, 1:300, 1:500, 1:750, 1:1000, 1:1,250, 1:1,500, 1: 2,000, 1:2,500, 1:5,000 or any other scale approved by the Director. Diagram either in larger scale or not to scale may be added to illustrate any part of the plan, measurements or details.

(d) **Plotting**

(i) All plans shall be accurately plotted with the meridians parallel with the side of the plan form and north point upwards; but in exceptional cases, where it is necessary to make the best use of the plan form on account of the shape or layout of the survey, the plan may be plotted with the meridian at an angle to the side of the plan form. In such cases, the angle shall not exceed 90° , and the north point shall be shown at a suitable space not below a line parallel with the bottom edge of the plan form.

(ii) Full plotting lines for grids shall not be required but grid cuts at a reasonable space shall be shown towards the edge of the plan form together with their co-ordinates.

(iii) If the plan is plotted with the aid of a computer, tabulation of plan details in lieu of diagrams is permitted.

(e) **Plan serial numbers**

- (i) Every survey plan shall be allotted a serial number issued by the Land and Survey Department and shall be shown at the bottom right hand corner of the plan.
- (ii) Where more than one survey plan is to be prepared for any cadastral land survey carried out under the same survey job, the same heading and survey plan number shall be used with the letter A, B, C, *etc.*, suffixed to the survey plan number, e.g. if two plans are drawn for DP 1/288, then the plans shall be numbered as DP 1/288A and DP 1/288B. If a key plan is drawn, then it shall be numbered as DP 1/288.

(f) **Plan headings**

The heading of each plan shall include:

- (i) The type of survey
- (ii) The original and new lot numbers in the case of title surveys
- (iii) The block or section number
- (iv) The land or town district names
- (v) The cadastral sheet reference

(g) **Survey marks**

- (i) Survey marks shall be classified into boundary marks and control marks and shall be represented on survey plans as shown in the Sixth Schedule.
- (ii) Where the boundary mark cannot be placed on the ground for some reason, it shall be denoted with the annotation "No Mark" on the plan.
- (iii) Old marks shall be annotated with the boundary marks and the expression, "Renewed" or "Refixed" where appropriate. Note "Renewed" or its abbreviation shall be used to denote the old boundary mark which has been found in order but its condition warrants a replacement by a new mark. "Refixed" or its abbreviation shall be used to describe the boundary mark which is used to re-establish the missing or disturbed old boundary mark.
- (iv) An old mark found and renewed or refixed shall be shown by the symbol of a new mark and the mark replaced shall be indicated in the notation.
- (v) All adopted marks shall be annotated with the expression "Adpt." and the source information shall be shown on the plan. For theodolite survey, traverse volume reference shall be quoted e.g. TV1/12/147, IM/12/147, RSO/12/147, *etc.* For prismatic compass survey, the field book reference shall be shown.
- (vi) The type and the number of the survey mark shall be noted against the symbol, e.g. 648 Pkt. or STG 1206, *etc.*

(h) Linework

The linework depicting the boundaries of districts, blocks, lots, reserves, roads, fences and other details shall be as shown in the Sixth Schedule.

(i) Text styles and details on plan

The styles of the alphanumerics indicating the various details on plan such as lot numbers, blocks or sections, roads and river names, plan number and headings, bearings and distances, *etc.*, shall be as shown in the Sixth Schedule.

(j) Lot numbers

- (i) Lot numbers of lots under survey shall be clearly printed near the centre of the respective lots in which they refer, as well as in plan heading.
- (ii) Underlying lot numbers shall be shown in pecked line and adjoining lot numbers shall be shown in full.
- (iii) The pre-block lot numbers shall be underlined and the other land titles such as leases, occupation tickets, *etc.*, shall be pre-fixed with the initials L, O.T., *etc.*

(k) Areas

- (i) Areas of lots shown on plan shall be rounded according to the Table of Area Approximation as set out in the Third Schedule.
- (ii) Area of each lot shall be shown beneath the lot number or tabulated with the lot number.

(iii) Scaled area shall be distinguished by the letter "Sc." and shown after the area.

(l) Bearings and distances

- (i) Bearings and distances shall be written as close as possible to the boundary or surveyed lines. Bearings shall be shown to the nearest second of arc except for lines of less than ten metres, the bearing shall be shown to the nearest minute of arc. Distances shall be shown to the nearest millimetre. For Prismatic Compass Survey, the bearings shall be shown to the nearest 15' and the distances to the nearest decimetre (0.1m).
- (ii) To distinguish the bearings and distances which have been obtained by direct measurement from that which have been obtained indirectly, the following abbreviations shall be added:
 - (a) to calculated bearings and distances the letter "Cal." and
 - (b) to deduced distances obtained by subtracting one measured distance from another, the letter "Ded."

(m) Roads

- (i) Print "LEGAL ROAD" for unnamed road which has been gazetted as road reserve.
- (ii) Print "ROAD RESERVE" for road to be surrendered to the State.
- (iii) Print the official road name for road which has been named.

(n) Administrative boundaries, land classifications and land categories

Administrative boundaries, land classifications and land categories shall be shown on the plan.

(o) Easements and Rights of way

The purpose and position of all existing easements and rights of way shall be shown on the plan.

(p) Buildings eaves/Party walls

Buildings with their eaves or projecting portions abutting on, overlapping or closely approaching the boundaries shall be accurately fixed and their positions in relation to the boundary shall be clearly specified and delineated on the plan. Where the wall or a building or structure is erected on or adjoining a boundary, and a wall is used as a party wall or where party wall rights thereto have been created, the wall shall be described as a party wall on the plan and the position of the boundary in relation to the wall shall be shown by diagrams illustrating the height and width or any change in the thickness of the wall. Fixes of the party wall shall be shown on the survey plan.

(q) Datum

The datum adopted for survey and its initial bearing shall be identified by the word "ORIGIN".

(r) Field Books

Field books used for recording survey measurements shall be indicated on the plan.

(s) Other information

Any other information, numerical or otherwise, which might be of value in locating boundaries.

(t) Abbreviations

Abbreviations used on plans shall be as follows:

Adopted	Adpt.
Balance	Bal.
Besar	B.
Bitumen	Bitu.
Building/Bangunan	Bgn.
Bukit	Bt.
Brick	Br.
Belian picket	Pkt.
Block	Blk.
Calculated	Cal.
Close	Cl.
Communal forest Reserve	CFR
Concrete	Conc.
Corner	Cor.
Concrete Mark	CM

Deduced	Ded.
Destroyed	Destd.
Diagram	Diag.
Distance	Dist.
Disturbed	Distd.
Electric Pole	EP
Forest Reserve	FR
Found	Fd.
Found firm	Ff
Galvanised Iron	GI
Gazette Number	G.N.
Grant	G.
Ground	Grd.
High Water Mark	HWM
hectare	ha.
Iron Pipe	IP
Jalan	J.
Jubilee Occupation Ticket	JOT
Kampong	Kg.
Kecil	K
Kuala	K.
Lease	L
Lebuh	Lbh.
Loba	L.
Lorang	Lrg.
Land District	LD
Low Water Mark	LWM
Malay	M.
Mark	Mk.
Measurement	Mea.
Mixed Zone Land	MZL
Metre	m
Native Area Land	NAL
New Control Peg, belian	NP
New Boundary Peg, belian	NBP
Old Control Peg, belian	OP
Old Boundary Peg, belian	OBP
Occupation Ticket	OT
Permit	Pmt.
Persiaran	P.
Refixed	Rfx.
Reinstated	Reinst.
Renewed	Rnw.
Right of Access	ROA
Right of Way	ROW
Secondary trig point	N
Section	Sec.
Square metres	m ²
SS Control Station	SS
STG Control Station	STG
Street	St.
Suburban	Subn.
Sungai	Sg.
Surface Area	Surf. A
Tanjung	Tg.
Town District	TD
Tertiary Trig. Station	T
Traverse	Trav.
Trig. Point, Tellurometer traverse	TT
Terrace	Ter.
Telephone Pole	TP
Underground	U/G
Underlying Boundary	UB
Water Manhole	WMH

2. Strata Titles Plans

Strata Titles Plans shall include the Index Plan, Storey Plan and Certified Plan and shall be prepared as follows:

(1) Index Plan

- (a) Every Index Plan shall be drawn on durafilm of ISO A3 size or any other size approved by the Director.
- (b) Every Index Plan shall be numbered with reference to the Type A Survey Plan No., e.g. SP 5/132- ISP 1, 2, 3.....
- (c) The Index Plan shall show an Inset Site Plan in its first plan if there are more than one Index Plan.
- (d) The Inset Site Plan shall show the following:
 - (i) The boundaries and boundary marks of the lot, its number and area;
 - (ii) The existing building(s) to be sub-divided, its number and its first storey area (ground floor) and all other building(s) thereon, if any;
 - (iii) The provisional block(s) of the building(s) in broken lines, if any;
 - (iv) The abutments and adjoining lot numbers, roads, and all other relevant details as may be required.
- (e) The Index Plan shall have vertical section(s) showing the floors and ceilings, the height of each storey as measured from the centres of the floors to the centres of the ceilings.
- (f) Only the front vertical section(s) of the building(s) shall be drawn unless the floor levels for the front and back elevations are different.
- (g) In the case of provisional block(s), the vertical section(s) showing the storeys of the building(s) shall be drawn in broken lines and the number of parcels for each storey and the total number of parcels for the whole block stated. Only the front vertical section(s) of the provisional block(s) shall be drawn unless the floor levels for the front and back elevations are different.
- (h) Storeys shall be numbered from the ground floor as Storey 1, Storey 2, *etc.*, upwards and the basements directly below Storey 1 shall be numbered as Basement 1 (B1), Basement 2 (B2), *etc.*, downwards.
- (i) Every Index Plan shall have a certification by a land surveyor that the building(s)/provisional block(s) is/are situated wholly within the boundaries of the lot in question.
- (j) Every Index Plan shall also have a certification by a land surveyor that the Index Plan(s) is/are correct and is/are prepared from the approved building plan(s).
- (k) The format of the certifications are as set out in the Fifth Schedule.

(2) Storey Plan

- (a) Every Storey Plan shall be drawn on durafilm of ISO A3 size or any other size approved by the Director.
- (b) Every Storey Plan shall be numbered with reference to the Type A Survey Plan No., e.g. SP 5/132- ISP 1,2,3. The Storey Plans shall be numbered consecutively after the Index Plans.
- (c) Each Storey Plan shall show:
 - (i) the number of the lot, the title number of the land comprised therein, and the building and numbered storey thereof to which the plan relates;
 - (ii) the boundaries of each of the proposed parcels within the storey by reference to walls of permanent construction;
 - (iii) the area of each parcel and its dimensions;
 - (iv) the boundaries of the common property and its perimeter dimension;
 - (v) the scale of the plan
- (d) Each parcel shall be identified by non-recurrent references. For example, Parcel 123-2-14 means Parcel 14 on Storey 2 of the building on Lot 123. However, in the Storey Plan, the lot number shall be omitted from the parcel number, e.g. the above parcel number 123-2-14 shall be shown as Parcel 2-14 only on the Storey Plan.

- (e) Where storeys and parcels are identical, only a typical Storey Plan needs to be drawn, e.g. the number (3-7)-8 means Parcel 8 from Storey 3 to Storey 7.
- (f) Where more than one building/provisional block is to be sub-divided, the building number shall follow an alphabetical order (A, B, C, ..., Z, AA, AB, AC, ..., AZ, ZA, ZB, ZC, ...). The building number shall be suffixed to the parcel number e.g. parcel number 123-2-1-A means parcel 1 on the storey 2 of Building A on Lot 123.
- (g) Several identical storeys may be represented by one Storey Plan.
- (h) Every Storey Plan shall have a certification by a land surveyor that the boundaries of each of the proposed parcels within the storey are defined by reference to walls of permanent construction and the Storey Plan(s) is/are correct and prepared from approved building plan(s). The format of the certificate is as set out in the Fifth Schedule.

(3) Certified Plan

- (a) Every Certified Plan shall be drawn on durafilm of ISO A3 size or any other size approved by the Director.
- (b) Each Certified Plan shall show an Inset Site Plan as in paragraph 2(1)(d).
- (c) If the Certified Plan is drawn on one folio, the vertical section and all the storey plans of the whole building are to be shown.
- (d) If the Certified Plan is drawn on more than one folio, then each folio shall show the vertical section of the storey or storeys to which it relates.
- (e) Each vertical section shall show the storey numbers, the height of each storey, the building number where there is more than one building to be sub-divided and the scale.
- (f) Where the storey plan of different storeys are similar, one storey plan shall be sufficient for all such storeys.
- (g) In the case of provisional block(s) of building(s), the building number(s) shall be numbered as in paragraph 2(2)(f).
- (h) The certified plan shall show the following information and details:
 - (i) A heading stating the storey to which the plan relates.
 - (ii) Boundaries of each parcel in firm black lines.
 - (iii) Number of each parcel as in paragraph 2(2)(d).
 - (iv) Area of each parcel rounded down to the nearest square metre.
 - (v) All other relevant details of the common property e.g. staircase, lift, toilets, etc.
 - (vi) The scale(s) of the storey plan(s).
 - (vii) The Survey Job No. for the Type A Survey.
- (i) Each Certified Plan shall have a tabulation or schedule showing the parcel number, building number, area and share units of each parcel.
- (j) Every Certified Plan shall be allotted a serial number issued by the Land and Survey Department. If more than one set of Certified Plan is required, the Certified Plan number shall be followed by a suffix A, B, C... etc. For example, CP 1/1234(A) means the first sheet of Certified Plan from 1st Division of Serial Number 1234.
- (k) In the case of provisional block(s), the proposed vertical section(s) shall be drawn in broken lines. Only the superficial area of the provisional block(s) and the horizontal dimensions of its/their external boundaries shall be shown and the total number of parcels stated.
- (l) Every Certified Plan shall have a certification by a land surveyor that he undertakes full responsibility as to the correctness of the survey and the Certified Plan. The format of the certificate is as set out in the Fifth Schedule.

FIFTH SCHEDULE

CERTIFICATION OF PLANS

(Rule 34)

1. **Certification of Survey Plan**

Every survey plan shall bear a certificate in the following form:

"I,of, a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that this plan has been prepared from the survey undertaken by me/done under my supervision and that both plan and survey are correct.

I hereby agree that I shall bear full responsibility as to the correctness of the survey and that it has been made in strict accordance with the Land Surveyors (Conduct of Cadastral Land Surveys) Rules, 2003.

Dated atthisday of, 20

.....
Land Surveyor
(Registration No. _____)"

2. **Certification of wholly compiled plan**

Every wholly compiled plan shall bear a certificate in the following form:

"I, of, a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that this plan has been compiled by me in whole from

Dated at this day of, 20.....

.....
Land Surveyor
(Registration No. _____)"

3. Certification of Index Plan

"I, of, a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that the Index Plan(s) as shown herein is/are correct and is/are prepared from Building Plan(s) No. approved by on reference"

Dated at this day of, 20.....

.....
Land Surveyor
(Registration No. _____)"

"I, of, a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that the building (s) to be sub-divided is/are situated wholly within the lot.

Dated at this day of, 20.....

.....
Land Surveyor
(Registration No. _____)"

4. Certification of Storey Plan

"I, of, a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that the storey plan(s) as shown herein is/are correct and is/are prepared from Building Plan (s) No..... approved by on reference"

Dated at this day of, 20

.....
Land Surveyor
(Registration No. _____)"

"I, of, a land surveyor licensed under the Land Surveyors Ordinance, 2001, do hereby certify that the boundaries of each of the proposed parcels within the storey are defined by reference to walls of permanent construction.

Dated at this day of, 20

.....
Land Surveyor
(Registration No. _____)"

Sub-division of Buildings

35. (1) Application for sub-division of any building for the issue of subsidiary titles (strata titles) for individual parcels in respect of completed building or provisional subsidiary title for any provisional block shall be made in the prescribed forms to the Superintendent as required under the Strata Titles Ordinance, 1995 [Cap. 181].

(2) In the case of phased development, the number of stages in which the proposed phased development is to take place shall be clearly indicated in the application.

Sub-division of Buildings

(3) Strata titles survey required to be carried out in connection with the application for sub-division of building(s) or in respect of phased development shall consist of Type A and Type B Surveys.

(a) Type A Survey shall be carried out to satisfy that:

(i) the building(s) has/have such superficial area(s) on the ground as may be prescribed, or where no such area is prescribed, a superficial area on the ground of at least 464 square metres; and
(ii) the building(s) is/are situated wholly within the boundaries of the lot in question.

(b) Type B Survey shall be carried out upon the approval of the strata title application by the relevant authority to define the strata title parcel and common property boundaries.

Sub-division of Buildings

(4) Standard of Survey

(a) Type A Survey

- (i) Type A Survey shall be carried out to First Class Cadastral Survey standard as stipulated in the Second Schedule.
- (ii) Buildings abutting on or closely approaching boundaries shall be accurately offsetted.
- (iii) If the application involves provisional block(s) of building(s) to be built at a later date(s), the approved proposed site(s) of this/these building(s) shall be set out and indicated on the plan.

Sub-division of Buildings

(b) Type B Survey

(i) Type B Survey shall be carried out to define the boundaries of each parcel, thickness of each floor, ceiling or boundary wall and the vertical height of each parcel, unless the boundary point falls into absolutely inaccessible area where the boundary distance(s) concerned may be deduced from the approved building plan.

(ii) All linear distances including vertical heights shall be measured to the accuracy that any length measured shall not differ from the true length in terms of the official standard of length, by 0.02 metre plus 0.001 metre per 10 metres.

Sub-division of Buildings

(iii) All distances shall be measured and recorded in the field book to the nearest centimetre (0.01 metre). Check measurement shall be made to ensure that all distances measured are correct.

(iv) The height of each storey shall be determined by ordinary leveling or vertical angle heighting method to the accuracy as required under subparagraphs (ii) and (iii).

Sub-division of Buildings

(v) All permanent structures and prominent features within the common properties shall be offsetted to be included in the Certified Plan for the general information of the parcel owners.

(vi) For each parcel, only the perimeter boundary walls shall be offsetted for the purpose of plotting on the Certified Plan. Internal room walls and details for furniture and fitting need not be offsetted.

Sub-division of Buildings

(5) Computation

(a) Type A Survey

The computations required for (i)pe A Survey shall be as specified in rule 21.

(b) Type B Survey

(i) All parcel and common property boundaries distances shall be reduced to the nearest centimetre (0.01 metre).

Sub-division of Buildings

(ii) If the distances measured do not differ from the dimensions shown on the approved building plan(s) by more than 0.10 metre, then the dimensions shown on the building plan(s) shall be accepted for the preparation of the Certified Plan. If the said difference is more than 0.10 metre, then the measured distances shall be accepted.

(iii) Areas shall be either calculated by using the standard Land and Survey Department's area computation sheets or obtained from digital Computer Aided Design (CAD) drawings.

(iv) Areas calculated shall be rounded down and shown on the plan to the nearest square metre.

Sub-division of Buildings


(6) Plans

In connection with strata titles application, the following plans shall be prepared in accordance with the Fourth Schedule:











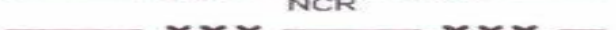







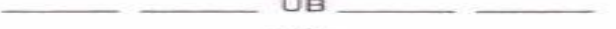
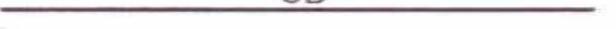

- (a) Survey Plan (SP or BP) shall be prepared for the Type A Survey;
- (b) Index Plan shall be prepared from the approved building plan;
- (c) Storey Plan shall be prepared from the approved building plan;
- (d) Certified Plan shall be prepared for the Type B Survey.

SIXTH SCHEDULE
SYMBOLS AND SPECIFICATIONS FOR SURVEY PLANS

1. SURVEY MARKS

Boundary Marks	New	Adopted	Old Mark Found	Diameter, Line Gauge
Peg or other mark including concrete mark, iron rod, iron tube, metal or plastic mark.	○	○ Adpt.	●	1.78mm., 0.25mm.
Control Marks				
Bench Mark, standard block or other control survey station, picket, permanent reference mark.	◎	◎ Adpt.	◎	1.35mm., 0.25mm. 2.79mm., 0.25mm.
No Mark	No Mark 5 			0.70mm.

2. LINEWORK

		Line Gauge
State		0.70mm.
Divisional		0.70mm.
District		0.70mm.
Block or Section		0.70mm.
Town Land		0.70mm.
Suburban		0.70mm.
Government Reserves (GR)		0.70mm.
Forest Reserves (with Name) (FR)		0.70mm.
Mixed Zone Land (MZL)		0.70mm.
Native Area Land (NAL)		0.70mm.
Native Communal Reserves (NCR)		0.70mm.
Communal Forest Reserves (with Name) (CFR)		0.70mm.
Boundaries of new parcels (lots)		0.70mm.
All new survey traverse lines		0.25mm.
Existing or abutting lot boundary		0.25mm.
Easement		0.50mm.
Fences: (1) Not alongside lot boundary		0.25mm.
(2) Alongside lot boundary		0.70mm.
Underlying lot boundary (UB):		
(1)		0.25mm.
(2) Coincidence with new lot boundary		0.70mm.
Road sides other than new boundary		0.50mm.

Road formation (1) Metalled		0.35mm.
(2) Unmetalled		0.25mm.
Footpath (fp)		0.25mm.
River bank, sea coast, etc		0.25mm.
Drain: (1) Earth		0.25mm.
(2) Concrete		0.25mm.
Tidal flow: (1) One flow		0.25mm.
(2) High and low tidal flows. Longer arrow directing to the river mouth.		0.25mm.
Buildings		0.25mm.

3. TEXT STYLES AND DETAILS ON PLAN

		Text Height, Line Guage
New lot number	275	5.0mm., 0.70mm.
Underlying lot number	1250	5.0mm., 0.35mm.
Adjoining lot number	326	5.0mm., 0.35mm.
D.P., T.D., L.D., Block or Section	SEDUAN L.D.	5.0mm., 0.35mm.
Road names	JALAN MATANG	3.0mm., 0.50mm., 0.50mm. - 0.70mm.
River names	SUNGAI SARAWAK	3.0mm., 0.50mm., 0.50mm. - 0.70mm.
Plan serial number	DP 2/79	4.5mm., 0.50mm.
Plan heading	Plan of Lots 1 - 3, Block 7.....	3.0mm. - 3.5mm., 0.50mm.
Area	352.9 m²	3.0mm., 0.50mm.
Road Reserve	ROAD RESERVE	3.0mm., 0.50mm.
Legal Road (road without name)	LEGAL ROAD	5.0mm., 0.35mm.
Bearings and distances	269° 01' 40" 71.986	2.0mm., 0.25mm.
Survey mark numbers	35, 12 Pkt., CM1/6710, 307 Nail	2.0mm., 0.25mm.
Grid values	5172335 m. N	2.0mm., 0.25mm.
Field book and traverse volume references	1M/C98-27, 1M/T78-8, 1M/7-185	2.0mm., 0.25mm.

North point



Line Guage : 0.50mm.

Letter 'N' :
Text Height : 4.5mm.
Line Guage : 0.50mm.

THANK YOU