

General Survey Instruction Rules

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INTRODUCTION

I-1 Definitions

- "active control point" means a Class A GNSS base station validated and categorized by the Province.1
- "Association" has the same meaning as in the Land Surveyors Act.
- "average combined factor" means the arithmetic product of the average *elevation scale factor* and the average *UTM* point scale factor for the area that is being surveyed.²
- "British Columbia Geo-Spatial Reference" means the horizontal and vertical datums as realized on the ground through *active control points* and *geodetic control monuments*, including their associated accuracies, defined and published by the Province.
- "cell" has the same meaning as in Section 1 of the Mineral Tenure Act.
- "cell claim" has the same meaning as in Section 1 of the Mineral Tenure Act.
- "claim" has the same meaning as in Section 1 of the Mineral Tenure Act.
- "combined factor" means the arithmetic product of the *elevation scale factor* and the *UTM* point scale factor.¹
- "control monument" means a coordinate control monument as defined in Section 11 of the Land Survey Act.
- "Director" means the Director of Land Titles appointed under Section 9 of the Land Title Act and a registrar instructed under Section 10 of the Land Title Act to perform the duties and exercise the powers of the Director.³
- "disturbed" means, with respect to a monument, moved:
 - (a) except by a British Columbia Land Surveyor in the exercise of professional duty, and
 - (b) in such a way that it can be proven beyond doubt that the disturbed monument was moved from its original position.
- "electronic plan" means a survey plan, consisting of a plan image and a plan certification form, prepared for submission to the Land Title and Survey Authority.
- "elevation scale factor" means the radius of the earth as defined by NAD83 (CSRS) divided by the sum of the radius of the earth and an appropriate ellipsoidal elevation.²
- "geodetic control monument" means a control marker officially published on the MASCOT geodetic control database or any other geodetic control monument that has been approved by the Surveyor General.
- "georeference" means the determination of the horizontal coordinates for a point with respect to the adopted *British Columbia Geo-Spatial Reference*.¹
- "GNSS" means the Global Navigation Satellite System and refers collectively to the worldwide civil positioning, navigation, and timing capabilities available from one or more satellite systems, such as the United States' Global Positioning System (GPS), the Russian Federation's GLONASS and the European Union's Galileo systems.²
- "grid bearings" means full circle bearings referred to the central meridian of the *UTM* zone to which the survey is referenced.²
- "hardcopy plan" means a survey plan prepared on mylar for submission to the Land Title and Survey Authority.⁴
- "horizontal positional accuracy" means the *network horizontal accuracy* of all the *georeferenced* points in the survey.²



- "intended plot size" means the intended physical plan dimensions, including a reasonable buffer of not more than 2 centimetres outside of the border of the plan, as determined by the land surveyor, that will provide optimum readability when reproduced in hard copy form without enlargement or reduction.
- "land surveyor" means a practising land surveyor under the Land Surveyors Act.
- "legacy" has the same meaning as in Section 1 of the Mineral Tenure Act.
- "legal survey" means a survey that pertains to all posts placed or found shown on a plan tendered for deposit with the Land Title and Survey Authority of BC.¹
- "LTSA" denotes the Land Title and Survey Authority of BC.²
- "lost" means, with respect to a monument, that the position of the monument must be reestablished, and can be re-established only by measurements from some other monument or monuments to which the lost monument was previously connected by survey.
- "mineral title" has the same meaning as in Section 1 of the Mineral Tenure Act.
- "mining lease" has the same meaning as in Section 1 of the Mineral Tenure Act.
- "NAD83 (CSRS)" means North American Datum 1983 (Canadian Spatial Reference System) and is the adopted provincial horizontal datum.
- "network horizontal accuracy" means the absolute accuracy of the coordinates for a point with respect to the adopted British Columbia Geo-Spatial Reference to a 95% confidence level, which is dependent on the network accuracy of the known point(s) used to derive the coordinates of the legal survey and the relative accuracy of the connection(s) to the known point(s).
- "obliterated" means, with respect to a monument, that the monument is no longer observable but can be restored with confidence from traces remaining on the ground of the original monument or from other physical evidence of the position of the original monument.
- "original monument" has the same meaning as in Section 11 of the Land Survey Act.
- "passive control point" means a geodetic control monument not used as an active control point.²
- "PDF" means the Adobe Portable Document Format standard.
- "plan image" means an electronic file prepared by a land surveyor containing a graphical representation of the details of a survey.
- "post" means a post described in GSI Rules 1-2 to 1-7.
- "plan certification form" means an electronic form in the format designated by the Director of Land Titles or the Surveyor General.
- "reference post" means a reference post described in GSI Rule 1-9.
- "timber licence" means a timber licence or a special timber licence as defined in Section 1 of the Forest Act.
- "unit" in relation to a legacy claim means a unit within that claim immediately before the date that this regulation comes into force, as defined in *Section 1* of the *Mineral Tenure Act* Regulation.
- "UTM" means Universal Transverse Mercator.



I-2 Duties of a British Columbia land surveyor ⁵

- (1) Unless an exemption is granted by the *Association* or if specifically provided for in these rules by the Surveyor General, each *land surveyor* shall:⁵
 - (a) ensure that a legal survey he or she performs, including the plans associated with it, conforms to these rules,⁵
 - (b) assess the relevant documentary evidence for the land under survey or included in a plan and for adjoining lands,⁵
 - (c) except in the case of an explanatory plan, carry out a thorough field investigation for the best available evidence of all boundaries and corners of the land under survey and give appropriate consideration to the evidence in accordance with common law and statute law.⁵
 - (d) Each land surveyor must certify the correctness of the survey and plan by personally affixing his or her signature in a form acceptable to the *Director* for plans filed in the Land Title Office or the Surveyor General for plans filed in the Surveyor General's vault.³

Hardcopy Plans

The land surveyor's certifying statement and signature must be placed on the original mylar film.³

Electronic Plans

The land surveyor's electronic signature must be incorporated into the plan certification form associated with the *plan image*.³

- (2) Despite GSI Rule I-2 (1), where:⁶
 - (a) Crown land is being surveyed as first nation treaty settlement lands the Surveyor General may issue instructions that allow exemption or relaxation of these rules as deemed appropriate by the Surveyor General for a particular survey, so long as that exemption or relaxation is consistent with the final agreement of the First Nation treaty.
 - (b) Crown land is being surveyed under the *Land Act* for land exchange purposes, the Surveyor General may issue instructions that allow exemption or relaxation of these rules as deemed appropriate by the Surveyor General for a particular survey.
 - (c) Private land is being surveyed by the Province for the purpose of acquiring the land for park use, wildlife management, or purposes related to environmental conservation and protection, the *Association* may allow exemption or relaxation of these rules upon the request of the Surveyor General for a particular survey.

I-3 Interpretation of plan requirements for hardcopy and electronic plans³

Unless prescribed otherwise, the General Survey Instruction Rules pertaining to plans apply to both hardcopy and electronic plans.³



amended Nov 3/11 SR1-06

² added Nov 3/11 SR1-06

³ added Mar 15/12 SR4-09

added May 30/11

⁵ amended July 12/11 SR9-09

⁶ amended Dec 17/09 SR3-06

PART 1 — PERMANENT SURVEY MONUMENTS AND ANCILLARY MONUMENTATION

Division 1: Monuments

1-1 Permanent survey monument

Subject to these rules, a permanent survey monument must consist of a standard <u>post</u> of a type referred to in GSI Rules <u>1-2 to 1-7</u>, together with a <u>reference post</u> of a type referred to in <u>GSI Rules 1-9</u> and, if required, <u>bearing trees</u>, a <u>stone mound</u>, or a <u>cairn</u>.

1-2 Type 1 post

- (1) A type 1 post, to be known as the standard concrete post, must consist of a type 2 or type 4 post set in the centre of and flush with the top of a concrete cylinder that is not less than 75 cm high and 30 cm in diameter.
- (2) The concrete may be poured into a form or directly into a shaped hole using a form for not less than the top 20 cm.
- (3) Not more than 15 cm of the monolith may project above ground level.

1-3 Type 2 post

- (1) A type 2 post, to be known as the standard rock post, must consist of a bronze post cap that is approximately 7.5 cm in diameter and is cast as a <u>unit</u> with a shank that is approximately 6.5 cm long.
- (2) A rock post must be securely set into a hole that is drilled in rock or concrete to the full depth of the shank.

1-4 Type 3 post

- (1) A type 3 post, to be known as a lead plug, must consist of lead firmly set into and flush with the top of a hole that is drilled in rock or concrete.
- (2) A copper or brass tack must be set in the top of the lead plug to indicate its true position.

1-5 Type 4 post

- (1) A type 4 post, to be known as the standard capped post, must consist of a bronze post cap that is approximately 7.5 cm in diameter fitted on a pointed length of steel reinforcing bar that is not less than 15 mm in diameter and not less than 75 cm long.
- (2) In loose ground where the <u>land surveyor</u> considers that additional stability is required, a stainless steel anchor plate 7.5 cm square with a hole of appropriate size in the centre must be fitted to the post 8 cm above the point and the post must be dug into the ground.

1-6 Type 5 post

- (1) A type 5 post, to be known as the standard iron post, must consist of a galvanized square iron bar that is not less than 1.2 cm across any face nor less than 75 cm long and that has, before galvanizing, been marked near the top with the initials "B.C.L.S.".
- (2) A standard iron *post* must be driven firmly into the ground with not more than 5 cm protruding above ground level.



1-7 Alternate type 5 post

- (1) An alternate type 5 post, to be known as a short iron post, must consist of a galvanized square iron bar not less than 1.2 cm across any face and not less than 9 cm long, firmly set in a hole drilled in concrete or rock.
- (2) The drill hole referred to in *GSI Rule 1-7 (1)* must be at least 6 cm deep, and the short iron pin must be securely set with a grout or equivalent compound, or pressure set with lead, and must not extend more than 3 cm above ground level.

Division 2: Orientation and Marking

1-8 Post orientation, centering and marking

- (1) <u>Posts</u> of types 1, 2 or 4 must be set with the crown on the cap facing north, and with the centre of the cap, as nearly as possible, at its true position.
- (2) The true position must be marked by a small hole that is punched or drilled in the cap.
- (3) The <u>land surveyor</u> must indicate diagrammatically on the cap the directions of the boundary lines, and the designations of the district lots, sections, blocks and quarters adjoining the corner, together with the year in which the post was set and the registry number of the land surveyor's commission.
- (4) Parcel designations under the *Land Title Act*, other than for roads, railways or rights-ofway, must not be indicated.
- (5) If a post is set as a <u>witness post</u>, the post cap must be marked with the letters "WT" and with the distance and direction to the corner witnessed.
- (6) Posts of type 1, 2 or 4 must contain the words "BRITISH COLUMBIA LEGAL SURVEY". 1

Division 3: Ancillary Monumentation

1-9 Reference posts

- (1) Each post must be accompanied by a reference post.
- (2) Triangular reference posts must comply with the following:
 - (a) measure not less than 8 cm on one face and 5 cm on each of the other faces;
 - (b) if milled, be chamfered at the top;
 - (c) if hand hewn, be pointed at the top to shed water;
 - (d) if referencing a post of type 1, 2 or 4, be at least 1 m high where the post marks a district lot corner, block corner, section corner, centre post or a quarter post and, in every other case, be painted white and be at least 30 cm high, with all posts marked with "MON" on the side facing the post;
 - (e) if referencing a post of type 3 or 5, be painted white, be at least 30 cm high, and be marked with LP or IP on the side facing the post and with lot or block designations carved or painted on appropriate faces.
- (3) The metal reference post must consist of an aluminum plate approximately 10 cm by 20 cm, marked "Legal Survey Post Do Not Disturb", bolted to a galvanized angle iron post



which, if referencing a post of type 1, 2 or 4 at a district lot corner, block corner, section corner, centre post or quarter post, must stand not less than 1 m high and, in every other case, must stand not less than 30 cm high.

1-10 Witness posts

Where a reference post is set to mark the presence of a post of type 3 or 5 that witnesses a true corner, it must be marked with "WT" and the distance from the post to the true corner.

1-11 Bearing trees

- (1) Where bearing trees are required, they must be made and recorded as follows:
 - (a) each bearing tree must be blazed and carved with the letters "BT" and the distance to the post;
 - (b) the distance to the post must be measured from the blaze to a point 1 m vertically above the post;
 - (c) the diameter and species of the tree and the bearing and distance from the post to the blaze must be recorded and noted on the plan.
- (2) Bearings may be magnetic or on the same origin as the plan. The derivation must be clearly noted.

1-12 Stone mounds

Where <u>posts</u> of type 2 or 4 are placed, and the erection of a standard cairn as defined in <u>GSI</u> <u>Rule 1-13 (1)</u> is not required, the <u>land surveyor</u> must, if possible, surround the post with a substantial circle of rocks which must be recorded and shown on the plan as a stone mound.

1-13 Cairns

- (1) At a corner post, a cairn must:
 - (a) be pyramid shaped with the centre of the pyramid lying due south of the post;
 - (b) have a base with dimensions of 1.5 m and a height of 1 m; and
 - (c) have one corner adjoining the post.
- (2) At a witness post, a cairn must:
 - (a) be cone shaped;
 - (b) have a diameter at the base of 2 m and a height of 1 m; and
 - (c) stand on the opposite side of the post to the witnessed corner with its centre 1 m from the witness post.

Where it is impractical to put the cairn in the place required by GSI Rules 1-13 (1) and (2), the cairn's location may be varied and the variation must be recorded and shown on the plan.



¹ added May 1/12 SR6-11

PART 2 — GENERAL SURVEY REQUIREMENTS

2-1 Survey accuracy standards

- (1) For new surveys consisting of the <u>land surveyor's</u> own work, the maximum limit of error is $1:5000 \pm 2$ cm.
- (2) If, due to rugged terrain, swamps or other conditions, it is impracticable to obtain the minimum accuracy set out in *GSI Rule 2-1 (1)*, the *Association* may, on application, accept a lower standard of accuracy.

2-2 Survey methods

- (1) Surveys may be conducted using conventional, <u>GNSS</u>, or other methods, providing the survey accuracy standards are met.
- (2) It is the responsibility of the land surveyor to assess which survey method or combination of survey methods must be used for a particular survey.
- (3) The preferred method of placing monuments and determining the length and direction of boundaries is by direct measurement along boundaries.
- (4) Survey traverses and networks must consist of closed figures or be confirmed by sufficient redundant measurements to verify the survey accuracy standards required under GSI Rule 2-1, except that single measurements may be made when closing between corners of a previously surveyed parcel.
- (5) The misclosure to the existing survey must not exceed $1:2500 \pm 0.02$ metres; otherwise, the measurements must be independently verified.
- (6) Except as permitted by the Association, measurements shown on the plan must be based on the survey and must not be derived from previously registered plans nor from surveys or plans made by a person other than the land surveyor performing the current survey.
- (7) The datum for <u>UTM</u> coordinates must be <u>NAD83 (CSRS)</u>.
- (8) Surveys must be carried out under the direct supervision of the land surveyor signing the plan.

2-3 Measuring system validations

- (1) All measuring equipment must be kept in proper adjustment and must be validated to ensure the equipment is operating to the manufacturer's specifications.
- (2) The land surveyor must keep validation records and be prepared to verify the accuracy of the measuring systems used for any survey project.

2-4 Survey measurements and adjustments

- (1) A land surveyor must directly assess and manage the method in which the survey measurements are processed and adjusted.
- (2) Survey measurement blunders must be detected and eliminated and all known systematic errors must be identified and corrected before adjustment.
- (3) Survey measurements must be adjusted to eliminate misclosures.
- (4) A least squares adjustment process is the preferred method of adjustment for all surveys and must be used to process redundant post-mission <u>GNSS</u> measurements.



2-5 Bearings

- (1) With the exception of Explanatory Plans, bearings may be derived from the following: 1
 - (a) stellar observations;
 - (b) solar observations, except for right-of-way surveys which exceed one kilometre in length;
 - (c) geodetic control monuments;
 - (d) points derived from **GNSS** observations with a minimum separation of 150 metres;²
 - (e) existing surveys for surveys:
 - (i) under the Land Act;
 - (ii) under the *Land Title Act*, except right-of-way surveys which exceed one kilometre in length;
 - (iii) under the Strata Property Act;
 - (iv) under the Mineral Tenure Act;³
 - (v) under the Oil and Gas Activities Act;³
 - (vi) under the Coal Act;³
 - (f) any other methods approved by the Association.
- (2) Bearings for surveys under GSI Rules Parts 6 to 10 and 13 that are derived in accordance with GSI Rules 2-5 (1)(a) or (b) must be referred to a local astronomic meridian.¹
- (3) Bearings of surveys that lie wholly or partially within integrated survey areas must be grid bearings referred to the central meridian of the <u>UTM</u> zone specified on the plan of the appropriate integrated survey area.¹
- (4) Bearings derived by <u>GNSS</u> methods or from <u>geodetic control monuments</u> must be grid bearings referred to the central meridian of the UTM zone to which the survey is referenced.¹
- (5) Bearings on Explanatory Plans shall be referenced to the existing land title office records upon which the plan is based.³
- (6) Bearings for surveys under *GSI Rules Part 11 Mineral Tenure Act* Surveys must be grid bearings referred to the central meridian of the UTM zone to which the survey is referenced.¹
- (7) Bearings for surveys under *GSI Rules Part 12 Surveys Under the Oil and Gas Activities Act* must be:¹
 - (a) referred to the central meridian of the township in which the survey is situated where the survey lies within the Peace River Block, or where bearings are derived in accordance with GSI Rules 2-5 (1)(c) or (d), be grid bearings referred to the central meridian of the UTM zone to which the survey is referenced, or;¹
 - (b) grid bearings referred to the central meridian of the <u>UTM</u> zone to which the survey is referenced where the survey lies outside the Peace River Block.¹
- (8) When bearings are derived according to GSI Rules 2-5 (1)(c) or (d), the vector(s) used to determine the bearing(s) must be shown and identified on the plan.³



(9) The accuracy of bearings derived according to GSI Rules 2-5 (1)(c) or (d) is to be calculated for each vector upon which the bearing derivation is based. The grid bearing for each of these vector(s) should be accurate to 1 minute of arc or less at a 95% confidence level. If it is not practical to achieve this accuracy the following statement shall be placed on the plan:³

"Grid bearings of vector(s) (insert identifiers) are accurate to ____ minutes/seconds of arc at a 95% confidence level."³

- (10) Other than those bearings derived in accordance with GSI Rule 2-5 (1)(d), bearings for surveys under GSI Rules Parts 6, 7 and 12 greater than one kilometre in length must be derived as follows:¹
 - (a) at the origin and close of the survey;
 - (b) at least once:
 - (i) for every 40 angles of the main traverse; or
 - (ii) every 8 kilometres along the length of the survey, whichever occurs first;
 - (c) the discrepancy between bearings observed under GSI Rule 2-5 (10)(b), after convergence has been applied, must not exceed 15 seconds for every kilometre of the extent of the survey.
- (11) Bearings derived in accordance with GSI Rule 2-5 (1)(d) for surveys under Parts 6, 7 and 12 greater than one kilometre in length must be derived as follows:³
 - (a) at the origin and close of the survey;³
 - (b) at least once:3
 - (i) for every 40 angles of the main traverse; or³
 - (ii) every 8 kilometres along the length of the survey, whichever occurs first;³
 - (c) the discrepancy between bearings observed under GSI Rule 2-5 (11)(b) must not exceed 15 seconds for every kilometre of the extent of the survey.³

2-6 Georeferencing

- (1) With the exception of Explanatory Plans, surveys located outside of integrated survey areas may be georeferenced. Any such surveys that include <u>GNSS</u> observations must be georeferenced. Georeferencing may be achieved by the following methods:³
 - (a) GNSS or conventional ties to passive control points;³
 - (b) GNSS ties to active control points;³
 - (c) Single point positioning techniques using the Precise Point Positioning (PPP) service of Natural Resources Canada;³
 - (d) Ties to previously georeferenced surveys that meet the georeferencing requirements of the survey being undertaken;³
 - (e) Any other method approved by the Association.³
- (2) Unless stated elsewhere in these Rules, the horizontal positional accuracy under *GSI Rule* 2-6 (1) of all the georeferenced points within the survey must be 1 metre or less;¹



(3) The association may exempt a land surveyor from any provision of GSI Rules 2-6 (1) or 2-6 (2), in whole or in part, if, in the opinion of the association, strict compliance is impracticable.³

2-7 Natural boundaries

- (1) The position of natural boundaries may be determined by any survey method that yields an accuracy of 0.5 metres or better.
- (2) Ties to the natural boundary must be made at intervals sufficiently close to permit the accurate plotting of the natural boundary and the computation of areas.
- (3) Where the natural boundary is determined from angular and distance measurements, these ties must be made from a closed traverse line or by radial ties from points established as part of a closed survey.
- (4) The following methods may also be used to determine the present natural boundary upon application and approval by the Association:
 - (a) photogrammetric methods where at least two photo points are tied in order to control scale and azimuth, and those points must be identified in the photo during the course of the ground survey;
 - (b) existing suitable maps prepared from photographs where two points common to the map and the survey being conducted can be determined;
 - (c) other methods approved by the Association.



¹ amended Nov 3/11 SR1-06

² amended May 13/11

³ added Nov 3/11 SR1-06

PART 3 — GENERAL PLAN REQUIREMENTS

Division 1: General

3-1 Size and material

- (1) Subject to GSI Rules 3-1 (1)(a) and (b) plans may be prepared as a <u>hardcopy plan</u> or an electronic plan.
 - (a) Posting plans prepared under Section 68 of the Land Title Act shall be electronic plans.
 - (b) Plans prepared under the Land Act, Mineral Tenure Act, Coal Act and Oil and Gas Activities Act for filing in the Crown Land Registry shall be electronic plans.

(2) Hardcopy Plans

The plan must be prepared on mylar film with a minimum thickness of 0.075 mm and a matte finish on both sides in one of the following standard sheet sizes: ¹

A size - 216 mm by 280 mm

B size - 280 mm by 432 mm

C size - 432 mm by 560 mm

D size - 560 mm by 864 mm

E size - 864 mm by 1120 mm (May be used when approval is given by the Registrar of Land Titles).¹

Electronic Plans

The <u>plan image</u> must be created as a <u>PDF</u> file compatible with Adobe Acrobat 8.0, or higher, with a resolution of not less than 600 dots per inch and having an <u>intended plot</u> <u>size</u> of:¹

A size - 216 mm by 280 mm

B size – 280 mm by 432 mm

C size – 432 mm by 560 mm

D size – 560 mm by 864 mm

E size - 864 mm by 1120 mm

When a multi-sheet plan is permitted all sheets shall use the same sheet size and have the same sheet orientation (all landscape or all portrait).¹

(3) Hardcopy Plans

Right-of-way plans must be prepared using the standard sheet sizes required by *GSI Rule* 3-1 (2) if possible, but a plan must not in any case exceed 4 metres in length and 0.75 metres in width, except with the consent of the Registrar of Land Titles.

Electronic Plans

The <u>intended plot size</u> of right-of-way plans must be the standard sheet sizes required by <u>GSI Rule 3-1 (2)</u> if possible, but the intended plot size must not in any case exceed 4 metres in length and 0.75 metres in width.

(4) Hardcopy Plans

Strata plans must be prepared using an A or B size sheet, unless the Registrar of Land Titles authorizes C or D size plans.

Electronic Plans

Strata plans shall be subject to GSI Rule 3-1 (2).



3-2 Scale

(1) The scale of the plan must be 1:100, 1:125, 1:150, 1:200, 1:250, 1:300, 1:400, 1:500, 1:600, 1:750 or 1:900, or multiples of such scales by an integral power of 10.

(2) Hardcopy Plans

The smallest scale that will permit all required detail and information to be shown on the plan without congestion must be used.

Electronic Plans

The smallest scale and sheet size that will permit all required detail and information to be shown on the plan without congestion at the *intended plot size* must be used.

- (3) A scale must not be used where a parcel under survey would be represented on the plan as less than 5 cm².
- (4) If the requirements of GSI Rule 3-2 (3) would result in the preparation of an unduly large plan, the main body of the plan may be drawn to a smaller permitted scale with necessary detail shown on inserted enlargements.
- (5) The inserted enlargements referred to in *GSI Rule 3-2 (4)* must conform to a scale required by *GSI Rule 3-2 (1)* except if impractical, in which case "not to scale" must be noted on the inserted enlargement.

3-3 Draughting and printing

(1) Hardcopy Plans

Plans must be draughted in permanent black ink and all words on the plan, other than signatures, must be printed.

Electronic Plans

All features in an electronic plan must be depicted in black on a white background and all words and numbers must be printed (stylized or ornate fonts are not acceptable).

(2) Hardcopy Plans

Except in the case of a posting plan, other than a block outline posting plan, the exterior boundaries of the land being dealt with by the plan must be shown as a solid black line, between 1 and 1.5 mm in width.

Electronic Plans

Except in the case of a posting plan, other than a block outline posting plan, the exterior boundaries of the land being dealt with by the plan must be shown as a solid black line, between 1 and 1.5 mm in width when the <u>plan image</u> is reproduced at the <u>intended plot size</u>.

- (3) If a <u>perimeter</u> boundary is shown on an inserted enlargement, GSI Rule 3-3 (2) applies to that boundary.
- (4) Hatching may be used if it is necessary to distinguish between parcels being surveyed.
- (5) The top of the plan must, if practical, be north and the lettering must be so arranged that it may be easily read when facing the top of the plan.
- (6) Extraneous information must not be shown on the plan, however, the name and address of the <u>land surveyor</u>'s firm may be appended.



(7) Hardcopy Plans

Signatures on a plan must be original signatures in permanent black ink.

Electronic Plans

The plan image must contain no signatures. Any signatures that may be required for the plan must be obtained in a form and manner prescribed by the <u>Director</u> for plans filed in the Land Title Office or the Surveyor General for plans filed in the Surveyor General's vault.¹

- (8) The style and methods in specimen plans must be used where practical.
- (9) The plan must have a border of solid straight lines.
- (10) Hardcopy Plans

Plan lettering must be in a solid black font and must not be less than 2.0 mm in height.

Electronic Plans

Lettering on plan images must be in a black font and must not be less than 2.0 mm in height when the plan image is reproduced at the intended plot size.

(11) Hardcopy Plans²

Plans must be capable of being reproduced or scanned so that the resulting copy shows a clear and legible image. The original plan must be identified by adding the word "original" in the lower right hand margin of the plan.

Electronic Plans

Plan images must be capable of being produced so that the resulting copy shows a clear and legible image at the intended plot size. The word "original" as prescribed for hardcopy plans in this GSI Rule must not be shown on the plan image.¹

(12) Plans must be in compliance with any standards for electronic submission that have been approved by the Surveyor General.

3-4 General plan information

- (1) The plan, and any enlargements, must contain the following information and the information required under *GSI Rule 3-4 (2)*, as applicable:¹
 - (a) bar scale and the following notation:¹

The intended plot size of this plan is __mm in width by __mm in height (insert sheet size e.g. D size) when plotted at a scale of 1: .1

(i) enlargements shall contain a bar scale and the following notation:³

Scale of enlargement is 1:_____at intended plot size of plan³

(ii) enlargements that are exaggerated for clarity and not plotted to scale shall not require a bar scale and shall include the following notation:³

Not to scale³

- (b) a north point;
- (c) details of bearing derivation in accordance with GSI Rule 2-5 must be given on the plan;⁴
- (d) a legend giving details of the various monuments shown on the plan, subject to the following:
 - (i) the required monument standard abbreviations must be used;
 - (ii) only monuments shown on the plan may be represented in the legend;



- (e) the British Columbia Geographic System designation or designations shown immediately below the title using the 6 minute latitude by 12 minute longitude breakdown;
- (f) all bearings must be shown in the full circle sexagesimal system clockwise from north;
- (g) adjusted bearings and distances must be shown on the plan of survey;
- (h) all linear measurements must be shown as horizontal ground-level distances in metres and decimals thereof, except for distances to bearing trees and ties to geodetic control monuments, active control points or as required under GSI Rule 11-9 (1)(a)(i), unless otherwise directed by the Association;⁵
- (i) if a plan shows both horizontal ground-level distances and grid distances or only grid distances, a note is required to clearly identify the type of distance shown;⁵
- (j) details of found and made bearing trees, stone mounds, cairns or other ancillary evidence;
- (k) the boundaries of existing rights-of-way or easements if there is a charge on title to the parcel under survey, or if, in the opinion of the Registrar of Land Titles, there is a reasonable expectation of a charge being placed on the title to the parcel under survey, or on the titles of newly created parcels, shown by broken lines;
- (I) the boundaries of surveyed covenant areas shown by broken lines;
- (m) if the <u>land surveyor</u> considers it appropriate, traverse lines, <u>GNSS</u> baselines or radial ties shown as fine broken lines, the dimensions and bearings of which may be shown adjacent to the broken line in the body of the plan or in tabular form at a convenient location on the plan;
- (n) the length of the arc and the radius of curved boundary which must be the arc of a circle;
- (o) the bearings of radii to intersections with points on the curve;
- (p) the bearings of radii at the beginning and end of the curve;
- (q) all radii shown as fine broken lines;
- (r) the designation of the lands under survey, as well as all lands adjacent to each boundary thereof, by District Lot, Group, Block, Section, Township, Range, Meridian, Indian Reserve, or Unsurveyed Crown Land, as appropriate (being the primary parcel information). The primary parcel information shall be shown prominently in the body of the plan in solid font;⁶
- (s) the Lot, Block, Parcel and land title plan number, whichever applies, of the lands under survey, as well as of all lands adjacent to each boundary thereof in solid font.⁶
- (t) Except for plans prepared under the *Land Act*, fine broken lettering and broken lines shall be used to indicate parcels, their land title plan numbers and boundaries which will be cancelled on the deposit of the new plan;



(u) areas shown on the plan for each parcel created, highway, park or public square dedicated, or other interest in land delineated, except strata floor plans, posting plans prepared pursuant to *Section 68* of the *Land Title Act* and other unique plans, to a minimum precision as given in the following table:⁷

Up to 0.1 ha quote to 0.1 m2 From 0.1 ha to 1 ha quote to 0.001 ha From 1 ha up to 10 ha quote to 0.01 ha From 10 ha up to 100 ha quote to 0.1 ha From 100 ha and over quote to 1 ha

and where a parcel created, highway, park or public square dedicated, or other interest in land delineated is in multiple parts, an area for each part must be expressed to the precision described above.

- (v) posts found and set;
- (w) if an <u>obliterated</u>, <u>lost</u> or <u>disturbed</u> corner <u>post</u> has been re-established, the method of re-establishment;
- (x) if evidence on one side of a road is used to establish the opposite side, sufficient ties by bearing and distance from the posts found to those set on the opposite side;
- (y) the perpendicular width of each road created by the survey;
- (z) if the sides of the road are not parallel, the varying width clearly indicated;
- (aa) the names of roads and bodies of water and the direction of flow, if appropriate; ¹
- (bb) if new highways are created, they must be shown on the plan as "arterial highway", "highway", "road" or "lane" as appropriate; 1 8
- (cc) where a witness post has been set:9
 - (i) the notation "witness" or "Wt" must be shown on the plan to confirm the post(s) not set on a true corner;
 - (ii) the position of the witness post in relation to the corner must be shown by dimensions with no ambiguity as to whether the offset distance is measured at right angles to or on a boundary or its production; and
 - (iii) the following notation must be placed in the legend of the plan:

Note: This plan shows one or more witness posts which are not set on the true corner(s).

- (2) The plan must contain the following information and the information required under *GSI* Rule 3-4 (1):
 - (a) the present natural boundary and the natural boundary on which title is based, except in the case of a plan endorsed under *Section 94 (1)(d)* of the *Land Title Act,* in which case only the present natural boundary must be shown;
 - (b) the distance along boundaries to the natural boundaries as they exist at the time of the survey;
 - (c) offsets from a boundary or traverse line to natural boundaries and the distance along the boundary or traverse line to the point of offset;



- (d) radial ties to natural boundaries may be shown in tabular format indicating the observation point numbers and their corresponding bearings and distances;
- (e) small watercourses of a temporary or seasonal nature that do not have natural boundaries, must not be shown on the plan;
- (f) Hardcopy Plans

the Statement By Surveyor as prescribed by the *Director*¹

Electronic Plans

the following notation must be shown on the plan image:

(i) For plans based on field survey:

The field survey represented by this plan was completed on the [dd] day of [month], [yyyy]

[full name of BCLS], BCLS¹

(ii) For plans based on existing records:

This plan is based on the following Land Title and Survey Authority of BC records:

(list plans and documents used to compile the plan)

[full name of BCLS], BCLS

[dd] day of [month], [yyyy]

- (g) the boundaries of all lots, roads and walkways shown by solid black lines, except that, where boundaries have been cancelled or where a block overlaps two or more adjacent sections or District Lots, those boundaries must be shown by broken lines;
- (h) natural boundaries shown by a sinuous line;
- (i) in a location near the certificate required by GSI Rule 3-4 (2)(f), the following: ¹⁰

 This plan lies within the (Regional District);
- (j) where an alternate type 5 post is found or placed, either a note next to the post reading: "short iron post....... [description]......", or an abbreviation of the note in the legend;
- (k) post cap diagrams.
- (I) Electronic Plans¹¹

The pre-assigned plan number as prescribed by the Surveyor General or the Director of Land Titles must be prominently displayed in the top right corner, immediately below the top margin as follows:

Plan [plan number];

This requirement does not apply to plans submitted under Section 25 of the Oil and Gas Activities Act General Regulation.

- (3) Where grid bearings are used outside of an integrated survey area, the plan must contain the following information if applicable:⁴
 - (a) a statement or diagram of the amount and correct application of convergence between the astronomic meridian through one or more points within the legal survey and the central meridian of the UTM zone;⁴



(b) a notation, with modification as necessary: 12

"Grid bearings are derived from [insert bearing derivation method] and are referred to the central meridian of UTM Zone [insert number]";¹²

- (c) surveys georeferenced in accordance with *GSI Rule 2-6(1)* must indicate on the plan the following:⁴
 - (i) Except in the case of *Part 11* Mineral Tenure Act surveys, the datum, *UTM* coordinates of at least one point plus additional points to yield an average density of one point every three kilometres along the length of the survey based on the *NAD 83 (CSRS)* datum, combined factor, the UTM zone and the estimated horizontal positional accuracy achieved placed next to the georeferenced point(s) or in a table with a cross reference number where appropriate. The grid bearing and grid distance, noted as such, to geodetic control monuments or active control points may also be shown on the plan;⁴
 - (ii) the following notations, with modifications as necessary:⁴

"The UTM coordinates and estimated horizontal positional accuracy achieved are derived from [insert type of GPS survey georeferencing method] to [insert geodetic control monument(s) number(s), and/or insert active control point(s) number(s), or previously registered plan].";⁴

"This plan shows horizontal ground-level distances, unless otherwise specified. To compute grid distances, multiply ground-level distances by the average combined factor of [insert factor]." The average combined factor has been determined based on an ellipsoidal elevation of [insert ellipsoidal elevation] metres.";⁴

Where a single average combined factor is not appropriate the combined factor and ellipsoidal elevations may be shown at specific points or in a tabular form and then the following statement may be used:¹²

"This plan shows horizontal ground-level distances unless otherwise specified. To compute grid distances, multiply ground-level distances by the appropriate combined factor as derived from the combined factors ['noted hereon' or 'in the coordinate table' as applicable]."¹²

(iii) where surveys cross UTM zone boundaries, translation parameters between zones, including coordinate shifts, combined factor and grid bearing conversion, should be added.¹²

3-5 Submission of plans to Surveyor General

- (1) If complete posting of a survey is impractical, application may be made to the <u>Association</u> for modified posting.
- (2) Hardcopy Plans

If an application for modified posting is approved by the association, the following note must be shown on the plan:¹

The monumentation on this survey is approved	.[date]
Surveyor General	



Electronic Plans

If an application for modified posting is approved by the association, the following note must be shown on the $\underline{plan\ image}$:

Modified monumentation has been approved for this survey.

Division 2: Symbols and Abbreviations

3-6 Standard symbols and abbreviations

(1) The following standard symbols must be used on all survey plans, where applicable:

Symbols		Description	Dimensions
Found	Placed		(mm)
•	0	Standard Concrete Post (<u>Type 1</u>)	3.5, 1.5
		Standard Rock Post (<i>Type 2</i>)	3.5, 2.0
		Lead Plug (<i>Type 3</i>)	2.0
	\otimes	Standard Capped Post (<u>Type 4</u>)	3.0
•	0	Standard Iron Post (<i>Type 5</i>)	2.0
		<u>Control Monument</u>	3.5, 2.5
		Old Pattern Dominion Iron Post	3.0, 1.5
•		Non-Standard Post (describe)	3.0, 2.0
À		Angle Iron	3.5, 1.0
•		Aluminum Post	2.0, 2.5
A	\triangle	Traverse Hub	2.5
	+	Unmarked Measured Point	1.0



(2) The following standard abbreviations with or without periods may be used and need not be explained in the legend: 13

а	arc
ACP	active control point
AP	aluminum post
ASP	Air Space Parcel
ASPI	Air Space Plan
BCGS	British Columbia Geographic System
BCLS	British Columbia <u>Land Surveyor</u>
Bk.	block
Bdy.	boundary
Brg.	bearing
BT	bearing tree
С	standard cairn
(c)	calculated
C. of T.	Certificate of Title
CAP	old style capped aluminum post
Q	centreline
CIP	old style capped iron post
CLS	Canada Lands Surveyor
CLSR	Canada Lands Surveyor Canada Lands Surveyor
cm	centimetre
cor.	
CP CP	standard capped post
diam.	diameter
DL	District Lot
DLSIP	old style Dominion Land Surveys iron post
E.	east
elev.	elevation
Ex.	explanatory
Fd.	found
Fr.	fractional
FSR	Forest Service Road
GCM	geodetic control monument
GNSS	Global Navigation Satellite System
G.	·
GPS	group global positioning system
ha	hectare
	highway
Hwy.	illegible
illeg.	standard or short iron post
I.R.	Indian Reserve
KDYD	Kamloops Division of Yale District
	kilometre
km L	Lot
Lat.	latitude



LCP	limited common property
	longitude
Long.	
	standard lead plug
L.S.	Legal Subdivision
LTO	Land Title Office
M.	dirt mound or meridian (i.e. W6M)
m m ²	metre
	square metre(s)
m ³	cubic metre(s)
mag.	magnetic
M.C.	Mineral Claim
Meas	measured
Mkd.	marked
N.	north
NAD27	North America Datum 1927
NAD83 (CSRS)	North American Datum 1983 (Canadian Spatial Reference System)
NCO	Not cut out
NF	nothing found
No.	number
NWD	New Westminster District
oblit.	<u>obliterated</u>
ODYD	Osoyoos Division of Yale District
P&NG	Petroleum and Natural Gas
PC	point of curvature
P.Con	standard concrete post
PCC	point of change of curvature
PDR	Petroleum Development Road
PI	point of intersection of tangents
Pl.	placed
PNB	present natural boundary
POT	point on tangent, subtangent or subtangent produced
PP	old style pipe post
PRD	Peace River District
P.Rock	standard rock post
QCD	Queen Charlotte District
R.	Range
r	radius
Rem.	remainder
Re-est.	Re-established
Res.	restored
RP RP	reference post
R/W	right-of-way
Ry.	railway
S.	south
Sec.	Section
SDYD	Similkameen Division of Yale District
SL	strata lot
S.M.	stone mound built around a monument
J.IVI.	stone mound built around a monument



SRW	statutory right-of-way
Sta.	station
T.	trench
temp.	temporary
TH	traverse hub
THSL	Town of Hastings Suburban Lands
Tp.	Township
Tri.	tripod
UCL	unsurveyed crown land
UTM	universal transverse mercator
W.	west
W.Loc	Well location
Wo.	wood post
Wt.	witness
YDYD	Yale Division of Yale District

(3) Non-standard abbreviation used must be explained in the legend.

amended Mar 15/12 SR4-09

² amended Mar 13/09

3 added Mar 15/12 SR4-09

⁴ amended Nov 3/11 SR1-06

⁵ amended Mar 18/09

6 amended Mar 7/11 SR12-10

7 amended July 22/09

⁸ amended May 1/12 SR2-12

amended Mar 2/11

amended Sep 3/08

11 amended Sep 30/10
12 added Nov 3/11 SR1-06
13 amended Sep 2/10



PART 4 — CONTROL SURVEYS IN INTEGRATED SURVEY AREAS

Division 1: General

4-1 Definition

- (1) In this Part, "control survey" means a survey to establish coordinates for
 - (a) a coordinate <u>control monument</u> set before constituting a portion of British Columbia as an integrated survey area, or
 - (b) an additional coordinate control monument or more accurate coordinates for an existing coordinate control monument in a constituted integrated survey area.

4-2 Application of Part

This Part applies to all control surveys in an integrated survey area.

Division 2: Specifications for Control Surveys

4-3 Integration

A control survey must be integrated with a provincially validated geodetic control network.

4-4 Datum

- (1) Coordinates must be based on the NAD83 (CSRS) datum.¹
- (2) Elevations must be referred to the vertical datum approved by the Surveyor General.

Division 3: Control Monumentation

4-5 Position of monuments

- (1) A control monument may be set at a position that is arbitrary in relation to <u>original</u> monuments.
- (2) If an original monument complies with the requirements of GSI Rules 4-6 and 4-7, the <u>land surveyor</u> may upgrade it to the status of a control monument.
- (3) If an original monument does not comply with the requirements of GSI Rules 4-6 and 4-7, the land surveyor may replace it with a control monument.

4-6 Types of monuments

A coordinate control monument must be a <u>type 1</u> or <u>type 2 post</u> required in Part 1 of these rules, a special survey monument as defined in <u>Section 322</u> of the <u>Land Title Act</u>, or a type of monument approved by the Surveyor General.¹

4-7 Siting of monuments

A coordinate control monument must be set in a safe location and in a useful position such that it is least likely to be subject to damage or removal or create interference.



4-8 Referencing

- (1) Coordinate <u>control monuments</u> in rural areas must, if possible, be referenced by a metal reference post referred to in GSI Rule 1-9(3).²
- (2) A reference post or bearing tree must not be used as a means of replacing a coordinate control monument that has been damaged or removed.

4-9 Marking of post caps

- (1) The post cap of a coordinate control monument must be marked with a unique identifier or other designation allotted to it by the Surveyor General.
- (2) If an <u>original monument</u> is upgraded to the status of coordinate control monument, the markings designated under GSI Rule 4-9 (1) must be added to the post cap.



¹ amended Mar 15/12 SR4-09

² amended Jan 21/13 SR1-12

PART 5 — LEGAL SURVEYS IN INTEGRATED SURVEY AREAS

Division 1: General

5-1 Definition

In this Part, "monument" means a <u>type 1</u> or <u>type 2</u> standard <u>post</u> required by Part 1 of these rules.

5-2 Application of Part 5

- (1) This Part applies to all legal surveys in integrated survey areas.
- (2) If an area to be surveyed lies partially within an integrated survey area, this Part applies to the whole survey.
- (3) If there is a conflict between this Part and another Part, this Part prevails.

5-3 Onus on land surveyor

It is the responsibility of every <u>land surveyor</u> to determine whether a legal survey he or she conducts relates to land within an integrated survey area.

Division 2: Rules for Surveys

5-4 Integration

- (1) Legal surveys must be integrated with active or passive control points in the vicinity of the area under survey.¹
- (2) Integration of legal surveys means performing one of the following:
 - (a) a conventional closed traverse containing any two passive control points;¹
 - (b) a conventional traverse closing on two pairs of passive control points;¹
 - (c) GNSS ties to two or more passive or active control points;¹
 - (d) Two independent GNSS ties to one active control point.¹
- (3) Integration of legal surveys by conventional methods must meet or exceed the survey accuracy standards required under *GSI Rule 2-1*.
- (4) Integration of legal surveys to active control points must be within 0.05 metres or less.
- (5) If a legal survey is integrated to an active control point and the survey is within 200 metres of one or more passive control monuments, a tie should be made to at least one of the nearby passive control monuments.

5-5 Exemption

- (1) The <u>Association</u> may exempt a <u>land surveyor</u> from any provision of these rules, in whole or in part, if, in the opinion of the Association, strict compliance is impractical, and the land surveyor, before completion of the survey, explains in writing why the survey cannot be completed in strict compliance with these rules.
- (2) Applications for exemption to integrate surveys will be considered if:
 - (a) more than three traverse hubs would be required to tie to the integrated *control* monuments, or
 - (b) a conventional traverse to the integrated control monuments will exceed 1000 metres.



(3) New right-of-way, posting, strata or reference plans wholly within a plan or plans previously integrated under *GSI Rule 5-4* do not have to comply with GSI Rule 5-4, and a certificate issued under *GSI Rule 5-7* (3) is not required.

5-6 Damaged or destroyed control monument — report

If a coordinate control monument is damaged or destroyed, the land surveyor must promptly report the matter to the Surveyor General.

Division 3: Plans within Integrated Survey Areas

5-7 Additional plan requirements

- (1) Plans, except Explanatory Plans, within integrated survey areas must contain the following information:²
 - (a) if integration under *GSI Rule 5-4* is completed solely by conventional means, the plan must show at least two or more *geodetic control monuments* accompanied by connecting data to all *original monuments* so that the coordinates of any monument or position shown on the plan may be computed without reference to any other plan;
 - (b) if integration under *GSI Rule 5-4* is completed by ties to passive or active geodetic control monuments, the plan must show:
 - (i) the location of two or more geodetic control monuments relative to the <u>legal</u> <u>survey</u>; and
 - (ii) the location of the <u>active control points</u> relative to the legal survey by indicating the grid bearing and grid distance to the active control point(s).
 - (c) if integration under *GSI Rule 5-4* is completed solely by ties to active control point(s), the plan must show the location of the active control point(s) relative to the legal survey by indicating the grid bearing and grid distance to the active control point(s);
 - (d) the Integrated Survey Area number, name, datum, bearing derivation and adopted <u>combined factor</u>, and must contain the following notations:

Integrated Survey Area No.[name]........., NAD83 (CSRS)

Grid bearings are derived from [observations between geodetic control

monument(s) or GNSS observations]¹

"This plan shows horizontal ground-level distances unless otherwise specified. To compute grid distances, multiply ground-level distances by the average combined factor of [insert factor] which has been derived from [list control monuments].",1

Where a single average combined factor is not appropriate the combined factor and ellipsoidal elevations may be shown at specific points or in a tabular form and then the following statement may be used:³

"This plan shows horizontal ground-level distances unless otherwise specified. To compute grid distances, multiply ground-level distances by the appropriate combined factor as derived from the combined factors ['noted hereon' or 'in the coordinate table' as applicable]."³



(2) <u>Control monuments</u> found must be shown on the plan of survey by the symbol required in <u>GSI Rule 3-6 (1)</u>, together with the number or designation of each control monument.

(3) Hardcopy Plans

If exemption from integration is granted under *GSI Rule 5-5*, the plan must contain the following notation:

Pursuant to Rule 5-5 of the General Survey Instruction Rules, this survey need not be integrated with survey control.

Surveyor General

[date]

Electronic Plans

If exemption from integration is granted under *GSI Rule 5-5*, the following notation must be shown on the *plan image*:

Pursuant to Rule 5-5 of the General Survey Instruction Rules, this survey need not be integrated with survey control.



amended Nov 3/11 SR1-06

² amended Sep 3/08

³ added Nov 3/11 SR1-06

PART 6 — GENERAL RIGHT-OF-WAY SURVEYS

Division 1: General

6-1 Definition

- (1) In this Part:
 - (a) "forest service road" means a forest service road as defined in the Forest Act.
 - (b) "public road" means a *highway* as defined in the *Transportation Act* or a *public road* as defined in the *Land Act*.
 - (c) "right-of-way" includes a statutory right-of-way under the Land Title Act.

6-2 Commencement and completion of survey

- (1) Subject to GSI Rule 6-2(2), a survey under this Part must not be posted until clearing has been completed.
- (2) The survey of a pipeline right-of-way must not be posted until construction has been completed.
- (3) The survey of a right-of-way must be completed in accordance with *Section 24* of the *Oil and Gas Activities Act* General Regulation.¹

Division 2: Ties

6-3 Intersecting surveyed boundaries

- (1) A right-of-way that crosses a surveyed parcel of land, or a surveyed road, or right-of-way, must be tied, by bearing and distance, to at least one monument of the existing survey on each side of the right-of-way.
- (2) If GSI Rule 6-3(1) cannot be complied with, other ties must be made to determine the true position of the intersected boundary.

6-4 Timber licence boundaries

- (1) If a right-of-way crosses an area covered by a <u>timber licence</u>, a <u>land surveyor</u> must ascertain whether the licence is in force.
- (2) A timber licence that is not in force need not be tied.²
- (3) A timber licence in force must be tied:²
 - (a) in the manner provided for in *GSI Rule 6-3* if the area has been assigned a district lot number and surveyed under the *Land Act* or an Act which that Act replaced; or
 - (b) in any other case, in a manner sufficient to enable the boundaries of the licence to be indicated on the plan without dimensions.
- (4) In complying with GSI Rule 6-4(3)(b), a reference to cut lines, topography, other survey plans or a tie to one corner is sufficient.



6-5 Crossing of water features (unsurveyed Crown land)

If a right-of-way, through unsurveyed Crown land, crosses a lake, stream, river or tidal water, the natural boundaries must be tied in accordance with GSI Rule 2-7.

6-6 Crossing of water features (surveyed lands)

- (1) If a right-of-way under survey, through a surveyed parcel or a parcel existing by description, crosses a lake, stream, river or tidal water, the natural boundaries must:
 - (a) be tied in accordance with GSI Rule 2-7; and
 - (b) where the natural boundary differs with the title boundary of the upland parcel, enough survey evidence must be tied in order to resolve the discrepancy under *Section 118* of the *Land Title Act*.

6-7 Crossing of roads and highways

- (1) Public roads must be excluded from a right-of-way and, if unsurveyed, the width to be excluded must be:
 - (a) in the case of a road established by notice in the Gazette, the width stated in the notice;
 - (b) in the case of a road established under *Section 42* of the *Transportation Act*, the travelled width;
 - (c) in the case of a road established under *Section 79* of the *Land Act*, the width shown on the plan which established the road; and
 - (d) in the case of a road or trail referred to in Section 27 (b) of the Land Act, the width required by Sections 13 or 57 of the Land Act, or if Section 13 or 57 does not apply, the improved width or travelled width, whichever is greater.
- (2) If a right-of-way over Crown land crosses an unsurveyed travelled road, other than a public road, the road must be shown on the plan as part of the right-of-way without reference to its width.
- (3) If a right-of-way crosses a Forest Service Road, the road must be shown as part of the right-of-way.

6-8 Crossing surveyed mineral titles

- (1) A right-of-way that crosses a surveyed <u>mineral title</u> must be tied in accordance with <u>GSI</u> Rule 6-3.
- (2) The area of a right-of-way that crosses a surveyed mineral title must be shown on the plan.

6-9 Crossing unsurveyed boundaries

- (1) Intersections of a right-of-way with:
 - (a) boundaries that exist by description under the Land Title Act;
 - (b) lines that bound unposted aliquot parts of surveyed parcels;
 - (c) unposted legal subdivision boundaries within the township system; or



(d) unposted boundaries pursuant to GSI Rule 6-11(1)

must be calculated and shown on the plan and need not be posted.

Division 3: Monumentation

6-10 Posting requirements

- (1) Except as provided in this Division, posts of type 1, 2, 3, 4 or 5 must be set as follows:
 - (a) where the right-of-way begins;
 - (b) where the right-of-way ends;
 - (c) at each angle of the right-of-way;
 - (d) where the right-of-way intersects with an existing surveyed boundary;
 - (e) on both sides of a road referred to in GSI Rule 6-7;
 - (f) at or near where the right-of-way intersects with a natural boundary of a body of water having a width greater than 6 metres;
 - (g) at a point witnessing a location referred to in GSI Rules 6-10(1)(a) to (e).

6-11 Linear oil and gas rights-of-way

- (1) This section shall only apply to right-of-way surveys that:³
 - (a) are located within the Peace River Regional District or the Northern Rockies Regional District; and
 - (b) are linear in nature and are for the transmission of oil or gas or products such as fuel gas or power that directly support the production or transmission of oil or gas.
- (2) If a right of way has a width of 20 metres or less it may be posted on one boundary only. The posted boundary should remain consistent throughout the survey, except that where the right-of-way under survey parallels an existing right-of-way, the posted boundary may be changed in order to maximize the potential for monument preservation.
- (3) Relief is granted from the posting requirements of GSI Rules 6-10(1)(c) and (d) only where it refers to surveyed boundaries of rights-of-way, to require no more than 6 monuments per kilometre, including all monuments required by GSI Rule 6-10. Where this provision is used, the <u>land surveyor</u> should give priority to monuments set at right of way crossings rather than deflection points and should attempt to have monuments spaced evenly along the right-of-way under survey instead of grouping them together excessively and having areas of little or no posting.
- (4) When the right-of-way under survey crosses multiple adjoining rights-of-way which are required to be posted under GSI Rule 6-11(2), the posting requirements may be further reduced such that only the outside boundaries of the adjoining rights-of-way are required to be posted, notwithstanding GS1 Rule 6-11(3).
- (5) A land surveyor may post both sides of a right of way or set additional posts where they feel it is beneficial to the cadastral fabric.⁴



6-12 Type 1, 2 and 4 monuments

- (1) Posts of type 1, 2 or 4 must be set on one side of the right-of-way at intersections with district lot, section or quarter section boundaries and at intervals along the right-of-way not greater than 1 km.
- (2) If the length of a right-of-way crossing a body of water exceeds 500 m, a type 1, 2 or 4 post must be set on one boundary near the intersection with the natural boundary.
- (3) Posts of types 1, 2 or 4 must be numbered consecutively along the right-of-way and the designation of adjoining parcels must be marked on the posts.

6-13 Narrow rights-of-way and rough country

- (1) If a right-of-way has a width of 6 m or less it may be posted on one boundary only.
- (2) If a right-of-way crosses extremely rough country, the <u>Association</u> may, on application, permit posting on one boundary, along the centreline or on a suitable offset.

6-14 Right-of-way adjoining an existing right-of-way

- (1) If a new right-of-way is coincident with and parallel to an existing right-of-way and the owners of the right-of-way are the same, the *land surveyor* may:
 - (a) post both sides of the new right-of-way; or
 - (b) post the outermost boundaries of the new and the existing right-of-way.

6-15 Timber licences

If a right-of-way intersects with the boundaries of an area covered by a <u>timber licence</u> other than an area referred to in *GSI Rule 6-4(3)(a)*, posts need not be set.

6-16 Replacement of posts at district lot or section corners

- (1) If, in the course of a survey, a district lot corner, section corner, centre post or quarter post is tied to, and is not found monumented with a post of type 1, 2 or 4, or an old style Dominion iron post, it must be replaced with a post of type 1, 2 or 4.
- (2) If no evidence of an original district lot corner, section corner, centre post or quarter post is found, the position of the original post must be re-established from other evidence in accordance with the *Land Survey Act* and posted with a post of type 1, 2 or 4.

6-17 Railway Belt and the Peace River Block

- (1) The following applies if a right-of-way crosses land in the Railway Belt or the Peace River Block:
 - (a) a dotted line on an official township plan may be treated as a line that exists by description, and confirmation of the cadastral fabric should be obtained from the Surveyor General; and
 - (b) if a theoretical division of a section into quarters or quarters into legal subdivisions is not shown on the official township plan, theoretical division must not be shown on the right-of-way plan.



6-18 Mineral title boundaries

- (1) If a right-of-way crosses a surveyed <u>mineral title</u>, posts must be set at all points of intersection.
- (2) On application, the <u>Association</u> may permit modified posting.

Division 4: General Right-of-Way Plans

6-19 Additional plan requirements

- (1) General right-of-way plans must contain the following information in addition to *GSI Rules Part 3* if appropriate:
 - (a) the width of the right-of-way at frequent intervals;
 - (b) the values of convergence from the origin to points on the plan at 8 kilometre intervals or less;
 - (c) the serial numbers that have been stamped on the monuments;
 - (d) a book of reference, if the plan deals with more than one parcel, near the title, listing in progressive order the legal description of all parcels crossed by the right-of-way and the total area of right-of-way within each parcel;
 - (e) the plan title placed at the right hand end of the plan indicating the locality and land district in which the right-of-way is located;
 - (f) if a <u>timber licence</u> has a licence number and a district lot number and no survey has been completed under the *Land Act* in respect of the land covered by the timber licence, both the licence number and district lot number must be shown with equal prominence on the plan;
 - (g) if a survey under the *Land Act* was carried out in respect of land covered by a timber licence, only the district lot number must be shown;
 - (h) surveyed and unsurveyed forest service roads should be included within the right-ofway and labelled surveyed or unsurveyed forest service road as appropriate;
 - (i) if a right-of-way is divided by a road, the plan must show ties across the road in fine broken lines and must provide a mathematical link across the road;
 - (j) if private lands are dealt with and the natural boundary differs from the title boundary, the <u>land surveyor</u> must proceed under <u>Section 118 (1)</u> of the <u>Land Title Act</u>.
 - (k) Intersections of a right-of-way with:
 - (i) boundaries that exist by description under the Land Title Act;
 - (ii) lines that bound unposted aliquot parts of surveyed parcels;
 - (iii) unposted legal subdivision boundaries within the township system.
 - (iv) unposted boundaries pursuant to GSI Rule 6-11(1); or
 - (v) unsurveyed <u>mining leases</u> must be calculated and shown on the plan but need not be posted.



6-20 General right-of-way plans crossing both Crown and private land

(1) If a right of way crosses both Crown land and private land, a separate plan must be prepared in respect of the part of the right of way that crosses Crown land and submitted to the Surveyor General.⁵

(2) Hardcopy Plans

All right-of-way plans over Crown land must be submitted to the Surveyor General and must include the following notation placed in the bottom right-hand corner of the plan:

I hereby certify that this is the outlined hereon.	Official Plan of the right-of-way shown
Surveyor General	
[date]	

Electronic Plans

The notation required under hardcopy submission is moved to the submission form under electronic submission and is not required to be shown on the *plan image*.



¹ amended Sep 30/10

² amended Mar 18/09

³ amended Dec 13/12 SR5-12

⁴ added Dec 13/12 SR5-12

⁵ amended Mar 15/12 SR4-09

PART 7 — HIGHWAY AND RAILWAY SURVEYS

Division 1: General

7-1 Definitions

- (1) In this Part:
 - (a) "highway" means a highway as defined in the *Transportation Act* or a *forest service* road as defined in the *Forest Act*.
 - (b) "railway" means a railway within the meaning of the Railway Act and includes:
 - (i) a railway established under an enactment of another jurisdiction that provides for a railway in British Columbia; and
 - (ii) a railway right-of-way.
 - (c) "road" means a surveyed or unsurveyed public road which is not under survey.

7-2 Instructions for railway surveys

Before commencing a railway survey that crosses Crown land, the <u>land surveyor</u> must obtain parcel designations from the Surveyor General.

Division 2: Rules for Survey

7-3 Widenings

- (1) Widenings of highways or railways on Crown land must, if practical, be bounded by a series of straight lines.
- (2) Widenings of highways or railways on land other than Crown land must be surveyed to conform as closely as practical to the boundaries shown on the design plans or as described in instructions provided by the appropriate authority.
- (3) Construction widths or other conditions that differ from those provided on the plans or described in the instructions must be reported to the appropriate authority, and that authority must provide further instructions.

7-4 Substitution of curves

The use of the spiral-circular-spiral curve used in highway or railway construction must be replaced by one circular curve of a radius which will reduce the displacement of the centreline of the constructed road or railway from the centreline of the highway or railway under survey to a minimum, or terminal curves must be used in place of the spiral curves.

7-5 Establishing boundaries

The boundaries of a highway or railway should be surveyed symmetrically with the centre line of the constructed highway or railway.

Division 3: Ties

7-6 Intersecting surveyed boundaries

(1) A highway or railway under survey that crosses a boundary of a surveyed parcel of land or a surveyed road or right-of-way must be tied, by bearing and distance, to at least one monument of the existing boundary on each side of the highway or railway.



(2) If GSI Rule 7-6 (1) cannot be complied with, other ties must be made to determine the true position of the intersected boundary.

7-7 Timber licence boundaries

<u>Timber licence</u> boundaries must be surveyed in accordance with GSI Rule 6-4.

7-8 Crossing of water features

Ties to water features must be in accordance with GSI Rules 6-5 and 6-6.

7-9 Crossing mineral titles

- (1) A highway or railway under survey that crosses a surveyed <u>mineral title</u> must be tied in accordance with GSI Rule 7-6.
- (2) The area of a highway or railway under survey crossing a surveyed mineral title must be shown on the plan.

7-10 Crossing unsurveyed roads

If the highway or railway under survey and an unsurveyed road both cross the same surveyed lands and plans of those lands have been deposited in a land title office, the first course from a junction of the road that joins the highway or railway must be tied.

Division 4: Monumentation

7-11 Monumentation systems

- (1) Subject to GSI Rule 7-11 (2), the boundary system described in GSI Rule 7-12 must be used in all highway or railway surveys.
- (2) If it is impracticable to use the boundary system, the centre line system described in *GSI* Rule 7-13 may be used, with the prior approval of the <u>Association</u>.

7-12 Boundary system

- (1) Type 4 or better posts must be set on one side of the highway or railway under survey:
 - (a) at points of curve;
 - (b) at points of deflection;
 - (c) at intermediate points on tangent, so that the distance between the posts is no greater than 1 km; and
 - (d) at points of intersection with boundaries of:
 - (i) a district lot other than mineral titles;
 - (ii) a section;
 - (iii) a block; and
 - (iv) a surveyed mineral title;

and must be the main monumentation of the boundary system of monumentation.

- (2) Type 5 or better posts must be set:
 - (a) on the side of the highway or railway under survey opposite the side posted with the main monumentation; and
 - (b) on both sides of the highway or railway under survey at intersections with:
 - (i) any type of surveyed boundary not referred to in GSI Rule 7-12 (1)(d), and
 - (ii) unsurveyed described boundaries.



7-13 Centre line system

- (1) Type 4 or better posts must be set:
 - (a) at centre line points of intersection, or at points witnessing centre line points of intersection on subtangents or subtangents produced;
 - (b) at intermediate points on the boundary of the highway or railway under survey, if any tangent exceeds 1 km in length; and
 - (c) at points of intersection between one highway or railway boundary and boundaries of:
 - (i) a district lot other than mineral titles;
 - (ii) a section;
 - (iii) a block; and
 - (iv) a surveyed mineral title;

and must be the main monumentation of the centre line system of monumentation.

- (2) Type 4 or better posts required by this section must not be set:
 - (a) on the shoulder of the highway or railway under survey;
 - (b) in ditches adjacent to the highway or railway under survey; or
 - (c) in any place where they may be <u>disturbed</u> by highway or railway maintenance equipment.
- (3) Type 5 or better posts must be set on the boundary of the highway or railway under survey:
 - (a) at all points of curve and deflection;
 - (b) on the side of the highway or railway under survey opposite the side posted with the main monumentation at intersections with the boundaries referred to in GSI Rule 7-13 (1)(c), and
 - (c) on both sides of the highway or railway under survey at intersections with:
 - (i) any type of surveyed boundary not referred to in GSI Rule 7-13 (1)(c), and
 - (ii) unsurveyed described boundaries.

7-14 Monument substitutions

- (1) In the boundary system and in the centre line system:
 - (a) type 1 or 2 posts must be substituted for type 4 posts so as to give an average density of one type 1 or 2 post every 2 km; and
 - (b) type 5 posts may be substituted for type 1, 2 or 4 posts so as to reduce the average density of type 1, 2 or 4 posts to 5 per kilometre.

7-15 Intersection with superseded boundaries

Points of intersection of the highway or railway under survey with district lot, section and block boundaries that are no longer parcel boundaries need not be posted but must be indicated on the plan without dimensions.

7-16 Offset monuments

(1) If, due to interference by fences and other structures, posting under this Division is impracticable, posts must be offset toward the centre of the highway or railway.



- (2) If practicable, posts that are offset must be set:
 - (a) at a point on the production of an intersecting boundary;
 - (b) on the radial line at a point of curve; or
 - (c) on the bisector of an angle at a deflection point.

7-17 Replacement of posts at district lot or section corners

- (1) If, in the course of a survey, a district lot corner, section corner, centre post or quarter post is tied to, and is not found monumented with, a post of type 1, 2 or 4 or an old style Dominion iron post, it must be replaced with a post of type 1, 2 or 4.
- (2) If no evidence of an original district lot corner, section corner, centre post or quarter post is found, the position of the original post must be re-established from other evidence in accordance with the Land Survey Act and posted with a post of type 1, 2 or 4.

7-18 Railway Belt and the Peace River Block

If a highway or railway under survey crosses land in the Railway Belt or the Peace River Block, the survey must be conducted in accordance with *GSI Rule 6-17*.

7-19 Monument markings

- (1) Monuments must be marked with the designation of lands adjoining the highway or railway.
- (2) Posts of types 1, 2 or 4 that are not sited to mark intersections with the boundaries of a district lot, section or block must be serially numbered.
- (3) If posts are set to mark changes in direction of highway or railway boundaries, the abbreviations in GSI Rule 7-19 (5) must be used.
- (4) If a railway under survey over Crown land has been given a district lot number or a block designation, posts must be marked accordingly.
- (5) In marking post caps, the following abbreviations apply:
 - (a) "PC" means the point of curve;
 - (b) "POT" means the point on tangent, subtangent or subtangent produced;
 - (c) "PI" means point of intersection;
 - (d) "R" means the highway under survey;
 - (e) "RR" means the railway under survey.

Division 5: Block Outline Method

7-20 Application

This Division applies only to the survey of a highway as defined in GSI Rule 7-1.

7-21 Block Outline Survey

If future construction renders a fully posted survey impractical, the highway under survey must be referenced by monuments before construction and then posted after construction has been completed in accordance with *Section 69* of the *Land Title Act*.



7-22 Control traverse

- (1) A control traverse must be established in a suitable location, to be determined by the *land surveyor*, and must be referenced by monuments of type 1, 2 or 4.
- (2) The control traverse plan must be submitted to the Surveyor General for deposit into the Crown Land Registry.

7-23 Ties

All ties, as required by *GSI Rule 7-6*, and replacement of corners, as required by *GSI Rule 7-17*, must be carried out, but the posting of the boundaries of the highway under survey must not be carried out until all construction has been completed.

7-24 Posting Concession

- (1) Plans defining the highway required must be prepared and submitted to the Surveyor General for approval.
- (2) Block outline surveys need not comply with GSI Rules 7-11 to 7-14 inclusive.

7-25 Guarantee to post

At the time of submission of block outline plans to the Surveyor General for approval, the ministry submitting the plan must submit a letter from the land surveyor stating that he or she will guarantee completion of posting in accordance with the terms of the order.

7-26 Final posting

- (1) After construction has been completed, final posting as required by GSI Rules Part 7

 Division 4 of this Part must be carried out.
- (2) The Surveyor General may grant an extension of time in which to complete the posting.

7-27 Monument density

Monuments of type 1, 2 or 4, set to reference the control traverse, may be included in the average density calculations for substitution purposes, as outlined in GSI Rules 7-12, 7-13 and 7-14, providing those monuments remain undisturbed.

Division 6: Highway and Railway Plans

7-28 Additional highway and railway plan requirements

- (1) A plan of a highway or railway must contain the following information in addition to that required by GSI Rules Part 3:
 - (a) the perpendicular width of the highway or railway at frequent intervals;
 - (b) the values of convergence from the origin to points on the plan at 8 kilometre intervals or less;
 - (c) the serial numbers that have been stamped on the monuments;
 - (d) a book of reference, if the plan deals with more than one parcel, near the title, listing in progressive order the legal description of all parcels crossed by the highway or railway and the total area of highway or railway within each parcel;
 - (e) the plan title placed at the right hand end of the plan indicating the location and land district in which the highway or railway is located;
 - (f) both Crown and private land may be dealt with on a plan of a highway survey, however, separate plans are required for railway surveys;



- (g) if a <u>timber licence</u> has a licence number and a district lot number and no survey has been completed under the *Land Act* in respect of the land covered by the timber licence, both the licence number and district lot number must be shown with equal prominence on the plan;
- (h) if a survey under the *Land Act* was carried out in respect of land covered by a timber licence, only the district lot number must be shown;
- the Surveyor General should be contacted regarding appropriate notations for highway plans over Crown land;

Hardcopy Plans

(i) the following notation is required for railway and highway plans over untitled

Official Plan

CONFIRMED UNDER SECTION 72

LAND ACT

Surveyor General

I hereby certify that this is the Official Plan of
[designations]
shown outlined hereon.
Surveyor General

......[date]

the following notation is also required for railway plans:

Electronic Plans

(ii)

The notation required under hardcopy submission is moved to the submission form under electronic submission and is not required to be shown on the *plan image*.

7-29 Existing roads through surveyed lands (highway plans)

- (1) If a highway under survey and an unsurveyed road both cross the same surveyed lands, and plans of those lands have been deposited in a land title office, the highway plan must show:
 - (a) without dimensions, that part of the road contained in whole or in part within the highway boundaries;
 - (b) without dimensions, the first course from a junction of the road that joins the highway; and



(c) on the face of the plan, the area of existing roads made public by *Section 42* of the *Transportation Act* or by notice in the Gazette, the area of the new road being acquired and the total area of the road within the highway boundaries.

7-30 Existing roads through Crown lands (highway plans)

- (1) If the highway under survey and an unsurveyed road both cross unsurveyed lands or Crown lands of the district lot, section or sub-lot category, the plans of which have not been deposited in a land title office, the plan of the highway under survey must show:
 - (a) by dotted lines, the travelled surface of the road departing from the highway; and
 - (b) no part of the road contained within the highway boundaries.

7-31 Crossing roads and highways (railway plans)

- (1) Public roads must be excluded from a railway and, if unsurveyed, the width to be excluded must be:
 - (a) in the case of a road established by notice in the Gazette, the width stated in the notice;
 - (b) in the case of a road established under *Section 42* of the *Transportation Act*, the travelled width;
 - (c) in the case of a road established under *Section 80* of the *Land Act*, the width shown on the plan which established the road; and
 - (d) in the case of a road or trail referred to in Section 27 (b) of the Land Act, the width required by Sections 13 or 57 of the Land Act or, if Sections 13 or 57 does not apply, the travelled width.
- (2) If a railway over Crown land crosses an unsurveyed travelled road, other than a public road, the road must be shown on the plan as part of the right-of-way without reference to its width.

7-32 Railway plans on Crown land

A railway survey crossing Crown land must be registered in accordance with the Land Title Act.



PART 8 — SURVEYS OF LAND IN THE ESQUIMALT AND NANAIMO RAILWAY GRANT

Division 1: General

8-1 Definition

In this Part, "Act" means the Land Title Act.

8-2 Application

This Part applies to the conduct of surveys and the preparation of explanatory plans under *Section 70* of the Act.

8-3 Approval of proposal

A <u>land surveyor</u> must apply to the Surveyor General for approval of the proposed method of preparation of plans that are referred to in Sections 70 (1) and (2) of the Act.

8-4 Supporting data for applications

- (1) Applications referred to in Sections 70 (1) and (2) of the Act must be accompanied by all of the following:
 - (a) a paper print of a cut sheet of an appropriate part of a map of the area bearing the number of the map from which it is taken;
 - (b) a print of the plan of each of the surveyed blocks that surround the area dealt with in the proposed plan;
 - (c) if the perimeter of the area dealt with by the survey is completely dimensioned, a traverse sheet or computer output sheet showing complete data of boundary courses as they appear on previously deposited plans, and the error of closure; and
 - (d) a statement indicating ownership of surveyed and unsurveyed surrounding blocks.
- (2) The block that is to be surveyed must be outlined on the print of the cut sheet in heavy outline along previously surveyed lines and by a different line along the new boundary, and the area outlined must be the same as the area shown on the plan attached to the agreement between the Esquimalt and Nanaimo Railway Company and the purchaser.

8-5 Plans under Section 70 (1) of the Act

Approval of applications of plans prepared under Section 70 (1) of the Act is unconditional.

8-6 Section 70 (2) plans

The approval according to Section 70 (2) of the Act is conditional on obtaining a closure with a limit of error not exceeding 1:2 500 \pm 2 cm, after the unsurveyed boundaries of the area are run or traversed.

8-7 Bearings

- (1) Adjustment of bearings must not be made unless the course being adjusted has been tied on the ground.
- (2) Bearings of successive boundaries of a block must not be adjusted on the basis of a tie to only one course.
- (3) An explanation must be given to the Surveyor General when any adjustment to bearings has been made.



8-8 Deviations in boundaries

Deviations between a boundary set out in an application approved by the Surveyor General and the same boundary as it has been surveyed under *Section 70 (2)* of the Act must be reported to the Surveyor General when the completed plan is submitted for approval under *Section 70 (3)* of the Act.

Division 2: Block Outline Surveys of Land in the Esquimalt and Nanaimo Railway Grant

8-9 Application and interpretation

This Division applies to block outline surveys of land in the Esquimalt and Nanaimo Railway Grant.

8-10 Application for block outline survey

- (1) An application under *Section 69 (1)* of the Act must be accompanied by all of the following:
 - (a) 2 paper prints of the proposed survey;
 - (b) a proposal of the plan of posting and the method of survey;
 - (c) a statement indicating ownership of the surrounding blocks; and
 - (d) a statement indicating whether it will be a complete survey or a survey made under Section 70 (2) of the Act.

8-11 Monumentation references

A corner that cannot be marked by a <u>post</u> of type 3, 4 or 5 must be witnessed by a post of type 1 or 2.

8-12 Intervisibility

- (1) A witness post must be set so that:
 - (a) it is intervisible with at least one other witness post, <u>control monument</u> or provincial triangulation station;
 - (b) intervisibility is unlikely to be impaired by new timber growth; and
 - (c) if practicable, it will not be subject to disturbance by logging operations.
- (2) If maintenance of intervisibility may be disrupted by timber growth, additional posts must be set to achieve compliance with GSI Rule 8-12 (1) and to allow for future bearing derivation.

8-13 References to witness posts

- (1) A <u>witness post</u> must, if possible, be referenced by:
 - (a) A cairn, and ¹
 - (b) at least 3 <u>bearing trees</u> except where the land surveyor can demonstrate that the making of bearing trees would be environmentally or aesthetically unacceptable.¹

8-14 Coordinate system

Every witness post and every corner being surveyed must be coordinated on a rectangular coordinate system and the plan must include the coordinates of no fewer than 2 corners of an adjoining previous survey.



8-15 Georeferencing

The survey must be georeferenced.²

8-16 Density of monumentation

- (1) A post that witnesses a corner must not be set more than 400 m from that corner and a post or pairs of posts must not witness more than 3 corners.
- (2) Witness posts must be clearly marked with the letters "Wt" and a serial number that must be shown on the plan.

8-17 Boundaries

Boundaries of the block being surveyed under the block outline method need not be run nor blazed.

Division 3: Notations for Surveys of Land in the Esquimalt and Nanaimo Railway Grant

8-18 Notations

(1) Hardcopy Plans

If a plan is prepared of an unsurveyed area designated as a block in an original grant from the Esquimalt and Nanaimo Railway Company under *Sections 70 (1)* and *(2)* of the Act, it must contain the following notation:

This plan has been prepared in accordance with Part 8 of The General Survey Instruction Rules
Approved on (date)
Surveyor General

Electronic Plans

If an electronic plan is prepared of an unsurveyed area designated as a block in an original grant from the Esquimalt and Nanaimo Railway Company under *Sections 70 (1)* and *(2)* of the Act, the following notation must be shown on the *plan image*:

This plan has been prepared in accordance with Part 8 of the General Survey Instruction Rules

(2) Hardcopy Plans

If a block outline survey has been consented to of an unsurveyed area designated as a block in an original grant from the Esquimalt and Nanaimo Railway Company under *Section 70 (2)* of the Act, it must contain the following notation:

Modified monumentation has been use	d for this survey.
Approved on (date)	
Surveyor General	



Electronic Plans

If a block outline survey has been consented to of an unsurveyed area designated as a block in an original grant from the Esquimalt and Nanaimo Railway Company under *Section 70 (2)* of the Act, it must contain the following notation:

Modified monumentation has been approved for this survey.

(3) Plans prepared under *Section 70 (2)* of the Act must contain a note indicating the boundaries to which the *land surveyor*'s certificate, in the form prescribed under the Act, applies.



¹ amended Jan 21/13 SR1-12

² amended Nov 3/11 SR1-06

PART 9 — SURVEYS UNDER THE LAND ACT

Division 1: General

9-1 Definitions

- (1) In this Part:
 - (a) "Act" means the Land Act;
 - (b) "instructions" means the instructions issued by the Surveyor General under Section 77
 (1) of the Act;
 - (c) "ministry" means the ministry responsible for administering the Act.

9-2 Parcel designations

Before beginning a survey under the Act, the <u>land surveyor</u> must obtain parcel designations from the Surveyor General.

9-3 Instructions from Surveyor General

- (1) A survey must comply with instructions issued by the Surveyor General for complex projects.
- (2) Unless an exemption is given by the <u>Association</u>, each survey under the Act must comply with this Part.

Division 2: System of Survey

9-4 Parcel structure

- (1) Subject to GSI Rule 9-4 (2), if the Canada Lands Township System is used, the third or fourth system as set out in the current Manual of Instructions for the Survey of Canada Lands, published by the Queen's Printer (Canada), must be used as directed by the Association.
- (2) If the third system referred to in GSI Rule 9-4 (1) is used, road allowances must be 25 m in width.

9-5 Rights-of-way adopted as boundaries

A surveyed right-of-way boundary may, at the discretion of the Association, be adopted as the boundary of a lot or block.

9-6 Lakes and rivers

- (1) Natural boundaries of rivers that are not readily fordable at ordinary stages of water and that have well defined and visible permanent channels will normally be adopted as part of the perimeter boundary of a district lot or block of a lot.
- (2) If a lake lies across a boundary which, but for the lake, would have been a straight line boundary, the natural boundary of the lake must be adopted as the perimeter boundary of the district lot or block of a lot or section.
- (3) The area of any river, stream, lake or other body of water, other than a small watercourse or pond of a temporary or seasonal nature not having a natural boundary, is to be excluded from the area of the disposition, but form part of the parcel.



9-7 Small holdings

- (1) Small holdings fronting on a road or body of water may be surveyed on a modified district lot system and, if practical, the sidelines must be parallel to each other and perpendicular to the general trend of the road or body of water onto which the small holding fronts.
- (2) Public access to bodies of water must be provided in suitable locations at intervals of not more than 1.2 km.
- (3) Public access to lands lying beyond the small holdings under survey must be provided in suitable locations at intervals of not more than 600 m.
- (4) Road allowances must be shown on the plan and designated as "Road".
- (5) If small holdings are being created, the depth should be controlled by an established or developing pattern so as to eliminate unnecessary jogs or bends in the back line.

9-8 Foreshore lots

- (1) Sidelines of foreshore lots must, if practical, be laid out at right angles to the general trend of the natural boundary.
- (2) Foreshore lots must be surveyed so as not to encroach on the foreshore fronting adjoining upland parcels.
- (3) The waterward boundary must be a straight line, or a series of straight lines, connecting the outer ends of side boundaries.
- (4) If the foreshore lot is located adjacent to a narrow channel, its waterward boundary must not extend into the navigable part of the channel.
- (5) If all boundaries of a foreshore lot are below the natural boundary, they must be straight line boundaries with appropriate directions and lengths.
- (6) When surveying a parcel covering filled foreshore, the waterward boundary must be labelled "limit of fill" or by using another appropriate notation approved by the Surveyor General.
- (7) The limit of fill referred to in GSI Rule 9-8 (6) must be surveyed as a series of straight lines along the edge of the fill and must be fully monumented.

Division 3: Rules for Survey

9-9 Responsibility of land surveyor

Surveys must be carried out under the personal on-site supervision of the *land surveyor* signing the plan who must ensure that the spirit and intent of the Act is reflected in the survey.

9-10 Conflicting interests

- (1) If, due to the existence of application posts, there is insufficient land to survey full size lots for all applicants, the land surveyor must seek direction from the <u>Association</u>, and include in the request for direction the following information:
 - (a) the dates of notices attached to the posts;
 - (b) the location of the application posts;
 - (c) the intention of the applicants, if it can be ascertained.



9-11 Running of boundaries¹

- (1) Boundary lines of all surveys should be cut and cleared of debris to a width of approximately one metre and blazed in accordance with *GSI Rule 9-12*:
 - (a) If topography or other field conditions make cutting and clearing the true boundary line impractical, then a traverse line may be run but the true boundary line must still be blazed;
 - (b) Although it is highly desirable to clear and blaze all boundary lines there are circumstances where, due to environmental or aesthetic reasons, these lines may not be run, cut or blazed. If the land surveyor considers it inappropriate to clear and blaze certain boundary lines, the land surveyor must seek direction from the Association.
- (2) Notwithstanding GSI Rule 9-11 (1), where a boundary or boundaries are offset from the centerline of a road or trail and are generally parallel to the centerline, the boundaries need not be run or blazed if the offset is 30 metres or less.

9-12 Boundary lines through timber

- (1) Trees within 2 m of a boundary must be blazed with 2 readily distinguishable marks which quarter toward the boundary.
- (2) Trees located on the boundary line must be blazed with 3 notches on each side of the tree in the direction of the boundary, and the size and type of all boundary line trees and their distance from the last *post* to the centre of the tree must be recorded.

9-13 Common boundaries

- (1) Subject to GSI Rule 9-13 (2), if an existing surveyed boundary coincides with all or part of a boundary of the lot being surveyed, the existing boundary must be retraced between the nearest undisputed posts and new posts must, where required, be set on the boundary.
- (2) If there is no on-site evidence of gross error in the existing survey and the adjoining land is Crown land, the Association may, on application, allow new posts to be set on existing lines without retracement if:
 - (a) the azimuth of the survey being conducted is derived from the existing survey and the new post is to be set at not more than one-quarter of the total distance along the boundary; or
 - (b) the survey being conducted and the survey which created the existing boundary are both on the azimuth of the local meridian and the new post is to be set at not more than one-eighth of the total distance along the boundary.

9-14 Georeferencing

- (1) Surveys that are located outside of integrated survey areas must:
 - (a) be georeferenced by autonomous GNSS or superior positioning methods; or
 - (b) tie a type 1, 2 or 4 post set as near as practical to a prominent topographical or structural feature shown on a published 1:20 000 or larger scale provincial map; or
 - (c) be tied to the nearest existing cadastral survey.
- (2) If a post is set as in GSI Rule 9-14 (1)(b), it must be stamped as a reference to the lot being surveyed.



- (3) The post referred to in GSI Rule 9-14(1)(b) must be: 2
 - (a) tied to the survey according to the survey accuracy standards required under GSI Rule 2-1;²
 - (b) tied to the feature; and²
 - (c) referenced by a <u>cairn</u> or at least 3 <u>bearing trees</u> except where the land surveyor can demonstrate that the making of bearing trees would be environmentally or aesthetically unacceptable.³

Division 4: Monumentation

9-15 Boundary posting and centre posts

- (1) If a new district lot boundary exceeds 1200 m in length, posts must be set on the boundary line at intervals not exceeding 800 m.
- (2) For the purposes of GSI Rule 9-15 (1), it is preferable to set the intermediate post as near as possible to the midpoint.
- (3) If the boundary of a new lot is jogged, the posts referred to in GSI Rule 9-15 (1) should be set so that the lines joining the posts on opposite boundaries will be parallel to the outer boundaries.

9-16 Corner posts

- (1) Posts of type 1, 2 or 4 must be used at all corners except in cases where posts of type 3 or 5 are permitted by this Division.
- (2) If 3 or more small holdings have a straight line common boundary, posts of types 3 and 5 may be used to mark the corners, and posts of type 1, 2 or 4 must be used to mark the extremities.
- (3) If the common boundary over these small holdings is greater than 400 m, posts of type 1, 2 or 4 must be substituted for posts of type 3 or 5 to mark a corner at intervals of not more than 400 m.
- (4) If 2 or more smallholdings front on a body of water, a post of type 1, 2 or 4 must be used on one waterfront corner of each smallholding, and posts of type 3 or 5 may be used on other corners.
- (5) A single smallholding must be posted at opposite ends of one side boundary with posts of type 1, 2 or 4, and may be posted with posts of type 3 or 5 at other corners.
- (6) If a boundary consists of a series of short lines, corners may be posted with type 5 posts with substitute monuments of type 1, 2 or 4 at intervals of 500 metres or less.

9-17 Intersection with conventional boundaries

Except in a case referred to in GSI Rules 9-16 (3), (4) and (5), the intersection of a side boundary of a parcel with a conventional boundary must be posted with a <u>post</u> of type 1, 2 or 4, and the deflection points along a conventional boundary must be posted with posts of type 3 or 5.

9-18 Foreshore lots

(1) Posts marking the boundaries of a foreshore lot must be considered to be witness posts



- unless set on a true corner and must be type 1, 2 or 4.
- (2) Posts set to range the sideline of a foreshore lot are required and may be of type 3 or 5 unless marking the corner of a foreshore lot.

9-19 Intersection with rights-of-way

Intersections of boundaries of the parcel under survey with boundaries of surveyed rights-of-way must be posted in the same manner (one boundary or both boundaries) as the intersected right-of-way is posted, except that if the right-of-way boundary is also a boundary of the parcel under survey, posts of type 1, 2 or 4 must be used.

9-20 Surveyed roads within parcel under survey

- (1) The boundaries of surveyed roads located within the parcel under survey must be posted with posts of type 3 or 5 where they intersect a boundary of the parcel under survey, but if the road boundary is also a boundary of the parcel under survey, posts of type 1, 2 or 4 must be used.
- (2) If widenings to a surveyed road are necessary, the boundaries of the widenings must be posted at points of deflection, points of curvature and where they intersect a boundary of the surveyed road or a boundary of the parcel under survey.

9-21 Blocks over multiple district lots, sections or quarter section/lots

If a block under survey lies within more than one surveyed district lot or section, or aliquot parts of either, or over a combination of these, the intersections of the boundaries of the parcel under survey with the existing surveyed boundaries must be posted with posts of type 1, 2 or 4 in order that the corners of the remainders of the previously surveyed parcels are defined on the ground.

9-22 Unsuitable sites for posting

- (1) If it is impossible or inadvisable to place a post at the true corner of a parcel, one <u>witness</u> <u>post</u> of the type which would be required at the true corner must be planted at the nearest suitable location on a boundary of the parcel or production thereof.
- (2) Subject to *GSI Rule 9-18 (1)*, if a witness post described in GSI Rule 9-22 (1) cannot be placed within 20 m of the true corner, posts of the type which would be required at the true corner must be set on each boundary radiating from the witnessed corner and, in this case, the *land surveyor* must not mark either *post* as a witness post.
- (3) Posts set on the boundary of a district lot a short distance above a natural boundary are considered to be line posts.

9-23 Requirements of posting

- (1) If a parcel under survey has jogs in one or more boundaries, the posts must be consecutively numbered from "1" upwards for the purpose of identifying corners which cannot be described by cardinal directions.
- (2) If an existing post of an adjacent survey is part of the new survey, the new lot or block designation and appropriate lines must be added to the markings on the existing post.
- (3) If, in the course of a survey, a district lot corner, section corner, centre post or quarter post is tied to, and is not found monumented with a post of type 1, 2 or 4, or an old style Dominion iron post, it must be replaced with a post of type 1, 2 or 4.



9-24 Reference to bearing trees

The position of every post of type 1, 2 or 4 must, if possible, be referenced by at least 3 <u>bearing</u> <u>trees</u>, except where the land surveyor can demonstrate that the making of bearing trees would be environmentally or aesthetically unacceptable.²

9-25 Cairns

If bearing trees are not available, and if practicable, a <u>cairn</u> must be built to reference the position of all posts of type 1, 2 or 4 set on lots having an area of 15 ha or greater.

Division 5: Land Act Plans

9-26 Plan title

A Land Act plan must contain a plan title similar in form to the following:

"Survey Plan of [District Lot or Block] District"

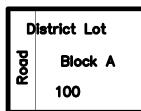
9-27 Additional plan requirements⁴

- (1) Land Act plans must contain the following information or details in addition to that required by GSI Rules Part 3:
 - (a) Survey Plan of Block A and Road, District Lot 100, Cassiar District

Area of Road = X Area of Bk A = Y

Total Area of DL 100 = Z (=X+Y)

Note: District Lot 100 under Survey

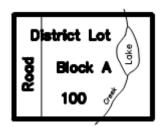


(b) Survey Plan of Block A and Road, District Lot 100, Cassiar District

Area of Road = AArea of Bk A = BArea of Waterbody = C

Total Area of DL 100 = Z (=A+B+C)

Note: Waterbody is part of the district lot, but not part of Block A. District Lot 100 under survey.



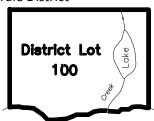
(c) Survey Plan of District Lot 100, Yale Division of Yale District

Area above Present

Natural Boundary = X Area of Waterbody = Y

Total Area of DL 100 = Z (=X+Y)

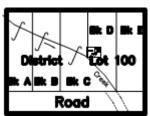
Note: District Lot 100 under survey.





(d) Survey Plan of Blocks A to E and Road, District Lot 100, Cassiar District

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Area of Bk A = A
Area of Bk B = B
Area of Bk C = C
Area of Bk D = D
Area of Bk E = E
Area of Road = F
Area of Waterbody = G
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Total Area of DL 100 = H (= the sum of A to G)

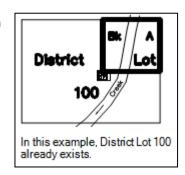
Note: Waterbody is part of the district lot, but not part of the Blocks.

District Lot 100 under survey.

(e) Survey Plan of Block A, District Lot 100, Yale Division of Yale District

Area of Bk A (above present natural boundary) = X

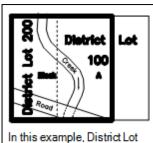
Note: An expression of the area for the creek running through Block A is not required.



(f) Survey Plan of District Lot 200, and Block A of District Lot 100 and 200, Yale Division of Yale District

Area of Bk A (above PNB) in DL 100 = XArea of Road in DL 100 = YArea Bk A (above PNB) in DL 200 = YArea of Road in DL 200 = YArea of Waterbody in DL 200 = Y

Total Area of DL 200 = D (being A+B+C) Total Area of Bk A (above PNB) = E (being X+A)



In this example, District Lo 100 exists, Block A and District Lot 200 are being created.

Note: PNB means present natural boundary

Note: Waterbody is part of district lots and not part of the block

(g) if appropriate, a note providing details of any boundaries not cut and cleared.



amended Apr 1/10

² amended Jan 21/13 SR1-12

³ added Jan 21/13 SR1-12

⁴ amended May 30/11

PART 10 — SURVEYS UNDER THE LAND TITLE ACT

Division 1: Surveys

10-1 Application

This Part applies to all surveys made under the Land Title Act.

10-2 Survey of boundaries

- (1) The survey of the parcel created must be closed about its outer limits.
- (2) The <u>land surveyor</u> must retrace the boundaries of the parcel being subdivided as is necessary to show the actual position of the parcels being created with respect to those boundaries.
- (3) If evidence of the boundaries has been <u>lost</u>, the land surveyor must re-establish the position of those boundaries in accordance with principles set out in the *Land Survey Act*.

10-3 Errors in original boundaries

If a serious discrepancy or error affecting the original boundaries shown in the Crown grant of the land being surveyed is found, the land surveyor must report it to the Surveyor General.

10-4 Railway land grant surveys

If a transfer of railway land is to be designated as a "block" under Sections 61 and 70 of the Land Title Act, Part 8 of the GSI Rules also applies.

10-5 Block designation

If, under GSI Rule 10-14 (2)(g), new parcels are grouped into blocks of lots, the blocks may be designated by one series of distinguishing numbers or letters and the lot numbers or letters in a block may comprise an independent series for that block.

Division 2: Monumentation

10-6 Corner posts

- (1) Posts of type 1, 2, 3, 4 or 5 must be set at all corners of the parcel under survey except as allowed by GSI Rule 10-8.
- (2) If an angle or corner of a parcel under survey is marked by a wooden <u>post</u> that was set during an earlier survey, that post must be replaced or witnessed with a post of type 1, 2, 3, 4 or 5.
- (3) Except in the case of a posting plan, if boundaries of a parcel exceed 1200m in length, posts must be set at intervals not exceeding 800 m.

10-7 Posting Intersections with rights-of-way, easements and covenants

- (1) If a new parcel under survey has an area of 1 ha or less and the new parcel intersects a right-of-way, easement or covenant area that exceeds 6.5 m in width, and is registered as a charge on the parcel under survey or if the registrar believes that there is a reasonable expectation of a charge being placed on the title of the new parcel under survey, posting of the points of intersection with the right-of-way, easement or covenant is required.
- (2) If the width of the right-of-way, easement or covenant referred to in GSI Rule 10-7 (1) is 6.5 m or less, posts need not be set at the points of intersection but the distance to the nearest corner along the property line must be shown on the survey plan of the new parcel.



(3) If the registrar believes there is a reasonable expectation of the charge referred to in GSI Rule 10-7 (1) being released at or near the time of deposit of the new plan, the intersections need not be posted.

10-8 Witness posts

- (1) A <u>land surveyor</u> may set a witness post in lieu of a true corner post under the following conditions:¹
 - (a) If necessary due to a physical obstruction, or 1
 - (b) If a post set on the true corner is likely to be destroyed and a more durable definition of the corner would result.¹

10-9 District lot or section corners

If, in the course of a survey, a district lot corner, section corner, centre post or quarter post is tied to, and is not found monumented with a post of type 1, 2 or 4 or an old style Dominion iron post, it must be replaced with a post of type 1, 2 or 4.

10-10 Witness district lot or section corners

If a district lot corner, section corner, centre post or quarter post is situated within a road, it must be witnessed by a post of type 1, 2 or 4 set in a suitable position.

10-11 References to corner posts

<u>Cairns</u>, <u>stone mounds</u> or at least 3 <u>bearing trees</u>, when available, must be used to reference monuments at a district lot corner, section corner, centre post or quarter post that is tied to or reset in the course of a survey, except where the land surveyor can demonstrate that the making of bearing trees would be environmentally or aesthetically unacceptable.²

Division 3: Additional Land Title Act Plan Requirements

10-12 Title

A *Land Title Act* plan must have a clear and concise plan title that includes the purpose of the plan and, where applicable, reference to the pertinent section of *Land Title Act*, the legal description of the subject lands in accordance with the register, and indicating whether all or part of the subject lands are being dealt with.³

10-13 Owners signatures

Hardcopy Plans

On a blank space outside the main body of the plan, a space must be provided if required for the signatures of owners as defined in the *Land Title Act* and for witnesses, their occupations and addresses.

Electronic Plans

Plan images must not contain the signatures of owners and witnesses. These signatures must be obtained in a form and manner prescribed by the *Director*.³

10-14 Miscellaneous Land Title Act plan requirements

(1) Hardcopy Plans

Plans must have a rectangle that has an area of not less than 150 cm^2 , preferably in the top right corner of the plan, which will contain notations required under *GSI Rules* 10-15 (1)(a) and (b) with the remaining area left blank for the use of the registrar.



Electronic Plans

Plans must have a rectangle that has an area of not less than 150 cm² relative to the <u>intended plot size</u>, preferably in the top right corner of the plan, which will contain the notation required under <u>GSI Rule 10-15 (1)(a)</u> with the remaining area left blank for the use of the registrar.

- (2) A plan tendered for deposit, other than an explanatory or sketch plan, must comply with the following requirements:⁴
 - (a) if a whole district lot, section or parcel is subdivided, the plan must show the boundaries of the district lot, section or parcel;
 - (b) if a portion of a district lot, section or parcel is subdivided, the plan must show the boundaries of that portion and:
 - (i) the number of angular and linear measurements to indicate its inclusion within the boundaries of the district lot, section or parcel and its connection with one or more of those boundaries that may be necessary to determine its location; and
 - (ii) the number of similar measurements to indicate its connection with any other parcel forming a portion of the same district lot, section or parcel that may be necessary to determine the relative location of the several parcels and of the highways serving them.
 - (c) there must be marked on the plan the dimensions and courses of the boundaries of each parcel into which the land is divided, or there must be shown on the plan a sufficient number of angular and linear measurements and bearings from which the dimensions can be deduced;
 - (d) if there are curved lines on a plan, the plan must indicate the radius, point of curvature and point of tangency of the curved lines;
 - (e) if the rights of all affected parties are not prejudiced, a terminal curve may be substituted for a transition curve referred to in Sections 116 (1)(e) and (g) of the Land Title Act;
 - (f) each angle of each parcel must be defined on the ground by a post or monument of a durable character, and the manner in which each angle is defined on the ground and the exact position of all posts and monuments placed in or on the ground must be shown on the plan, and if any offset is made it must be shown on the plan;
 - (g) unless the registrar is satisfied that convenience of reference will be served by adopting a particular method of marking, each parcel into which the land is divided must be marked with a distinct number or letter on the plan, and must continue an existing series or begin with "1" or "A" and must number or letter consecutively or alphabetically, but in any case the parcels must not be designated as sections or ranges;
 - (h) every highway, park or public square appropriated or set apart for public use must be shown as such, and distinctly delineated with its measurements marked on the plan;
 - (i) if a watercourse is included in the land shown on the plan outlined under GSI Rule 3-3 (2) and the watercourse:⁵
 - (i) is owned by the Crown or, by dedication or the operation of *Section 108 (2)* of the *Land Title Act*, is returned to the Crown on the subdivision of land;



- (ii) lies within the boundary of a parcel of one hectare or more in area being created by the plan; and
- (iii) is less than 1/10 of the area of the parcel it passes through;

the natural boundaries of the watercourse may be indicated on the plan, without dimensions, by photogrammetric means, compass and stadia, or other similar method approved by the <u>Association</u>.

(3) The words "Arterial Highway" must be placed upon the appropriate area of the plan when dedicating land for arterial highway as authorized by the Minister of Transportation and Infrastructure.⁶

10-15 Notations on plan

(1)



Section 219 of the Land Title Act.;

(f)	if an a	application to include accreted land has been consented to:
	(i)	Certificate under the Land Title Act, Section 94 (1)(c)
		The unregistered land included within this plan is deemed to be lawfully accreted land adjoining Crown land.
		Surveyor General [date]
	or in	the case of a statutory right-of-way:
	(ii)	Certificate under the Land Title Act, Section 118 (1)(b)
		The unregistered land adjoining Lot[complete legal description] is deemed to be lawfully accreted land adjoining Crown land.
		Surveyor General[date]
(g)	if an a	application to adjust a natural boundary has been consented to:
	(i)	Certificate under the Land Title Act, Section 94 (1)(d)
		The water boundary shown hereon is deemed to be the natural boundary as defined in the Land Act.
		Surveyor General
		[date]
	or in	the case of a statutory right-of-way plan:
	(ii)	Certificate under the Land Title Act, Section 118 (1)(a)
		The water boundary of Lot
		Surveyor General
		[date]
(h)		application to include unregistered land within a subdivision plan has been ented to: ⁷
		Certificate under the Land Act, Section 58
		The unregistered land included within this plan, which was not included in a



	grant from the Crown, need not be retained by the Crown.
	for Minister of Forests, Lands and Natural Resource Operations
	[date]
(i)	if a public road allowance is being established over Crown land, as access to a subdivision:
	Certificate under the Land Act, Section 80
	The public road through Crown land shown hereon is authorized under the Land Act, Section 80.
	Surveyor General
	[date]
(j)	if tentative approval has been obtained to access a subdivision by a Forest Service Road: ⁷
	Road established under the Forest Act
	Pursuant to Section 15 (2) of B.C. Reg. 334/79, consent is given to this plan of subdivision. The giving of this consent shall not imply an obligation of the Crown in right of the Province to improve, maintain or repair the forest service road shown on this plan[date].
	Regional Engineering Officer, Ministry of Forests, Lands and Natural Resource Operations;
(k)	if exemption under <i>Section 108 (3)</i> of the <i>Land Title Act</i> has been granted by minister's order:
	Pursuant to Section 108 (3) of the Land Title Act, land dealt with hereon, shown covered by water and not designated "Returned to Crown in right of the Province", is not deemed to be transferred to the Crown by virtue of an exemption, by Ministerial Order, to the action of Section 108 (2) of the Land Title Act. See DF [insert LTO filing no.]
(1)	for plans establishing a highway over both titled land and untitled Crown land under Section 9 (1) of the Ministry of Lands, Parks and Housing Act: ⁷
	The public highway through Crown land shown hereon is approved and established under Section 9 (1) of the Ministry of Lands, Parks and Housing Act. 7
	for Minister of Forests, Lands and Natural Resource Operations
	[date]



	ans establishing a forest service road over both titled land and untitled Crown land Section 9 (1) of the Ministry of Lands, Parks and Housing Act:
	The forest service road through Crown land shown hereon is approved and established under Section 9 (1) of the Ministry of Lands, Parks and Housing Act. ⁷
	for Minister of Forests, Lands and Natural Resource Operations
	[date]
(n) for exp	planatory plans:
	This plan was completed and checked, and the checklist filed under #, on the day of and is hereby certified correct in accordance with Land Title Office records.
	[name] B.C.L.S.
(o) for sul	odivision, reference and explanatory plans of titled Crown land: ⁷
	HER MAJESTY THE QUEEN IN RIGHTOF BRITISH COLUMBIA as represented by the Minister of Forests, Lands and Natural Resource Operations
	[Signature] Authorized Signatory
	[Signature]
	Witness
	[Print Name]
	Name[Address Line 1]
	[Address Line 1]
	[Address Line 2] Address
	[Print Occupation]
	Occupation
	te: information in square brackets is for information purposes only and need not shown on the mylar. ³
(p) for pla	ins dedicating an arterial highway: ⁶
	Certificate under the Transportation Act
	I BCLS certify that I am authorized by the Minister of Transportation and Infrastructure under Section 44.1 of the Transportation Act to show certain lands identified on this plan dedicated as Arterial Highway.
	BCLSdate



	(q)		by certify that this subdivision plan is approved under Sectionof the Agricultural Reserve Use, Subdivision and, Procedure Regulation on ⁸
			[date]
			[approving officer's title and jurisdiction]
			[include file reference if desired]
(2)	The		<u>c Plans</u> ving notes, with modification as necessary, must be shown on the <u>plan image</u> if e:
	(a)	see G	SI Rule 3-4 (2)(I);
	(b)		otation required under hardcopy submission is not required to be shown on the mage;
	(c)		lank space outside the plotted boundaries the jurisdiction of the Approving er(s) shall be noted with the following statement:
		Th	is plan lies within the jurisdiction of the Approving Officer for [insert jurisdictions].
	(d)	if relie	ef from compliance with Sections 75 (1)(c) or (d) of the Land Title Act is obtained:
		Th	is plan need not comply with Section 75 (1)() of the Land Title Act;
	(e)		ovenant in favour of the Crown, a Crown corporation or agency, a municipality or a nal district is a condition of approval:
		pu	Covenant [or: (insert number) Covenants] in the name of{name of covenantee}_ rsuant to Section 219 of the Land Title Act is a condition of approval for this bdivision.
	(f)	if an a	application to include accreted land has been consented to:
		(i)	Land Title Act, Section 94 (1)(c) The unregistered land included within this plan is accreted land.
			or in the case of a statutory right-of-way:
		(ii)	Land Title Act, Section 118 (1)(b) The unregistered land adjoining Lot[complete legal description] is accreted land.
	(g)	if an a	application to adjust a natural boundary has been consented to:
		(i)	Land Title Act, Section 94 (1)(d) The water boundary shown hereon is the natural boundary as defined in the Land Act.



or in the case of a statutory right-of-way plan:

(ii) Land Title Act, Section 118 (1)(a)

The water boundary of Lot [complete legal description] shown hereon is the natural boundary as defined in the Land Act.

(h) if an application to include unregistered land within a subdivision plan has been consented to:

Land Act, Section 58

This plan includes unregistered land which was not included in the grant from the Crown³

(i) if a public road allowance is being established over Crown land, as access to a subdivision:

Land Act, Section 80

This plan includes road through Crown land.³

(j) if tentative approval has been obtained to access a subdivision by a Forest Service Road:

Road established under the Forest Act

Access to the subdivision is to be by Forest Service Road pursuant to Section 15 (2) of B.C. Reg. 334/79. The Crown in right of the Province shall not be obligated to improve, maintain or repair the forest service road shown on this plan.

(k) if exemption under Section 108 (3) of the Land Title Act has been granted by minister's order:

Section 108 (3) of the Land Title Act

Subject to an exemption to be granted by minister's order to the action of Section 108 (2) of the Land Title Act, land dealt with hereon, shown covered by water and not designated "Returned to Crown in right of the Province", is not to be transferred to the Crown.

(I) for plans establishing a highway over both titled land and untitled Crown land under Section 9 (1) of the Ministry of Lands, Parks and Housing Act:

This plan includes public highway through Crown land.³

(m) for plans establishing a forest service road over both titled land and untitled Crown land under Section 9 (1) of the Ministry of Lands, Parks and Housing Act:

This plan includes forest service road through Crown land.³

(n) for explanatory plans:

See GSI Rule 3-4 (2)(f).

(o) for subdivision, reference and explanatory plans of titled Crown land:

The notation required under hardcopy submission is moved to the submission form under electronic submission and is not required to be shown on the plan.³

(p) for plans dedicating an arterial highway pursuant to Section 44.1 of the Transportation Act:

This plan dedicates arterial highway as authorized by the Minister of Transportation and Infrastructure.³



	(q) where an approving officer has required a land surveyor to inspect a survey pursuant to Section 84 Land Title Act: ⁸
	Inspected under the Land Title Act on [dd] day of [month], [yyyy]
	(r) where all or part of a subdivision lies within the Agricultural Land Reserve: ⁸
	This subdivision lies within the Agricultural Land Reserve.
	(s) for subdivision by way of lease the notation under GSI Rule 10-15(2)(c) applies: ⁸
	(t) where a dominant tenement is subdivided in whole or in part: ⁸
	Pursuant to Section 223 of the Land Title Act, Lot of this plan is hereby designated as a parcel to which the benefit of Easement does not attach
	(u) where alternate access pursuant to <i>BC Regulation 334/79</i> is required for one or more of the lots on the plan, the following applicable notation must be shown on the plan image in close proximity to the notation under GSI Rule 10-15(2)(c): ⁹
	ACCESS BY AIR ONLY
	ACCESS BY WATER ONLY
	ACCESS TO LOT BY EASEMENT ONLY
	ACCESS BY COMMON LOT
10-16 Blo	ck outline plans
(1)	Block outline plans must clearly show the mathematical relationship of the lands being surveyed and the controlling monuments.
(2)	If approval has been obtained for a block outline survey under <i>Sections 69 (3)</i> and <i>(4)</i> of the <i>Land Title Act</i> , show the following notation on the subdivision or reference plan: ³
	Hardcopy Plans
	Pursuant to my Order dated, the monumentation on this block outline survey is hereby approved.
	Surveyor General
	The conditions of the above mentioned Order are accepted:
	Owner(s)
	The Order of the Surveyor General dated has been filed in the Land Title Office in
	Registrar
	Note : For a block outline survey of <i>highways</i> as defined in the <i>Transportation Act</i> or a <i>forest service road</i> as defined in the <i>Forest Act</i> , "Ministry of" must be substituted for "Owner(s)".

<u>Electronic Plans</u> Modified monumentation has been approved for this survey.³

(3)	On posting plans of block outline surveys, the following notation must be shown on
	Hardcopy Plans
	Posting of Block Outline Survey is hereby approved[date].
	Surveyor General
	Electronic Plans
	This is the posting plan required under order number [number]. ³

- (4) For a block outline survey of highways as defined in the *Transportation Act* or a forest service road as defined in the *Forest Act*, if it is necessary to deal with individual parcels using separate block outline plans instead of a single block outline plan, then:
 - (a) <u>Hardcopy Plans</u>
 a plan of a control traverse must be prepared and filed in the Office of the Surveyor
 General and must contain the following information:
 - (i) show the relation of type 4 or better posts set as control monuments;
 - (ii) sufficient cadastral detail to locate the traverse on the ground;
 - (iii) the following note:

The monumentation of	f the control traverse shown on this plan is hereby
approved	[date].
Surveyor General	

Electronic Plans

a plan image of a control traverse must be prepared and filed in the Office of the Surveyor General and must contain the following information:

- (i) show the relation of type 4 or better posts set as control monuments;
- (ii) sufficient cadastral detail to locate the traverse on the ground;
- (b) a reference plan must be completed for each owner defining the land to be acquired for the road, and
- (c) a final posting plan must be completed in accordance with the block outline orders.
- (5) should be a single posting plan for the length of the survey.
- (6) All block outline posting plans shall show the exterior boundaries as a solid black line between 1 and 1.5 mm in width being the same as the original block outline plan when the plan image is reproduced at the *intended plot size*. ¹⁰



10-17Air space plans

- (1) Air space plans must be prepared in accordance with the Land Title Act and must, where appropriate, contain the following information in addition to the requirements of the GSI Rules Part 3:
 - (a) plan view showing the relationship of the air space parcel to the boundaries of the parcel upon which it is based;
 - (b) in addition to a plan view of the air space parcel, an isometric view that is a three-dimensional para-line drawing in isometric format as follows:
 - (i) isometric views may be shaded in a manner compatible with image scanning to further illustrate the three dimensional character;
 - (ii) isometric views may be exploded to illustrate shapes or jogs that might be obscured in any particular three dimensional view, and the exploded isometric view may include:
 - (A) construction lines to illustrate break lines and tie points; and
 - (B) point numbers or letters to identify individual points or corners.
 - (iii) plan, vertical or other orientation cross sectional views may be provided to better illustrate inflections or corners which may be obscured in any particular three dimensional view, and cross sections must include:
 - (A) point numbers or letters to identify individual points or corners; and
 - (B) geodetic elevations clearly noted.
 - (c) the side boundaries of the air space parcel shown, in both plan view and isometric view, as a bold outline;
 - (d) the bearings and dimensions of the perimeter of the air space parcel in a manner which clearly relates the plan view to the isometric view without causing confusion;
 - (e) a number or letter, assigned to every corner of the air space parcel, which must be shown on both the plan view and the isometric view;
 - (f) coordinates and elevation of each air space parcel corner and one or more of the corners of the parent parcel;
 - (g) dimensions of the boundaries of the air space parcel on the plan view and on the isometric view in a manner which clearly shows the size, shape and configuration of the air space parcel, and relates the plan view to the isometric view;
 - (h) an arrow on the plan view which shows the direction of the isometric view and it must be noted "Isometric View";
 - (i) a notation that the elevations are to geodetic datum and the number, description, elevation and location of the bench marks used to derive the elevations;
 - (j) the description, elevation and location of the local bench mark established in the immediate vicinity of the air space parcel;
 - (k) the elevation of the ground at one or more corners of the air space parcel;
 - (I) the scale of the plan view;
 - (m) the volume of an air space parcel created in cubic metres expressed to four significant figures; ¹¹



- (n) a book of reference, when the air space plan creates more than one air space parcel, which shows the air space parcel number, the assigned numbers, or letters, for the corners which define the limits of the air space parcel, and the volume of each air space parcel in cubic metres expressed to four significant figures;¹¹
- (o) for the purpose of clarification of an air space plan, the registrar may accept a machine made, mylar copy of the plan, that has planes of the isometric view shaded or stippled in varying densities;
- (p) a note in the upper right hand corner "Air Space Plan....".



amended Feb 23/12 SR7-10

² amended January 21/13 SR1-12

³ amended Mar 15/12 SR4-09

amended Mar 7/11 SR12-10

amended Apr 30/11

⁶ added Sep 2/10

amended Dec 16/10

added Mar 15/12 SR4-09

amended May 1/12 SR2-12

¹⁰ amended Sep 3/08

¹¹ amended Sep22/09

PART 11 — SURVEYS UNDER THE MINERAL TENURE ACT

Division 1: General

11-1 Definitions

- (1) In this Part:
 - (a) "Act" means the Mineral Tenure Act;
 - (b) "mineral title online grid" has the same meaning as set out in the Mineral Title Online Grid Regulation (B.C. Reg. 530/2004); and
 - (c) "records" includes all documents relating to a tenure held under the *Mineral Tenure*Act and available from the Chief Gold Commissioner. 1

11-2 Requirements for survey

- (1) A survey of a *mineral title* or portion thereof must be conducted when:
 - (a) required by the Chief Gold Commissioner;
 - (b) required by legislation; or
 - (c) ordered by the court;

and may be conducted when requested by the recorded holder of the mineral title.

Division 2: Rules for Survey

11-3 Responsibilities of the land surveyor²

- (1) Under this Part, a plan showing all or a portion of the ground held by a mineral title must be prepared by a *land surveyor* in accordance with these rules.
- (2) Surveys must be carried out under the personal on-site supervision of the land surveyor signing the plan, who must ensure that the spirit and intent of the *Mineral Tenure Act* and any regulations made under the Act are reflected in the survey.

11-4 Extent of Mineral Titles

- (1) The extent of a mineral title shall be defined by:
 - (a) in the case of *cell claims*, the mineral title online grid;
 - (b) in the case of <u>legacy</u> claims, by the position shown on a map approved by the Chief Gold Commissioner; or
 - (c) approved surveyed parcel(s) referred to in the Chief Gold Commissioner's records.

11-5 Rules for Boundary Determination

- (1) In determining the boundaries of a mineral title, the land surveyor must be governed by:
 - (a) the Mineral Tenure Act;
 - (b) all pertinent regulations under the Act; and
 - (c) this Part.
- (2) The land surveyor shall conduct sufficient research and field survey to identify all conflicting interests that affect or may affect the extent of a mineral title, or portion thereof, under survey.



- (3) The land surveyor must procure sufficient evidence in order to reach a conclusion as to the true location of the mineral title boundary being surveyed.
- (4) If a land surveyor is unable to determine the extent of the mineral title pursuant to GSI Rule 11-4, then written direction shall be requested from the Chief Gold Commissioner.¹

Division 3: Monumentation

11-6 Georeferencing

- (1) All monumentation found or placed in conjunction with a *Mineral Tenure Act* survey outside of Integrated Survey Areas must be georeferenced, with the estimated <u>network</u> horizontal accuracy of 0.5 metres or less.
- (2) If, due to rugged terrain, swamps, other conditions, or undue hardship, it is impracticable to obtain the minimum network horizontal accuracy set out in GSI Rule 11-6 (1), the *Association* may, on application, accept a lower standard of accuracy.

11-7 Monument placement and types

- (1) Sufficient monumentation must be placed to adequately define the boundary or portion of the boundary being surveyed.
- (2) Additional monumentation may be placed.
- (3) All monumentation placed must be of Type 1, 2, or 4.
- (4) All monumentation must be stamped with the year of survey, commission number of the land surveyor, the letters MT, the <u>electronic plan</u> number, and the monument number in accordance with <u>GSI Rule 11-9(1)(b)</u>.

Division 4: Mineral Tenure Act Plans

11-8 Title

A plan under the *Mineral Tenure Act* must contain the appropriate title similar in form to the following:

"Plan of Survey of (Part of)(description of mineral title(s) being surveyed), Land District, B.C.G.S. Grid designation(s)."

11-9 Additional plan requirements

- (1) A plan under the *Mineral Tenure Act* must contain the following information in addition to that required by *GSI Rules Part 3*:
 - (a) notwithstanding Part 3, all information shown on the plan must be expressed in the *UTM* projection, specifically:
 - (i) grid distances;
 - (ii) grid bearings;
 - (iii) areas; and
 - (iv) co-ordinates.
 - (b) exterior corners and monumentation found or placed must be consecutively numbered,
 - (c) a table showing:



- (i) the number and co-ordinates of all exterior corners on the portion of the *mineral title* under survey; and
- (ii) the number and co-ordinates of all monumentation found or placed on the portion of the mineral title under survey;
- (d) the datum and <u>UTM</u> zone;
- (e) estimated network horizontal accuracy;
- (f) boundaries of cells shown as broken lines within the mineral title being surveyed;
- (g) the mineral title designation used by the Chief Gold Commissioner;
- (h) in the case of a survey of all of a mineral title, the total area;
- (i) roads shall be shown as follows:
 - if an unsurveyed highway, forest service road, petroleum development road, or traveled road that is not a public highway under the *Transportation Act*, is located on the mineral title being surveyed, it must be accurately plotted without dimension;
 - (ii) if a road, located within the vicinity of the survey of a mineral title being surveyed, has been previously surveyed and a plan of that survey is on deposit at the land title office or in the Crown land registry, the calculated position of the intersection of each boundary of the road with the mineral title under survey must be dimensioned; and
 - (iii) for the purpose of determining the boundary of a road located under GSI Rule 11-9 (1)(i)(ii), if a road boundary located within the vicinity of the survey of a mineral title being surveyed has been gazetted at a width greater than that on the previous survey, the gazetted width applies;
- (j) the accurately calculated position of conflicting interests determined in *GSI Rule 11-5 (2)* and any other surveyed tenures or surveyed interests in the vicinity;
- (k) if appropriate, a note providing details of any boundaries cut, cleared and blazed; and
- (I) The notation that the plan was prepared under Sections 42, 44, and 45 of the Mineral Tenure Act or that it was deposited under Section 7 of the Land Act is to be shown on the submission form under electronic submission and is not to be shown on the plan image.



¹ amended Mar 15/12 SR9-11

² amended May 30/11

PART 12 — SURVEYS UNDER THE OIL AND GAS ACTIVITIES ACT 1

Division 1: General

12-1 Definition

In this Part, "Act" means the Oil and Gas Activities Act. 1

Division 2: Rules for Survey

12-2 Vertical datum

- (1) The ground elevation of the well position and the monuments required by *GSI Rule 12-5* must be derived from a datum acceptable to the Surveyor General.
- (2) Differences in elevation may be determined by differential levelling, trigonometric levelling, GNSS or other methods providing the misclosure is ±50mm times the square root of the distance in kilometres or less between known elevations.
- (3) If differential GNSS methods are used to determine elevations, a geoid model acceptable to the Surveyor General must be used.

12-3 Ties

- (1) The <u>legal survey</u> must be georeferenced according to <u>GSI Rule 2-6 (1)</u> or the survey must commence and close on monuments of:
 - (a) the township systems in the Peace River Block;
 - (b) an approved well site survey or surveys;
 - (c) an approved Provincial boundary survey; or
 - (d) an approved right-of-way survey coordinated on the provincial geo-spatial reference.
- (2) The maximum linear error of closure between the published coordinates of existing monuments under GSI Rule 12-3 (1) and the current survey measurements is 4 metres.
- (3) If the linear error of closure derived under GSI Rule 12-3 (2) exceeds 4 metres, then additional monuments must be tied to ensure that the required accuracy is obtained.

Division 3: Monumentation

12-4 Posting of well sites

If well sites are posted, they must be posted with posts of type 1, 2, 3, 4 or 5.

12-5 Referencing of surveys

- (1) Subject to GSI Rule 12-5 (2), well sites must be carefully referenced by 2 intervisible monuments, of type 1, 2 or 4 which are at least 150 m apart.
- (2) Well sites located within surveyed townships in the Peace River Block must be referenced by ties to at least 2 existing survey monuments of types 1, 2, 3, 4 or 5 or old style Dominion iron posts, which monuments mark corners of the section, quarter section or legal subdivision in which the well is situated or can be related to such corners through survey plans of record.



- (3) One of the 2 intervisible monuments referred to in *GSI Rule 12-5 (1)* may be a *post* set on a corner of the well site in accordance with *GSI Rule 12-4*.
- (4) If a traverse is made, that traverse must be referenced by monuments of type 1, 2 or 4, set in intervisible pairs at least 150 m apart, at intervals not exceeding 5 km.

12-6 Markings

- (1) Monuments must be marked in accordance with *GSI Rule 1-8* except that, in lieu of boundary lines:
 - (a) in the case of monuments required by *GSI Rule 12-5 (1)* not set on the true corner of a well site, the letters "PNG" followed by the numerical portion of the well name must be marked on the cap; or
 - (b) in the case of monuments required by *GSI Rule 12-5 (4)*, the number of the traverse station must be marked on the cap.

12-7 Bearing trees

The position of every type 1, 2 or 4 post found or set in accordance with *GSI Rules 12-4* and *12-5 (2)* must, if possible, be referenced by at least 3 <u>bearing trees</u>, except where the land surveyor can demonstrate that the making of bearing trees would be environmentally or aesthetically unacceptable. If bearing trees are not made, the monuments noted above must, if possible, be referenced by a substantial tripod.²

12-8 Tripods

Monuments required by GSI Rules 12-5 (1) and (4) must, if possible, be referenced by a substantial tripod.²

Division 4: Oil and Gas Activities Act Plans

12-9 Title

A Plan under Section 25 of the Oil and Gas Activities Act General Regulation must contain the appropriate title similar in form to the following:¹

"Survey Plan of Well Site	[insert name of we	11
site]	District"	

12-10 Additional plan requirements

- (1) A plan under Section 25 of the Oil and Gas Activities Act General Regulation must contain the following information in addition to that required by GSI Rules Part 3:1
 - (a) the perimeter of a surveyed parcel, other than a well site or right-of-way, shown as a solid line;
 - (b) the land through which the traverse passes and the well site lies designated by the lot, block or section number, the land title plan number, or as "Unsurveyed Crown Land", whichever applies;
 - (c) the names of roads and bodies of water crossed by a traverse or within the well site area;
 - (d) the convergence to be added to or subtracted from plan bearings to obtain bearings to the meridian through the well centre;



- (e) the point of commencement and closing of the survey;
- (f) the perpendicular offsets from the well centre to the nearest corner of the spacing area in which the well is situated, shown in the body of the plan;
- (g) if the well site lies outside the Peace River Block, a balanced table of UTM coordinates for each traverse or GNSS station, each monument found or set, and the well site and, if the UTM coordinates are derived from ties under GSI Rule 12-3 (1)(a), (b), (c) or (d), then the estimated network horizontal accuracy must not be shown on the plan;
- (h) the ground elevation of the well position and the monuments required by *GSI* Rule 12-4 in metres above sea level;
- (i) if the well site lies outside the Peace River Block, the petroleum and natural gas grid in fine broken lines;
- (j) if the well site lies within the Peace River Block, surveyed boundaries of the township system shown as solid lines and theoretical or unsurveyed lines shown as fine broken lines;
- (k) if the well site lies outside the Peace River Block, the <u>combined factor</u> adopted by the <u>land surveyor</u> using the following note:

"This plan shows horizontal ground-level distances unless otherwise specified. To compute grid distances, multiply ground-level distances by the average combined factor of [insert factor]. The average combined factor has been determined based on an ellipsoidal elevation of [insert ellipsoidal elevation] metres.";3

Where a single average combined factor is not appropriate the combined factor and ellipsoidal elevations may be shown at specific points or in a tabular form and then the following statement may be used:⁴

"This plan shows horizontal ground-level distances unless otherwise specified. To compute grid distances, multiply ground-level distances by the appropriate combined factor as derived from the combined factors ['noted hereon' or 'in the coordinate table' as applicable]."⁴

- (I) the datum and source used for elevations and coordinates;
- (m) in the lower right hand corner of the plan:⁵

Well Authority No. Crown File No.



amended Sep 30/10

² amended Jan 21/13 SR1-12

³ amended Nov 3/11 SR1-06

added Nov 3/11 SR1-06

⁵ amended May 30/11

PART 13 — STRATA PROPERTY ACT

Division 1: Building Strata

13-1 Field procedures

- (1) The boundaries of the parcel or parcels that are subject to the strata plan must be retraced and all posts must be found or new posts must be placed at all corners. 1
- (2) Lengths of all exterior building walls must be measured.
- (3) Measurements must be made on each and every strata lot, limited common property and perimeter boundaries of each floor plan.
- (4) Design plans may be utilized to assist in preparation of strata plans, but must not be used for derivation of dimensions and areas.

13-2 Sheet one

- (1) The first sheet must contain the following information in addition to the requirements of GSI Rules Part 3:
 - (a) the type of monumentation found or placed at every corner of the land that is subject to the strata plan except phased boundaries which do not require posting;
 - (b) the Statement By Surveyor as prescribed by the Director of Land Titles for subdivision and reference plans; and²
 - (c) where buildings are shown:
 - (i) if there is more than one building, each building must be identified by either a building number or by strata lot numbers to enable a cross reference from the first sheet to the floor plans, and³
 - (ii) the shortest distance offsets from each building to the adjacent perimeter strata plan boundaries and additional offsets or bearing and distances to clearly define the relationship of the building(s) to the perimeter plan boundary, if necessary, unless this requirement is dispensed with by the registrar.³
 - (iii) The following notations are required on the plan:⁴

Hardcopy Plans⁴

Form U as prescribed in the Strata Property Act Regulation.

Electronic Plans⁴

The buildings shown hereon are within the external boundaries of the land that is the subject of the strata plan.

or

Certain parts of the buildings shown hereon are not within the external boundaries of the land that is the subject of the strata plan and appropriate and necessary easements or other interests are required to provide for these encroachments.



13-3 Floor plans

- (1) Strata plans showing buildings must also show floor plans for each floor of a building that contains a strata lot, limited common property or common property, but it is not necessary to show a plan of crawl spaces or attic space if they are wholly common property.
- (2) Floor plans must show the following:
 - (a) a title which clearly identifies the floor and building number if applicable;
 - (b) designations for strata lots, common property, limited common property and non-habitable parts of strata lots if applicable;
 - (c) a notation indicating the particular strata lot or lots to which limited common property is appurtenant;
 - (d) dimensions to 0.01 metres of all boundaries of each strata lot, part strata lot and limited common property;
 - (e) dimensions to 0.01 metres of the perimeter boundary of a floor plan and sufficient dimensions to clearly relate the location of all strata lots, part strata lots and limited common property within a floor plan;
 - (f) areas to 0.1 square metres of each strata lot or part strata lot;
 - (g) boundaries of strata lots, part strata lots, common property and limited common property shown as solid lines;
 - (h) where strata lot boundaries change direction other than at forty five or ninety degrees, sufficient additional distances or angles shown to clearly define the strata lot boundary to the extent that the area can be calculated from the dimensions provided;
 - (i) floors to be numbered from the lowest floor to the highest floor; and
 - (j) if applicable, the location and descriptive notation of cross sections.

13-4 Cross sections

- (1) Strata plans that show floor plans must also show cross sections when requested by the registrar or if clarification is needed.
- (2) Building cross section(s) must indicate the vertical relationships of the strata lots and common property and show the following:
 - (a) description of the cross section;
 - (b) the appropriate strata lots, decks, patios, garages, and other areas through which the cross section passes;
 - (c) a label for the various floors of the buildings;
 - (d) the outline of the roof of the building through which the section passes;
 - (e) the extent of a strata lot where the floor or ceiling levels change within the strata lot; and
 - (f) the extent of a strata lot where a bay window extends outward part way up a wall.



13-5 Elevation views

- (1) Strata plans that show buildings must also show elevation view(s) when requested by the registrar or if clarification is needed.
- (2) Elevation views must indicate the vertical relationships of strata lots and floors within a building and show a description of the elevation view.

Division 2: Bare Land Strata

13-6 Monumentation

Subject to *GSI Rule 13-7*, bare land strata lots, common property and limited common property must be posted in accordance with the requirements of *Division 2* of Part 10 of these rules.

13-7 Alternative monumentation

- (1) The Association may permit modified posting of type 1, 2 or 4 set at specified locations if:
 - (a) bare land strata lots are smaller than normal residential lots in the area, and the strata lots are laid out on a regular grid pattern; or
 - (b) the Association considers it advisable.
- (2) Application for modified posting of bare land strata plans must be made in writing to the Association.

13-8 Additional bare land strata plan requirements

- (1) In addition to the requirements of a strata plan, bare land strata plans must show the following:
 - (a) if a land use is to be indicated within the area being dealt with by a bare land strata plan, the use must be stated on the plan within the indicated area and hatching may be used to illustrate the boundaries of the indicated area;
 - (b) if buildings exist on land that is to be divided by a bare land strata plan, then, only buildings that are located on common property may be shown on the plan;
 - (c) buildings that exist on land that is to be divided by a bare land strata plan, other than those referred to in GSI Rule 13-8 (1)(b), must be shown on a separate sketch which must be submitted to the approving officer;
 - (d) the dimensions and bearings of the boundaries of the land included within the strata plan, strata lots, limited common property and common property must be shown on the plan; and
 - (e) if the Association permitted modified posting with type 1, 2 or 4 under *GSI Rule 13-7*, then the plan must bear the following certification:

|--|

Modified monumentation has been used for this survey	y.
Approved	
Surveyor General	



Electronic Pl	an	S
---------------	----	---

Modified monumentation has been approved for this survey.

(f) where relief is granted from all or part of Section 8 of the Bareland Strata Regulations 75/78, the following notation shall be shown on sheet 1of the plan:⁴

Hardcopy Plans⁴

This plan need not comply with Section 8 of the Bareland Strata Regulations 75/78.

Minister of Transportation and Infrastructure or Approving Officer for Ministry of Transportation and Infrastructure

_____[fill in file reference if desired]

Electronic Plans⁴

This plan need not comply with Section 8 of the Bareland Strata Regulations 75/78.

(g) in a blank space on sheet 1 of the plan:

Hardcopy Plans⁴

Notation as prescribed in Section 18 of the Bareland Strata Regulations 75/78.

Electronic Plans4

This bare land strata plan lies within the jurisdiction of the Approving Officer for [insert jurisdictions].

(h) where a re-inspection is required for Section 19 (3) of the Bareland Strata Regulations 75/78, the following notation shall be shown on sheet 1 of the plan:⁴

Inspected under the Strata Property Act on the _____ day of _____, ____.

Division 3: Phased Strata Plans

13-9 Plans

In addition to the requirements of a strata plan, phased strata plans must show the limits of the phase boundaries with complete bearings and distances and must comply with *GSI Rule* 3-3 (2) by showing the exterior boundaries of the phase being dealt with on the plan as a solid black line between 1 and 1.5 mm in width.⁵

13-10 Notations

Phased strata plans shall include the following notation on sheet 1:4

Hardcopy Plans⁴

Form Q as prescribed in the Strata Property Act Regulation.

Electronic Plans⁴

This Plan is Phase _____ [number of phase] of a _____ [total number of phases]



phase strata plan under section 224 of the Strata Property Act lying within the jurisdiction of the Approving Officer for [insert jurisdictions]

13-11 Common Facility

If a common facility is to be constructed in conjunction with a phase other than phase 1 of a strata plan, include the following notation on sheet 1:4

Hardcopy Plans⁴

Form R as prescribed in the Strata Property Act Regulation.

Electronic Plans⁴

The common facility [name the common facility] in this phase is subject to the conditions set out in the Form P filed for this strata plan.

Division 4: Strata Plan Amendments – Approvals⁴

13-12 Notations

When a plan is prepared for *Section 262 (3)(c)(ii)* under the Strata Property Act, the plan shall include the following notation:⁴

Hardcopy Plans⁴

	amendment of Strata Plan complies with any egional district bylaws or applicable Nisga'a Government
laws] for the	[jurisdiction].
[date]	
Approving Officer	
[Municipality, or as the co	ase may be]

Electronic Plans⁴

This plan lies within the jurisdiction of the Approving Officer for [insert jurisdictions].



¹ amended Mar 18/09

² amended Mar 16/10

³ amended Mar 15/12 SR4-09

added Mar 15/12 SR4-09

⁵ amended Mar 15/12 SR3-11