3.2 North East Link: Spark Urban Design and Landscape Plan Submission

Executive Summary

Purpose

This report presents Council's draft submission (**Attachment 1**) to the Spark consortium (Spark) developed North East Link (NEL) Tunnels Urban Design and Landscape Plan (UDLP) public exhibition for consideration and endorsement.

Background

Spark was awarded the (NEL) tunnels (central) package contract in October 2021. The package includes the detailed design and construction of the NEL twin tunnels and the concept design of the northern and southern interface zones. The southern interface zone includes the NEL, Eastern Freeway and Bulleen Road interchange, the western third of the Koonung Creek Reserve (KCR), parts of the Freeway Golf Course (FGC) and the Boroondara Tennis Centre land.

The NEL Incorporated Document (ID) requires a UDLP be prepared "prior to the commencement of development of permanent above-ground buildings or structures" and "must be prepared to the satisfaction of the Minister for Planning".

Spark developed a UDLP for the tunnel (central) package and southern interface zone and put it on public exhibition from 11 to 31 May 2022 (21 calendar days), the minimum statutory exhibition period. Copies of the UDLP were put on display at Camberwell and Balwyn libraries and at the Greythorn Community Hub.

The UDLP includes a design for the western section of the KCR. During the public exhibition period, Council conducted a community consultation to gather feedback on the use of the reserve, how it is valued and future ideas for the reserve. A summary report from this consulation can be seen in **Attachment 2**.

The UDLP document and attachments have been reviewed by Council officers and urban design and landscape architecture consultants Lat Studios. These reviews, along with conversations with residents and the findings from Council's KCR survey have informed Council's draft submission (**Attachment 1**).

Key Issues

Council officers have reviewed the UDLP and have concerns about the quality of the UDLP as well as the design solution it presents.

Key issues include:

Size and complexity of the UDLP, as well as the very limited time to assess the documents.

- Errors and missing detail (including key Boroondara visualisations and viewpoints).
- Failure to reference Council plans and policies.
- The complexity of the southern interchange for all road users, including pedestrians and cyclists.
- The footprint and visual impact of the southern interchange affecting sensitive residential areas and open space in Balwyn North.
- Failure to future proof cycling and pedestrian paths through mode separation and on-road protected cycling infrastructure.

- The height and likely visual impacts of the southern ventilation structure.
- The inclusion of a KCR concept design in the UDLP for approval by the Minister head of the 2023 masterplanning process agreed to by the State and Council in 2020.

Next Steps

Should Council choose to endorsed the submission, it will be sent to the Minister for Planning, Minister for Transport Infrastructure, Spark CEO, NELP CEO and others as detailed below. The endorsed submission will be uploaded to Council's website.

Officers' recommendation

That the Services Delegated Committee resolve to:

- 1. Endorse the draft submission (**Attachment 1**) to the Spark developed North East Link Tunnels Urban Design and Landscape Plan (UDLP).
- 2. Write to the following to advise of this resolution and the submission:
 - a. The Hon. Richard Wynne, MP, Minister for Planning.
 - b. The Hon. Jacinta Allan, MP, Minister for Transport Infrastructure.
 - c. Mr Duncan Elliott, CEO North East Link Program.
 - d. Mr Paul Yerondais, CEO Spark.
 - e. Members of State Parliament with seats representing Boroondara

Responsible director: Daniel Freer, Director Places and Spaces

1. Purpose

The purpose of this report is to present the draft submission (**Attachment 1**) to the Spark consortium (Spark) prepared North East Link (NEL) Tunnel Urban Design and Landscape Plan (UDLP) for consideration and endorsement.

2. Policy implications and relevance to community plan and council plan

This report is consistent with the Council Plan 2021-2025 and the Boroondara Community Plan 2021-2031, in particular the following themes:

- Your Parks and Green Spaces
- The Environment
- Getting Around Boroondara

3. Background

The NEL project is separated into five works packages. The Spark consortium (Spark) was awarded the central (tunnel) package in October 2021. Spark is responsible for the detailed design and construction of the NEL twin tunnels and the concept design of the northern and southern interface zones. The southern interface zone includes:

- The NEL, Eastern Freeway and Bulleen Road interchange
- The Eastern Freeway from Musca Street Reserve in the west to the Estelle Street footbridge in the east
- The western third of the Koonung Creek Reserve (KCR)
- Part of the Freeway Golf Course
- The Boroondara Tennis Centre land

Requirement for the UDLP

The North East Link Incorporated document (GC98) facilitates the delivery of the NEL, with clause 4.9.1 setting out requirements for the preparation of a UDLP prior to the development of any permanent above ground structures and buildings.

UDLPs must be approved by the Minister for Planning. The UDLP must respond to specific principles, objectives and place specific guidelines set out in the NEL Urban Design Strategy (UDS). It must also respond to the Environmental Management Framework (EMF). The NEL UDS and EMF were approved by the Minister for Planning as part of the NEL project approval process.

The Spark Urban Design and Landscape Plan (UDLP) and public exhibition

The Spark UDLP is 519 A3 pages and includes:

- UDLP report
- Attachment 1: Urban Design and Architecture
- Attachment 2: Landscaping Design

- Attachment 3: Urban Design Visualisations
- Attachment 4: Urban Design overshadowing assessments

Spark released their UDLP for public exhibition on the 11 May 2022. The public exhibition period ran for the minimum statutory period of 21 calendar days, closing on the 31 May 2022.

Hard copies of the UDLP and fact sheets were on display at Camberwell Library, Balwyn Library and the Greythorn Library Lounge for the public exhibition period.

Koonung Creek Reserve

In 2020, the State and Council committed to developing a masterplan for the Koonung Creek Reserve (KCR) in partnership with the community. The masterplan will be the overarching plan for the reimagined KCR once the NEL is complete sometime in 2028. The master planning process will begin in early 2023.

The UDLP includes a concept design for the western portion of KCR and shows the amount of KCR land required the widening of the Eastern Freeway. The design features an ephemeral creek and two large water bodies to treat stormwater run-off from the widened Eastern Freeway to protect the new road infrastructure from flooding.

Council's submission to Spark's UDLP

Council engaged multidisciplinary urban design and landscape architecture consultancy Lat Studios to review of the UDLP. Subject matter experts from across Council also provided feedback on the UDLP, including officers from Strategic Planning, Parks and Open Space, Capital Projects and Environment and Sustainability.

Council's draft submission (**Attachment 1**) prepared by the Major Project Interface Team collates feedback from the community, Councillors, officers, and Lat Studios.

4. Outline of key issues/options

UDLP compliance with NEL GC98 Incorporated Document

Officers from Strategic Planning and the Major Project Interface Team have reviewed the NEL Incorporated Document (ID) and confirm that the NEL Tunnels UDLP technically complies with the requirements of the ID.

UDLP quality and structure

The UDLP quality, size and scope made it challenging to review and community members acknowledged this challenge, particularly within the short public exhibition period.

Feedback included in the draft Council submission (**Attachment 1**) provides commentary on the UDLP, the process and specific concerns associated with the urban and landscape design. General feedback themes include:

- Documents were not easy to use requiring constant cross referencing to the 2020 endorsed Urban Design Strategy (UDS) and moving between the UDLP report and attachments and within attachments.
- It was unclear whether the UDLP was informed by Council strategies and plans as there were no references to these in the UDLP. At a minimum, the UDLP should refer to the Community Plan (2021 to 2031).
- Language used in the report is at times pretentious, difficult to understand and sometimes very vague and generalised.
- There are errors in the UDLP such as missing words, incorrect detail and inconsistencies across figures and maps.
- The UDLP has no visualisations or renders from areas of Boroondara most significantly impacted by views to elevated roads and ramps.
- There is no attention given to design challenges and any improvements to reduce impacts at the southern interchange, where sensitive residential areas are located.

Specific design concerns

Complexity of the southern interchange:

- Simplification of the Manningham Road interchange design has improved open space benefits in the Manningham municipality but resulted in a complicated southern interchange and negative impacts for Boroondara residents.
- The interchange is confusing and will be challenging for all road users to safely navigate.

Reduced footprint but impacts remain at sensitive residential/open space interface:

- Spark has minimised the land take from the Freeway Golf Course for the southern interchange.
- No attempt has been made to reduce the bulk, scale and visual intrusion of the southern interchange for critical southern interfaces with the Koonung Creek Reserve, Belle Vue Primary School and nearby residential areas.

Views to infrastructure from Balwyn North:

- The southbound NEL to westbound Eastern Freeway ramp is elevated above Bulleen Road, generating significant visual intrusion and impacts for residents on the south of the Eastern Freeway and other sensitive receptors (i.e. Belle Vue Primary School).
- The satin finish metal and PV panel clad southern ventilation structure is 53m tall, with the UDLP's helicopter or 'top down' artist's impressions deliberately minimising the dominance and impact of the structure.

Cycling and pedestrian paths – missed opportunity to future proof active transport routes:

- Spark's design does not include mode separated paths in Boroondara despite our community preferring them and current shared path volumes warranting them.
- Lighting on shared use, cycling and walking paths is not included in the design either despite support for lighting along paths.

Noise walls:

- Traffic noise is already an issue for residents living near the Eastern Freeway and the UDLP does not acknowledge this.
- Overshadowing from noise walls will be significant throughout the year.
- Some noise walls will include panels of coloured acrylic to allow light to filter through to vegetation, however no information is provided about whether vegetation will be able to grow next to these noise walls.

Koonung Creek Reserve (KCR):

- The UDLP does not acknowledge the commitment the State made to develop a masterplan for the KCR in partnership with Council and the community.
- The feedback from Council's community engagement survey on the KCR has informed the submission.

Vegetation, biodiversity, and wetlands:

- The UDLP must reference the Boroondara Canopy Replacement Plan to guide NEL-funded tree planting in parks and reserves.
- Replacement indigenous vegetation will be planted on the south side of new noise walls, leading to concerns about the ability of vegetation to survive in these locations.
- The UDLP should restore the Koonung Creek from the project interface to the Yarra River to significantly improve biodiversity outcomes.

5. Consultation/communication

Spark led UDLP consultation

The UDLP was available to download and view on the Engage Victoria website from 11 May to 31 May 2022, with survey and free form response links open until 5pm Tuesday 31 May 2022.

Hard copies of the UDLP were available at the Camberwell and Balwyn libraries, as well as the Greythorn Library lounge. The UDLP was also available at the Watsonia and Rosanna libraries, Council venues in other municipalities and the two NEL hubs (Watsonia and Bulleen).

Spark hosted in-person information sessions at the Veneto Club on Saturdays during the public exhibition period.

Council led Koonung Creek Reserve survey

Council ran a community engagement survey (concurrent with the UDLP public exhibition) to gather information and opinions from the community about the KCR. The community consultation summary report which presents and analyses the survey findings can be seen in **Attachment 2**, with a brief summary below.

- The consultation was Council-branded and hosted on the Engage Boroondara website from the 12 to 25 May 2022.
- The survey was conducted in English and Simplified Chinese.
- A total of 268 responses were received, including 16 responses in Chinese (Mandarin).
 - o 68% of survey respondents were from Balwyn and Balwyn North.

The survey findings demonstrated the importance of the KCR to the community for a variety of activities and for the community's health and wellbeing.

Most common feedback on the community's use of the KCR were walking the Koonung Creek Trail, walking on informal paths and in open space, dog walking (on and off leash), playing and relaxing in the open space and recreational cycling. Respondents also commented on using the KCR for nature-based activities such as bird watching.

Facilities at the reserve including the toilet at the playground, and the playground were considered important. Respondents noted that having a toilet(s) in the reserve increases the amount of time people can spend there. The playground was considered an important community asset and meeting place for families.

When asked if respondents preferred shared or mode separated paths, 83% of respondents nominated a preference for mode separated paths. Council's submission strongly advocates for mode separated paths.

The survey also asked for ideas on the look and feel of the reserve following NEL works. Common themes were green open spaces, biodiversity and natural environment, a variety of recreation areas (more recreation spaces/activities for children and teenagers such as nature play, rope walk lines, beach volleyball court), separate cycling and walking paths, and better lighting in the reserve to increase safety.

Findings from the survey report have been incorporated into Council's draft submission. They will be used to inform the development of the masterplan for the KCR in early 2023.

6. Financial and resource implications

Council incurred costs associated with engaging consultants to review and prepare a report on the UDLP and to deliver the Koonung Creek Reserve community engagement survey and report.

7. Governance issues

The implications of this report have been assessed in accordance with the requirements of the Victorian Charter of Human Rights and responsibilities.

The officers responsible for this report have no direct or indirect interests requiring disclosure.

8. Social and environmental issues

The social and environmental issues associated with this report are mixed. The report seeks to inform councillors of the UDLP public exhibition and review to highlight potential issues and opportunities that will improve the UDLP and design outcomes for the Boroondara community.

Manager: Clare Davey, Senior Coordinator, Major Projects Interface

Report officer: Andrea Lomdahl, Senior Transport Planner

Spark - Central (tunnels) package - Urban Design and Landscape Plan Submission from Boroondara City Council Date: XX June 2022

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Introduction

Thank you for the opportunity to provide input to the central (tunnels) package Urban Design and Landscape Plan (UDLP) developed by the Spark consortium (Spark) for the North East Link (NEL) project. We acknowledge the role the North East Link Program (NELP) has had in the development of the UDLP and appreciate the extension to the public exhibition period both NELP and Spark provided Council to ensure good and transparent governance processes were followed.

With assistance from Lat Studios, an urban design and landscape architecture consultancy, and our expert witness reports in urban design and landscape presented at the 2019 Inquiry and Advisory Committee (IAC) panel hearing, we have focussed our commentary on elements of the proposal which will affect our community both in and outside the Boroondara Council area. Along with walking and cycling infrastructure and the Motorway Control Centre (MCC), the four UDLP areas of impact in Boroondara are:

- 1. Southern ventilation structure.
- 2. Bulleen Road, North East Link and Eastern Freeway interchange.
- 3. Koonung Creek Reserve.
- 4. Freeway Golf Course.

Where we have identified issues, we have endeavoured to highlight the opportunities these issues present Spark, NELP, Council and/or the community to improve the project and generate a better outcome.

A common theme running through the issues identified and discussed is the lack of human focussed response in the design. This is apparent in the helicopter, 'top down' viewpoints used throughout the UDLP and the lack of consideration given to the experience of nearby residents and other sensitive receptors. The design is described in the UDLP report section as being sensitive to its surrounds and being enveloped in location appropriate landscaping to minimise its dominance. When considered as a set of design plans only and without the UDLP report text (which is often pretentious and vague), the design response is best described as dominant and forceful. This is clearly demonstrated by the design of the southern and northern ventilation structures which dominate the skyline at 53m tall, gleaming and shining in the sun and lit by a skirt of LED lights at night.

This document and appendices, when read together, form Council's submission to the Spark UDLP public exhibition exercise. This submission was considered and endorsed at the 20 June 2022 Services Delegated Committee meeting of Boroondara Council.

The UDLP

The UDLP presents a concept landscape design and well defined road design focussing on the drivers experience and ignoring that of nearby residents, visitors to parks and reserves, golfers and users of the neighbouring school and public sports facilities. The design is forceful and lacks human eye level viewpoints, especially for sensitive receptors and of imposing structures. It is the very hungry caterpillar of road designs and little care or attention has been shown for the sensitive surrounds, parks and reserves.

The UDLP claims to be exactly what the title says - an urban design and landscape plan. It is, however, the first opportunity the community has had to view the road design for the NEL and the Eastern Freeway. If the community read only the title and decide they do not want to look and urban design and/or landscape plans, they will miss their only opportunity to review and influence the road and noise attenuation measure designs.

The lack of reference in the UDLP to Boroondara plans, policies and strategies does little to build trust in the Spark design. As an absolute minimum, the Boroondara Open Space Strategy and Boroondara Tree Canopy Replacement Plan must be referenced within the UDLP.

Public exhibition

We acknowledge the 21 calendar day public exhibition period (11 to 31 May 2022) complies with the minimum public exhibition period defined by the North East Link Project Incorporated Document.

The links to download and view the UDLP on the Engage Victoria website were not live until mid-morning on Wednesday 11 May 2022. The survey and response forms closed promptly at 5pm on Tuesday 31 May 2022.

We consider the public exhibition duration to be inadequate for a UDLP of this size, scope and influence. This concern is exacerbated by the late 'go live' of the UDLP download links and prompt closure of the survey and response forms.

Scope, scale and influence

This is the first of five UDLPs for the NEL and will greatly influence the following four UDLPs and the design solutions they present.

Spark has consistently advised it is developing a preliminary design only for the southern interchange and some of the Eastern Freeway and this design can and will be altered by the southern, east and west works package alliances. While this might be true and possible for the landscape design elements, the road geometry and alignment along the length of the Eastern Freeway and at the interchange are defined and locked in by the Spark preliminary design.

The Eastern Freeway width, number and alignment of lanes, location of barriers, arrangement and location of ramps, noise walls and pylons to be covered by the southern, east and west works packages and associated UDLPs become non-negotiables as a direct result of Spark's preliminary southern interchange and Eastern Freeway design. The land take from the Koonung Creek Reserve is set by the Spark UDLP.

The size of the document, 519 A3 pages, presented an almost insurmountable challenge to anyone attempting to review it within the allocated 21 calendar days.

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Community feedback

A number of community members contacted Council to express their concerns about the very limited public exhibition period and to advise that they would attempt to provide a submission but it would be very superficial.

Members of the NELP Southern and Northern Community and Business Liaison Groups (CLG and BLG) all expressed grave concerns about the short duration of the public exhibition period. Members of these four groups were invited to request an extension through the CLG and BLG chair.

While some members did request an extension, they did not hear back from NELP or Spark by the 5pm, Tuesday 31 May 2022 deadline.

Bulleen Park and Ride UDLP

It is informative to compare the Spark UDLP and public exhibition period with the Bulleen Park and Ride UDLP (BPR UDLP) developed by NELP.

The BPR UDLP was 259 pages, approximately half the size of the Spark UDLP. The subject matter and scope were limited to the Bulleen Park and Ride proposed to be located on the then Koonung Reserve in Manningham. Given the very focussed scope of the document, the influence of the BPR UDLP was limited to the facility itself and nearby streets.

The BPR UDLP is significantly smaller in size, scope and influence than the Spark UDLP. The public exhibition period for the BPR UDLP was 36 calendar days from 2 November 2020 to 7 December 2020.

NELP advised the longer public exhibition period was because of the Victorian lockdown and Covid restrictions in place at the time of exhibition. This is despite most lockdown restrictions lifting on 28 October 2020. No matter the reason for the longer public exhibition period, the difference - 15 calendar days - is stark and incredibly disappointing.

Spark could have chosen to have a longer public exhibition period but very deliberately did not. This calculated choice does little to build trust and respect between Spark, the community and stakeholders. It will result in limited, rushed and superficial feedback from stakeholders on a critically important document.

Adherence to the Environmental Performance Requirements (EPRs)

Clause 4.9.3 of the project's Incorporated Document requires the UDLP submitted to the Minister for Planning be accompanied by an explanation demonstrating how the UDLP will comply with the EPRs detailed in the approved Environmental Management Framework (EMF).

Section 6 of the Spark's UDLP details the EPRs and their responses¹.

Spark's responses are very high level, do not always fully or properly respond to the EPRs and note further site investigation works will be required during the development of preliminary design. These investigation works include topographic surveys, utility proofing, arborist and ecological surveys, traffic surveys, acoustic modelling and the like to further inform the EPR responses.

In some cases, the EPR response reads more like a statement of commitment to comply with EPRs rather than demonstrating compliance. This makes it challenging for stakeholders and the

¹ Urban Design and Landscape Plan, 6.0 Compliance with Environmental Performance Requirements, Pages 245 to 305.

community to assess how Spark and its design will meet the EPR obligations. It raises the question of 'how can the Minister for Planning approve this section of the UDLP when this is the case?'.

Appendix B sets out Council's detailed comments on Spark's response to the EPRs and requests for further information and details, including:

- Seeking an explanation about the focus on design achievements in Manningham rather than discussing the design response to minimise impacts at sensitive and challenging interfaces or responding to specific requirements set out in the EPRs.
- Asking Councils be acknowledged as critical stakeholders through design and construction and ensuring they are consulted appropriately about relevant project plans (e.g. CEMP, WEMP, CCP, OEMP) and reports (e.g. Arboriculture, Ecology, flood modelling, traffic modelling etc).
- Ensuring best practice approaches during operations, for example the tagging of trees with unique IDs during arboriculture assessments to avoid trees being accidentally felled.
- Timely provision of community notifications and ensuring Councils are informed of community complaints recorded in the Complaints Register.
- Release of summary reports to the public, especially those relating to noise (construction and operation), air quality and environmental compliance where there is heightened community concern.
- Ensuring that Council is made aware of any contaminated spoil found on Council managed land and provided with details of EPA approvals for removal and evidence of proper disposal (i.e. copies of landfill gate tickets).

Detailed comments on the UDLP

Please see Appendix C for detailed comments on the UDLP. We welcome Spark's consideration of these detailed comments, request timely written responses to each comment and workshops to discuss the comments and Spark's responses.

We look forward to working with Spark through the detailed design phase to enable and ensure design changes incorporate our comments and requests.

Errors in the UDLP

It is unfortunately necessary to list the errors in the May 2022 (public exhibition) version of the UDLP and ask they be fixed in the final version to ensure the UDLP accurately and correctly reflects current conditions. The lack of attention to detail for a document of this significance is frustrating.

See Appendix D for the details of the errors and requested amendments.

Information missing from the UDLP

It is also unfortunately necessary to list the information missing from the May 2022 (public exhibition) version of the UDLP and ask the information is provided in the final version. Providing the missing information will help Council and the community properly understand the impact of the Spark concept design on their neighbourhood, parkland, homes and lives.

See Appendix E for details of the missing information.

Issues and opportunities

We have grouped commentary about the issues and opportunities identified during our review of the UDLP into the four main areas of impact in Boroondara, being:

- 1. The southern ventilation structure.
- 2. The southern interchange/Bulleen Road, NEL and Eastern Freeway interchange.
- 3. Koonung Creek Reserve.
- 4. Freeway Golf Course.

A fifth section provides our comments on the UDLP more generally and in areas outside of Boroondara that influence the design and impact on our community.

Southern ventilation structure

The UDLP describes the southern ventilation structure as "not dominating the skyline"². The UDLP also notes, in response to a key design requirement of "minimising light pollution in the surrounding areas from reflectivity"³, that "low reflectivity materials such as concrete, weathering steel, and matte coloured acrylic, are used for road corridor structures to minimise light pollution"⁴.

The southern ventilation structure, a road corridor structure, is 53m tall, ~55m wide and ~140m long clad in a satin finish metal panel with LED feature lights and PV panels.

For comparison:

- Eastlink tunnel ventilation structures are 45m tall and clad in a decorative non-reflective material.
- The Shane Warne Stand (Great Southern Stand) at the MCG is 45m tall.
- Marvel (Docklands) Stadium is ~57m tall.
- The Colosseum is ~48m tall and ~156m long.

The renders and artists impressions of the structure showing it glinting in the sun during the day and sparkling at night when lit by the LEDs.

The structure is sited between Bulleen Park and Marcellin College's sports grounds. The immediately surrounding area includes the Carey sports grounds, Trinity Grammar playing fields, Freeway Golf Course and Yarra River. All flat and green open space. The land use in the wider area is low height residential and some low height commercial, although the NEL will see much of this commercial land use leave the area.

The suggestion by Spark that their southern ventilation structure does not dominate the skyline is perplexing.

The UDLP does its utmost to give the impression the southern ventilation structure is a diminutive feature. The helicopter viewpoints used for the renders and artists impressions seek to minimise the true scale of the structure. The lack of human eye level viewpoints from neighbouring areas, including Bulleen Park, Trinity Grammar sports fields, Carey sports fields and the Freeway Golf Course, supports the notion Spark are deliberately playing down the visual bulk and dominant nature of their southern ventilation structure.

² Urban Design and Landscape Plan, Response to Key place-specific requirement 1A, Table 36, Page 237.

³ Urban Design and Landscape Plan, Key Design Requirement 20.3, Table 22, Page 185.

⁴ ibid

The UDLP public exhibition and associated feedback presents Spark the opportunity to reduce the scale and bulk of the southern ventilation structure to ensure it sensitively responds to its surrounds and does not dominate the skyline.

EPA works approval assessment

It is noted the Environment Protection Authority Victoria (EPA) works approval assessment report for the road tunnel ventilation system⁵ is based on the reference design, including the ventilation structure reference design detailed in the report as:

- "Two tunnel ventilation structures with two ventilation stacks of 40m in height each:
 - the northern ventilation stack at Blamey Road: two discharge outlets: 40 m2 (primary) and 20 m2 (secondary) respectively
 - the southern ventilation stack at Bulleen Road: two discharge outlets—33 m2 (primary) and 17 m2 (secondary) respectively.
- An emergency smoke discharge structure at Manningham Road Interchange:
 four outlets—20.25 m2, each 4m high above local ground level."

The EPA provided conditional approval for the road tunnel ventilation systems and requires NELP/Spark to provide them the final design of the tunnel ventilation system reviewed by a consultant or engineer with demonstrated qualification and experience in road tunnel ventilation design suitable for the project.

We look forward to NELP and/or Spark responding to the opportunity the EPA has provided to rigorously and independently review and assess the road tunnel ventilation design, with a view to minimise the scale and bulk of the southern ventilation structure, prior to commencing any works.

Bulleen Road, North East Link and Eastern Freeway interchange

The UDLP is, first and foremost, a document seeking to showcase the urban design and landscape concept design of the central (tunnels) works package. Its accidental secondary purpose is to show the NEL road design to the community for the first time.

The commentary included in this document about the road design has deliberately been kept to a minimum. This is done with the hope other comments about urban design and landscape design aspects result in road design changes for the better and the knowledge Council will be invited to review and comment on the detailed road designs.

However, three messages must be made very clear to Spark about their Bulleen Road, NEL and Eastern Freeway Interchange design.

- 1. The design presented in the UDLP fails to address the issues and concerns Council and the community raised during the 2019 IAC panel hearing.
- 2. The design fails to respond to the Minister's assessment of environmental effects. The design does not minimise visual impacts⁶ and is not a nuanced response⁷.
- 3. Spark must review and redesign the interchange to reduce the height, bulk and visual intrusion for all nearby residents.

⁷ ibid

⁵ <u>https://www.epa.vic.gov.au/-/media/epa/files/for-community/current-projects-and-issues/major-projects/north-east-link-project/so1003465-nel-wa-assessment-report.pdf</u>

⁶ North East Link, Minister's assessment of environmental effects, November 2019, Page 35

Spaghetti junction

The Bulleen Road, NEL and Eastern Freeway interchange has been described, without the slightest hint of fondness, by community members and others closer to the project as 'spaghetti junction'. Others have referred to it as 'the very complicated interchange' to highlight the contrast to Spark's Manningham Road interchange they have titled 'the simple interchange'.

The very complicated interchange is a dangerous, confusing and convoluted design for pedestrians, cyclists and drivers.

Scale, bulk and visual impact

The reduced footprint of the very complicated interchange on the Freeway Golf Course is acknowledged. This reduction, however, has come at the expense of residents on the south side of the Eastern Freeway by way of the elevated over Bulleen Road southbound NEL to westbound Eastern Freeway ramp and the FGC reconfiguration by limiting the design footprint to land outside the NEL declared project area.

The UDLP does not present a single human eye viewpoint of the very complicated interchange. The residents do not know what they will see when they look out their front door or front room window. They do not know what or who will be able to see into their homes and their lives. The deliberate choice to only include views from a helicopter and a drivers eyeline ensures the design focuses all attention on the road and the driver. Residents are ignored and reminded their experience of the NEL is not important, not at all, not to anyone.

Spark's literal interpretation of place specific requirement 5K (Minimise overlooking to residential properties located north-east of the Eastern Freeway interchange)⁸ is odd. The requirement was written with the reference design in mind and not the Spark design which has significant overlooking and intrusion into residential properties located to the south of the very complicated interchange. Spark would do well to review the intent of the place specific requirement and apply that intent to their concept design.

Spark must use the opportunity of seeking and receiving public feedback to acknowledge the nearby residents experience of the NEL, ensure their homes and lives are not viewed and viewable and continue to provide the long views of greenery from their front doors and rooms.

Pedestrians

Everyone is a pedestrian at some point in their day, whether it is walking from their front door to their car or home to the bus park and ride. Everyone understands pedestrians are opportunists and do not always behave as road designers want or expect them to.

Every road design needs to be forgiving to mistakes pedestrians, and other road users, make. Every road design needs to ensure all road users will make it home safely. The very complicated interchange design does not do this.

The design forces pedestrians to cross multiple lanes of traffic in multiple stages, to wait in the middle of very busy roads for a green person signal and cross slip lanes, bus lanes and freeway on-ramps angled such that pedestrians are encouraged to look the wrong way for on-coming traffic. It is extremely likely pedestrians will behave outside the way the design wants them to and will make risky moves to get to their bus, get home or to school.

⁸ Urban Design and Landscape Plan, Section 5.3.3, Table 21, Pages 159 & 160

Spark must take the opportunity the draft UDLP presents to rethink and redesign the very complicated interchange to provide a safe, forgiving and easily travelled environment for pedestrians. This opportunity is critically important when the number and age of the children attending the school and school sports fields on both sides of Bulleen Road are considered.

Cyclists

The inclusion of both on- and off-road cycling infrastructure is welcomed and the opportunities Sparks concept design present the cycling community through design refinement are exciting.

All on-road bike lanes, including those through the very complicated interchange, should be properly separated and protected rather than separated from traffic by a 100-150mm thick line of white paint. Cyclists feel and ride with more confidence when properly separated and protected lanes are provided, with more people cycling on this style of bike lane.

As discussed elsewhere in this document, off-road paths must be mode separated to improve safety for all users and provide a high quality riding experience.

Drivers

For a driver of any age, not just older drivers, the very complicated interchange will be almost impossible to navigate. The design effectively encourages drivers to weave through double turn lanes to access the freeway on-ramp and offers an easy opportunity to drive onto the busway by mistake.

No amount of signage will assist drivers as they manoeuvre through the intersection.

The very complicated interchange must be redesigned to make it a simpler, easier and safer interchange for all road users. Spark must take this opportunity and use it to relocate the northerly ramps back to the Manningham Road interchange/the simple interchange.

Noise attenuation

The inclusion of noise walls on all elevated road structures is appreciated as traffic noise is an ongoing concern for residents living near the Eastern Freeway. The concept design for the on-structure noise walls is underwhelming and bog standard. The UDLP presents Spark an opportunity to be innovative in the design of on-structure elements, including noise attenuation measures. Investigation into the inclusion of location sensitive, well designed City Link style sound tubes on all elevated road structures to better protect residential properties from traffic noise is encouraged.

The need to provide a fully managed motorway, complete with Intelligent Transport System (ITS) infrastructure is acknowledged. Overhead gantries with variable speed limit signs and variable message signs form important components of the system which ensures a safe road environment. Ramp metering is an important ITS element to ensure traffic flow on the freeway does not breakdown by limiting the number of vehicles merging at any one time. The disadvantages of ramp metering, particularly on downhill grade such as the southbound NEL to westbound Eastern Freeway ramp, are general traffic noise and engine braking noise.

The NEL will carry a large volume of heavy vehicles with a significant proportion of those expected to access the westbound Eastern Freeway through the proposed ramp metering and often using engine braking. Noise attenuation must be designed and constructed on the southbound NEL to westbound Eastern Freeway ramp to protect residential properties almost immediately adjacent and above the ramp from traffic noise.

8

Interchange landscaping

The very complicated interchange will be a harsh environment for any landscaping provided, with maintenance access a very real issue.

The combination of multiple overhead structures casting shadows and shade along with the constant exhaust fumes, will ensure all but the hardiest of plants will not survive. The landscape design shown in some cross-sections and site-sections acknowledge this reality with the inclusion of large sections of 'granitic gravel' in areas under elevated road structures.

Koonung Creek Reserve

Eastern Freeway design impact

The widened Eastern Freeway design presented in the UDLP significantly and adversely impacts the Koonung Creek Reserve (KCR). The design is as land hungry and forceful as the reference design, despite the Minister for Planning stating in his response to the 2019 IAC panel report and recommendations:

"I also accept the IAC's conclusion that the traffic performance and functionality of the project needs to be balanced against the environmental effects of the built form. A detailed design that balances these occasionally competing objectives is the appropriate outcome."⁹

The environmental effects of the built form on the KCR are incredibly negative and will impact the reserve, and community, for generations. The Eastern Freeway design demonstrates Spark has not even attempted to consider the alternative designs presented at the IAC panel hearing. They have steamrolled their preferred design through without consideration for the KCR, its vegetation, wildlife, biodiversity, ecosystem functions, community functions and connectivity.

Extrapolating the Spark Eastern Freeway design along the length of the KCR to Doncaster Road results in the decimation of 6-7 hectares or approximately 20% of the reserve. This is a devasting loss for the community, the neighbourhood and the many critters and plants that call the KCR home.

Spark still has the opportunity to rethink, reimagine and redesign the Eastern Freeway and the NEL to reduce the land grab from the KCR. We firmly encourage Spark and NELP to take this opportunity and for the southern works package team and alliance to review and implement the O'Brien Traffic alternate design and to listen to the community and Council.

Masterplan

Noting the UDLP incorporates the western third of the KCR and presents a concept design for this area, it is critically important Spark acknowledge the KCR is subject to a masterplan as agreed by the State and Council in their UDLP. The development of the masterplan is expected to start in early 2023 and be a partnership project including the community, Council and NELP. It is an opportunity to engage the community and ask them to reimagine their parkland.

It is understood Spark has a contractual obligation with the State to develop and exhibit a concept design for the KCR and this obligation contradicts the agreement between Council and the State for a masterplan. This contradiction is frustrating and Spark's obligation is considered inappropriate.

The UDLP public exhibition process is an opportunity for Spark to listen and respond to Council and acknowledge the commitment the State made to develop and implement a KCR masterplan. Ideally

⁹ <u>https://www.planning.vic.gov.au/__data/assets/pdf_file/0032/447449/North-East-</u> <u>Link_MinistersAssessment_Final.pdf</u>

a 'hold cloud' would be placed over the KCR area included in the UDLP area and a note added to reflect the State and Council commitment to a masterplan, this masterplan will be the plan implemented and the Spark concept design may not be included in the masterplan.

All commentary about the KCR included in the UDLP is provided in the spirit of cooperation, with the above request taking precedent over all other KCR commentary and requests.

Walking and cycling

It is disappointing the KCR concept plan has several errors in terms of existing infrastructure and does not deliver, despite repeated requests, mode separated walking and cycling paths.

Spark's intent to slow and enrich the movement experience through linear parklands is applauded, however it fails to recognise how people experience and use the KCR. It focuses on people recreating in the KCR, those playing at the playground, having picnics and walking their dogs. The gently winding Koonung Creek Trail (KCT) design ignores the commuter use of the KCT and the need for these cyclists, scooter riders and runners to safely travel through the KCR for transport. It fails to understand the need to separate dogs, cyclists and scooter riders for the safety of all.

Spark missed a major opportunity to provide walking and cycling access from the Bulleen Park and Ride (BPR) across the Eastern Freeway to the KCR, surrounding residential area and ignored the potential opportunity a reconstructed Estelle Street bridge could bring to the area. The BPR will primarily serve a commuter purpose and will be relatively empty on weekends when it could be used by KCR visitors. The lack of safe, easy and good walking and cycling connection between the two significant facilities is an easily fixed failure and in Spark's design.

Park furniture

The Spark concept design for the KCR includes a wide variety of park furniture, including:

- Bike parking
- Bins
- Seats
- BBQs
- Shelters
- Picnic tables
- Drinking fountains
- Bike repair stations
- E-bike charging points
- WiFi stations

The location of the park furniture does not follow any clear plan and is scattered along the proposed KCT alignment. This unplanned approach suggests the KCR design, KCT alignment and delivery of park furniture has not be thoroughly examined and considered from a user's point of view. Considering the design and delivery of park furniture as a park user, it is disappointing the list of park furniture does not include a new playground at the western end of the KCR near Kosciusko Road or public toilets. The latter ranked highly in the Council run KCR users survey and playgrounds were highlighted as an important element of the reserve for all users.

Spark's concept design for the KCR and proposed suite of park furniture presents NELP, Council and the community a conversation starter and opportunity to build from through the KCR masterplan development.

Drainage infrastructure

The Spark KCR concept design includes two water bodies and an ephemeral creek, with the former approximately 250m to the west of the existing KCR wetland and dog beach. The inclusion of the two water bodies either at all or so close to the existing KCR wetland is not explained or justified in the UDLP. This lack of explanation leads to the conclusion they have been supplied for Eastern Freeway stormwater drainage purposes only and do not intend to serve any sort of biodiversity or other ecosystem function.

The ephemeral creek running through the KCR ends at a smaller water body at the western end of the KCR. Again, no explanation is provided as to the purpose of the ephemeral creek which, incidentally, does not correspond with the approximate alignment of the barrelled Koonung Creek under the KCR and Eastern Freeway. This leads, again, to the assumption the ephemeral creek is designed as part of the Eastern Freeway stormwater management system with no biodiversity or ecosystem service purpose.

The inclusion by Spark of two stormwater retention basins and an at grade open drain in highly valued, high quality and biodiversity rich Council managed public open space is unacceptable without deliberative engagement. The inclusion contradicts Key Design Requirement 18.5 (Drainage infrastructure and retarding basin design)¹⁰. The requirement dictates drainage infrastructure and retarding basins must be located and designed to not adversely impact on the function of public open space and not inhibit the ability for residents to access open space near where they live.

The one urban design visualisation showing the KCR¹¹ does not show any of the drainage infrastructure and is deliberately located to not show the two large water bodies. This is compared with the landscape design drawings showing the proposed drainage infrastructure¹². This discrepancy between images, combined with concerns about the impact of the drainage infrastructure on the KCR further erodes trust in the UDLP and Spark's design intentions.

The Spark KCR concept design is an opportunity to explore the idea of delivering drainage infrastructure in the KCR with the community during the masterplan development.

Noise attenuation

Noise walls

The inclusion of noise walls along the length of the northern edge of the KCR is welcomed and appreciated by Council and the community. Traffic noise is a serious concern for the community and the noise walls will assist in attenuating the traffic noise and improve the amenity of the area. It is noted the design of the noise walls, including height, is subject to further noise modelling and data analysis.

In the detailed design of the noise walls, we encourage Spark to review international best practice noise wall design and construction to ensure the noise EPRs are at least met. Where Spark can achieve better noise attenuation than detailed in the EPRs, this opportunity should be taken.

Overshadowing and shading

While the noise walls are welcomed, they are welcomed with some caution. The UDLP is inconsistent in the information it shows about the noise walls in terms of locations, heights and

¹⁰ Urban Design and Landscape Plan, Section 5.4.4, Table 22, Page 184

¹¹ Urban Design and Landscape Plan, Attachment 3, UDLP visualisations Koonung Creek Reserve aerial, Page 197

¹² Urban Design and Landscape Plan, Attachment 2, Landscaping design, Pages 132 - 134

types. It does suggest the noise walls adjacent to the KCR will be up to 10m and be made of concrete with a small triangular panel of semi-transparent coloured acrylic. The height and opacity of most of the noise walls generate serious concerns about overshadowing and shading on the KCR. We note the 10m height is described by Spark as the worst case scenario and consider it the most likely scenario based on the traffic noise information from the Environment Effects Statement (EES).

Shading and shadowing are at their worst on the winter solstice, June 21. At the winter solstice the shadows generated by the 10m noise walls extend beyond 20m. The use of September 22, the spring equinox, in the demonstration of overshadowing and shading is misleading and inappropriate.

Noting the coloured acrylic panel provided in the noise wall may only be 3m tall at their maximum and the proposed colour palette, it is considered the winter solstice shading and shadowing will severely affect on the growth potential of any tree or vegetation planted within the area of shade. Consideration may need to be given to including dry rainforest species along noise walls given the light constraints rather than expecting the local, historical EVCs to perform well. This consideration would recognise the change in local conditions and microclimates the noise walls will create and will help NELP to achieve the tree canopy restoration target. Understanding the best and worst case conditions will help in selecting climate resilient species.

Any overshadowing of shared use paths, cycle paths and footpaths may contribute to icy conditions and accidents.

Spark must take the opportunity to remodel the overshadowing from their noise walls using the winter solstice of June 21 and provide this information in the final UDLP, alongside a reconsidered planting palette for areas next to the noise walls and within the area of overshadowing. It is acknowledged the requested date is a departure from standard practice for the assessment of overshadowing and suggested it is a better practice which should be adopted industry wide.

Noise mounds

There are several existing areas of noise mounds in the KCR. These mounds not only attenuate traffic noise, they also provide a greater soil depth for vegetation and an interesting topographical feature. In finalising the noise attenuation design, following the further noise modelling and data analysis, Spark should investigate the opportunity to recreate the noise mounds in the KCR.

Vegetation

The volume of vegetation identified for removal in the KCR is overwhelming and unjustified. The vegetation in the KCR is established, healthy and highly valued by the community and Council that will take 30-40 years to regrow to the current scale, density and achieve the current biodiversity values and ecosystem services.

The UDLP should provide reasons and give explanations for the removal of so much vegetation in the KCR, especially the areas some distance from the proposed Eastern Freeway southern edge. Spark must accept and sensitively respond the challenge of minimising vegetation removal for any project purpose. Moonscaping and 'accidental' tree felling are not tolerated by the community or Council.

The UDLP states:

"The expansion of tree canopy and habitat corridors reduces the heat island effect within the surrounding areas reducing energy requirements."¹³

The expansion of the Eastern Freeway into the KCR is doing the opposite of what the Spark response claims. It is reducing the tree canopy cover and habitat corridor areas by making the adjoining parkland smaller and removing all established trees and vegetation to, presumably, ease construction. The Eastern Freeway will be a 22 lane wide wasteland of asphalt and concrete, banded by 10m tall concrete noise walls. It will be a massive heat island. It is disingenuous of Spark to claim their removal of established, dense and healthy vegetation and noise mounds in the KCR and replacement with tube stock, juvenile potted trees and concrete noise walls will achieve any reduction in the heat island effect within the area surrounding the widened Eastern Freeway.

Urban heat island effect

Spark's heat island statement claims that roadside plantings will ameliorate urban heat islands, despite the bulk of the vegetation alongside the Eastern Freeway being behind noise walls. Clarification as to the expected impact of these plantings on day and night temperatures would be valuable as it is a big claim to make without evidence from past projects and the extensive scientific research in this area.

Cities are warmer than rural areas because of urban densification, heat-generating human activities and absorption of solar energy by thermally dense building materials and unshaded hardscape. Urban heat islands develop when heat captured during the day is released to the surrounding atmosphere. At night, the urban heat island effect is more marked as the cooling effects of vegetation are reduced because trees, shrubs and turf are not transpiring. This is true for still clear nights, when inversion layers develop (warm air is trapped under cooler air), and on cloudy nights, where warm air is retained close to the earth's surface under a blanket of cloud cover.

Trees and other vegetation cool the environment by directly shading the ground, preventing heat gain by soil or hardscape, and through transpiration of water and its evaporation from the leaf surface to the atmosphere. The extent of cooling that trees and understorey plantings can provide depends on their spacing, size, foliage density, and ability to control water loss (more effective control of water loss reduces transpirational cooling). While the focus on indigenous or Australian species is understood in the context of the project, it's worth noting that well-selected deciduous trees may provide increased daytime cooling benefits (if soil moisture is available) and offer increased access to light in winter, which contributes to passive solar heat gain and improve human thermal comfort throughout the year. Along the road (where people will not be walking) this may not be of interest, but it must be considered in open space planning by us and the NEL team.

Accepting that some vegetation may need to be removed to facilitate construction, it is worth stating the replacement vegetation will need to be tolerant of high levels of radiant heat and pollution. It will need to filter both short and long views across and through the KCR and be consistent with Council's planting palette in the KCR. The preference is for indigenous species with a demonstrated ability to survive and thrive in warmer climates. We look forward to working with NELP and the community through the masterplan development for the KCR to ensure the appropriate climate risk assessment tools are used in the finalisation of the planting palette. Noting parts of the KCR have been landfill in previous decades, it will be vitally important to know and

¹³ Urban Design and Landscape Plan, 5.0 Consistency with Urban Design Strategy, Principle 4, Objective 4.3, Table 34, Page 234

understand the soil quality and conditions. This knowledge will be gained through the masterplan process and will guide planting plans.

Freeway Golf Course

Excess land

The reduced land take from the Freeway Golf Course (FGC) is a welcome design inclusion. It is, however, frustrating to only be made aware of this reduced land take now and not when Council was redesigning the FGC to accommodate the NEL declared project area. Had NELP chosen to provide Council officers information about the reduced FGC land take for the NEL as requested on several occasions, our reconfigured course design would have been significantly different and less compromised.

The excess land is not consistently defined in the UDLP, with different renders, artist impressions and cross-sections showing different outcomes. In some images, the FGC is untouched. In others, there is significant incursion from the road and/or busway edge. This lack of definition, consistency and attention to detail is concerning but provides Spark an opportunity to listen to and engage with Council about the potential uses of the land and to amend the UDLP images to reflect the reconfigured course design.

We welcome ongoing discussions, workshops and design reviews with the Spark team about the potential uses of the excess land, including:

- Constructing a golf hole.
- Building a driving range, including appropriate caging and fencing, carparks and a hub/shop.
- Installing a bespoke mini-golf facility.
- Building and planting a turf nursery.
- Planting an urban forest and understorey managed for biodiversity purposes.

Fencing

The legend sheet provided in the UDLP attachments for the landscape design lists 'FE2 - Golf Course Fencing, Determined by other'¹⁴. Confusingly the landscape design legend also lists fence type 'FE1 - Black chain line fencing, 1.8M high' and uses the same line type as fence type FE2, with two indistinguishable colours defining the fence types.

The landscape design plans which include the FGC include a note "Golf course fencing height and alignment to be determined"¹⁵.

NELP has a copy of the FGC reconfiguration design and has been able to determine the golf course fencing height and alignment they need to design and construct to protect their road and infrastructure for some time now. NELP are creating the need for golf course fencing by designing and constructing the NEL as they are choosing to do. It is their responsibility to design, construct, own and maintain any golf course fencing they determine is required.

The UDLP public exhibition feedback presents Spark an opportunity to consider how they and/or NELP will design and construct any golf course fencing they deem as necessary without impacting the operations and play of the golf course.

¹⁴ Urban Design and Landscape Plan, Attachment 2, Landscape Design Master Legend Sheet 02, Page 97

¹⁵ Urban Design and Landscape Plan, Attachment 2, Landscape Design Surface Treatment Plans 06, Page 132

Habitat corridor

In response to Key Design Requirement 3B (Consider providing a habitat link across the Eastern Freeway to the Freeway Public Golf Course)¹⁶ the UDLP shows a habitat corridor and notes "a habitat link has been included."¹⁷.

The proposed location of the habitat link is questionable, particularly when there are higher quality habitat areas nearby where a habitat link would be of benefit including Hays Paddock to the Kew Golf Club and Burke Road Billabong or Musca Street Reserve to the Yarra Flats Reserve and Burke Road Billabong under the Burke Road bridge. These two suggestions are listed as 'Key Design Requirements', however we note they are both outside the Spark UDLP area.

Given the lack of any other reference to the link elsewhere in the UDLP and noting the superior nearby locations, the habitat link seems to have been included as a hopeful afterthought. The inclusion of the link gives Spark the opportunity to consider the appropriateness of the proposal and, if thought valuable enough to proceed, undertake faunal monitoring to inform the design. It also gives time for Spark to develop a faunal monitoring plan to ensure the link is appropriately designed and used.

Koonung Creek

The UDLP response to 'Principle 4 - Resilience and Sustainability, Objective 4.3 Environmental Sustainability' states:

"A new wetland will treat the flow of water from the Koonung Creek before it passes under the intersection. The riparian vegetation corridor of the Koonung Creek continues over the land bridge to be reunited with the creek on the western side." ¹⁸

The response is dishonest as the land bridge does not interface with the Koonung Creek on the western side of Bulleen Road. The Koonung Creek flows under Bulleen Road and between the Freeway Golf Course and Carey sports fields, at least a football fields distance from the land bridge.

Spark should take the opportunity to reconsider their response to 'Principle 4 - Resilience and Sustainability, Objective 4.3 Environmental Sustainability' and shift their focus to naturalising and improving the Koonung Creek within the Freeway Golf Course and to its intersection with the Yarra River. This work would make a difference to the quality of habitat along the length of the creek and further improve the Koonung Creek biodiversity corridor.

Noise attenuation

The FGC maintenance and administration building (MAB) is sited on the south western point of the course, with the busway running almost underneath it in the cutting. The proximity of the busway and freeway to the MAB, the home of Council's Turf Management team, and the potential traffic noise is concerning. Spark has an opportunity to provide the team with a work environment that does not exceed the EPR noise limits and must ensure the area is included in the updated traffic noise modelling and assessment, with noise attenuation measures provided as appropriate.

¹⁶ Urban Design and Landscape Plan, 5.0 Consistency with Urban Design Strategy, Table 20, Page 153 ¹⁷ ibid

¹⁸ Urban Design and Landscape Plan, 5.0 Consistency with Urban Design Strategy, Table 34, Page 234

General

Reference design and Spark design comparisons

The reference design and Spark design images chosen for inclusion in section 4.1 (Design Changes Since the EES)¹⁹ of the UDLP cannot be compared and the use of the two very different images is deceptive. Especially when considering the community had extremely limited time to review the UDLP and it has been close to 3 years since the release of the reference design.

The reference design images shown are the '*Horizontal plan: construction*' drawings from the EES map book²⁰. The Spark design images look to be from the preliminary landscape design package. The use of the different images is akin to comparing apples and oranges. If the reference design plans showed the same details as the Spark design plans, the differences between the two designs would not be noticeable. Similarly, if the Spark design plans showed the same details as the references between the two would not be noticeable.

Spark has an opportunity to amend the images used to ensure a fair and equitable comparison between the reference design and Spark design. The '*Horizontal plan: operation*' from the map book would potentially enable a more equitable comparison.

Motorway Control Centre

The MCC design is well developed, with significant detail included in the UDLP²¹. The attention to design detail is ensures the MCC responds sensitively to its setting adjacent to the Yarra River near the Manningham Road interchange. The intended 5-star GreenStar rating is welcomed and aligns with Council's design practice.

While it is clear the NEL maintenance and incident response vehicles will all be accommodated within the MCC car park, rapid, safe and easy access to the NEL north of the Manningham Road interchange for these vehicles is not apparent in the designs. What is apparent is these vehicles will need to either drive south on Bulleen Road, make a U-turn at the very complicated southern interchange or travel north on Rosanna Road to the Lower Plenty Road interchange to access the NEL. Either route will increase incident response times and potentially put drivers at risk.

The lack of rapid, safe and easy access to the NEL directly from the MCC is a direct result of the removal of the northern ramps from the Manningham Road interchange. The "simpler Manningham Road interchange²²" has, perhaps unintentionally, resulted in a road and driver safety issue in the 6.5km long tunnel and the rest of the NEL.

In contrast, the EastLink MCC is located at the Maroondah Highway interchange very close to the EastLink tunnels. It provides rapid, safe and easy access to the EastLink tunnels and alignment for the incident response and maintenance vehicles stored at the MCC.

²¹ Attachment 1, Architecture and Urban Design, Motorway Control Centre, Pages 23 - 35

¹⁹ Urban Design and Landscape Plan, 4.1 Design Changes Since the EES, Pages 40 - 47

²⁰ <u>https://bigbuild.vic.gov.au/___data/assets/pdf_file/0011/524288/NELP-EES-Map-book-Key-Map-and-Horizontal-Alignment-Plans-Part-1.pdf</u> and

https://bigbuild.vic.gov.au/ data/assets/pdf_file/0004/524299/NELP-EES-Map-book-Horizontal-Alignment-Plans-Part-2.pdf and https://bigbuild.vic.gov.au/ data/assets/pdf_file/0017/524303/NELP-EES-Map-book-Vertical-Alignment-Plans-and-Indicative-Cross-Sections.pdf

²² <u>https://engage.vic.gov.au/north-east-link-tunnels-urban-design-and-landscape-plan</u>

Alternative Motorway Control Centre

The notation of 'Alternate Motorway Control Centre (AMCC)' on the northern ventilation structure²³ responds somewhat to the concerns about lack of direct access the incident response and maintenance vehicles will have to the NEL.

The northern ventilation structure and AMCC is essentially sited at the Lower Plenty Road interchange. This location removes the journey from the Manningham Road interchange for incident response and maintenance vehicles and locates the AMCC in a position similar to the EastLink MCC.

There are no other references to the AMCC in the UDLP, leading to a lack of clarity about the intention of the AMCC and its role in incident response and maintenance access.

The UDLP public exhibition and feedback provides Spark the opportunity to reconsider the location of the MCC, with a view to locating it to minimise incident response times for the NEL alignment and tunnels in particular.

Walking and cycling infrastructure

The NEL presents a once in a lifetime opportunity to provide a well-design and connected walking and cycling network. The potential to connect with the Koonung Creek Trail, EastLink Trail and Peninsula Link Trail is an exciting prospect. However, the walking, cycling and shared use paths shown in the UDLP do not appear to meet the requirements of the AustRoads Guide to Road Design Part 6A: Paths for Walking and Cycling²⁴.

Shared or mode separated paths

The provision of shared use paths throughout the design rather than mode separated walking and cycling paths is the most obvious failure of the Spark design. The AustRoads guide provides very clear direction about when shared and mode separated paths are appropriate and the width for each type of path. The decision to mode share or mode separate is based on directional split and volume of both modes.

A brief review of current pedestrian and cyclist volumes on the Koonung Creek Trail, within the scope of this UDLP, demonstrates current volumes of both modes are sufficient to warrant mode separated paths. While this is a Boroondara local example, it will be the rule and not the exception across and along the project corridor as walking and cycling for transport and recreation boomed through 2020 and 2021. The growth rates are persisting as the community continues to enjoy the benefits of walking and cycling.

It is disappointing to hear Spark's justification for providing shared paths only - being they do not want to build too much hardstand area (concrete and asphalt), particularly in parks and reserves where the walking and cycling infrastructure is located.

This justification is absurd when you consider the volume of concrete and asphalt Spark are choosing to include in their design of the tunnels and the widened Eastern Freeway. The O'Brien Traffic design, an alternate design, presented at the 2019 EES IAC panel hearing demonstrated how traffic performance along the Eastern Freeway and NEL would meet the documented requirements in a significantly reduced footprint with a reduced land take. In his assessment of the IAC report and recommendations, the Minister for Planning states:

²³ Attachment 1, Architecture and Urban Design, Northern Ventilation Structure, Page 9

²⁴ AustRoads Guide to Road Design Part 6A: Paths for walking and cycling, Edition 2.1, 2021

"...I accept IAC Recommendation 6, that the alternative designs be provided to tenderers for their consideration."²⁵

It is frustrating Spark has chosen to not include any elements of the O'Brien Traffic alternate design and has ignored Council and community feedback about mode separated paths. The results of a recent Council survey of Koonung Creek Reserve users indicated 84% (222) of respondents supported mode separated paths through the reserve. The community and Council are in lock step when it comes to mode separated path, but Spark continue to refuse to listen.

Gradients and curves

The gradients and radius of the curves on the proposed shared paths look to be problematic across the UDLP area. AustRoads specify a 3% grade as the maximum preferred grade for ease of cycling, with up to 5% with flatter sections of path at regular intervals acceptable. It is obvious that the flatter the path, the easier it is for people with mobility issues to travel along but distance can become an issue. A delicate balance needs to be struck to ensure appropriate and safe grades are provided for all users, as well as appropriate distances.

Noting the influence this UDLP and design has on the remaining four works packages and UDLPs, Spark need to take the once in a lifetime opportunity their UDLP and works package present them and the community. They need to listen to the community and Council and deliver a well-designed and connected walking and cycling network that will meet the needs of users now and for the future.

²⁵ <u>https://www.planning.vic.gov.au/___data/assets/pdf_file/0032/447449/North-East-____link_MinistersAssessment_Final.pdf</u>

Appendix A - Lat Studios design review memo

Appendix B - Detailed comments on the EPR responses

Appendix C - Detailed comments on the UDLP

Appendix D - Errors in the UDLP

Appendix E - Information missing from the UDLP

20/06/2022

REPORT



North East Link Advocacy

City of Boroondara FINAL APPROVED, 6 June 2022

capire

The following lists the key definitions for common terms used in the design and delivery of community engagement as stated in the City of Boroondara's Community Engagement Policy 2021-2026:

COMMUNITY

People who live in the City of Boroondara, people and bodies who are ratepayers; and people and bodies who conduct activities in the City of Boroondara.

STAKEHOLDER

The term 'stakeholder' in this policy represents a broader definition than a group with a special or particular interest in an issue; it is extended to include the broader community and Council staff as stakeholders.

ENGAGEMENT

'Engagement', as used in this policy, is a practice, specifically through the development and delivery of a community engagement program.

'Engagement' may also describe the broad range of interactions between people, including approaches such as one-way communication or information delivery, consultation, involvement and collaboration in decision-making, and empowered action in informal groups or formal partnerships.

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Giving every person a voice.

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1 Introduction

1.1 Report Purpose

This report summarises the key findings from engagement on the Koonung Creek advocacy survey for the City of Boroondara. The findings will be provided to the project team and used to assist in the drafting of a submission to the North East Link (NEL) Tunnel's Urban Design Landscape Plan.

1.2 Project context and objectives

As part of the NEL Tunnel project, around 20% of the Koonung Creek Reserve (Reserve) may be acquired for widening of the Eastern Freeway and used as a construction laydown site.

North East Link Program (NELP) has committed to working with Council and the community to develop a master plan for the whole of Koonung Creek Reserve. This master plan will support works to restore the area after the tunnel and freeway widening are complete.

Spark, the consortium awarded the NEL Central Package is designing the Southern Interface Zone at the Eastern Freeway and has developed an Urban Design Landscape Plan (UDLP). This UDLP includes a concept design for the western third of the Koonung Creek Reserve. Spark placed the NEL Tunnels UDLP on public exhibition for 21 business days (11 to 31 May 2022).

The City of Boroondara (Council) is preparing a submission to this consultation and will advocate on behalf of the community to ensure community use of the Reserve and initial ideas for the Reserve's restoration are shared with Spark and NELP. The survey findings will also inform the Koonung Creek master planning process which is due to begin in 2023.

To guide the drafting of their submission, Council engaged Capire Consulting Group to design and analyse a community survey.

The purpose of the survey was to understand the community's views and aspirations for the Reserve. The objectives of the engagement are to understand:

- what the community values about the Reserve
- how the community uses the Reserve
- what elements the community might want to see in a refreshed Reserve
- how the community might use the Reserve in the future.

NORTH EAST LINK ADVOCACY, FINAL APPROVED, JUNE 2022

2 Engagement approach

2.1 Activities

City of Boroondara's community engagement consisted of a survey that was posted on the engagement platform, *Engage Boroondara*. Postcards promoting the survey were letter box dropped to houses in North Balwyn and posters were installed across Koonung Creek Reserve and at Balwyn Library, Greythorn Library Lounge, Camberwell library and in local shops and schools.

The survey ran from Thursday, 12 May 2022 to Wednesday, 25 May 2022. 268 responses to the survey were received, including 16 responses in Chinese (Mandarin).

2.2 Limitations

The engagement methodology has several limitations that should be acknowledged when reading this report. These are outlined below.

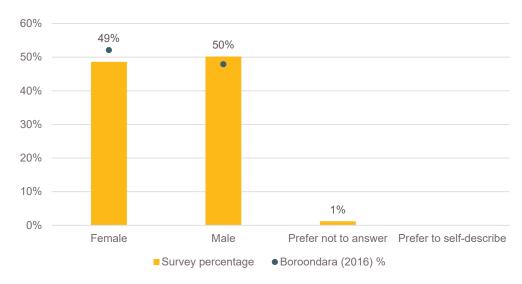
- This engagement presented only one opportunity for the community to be involved, via an online survey. This means that various members in the community may not have had the chance or access to participate in this engagement.
- Participants self-selected to participate in this survey, meaning that although efforts to gather the views of various stakeholders were made, the information in this report does not reflect the views of a representative sample of the community.
- Capire has reported on information documented by participants and interpreted the information to represent the views of participants as closely as possible.
- In some instances, participants used the opportunity to provide feedback that was not related to the project. This feedback has not been included in this report.
- Question and responses in Chinese (Mandarin) were translated by an external provider, Language Loop. While efforts are made to translate information as close to its original tone and meaning, translations may distort the information being conveyed by survey respondents.
- Due to timeline constraints, this report does not include the analysis and findings from the Chinese surveys. These are presented in appendix 1.

NORTH EAST LINK ADVOCACY, FINAL APPROVED, JUNE 2022

3 Participants

To understand who was reached through the engagement, we asked a series of demographic questions, including age, gender, and suburb.

3.1 Demographics



GENDER

Figure 1 Survey responses by gender (n=251)

As seen in Figure 1, 49 percent of survey responses (122 responses) identified as female, and 50 percent responses (126) as male. One percent of respondents (3) chose not to answer. These numbers are equitable when compared to the gender percentage in the City of Boroondara local government area, where females comprise of 52 percent of the total population and males comprise 48 percent of the total population.



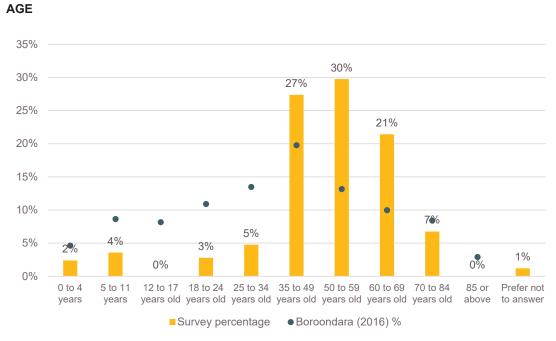
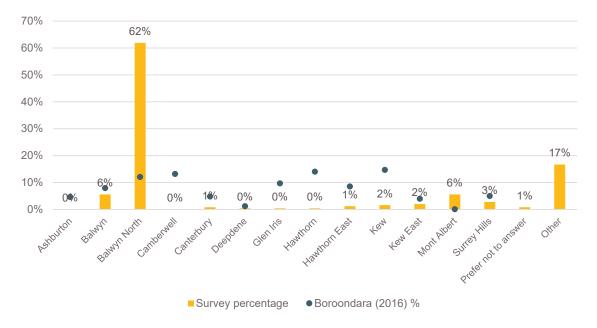


Figure 2 Age of survey respondents (n=252)

Figure 2 shows that people between the ages of 35 to 69 years were highly represented in the survey with 78 percent of responses. The largest overrepresentation was found in the age group of 50 to 59 years (30 percent, 75 responses) while they account for 13 percent of the City of Boroondara's total population. The largest underrepresentation was found in age group of 25 to 34 years. They account for 13 percent of Council's population but made-up 5 percent of responses (12).



LOCATION OF RESIDENCE

Figure 3 Survey responses by location of residence

Figure 3 shows that survey responses predominately reside in Balwyn North. Balwyn North makes up 12 percent of the total population and provided 62 percent of responses (156 responses).

The 17 percent (42) of responses who selected 'other' reside in suburbs outside of Boroondara.	
These locations were:	

Abbotsford	Banyule	Bellfield
Blackburn	Box Hill	Box Hill North
Bulleen	Cremorne	Doncaster
Donvale	Eaglemont	Eltham
Fitzroy	Forest Hill	Heatherton
Heathmont	Kangaroo Ground	Mitcham
Mont Albert North	Nunawading	Ringwood North
Templestowe	Wantirna South	Whitehorse

Demographic Observations

The gender representation is equitable and matches the gender percentages of City of Boroondara.

The age of participants indicates that it is the 35 - 69 age group that has most interest in, and highest engagement with this survey. six percent of the responses came from parents of children aged 0 -11 years (13 responses).

The location of responses by residence reveals that most responses are (62 percent) from North Balwyn. Considering this is the location of the Reserve, this is unsurprising. Interestingly, 17% (42 responses) came from locations not listed in the survey, and outside the City of Boroondara. This suggests that the site, while used most by locals, also attracts visitors and users from other areas.

Respondents from outside the Council area utilise the Koonung Creek Reserve less frequently compared to others who live within the Council area. Those that used the Reserve more frequently (a few times a week) walk (29%) or ride (29%) on the Koonung Creek Trail and utilise other footpaths in the Reserve (29%). They also use paths and open spaces in the area for picnics, exercising dogs, birdwatching, and other nature-based activities.

Respondents under 25 tend to use the Koonung Creek Reserve more frequently. 32% of respondents used the Reserve's open spaces, and 27% walked the Koonung Creek Trail a few times a week. They were also more likely to use the gazebo at the wetland a few times a week (18%).

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4 Key findings

4.1 Reserve usage

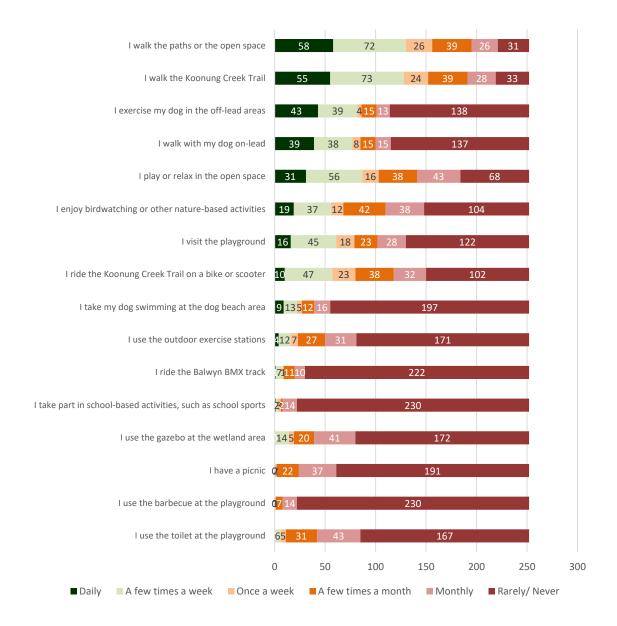


Figure 4 How often survey respondents do specific activities in the Reserve (n=252)

	Daily	A few times a week	Once a week	A few times a month	Monthly	Rarely/ Never
I walk the paths or the open space	58	72	26	39	26	31
I walk the Koonung Creek Trail	55	73	24	39	28	33
I exercise my dog in the off-lead areas	43	39	4	15	13	138
I walk with my dog on-lead	39	38	8	15	15	137
I play or relax in the open space	31	56	16	38	43	68
I enjoy birdwatching or other nature- based activities	19	37	12	42	38	104
I visit the playground	16	45	18	23	28	122
I ride the Koonung Creek Trail on a bike or scooter	10	47	23	38	32	102
I take my dog swimming at the dog beach area	9	13	5	12	16	197
I use the outdoor exercise stations	4	12	7	27	31	171
I ride the Balwyn BMX track	1	7	1	11	10	222
I take part in school-based activities, such as school sports	1	2	3	2	14	230
I have a picnic	0	0	2	22	37	191
I use the barbecue at the playground	0	0	1	7	14	230
I use the gazebo at the wetland area	0	14	5	20	41	172
I use the toilet at the playground	0	6	5	31	43	167

Table 1 How often survey respondents do specific activities in the Reserve (n=252)

As shown in Figure 4 and Table 1, the dominant daily use for the Koonung Creek Reserve is walking. This includes walking on the paths or open spaces, using Koonung Creek Trail, exercising dogs in the off-leash areas, and on-lead dog walking.

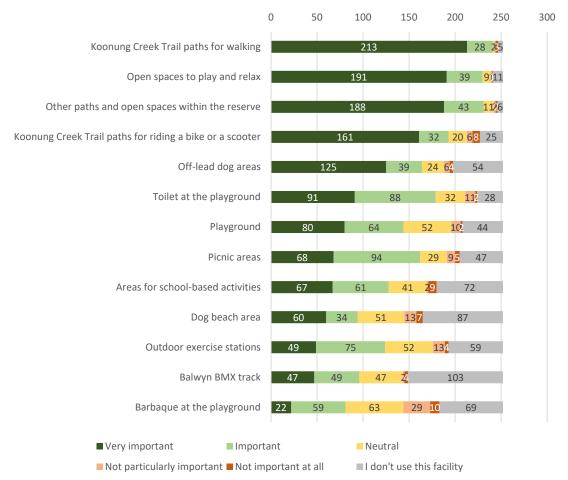
Participants were also asked if they use the Reserve in any other ways to those listed.

Some participants used the opportunity to comment further on the activities already listed, such as '*No, mainly recreational riding and birdwatching*' and '*Most of my activities are related to walking in the Reserve and enjoying the natural habitat*".

Other frequently mentioned uses included:

- running and jogging, either the trails or the open spaces
- catching up with friends and other social activities, such as kids' birthday parties and social gatherings
- meeting new people and other walkers
- kicking a ball, throwing a frisbee
- meditation, mindfulness, and relaxation.

This question revealed the range of usages of the Reserve, with respondents highlighting other uses such as photography, stargazing or *'I listen to the frogs in the wetlands, and I draw the flora and fauna'*. This section highlights how participants use the site for a range of physical health and mental health activities.



4.2 Importance of facilities in the Reserve

Figure 5 Survey responses about the importance of specific facilities found in the Reserve (n=252)

How important are these facilities to you?	Very important	Important	Neutral	Not particularly important	Not important at all	I don't use this facility
Koonung Creek Trail paths for walking	213	28	2	1	3	5
Open spaces to play and relax	191	39	9	1	1	11
Other paths and open spaces within the reserve	188	43	11	2	2	6
Koonung Creek Trail paths for riding a bike or a scooter	161	32	20	6	8	25
Off-lead dog areas	125	39	24	6	4	54
Toilet at the playground	91	88	32	11	2	28
Playground	80	64	52	10	2	44
Picnic areas	68	94	29	9	5	47
Areas for school- based activities	67	61	41	2	9	72
Dog beach area	60	34	51	13	7	87
Outdoor exercise stations	49	75	52	13	4	59
Balwyn BMX track	47	49	47	2	4	103
Barbeque at the playground	22	59	63	29	10	69

Table 2 Survey responses about the importance of specific facilities found in the Reserve (n=252)

Figure 5 and Table 2 highlights to what extent participants found specific facilities important.

Respondents were also asked why they answered their response. Some key themes and observations that emerged for why facilities are important are listed below. The findings are numbered according to frequency of the comment.

Koonung Trail Paths for walking

- 1. Designated walking paths support good physical and mental health and supports recreation.
- 2. Supports social activities like walking together, increasing opportunities for safer connection.
- 3. Multiple usage walking/ riding to school, work, for exercise '*It's good to have a variety of paths to cater for the different types of users I like to use the trails to avoid the bikes, scooters.*
- 4. Walking paths reduce fear of falling due to uneven surfaces.

Open Spaces to play and relax

- 1. Supports physical health including for exercise, and dog walking.
- 2. Supports mental health 'Mental health is important relaxation and exercise are invaluable for helping to maintain a positive attitude' and 'Open spaces help keep people sane. Away from crowds, noise, congestion, helps calm people'.
- 3. Supports family time and connection *'it puts a smile on my kids' faces and it's our precious time together'.*
- 4. Supports physical safety as open areas increase visibility and safety of lone walkers.

Other paths and open spaces within the reserve

- 1. Other paths and open spaces allow for and encourage informal sports and activities and enjoyment of green space.
- 2. Open spaces are vital in suburbia, as many houses have no or small backyards.
- 3. Open spaces like Koonung Creek Reserve are rare in the area and ought to be preserved and protected.

Koonung Bike Paths for riding/scootering

- 1. Provides recreational activities for families and children
- 2. Connection point for other bike trails and a key thoroughfare to the city '*The trail is access point to CBD, Austin Hospital, Banyule Flats*'.
- 3. Provides a safe alternative to roads for cyclists 'For safety to ride off the roads, I feel unsafe on the road so would rather drive than bike'.

Off-lead dog areas

- 1. Off-lead areas are essential for exercising dogs, and that the off-lead areas at the site provide more open space than other off-lead spaces.
- 2. Few dog off-lead parks and spaces exist in this area of Boroondara.
- 3. Dog off-lead areas provide an opportunity for dog owners to gather and socialise.
- 4. Dog off-lead areas are important for those who cannot walk their dogs '*I* use a wheelchair so cannot exercise my dog on leash. Great that dogs should be able to run free and sniff.

Toilet at the playground

- 1. For those with children, a disability or other vulnerabilities, a toilet increases the accessibility of the space and their confidence in using it *'it's important to have for adults and children when having picnics and toilet training'*.
- 2. There are no other toilets so close to the trail.
- 3. Increases the amount of time people can spend at the Reserve '*As an older person, having access to toilets increases the length of time I can spend at the reserve.*'

Playground

- 1. Important space for social engagement for children and parents 'It's important for children to have space to play and for mums to meet outdoors' and "Kids love the playgrounds they make a good destination or meeting point'.
- 2. It is important for the local community even if they do not use it themselves.

Picnic Area

- 1. Post covid outdoor picnics are the new 'normal'.
- 2. Provides popular meeting places for all cultures in the community.

Areas for school-based activities

- 1. Provides sports facilities for schools without sports ovals and grass areas.
- 2. Schools use Koonung Creek Trail for cross-country and long-distance running events.
- 3. The Koonung Creek Trail is important for children who travel from Doncaster to schools in the area. The Trail allows them safe passage over the Eastern Freeway.
- 4. Some respondents believe school sports should be isolated from other park facilities, and that Council does not necessarily have a role providing space for these activities as the expense of other community priorities.

Dog Beach Area

- 1. The area is extremely popular in summer, and still used by some dogs in winter.
- 2. A respondent noted that the dog beach can be dirty in some instances.

Outdoor exercise stations

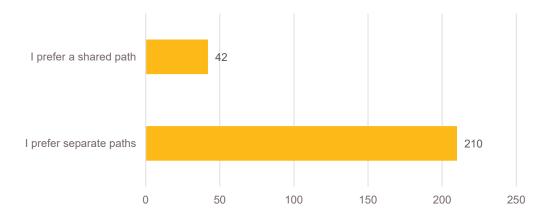
- 1. Provides affordable options for exercise 'Exercise is important for mental and physical health- some people can't afford the gym'.
- 2. Used regularly by some, and occasionally by others.
- 3. Respondents noted that the stations are a good way to encourage exercise in the community and for families to exercise together.

Balwyn BMX Track

- 1. Provides great opportunities for children to be outdoors and exercise.
- 2. The facility allows children to have fun in a safe environment away from cars.
- 3. Provides facilities appealing to older children.

BBQ at the playground

- 1. Families use the barbeques for family or friend gatherings and birthdays, and it has been particularly useful since COVID-19.
- 2. Some people do not keep the barbeques clean after use.



4.3 Path Sharing Preferences

Figure 6 Survey responses regarding shared paths for cyclists and pedestrians

Figure 6 reveals user sentiment on the usage of paths.

The comments throughout the survey reveal that walkers, dog walkers, and families feel afraid of or unsafe sharing a path with faster moving bicycles and scooters. Comments include '*The bikes and scooters really do need their dedicated pathway to keep the walkers and the dogs safe*' and '*These paths are very important & must be separate. Speeding cyclists aren't always appreciative of slow walkers by & dogs.*

Those who support shared paths favour finding a balance between infrastructure and green open spaces – the risk of creating too many paths that impact the green space and biodiversity. Other respondents feel dedicated bike paths don't work, and favour learning to share facilities. 'It's impossible to keep pedestrian off dedicated paths, and I also think that learning how to share is a very important part in our society and dedicated facilities for a particular user group can create a sense of entitlement that is not helpful'.

4.4 Emerging "Big Picture/Vision" themes

The survey asked, 'In an ideal world, how would you like Koonung Creek Reserve to look and feel like in 5-10 years?' where big ideas were welcome.

Table 3 outlines the key themes emerging from the responses, their frequency, and a description of the theme using verbatim quotes to ensure the language and intention of respondents is included.

Theme and	Description - in respondents' words
Frequency (~%)	
Green open space	'Maintain large green spaces for people to use - important for health & wellbeing- environment is very important.'
23%	'Green with lots of different foliage and full tree canopy cover over the paths.'
	'Maintain natural beauty and landscape, and seating for relaxation and meditation.'.
Biodiversity	'Wetland areas to encourage native flora and fauna.'
/ Natural environment 18%	'I would like to see as much of the parkland and large trees retained as possible - replanting these will take decades before they're large enough to provide habitat for fauna, especially any hollow-nesting species - has council considered providing and monitoring nest-boxes in the interim?'
	'Small ponds that attract bird life would also be a great attraction not only for families with young children but also older residents that could sit by the water and enjoy any birdlife.'
	'The trail from Mullum through to Heidelberg is a major habitat link. Keeping the vegetation densities viable for our fauna is vital to keep this aspect alive. The wildlife diversity on show along the waterways after a big rain event is spectacular, something I hope future generations may experience.'
Variety of recreational	Nature play – 'I'd like to see scrambling places for kids, not necessarily a BMX track but a place with hills and hollows and climbable trees.'
space 17%	Recreational activities – 'rope walk lines about the water. Free tennis court, beach volleyball court."
	'More recreation spaces for children and teenagers are important e.g., a basketball hoop.'
	Dog Amenities – 'Continue with dog off leash areas" or "Large, fenced dog park with natural vegetation.'
Separated bike path	'Bike paths a distance from these areas to maintain safety of kids, dogs, walkers and riders.'
14%	<i>Wider footpath or separate bike path, which will be better for walkers and cyclists. Motorized scooters are not to be used on the path.</i>
Increase	'Lighting. I am very wary of sunset and will avoid going when it is dark.'
public amenity	'More bins and drink taps would also be useful" or "More toilet and more bins.'
10%	'Better BBQ areas with under cover seating.'

Table 3 Survey responses about ideal looks and feels of Koonung Creek Reserve in 5-10 years

	'Undercover pergola areas for picnics and meeting up/resting.' 'More drinking stations or knowledge on a map where the drinking stations/toilets are.'
Reduced noise pollution 9%	'We had no idea that the vehicle noise would be so loud. It is extremely distracting and substantially impacts the enjoyment of the space. We cannot overstate the need for noise reducing measures/barriers to be carefully considered and implemented.' 'More protection from noise of traffic.'
Increase safety measures 6%	'A well-lit reserve which is functional & safe all year round.' 'Adequate lighting and visibility to maximise the personal safety of the area.'
Promote active transport links 2%	'Area for walkers, runners, cyclists, scooters (ideally with the last two having a direct route to Melbourne CBD without having to go on streets to promote much safer rides). runners can potentially use these direct routes too!' 'Koonung Creek Reserve should be maintained and enhanced for the use of local residents and as a part of a broader set of paths connecting our communities. Bike paths should be encouraged and enhanced to promote this form of commuting from one location to another.'
Activate Public Space 1%	'Cafes or food trucks ice cream carts. Ice skating in winter, roller skating in summer. A place for activity & just hanging out. Bike track only for safety of all. Large, fenced Dog park with natural vegetation.' 'Well utilised space by the community in different ways. Sporting field(s) on the open grass fields. Community gardens. Amphitheatre with regular local performances. Community market.'

Survey responses to the ideal look and feel of Koonung Creek Reserve in 5-10 years covered a spectrum in scale covering:

- **Maintaining the site as it is / minimal change**: requests for no changes, no freeway expansion.
- Implementing improvements to amenities: more/upgraded toilets, bins, lighting, seats, undercover spaces, nesting boxes, expanded wetlands, and frequent commentary on separate bike paths for bicycles and scooters for the benefit of all users.
- **Big ideas**: some big ideas for the space were identified, such as '*I'd love to see a* community orchard where people could tend fruit trees that don't fit into tiny suburban blocks and beekeepers could place hives' and 'A big idea could be a tunnel/bridge to avoid stopping at the lights at Bulleen Rd/freeway intersection'.

4.5 Other issues about Koonung Creek Reserve Council should know about

Survey respondents were asked if there are other issues about Koonung Creek Reserve they feel Council should know about. The responses to this question frequently repeated responses and sentiments shared elsewhere in the survey. Table 4 below highlights new comments shared in this section.

Table 4 Other issues about Koonung Creek Reserve survey respondents feel Council should know about

Theme	Comment
Opposition to North East Link	'Council needs to do something to help residents from the destruction of the North East Link!'
	'VERY much against the Govt using the Reserve as a Freeway grab and Construction area.'
Consultation	'Once work plans a better prepared there should be proper consultation with impacted residents living adjacent to the Koonung Reserve.'
	'No, I appreciate the opportunity to comment. I grew up in area and have used the Koonung Creek area since the 1960s.'
Safety	'Not policed enough to address anti-social behaviour and poor use'
	'Please advocate for reduced speeds on the Freeway overnight time please and overall maximum speed of 80km.'
General	'No, the Council do a great job of the Reserve.'
	'Have the traditional owners been contacted for their thoughts?'

5 Key Observations

Considering the responses overall, some key observations are as follows:

Impacts of COVID-19. The sense of community appreciation and usage of the Reserve increased over the last two years with COVID-19 and the consequent lockdowns. Respondents felt that the Koonung Creek Reserve played a significant role in helping them get through the lockdowns, by providing spaces for walking and sitting outdoors. It also plays a part in helping users of the Reserve to adapt to a new 'normal'; where more activities are held outside. This increases the appreciation of and desire for more outdoor activities and spaces.

Individual and Collective. Many respondents considered their answers from both their own perspective and from others. When considering the amenities, their usage and their value to the Reserve, it was common for respondents to acknowledge that they did not use the amenity,

although they valued its presence for others. This means the correlations between the usage and value of an amenity may not be direct.

Nurturing nature. Survey respondents took opportunities to celebrate the wildlife and biodiversity of the area, and the need to protect and enhance this, with a focus on indigenous species.

Health and Well-being. The Reserve is a valued place for maintaining physical health, through various forms of exercise, mental health through connecting to nature, quiet spaces for meditation, and social health through gathering to exercise, catch up or picnic and BBQ. Many also felt that the off-leash dog area increases the enjoyment of dogs and their owners further promoting wellbeing.

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Appendix 1: Chinese (Mandarin) Survey Analysis

An in-language (Mandarin) survey was included as part of the online engagement portal, and 13 respondents used this option. The analysis of these responses has been included in the appendix due to time constraints with translation

Limitations

When information is translated, efforts are made to reflect original tone and meaning. However, translation may distort the information being received and conveyed by survey respondents.

The responses reflect a small dataset, with only 13 respondents. There were fewer long qualitative comments that convey an idea, meaning there is insufficient data to address all survey q

Demographics:

The dataset for in-language surveys is too small for statistical analysis. However, the demographics are broadly consistent with the English language dataset.

GENDER

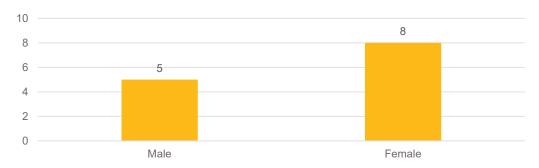
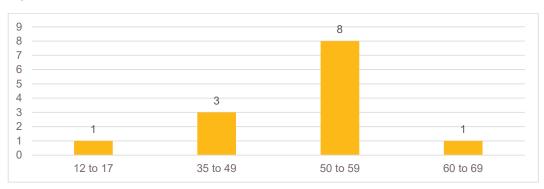


Figure 7 Responses by gender (n=13)

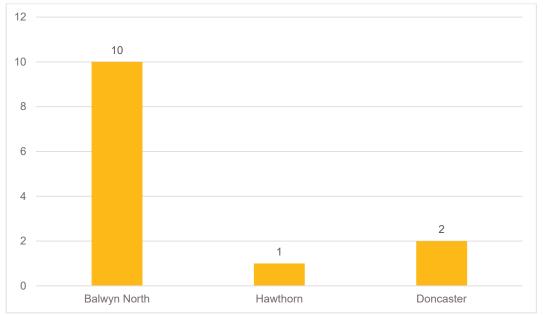
Figure 7 shows the number of responses received by gender. There were no respondents who preferred to not reveal their gender or identify themselves as another gender.



AGE

Gender							
Male	Female	Female					
5 respondents	8 respondents	8 respondents					
Age							
12-17	35-49 50-59 60-69			60-69			
1 respondent	3 respondents 8 respo		ondents	1 respondent			
Location							
Balwyn North	Hawthorn		Doncaster				
10 respondents	1 respondent		2 respondents				

LOCATION



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Frequency of usage of Koonung Creek Reserve Facilities

	Daily	A few times a week	Once a week	A few times a month	Monthly	Rarely/ Never	No Answe r
I walk the paths or the open space	2	3		2	1	3	2
I walk the Koonung Creek Trail	1	3	1	1	2	3	2
I exercise my dog in the off-lead areas	1			1		9	2
I walk with my dog on-lead	1	1				9	2
I play or relax in the open space	1	3	2	1	1	3	2
I enjoy birdwatching or other nature- based activities		1			5	5	2
I visit the playground	1	2	1	1	1	5	2
I ride the Koonung Creek Trail on a bike or scooter		2	1	2	4	3	1
I take my dog swimming at the dog beach area						12	1
I use the outdoor exercise stations				2	3	6	2
I ride the Balwyn BMX track		2	1	1		7	2
I take part in school-based activities, such as school sports		1			2	8	2
I have a picnic			1	1	1	8	2
I use the barbecue at the playground			1	2	1	7	2
I use the gazebo at the wetland area		1		2	2	6	2
I use the toilet at the playground		1	1	2	1	6	2

Importance of facilities in Koonung Creek Reserve

How important are these facilities to you?	Very important	Important	Neutral	Not particularly important	Not important at all	l don't use this facility
Koonung Creek Trail paths for walking	10	2	1			
Open spaces to play and relax	7	4	2			
Other paths and open spaces within the reserve	5	5	3			
Koonung Creek Trail paths for riding a bike or a scooter	12		1			
Off-lead dog areas	2	4	3	1		3
Toilet at the playground	8	4	1			
Playground	6	4	2			1
Picnic areas	3	6	1	2		1
Areas for school- based activities	4	3	2	2		2
Dog beach area	1	2	4	1		5
Outdoor exercise stations	3	3	5	2		
Balwyn BMX track	7	4				2
Barbeque at the playground	3	6	2	1		1

Shared Path preferences

Common to the main English language response dataset, most respondents prefer separate paths, with 12 respondents opting for separate bike paths, and 1 respondent for shared.

Key Observations:

The data set from Chinese speaking respondents largely matches the main dataset. Most respondents were from Balwyn North, and the gender and age of respondents correlates with the main dataset.

Points of difference or interest:

The usage is low for dog amenities, with one respondent noting that 'Off-leash dog areas in natural areas may affect use of these areas by native animals.'

Low usage of the paths for bikes and scooters and BMX track, but these amenities were assigned a high value to these.

Respondents also appreciated the BBQ areas as culturally significant; 'Aussie lifestyle' and 'A tradition of Aussie lifestyle; can't lose it even if it's getting busier in life'

Two stand out consistencies with the main data set were the preference for separate bike and scooter paths, and safety concerns with the current shared arrangements, and requests for improvements to amenities, such as more security, bins and toilets.

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Appendix 2: Survey Questions

About you

We ask these questions so we know who we are hearing from.

- 1. Your name (optional)
- 2. Can we contact you with questions or information about this project? (yes/no)
- 3. What is the best email to contact you (optional)
- 4. What is the best phone number to call you (optional)

What is your gender?

- Female
- Male
- Prefer to self-describe: _____
- Prefer not to answer _____

Where do you live?

- Ashburton
- Balwyn
- Balwyn North
- Camberwell
- Canterbury
- Deepdene
- Glen Iris
- Hawthorn
- Hawthorn East
- Kew
- Kew East
- Mont Albert
- Surrey Hills
- Other:
- Prefer not to answer

What is your age?

- Parent of a child aged 0-4 years
- Parent of a child aged 5-11
- 12-17
- 18-24
- 25-34
- 35-49
- 50-59
- 60-69
- 70-84
- 85 or above
- Prefer not to answer

As you are under 18, you need permission to complete this survey from a parent or guardian. Do you have this permission? (If under 18 years logic)

• Yes/No

Using the Koonung Creek Reserve

The next set of questions ask you to share how you use the Reserve and what you value most highly. This information will help the City of Boroondara advocate on how the Reserve is reinstated after the North East Link is constructed.

How often do you use the facilities within the Koonung Creek Reserve	e?
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	Daily	A few times a week	Once a week	A few times a month	Monthly	Rarely/ Never
Visiting the playground						
Using the toilet at the playground						
Using the BBQ at the playground						
Having a picnic						
Playing/relaxing informally in the open space						
Walking the Koonung Creek Trail						
Riding the Koonung Creek Trail on a bike or scooter						
Walking on informal paths or in open space						
Walking with a dog on a leash						
Exercising a pet in the dog off-leash areas						
Swimming for pets at the dog beach						
Using the outdoor exercise stations						

Undertaking school-based activities, such as school sports			
Riding the Balwyn BMX Track			
Using the gazebo at the wetland			
Birdwatching/other nature-based activities			

Do you use the Reserve in any other ways? [open question]

Thinking about what's important to you, please rate the importance of each of the facilities or recreational areas within the Reserve from your personal perspective.

- How important is the playground?
- How important is the toilet at the playground?
- How important is the barbecue at the playground?
- How important are the picnic areas?
- How important are the open spaces to play and relax?
- How important are the Koonung Creek Trail paths for walking?
- How important are the Koonung Creek Trail paths for riding a bike or a scooter?
- How important are the other paths and open spaces within the reserve?
- How important are the off-lead dog areas?
- How important is the dog beach area?
- How important are the outdoor exercise stations?
- How important are the areas for school-based activities, such as school sports?
- How important is the Balwyn BMX track?

If you use this facility, why did you rate it in this way? (or) Why did you rate the facility in this way? (Include optional open question after each rating)

	Very important	Important	Neutral	Not particularly important	Not important at all	N/A as I don't use this facility
Visiting the playground						
Using the toilet at the playground						

Using the BBQ at the playground			
Having a picnic			
Playing/relaxing informally in the open space			
Walking the Koonung Creek Trail			
Riding the Koonung Creek Trail on a bike or scooter			
Walking on informal paths or in open space			
Walking with a dog on a leash			
Exercising a pet in the dog off-leash areas			
Swimming for pets at the dog beach			
Using the outdoor exercise stations			
Undertaking school-based activities, such as school sports			
Riding the Balwyn BMX Track			

Shared paths

Do you prefer shared paths where cyclists and pedestrians mix, or separate paths for pedestrians and cyclists?

Shared paths

Separate paths

Vision for Koonung Creek Reserve

In an ideal world, how would you like Koonung Creek Reserve to look and feel like in 5-10 years? (Big ideas are welcome) [open question]

Closing question

Are there any other issues about Koonung Creek Reserve you feel Council should know about? (open response)

Thank you!

Thank you for taking part in this survey. Council will include key feedback from this survey in our submission to the North East Link (NEL) Tunnel Urban Design and Landscape Plan (UDLP). We encourage you to also provide your feedback directly to the Victorian Government. Visit Engage Victoria <insert link> to view the NEL Tunnel plans and proposed designs for the interchange at Bulleen Road/Eastern Freeway. The deadline for community feedback is Tuesday 31 May 2022.