

Northam greyhound track upgrade Report 7 – Review of the proposed refurbishment

By Prof David Eager and Imam Hossain

14 March 2021



Executive summary

The purpose of this Report was to review the proposed refurbishment of the Northam greyhound track for Racing and Wagering Western Australia (RWWA).

It was concluded that the proposed refurbishment was a cost-effective vehicle for improving the welfare and safety of the greyhounds racing and trialing at the Northam greyhound track in the short-term. Coupled with regular laser grading the greyhounds will be provided with a consistent track surface upon which to race and trial.

Other options for Northam greyhound track involved costly building works. The proposed refurbishment provides RWWA with a temporary solution while the Mandurah track undergoes a major rebuild.



Contents

1	General	3
2	Track shape	3
3	Discussion	4
4	297 m Start	4
5	509 m Start	5



1 General

UTS was engaged by Racing and Wagering Western Australia (RWWA) to conduct reviews of the Cannington, Mandurah and Northam greyhound tracks.

2 Track shape

Figure 1 is a David Allan Consulting Engineering Pty Ltd plan of the proposed upgrade of the Northam greyhound track dated 23 November 2020. UTS was asked to provide an opinion on this proposed refurbishment.



Figure 1: Northam greyhound track plan view of the proposed upgrade. Source: David Allan Consulting Engineering Pty Ltd, 23 November 2020.



3 Discussion

The proposed refurbished Northam greyhound track has two starts, namely: 297 m and 509 m.

This track is a traditional track ie two 50 m semicircles joined by two 55 m straights (with no transitions in the horizontal plane).

Both bends have an 8% camber and 6 m track width.

The home straight has a 5% camber and the back straight has a 4% camber.

There are vertical transitions into and out of each bend.

4 297 m Start

The 297 m start precedes the back straight and is located in the north western vertical transition areas of the northern bend.

Upon exiting the 297 m boxes on the tail of the northern bend the greyhounds take a few strides on a level track before they drop approximately 350 mm as they transverse across the track and enter the back straight.

The 40 m back straight and the 35 m south western transition provide an acceptable running distance for the greyhounds, on average, to sort themselves out before they enter the constant radius southern bend.

The 35 m south western transition serves the purpose of preparing the greyhounds for the constant 8% camber on the constant radius northern bend.

At 100 m from the finish post the south eastern transition commences and serves the purpose of softening the camber from 8% to 5% before the straight.

At 15 m before the finish post which is still on a straight section of the track the north eastern camber commences and continues for 35 m taking the greyhounds from 5% to 8%.

The greyhounds are kept at constant 8% until just before the catching pen where, on average, their speed has dropped to a level where the effect of the centrifugal force is negligible.



5 509 m Start

The 509 m start precedes the home straight and is located in the south eastern vertical transition areas of the southern bend.

Upon exiting the 509 m boxes on the tail of the southern bend the greyhounds take a few strides on a level track before they drop approximately 300 mm as they transverse across the track and enter the home straight.

The 40 m home straight and the 35 m north eastern transition provide an acceptable running distance for the greyhounds, on average, to sort themselves out before they enter the constant radius southern bend.

At 15 m before the finish post which is still on a straight section of track the south western camber commences and continues for 35 m taking the greyhounds from a camber of 5% to 8%.

The greyhounds are kept at a constant 8% around the northern bend. At approximately 53 m before the back straight the north western transition commences and transitions the greyhounds from an 8% camber to 4% as they enter the back straight.

The back straight is approximately $40 \,\mathrm{m}$ in length and a constant 4% camber.

At 15 m before the southern bend the south western camber commences and continues for 35 m taking the greyhounds from 4% to 8% and into the bend.

The 35 m south western transition serves the purpose of preparing the greyhounds for the constant 8% camber on the constant radius northern bend.

At 100 m from the finish post the south eastern transition commences and serves the purpose of softening the camber from 8% to 5% before the home straight.

At 15 m before the finish post which is still on a straight, the north eastern camber commences and continues for 35 m taking the greyhounds from 5% to 8%.

The greyhounds are kept at constant 8% until just before the catching pen where, on average, their speed has dropped to a level where the effect of the centrifugal force is negligible.