

APPENDIX 4: SIGN TYPES

Smithfield Mountain Bike Park Expansion Project MASTERPLAN

Sign Types

Trailhead Signs

Purpose

The purpose of a trailhead sign at a mountain bike park is to prepare users to make safe, informed decisions before entering the trail network, while reinforcing expectations, responsibility, and the character of the park. The same information can be conveyed on a secondary trailhead sign where riders can enter the trail network without passing through the trailhead.

In practice, a trailhead sign serves five core purposes:

1. Risk Communication & Prior Informed Consent facilitation

The primary intent is to ensure riders understand that:

- Mountain biking involves inherent risks
- Trail difficulty varies and may exceed their skill level
- Conditions can change due to weather, maintenance, or natural hazards
- Emergency and incident management expectations

This supports duty of care and helps establish informed consent before users commit to the trails.

2. User Orientation & Decision-Making

Trailhead signage allows riders to:

- Understand the overall network layout
- Identify trail difficulty ratings
- Choose routes appropriate to their skills, fitness, and available time
- Locate emergency access points, trail junctions, exits, and facilities

Good trailhead signs reduce confusion, wrong turns, and unintended exposure to risk.

3. Behavioural Guidance & Expectations

Trailhead signs clearly communicate:

- Who the trails are for (e.g. bike-only, shared use)
- Rules of use (yielding, direction of travel, closures)
- Environmental responsibilities (stay on trail, respect wildlife)
- Emergency protocols (what to do if something goes wrong)

This helps set a consistent culture of use across the network.

4. Accessibility & Inclusivity

A well-designed trailhead sign supports:

- Beginner confidence by clearly identifying easy options
- Family and school group use through legible, plain-language information

- Non-local visitors unfamiliar with terrain, climate, or trail norms

Clear signage helps broaden participation and reduces intimidation, especially for novice riders.

5. Place-Making & Identity

Trailhead signage also:

- Establishes the identity of the park
- Communicates values such as sustainability, progression, and stewardship
- Provides a professional, welcoming first impression

This is especially important for publicly funded facilities.

The following diagram shows the Trailhead Signs for the project.



Placement Principles and Rules

1. Trailhead signs must be placed at every trailhead or trail access point (i.e. any formal entry point into the trail network from outside the park), noting that Land Manager discretion could be applied to install a Trail Junction sign at an access point in lieu of a Trailhead sign.
2. Trailhead signs should be placed at a logical point where riders must pass by the sign to enter the trails.
3. Trailhead signs should be placed close to the car park, toilets and other amenities / facilities, where riders are likely to congregate while preparing for their ride.
4. Trailhead signs should be clearly visible in natural light and easy to read and understand.
5. Trailhead signs should have a clear unobstructed space in front of the sign, large enough to allow several groups of people to stand side-by-side and read the sign simultaneously. The sign should not be obstructed by vegetation, parked cars or other structures.
6. Trailhead signs should be placed where they can be easily inspected, maintained and replaced.
7. Trailhead signs must be designed so that mandatory safety and decision-making content is immediately visible and prominent. Optional content should not compete visually with mandatory risk management information.

Sign Information

The following elements are considered **mandatory** risk controls and must be included on Trailhead Signs:

Control	Information
1. Logos and Acknowledgements	- Smithfield Bike Park, including recommended colours, fonts etc. Refer to SMBP Visual Style Guide (2026) - Queensland Government crest and QPWS&P logo - Acknowledgement of land managers and funding partners - Acknowledgement of Traditional Owners
2. Trail Network Map	- Simplified but accurate map of the trail network, clearly showing: - Trail alignments, names, directions and difficulty ratings - Trail junctions and those acting in an emergency pick up point - Trailheads and key visitor nodes such as shuttle pick-up / drop-off points, lookouts, etc. - Any vehicle use and other shared-use trails clearly differentiated from MTB-only trails - Include a “You Are Here” indicator - Tenure property boundaries in a simplified representation - Contours
3. Trail Difficulty Rating System	- The AusCycling Trail Difficulty Rating System as amended for project needs to be included in its entirety, along with the various criteria, dimensions, explanations and symbols. - Users need to understand the system to make an informed choice about which trails to attempt.
4. Risk & Responsibility Statement	- Plain-language statement acknowledging: - Inherent risk of mountain biking - Rider responsibility to wear protective equipment and choose appropriate bicycles and trails - Variable trail and weather conditions
5. Rules of Use / Code of Conduct	- Core behavioural rules such as: - Ride within ability - Respect the environment and leave no trace - Stay on marked trails - Obey closures and signage - Yielding hierarchy (if shared use) - Wear appropriate protective gear – helmets compulsory
6. Emergency Information	- Provide name and address of nearest hospital - Provide emergency contact number – 000 - Outline the emergency location system used throughout the park – Emergency+ App and What3Words

Control	Information
	• Location reference (trailhead ID, map grid, or code) • Instruction to stay on trail and provide location details • Supported emergency and wayfinding apps and how to download – e.g. Emergency+ and Trailforks
7. Trail Descriptions	• Each trail should have a small information panel that lists the following information: ○ Name ○ Pictogram ○ Difficulty rating ○ Length ○ Elevation profile ○ Trail style ○ Brief description ○ Amount of climbing / descending ○ Approximate ride time

The following elements are considered **optional**. They enhance user experience, inclusivity, and place-making but are not strictly required for risk management. They could be provided on an adjacent sign panel.

Control	Information
1. Weather, Trail Closures & Maintenance	• Seasonal conditions (wet season / dry season) • Trail closure threshold and process • Maintenance requests / condition reports
2. Rider Services	• Shuttle services – schedule and booking process • Rider coaching or guiding services • Club information
3. Recommended Routes & Ride Itineraries	• Identification of a range of different ride combinations based on total time, ability or riding style, and specifically including: ○ Beginner-friendly routes ○ Family-friendly routes ○ Less challenging intermediate routes • Clear reassurance for first-time users
4. Environmental & Cultural Messaging & Historical Interpretation	• Stay-on-trail messaging • Wildlife and vegetation protection • Acknowledgement of Traditional Owners • Mountain biking history of Smithfield and Cairns area
5. QR Codes or Digital Links to Trail Navigation Apps	• Live trail status or closures • Online maps or safety information • Events or volunteer opportunities • Location tracking capabilities provide real benefits to riders

Ride Itineraries Signs

Purpose

The purpose of the rider itineraries and recommended route signs is to identify a range of different ride combinations based on total time, rider ability (difficulty) or riding style. Itineraries may include beginner friendly routes, family-friendly routes, less challenging intermediate routes or advanced routes and will compliment the trailhead signs.

Placement Principles and Rules

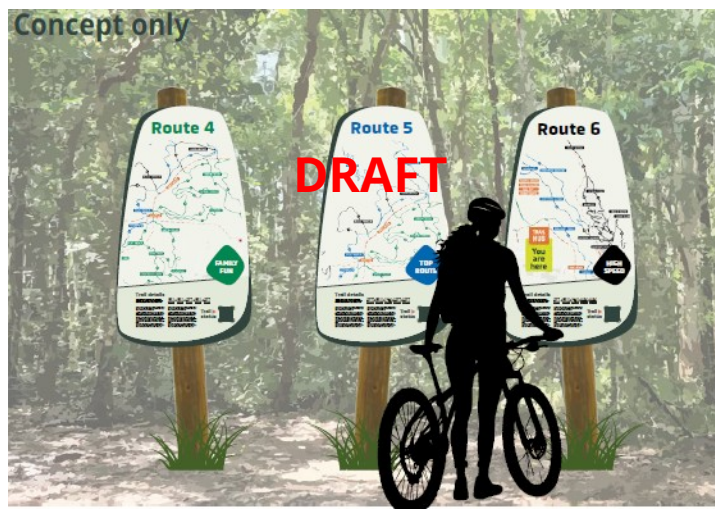
1. Ride Itineraries Signs should be placed at trailheads or access points from where the specific ride combinations depart.
2. Ride Itineraries Signs should be placed at a logical point where riders pass by the sign to enter the trails
3. Ride Itineraries Signs should not obstruct or detract from the trailhead signs. The sign should not be obstructed by vegetation, parked cars or other structures.
4. Ride Itineraries Signs should be clearly visible in natural light and easy to read and understand.
5. Ride Itineraries Signs should be placed where they can be easily inspected, maintained and replaced.

Sign Information

Ride Itineraries Signs will present a specific portion of the MTB trail network map, simplified for on-site readability. The diagram shows the Ride Itineraries Signs for the project.

Content will include:

- Itinerary/route name
- Itinerary description, distance and duration
- A detailed network map with a clear "You are here" marker, clear representation of how trails connect (so riders can plan complete loops)
- Itinerary specific trail names and trail difficulty indicators
- Key nodes (e.g., trailhead, junctions, shuttle point, amenities where relevant)
- QR code for Trailforks online maps



Trail Junction Signs

Purpose

Trail Junction Signs at Smithfield MTB Park are intended to support route planning and decision-making at key trail junctions or hubs within the trail network. Unlike the smaller on-trail Wayfinding Totems that are designed to be read quickly while riding, these signs are intended to be read while stationary, allowing riders to pause, orient themselves, and plan a route through the broader network.

Placement Principles and Rules

1. Trail Junction Signs will be installed at major trail junctions and hub locations where multiple route options exist and riders are likely to stop, including:
 - Major trail junctions
 - Shuttle drop-off / pick-up locations
 - Other strategic decision points where users commonly re-route or choose between multiple trail options
2. Trail Junction Signs should be positioned to support safe stopping and reading:
 6. Located off the riding line with adequate standing space so users can gather without obstructing traffic
 7. Placed where they are highly visible on approach, but not so close to the junction that they create a hazard or visual clutter
 8. Oriented for legibility (clear sightlines, minimal competing signage in the immediate field of view)

Sign Information

Trail Junction Signs will present the full MTB trail network map, simplified for on-site readability. The diagram shows the Trail Junction Signs for the project.

Content will include:

- Trail junction name
- A full network map with a clear “You are here” marker
- A zoomed-in inset map showing the trails accessible from the specific junction where the sign is located
- Trail names and trail difficulty indicators
- Key nodes (e.g., trailhead, junctions, shuttle point, amenities where relevant)
- Clear representation of network structure and how trails connect (so riders can plan complete loops, shuttle runs, or point-to-point rides)
- QR code for Trailforks online maps
- Emergency services and location information – What3Words



Wayfinding Totems

Purpose

Wayfinding Totems provide simple, fast confirmation at trail entry points, and clear operational and safety messaging across the trail network. These signs are designed to be read quickly and consistently, giving riders confidence that they are entering the correct trail and travelling in the intended direction. They also support predictable rider behaviour, reduce potential conflicts between trail users, and communicate simple rules or warnings where riders must adjust speed, direction or awareness.

At Smithfield MTB Park, these signs primarily address trail navigation and flow management, ensuring riders understand how to safely navigate the network.

Placement Principles and Rules

Wayfinding Totems should be installed where users have sufficient time to see, interpret, and react to the message while travelling at typical trail speeds. Signs should be clearly visible from the approach direction and not obscured by vegetation, terrain or other infrastructure.

Principles include:

1. A Wayfinding Totem must be installed at the entry to every trail so riders receive confirmation at the moment of commitment. Where two trails commence from the same location, signing may be configured to include both trails on the same totem, provided the outcome remains clear and unambiguous.
2. Locate signs in advance of the trail entry, allowing riders time to adjust behaviour.
3. Position signs to be visible on approach at the rider's angle of vision, without requiring riders to stop on the riding line.
4. Signs are placed to minimise hazards and avoid creating obstacles within the trail corridor or likely rider fall zones (where practical).
5. Maintain consistent messaging and iconography across the network to support rapid recognition.
6. Keep messaging simple and concise, prioritising the most critical safety information where multiple messages could occur.
7. A Wayfinding Totem should be placed at any point of uncertainty, especially on more remote trails. For example, at a crossing of an old management vehicle track.

Sign Information

The information provided on most totems is relatively straightforward, with the primary use of symbols to convey the required information.

For Trail Entry Totems, each sign will include:

- Smithfield Mountain Bike Park identity
- Emergency contact number (000) and location specific emergency information (What3Words)
- A Trail Icon that communicates:
 - Trail graphic – a distinctive visual element representing the character or theme of the trail
 - Trail name – clearly displayed and legible at typical viewing distances
- A directional arrow indicating direction of travel and trail difficulty rating – as per the AusCycling Trail Difficulty Rating System

Where two trails are signed on one Wayfinding Totem, the presentation must maintain clarity so riders can immediately distinguish between the two trail options (trail name + difficulty + arrow for each).

This format allows riders to quickly recognise trails through a combination of icon, name and colour supporting intuitive navigation throughout the network.

The diagram adjacent shows the Wayfinding Totem for the project.

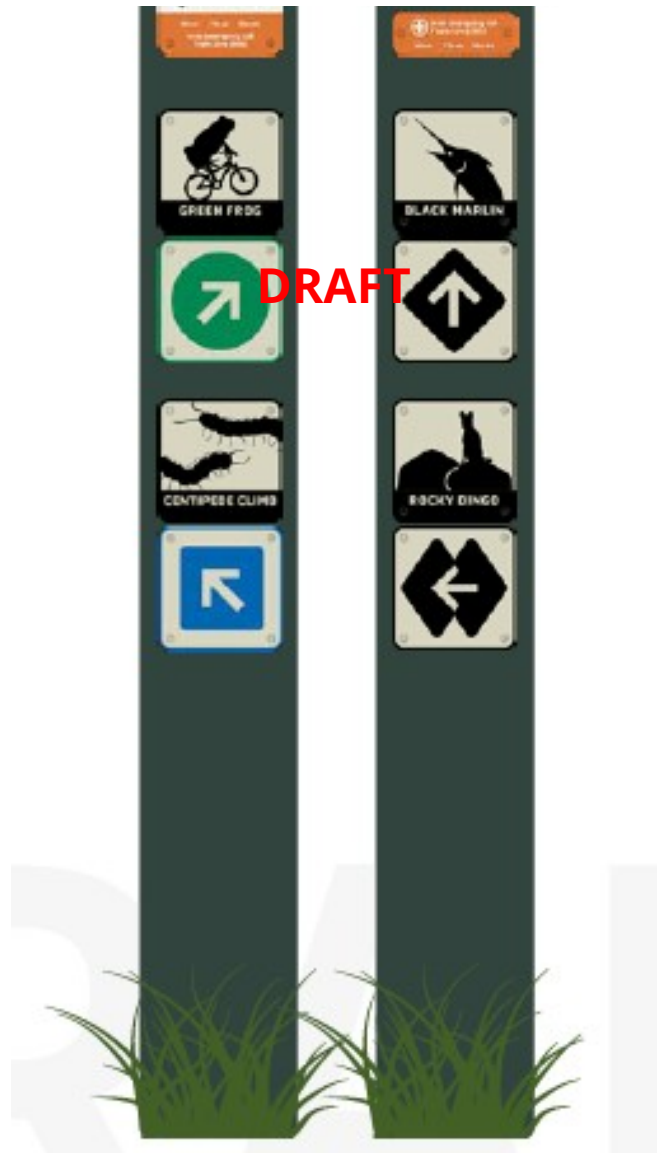
Wayfinding Totem Sign Types

Trail Entry Totem Sign

Trail Entry Signs are intended to provide simple, fast confirmation at trail entry points. These signs are designed to be read quickly and consistently, giving riders confidence that they are entering the correct trail and travelling in the intended direction.

Information Totem Sign

Information Signs are intended to provide simple, fast information at specific locations along the trail. There are several types of information signs that may be used on the wayfinding totems for the project including safety, identity, emergency, estate type and directional signs.



Wayfinding Totem Sign Symbols

QPWS&P Symbols

QPWS&P symbols will be prioritised wherever possible for general trail messaging, safety communication, and operational signage. These symbols are part of the established QPWS&P signage system and are designed to provide clear, widely understood visual messages.

Using the standard symbol library ensures the signage system remains consistent with other Queensland park environments and aligns with recognised visitor expectations.

Custom Symbols

Custom symbols may be developed where a suitable QPWS&P symbol does not exist for a required message. The use of custom symbols will be kept to a minimum to maintain visual consistency with the QPWS&P signage system.

Where custom symbols are introduced, they should follow the design principles of the QPWS&P symbol set, including simplicity, strong contrast, and clear recognisability at a distance.

Custom pictograms will primarily be used for trail identification graphics or specialised operational messages unique to the Smithfield MTB Park trail network.

Custom pictograms may arise during the design and construction process. Below are the anticipated custom pictograms at this stage of the project.



Timber Plank Signs

Purpose

Timber Plank Signs provide clear operational and safety messaging across the shuttle network. These signs inform riders of shuttle pick up / drop off points, helping to understand vehicular movements, support vehicle behaviour and reduce potential conflicts with trail users.

At Smithfield MTB Park, these signs primarily address shuttle pick up / drop off points, ensuring both riders and shuttle operators understand how to access this service.

Placement Principles and Rules

Timber Plank Signs should be installed where users and drivers have sufficient time to see the message while travelling at typical trail or vehicle speeds. Signs should be clearly visible from the approach direction and not obscured by vegetation, terrain, or other infrastructure.

General principles include:

1. Locate signs in advance of the location, allowing riders or drivers time to adjust behaviour.
2. Position signs on the natural approach line of riders or vehicles to align with typical sightlines.
3. Avoid placing signs where they could create an obstacle or hazard within the trail corridor or vehicle path.
4. Maintain consistent messaging and iconography across the network to support rapid recognition.
5. Keep messaging simple and concise.

Sign Types / Information

Shuttle Drop-off Signs

Shuttle Drop-off Signs identify locations where shuttle vehicles unload riders and bikes. These signs guide shuttle drivers to the correct unloading location and help riders understand where to safely disembark and access the trail network.

Shuttle Pick-up Signs

Shuttle Pick-up Signs identify locations where riders wait to be collected by shuttle vehicles. These signs help riders find the correct pick-up point and support orderly queueing and safe interaction between riders and vehicles.

The following diagram shows the Timber Plank Signs for the project.

