North East Link Project

Submission: Carey Baptist Grammar School

August 2019
The Carey Learning Journey at Bulleen

• 2000 Carey students access the Bulleen Campus each week
• Years 5-10 students study physical education each week
• All students complete at least one night after school sport and Saturday sport
• Local Primary Schools study intensive swimming

“physical and outdoor education and health programs are an integral part of the Carey education”
Carey Bulleen: School in Operation
The Carey Learning Facilities at Bulleen

• 25 metre indoor swimming pool, and diving pool
• Gymnasium, weights training room
• Four ovals
• Grass and synthetic wickets
• Tennis courts,
• Basketball courts
• Soccer and rugby fields
• Pavilions and spectator stands
Adverse Impacts on Carey

Health and Safety
- Possible increase in flooding effects
- Possible increased risk of soil and water contamination from Bulleen Park Oval
- Increased dust and air born contamination

Program Delivery
- Occupancy of land during construction phase
- Loss of existing car parking
- Additional inconvenience in traffic access, circulation and egress
- Disconnection of infrastructure services
- Likely increase in ambient noise

Land Holding and Facility Development
- Compulsory acquisition of land with sports facilities on it
- Loss of potential masterplan developments
- Increased Building costs due to possible increased flooding effects

Reputation
- Impact of adverse impacts on reputation, enrolments
NELP Impacts

- Southern Portal entrance at Carey’s entrance
- Construction Compound next door at Bulleen Park
- New Intersection at Veneto Club
- 1.1 hectares of land acquired
- Loss of 2 multipurpose courts, 2 shot put areas, 1 long jump area
- Loss of 75 carparks
- Loss of internal circulation road
Carey’s Consultant Team

- Lead Consultant: Colin Stuckey
- Noise & Vibration: Christophe Delaire (Marshall Day)
- Air Quality: Ben Sichlau (Point Advisory)
- Infrastructure Services: Simpson Kotzman
- Contaminated Water/Soil: Peter Oxnam (Greencap)
- Traffic & Parking: Brett Young (Ratio)
- Surface Water Flooding: Mike Cawood (Cawood & Associates)
- Site Planning: Hayball Architects
Noise and Vibration
Recommendations

- **Operational noise – EPR code NV1**
  - Criteria for Category B buildings to apply to Carey Sports Complex
  - Requirement for pre-construction noise assessment report and should address predicted noise levels at both buildings and outdoor noise sensitive locations

- **Construction noise – EPR code NV3**
  - Passive recreation criteria to be specified for outdoor areas associated with educational facilities

- **Construction noise – EPR code NV4**
  - Outdoor areas associated with educational facilities should be included in CNVMP
  - CNVMP should include predicted levels and mitigation measures to address the Carey Sports Complex
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<table>
<thead>
<tr>
<th>Land use</th>
<th>Construction noise management level, (L_{Aeq\ (15\ min)}) applies when properties are in use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms in schools and other educational institutions</td>
<td>Internal noise level 45 dB(A)</td>
</tr>
<tr>
<td>Hospital wards and operating theatres</td>
<td>Internal noise level 45 dB(A)</td>
</tr>
<tr>
<td>Places of worship</td>
<td>Internal noise level 45 dB(A)</td>
</tr>
<tr>
<td>Active recreation areas characterised by sporting activities and activities which generate their own noise, making them less sensitive to external noise intrusion</td>
<td>External noise level 65 dB(A)</td>
</tr>
<tr>
<td>Passive recreation areas characterised by contemplative activities that generate little noise and where benefits are compromised by external noise intrusion, for example reading, meditation</td>
<td>External noise level 60 dB(A)</td>
</tr>
<tr>
<td>Community centres</td>
<td>Depends on the intended use of the centre. Refer to the recommended maximum internal levels in AS/NZS 2107:2016 for specific uses</td>
</tr>
<tr>
<td>Industrial premises</td>
<td>External noise level 75 dB(A)</td>
</tr>
<tr>
<td>Offices, retail outlets</td>
<td>External noise level 70 dB(A)</td>
</tr>
<tr>
<td>Other noise sensitive land uses as identified in AS/NZS 2107:2016</td>
<td>Refer to the noise levels in AS/NZS 2107:2016</td>
</tr>
</tbody>
</table>
Recommendations

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Air Quality
NELP IAC Hearing
Air Quality impacts

Carey Baptist Grammar School

7 August 2019
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/05</td>
<td>PA review of NELP EES AQTR (V0)</td>
</tr>
<tr>
<td>24/05</td>
<td>PA update (V1) consideration of historic landfills</td>
</tr>
<tr>
<td>25/06</td>
<td>PA submission of information request to NELP</td>
</tr>
<tr>
<td>10 &amp; 12/07</td>
<td>NELP response &amp; expert meeting with Golders</td>
</tr>
<tr>
<td>15/07</td>
<td>New modelling at additional receptors</td>
</tr>
<tr>
<td>29 &amp; 31/07</td>
<td>EPR updates &amp; AQ Expert witness conclave report</td>
</tr>
<tr>
<td>07/08</td>
<td>Further EPR updates</td>
</tr>
</tbody>
</table>

Surface road (and cumulative) impacts not modelled at Carey GS, despite the site being a nominated sensitive receptor (#105). As such, no conclusion about impact can be drawn.

Modelled stack velocity seems too high (3x the velocity used in the noise assessment, and 1.5x the velocity used for Eastlink). This could reduce the predicted impact at ground level.

Concern as to whether the EPAV justification for not modelling all pollutants listed in Schedule B of the SEPP AQM has held true (based on Westgate tunnel EES).

Concern regarding the use of AERMET against EPAV Guidance (publications 1550 and 1551).

Concern that the use of COPERT for emission rates would result in under-estimate.

Concern at the lack of dispersion modelling of construction dust impacts, despite construction dust having been assessed as higher risk than operational impacts.

Concern remained outstanding.

Modelling undertaken at Carey GS, supports the conclusions of EES.

Multi-flue design was highlighted. This will ensure high stack velocity.*

Concern remained outstanding.

Acknowledged that EPAV guidance is out of date.

Resolved via elaboration on rationale, and recent PIARC publication.*

Agreed - too early for meaningful modelling. Preference instead for bolstering AQ1 EPR, making it more proactive.

Preference remained for bolstering AQ1 EPR.

EPR AQ1 updates on 29/07 were minimal, but the expert witness conclave on 31/07 recommended more significant updates. Point Advisory agrees with these recommendations. Further updates on 07/08 did not fully adopt the expert witness recommendations.

EPR AQ4 was also updated on 29/07 to make air quality monitoring results publicly available. Point Advisory agrees with this change. However, the manner in which monitoring and compliance information will be communicated remains unspecified.

*NOTE: Interim technical advice to the NELP IARC by Catherine Wilson (ref. CW2) recommends that the ventilation system Works Approval application include updated modelling. Point Advisory agrees.
Outstanding concerns – EPRs AQ1 & AQ4

The following submissions have recommended bolstering EPRs:

- Point Advisory – 12/07 (V2) – Via Carey GS (changes to EPR AQ1).
- EPA Victoria - EES Submission 600 (changes to EPRs AQ1 & 4).
- NELP Air Quality Expert Witness Conclave – Panel Submission 131 (changes to EPR AQ1).

Each of these recommendations has sought to:

- Ensure that the Dust and Air Quality Management and Monitoring Plan (under EPR AQ1) will prevent off-site impacts, rather than simply reacting to them.
- Refer to the SEPP AAQ or AQM to define applicable air quality objectives (noting that the adopted EPA publication 480 does not do this).
- Define the timing and/or manner in which monitoring and compliance information will be communicated to the public.

The current versions of EPR AQ1 & 4 do not ensure that these stakeholder objectives will be addressed.

Instead, EPR AQ1 now refers only to EPA Publication 480 - *Best Practice Environmental Management: Environmental Guidelines for Major Construction Sites*. This document:

- Does not reflect the 2012 classification of diesel dust as a Group 1 carcinogen by the IARC (International Agency for Research on Cancer).
- Does not reflect the growing body of scientific knowledge (and public concern) as to the health impacts of fine (inhalable) and very fine (respirable) particulates – to which asthma-prone students can be susceptible, particularly during exercise.
Infrastructure Services

• Relocation of services required to provide continuous supply
Contamination
North East Link Panel Hearing - Contaminated Land

- Peter Oxnam – Principal Contaminated Land
Key Findings

• Insufficient subsurface soil characterisation within the Bulleen Oval (main landfill zone) to provide an adequate assessment of risks to human health or consideration of aesthetics

• Insufficient understanding of subsurface waste composition (asbestos and other hazardous materials content) within the Bulleen Oval (main landfill zone) to provide an adequate assessment of risks to human health or consideration of aesthetics

• Insufficient groundwater monitoring well coverage within the Bulleen Oval (main landfill zone) to provide an adequate assessment of risks to human health or consideration of aesthetics

• Insufficient landfill gas assessment and no installation of landfill gas bores within the Bulleen Oval (main landfill zone) to provide an adequate assessment of risks to human health or consideration of aesthetics

• No reference to the Environment Protection Amendment Act 2018
Greencap’s conclusion on data sufficiency is based on statutory references that stipulate assessment and sampling density expectations:

- National Environmental Protection (Assessment of Site Contamination) Measure 2013 (Schedule A, B1 and B2)
Bulleen Oval - NE Link
Construction Activity Zones
Bulleen Oval Investigation

- Soil, groundwater and landfill gas assessment limited to the fringe of Bulleen Oval (in red)
- Landfill evident from the aerial (1963)
Bulleen Oval Investigation

• Soil bores locations (no test pits)
Bulleen Oval Investigation

- Groundwater bore locations
Bulleen Oval Investigation

- Surface methane gas testing locations
Bulleen Oval –
Estimated Waste Soil Categories and Volumes

- Category A waste present

Table sourced from Spoil Volume Estimate (Technical report O - Contamination and Soil – Appendix M). Refer to that report for assumptions.

<table>
<thead>
<tr>
<th>Location</th>
<th>Fill</th>
<th>Cat A</th>
<th>Cat B</th>
<th>Cat C</th>
<th>Total PIW</th>
<th>Sub Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M80 Ring Road to northern portal</td>
<td>2,120,000</td>
<td>-</td>
<td>3,000</td>
<td>32,000</td>
<td>35,000</td>
<td>2,155,000</td>
</tr>
<tr>
<td>Greensborough landfill</td>
<td>12,850</td>
<td>1285</td>
<td>11,565</td>
<td>12,850</td>
<td>25,700</td>
<td></td>
</tr>
<tr>
<td>Watsonia landfill (AK Lines Reserve)</td>
<td>4500</td>
<td>450</td>
<td>4050</td>
<td>4500</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td>Watsonia railway station</td>
<td>84,350</td>
<td></td>
<td>8750</td>
<td>8,750</td>
<td>93,100</td>
<td></td>
</tr>
<tr>
<td>Yallambie Road fuel station</td>
<td>77,750</td>
<td>825</td>
<td>7425</td>
<td>8250</td>
<td>86,000</td>
<td></td>
</tr>
<tr>
<td>Northern portal to southern portal</td>
<td>3,111,000</td>
<td>5,500</td>
<td>11,500</td>
<td>137,000</td>
<td>154,000</td>
<td>3,265,000</td>
</tr>
<tr>
<td>Yallambie landfill (Borlase Reserve)</td>
<td>158,300</td>
<td>-</td>
<td>-</td>
<td>35,000</td>
<td>35,000</td>
<td>193,300</td>
</tr>
<tr>
<td>Bulleen Industrial Precinct</td>
<td>774,000</td>
<td>5000</td>
<td>10,000</td>
<td>85,000</td>
<td>100,000</td>
<td>874,000</td>
</tr>
<tr>
<td>Former Bulleen quarry</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bulleen Park (landfill)</td>
<td>11,000</td>
<td>500</td>
<td>1,500</td>
<td>17,000</td>
<td>19,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Eastern Freeway</td>
<td>612,000</td>
<td>500</td>
<td>1,500</td>
<td>66,000</td>
<td>68,000</td>
<td>680,000</td>
</tr>
<tr>
<td>Bulleen Park (landfill)</td>
<td>11,000</td>
<td>500</td>
<td>1,500</td>
<td>17,000</td>
<td>19,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>
Risk Assessment Considerations:

- Without sufficient data, an adequate assessment of risks cannot be made.
- Current EES (Attachment III) assesses initial risk for “Contamination and Soil” at former landfills which includes the Bulleen Oval Landfill as a ‘medium risk’.
- The EES downgrades the initial risk for the Bulleen Landfill to a ‘low risk’ without additional risk controls.
- NELP has not been provided evidence of how the risk classification was reduced from ‘medium’ to a ‘low’.
Recommendations provided to NELP

• Complete subsurface soil characterisation within the Bulleen Oval (main landfill zone) to provide an adequate assessment of risks to human health and impact on aesthetics

• Complete subsurface waste composition characterisation (asbestos and other hazardous materials content) within the Bulleen Oval (main landfill zone) to provide an adequate assessment of risks to human health and impact on aesthetics

• Install groundwater monitoring wells within the Bulleen Oval (main landfill zone) and the Carey Sports Complex to provide an adequate assessment of risks to human health, impact on aesthetics and impact on property

• Installation of landfill gas bores within the Bulleen Oval (main landfill zone) to provide an adequate assessment of risks to human health and impact on aesthetics
NELP’s response to Carey’s concerns:

• “A comprehensive soil contamination assessment of the Former Bulleen Landfill has not been undertaken.”

• “A comprehensive predictive numerical groundwater model has not been prepared for the project reference design, nor has a comprehensive assessment of groundwater quality at the Former Bulleen Landfill been undertaken.”

• “A Groundwater Management Plan (GWMP) has not been prepared…”

• “A Soil Management Plan (SMP) has not been prepared…”

• “The difference in risk ratings reflects the progressive assessment of the risks as further investigations were undertaken…”

• “IAC has also requested a response on the matter of the new EP Act and NELP is preparing a response.”
Traffic and Parking
Issues

1. Access during construction
2. Car parking availability during construction
3. Car parking provision post construction
4. Construction impacts
5. Adequacy of access to Bulleen Road
6. Alternate Design
1. Access during construction
1. Access during construction

Figure 5.2.2: Reference Design of construction of the project
2. Parking availability during construction

Figure 4.2.3: Parking Occupancy and Availability Saturday 4 May 2019
3. Parking provision post-construction

Figure 4.5.1 Car parking area lost due to the project
3. Parking provision post-construction

Figure 4.5.2 Existing Car Parking Spaces Impacted
3. Parking provision post-construction

Figure 4.5.3 Master Plan Car Parking Spaces Impacted
4. Construction impacts

Performance Requirement (EPR) T2 states the following:

...The TMP must be informed and supported by an appropriate level of transport modelling and must include:

- Requirements for maintaining transport capacity in the **peak periods**
- Requirements for limiting the amount of construction haulage during the **peak periods**

I am concerned that the weekend period could be dismissed in the interpretation of ‘peak periods’.

At the conclave held, both experts and DoT agreed on the following possible rewording for the first dot point of EPR T2 to address this:

- Requirements for maintaining transport capacity in the peak periods, ‘not limited to the AM and PM weekday peak periods’
- Requirements for limiting the amount of construction haulage during the peak periods, ‘not limited to the AM and PM weekday peak periods’.
5. Adequacy of access to Bulleen Road

Figure 5.3.2: Layout of Signalised Intersection
5. Adequacy of access to Bulleen Road

Figure 5.3.6: Comparison of traffic volumes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekday AM Peak</td>
<td>10 movements</td>
<td>Not modelled as this does not represent the peak period of activity of CGSC, Bulleen Park and The Veneto Club</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Weekday PM Peak</td>
<td>160 movements</td>
<td>761 movements</td>
<td>601 movements</td>
<td></td>
</tr>
<tr>
<td>Saturday Peak</td>
<td>Not modelled</td>
<td>1,390 movements</td>
<td>n/a</td>
<td></td>
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</table>
### Figure 5.3.8: SIDRA Results – Weekend Peak

<table>
<thead>
<tr>
<th>Approach</th>
<th>Movement</th>
<th>WEEKEND PEAK</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>D.O.S.</td>
<td>95thile Queue (m)</td>
<td>Average Delay (s)</td>
<td></td>
</tr>
<tr>
<td>Bulleen Road (S)</td>
<td>Left</td>
<td>0.350</td>
<td>47.4</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Through</td>
<td>1.079</td>
<td>778.2</td>
<td>134.7</td>
<td></td>
</tr>
<tr>
<td>Bulleen Road (N)</td>
<td>Through</td>
<td>0.736</td>
<td>236.6</td>
<td>9.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>1.092</td>
<td>247.3</td>
<td>160.0</td>
<td></td>
</tr>
<tr>
<td>Western Access Road</td>
<td>Left</td>
<td>0.214</td>
<td>41.3</td>
<td>25.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Right</td>
<td>1.094</td>
<td>255.2</td>
<td>160.9</td>
<td></td>
</tr>
<tr>
<td>All Vehicles</td>
<td></td>
<td>1.094</td>
<td>765.5</td>
<td>77.0</td>
<td></td>
</tr>
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</table>
5 Adequacy of access to Bulleen Road

Figure 5.3.9: Layout of Option 1 Upgraded Intersection
5 Adequacy of access to Bulleen Road

Figure 5.3.10: Layout of Option 2 Upgraded Intersection
6. Alternate Design
6. Alternate Design:
by Boroondara, Banyule, Whitehorse Councils
Flooding
CAREY SPORTS COMPLEX AT BULLEEN

Report on Review of the Surface Water Flood Related Sections of the North East Link Draft Environmental Effects Statement in Relation to the Sports Complex

Michael Cawood
Site Planning
CAREY BAPTIST GRAMMAR SCHOOL

MASTER PLAN - BULLEEN CAMPUS
NORTH EAST LINK ENVIRONMENTAL EFFECTS STATEMENT (EES) REVIEW
‘PRIVATE & CONFIDENTIAL’
Hunt & Hunt Lawyers on behalf of Carey Baptist Grammar School
169 Bulleen Road, Bulleen
July 2019
1.1 The Project

- Carey Baptist Grammar School has prepared a strategic plan for the next 10 years – Carey’s Future: Strategic Directions Towards Our Centenary 2023.
- The School has commissioned Hayball to prepare corresponding Master Plans for its four campuses at Kew, Donvale, Bulleen and Templestowe.
- The purpose of these Master Plans is to provide a comprehensive and considered basis for future development of these sites and to support the education vision and values of the School.
- The strategic plan ‘Carey’s Future’ was based on wide consultation and community engagement.
- This document is the Master Plan for the Bulleen Campus.

**BULLEEN CAMPUS**

**SPORTS CAMPUS**

- Carey Sports Complex is set on 14 hectares in Bulleen, close to the Eastern Freeway and approximately 6.5km from the Kew Campus.
- Facilities include five playing fields, swimming and diving pools, a gymnasium, a weights training room and an indoor stadium with ball courts and seating for spectators.
- The Carey Sports Complex serves the needs of Carey students and the wider community by hosting Physical Education classes, APS/AIS competition, School sport training, major House sporting events and the Old Grammarians Association. The Carey Sports Complex is available for external use outside school hours.
- The Carey Rowing Club is a boating facility located on the Yarra River near Como Park.

1.2 School Vision

Carey’s Future - Strategic Directions Towards Our Centenary 2023 outlines the vision for the next 10 years at Carey Baptist Grammar School.

Contents within this document are a series of strategic and vision statements including the Carey Charter; 5 Strategic Priorities; 21 Guiding Principles; and Specific Action Plans. These comprehensive vision principles provide guidance for the school’s future development across the 3 Carey Pillars of Curricular, Co-curricular and Wellbeing.

‘The Master Plan for the development at Carey aims to develop a holistic, coherent design solution to support and express Carey’s vision. Carey’s Charter clearly articulates how it distinguishes itself. Elements of Carey’s Charter is five strategic priorities and its vision for learning and 21st century capabilities, provide the touchstone for all aspects of master planning and facilities design.’

Dr. Julie Allen

‘Our vision for Carey in the 21st Century is that it will continue to be recognised as a leading Christian, co-educational learning community committed to providing the best possible educational opportunities for its students.’

Carey Baptist Grammar School Mission/ Vision 2014
1.0 Introduction

1.3 The Campus
The Bulleen campus of CBGS was established in 1959 as a sports campus serving both the Kew and Donvale campuses.

Facilities at Bulleen are used for Physical Education (PE) classes during school hours, co-curricular sporting events and training, after school and on Saturday (current and past Grammarians). Some facilities are also hired to a number of external users on a regular and event-specific basis.

The Bulleen campus Master Plan will articulate a 20 year vision for the campus.

1.4 The Process
The Consultation
- Hayball Architects have undertaken a process of consultation with Carey Baptist Grammar School to inform the Master Plan, including a workshop and site visit with teaching and maintenance staff to observe the operating campus. Details of this consultation have been presented to CBGS as The Return Brief.
- GTA Traffic Engineers have undertaken studies of traffic movement and parking requirements which inform the Master Plan. Discussions with VicRoads in relation to safe and expedient egress from the campus are ongoing.
- Aspect Studios have been engaged to prepare a Landscape Master Plan for the campus and this work has informed the development of the overall Master Plan and is included in full in the appendix of this report.
- In association with CBGS, Coffey Projects and Michael Cavin, Hayball have consulted with Melbourne Water in relation to the particular nature of flooding experienced on the campus.
- Further consultation in the development of the Master Plan includes:
  1. Services Master Plan overview and detailed analysis of Pool Services,
  2. Hydrology analysis and reporting
  3. Planning overview and recommendations
  4. Accessibility overview and recommendations

Analysis and Context
- The consultant team, lead by Hayball Architects, undertook a detailed analysis of the campus, including technical analysis of existing documentation.
- Findings of the Master Plan team’s analyses are contained within Section 2.0 Context, as well as Appendices, where consultant technical reports are included in full.

Design Development
- The development of a Master Plan design for the Bulleen campus has evolved from the process of analysis and investigation undertaken.
- The establishment of an enduring framework for development will shape the Bulleen campus for 10 years and beyond.

Master Plan Key Projects
- The Master Plan identifies a series of Key Projects to be implemented, and it is these Key Projects which will be instrumental in the transformation of the Bulleen campus, as a physical environment which embodies the school’s future vision.

1.5 Previous Documentation
The following documentation has been reviewed and informs the development of the 2015 Master Plan:

- Carey Charter
- Carey Baptist Grammar School, Master Plan Review Kew Campus
- Carey’s Future - Strategic Directions Towards Our Centenary 2023
- 2003 Ratio Traffic Management Review
- 2006 Ratio Traffic Impact Report
- 2009 PMER Master Plan | Development Plan
- 2006 Arboricultural Inspection and Report by Nicholas Archer
- 2011 Corson Ramsey concept Master Plan diagrams
- CBGS Bulleen Campus Flood Management Plan Version 1.0, 2006

1.6 Master Plan Objectives
Priority Overview
The following issues have emerged from the consultation and are identified as key issues to be addressed by the Master Plan:

1. Education Practice/Learning
- Continue to develop the Bulleen campus as the centre for sports and outdoor education in support of the Kew and Donvale campuses and the CBGS Educational Vision for the next 10+ years.
- Seek opportunity to showcase the CBGS brand and identity at the Bulleen campus.
- Demonstrate CBGS commitment to a sustainable future through the development and retention of landscapes at the Bulleen campus as a unique feature of the Master Plan, and through involvement in regional projects for sustainable irrigation of the campus.

2. School Structures and Growth
- Develop facilities which will accommodate learning programmes at the Bulleen campus including improved wet weather and all weather facilities, improved amenities for students and spectators and improved access and pedestrian movement networks.
- Develop improved facilities for CBGS whole of school support operations within the Bulleen campus, including maintenance department, boat club, maintenance, theatre workshops, storage facilities and outdoor education development facilities.
- Develop opportunities for improved community engagement through the development of facilities for sports and hospitality which are available for use by the broader community.

3. Master Planning Advocacy
- Provide a Master Plan framework document as an advocacy tool for continued dialogue and engagement with Council, Authorities and the community to ensure a sustainable future for the Bulleen campus.
- Continue to work with the Authorities to develop the greatest potential for the campus within the environmental constraints of the campus environs.
- The CBGS branding will align with the Kew campus design ideology.
1.7 Master Plan Vision & Principles

Campus Vision Statement
- The Carey Baptist Grammar School campus at Bulleen will provide exemplary sporting facilities for the Carey community. In support of learning, physical education and outdoor education. These facilities will continue to engage both the Kew and Donnalee communities as well as the Old Grammarians and the broader community.
- The campus will be distinguished by the quality of its sporting facilities and the unique nature of the landscape environment.
- Amenities supporting the campus will provide access for all and promote pedestrian movements, offering improved social opportunity through the provision of indoor and outdoor facilities for socialisation and hospitality.
- The Bulleen campus will become the home for campus wide support facilities, including: maintenance; outdoor education; rowing boat maintenance; theatre set construction and stores; and bulk storage, supporting learning and activities at the Kew and Bulleen campuses.

Master Plan Principles
The Master Plan conceptual design for Bulleen has developed a series of Principles which will guide the future growth and development of the campus.

Precincts and Identity
1. Create a CBGS identity at the campus entry.
2. Facilitate a broader diversity of available sports fields.
3. Improve on site amenities including food, BBQ, toilet and change facilities.

Spaces and Places
1. Enhance and develop central gathering spaces at the heart of the campus.
2. Design an organised and systematic maintenance storage facility at Bulleen for all CBGS.
3. Create an all weather multi-purpose sports area beneath the Gerard Cramer PE Centre.
4. Design a central learning and hospitality facility at level 1 of the Gadsden Pavilion.

Access and Wayfinding
1. Optimised and segregated the movement of traffic, bus and private vehicles.
2. Maintain pedestrian priority and clarify wayfinding.
3. Prioritise mobility and access for all.

1.8 Master Plan Key Projects

1. Transform the Gerard Cramer Pavilion Undercroft
   - Relocate storage and first aid and transform the building undercroft into a multi-purpose sports and teaching facility. Include new floor surface, restorable wing wall, improved seating, all weather sports elements, sports lighting, multi-sports lift out opportunities. (Indicative layout shows 12 table tennis tables downstairs)

2. Renovate and Extend the Gadsden Pavilion
   - Renovate and extend the Gadsden Pavilion over two levels to provide improved male and female change facilities at ground level, relocated first aid station (ground); opportunities for an expanded hospitality and learning facility at first floor.

3. Upgrade the Aquatic Centre
   - Develop a maintenance programme for the Aquatic Centre which is aligned to the Services Reports prepared by BRT Consulting Pty Ltd and Cattrell Consultants (Refer Appendix) and coordinates maintenance of the building interior and pool tiling and finishes.

4. Create a Dynamic Campus Heart
   - Identify the full extent of the campus heart and undertake a comprehensive and coordinated concept design for the area, including detailed consideration of landscape elements and hospitality opportunities, including shelter and BBQ facilities. (Refer also the Appendix for detailed consideration of the design briefing requirements)

5. Renovate the Witton Field B
   - Create a new synthetic surface which can accommodate multi-sport options for all weather play. Review the opportunity to include new tennis courts (Note: Spacing between courts and fencing as shown is suitable for recreational play only)

6. Develop a New Super Shed
   - Develop a design for the proposed Super Shed to accommodate the requirements of the detailed brief (Refer Appendices for Preliminary Area Schedule and Briefing data compiled during consultation)
   - Construct Melbourne Water during the design process to ensure flood management requirements are accommodated in the building design.
   - Design road extensions for vehicle movements which will accommodate access to meet on-street vehicular and trailer turning parameters.
   - Seek opportunity for CBGS branding to be incorporated into the proposed building facades facing Gadsden Oval

7. Expand the South Cricket Practice Nets
   - Expand the existing cricket nets to the south of Gadsden Oval to provide additional area, including short run up area nets suitable for junior players.

8. Enhance the North Cricket Practice Nets
   - Retain the existing synthetic cricket nets north of Gadsden Oval and modify the interface with the oval to provide a continue run up across the drainag e rim at the oval edge.

9. Convert Rees and Smith Ovals
   - Convert the Rees and Smith ovals for alternative sports use following a detailed study by Sports staff to determine best practice outcomes for learning. (Refer the Appendix for layout options study. The preferred option is noted on the Master Plan)

10. Convert Spicer Oval
    - Work with Sports staff to determine the most appropriate functional conversion of the Spicer Oval to meet learning and sporting demand. (Refer the Appendices for layout option studies. The preferred option is noted on the Master Plan)

11. Identify the Campus Entry
    - Create a CBGS identity at the campus entry and brand signage to align with the new campus.
    - Design a noise wall barrier to Bulleen Road, in consultation with Authorities, to improve the amenity of sports courts for teaching activity. Create a Carey brand identity to the faces of the noise wall.

12. Enhance Traffic and Transport Management
    - Continue dialogue and development of work to resolve the issues associated with traffic and transport as identified by the Master Plan, including: improved access to Bulleen Road; optimal parking and overflow parking opportunities; and effective and safe traffic flow networks. Work with the Authorities to ensure best outcomes for the campus (Refer also the Appendix for Traffic Engineering detailed proposals)

13. Create a Secondary Activity Space
    - Establish a secondary activity space adjacent to the Southern Pavilion for participant and spectators. Develop this area in alignment with the conversion of the Spicer Oval and ensure treatments are aligned to the Campus Heart.

14. Create Clear Pedestrian Networks and Access for All Campus Wide
    - Establish a campus wide pedestrian pathway network which clearly identifies Primary and Secondary networks.
    - Support the network hierarchy through branded CBGS signage to enhance campus wide wayfinding.
    - Ensure campus wide access is ADA compliant.
    - Include a lift to provide access to upper levels of Gerard Cramer and Gadsden Pavilions.

15. Enhance Spectator Amenities
    - Enhance spectator amenities campus wide through the provision of toilet facilities, rubbish bins, shade trees, planting, temporary and permanent spectator seating, improved signage and wayfinding and hospitality opportunities.

16. Create a Landscape Palette for the Campus
    - Utilise the CBGS furniture and materials palette for landscape enhancements throughout the campus.
    - Develop a landscape planting palettes for ongoing development and maintenance.
Key Projects

1. Transform the Gerard Craner Pavilion Landscape
2. Renovate and Extend the Gladstone Pavilion and Lift Access to Upper Level
3. Upgrade Aquatic Centre
4. Create a Dynamic Campus Heart
5. Renovate Wilcox Field
6. Develop a New Super Shed
7. Expand the South Cricket Practice Nets
8. Expand the North Cricket Practice Nets
9. Convert Rees and Smith Ovals
10. Convert Spicers Oval
11. Identify the Campus Entry
12. Enhance Traffic and Tramway Management
13. Create a Secondary Activity Space
14. Create Clear Pedestrian Networks and Access for All Campus Wide
15. Enhance Spectator Amenities
16. Create a Landscape Palette for the Campus

Carey Baptist Grammar School Bulleen Campus Master Plan North East Link EES Review
2.0  NORTH EAST LINK IMPACT
2.1 North East Link Project

North East Link Project Description
- "North East Link is a proposed new freeway-standard road connection that would complete the missing link in Melbourne's ring road, giving the city a fully completed orbital connection for the first time. The project would also upgrade and increase the capacity of one of Melbourne's key road corridors, the Eastern Freeway."
- "North East Link is a priority project identified in the Victorian Government's long-term metropolitan planning strategy, Plan Melbourne 2017-2050."
- Source North East Link EES

Eastern Freeway Interchange
- The Eastern Freeway interchange will occur in the Yarra River area. It will connect the Eastern Freeway to the new section of North East Link. The new interchange at Bulleen Road is adjacent to CBGS. The western section of the works will impact the north-east section of the CBGS campus.

North East Link Project EES map book
- "The EES map book shows the North East Link Project design and its key elements across three types of plans: • Horizontal alignment plans showing at each page opening the construction phase of the project (left side) and the operation phase of the project (right side) • Vertical alignment plans showing the relative level of the project infrastructure above and below surface level • Indicative cross sections showing graphical illustration of indicative cross sections along the project corridor. The proposed project boundary encompasses the key locations that would be used for permanent structures and temporary construction works sites (above and below ground). Further details of construction and operation are described in Chapter 8 Project (EES) description."
- The project boundary often aligns to registered property boundaries, and in some locations, this appears to impact private property. However, this is often a result of the area of urban expansion and road rationalisation by the City of Bulleen. The North East Link alignment shown in this map book outlines one feasible means by which the project could be designed, constructed and operated. The EES is based on the reference project illustrated in this map book. As the design and consultation with stakeholders for the project is ongoing, components of the project design as shown in this map book may change."
- Source North East Link EES
- Refer Appendix for EES map
- Note: The area affecting (outside the road alignment) the campus seems to be blanked out in the operational plan.

Construction Period
- "Construction works in this element would extend over five years from 2021. Works would start with the construction of the new Eastern Freeway interchange, followed by upgrading of the Eastern Freeway east and Eastern Freeway west commencing in mid-2022 and mid-2023 respectively."

2.2 Campus Impact

Existing Campus
- Based on the Environmental Effects Statement (EES) map book, the land to be impacted by the interchange is approximately 12,000m² (Project Boundary - Surface Works, TSC by Lands surveyors). Existing elements within the affected area are:
  - Bulleen Park Drive (Although outside the school boundary, it serves as the only entry road to the campus)
  - Access drive & car parking
  - Two synthetic basketball/football courts and seating
  - Long jump track
  - Shot put field 2 x
  - Mature trees
  - Graded areas
  - Garden beds
  - Boundary fencing and Signage
  - North east edges of Dunsheas Oval
  - Internal access driveway on the eastern side of Dunsheas Oval

Campus Masterplan
The Master Plan Key Projects to be impacted are:
- Identify the Campus Entry – Create a CBGS identity at the campus entry and brand signage to align with the new campus – Design a noise wall barrier to Bulleen Road, in consultation with Authorities, to improve the amenity of sports courts for teaching activity. Create a Carey brand identity to the façades of the noise wall.
- Enhance Traffic and Transport Management – Continue dialogue and development of work to resolve the issues associated with traffic and transport as identified by the Master Plan, including; improved egress to Bulleen Road optimal parking and overflow parking opportunities, and effective and safe traffic flow networks. Work with the authorities to ensure best outcomes for the campus.
- Enhance Spectator Amenities (Dunsheas Oval) – Enhance spectator amenities campus wide through the provision of toilet facilities, rubbish bins, shade tree planting, temporary and permanent spectator seating, improved signage and wayfinding and hospitality opportunities.

2.3 Impacted Area

- Project Boundary - Surface Works (Construction Phase)
- Proposed Road Alignment (Operational)
- Site Boundary

Carey Baptist Grammar School Bulleen Campus Master Plan North East Link EES Review

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2.4 North East Link Impact | Existing + Roadwork Overlay
2.6 Carpark Loss

- Existing Car Park Loss: 27 Spaces
- Masterplan Car Park Loss: 65 Spaces
3.0 SITE PROPOSAL
Replacement of Facilities Siting Over View

New Siting Proposal

Utilizing park land to the north west of the campus boundary to provide:

- Access drive off Bulleen Park Drive
- For car park spaces lost, see Report
- Consultant’s report
- 2 hard courts, for netball and basketball
- Long jump track
- 2 shot put fields
- Grassed area
- Matured trees and garden beds
- Boundary fencing and signage

Benefits:

- Provides replacement of lost school facilities without further impact on the campus.
- Good connection to existing internal drive ways and car parks.
- Connection to Bulleen Park Drive
- This area seems to be unusual by the existing sporting clubs.
Planning Issues

- Use by School Associates
- Use by Other Schools
- Community Use
- Approved Kew Campus Masterplan
- Planning Scheme Use Definition
- Exemption from the Manningham Planning Scheme
- Amenity Impacts
Compliance with Manningham Planning Scheme
Bolin Bolin Water Infrastructure

- Preservation of water infrastructure
- Retention of water rights for irrigation
Conclusion