**Australian Rover Challenge 2026
Critical Design Review (CDR) Report**[Team Name]

[University]

[Department/School/Faculty]

Team Email :

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Team Lead(s) Name & Email :

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[Additional Contact Information If required]

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Team Supervisor(s) Name & Email

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[*This is the Cover page – You may reformat include team/university logos here]*

*[No other information is required on this page]*

# *Body of the Report (Pages 2-9)*

All text within this report shall be fully justified.

Subsequent paragraphs shall not be indented.

# Development Approach

A comprehensive and convincing development approach is outlined.

# Approach to System Development Lifecycle

Outline the overall approach to the design and development of the system and team including reference to system lifecycles with appropriate adjustments. The outlined approach indicates reasonable confidence it will result in successful development of the system for competition.

# Project Management

This section shall include key elements like project organisation, scheduling and budget, mechanisms identified to identify and deal with any issues in these domains, which would lead to high confidence in project outcomes.

# Method for Determining Requirements

Method for determining system and sub-system requirements which will set up the team for success is clearly outlined here, in alignment with industry standards.

# Solution Exploration Approach

Method for exploring solution space for each sub-system, which informs the design, is outlined which will set up the team for success is clearly outlined, in alignment with industry standards.

# Procurement and Manufacturing

Resources available to the team and existing expertise as it pertains to manufacturing and procurement are outlined here. Teams shall not be judged on what resources they have access to, but rather on demonstrating that they have clearly outlined what is available to them and how this constrains and motivates future design decisions.

# Integration Planning

An integration plan for the system and its subsystems is outlined here. This plan gives confidence that issues will be identified and addressed, and system integration and testing will progress smoothly.

# Evaluation Plan for Verification and Validation

An evaluation plan for the system and its subsystems is outlined. A plan to determine acceptance criteria for each stage of testing is present. Clear evidence that executing this plan will show that the rover and its subsystems have met the requirements, and that it will result in a successful ARCh rover.

# Rover Operation

Operation of the system is outlined here, and the effects this may have on all associated infrastructure, testing, training and support shall be outlined and considered (even if exact plans are not prepared).

# Preliminary Technical Design

# System Overview

Subsystems shall be appropriately identified and outlined here, including appropriate justifications and reasoning for their selection.

# Interface Definition

All external interfaces between subsystems will be identified here, including sub-system and external interfaces.

# Requirements Analysis

Requirements for ALL identified sub-systems shall be outlined or summarized here. Requirements have some sort of priority which allows for future trade space and include verification and validation approach. Full details (tabulated summary) can be placed in Supplementary Section (Pages 12-14) and cross-referenced here. You must address minimum system requirements as per rule 7.1 from the Critical Design Review Guidelines document.

# Drivetrain

# Chassis

# Perception

# Power

# Communications

# Command and Control

# Base Station

# Payload(s) *[e.g. Robotic Arm, Excavation & Construction, Space Resources, Mapping & Autonomy]*

*Use multiple subsections if appropriate.*

# Nomination of Competition Tasks

Teams must indicate which tasks they intend to compete at for the Australian Rover Challenge, which will be assessed by the review panel, then ratified at the System Acceptance Review (SAR). After the SAR, no changes to task entry are permitted.

# Schedule *(Pages 10–11)*

Insert a Gantt chart or appropriate schedule here. Highlight critical path tasks. Consider procurement and lead-times, feasibility of tasks, buffer time.

# Supplementary Figures & Tables *(Pages 12–14)*

Insert subsystem diagrams, tables, and additional figures. Each must have a caption and be referenced in text.

# Academic Endorsement *(Page 15)*

Letter from faculty/staff confirming support for travel and competition.

# References *(Do not count towards page limit)*

Use consistent referencing style (Harvard, IEEE, etc.). Example:

Harvard: Siegler, M.A. 2012, Lunar Thermal Environment Thesis, MIT, Cambridge.
IEEE: [1] M.A. Siegler, “Lunar Thermal Environment Thesis,” MIT, Cambridge, 2012.