

CODE OF PRACTICE

LAND SURVEY ORDINANCE

(Chapter 473)

Third Edition – 31 October 2003

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LAND SURVEY ORDINANCE (Cap. 473)
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CONTENTS

Parts		Paragraphs
I	GENERAL	1-2
II	INTERPRETATION	3
III	CONDUCT OF LAND BOUNDARY SURVEYS	4-42
	(A) Field notes	4-8
	(B) Origin of co-ordinates & bearings	9-12
	(C) Bearings, distances and co-ordinates	13-16
	(D) Survey instruments	17-19
	(E) Traverses	20-27
	(F) Boundary marking	28-34
	(G) Permanent Survey Marks	35-36
	(H) Physical features	37-39
	(I) Survey Report	40-42
IV	MEASUREMENTS AND SURVEY TOLERANCES	43-44
V	LAND BOUNDARY PLANS	45-46
VI	SURVEY RECORD PLANS	47-48
VII	LOT SUBDIVISION SURVEY	49-63
	(A) Designations of Subdivided Lots	49-59
	(B) Subdivision of a Land Parcel of Special Configuration	60-63
APPENDIX A	SPECIFICATIONS FOR SURVEY MARKS	
APPENDIX B	DRAUGHTING SPECIFICATIONS FOR SURVEY RECORD PLANS	
APPENDIX C	RECOMMENDED FORMAT FOR SURVEY REPORTS	
APPENDIX D	SPECIMEN LAND BOUNDARY PLAN	
APPENDIX E	SPECIMEN SURVEY RECORD PLAN	

I GENERAL

1. These regulations state the requirements for carrying out all land boundary surveys in Hong Kong under the Land Survey Ordinance (LSO).
2. For the purpose of control of land boundary surveys, every Authorized Land Surveyor (ALS) shall carry out land boundary surveys in compliance with the Land Survey Ordinance and these regulations.

II INTERPRETATION

3. The following are the definitions of the terms used in these regulations:-

"adopted data" means the traverse or land boundary information accepted from previous survey.

"boundary mark" means a survey mark which demarcates a parcel of land.

"boundary stone" means a boundary mark made from white granite, or concrete slab established by the Survey and Mapping Office of Lands Department to demarcate a parcel of land.

"calibration" means the process of checking of a distance measuring equipment against a standard baseline established by the Survey and Mapping Office of Lands Department for corrections to be made to measured lines.

"common land boundary" means the common boundary of two adjoining land parcels.

"field note" means the original record of field observations and measurements recorded in the field in the course of a land boundary survey, including a print-out from an electronic data recorder.

"geodetic survey station" means a trigonometric or a traverse station emplaced and mathematically fixed under the Hong Kong Geodetic Survey System with coordinates published by the Geodetic Section, Survey and Mapping Office, Lands Department.

"grid lines" means lines drawn on a map or plan in the form of rectangular grid under the Hong Kong Geodetic Survey System.

"Hong Kong Geodetic Survey System" means the current network of survey stations, emplaced and mathematically fixed, based on the "Hong Kong 1980 Geodetic Datum (HK80)" by the Survey and Mapping Office of Lands Department.

"Hong Kong 1980 Geodetic Datum (HK80)" means the survey datum used by the Survey and Mapping Office, Lands Department since 1980.

“land” includes-

- (a) land covered by water; and
- (b) a building or other thing attached to land or a thing permanently fastened to a building or other thing attached to land,

but does not include-

- (i) any right, interest or easement in or over land; or
- (ii) the whole or part of an undivided share in land or a building.

“land boundary” means a line defining the territorial limits of a parcel of land.

“land boundary plan” means a plan showing and delineating the land boundary of a parcel of land.

“land boundary record”, in relation to a parcel of land, means the record, kept by the Land Survey Authority, of all measurements, computations and survey data used in connection with defining the land boundary of the parcel of land and includes the survey record plan, the land boundary plan and other documents used in connection with defining such land boundary.

“land boundary survey” means any survey which is required in connection with defining land boundaries and includes the preparation of field notes, survey record plans and land boundary plans.

“missing lot” arises when its landowner requests the Government to locate the boundaries of a lot but a search of Government records fails to establish their position.

“party wall” means a wall wherein the common boundary of two land parcels is located.

“permanent survey mark” means a survey mark established by a land boundary survey for future use and reference. It serves to provide primary evidence for boundary definition when other more vulnerable survey stations have been disturbed or destroyed by development / redevelopment.

“picket box” means a geodetic survey station enclosed by a cast iron box.

“survey mark” means a mark defining a surveyed position.

“survey record plan” means a plan recording survey data (including land boundaries, survey evidence, survey marks, traverses, alignments and significant ties to occupation and related features) used in a land boundary survey.

“survey station” means a survey mark over which survey observations are made in connection with land boundary surveys submitted to the Land Survey Authority under the Land Survey Ordinance or land boundary surveys carried out by the Survey and Mapping Office of Lands Department. It is either a trigonometric or traverse station.

“traverse” means a series of lines between survey stations established by angular and linear measurements starting from and closing onto geodetic survey station or old traverse survey stations.

“urban survey mark” means a geodetic survey station made of metal in a mushroom like shape.

III CONDUCT OF LAND BOUNDARY SURVEYS

In order to maintain a uniform standard practice for all land boundary surveys, Authorized Land Surveyors are required to adhere to the following regulations:-

(A) Fields notes

4. The first page of the field notes of every survey shall bear the certificate signed by the Authorized Land Surveyors in the following form:

I , , an Authorized Land Surveyor registered under the Land Survey Ordinance (Cap. 473), hereby certify that these field notes, consisting of pages, are a correct and complete record of the observations and measurements made in the field, either by me, or under my immediate direction and supervision.

I also certify that the land boundary survey, of which the field notes form a part, was carried out in conformity with the Code of Practice approved by the Land Survey Authority under the above Ordinance, and that the survey was completed on the day of 20

Dated this day of 20

.....
Authorized Land Surveyor

5. An ALS or his assistants who carry out the land boundary surveys shall initial and date each page of the field notes. Where an assistant is carrying out the survey under the direction of an authorized land surveyor, the latter or his delegate will additionally initial and date those pages of the field notes where the survey has been tested or otherwise checked by him and/or, other field instruction has been given.
6. Field notes shall be prepared for all land boundary surveys performed under the Ordinance and should be a complete original record of all field observations and field measurements recorded in the field. Printout from electronic data recorder shall bear the signature of the surveyor and shall contain equivalent information as contained in traditional field notes. Hand-written field notes shall be neatly and clearly recorded or annotated in permanent blue or black ink and shall not be obliterated, inked over or erased. Corrections may only be made by crossing out the erroneous entry in such a way that it remains legible, and writing the correct value above or alongside it.

7. Field notes shall record the type and identification number of the instruments including theodolite, electronic distance meter (EDM) and steel tape etc. used for the survey. The first page shall show the designation of the land parcel, locality or such other reference or legal descriptions. The date of starting and completing the survey shall also be recorded.
8. All field notes and computations shall be properly kept for submission upon request by the Land Survey Authority.

(B) Origin of co-ordinates & bearings

9. Only survey stations shall be used for origin of co-ordinates and bearings. Old Permanent survey mark not being a survey station in the previous land boundary survey shall not be used for an origin of coordinates and bearings.
10. The reliability of any survey station(s) used for an origin of coordinates and bearings shall be proved in any of the following ways by direct observations and measurements :-

- (a) Where the survey station to be used for an origin of coordinates is a trigonometric station, by observing the angle between the rays to two or more trigonometric stations and measuring the distances between the survey station and at least two witness marks as shown in Figure 1.

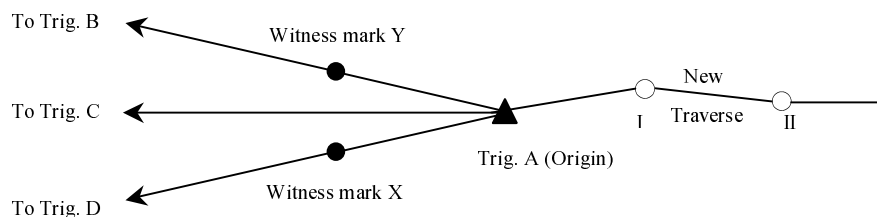


Figure 1

- (b) Where the survey station to be used for origin of coordinates is a traverse station, by observing the angle between two adjacent traverse lines of the same existing traverse and measuring the length of one of these traverse lines as shown in Figure 2 and Figure 3.

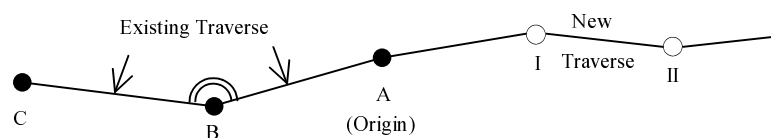


Figure 2

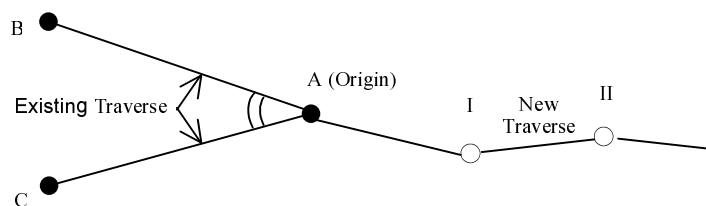


Figure 3

- (c) Where the survey station to be used for origin of coordinates is collinear with two adjacent stations of the same existing traverse, by checking whether the three stations are still in a straight line and measuring the distance between any two of them as shown in Figure 4.

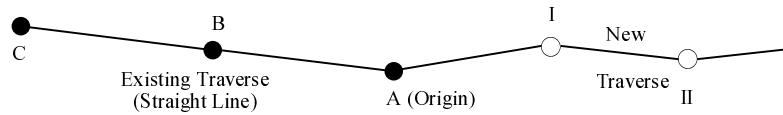


Figure 4

- (d) Where the survey station to be used for origin of coordinates is a traverse station and it is impossible or impractical to prove its reliability in the ways as described in Sub-paragraphs (b) or (c) above (for example where only two stations from an old traverse can be found), by measuring the distance of a previously observed and adjusted ray and observing the angles between this ray and at least two other calculated rays to distant geodetic survey stations as shown in Figure 5.

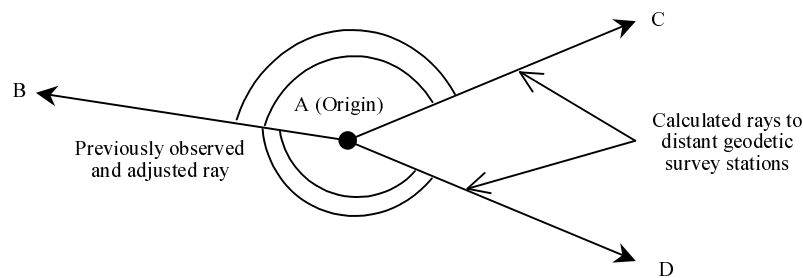


Figure 5

- (e) Where the survey station to be used for an origin of coordinates is a geodetic survey station, by observing a minimum of 1 angle between the calculated rays to two or more other geodetic survey stations, and measuring the distance of any one of the calculated rays.

11. Any one of the survey stations proven reliable as in paragraph 10 above shall be acceptable as an origin of co-ordinates.
12. The survey tolerances stated in Part IV shall be used when proving origins and testing agreements with old survey work in the field.

(C) Bearings, distances and co-ordinates

13. Bearings shall be observed with a theodolite reading to 20 seconds or better precision. Traverse bearings shall be made with a minimum of one arc on both face left and face right of the theodolite.

14. Bearings shall be recorded in the field in accordance with the precision of the theodolite being used and shown on survey record plan and land boundary plan to the nearest 10 seconds. To facilitate the use of computer in computation and plan production, bearings may be shown on land boundary plan and survey record plan to the nearest 1 second without rounding off the figures.
15. Distances shall be measured in metres and decimals of a metre and recorded in the field to 0.001 of a metre. Distance measurements shall be made with a steel tape or an electronic distance meter (EDM). All necessary corrections shall be applied.
16. Distances and co-ordinates shall be shown on survey record plans to 0.001 of a metre but shall be shown on the land boundary plan to the nearest 0.01 of a metre. To facilitate the use of computer in computation and plan production, distances and coordinates may also be shown on land boundary plan to the nearest 0.001 of a metre without rounding off the figures.

(D) Survey instruments

17. Distance measuring instruments include steel tape and electronic distance meter (EDM). Steel tape shall be checked against an adopted baseline, which is established by the Land Survey Authority, at intervals not exceeding 6 months, or immediately following repair. EDM shall also be checked against an adopted baseline established by the Land Survey Authority annually or immediately following servicing.
18. A full report of each calibration shall be kept by the Authorized Land Surveyor for record purposes, and shall be presented for inspection when required by the Land Survey Authority.
19. The Land Survey Authority may also inspect instruments used for a land boundary survey to ascertain they are in an operating condition to the satisfaction of the Land Survey Authority.

(E) Traverses

20. Traverses shall start from survey stations as described in Paragraph 9. Before any traverse begins, the reliability of the survey stations used for an origin should be proved by the Authorized Land Surveyor as described in Paragraph 10. Closing rays should be considered as second origins. The reliability of the survey stations used for closing rays and coordinates should be proved by using the same methods as for origins. It is just as important to select suitable closing stations as it is to select a good origin, and particular care should be taken to ensure that the bearings used for the closing rays are in the same terms as the bearings used for the origin.
21. No unclosed traverses are allowed.

22. Geodetic survey stations emplaced and mathematically fixed by the Survey and Mapping Office of Lands Department are normally in the form of concrete pillars, picket boxes and urban survey marks, and they are collectively described as geodetic survey stations.
23. Traverse survey stations shall be marked by one of the following survey marks, details for which are specified at *Appendix A*:-
 - (a) Iron tubes;
 - (b) Lead plugs;
 - (c) Iron spikes;
 - (d) Survey nails;
 - (e) Wooden pegs; or
 - (f) Cut marks. (cut marks shall only be used where other marks cannot be emplaced)
24. Angular misclosure for a traverse shall not exceed $(30\sqrt{n})$ seconds where **n** is the number of survey stations in the traverse.
25. Linear misclosure for a traverse shall not exceed $(10+2S/15)$ millimetres where **S** is the total length of the traverse in metres.
26. When a traverse longer than 1.5 km is run, control bearings shall be observed reciprocally between traverse survey stations and some other geodetic survey stations, at such station intervals as will adequately control the orientation of the traverse lines. The number of traverse survey stations between control bearings shall not be more than fifteen. In special situations and where there is no practical alternative, the Land Survey Authority may approve the use of a single ray, observed to a distant geodetic survey station, to control the orientation of the traverse lines.
27. Traverse misclosures shall be mathematically adjusted.

(F) Boundary marking

28. In defining the boundary of a parcel of land, an ALS shall adopt the common land boundary previously surveyed and defined by the Government or by another ALS unless he has proved that the previous boundary definition is wrong.
29. Boundaries shall be marked at every corner, and where necessary at points on the boundary line if the corners are not intervisible.
30. Where a boundary mark cannot be placed because of an obstruction the boundary mark position shall be offset for establishing its position in future.

31. Boundary marks shall be one of the following survey marks, details for which are specified at *Appendix A*:-
- (a) Iron tubes;
 - (b) Lead plugs;
 - (c) Iron spikes;
 - (d) Survey nails;
 - (e) Wooden pegs; or
 - (f) Cut marks. (cut marks shall only be used where other marks cannot be emplaced)
32. Every boundary mark shall be placed by bearing and distance from a survey station and checked independently by radiation from another survey station. Where double radiation is impracticable, other checking method will be used to verify the accuracy intended. The same requirements apply when fixing the position of old marks, occupation and other elements essential to land boundary definitions.
33. The setting out distance from a survey station to a boundary mark using steel tape and EDM shall not exceed 20 metres and 150 metres respectively. They must be checked independently and recorded accordingly.
34. Curved boundaries shall be marked at both end points and at least one other point on the curve. In addition, curves shall be marked at intervals not exceeding 15 metres, measured along the chord.

(G) Permanent Survey Marks

35. At least two permanent survey marks (PSMs) shall be established for every land boundary survey in accordance with specifications at *Appendix A*. Where there are existing PSMs from previous land boundary surveys in the vicinity, they may be accepted as PSMs after verification. No PSM shall be at a greater distance than 100 metres from a boundary mark.
36. All PSMs shall be fixed by double radiation. They shall be described with sketches in the field notes and shown on the survey record plan as to the type of survey mark and its position and height above ground level.

(H) Physical features

37. The positions of all buildings or prominent physical features, on or within 0.5 metre of a boundary line, shall be surveyed, calculated and shown as offsets on the survey record plan. Physical features beyond this and up to 3 metres need only be shown graphically.
38. If the boundary is located in a party wall, its offset distances in relation to the party wall shall be shown on the survey record plan.

39. Where a boundary is located in a party wall, or between abutting walls, checks must be carried out to confirm that the line of the party wall or the line between abutting wall is a straight line.

(I) Survey Report

40. The ALS shall submit a survey report, giving the rationale of how the boundaries are established for every land boundary survey. The report should contain information regarding the evidence found and include a copy of any land boundary plan, survey record plan, lot index plan, traverses and any other plan, sketch, photograph or document containing information or data, which have been used or based on for traverse origin and/or boundary definition or redefinition. The recommended format for survey reports is at Appendix C.
41. Evidence as referred to in Paragraph 40 above may include relevant information obtainable from records (such as Demarcation District (DD) sheets, DD control sheets, DD enlargement, house lot plans, house lot plans retrace, "A" sheet, Cadastral Survey Plan, lot index plan (previously known as DD lot identification plan), survey record plans (SRP), SRP equivalent data, land boundary plans, aerial photographs, survey sheets from microfilm), as well as ground occupation and investigation, interviews and any other form of data that will support the position and dimensions of the lot under survey.
42. It is essential that a field survey be conducted to verify the actual field conditions when a division of land is carried out by pure calculations based on an existing land boundary plan prepared by an ALS in accordance with the code of practice or by the Government of the land being divided. If an ALS considers that no field survey is required for that purpose, he shall provide justifications for and make a declaration of his decision in the survey report.

IV MEASUREMENTS AND SURVEY TOLERANCES

43. If a bearing, an angle, a distance or an area is re-measured or re-calculated for verification, re-establishment or whatever reasons, the original values will be adopted if the discrepancies are within the tolerances listed below. If the discrepancies fall outside these tolerances the new values must be conclusively checked for correctness. If confirmed, the original values must be considered as superseded by the new values with reasons clearly recorded. The tolerances are:

- (1) Survey tolerances – **Bearing / angular** measurements:

<u>Distance</u>	<u>Tolerance</u>
under 15 m	±2' 00"
15 m - 150 m	±1' 00"
over 150 m	±0' 30"

- (2) Survey tolerances - **Distance** measurements:

Tolerance:

$$\pm(0.015 + 0.0001 \times \text{distance in metres}) \text{ metre}$$

- (3) Survey tolerances - **Area** calculations:

Tolerance:

$$\pm 0.1 \%$$

44. Areas shall be **rounded off** to the nearest unit as follows:

<u>Area of Lot</u>	<u>Expressed in</u>	<u>Rounded off to nearest</u>
under 2000 m²	sq. metre (m²)	0.1 m²
2000 m² and above	sq. metre (m²)	1 m²

However, areas already committed may be exempted from this rule, in which case the tolerance in Paragraph 43(3) will apply.

All areas shown on plans shall be qualified with the word "about".

V LAND BOUNDARY PLANS

45. A land boundary plan is a plan showing and delineating the land boundary of a parcel of land. It shall be prepared for every land boundary survey in connection with defining land boundaries. Under Section 30(4) of this Ordinance, a duplicate of the land boundary plan prepared for a division of land for attachment to the instrument for registration with Land Registry under the Land Registration Ordinance (Cap. 128) shall be deposited to the Land Survey Authority. Nevertheless, the Land Survey Authority will not accept the deposition of a duplicate of the land boundary plan or a survey record plan prepared for the division of a missing lot.

46. The land boundary plan shall include the following information:

(1) Land parcel information:

- (a) A plot of boundaries drawn to scale;
- (b) Designation of the subject lot or parcel;
- (c) The area of each lot or parcel;
- (d) Notation and if applicable, the description of each boundary corner;
- (e) Boundary dimensions of subject lot or parcel;
- (f) Co-ordinates of each boundary corner may be shown at the discretion of the Authorized Land Surveyor; and
- (g) Abutting land information.

(2) Supporting information:

- (a) Grid lines with co-ordinates;
- (b) Location diagram of the site, where necessary;
- (c) The plot, with details of colouring and abbreviations;
- (d) Scale; and
- (e) Standard north point symbol.

(3) Plan size:

Any such plan and copy thereof shall be of A3 size or of such size as specified under the Section 8 of Land Registration Regulations (Cap. 128).

(4) Plan numbering:

The number of the land boundary plan for each land boundary survey shall be unique. It shall not be re-used for numbering of another plan for the purpose of superseding the old plan or others. The plan numbering system shall be as follows:-

LBP/[DSO]/[ALS#]/[Plan#]/[Type][Version] where

- [DSO] = 2-figure code of District Survey Office. The codes for various DSOs are:- 'HK' for Hong Kong, 'KL' for Kowloon, 'KT' for Kwai Tsing, 'TW' for Tsuen Wan, 'IS' for Islands, 'DN' for North, 'SK' for Sai Kung, 'ST' for Shatin, 'TP' for Tai Po, 'TM' for Tuen Mun and 'YL' for Yuen Long. It is not necessary to specify the division of a DSO such as east, west or central, etc.
- [ALS#] = 3-figure registration number of the ALS who signs and certifies the plan.
- [Plan#] = 4-figure plan number as prepared by the ALS.
- [Type] = Nature of the survey. 'D' for lot dimension plan. 'S' for lot setting-out plan.
- [Version] = The version number of a plan. The next Arabic numeral shall be used if there is change made to the earlier version. A revision note giving information about the new version shall be given in the notes column of the revised plan.

Example:- LBP/HK/001/0001/D1

- (5) Except for cases under Sub-paragraph (6) below, every land boundary plan shall bear a certificate signed and certified by the Authorized Land Surveyor in the following form:-

I , , an Authorized Land Surveyor registered under the Land Survey Ordinance (Cap. 473), hereby certify that this land boundary plan has been prepared from land boundary surveys that were carried out by me or under my direct supervision in conformity with the Code of Practice approved by the Land Survey Authority under the above Ordinance, and that this plan correctly represents that survey completed on the day of 20

Dated this day of 20

.....
Authorized Land Surveyor

- (6) Where the land boundary survey is carried out partly by or under the supervision or direction of another authorized land surveyor, the land boundary plan shall bear a certificate in the following form:-

I , , an Authorized Land Surveyor registered under the Land Survey Ordinance (Cap. 473), hereby certify that this land boundary plan has been prepared from land boundary surveys that were carried out partly by me or under my direct supervision in conformity with the Code of Practice approved by the Land Survey Authority under the above Ordinance, and partly by or under the supervision or direction of another authorized land surveyor, and that this plan correctly represents that survey completed on the day of 20

Dated this day of 20

.....
Authorized Land Surveyor

Remarks:- The above certificate shall not be applied to the adoption of survey stations, lot boundary coordinates, and other types of survey data extracted or derived from the work of another surveyor. It shall only be applied to a land boundary survey conducted by more than one authorized land surveyor and the authorized land surveyor who signed and certified the plan shall be responsible for the accuracy and completeness of the plan.

VI SURVEY RECORD PLANS

47. A survey record plan (SRP) is a plan which records survey data (including land boundaries, survey evidence, survey marks, traverses, alignments and significant ties to occupation and related features) used in a land boundary survey. It shall be prepared for every land boundary survey in connection with defining land boundaries. The objectives of preparing a SRP are:
- (1) to maintain repeatability such that:
 - (a) the SRP alone is to ensure users to be able to maintain consistency of boundary definition,
 - (b) the SRP alone can allow a reader to be confident in that consistency has been achieved, and
 - (c) positive identification of marks and boundary features are made possible; and
 - (2) to comprehensively convey what constitutes and marks the boundary. It is accepted that SRP alone cannot reveal why a boundary is so defined or how decision has been made.
48. The survey record plan shall include the following information:
- (1) Land parcel information:
 - (a) A plot of boundaries drawn to scale;
 - (b) Designation of the subject lot or parcel;
 - (c) The area of each lot or parcel;
 - (d) Notation and if applicable, description of each boundary corner;
 - (e) Boundary dimensions of subject lot or parcel;
 - (f) Co-ordinates of each boundary corner; and
 - (g) Abutting land information.
 - (2) Survey station information:
 - (a) A plot of survey stations;
 - (b) Description of the survey stations; and
 - (c) Bearings and distances of traverses.

(3) Supporting information:

- (a) Grid lines with co-ordinates;
- (b) Location diagram, inset diagram where necessary;
- (c) Co-ordinates of points;
- (d) Scale;
- (e) Reference to relevant document and computations where necessary;
- (f) Standard north point symbol;
- (g) Setting out and PSM radiations if applicable (checking radiations are not required to be shown); and
- (h) Positions and descriptions of PSMs.

(4) Plan numbering:

The number of the survey record plan for each land boundary survey shall be unique. It shall not be re-used for numbering of another plan for the purpose of superseding the old plan or others. The plan numbering system shall be as follows:-

SRP/[DSO]/[ALS#]/[Plan#]/[Type][Version] where

[DSO] = 2-figure code of District Survey Office. The codes for various DSOs are:- 'HK' for Hong Kong, 'KL' for Kowloon, 'KT' for Kwai Tsing, 'TW' for Tsuen Wan, 'IS' for Islands, 'DN' for North, 'SK' for Sai Kung, 'ST' for Shatin, 'TP' for Tai Po, 'TM' for Tuen Mun and 'YL' for Yuen Long. It is not necessary to specify the division of a DSO such as east, west or central, etc.

[ALS#] = 3-figure registration number of the ALS who signs and certifies the plan.

[Plan#] = 4-figure plan number as prepared by the ALS.

[Type] = Nature of the survey. 'D' for lot dimension plan. 'S' for lot setting-out plan.

[Version] = The version number of a plan. The next Arabic numeral shall be used if there is change made to the earlier version. A revision note giving information about the new version shall be given in the notes column of the revised plan.

Example:- SRP/HK/001/0001/D1

- (5) Except for cases under Sub-paragraph (6) below, every survey record plan shall bear a certificate signed and certified by the Authorized Land Surveyor in the following form:-

I , , an Authorized Land Surveyor registered under the Land Survey Ordinance (Cap. 473), hereby certify that this survey record plan has been prepared from land boundary surveys that were carried out by me or under my direct supervision in conformity with the Code of Practice approved by the Land Survey Authority under the above Ordinance, and that this plan correctly represents that survey completed on the day of 20

Dated this day of 20

.....
Authorized Land Surveyor

- (6) Where the land boundary survey is carried out partly by or under the supervision or direction of another authorized land surveyor, the land boundary plan shall bear a certificate in the following form:-

I , , an Authorized Land Surveyor registered under the Land Survey Ordinance (Cap. 473), hereby certify that this survey record plan has been prepared from land boundary surveys that were carried out partly by me or under my direct supervision in conformity with the Code of Practice approved by the Land Survey Authority under the above Ordinance, and partly by or under the supervision or direction of another authorized land surveyor, and that this plan correctly represents that survey completed on the day of 20

Dated this day of 20

.....
Authorized Land Surveyor

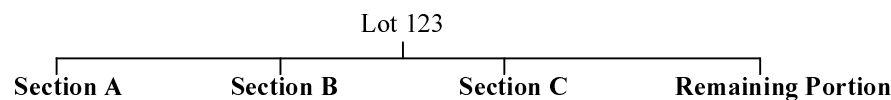
Remarks:- The above certificate shall not be applied to the adoption of survey stations, lot boundary coordinates, and other types of survey data extracted or derived from the work of another surveyor. It shall only be applied to a land boundary survey conducted by more than one authorized land surveyor and the authorized land surveyor who signed and certified the plan shall be responsible for the accuracy and completeness of the plan.

VII LOT SUBDIVISION SURVEY

(A) Designations of Subdivided Lots

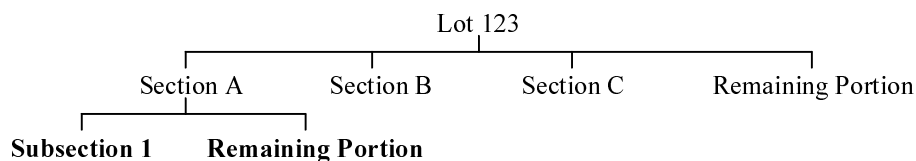
49. The resultant parcels of land when a lot is subdivided shall be designated in accordance with the following practice. It is essential that a standardized system of designations and abbreviations is adopted so that the subdivided lots can be unambiguously and easily identified.
50. When a lot is subdivided for the first time, the subdivided portions are called "Sections" which shall be designated with letters in alphabetical order successively as Section A, Section B, Section C etc. except for the last section which shall be designated as the Remaining Portion of the original lot (see Example 1). There shall be no skipping in the sequence of the letters (the letters I and O shall also be used). If Z is reached then the sequence shall be continued by prefixing A to the letter, then B, and so on, e.g. Section Z, Section AA, Section AB etc.

Example 1: First subdivision of Lot 123



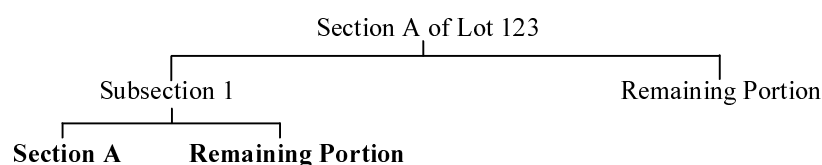
51. In a subsequent subdivision of a section, the subdivided portions are called "Subsections" which shall be designated with numbers successively as Subsection 1, Subsection 2, Subsection 3 etc. except for the last subsection which shall be designated as the Remaining Portion of the original section (see Example 2).

Example 2: Subdivision of Section A of Lot 123



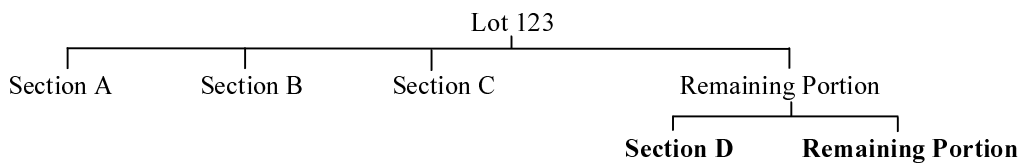
52. On further subdivisions of a section or a subsection into the next tiers, the key to the designations is that a section is followed by a subsection which in turn followed by a section, ad infinitum. The last portions shall always be designated as the Remaining Portion of the original section/subsection. Sections are labelled by using letters and subsections are labelled by using numbers (see Example 3).

Example 3: Subdivision of Subsection 1 of Section A of Lot 123

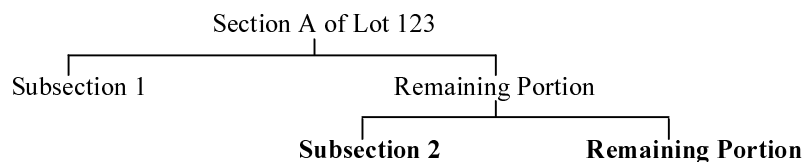


53. If the Remaining Portion of a lot, a section or a subsection is further subdivided, the subdivided portions become additional sections or subsections of the original lot/section/subsection. For new sections, they shall be labelled alphabetically with the letter sequence following on from the letters used in the previous subdivision (see Example 4). For new subsections, they shall be labelled by numbers following on from the sequence in the previous subdivision (see Example 5). There shall be no skipping in the sequence of the letters or numbers. The last section or subsection shall be designated as the Remaining Portion of the original lot/section/subsection.

Example 4: Subdivision of the Remaining Portion of Lot 123

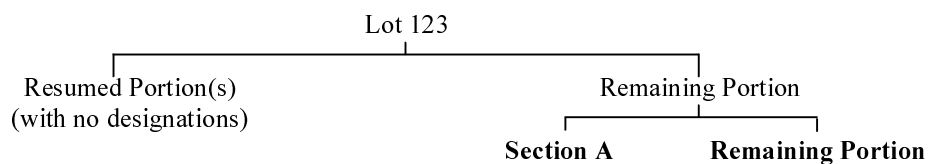


Example 5: Subdivision of the Remaining Portion of Section A of Lot 123

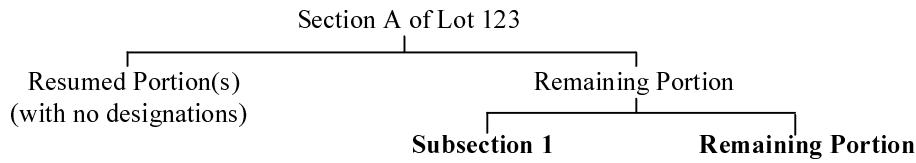


54. When a portion of a lot/section/subsection is resumed by the Government, it will not be given any designation. The land parcel with non-designated portion(s) being resumed will become known as the Remaining Portion of the original lot/section/subsection. On subdivision of a remaining portion involving resumed portion(s) with no designation(s), labels for the designations of the subdivided portions shall start with the letter "A" for sections or the number "1" for subsections if the parent lot/section/subsection has not been subdivided previously (see Examples 6 and 7). If parent lot/section/subsection has been subdivided before, the new sections/subsections shall be labelled by letters or numbers following on from the letter or number sequence of the designated sections/subsections in the previous subdivision (see Examples 8 and 9).

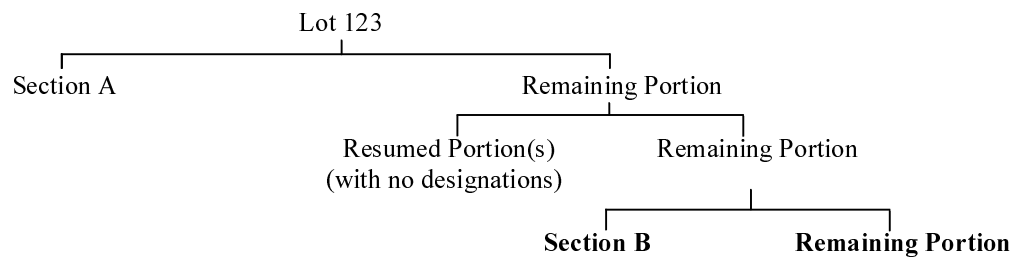
Example 6: Subdivision of the Remaining Portion of Lot 123 involving resumed portion(s) with no designation(s) (Lot 123 has not been subdivided previously)



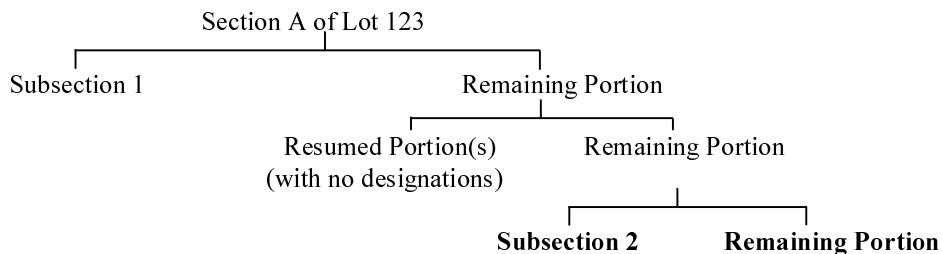
Example 7: Subdivision of the Remaining Portion of Section A of Lot 123 involving resumed portion(s) with no designation(s) (Section A of Lot 123 has not been subdivided previously)



Example 8: Subdivision of the Remaining Portion of Lot 123 involving resumed portion(s) with no designation(s) (Lot 123 has been subdivided previously)

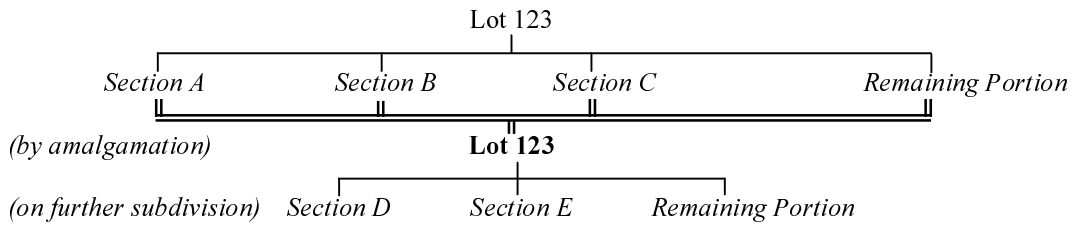


Example 9: Subdivision of the Remaining Portion of Section A of Lot 123 involving resumed portion(s) with no designation(s) (Section A of Lot 123 has been subdivided previously)

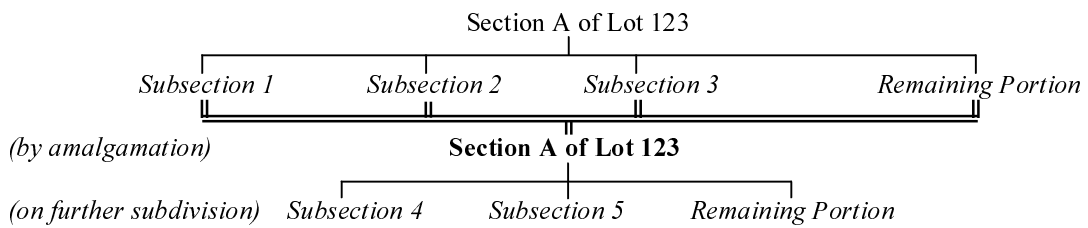


55. Sections/subsections of a lot created in previous subdivisions may sometimes be amalgamated to form a new parcel of land. The resultant land parcel shall be assigned with a new designation except when all the subdivided portions of a lot/section/ subsection are involved in the amalgamation, in which case, the original lot/section/subsection will deem to have been "re-established" by means of amalgamation and the original designation shall be adopted. On further subdivision of the re-established lot/section/subsection, the new sections/subsections shall be designated in the manner as described in Paragraph 53 above to avoid confusing them with the old sections/subsections which existed prior to amalgamation (see Examples 10 and 11).

Example 10: Amalgamation involving all subdivided portions of Lot 123

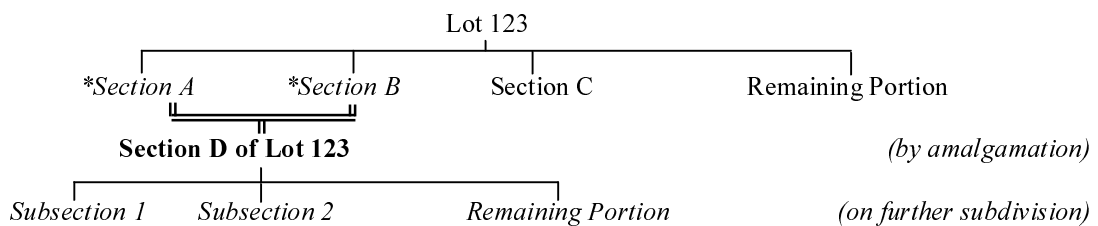


Example 11: Amalgamation involving all subdivided portions of Section A of Lot 123



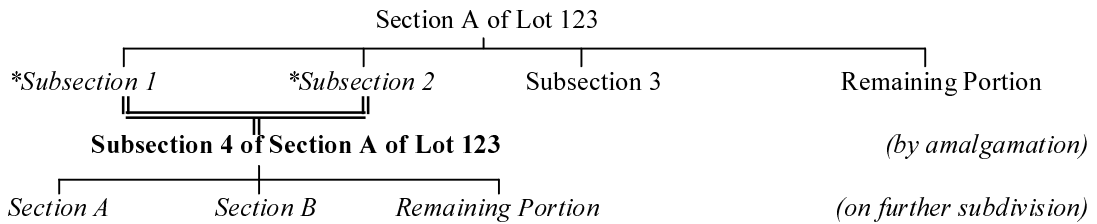
56. When the amalgamation involves only some of the subdivided portions of a lot/section/subsection, the resultant land parcel will be regarded as a new section or subsection of the original lot/section/subsection depending on the highest level of the subdivided portions in the subdivision tree involved. It will be a section if the highest level of subdivided portions in the amalgamation involves sections. It will be a subsection if the highest level of subdivided portions in the amalgamation involves subsections. The resultant land parcel shall be designated by a letter (for section) or a number (for subsection) following on from the last letter or number used in the previous subdivision at that highest level. On further subdivision of the resultant land parcel, the new sections/subsections shall be designated in the manner as described in Paragraphs 51 and 52 (see Examples 12, 13, 14 and 15).

Example 12: Amalgamation involving some of the subdivided sections of Lot 123 (excluding the Remaining Portion of Lot 123)



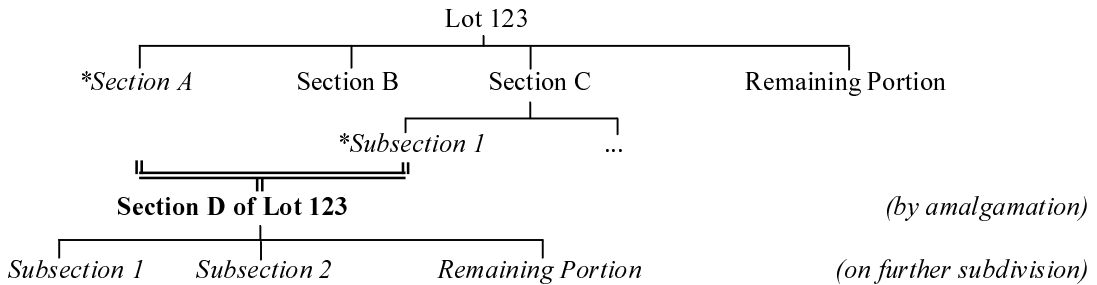
* subdivided land parcels involved in the amalgamation

Example 13: Amalgamation involving some of the subdivided subsections of Section A of Lot 123 (excluding the Remaining Portion of Section A of Lot 123)



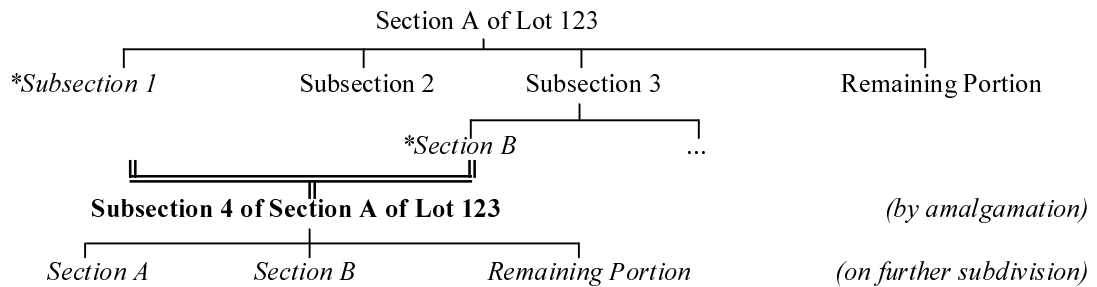
* subdivided land parcels involved in the amalgamation

Example 14: Amalgamation involving some of the subdivided portions of Lot 123 (excluding the Remaining Portion of Lot 123)



* subdivided land parcels involved in the amalgamation

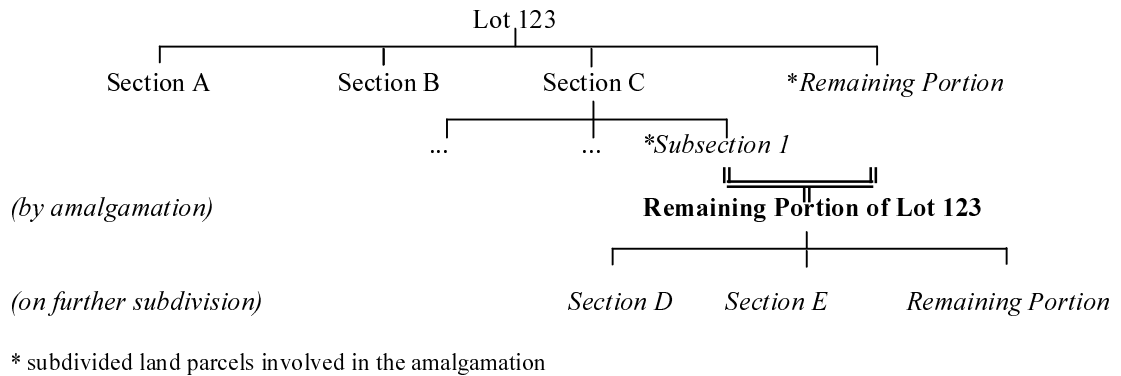
Example 15: Amalgamation involving some of the subdivided portions of Section A of Lot 123 (excluding the Remaining Portion of Section A of Lot 123)



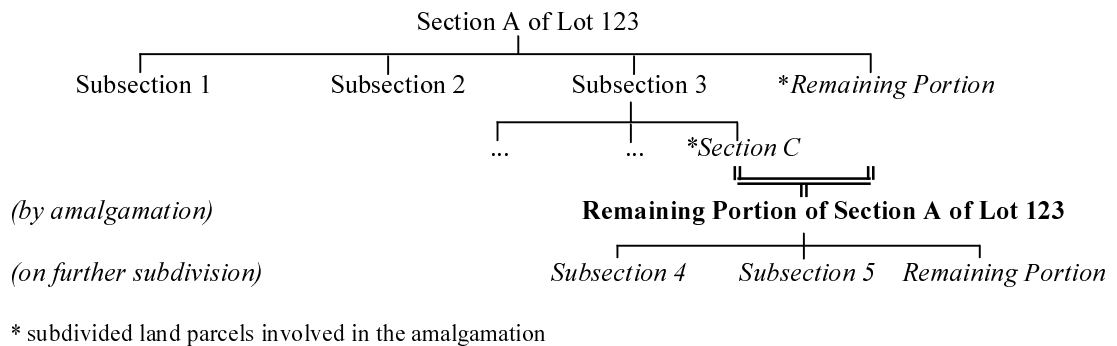
* subdivided land parcels involved in the amalgamation

57. The resultant land parcel shall be designated as the Remaining Portion of the original lot/section/subsection if the highest level of the subdivided portions in the amalgamation involves the Remaining Portion of that lot/section/subsection. On further subdivision of the resultant land parcel, the new sections/subsections shall be designated in the manner as described in Paragraph 53 above (see Examples 16 and 17).

Example 16: Amalgamation involving some of the subdivided portions of Lot 123 (including the Remaining Portion of Lot 123)



Example 17: Amalgamation involving some of the subdivided portions of Lot 123 (including the Remaining Portion of Section A of Lot 123)



58. For any further subdivision of a section/subsection/Remaining Portion that was subdivided not following any one of the patterns of lot designation as described in Paragraphs 50 to 57, the authorized land surveyor shall decide the lot designation for the new subdivision as appropriate.

59. The following abbreviations shall be used for the designations of the subdivided lots shown on survey record plans and land boundary plans.

- (a) Section - S.
- (b) Subsection - ss.
- (c) Remaining Portion - RP

e.g. Lot 123 S.O ss.1 S.I RP - The Remaining Portion of Section I of Subsection 1 of Section O of Lot 123

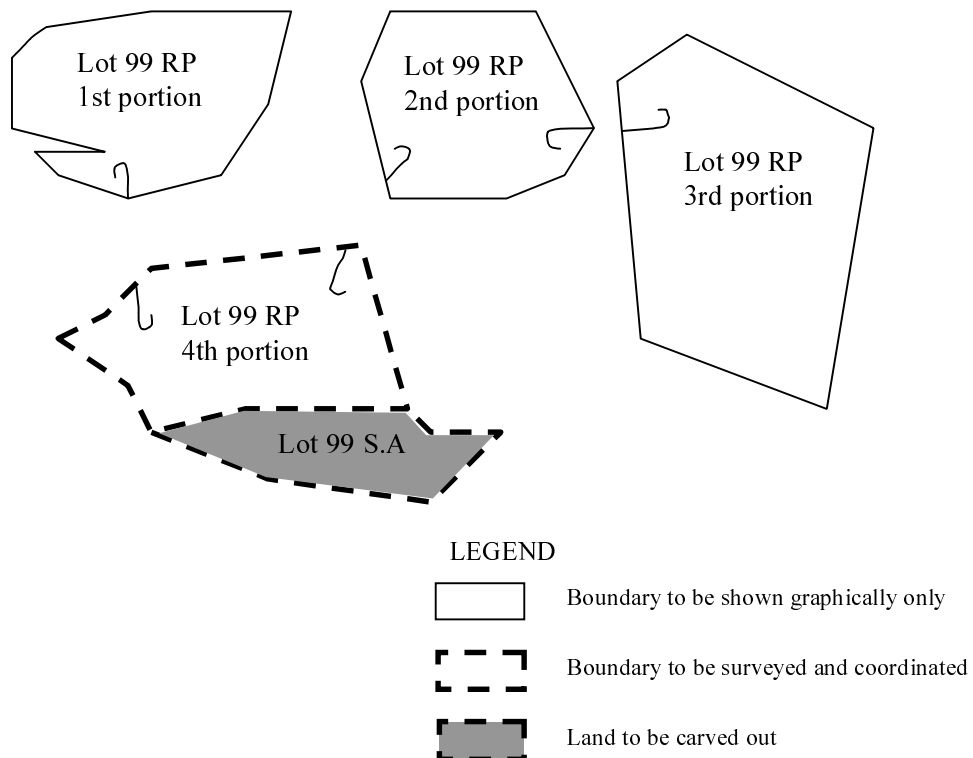
(B) Subdivision of a Land Parcel of Special Configuration

60. The boundaries of a land parcel shall be precisely defined by survey prior to a subdivision. The exact area of the land parcel to be subdivided must be derived and ascertained by the survey. However, for land parcels which consist of separating pieces of land or are enclosing some other lots/sections, to establish the boundaries of these parcels would very often require considerable survey input in terms of both field work and land record search. If a subdivision belongs to either one of the two cases as described in Paragraphs 61 or 62 below, the following principles shall be adopted for the subdivision survey:-

61. Case 1: Subdivision of land parcels consisting of separating pieces of land

For cases where it is only required to subdivide from one of the separating pieces of a land parcel, it is acceptable to just define the boundaries of that piece of land in question. The boundaries of the other pieces of land would only need to be shown graphically on the land boundary plan and survey record plan.

Example 1



Areas to be shown on SRP/LBP

<u>Section</u>	<u>Area</u>	
Lot 99 S.A	100.0m ²	
Lot 99 RP	1899.4m ²	[588.4 m ² (Surveyed) + 1311m ² (Scaled)]

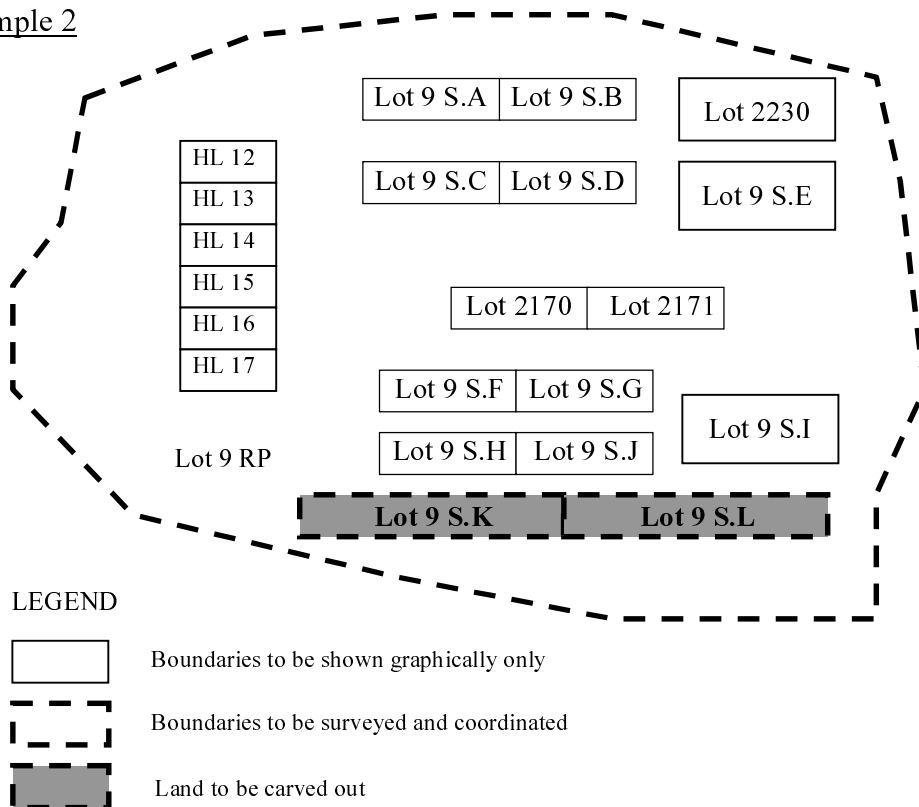
Area computation for the remaining portion (to be shown in the survey report only)

<u>Land Parcel</u>	<u>Area</u>	<u>Remarks</u>
<i>1st portion</i>	301m ²	Scaled
<i>2nd portion</i>	230m ²	Scaled
<i>3rd portion</i>	780m ²	Scaled
<i>4th portion</i>	588.4m ²	Surveyed (less the area of the new section)
	1899.4m ²	(total)

62. Case 2: Subdivision of land parcels which are enclosing other lots or sections

Where sections are to be carved out from a land parcel which is enclosing other lots or sections, it is acceptable to just define the peripheral boundaries of the subject land and the boundaries of the new sections, provided that the boundaries of the new sections being defined will not prejudice the boundary definition of all other existing lots/sections enclosed by the subject land. As a general guideline, the existing lots/sections enclosed by the subject land will need to be surveyed with their boundaries precisely defined if they fall within 3 metres from any boundary line of the new sections. Existing lots/sections which fall outside this clearance limit would only need to be shown graphically on the land boundary plan and survey record plan.

Example 2



Areas to be shown on SRP/LBP

<u>Section</u>	<u>Area</u>
Lot 9 S.K	80.0m ²
Lot 9 S.L	80.0m ²
Lot 9 RP	1234.5m ² [2114.5m ² – 880m ² (Scaled)]

Area computation for the Remaining Portion (to be shown in the survey report only)

<u>Existing Lots/Sections</u>	<u>Area</u>	<u>Remarks</u>
Lot 9 RP (peripheral)	2114.5m ²	Surveyed
HL12	40.5m ²	Scaled
HL13	40.5m ²	Scaled
.		Scaled
.		Scaled
.		Scaled
Lot 9 S.K	80.0m ²	Surveyed
Lot 9 S.L	80.0m ²	Surveyed
	1234.5m ²	(by deduction)

63. The surveyed and/ or scaled areas of the remaining portion of the subject lot shall be shown on the land boundary plan and survey record plan. For clarity, a detailed breakdown showing the area computation for the remaining portion of the subject lot shall be included in the survey report.