

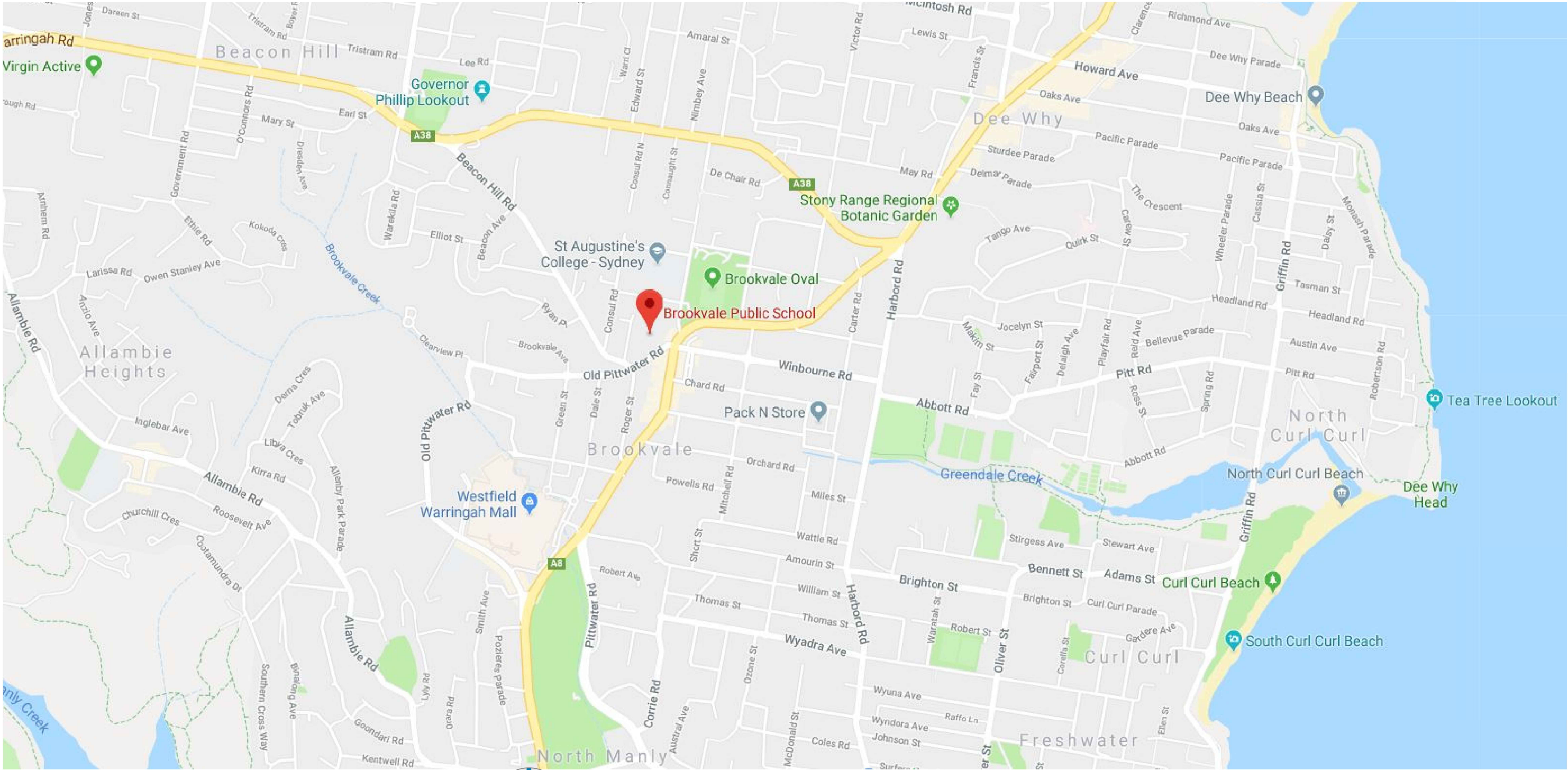
BROOKVALE PUBLIC SCHOOL

NEW HALL & REFURBISHMENT OF BLOCK B
OLD PITTWATER ROAD, BROOKVALE



ARCHITECTURAL

DA01	COVER PAGE AND LOCATION PLAN
DA02	SITE ANALYSIS PLAN
DA03	SITE PLAN
DA04	DEMOLITION PLAN
DA05	FLOOR PLAN
DA06	ROOF PLAN & FINISHES SCHEDULE
DA07	ELEVATIONS
DA08	SECTIONS
DA09	CONSTRUCTION MANAGEMENT PLAN
DA10	SHADOW DIAGRAM
DA11	OPEN LANDSCAPED AREA STUDY
DA12	HALL REUSE PLAN



LOCATION PLAN
NTS



BROOKVALE PUBLIC SCHOOL SITE AREA
NTS

NEW HALL
BROOKVALE PUBLIC SCHOOL
Old Pittwater road, Brookvale, NSW, 2100

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PUBLIC SCHOOL
AN OUTSTANDING EDUCATION FOR YOUR CHILD

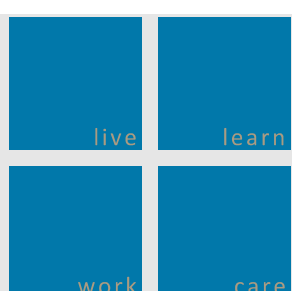


Education

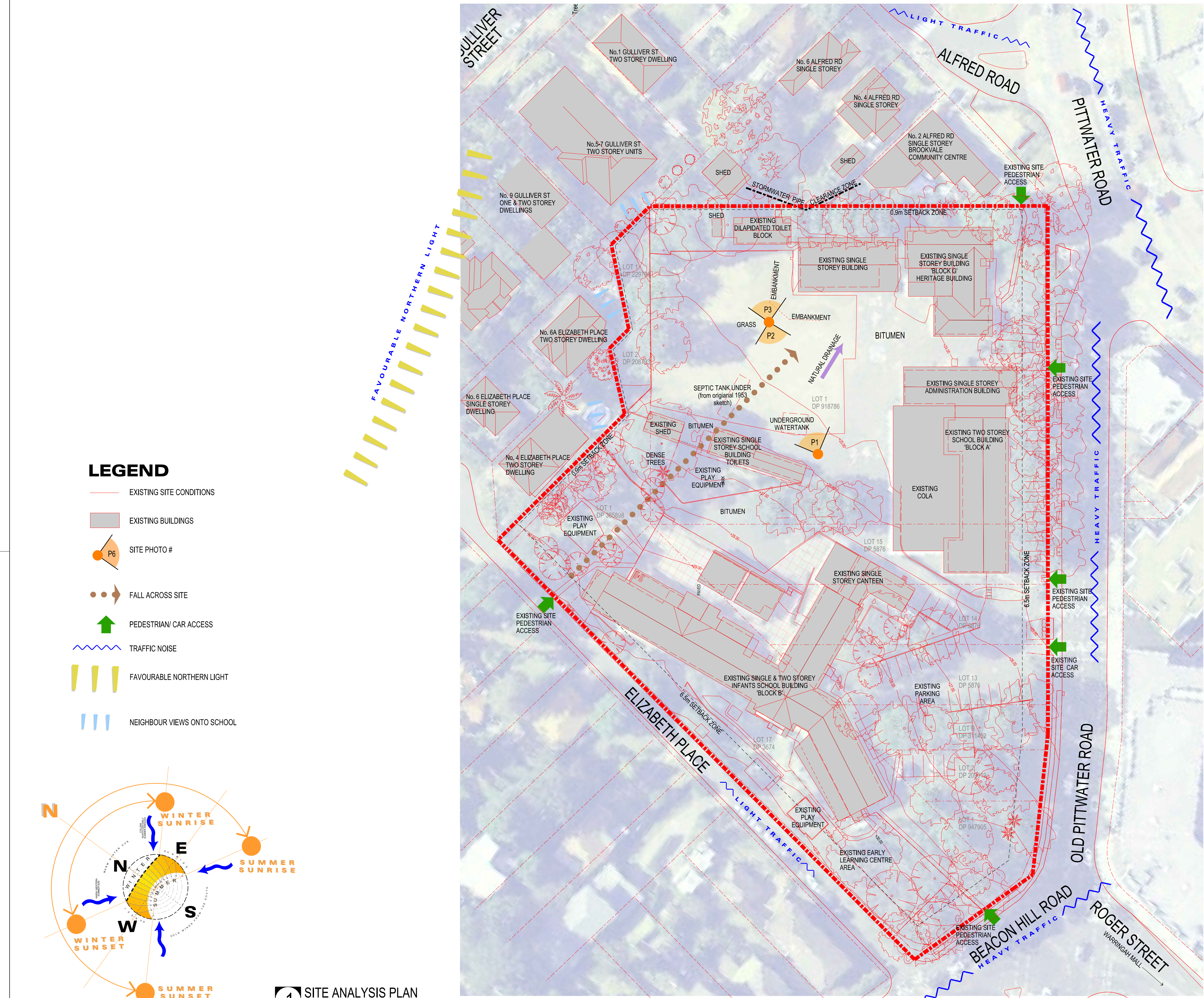
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DRAWING LIST AND
LOCATION PLAN
DA01
DATE: April 2019 Job #: 18004



SITE PHOTO - P 1



SITE PHOTO - P 2



SITE PHOTO - P 3

NEW HALL
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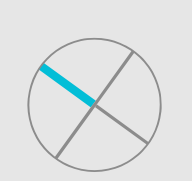
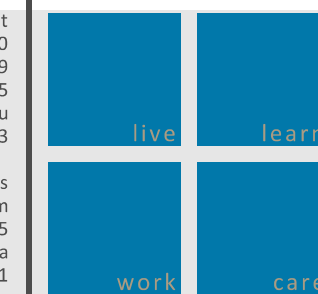
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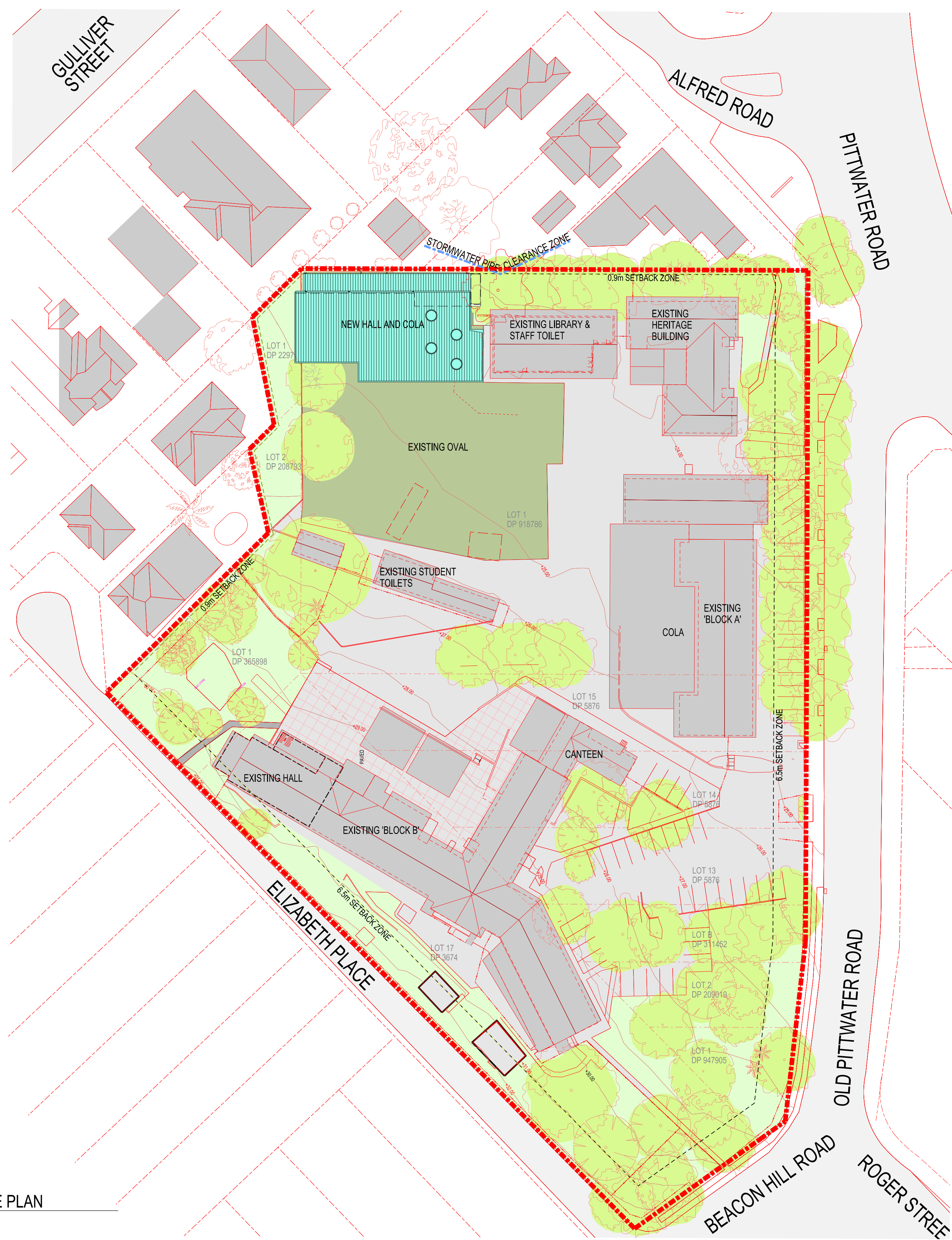


SITE ANALYSIS PLAN

DA02

DATE: April 2019 Job #: 18004

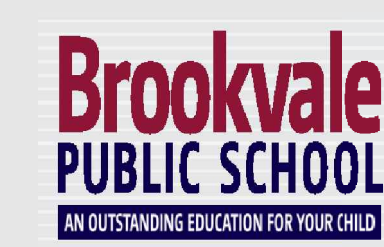
0 2 4 6 8 10 12 14 16 18 20



- LEGEND**
- EXISTING SITE CONDITIONS
 - EXISTING BUILDINGS
 - PROPOSED NEW BUILDING
 - CHANGE OF USE - SEE DA12 - HALL REUSE PLAN
 - LOT BOUNDARIES

1 SITE PLAN
1:500

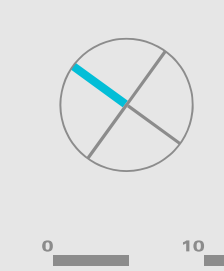
NEW HALL
BROOKVALE PUBLIC SCHOOL
Old Pittwater road, Brookvale, NSW, 2100



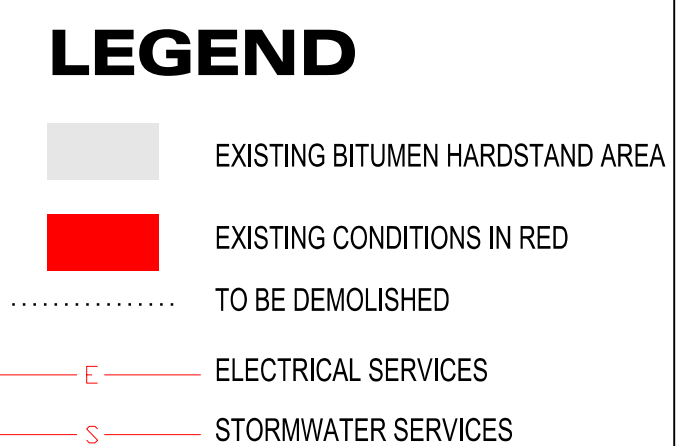
Education

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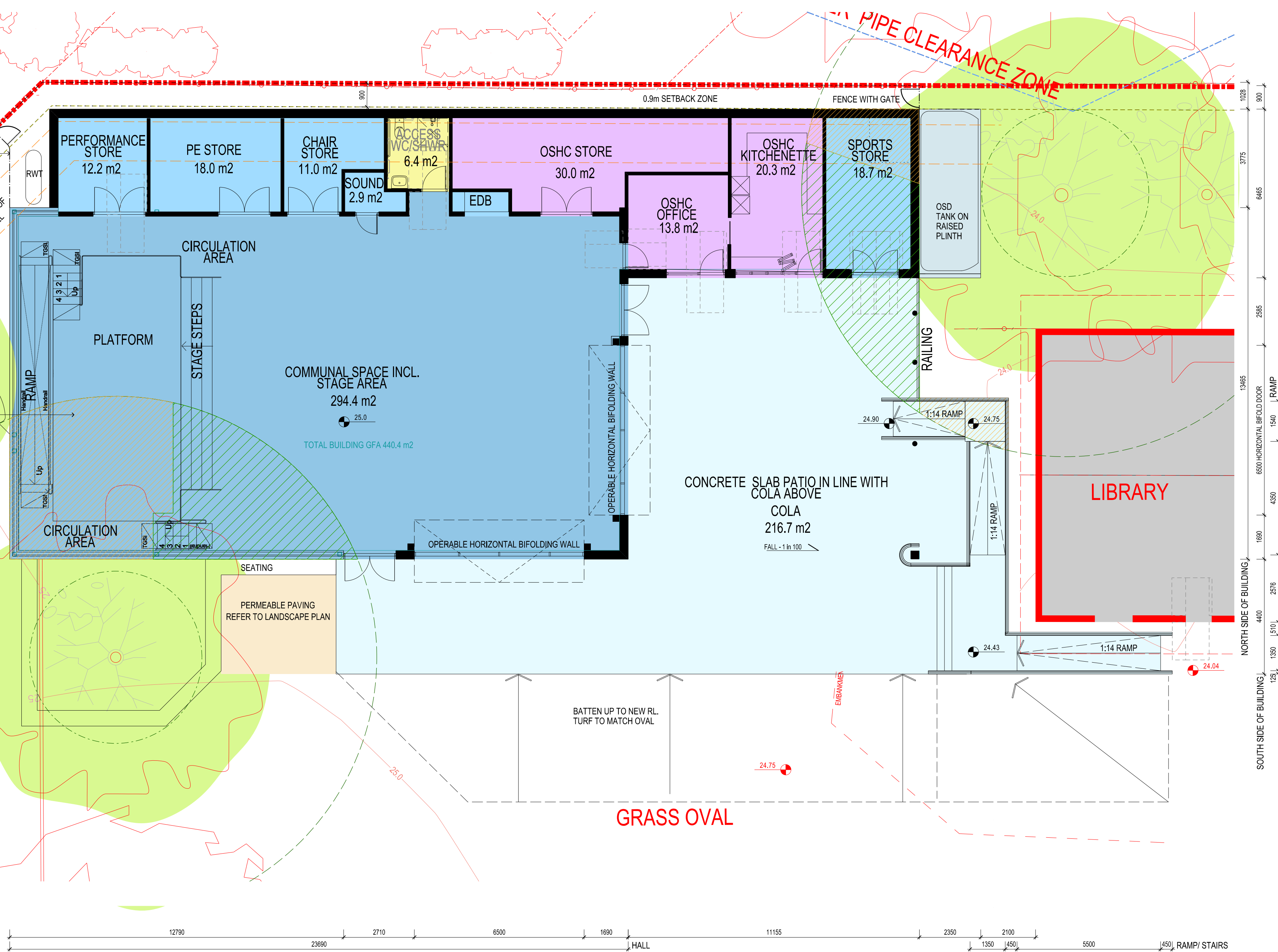
SITE PLAN
DA03
DATE: April 2019 **Job #: 18004**



1

5-7 GULLIVER STREET 2 STOREY UNITS

6A ELIZABETH PLACE TWO STOREY DWELLING



- LEGEND**
- COMMUNAL HALL
 - AUXILIARY ROOMS
 - OSHC
 - ACCESS FACILITIES
 - TREE PROTECTION ZONES
 - ROOT PROTECTION ZONES
 - 10% OF TPZ
 - TPZ AFFECTED ZONE
 - RWT RAIN WATER TANK
 - FIRE RATING ZONES
 - FENCE

1 GROUND FLOOR PLAN
1:100

NEW HALL
BROOKVALE PUBLIC SCHOOL
Old Pittwater road, Brookvale, NSW, 2100

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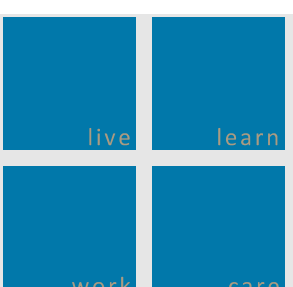


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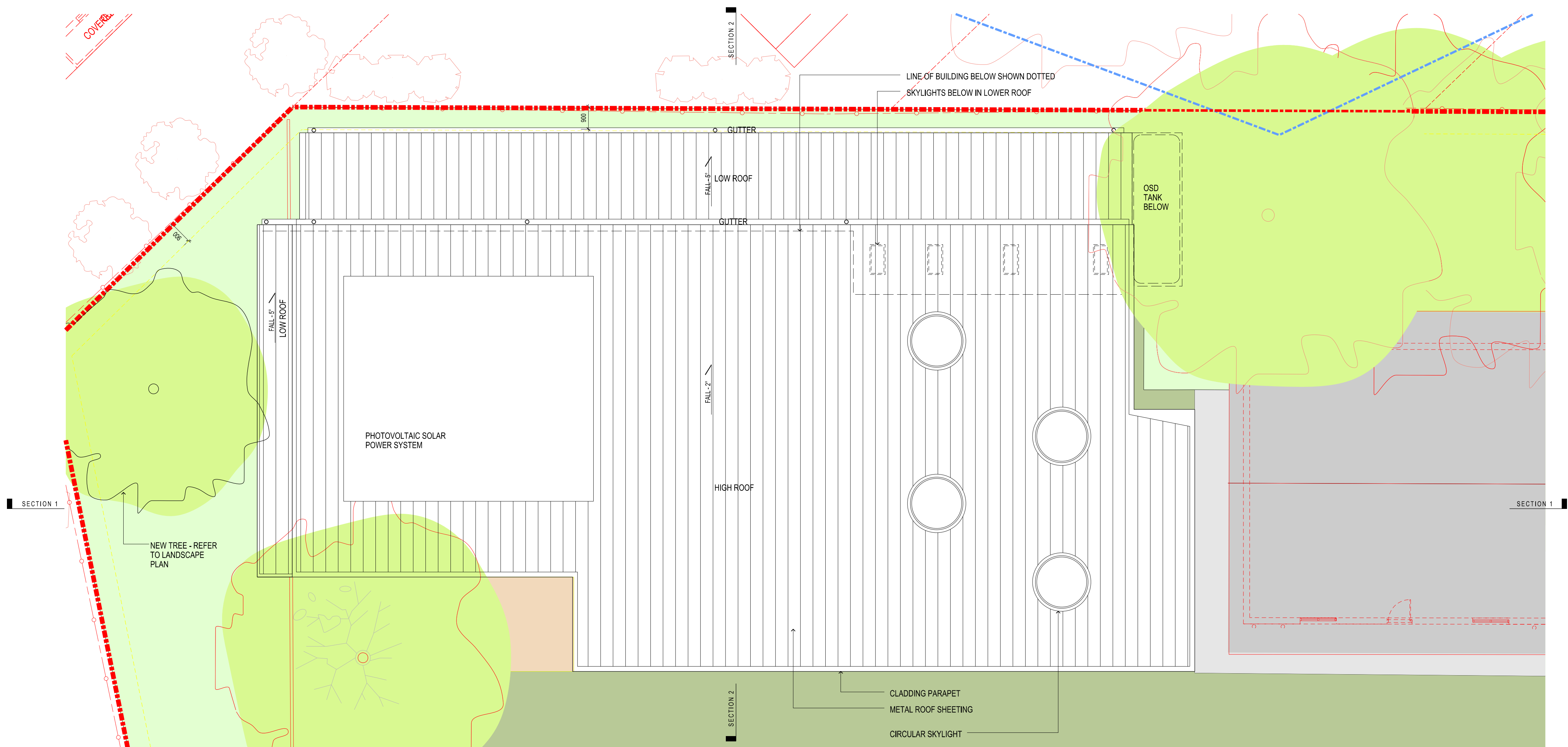


FLOOR PLAN

DA05

DATE: April 2019 Job #: 18004



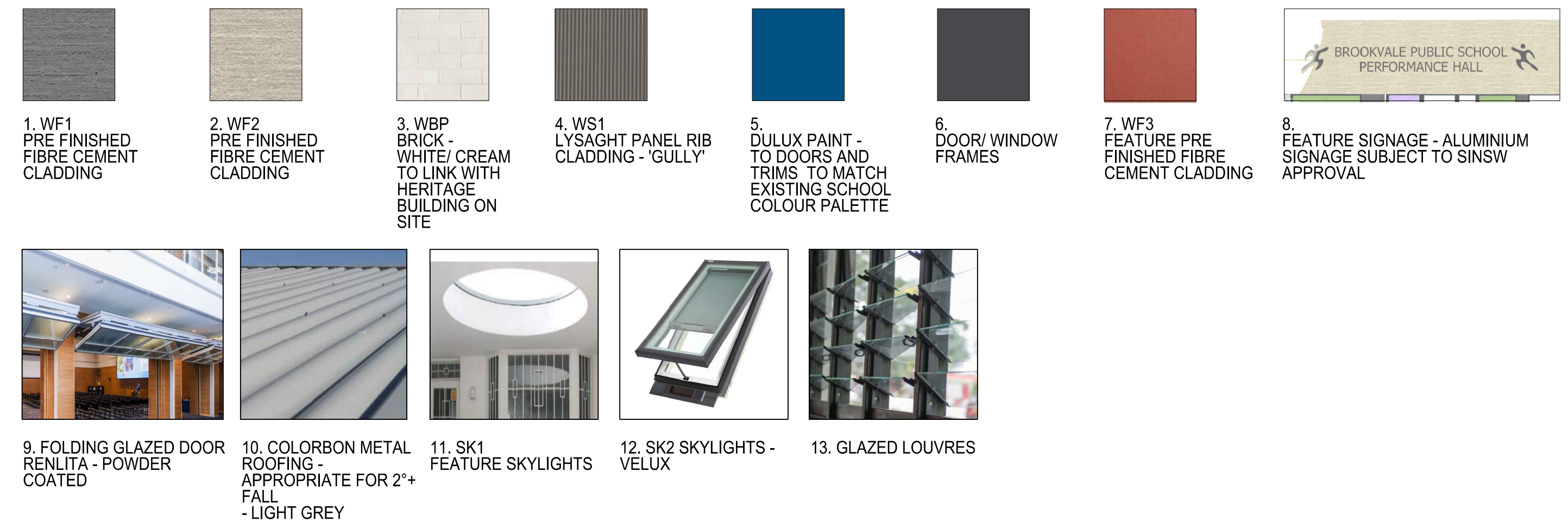


1 ROOF PLAN
1:100

EXTERIOR SKETCH PERSPECTIVE



MATERIALS / COLOUR PALLETTE



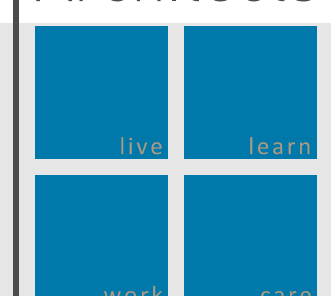
NEW HALL
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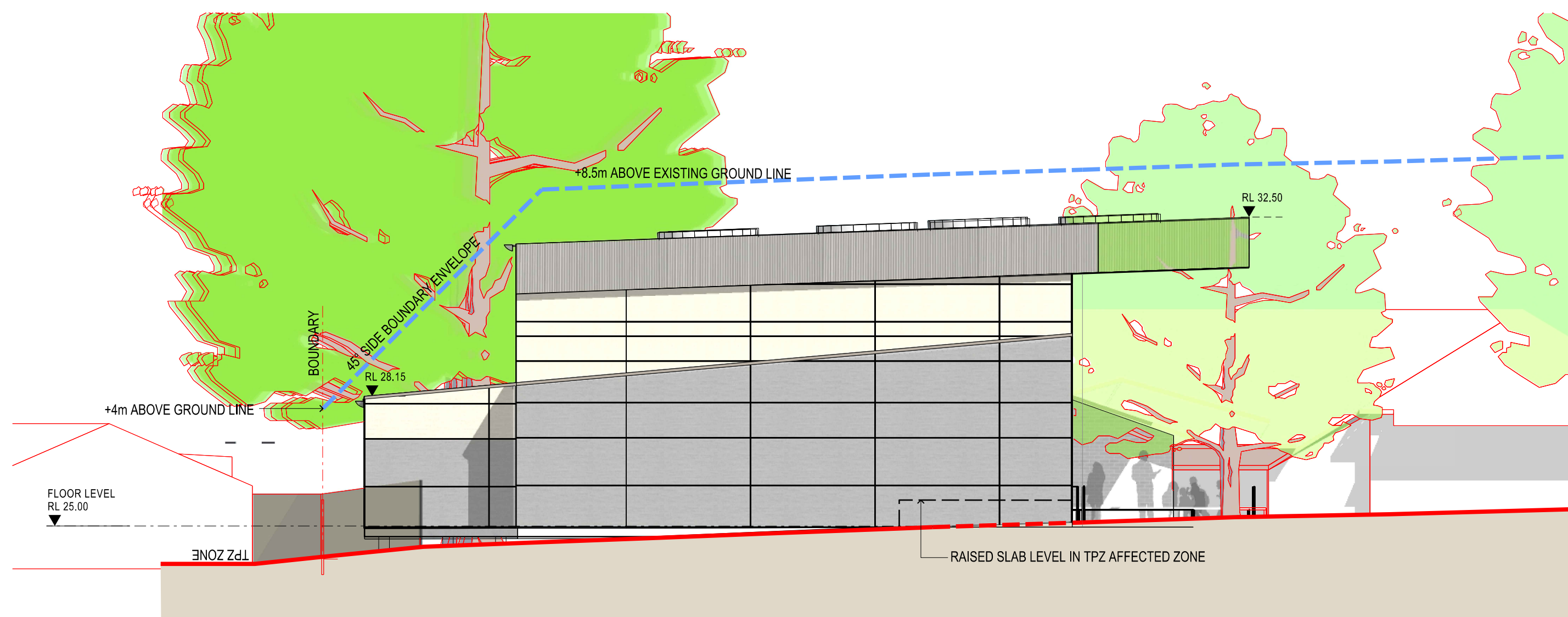
NSW
GOVERNMENT
Education

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ROOF PLAN AND
FINISHES SCHEDULE
D A 0 6
DATE: April 2019 Job #: 18004



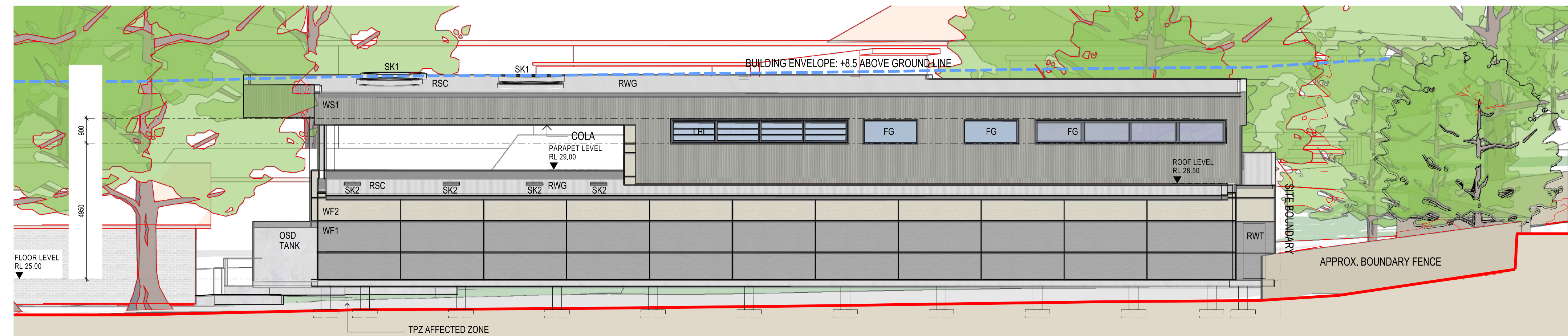
3 NORTH WEST ELEVATION
1:100



4 SOUTH EAST ELEVATION
1:100



2 SOUTH WEST ELEVATION
1:100



1 NORTH EAST ELEVATION
1:100

LEGEND

BA1	BALUSTRADE TYPE 1
FG	FIXED GLASS
LHL	HIGH LEVEL LOUVRE WINDOW
RSC	CORRUGATED METAL ROOF SHEETING
RWT	RAIN WATER TANK
RWG	RAINWATER GUTTER
SK1	SKYLIGHT TYPE 1 - DOME
SK2	SKYLIGHT TYPE 2 - VILUX
WBP	WALL BRICK TYPE 1
WF1	FIBRE CEMENT WALL TYPE 1
WF2	FIBRE CEMENT WALL TYPE 2
WF3	FEATURE FIBRE CEMENT WALL TYPE 3
WS1	METAL CLADDING

REFER TO DRAWING - DA06 ROOF PLAN AND MATERIALS SCHEDULE
REFER TO LANDSCAPE PLAN FOR MORE INFORMATION ON TREES

NEW HALL
BROOKVALE PUBLIC SCHOOL
Old Pittwater road, Brookvale, NSW, 2100

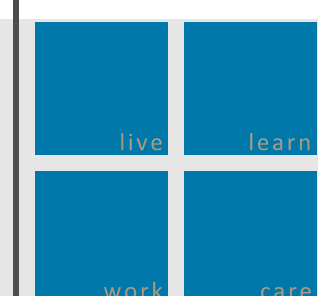
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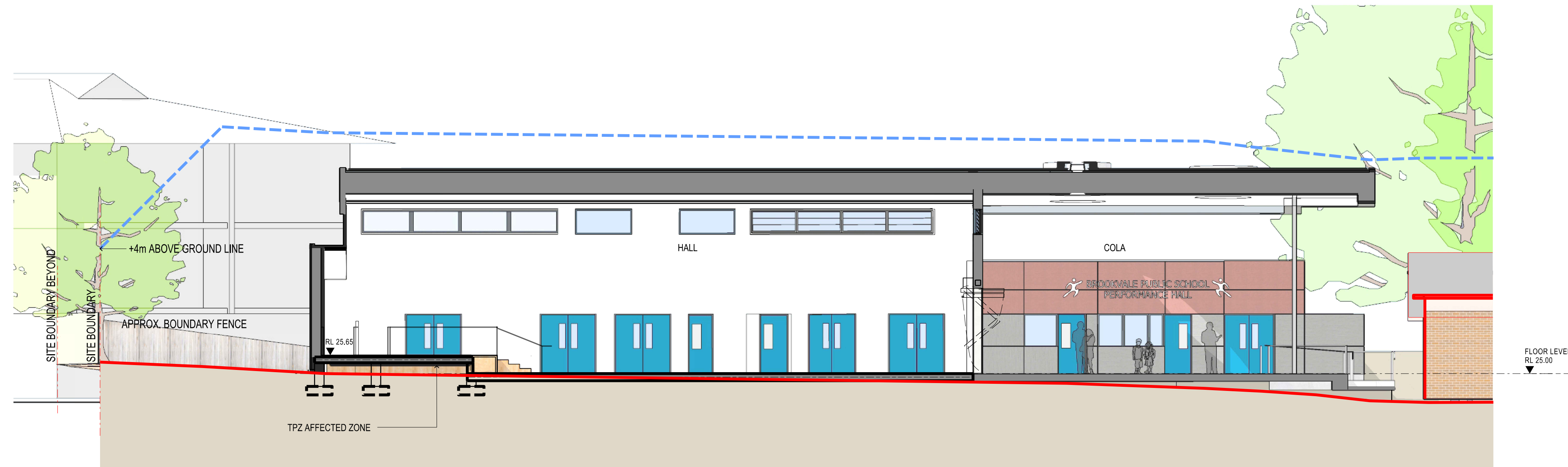
ELEVATIONS

DA07

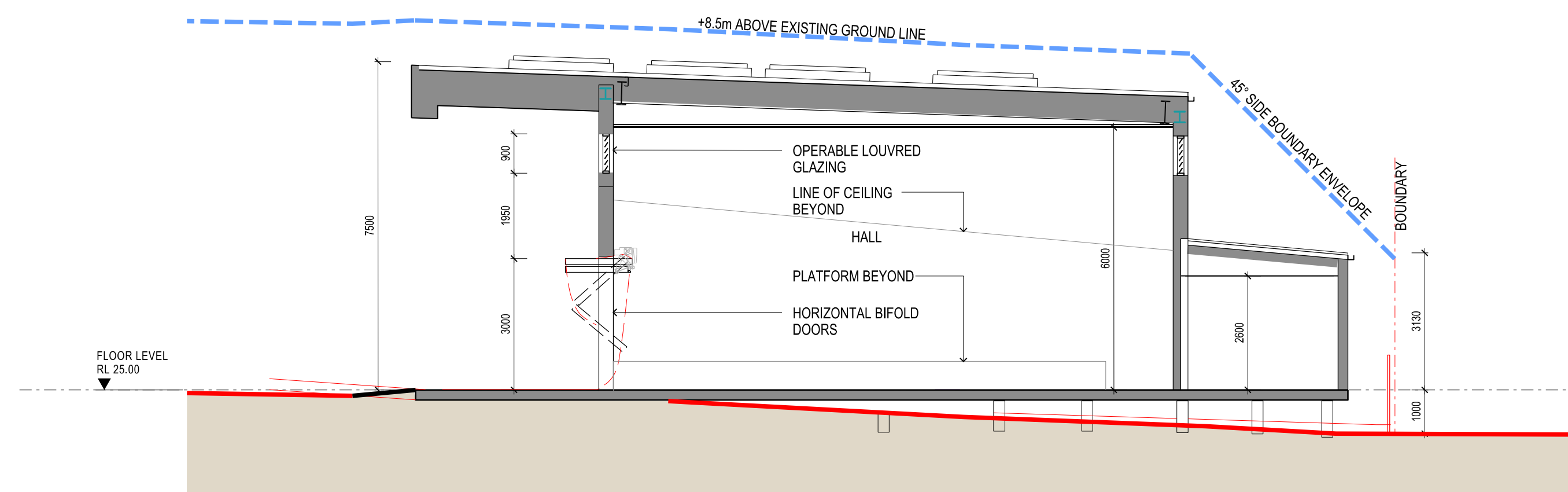
DATE: April 2019

Job #: 18004

0 2 4 6 8 10 12 14 16 18 20



1 SECTION
1:100



1 SECTION
1:100

NEW HALL
BROOKVALE PUBLIC SCHOOL
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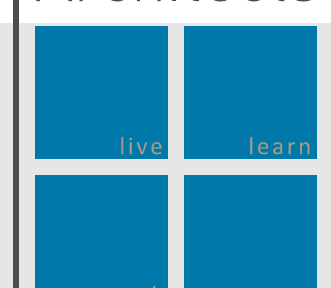


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0 1 2 3 4 5 6 7 8 9 10

SECTIONS

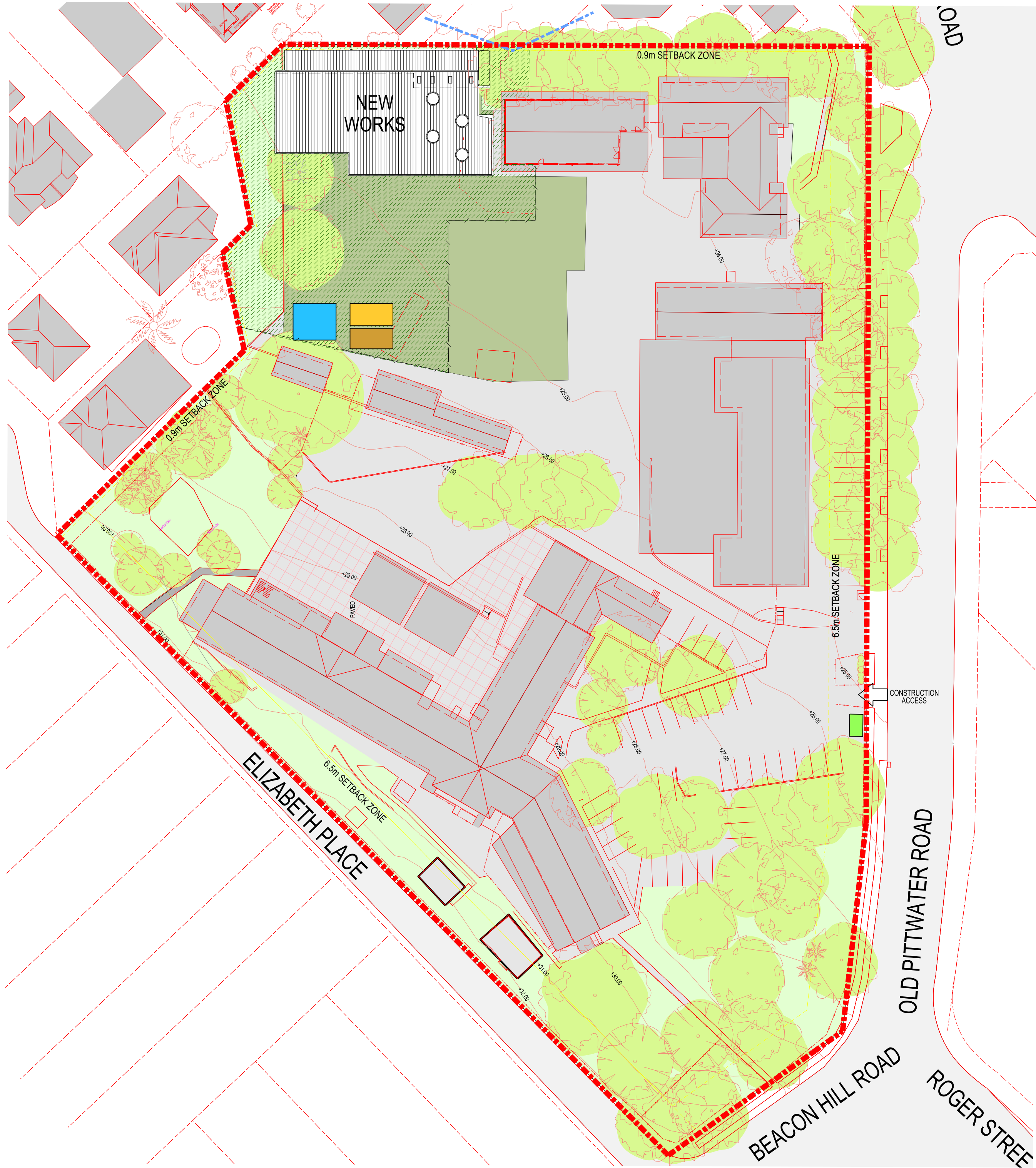
D A 0 8

DATE: April 2019

Scale 1:100@A1

Job #: 18004

Prepared by SARM Architects on 18/04/2019



To be read in conjunction with Site Management Plan

TREES

Existing trees in Construction zone to be retained and protected during works as per Arborist report, and Landscape Plan.

TRAFFIC MANAGEMENT

Refer to Construction Traffic Management Plan report for Construction Entrance details

1 CONSTRUCTION MANAGEMENT PLAN
1:500

LEGEND

- EXISTING WORKS
- NEW WORKS
- STORAGE PILE FOR RUBBISH - GENERAL WASTE
- STORAGE PILE FOR RUBBISH - RECYCLED
- STORAGE PILE FOR CONSTRUCTION MATERIALS
- CONSTRUCTION ZONE
- BUILDER'S FENCE
- EXISTING WASTE MANAGEMENT AREA

Section 1 - Demolition

This section must be completed in accordance with 'Chapter 1 - Demolition' of the Waste Management Guidelines

MATERIALS ON SITE	DESTINATION				
	Evidence such as weighbridge dockets and invoices for waste disposal or recycling must be retained on site for inspection				
	REUSE AND RECYCLING (MOST FAVOURABLE)		DISPOSAL (LEAST FAVOURABLE)		
Types of Waste Material	Estimated Volume (m³) or Weight (t)	ONSITE RE-USE ✓ Specify how material will be reused on site	OFF-SITE RECYCLING ✓ Recycling Outlet (RO) ✓ Waste Transport Contractor (WTC)	OFF-SITE DISPOSAL ✓ Specify landfill site (LS) ✓ Specify Waste Transport Contractor (WTC)	
			WTC	RO	WTC
Excavated Material	N/A				
Garden Organics	3 mature trees				*
Bricks	10.6m³			*	
Tiles	N/A				
Concrete	25m³			*	
Timber	0.2t	Denailed and prepared for re-use			
Plasterboard	N/A				
Metals	0.5t			*	
Asbestos	N/A				
Other waste (please specify)	1.2t (ceramic tiles, plastics, PVC tubing)			*	
Estimated Total % Recovered					

* Approved landfill site by licensed contractor.

Waste management plan to be read in conjunction with DA 10/1 Construction management plan and Northern Beaches Waste Management Plan that meets with the requirements of Northern Beaches Waste Management Guidelines and Parts C8 & C9 of the Warringah DCP 2011

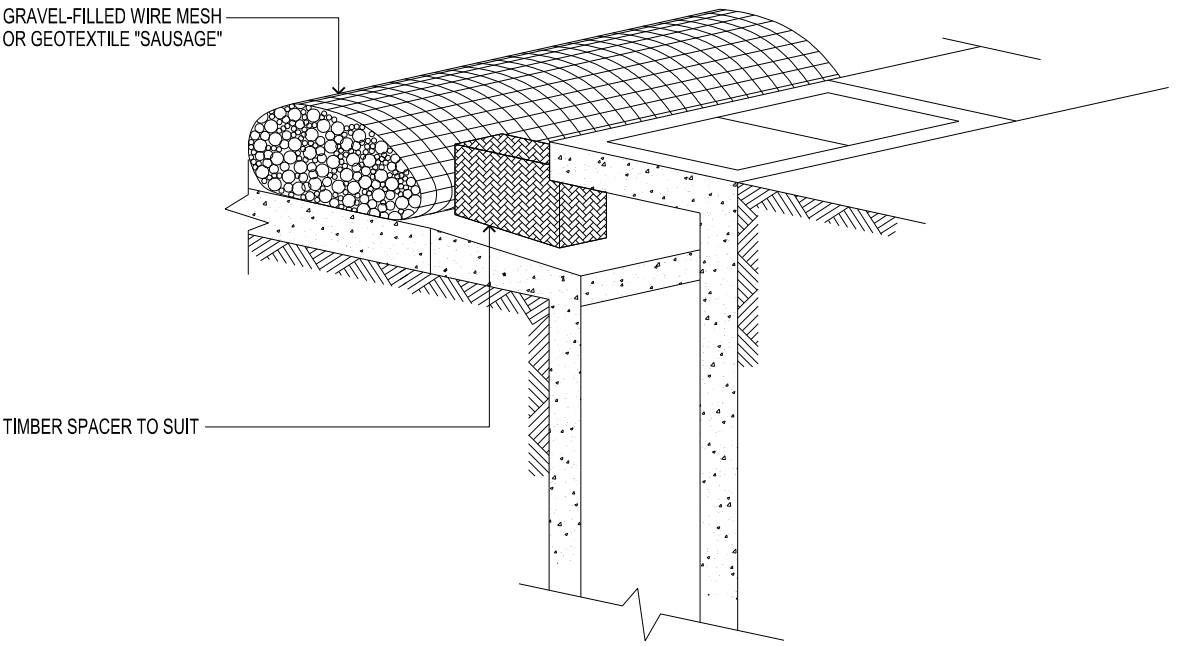
Construction Phase

All construction waste is unknown but is to be kept at a minimum. Disposal is to be to an approved landfill site by a licensed contractor. Hazardous waste will be suitably disposed in accordance with all Australian codes and standards.

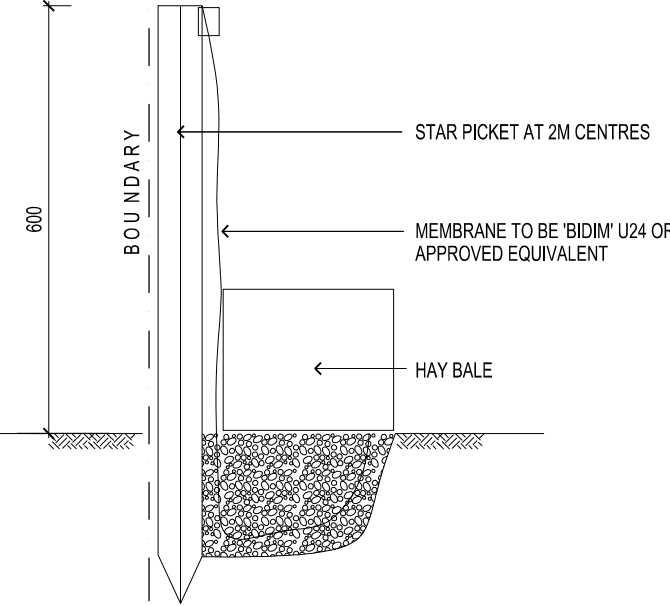
On-going (Operation) Phase

All waste will be stored and disposed in the same manner as present. The proposed development does not interfere with the present waste management procedures.

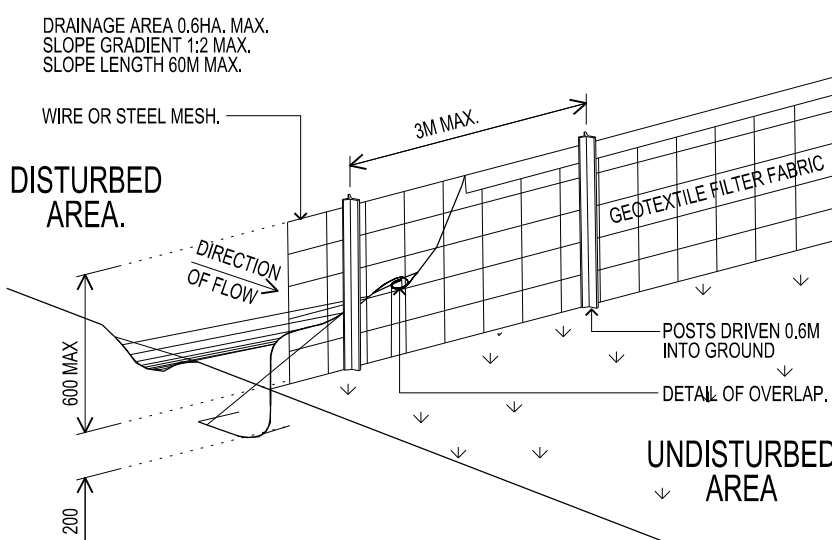
1 WASTE MANAGEMENT PLAN



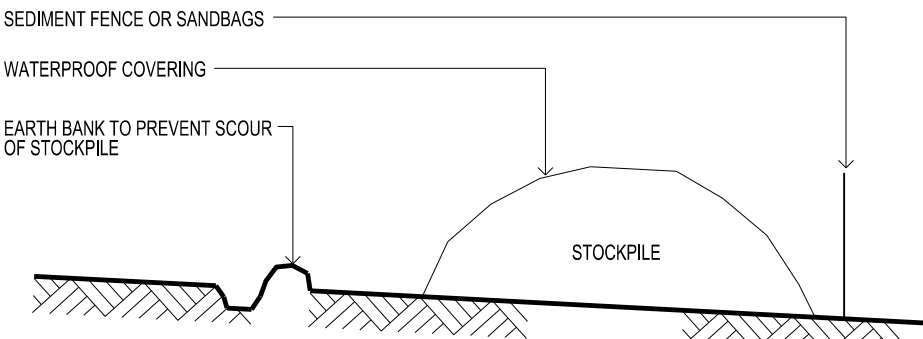
PORTABLE GRAVEL KERB INLET SEDIMENT TRAP
N.T.S.



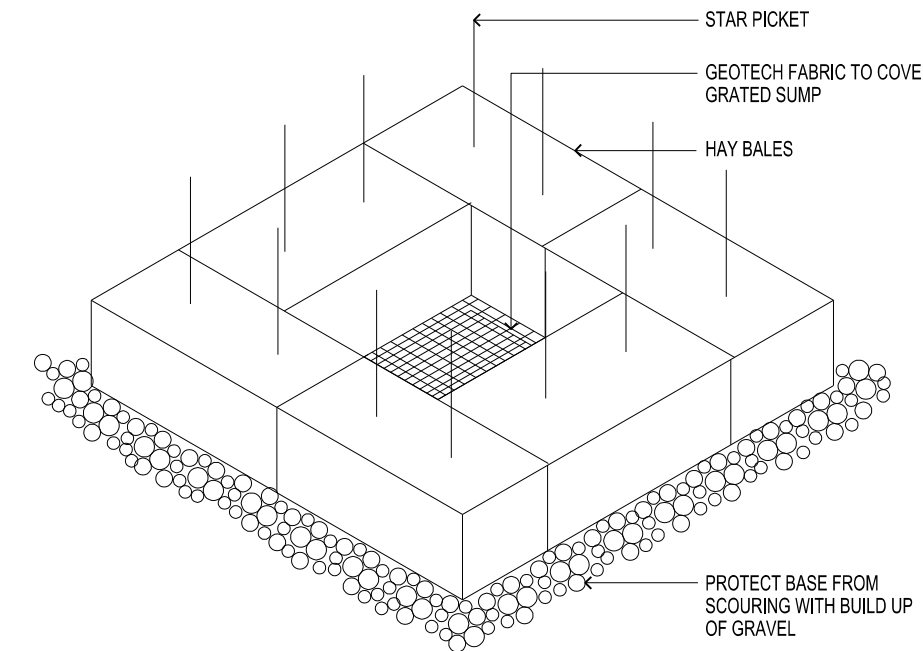
SILT FENCE DETAIL
N.T.S.



SEDIMENT FENCE
N.T.S.



MATERIALS STOCKPILE
N.T.S.



STORMWATER PIT INLET SEDIMENT TRAP
N.T.S.

1 EROSION AND SEDIMENT CONTROL MEASURES

NEW HALL
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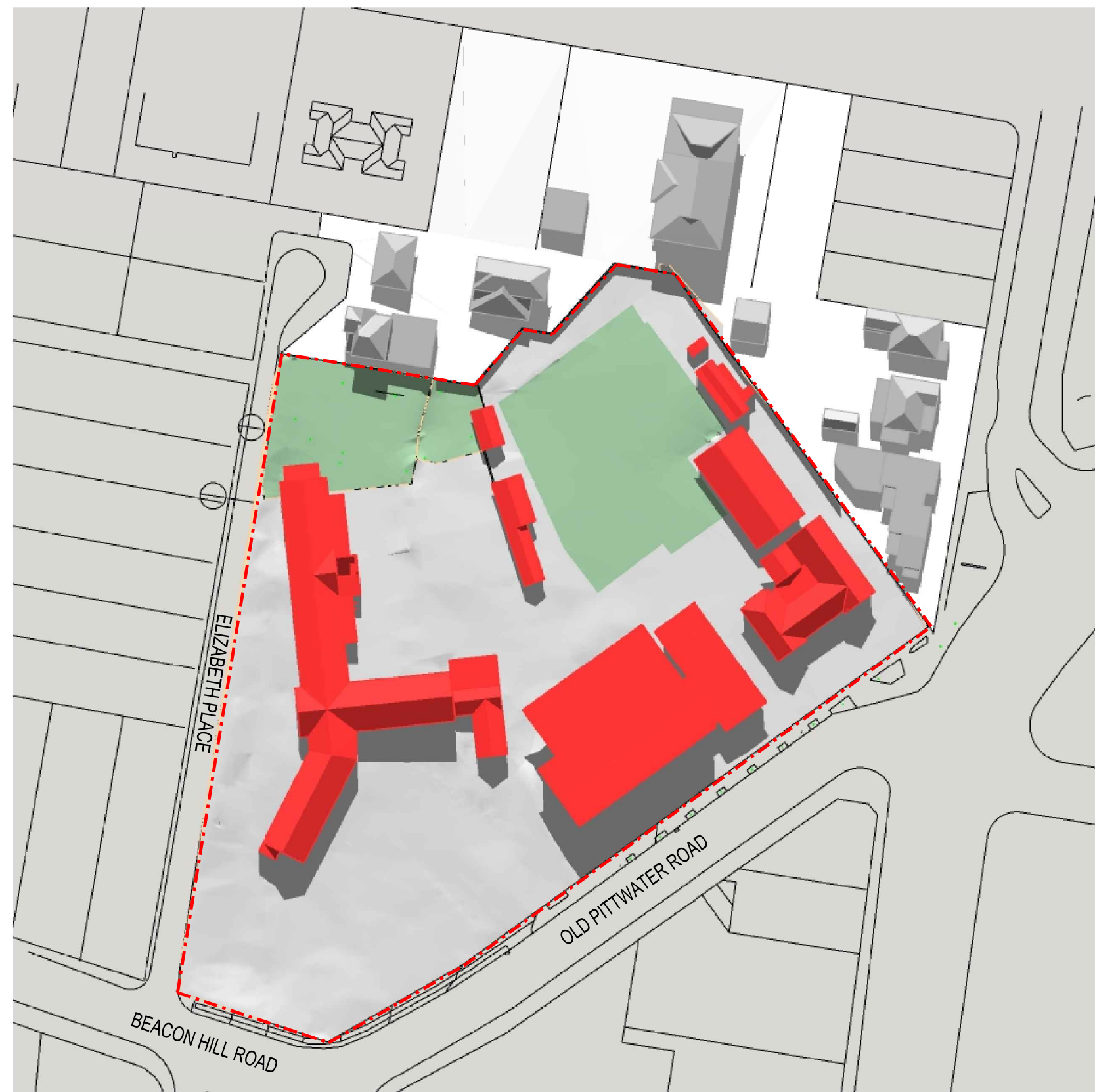
0 2 4 6 8 10 12 14 16 18 20

CONST. SOIL AND WATER
MANAGEMENT PLAN
DA09
DATE: April 2019 Job #: 18004

Prepared by SARM Architects on 04/04/2019



1 9AM WINTER
EXISTING



2 12PM WINTER
EXISTING



3 3PM WINTER
EXISTING



1 9AM WINTER
PROPOSED



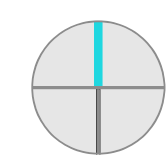
2 12PM WINTER
PROPOSED



3 3PM WINTER
PROPOSED

LEGEND

- EXISTING BUILDINGS ON SITE
- PROPOSED BUILDING
- SHADOW CAST BY PROPOSED NEW BUILDING



NEW HALL
BROOKVALE PUBLIC SCHOOL
Old Pittwater road, Brookvale, NSW, 2100

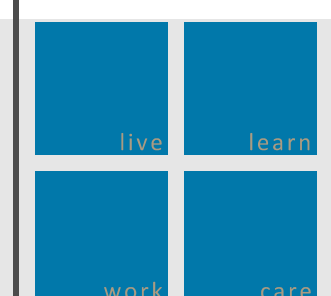
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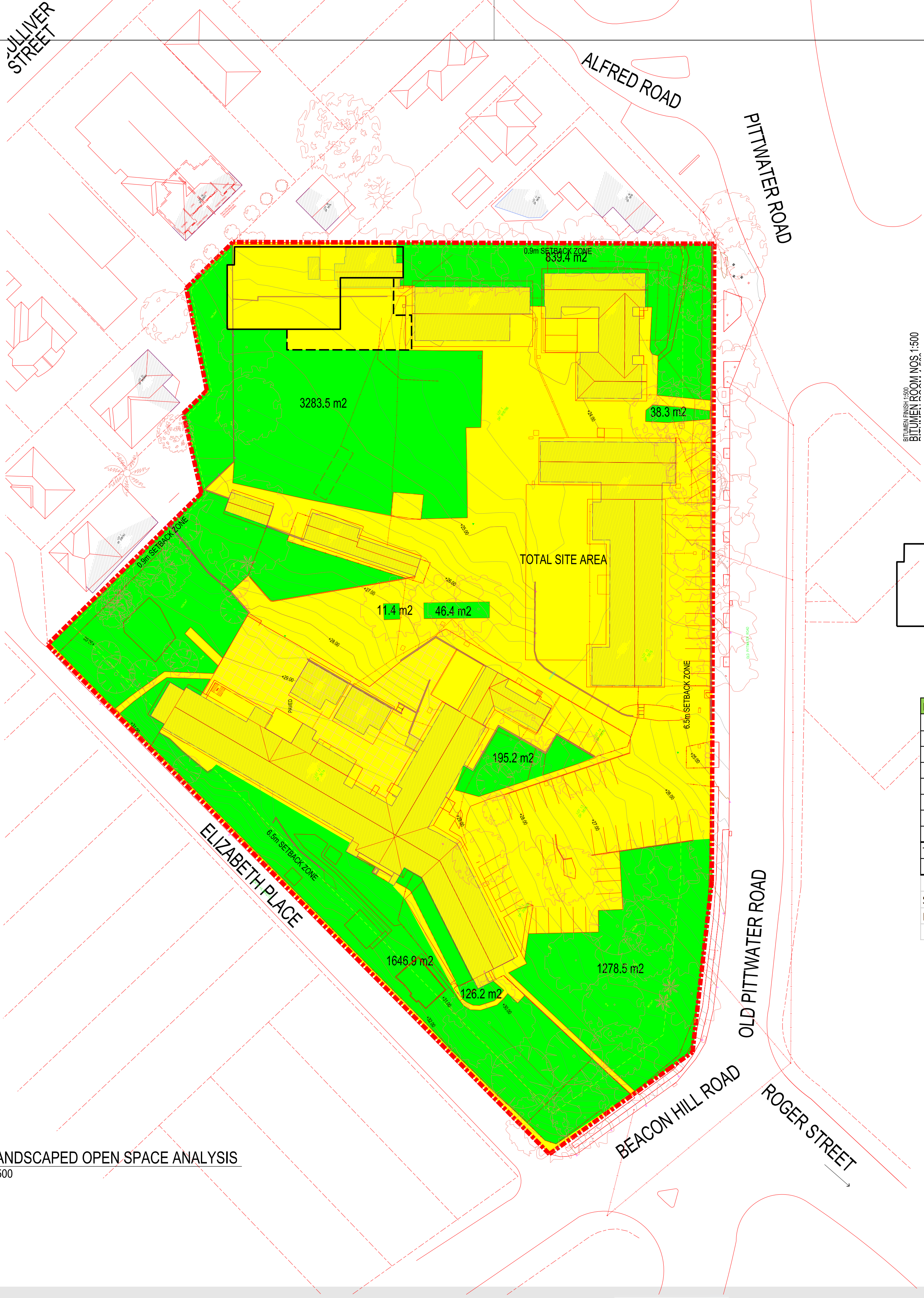
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SHADOW DIAGRAM

D A 1 0
DATE: April 2019 Job #: 18004



LEGEND

SOFT STAND AREA

HARD STAND AREA

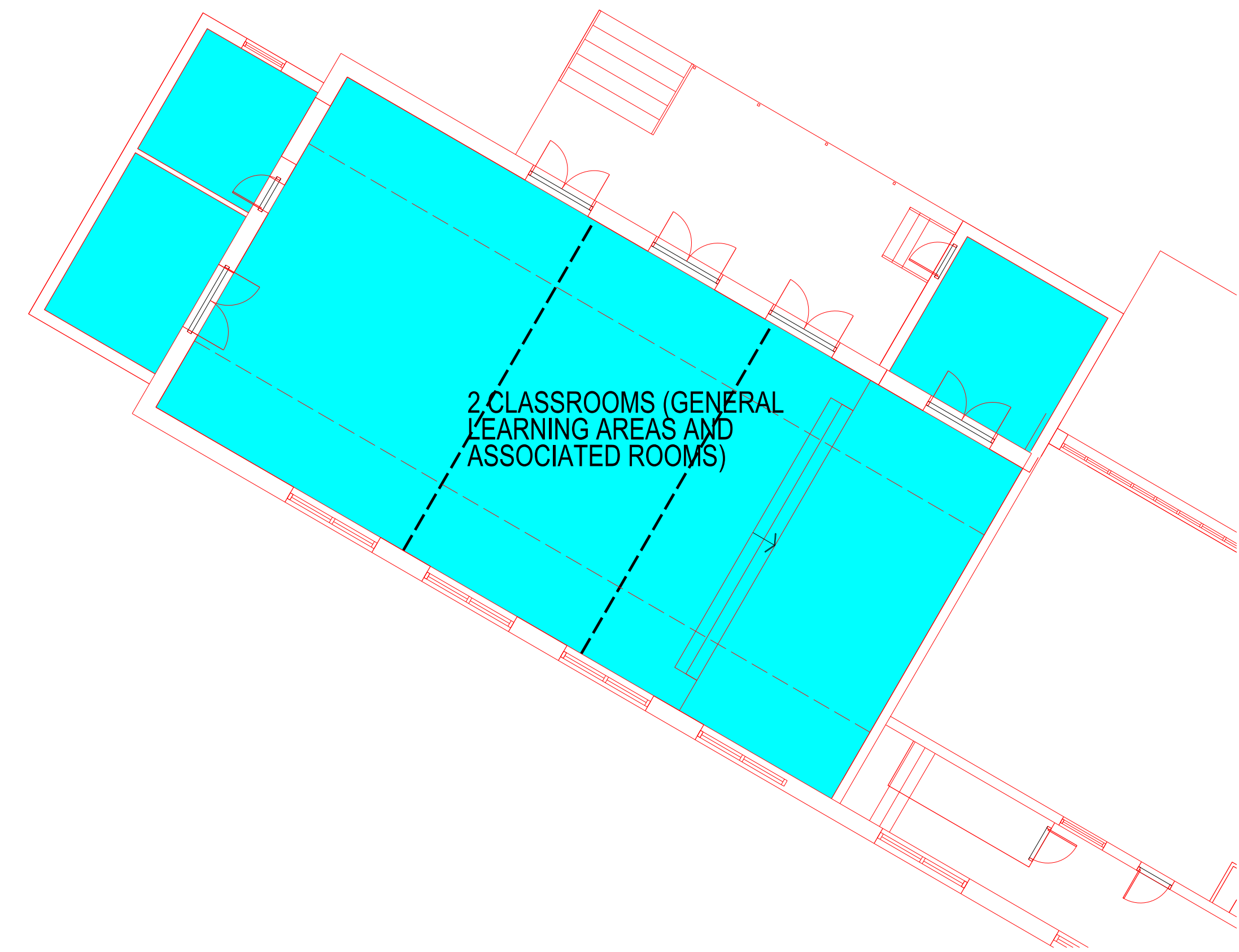
PROPOSED HALL FOOTPRINT WITH COLA ABOVE SHOWN DOTTED

Landscaped Open Space	839.4 m2	Hard stand area	10,864.2 m2	
	33.3 m2			
	3,283.5 m2			
	46.4 m2			
	11.4 m2			
	195.2 m2			
	1,278.5 m2			
	126.2 m2			
	1,646.9 m2			
Total	7,460.8 m2		10,864.2 m2	
	0.41 %		0.59 %	
Site Area	18325 m2			
Requirement	Landscaped Open Space to be minimum 40% of Total area			
	Complies			

1 LANDSCAPED OPEN SPACE ANALYSIS
1:500



1 HALL REUSE LOCATION PLAN
1:500



2 HALL REUSE FLOOR PLAN
1:100

LEGEND

 LOCATION OF HALL TO BE CONVERTED TO TWO CLASSROOMS.
CHANGE OF USE

NEW HALL
BROOKVALE PUBLIC SCHOOL
Old Pittwater road, Brookvale, NSW, 2100

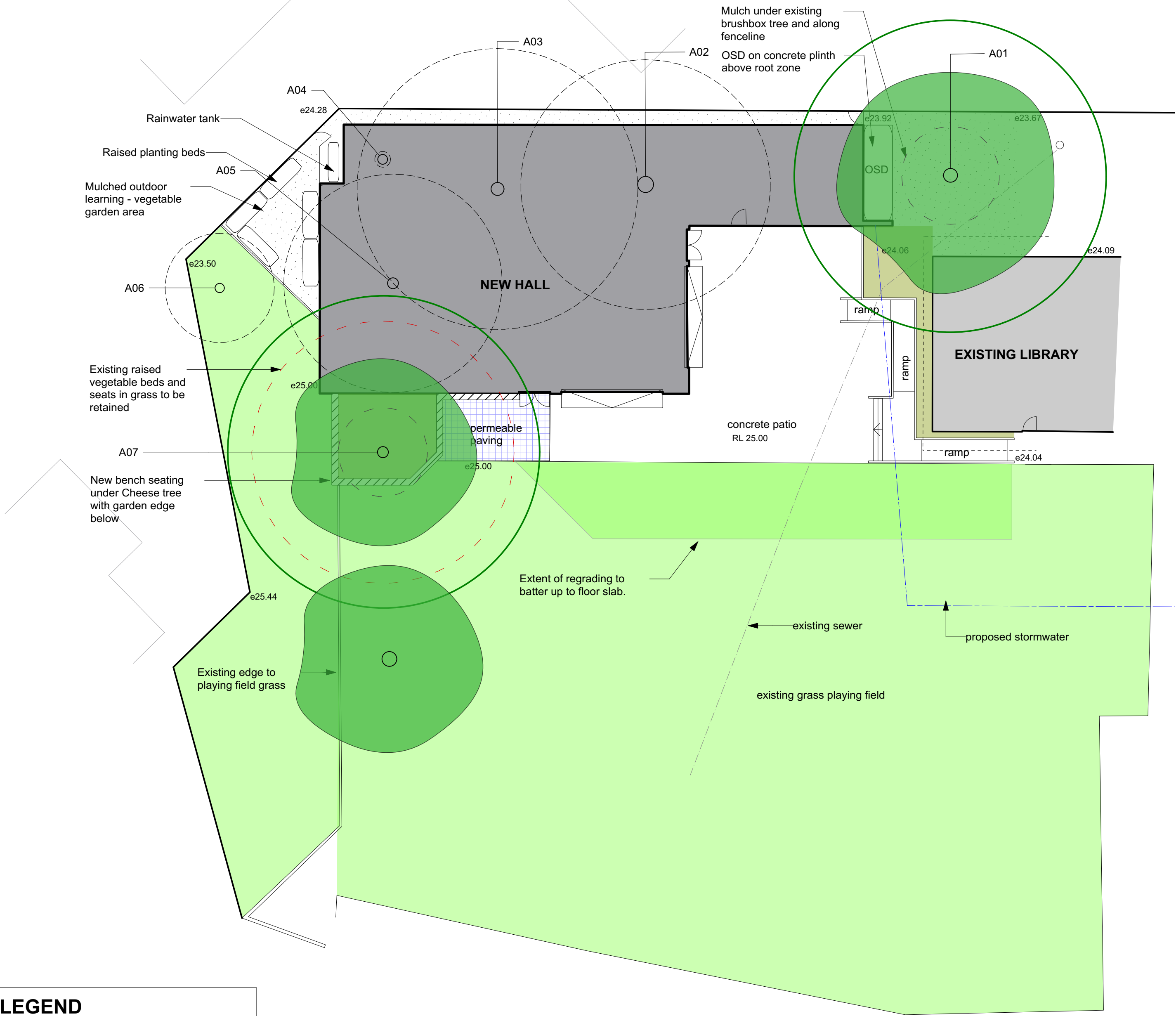
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 **NSW**
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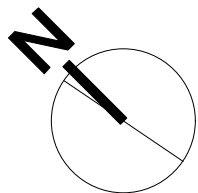
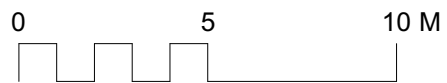
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HALL REUSE PLAN
D A 1 2
DATE: April 2019 Job #: 18004

Existing Tree Report							
ID	Botanical Name	Common Name	Height	DBH	SULE	Action	Notes
A00	Lophostemon confertus	Brushbox	5000	955	Not Set	Retain	
A01	Lophostemon confertus	Brushbox	9000	890	2	Retain	
A02	Lophostemon confertus	Brushbox	10000	1030	2	Remove	removed for building footprint
A03	Lophostemon confertus	Brushbox	10000	830	2	Remove	removed for building footprint
A04	Dead tree		7000	620	4A	Remove	dead tree
A05	Lophostemon confertus	Brushbox	8000	700	2	Remove	removed for building footprint
A06	Robinia Pseudoacacia	Golden Robinia	6000	590	4C	Remove	Declining health. WH&S concerns
A07	Glochideon ferdinandi	Cheese Tree	10000	700	3	Retain	

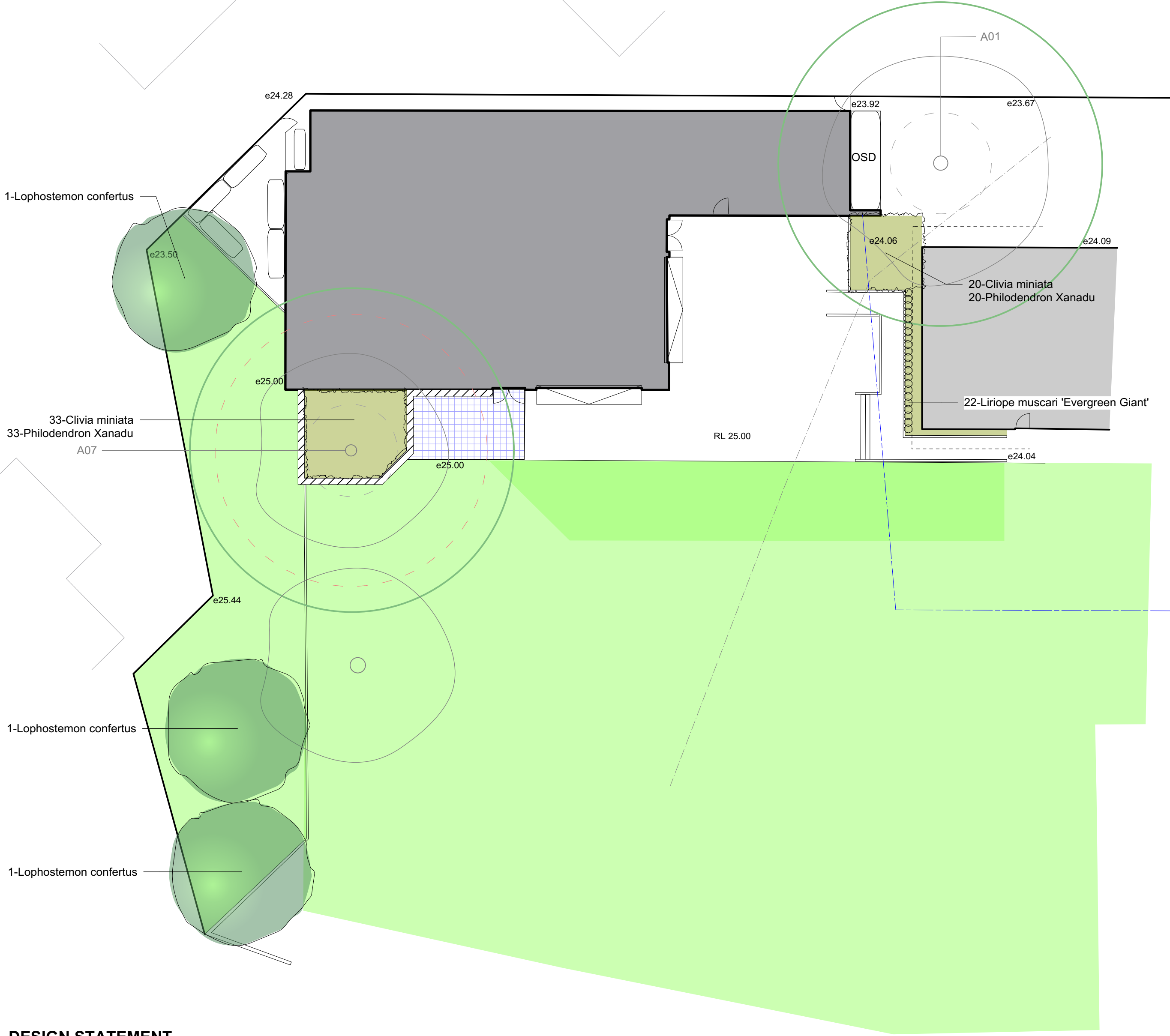


LEGEND	
	Mass planting bed- organic mulch
	Mulch
	Turf grass
	Concrete edge
	Bench seat
	Permeable interlocking unit paving



EXISTING TREE AND SITE PLAN

Plant List				
ID	Qty	Common Name	Botanical Name	Scheduled Size
Trees				
Lop con	3	Brush Box	Lophostemon confertus	200 litre
Shrubs				
Phi Xan	53	Xanadu	Philodendron Xanadu	5 litre
Grasses				
Lir Eve	22	Evergreen Giant Lilyturf	Liriope muscari 'Evergreen G	150mm
Perennials				
Cli min	53	Bush Lily	Clivia miniata	5 litre



PLANTING PLAN

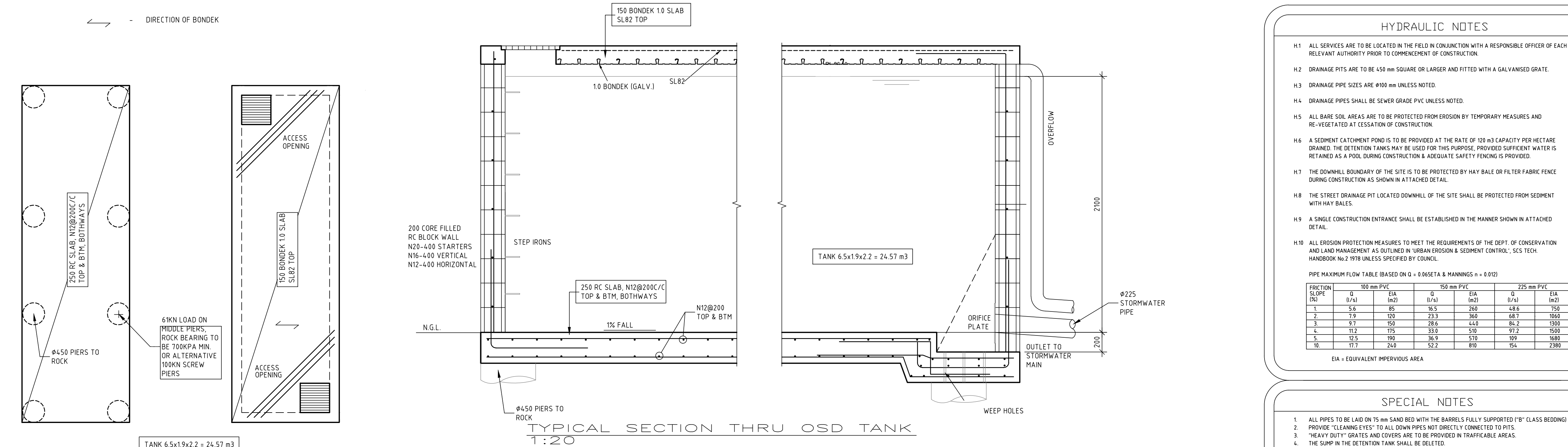
DESIGN STATEMENT

The Hall is located in the most suitable location for the functionality of the School. Wherever it was to be located, (other than in the middle of the only open grass area the school has), several large trees would need to be removed. The Hall will require three Brushbox trees to be removed. The Brushbox in the immediate vicinity of the heritage building, and closer to the street, provide the vegetated backdrop visible from Pittwater Road and these trees get less visually significant the further into the school the trees are located. Three new Brushbox trees (Lophostemon conferta) will be planted along the rear boundary of the School. These have been located to eventually reach a height to create a visual backdrop to the new Hall from Pittwater Road, while being sufficiently distant from school and adjacent neighbouring buildings.

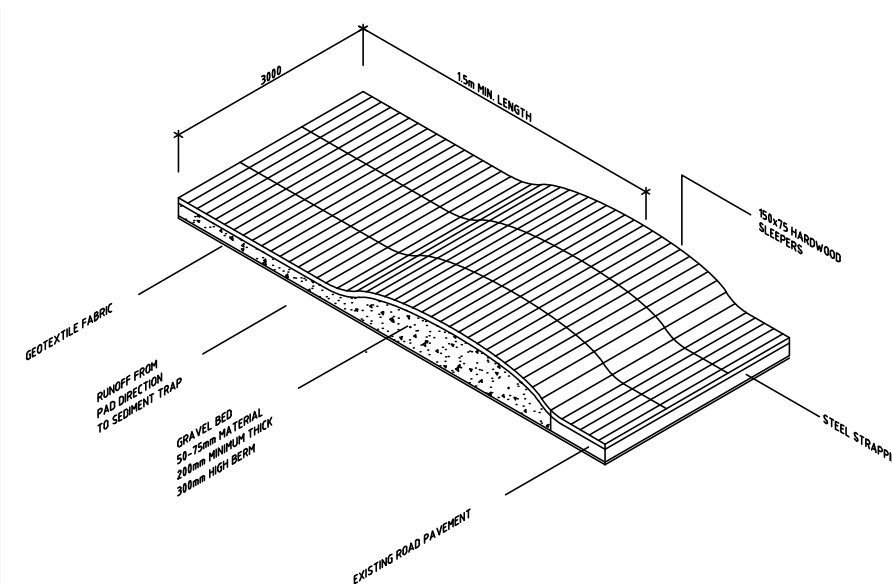
Tree protection measures have been adopted to ensure the existing Cheese Tree (Glochidion ferdinandi) will be protected from Hall development, with permeable paving, a border of seating and planting where there is currently compacted soil. Proposed planting will all be shade tolerant species and will be watered from the rainwater tanks installed with Hall.

New services have been located away from TPZ of existing trees.

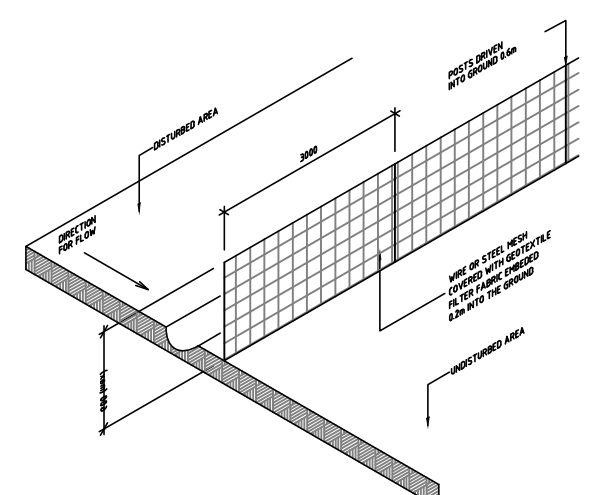




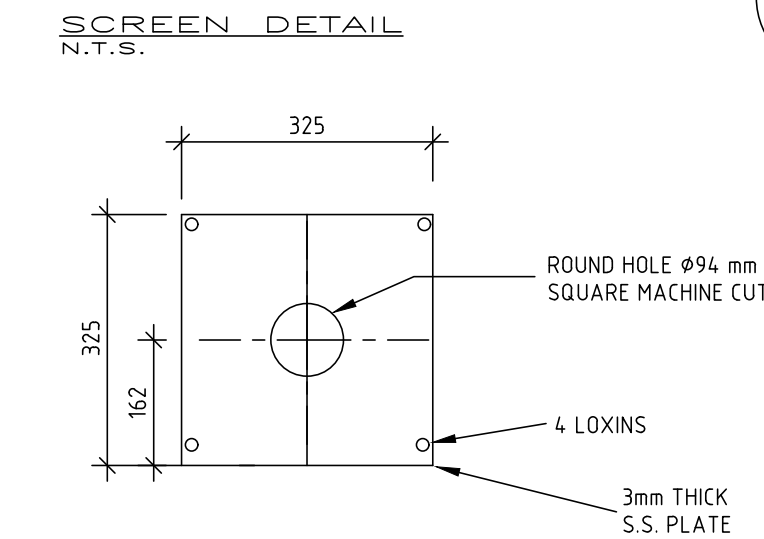
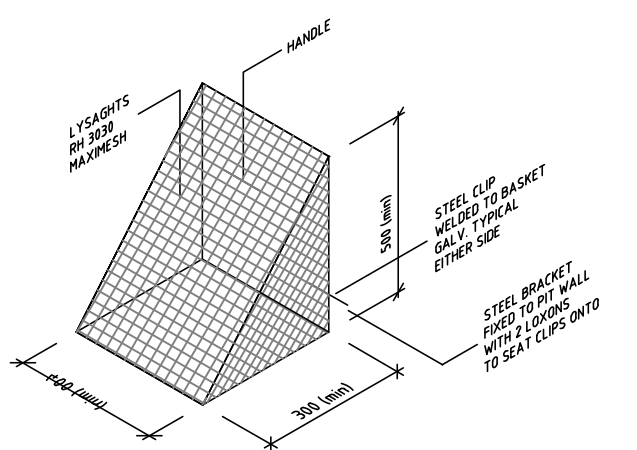
PLAN ON TANK
BTM
1:50



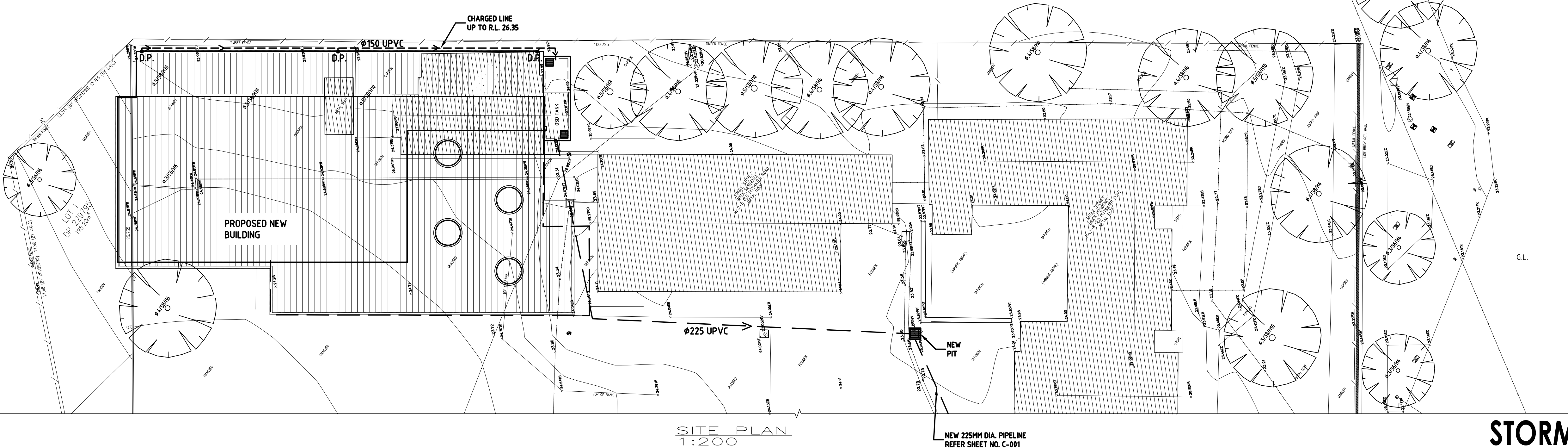
PLAN ON TANK
TOP
1:50



SITE PARAMETERS	
ADDITIONAL IMPERVIOUS AREA	6915 m2
ZONE	1
SLOPE	2%
REQUIRED VOLUME	24 m3
PROVIDED VOLUME	24.57m3
PSD	17 litre/sec
ORIFICE DIAMETER	94 mm



TEMPORARY CONSTRUCTION EXIT
N.T.S.



SITE PLAN
1:200

HYDRAULIC NOTES

- H.1 ALL SERVICES ARE TO BE LOCATED IN THE FIELD IN CONJUNCTION WITH A RESPONSIBLE OFFICER OF EACH RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- H.2 DRAINAGE PITS ARE TO BE 450 mm SQUARE OR LARGER AND FITTED WITH A GALVANISED GRATE.
- H.3 DRAINAGE PIPE SIZES ARE Ø100 mm UNLESS NOTED.
- H.4 DRAINAGE PIPES SHALL BE SEWER GRADE PVC UNLESS NOTED.
- H.5 ALL BARE SOIL AREAS ARE TO BE PROTECTED FROM EROSION BY TEMPORARY MEASURES AND RE-VEGETATED AT CESSATION OF CONSTRUCTION.
- H.6 A SEDIMENT CATCHMENT POND IS TO BE PROVIDED AT THE RATE OF 120 m3 (CAPACITY PER HECTARE DRAINED). THE DETENTION TANKS MAY BE USED FOR THIS PURPOSE, PROVIDED SUFFICIENT WATER IS RETAINED AS A POOL DURING CONSTRUCTION & ADEQUATE SAFETY FENCING IS PROVIDED.
- H.7 THE DOWNHILL BOUNDARY OF THE SITE IS TO BE PROTECTED BY HAY BALE OR FILTER FABRIC FENCE DURING CONSTRUCTION AS SHOWN IN ATTACHED DETAIL.
- H.8 THE STREET DRAINAGE PIT LOCATED DOWNHILL OF THE SITE SHALL BE PROTECTED FROM SEDIMENT WITH HAY BALES.
- H.9 A SINGLE CONSTRUCTION ENTRANCE SHALL BE ESTABLISHED IN THE MANNER SHOWN IN ATTACHED DETAIL.
- H.10 ALL EROSION PROTECTION MEASURES TO MEET THE REQUIREMENTS OF THE DEPT. OF CONSERVATION AND LAND MANAGEMENT AS OUTLINED IN 'URBAN EROSION & SEDIMENT CONTROL', SES TECH. HANDBOOK No 2 1978 UNLESS SPECIFIED BY COUNCIL.

PIPE MAXIMUM FLOW TABLE (BASED ON Q = 0.065ETA & MANNINGS n = 0.012)

FRICTION SLOPE (%)	100 mm PVC		150 mm PVC		225 mm PVC	
	Q (l/s)	EIA (m2)	Q (l/s)	EIA (m2)	Q (l/s)	EIA (m2)
1	5.6	85	16.5	260	48.6	750
2	7.9	120	23.3	360	68.7	1060
3	9.7	150	28.6	440	84.2	1300
4	11.2	175	33.0	510	97.2	1560
5	12.5	190	36.9	570	109	1680
10	17.7	240	52.2	810	154	2380

EIA = EQUIVALENT IMPERVIOUS AREA

SPECIAL NOTES

1. ALL PIPES TO BE LAID ON 75 mm SAND BED WITH THE BARRELS FULLY SUPPORTED ("B" CLASS BEDDING)
2. PROVIDE "CLEANING EYES" TO ALL DOWN PIPES NOT DIRECTLY CONNECTED TO PITS.
3. "HEAVY DUTY" GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFICABLE AREAS.
4. THE SUMP IN THE DETENTION TANK SHALL BE DELETED.
5. ORIFICE PLATES USED TO RESTRICT THE OUTFLOW MUST BE MACHINED TO THE EXACT DIMENSION AS CALCULATED, FROM MINIMUM 3 mm THICK STAINLESS STEEL OR 3 mm THICK GALVANISED STEEL AFTER MACHINING, THEY MUST BE CAST IN THE PIT WALLS OR PERMANENTLY FIXED IN THE PIT BY SOME APPROVED METHOD SO THEY CANNOT BE EASILY REMOVED.
6. A PLAQUE MEASURING NO LESS THAN 400 mm X 200 mm SHALL BE IN SOME WAY PERMANENTLY ATTACHED AND PROMINENTLY DISPLAYED WITHIN THE IMMEDIATE VICINITY OF THE OSD DEVICE. THIS PLAQUE SHALL ADVISE OCCUPERS OF THE PROPERTY OF THE EXISTENCE OF THE OSD DEVICE AND ALSO THAT THE DEVICE IS NOT IN ANY WAY TO BE TAMPERED WITH OR CHANGED WITHOUT PRIOR WRITTEN CONSENT OF COUNCIL.
7. THE CONSTRUCTED OSD INSTALLATION MUST BE APPROPRIATELY CERTIFIED BY A SUITABLY QUALIFIED AND EXPERIENCED CONSULTING ENGINEER (GENERALLY CP ENG. QUALIFICATION) WHO MUST STATE THAT IT COMPLIES WITH COUNCIL'S OSD POLICY, ALL RELEVANT CODES AND STANDARDS AND ALSO THAT IT IS GENERALLY IN ACCORDANCE WITH APPROVED PLANS.
8. UPON COMPLETION OF THE OSD WORKS, WORK-AS-EXECUTED (WAE) PLANS SHALL BE SUBMITTED TO THE COUNCIL BY THE CONSULTING ENGINEER/REGISTERED SURVEYOR TO VERIFY THAT THE VOLUME OF STORAGE HAS BEEN ATTAINED AND THAT CRITICAL WATER AND FLOOR LEVELS ARE IN ACCORDANCE WITH DESIGN REQUIREMENTS. ANY CHANGES OR VARIATIONS TO THE APPROVED PLANS SHALL BE HIGHLIGHTED IN RED.
9. CERTIFICATION ON THE STANDARD FORM FOR ON-SITE DETENTION RECORD OF INSTALLATION ISSUED BY COUNCIL AND WAE PLANS SHALL BE SUBMITTED TOGETHER WITH THE COMPLIANCE CERTIFICATE.

GENERAL NOTES

- G.1 THESE NOTES SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTION AS ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT OR ENGINEER BEFORE PROCEEDING WITH THE WORK.
- G.2 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G.3 SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY ON-SITE MEASUREMENT.
- G.4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
- G.5 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE SAA CODE AND THE BY-LAWS AND ORDINANCES OF THE RELATIVE BUILDING AUTHORITY.
- G.6 EXCAVATIONS SHALL NOT BE PERMITTED WITHIN 2 METRES OF AN EXISTING STRUCTURE WITHOUT PRIOR APPROVAL OR RECOMMENDATIONS FOR SHORING OR UNDERPINNING PROVIDED BY ENGINEER.

- FOUNDATIONS AND FOOTINGS
- F.1 FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE INTENSITY OF BEARING PRESSURE OF 150kPa. THE BUILDER SHALL OBTAIN APPROVAL OF THE FOUNDATION MATERIAL BEFORE PLACING CONCRETE.
 - F.2 FOOTINGS SHALL BE PLACED UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED.
- SUB-GRADE
- SG.1 UNDER ALL SLABS ON GRADE, WHETHER ON CUT OR FILL, REMOVE SOFT SPOTS AND RE-FILL BY COMPACTING CUT SURFACES OR FILL SURFACES IN LAYERS NOT EXCEEDING 200 mm TO 95% DRY DENSITY, ENSURING MINIMUM SETTLEMENT TO SLABS.

CONCRETE WORK

C.1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.

C.2 CONCRETE QUALITY SHALL BE AS TABULATED AND SHALL BE VERIFIED BY TESTS.

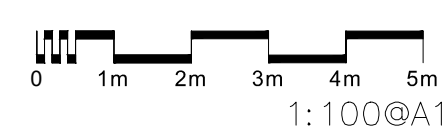
ELEMENT	SLUMP	MAX. SIZE AGG.	CEMENT TYPE	ADMIXTURE	MPa CONCRETE GRADE
ALL	80	20	A	NIL	32

C.3 CLEAR CONCRETE COVERS TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN

CAST IN FORMS COMPLYING WITH AS 1509			
ELEMENT	CONDITION 1 NOT TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 2 TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 3 CAST AGAINST OTHER FORMWORK OR THE GROUND
PAD FOOTINGS & PILE CAPS	-	65	75
STRIP FOOTINGS	-	50	65
SORE OR CAST PIERS	-	50	75
COLUMNS	40	50	75
WALLS, INCLUDING RETAINING WALLS	20	30	65
BEAMS	25	40	65
SLABS, INCLUDING JOISTS & HOLLOW BLOCK CONSTRUCTION	20	30	65
REINFORCEMENT ADJACENT TO HOLLOW BLOCKS INTEGRAL WITH STRUCTURE	5	-	-

- NOTE:
1. SLABS POURED OVER A MEMBRANE ON THE GROUND ARE INCLUDED AS CONDITION 2.
 2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED OR NOT LESS THAN AS REQUIRED FOR CONDITION 3.

- C.4 SIZES OF ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- C.5 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER.
- C.6 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY, UND.
- C.7 NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- C.8 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
- C.9 SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER, WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.
- C.10 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
- C.11 PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.
- C.12 ALL REINFORCING BARS SHALL COMPLY WITH AS 1902. ALL FABRIC SHALL COMPLY WITH AS 1903 AND AS 1904 AND SHALL BE SUPPLIED IN FLAT SHEETS.
- C.13 REINFORCING SYMBOLS
S GRADE 230S DEFORMED BAR
C GRADE 410C COLD WORKED DEFORMED BAR
Y GRADE 410R DEFORMED BAR
R GRADE 230R PLAIN BAR
F GRADE 450 WELDED WIRE FABRIC
N GRADE 500 DEFORMED BAR
THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE BAR DIAMETER IN MILLIMETRES
- C.14 FABRIC REINFORCEMENT TO BE LAPPED 300 MINIMUM AT ENDS AND SIDES UNO. LAPS IN POSITION OF MAXIMUM MOMENT ARE NOT PERMITTED.
- C.15 ALL REINFORCEMENT SHALL BE FULLY SUPPORTED ON INSULATED STEEL, PLASTIC OR CONCRETE CHAIRS SPACED AT 900 AND 750 CENTRES BOTH WAYS UNDER ROD AND FABRIC REINFORCEMENT RESPECTIVELY. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- C.16 MINIMUM STRIPPING TIMES FOR FORMWORK SHALL BE AS RECOMMENDED IN AS 1509 OR AS DIRECTED BY ENGINEER.



STORMWATER MANAGEMENT PLAN

NO.	DATE	AMENDMENT	CHECKED
01	05-04-2019	DA	KAE

KNOX ADVANCED ENGINEERING

MECHANICAL
ELECTRICAL
HYDRAULICS
ESD
ADVICE
STRUCTURAL
CIVIL

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SCHOOL INFRASTRUCTURE NSW

NSW Education

SARM S

NORTH

Job Name	BROOKVALE PUBLIC SCHOOL	Date	MAR 2019	Scales	
Drawn	KAE	Job No.	P 18 107-CIVIL	No. in set	
Checked	KAE	Sheet Title	STORMWATER MANAGEMENT PLAN	Sheet No.	
Authorised	KAE				C - 002