



Metro South-West Joint Development Assessment Panel Agenda

Meeting Date and Time: Friday, 8 July 2016; 9.00am
Meeting Number: MSWJDAP/ 108
Meeting Venue: City of Mandurah
3 Peel Street, Mandurah

Attendance

DAP Members

Mr Ian Birch (Presiding Member)
Ms Stacey Towne (Deputy Presiding Member)
Mr Rob Nicholson (Specialist Member)
Cr Caroline Knight (Local Government Member, City of Mandurah)
Cr Chris Elliott (Local Government Member, City of Rockingham)
Cr Kelly McManus (Local Government Member, City of Rockingham)
Cr Dennis Wood (Local Government Member, City of Kwinana)

Officers in attendance

Mr Aaron Lucas (City of Mandurah)
Ms Donna Shaw (City of Rockingham)
Mr Greg Delahunty (City of Rockingham)
Mr Kevin Keyes (City of Rockingham)
Mr Neels Pretorius (City of Rockingham)
Mr Brenton Scambler (City of Kwinana)
Ms Jessica Birbeck (City of Kwinana)

Local Government Minute Secretary

Ms Kyl Betteridge (City of Mandurah)

Applicants and Submitters

Mr Marc Re (Planning Solutions)
Mr Kristian Kennedy (ARP)
Ms Colleen Thompson (GHD)
Mr Matt Raymond (TPG)
Ms Lisa Engelbrecht (MGM Town Planners)

Members of the Public

Nil

1. Declaration of Opening

The Presiding Member declares the meeting open and acknowledges the past and present traditional owners and custodians of the land on which the meeting is being held.



2. Apologies

Cr Darren Lee (Local Government Member, City of Mandurah)
Cr Ruth Alexander (Local Government Member, City of Kwinana)

3. Members on Leave of Absence

Nil

4. Noting of Minutes

Note the Minutes of the Metro South-West JDAP meeting No.107 held on the 27 June 2016.

5. Declarations of Due Consideration

Any member who is not familiar with the substance of any report or other information provided for consideration at the DAP meeting must declare that fact before the meeting considers the matter.

6. Disclosure of Interests

Nil

7. Deputations and Presentations

Nil

8. Form 1 - Responsible Authority Reports – DAP Application

- | | | |
|------------|--|--|
| 8.1 | Property Location:
Application Details:

Applicant:
Owner:
Responsible authority:
DoP File No: | Lot 50 Mandurah Road, Meadow Springs
Redevelopment of Existing Caltex Service
Station and Convenience Store
Planning Solutions
Arena Nominees Pty Ltd
City of Mandurah
DAP/16/01018 |
| 8.2 | Property Location:
Application Details:
Applicant:

Owner:
Responsible authority:
DoP File No: | Lot 10 (No.731) Eighty Road, Baldivis
Additions to Educational Establishment
Mother Teresa Catholic College C/O MGA Town
Planners
Roman Catholic Archbishop of Perth
City of Rockingham
DAP/16/00995 |

9. Form 2 – Responsible Authority Reports - Amending or cancelling DAP development approval

- | | | |
|------------|--|---|
| 9.1 | Property Location:
Application Details:

Applicant:
Owner:
Responsible authority:
DoP File No: | Lot 1 Mandurah Road, Karnup
Amendment to Development Approval for the proposed Singleton East Neighbourhood Centre (a service station, a medical centre, a consulting room and 12 shops, including a pharmacy, a super market and 10 specialty shops)
Aigle Royal Developments
ARP No 3 Pty Ltd
City of Rockingham
DP/13/00706 |
| 9.2 | Property Location:
Application Details:
Applicant:
Owner:
Responsible authority:
DoP File No: | Lot 100 (432-434) Safety Bay Rd, Safety Bay
4 storey mixed use development
TPG Town Planning Urban Design & Heritage
434 Safety Bay Road Pty Ltd
City of Rockingham
DP/12/00130 |
| 9.3 | Property Location:

Application Details:

Applicant:

Owner:
Responsible authority:
DoP File No: | Lot 9002 Kwinana Beach Road and Lot 1003 Patterson Road, Kwinana Beach
Proposed General Industry – Bitumen Storage and Distribution Facility
TPG Town Planning Urban Design & Heritage (on behalf of development operator Puma Energy)
WA Land Authority – LandCorp
City of Kwinana
DAP/14/00677 |
| 9.4 | Property Location:
Application Details:

Applicant:

Owner:
Responsible authority:
DoP File No: | Part Lot 9002 Port Road, Kwinana Beach
Proposed General Industry – Bitumen Storage, Processing and Distribution Facility
GHD Pty Ltd (on behalf of SAMI Bitumen Technologies Pty Ltd)
WA Land Authority – LandCorp
City of Kwinana
DAP/15/00924 |

10. Appeals to the State Administrative Tribunal

Nil

11. General Business / Meeting Closure

In accordance with Standing Order 7.3 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.



Minutes of the Metro South-West Joint Development Assessment Panel

Meeting Date and Time: Monday, 27 June 2016; 10:00am
Meeting Number: MSWJDAP/ 107
Meeting Venue: City of Cockburn
9 Coleville Crescent, Cockburn

Attendance

DAP Members

Mr Ian Birch (Presiding Member)
Ms Stacey Towne (Deputy Presiding Member)
Mr Rob Nicholson (Specialist Member)
Cr Carol Reeve-Fowkes (Local Government Member, City of Cockburn)
Cr Steven Portelli (Local Government Member, City of Cockburn)

Officers in attendance

Mr Dawid Jansen Van Rensburg (City of Cockburn)
Mr Andrew Lefort (City of Cockburn)

Local Government Minute Secretary

Ms Lynette Jakovcevic (City of Cockburn)

Applicant and Submitters

Mr Andrew Wallis (Stockland)
Mr Will Lakin (MJA Architects)
Mr Matt Raymond (TPG)

Members of the Public

Nil

1. Declaration of Opening

The Presiding Member, Mr Ian Birch declared the meeting open at 10.03am on 27 June 2016 and acknowledged the past and present traditional owners and custodians of the land on which the meeting was being held.

The Presiding Member announced the meeting would be run in accordance with the *Development Assessment Panel Standing Orders 2012* under the *Planning and Development (Development Assessment Panels) Regulations 2011*.

The Presiding Member advised that the meeting is being audio recorded in accordance with Section 5.16 of the *Standing Orders 2012*; No Recording of Meeting, which states: 'A person must not use any electronic, visual or audio



recording device or instrument to record the proceedings of the DAP meeting unless the Presiding Member has given permission to do so.' The Presiding Member granted permission for the minute taker to record proceedings for the purpose of the minutes only.

2. Apologies

Cr Kevin Allen (Local Government Member, City of Cockburn)

3. Members on Leave of absence

Nil

4. Noting of minutes

Minutes of the Metro South-West JDAP meeting No.105 held on the 7 June 2016 and meeting No.106 held on the 9 June were noted by DAP members.

5. Declaration of Due Consideration

All members declared that they had duly considered the documents.

6. Disclosure of interests

Nil

7. Deputations and presentations

7.1 Mr Andrew Wallis (Stockland) presenting for the application at Item 8.1.

7.2 Mr Will Larkin (MJA Architects) presenting for the application at Item 8.1.

7.3 Mr Matt Raymond (TPG) presenting for the application at Item 8.1.

8. Form 1 - Responsible Authority Reports – DAP Application

8.1 Property Location:	Lot 9021 Jandakot Road, Banjup
Application Details:	139 Grouped Dwellings (Aged Persons)
Applicant:	TPG Town Planning, Urban Design and Heritage
Owner:	Stockland WA Development Pty Ltd
Responsible authority:	City of Cockburn
DoP File No:	DAP/16/00996

REPORT RECOMMENDATION / PRIMARY MOTION

Moved by: Ms Stacey Towne

Seconded by: Mr Rob Nicholson

With agreement from the Mover and Seconder, an administrative error was corrected in Condition 4 so as to read, "...the subject of Condition 3".

That the Metro South-West JDAP resolves to:



Approve DAP Application reference DAP/16/00996 and accompanying plans A0.01: Site - Site Location, DA1.02: Masterplan - Landscape Zones & Fences, DA1.03: Masterplan, DA2.01:Streetscapes - 15m Boulevard, DA2.02: Streetscapes - 13.5m Retirement St, DA2.03: Streetscapes - 9m Mews St, DA2.04: Streetscapes - 1 & 11M Mews St, DA2.05: Streetscapes - Internal St Elevations, DA2.06: Streetscapes - Typical Double Fronted ILU's, DA2.08: Streetscapes - Secondary Entrance, DA2.09: Streetscapes - Western Interface, DA2.10: Streetscapes - ILU's Facing Clubhouse, DA3.01: House Type A – 11.5m lot width, DA3.02: House Type A – 11.5m lot width, DA3.03: House Type B – 11.5m lot width, DA3.04: House Type B – 11.5m lot width, DA3.05: House Type C – 12.5m lot width, DA3.06: House Type C – 12.5m lot width, DA3.07: House Type D – 12.5m lot width, DA3.08: House Type D – 12.5m lot width, DA3.09: House Type E – 13m lot width, DA3.10: House Type E – 13m lot width, DA3.11: House Type F – 336m² lot, DA3.12: House Type F – 336m² lot, DA6.01: Built Form – Fencing Detail in accordance with the provisions of the City of Cockburn Town Planning Scheme No. 3, Clause 68(2)(b) of the Planning and Development (Local Planning Schemes) Regulations 2015 and the Metropolitan Region Scheme, subject to the following conditions:

Conditions:

1. This approval is for 139 '*Grouped Dwellings (Aged Persons)*' as defined in the Residential Design Codes.
2. Prior to the issue of a Building Permit, arrangements shall be made to the satisfaction of the Chief Executive Officer for the pro-rata development contributions towards those items listed in the City of Cockburn Town Planning Scheme No.3 for Community Infrastructure (DCA 13).
3. A modified Waste Management Plan shall be submitted to and approved by the City prior to the lodgement of a Building Permit application for new buildings. The Waste Management Plan shall be to the satisfaction of the Manager Waste Services and shall include common bin stores and 1 set of bins between 3 units as a minimum. Provisions identified in the modified Waste Management Plan approved by the City shall be implemented and maintained thereafter to the satisfaction of the City.
4. All relevant plans shall be revised to incorporate a design reflective of a modified Waste Management Plan, the subject of Condition No. 3.
5. Prior to the issue of a Building Permit for new buildings, the submission of a detailed landscape plan for assessment and approval by the City is required. The Landscape Plan shall include the following:
 - a) The location, number and type of proposed planting;
 - b) The size of selected species at planting and maturity;
 - c) Those areas to be reticulated or irrigated; and
 - d) Details of any common area lighting.
6. Landscaping shall be installed and reticulated in accordance with an approved detailed landscape plan prior to the occupation of the



development. Landscaped areas are to be maintained thereafter in good order to the satisfaction of the City.

7. A schedule of the materials finishes and colours shall be submitted to and approved by the City prior to the issue of a Building Permit Application. The schedule shall include details of the type of materials proposed to be used, including their colour and texture. The development shall thereafter be maintained in accordance with the approved materials schedule.
8. Prior to the initial occupation of the building, the parking bays, driveways and points of ingress shall be sealed, kerbed, drained and line marked in accordance with the approved plans to the satisfaction of the City. Car parking and access driveways shall be designed, constructed and maintained to comply with AS2890.1 and provide for safe pedestrian movement, to the City's satisfaction.
9. Walls, fences and landscape areas shall be truncated within 1.5 metres of where they adjoin vehicle access points, where a driveway and/or parking bay meets a public street or limited in height to 0.75 metres to the satisfaction of the City.
10. All stormwater shall be contained and disposed of on-site to the satisfaction of the City.
11. The development site shall be connected to the reticulated sewerage system of the Water Corporation before commencement of any use.
12. A Dust Management Plan shall be submitted to and approved by the City prior to any works commencing on-site. The approved Dust Management Plan shall be implemented to the satisfaction of the City.
13. A Construction Management Plan shall be submitted to and approved by the City prior to the submission of a Building Permit application and all measures identified in the plan are to be implemented during the construction phase to the satisfaction of the City.
14. No activities causing noise and/or inconvenience to neighbours shall be carried out after 7.00pm or before 7.00am, Monday to Saturday, and not at all on Sunday or Public Holidays.
15. All dwellings shall incorporate 6.38mm laminated glazing (Rw 33 or greater) to all habitable rooms, including kitchens.
16. Written confirmation from the builder detailing that all glazing requirements as imposed as part of this approval have been incorporated into the proposed development, shall be submitted to the City with the Building Permit Application.
17. All service areas and service related hardware, including antennae, satellite dishes, air-conditioning units and any required fire tanks, shall be suitably located away from public view and/or screened to the satisfaction of the City.



18. All relevant provisions identified in the Fire Management Plan prepared by Strategen Environmental dated 24 February 2015 as part of the approved Banjup Quarry Local Structure Plan shall be implemented and maintained thereafter to the satisfaction of the City.
19. To ensure the Fire Management Plan referred to in Condition 18 is implemented, the Bushfire Attack Levels and Asset Protection Zones outlined in Figure 1 – BAL assessment Calleya North Retirement Living Site, prepared by Strategen Environmental and dated 29 February 2016, shall be implemented.
20. All recommendations proposed in *Corrective Action Report* dated 7 June 2016 prepared by Transcore in response to the Road Safety Audit for the proposed development, shall be implemented at the detailed design stage in consultation with and to the satisfaction of the City.

Advice Notes

1. This is a Planning Approval only and does not remove the responsibility of the applicant/owner to comply with all relevant building, health and engineering requirements of the Council, or with any requirements of the City of Cockburn Town Planning Scheme No. 3. Prior to the commencement of any works associated with the development, a building permit is required.
2. Under the Residential Design Codes '**Grouped Dwelling**' is defined as: '*A dwelling that is one of a group of two or more dwellings on the same lot such that no dwelling is placed wholly or partially above another, except where special conditions of landscape or topography dictate otherwise.*'; and
3. Under the Residential Design Codes '**Aged person**' is defined as: '*A person who is aged 55 years or older.*'
4. Where the obligation for payment of developer contributions has been met by a previous approval, such as subdivision, the condition requiring development contributions will be deemed to have been complied with. The principles and administrative requirements for Development Contribution Plans are set out in Part 6.3 of the City of Cockburn's Town Planning Scheme No. 3. Further information may be found at www.cockburn.wa.gov.au/communityinfrastructure
5. With regards to Condition 10, all stormwater drainage shall be designed in accordance with Australian Standard AS3500.
6. With regards to Condition 12, an Application for Approval of a Dust Management Plan may be obtained from www.cockburn.wa.gov.au and shall identify the mitigation and contingency measures proposed by the developer. Appropriate mitigation and contingency measures are outlined in



the Department of Environment Regulation publication "*Land development sites and impacts on air quality*" (November 1996)

7. With regards to the Condition 13, such a plan shall address the following items:
 - a) Access to and from the site;
 - b) Delivery of materials and equipment to the site;
 - c) Storage of materials and equipment to the site;
 - d) Parking arrangements for contractors and subcontractors;
 - e) Management of construction waste; and
 - f) Other matters likely to impact on the surrounding properties.
8. All toilets, ensuites and kitchen facilities in the development shall be provided with mechanical ventilation flued to the outside air, in accordance with the requirements of the National Construction Code (Building Code of Australia), the Sewerage (Lighting, Ventilation and Construction) Regulations 1971, Australian Standard S1668.2-1991 "The use of mechanical ventilation for acceptable indoor air quality" and the City of Cockburn Health Local Laws 2000. The City's Health Service further recommends that laundries without external windows and doors should be ventilated to external air and condensating clothes dryers installed.
9. The development shall comply with the noise pollution provisions of the Environmental Protection Act 1986, and more particularly with the requirements of the Environmental Protection (Noise) Regulations 1997. The installation of equipment within the development including air-conditioners, spas, pools and similar equipment shall not result in noise emissions to neighbouring properties exceeding those imposed by the Environmental Protection (Noise) Regulations 1997 (as amended).
10. With regards to street numbering of this proposal, you are advised to contact the City's Strategic Planning team on 9411 3444 or email streetnumbers@cockburn.wa.gov.au to ensure that any street numbers used comply with the City's requirements.
11. If the development the subject of this approval is not substantially commenced within a period of two (2) years, the approval shall lapse and be of no further effect.
12. In the event of the approval having lapsed, no development shall be carried out without further approval having first being sought and obtained, unless the applicant has applied and obtained Development Assessment Panel approval to extend the approval term under regulation 17(1)(a) of the Development Assessment Panel Regulations 2011.



AMENDING MOTION

Moved by: Mr Rob Nicholson

Seconded by: Mr Ian Birch

To amend the pre-amble as follows:

*“**Approve** DAP Application reference DAP/16/00996 and accompanying plans **dated 15 January 2016** A0.01: Site - Site Location, DA1.02: Masterplan - Landscape Zones & Fences, DA1.03: **Amended** Masterplan (**received dated 31 May 2016**), DA2.01: Streetscapes - 15m Boulevard, DA2.02: Streetscapes - 13.5m Retirement St, DA2.03: Streetscapes - 9m Mews St, DA2.04: Streetscapes - 1 & 11M Mews St, DA2.05: Streetscapes - Internal St Elevations, DA2.06: Streetscapes - Typical Double Fronted ILU's, DA2.08: Streetscapes - Secondary Entrance, DA2.09: Streetscapes - Western Interface, DA2.10: Streetscapes - ILU's Facing Clubhouse, DA3.01: House Type A – 11.5m lot width, DA3.02: House Type A – 11.5m lot width, DA3.03: House Type B – 11.5m lot width, DA3.04: House Type B – 11.5m lot width, DA3.05: House Type C – 12.5m lot width, DA3.06: House Type C – 12.5m lot width, DA3.07: House Type D – 12.5m lot width, DA3.08: House Type D – 12.5m lot width, DA3.09: House Type E – 13m lot width, DA3.10: House Type E – 13m lot width, DA3.11: House Type F – 336m² lot, DA3.12: House Type F – 336m² lot, DA6.01: Built Form – Fencing Detail in accordance with the provisions of the City of Cockburn Town Planning Scheme No. 3, Clause 68(2)(b) of the Planning and Development (Local Planning Schemes) Regulations 2015 and the Metropolitan Region Scheme, subject to the following conditions.”*

REASON: To provide certainty as to the plans that are being approved.

The Amending Motion was put and CARRIED UNANIMOUSLY.

AMENDING MOTION

Moved by: Ms Stacey Towne

Seconded by: Cr Steven Portelli

To modify Condition 3 as follows and delete Condition 4 and renumber all remaining conditions.

*“A modified Waste Management Plan shall be submitted to and approved by the City prior to the lodgement of a Building Permit application **showing 2 sets of bin pads to service the dead end streets such that the waste trucks can collect the waste in a forward motion only to the satisfaction of the City.**”*

REASON: Whilst noting the City's Policy for minimising waste and its sustainability objectives, it is considered that the waste management as proposed by the applicant makes a concerted effort to include waste minimisation whilst more effectively accommodating the needs of the intended residents (being aged and dependent persons). It is also noted that the condition as recommended could have led to significant changes to the plans as submitted.



The Amending Motion was put and CARRIED UNANIMOUSLY.

AMENDING MOTION

Moved by: Mr Rob Nicholson

Seconded by: Cr Carol Reeve-Fowkes

To insert a new Condition to read as follows:

“Prior to lodgement for a building permit, provide evidence that R-Codes 5.5.2 C2.3 i, ii, iii and iv are being complied with to the satisfaction of the City. This will require amendment to the approved plans, to comply with AS4299-1995 (Adaptable Housing).”

REASON: To ensure that all units meet the standard required to accommodate aged and dependent persons.

The Amending Motion was put and CARRIED UNANIMOUSLY.

PRIMARY MOTION (AS AMENDED)

That the Metro South-West JDAP resolves to:

Approve DAP Application reference DAP/16/00996 and accompanying plans dated 15 January 2016 A0.01: Site - Site Location, DA1.02: Masterplan - Landscape Zones & Fences, DA1.03: Amended Masterplan (received dated 31 May 2016), DA2.01:Streetscapes - 15m Boulevard, DA2.02: Streetscapes - 13.5m Retirement St, DA2.03: Streetscapes - 9m Mews St, DA2.04: Streetscapes - 1 & 11M Mews St, DA2.05: Streetscapes - Internal St Elevations, DA2.06: Streetscapes - Typical Double Fronted ILU's, DA2.08: Streetscapes - Secondary Entrance, DA2.09: Streetscapes - Western Interface, DA2.10: Streetscapes - ILU's Facing Clubhouse, DA3.01: House Type A – 11.5m lot width, DA3.02: House Type A – 11.5m lot width, DA3.03: House Type B – 11.5m lot width, DA3.04: House Type B – 11.5m lot width, DA3.05: House Type C – 12.5m lot width, DA3.06: House Type C – 12.5m lot width, DA3.07: House Type D – 12.5m lot width, DA3.08: House Type D – 12.5m lot width, DA3.09: House Type E – 13m lot width, DA3.10: House Type E – 13m lot width, DA3.11: House Type F – 336m² lot, DA3.12: House Type F – 336m² lot, DA6.01: Built Form – Fencing Detail in accordance with the provisions of the City of Cockburn Town Planning Scheme No. 3, Clause 68(2)(b) of the Planning and Development (Local Planning Schemes) Regulations 2015 and the Metropolitan Region Scheme, subject to the following conditions:

Conditions:

1. This approval is for 139 'Grouped Dwellings (Aged Persons)' as defined in the Residential Design Codes.
2. Prior to the issue of a Building Permit, arrangements shall be made to the satisfaction of the Chief Executive Officer for the pro-rata development contributions towards those items listed in the City of Cockburn Town Planning Scheme No.3 for Community Infrastructure (DCA 13).



3. A modified Waste Management Plan shall be submitted to and approved by the City prior to the lodgement of a Building Permit application showing 2 sets of bin pads to service the dead end streets such that the waste trucks can collect the waste in a forward motion only to the satisfaction of the City.
4. Prior to the issue of a Building Permit for new buildings, the submission of a detailed landscape plan for assessment and approval by the City is required. The Landscape Plan shall include the following:
 - a) The location, number and type of proposed planting;
 - b) The size of selected species at planting and maturity;
 - c) Those areas to be reticulated or irrigated; and
 - d) Details of any common area lighting.
5. Landscaping shall be installed and reticulated in accordance with an approved detailed landscape plan prior to the occupation of the development. Landscaped areas are to be maintained thereafter in good order to the satisfaction of the City.
6. A schedule of the materials finishes and colours shall be submitted to and approved by the City prior to the issue of a Building Permit Application. The schedule shall include details of the type of materials proposed to be used, including their colour and texture. The development shall thereafter be maintained in accordance with the approved materials schedule.
7. Prior to the initial occupation of the building, the parking bays, driveways and points of ingress shall be sealed, kerbed, drained and line marked in accordance with the approved plans to the satisfaction of the City. Car parking and access driveways shall be designed, constructed and maintained to comply with AS2890.1 and provide for safe pedestrian movement, to the City's satisfaction.
8. Walls, fences and landscape areas shall be truncated within 1.5 metres of where they adjoin vehicle access points, where a driveway and/or parking bay meets a public street or limited in height to 0.75 metres to the satisfaction of the City.
9. All stormwater shall be contained and disposed of on-site to the satisfaction of the City.
10. The development site shall be connected to the reticulated sewerage system of the Water Corporation before commencement of any use.
11. A Dust Management Plan shall be submitted to and approved by the City prior to any works commencing on-site. The approved Dust Management Plan shall be implemented to the satisfaction of the City.
12. A Construction Management Plan shall be submitted to and approved by the City prior to the submission of a Building Permit application and all measures identified in the plan are to be implemented during the construction phase to the satisfaction of the City.



13. No activities causing noise and/or inconvenience to neighbours shall be carried out after 7.00pm or before 7.00am, Monday to Saturday, and not at all on Sunday or Public Holidays.
14. All dwellings shall incorporate 6.38mm laminated glazing (Rw 33 or greater) to all habitable rooms, including kitchens.
15. Written confirmation from the builder detailing that all glazing requirements as imposed as part of this approval have been incorporated into the proposed development, shall be submitted to the City with the Building Permit Application.
16. All service areas and service related hardware, including antennae, satellite dishes, air-conditioning units and any required fire tanks, shall be suitably located away from public view and/or screened to the satisfaction of the City.
17. All relevant provisions identified in the Fire Management Plan prepared by Strategen Environmental dated 24 February 2015 as part of the approved Banjup Quarry Local Structure Plan shall be implemented and maintained thereafter to the satisfaction of the City.
18. To ensure the Fire Management Plan referred to in Condition 18 is implemented, the Bushfire Attack Levels and Asset Protection Zones outlined in Figure 1 – BAL assessment Calleya North Retirement Living Site, prepared by Strategen Environmental and dated 29 February 2016, shall be implemented.
19. All recommendations proposed in *Corrective Action Report* dated 7 June 2016 prepared by Transcore in response to the Road Safety Audit for the proposed development, shall be implemented at the detailed design stage in consultation with and to the satisfaction of the City.
20. Prior to lodgement for a building permit, provide evidence that R-Codes 5.5.2 C2.3 i, ii, iii and iv are being complied with to the satisfaction of the City. This will require amendment to the approved plans, to comply with AS4299-1995 (Adaptable Housing).

Advice Notes

1. This is a Planning Approval only and does not remove the responsibility of the applicant/owner to comply with all relevant building, health and engineering requirements of the Council, or with any requirements of the City of Cockburn Town Planning Scheme No. 3. Prior to the commencement of any works associated with the development, a building permit is required.
2. Under the Residential Design Codes '**Grouped Dwelling**' is defined as: '*A dwelling that is one of a group of two or more dwellings on the same lot such that no dwelling is placed wholly or partially above another, except*



where special conditions of landscape or topography dictate otherwise.';
and

3. Under the Residential Design Codes '**Aged person**' is defined as: 'A person who is aged 55 years or older.'
4. Where the obligation for payment of developer contributions has been met by a previous approval, such as subdivision, the condition requiring development contributions will be deemed to have been complied with. The principles and administrative requirements for Development Contribution Plans are set out in Part 6.3 of the City of Cockburn's Town Planning Scheme No. 3. Further information may be found at www.cockburn.wa.gov.au/communityinfrastructure
5. With regards to Condition 9, all stormwater drainage shall be designed in accordance with Australian Standard AS3500.
6. With regards to Condition 11, an Application for Approval of a Dust Management Plan may be obtained from www.cockburn.wa.gov.au and shall identify the mitigation and contingency measures proposed by the developer. Appropriate mitigation and contingency measures are outlined in the Department of Environment Regulation publication "*Land development sites and impacts on air quality*" (November 1996)
7. With regards to the Condition 12, such a plan shall address the following items:
 - a) Access to and from the site;
 - b) Delivery of materials and equipment to the site;
 - c) Storage of materials and equipment to the site;
 - d) Parking arrangements for contractors and subcontractors;
 - e) Management of construction waste; and
 - f) Other matters likely to impact on the surrounding properties.
8. All toilets, ensuites and kitchen facilities in the development shall be provided with mechanical ventilation flued to the outside air, in accordance with the requirements of the National Construction Code (Building Code of Australia), the Sewerage (Lighting, Ventilation and Construction) Regulations 1971, Australian Standard S1668.2-1991 "The use of mechanical ventilation for acceptable indoor air quality" and the City of Cockburn Health Local Laws 2000. The City's Health Service further recommends that laundries without external windows and doors should be ventilated to external air and condensating clothes dryers installed.
9. The development shall comply with the noise pollution provisions of the Environmental Protection Act 1986, and more particularly with the requirements of the Environmental Protection (Noise) Regulations 1997. The installation of equipment within the development including air-conditioners, spas, pools and similar equipment shall not result in noise emissions to neighbouring properties exceeding those imposed by the Environmental Protection (Noise) Regulations 1997 (as amended).



10. With regards to street numbering of this proposal, you are advised to contact the City's Strategic Planning team on 9411 3444 or email streetnumbers@cockburn.wa.gov.au to ensure that any street numbers used comply with the City's requirements.
11. If the development the subject of this approval is not substantially commenced within a period of two (2) years, the approval shall lapse and be of no further effect.
12. In the event of the approval having lapsed, no development shall be carried out without further approval having first being sought and obtained, unless the applicant has applied and obtained Development Assessment Panel

The Primary Motion (as amended) was put and CARRIED UNANIMOUSLY.

9. Form 2 – Responsible Authority Reports - Amending or cancelling DAP development approval

Nil

10. Appeals to the State Administrative Tribunal

Nil

11. General Business / Meeting Close

The Presiding Member reminded the meeting that in accordance with Standing Order 7.3 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.

There being no further business, the Presiding Member declared the meeting closed at 11.33am.

ITEM 8.1

Property Location:	Lot 50 Mandurah Road, Meadow Springs
Application Details:	Redevelopment of Existing Caltex Service Station and Convenience Store
Applicant:	Planning Solutions
Owner:	Arena Nominees Pty Ltd
Responsible authority:	City of Mandurah
DoP File No:	DAP/16/01018

**THE CITY OF MANDURAH RESPONSIBLE AUTHORITY REPORT (RAR) WAS NOT
MADE AVAILABLE FOR INCLUSION IN THE AGENDA.**

THE RAR WILL BE MADE AVAILABLE ON MONDAY 4 JULY 2016.



Form 1 - Responsible Authority Report (Regulation 12)

Property Location:	Lot 10 (No.731) Eighty Road, Baldivis
Application Details:	Additions to Educational Establishment
DAP Name:	Metro South-West JDAP
Applicant:	Mother Teresa Catholic College C/O MGA Town Planners
Owner:	Roman Catholic Archbishop of Perth
LG Reference:	DD020.2016.00000064.001
Responsible Authority:	City of Rockingham
Authorising Officer:	Mr Bob Jeans, Director Planning & Development Services
Department of Planning File No:	DAP/16/00995
Report Date:	20 June 2016
Application Receipt Date:	18 February 2016
Application Process Days:	90 days
Attachment(s):	<ol style="list-style-type: none">1. Feature Survey Plan, Reference 15710-1F, Dated 12.11.20152. Site Plan, Drawing No.DD1.01 Rev A, Dated 05.02.20163. Ground Floor Design Development Plan, Drawing No.DD2.01 Rev A, Dated 05.02.20164. First Floor Design Development Plan, Drawing No.DD2.02 Rev A, Dated 05.02.20165. Elevations Learning Block Stage 3 Plan, Drawing No.DD3.01 Rev A, Dated 14.12.20156. Elevations Learning Block Plan, Drawing No.DD03.02 Rev A, Dated 14.12.20157. Elevations Learning Block Plan, Drawing No.DD3.03 Rev A, Dated 14.12.20158. Elevations Admin Plan, Drawing No.DD3.04 Rev A, Dated 14.12.20159. Elevations Library & Science Plan, Drawing No.DD3.05 Rev A, Dated 14.12.201510. Elevations Library & Science Plan, Drawing No.DD3.06 Rev A, Dated 14.12.201511. Sections Learning Block Plan, Drawing No.DD4.01 Rev A, Dated 14.12.201512. Sections Library & Science, Admin Plan, Drawing No.DD4.02 Rev A, Dated 14.12.201513. Public Submission14. Bushfire Management Plan15. Emergency evacuation Plan16. DA Report

Officer Recommendation:

That the Metro South-West JDAP resolves to:

Approve DAP Application reference DAP/16/00995 and accompanying plans:

- Feature Survey Plan, Reference 15710-1F, Dated 12.11.2015;
- Site Plan, Drawing No.DD1.01 Rev A, Dated 05.02.2016;
- Ground Floor Design Development Plan, Drawing No.DD2.01 Rev A, Dated 05.02.2016;
- First Floor Design Development Plan, Drawing No.DD2.02 Rev A, Dated 05.02.2016;
- Elevations Learning Block Stage 3 Plan, Drawing No.DD3.01 Rev A, Dated 14.12.2015;
- Elevations Learning Block Plan, Drawing No.DD03.02 Rev A, Dated 14.12.2015;
- Elevations Learning Block Plan, Drawing No.DD3.03 Rev A, Dated 14.12.2015;
- Elevations Admin Plan, Drawing No.DD3.04 Rev A, Dated 14.12.2015;
- Elevations Library & Science Plan, Drawing No.DD3.05 Rev A, Dated 14.12.2015;
- Elevations Library & Science Plan, Drawing No.DD3.06 Rev A, Dated 14.12.2015;
- Sections Learning Block Plan, Drawing No.DD4.01 Rev A, Dated 14.12.2015;
- Sections Library & Science, Admin Plan, Drawing No.DD4.02 Rev A, Dated 14.12.2015;
- Mother Teresa Catholic College – Stage 3 Bushfire Management Plan Version 1.1, prepared by RUIC Fire, Dated May 2016; and
- Mother Teresa Catholic College – Stage 3 Bushfire Emergency Evacuation Plan Version A3, prepared by RUIC Fire, Dated May 2016;

in accordance with Clause 68(2)(b) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, subject to the following conditions:

Conditions

1. This decision constitutes planning approval only and is valid for a period two years from the date of approval. If the subject development is not substantially commenced within the two year period, the approval shall lapse and be of no further effect.
2. Prior to applying for a Building Permit, detailed plans and specifications must be submitted to and approved by the City of Rockingham for the proposed crossovers to Eighty Road, to ensure that there is no conflict with the approved access and egress points of the adjacent Parkland Heights Estate.

The crossovers must be constructed in accordance with the approved plans prior to occupation of the development.
3. All trees within the Eighty Road road reserve must be retained and not be removed, to the satisfaction of the City of Rockingham.
4. Prior to occupation of the development, a footpath must be provided for the full length of the development area adjacent Eighty Road and connecting to

the existing footpath network on Eighty Road, to the satisfaction of the City of Rockingham.

5. Earthworks over the site associated with the development must be stabilised to prevent sand or dust blowing off the site, and appropriate measures shall be implemented within the time and in the manner directed by the City of Rockingham in the event that sand or dust is blown from the site.
6. Prior to applying for a Building Permit, all stormwater generated by the development shall be designed to be contained on-site and certified by a suitably qualified engineer. The design shall be implemented and maintained for the duration of the development.
7. Prior to applying for a Building Permit, a Landscaping Plan must be prepared and include the following detail, to the satisfaction of the City of Rockingham:
 - (i) The location, number and type of existing and proposed trees and shrubs, including calculations for the landscaping area;
 - (ii) Any lawns to be established and areas to be mulched;
 - (iii) Any natural landscape areas to be retained;
 - (iv) Include one mature Tuart tree (*Eucalyptus Gomphocephala*); and
 - (iv) Those areas to be reticulated or irrigated;

The landscaping must be completed prior to the occupation of the development, and must be maintained at all times to the satisfaction of the City of Rockingham.

8. The carpark must:
 - (i) provide a minimum of 160 parking spaces;
 - (ii) prior to applying for a Building Permit, be designed in accordance with User Class 3 of the Australian/New Zealand Standard AS/NZS 2890.1:2004, *Parking facilities, Part 1: Off-street car parking* unless otherwise specified by this approval;
 - (iii) include two car parking space(s) dedicated to people with disabilities designed in accordance with Australian/New Zealand Standard AS/NZS 2890.6:2009, *Parking facilities, Part 6: Off-street parking for people with disabilities*, linked to the main entrance of the development by a continuous accessible path of travel designed in accordance with Australian Standard AS 1428.1—2009, *Design for access and mobility, Part 1: General Requirements for access—New building work*;
 - (iv) be constructed, sealed, kerbed, drained and marked prior to the development being occupied and maintained thereafter;
 - (v) have lighting installed, prior to the occupation of the development; and
 - (vi) confine all illumination to the land in accordance with the requirements of Australian Standard AS 4282—1997, *Control of the obtrusive effects of outdoor lighting*, at all times.

The car park must comply with the above requirements for the duration of the development.

9. Prior to applying for a Building Permit, detailed plans and specifications must be submitted to and approved by the City of Rockingham for on-street car parking spaces within the Eighty Road road reserve.

The car parking spaces must be designed in accordance with the High Turnover Use Category of the Australian Standard AS 2890.5—1993, *Parking facilities, Part 5: On-street parking*, approved by the City of Rockingham and constructed prior to occupation of the development.

10. Prior to applying for a Building Permit, a Waste Management Plan must be prepared and include the following detail to the satisfaction of the City:
 - (i) the location of bin storage areas and bin collection areas;
 - (ii) the number, volume and type of bins, and the type of waste to be placed in the bins;
 - (iii) management of the bins and the bin storage areas, including cleaning, rotation and moving bins to and from the bin collection areas; and
 - (iv) frequency of bin collections.

All works must be carried out in accordance with the Waste Management Plan, for the duration of development and maintained at all times.

11. Prior to the occupation of the development, the private driveway as shown on Figure 1C of the Mother Teresa Catholic College – Stage 3 Bushfire Management Plan prepared by RUIC Fire dated May 2016, must be constructed in accordance with the following requirements:
 - (i) minimum trafficable surface of 4 metres;
 - (ii) minimum horizontal clearance of 6 metres;
 - (iii) minimum vertical clearance of 4.5 metres;
 - (iv) maximum grade over <50 metres of 1 in 10;
 - (v) minimum weight capacity of 15 tonnes;
 - (vi) maximum crossfall of 1 in 33;
 - (vii) curves minimum inner radius of 8.5 metres;
 - (viii) turn around area for 3.4 fire appliance as shown on the plan;
 - (ix) passing bays located every 200 metres, having a minimum length of 20 metres and minimum width of 2 metres; and
 - (x) all weather surface (i.e.compacted gravel, limestone or sealed)

The private driveway must be maintained in accordance with these requirements and in a good and safe condition at all times for the duration of the development

12. Prior to occupation, the development must be connected to a reticulated water supply in accordance with the specifications of the Water Corporation.

At all times, the reticulated water supply must be maintained in accordance with those requirements and in working condition.

13. In accordance with the approved Mother Teresa Catholic College – Stage 3 Bushfire Management Plan Version 1.1, prepared by RUIC Fire, dated May 2016, the buildings must designed and constructed to BAL-12.5 of *Australian Standard AS3959: Construction of Buildings in Bushfire-Prone Areas*, to achieve adequate hazard separation in accordance with the *Guidelines for Planning in Bushfire Prone Areas 2015*, and maintained as such at all times to the satisfaction of the City of Rockingham.

14. Prior to occupation of the development, the Asset Protection Zone (APZ), as depicted in Figure 1C of the Mother Teresa Catholic College – Stage 3 Bushfire Management Plan prepared by RUIC Fire dated May 2016, must be installed on the site in accordance with the following requirements:

- (i) maximum fine fuel load of 2 tonnes per hectare;
- (ii) Trees crowns a minimum of 10m apart, not located within 2 metres of a building or overhanging a building, and no dead material within the trees crown or on the bole;
- (iii) Shrubs not located within 2 metres of a building;
- (iv) Fences and sheds are to be constructed of non-combustible material; and
- (v) Sheds must not contain flammable materials

The APZ must be maintained in accordance with these requirements and in a good and safe condition at all times.

15. Prior to applying for a Building Permit, a plan must be submitted to and approved by the City of Rockingham to determine the vegetation to be cleared and retained within the Asset Protection Zone. The plan is to be based on an accurate survey showing the location and canopy spread of the vegetation. The vegetation to be retained and removed is to be determined at a site inspection attended by City Officers.

Any vegetation removed from within the Asset Protection Zone is to be in accordance with the approved plan.

Advice Notes

- 1. With respect to the landscaping plan, the applicant and owner should liaise with the City's Parks Services to confirm requirements for landscaping plans.
- 2. The development must comply with the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*; the applicant and owner should liaise with the Department of Environment and Conservation in this regard.
- 3. All works in the road reserve, including construction of a crossover or footpath, installation of on-street carparking spaces, planting of street trees, bicycle parking devices, street furniture and other streetscape works and works to the road carriageway must be to the specifications of the City; the applicant should liaise with the City's Engineering Services in this regard.
- 4. A Permit to Take Water for the use of groundwater may need to be obtained; the applicant should liaise with the Department of Water in this regard.
- 5. It is recommended the applicant provide sufficient bicycle parking bays to service the number of students and staff of the development.
- 6. With respect to condition 7, the applicant is advised that a market garden is operating on Lots 4 and 5 Sixty Eight Road, Baldivis, which is likely to have odour, dust and air quality impacts on the proposed development. Planting of vegetation on the southern boundary of the lot is recommended to mitigate potential spray drift impacts associated with the market garden.

Background:

Property Address:	Lot 10 (No.731) Eighty Road, Baldivis
Zoning	MRS: Rural
	TPS: Rural
Use Class:	Educational Establishment
Strategy Policy:	State Planning Policy 3.7 - Planning in Bushfire Prone Areas (SPP3.7) State Planning Policy 4.1 - State Industrial Buffer Policy (SPP4.1) Planning Policy 3.1.1 - Rural Land Strategy (PP3.3.1) Planning Policy 3.3.14 - Bicycle Parking and End-of-Trip Facilities (PP3.3.14)
Development Scheme:	City of Rockingham Town Planning Scheme No.2
Lot Size:	22.0527ha
Existing Land Use:	Educational Establishment
Value of Development:	\$23,867,153

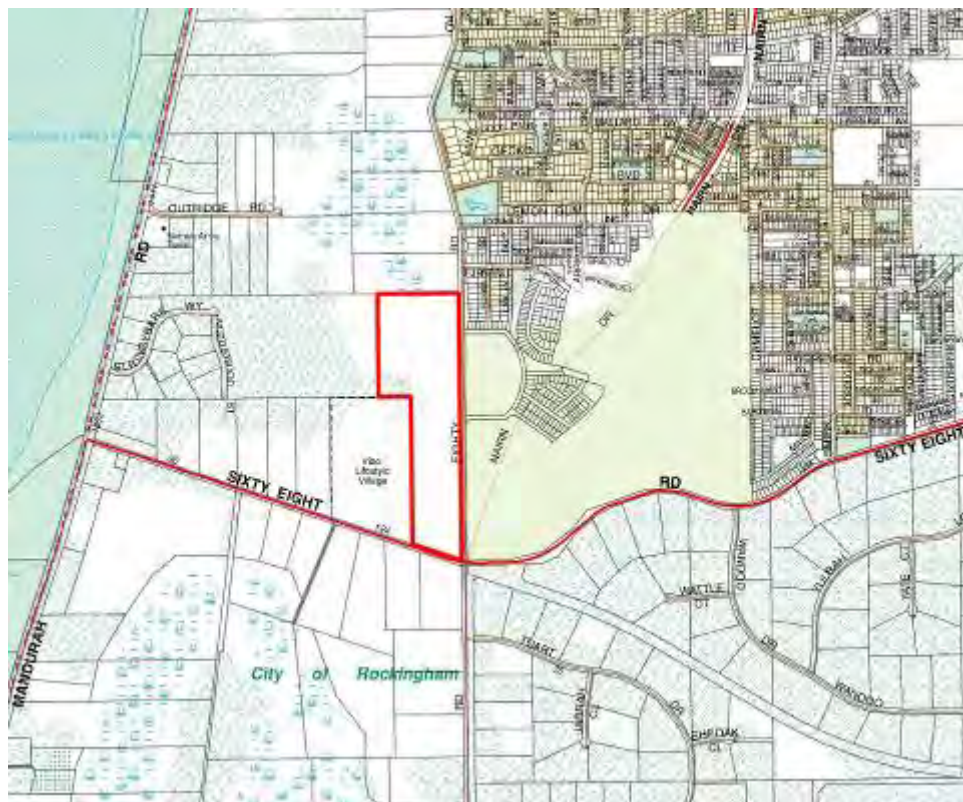


Figure 1 - Location Plan



Figure 2 - Aerial Photo

Site Information

The subject site is located on Eighty Road, immediately north of Sixty Eight Road.

The site has a total land area of 22.0527 hectares and is currently developed in the southern portion of the site. The remainder of the site is vacant, flat and predominantly cleared, containing sparse vegetation. There is a multiple use conservation category wetland located in the north west corner of the site.

Vehicle access is currently obtained from Eighty Road.

The 'Parkland Heights' residential estate is currently under construction to the east of the site, and the 'Vibe National Lifestyle Village Baldivis' is located to the west of the site. An operational market garden is located directly south of the site and rural landholdings are adjacent to the site to the north and north west.

History of Approvals

In November 2012, Council approved Stage 1 of the Mother Teresa Catholic School (Educational Establishment) on the site, which included the following elements:

- Pre-primary room, Kindergarten and Years 1 and 2 rooms;
- Administration and library;
- Covered area, hard court and landscaping including four courtyards; and
- Carparking area with 38 car parking spaces and nine on-street spaces in the Eighty Road road reserve.

The Stage 1 Development Application included an overall Masterplan for the development of the school (the Masterplan was provided for the purposes of guidance, although it was not approved as part of the application). The Masterplan, detailing each stage of the development, is shown in Figure 3.

The Stage 1 proposal also required determination by the Western Australian Planning Commission (WAPC) as an Educational Establishment is not consistent with the Rural zone under the Metropolitan Region Scheme (MRS).

The Stage 1 application was not determined by the South-West Joint Development Assessment Panel (SWJDAP) as the value of the works was \$5.9 million, less than the \$7 million required to trigger a mandatory Development Assessment Panel (DAP) Application, under the *Planning and Development (Development Assessment Panels) Regulations 2011*, at that time. The applicant did not seek to have the application determined by the SWJDAP as an optional DAP application.

Stage 1 has since been constructed and the school is operational. It should be noted that only five of the proposed nine on-street carparking spaces in the Eighty Road road reserve have been constructed.

In April 2014, a Building Permit was issued by the City for a Single House on the subject site to accommodate the School's priest.

In August 2014, Council approved Stage 2 of the Mother Teresa Catholic School on the site. The proposal was consistent with the Masterplan and included the following elements:

- Ten classrooms for years 3 to 6;
- Two multi-purpose classrooms;
- Administration building and entry canopy;
- A central court area;
- Supporting utility rooms;
- Landscaping; and
- Carparking area with 40 additional car parking spaces accessed via Eighty Road, bringing the total number of carparking bays to 78 on site and five on-street carparking bays.

As with Stage 1, the value of the works was less than the \$7 million required to trigger a mandatory DAP Application (the approximate cost of the development was \$6.84 million), therefore the application did not require determination by the SWJDAP. The Stage 2 application was also determined by the WAPC under the MRS.

It should be noted that only 74 carparking bays have been constructed on site in addition to the five on-street carparking spaces in the Eighty Road reserve.

The City met with the owners of the School to discuss concerns regarding traffic, the parking of vehicles along Eighty Road, and carparking bays that have yet to be constructed. The City recommended that temporary carparking areas be constructed to address these issues until such time that the entirety of the School and associated carparking areas had been developed. The applicant has provided temporary limestone carparking areas in this respect.

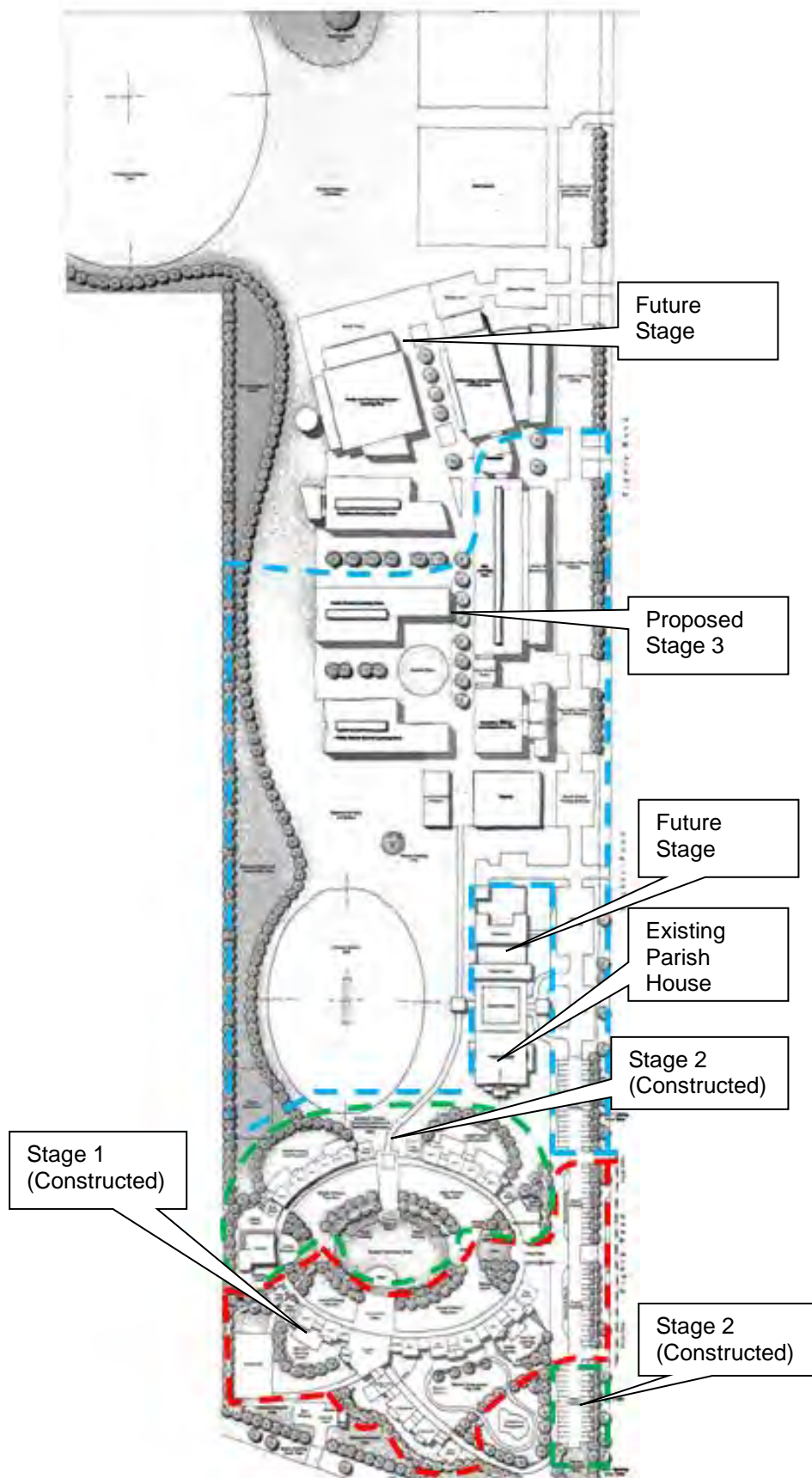


Figure 3 - Overall Masterplan

Details: outline of development application

Details of Proposed Development

The application proposes Stage 3 of the School, being the development of the secondary school.

Stage 3 will be constructed on approximately 3ha of the lot.

Generally, the proposal comprises three new buildings for administration and teaching purposes, new play areas, carparking and associated storage and service areas.

Specifically, the proposal involves the construction of:

- A two storey secondary school learning block comprising the following:

Ground Floor

- 13 learning rooms;
- Three multi-purpose rooms;
- One staff room;
- One information technology room;
- One seminar room;
- Three information learning areas, including a staircase; and
- Ablution facilities, storage, and mechanical plant areas.

Upper Floor

- Nine learning rooms;
- Three multi-purpose rooms;
- Four information learning areas, including a staircase;
- Two music/drama and art studios;
- One staff area; and
- Ablution facilities, storage, and mechanical plant areas.

- A two storey library and science facility comprising the following:

Ground Floor

- Library;
- Library work area and offices;
- Canteen; and
- Storage and mechanical plant areas.

Upper Floor

- Five science laboratories;
- One food studio;
- Staff amenities; and
- Ablution facilities and storage areas.

- Single storey Administration Building comprising the following:

- Staff amenities;
- Eight offices and board room;
- Reception Area; and
- Ablution facilities, sick bay and storage and mechanical plant areas;
- Two hardcourts and a playing field;
- Carparking area and internal access roads; and
- Landscaping and maintenance shed.

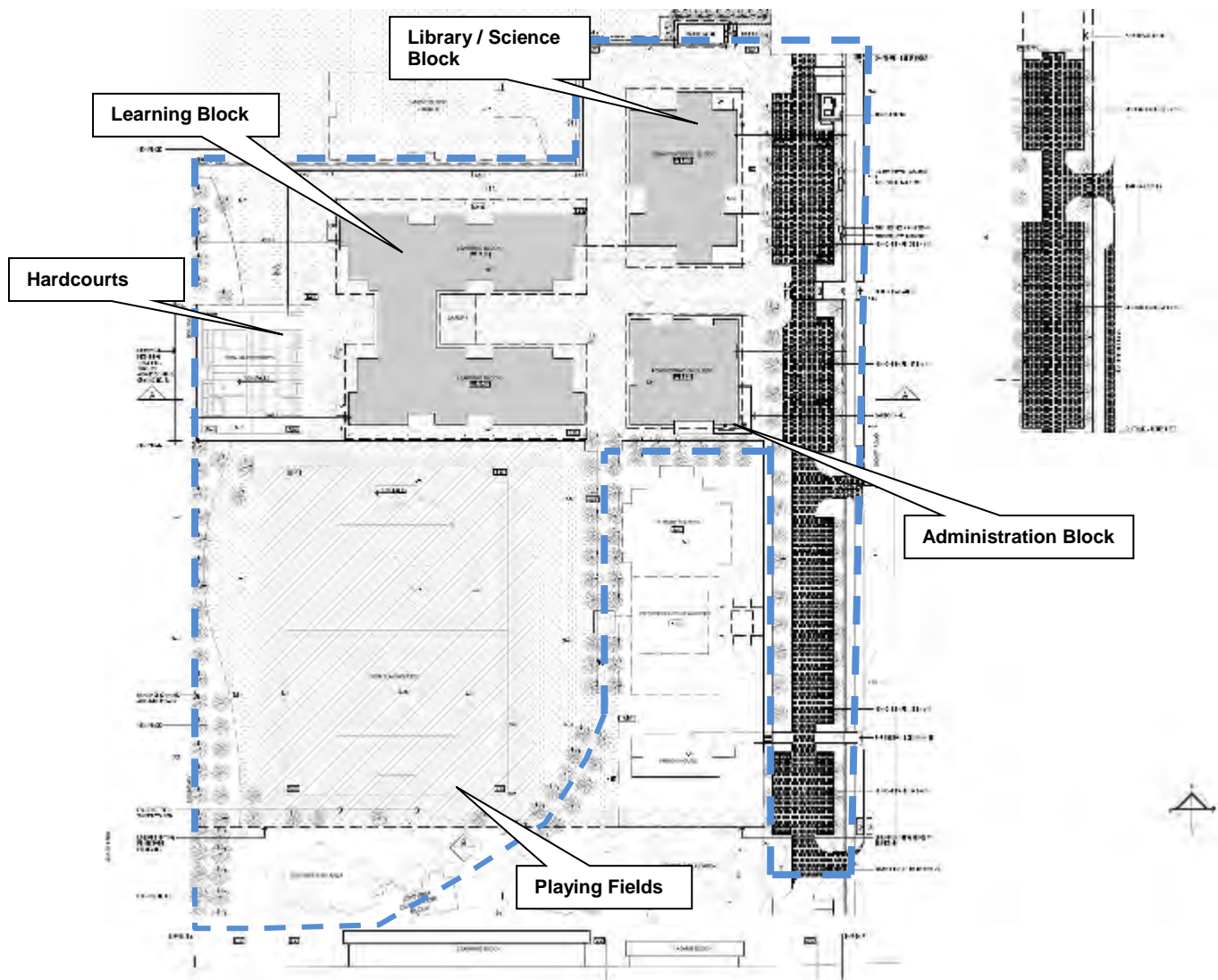


Figure 4 - Site Plan - Development Area

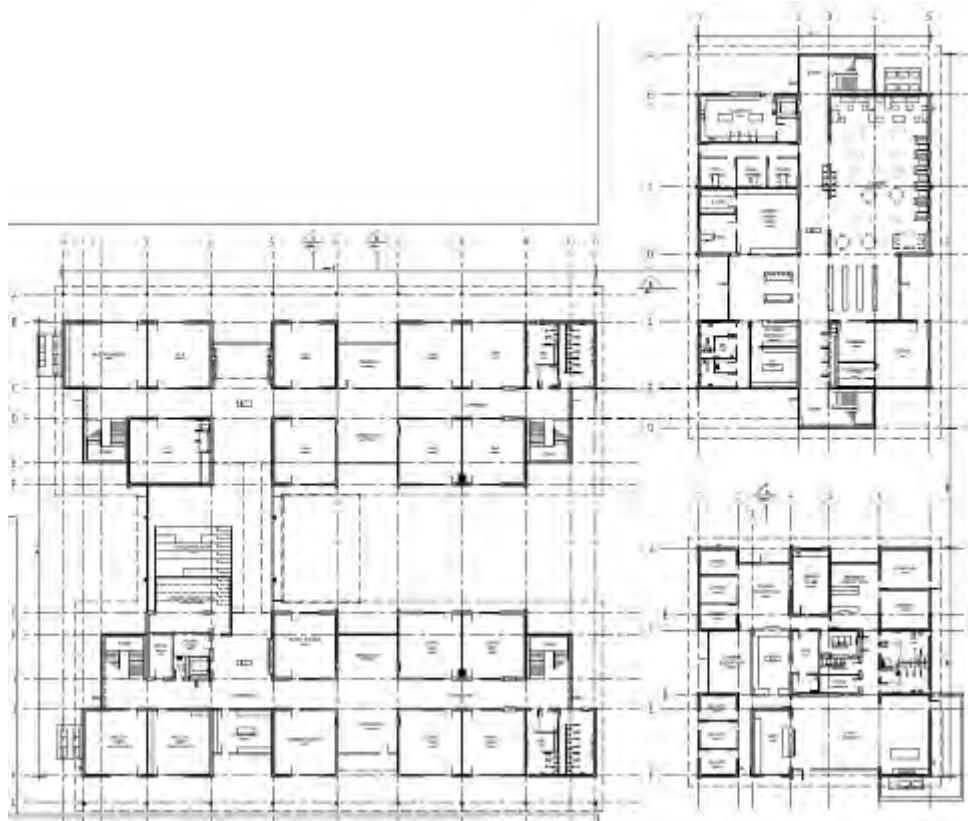


Figure 5 - Ground Floor Plan

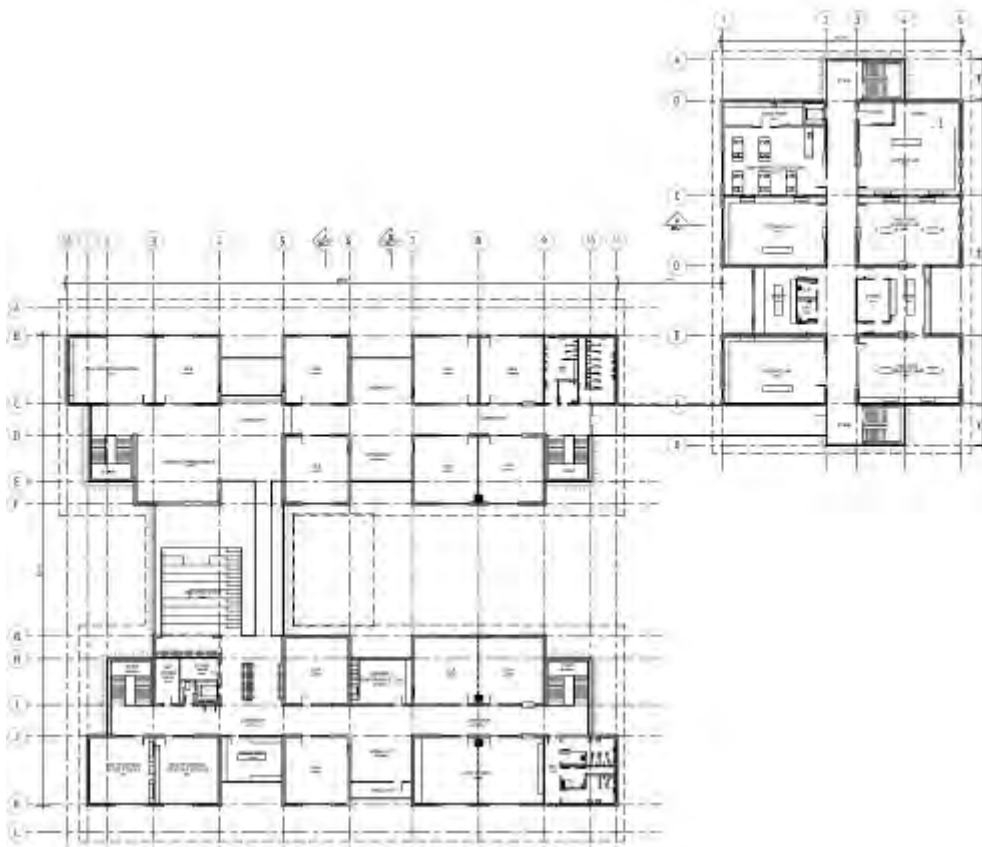


Figure 6 - First Floor Plan

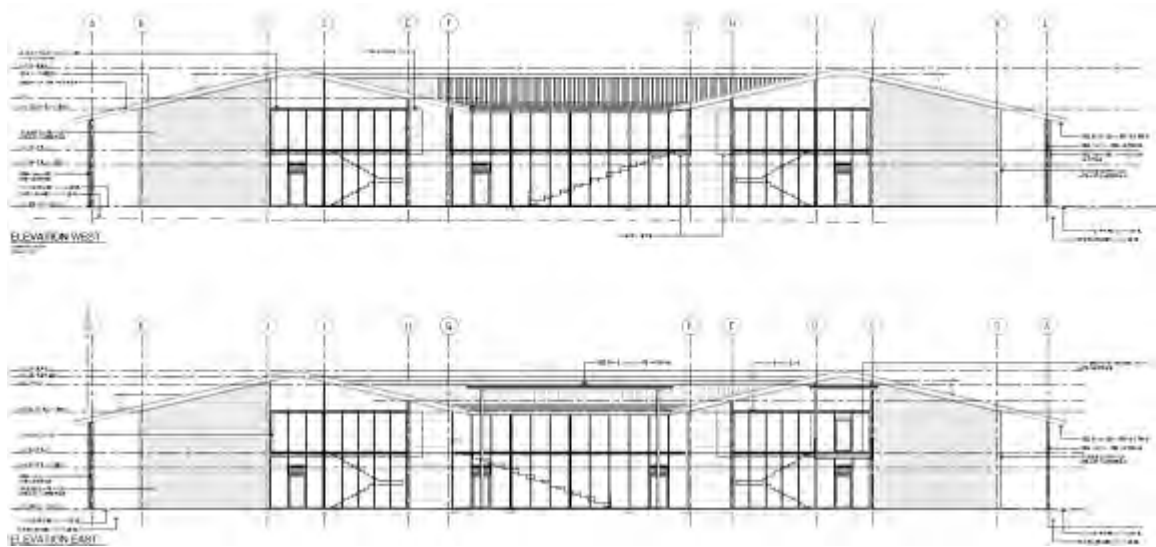


Figure 7 - Learning Block (Eastern and Western Elevations)

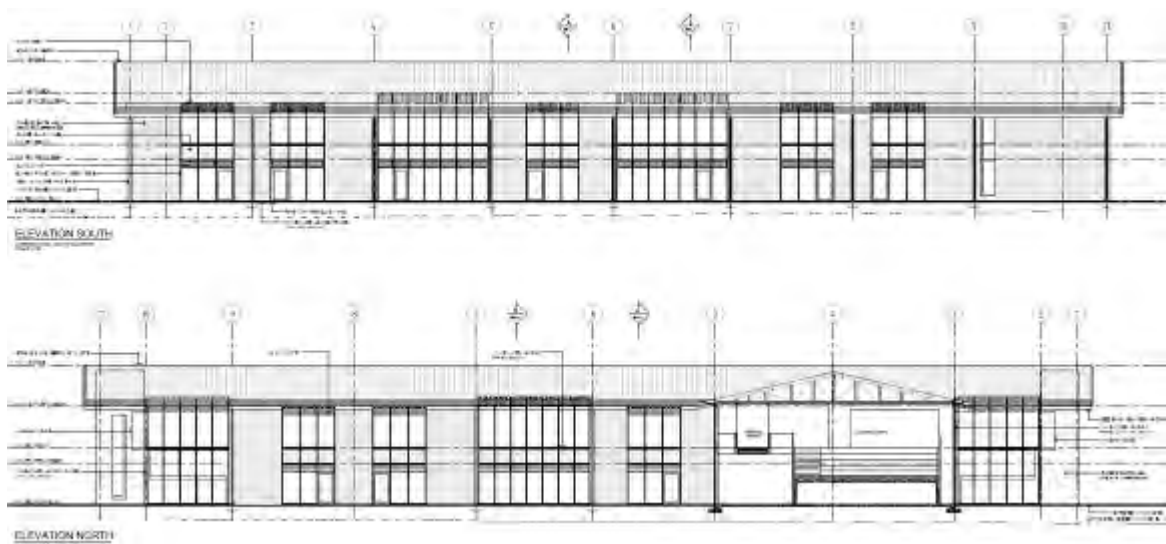


Figure 8 - Learning Block (Southern and Northern Elevations)

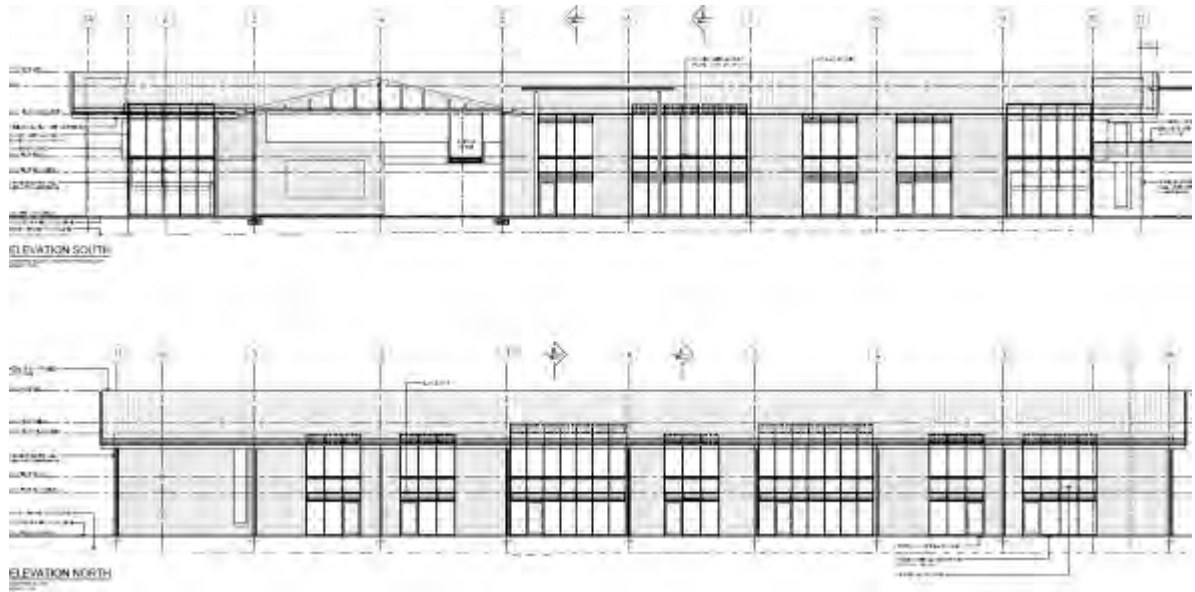


Figure 9 - Learning Block 1 (Southern and Northern Elevation)

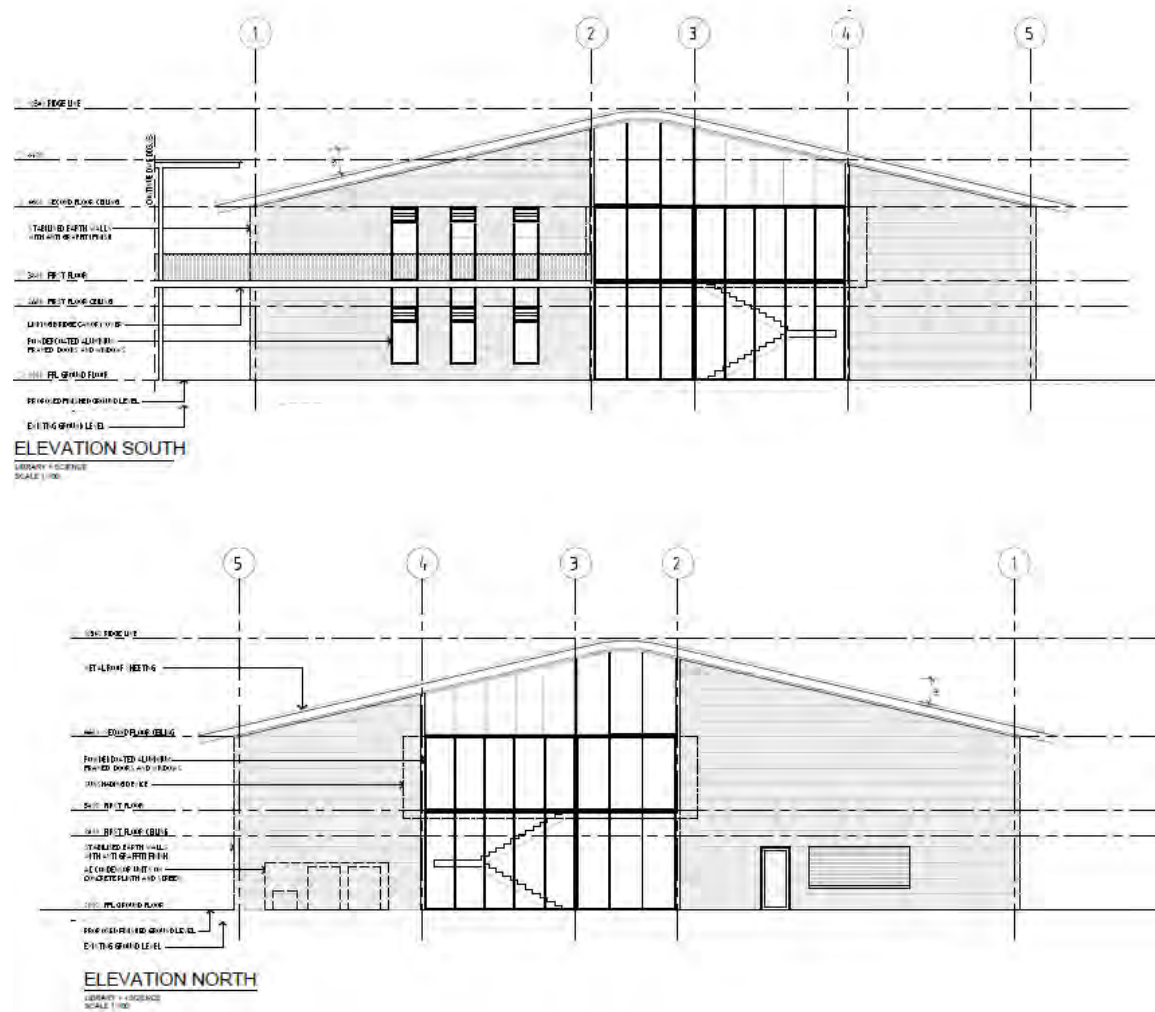


Figure 11 - Library & Science Block (Southern and Northern Elevations)

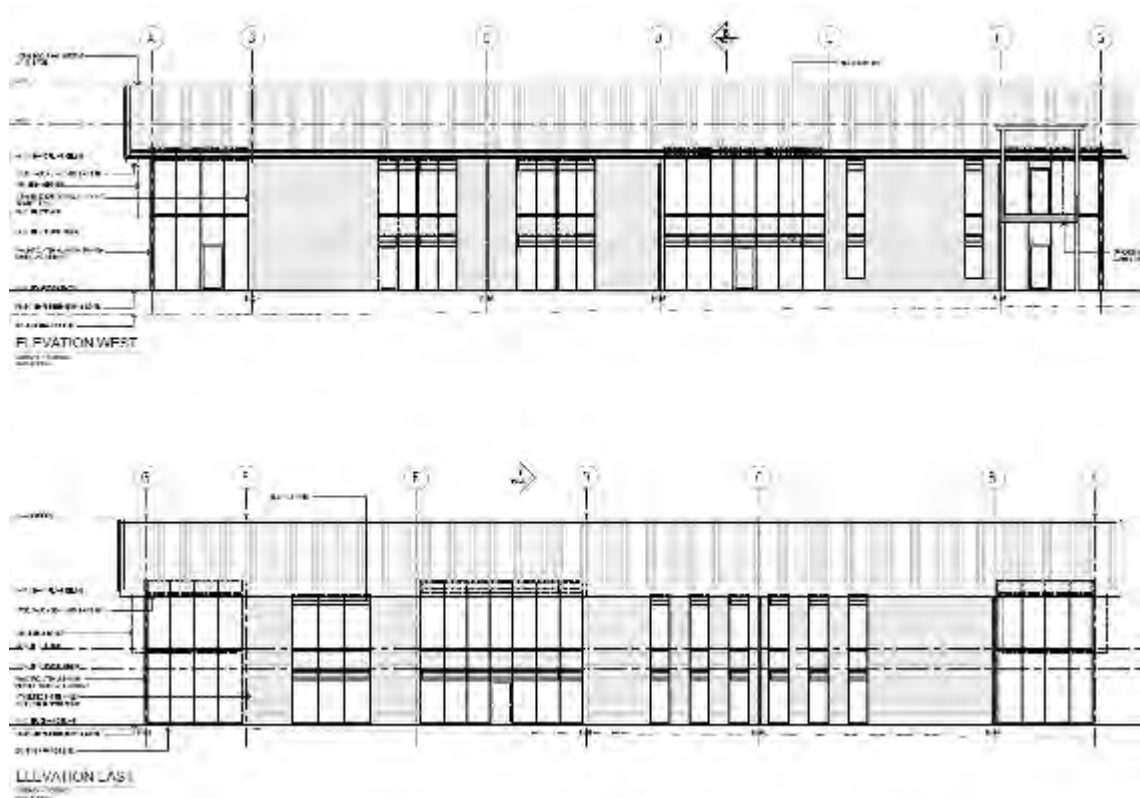


Figure 12 - Library & Science Block (Eastern and Western Elevations)

The existing primary school on the site has a maximum capacity of 432 students and 43 staff. The applicant is intending to stage the development of the secondary school in the following manner:

Year	Number of Students	Number of Staff
2018	100	14
2019	350	35
2020	600	75

By 2020, the total capacity of the school (both primary and secondary) will be 1,032 students and 118 staff.

Parking and Access

Access to the development will be via the existing crossovers from Eighty Road, with the northernmost crossover being modified to enable two way access. Two additional crossovers (a one way entry and a two way entry and exit) to Eighty Road, to the north of the existing accessways, are also proposed. A plan showing the existing and proposed carparking and access is shown in Figure 13.

A total of 160 carparking spaces are proposed, including two for the exclusive use of people with disability. New on-street carparking bays are also proposed, however, the total amount is not shown on the plans. The Transport Assessment provided in support of the application states that a total of 264 bays are required to be constructed by 2020.

Access to the proposed carparking bays will be via an internal accessway, which will be a continuation of the existing one way internal accessway servicing the existing developed portion of the school.

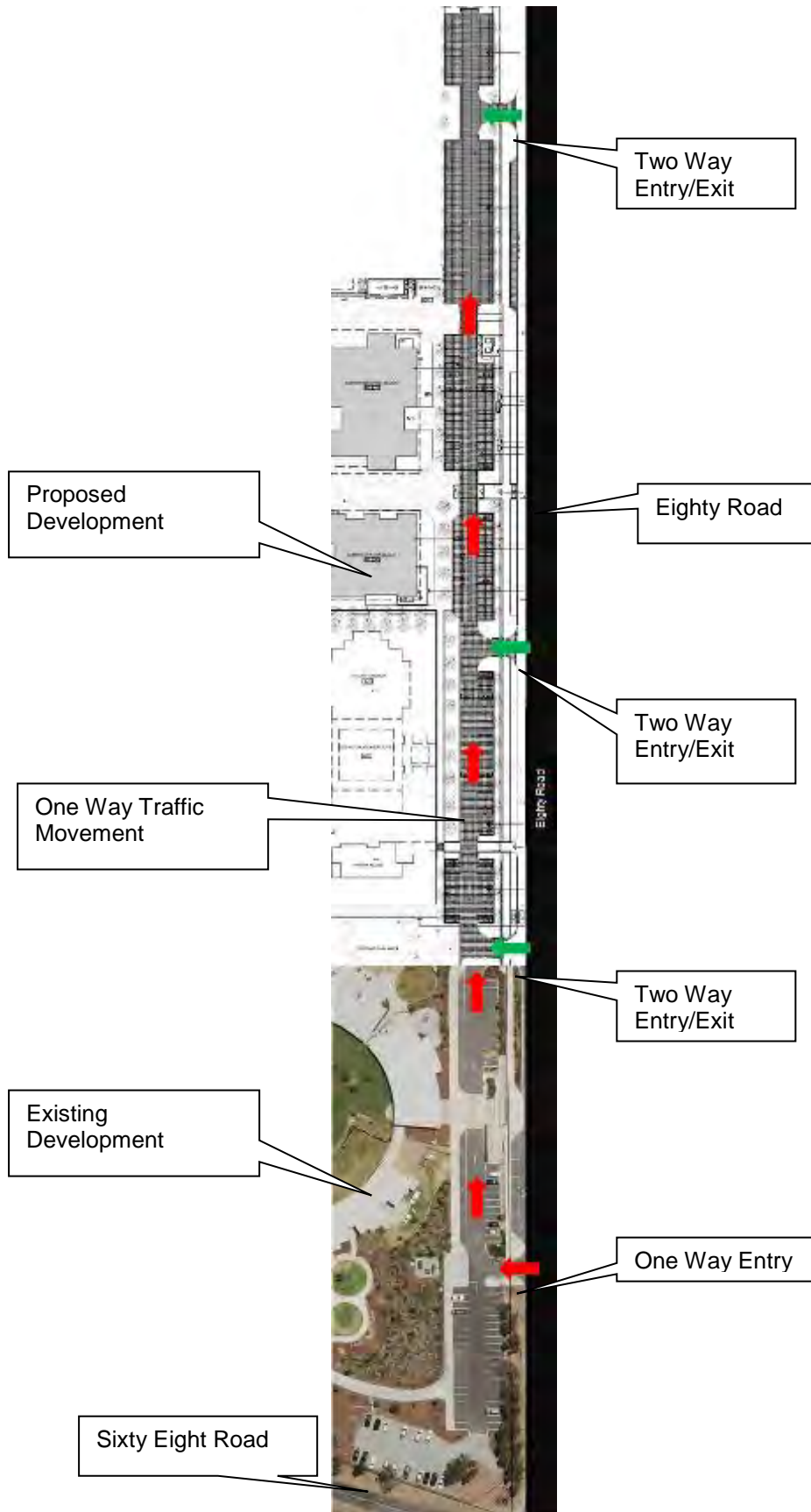


Figure 13 - Existing and Proposed Carparking & Access

LEGISLATION & POLICY

Legislation

Metropolitan Region Scheme (MRS)

Clause 32 Resolution

Clause 32 of the MRS provides the ability for the WAPC to require that certain classes of applications be referred to the WAPC for its determination.

Resolution (RES 2014/01) published in 9 May 2014 Government Gazette, requires that any use, in the opinion of the Local Government, that may not be consistent with the Rural zone be referred to the WAPC for its determination. The proposed Educational Establishment is not considered consistent with the rural zoning of the land and was therefore referred to the WAPC. The WAPC, however, advised that a separate determination was not required by the WAPC given that the works constitute additions to a previously approved Educational Establishment and they do not include any planning issues that would warrant WAPC involvement.

Planning and Development (Local Planning Scheme) Regulations 2015 (Regulations)

Schedule 2

Clause 67 - Matters to be considered by local government

Clause 67 of Schedule 2 of the Regulations outlines the matters to which the Local Government is to have due regard when considering an application for development approval. Where relevant, these matters have been discussed in the Planning Assessment section of this report.

City of Rockingham Town Planning Scheme No.2 (TPS2)

Clause 3.2 - Zoning Table

The subject site is zoned 'Rural' under TPS2. The proposed development is defined as an 'Educational Establishment' under TPS2. Within the Rural Zone, 'Educational Establishment' is an 'A' use, which means that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with Clause 64 in Schedule 2 of the Regulations.

Clause 4.11 - Rural Zone

Clause 4.11.1 - Objectives

The subject site is zoned 'Rural' under TPS2. The objective of the Rural Zone is as follows:-

to preserve land for farming and foster semi-rural development which is sympathetic to the particular characteristics of the area in which it is located, having due regard to the objectives and principles outlined in the Rural Land Strategy and supported by any other Plan or Policy that the Council may adopt from time to time as a guide to future development within the Zone.

The proposed development is consistent with the existing use of the site as an Educational Establishment and is considered a compatible land use with the urban land to the east. The location of the proposed development on the southern portion of the site directly adjacent the existing portion of the school is such that it is 'in line' with the adjacent National Lifestyle Village site, which is considered suburban in the scale of its development and therefore compatible with an Educational

Establishment. Given the location of the development on the site, the proposed development is not considered to adversely impact the rural lifestyle properties to the south east and north and north east of the subject site.

Clause 4.11.2 - General Provisions

Provision	Provided	Compliance
<p>Setbacks:</p> <p>All development, including the clearing of land, shall be setback a minimum of 30 metres from the primary street and 10 metres from all other boundaries, other than for the purpose of providing a fire break or vehicular accessway.</p>	<p>All development, with the exception of the carparking area adjacent Eighty Road and the hardcourts on the western boundary, is proposed to be setback in excess of 30m from all lot boundaries.</p> <p>The proposed buildings will be setback 29.5m from Eighty Road and 40m from the western boundary.</p> <p>The setback variation for the carpark and hardcourt areas is considered acceptable given the City has permitted the same setback variation in Stages 1 and 2 of the school for a hardcourt area, and the carparking area will be in line with, and a continuation of, the existing carparking area servicing the development.</p>	Yes
<p>Clearing of Vegetation:</p> <p>No native or remnant vegetation shall be removed or cleared unless approved by the Council, and other than for the purpose of a fire break, fire protection within a building protection zone, dwelling, outbuilding, fence and vehicular access or where such vegetation is dead, diseased or dangerous.</p>	<p>Seven trees (six within the Eighty Road reserve and one within the site) are proposed to be removed to facilitate the development. The City considers that the six trees within the Eighty Road road reserve should be retained to preserve the landscape values of the site from Eighty Road. The City recommends that a condition of Development Approval be included in this respect.</p>	Yes

Clause 4.11.3 - Precinct Planning

Clause 4.11.3 provides the following with respect to the assessment of applications against the Rural Planning Precincts of *Planning Policy 3.1.1 - Rural Land Strategy* (PP3.1.1):-

“(a) The Rural Land Strategy divides the Scheme area into Rural Planning Units which reflect varying development potential based on land capability, location and the committed nature of land. The Rural Planning Precincts are shown on Plan No.2.

“(b) The specific requirements and performance standards under each Planning Units, as set out in the Strategy, shall be considered by the Council in dealing with any application for development approval.”

An assessment of the proposed development against the requirements and performance standards of the PP3.1.1 is contained in the Local Policies section of this report, where it is considered that the proposal is compliant with PP3.1.1.

Clause 4.11.4 - Planning Control

Clause 4.11.4 of TPS2 provides the following with respect to Planning Controls in the Rural Zone:

“In assessing applications for rezoning, development approval and formulating comments and recommendations on applications for the subdivision of land, the Council shall take into account the objective for the particular Zone and the principles and policies as set out in the Rural Land Strategy.”

The assessment of the proposed development against the objectives of the Rural Zone is contained in Clause 4.11.1 above.

An assessment of the proposed development against PP3.1.1 is contained in the Local Policies section of this report where it is considered that the proposal is compliant with the provisions of PP3.1.1.

Clause 4.15 - Carparking

TPS2 does not specify car parking provision requirements for Educational Establishments. In these circumstances, TPS2 requires that the minimum number of car parking spaces required for the proposed development to be determined having regard to:

- “(i) the nature of the proposed development;*
- (ii) the number of employees likely to be employed on the site;*
- (iii) the anticipated demand for parking; and*
- (iv) the orderly and proper planning for the locality.”*

The applicant has advised that the ultimate development will accommodate 1,032 students and 118 staff.

The Western Australian Local Government Association's 'Road Safety Around Schools' Guidelines require one bay per staff member and seven pickup and set down bays per 100 students for high schools. Using this guideline, 191 carparking bays would be required for the proposed development (118 for staff and 73 pickup and set down bays).

A minimum of one accessible carparking space for every 100 carparking spaces or part thereof is required for people with disability, which equates to the requirement for two bays for people with disability.

A total of 160 carparking spaces are proposed, including two for the exclusive use of people with disability. There are currently 79 carparking spaces available, including five on-street carparking bays. As the total 160 bays are constructed in addition to the existing carparking spaces on site, a total of 239 carparking bays would be

available at the completion of the development. This is considered to meet the TPS2 parking demand for the proposed development.

State Government Policies

State Planning Policy 3.7 - Planning in Bushfire Prone Areas (SPP3.7)

SPP 3.7 seeks to guide the implementation of effective risk-based land use planning and development to preserve life and reduce the impact of bushfire on property and infrastructure.

Portions of the site have been designated bushfire prone under the *Fire and Emergency Services Act 1998 (as amended)* and therefore the requirements of SPP3.7 are applicable.

The objectives of SPP3.7 are to:

- *“Avoid any increase in the threat of bushfire to people, property and infrastructure. The preservation of life and the management of bushfire impact are paramount.*
- *Reduce vulnerability to bushfire through the identification and consideration of bushfire risks in decision-making at all stages of the planning and development process.*
- *Ensure that higher order strategic planning documents, strategic planning proposals, subdivision and development applications take into account bushfire protection requirements and include specified bushfire protection measures.*
- *Achieve an appropriate balance between bushfire risk management measures and, biodiversity conservation values, environmental protection and biodiversity management and landscape amenity, with consideration of the potential impacts of climate change.”*

As the land is designated as a Bushfire Prone Area and is classified as a vulnerable land use, the applicant submitted a Bushfire Management Plan (BMP) in support of the application, as per the requirements of SPP3.7. The BMP has been assessed and is considered acceptable. Requirements of the BMP are recommended as conditions of approval.

Guidelines for Planning in Bushfire Prone Areas (GfPBPA)

The GfPBPA provide supporting information to assist in the interpretation of the objectives and policy measures outlined in SPP3.7. The following is an assessment against the relevant requirements of the GfPBPA.

Bushfire Protection Criteria

Element 1 - Location

The development complies with the relevant Acceptable Solution, as it will be located within an area which requires construction standards less than BAL-FZ or BAL-40.

The applicant has demonstrated, through a Bushfire Attack Level (BAL) assessment, that the maximum BAL level that buildings will be required to be constructed to will be BAL-12.5 of *Australian Standard 3959 - Construction of Buildings in Bushfire Prone Areas (AS3959)*. A condition of development approval has been recommended in this regard.

Element 2 - Siting and Design of Development

The applicant has proposed compliance with the Performance Criteria of this Element, which states:

“The siting and design of the strategic planning proposal, subdivision or development application, including roads, paths and landscaping, is appropriate to the level of bushfire threat that applies to the site. That is minimises the bushfire risk to people, property and infrastructure, including compliance with AS 3959 if appropriate.”

The applicant has proposed an Asset Protection Zone (APZ) and construction to the BAL-12.5 requirements of AS3959 to satisfy this requirement. Conditions of development approval are recommended to ensure the APZ is provided prior to the occupation of the development, and buildings are constructed to the requirements of AS 3959.

Element 3 - Vehicular Access

The applicant has proposed compliance with the Performance Criteria for this Element, which states:

“The internal layout, design and construction of public and private vehicular access in the subdivision/development allows emergency and other vehicles to move through it easily and safely at all times.”

The internal layout of driveways has been designed to ensure emergency vehicles can move through the site easily and safely at all times. Thus Element 3 is considered to be satisfied. A condition of development approval is recommended ensuring the internal driveways are constructed to the standards required by the GfPBPA.

Element 4 - Water

The development will comply with the relevant Acceptable Solution as the site will be connected to a reticulated water supply and including a fire hydrant system in accordance with Water Corporation, Department of Fire and Emergency Services and City of Rockingham requirements. A condition of development approval is recommended in this respect to ensure the connection to reticulated water is maintained at all times.

Summary

The proposed development and associated BMP is considered to be consistent with the requirements of the GfPBPA and SPP3.7.

State Planning Policy 4.1 - State Industrial Buffer Policy (SPP4.1)

SPP4.1 provides for the protection of industrial zones, other utilities and special uses including market gardens. Objectives of SPP4.1 are to:

- *“To provide for the safety and amenity of land uses surrounding industry, infrastructure and special uses; and*
- *To recognise the interests of existing landowners within buffer areas who may be affected by residual emissions and risks, as well as the interests, needs and economic benefits of existing industry and infrastructure which may be affected by encroaching incompatible land uses.”*

The subject site is within the vicinity of an existing rural industry (market garden) located directly south of the subject site on Sixty Eight Road, which is likely to have odour, dust and air quality impacts on the proposed development. market garden is a special use in terms of SPP4.1, meaning it is a land use that requires a buffer area to enable it to operate in harmony with surrounding areas.

In this respect, SPP4.1 recommends the use of relevant Environmental Policy in determining appropriate separation distances between industry and sensitive land uses. The Environmental Protection Authority's '*Separation Distances between Industrial and Sensitive Land Uses*' recommends a 300-500m buffer distance to sensitive land uses for market gardens depending on the size of the operation.

The development is proposed to be located approximately 180m away from the market garden, however, given that the existing school has already been approved and constructed between the market garden and the proposed additions, it is not considered practical to apply the buffer requirements. It is instead recommended the school be advised of the potential impacts associated with the market garden and recommend vegetation planting on the southern boundary of the site to screen the impacts associated with the market garden.

Local Policies

Planning Policy 3.1.1 - Rural Land Strategy (PP3.1.1)

PP3.1.1 applies to rural land within the City and provides a framework for the assessment of proposals to develop rural land.

General Objectives

The objectives of PP3.1.1 relevant to the application are to:

3. *“Protect and conserve landscape values; and*
4. *Protect and conserve areas of environmental significance.”*

The proposal is considered to comply with the objectives of PP3.1.1 as it does not result in the loss of areas of environmental significance and generally conserves the landscape values of the site. An assessment of the proposal against the requirements of PP3.1.1 is contained below.

Planning Unit Objective

The subject site is located within Planning Unit No.4 of PP3.1.1. The primary objective of Planning Unit No.4 is to:

“encourage special rural/special residential development which recognises and enhances the landscape and natural resource attributes of the unit and provides a rural context to proposed urban development to the east.”

Whilst it is noted that the proposed development does not result in special rural/special residential development, the proposal is for additions to a previously approved Educational Establishment on the site and is therefore considered acceptable.

The subject site, particularly in the area in which development is proposed to occur, is largely devoid of vegetation and predominantly cleared. Other than the six trees proposed to be removed in the Eighty Road reserve which the City seeks to retain, significant earthworks or vegetation removal are not required to facilitate the proposed development. Therefore the proposed development is not considered to have an adverse impact on the landscape values of the site.

Whilst Outridge Swamp, on the northern portion of the lot, is considered to be an area of environmental significance, no development is proposed to occur within approximately 500m of the wetland. Therefore the proposed development is not considered to have any adverse impacts on this area of environmental significance.

Landscape Protection

PP3.1.1 provides landscape protection measures to limit the impact that development or changes in land use can have on the visual landscape.

The proposed rammed earth buildings are considered to be sympathetic in design, materials and colour to complement the existing buildings on the site and surrounding landscape.

As previously noted, the City considers that the six trees within the Eighty Road road reserve form part of a significant row of trees contributing to the landscape. A condition is therefore recommended for their retention.

Planning Unit Requirements

Specifically, the subject site is located in Planning Unit 4A of PP3.1.1, which serves as an interface between land designated for future urban purposes east of the ridgeline and the lake system parallel to Mandurah Road to the west of the ridgeline.

Lots east of the ridgeline, such as the subject site, are to promote a transition of special residential lot densities between the urban land and the ridge. The approval and development of the existing school established the acceptability of specific urban related development (e.g. community purposes) within the transition area immediately abutting the urban area.

The following is an assessment of the proposed development against the relevant specific requirements of Planning Unit No.4A:

Requirement	Provided	Compliant
Buildings to be setback a minimum of 40m from Mandurah Road, 30m from other subdivisional roads and 10m from all other lot boundaries (setbacks to accord with R2 east of ridgeline) with no clearing in the setback area except for fire management or for vehicular access as approved by Council.	<p>All development, with the exception of the carparking area adjacent Eighty Road and the hardcourts on the western boundary, is proposed to be setback in excess of 30m from all lot boundaries.</p> <p>The proposed buildings will be setback 29.5m from Eighty Road and 40m from the western boundary.</p> <p>The setback variation for the carpark and hardcourt areas is considered acceptable given the City has permitted the same setback variation in Stages 1 and 2 of the school for a hardcourt area, and the carparking area will be in line with and a continuation of the existing carparking area servicing the development.</p>	Yes
No clearing being permitted without the specific approval of Council.	Seven trees (six within the Eighty Road reserve and one within the site) are proposed to be removed to facilitate the development. The City considers that the six trees within the Eighty Road road reserve should be retained to	Yes

Requirement	Provided	Compliant
	preserve the landscape values of the site from Eighty Road. The City recommends a condition of Development Approval be included in this respect.	
Development shall be of a scale that minimises intrusion into the landscape.	<p>The proposed development does not require extensive earthworks to facilitate construction and does not result in extensive clearing of vegetation and is therefore considered to be of a scale that minimises intrusion into the landscape.</p> <p>A landscaping condition has been recommended which will further limit the visual intrusion of the development.</p>	Yes
Provision of Aerobic Treatment Unit (ATU) for effluent disposal purposes.	The subject site is connected to reticulated sewer and ATUs are not required.	N/A
When sensitive development (such as rural-residential development) is proposed near an existing/proposed intensive rural land uses (such as piggeries, poultry farms, market gardens or any other agricultural activity or industry) or a new intensive rural land use is proposed near existing or proposed sensitive development, the requirements of the WAPC's State Industrial Buffer Policy must be observed.	The assessment of the proposal against the requirements of the State Industrial Buffer Policy has been discussed in the State Government Policies section of this report.	Noted
Development affecting wetlands to comply with provisions of Environmental Protection (Swan Coastal Plain Lakes) Policy 1992 (EPP 1992).	EPP 1992 was repealed by the Minister in March 2015. Although the Swan Coastal Plain Lakes EPP has been withdrawn there are other regulatory mechanisms which protect significant wetlands, such as need to comply with the Clearing Provisions of the <i>Environmental Protection Act 1986</i> .	N/A

Requirement	Provided	Compliant
Fire Management is to be addressed in accordance with the WAPC's Development Control Policy 3.7 - Planning for Bushfire Protection (now superseded by State Planning Policy 3.7 - Planning in Bushfire Prone Areas)	A BMP has been provided which is compliant with the requirements of SPP3.7.	Yes

Planning Policy 3.3.14 - Bicycle Parking and End-of-Trip Facilities (PP3.3.14)

The objective of PP3.3.14 is to facilitate the provision of secure, well designed and effective on site bicycle parking spaces and end-of-trip facilities, to encourage the use of bicycles as a means of transportation.

There is no requirement under PP3.3.14 to provide bicycle parking spaces and end-of-trip facilities for a school. Despite this, it is recommended that the applicant be advised to provide bicycle parking spaces to service the development.

CONSULTATION

Public Consultation

In accordance with the requirements of the Regulations, the application was referred to adjacent and nearby landowners and occupiers for comment for a period of 23 days, concluding on the 18th March 2016 (see Figure 14 below).

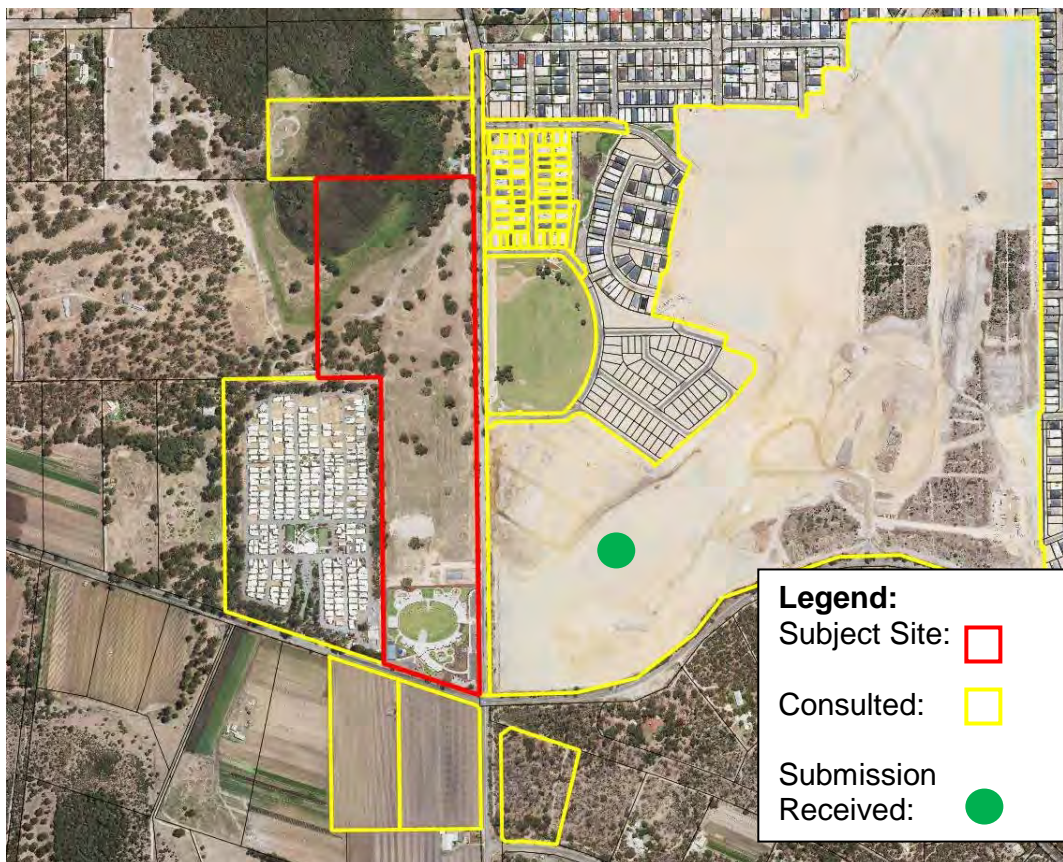


Figure 14 - Consultation Plan

At the close of the advertising period, one submission was received, from the Project Manager of the adjacent Parkland Heights estate, which generally supported the proposal and requested consideration of a number of matters. A summary of the matters raised has been provided below:

Issue 1 - Access
<p>Submission Issues:</p> <ul style="list-style-type: none"> Proposed access and egress should not conflict with access and egress to Parkland Heights Estate. Adequate vehicle sight lines along Eighty Road must be maintained. <p>The design levels of the proposed development should coordinate with the finished levels of Eighty Road.</p>
<p>City's Response:</p> <p>The City has reviewed the location of access and egress points to the School in relation to the approved Parkland Heights Structure Plan and has identified that the location of access and egress points to the School do not align with the adjacent existing and proposed access and egress points to the Parkland Heights estate.</p> <p>Should the application be approved, a condition of approval is recommended requiring that the proposed access and egress points to the school do not conflict with the approved Parkland Heights Structure Plan to ensure the safe access and egress from both the Parkland Heights estate and the School.</p> <p>The proposed development does not impede on vehicle sight lines along Eighty Road.</p> <p>The City will ensure that the finished levels of the proposed development coordinate with the levels of Eight Road through approval of detailed civil drawings at Building Permit stage.</p>
Issue 2 - Carparking
<p>Submission Issues:</p> <ul style="list-style-type: none"> Sufficient carparking to be provided to service the development. On-street carparking on Eighty Road that may conflict with access and egress to the Parkland Heights estate.
<p>City's Response:</p> <p>As discussed in the Legislation section of this report, the amount of carparking provided is deemed adequate to service the proposed development.</p> <p>Should the application be approved, the final design and location of on-street carparking bays will be to the satisfaction of the City. This will ensure there is no conflict between the location of the bays and entries to the Parkland Heights estate.</p>
Issue 3 - Masterplan
<p>Submission Issue:</p> <ul style="list-style-type: none"> A superseded version of the Parkland Heights Structure Plan has been used in the preparation of the development application, and the latest plan should instead be used to ensure access points, lot layouts, road alignments etc. are

consistent.
<p>City's Response:</p> <p>Should the application be approved, a condition of approval requiring the application to be modified to ensure access and egress points to the school align with the approved Parkland Heights Structure Plan to the satisfaction of the City is recommended. The City will ensure that the approved version of the Parkland Heights Structure Plan is used when determining the location of access and egress points to the School.</p>
Issue 4: Pedestrian Connectivity
<p>Submission Issue:</p> <ul style="list-style-type: none"> • Footpaths and pedestrian connections should 'tie in' with those within the Parkland Heights Estate.
<p>City's Response:</p> <p>The applicant is proposing to extend the existing footpath adjacent to the majority of the length of the development area. A condition of approval is, however, recommended ensuring the applicant extends the footpath the full length of the development area to ensure safe pedestrian access is available. The City will liaise with the applicant in respect to the location of pram ramps to ensure the footpath is consistent with the footpath and pedestrian connections to the adjacent Parkland Heights estate.</p>
Issue 5: Amenity
<p>Submission Issue:</p> <ul style="list-style-type: none"> • New buildings should be constructed to similar materials to the existing buildings at the School.
<p>City's Response:</p> <p>The proposed buildings will be designed and constructed of the same materials as the existing buildings at the School.</p>

Consultation with other Agencies or Consultants

As discussed in the Legislation section of this report, the WAPC advised that a separate determination is not required given that the works constitute additions to a previously approved Educational Establishment and they do not include any planning issues that warrant WAPC involvement.

PLANNING ASSESSMENT

Public Transport, Servicing, Waste and Pedestrian & Cyclist Access and Access for the Aged and People with Disability

Clause 67(u) of the Regulations requires consideration of

“the availability and adequacy for the development of the following:

- *public transport services;*
- *storage, management and collection of waste; and*

- *access by older people and people with disability”.*

Public Transport

The nearest public transport route (a bus service) is located approximately 1km from the site and the site is not considered to be well serviced by public transport. It is, however, anticipated that additional bus services will become more readily available when the Parkland Heights estate is completed immediately to the west of the site.

Waste

The applicant has not provided details of waste storage, management or collection. Should the application be approved, a condition should be imposed requiring the submission of a detailed Waste Management Plan to the City's for approval and implementation throughout the operation of the development.

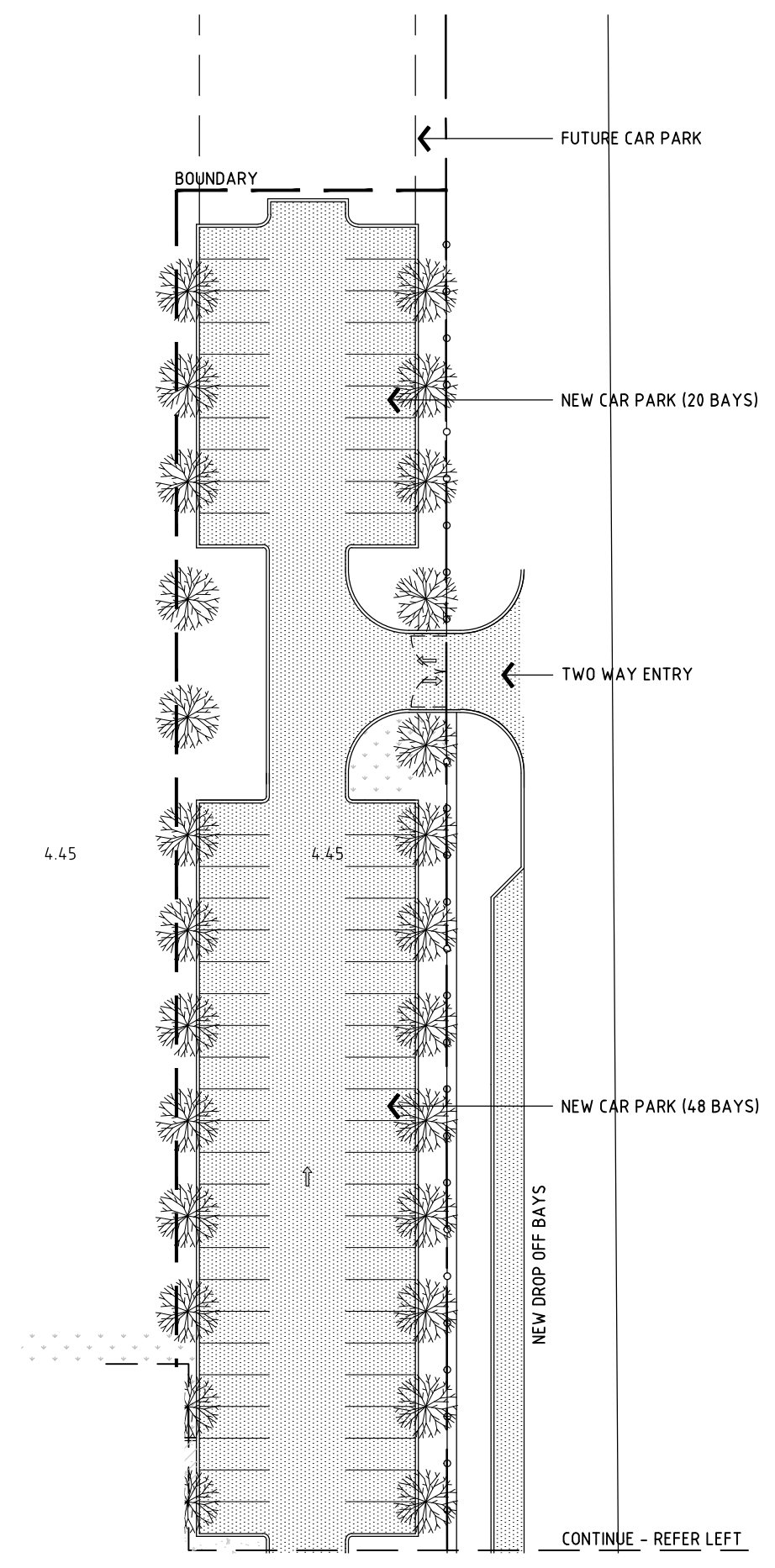
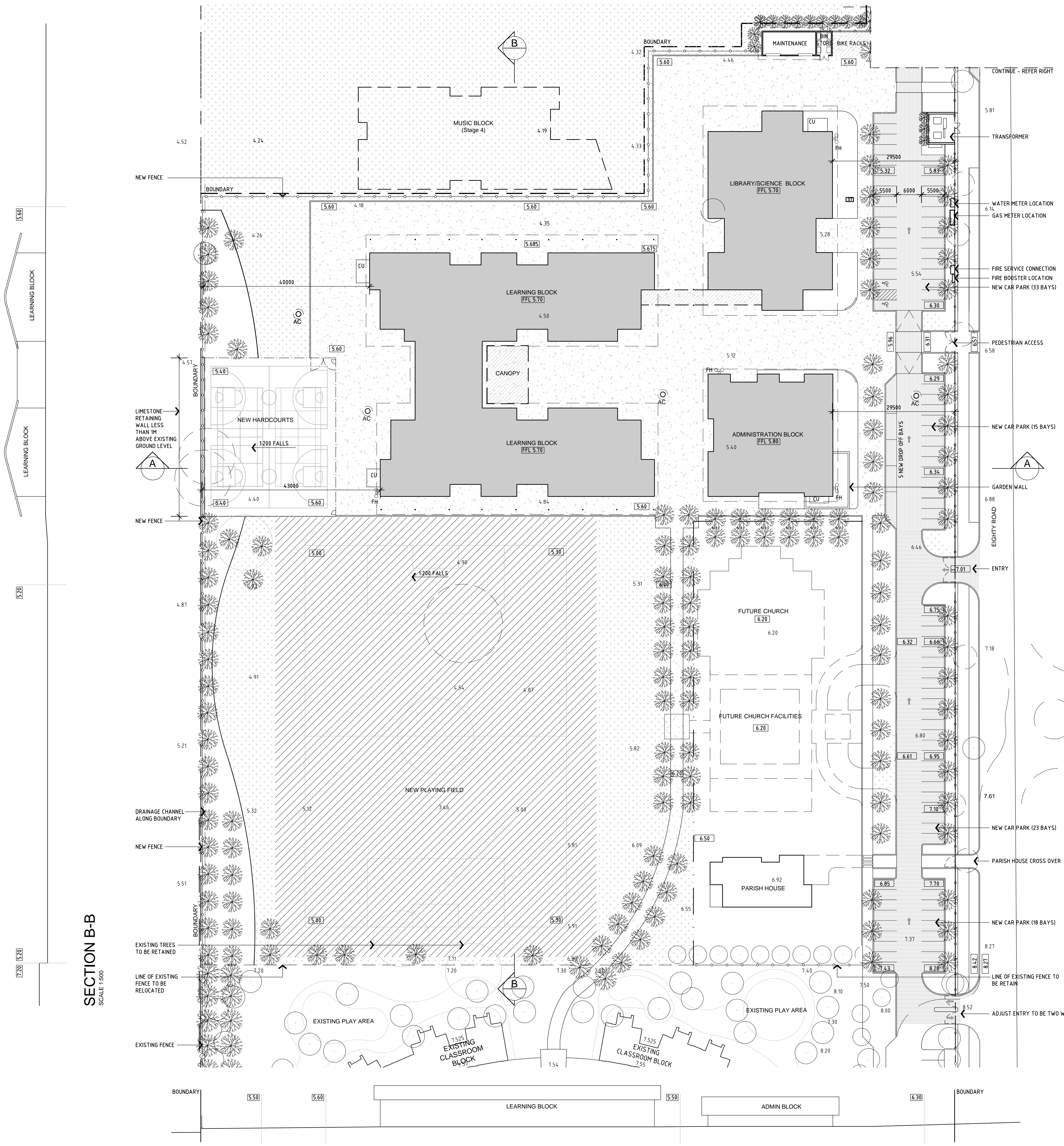
Access for the Aged and People with Disability

The site is predominantly flat and the City does not anticipate any issues with respect to the provision of adequate access for the aged and people with disability. The applicant will be required to comply with the requirements of the Building Code of Australia in this respect.

Conclusion:

The proposed development is compliant with TPS2 and Policy requirements, it is consistent with the existing land use and is considered a suitable addition to the existing School.

It is therefore recommended that the application be conditionally approved.



NOTES

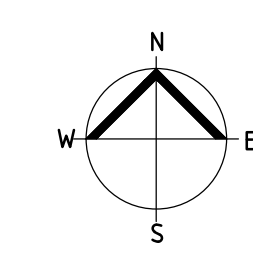
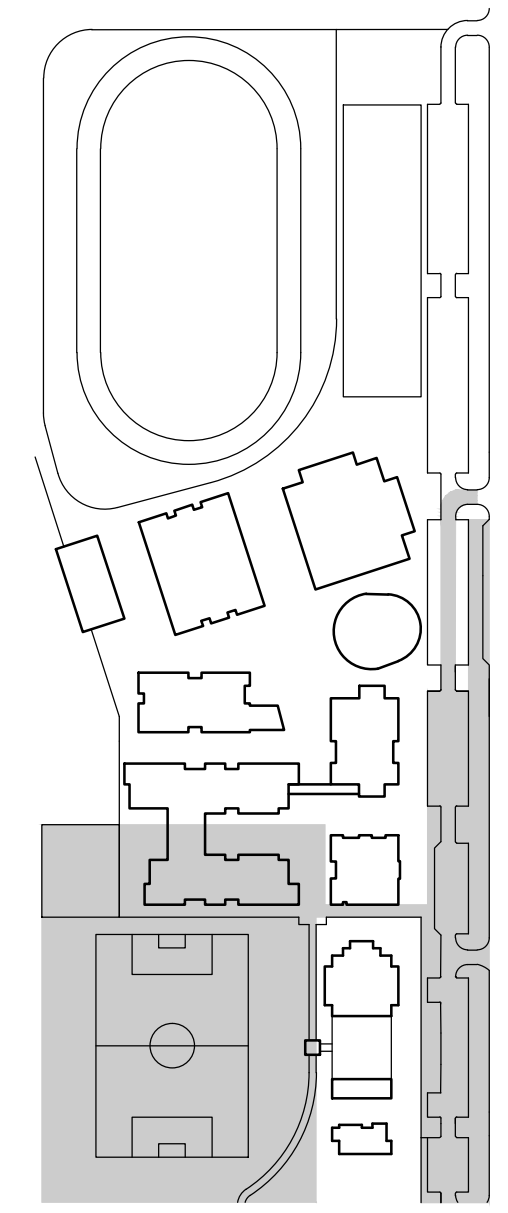
DO NOT SCALE OFF DRAWINGS

DIMENSIONS & LEVELS OF ALL WORK TO BE CHECKED ON SITE BY CONTRACTOR BEFORE COMMENCEMENT WORKS, BEFORE PROVISION OF SHOP DRAWINGS & BEFORE MANUFACTURING OF ANY COMPONENTS.

ANY DISCREPANCIES BETWEEN DRAWINGS TO BE REPORTED IMMEDIATELY TO THE ARCHITECT.

SET-OUT POINTS & LEVELS OF BUILDINGS & ROADS TO BE CONFIRMED ON SITE WITH ARCHITECT PRIOR TO COMMENCEMENT, ALLOW FOR LICENSED SURVEYOR AS REQUIRED TO LOCATE EXISTING ELEMENTS AND SETOUT OF THE WORKS.

- LEGEND**
- NEW BUILDING
 - NEW PARKING
 - 16.00 EXISTING LEVEL
 - 16.00 NEW LEVEL
 - EXISTING TREE TO BE REMOVED AND REPLACED
 - EXISTING TREE TO BE RETAINED & PROTECTED
 - NEW PLANTED TREE
 - NEW OLIVE TREE
 - HARD PAVING AND LANDSCAPE
 - LANDSCAPE
 - PLAYING FIELD
 - HYDRAULIC SILT TRAP
 - HYDRAULIC ACCESS CHAMBER PIT COVERS
 - FIRE HYDRANT



10.02.16	A	ISSUED FOR DEVELOPMENT APPROVAL	SB
DATE	REV	NOTE	BY

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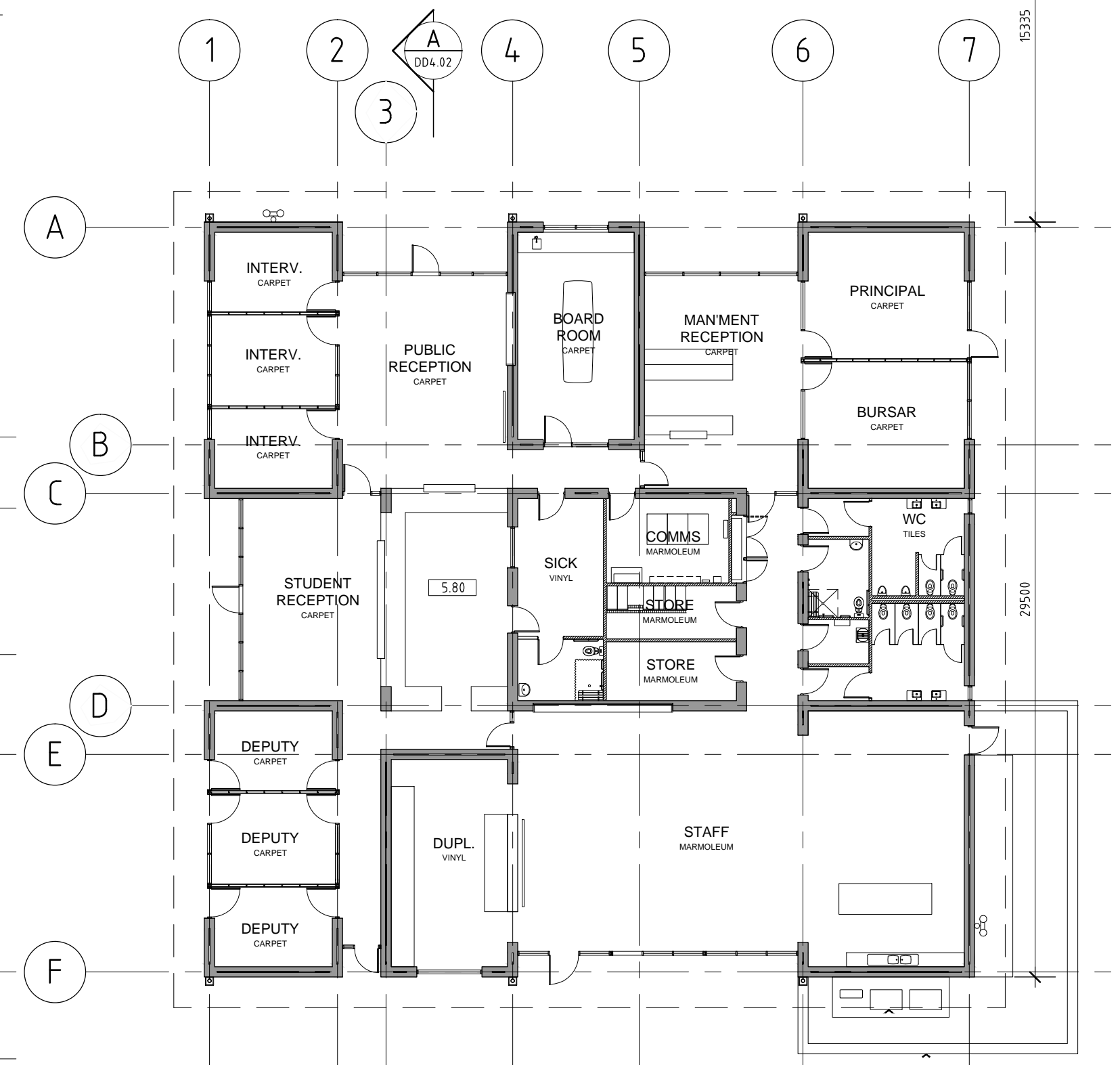
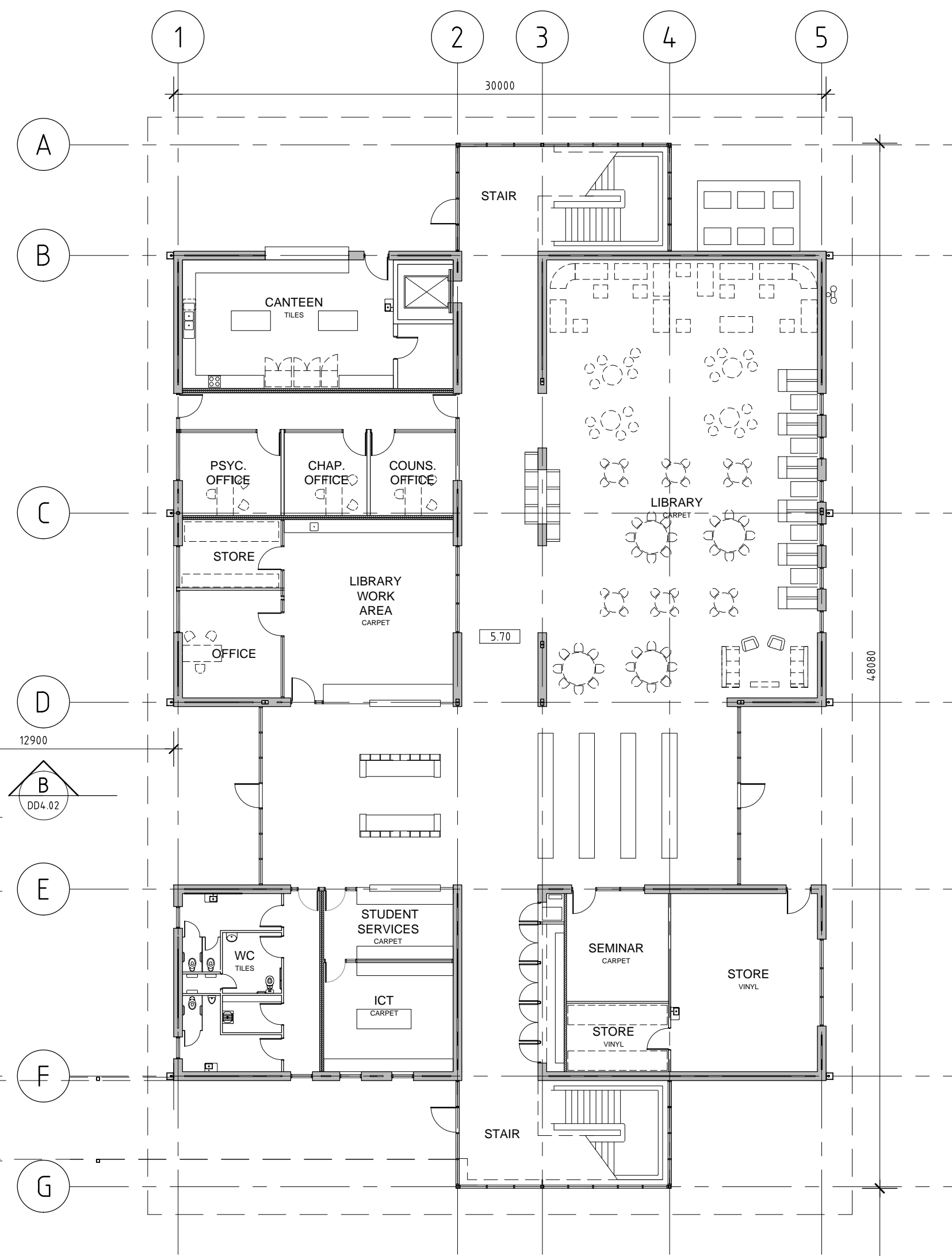
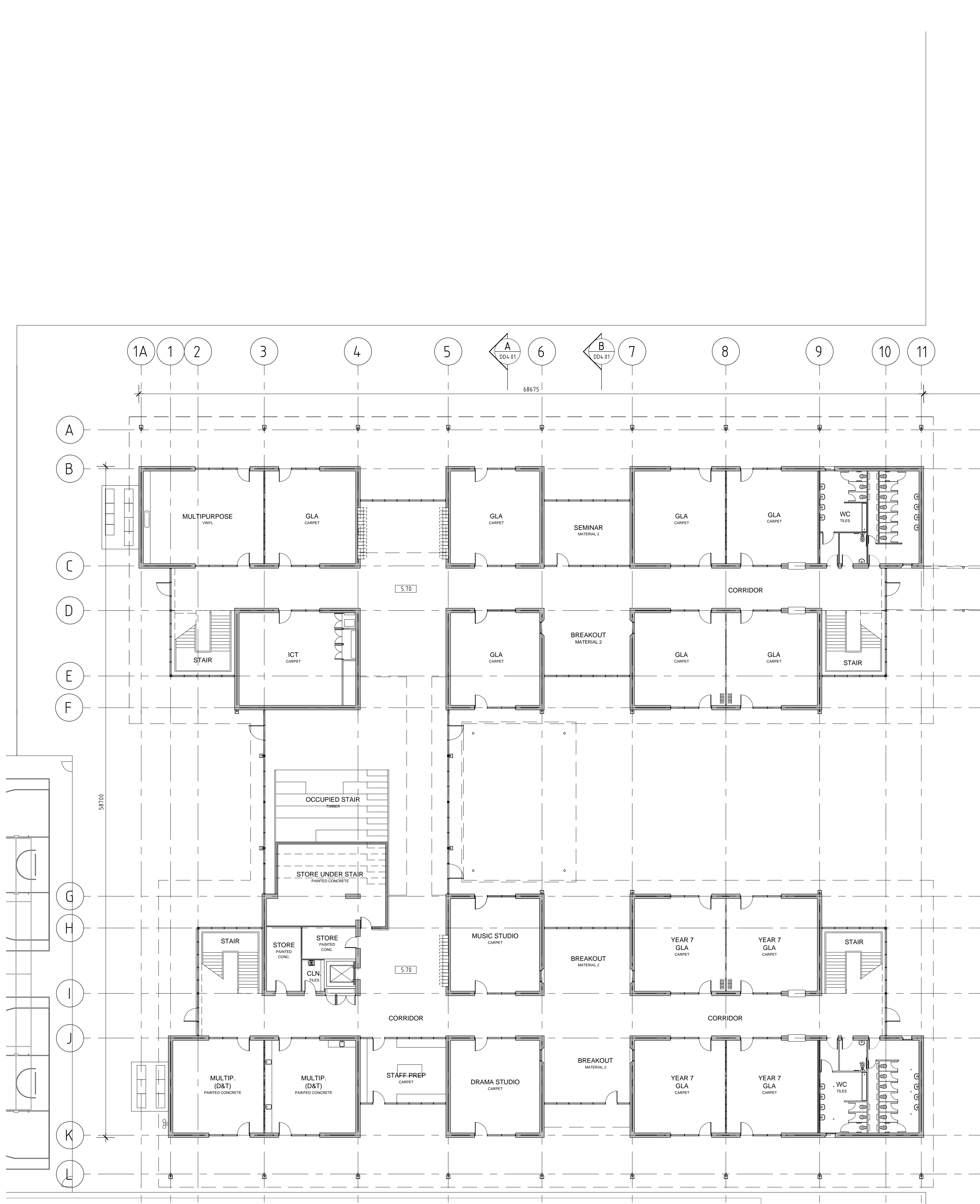
**MOTHER TERESA CATHOLIC COLLEGE
STAGE 3**

**SITE PLAN ST3
DESIGN DEVELOPMENT**

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JOB No.	SCALE			
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SECTION B-B
SCALE 1:500

SECTION A-A
SCALE 1:500



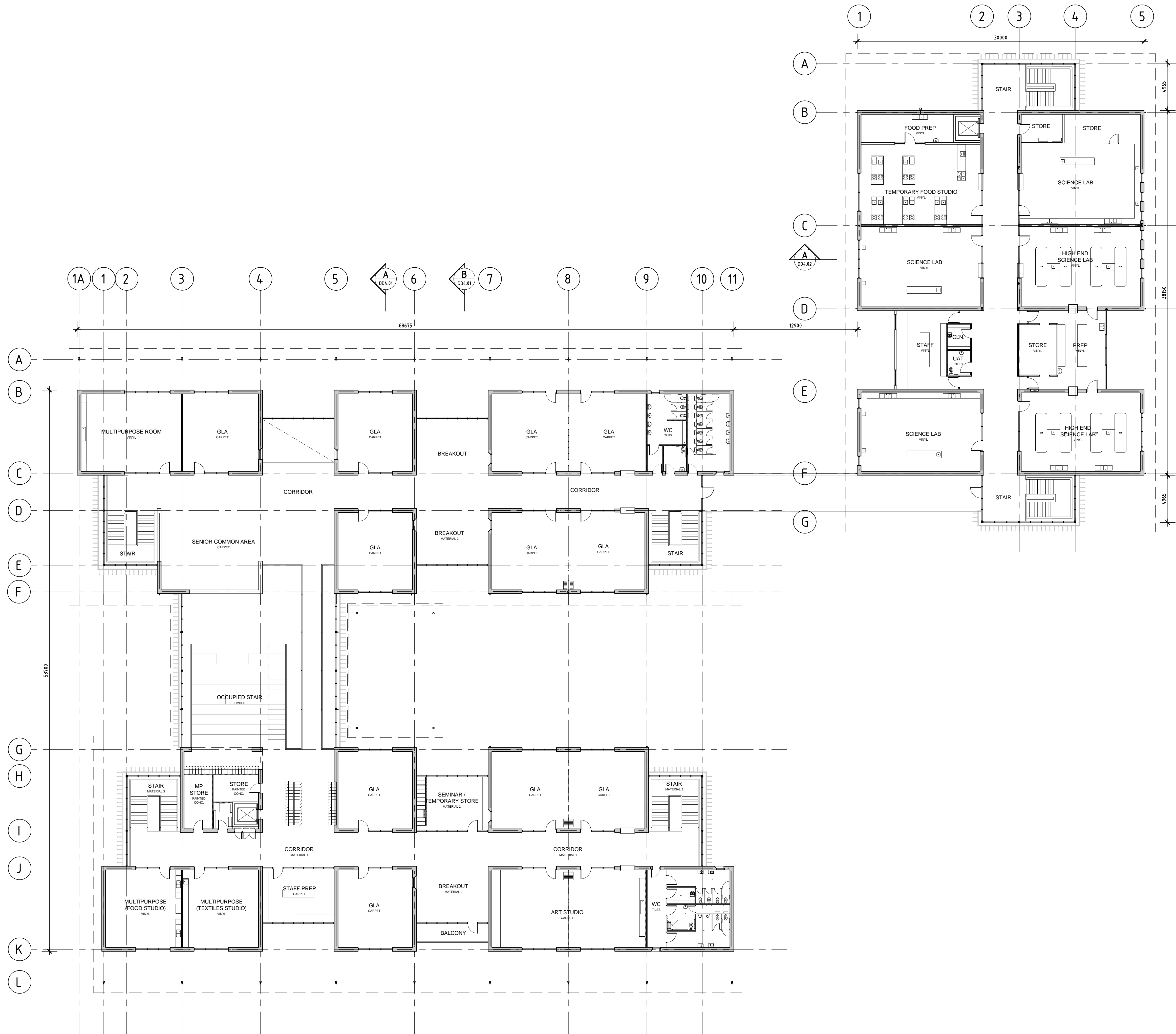
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DATE	REV	NOTE	BY

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**MOTHER TERESA CATHOLIC COLLEGE
STAGE 3**

GROUND FLOOR PLAN
DESIGN DEVELOPMENT

DRAWN	DATE	APPROVED	DRAWING No.	REV
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JOB No.	SCALE			
15007	1:200 @ A1			



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**MOTHER TERESA CATHOLIC COLLEGE
STAGE 3**

**FIRST FLOOR PLAN
DESIGN DEVELOPMENT**

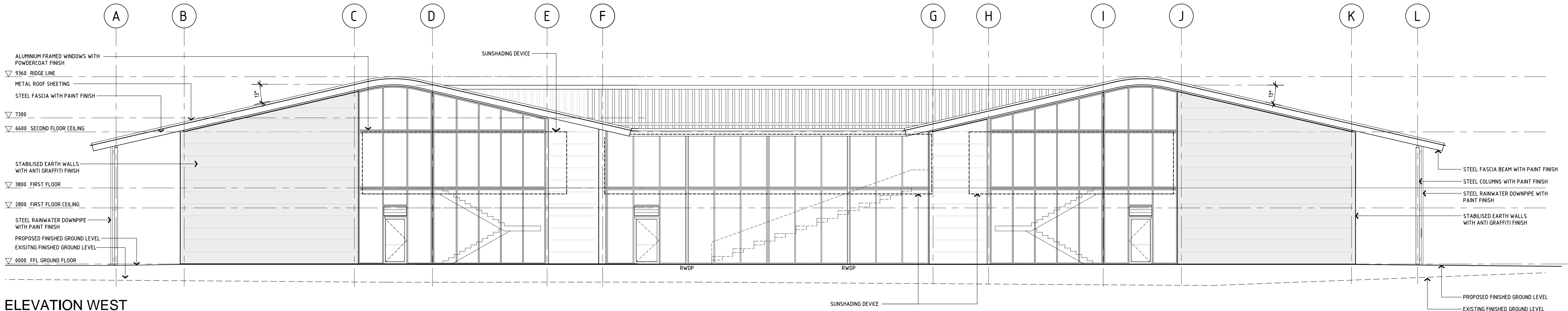
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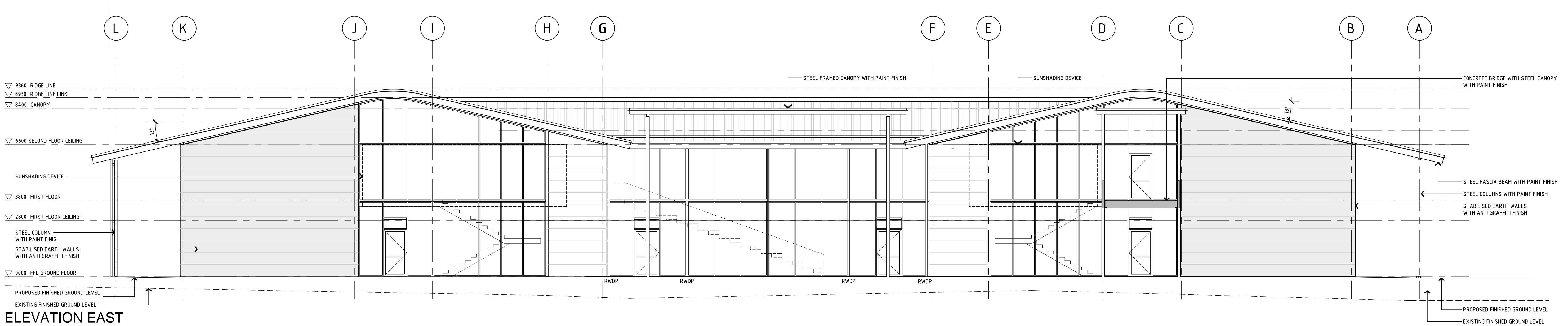
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ELEVATION WEST

LEARNING BLOCK
SCALE 1:100



ELEVATION EAST

LEARNING BLOCK
SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

ELEVATIONS
LEARNING BLOCK STAGE 3
DESIGN DEVELOPMENT

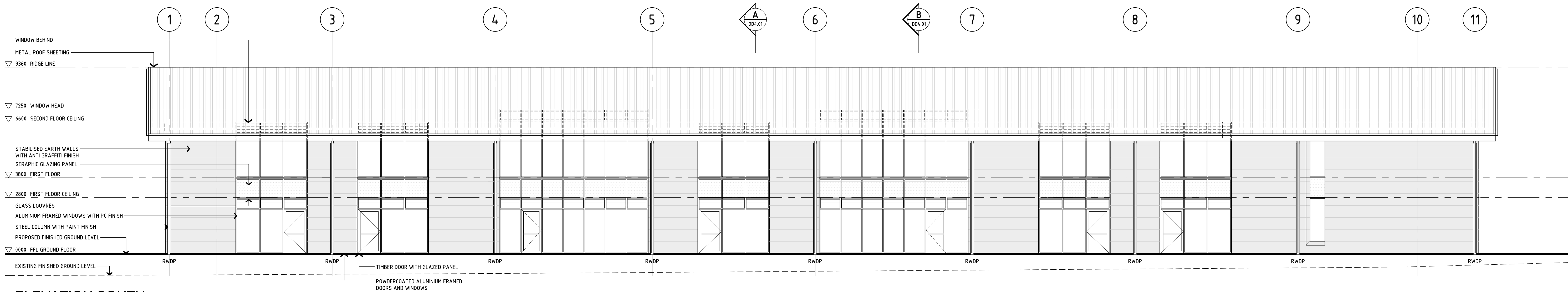
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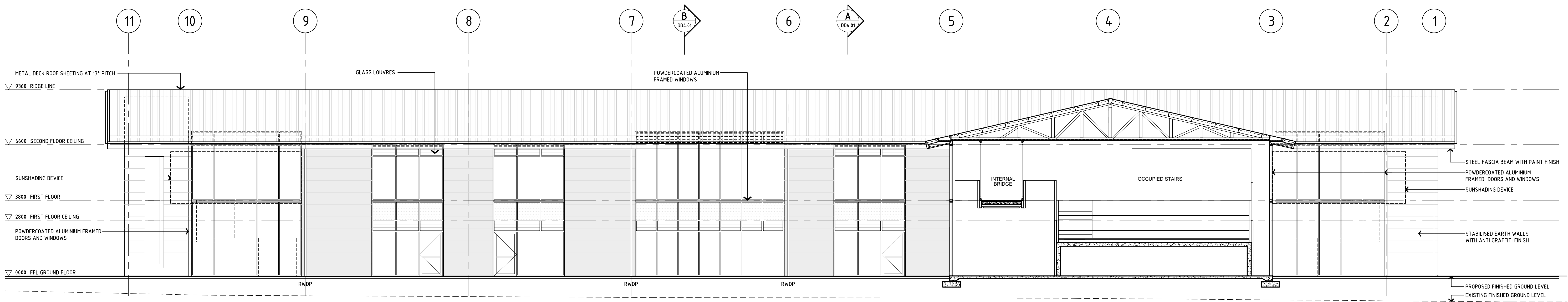
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ELEVATION SOUTH

LEARNING BLOCK - SOUTH ELEVATION
SCALE 1:100



ELEVATION NORTH

LEARNING BLOCK - SECTION THROUGH LINK
SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

ELEVATIONS
LEARNING BLOCK
DESIGN DEVELOPMENT

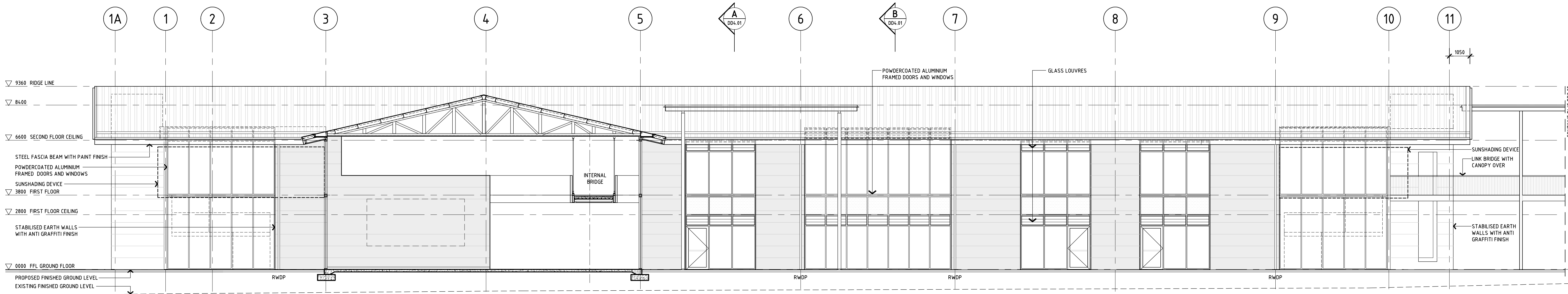
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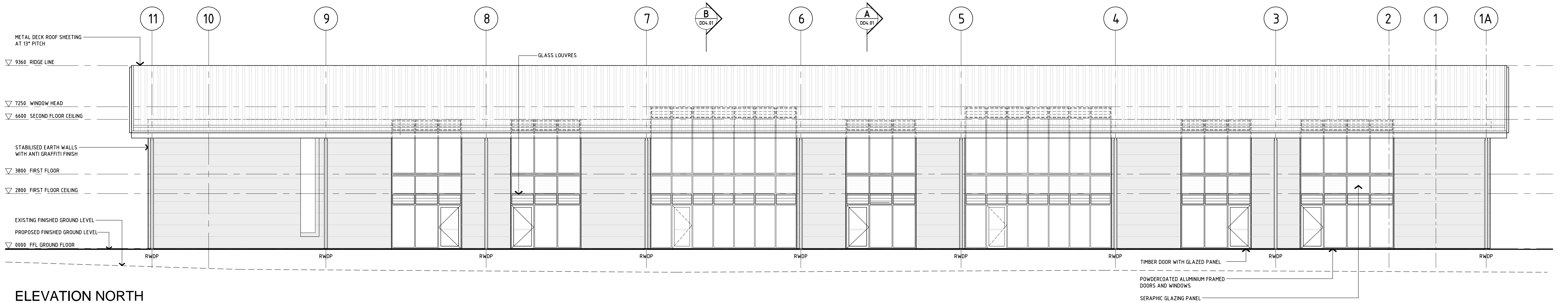
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ELEVATION SOUTH
LEARNING BLOCK - SECTION THROUGH LINK
SCALE 1:100



ELEVATION NORTH
LEARNING BLOCK
SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

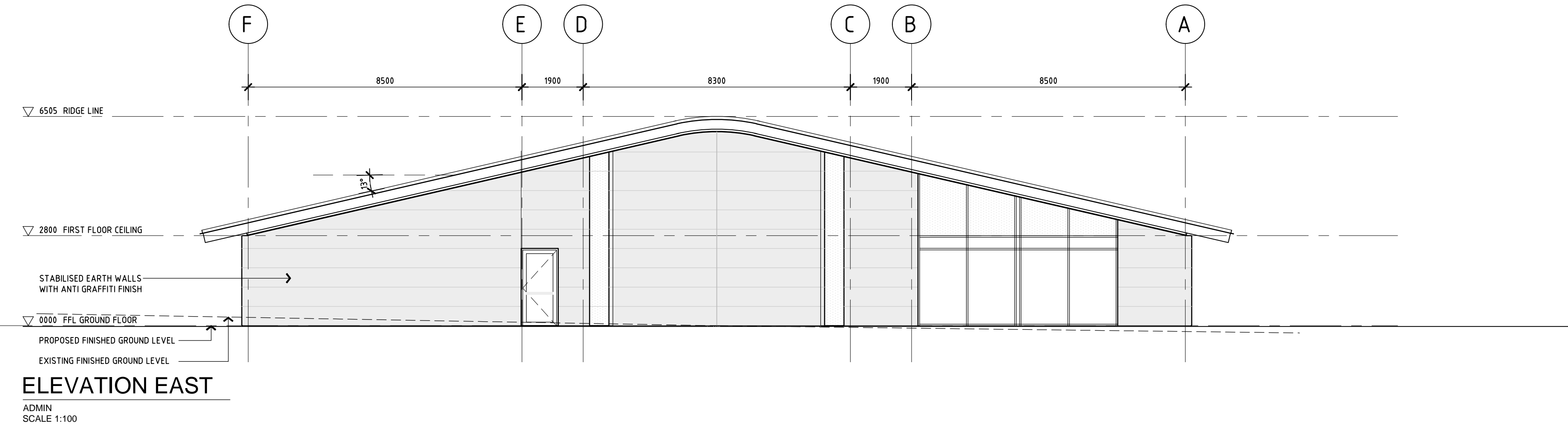
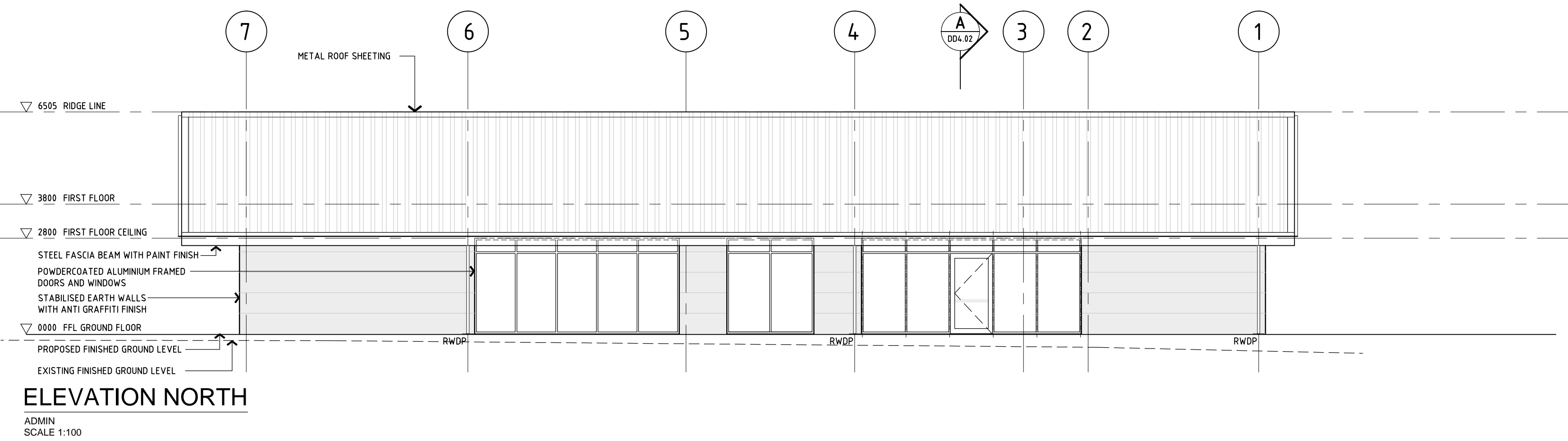
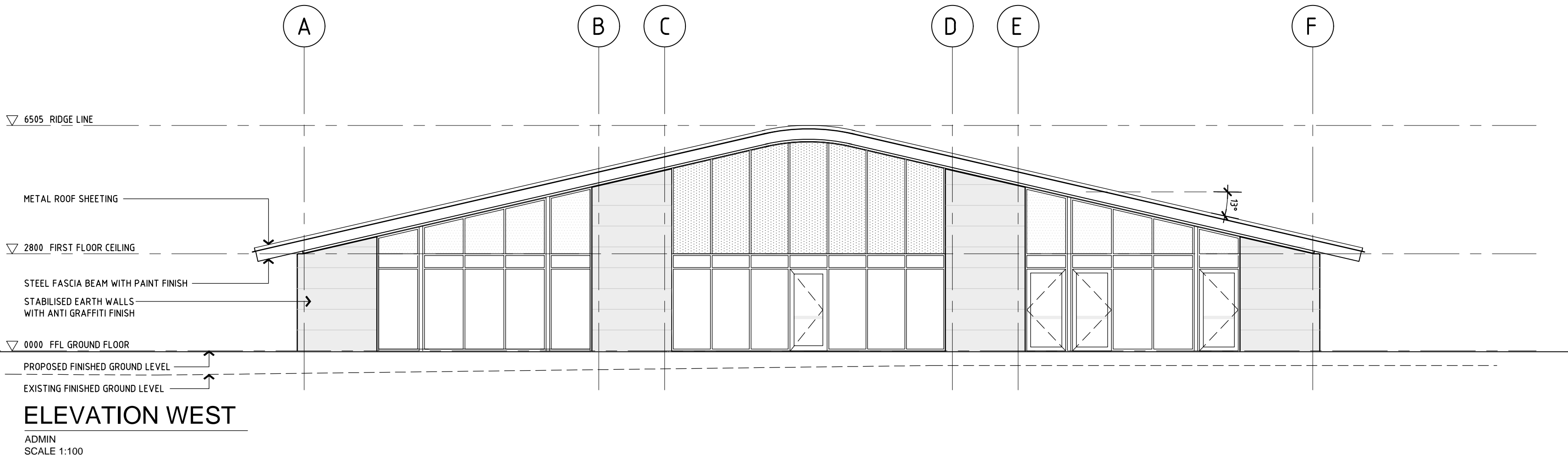
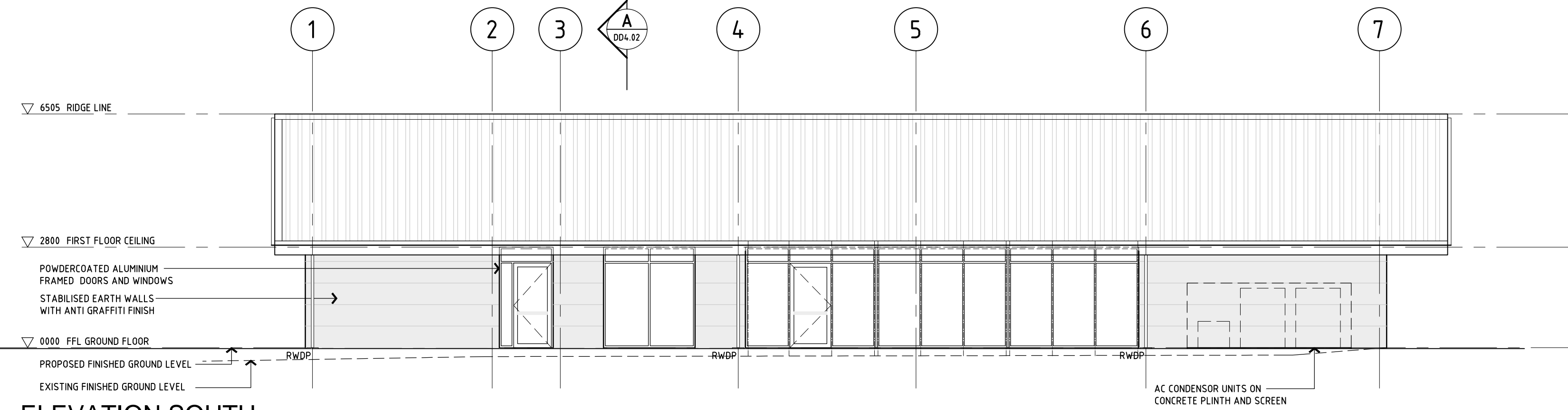
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**MOTHER TERESA CATHOLIC COLLEGE
STAGE 3a**

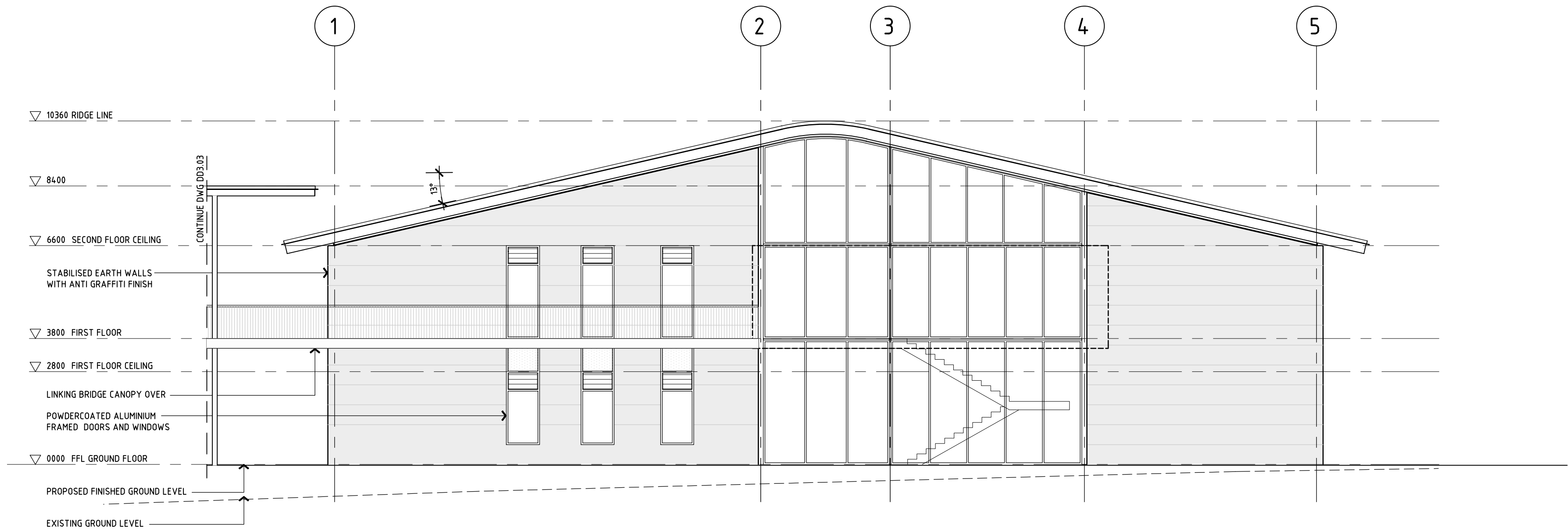
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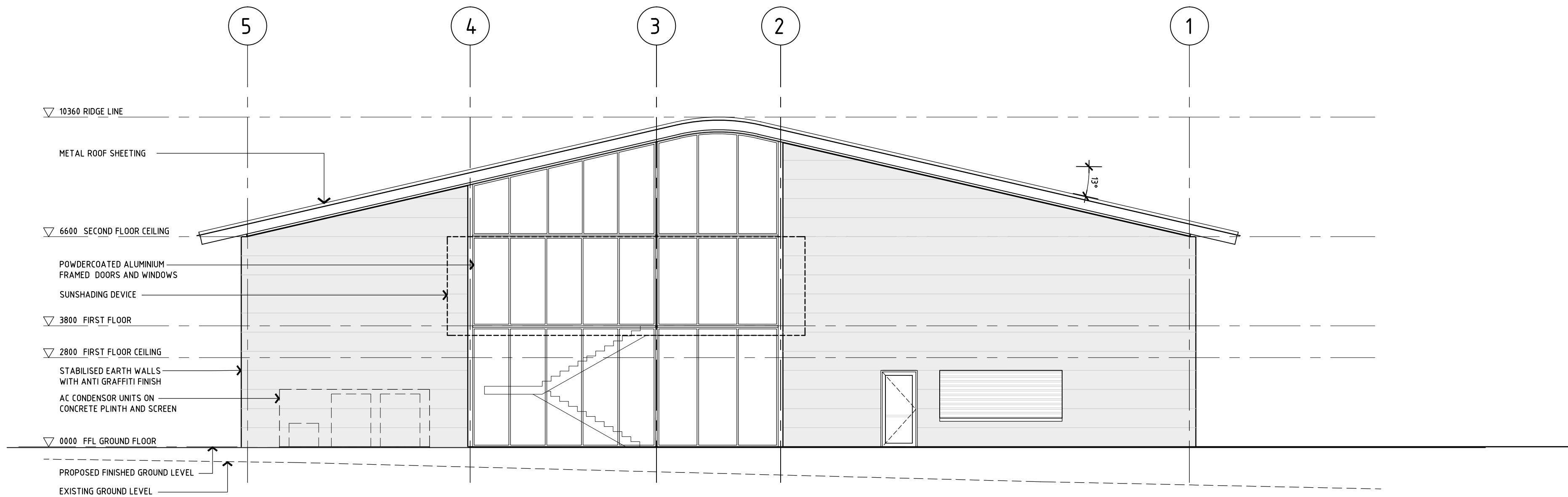
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ELEVATION SOUTH

LIBRARY + SCIENCE

SCALE 1:100



ELEVATION NORTH

LIBRARY + SCIENCE

SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE

STAGE 3

ELEVATIONS

LIBRARY + SCIENCE

DESIGN DEVELOPMENT

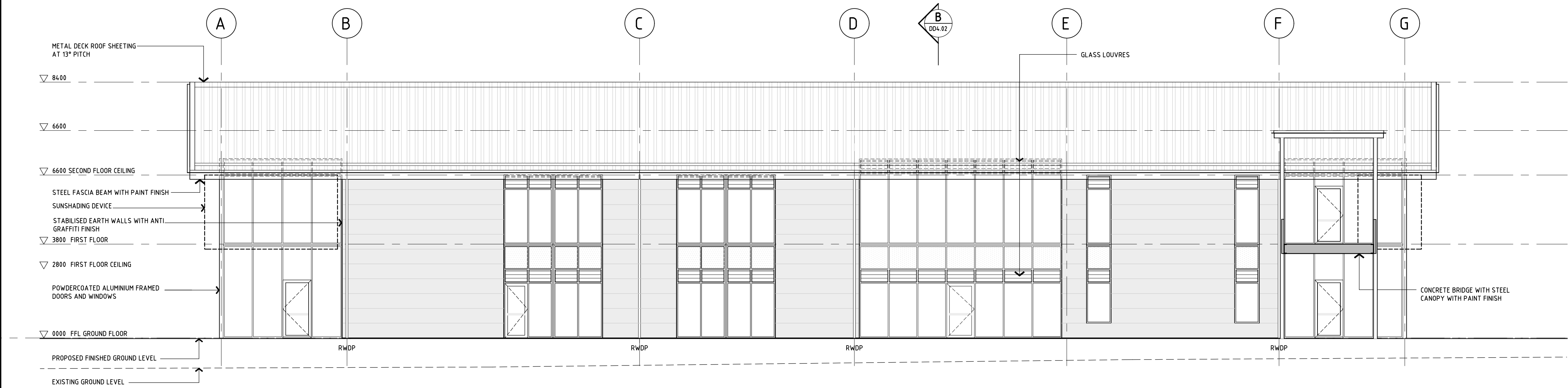
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NOTES

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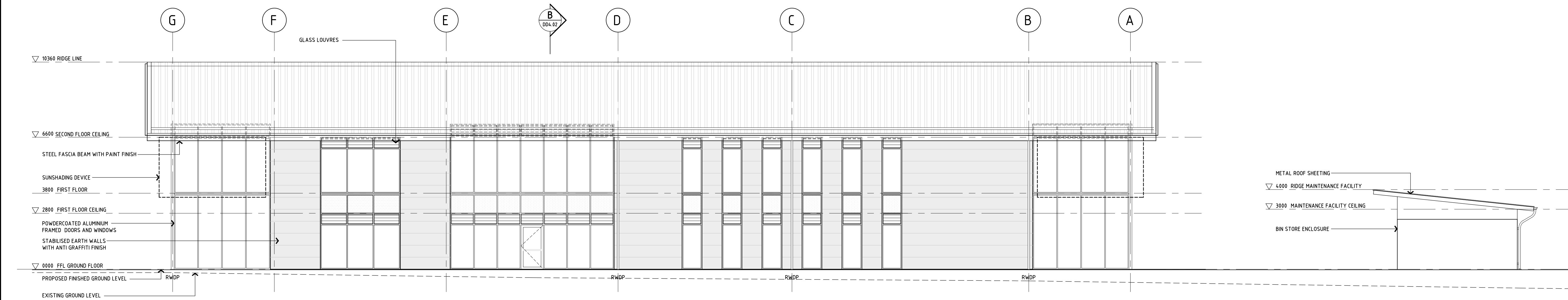
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ELEVATION WEST

LIBRARY + SCIENCE

SCALE 1:100



ELEVATION EAST

LIBRARY + SCIENCE

SCALE 1:100

10.02.16	A	ISSUED FOR DEVELOPMENT APPROVAL	SB
DATE	REV	NOTE	BY

Parry & Rosenthal Architects

2nd Floor
43 Ventnor Avenue
West Perth WA 6005
PO Box 729 West Perth WA 6872

T (08) 9481 0540
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W www.pandrs.com.au

MOTHER TERESA CATHOLIC COLLEGE

STAGE 3

ELEVATIONS

LIBRARY + SCIENCE

DESIGN DEVELOPMENT

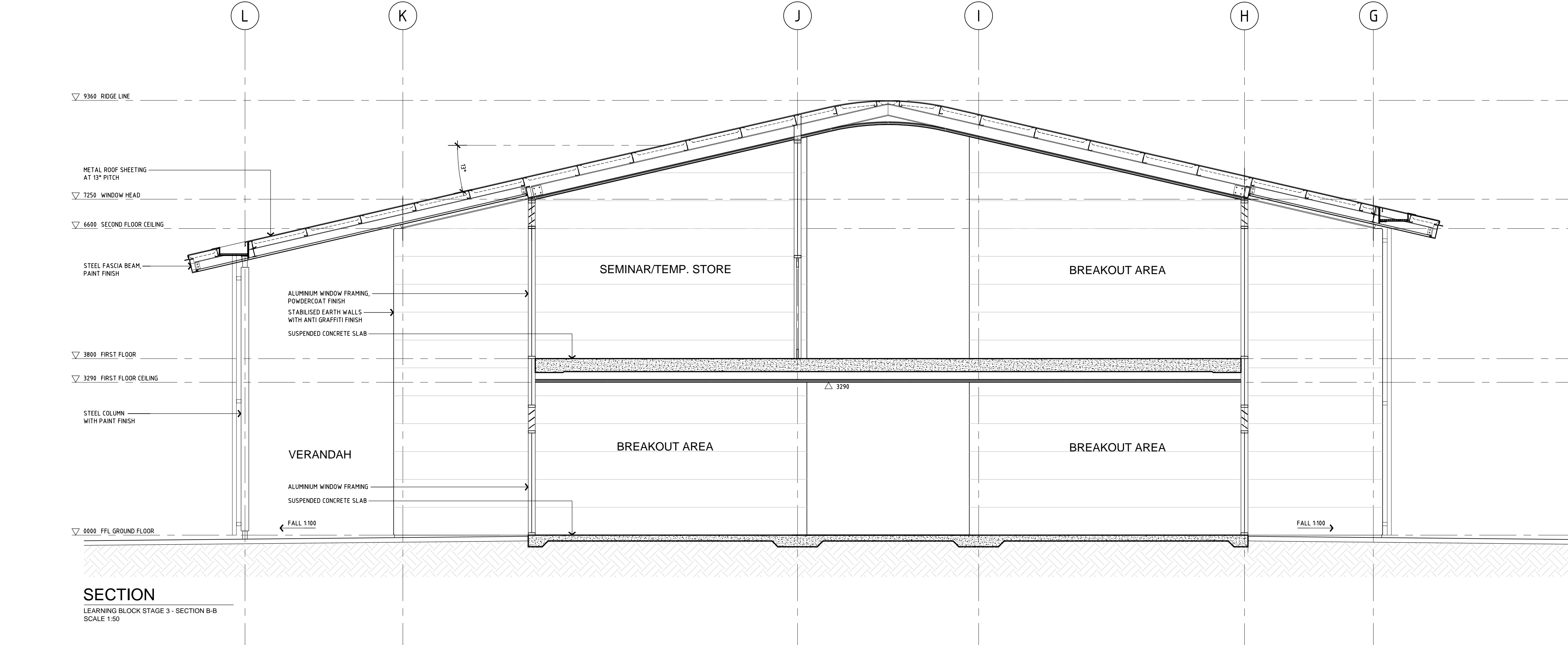
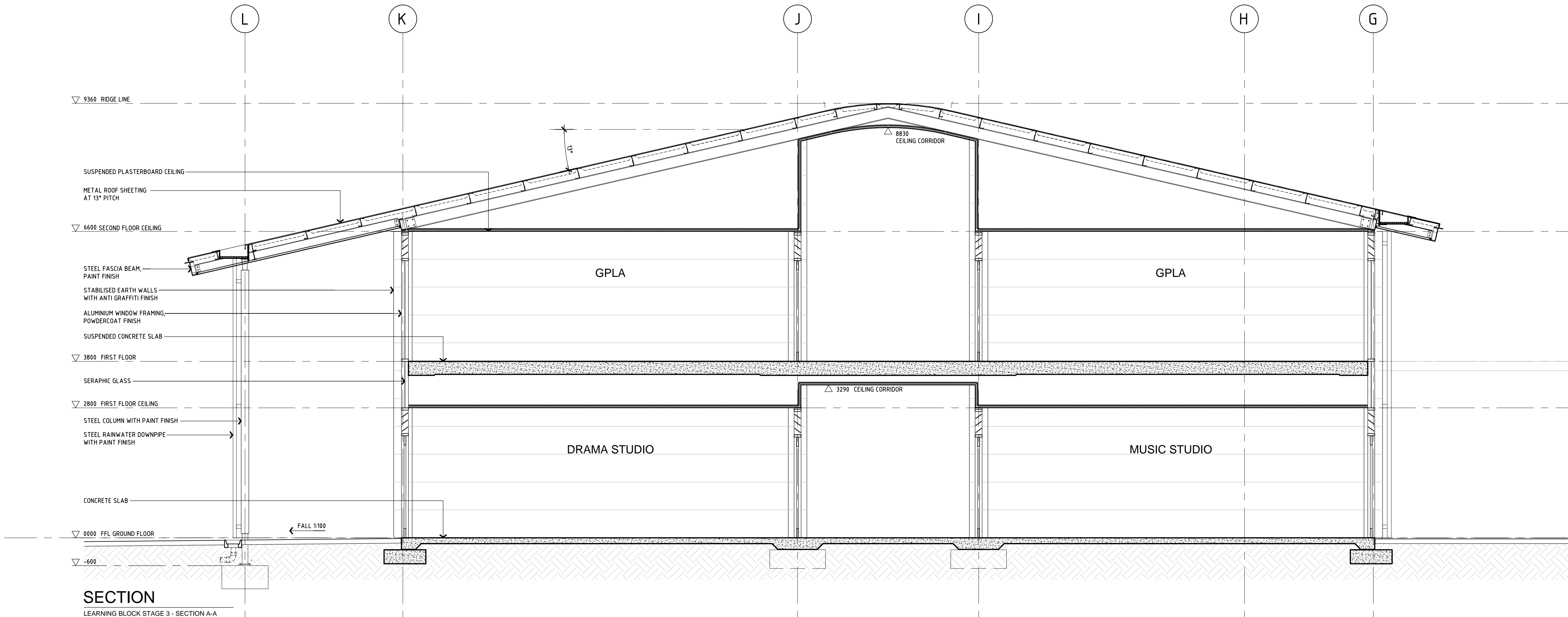
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10.02.16	A	ISSUED FOR DEVELOPMENT APPROVAL	AR
DATE	REV	NOTE	BY

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

SECTIONS
LEARNING BLOCK
DESIGN DEVELOPMENT

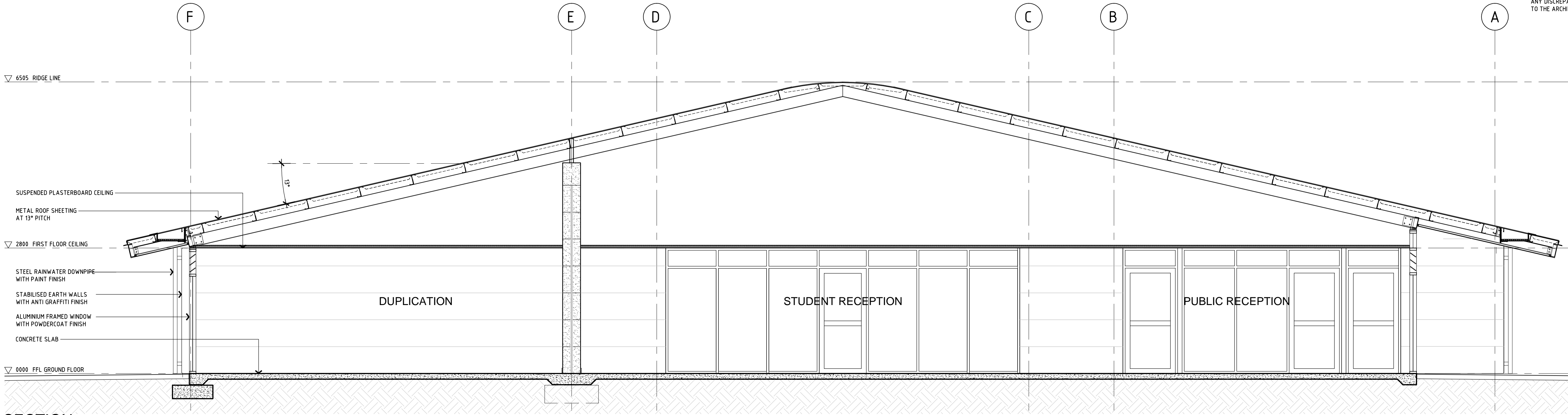
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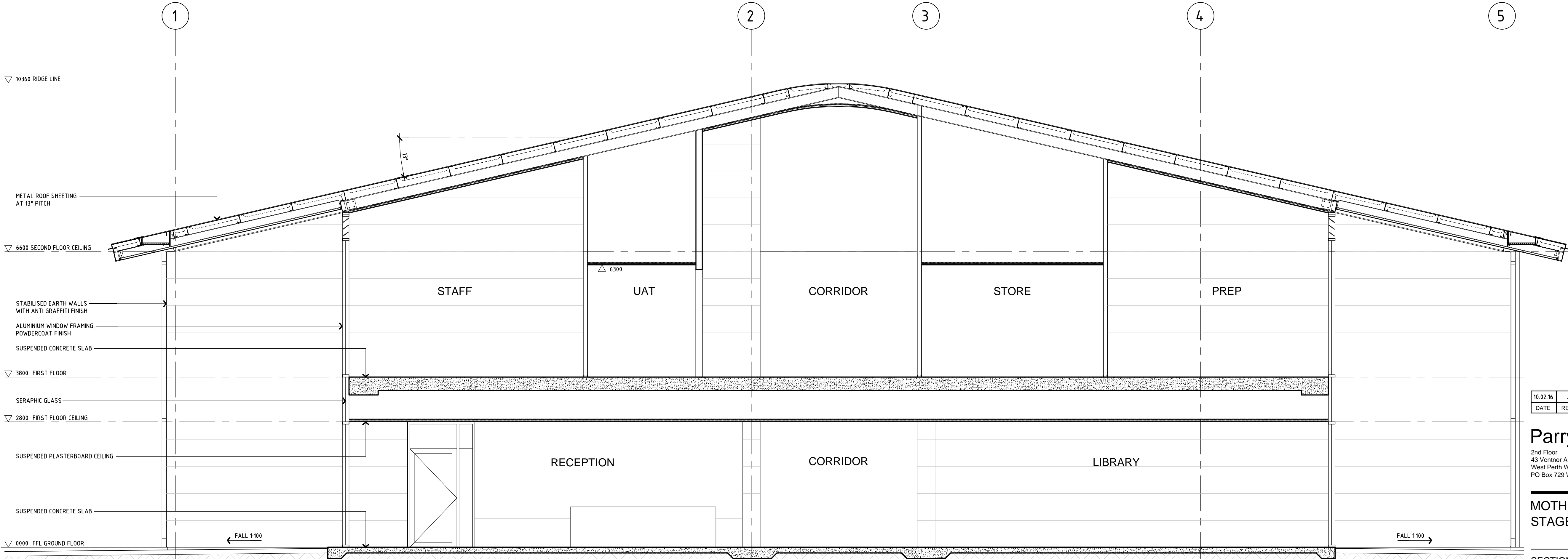
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SECTION

ADMIN - SECTION A-A
SCALE 1:50



SECTION

LIBRARY + SCIENCE - SECTION B-B
SCALE 1:50

10.02.16	A	ISSUED FOR DEVELOPMENT APPROVAL	AR
DATE	REV	NOTE	BY

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

SECTIONS
LIBRARY + SCIENCE BLOCK, ADMIN BLOCK
DESIGN DEVELOPMENT

DRAWN	DATE	APPROVED	DRAWING No.	REV
AR	14.12.2015		DD4.02	A
JOB No.	SCALE			
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To: The Chief Executive Officer of the City of Rockingham

Proposed Additions to Existing Educational Establishment (Mother Teresa Catholic College) – Lot 10 (No.731) Eighty Road, Baldviss

SUBJECT OF SUBMISSION: (State how your interests are affected, whether as a private citizen, on behalf of a company or other organisation, or as an owner or occupier of property).
The company I work for (Mortons Urban Solutions) is employed as the Project Manager + Project Engineer of Parkland Heights Estate

Corner of Sixty-Eight and Eighty Road, Baldovis

Refer attached letter

All submissions are to be made to the Chief Executive Officer, City of Rockingham, PO Box 2142, Rockingham DC WA 6967 and be received on or before 18 March 2016. Any written submission the City receives may be placed on the public record and be available for inspection.



Our Reference: 28601- -Mother Teresa College

**Civil Engineering
Project Coordination
Urban & Regional Planning**

17 March 2016

mortons@urbansolutions.net.au
www.urbansolutions.net.au

Chief Executive Officer
City of Rockingham
PO Box 2142
ROCKINGHAM DC WA 6967

MUS Pty Ltd Was
Mortons - Urban Solutions
ABN 39 116 376 085

Attention: The Manager / Miss Donna Shaw

Dear Miss Shaw,

Re: Proposed Additions (Stage 3) to Existing Educational Establishment (Mother Teresa Catholic College) – Lot 10 (No. 731) Eighty Road, Baldivis

The following submission has been prepared on behalf of our client Rockingham Park Pty Ltd who is the developer of Parkland Heights Estate. Our company, Mortons Urban Solutions is currently engaged by Rockingham Park as the Project Manager and Project Engineer for Parkland Heights Estate.

We thank you for the opportunity to provide comment in respect to the above mentioned application and note the general principle of the school expansion is supported by Rockingham Park, however request consideration of the following factors in your assessment of the proposed additions.

1. Master Plan

The Masterplan prepared by Parry & Rosenthal Architects (refer Mother Teresa Catholic School, School Site Masterplan – Ground Floor prepared by Parry & Rosenthal Architects and dated 6 February 2016) has used a superseded layout of Parkland Heights as the base plan, please ensure the current relevant approvals for Parkland Heights are referenced/used so the road alignments, access points, lots layouts etc are consistent.

The current relevant approvals showing this detail for Parkland Heights is the Stages 4 & 5 Subdivision Approval (WAPC Application No: 148766 dated 17 September 2013), the Stages 4 & 5 Engineering Approval and the current Structure Plan (prepared by Taylor Burrell Barnett, dated October 2015 and approved under CoR Delegated Authority 10 October 2015).

2. Design Levels

The design levels of the proposed additions and specifically the carparks shall be coordinated to tie in with the finished levels of the recently constructed Eighty Road.

3. Access Considerations

The proposed entry points to the school are in close proximity to the existing Parkland Heights road intersections, please ensure that sufficient site distances are maintained



BUSHFIRE MANAGEMENT PLAN

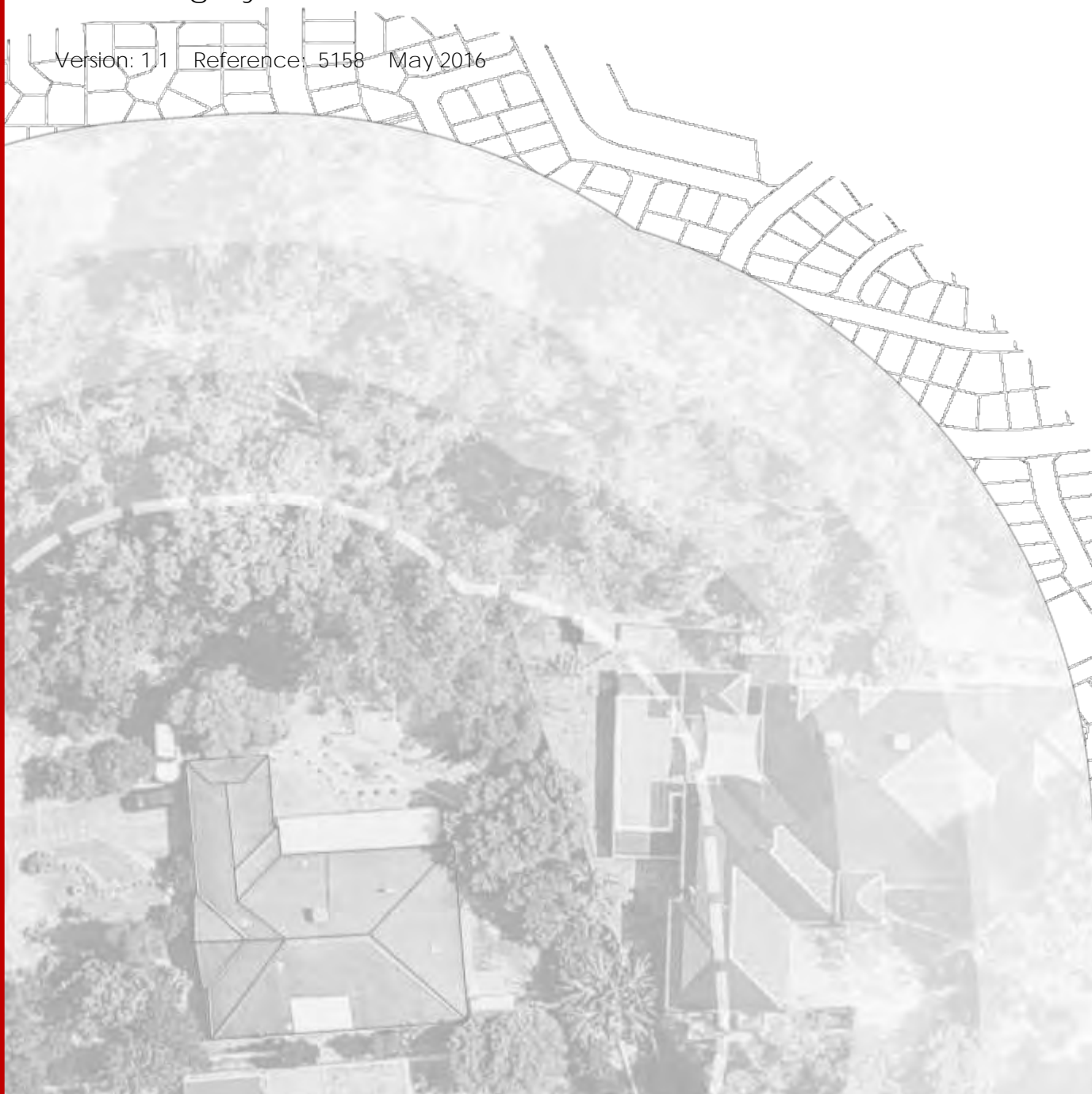
State Planning Policy 3.7

(Development Application)

Mother Teresa Catholic College – Stage 3

Lot 10 Eighty Rd, Baldivis

Version: 1.1 Reference: 5158 May 2016



DISCLAIMER AND LIMITATION

This report is prepared solely for Mother Teresa Catholic College (the 'proponent') and any future landowners of the subject lot(s) and is not for the benefit of any other person and may not be relied upon by any other person.

The mitigation strategies contained in this Bushfire Management Plan are considered to be prudent minimum standards only, based on the writer's experience as well as standards prescribed by relevant authorities. It is expressly stated that RUIC Fire and the writer do not guarantee that if such standards are complied with or if a property owner exercises prudence, that a building or property will not be damaged or that lives will not be lost in a bush fire.

Fire is an extremely unpredictable force of nature. Changing climatic factors (whether predictable or otherwise) either before or at the time of a fire can also significantly affect the nature of a fire and in a bushfire prone area it is not possible to completely guard against bushfire.

Further, the growth, planting or removal of vegetation; poor maintenance of any fire prevention measures; addition of structures not included in this report; or other activity can and will change the bushfire threat to all properties detailed in the report. Further, the achievement of the level of implementation of fire precautions will depend on the actions of the landowner or occupiers of the land, over which RUIC Fire has no control. If the proponent becomes concerned about changing factors then a new Fire Risk Management Plan should be requested.

To the maximum extent permitted by the law, RUIC Fire, its employees, officers, agents and the writer ("RUIC Fire") excludes all liability whatsoever for:

1. claim, damage, loss or injury to any property and any person caused by fire or as a result of fire or indeed howsoever caused;
2. errors or omissions in this report except where grossly negligent; and

the proponent expressly acknowledges that they have been made aware of this exclusion and that such exclusion of liability is reasonable in all the circumstances.

If despite the provisions of the above disclaimer RUIC Fire is found liable then RUIC Fire limits its liability to the lesser of the maximum extent permitted by the law and the proceeds paid out by RUIC Fire's professional or public liability insurance following the making of a successful claim against such insurer.

RUIC Fire accepts no liability or responsibility whatsoever for or in respect of any use or reliance upon this report and its supporting material by any third party.

This report is valid for a period of three years only from the date of its issue. All BAL ratings identified in this report are indicative and are required to be verified at the time of construction of individual buildings to ensure appropriate setbacks identified in the proposed development have been achieved.

RUIC Fire is a trading name of

Rural Fire Risk Consultancy Pty Ltd

ABN: 48 151 451 713



BUSHFIRE EMERGENCY EVACUATION PLAN

Mother Teresa Catholic College

731 Eighty Rd, Baldivis

Nearest Cross Street: Sixty Eight Rd, Baldivis

Telephone: (08) 9591 7100

DISCLAIMER AND LIMITATION

This report is prepared solely for Mother Teresa Catholic College (the 'proponent') and is not for the benefit of any other person and may not be relied upon by any other person.

The information contained in this Plan is provided by Rural Fire Risk Consultancy Pty Ltd (RUIC Fire) and has been prepared in good faith and is derived from sources believed to be reliable and accurate at the time of publication. Nevertheless, the reliability and accuracy of the information cannot be guaranteed and RUIC Fire expressly disclaims liability for any act or omission done or not done in reliance on the information and for any consequences, whether direct or indirect, arising from such act or omission. This Plan is intended to be a guide only and is to be rehearsed, reviewed and updated on a regular basis, and in particular prior to each bushfire season commencement.

Fire is an extremely unpredictable force of nature. Changing climatic factors (whether predictable or otherwise) either before or at the time of a fire can also significantly affect the nature of a fire and in a bushfire prone area it is not possible to completely guard against bushfire.

To the maximum extent permitted by the law, RUIC Fire, its employees, officers, agents and the writer ("RUIC Fire") excludes all liability whatsoever for:

1. claim, damage, loss or injury to any property and any person caused by fire or as a result of fire or indeed howsoever caused;
2. errors or omissions in this report except where grossly negligent; and

the proponent expressly acknowledges that they have been made aware of this exclusion and that such exclusion of liability is reasonable in all the circumstances.

If despite the provisions of the above disclaimer RUIC Fire is found liable then RUIC Fire limits its liability to the lesser of the maximum extent permitted by the law and the proceeds paid out by RUIC Fire's professional or public liability insurance following the making of a successful claim against such insurer.

RUIC Fire accepts no liability or responsibility whatsoever for or in respect of any use or reliance upon this report and its supporting material by any third party.

This plan is a draft version to provide a basis for the formulation of a Final version for school use, and to demonstrate compliance with State Planning Policy 3.7 (SPP3.7) Guidelines for planning on Bushfire Prone Areas, and as such is to be revised prior to any habitation of any building within the site. A full bushfire plan is to be developed, in accordance with the Department of Education's publication: *The Principals Guide to Bushfire*.

RUIC Fire is a trading name of

Rural Fire Risk Consultancy Pty Ltd

ABN: 48 151 451 713

DEVELOPMENT APPLICATION

Addition of new classroom buildings, administration buildings, science laboratories, car parking, landscaping and sporting facilities to existing Educational Establishment –

Mother Teresa Catholic College, Baldivis

No. 731 (LOT 10) Eighty Road, Baldivis
CITY OF ROCKINGHAM
February 2016

Submitted by:
MGA TOWN PLANNERS
Parry & Rosenthal **Architects**




DEVELOPMENT APPLICATION

Addition of new classroom buildings, administration buildings, science laboratories, car parking, landscaping and sporting facilities to existing Educational Establishment –

Mother Teresa Catholic College

No. 731 (Lot 10) Eighty Road, Baldivis
CITY OF ROCKINGHAM
February 2016

Document Status

Rev No.	Author	Reviewed By	Date	Issued For	Signature	Date
1	L Engelbrecht	J Malcolm	19/01/2016	Draft		19/01/2016
2	L Engelbrecht	J Malcolm	09/02/2016	Draft		09/02/2016
3	L Engelbrecht	J Malcolm	11/02/2016	Final		11/02/2016

MGA TOWN PLANNERS

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APPENDIX A – CERTIFICATE OF TITLE

APPENDIX B – MASTER PLAN AND DEVELOPMENT PLANS

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EXECUTIVE SUMMARY

Mother Teresa Catholic College is a recent addition to the Baldivis community, opening in February 2014 for primary aged students. The College is to become an integral part of the Baldivis community and its broader surrounds. This development application proposes to construct the secondary school portion of the College, in line with the approved Master Plan. The development proposal will provide more extensive teaching and learning facilities, in addition to which, it proposes to improve onsite parking, and rationalise existing traffic flows, to make better and more effective use of the land and immediate road network.

The proposed development is critical to the capacity of the college to provide for secondary school students and to continue to offer educational standards of the highest calibre.

The development proposal contains the following elements:

1. construction of a new two level secondary school learning block;
2. construction of a new two level library and science facility;
3. construction of a new single level administration building;
4. construction of two new hardcourts and a playing field; and
5. provision of supporting facilities including internal roads, car parking, maintenance shed and landscaping.

The development is consistent with the scale and form of institutional buildings on the Mother Teresa Catholic College site, and will have no adverse impact on the surrounding developments.

The development meets and maintains the desired local character for the area. The design of the new buildings complements the existing buildings on the site.

The capacity of the existing road network is sufficient to accommodate the future demand expected of the proposed development.

Onsite parking will be increased, in response to the expansion of student and staff numbers. The development also makes provision for a rationalisation of traffic flow on Eighty Road, including inbuilt drop off, pickup zones, specifically designed for student transit in a safe and responsible manner.

On the basis of the above and subsequent justifications within this report, we respectfully request that the City of Rockingham and Joint Development Assessment Panel consider the proposal favourably.

1.0 INTRODUCTION

1.1 PREAMBLE

This development application has been prepared by MGA Town Planners on behalf of Mother Teresa Catholic College. The subject site is No. 731 (Lot 10) Eighty Road, Baldivis. This development application provides detail relating to the development, involving the construction of new Educational Establishment buildings and facilities. Justification for the proposal is provided with respect to its design merits, overall benefit to the City of Rockingham and an assessment addressing local government strategic and statutory policy.

This proposal represents an opportunity for Mother Teresa Catholic College to provide new facilities and contribute to improved educational outcomes for secondary students.

1.2 PROJECT TEAM

The development application and accompanying professional reports/plans have been prepared by the following:

- Parry & Rosenthal Architects
- MGA Town Planners
- Shawmac Civil and Traffic Engineers

1.3 PROJECT APPROVALS

The development proposal is to be considered by the Metropolitan South-West Joint Development Assessment Panel (JDAP) as a mandatory application with a construction cost in excess of \$10 million. The decision making process will involve the consideration of development requirements under the City of Rockingham Town Planning Scheme No. 2 (TPS2) and the City of Rockingham local planning policies.

1.4 APPROVAL HISTORY

The site at Lot 10 Eighty Road, Baldivis has been subject to the previous development approvals:

December 2012 - Council and the WA Planning Commission approved Stage 1 of the Mother Teresa Catholic School on the subject site, which included a pre-primary, kindergarten and Years 1 and 2 rooms, administration and library, covered area, hard court, landscaping including four courtyards, a carpark with 38 car parking spaces, and 9 on-street spaces in the Eighty Road reserve. A Master Plan showing the full development of the school site was submitted as part of the application.

August 2014 – Council and the WA Planning Commission approved additions (Stage 2) to the existing educational establishment (Mother Teresa Catholic College) on the subject site. The approved development included classrooms for years 3 to 6, an administration building and entry canopy, central court area, supporting utility rooms, landscaping and car parking. A Master Plan also formed part of this application.

2.0 SITE CONTEXT AND ANALYSIS

2.1 LEGAL DESCRIPTION

The subject site is legally described as 'Lot 10 on Diagram 29814' being the whole of the land contained within Certificate of Title Volume 1928 and Folio 48. The registered proprietor is the Roman Catholic Archbishop of Perth.

The subject site has an area of 22.0527ha.

Refer to **Appendix A** – Certificate of Title.

2.2 LOCATION

2.2.1 Regional Context

From a regional perspective, the subject site is located approximately 10 kilometres to the south-east of the Rockingham central city area and approximately 46 kilometres south of the Perth central area.

The site has reasonable access to north-south oriented regional road networks, with Ennis Avenue and the Kwinana Freeway (Primary Regional Roads) and Mandurah Road and the proposed Nairn Road (Other Regional Roads) in close proximity.

The Lake Walyungup Regional open space has separated urban development south of Rockingham into two distinct corridors. The subject site is located in the eastern corridor, adjoining land zoned Urban and currently being developed predominantly for housing.

Refer to **Figure 1**, Regional Context.

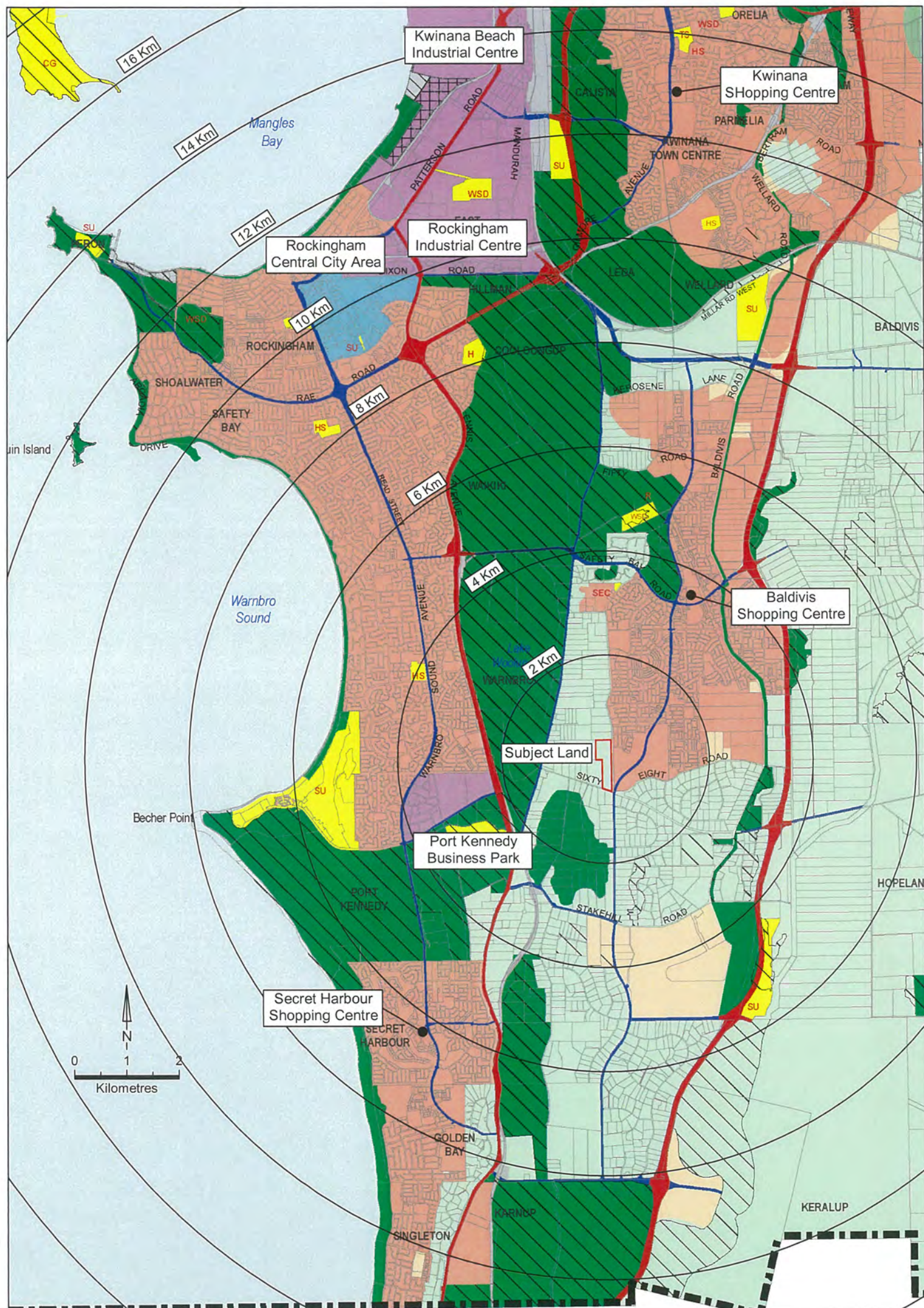


Figure 1 - Regional Context

2.2.2 Local Context

The subject site is located within the suburb of Baldivis, at the southern extent of the Perth Metropolitan Area. The site adjoins urban land being developed for predominantly residential purposes to the east, while to the west is a lifestyle village development. A wetland exists to the north and farming land is evident across Sixty-Eight Road to the south.

Mother Teresa Catholic College is positioned on the western side of Eighty Road. Within the site context, a previous approval has seen the development of the primary school on the southern portion of the site, with the current proposal for the secondary school and administration to occupy the central portion.

Refer to **Figure 2**, Local Context.

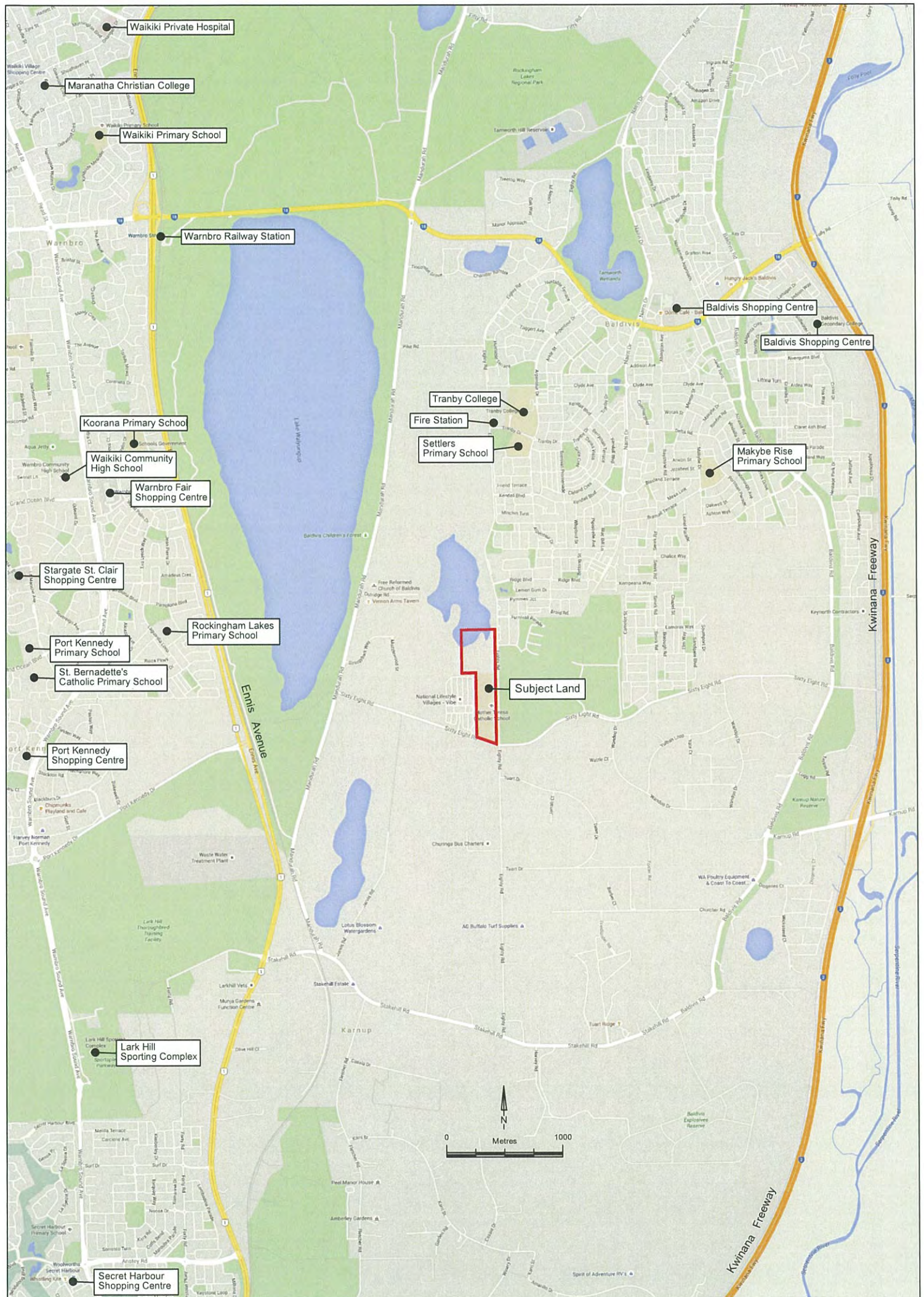


Figure 2 - Local Context

2.3 LAND USE AND TOPOGRAPHY

The development area represents a portion of the whole Mother Teresa Catholic College site. The total site area of 22.0527ha is represented in a lineal fashion, extending from a frontage of 192.44m to Sixty-Eight Road in the south, to incorporate a frontage of 993.79m to Eighty Road. The lot width in the north increases to 300.75m.

The College primary school exists in the southern part of the property and this application relates to development of the secondary school, north of the primary. The development area leaves a rectangular area free, to accommodate future parish buildings, adjoining the existing parish house.

The site has a total crossfall of approximately 9.5m from south-east to north-west, which occurs over a distance of more than 1.0 km and is therefore of a minor nature. The low point represents the wetland in the north of the site, which is well clear of the development area.

Figure 3 – Site Aerial illustrates the proposed development area in respect of the site boundaries and existing primary school. The site of the proposed works is located abutting an existing adjoining lifestyle village.



Figure 3 - Aerial Photography

3.0 PROPOSAL

This application seeks approval to construct a new classroom building, a new library and science facility, a new administration building, two new hardcourts and a playing field, as well as supporting facilities such as internal roads, car parking, maintenance shed and landscaping. The development is intended to provide the advanced teaching and learning facilities, as well as addressing parking and traffic issues for the safety of the public.

Mother Teresa Catholic College strives to provide an excellent quality of education, ensuring all students are able to achieve their potential and are prepared for the challenges and opportunities they may face now and in the future. To this end the College has engaged highly experienced education architects Parry & Rosenthal to develop concept plans for the development of a state-of-the-art secondary school on property owned by the Roman Catholic Archbishop of Perth.

The previously approved primary school has capacity for 432 students, supported by some 43 staff. The development of the secondary school will increase those numbers in a staged way, in line with the following:

Table 1 – Proposed Secondary Student Numbers:

Year	No. of Students	No. of Staff
2018	100	14
2019	350	35
2020	600	75

The College (both primary and secondary) will reach full capacity of 1032 students and 118 staff after 2020.

The proposal incorporates the following:

Construction of a new two level secondary school learning block (4864m²) consisting of:

- Ground floor level comprising:
 - 13 general learning areas;
 - 3 multipurpose rooms;
 - 1 staff preparation area;
 - 1 information technology room;
 - 2 ablutions (including 2 universal access toilets);
 - 1 seminar room;
 - 3 informal learning areas, including an occupied stair;
 - Storage and mechanical plant areas;
 - Lift and stair access to upper floor.
- Upper floor level comprising:
 - 9 general learning areas;
 - 3 multipurpose rooms;
 - 4 informal learning areas, including an occupied stair;
 - 2 music/drama and art studios;

- 1 staff preparation area;
- 2 ablutions (including 2 universal access toilets);
- Lift and stair access to lower floor;
- Storage and mechanical plant cupboards.

Construction of a two level library/science block (2196m²) consisting of:

- Ground floor level comprising:
 - An open library;
 - Library work area and associated offices;
 - Canteen;
 - Ablution facilities (including 1 universal access toilet);
 - Lift and stair access to upper level;
 - Storage and mechanical plant areas.
- Upper floor level comprising:
 - 5 science laboratories;
 - 1 food studio;
 - Staff amenities;
 - Ablution facilities (including 1 universal access toilet);
 - Stair access to lower level;
 - Storage areas.

Construction of a single level administration block (802m²) consisting of:

- Floor area comprising:
 - Staff amenities;
 - 8 offices and board room;
 - Reception areas;
 - Ablution facilities (including 1 universal access toilet);
 - sick bay;
 - Storage and mechanical plant areas.

Construction of two new hardcourts and a new playing field. Provision of supporting facilities including internal roads, car parking, maintenance shed and landscaping

Key factors that have been considered in developing the design concept for the secondary school include:

INTEGRATION - Ensure the development is in keeping with the existing local buildings and amenities

ACCESSIBILITY OF RESOURCES - Ensure the availability of required resources for students, staff and the community

PROVISION OF CAR PARKING - Provide adequate and accessible car parking as a part of the development

EDUCATION PROVISION - Provide a facility that will enable the best delivery of the curriculum and respond to contemporary directions in education

FLEXIBILITY - To develop a facility that meets a range of student learning needs, now and into the future

GOVERNMENT AND COMMUNITY REQUIREMENTS - Ensure the development meets required standards and seeks to optimise outcomes for the College and local community.

The proposed design is simple and restrained in its appearance and makes use of appropriate maintenance free materials to provide a timeless quality, which will harmonise with the existing buildings on the Mother Teresa Catholic College site.

Plans illustrating the proposal are included in this application at **Appendix B**.

4.0 PLANNING FRAMEWORK

4.1 STATE PLANNING FRAMEWORK

4.1.1 Metropolitan Region Scheme

The subject site is zoned Rural under the provisions of the Metropolitan Region Scheme (MRS).

4.1.2 Statement of Planning Policy 2.5 – Land Use Planning in Rural Areas

SPP2.5 applies to the subject site, by virtue of its Rural zoning. However, the intended application of the policy is stated as follows, which does not include a development application such as is proposed in this instance:

This policy should be applied throughout State and local government planning decision making in conjunction with other State planning policies:

- *for the preparation of regional frameworks, sub-regional strategies and local planning strategies and schemes where it may be incorporated into local planning schemes by reference;*
- *when initiating or assessing amendments to region schemes or local planning strategies and schemes; and*
- *for rural land to guide decision making for subdivisions in tandem with Development Control Policy 3.4 - Subdivision of rural land.*

The current proposal is part of a staged development. The use of the site was considered when the previous stages and Master Plan were approved and it was deemed that an Educational Establishment use would not conflict with the Rural zoning. Furthermore, the Educational Establishment use will support conservation of the wetland area in the north of the site, by promoting adequate separation distances for development.

4.1.3 Statement of Planning Policy 2.8 - Bushland Policy for the Perth Metropolitan Region

Figure 4 – Bush Forever & DFES Bushfire Prone Areas, indicates that the wetland in the northern extent of the subject site is not a Bush Forever site, however it is identified as a Conservation Category Wetland. The proposal ensures that the necessary distance between wetland (including the area it needs to function) and the proposed development is maintained.

The WA Planning Commission produced a document in 2005, *Guideline for the Determination of Wetland Buffer Requirements (Draft)*, which indicates that the maximum separation distance of 100m would apply to a significant wetland. The proposed development area seeks a separation distance of 510m, which is well in excess of the requirements and will ensure that there will be minimal impact on the ecological functioning of the wetland.

4.1.4 State Planning Policy 3.7 – Planning in Bushfire Prone Areas

Parts of the subject site are designated as bushfire prone by the Department of Fire and Emergency, as shown on **Figure 4**. The figure indicates that the proposed development area is outside the bushfire prone areas and therefore no further action relating to a Hazard Levels or Bushfire Attack Levels is required.

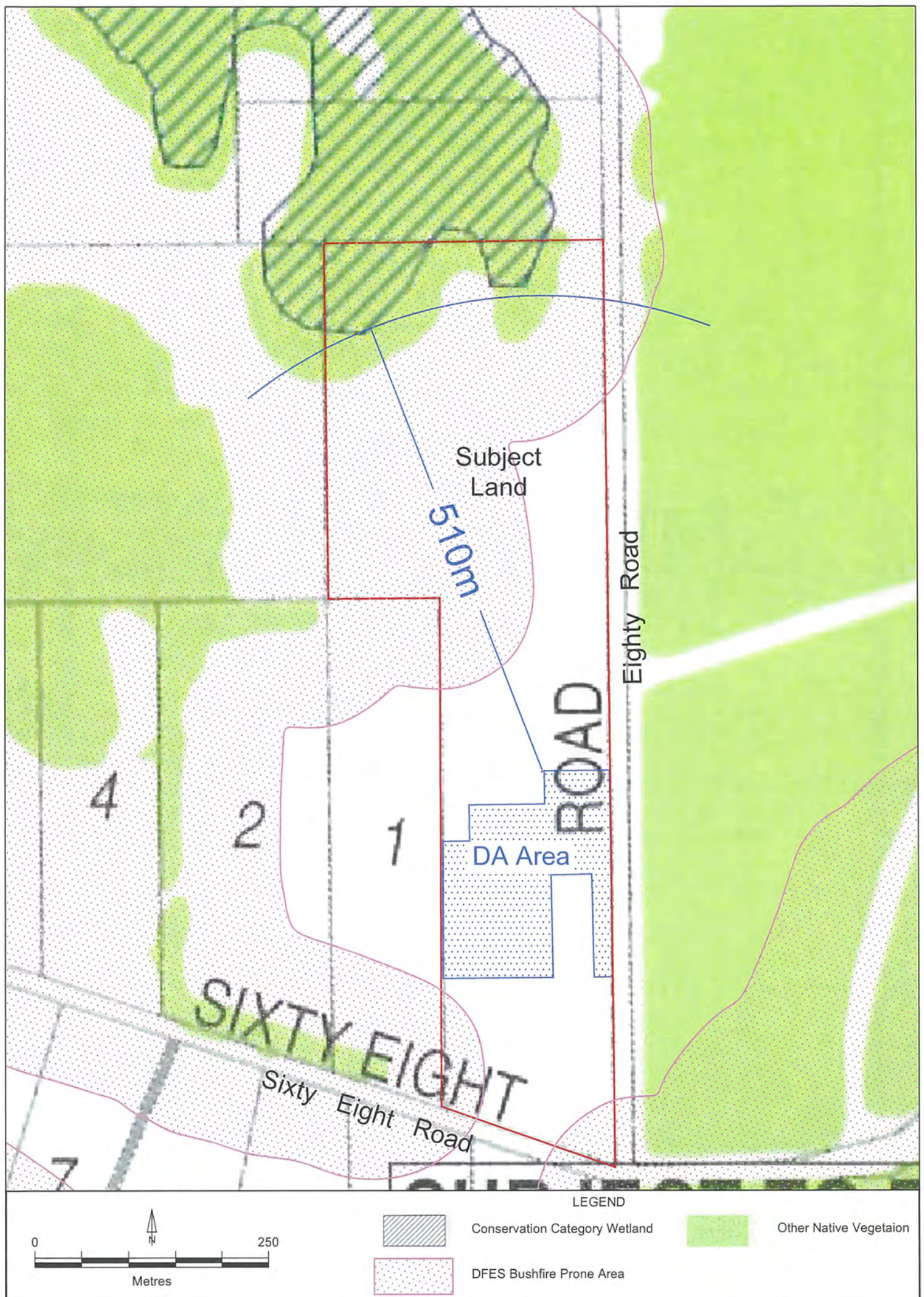


Figure 4 - Bush Forever & DFES Bushfire Prone Areas

4.2 CITY OF ROCKINGHAM TOWN PLANNING SCHEME NO. 3

4.2.1 Zoning

The subject site is zoned Rural under the TPS2 and the objective of the zone is as follows:

To preserve land for farming and foster semi-rural development which is sympathetic to the particular characteristics of the area in which it is located, having due regard to the objectives and principles outlined in the Rural Land Strategy and supported by any other Plan or Policy that the Council may adopt from time to time as a guide to future development within the zone.

The approval of the previous stages and Master Plan by Council indicates that the Educational Establishment use is considered consistent with the area characteristics under the Rural zoning.

Refer to **Figure 5 – Zoning**.



Region Scheme Reserves



Parks & Recreation



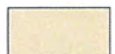
Other Regional Roads

Local Scheme Reserves



Parks & Recreation

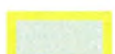
Local Scheme Zones



Residential



Rural



Special Rural

Other Categories



DA1 Development Area



Development Contribution Area 2



Subject Land

Figure 5 - Zoning

4.2.2 Land Use

Table 1 of TPS2 indicates the permissibility of land uses within the different zones. Mother Teresa Catholic College can best be defined under TPS2 as:

“Educational Establishment Means premises used for the purposes of education and includes a school, tertiary institution, business college, academy or other educational centre;”

In the Zoning Table, Educational Establishment is listed as a Utilities/Community use. This form of development is listed as an ‘A’ use in the Rural zone, indicating that any proposal requires the exercise of discretion for approval following advertising.

In approving the previous stages and Master Plan for the site, the City of Rockingham considered the Educational Establishment use to be appropriate.

4.2.3 Rural Development Requirements

Clause 4.11.2 of TPS2 specifies general requirements for development within the Rural zone and some sections are relevant to the proposed development. They are addressed in the proceeding parts of the current section (4.2.3).

Clause 4.11.3 of TPS2 relates to precinct planning under the Rural Land Strategy. Further comment in relation to the Rural Land Strategy is made in section 4.3 of this report.

Setbacks

Clause 4.11.2 (a) of TPS2 relates to setback requirements. The subject development adjoins Eighty Road and abuts land zoned Rural to the north and west. The orientation of the administration building seeks to utilise Eighty Road as the primary frontage and seeks to utilise the front setback area for vehicular parking. **Table 2** below indicates the setback requirements and details compliance:

Table 2 – Setback Compliance

Boundary	Required	Proposed	Compliance
Primary Street (East) Eighty Road	30.0m (excluding a fire break or vehicular access)	30.0m to administration block and library/science block	Compliant
Secondary Street (South) Sixty-Eight Road	10.0m	270m to southern extent of learning block (minimum distance to angled boundary)	Compliant
West	10.0m	41.0m to western extent of learning block	Compliant
North	10.0m	580m to northern extent of library/science block	Compliant

On this basis, it can be seen that the proposed development has been sited to have minimal impact on the amenity of adjoining properties and the streetscapes of Eighty Road and Sixty-Eight Road. Furthermore, the location of buildings and facilities is consistent with the Master Plan for the site.

Clearing of Vegetation

The subject site has been predominantly cleared of native vegetation, excluding the portion affected by the wetland in the north and some individual trees (refer to Figure 3 – Aerial Photography). The majority of the undeveloped portion of the site is covered in weeds and grasses, as shown in the photograph below:



Photograph of subject site from Eighty Road

The proposed development follows the building and facility locations shown in the Master Plan and adequate buffers to the conservation category wetland are proposed. Therefore, no significant areas of native vegetation are proposed to be removed.

Agricultural Pursuits

This application does not involve intensive or rural pursuits, including the breeding and keeping of animals.

Rural Subdivision

This application does not propose subdivision of the subject site.

Peel Harvey Coastal Plain Catchment, Serpentine River and Peel Drains, Swan Coastal Plain Lakes

The subject site is not located in any of the above mentioned catchment areas.

4.2.4 Car Parking

Clause 4.15 of TPS2 relates to car parking requirements within the City of Rockingham. An Educational Establishment use is not specified in Table 2 and as such, Clause 4.15.1.4 requires consideration of the following elements:

- i. The nature of the proposed development;*
- ii. The number of employees likely to be employed on the site;*
- iii. The anticipated demand for parking; and*
- iv. The orderly and proper planning of the locality.*

To aid in the consideration of the proposed car parking, Shawmac Consulting Engineers have provided a transport assessment, including an assessment of parking bays (refer to **Appendix C**). The Shawmac report refers to the WA Planning Commission guidelines, indicating that the proposed number of bays is adequate to support the proposed development.

4.2.5 Discretion

A general discretionary clause can also be found at CI 4.20 of TPS2, which states as follows:

“Except for development in respect of which the Residential Design Codes apply, if a development is the subject of an application for planning approval and does not comply with a standard or requirement prescribed under the Scheme, the Council may, notwithstanding the non-compliance, approve the application unconditionally or subject to such conditions as the Council thinks fit.”

4.3 CITY OF ROCKINGHAM LOCAL PLANNING POLICIES

The City has two planning policies that are relevant to the subject site and the proposed development. Details of these are provided below:

- LPP3.1.1 – Rural Land Strategy
- LPP3.3.14 – Bicycle Parking & End-Of-Trip Facilities

4.3.1. Rural Land Strategy

The Rural Land Strategy was adopted by Council in 2003 and most recently modified in 2013. In brief, the Strategy introduces planning units and precincts to focus on the achievement of strategic objectives. The subject site is found within Planning Unit 4 and Precinct 4A.

Planning Unit 4 is identified as being a transitional area between the lake system of the Lake Walyungup Regional Park and urban areas to the east. Precinct 4A requirements relate to lot sizes, as well as the protection of natural bushland and environmental features. Specifically, compliance with the guidelines of the Rural Land Strategy as they relate to the subject site, are shown in **Table 3 – Planning Unit 4**:

Table 3 – Planning Unit 4

Requirement	Sub-requirement	Proposal	Compliance
Existing and proposed rural uses to be guided by the provisions of the District Zoning Scheme and Statements of Planning Policy.	N/A	The proposed development complies with TPS2 and relevant SPP's – see sections 4.1 and 4.2 of this report.	Compliant
Appropriate zoning in the District Zoning Scheme is a prerequisite to development in accordance with Strategy recommendations.	N/A	The Educational Establishment use has been deemed consistent with the Rural zoning, via approval of the Master Plan and Primary School.	Compliant
Subdivision and development to be carried out in accordance with an approved Rural Concept Plan, where the following standards apply:	Lot sizes to be based upon natural resource management criteria and landscape protection objectives. Recommended minimum lot size in precinct 4A is 1ha (west of ridgeline) 5000m ² (east of ridgeline)...	This development does not include subdivision. Total site area of 22ha complies.	Compliant
	The optimum method of water supply being provided as determined by WRC.	Water supply is in accordance with AS3500.1.	
	One dwelling house per lot.	The proposal is for Educational Establishment buildings and facilities.	N/A
	Buildings to be setback a minimum of 40m from Mandurah Road, 30m from other subdivisional roads and 10m from all other boundaries (setbacks to accord with R2 east of ridgeline) with no clearing the setback area except for fire management or for vehicular access as approved by Council.	Setbacks are detailed in Table 2 of this report.	Compliant
	No clearing being permitted without the specific approval of Council.	The development area is generally cleared. Any trees to be removed are shown on the site survey.	Compliant

	Development shall be of a scale that minimises intrusion into the landscape.	The buildings are between one and two storeys, which is in keeping with the adjoining lifestyle development to the west and future residential development to the east. Building bulk is reduced by having separation between buildings and areas of landscaping.	Compliant
	Provision of an Aerobic Treatment Unit (ATU) for effluent disposal purposes.	The site is connected to the sewer main, so ATU's are not required.	
	When sensitive development (such as rural-residential development) is proposed near an existing/proposed intensive rural land uses (such as piggeries, poultry farms, market gardens or any other agricultural activity or industry), or a new intensive rural land use is proposed near existing or proposed sensitive development, the requirements of the WAPC's State Industrial Buffer Policy must be observed.	N/A	N/A
	Subdivision/development proposals are to include a landscaping plan detailing a proposed tree planting programme.	A landscaping concept is provided as part of the development plans (Appendix B).	Compliant
	Development affecting wetlands to comply with the standards applied by the Department of Agriculture (refer to Appendix 2 for general guide).	Appendix 2 relates to stocking rates. This application does not involve livestock. A separation buffer of 510m between the wetland in the north of the site and the proposed development exists, which is adequate.	Compliant
	Fire Management is to be addressed in accordance with the Western Australian	The subject development is located outside the Department of Fire and Emergency Services	N/A

	Planning Commission Planning for Bushfire Protection Guidelines – Edition 2 (May 2010).	bushfire prone area.	
Subdivision/development of the Stakehill Swamp precinct will be dealt with on its merits following analysis of the proposed Rural Concept Plan.	N/A	Subject site is not located within the Stakehill Swamp precinct.	N/A
Subdivision/development of Precinct 4D to be the subject of further detailed investigations.	N/A	Subject site is located in Precinct 4A	N/A

4.3.2 LPP3.3.14 – Bicycle Parking & End-of-Trip Facilities

LPP3.3.14 applies to the proposed Mother Teresa Catholic College secondary school, as a development seeking planning approval. The policy seeks to encourage sustainable transport methods, in particular promoting cycling.

The Zoning Table of TPS2 categorises an Educational Establishment use under the heading of Utilities/Community. Table 1 of LPP3.3.14 provides bicycle parking ratios for a “Community Use” as follows:

- Long term – no bays required;
- Short term – 1bay per 30 people the building is designed for.

In defining Long-term parking, LPP3.3.14 states:

Long-term parking includes day parking for employees, residents’ parking at apartments and student parking at educational establishments.

Short-term parking includes parking for shoppers and visitors to a premises.

As a “Community Use”, an Educational Establishment does not require formal bicycle parking for staff (employees) or students.

The Shawmac Transport Assessment (Appendix C) recognises the unusual circumstances of this green fields site in relation to bicycle parking:

“The school site is located within a pre-existing rural area and as such no formal path or cycle facilities exist. The master plan for the school indicates an extensive network of internal paths and the Parkland Structure Plan prepared by Taylor Burrell Barnett shows future on road cycle lanes on Nairn Drive and footpaths on Eighty Road north of the connection with Nairn Drive.”

Despite this, a bicycle structure is proposed adjoining the maintenance shed in the north of the application area. The bicycle compound will house around 25 bicycles which will accommodate any current and future bicycle traffic, once infrastructure is developed. Furthermore, all of the proposed buildings incorporate end-of-trip facilities via universal access toilets (UATs) and adequate space for lockers.

5.0 CONCLUSION

Mother Teresa Catholic College proposes to develop a further stage of the College, to accommodate secondary students. The proposal should be favourably determined, recognising that the application follows a Master Plan that was submitted as part of the previous two stages and meets the objectives of the relevant local planning policies informing development on Rural zoned land.

The secondary school buildings reference the materials and styles common to the primary school, providing a cohesive streetscape and campus outcome. They also respect the residential nature of surrounding development.

In summary, the proposal is justified and considered appropriate for the following reasons:

- The proposal is consistent with the MRS and the proposed use of the land is in accordance with the zoning of Rural;
- The proposal is consistent with the objectives and requirements of the TPS2 and relevant local planning policies including:
 - Local Planning Policy 3.1.1 – Rural Land Strategy
 - Local Planning Policy 3.3.14 – Bicycle Parking & End-of-Trip Facilities
- The proposal is consistent with a Master Plan, previously submitted to Council and informing staged development over the site.
- The proposal will enable development of improved education facilities enhancing student safety and teaching/learning efficiencies, as well as addressing energy efficiency in building design.
- The development is consistent with the scale and form of institutional buildings on the Mother Teresa Catholic College site, and will have no adverse impact on surrounding developments.
- The development proposes a suitable solution for dealing with car parking, landscaping, the storage and collection of waste.

In accordance with the above points and attachments, early approval is requested as works are programmed to integrate with the Mother Teresa Catholic College calendar and particularly, school holidays.

APPENDIX A – CERTIFICATE OF TITLE

WESTERN



AUSTRALIA

REGISTER NUMBER 10/D29814	
DUPLICATE EDITION N/A	DATE DUPLICATE ISSUED N/A

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME
1928FOLIO
48

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 10 ON DIAGRAM 29814

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

THE ROMAN CATHOLIC ARCHBISHOP OF PERTH OF VICTORIA SQUARE, PERTH
(T G571384) REGISTERED 1 SEPTEMBER 1997

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. *M302760 NOTIFICATION CONTAINS FACTORS AFFECTING THE WITHIN LAND. LODGED
12.6.2013.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

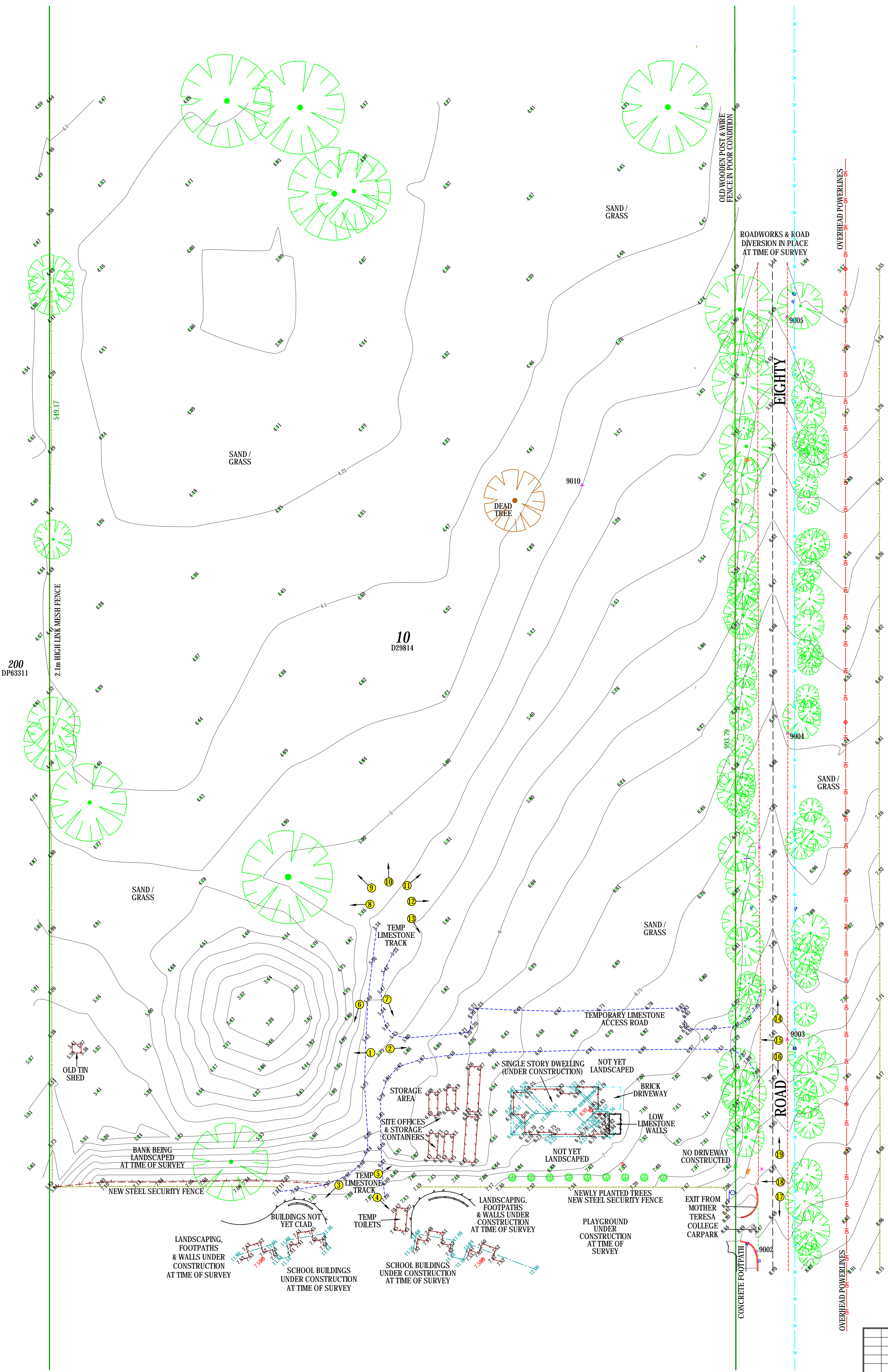
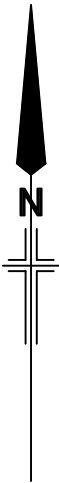
-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1928-48 (10/D29814).
PREVIOUS TITLE: 1649-430, 1296-63.
PROPERTY STREET ADDRESS: 731 EIGHTY RD, BALDIVIS.
LOCAL GOVERNMENT AREA: CITY OF ROCKINGHAM.

APPENDIX B – MASTER PLAN AND DEVELOPMENT PLANS



LOCATION PLAN
APPROXIMATE EXTENT OF SUBJECT SITE
2015 AERIAL PHOTOGRAPHY
NOT TO SCALE

- LEGEND OF FEATURES**
- BOUNDARY
 - CONTOUR (INTERVAL OF 0.25m)
 - BUILDING / STRUCTURE
 - WALL
 - FENCE
 - ROOF EAVE LINE
 - CONCRETE EDGE
 - BRICK PAVING
 - TRACK
 - ROAD ON
 - FOOTPATH
 - EDGE OF BITUMEN
 - ROAD DASHED LINE MARK
 - KERB
 - TOP OF BANK
 - OVERHEAD POWER LINES
 - WATER PIPE
 - NATURAL SURFACE LEVEL
 - FLOOR LEVEL
 - SURVEY CONTROL MARK
 - HYDRANT GROUND
 - WATER METER
 - POWER POLE
 - POWER DOME
 - SIGN
 - TELSTRA PIT
 - TELSTRA OPTIC FIBRE MARKER
 - MAIL BOX
 - TREE AT SCALE

WATER DATA SHOWN ON THIS PLAN IS DERIVED FROM SUPPLIED WATER CORPORATION INFORMATION SHEETS AND IS COMPILED AS BEST-FIT MODEL. BROWN MCALLISTER SURVEYORS CANNOT GUARANTEE THE ACCURACY OF THIS DATA.

REVISIONS			
No.	APPROVED AND ISSUED TO CLIENT	DATE	CHECKED
0	DETAILS	12/11/2015	R. COLELLA

FEATURE SURVEY OF PORTION OF
LOT 10 ON D29814 - MOTHER TERESA CATHOLIC COLLEGE
731 EIGHTY ROAD, BALDWIN

Client MOTHER TERESA CATHOLIC COLLEGE

DATUM
HORIZONTAL - PCG84
VERTICAL - AHD

COPYRIGHT OF ALL THIS PLAN IS RESERVED BY BROWN MCALLISTER SURVEYORS AND REMAINS THE PROPERTY OF THE AFORESAIDED AND SHALL BE RETURNED UPON REQUEST. USE OF ALL OR PART OF THIS PLAN IS RESTRICTED WITHOUT PRIOR WRITTEN PERMISSION.

SCALE 1 : 600 0 6 12 18 24 30

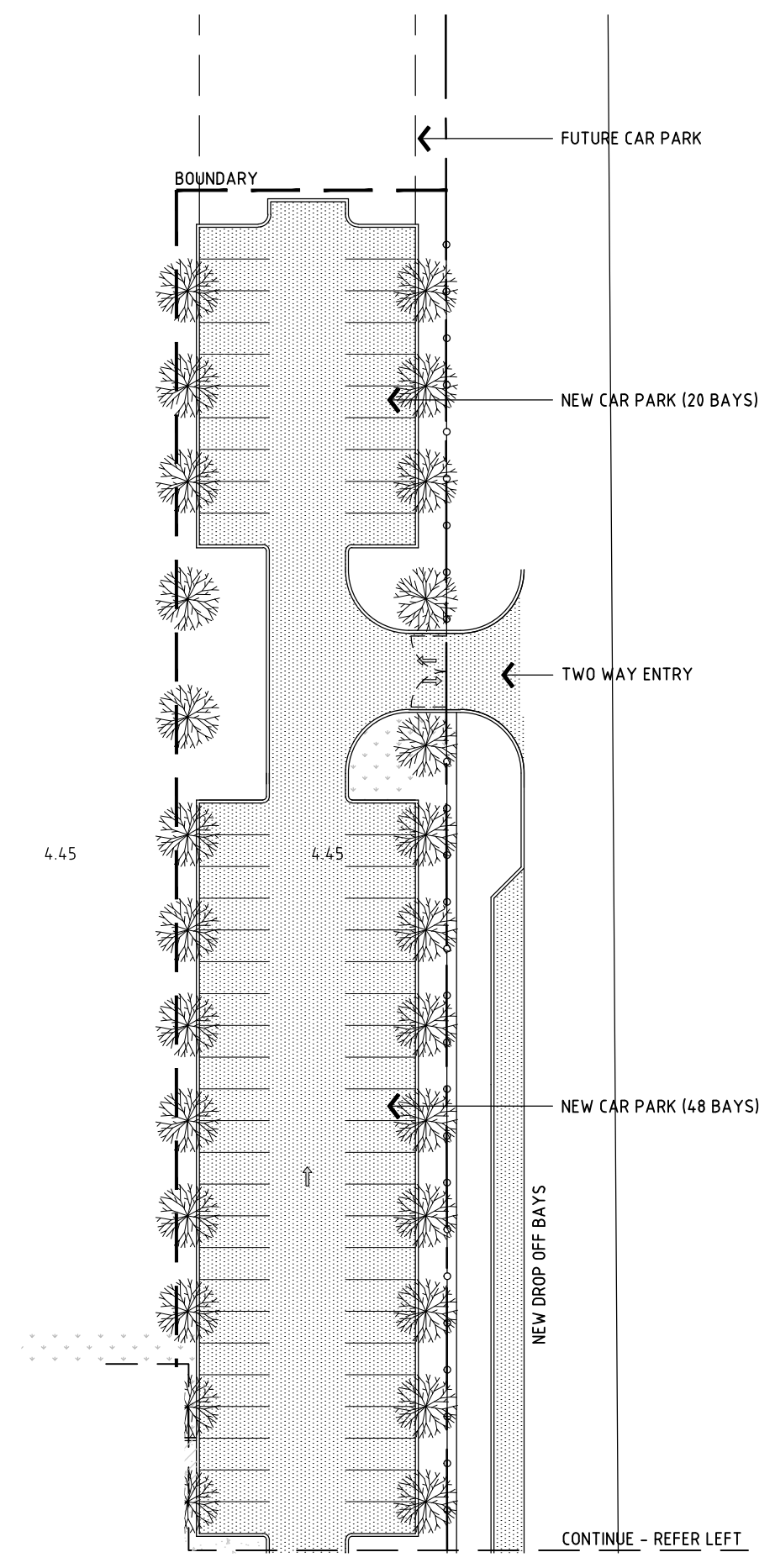
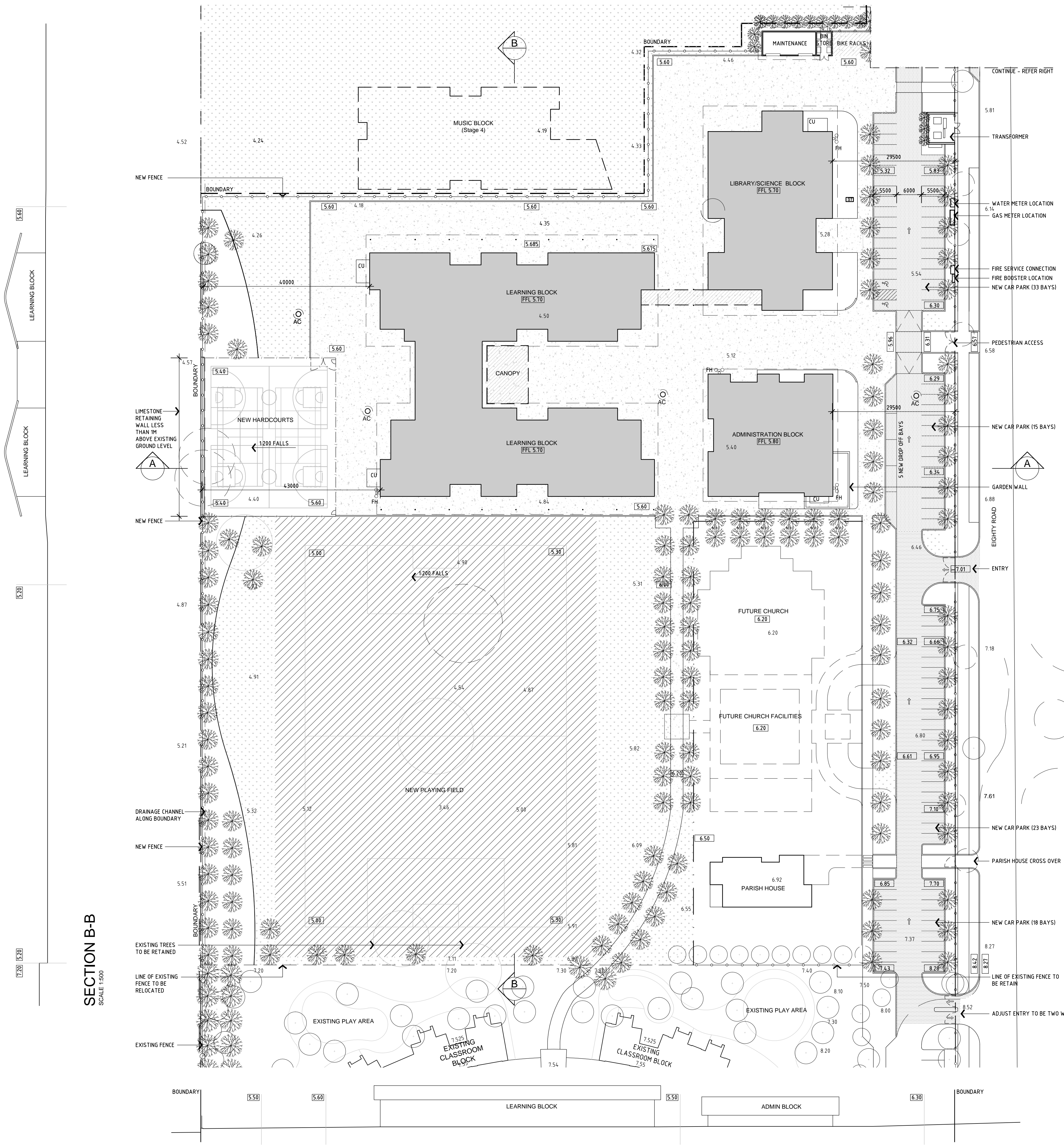
ALL AREAS AND DIMENSIONS ARE SUBJECT TO SURVEY AND EXAMINATION. EXISTING BOUNDARY DIMENSIONS AND LOT AREAS HAVE BEEN TAKEN FROM LANDGATE RECORD D29814.

THE BOUNDARIES WERE NOT RE-ESTABLISHED AS PART OF THIS SURVEY THEREFORE THIS PLAN DOES NOT GUARANTEE THEIR ACCURACY. FIELD INSPECTION IS RECOMMENDED FOR LOCATION OF SERVICES PRIOR TO ANY EXCAVATION.

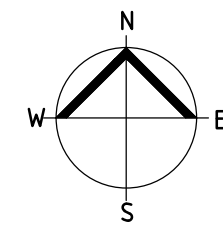
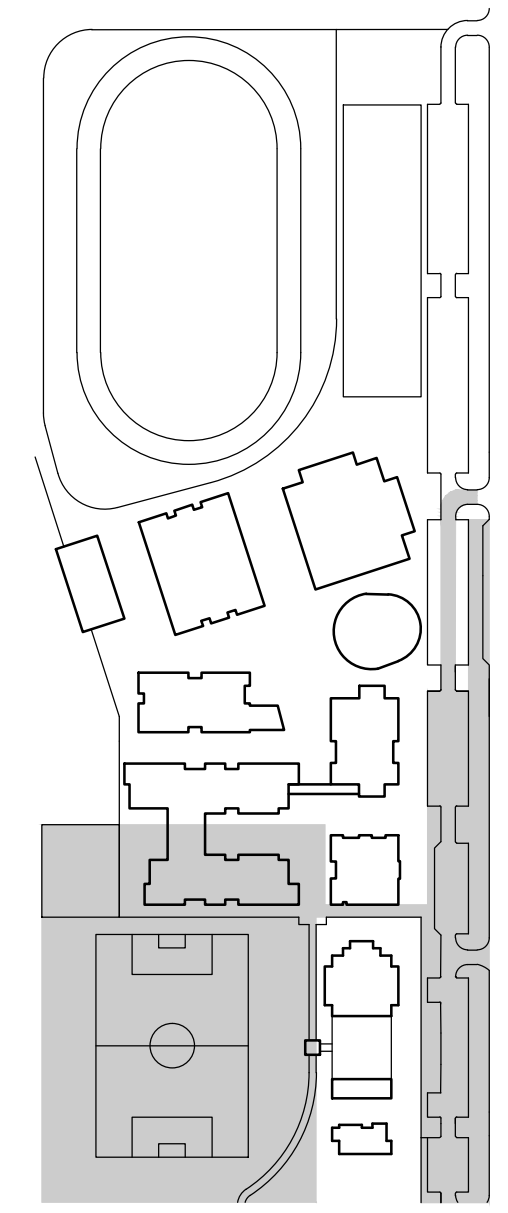


Brown McAllister Surveyors
Licensed Surveyors | Land Development & Strata Consultants | Engineering Surveys
Email: admin@brownmcallister.com.au Tel: (08) 9386 9688
43 Broadway, Nedlands, Western Australia, 6009 Fax: (08) 9386 9677

SHEET	A1
SURVEYED	M.WALL - 06/11/2015
FIELD NOTES	
DRAWN	R. COLELLA - 12/11/2015
CHECKED	
REFERENCE	15710-1F



- NOTES**
- DO NOT SCALE OFF DRAWINGS
- DIMENSIONS & LEVELS OF ALL WORK TO BE CHECKED ON SITE BY CONTRACTOR BEFORE COMMENCEMENT WORKS, BEFORE PROVISION OF SHOP DRAWINGS & BEFORE MANUFACTURING OF ANY COMPONENTS.
- ANY DISCREPANCIES BETWEEN DRAWINGS TO BE REPORTED IMMEDIATELY TO THE ARCHITECT.
- SET-OUT POINTS & LEVELS OF BUILDINGS & ROADS TO BE CONFIRMED ON SITE WITH ARCHITECT PRIOR TO COMMENCEMENT, ALLOW FOR LICENSED SURVEYOR AS REQUIRED TO LOCATE EXISTING ELEMENTS AND SETOUT OF THE WORKS.
- LEGEND**
- NEW BUILDING
 - NEW PARKING
 - 16.00 EXISTING LEVEL
 - 16.00 NEW LEVEL
 - EXISTING TREE TO BE REMOVED AND REPLACED
 - EXISTING TREE TO BE RETAINED & PROTECTED
 - NEW PLANTED TREE
 - NEW OLIVE TREE
 - HARD PAVING AND LANDSCAPE
 - LANDSCAPE
 - PLAYING FIELD
 - HYDRAULIC SILT TRAP
 - HYDRAULIC ACCESS CHAMBER PIT COVERS
 - FIRE HYDRANT



10.02.16	A	ISSUED FOR DEVELOPMENT APPROVAL	SB
DATE	REV	NOTE	BY

Parry & Rosenthal Architects
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PO Box 729 West Perth WA 6872
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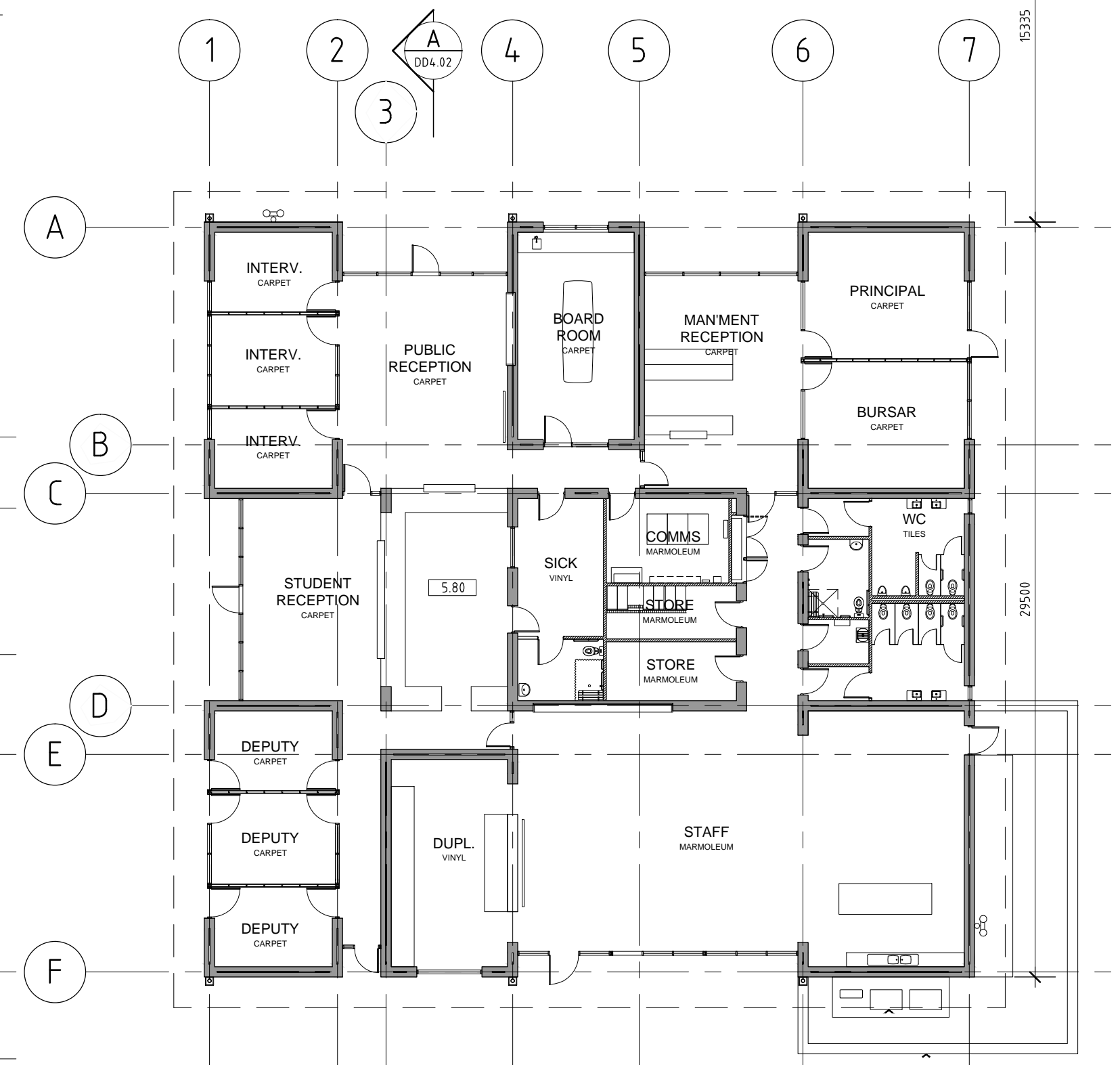
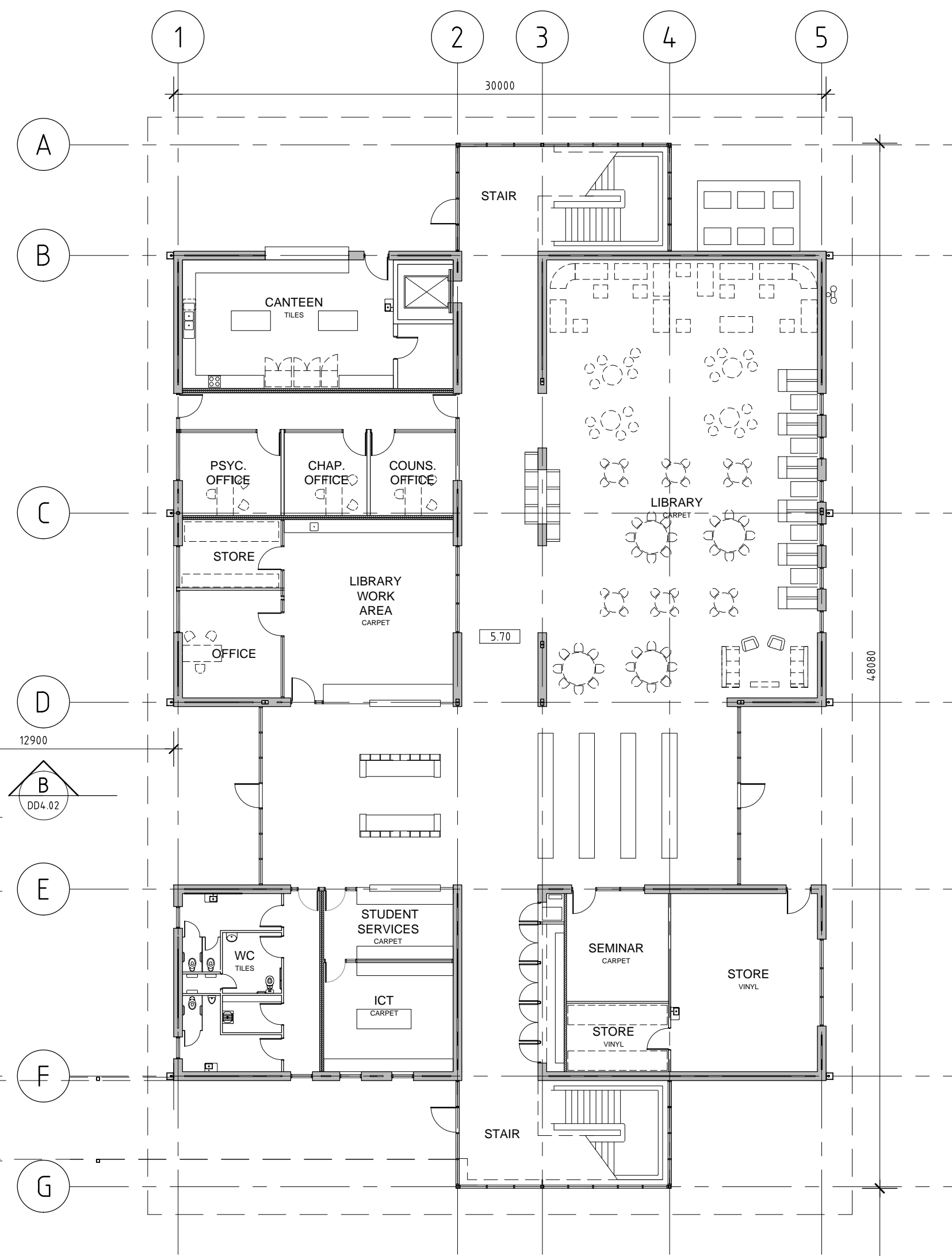
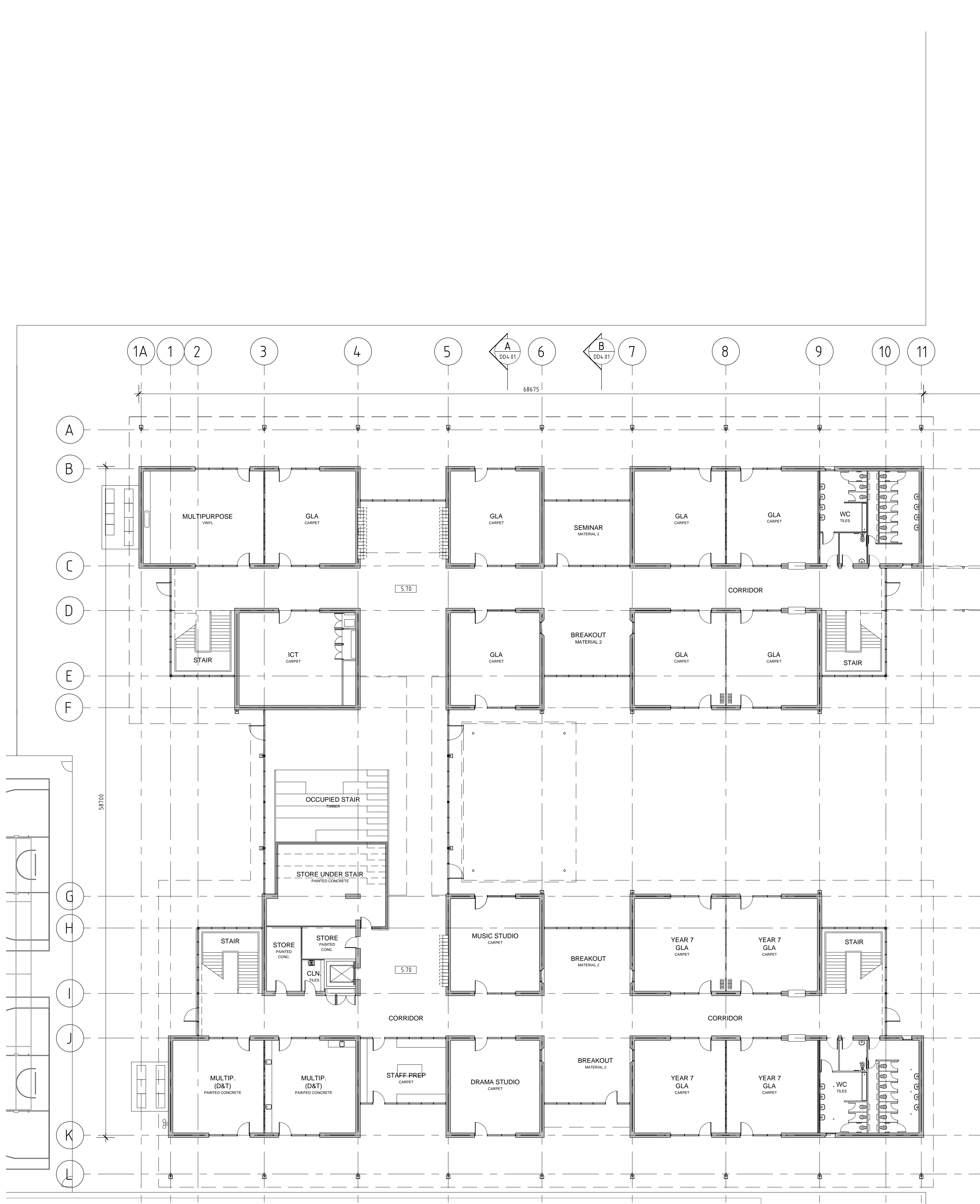
**MOTHER TERESA CATHOLIC COLLEGE
STAGE 3**

**SITE PLAN ST3
DESIGN DEVELOPMENT**

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JOB No.	SCALE			
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SECTION B-B
SCALE 1:500

SECTION A-A
SCALE 1:500



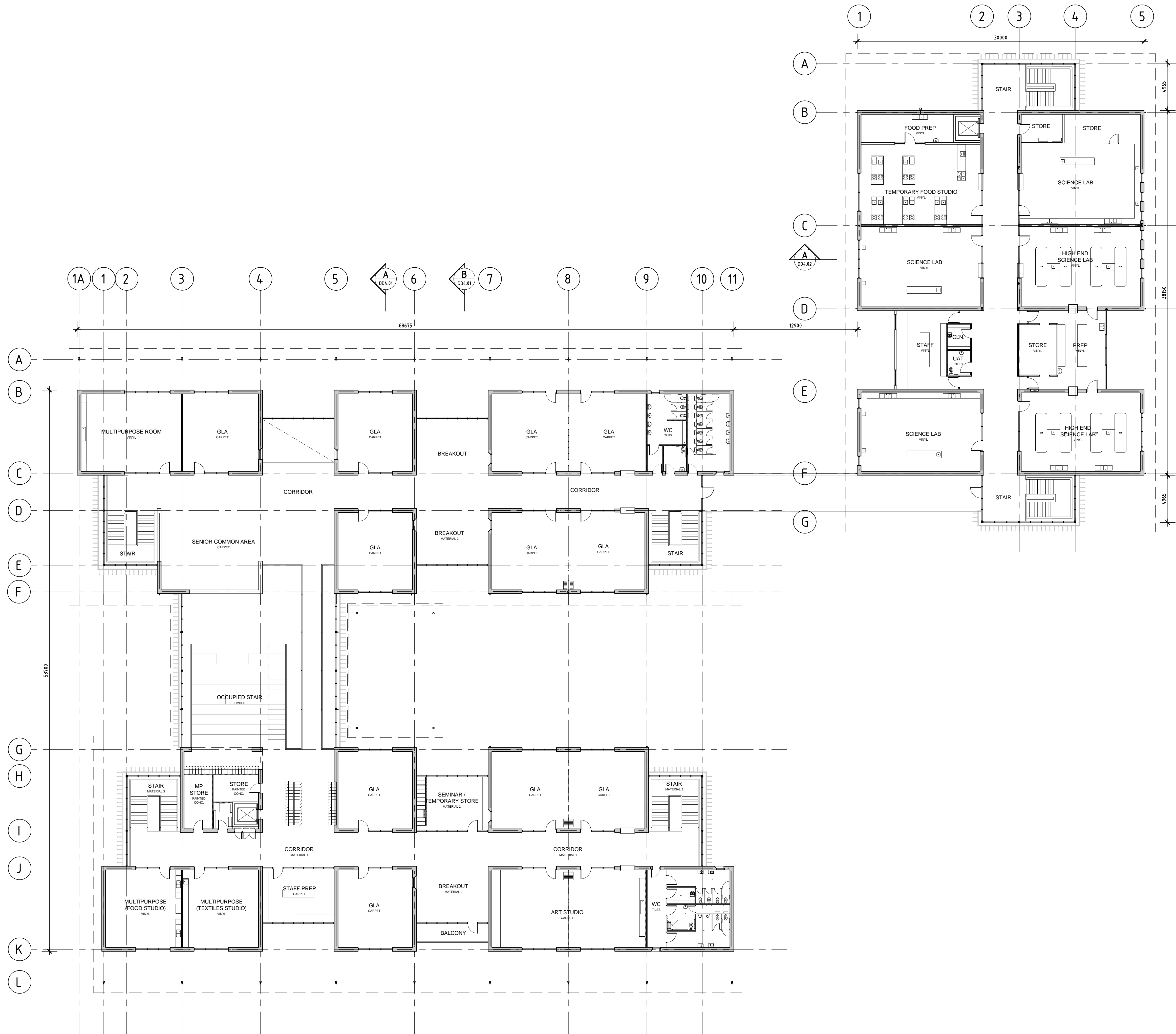
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DATE	REV	NOTE	BY

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**MOTHER TERESA CATHOLIC COLLEGE
 STAGE 3**

GROUND FLOOR PLAN
 DESIGN DEVELOPMENT

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JOB No.	SCALE			
15007	1:200 @ A1			



16.02.16	A	ISSUED FOR DEVELOPMENT APPROVAL	AR
DATE	REV	NOTE	BY

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**MOTHER TERESA CATHOLIC COLLEGE
STAGE 3**

**FIRST FLOOR PLAN
DESIGN DEVELOPMENT**

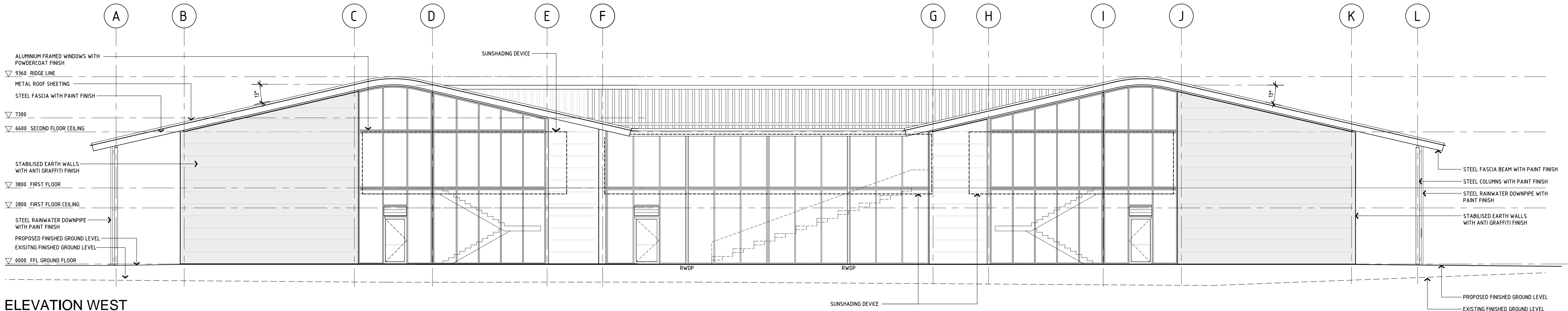
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JOB No.	SCALE			
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NOTES

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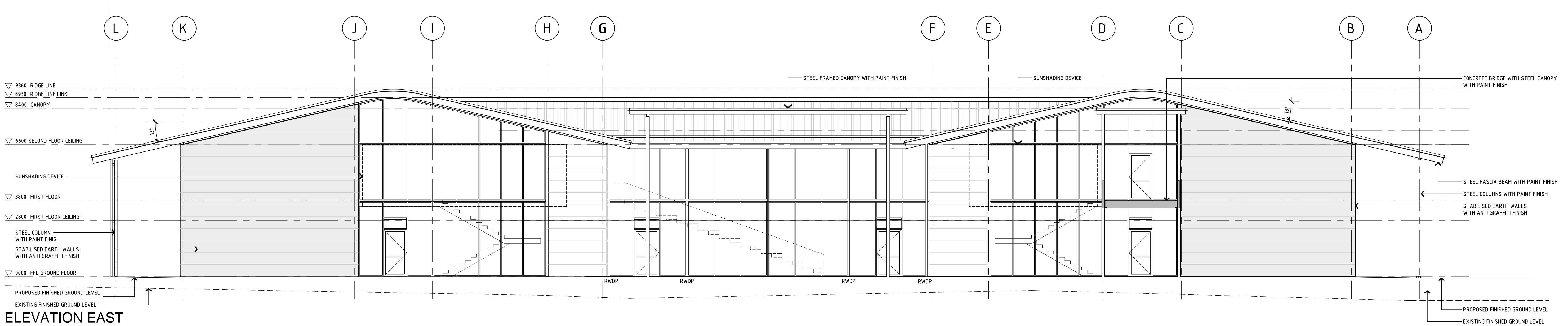
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ELEVATION WEST

LEARNING BLOCK
SCALE 1:100



ELEVATION EAST

LEARNING BLOCK
SCALE 1:100

10.02.16	A	ISSUED FOR DEVELOPMENT APPROVAL	SB
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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

ELEVATIONS
LEARNING BLOCK STAGE 3
DESIGN DEVELOPMENT

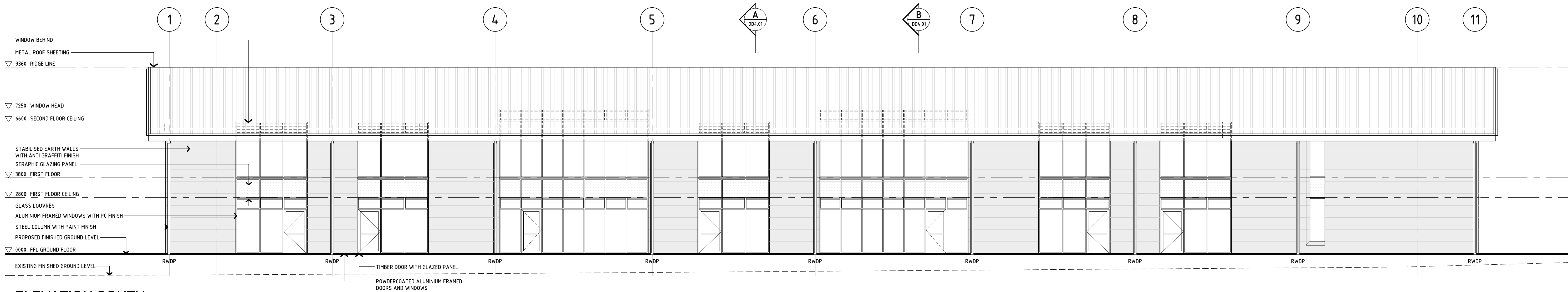
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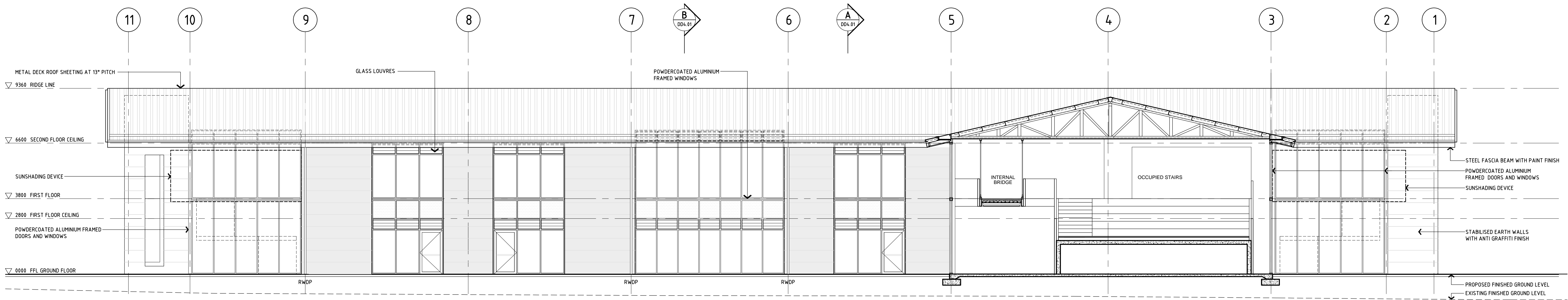
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ELEVATION SOUTH

LEARNING BLOCK - SOUTH ELEVATION
SCALE 1:100



ELEVATION NORTH

LEARNING BLOCK - SECTION THROUGH LINK
SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

ELEVATIONS
LEARNING BLOCK
DESIGN DEVELOPMENT

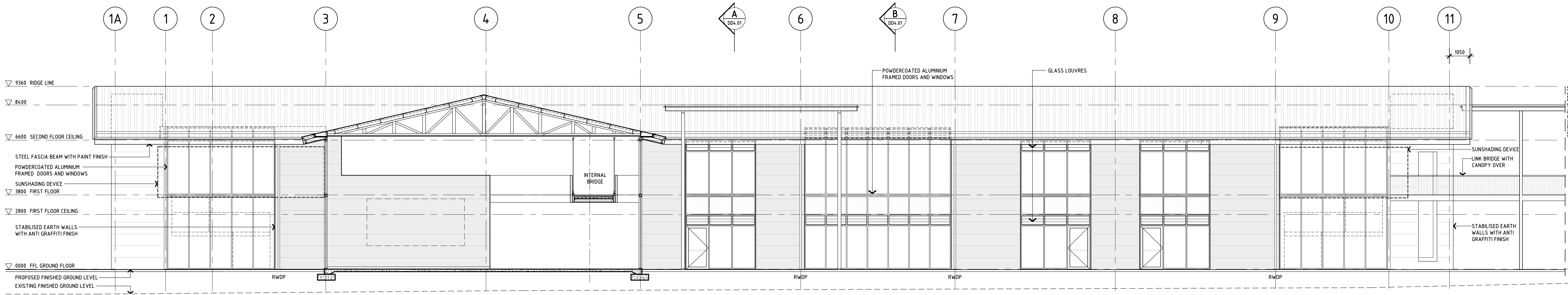
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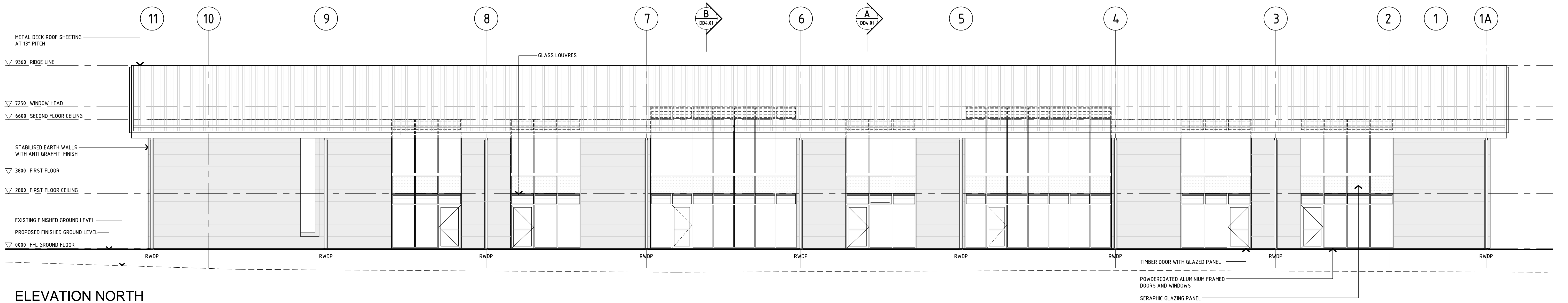
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ELEVATION SOUTH
LEARNING BLOCK - SECTION THROUGH LINK
SCALE 1:100



ELEVATION NORTH
LEARNING BLOCK
SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

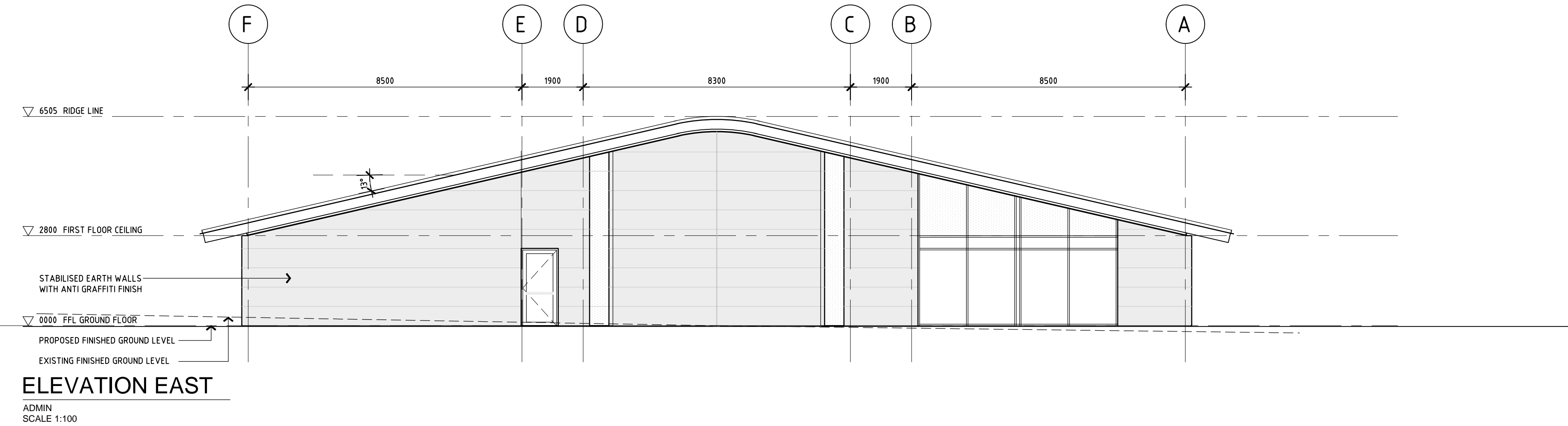
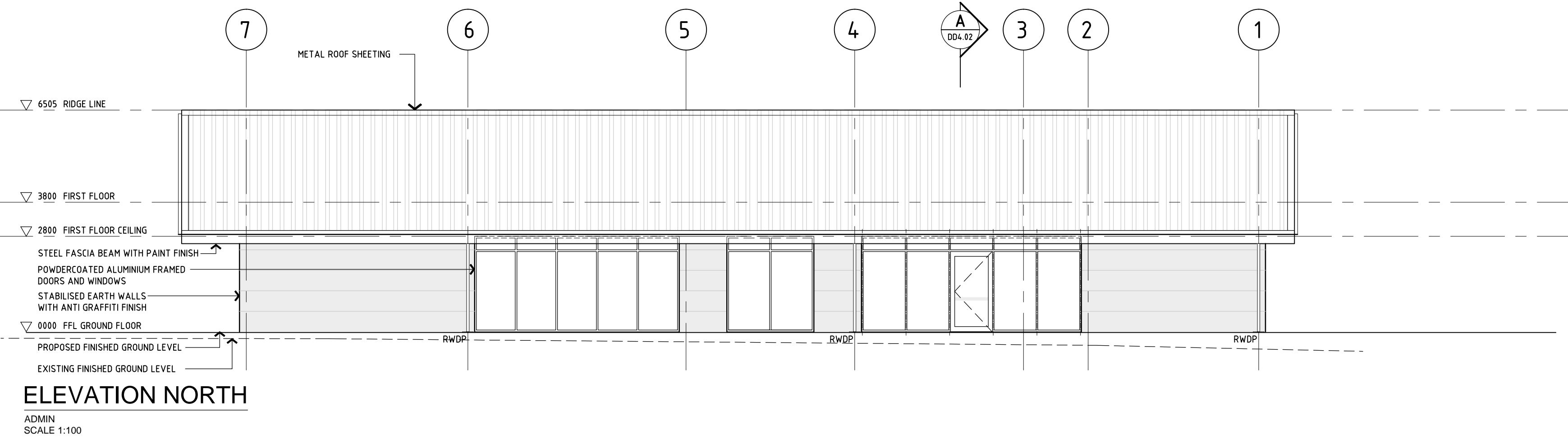
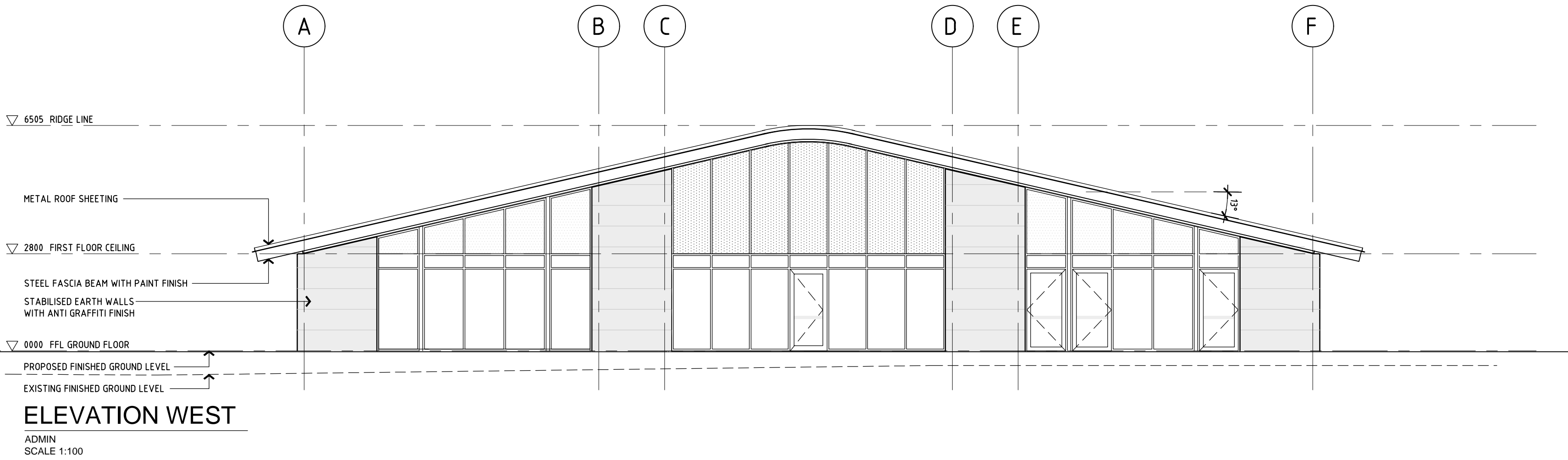
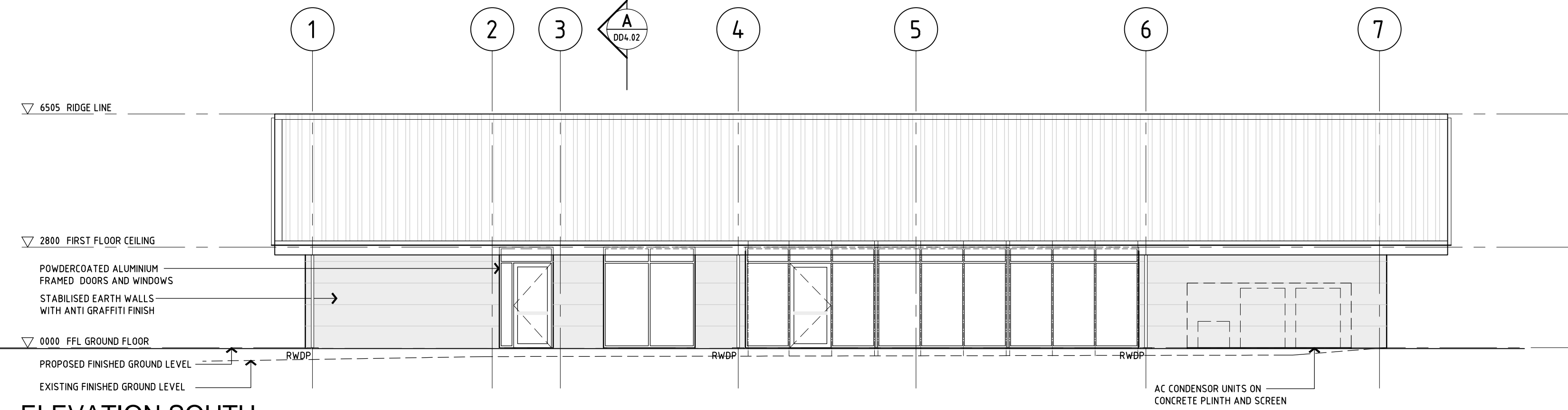
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NOTES

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**MOTHER TERESA CATHOLIC COLLEGE
STAGE 3a**

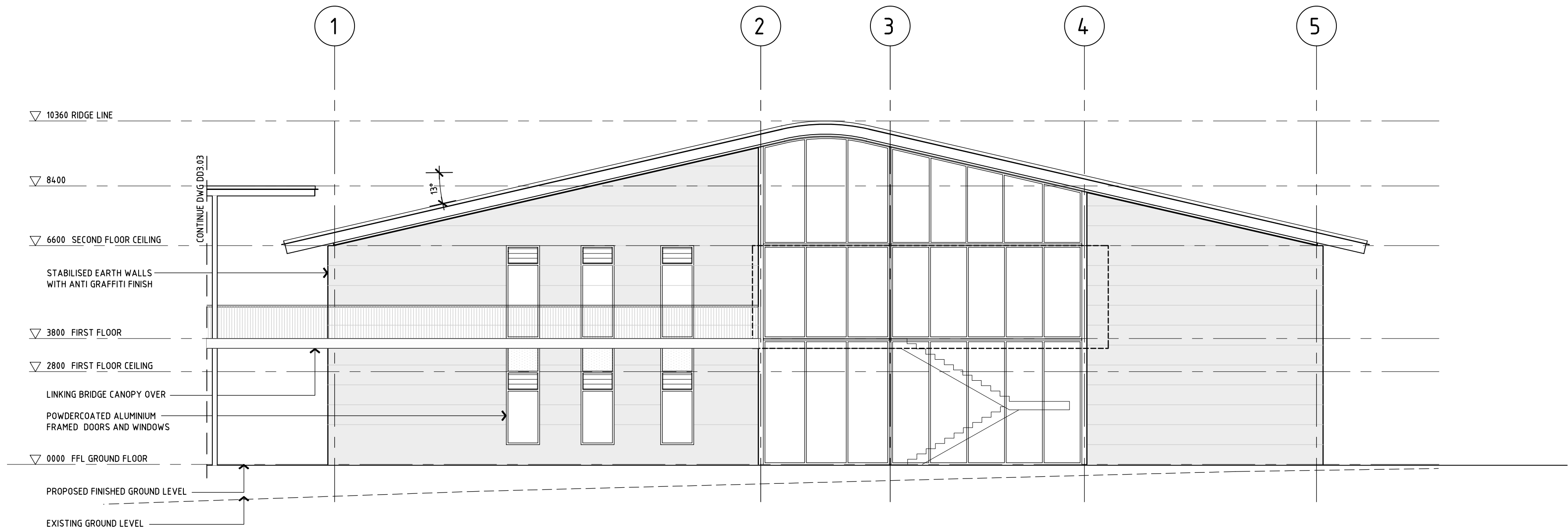
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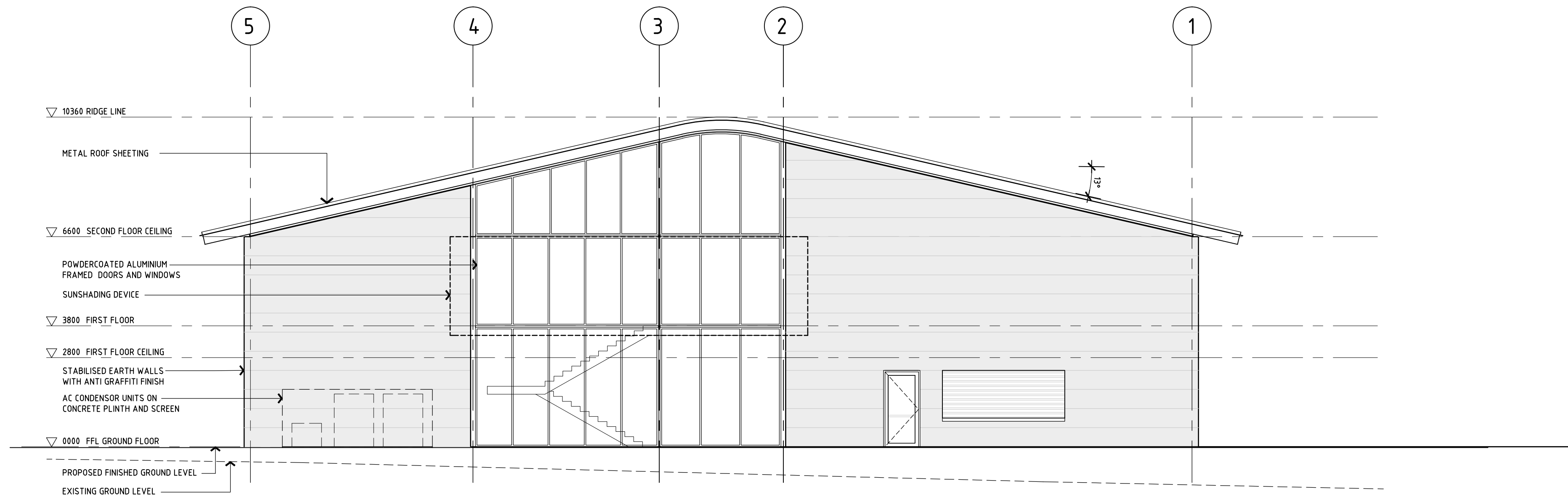
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ELEVATION SOUTH

LIBRARY + SCIENCE

SCALE 1:100



ELEVATION NORTH

LIBRARY + SCIENCE

SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE

STAGE 3

ELEVATIONS
LIBRARY + SCIENCE
DESIGN DEVELOPMENT

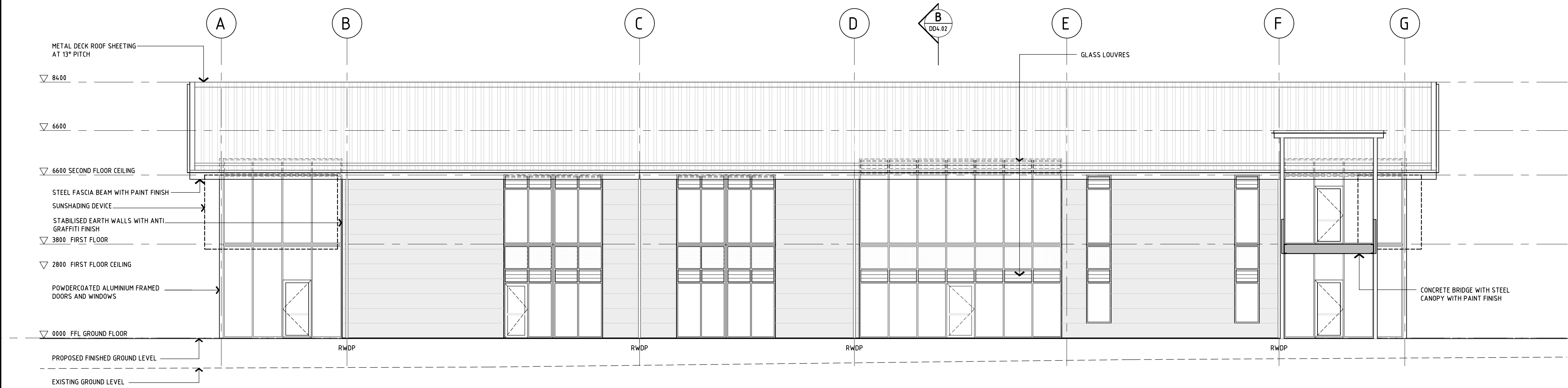
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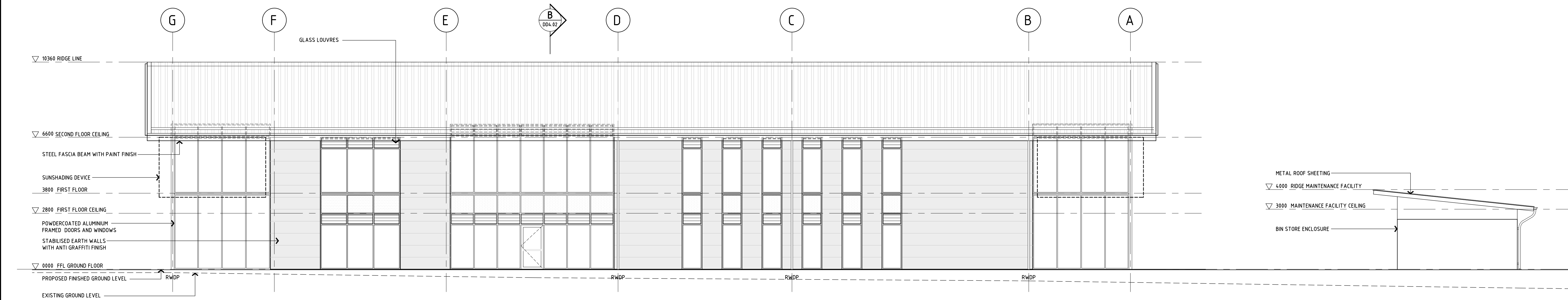
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ELEVATION WEST

LIBRARY + SCIENCE

SCALE 1:100



ELEVATION EAST

LIBRARY + SCIENCE

SCALE 1:100

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MOTHER TERESA CATHOLIC COLLEGE

STAGE 3

ELEVATIONS

LIBRARY + SCIENCE

DESIGN DEVELOPMENT

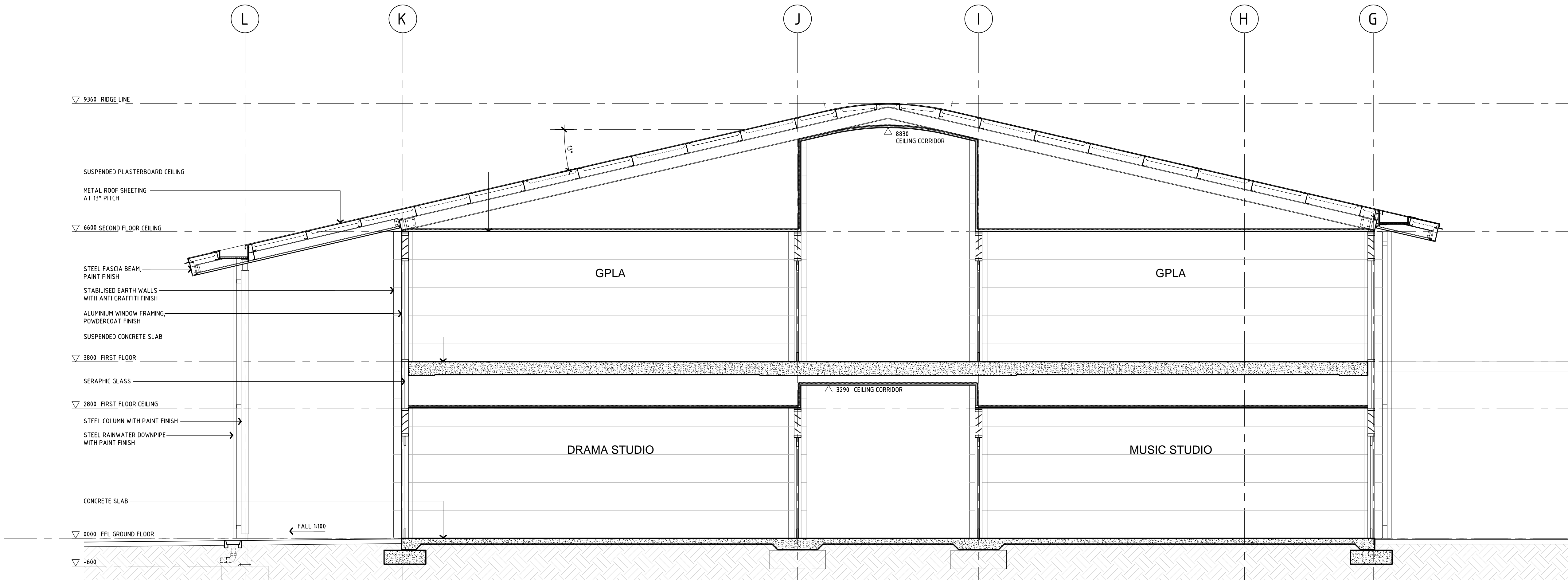
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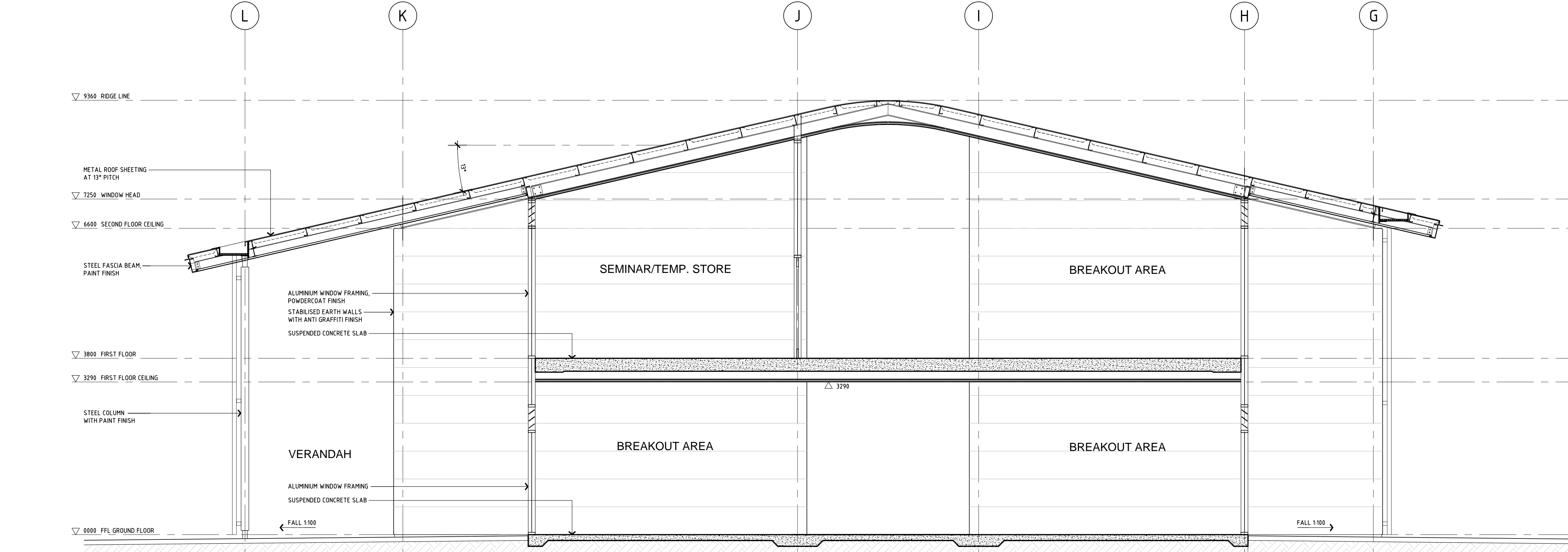
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SECTION

LEARNING BLOCK STAGE 3 - SECTION A-A
SCALE 1:50



SECTION

LEARNING BLOCK STAGE 3 - SECTION B-B
SCALE 1:50

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

SECTIONS
LEARNING BLOCK
DESIGN DEVELOPMENT

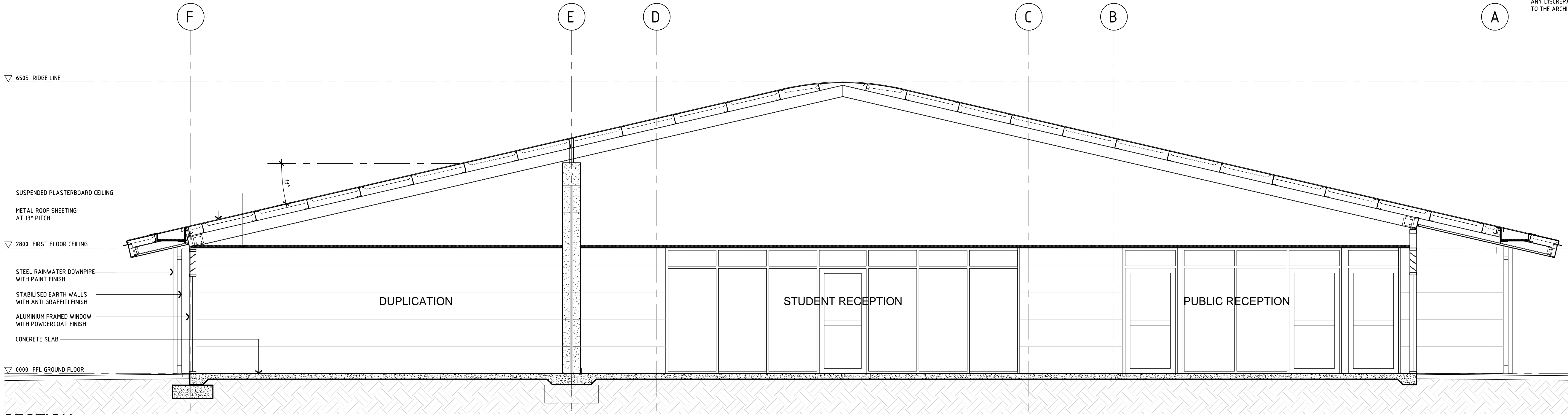
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NOTES

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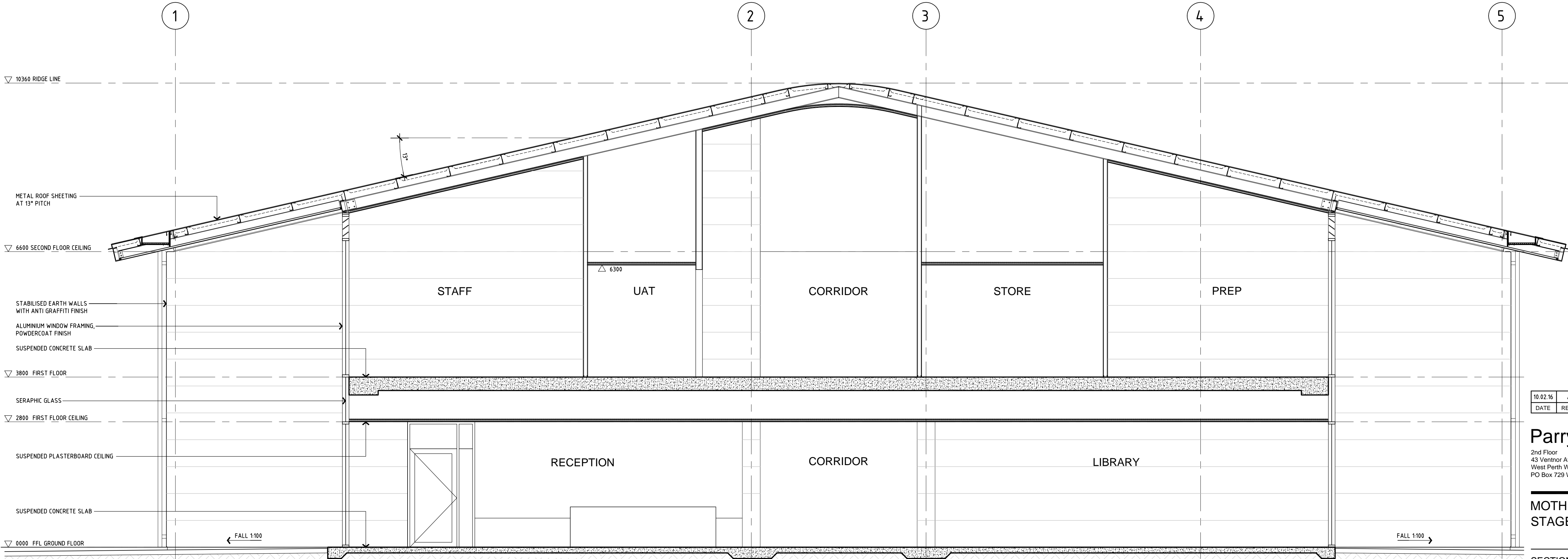
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SECTION

ADMIN - SECTION A-A
SCALE 1:50



SECTION

LIBRARY + SCIENCE - SECTION B-B
SCALE 1:50

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MOTHER TERESA CATHOLIC COLLEGE
STAGE 3

SECTIONS
LIBRARY + SCIENCE BLOCK, ADMIN BLOCK
DESIGN DEVELOPMENT

DRAWN	DATE	APPROVED	DRAWING No.	REV
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JOB No.	SCALE			
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SOFTWARES: TREE SPECIES SOFTWARES: Shrub / Groundcover Species



Large Feature Native Trees
Corymbia maculata



Central Spine Walk
Eucalyptus spathulata



Native Shrubs Mix:
Adenanthos sericea
Banksia menziesii dwarf
Beaufortia squanosa
Calothamnus quadrifidus
Isopogon cueatus
Melaleuca lateritia

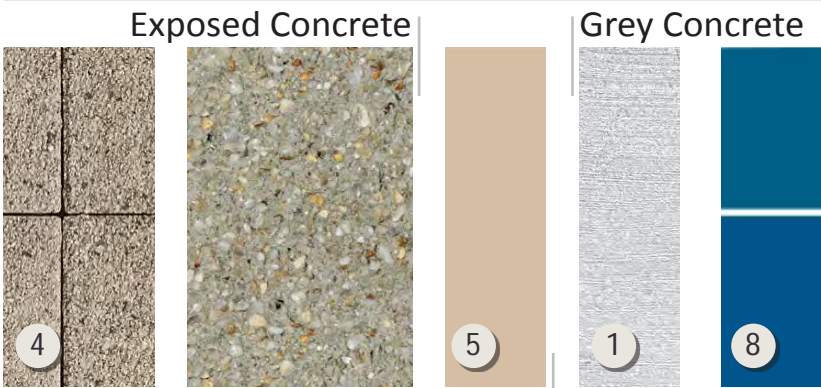


Garden Bed - Regular:
Lomandra 'Lime tuff'
Patersonia occidentalis
Anigozanthos 'Ruby Velvet'
Eremophila 'Silver Flame'
Grevillea 'Seaspray'
Olearia 'Little Silver'
Westringia 'Low horizon'
Darwinia citriodora



Garden Bed - Part Shade:
Dianella 'Tasred'
Metrosideros tomentosa 'Dalese'
Agonis 'mini peppermint'
Melaleuca incana nana
Acacia cognata 'Honey Bun'

Material Palette



Brick Paving Coloured Concrete

Plexipave - [Colour TBC]
Plexipave - [Colour TBC]

LEGEND

- 1 Path connection to Primary School
- 2 Trees to provide screening from neighbouring lots
- 3 Trees in turf to provide shade for spectators
- 4 Unit paving bands with coloured or grey concrete
- 5 Trafficable artificial turf & insitu concrete to DFES vehicle route
- 6 Ribbon seat & stool seating to courtyard
- 7 Informal grass mounds & shade trees to courtyards
- 8 Plexi pave to feature abstraction of schools logo
- 9 Native garden bed planting (fully-irrigated)
- 10 Tubestock planting & mulch to future building pad
- 11 Native verge planting (fully-irrigated) species to match existing Primary School
- 12 Bike Racks



Perimeter Shade Trees
Eucalyptus gomphocephala



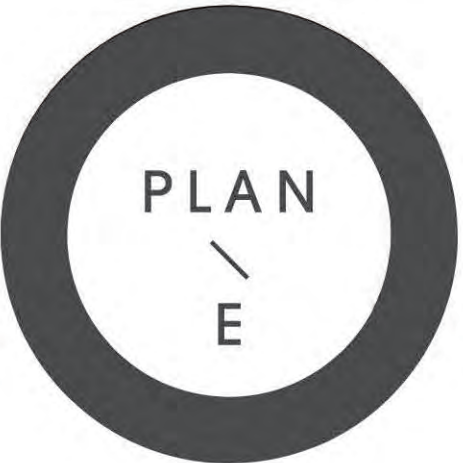
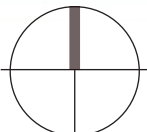
Carpark Evergreen Shade Trees
Eucalyptus victrix



Feature deciduous
Platanus acerifolia



Small courtyard deciduous
Gleditsia 'shademaster'



APPENDIX C – TRANSPORT ASSESSMENT



CONSULTING CIVIL & TRAFFIC ENGINEERS, RISK MANAGERS.



Project: Mother Teresa Catholic College, Baldivis – Stage 3

Transport Assessment – Version 5.

Client: Mother Teresa Catholic College

Author: Tony Shaw

Signature: 






Date: 08/02/16

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Document Status

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3	T Shaw	B Hartley	20/01/16	Draft		20/01/16
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1 Introduction and Background

This report assessed the traffic impacts associated with the proposed Stage 3 development of the Mother Teresa Catholic College located in Baldivis, in the City of Rockingham. The school is located on the corner of Eighty Road and Sixty Eight Road with frontage to Eighty Road.

This report was commissioned by the Mother Teresa Catholic College through Parry and Rosenthal Architects, and has been prepared by Shawmac Pty Ltd.

The College commenced in February 2014 with classes from Kindergarten to Year 2, extending to Year 3 in 2015.

Stage Two of capital development was completed for the start of the 2016 school year.

The Stage 3 works include new teaching blocks, offices and paved areas together with the construction of additional car parking off Eighty Road. Stage 3 will provide facilities for the secondary school together with an administration building.

According to data provided by the Catholic Education Office, enrolment of secondary students is expected to grow as shown below.

YEAR	# OF STUDENTS	# OF STAFF
2018	100	14
2019	350	35
2020	600	75

Key transport issues focus on the increased traffic generated from the use of the proposed facility and the attraction of that traffic onto roads adjacent to the school. Retention of the Eighty Road link to the carparks once Nairn Drive is extended as previously agreed is considered to be a critical issue and is considered necessary to maintain safe access to the school.

Pedestrian and cycle movements are expected to be adequately accommodated on proposed infrastructure surrounding the school site.

2 Transport Assessment Objective

This Transport Assessment outlines the likely impact of the Mother Teresa Catholic College expansion on network traffic flows, public transport availability, parking facilities, safe access, pedestrian and cycle facilities and local amenity.

The Transport Assessment considers aspects associated with:

- Additional generation of traffic including impacts on the road network;
- Safe walk and cycle access via local pathways;
- School access and egress issues;
- Internal and external parking needs;
- Any potential conflicts between vehicles, pedestrians and cyclists.

3 Location

The College site is located on the northwest corner of the intersection of Sixty Eight Road and Eighty Road in Baldavis. The subject site is bounded by residential areas to the west and semi rural land to the south and east. A wetland is located to the north of the site. Figure 1 shows the site location with respect to the Baldavis locality while Figure 2 shows the site in more detail in its local context.

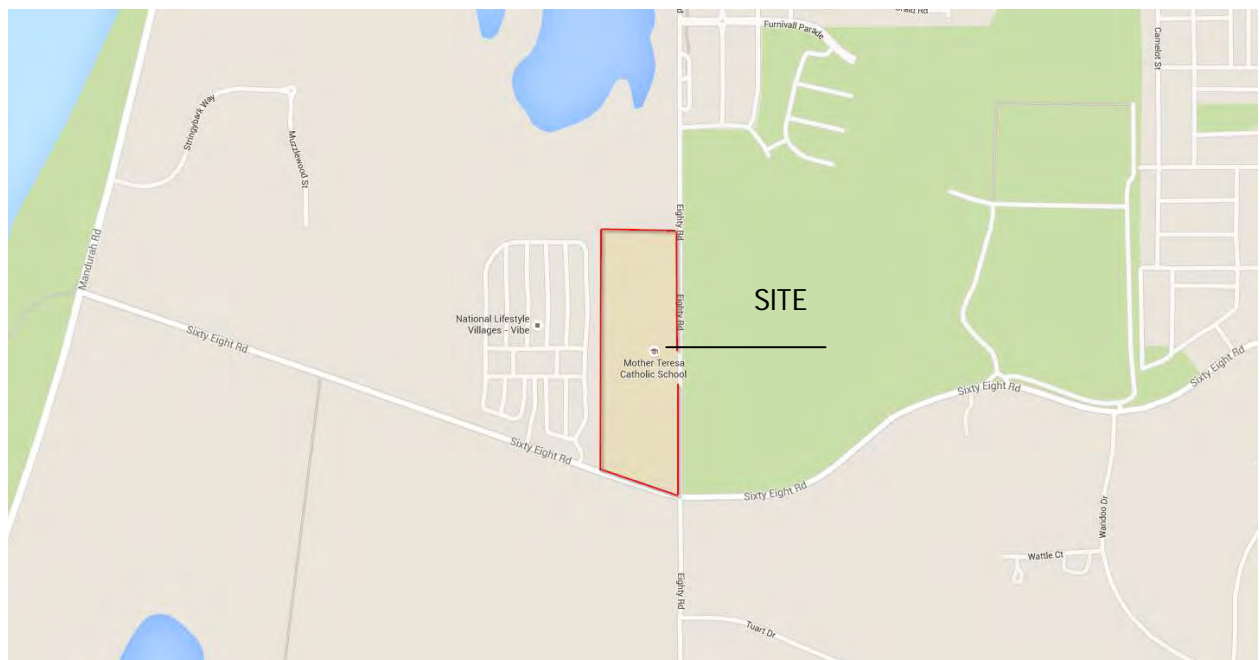


Figure 1 - Regional Context



Figure 2 - Local Context

4 Proposed Development

4.1 Regional Context

The site use as a “School” complies with City of Rockingham *Town Planning Scheme* from which the relevant extract is shown in Figure 3. The TPS shows that the subject site is zoned rural.

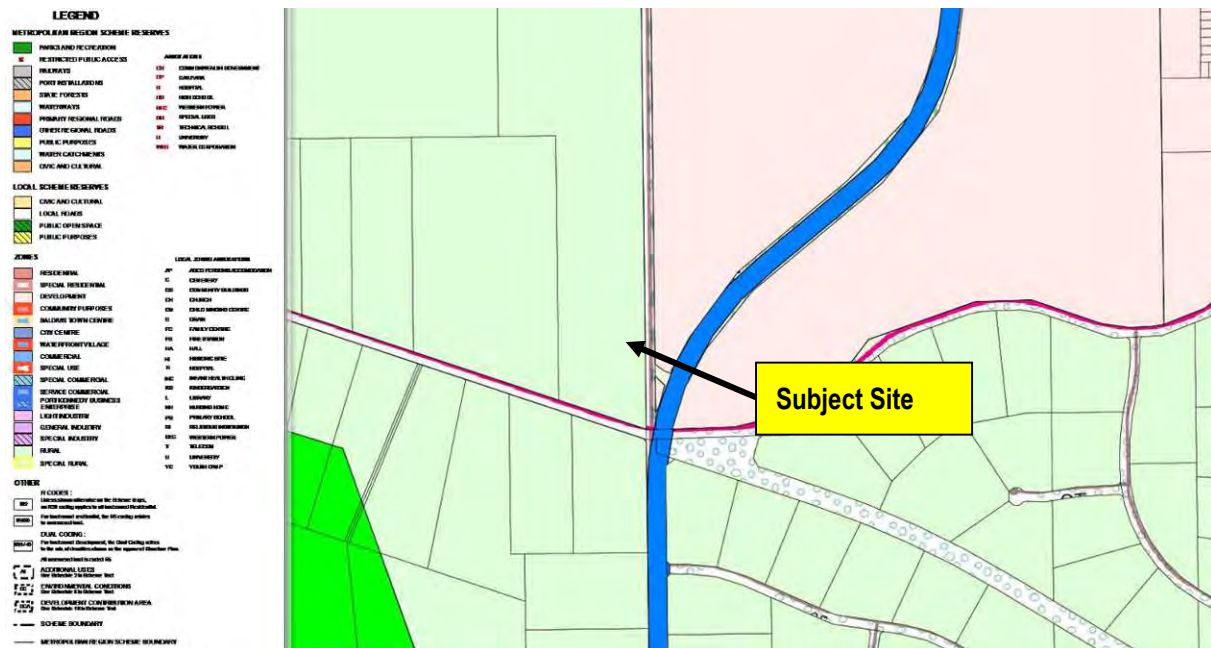


Figure 3 - Extract From City of Rockingham Town Planning Scheme

4.2 Existing Situation

The site is currently partly developed as a Primary School with the remaining portion of the site being vacant. The Primary School is located on the southernmost portion of the site and is currently occupied.

The site is bounded by pre-existing rural areas which are subject to recent and ongoing development as residential cells. The land on the northeast corner of Eighty and Sixty Eight Road is covered by a Local Structure Plan which indicates extensive residential development supported by commercial, educational and recreational land uses. The Structure Plan also indicates the diversion of Eighty Road east to join with a newly created "blue road" Nairn Drive which will ultimately form a four way roundabout controlled intersection with Sixty Eight Road.

4.3 Proposed Development

The proposed Stage 3 development is as follows:

- Stage 3:
 - Construction of 36 class rooms;
 - Construction of hard court areas;
 - Construction of common areas;
 - Construction of a library;
 - Construction of an Administration building;

- Construction of an additional 157 car bays and access roads off Eighty Road;

The development is planned to be constructed in a number of stages with various streams added between 2016 and 2018. Expected development numbers are shown on Table 1.

Year	Primary School		Secondary School		Total	
	Students	Teachers	Students	Teachers	Students	Teachers
2018	432	43	100	14	532	57
2019	432	43	350	35	782	78
2020	432	43	600	75	1032	118

Table 1. Predicted Development

The master planning for the school north of the existing stage of development is shown in Figure 4, and the proposed Stage 3 development is shown on Figures 5.

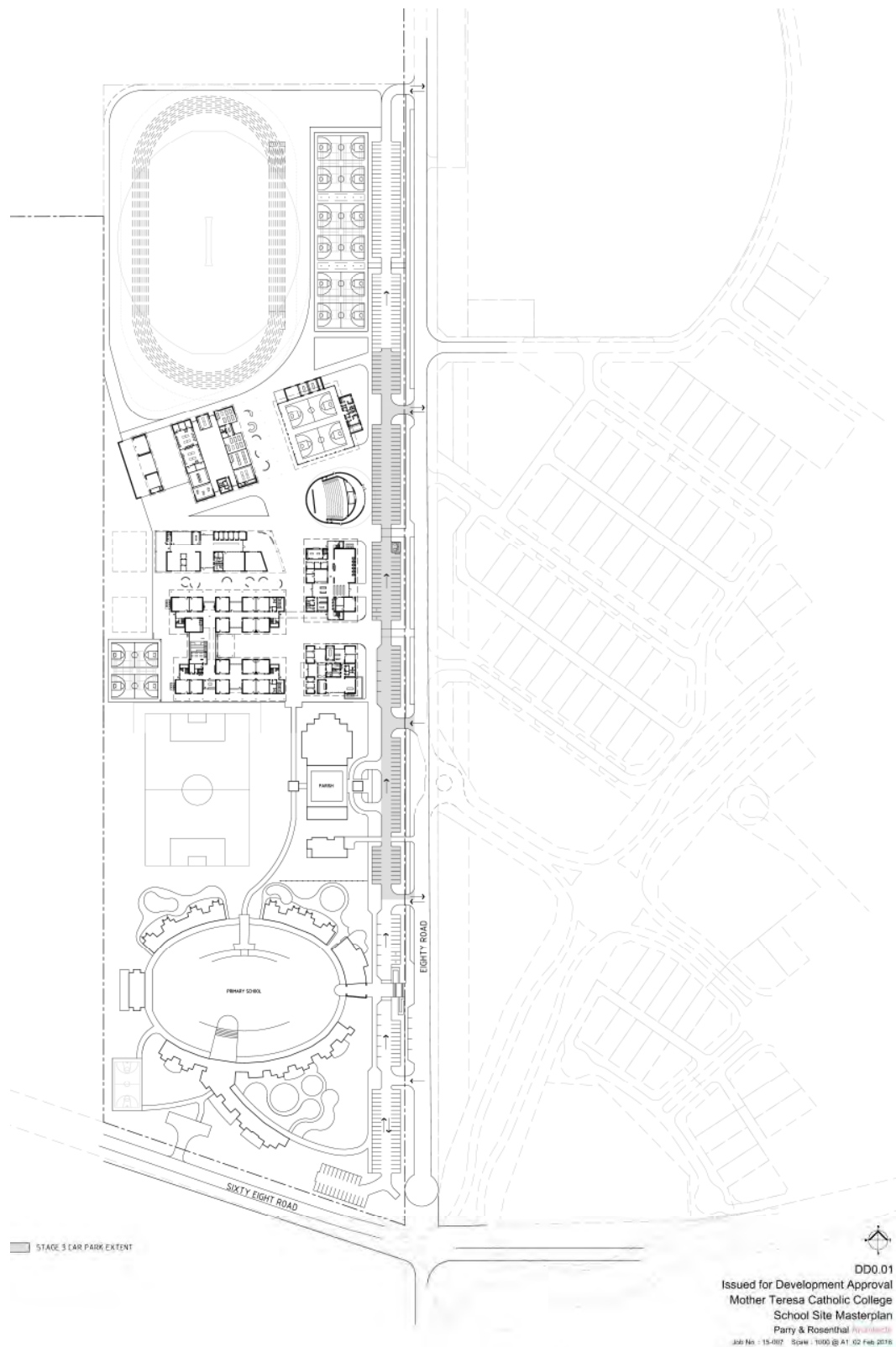


Figure 4 - Mother Teresa Catholic College - Proposed Ultimate Layout

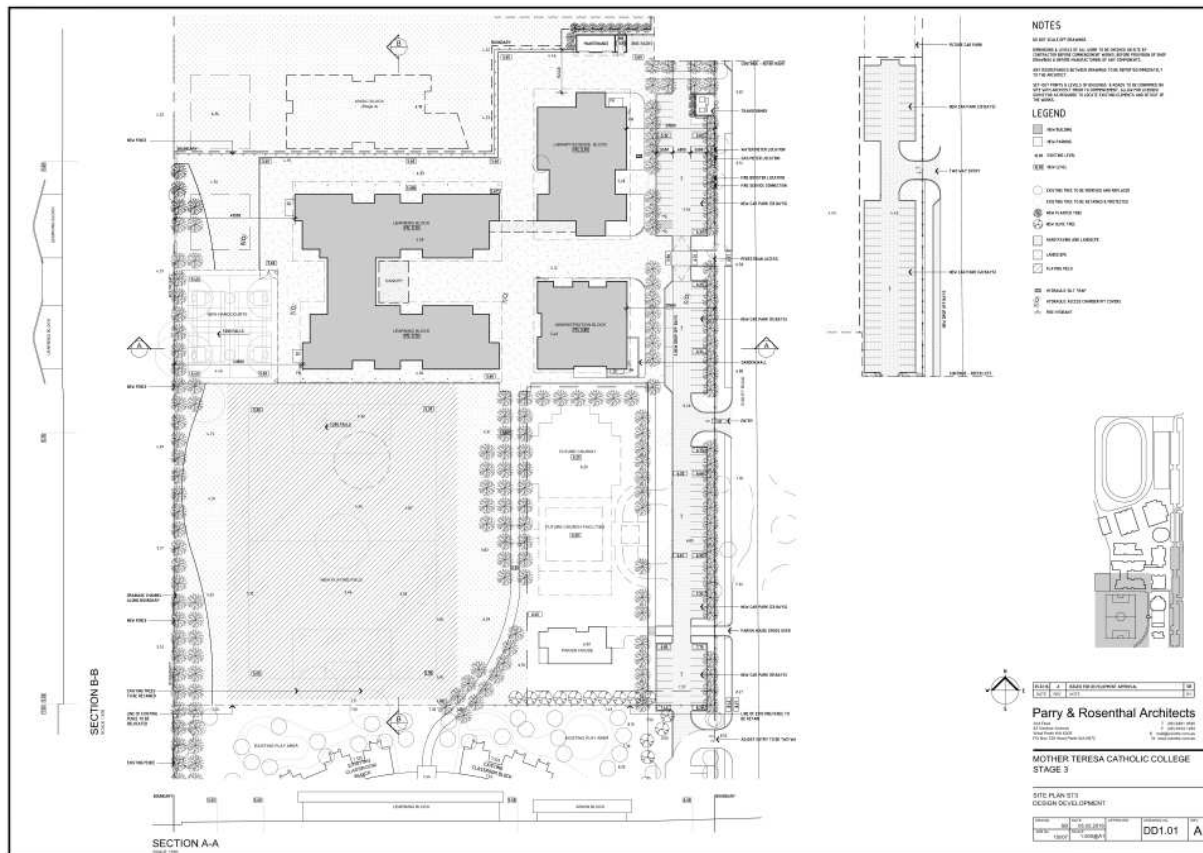


Figure 5 - Mother Teresa Catholic College - Proposed Stage 3 Layout

5 Existing Traffic Environment

5.1 Road Hierarchy

The road classification of current roads surrounding the site is shown in Figure 6 and Table 2 below, based on information obtained from Main Roads WA Functional Road Hierarchy and WAPC – “Liveable Neighbourhood Community Design Codes”. While the MRWA Hierarchy indicates Eighty Road as being a Local Distributor north of the school site and an access road adjacent to the school site, the Parkland Structure Plan indicates Eighty Road as being a Neighbourhood Connector A road north of the connection to Nairn Drive and an access road south of that point and Sixty Eight Road a Neighbourhood Connector A east of Eighty Road and an Integrator B Road west of Eighty Road.

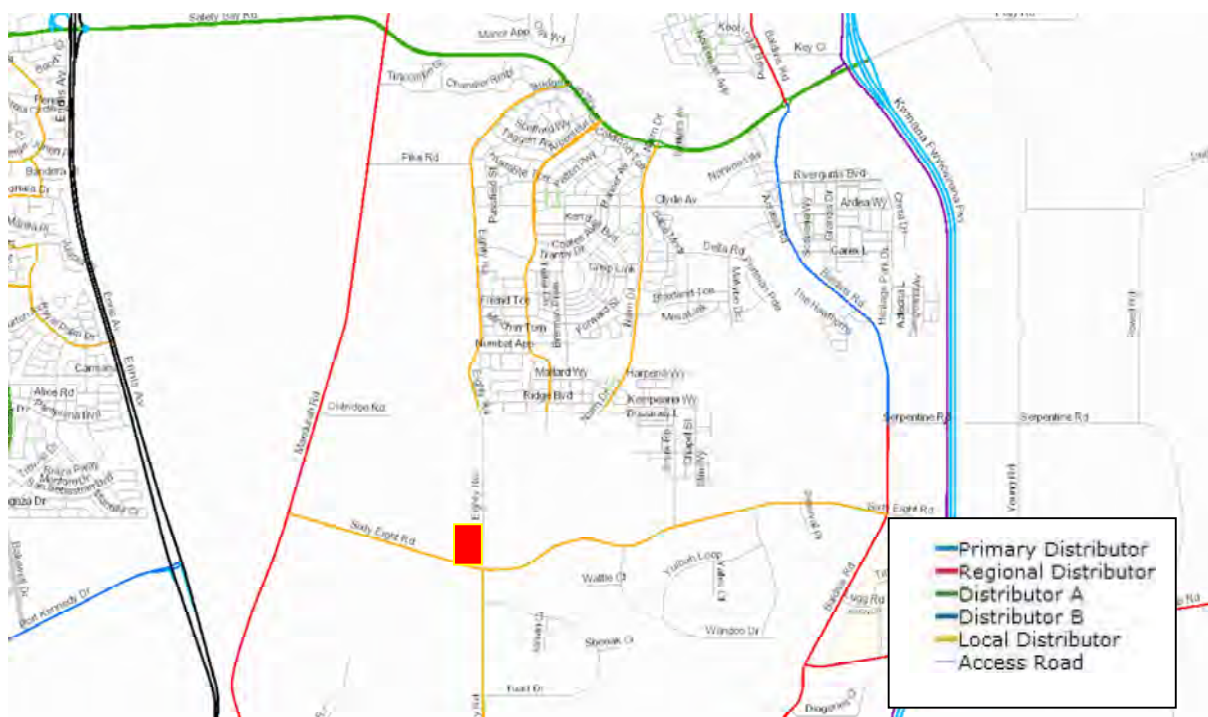


Figure 6 - Road Hierarchy

Road Category.	Road Name.	Desirable Max. Traffic Volume. (vpd)
Access Road	Eighty Road	3,000 vpd
Local Distributor	Sixty Eight Road	7,000 vpd

Table 2. Road Classification and Indicative Maximum Traffic Volume

The road network surrounding the site was constructed prior to the existing standards and guidelines and carriageway dimensions may subsequently not support the road hierarchy categories and their associated function prior to these roads being upgraded as part of the staged development of the adjacent land.

5.2 Traffic Volumes and Flows

5.2.1 Sixty Eight Road

Sixty Eight Road is a single undivided carriageway approximately 7.4 metres wide with narrow unsealed shoulders. Sixty Eight Road provides an important link to higher-order roads such as Mandurah Road to the west and the Kwinana Freeway to the east of the subject site. No paths are provided along Sixty Eight Road.

Sixty Eight Road forms a partially channelised four way intersection with Eighty Road, with Sixty Eight Road forming the priority road and Eighty Road the yield road. The intersection is controlled by Stop signs on Eighty Road.

Based on the latest traffic data available from Main Roads WA, recorded in May 2013, the traffic volumes east of Mandurah Road were 145 vph eastbound and 152 vph westbound in the AM peak period, 159 vph eastbound and 135 vph westbound in the PM peak period, and 1,413 vpd eastbound and 1,291 vpd westbound for the daily weekday total. Counts provided by the City of Rockingham in January 2015 indicated 2,704 vpd west of Eighty Road and 2,093 vpd east of Eighty Road. Recent (November 2015) counts recorded daily traffic volumes of 2,664 vehicles 200 metres west of Smirk Road (approximately 1.3 kilometres east of Eighty Road) with AM peak flow of 263 vehicles and PM peak flow of 254 vehicles.

5.2.2 Eighty Road

Eighty Road is also a single undivided carriageway approximately 7.4 metres wide with narrow unsealed shoulders. Eighty Road provides a link to higher-order roads such as Safety Bay Road to the north and Stakehill Road to the south of the subject site. No paths are provided along Eighty Road.

Based on the latest traffic data available from Main Roads WA, recorded in May 2013, the traffic volumes north of Sixty Eight Road were 231 vph northbound and 191 vph southbound in the AM peak period, 174 northbound and 203 vph southbound vph in the PM peak period, and 1,388 vpd northbound and 1,405 vpd southbound for the daily weekday total. Counts from the City of Rockingham recorded in 2013 indicated daily flows of 2,635 vehicles with AM peak flow of 272 vehicles and PM peak flow of 276 vehicles. Given the development that has occurred over the past two years it is expected that traffic volumes in Eighty Road would have increased from the figures recorded in 2013.

5.2.3 Summary of Traffic Flows

Based on the information outlined above, the network flows are within the maximum desirable limits for each road category. This information is summarised in Table 3 below.

Road Name	Road Characteristics		Road Volumes		
	Desirable Max. Traffic Volume. (vpd)	Road Width	Daily	A.M. Peak	P.M. Peak
Sixty Eight Road	Local Distributor 7,000 vpd	7.4 m wide unkerbed carriageway.	2,704 vpd	297 vph	294 vph
Eighty Road	Access Road 3,000 vpd	7.4 m wide unkerbed carriageway.	2,793 vpd	422 vph	377 vph

Table 3. Summary of Boundary Roads Characteristics Adjacent to Baldvis Primary School

5.2.4 Speed-Zone

Eighty Road and Sixty Eight Road are subject to a 60 km/h speed zone with a 40 km/h school zone in place during the morning and afternoon periods during school terms.

5.3 Public Transport

5.3.1 Bus Transport

The subject site is not served by a public transport bus route, with the nearest services located to the northeast as shown in Figure 7. The existing bus services connect to Warnbro station, Rockingham City Centre and Rockingham station.

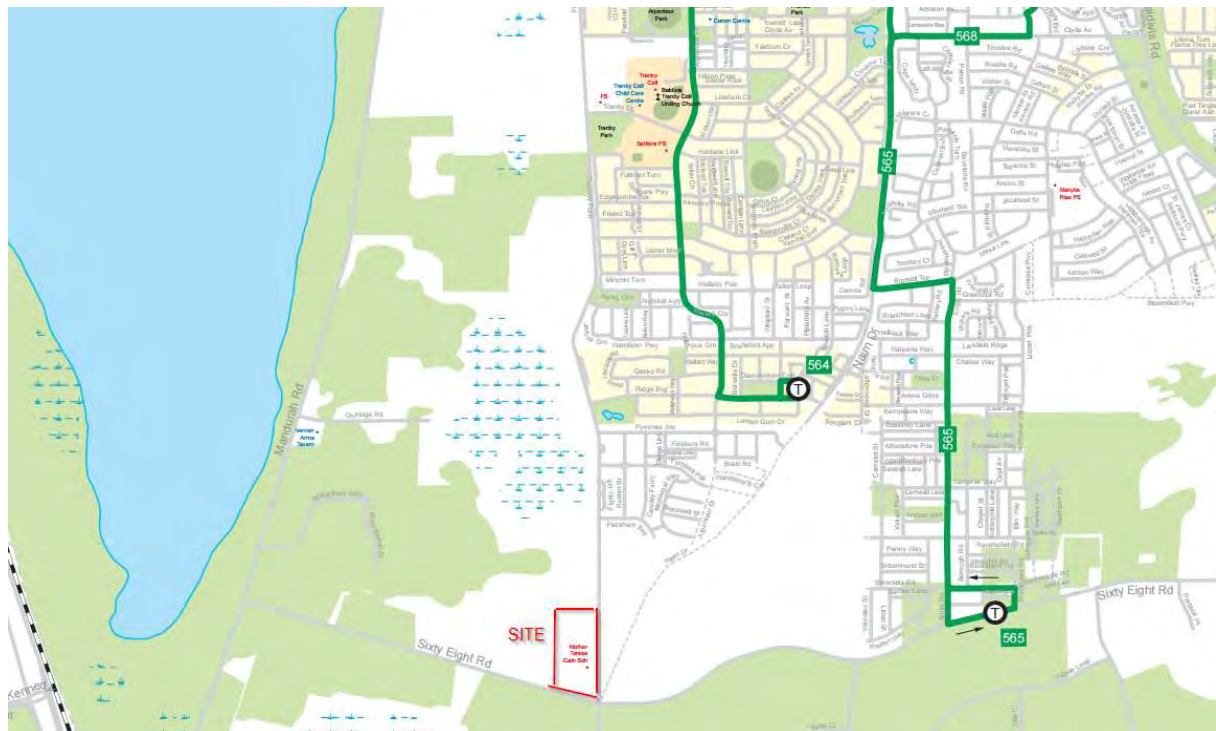


Figure 7 - Public Transit Services Adjacent to the Subject Site

5.4 Pedestrian and Cycle Facilities

The school site is located within a pre-existing rural area and as such no formal path or cycle facilities exist. The master plan for the school indicates an extensive network of internal paths and the Parkland Structure Plan prepared by Taylor Burrell Barnett shows future on road cycle lanes on Nairn Drive and footpaths on Eighty Road north of the connection with Nairn Drive.

6 Changes to Surrounding Transport Networks

The road infrastructure in the local precinct will change with ongoing development. The proposed road network and road hierarchy surrounding the site was sourced from the Parkland Structure Plan for the land to the east and is shown on Figure 8.

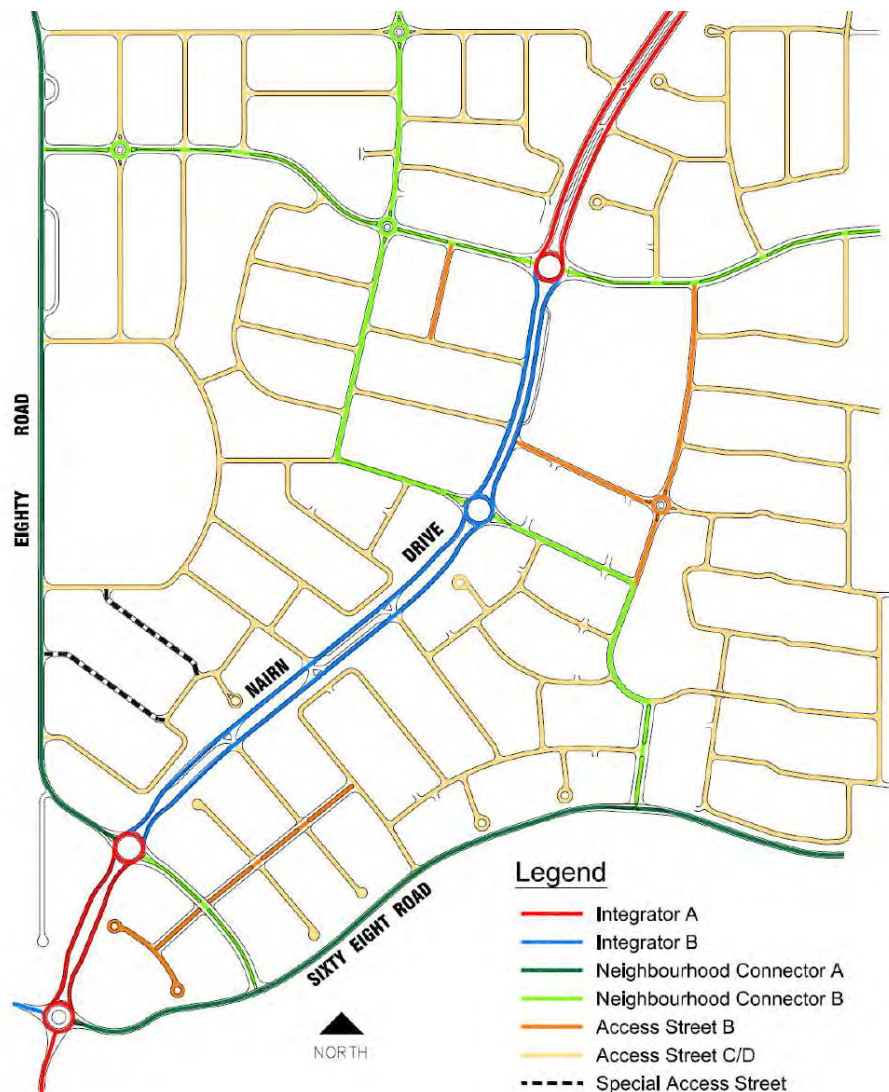


Figure 8 - Adjacent Road Hierarchy Source Parkland Heights Local Structure Plan, Lot 1507 Eighty Road, Baldvis Transport Assessment
Transcore July 2011.

7 Integration with surrounding area

The development integrates with the future land use planning for the area and the intended road network.

8 Period of Assessment

In terms of traffic impacts, based on previous Transport Assessments of schools, the morning school drop-off period, which coincides with the commuter peak, will have the greatest impact on the operations of the road network.

In terms of parking impacts, the afternoon pick-up period puts greatest demand on available parking spaces as parents arrive prior to the finish of the school day, park and wait to pick up their children at the completion of the school day.

9 Transport Analysis

9.1 Trip Generation

The proposed development site contains the following land uses and expected operation times.

Use	Operating Times	Peak Traffic Movements	Parking Requirements
Students	8.30am to 3.00pm Monday to Friday	8.00 to 8.30 am 2.45 to 3.30pm	Short term drop-off pick up
Staff	8.30am to 3.00pm Monday to Friday	7.30 am to 8.30 am 3.30 pm to 4.30pm	Long term day parking

Table 4. Proposed School Use

Vehicular traffic generation has been linked through established studies to the student numbers and the type of school facility. The Western Australian Planning Commission Transport Assessment Guidelines recommends school traffic generation is based upon data from the PARTS surveys that indicate around 65% to 70% of children are driven to primary school, with an average occupancy of around 1.4 to 1.5 children per car. This equates to approximately 0.5 vehicle movements per child to school and 0.5 vehicle movements per child from school in each of the morning and afternoon peak hours.

The school in its ultimate form is expected to cater for a maximum of 480 students.

The student and staff numbers for the current and predicted years are summarised in Table 5.

Year	Primary School		Secondary School		Total	
	Students	Teachers	Students	Teachers	Students	Teachers
2018	432	43	100	14	532	57
2019	432	43	350	35	782	78
2020	432	43	600	75	1032	118

Table 5. Summary of Estimated and Future Student and Staff Numbers

The following assumptions were made for trip generation:

- A car mode share of 65%;
- Vehicle occupancy of 1.5 students per vehicle; and,
- Staff to student ratio of 1 to 15.

The student and staff trip generation for daily traffic, am peak hour traffic and pm peak hour traffic is summarised in Table 6.

Years	2018	2019	2020
Student Number	532	782	1,032
Teacher / Staff Numbers	57	78	118
Mode Share	65%		
Occupancy	1.5		
Vehicles Student Generated)	230	339	447
Trips-Ends During Morning and Afternoon School Peak Periods	460	678	894
Total Daily Trips-Ends (Students)	920	1,356	1,788
Teacher trips AM (Assumes occupancy of 1.5 per vehicle)	37	51	78
Total Trips AM (Student plus Teachers)	497	729	972
Total Trips PM (Students only)	460	678	894
Total Trips Daily (Students plus Teachers)	957	1,407	1,866

Table 6. Summary of Trip Generation

9.2 Trip Distribution

Based upon the existing traffic patterns in the area and spatial distribution of adjacent land uses, the following distribution for the redeveloped site generated traffic has been assumed:

- 70% of overall site-generated trips would be originating from and destined to the north and east;
- 30% of overall site-generated trips would be originating from and destined to the south and west split as below.
 - 12.5% originating from and destined to the east on Sixty Eight Road.
 - 12.5% originating from and destined to the west on Sixty Eight Road.
 - 5% originating from and destined to the south on Eighty Road.

The traffic generated by the teachers at the school will coincide with the AM drop off period but as they will generally leave after the afternoon pick up period traffic generated by teachers in the afternoon will occur at a

different time.

The anticipated site-generated traffic was assigned to the boundary road system based upon the projected proportions for the weekday a.m. and p.m. peak hours. The resultant increases in weekday a.m. and p.m. peak hour-generated traffic under the 2018 and 2020 scenario for Eighty Road and Sixty Eight Road are outlined as follows:

- Eighty Road north of the school
 - Daily: +670 trips (2018) +1,306 trips (2020)
 - Network A.M. Peak Hour: +287 trips (2018) + 560 trips (2020)
 - School P.M. Peak Hour: +322 (2018) +626 trips (2020)
- Eighty Road south of the school
 - Daily: +287 trips (2018) +560 trips (2020)
 - Network A.M. Peak Hour: +149 trips (2018) +292 trips (2020)
 - School P.M. Peak Hour: +138 trips (2018) +268 trips (2020)
- Sixty Eight Road west of Eighty Road
 - Daily: +120 trips (2018) +233 trips (2020)
 - Network A.M. Peak Hour: +62 trips (2018) +122 trips (2020)
 - School P.M. Peak Hour: +58 trips (2018) +112 trips (2020)
- Sixty Eight Road east of Eighty Road
 - Daily: +120 trips (2018) +233 trips (2020)
 - Network A.M. Peak Hour: +62 trips (2018) +122 trips (2020)
 - School P.M. Peak Hour: +58 trips (2018) +122 trips (2020)
- Eighty Road south of Sixty Eight Road
 - Daily: +48 trips (2018) +93 trips (2020)
 - Network A.M. Peak Hour: +25 trips (2018) +49 trips (2020)
 - School P.M. Peak Hour: +23 trips (2018) +45 trips (2020)

In determining the estimated future traffic flows, the forecast increase in traffic movements was added to the existing measured vehicle movements. The resultant proposed development site-generated traffic volumes for a school day, including morning and afternoon pick-up and drop-off periods are shown in Figure 9. Future planning indicates Eighty Road being diverted to the east to join with the future extension of Nairn Drive which in turn extends south to form a four way junction with Sixty Eight Road. Under this scenario, traffic from the school will enter and exit via a connection to Eighty Road to the north. Likely flows under this scenario are shown on Figure 10.

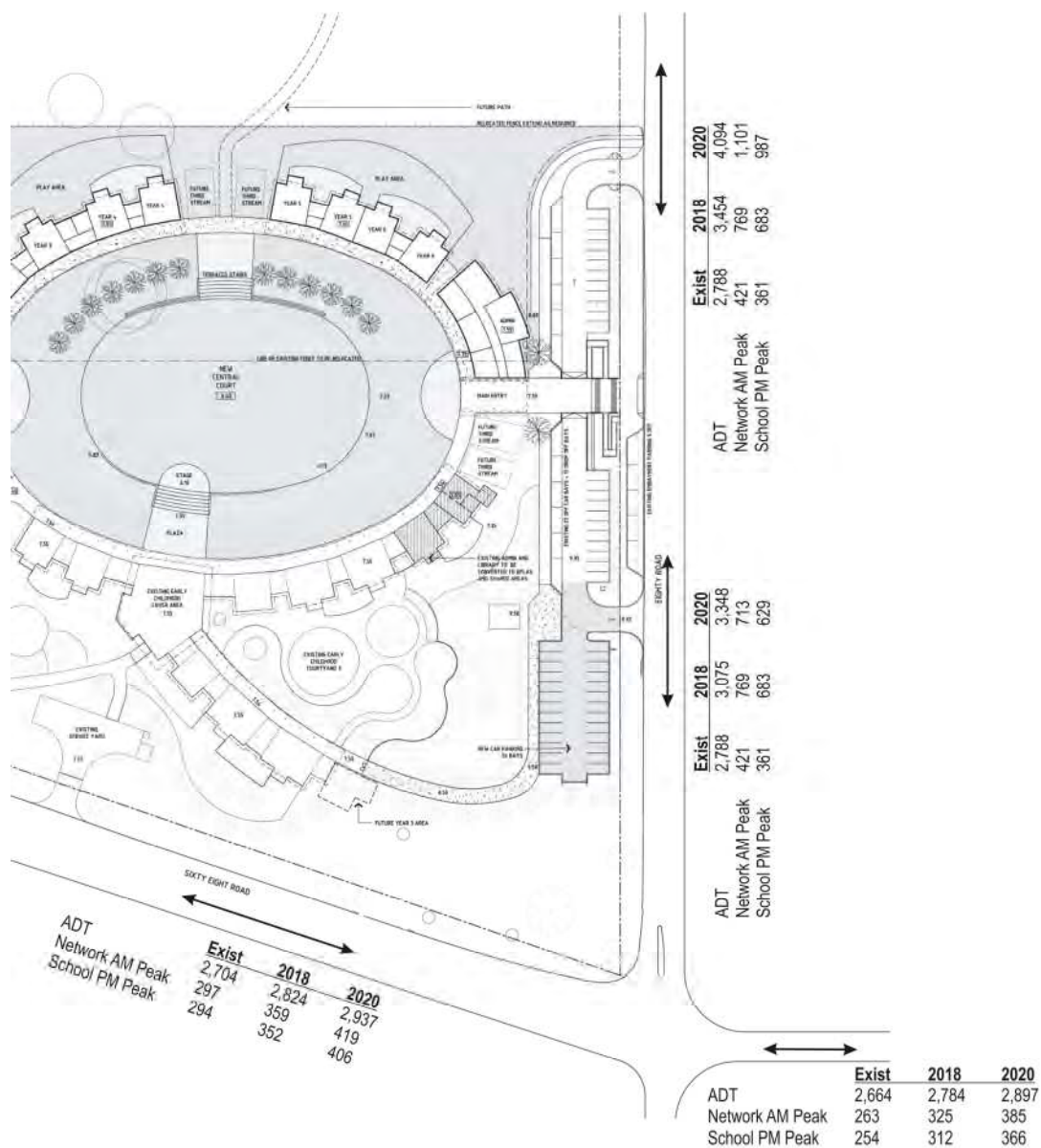


Figure 9 - Estimated Future Site-Generated Traffic Volumes – Current Road Configuration

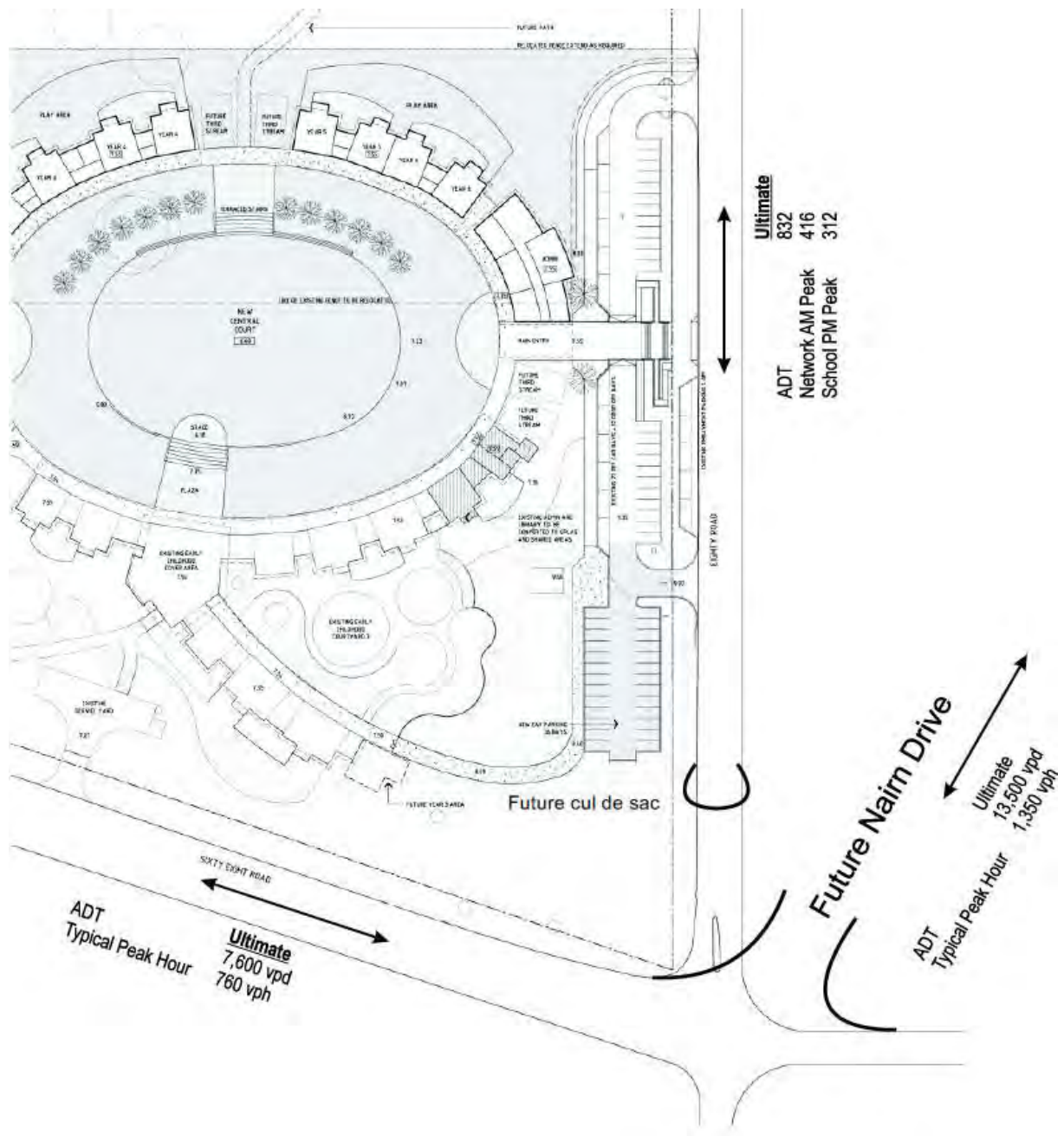


Figure 10 - Estimated Future Site-Generated Traffic Volumes – Future Road Configuration

9.3 Predicted Daily Traffic Volumes

The Transcore Transport Assessment for the Parklands Heights Structure Plan modelled flows on Sixty Eight Road, Eighty Road and Nairn Drive and these are shown on Figure 11.

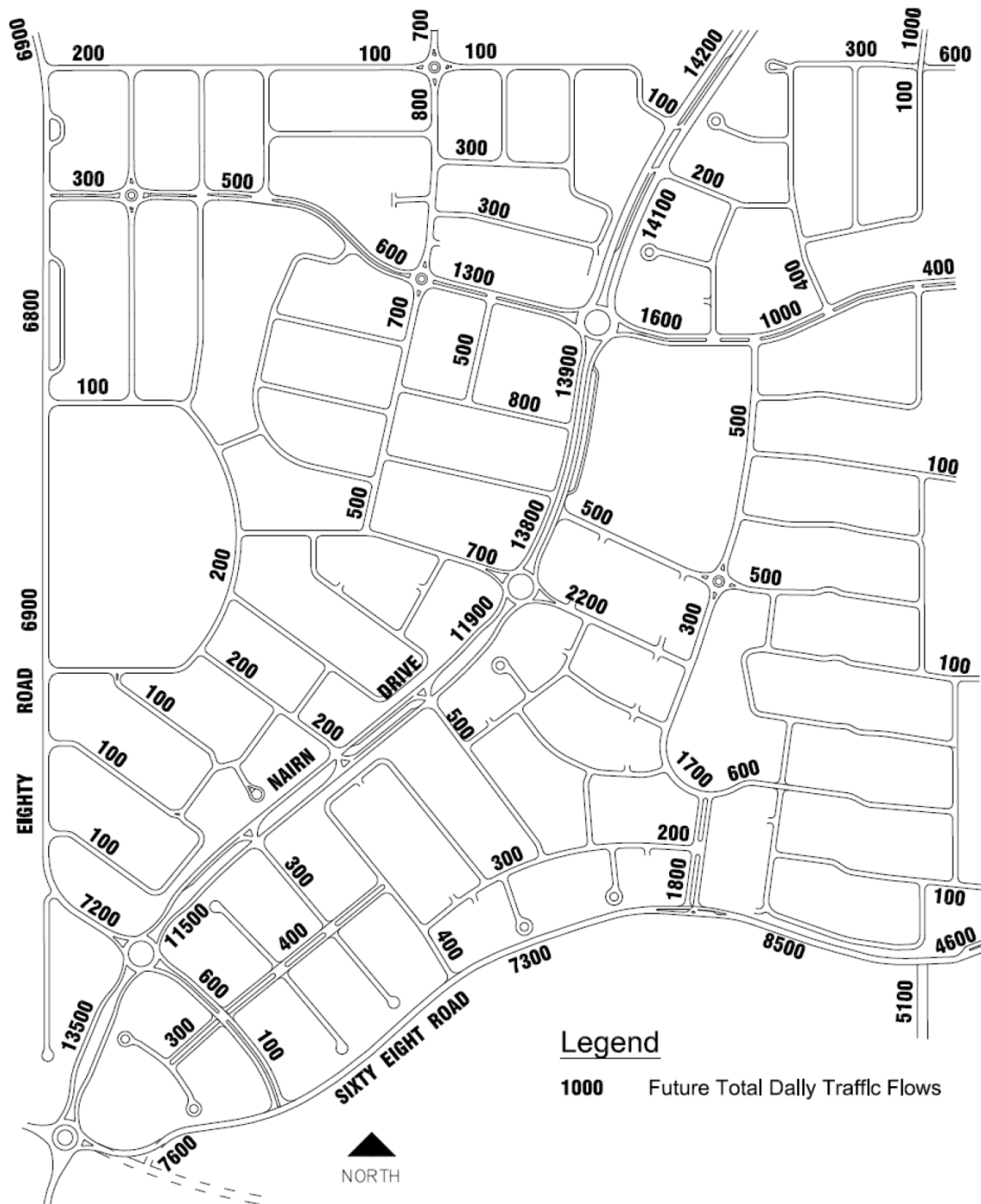


Figure 11 - Future Flows – Source, Parkland Heights Local Structure Plan, Lot 1507 Eighty Road, Baldvis Transport Assessment Transcore July 2011.

9.4 Impact on the Adjacent Road Network

The predicted increase in traffic volumes on the roads surrounding the school is shown on Figures 10 and 11.

In terms of midblock performance, the existing road network is predicted to cater for total flows associated with the development of the College traffic with assessment using the LOSPLAN software indicating the following.

- Sixty Eight Road Predicted flows (based on 2018 volumes), LOS "B"
- Sixty Eight Road Predicted flows (based on Ultimate volumes), LOS "C"
- Eighty Road Predicted flows (based on 2018 volumes), LOS "B"

The Transcore Transport Assessment makes provision for future road cross sections to meet predicted traffic demands and provides for the following.

9.4.1 Nairn Drive

The road reserve for Nairn Drive is established by the Other Regional Roads reservation which defines Nairn Drive as a "blue road". Nairn Drive is designated as initially being constructed as a two lane carriageway with future widening to four lanes.

9.4.2 Eighty Road

It is understood that Eighty Road will be upgraded to a kerbed and drained, 7.4m wide, single carriageway standard similar to the standard of construction of Eighty Road further north in conjunction with future residential development.

9.4.3 Sixty Eight Road

A similar standard of road is proposed for Sixty Eight Road as for Eighty Road.

9.5 Access Considerations

In rationalising the access to the overall site, consideration was given to the linear nature of the site and parking configuration, the internal traffic patterns and separation of the upper and lower schools, the location of the administration building in relation to crossovers and the impact of intersections located adjacent to the school on the east side of Eighty Road. With the above in mind, the access arrangements as shown on Figure 12 were originally proposed.

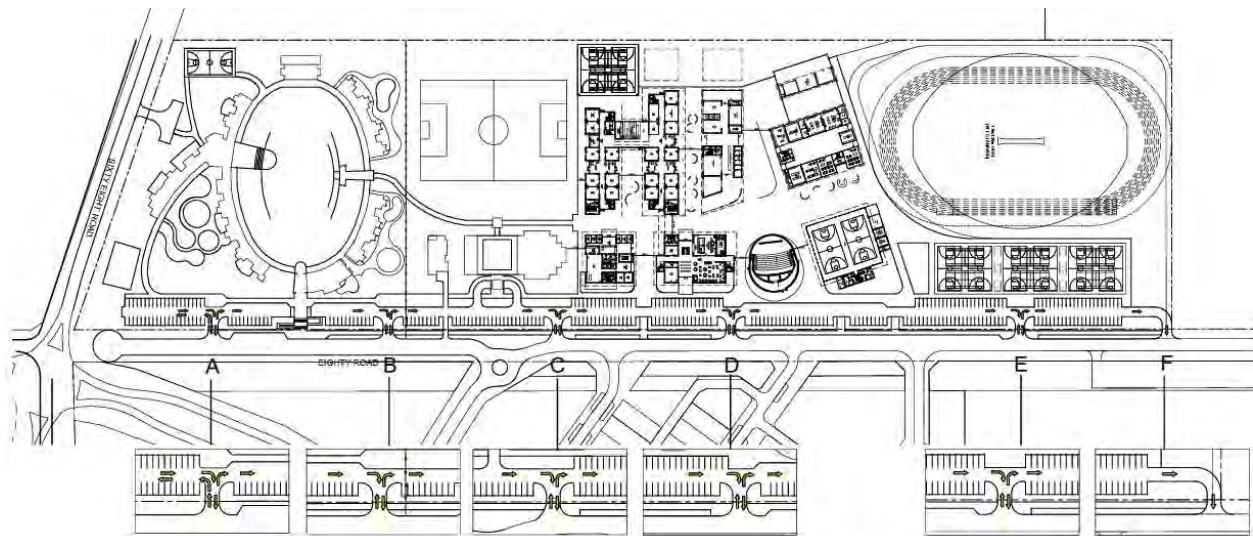


Figure 12 - Proposed Access Arrangements

The operational aspects of the proposed access arrangements were as summarised below:

- Access points A and B would primarily serve the parking associated with the primary school. This would require parents and carers to access and egress the cul de sac portion of Eighty Road via a connection through a roundabout proposed at the intersection of Eighty Road and the new connection to Nairn Drive. The traffic flow north of access point A is proposed to be one way from south to north.
- Traffic accessing the future chapel / church would enter also at access point B and could exit at C or D.
- Traffic accessing the parking areas associated with the upper school and administration building would enter via access points C and D. Access via access point C is desirable as it requires visitors to pass the administration building.
- Access point E and F provides access to the future sporting facilities and egress from the general internal spline road and parking areas.
- Egress point F provides egress only from the future sporting facilities and the internal spline road and parking areas.

In reviewing the access arrangements, the City of Rockingham proposed modifications that removed access points at locations C and E and provided wombat crossings within the carpark access spine at 4 locations. The City also suggested the rearrangement of internal parking so as to swap angle parking and parallel parking areas to better fit in with the recommended wombat crossings.

In considering the City's proposal the College sought to meet the operational needs of the school while being mindful of the comments received from the City. The amended access arrangements are shown on Figure 13.

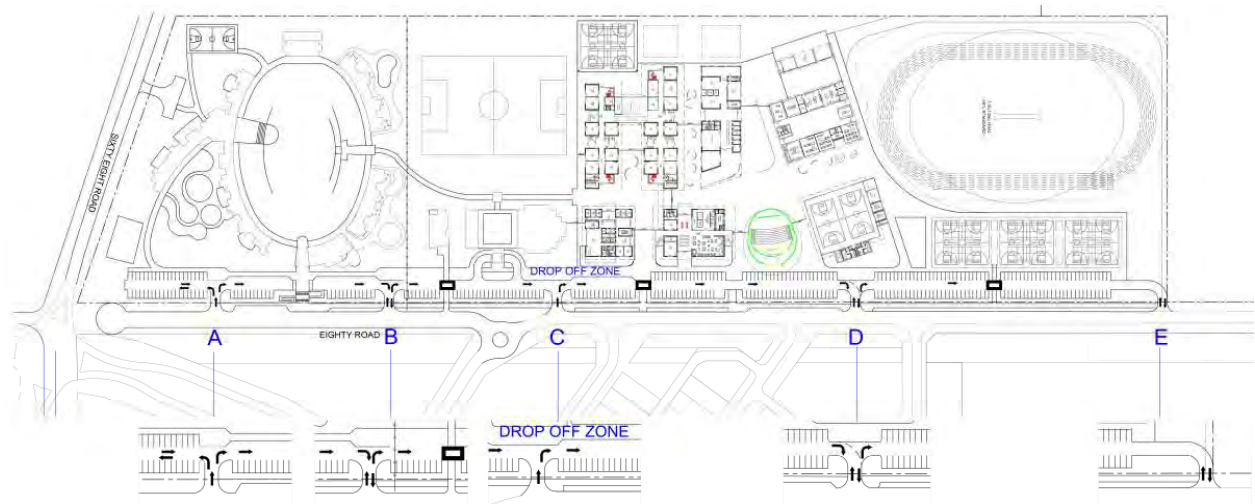


Figure 13 - Proposed Modified Access Arrangements

The proposed modified access arrangements incorporate the following elements:

- Access point A becomes an entry point only.
- Access and egress point B remains as originally proposed with movements to and from the school unaltered.
- Access C is maintained as an entry only so as to provide access to the administration building.
- Access points D and E provide access and egress to the parking area.
- A roundabout is proposed at the intersection of Eighty Road and Nairn Drive to regulate movement to and from the service road.
- Wombat crossings are provided at various locations along the central parking area spine access road to regulate traffic speed and provide designated pedestrian crossing points.
- Prohibition of parking on the east side of Eighty Road is recommended. Site inspections indicate that while vehicles continue to park on the east side of Eighty Road this is in spite of parking bays being available on site.

9.6 Intersection Performance Capacity

For all four way intersections, detailed design will provide central median islands so the regulatory signage can be located both on the verge and in the medians.

Three way intersections will also be designed as channelised intersections with central medians to regulate turning movements and to provide an opportunity to double up on regulatory signage.

Warrants as shown in Table 8.1 of Austroads Guide to Engineering Practice Part 2, Roadway Capacity were

applied to determine which adjacent intersections required capacity analysis. Peak hour traffic volumes were on previously predicted am peak hour traffic.

Intersection	Hourly volume major road	Hourly volume minor road	Comment.
Warrants as per Table 8.1 of Austroads Guide to Engineering Practice Part 2, Roadway Capacity -Two Lane Major Road Cross Road	400 vph 500 vph 650 vph	250 vph 200 vph 100 vph	Table details flows that initiate intersection analysis. As major flows increase, there is reduced capacity to accept minor flows.
Eighty Road – Sixty Eight Road – current configuration (2017)	525 vph	325 vph	4 way intersection – Analysis required.
Eighty Road – Sixty Eight Road – current configuration (2018)	552 vph	346 vph	4 way intersection – Analysis required.
Eighty Road – Eighty service road – future configuration (Ultimate)	750 vph	290 vph	Tee intersection – Analysis required.

Table 7. Intersection Assessment – 2013 flows not factored.

The above volumes are based on the 2013 figures plus the additional traffic predicted for the school and as such do not reflect any possible increase on Eighty Road and Sixty Eight Road associated with expected growth of adjacent residential cells. In order to test the integrity of the modelling, base flows on both roads were factored to allow for an annual increase of 5% and this gave the results indicated on Table 8.

Intersection	Hourly volume major road	Hourly volume minor road	Comment.
Warrants as per Table 8.1 of Austroads Guide to Engineering Practice Part 2, Roadway Capacity -Two Lane Major Road Cross Road	400 vph 500 vph 650 vph	250 vph 200 vph 100 vph	Table details flows that initiate intersection analysis. As major flows increase, there is reduced capacity to accept minor flows.
Eighty Road – Sixty Eight Road – current configuration (2015)	551 vph	341 vph	4 way intersection – Analysis required.
Eighty Road – Sixty Eight Road – current configuration (2018)	580 vph	363 vph	4 way intersection – Analysis required.
Eighty Road – Eighty service road – future configuration (Ultimate)	750 vph	290 vph	Tee intersection – Analysis required.

Table 8. Intersection Assessment – 2013 counts factored.

Assessment of the intersection of Eighty Road and Sixty Eight Road was carried out using the Sidra Intersection 5.1 software and volumes from Table 8. This confirmed that under design flows a simple two lane unchannelised intersection would perform at a satisfactory level of service. Output from the assessment is shown on Figures 14 and 15. Notwithstanding this, it is considered that the future roundabout at the intersection of Nairn Drive and Sixty Eight Road will continue to regulate traffic and provide a safe configuration, particularly given that school traffic peaks are high and traffic flows concentrated.

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		%			v/c	sec			
South: Eighty Road											
1	L	84	0.0	0.281	13.1	LOS B	1.4	9.5	0.40	0.79	44.8
2	T	126	0.0	0.281	12.6	LOS B	1.4	9.5	0.40	0.95	45.2
3	R	37	0.0	0.281	12.9	LOS B	1.4	9.5	0.40	0.95	45.0
Approach		247	0.0	0.281	12.8	LOS B	1.4	9.5	0.40	0.90	45.0
East: Sixty Eight Road											
4	L	26	0.0	0.091	8.6	LOS A	0.5	3.5	0.28	0.63	48.6
5	T	105	0.0	0.091	0.4	LOS A	0.5	3.5	0.28	0.00	54.2
6	R	37	0.0	0.091	8.9	LOS A	0.5	3.5	0.28	0.81	48.5
Approach		168	0.0	0.091	3.6	NA	0.5	3.5	0.28	0.28	52.0
North: Eighty Road											
7	L	89	0.0	0.349	13.2	LOS B	1.8	12.8	0.40	0.81	44.7
8	T	126	0.0	0.349	12.7	LOS B	1.8	12.8	0.40	0.95	45.1
9	R	89	0.0	0.349	12.9	LOS B	1.8	12.8	0.40	0.97	44.9
Approach		305	0.0	0.349	12.9	LOS B	1.8	12.8	0.40	0.92	44.9
West: Sixty Eight Road											
10	L	79	0.0	0.095	8.6	LOS A	0.5	3.6	0.32	0.51	48.0
11	T	58	0.0	0.095	0.4	LOS A	0.5	3.6	0.32	0.00	52.9
12	R	37	0.0	0.095	8.9	LOS A	0.5	3.6	0.32	0.71	48.0
Approach		174	0.0	0.095	5.9	NA	0.5	3.6	0.32	0.38	49.5
All Vehicles		895	0.0	0.349	9.8	NA	1.8	12.8	0.36	0.69	47.0

Figure 14 - Intersection Assessment – 2017 flows.

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flow	HV	Deg.	Satn	Average Delay	Level of Service	95% Back of Queue		Prop. Queued	Effective Stop Rate	Average Speed
		veh/h		%	v/c			sec	Vehicles			
South: Eighty Road												
1	L	95	0.0		0.378	14.8	LOS B	2.2	15.7	0.48	0.81	43.4
2	T	147	0.0		0.378	14.3	LOS B	2.2	15.7	0.48	1.03	43.8
3	R	53	0.0		0.378	14.6	LOS B	2.2	15.7	0.48	1.01	43.6
Approach		295	0.0		0.378	14.5	LOS B	2.2	15.7	0.48	0.95	43.6
East: Sixty Eight Road												
4	L	32	0.0		0.116	8.8	LOS A	0.7	4.6	0.34	0.56	48.4
5	T	126	0.0		0.116	0.6	LOS A	0.7	4.6	0.34	0.00	53.1
6	R	53	0.0		0.116	9.1	LOS A	0.7	4.6	0.34	0.80	48.4
Approach		211	0.0		0.116	4.0	NA	0.7	4.6	0.34	0.29	51.1
North: Eighty Road												
7	L	95	0.0		0.428	14.9	LOS B	2.8	19.7	0.50	0.86	43.3
8	T	137	0.0		0.428	14.5	LOS B	2.8	19.7	0.50	1.04	43.6
9	R	105	0.0		0.428	14.7	LOS B	2.8	19.7	0.50	1.04	43.5
Approach		337	0.0		0.428	14.7	LOS B	2.8	19.7	0.50	0.99	43.5
West: Sixty Eight Road												
10	L	105	0.0		0.127	8.7	LOS A	0.7	5.0	0.37	0.49	48.0
11	T	84	0.0		0.127	0.5	LOS A	0.7	5.0	0.37	0.00	52.1
12	R	42	0.0		0.127	9.0	LOS A	0.7	5.0	0.37	0.72	48.0
Approach		232	0.0		0.127	5.8	NA	0.7	5.0	0.37	0.35	49.4
All Vehicles		1074	0.0		0.428	10.6	NA	2.8	19.7	0.44	0.70	46.1

Figure 15 - Intersection Assessment – 2018 flows.

9.7 Pedestrian /Cycle Trips

9.7.1 Pedestrian Volumes and Facilities

It can be expected that up to 35% of students (approximately 361 ultimately) could be encouraged to walk or cycle to school. However, only small numbers of primary school students are expected to ride to school unless there is an active cycling programme run by the school. The school and surrounding areas are not currently serviced by a footpath network; however the recommended path network shown on the Parkland heights Structure Plan indicates 2.0 m shared paths on Eighty Road, Nairn Drive and Sixty Eight Road. Provision of internal north – south paths within the school to the Eighty Road future path will provide strong connection to the local path and cycle network. Notwithstanding this, the timing of the construction of the Parkland Heights path network is unknown and it is likely that the School will be built and operating prior to the path construction. However, with little or no development to the east, the demand for pedestrian and cycle movements are likely to be low. Connection to the recent subdivision immediately to the west is possible from the internal street network which consists of low speed low volume roads conducive to cycle and pedestrian traffic.

10 Parking

It is estimated that the future staff number for the school is anticipated to increase to an ultimate number of about 118.

Parking requirements based upon the WAPC guidelines are 14 bays per 100 students plus staff parking. The BMW requirements are the same base level plus 1 bay per 8 children in the kindergarten and 1 bus bay. As early childhood education (Kindergarten) is a 15 hour per week attendance (i.e. half days), the parking impact is halved when considering the total number of students enrolled at a school.

Based on the WAPC guidelines the theoretical demand for car parking is as shown on Table 9. It should be noted that based on actual demand currently observed, theoretical demand understates actual demand at this site and in response to this, temporary parking has been provided in addition to formal parking provided with Stage 1 and 2 works. Together with the parking proposed as part of the Stage 3 works, bays available on site are estimated to be in the order of 200 bays

	Student numbers	Staff Numbers	Theoretical Parking demand	Parking Supply
2018 development	532	57	132	264 onsite bays.
2020 development	1032	118	262	264 onsite bays.

Table 9. Parking Demand and Supply

A review of the proposed ultimate car parking supply in the context of the anticipated demand indicates that the parking supply will be adequate to cater for the anticipated demand associated with activities on the site. This is confirmed by site inspection which indicates that the parking management strategy is being implemented and generally parking demands are met. Notwithstanding this, some parents are continuing to park on the east side of Eighty Road despite there being an excess of vacant bays on the school site. As such, the prohibition of

parking on the east side of Eighty Road is recommended.

Design of the car parking bays will be in accordance with the requirements of Australian Standard AS 2890.

11 Traffic Management

In order to manage the traffic flow around the school and the parking during the peak drop-off and pick-up periods a Parking Management Guideline needs to be prepared to advise parents of the arrangements in place.

The Guide must cover:

- the various parking locations;
- school starting and finish times for various age groups;
- gateways to be used for the various age groups;
- rules and operation of "Kiss and Ride" facility;
- use of traffic wardens;
- general information on parking requirements to minimise impact on road network and adjacent residents.

Parents would need to be advised of the parking management guidelines which must be enforced by the school.

11.1 Future Arrangements.

The existing access via Eighty Road is shown as remaining as a service road following the extension of Nairn Drive and the diversion of Eighty Road in the Transcore Report and in early Structure Plans. Later Structure Plans indicated the section of Eighty Road south of the realigned section being removed and dedicated as POS.

The removal of access onto the Eighty Road service road was considered likely to introduce undesirable risk into the road environment as:

- It would require school traffic to enter the internal parking area – drop off area zones from a point on Eighty Road north of the school and move along the parking areas' access aisles. This two way traffic would increase conflict between through traffic and traffic moving into and out of parking bays.
- With the entry at the northern end, drop off would likely occur on the east side of parking areas requiring children to cross a traffic stream. For drop off on the west side of the parking areas, drivers would be required to travel south through the car parking areas, turn in a turn facility and travel north to a designated drop off zone.

Subsequent discussions with the City of Rockingham confirmed that the service road would be maintained.

12 Road Safety

Crash data provided by Main Road Western Australia for the five year period to 31st of December 2014 indicated that there were 8 crashes recorded at the intersection of Eighty Road and Sixty Eight Road. The crash data summary shown on Figure 17 revealed that crashes resulted in 2 medical severity crashes with the balance property damage type crashes. The number of right angle crashes (7) was significantly overrepresented when compared to the state average for this class of intersection. This may be in part attributed to the high approach speeds on Sixty Eight Road and Eighty Road which are expected to be lowered with impending development of residential precincts and the school site.



Figure 16 - MRWA Crash history

13 Traffic Noise and Vibration

The proposed development is not likely to generate any changed traffic noise pattern or result in any unacceptable vibration issues.

14 Conclusions

This Transport Assessment showed that the increase in vehicular traffic flows at the Mother Teresa Catholic College will have minimal overall impact on the surrounding road network and can be managed within the existing road carriageway and intersection geometries.

The resultant daily traffic flows on the adjacent roads after the completion of the College construction program fall within the desirable road capacity as detailed in the Liveable Neighbourhood Guidelines.

Whilst currently there is no dedicated pedestrian or cycle facilities adjacent to the school, future planning of Parkland Heights includes provision of shared paths on Eighty Road, Sixty Eight road and Nairn Drive. The future parking demand is anticipated to be serviced by a total number of on-site car bays in excess of the WAPC car parking requirements.

Current access is planned off Eighty Road with a combined two way and one way system regulating entry to and egress from parking areas. Given the level of traffic on Eighty Road no unacceptable adverse effects are predicted.

As agreed in previous stages, the portion of Eighty Road south of the diversion to Nairn Drive is to remain so as to provide access to the southern portion of the school.

With the implementation of the recommendations and proposals outlined above, the proposed development of the school should not have an adverse impact on the traffic flow on the surrounding road network.

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1.0 Document Details

1.1 Background Information

Project Number: 5158
Project Name: Mother Teresa Catholic College
Author: Erika Dawson, Grad Dip Bushfire Protection
Approved by: Darrel Krammer, Grad Cert Bushfire Protection, BPAD33412, Level 1
Version: A3 DRAFT RELEASE
Date of issue: 18th May 2016



Author:
Date: 18/5/2016



Approved by:
Date: 18/5/2016

Document Version Control

Amendment		Details of Version Release	Amended By
No.	Date		
A1	Draft	Draft release for comment	D. Krammer
A2	Draft	Draft release for development approval	E. Dawson
A3	18/5/16	Updated draft for development approval	E. Dawson

This plan is to be practiced, reviewed and updated upon the following triggers occurring:

- Prior to habitation of any buildings within the site (commissioning),
- September of each year (prior to the bushfire season),
- Upon commencement of each school year, and
- After any actual bushfire emergency requiring the plan to be used.

1.2 Purpose

The purpose of this document is not to develop plans for every emergency scenario, but to provide guidance to school staff on the recommended actions to be taken, to safely relocate students, staff and visitors, in the event of a bushfire event impacting the school. These plans cannot predict all scenarios, therefore the responsible persons must make decisions based on available information, experience and knowledge.

The school is located in a designated Bushfire Prone Area, and as such, must take appropriate actions to eliminate or lessen the threat to the school students, staff, visitors and infrastructure from the impacts of a bushfire.

The Department of Fire and Emergency Services' (DFES) website and the Department of Education's (DoE) publication: *The Principals Guide to Bushfire* provide the most up to date and relevant information for the preparation, prevention, response and recovery from a bushfire event. The sources should be referenced at regular intervals.

1.3 Scope

This plan has been developed to provide immediate actions to be followed, as far as is practicable, for a bushfire emergency occurring whilst the school is occupied, either during normal school hours or during after-hours school sanctioned events where school staff are present and buildings are unlocked and available for safer refuge.

The plan has not been prepared for emergency actions where the school buildings are secure and emergency shelter within is not a possibility, such as on weekends when local sporting groups may have approval to utilise the school ovals etc.

2.0 Site Details

Name: Mother Teresa Catholic College
Address: 731 Eighty Rd, Baldivis, WA, 6171
Nearest Cross Street: Sixty Eight Rd
Local Government: City of Rockingham
Responsible Person: Geri O'Keefe (College Principal)

2.1 Other contact persons

Name	Position	Primary Contact (B/H)	Secondary Contact (A/H)

2.2 School Details (2017)

Number of habitable buildings	No. of staff (total)	No. of students (total)	Hours of operation

2.3 Special Needs

This section details the number of special needs persons enrolled/employed within the school and their normal location within the school ground:

Total number of Staff	Total Number of Students	Usual Location(s)	No. of mobility impaired	No. of Intellectual disabilities	No. of other special needs

2.4 Bushfire Risk

The bushfire risk from within the school grounds is considered low due to the limited native standing vegetation, low threat areas consisting of ovals, recreation areas, development, carparks and buildings.

Vegetation along Eighty Rd is limited in its width and is broken due to development and natural spacing between standing vegetation, thereby limiting the rate of spread and intensity of any fire that may develop.

The main threat from bushfire to the school site will be the smoke and flying embers. Radiant heat is reduced through greater distance being obtained from the fire source or through shielding, whether inside or behind a building.

As any bushfire event within the greater area will be halted by non-vegetated areas of Sixty Eight Rd and the northern vegetation buffer, the most appropriate emergency action to take in the event of a bushfire is to SHELTER-IN -PLACE as any bushfire will be limited in intensity and duration

Shelter-in-Place is the process of moving people into a place that is still at the same site in which they are staying and away from the effects of a bushfire.

All buildings can be used as an emergency shelter, however buildings with increased construction standards to withstand the effects of a bushfire include the:

- Building 1 – Administration Building
- Building 2 – Learning Block
- Building 3 – Library/Science Block

These buildings have been constructed to be resilient to the effects of radiant heat and ember attack from a bushfire and offer the safest location for sheltering until the bushfire threat passes. Time before bushfire impact may prevent full school relocation to these buildings, and therefore the closest building/classroom provides greater protection than being outside during an ember attack.

3.0 Roles and Responsibilities

During any emergency, a coordinated approach to the implementation of these emergency procedures are required.

Staff are allocated areas of responsibility to ensure that all persons are accounted for, (staff, students and visitors), and appropriate emergency actions are carried out to safeguard all persons (where practicable).

The following tables details the Emergency Control Organisation for the school (amend as appropriate):

Building	Role	Person Responsible	Area of responsibility	Contact Number
Administration	Chief Warden	Principal	Whole of school	
	Deputy Chief Warden	Office Manager	Whole of School (in absence of chief)	
	Area Warden	Clerical Staff member #1	Administration building	
	Warden	Clerical Staff member #2	Administration building (in absence of Area Warden)	

Building	Role	Person Responsible	Area of responsibility	Contact Number
Library/Science Block	Area Warden	Staff Member #1	Whole of building area	
	Warden Lower West	Staff Member #2	West Part of building (*define limits)	
	Warden Lower East	Staff Member #2	East Part of building (*define limits)	
	Warden Upper West	Clerical Staff member #2	West Part of building (*define limits)	
	Warden Upper East	Clerical Staff member #2	East Part of building (*define limits)	

Building	Role	Person Responsible	Area of responsibility	Contact Number
Learning Block 1	Area Warden	Staff Member #1	Whole of building area	
	Warden West	Staff Member #2	West Part of building (*define limits)	
	Warden East	Staff Member #2	East Part of building (*define limits)	

Building	Role	Person Responsible	Area of responsibility	Contact Number
Learning Block 2	Area Warden	Staff Member #1	Whole of building area	
	Warden Lower West	Staff Member #2	West Part of building (*define limits)	
	Warden Lower East	Staff Member #2	East Part of building (*define limits)	
	Warden Upper West	Clerical Staff member #2	West Part of building (*define limits)	
	Warden Upper East	Clerical Staff member #2	East Part of building (*define limits)	

Building	Role	Person Responsible	Area of responsibility	Contact Number
Other	Area Warden	Staff Member #1	Whole of building area	
	Warden Lower West	Staff Member #2	West Part of building (*define limits)	
	Warden Lower East	Staff Member #2	East Part of building (*define limits)	
	Warden Upper West	Clerical Staff member #2	West Part of building (*define limits)	
	Warden Upper East	Clerical Staff member #2	East Part of building (*define limits)	

Building	Role	Person Responsible	Area of responsibility	Contact Number
Other	Area Warden	Staff Member #1	Whole of building area	
	Warden Lower West	Staff Member #2	West Part of building (*define limits)	
	Warden Lower East	Staff Member #2	East Part of building (*define limits)	
	Warden Upper West	Clerical Staff member #2	West Part of building (*define limits)	
	Warden Upper East	Clerical Staff member #2	East Part of building (*define limits)	

4.0 Bushfire Awareness

The scale of response will be determined by the available information from any of numerous sources such as:

- Emergency Services personnel,
- DFES website (<http://www.dfes.wa.gov.au/alerts/Pages/default.aspx>)
- DFES emergency information telephone: 13 3337
- Local knowledge (staff, students, visitors, parents, etc.).

Actions to be taken will depend on a number of factors including, but not limited to;

- Scale of bushfire event,
- Occupancy of school,
- Mobility of persons on the school grounds,
- Available refuge areas, and
- Transportation options.

4.1 Bushfire Awareness

The Department of Fire and Emergency Services (DFES) uses Fire Danger Rating (FDR) to provide advice about the level of bushfire threat on a particular day. When the rating is high, the threat of a bushfire increases.

When the FDR is Extreme or Catastrophic for your area it means any fires that start are likely to be so fierce that even a well prepared, well-constructed and actively defended building may not survive a fire.



Should the FDR be Severe or greater, nominated school staff are to monitor the DFES Alerts & Warnings website (www.dfes.wa.gov.au/alerts/Pages/default) for notification of any bushfires within the local area or within other areas likely to impact on the property.

Staff, local DFES officers, residents or other persons may notify the property management or residents that there is a bushfire within the local or greater area likely to impact on the school, prior to any DFES warnings being issued.

Upon notification of a bushfire with the potential to impact the school, all staff are to be notified by the Chief Warden.

4.2 DFES Warning System

During a bushfire, emergency services will provide as much information as possible through a variety of channels.

Community Alerts

DFES issues Community Alerts for bushfires that threaten lives and property.

The alert level changes to reflect the increasing risk to your life and the decreasing amount of time you have until the fire arrives.

DFES issues the following bushfires warnings:

Advice

A fire has started but there is no immediate danger, this is general information to keep you informed and up to date with developments.

Watch and Act

A fire is approaching and conditions are changing, you need to leave or prepare to actively defend to protect you and your family.

Emergency Warning

You are in danger and you need to take immediate action to survive as you will be impacted by fire. An emergency warning may be supported with a siren sound called the Standard Emergency Warning Signal (SEWS).

All Clear

The danger has passed and the fire is under control, but you need to remain vigilant in case the situation changes. It

BUSHFIRE WARNINGS: WHAT SHOULD YOU DO?		
ALERT LEVEL	WHEN WILL IT BE ISSUED?	WHAT SHOULD YOU DO?
ADVICE Be aware and keep up to date Based on 11am and 4pm updates the situation changes	<ul style="list-style-type: none"> When a fire has started but there is no immediate danger There is no known threat to lives and homes The fire is likely to be small and may be causing smoke near homes Firefighters will be able to control the fire 	You need to be aware <ul style="list-style-type: none"> Stay alert and monitor your surroundings by watching for signs of a bushfire, especially smoke and flames Check the Fire Danger Rating for your area Close all doors and windows Turn off evaporative air conditioners but leave water running through the system if possible Read through your bushfire survival plan. If you do not have one decide what you will do if the situation gets worse
WATCH AND ACT Put your preparations into action – do not wait and see Repeat every two hours unless the situation changes	<ul style="list-style-type: none"> When a fire is approaching and conditions are changing There is a possible threat to lives and homes The fire will be out of control. There may be smoke and embers around your home and roads Firefighters will be working with machines to put in containment lines to stop the fire spreading 	You need to leave or get ready to defend <ul style="list-style-type: none"> Put your bushfire survival plan into action If you have decided to leave for a safer place, leave now and take your survival kit with you Leave well before roads are closed and full of smoke If you are not prepared for a bushfire the safest place is to be away from the fire If you plan to stay and actively defend make final preparations now
EMERGENCY WARNING Take immediate action to survive – you will be impacted by fire Follow emergency instructions the authorities give you	<ul style="list-style-type: none"> When there is immediate danger and the fire will impact your home There is a threat to lives and homes The fire will be out of control and moving very fast. This is the highest level of warning Firefighters will find it difficult to control the fire and it will take significant firefighting resources and a change in conditions to bring it under control A siren sound called the Standard Emergency Warning Signal (SEWS) may be used to get your attention on radio and television 	You need to act immediately to survive <ul style="list-style-type: none"> If the way is clear leave immediately for your safer place and take your survival kit with you If you have not prepared your home, it is too late to do it now. Your safest option is to leave for a safer place, if the way is clear Do not relocate at the last minute in a vehicle or on foot as this is deadly. Leave immediately if the way is clear If you are unable to leave you need to get ready to hunker down in your home and actively defend it
ALL CLEAR Take care to avoid any dangers and keep up to date Repeat when the threat has passed	<ul style="list-style-type: none"> When the danger has passed and the fire is under control Firefighters will be working to put the last bits of the fire out and make the area safe It may still not be safe to return home. Emergency services will advise when you can go home 	You need to be careful <ul style="list-style-type: none"> Remain vigilant in case the situation changes When driving in the fire area you should take extreme caution and drive slowly Dangers like smoke, fallen trees and downed power lines may be on roads and emergency services will still be working in the area

Figure 4A: DFES Warning System (Source: DFES website)

5.0 Emergency Actions

The following provides guidance on actions to be taken when a bushfire impacts the school. Whilst the actions are listed in a chronological order; the actions may be moved up/down/disregarded as the priorities dictate.

Shelter-in-place is the preferred action for Mother Theresa Catholic College due to the limited bushfire impact potential.

Action	Person Responsible	Actioned
Call 000 (Fire Brigade) and advise of fire affecting school	Any staff member	
Notify Chief Warden of bushfire	Any staff member	
Notify all staff, students and visitors to move to nominated building if time does not permit, move to closest building.	Chief Warden or delegate	
Move all personnel indoors (if time permits, relocate to the Admin or Library/Science buildings)	Wardens/Supervising staff	
Turn off air conditioners, close windows and doors	Warden/Area Warden	
Account for all personnel (staff, students, visitors)	Wardens/Areas Wardens/Staff	
Report any unaccounted persons to Chief Warden	Area Warden	
Conduct search for missing persons (if not accounted for in other buildings via Chief Warden)	Warden/staff	
Monitor buildings for signs of fire (if building on fire, evacuate all people from building, to another building or to a safe location away from the buildings, notify Chief Warden)	Wardens/Area Wardens/Staff	
Make contact with on scene emergency services personnel (follow any instructions)	Chief Warden	
Ensure all people with special needs are accounted for and assembled close to an exit for ease of evacuation (if required)	Wardens/Area Wardens/Staff	
Arrange for emergency bus transport (if required)	Chief Warden or delegate	
Arrange for parents to pick up students (if time permits and on advice from emergency services personnel)	Chief Warden or delegate	
Monitor DFES warnings (www.dfes.wa.gov.au , or 13 3337)	Chief Warden or delegate	
Contact Regional Executive Director	Chief Warden or delegate	

Should a full evacuation of the school be necessary, after sheltering in place, the following actions provide guidance, assuming transport arrangements are in place to safely relocate the entire school population.

Action	Person Responsible	Actioned
Call 000 (Fire Brigade) and advise of the school evacuation to take place	Any staff member	
Liaise with onsite emergency services personnel as to the safest relocation point away from the bushfire threat	Chief Warden	
Identify the building/s most at risk	Chief Warden	
If safe to do so, relocate people at most risk to safer area	Warden/Area Warden	
Have buses park as close to the building exit as possible	Chief Warden or delegate	
Account for all personnel prior to and during evacuation to buses	Warden/Area Warden	
Evacuate personnel in an orderly manner to the awaiting buses	Warden/Area Warden	
Buses depart to nominated safer area	Bus drivers/Wardens/Areas Wardens/Staff	
On arrival, account for all personnel	Warden/Area Warden	
Report any unaccounted persons to Chief Warden	Area Warden	
Conduct search for missing persons (if not accounted for in other buildings via Chief Warden)	Warden/staff	
Maintain contact with on scene emergency services personnel (follow any instructions)	Chief Warden	
Ensure all people with special needs are accounted for and assembled close to an exit for ease of evacuation (if required)	Wardens/Area Wardens/Staff	
Arrange for parents to pick up students	Chief Warden or delegate	
Contact Regional Executive Director	Chief Warden or delegate	

6.0 References

DFES (2016). DFES website (www.dfes.wa.gov.au)

Education, Department of (2015). *The Principals Guide to Bushfire*

NSW Rural Fire Service (2004). *A Guide to Developing a Bushfire Evacuation Plan*

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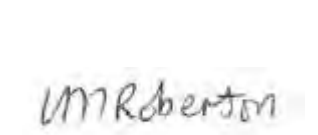
1.0 Document Details

1.1 Background Information

Project Number: 5158
Project Name: Mother Teresa Catholic College
Author: Erika Dawson, Grad Dip Bushfire Protection
Approved by: Louisa Robertson, BPAD36748 Level 1, MSc
Version: 1.1 Revised Final Report
Date of issue: 18th May 2016



Author:
Date: 18/5/2016



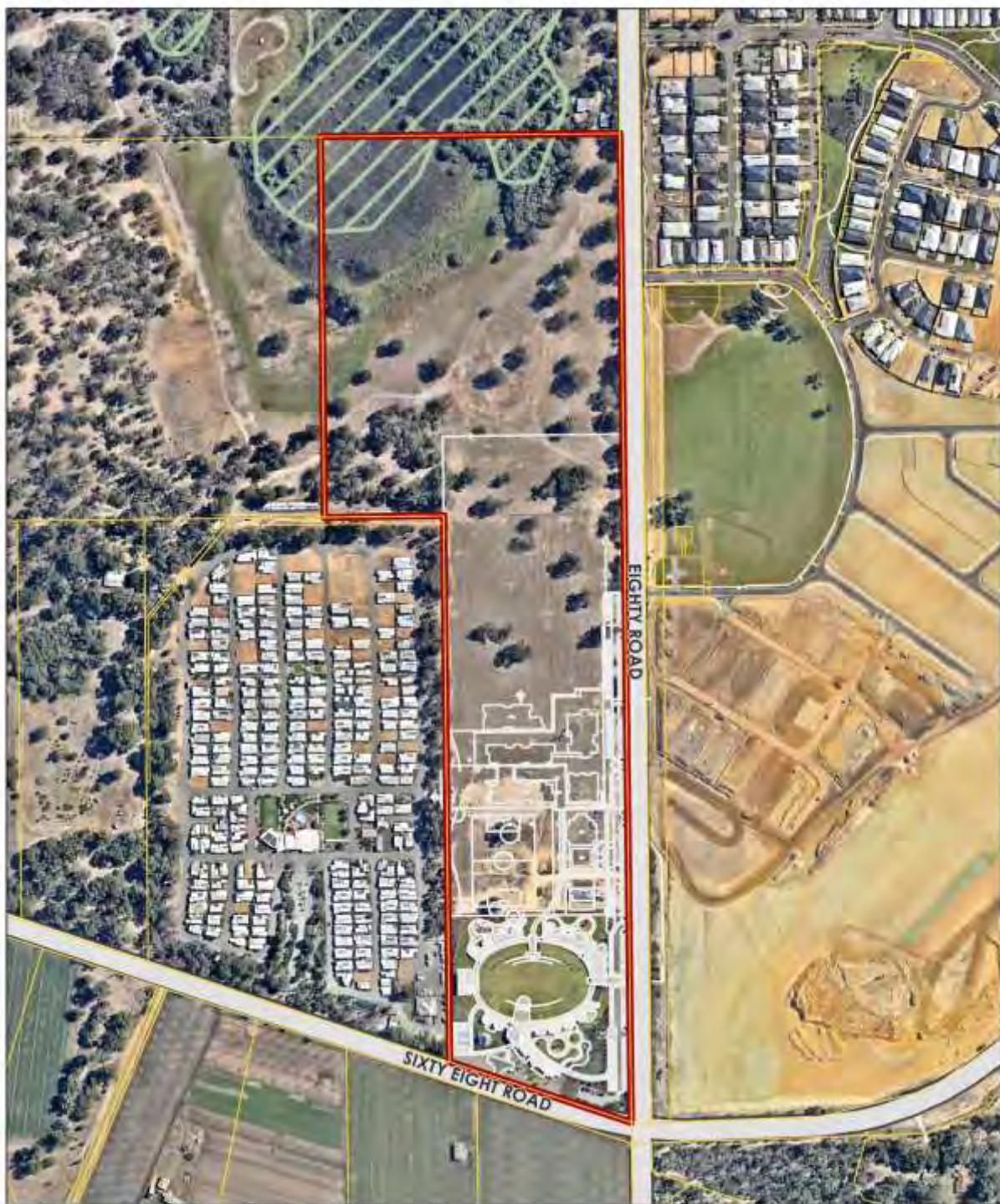
Approved by:
Date: 18/5/2016

In the signing the above, the author declares that this Bushfire Management Plan meets the requirements of State Planning Policy 3.7. This report supersedes all previous Bushfire Management Plans for the site.

1.2 Development Description

The development involves the Stage 3 development of land and construction of new buildings for Mother Teresa Catholic College (the development) at Lot 10 Eighty Rd, Baldivis (the site), within the municipality of the City of Rockingham (see Figure 1A). Specifically, the development involves the construction of three (3) new buildings, a grassed playing field, two hard courts and site landscaping (see Figure 1B).

The site is identified as Bushfire Prone through the State Bushfire Prone Maps which triggers the consideration of *State Planning Policy No.3.7 – Planning in Bushfire Prone Area (SPP3.7)* and the *Guidelines for Planning in Bushfire Prone Areas (GfPBPA)*.



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BUSHFIRE MANAGEMENT PLAN MAP **Lot 10 Eighty Road, Baldi**

Site Overview



Site Boundary

Proposed
Site Plan



Cadastre



Conservation
Category
Wetlands



Main Roads



Size: A4
Scale: 1:5,000

0 50 100 150 200 m

Ref: S158_000_01_BAL_ConfOver_20160322
Projection: GDA94 MGA50
Author: HR - RUIC | Date: 2015-04-14
Data Source: Cadastre - Landgate; Imagery -
Nearmap; Roads, Site Boundary - RUIC.

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Figure 1A: Site Overview



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1.3 Vulnerable / High Risk Land Use

The development is an educational establishment which is classified as a Vulnerable Land Use in SPP 3.7. Policy Provision 6.6, Vulnerable or high-risk land use is subsequently addressed in this report, inclusive of a draft Emergency Evacuation Plan (EEP) (Appendix 1). The Department of Education publication: *The Principal's Guide to Bushfire* (August 2015) is supplied as Appendix 2 for further reference.

The Bushfire EEP is to be completed and form part of the schools overall emergency evacuation procedures prior to occupation of the development. As the high school does not yet exist and no staff have been employed, the EEP cannot yet be completed.

1.4 Unavoidable Development

The development is not considered unavoidable development as defined in SPP 3.7.

1.5 Minor Development

The development is not considered minor development as defined in SPP 3.7.

1.6 Environmental Considerations

The north western corner of Lot 10 contains a Conservation Category and Multiple Use Wetland. The northern most extent of the proposed development (grassland management) would be located over 80m from the boundary of the Multiple Use Wetland and 280m from the Conservation Category Wetland.

An Environmental Protection Policy Lake is located in the north western corner of Lot 10. The development is located over 400m from the lake.

The proponent has not identified any other relevant environmental considerations (wetlands, foreshores, Bush Forever sites, remnant vegetation, threatened species, ecological communities, nature reserves or coastal reserves) within the site or being affected by the development.

1.7 Risk Assessment

Risk assessment was completed in accordance with ISO31000:2009 (Standards Australia, 2009) and COAG's National Inquiry on Bushfire Mitigation and Management (Ellis, Kanowski & Whelan, 2004) (Table 1A). The risk assessment demonstrates that after application of the risk management strategies incorporated into the design of the development, the residual bushfire related risk post subdivision is significantly reduced compared to the current state.

Table 1A: Risk assessment of development

Risk Number	Risk Statement	Impact Category	Pre-development Risk Level	Prevention Controls (Planning Specific)	Post-development Residual Risk Level
1.	There is the potential that a bushfire will impact the proposed development which in turn will cause death or injury to persons.	People	Moderate	<ul style="list-style-type: none"> Enhanced construction in accordance with AS 3959, to the degree necessary, to provide shelter during passage of the fire front. Multiple egress routes for residents 	Low

Risk Number	Risk Statement	Impact Category	Pre-development Risk Level	Prevention Controls (Planning Specific)	Post-development Residual Risk Level
				to evacuate to areas greater than 100m from the vegetation interface. • Reticulated firefighting water supply • Emergency Evacuation Plan developed for the site	
2.	There is the potential that a bushfire will impact the proposed development, which in turn will cause destruction of or damage to the proposed habitable buildings.	Infrastructure	Moderate	• Enhanced construction in accordance with AS 3959, to the degree necessary to provide ember protection. • Building setbacks ensure maximum BAL-12.5 rating. • Reticulated firefighting water supply	Low
3.	There is the potential that a bushfire will impact the proposed development, which in turn will cause destruction of or damage to environmental assets.	Environment	Low	• Development does not include the removal of any environmentally significant vegetation.	Low

1.8 Bushfire Design Criteria:

All bushfire related design criteria are addressed in Section 3 of this report. The Bushfire Management Plan Strategies Map is illustrated in Figure 1B on page 8 of this report.

Acceptable Solutions applied: A1.1, A2.1, A2.2, A3.1, A3.5, A3.8, A4.1

Acceptable Solutions not applicable: A3.2, A3.3, A3.4, A3.6, A3.7, A4.2, A4.3

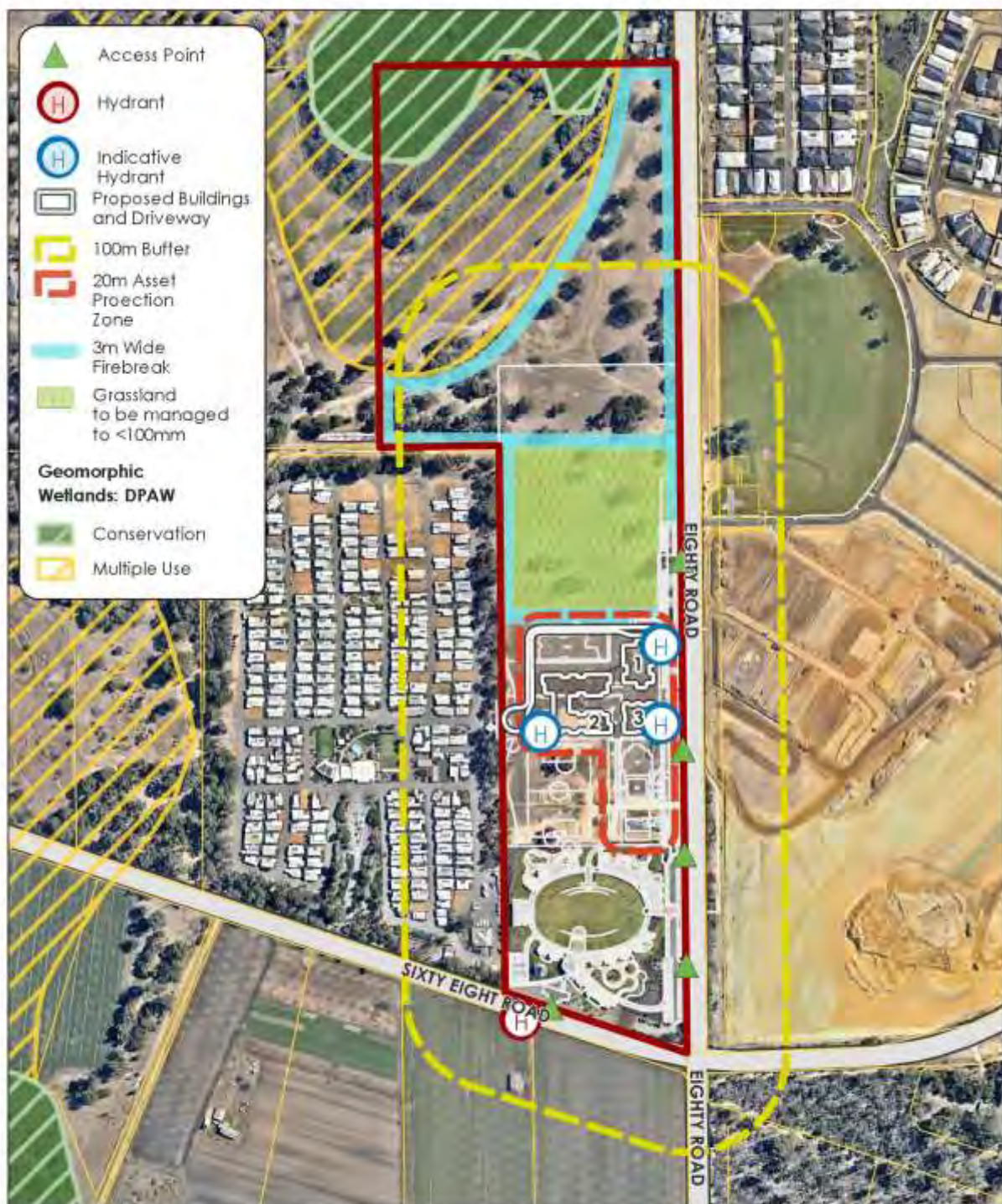
Non-compliances: None

Performance Based Solution Summary: None

1.9 Specific Bushfire Planning requirements:

Required bushfire planning design requirements are summarised as:

- (i) *Future habitable buildings to be constructed in accordance with AS 3959, to the degree necessary;*
- (ii) *Private driveway with associated turnaround area required to access buildings in the west of development;*
- (iii) *Installation and maintenance of an APZ in accordance with Section 4.2 and Figure 1C;*
- (iv) *Installation and maintenance of fire breaks in accordance with Section 4.3 and Figure 1C; and*
- (v) *Grassland north of the development to be managed to <100mm at all times as shown in Figure 1C.*



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BUSHFIRE MANAGEMENT PLAN MAP Lot 10 Eighty Road, Baldvis

Bushfire Management Strategies

- Site Boundary
- Cadastre
- Main Roads



Size: A4
Scale: 1:5,000

0 50 100 150 200 m

Ref: 5158_004_01_JUN06_001 60322
Projection: GDA94 MGA50
Author: RUIC - 1 Date: 2016-04-06
Data Source: Cadastre - Landgate; Imagery -
Nearmap; Roads, Site Boundary - RUIC.

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Figure 1C: Bushfire Management Strategies Map

2.0 Spatial consideration of bushfire threat

2.1 Bushfire Fuels and Potential Bushfire Impact

The location and extent of AS 3959 vegetation structures, including low fuel areas, within 100m of the site are mapped in Figure 2A and illustrated in the associated plates. Bushfire fuel loads are identified as consistent with AS 3959 Table B2 for radiant heat flux modelling purposes. All bushfire structures and fuel loads are assessed in their mature states (including revegetation and rehabilitation areas) unless otherwise identified.

In accordance with SPP 3.7, a BAL Contour Map is utilised to determine potential bushfire impact after the development is completed. Potential bushfire impact analysis was undertaken in accordance with AS 3959 Methodology 1 to determine the potential worst case scenario radiant heat impact on each of the buildings in the proposed development in the event of bushfire within vegetation classifiable in accordance with AS 3959.

The BAL Contour Map (Figure 2A) identifies that through the implementation of the required Asset Protection Zone and other bushfire management strategies shown in Figure 1C, the maximum potential radiant heat impact for any building in the proposed development is BAL-12.5. This satisfies GPBPA Element 1: Location, A1.1.

Table 2A: Classification and effective slope of vegetation plots identified in accordance with AS 3959-2009 (Figure 2A)

Veg. Plot	Veg. Classification	Effective Slope	Exclusion (AS 3959)
1	Low Threat (cultivated gardens)	N/A	c2.2.3.2 (f)
2	Class G Grassland	Flat	N/A
3	Class B Woodland	Upslope	N/A
4	Class B Woodland	Downslope >0 to 5°	N/A
5	Low Threat (Development)	N/A	c2.2.3.2 (e)&(f)
6	Low Threat (Nature Strip)	N/A	c2.2.3.2 (f)
7	Class B Woodland	Flat	N/A
8	Class B Woodland	Flat	N/A
9	Open Woodland (assessed as Class G Grassland)	Downslope >0 to 5°	N/A
10	Low Threat (Urban Development)	N/A	c2.2.3.2 (e)
11	Low Threat (Urban Development)	N/A	c2.2.3.2 (e)

Table 2B: Maximum BAL rating that applies to each habitable building within the development

Building (Fig. 2A)	Vegetation Classification	Effective Slope	Separation (m)	BAL rating
1	Class B Woodland	Flat	29 to less than 100m	BAL-12.5
2	Class B Woodland	Flat	29 to less than 100m	BAL-12.5
3	Class B Woodland	Flat	29 to less than 100m	BAL-12.5



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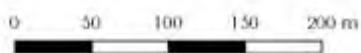
BUSHFIRE MANAGEMENT PLAN MAP Lot 10 Eighty Road, Baldvis

BAL Contours

- Site Boundary
- Cadastre
- Main Roads



Size: A4
Scale: 1:4,000



Ref: 1158_002_of_BAL_Contours_20160322
Projection: GDA94 MGA50
Author: HR - RUIC J Date: 2016-05-17
Data Source: Cadastre - Landgate; Imagery -
Nearmap; Roads, Site Boundary - RUIC

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Figure 2A: BAL Contour Map



Plate i: Plot 1 Low Threat Cultivated Gardens



Plate ii: Plot 1 Low Threat Cultivated Gardens



Plate iii: Plot 2 Class G Grassland (along road reserve)



Plate iv: Plot 3 Class B Woodland



Plate v: Plot 3 Class B Woodland



Plate vi: Plot 4 Class B Woodland



Plate vii: Plot 4 Class B Woodland



Plate viii: Plot 5 Low Threat Developed



Plate vii: Plot 7 Class B Woodland



Plate viii: Plot 7 Class B Woodland



Plate ix: Plot 8 Class B Woodland



Plate x: Plot 8 Class B Woodland



*Plate xi: Plot 9 Class B Open Woodland
(assessed as Class G Grassland)*



*Plate xii: Plot 9 Class B Open Woodland
(assessed as Class G Grassland)*

3.0 Proposal compliance and justification

3.1 Compliance with the objectives of SPP 3.7

Objective 1: Avoid increasing the threat of bushfire to people, property, and infrastructure. The preservation of life and management of bushfire impact is paramount.

Objective 1 is satisfied through the compliance of the proposed development with all required Policy Principles as detailed in Table 3A and all GPBPA Performance Principles as detailed in section 4 of this report.

Objective 2: Reduce vulnerability of bushfire through the identification and assessment of bushfire hazards in decision-making at all of stages of the planning and development process.

Objective 2 is satisfied through the appropriate identification and assessment of all relevant bushfire hazards as detailed in section 2 of this report, specifically the BAL Contour Mapping.

Objective 3: Ensure that planning proposals and development applications take into account bushfire protection requirements and include specified bushfire protection measures where land has or will have a moderate or extreme bushfire hazard level, and or where a rating higher than Bushfire Attack Level (BAL)- LOW applies.

Objective 3 is satisfied through the compliance of the proposed development with all required Policy Principles as detailed in Table 3A and all GPBPA Performance Principles as detailed in section 4 of this report.

Objective 4: Achieve a responsible approach between bushfire management measures and landscape amenity and biodiversity conservation values, with consideration of the potential impacts of climate change.

Objective 4 is satisfied through the appropriate consideration of all biodiversity and environmental assets as detailed in section 1 of this report in the development of bushfire related risk mitigation strategies detailed in section 4 of this report.

3.2 SPP 3.7 Policy Measures applicable to the proposal

Table 3A: Compliance of the proposed development with the Policy Measures of SPP 3.7.

Policy Measure	Description	Compliance	
6.1	Higher order strategic planning	✓	N/A – Development is at a Development Application stage.
6.2	Application of Policy Measures	✓	Site has a BAL rating above BAL-LOW. Policy Measure 6.5 applies.
6.3	Supporting information for Strategic Planning Proposals	✓	N/A – Development is at a Development Application stage
6.4	Supporting information for Subdivision Applications	✓	N/A – Development is at a Development Application stage
6.5	Supporting information for Development Applications	✓	This BMP supports the proposed development. BAL Contour Map is provided in Section 2.1 of this report identifying all bushfire hazard issues. Compliance against GPBPA detailed in section 3.3 of this report.
6.6	Vulnerable / High Risk Land Use	✓	Section 1.3 details the nature of the Vulnerable Land Use. Specific bushfire related risk mitigation measures are provided in section 4 of this report.
6.7	Minor / Unavoidable Development in BAL-40 and BAL-FZ areas	✓	N/A
6.8	Advice of State/relevant Authorities for Emergency Services to be sought where Policy Measures are not achieved or where development includes Unavoidable, Vulnerable or High Risk Land Use	✓	Advice of relevant authorities by the relevant approval agency (typically the Local Government) as part of the approvals process (this may include advice provided by Community Emergency Services Managers).
6.9	Advice of State/relevant Authorities for Environmental Protection sought	✓	N/A – wetland extents have been identified and development does not impact on these areas.
6.10	Bushfire conditions may be imposed	✓	If required, conditions relating to bushfire may be included by the approval authority on the development approval.
6.11	Precautionary Principle	✓	The precautionary principle has been adopted throughout this report. The relevant decision maker is encouraged to adopt an informed precautionary approach in accordance with SPP 3.7

3.3 Guidelines for Planning in Bushfire Prone Areas Compliance

Table 3B: Compliance with Guidelines for Planning in Bushfire Prone Areas (GPBPA)

Element	BMP section	Acceptable Solution (A) or Performance Based (PB) Solution	Compliance	Notes
1. Location	4.1	A1.1 Development location	✓	Maximum BAL-12.5 rating
2. Siting and Design of Development	4.2	A2.1 Asset Protection Zone (APZ)	✓	20m APZ for all buildings with a BAL rating
		A2.2 Hazard Separation Zone (HSZ)	✓	AS3959 construction standards to be applied as necessary.
3. Vehicular Access	4.3	A3.1 Two access routes	✓	Refer to Figure 4A
		A3.2 Public road	N/A	N/A - Public Roads are not part of this development
		A3.3 Cul-de-sac	N/A	N/A – no cul-de-sacs as part of this development
		A3.4 Battle-axe	N/A	N/A – no battle-axes as part of this development
		A3.5 Private driveways longer than 50m	✓	Private driveway to be installed for buildings to west. Refer to Figure 1C.
		A3.6 Emergency access way	N/A	N/A
		A3.7 Fire service access routes	N/A	N/A
		A3.8 Firebreak width	✓	3m wide by 4m high firebreaks required for balance of northern portion of lot. See Figure 1C.
4. Water	4.4	A4.1 Reticulated areas	✓	External and internal fire hydrants available. See Figure 1C.
		A4.2 Non-reticulated areas	N/A	Reticulated water available
		A4.3 Individual lots within non-reticulated areas	N/A	Reticulated water available

3.4 Areas of non-compliance with other relevant documents

This report has also been developed in order to comply with the requirements of all referenced and applicable documents. No non-compliances have been identified.

4.0 Bushfire Risk Management Measures

The bush fire risk mitigation strategies detailed in this report are designed to comply with the Bushfire Protection Criteria detailed in Guidelines for Planning in Bushfire Prone Areas (GPBPA) Appendix 4 (2015).

- i. The notation (P3) refers to Performance Principle 3 of GPBPA Appendix 4. Where a Performance Based Solution is offered detailed justification is provided in Appendix 1 of this report.
- ii. The notation (A3.1) refers to Acceptable Solution 3.1 of GPBPA Appendix 4.
- iii. The notation (E3.1) refers to Explanatory Note 3.1 of GPBPA Appendix 4.
- iv. Where discrepancy occurs between State and Local bushfire planning provisions the higher standard of mitigation has been selected.

4.1 Element 1 - Location

Intent: To ensure that the subdivision, development or land use is located in areas with the least possible risk of bushfire, to facilitate the protection of people, property and infrastructure.

Performance Principle (P1): The subdivision, development or land use is located in an area where the bushfire hazard assessment is or will, on completion, be moderate or low, or a BAL-29 or below, and the risk can be managed. For minor or unavoidable development in areas where BAL-40 or BAL-FZ applies, demonstrating that the risk can be managed to the satisfaction of the Department of Fire and Emergency Services and the decision-maker.

Acceptable Solution A1.1 Development location

The development application is located in an area that on completion will be subject to a BAL-29 or below for all habitable buildings.

The highest BAL rating applicable to any new habitable building is BAL-12.5.

4.2 Element 2 - Siting and design of Development

Intent: To ensure that the siting of development minimises the level of bushfire impact.

Performance Principle (P2): The siting and design of the strategic planning proposal, subdivision or development application, including roads, paths and landscaping, is appropriate to the level of bushfire threat that applies to the site. That it minimises the bushfire risk to people, property and infrastructure, including compliance with AS 3959 if appropriate.

Acceptable Solution A2.1 Asset protection zone (APZ)

The asset protection zone (APZ) is a low fuel area immediately surrounding a building and is designed to minimise the likelihood of flame contact with buildings.

Features such as driveways, footpaths, roads, vegetable patches, lawn or landscaped garden (including deciduous trees and fire resistant plant species) may form part of asset protection zones. Areas of vegetation deemed Low Threat Vegetation and managed in a reduced fuel state

inclusive of Public Open Space and nature strips may form part of a buildings defendable space. Isolated shrubs and trees may be retained within asset protection zones.

a) Standard:

- i. Width: 20 metres measured from any external wall of future buildings subject to a BAL rating to ensure the potential radiant heat impact of a fire does not exceed 29kW/m²;
- ii. Location: within the boundaries of the lot on which the building is situated, as shown on Figure 1C;
- iii. Fine fuel load: reduced to and maintained at 2 tonnes per hectare and maintained in accordance with AS 3959-2009 s2.2.3.2 (f) stated here as:
“Including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks. NOTE: Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm.”;
- iv. Trees (crowns) are a minimum distance of ten metres apart. A small group of trees within close proximity to one another may be treated as one crown provided the combined crowns do not exceed the area of a large or mature crown size for that species;
- v. No tall shrubs or trees located within 2 metres of a building;
- vi. No tree crowns overhanging the building;
- vii. Fences and sheds within APZ are constructed using non-combustible materials (e.g. iron, brick, limestone, metal post and wire); and
- viii. Sheds within the APZ should not contain flammable materials.

b) Specific considerations

- i. Prior to occupation of the proposed development.
- ii. It is the responsibility of the developer to ensure the APZ standard is established.
- iii. It is the responsibility of the school management to ensure the APZ standard continues to be achieved post completion of the construction.
- iv. Grassland within the balance of the lot to the north of the development are is to be maintained at <10 cm, as indicated in Figure 1C.

Acceptable Solution A2.2 Hazard separation zone (HSZ)

Hazard separation zones assist in reducing fire intensity when a bushfire impacts on buildings within a subdivision. Separation may be necessary on the perimeter of a subdivision but may also be needed where bushfire hazards exist within a subdivision. This separation reduces the overall vulnerability of a subdivision and related development and assists with fire control operations. A HSZ may not be required if the proposed construction meets the standard appropriate to the BAL for that location, and does not exceed BAL-29.

All new habitable buildings within 100m of bushfire prone vegetation will be constructed in accordance with AS 3959 to facilitate the reduced separation distance, therefore complying with A2.2.

4.3 Element 3 - Vehicular Access

Intent: To ensure that the vehicular access serving a subdivision/ development is safe in the event of a bush fire occurring.

Performance Principle (P3): The internal layout, design and construction of public and private vehicular access in the subdivision/development allows emergency and other vehicles to move through it easily and safely at all times.

The following Acceptable Solutions are not applicable to this development:

- A3.2 Public Roads (no new public roads as part of this development)
- A3.3 Cul-de-sac (no cul-de-sacs as part of this development)
- A3.4 Battle-axe (No battle-axe legs as part of this development)
- A3.6 Emergency Access Ways (not required as part of this development)
- A3.7 Fire Service Access Routes (not required as part of this development)



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BUSHFIRE MANAGEMENT PLAN MAP **Lot 10 Eighty Road, Baldvis**

Access Map

- Direction
- Roads
- Site Boundary



Size: A4
Scale: 1:25,000

File: 5158_p03_01_AccessMap_2016/022
Projection: GDA94 MGA50
Author: HR - RUIC - J. Date: 2016-03-23
Data Source: Cadastre - Landgate; Imagery -
Nearmap; Roads, Site boundary - RUIC

Disclaimer: Although the data within this map is considered accurate at the time of creation, RUIC Fire does not guarantee, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any data used within this map.

Figure 4A: Site Access

Acceptable Solution A3.1 Two access routes

As detailed in Figure 4A, more than two different vehicular access routes are provided, both of which connect to the public road network, provide safe access and egress to two different destinations and are available to all residents/the public at all times and under all weather conditions.

Acceptable Solution A3.5 Private driveway longer than 50 metres

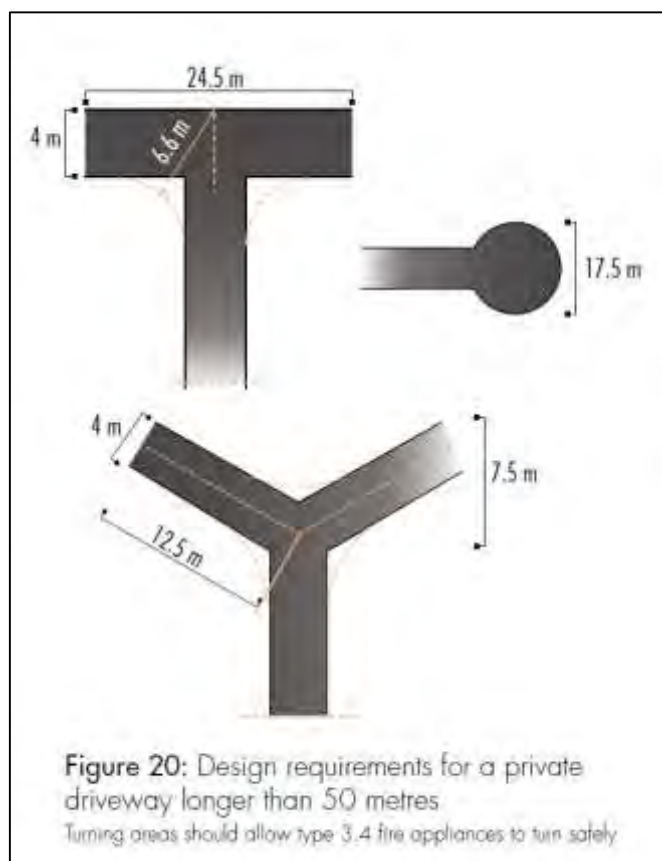
All habitable buildings located more than 50 metres from a public road are required to be serviced by a private driveway meeting the specifications of Acceptable Solution A3.5.

a) Standard:

- i. As per table 4A and shown on Figure 1C;
- i. Required where a habitable building site is more than 50 metres from a public road;
- ii. Passing bays: every 200 metres with a minimum length of 20 metres and a minimum width of two metres (i.e. the combined width of the passing bay and constructed private driveway to be a minimum 6 metres);
- iii. Turn-around areas designed to accommodate 3.4 fire appliances and to enable them to turn around safely every 500 metres (i.e. kerb to kerb 17.5 metres) and within 50 metres of a habitable building;
- iv. Any bridges or culverts are able to support a minimum weight capacity of 15 tonnes; and
- v. All-weather surface (i.e. compacted gravel, limestone or sealed).

b) Specific Considerations

- i. Construction is required prior to the occupation of the habitable building(s) serviced by the private driveway.
- ii. It is the responsibility of developer to ensure private driveways meet the required construction standards
- iii. It is the responsibility of the individual land owner to ensure private driveways continue to meet the required construction standards.



Source: Guidelines for Planning in Bushfire Prone Areas, Appendix 4

Acceptable Solution A3.8 Firebreak width

A 3 m wide by 4 m high firebreak will border the internal boundaries of the balance of the lot (Figure 1C). Firebreaks shall have a clear vertical axis, will not have locked gates and will comply with the City of Rockingham annual Fire Control Notice.

Table 4A: Vehicular access technical requirements

Technical Requirement	Public road	Cul-de-sac	Private driveway & turnaround	Emergency access way	Fire service access routes
	N/A	N/A		N/A	N/A
Minimum trafficable surface (m)	6	6	4	6	6
Horizontal clearance (m)	6	6	6	6	6
Vertical clearance (m)	4	N/A	4.5	4.5	4.5
Maximum grade over <50m	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius (m)	8.5	8.5	8.5	8.5	8.5

4.4 Element 4 – Water

Intent: To ensure that water is available to the subdivision, development or land use to enable people, property and infrastructure to be defended from bushfire.

Performance Principle (P4): The subdivision, development or land use is provided with a permanent and secure water supply that is sufficient for firefighting purposes.

Acceptable Solution A4.1 Reticulated areas

The site is serviced by reticulated scheme water and firefighting hydrants, satisfying Acceptable Solution A4.1.

Existing fire hydrants are located along Eighty Rd as illustrated in Figure 1C. New Internal fire hydrants will be installed as a requirement for structural firefighting response as shown in Figure 1C.

5.0 Implementation and Enforcement

Table 5A summarises the responsible party for each mitigation strategy and the time frame in which it must be completed.

Table 5A: Developer Schedule of Works

Strategy	Implementation		Maintenance	
	Responsible	Time Frame	Responsible	Time Frame
Amendments to BMP	Any amendments to this BMP shall be approved by the relevant Jurisdiction Having Authority.			
Asset Protection Zone	Developer	Prior to occupation of the new development	School Management	Ongoing
Grassland on site managed to <100m (Figure 1C)	Developer	Prior to occupation of the new development	School Management	Ongoing
Hazard Separation Zone	NA	NA	NA	NA
Construction to AS 3959	Developer	On construction of buildings	School Management	Ongoing
Cul-de-sacs	NA	NA	NA	NA
Battle-axe	NA	NA	NA	NA
Private Driveways & Turnaround Area	Developer	Prior to occupation of the new development	School Management	Ongoing
Emergency Access Ways	NA	NA	NA	NA
Fire Service Access Routes	NA	NA	NA	NA
Firebreaks	Developer	Prior to occupation of the new development	Individual Land Owners	Ongoing
Firefighting Water (hydrants)	Developer	Prior to occupation of the new development	Water Corporation	Ongoing
Firefighting Water (private tanks)	NA	NA	NA	NA
Firefighting Services & Response	DFES and Local Government	Ongoing	DFES and Local Government	Ongoing

Strategy	Implementation		Maintenance	
	Responsible	Time Frame	Responsible	Time Frame
Fuel Load Reduction and Fire Break Notice	Local Government	Annually	Local Government	Annually
Inspection and Issue of Works Orders or Fines.	Local Government	Ongoing	Local Government	Ongoing

6.0 References

- City of Rockingham. (2015). Fire Control Notice
- City of Rockingham. (2015). Town Planning Scheme No. 2
- Department of Education (2015). The Principal's Guide to Bushfire
- Ellis, S., Kanowski, P., & Whelan, R. (2004). National Inquiry on Bushfire Mitigation and Management. Council of Australian Governments.
- Keelty, M. J. (2011). A Shared Responsibility: The Report of the Perth Hills Bushfire February 2011 Review. Government of Western Australia, Perth.
- RUIC Fire. (2014.) Bushfire Attack Level Calculator v7.f.
- Standards Australia. (2009). AS 3959:2009 Construction of buildings in bushfire prone areas: SAI Global.
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- WAPC. (2015a). State Planning Policy 3.7 Planning in Bushfire Prone Areas. Western Australian Planning Commission & Department of Planning.
- WAPC. (2015b). Guidelines for Planning in Bushfire Prone Areas. Western Australian Planning Commission, Department of Planning & Department of Fire and Emergency Services.
- WAPC. (2015c). Guidelines for Planning in Bushfire Prone Areas Appendices. Western Australian Planning Commission, Department of Planning & Department of Fire and Emergency Services.
- WAPC. (2015d). Planning Bulletin 111/2015 Planning in Bushfire Prone Areas. Western Australian Planning Commission.

7.0 Appendix 1 – Draft Emergency Evacuation Plan

8.0 Appendix 2 - The Principal's Guide to Bushfire

and there is no conflict with traffic ingress/egress from the existing road network within Parkland Heights.

4. Carparking

On-site

Ensure there is sufficient on-site parking so the surrounding road network and amenity of the adjoining residential areas is not impacted.

On-street

There is a section of proposed on-street parallel parking along Eighty Road which may cause conflict with ingress/egress from Parkland Heights and those cars pulling out of the proposed parking bay location. We see a potential conflict with the proposed parallel parking bays on Eighty Road and the existing road network.

It would be preferable if all carparking associated with the proposed use could be accommodated wholly within the Catholic School site (ie on-site).

5. Pedestrian Paths and Connections

We request that pedestrian paths and connections tie in with Parkland Heights to achieve a high level of connectivity in the local area.

6. Amenity

It would be preferable if aesthetically the new buildings tied in with similar materials to the existing portion of the school.

We thank you for your consideration of the above points. Please feel free to contact me should you wish to discuss further.

Yours faithfully

Jane Charters
Project Manager
Mortons – Urban Solutions