#### GENERAL NOTES

- 1. CONTRACTOR TO VERIFY ALL DIMENSIONS, EXISTING LEVELS, INVERT LEVELS, SERVICES AND STRUCTURES ON SITE PRIOR TO COMMENCEMENT OF WORK AND ADVISE THE SUPERINTENDENT OF ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTATION.
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM OR ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK AND NOTIFY THE SUPERINTENDENT OF ANY DISCREPANCIES FROM THE PROJECT DOCUMENTATION.
- 3. ALL SETOUT OF THE WORKS TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- ALL EXISTING AND PROPOSED SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE EXCAVATED AND BACKFILLED TO SUB-GRADE LEVEL WITH 5% CEMENT STABILISED SAND OR APPROVED GRANULAR MATERIAL COMPACTED TO NOT LESS THAN A STANDARD MINIMUM DENSITY INDEX OF 80 IN ACCORDANCE WITH AS1289.
- ON COMPLETION OF PROPOSED WORKS ALL DISTURBED AREAS SHALL BE RESTORED & REPAIRED, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS ETC. (U.N.O.).
- WHERE NEW WORKS ABUT EXISTING, THE CONTRACTOR SHALL ENSURE THAT THE TRANSITION IS SMOOTH AND EVEN, AND FREE FROM ABRUPT CHANGES.

#### ROADWORKS & PAVEMENTS

- 1. ALL BASECOURSE AND SUB-BASECOURSE MATERIALS SHALL CONFORM WITH STANDARD RTA SPECIFICATION RTA3051. "UNBOUND AND MODIFIED BASE AND SUB-BASE MATERIALS".
- ALL BASECOURSE AND SUB-BASECOURSE MATERIALS SHALL BE PLACED IN ACCORDANCE WITH R35 UNBOUND PAVEMENT COURSE.
- ASPHALTIC CONCRETE FOR SURFACE COURSE SHALL CONSIST OF COARSE AND FINE AGGREGATES AND MINERAL FILLER, PLANT-MIXED WITH BITUMEN BINDER. MIX DESIGN, MANUFACTURE, PLACING AND COMPACTION SHALL BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS2734-1984 ASPHALT (HOT MIXED) PAVING, GUIDE TO GOOD PRACTICE, AND THE REQUIREMENTS OF RTA SPECIFICATION R116

#### CROSSOVERS & ROADWORKS IN COUNCIL PROPERTY

- 1. ALL WORKS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT COUNCIL'S STANDARD "SPECIFICATIONS FOR ROADWORKS, DRAINAGE AND MISCELLANEOUS WORKS" UNLESS OTHERWISE APPROVED.
- NO WORKS ARE TO COMMENCE UNTIL AN INITIAL INSPECTION IS UNDERTAKEN BY COUNCIL, IF REQUIRED.
- NO CONCRETE IS TO BE POURED UNTIL A COUNCIL OFFICER CARRIES OUT A FORMWORK INSPECTION, IF REQUIRED.
- 4. FOR THE PROTECTION OF THE PUBLIC, WORKCOVER APPROVED BARRIERS MUST BE ERECTED AND MAINTAINED AT ANY WORKSITE ON COUNCIL OWNED OR MANAGED PROPERTY.
- 5. THE FOOTPATH MUST BE CLEAR OF RUBBISH OR SUITABLY BARRICADED AT ALL TIMES. FOLLOWING COMPLETION. ALL WASTE MUST BE REMOVED FROM THE FOOTPATH AREA, GUTTERS AND PITS.
- 6. IN THE EVENT OF A NEW GUTTER CROSSING BEING REQUIRED, ANY DISUSED GUTTER CROSSINGS MUST BE RESTORED TO MATCH THE EXISTING KERB AND GUTTER.
- 7. IF THE EXISTING GUTTER CROSSING IS DAMAGED OR CRACKED, IT MUST BE COMPLETELY REMOVED AND RECONSTRUCTED TO COUNCIL SPECIFICATIONS IN ORDER TO PREVENT INFILTRATION OF WATER INTO PAVEMENT.
- 8. IF THE ROAD PAVEMENT IS DAMAGED DURING CONSTRUCTION, IT MUST BE RESTORED IN ACCORDANCE WITH COUNCIL'S SPECIFICATIONS AT THE CONTRACTOR'S COST.
- BOUNDARY LEVELS FOR NEW CROSS OVERS TO BE CONFIRMED WITH COUNCIL PRIOR TO WORKS PROCEEDING.

ARCHITECT'S AND HYDRAULIC ENGINEER'S DOCUMENTATION.

#### EARTHWORKS/COMPACTION NOTES

- 1. STRIP AND STOCKPILE TOPSOIL FOR RE-USE IN LANDSCAPING. ALL EXCESS EXISTING TOPSOIL, FILL, ROAD MATERIALS AND OTHER EXCAVATED MATERIAL, TREES/VEGETATION ETC. SHALL BE DISPOSED OFF SITE TO AN APPROVED DISPOSAL SITE. THE CONTRACTOR SHALL PAY ALL FEES AND CHARGES ASSOCIATED WITH THE TESTING AND DISPOSAL OF EXCESS MATERIAL.
- 2. THE SUPERINTENDENT SHALL BE NOTIFIED WHEN EARTHWORKS HAVE REACHED DESIGN SUB-GRADE LEVEL (ie. UNDERSIDE OF PROPOSED PAVEMENT) AND WHEN SURFACES ARE EXPOSED PRIOR TO FILLING. PROOF ROLL ALL DESIGN SUB-GRADES AND SURFACES EXPOSED, WITH A MINIMUM OF EIGHT PASSES OF A VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE SUPERINTENDENT. WHERE REQUIRED BENCH THE FILL AREA TO FACILITATE LEVEL FILL PLACEMENT. PARTICULARLY WHERE FILLING OR CUTTING OPERATIONS ARE REQUIRED TO ACHIEVE DESIGN SUB-GRADE.
- 3. ALL WEAK/SOFT AND UNSUITABLE MATERIAL (MORE THAN 3mm MOVEMENT UNDER ROLLER) TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL. PLACED & COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF SPECIFICATION FOR THE PAVEMENT IN THAT
- 4. ALL SELECT OR IMPORTED FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE SUPERINTENDENT AND SHALL COMPLY WITH THE FOLLOWING:
- GENERAL SELECT OR IMPORTED FILL
- a) FREE FROM ORGANIC AND PERISHABLE MATTER MAXIMUM PARTICLE SIZE 75mm
- PLASTICITY INDEX LESS THAN 15%
- MINIMUM CBR 8% PRIOR TO IMPORTING OF FILL, SAMPLES OF FILL MATERIAL SHALL BE TESTED TO ASSESS THE APPROPRIATENESS OF THE FILL MATERIAL & REPORTING SUBMITTED FOR REVIEW. WHERE SUITABLE MATERIALS FOR FILLING ARE AVAILABLE ON-SITE THE CONTRACTOR SHALL MANAGE AND SORT THE MATERIALS SO OBTAINED FROM CUTTINGS TO ENSURE THE BEST MATERIAL IS USED.
- 5. ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200mm THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (-2% TO 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289 OF NOT LESS THAN THE FOLLOWING STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH

AS1289.		
LOCATION	STANDARD DI	RY DENSIT
EXTERNAL PAVED AREAS,		
ROADS AND CARPARKS		
(TOP 600mm BELOW SUBGRADE	LEVEL)	100%
(BELOW TOP 600mm)		98%
LANDSCAPED AREAS		90%
SUB- BASE & BASE COURSE TO BE CO	OMPACTED AS	SPECIFIED
FOR THE APPROPRIATE PAVEMENT TY	PE.	
TOR THE ALTROPRIATE LAVEILENT TI		

- THE CONTRACTOR SHALL PROGRAMME THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLER MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL ANY DAMAGE RESULTING FROM THE CONTRACTOR UNSATISFACTORY DRAINAGE DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT THEIR COST.
- ALL TESTING OF THE SUB-GRADE SHALL BE CARRIED OUT BY AN APPROVED "NATA" REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE & RESULTS SUBMITTED TO THE SUPERINTENDENT FOR REVIEW.
- CONSTRUCTION GENERALLY TO BE IN ACCORDANCE WITH AS3798-2007 GUIDELINES ON EARTHWORKS FOR COMMERCIAL & RESIDENTIAL DEVELOPMENTS.

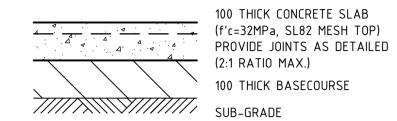
PAVEMENT TYPE P1 (PI) PEDESTRIAN TRAFFIC OR OCCASIONAL LIGHT VEHICLES.

#### BASECOURSE:

DGS40 (RTA FORM 3057) OR EQUIVALENT COMPACTED TO 98% SMDD. MINIMUM SOAKED CBR 45% U.N.O.

#### SUB-GRADE:

PROOF ROLLED NATURAL SUB GRADE ROCK OR ENGINEERED FILL. REFER PROJECT GEOTECHNICAL REPORT: REF 86625.00 BY DOUGLAS PARTNERS DATE 6TH DECEMBER 2018.



#### PAVEMENT TYPE P2 BASED ON A CBR= 4% & A TRAFFIC

LOADING FOR CARS / SERVICE VEHICLES.

### BASECOURSE:

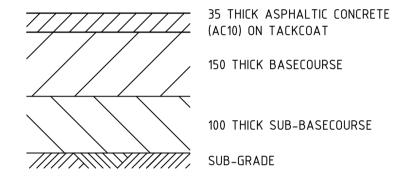
DGB20 (RTA FORM 3051) COMPACTED TO 100% SMDD. MINIMUM SOAKED CBR 80% U.N.O.

#### SUB-BASECOURSE:

DGS40 (RTA FORM 3057) OR EQUIVALENT COMPACTED TO 98% SMDD MINIMUM SOAKED CBR 45% U.N.O.

#### SUB-GRADE:

PROOF ROLLED NATURAL SUB GRADE ROCK OR ENGINEERED FILL. REFER PROJECT GEOTECHNICAL REPORT: REF 86625.00 BY DOUGLAS PARTNERS DATE 6TH DECEMBER 2018.



IN AREAS OF RESURFACING THE EXISTING BASECOURSE MAY BE RE-USED SUBJECT TO VERIFICATION ON SITE.

## PAVEMENT TYPE P3

PEDESTRIAN TRAFFIC OR OCCASIONAL LIGHT VEHICLES.

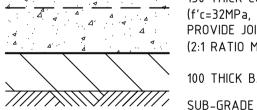
# P3

#### BASECOURSE:

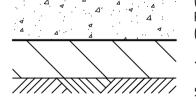
DGS40 (RTA FORM 3057) OR EQUIVALENT COMPACTED TO 98% SMDD. MINIMUM SOAKED CBR 45% U.N.O.

#### SUB-GRADE:

PROOF ROLLED NATURAL SUB GRADE ROCK OR ENGINEERED FILL. REFER PROJECT GEOTECHNICAL REPORT: REF 86625.00 BY DOUGLAS PARTNERS DATE 6TH DECEMBER 2018.



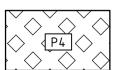
150 THICK CONCRETE SLAB (f'c=32MPa, SL92 MESH TOP) PROVIDE JOINTS AS DETAILED (2:1 RATIO MAX.)

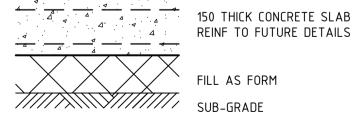


100 THICK BASECOURSE

## PAVEMENT TYPE P4

PEDESTRIAN TRAFFIC OR OCCASIONAL LIGHT VEHICLES.





PRELIMINARY - NOT FOR CONSTRUCTION

ISSUED FOR 75% TENDER 19.03.21 M.B. DATE CHECKED ISSUE AMENDMENT

FOR LEVELS, PAVEMENT FALLS AND SUB SOIL DRAINAGE REFER TO LANDSCAPE

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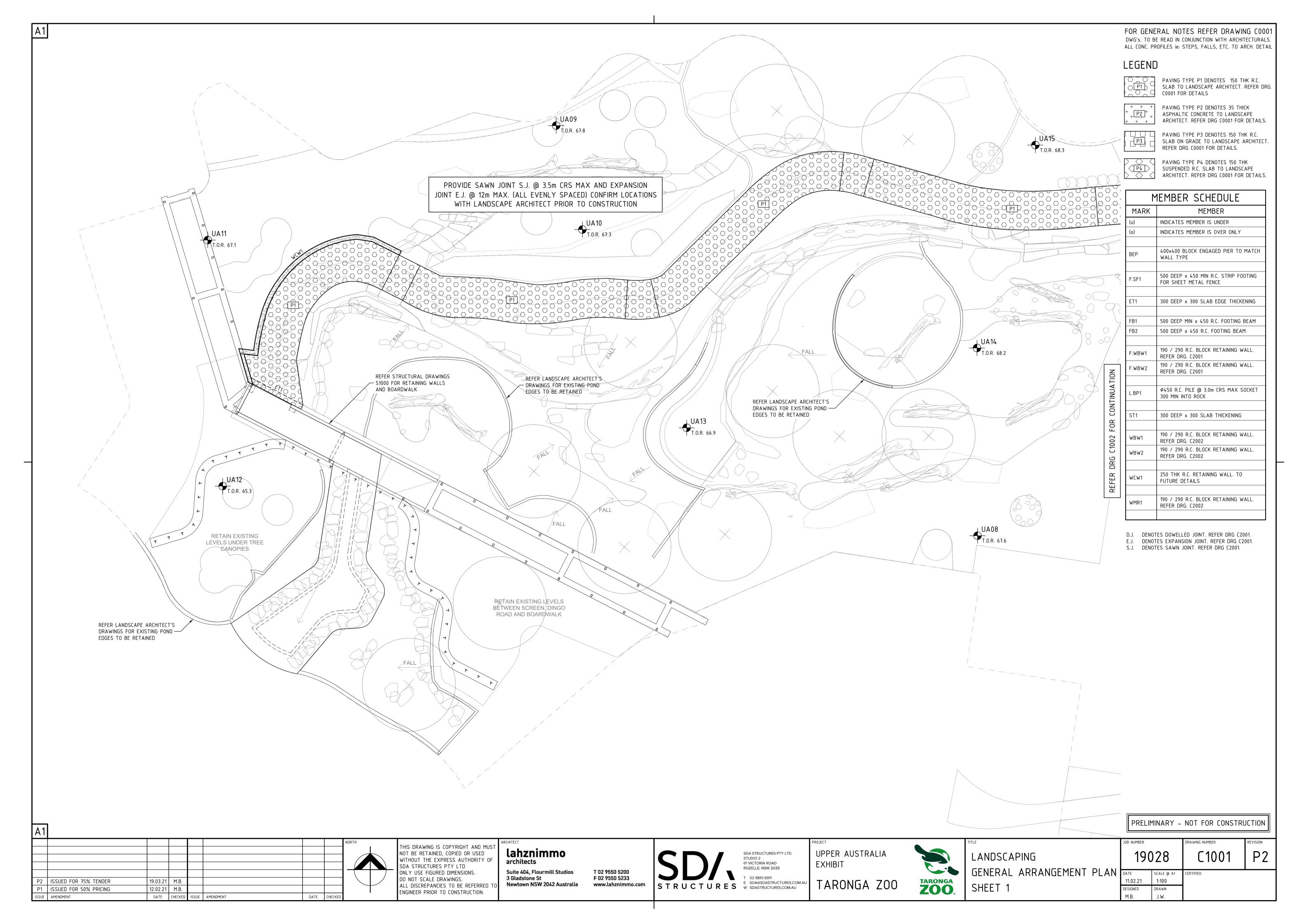
UPPER AUSTRALIA **EXHIBIT** 

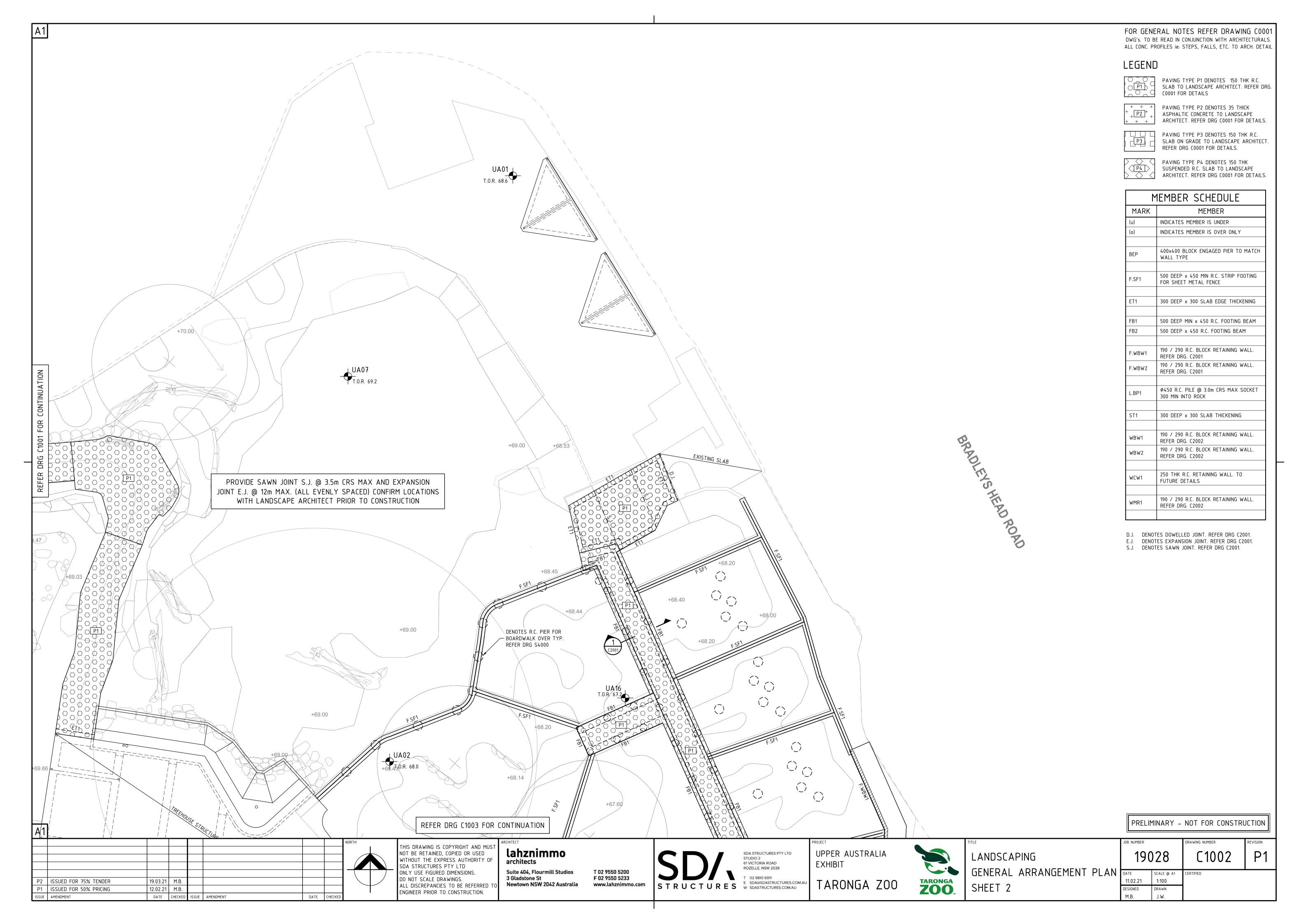
TARONGA ZOO

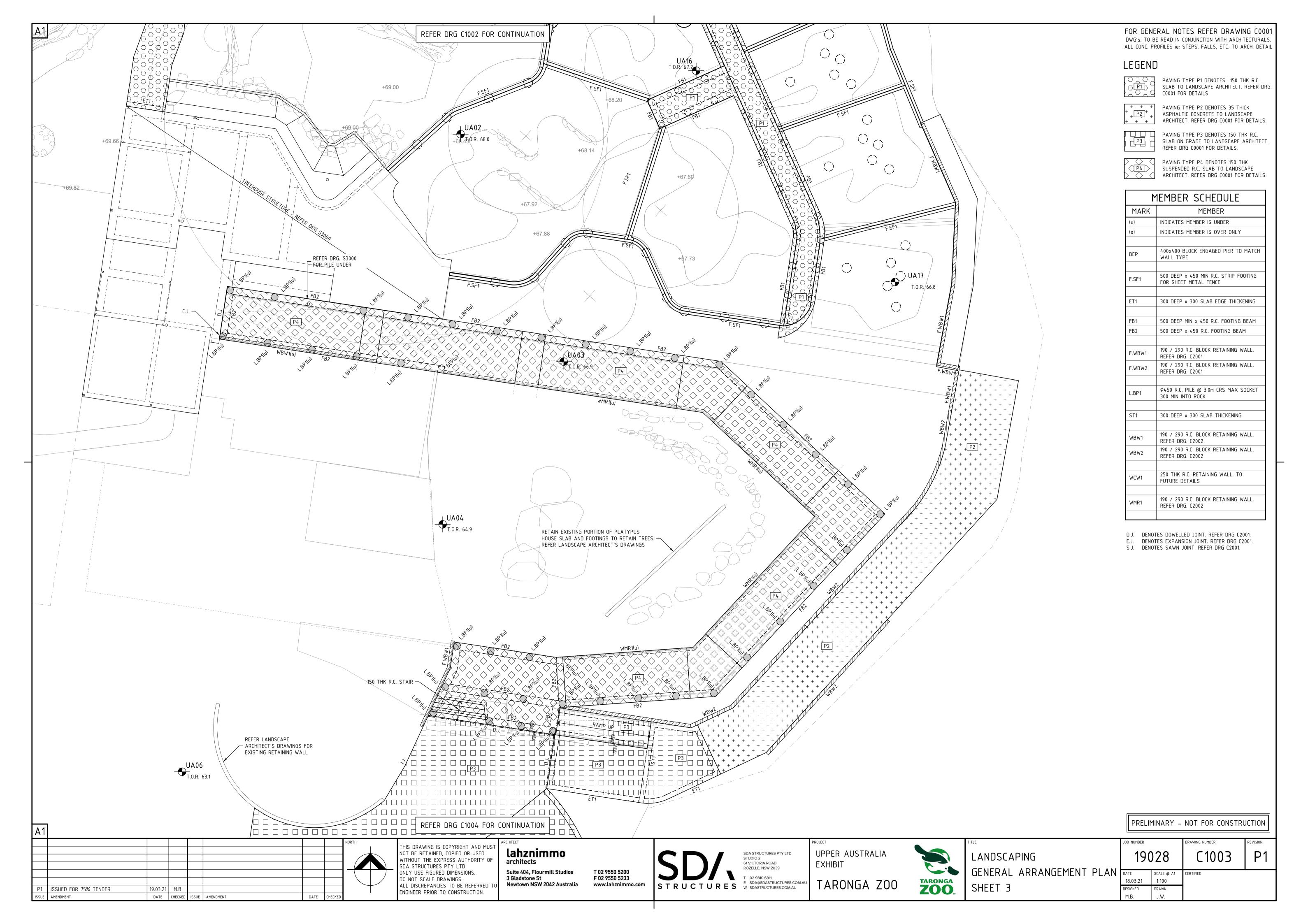
**ZOO**.

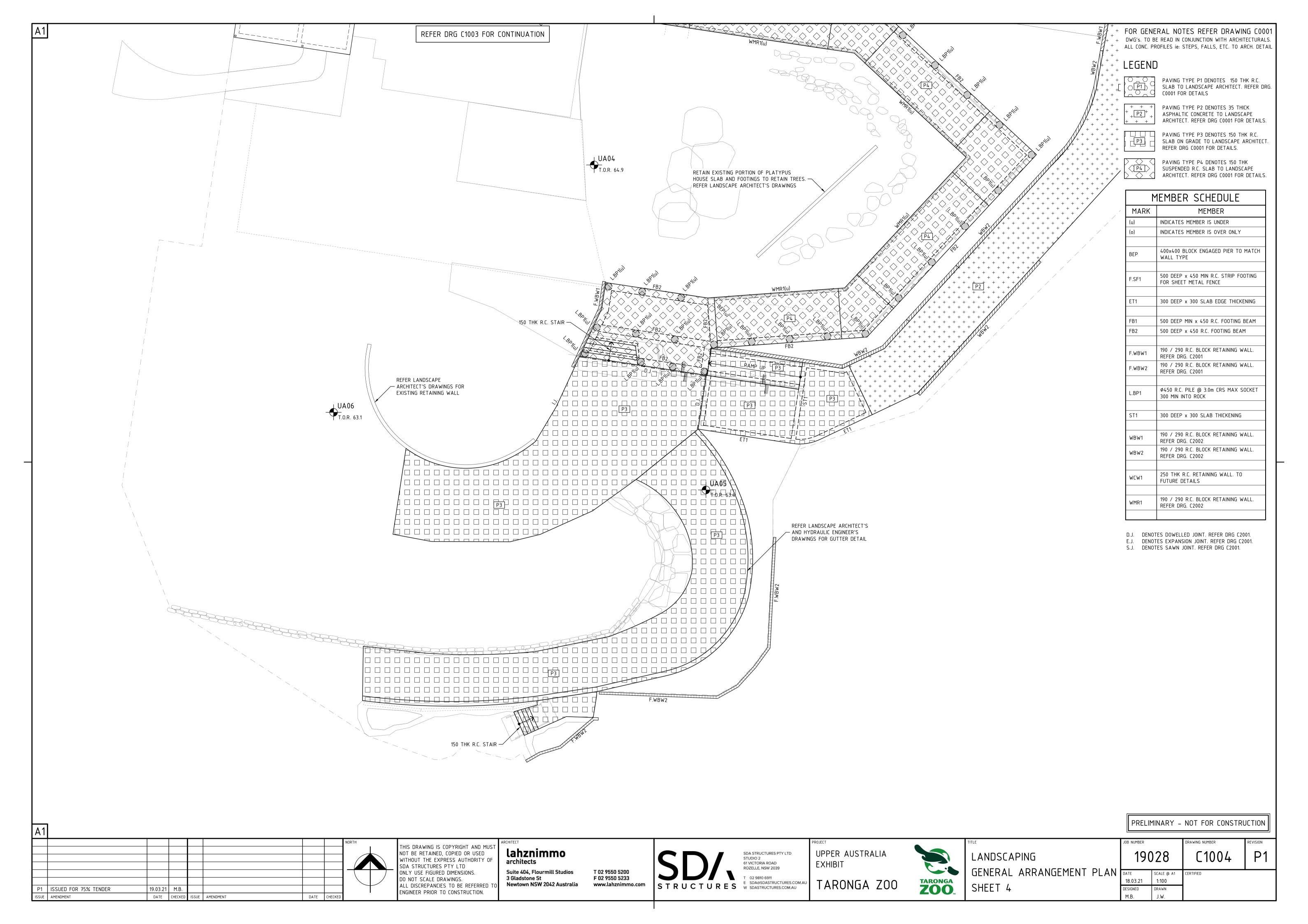
GENERAL NOTES

19028 C0001 19.03.21 N.A. DESIGNED DRAWN



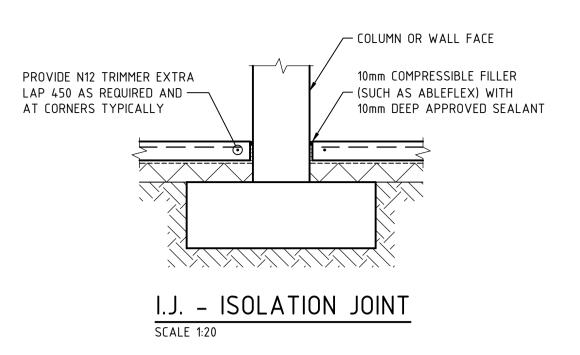


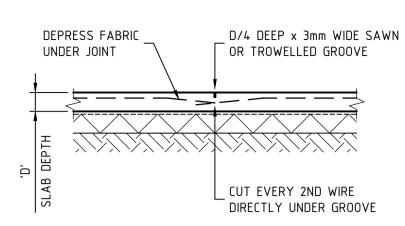




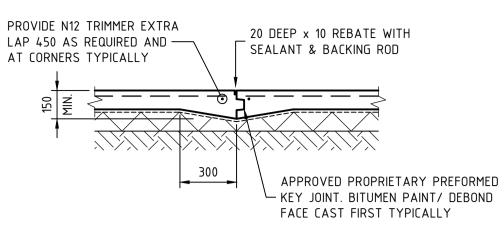


FOR GENERAL NOTES REFER DRAWING CO001 DWG's. TO BE READ IN CONJUNCTION WITH ARCHITECTURALS. ALL CONC. PROFILES ie: STEPS, FALLS, ETC. TO ARCH. DETAIL



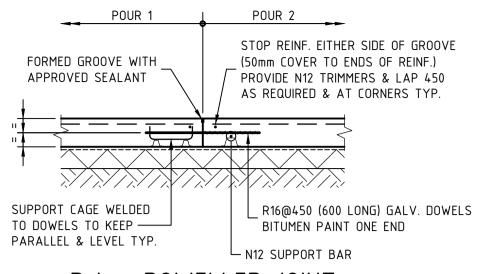


S.J. - SAWN CONTROL JOINT SCALE 1:20 NOTE: SAW CUT TO BE MADE WITHIN 16 HOURS OF CASTING SLAB.

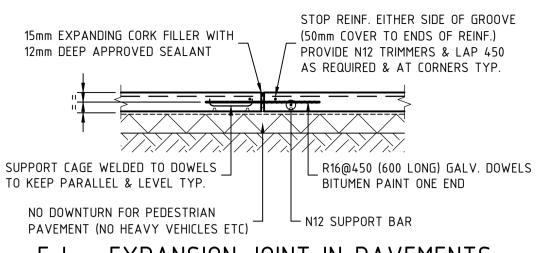


K.J. – KEYED JOINT SCALE 1:20

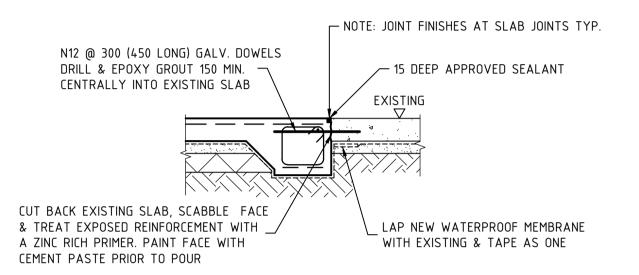
1. ALL KEYS TO STOP 300mm FROM ALL INTERSECTING JOINTS, WALL EDGES etc. 2. REPAIR ANY DEFECTS IN THE KEYS SO THAT THEY HAVE A FLAT AND SMOOTH SURFACE PRIOR TO BITUMEN COATING.



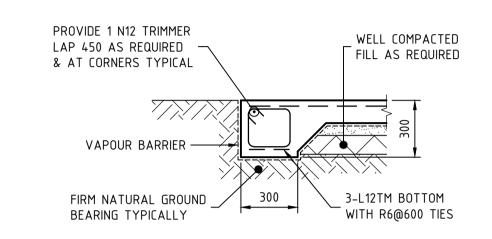
D.J. - DOWELLED JOINT SCALE 1:20



E.J. - EXPANSION JOINT IN PAVEMENTS SCALE 1:20

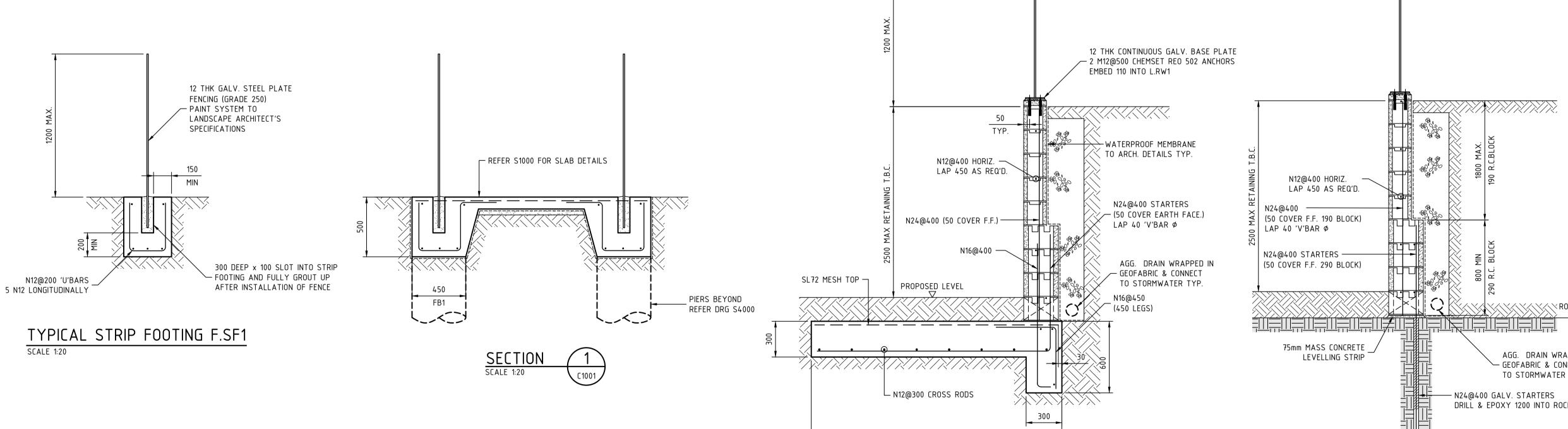


SHEET METAL FENCE - TO LANDSCAPE ARCHITECT'S DETAILS









ROCK LEVEL AGG. DRAIN WRAPPED IN - GEOFABRIC & CONNECT TO STORMWATER TYP. – N24@400 GALV. STARTERS DRILL & EPOXY 1200 INTO ROCK

RETAINING WALL - F.WBW1

2100

RETAINING WALL - F.WBW1 ON ROCK

ALTERNATE F.WBW1 DETAIL FOR WALL ONTO ROCK

PRELIMINARY - NOT FOR CONSTRUCTION

	<u>`</u>							
								NORTH
P1	ISSUED FOR 75% TENDER	19.03.21	M.B.					
ISSUE	AMENDMENT	DATE	CHECKED	ISSUE	AMENDMENT	DATE	CHECKED	1

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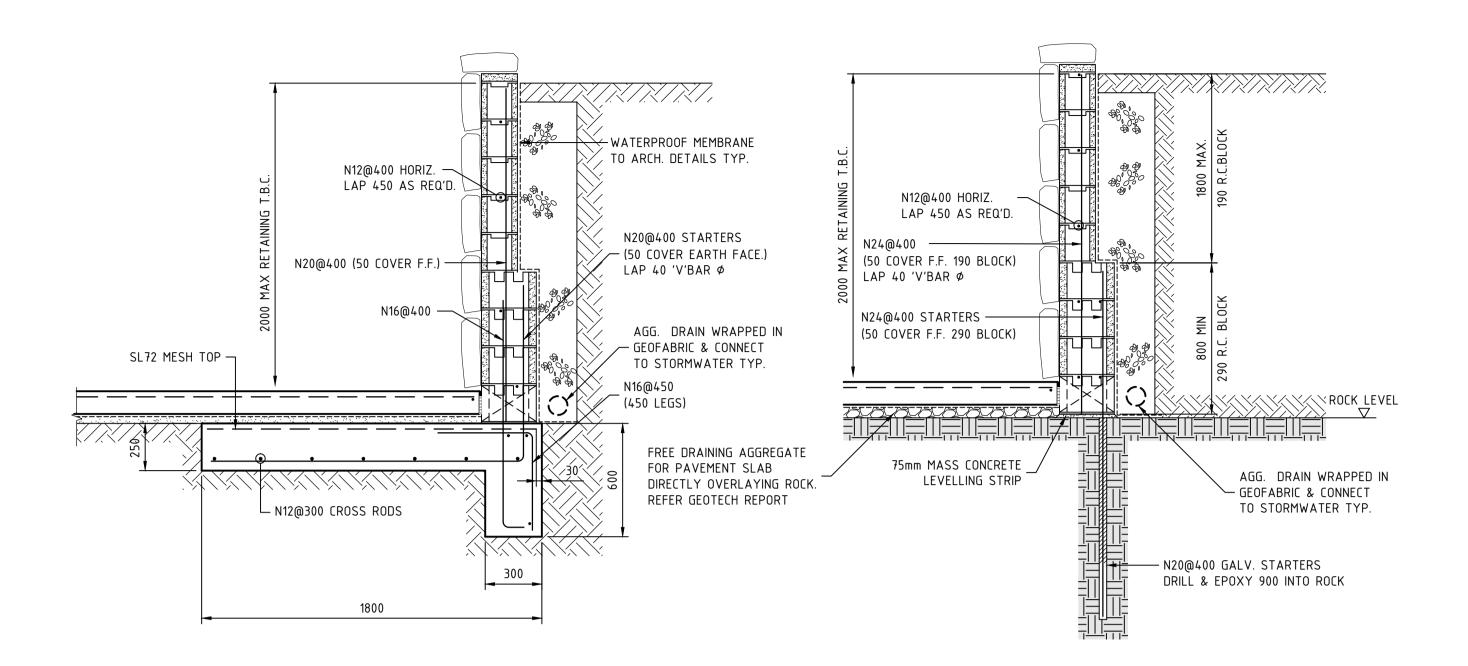
SDA STRUCTURES PTY LTD STUDIO 2 61 VICTORIA ROAD ROZELLE, NSW 2039 E SDA@SDASTRUCTURES.COM.A STRUCTURES.COM.AU

UPPER AUSTRALIA **EXHIBIT** TARONGA ZOO

TARONGA ZOO,

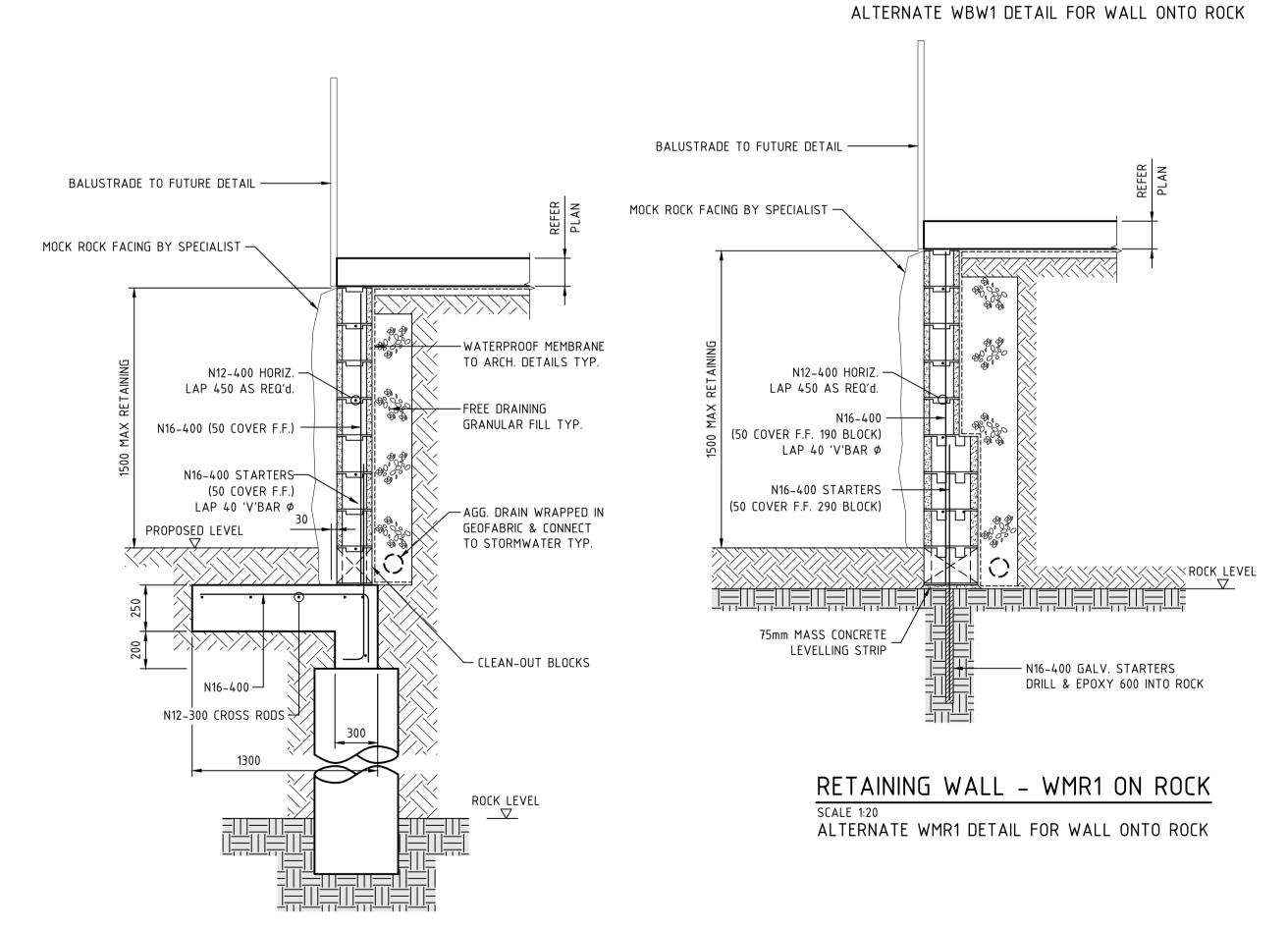
LANDSCAPING	
SECTIONS AND DE	TAILS
SHEET 1	

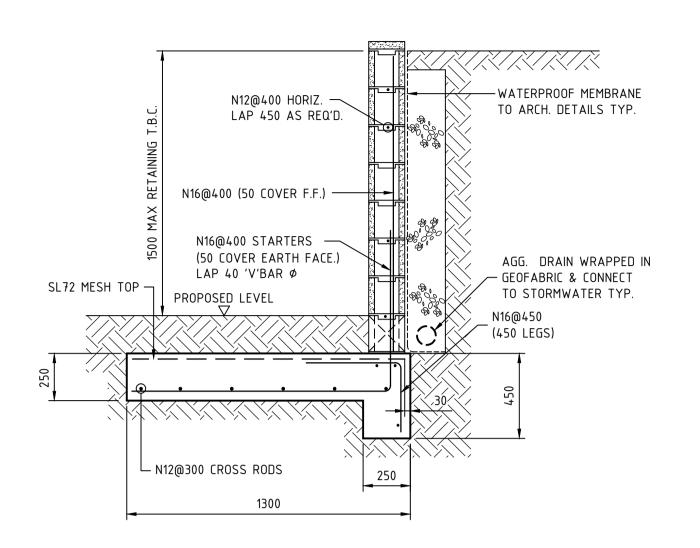
JOB NUMBER		DRAWING NUMBER	REVISION	
19028		C2001	P1	
DATE	SCALE @ A1	CERTIFIED		
03.03.21	1:20 U.N.O.			
DESIGNED	DRAWN			
M.B.	J.W.			





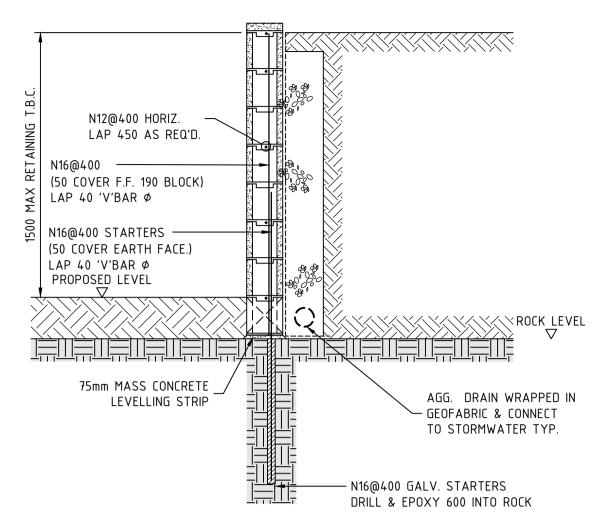
RETAINING WALL - WBW1 ON ROCK SCALE 1:20





RETAINING WALL - WBW2

NOTE: FOOTING BREADTH REDUCES TO 850mm FOR 1000 MAX. RETAINING.



RETAINING WALL - WBW2 ON ROCK

ALTERNATE WBW2 DETAIL FOR WALL ONTO ROCK

PRELIMINARY - NOT FOR CONSTRUCTION

								NORT
P1	ISSUED FOR 75% TENDER	19.03.21	M.B.					
ISSUE	AMENDMENT	DATE	CHECKED	ISSUE	AMENDMENT	DATE	CHECKED	

SCALE 1:20

RETAINING WALL - WMR1

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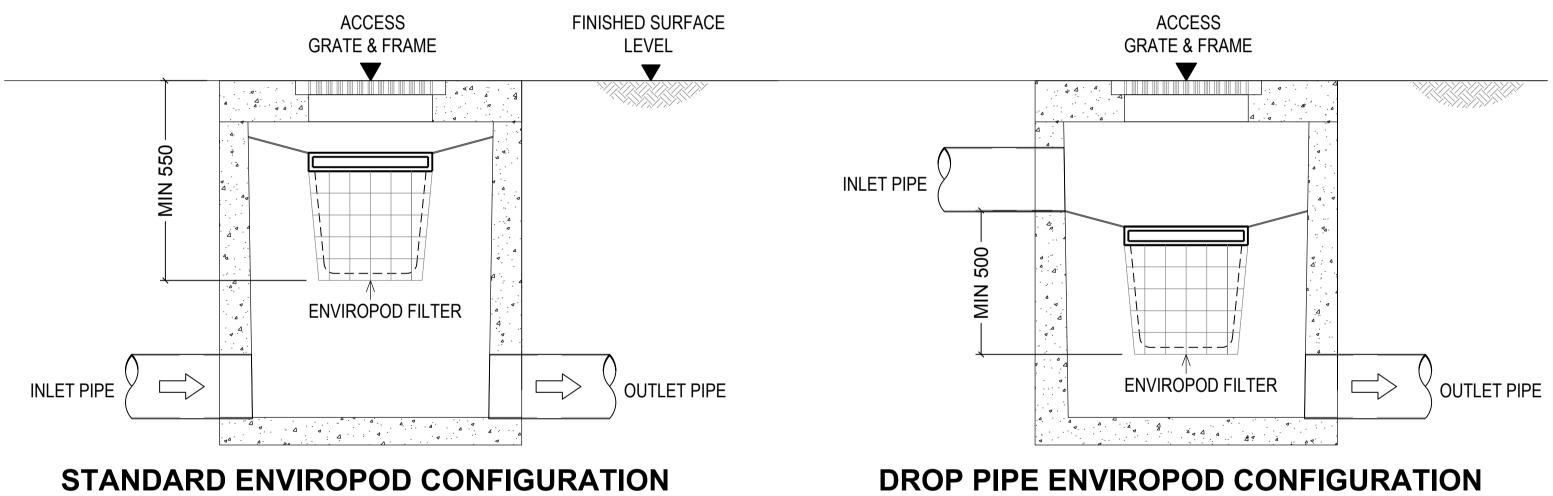
UPPER AUSTRALIA **EXHIBIT** 

TARONGA ZOO



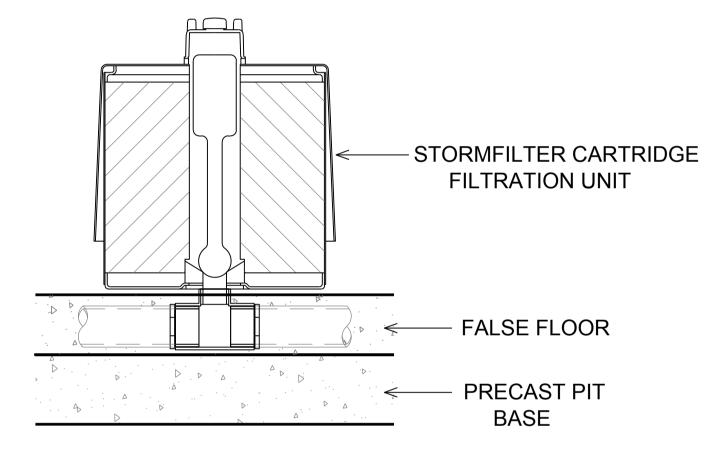
LANDSCAPING SECTIONS AND DETAILS SHEET 2

	JOB NUMBER		DRAWING NUMBER	REVISION				
	19028		C2002	P1				
	DATE	SCALE @ A1	CERTIFIED					
	19.03.21	1:20 U.N.O.						
	DESIGNED	DRAWN						
	M.B.	J.W.						



**SECTION** 

DROP PIPE ENVIROPOD CONFIGURATION **SECTION** 



**STORMFILTER CARTRIDGE DETAIL** 

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DATE REVISION AMENDMENT AMENDMENT DEVELOPMENT APPLICATION ISSUE FOR 75% DETAILED DESIGN 19/03/21 PROJECT



TARONGA ZOO -**UPPER AUSTRALIA** 



PREPARED BY

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■ Hydraulic Services ■ Fire Services ■ Civil Services ■ Sydney Water Accredited Water Servicing Co-ordinator and Designer

SERVING THE CONSTRUCTION INDUSTRY

STORMWATER TREATMENT **DEVICES TYPICAL DETAILS** 

ESIGNED M.Cz. HECKED J.G. **AS SHOWN** CS-TD-C6.07 6906000 75% DETAILED DESIGN