BOUNDARY RECALCULATIONS AND CONFLICT

It is important that surveyors identify and make it clear in a CSD where boundary conflict is present and is being resolved by the current CSD. This will help avoid requisition, ensure that the CSD is processed by the appropriate LINZ staff, and will reduce delays in survey approval. It will also help other surveyors who rely on that CSD for boundary definition to understand what decisions were made and why.

The definition of 'Conflict' is contained in Schedule 2, Dictionary, CSR2021:

conflict means that—

(a) there is a difference that exceeds the applicable accuracy standards—

(i) between the estate boundary and the boundary recorded in an approved CSD; or

(ii) between the same boundary as recorded in different approved CSDs; or

(iii) between the same boundary as recorded in an approved CSD and other evidence, including field evidence; and

(b) the difference has not been resolved by 1 or more approved CSDs

It is worth highlighting a key difference between the Rules for Cadastral Survey 2010 (RCS2010) and the CSR2021. There is a subtle difference when it comes to marking boundaries that are subject to conflict. RCS2010 required each boundary point on a boundary that is subject to conflict to be ground marked. CSR 2021 r 35(2)(a) only requires the boundary positions whose compliance with the applicable accuracy standard are in doubt to be ground marked (and defined by survey). So, if a boundary is recalculated outside of the tolerance found in rule 27, ie determined as being subject to conflict, and there is no doubt as to the position of the end points, then the points can be adopted and there is no requirement to mark the boundary points. Examples are discussed below.

There is no requirement to recalculate a boundary dimension if it is not contradicted by other evidence and the boundary points meet the accuracy requirements in rule 27, the boundary vector may just be adopted. However, some surveyors choose to undertake a recalculation to remove a small misclose and more accurately represent a boundary vector in terms of the current survey measurements. This is not considered conflict as the difference between the original boundary vector and the recalculated vector is within the permitted accuracy tolerance.

An apparent boundary conflict may already have been resolved by a previously approved CSD even if the Record of Title of the land under survey was not updated at that time. For example, the land under survey may share a common boundary with an abutting parcel and an adjacent survey determined the 'true' vector for the boundary. An evaluation should be undertaken to ensure the boundary was correctly determined and no new evidence is identified. To be suitable for adoption the vector needs to have been essentially 'defined by survey' by the previous CSD.

Rare situations can arise where a boundary on a previous CSD may have been incorrectly calculated (black values and line work on colour plans).

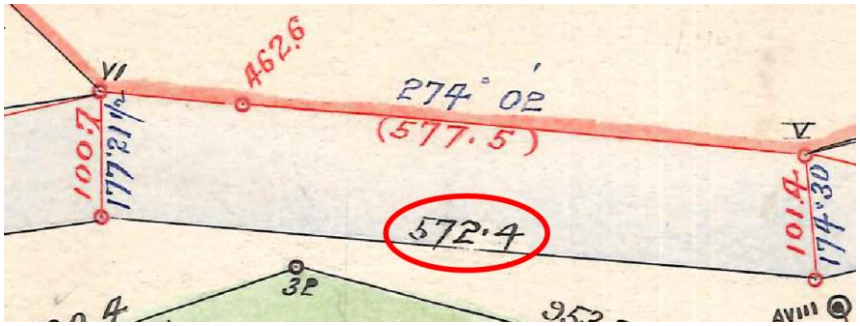

Figure 1: Example of a calculated boundary that appears incorrect.

If the end points of the boundary are accurately defined and if their positions can be confirmed, the boundary can be recalculated without requiring the points to be marked. Consideration must be given to the positional reliability of the end points, including:

- Are some lines more reliable? Were measurements made to place a peg in the recorded position?
- Do the original field notes and any independent checks confirm the measured plan face values?
- Is the recalculation supported by occupation evidence?
- Is the recalculated error supported by independent calculations? Perhaps half angle from the other side of the road and/or parcel closes.

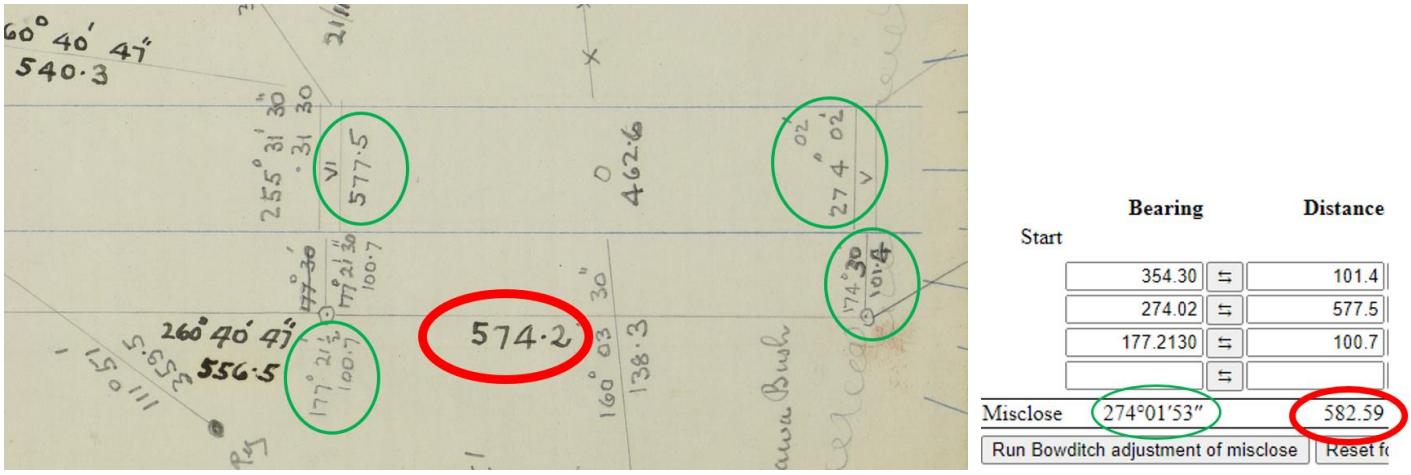

Figure 2: Example of evidence supporting the end point reliability and recalculation.

Note, while the boundary distance includes a transposed number (from the field notes to the plan face) the larger error is in the value calculated (shown by missing line misclose).

If the end points can be adopted with certainty (appreciating any tolerance provided by rule 27), then reporting should discuss in detail how this determination was verified. The survey report must identify each boundary in conflict, the magnitude of the conflict and the evidence considered while resolving it, rule 72(f).

KB 935 - Reporting on Definition - Conflict details

However, if a boundary end point (or points) is considered to be inaccurate or unknown and the boundary needs to be recalculated by more than the tolerance allowed for by rule 27, then the end point (or points) must be ground marked if practicable, rule 35(2)(a) and defined by survey, rule 13(d).

An example is a boundary being recalculated due to a shortage or excess in the 'block', perhaps by using pro-rata distribution. If an 'adjusted' boundary point position is determined to be greater than the tolerance found in rule 27 which results in a boundary being recalculated sufficiently to be subject to conflict then the point (or points) need to be marked.

Note, as required by rule 6, occupation is to be considered. The details are to be included in the Record of Survey in a graphical form, rule 81, and specifically by rule 81(3)(b). Boundary points defined by survey, marked or unmarked need to be referenced, rule 31(a), with full reporting required by rule 72(i).

For further information see:

KB 929 - Boundary conflict
KB 925 - Types of boundary reinstatement CSDs