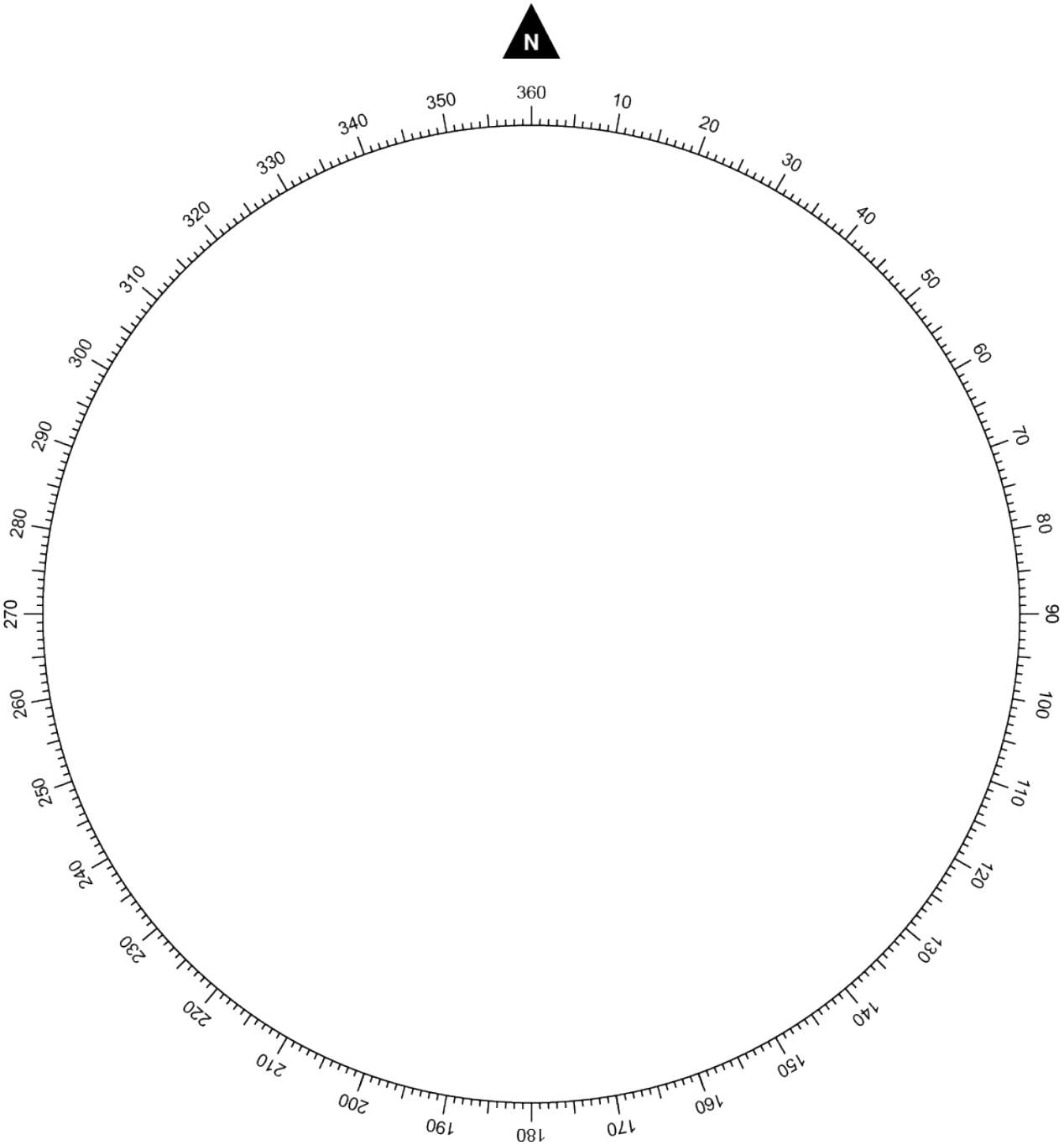
NSW Resources

Form WC31: Mark-out diagram to accompany mineral claim application



Applicant details	
Applicant name	
Date submitted	

Office use only	
Claim number	
Date granted	
Officer	☐ Map ☐ ARC

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Why do I need to complete a mark-out diagram?

An application for a mineral claim requires a mark-out diagram. A mark-out diagram is a map that identifies the location of your proposed mineral claim in relation to a survey post. The diagram records the distance and bearing from a survey post to the proposed claim. The distance and bearing of each side of the proposed claim is also documented.

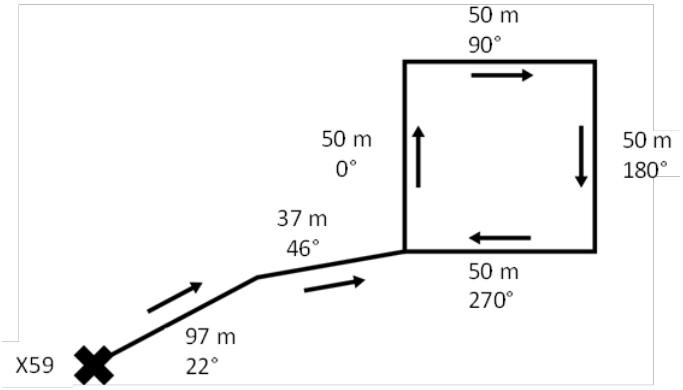
How do I survey a mineral claim and complete a mark-out diagram?

You will need a good magnetic compass and a long measuring tape. Compass applications on smartphones are not effective for surveying a mineral claim.

Survey posts in the opal fields are generally taller than ordinary star pickets. Survey posts are also painted in an alternating black and white scheme. Maps of the location of survey posts are available from the Lightning Ridge office or can be viewed online at MinView.

To complete a mark-out diagram:

Figure 1 Illustration of a completed mark-out diagram.



- Place an X on the mark-out diagram and write the name of the survey marker next to it.
- For all segments of your diagram, include the distance, bearing and an arrow indicating the direction you were looking when you recorded the bearing.
- Measure the distance and bearing from the survey post to your closest claim marker.
- Proceed in a clockwise direction around your claim recording the distance, bearing and direction for each side.
- Ensure the final version of your mark out diagram is done in black or blue pen to ensure all information on the mark-out diagram is clear.

Note: In the White Cliffs Mineral Claims District, there are some situations where it may be more appropriate to use GPS coordinates and then calculate the distance and bearing rather than using a compass and measuring tape. This includes where there are large distances from the survey marker post to the proposed mineral claim. If GPS coordinates are used to calculate the distance and bearing, this needs to be indicated on the mark-out diagram.

Is there anything else I should be aware of to complete a mark-out diagram?

The distance, bearings and directions recorded on the mark-out diagram must be clear. Additionally, do not copy an existing or old survey, as they can be inaccurate. The Department will only accept mark-out diagrams that are clear and accurate.

Additional considerations to record accurate distance and bearings:

- Remove personal metal objects and stand well behind steel posts when doing bearings.
- Do not lie your measuring tape flat on the ground or stretch it too much.
- Avoid one long measurement by measuring segments of less than 100 metres.
- Record bearings in the opposite direction to check original bearings are 180 degrees different.
- Use only one corner of the claim to record distance and bearing from the survey post.

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Do I need photographic evidence of my mark-out?

Yes. An application for a mineral claim must include photographic evidence from the outside looking in of each individual marker post installed on the corners of the proposed claim that shows the following:

- Boundary of the claim indicated through trenches at least 150mm deep or stone walls at least 150mm high for distance and at least one meter from each marker post.
- Possession notice installed on a wooden board or metal plate on the northernmost corner of the claim.
- Possession notice has details of proposed mineral claim including dimensions of land, date of mark-out as well as name and address of the applicant.

If you require assistance or more information, please contact:

NSW Resources

Small-Scale Titles Team

Phone: 02 6820 5200

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