The design concept development of the Brunswick Velodrome Bike Park has been a gradual and carefully considered one since its inception by Brunswick Cycling Club (BCC) in 2020.

Velosolutions Australia have worked with BCC and Merri-bek City Council to develop the Masterplan for the infield area of the velodrome to incorporate the pump track, jumps track, beginners and adaptive pump track and plaza area for bicycle coaching, events and improved operation of the BCC weekly operations on the banked track. The retention of a flexible area of open grassed area with new mounded features will allow various disciplines of cycling, including cyclocross and MTB courses and practice but also public use of the facility for recreation and dog walking as is already popular.

The design has developed to consider these issues below, during which the layout has been explored for 2 opposing site layouts in response to feedback from all stakeholders as described alongside those issues:

- Existing banked track operation
 - Safe access across the banking to the infield_ BCC are concerned that clear visibility is provided for the crossing point given its increase in traffic to the new facilities.
 - Visibility of all points of the banked track from the club pavilion, its terraces, the infield race management areas and particularly the race judging stand at the start finish line_BCC have reviewed the locations and the heights of the new facilities, concluding that the best location for the raised pump track and jumps track would be nearest the pavilion, using the fall of the site to sink these areas into the existing ground level.
 - The improved crossing chute paving proposed linking each side of the banked track for event use_BCC have reviewed the alignment of this pathway to optimise the safe use of this for its weekly race operations and for larger events. This can also be enjoyable for public recreational cycling and coaching, providing reliable riding route across the park.
 - Judging and race operation_a clear view of the start/finish line and straight is proposed to be provided as a raised podium also usable by the public for resting on seating under its shelter.
- Adjacent Residents habitability
 - Views of the velodrome_current views of this green space were discussed given the introduction of proposed paved bike tracks nearest the apartments overlooking the west end of the infield. The suggestion to mirror the site plan was explored and the effects on all issues was examined.
 - Noise from the new bike facilities_expected noise from riders on the new facilities has been managed by use of natural and resilient turfed finish suitable for safe use of the tracks and recovery from heavy use.
 - Encouragement of unsociable activity_the concern for increased after hours problems was examined for each site layout. Clear visibility is key to public surveillance of all areas and low level lighting is to be considered within the infield park.
- Drainage and construction

- Currently boggy conditions on the infield_proposed works would include installation of effective stormwater drainage for all new areas.
- Construction access for the infield_site layout and minimisation of wasteful excavation and material removal and importation.
- Reuse of existing services and material.
- Safety in Use
 - Appropriate facilities_the wide range of possible features explored in the masterplanning was refined to allow minimal management in public use and a safe progression of riding skills:
 - The air bag and its 'drop-in' tower have been considered as a future opportunity requiring expert management, allowing the better location of the beginners/adaptive pump track.
 - Lower platforms for pump track and jumps track for safe and easy access for all users.
 - Sand pit for CX has been removed to ensure no transfer of slip hazard to other areas.
 - The buffer zone of turfing around the perimeter of the infield has been widened to 4m minimum to allow greater safety and separation of all track areas and for recreational running and walking.
 - Banked track crossing_the gate control onto the banked track has been proposed as an 'airlock' approach to ensure riders stop and look before entering the banked track and infield.
 - Bridge crossing_installation of a high level bridge was explored and considered inappropriate due to excessive cost, engineering complication and intrusive effect on visibility within the velodrome. Speed control of riders entering and leaving onto the cycle path was also considered a risk.
 - The tunnel proposed as another crossing of routes within the infield was considered a risk in use and after hours due to lack of clear sightlines
 - Infield Amenities
 - Storage proposed within the infield was considered unnecessary in addition to that already available in the Club pavilion and in the existing kiosk, now to be renovated.
 - Drinking fountains_to be installed on central plaza for public use, with simple extension from existing supply
 - Seating_requested by many respondents now proposed on each track area.
 - Shade/shelter_also widely requested so to be provided in each track area and for club event management positions.

The Concept Design presented has compared Eastern and Western location of the infield facilities for the raised paved track areas of Zone A with the following outcome decided:

 outlook onto grassed area retained by turfing of all unpaved surfaces: both West and East option

- noise issue concern over paved pump track area reduced by undulation of new soft landscaped landforms:
 - West is best
- flexible grassed space in Eastern end (Zone C) for CX, MTB and event and spectator use on lower half of infield:
 - East is best
- best views of popular pump and jump track areas from entry and pavilion, with best activation of Western end of the velodrome and adjacent cycle path:
 - West is best
 - best views between banked track, judging platform and pavilion and terraces :
 - o West is best
 - lower level of pump track area possible in relation to banked track and pavilion terraces due to existing lower level of Eastern infield and duckboard:
 - West is best
 - easier new drainage solution using existing stormwater outlet due to lower infield level and proximity to creek outlet:
 - \circ West is best

Conclusion : West is best for Zone A facilities as shown in the Concept Design.