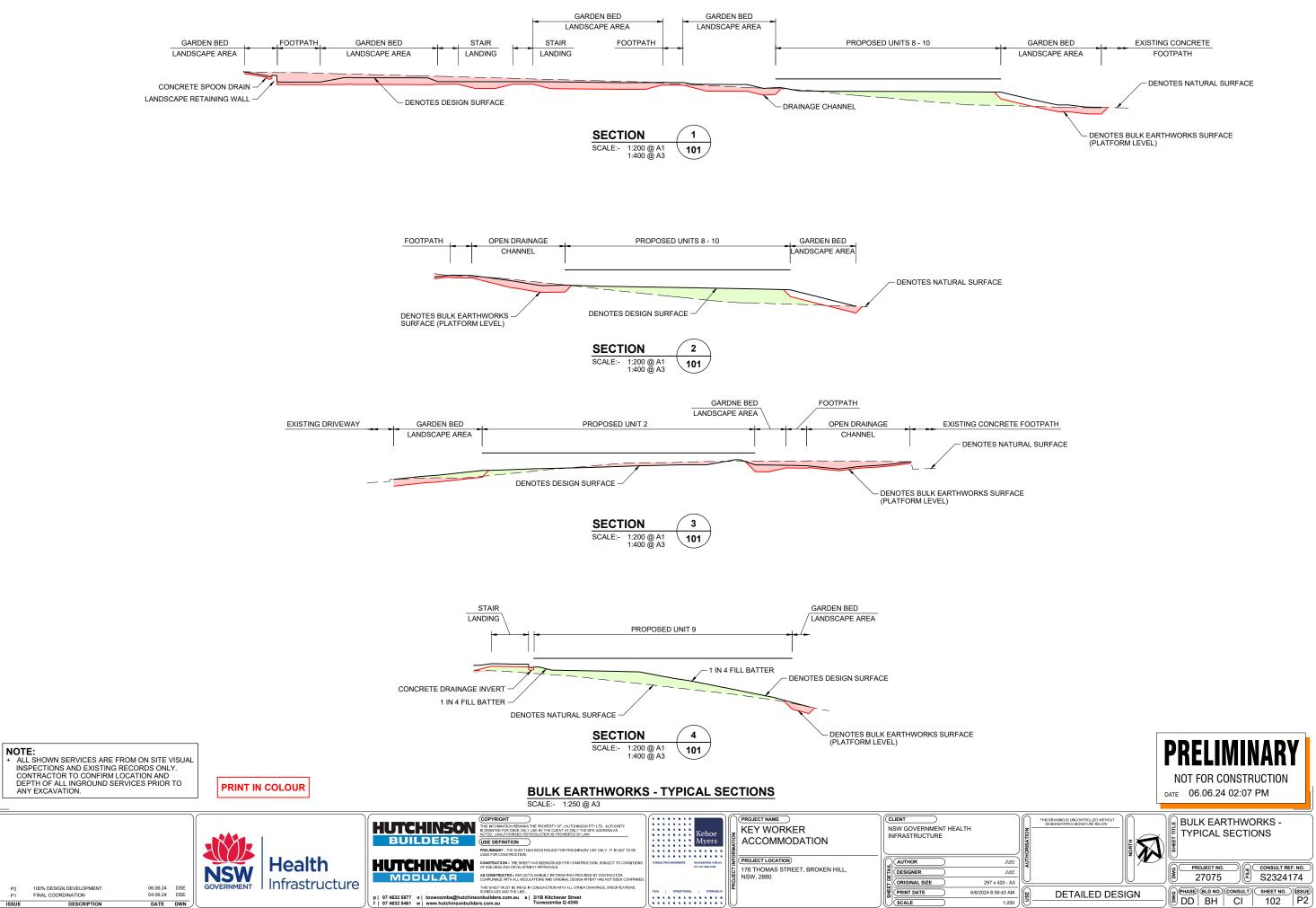


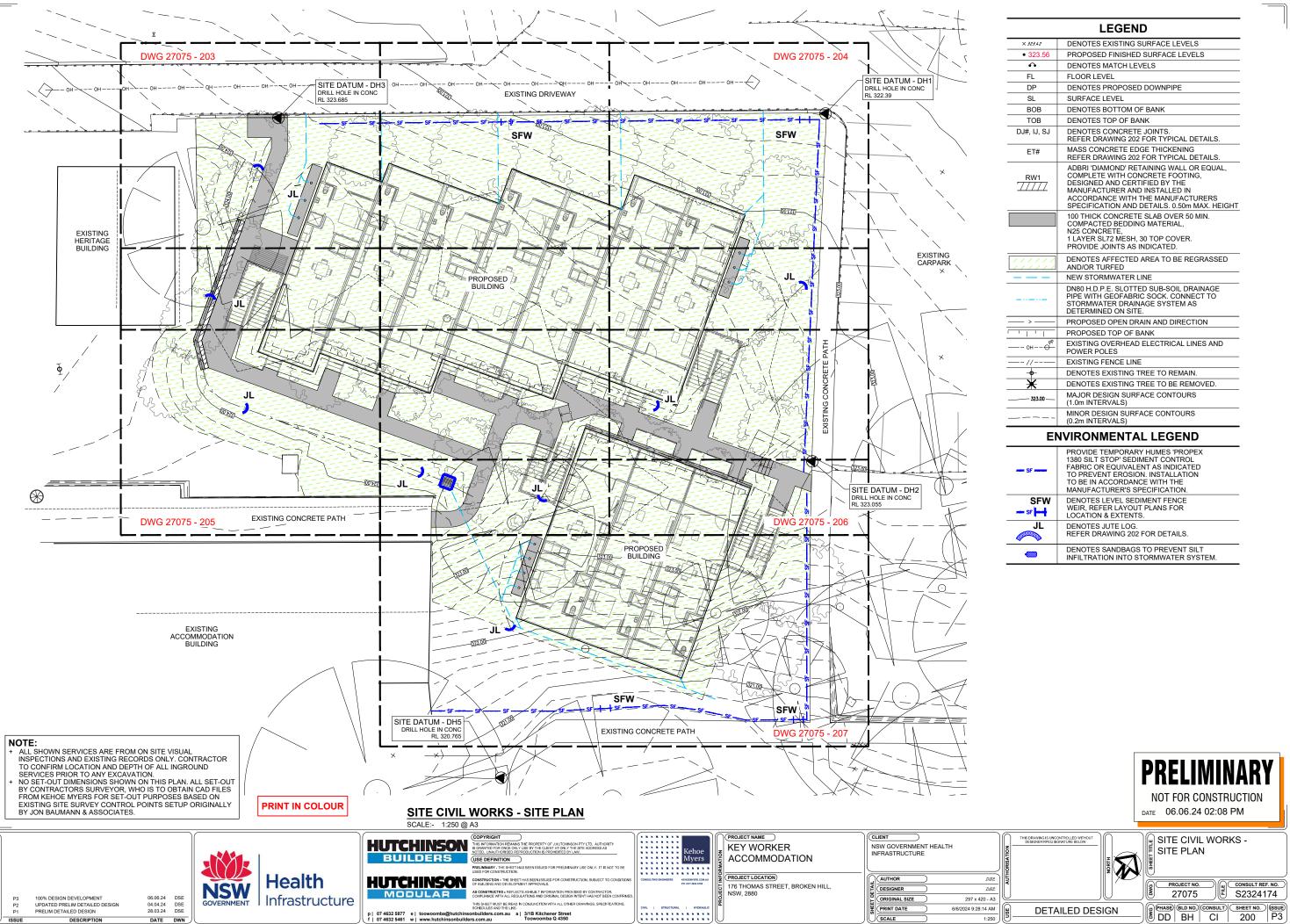
	Colour	Minimum Depth (m)	Maximum Depth (m)	2D Area (m²)	Volume (m³)
		-1.00	-0.80	5.6	0.2
٦ (-0.80	-0.60	24.9	2.7
		-0.60	-0.40	106.4	14.7
		-0.40	-0.20	370.5	53.5
		-0.20	0.00	394.9	141.9
		0.00	0.20	226.3	120.3
-		0.20	0.40	324.7	60.3
		0.40	0.60	103.4	20.3
		0.60	0.80	38.4	9.2
_		0.80	1.00	21.6	3.2
		1.00	1.20	6.3	0.3

Surface	Area (m²)	Cut (m ³)	Fill (m ³)	Net Volume (m³)
STRIPPED	1643.99	164.40	0.00	164.40 (Cut)
FINAL CUT & FILL	1643.99	212.86	213.62	0.76 (Fill)
TOTAL	1643.99	377.26	213.62	163.64 (Cut)





P2



	LEGEND			
× 323.42	DENOTES EXISTING SURFACE LEVELS			
• 323.56	PROPOSED FINISHED SURFACE LEVELS			
•	DENOTES MATCH LEVELS			
FL	FLOOR LEVEL			
DP	DENOTES PROPOSED DOWNPIPE			
SL	SURFACE LEVEL			
BOB	DENOTES BOTTOM OF BANK			
TOB	DENOTES TOP OF BANK			
DJ#, IJ, SJ	DENOTES CONCRETE JOINTS. REFER DRAWING 202 FOR TYPICAL DETAILS.			
ET#	MASS CONCRETE EDGE THICKENING REFER DRAWING 202 FOR TYPICAL DETAILS.			
 	ADBRI 'DIAMOND' RETAINING WALL OR EQUAL, COMPLETE WITH CONCRETE FOOTING, DESIGNED AND CERTIFIED BY THE MANUFACTURER AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION AND DETAILS. 0.50m MAX. HEIGHT			
	100 THICK CONCRETE SLAB OVER 50 MIN. COMPACTED BEDDING MATERIAL, N25 CONCRETE, 1 LAYER SL72 MESH, 30 TOP COVER. PROVIDE JOINTS AS INDICATED.			
	DENOTES AFFECTED AREA TO BE REGRASSED AND/OR TURFED			
	NEW STORMWATER LINE			
	DN80 H.D.P.E. SLOTTED SUB-SOIL DRAINAGE PIPE WITH GEOFABRIC SOCK. CONNECT TO STORMWATER DRAINAGE SYSTEM AS DETERMINED ON SITE.			
	PROPOSED OPEN DRAIN AND DIRECTION			
	PROPOSED TOP OF BANK			
—— он —— Срр	EXISTING OVERHEAD ELECTRICAL LINES AND POWER POLES			
	EXISTING FENCE LINE			
	DENOTES EXISTING TREE TO REMAIN.			
*	DENOTES EXISTING TREE TO BE REMOVED.			
323.00	MAJOR DESIGN SURFACE CONTOURS (1.0m INTERVALS)			
	MINOR DESIGN SURFACE CONTOURS (0.2m INTERVALS)			
El	NVIRONMENTAL LEGEND			
see SF sees	PROVIDE TEMPORARY HUMES 'PROPEX 1380 SILT STOP' SEDIMENT CONTROL FABRIC OR EQUIVALENT AS INDICATED TO PREVENT EROSION. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.			

EROSION AND SEDIMENT CONTROL NOTES

- 1. THE CONTRACTOR SHALL ENSURE THAT MUD AND SILT IS NOT TRACKED ONTO PUBLIC ROADS BY VEHICLES LEAVING THE SITE.
- 2. A REPRESENTATIVE OF THE CONTRACTOR SHALL BE ON SITE AT ALL TIMES DURING ANY CONSTRUCTION OPERATIONS AND SHALL RECTIFY ANY FAILURE OF THE SILT CONTROL DEVICES AND CLEAN ANY EXTERNAL ROADS CONTAMINATED BY CONSTRUCTION TRAFFIC.
- 3. INSPECTION OF THE SURROUNDING ROADWAYS SHALL BE CARRIED OUT ON A DAILY BASIS AND A DIARY RECORDS KEPT WITH RESPECT TO ANY CLEANING WORKS UNDERTAKEN.
- 4. SUBCONTRACTORS SHALL NOT BE ALLOWED TO WORK UNSUPERVISED.
- 5. DUST EMISSIONS FROM CONSTRUCTION MACHINERY SHALL BE CONTROLLED BY REGULAR WATERING OR ON AN AS-REQUIRED BASIS
- SILT STOP FENCES SHALL BE INSTALLED AT THE START OF WORKS AND SHALL BE MAINTAINED FOR THE FULL DURATION OF THE PROJECT AND UNTIL ESTABLISHMENT OF ANY PLANTINGS.

SEDIMENT FENCE NOTES

- 1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
- 2. POSTS SHOULD NOT BE SPACED MORE THAN 2.0M APART.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150MM AND FOLDED.
- 4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14MM GAUGE, 150MM MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
- 5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE
- 6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40M ON FLAT TERRAIN DECREASING TO 20M SPACINGS ON STEEP TERRAIN

EARTHWORKS NOTES

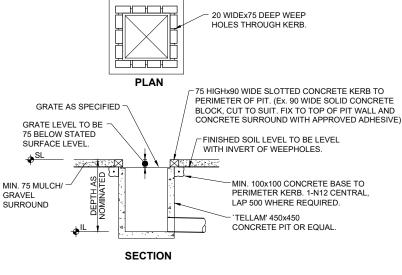
- 1. PRIOR TO THE COMMENCEMENT OF WORKS THE CONTRACTOR IS TO CONFIRM THE LOCATION OF ALL UNDERGROUND SERVICES AND SET OUT DIMENSIONS.
- 2. ALL WORKS SHALL BE IN ACCORDANCE WITH AS3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT
- 3. THE WHOLE OF THE SITE AREA AFFECTED BY EARTHWORKS IS TO BE STRIPPED OF MIN. 100mm THICKNESS OF TOPSOIL AND ORGANIC MATTER. TOPSOIL IS TO BE STOCKPILED FOR RE-USE IN LANDSCAPED AREAS AS DIRECTED ON SITE. THE REMAINING TOPSOIL SHALL BE REMOVED FROM
- 4. AFTER STRIPPING AND/OR CUTTING THE SITE, THE SUBGRADE IS TO BE PROOF ROLLED IN THE PRESENCE OF THE SUPERINTENDENT TO REVEAL ANY SOFT SPOTS WHICH ARE TO BE REMOVED. TREES TO BE REMOVED SHALL BE GRUBBED OUT AND BACKFILLED WITH APPROVED SELECTED MATERIAL
- 5. THE BUILDING PLATFORM SHALL BE PREPARED BY CUTTING AND FILLING THE NATURAL MATERIAL TO THE SPECIFIED PLATFORM LEVEL AND TO THE EXTERNAL DESIGN LEVELS. ADDITIONAL FILL MATERIAL REQUIRED SHALL BE APPROVED IMPORTED FILL MATERIAL OF MAX. ISS 2.5% OR ALTERNATIVELY APPROVED QUARRY SCALPING MATERIAL OF MIN. SOAKED CBR10, P.I.<15% AND MAX. AGGREGATE SIZE OF 75mm. SAMPLES WITH PROOF OF ABOVE SPECIFICATION LIMITS ARE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ARRIVAL ON SITE.
- 6. FILL SHALL BE PLACED IN MAXIMUM 150mm LAYERS AND COMPACTED TO 98% STANDARD COMPACTION TO AS1289. COMPACTION IS TO BE ±3% OF OPTIMUM MOISTURE CONTENT. THE COMPLETED FILL PLATFORM SHALL BE PROOF ROLLED IN THE PRESENCE OF THE SUPERINTENDENT. THE FINAL LAYER SHALL BE TRIMMED PRIOR TO PLACEMENT OF SLAB BEDDING, BEDDING MATERIAL IS TO BE OF UNIFORM COMPACTED THICKNESS. ADEQUATE SITE DRIMIN OF 10 TO 55 MAINTAINED RUNDING COMPACTED THICKNESS. ADEQUATE SITE DRAINAGE IS TO BE MAINTAINED DURING CONSTRUCTION.
- 7. EXCESS CUT TO BE REMOVED FROM SITE OR AS DIRECTED BY THE SUPERINTENDENT. RESPREADING OF MATERIAL ONSITE SHALL NOT CAUSE PONDING OR REDIRECTING OF OVERI AND FLOW
- 8. EARTHWORKS SHALL BE CARRIED OUT TO LEVEL 2 INSPECTION AND TESTING (SMALL SCALE OPERATIONS) REQUIREMENTS IN ACCORDANCE WITH AS3798 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT". CERTIFICATION OF ALL EARTHWORKS SHALL BE PROVIDED BY A RPEQ WHICH INCLUDES AS A MINIMUM THE FOLLOWING REQUIREMENTS:
- REQUIREMENTS: a. CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS (IE. STRIPPING, PROOF ROLLING OF SUBGRADE, ETC.) HAVE BEEN CARRIED OUT IN ACCORDANCE WITH EARTHWORKS SPECIFICATION. CERTIFICATION THAT FILL HAS BEEN PLACED AND COMPACTED TO THE REQUIRED MINIMUM DENSITY IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION
- CERTIFICATION. CERTIFICATION THAT THE QUALITY OF ANY IMPORTED FILL COMPLIES WITH THE EARTHWORKS SPECIFICATION REQUIREMENTS.

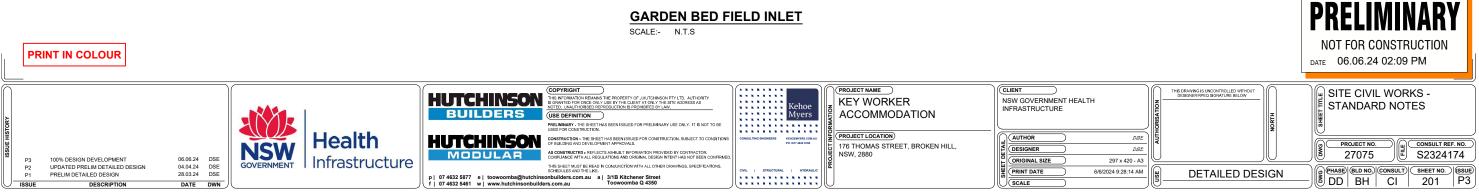
GENERAL NOTES

- 1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL CONSULTANTS DRAWINGS AS APPLICABLE AND THE SPECIFICATION.
- 2. ALL SET OUT DIMENSIONS SHALL BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORK. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING FROM THE DRAWING. REFER TO SUPERINTENDENT FOR DECISION IF ANY DISCREPANCIES EXIST.
- 3. WORK AS DETAILED ON THE DRAWINGS SHALL NOT BE VARIED WITHOUT THE PRIOR WRITTEN CONSENT THE ENGINEER.
- 4. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CURRENT SAA STANDARDS AND CODES OF PRACTICE (EXCEPT AS VARIED BY THE CONTRACT DOCUMENTS) AND OF THE BY-LAWS OF THE LOCAL AUTHORITY.
- THE CONTRACTOR SHALL MAINTAIN THE STRUCTURE IN A STABLE CONDITION DURING CONSTRUCTION. NO STRUCTURAL ELEMENTS SHALL BE OVERSTRESSED BY CONSTRUCTION LOADINGS.

STORMWATER DRAINAGE NOTES

- PIPE SIZES AND TYPES SHALL BE AS SHOWN ON THE PLANS. FRC PIPES SHALL BE CLASS 2 U.N.O. DN100 AND DN150 PIPES SHALL BE UPVC
 DRAINAGE PIPES FROM DOWNPIPES SHALL BE DN100 UPVC U.N.O.
- ALL PIPES SHALL BE LAID AT MIN GRADE OF 1 IN 100, U.N.O. ALL LINES SHALL BE FULLY SEALED. CONCRETE AND FIBRE CEMENT LINES SHALL BE RUBBER RING JOINTED.
- 5. ALL PIPES TO BE FULLY BEDDED IN SAND OR CRUSHER DUST AND INSPECTED AND APPROVED BY THE
- ALL PIPES TO BE FOLLT BEDDED IN SAND OR CROSHER DOST AND INSPECTED AND AFFROVED BY THE ENGINEER PRIOR TO BACKFILLING.
 BACKFILLING SHALL BE CLEAN EXCAVATED MATERIAL COMPACTED AS PER THE EARTHWORKS NOTES.
 ALL PITS SHALL BE BENCHED AFTER INSTALLATION OF PIPEWORK TO ENSURE NO WATER PONDS IN BOTTOM OF PIT
- 8. ALL PIT AND MANHOLE LIDS TO BE ADJUSTED TO MATCH CROSSFALLS OF THE SURROUNDING FINISHED SURFACE LEVELS.
- 9. THE CONTRACTOR SHALL LIAISE WITH ALL SERVICE AUTHORITIES TO DETERMINE THE LOCATION OF ALL EXISTING SERVICES. THE COST TO REPAIR ANY DAMAGE CAUSED TO EXISTING SERVICES DURING CONSTRUCTION SHALL BE PAID BY THE CONTRACTOR. 10.NO SURFACE PONDING OF STORMWATER IS TO OCCUR ANYWHERE ON THE BUILDING PLATFORM. CONTRACTOR TO INSTALL PIPED STORMWATER DRAINAGE SYSTEM IMMEDIATELY UPON COMPLETION
- OF BULK EARTHWORKS INCLUSIVE OF TEMPORARY MEANS OF SURFACE WATER COLLECTION INTO PITS/MANHOLES AT LOW POINTS ETC. 11.DISCHARGE FROM ROOF GUTTERS AND DOWNPIPES TO BE CONNECTED TO THE IN-GROUND PIPED
- DRAINAGE SYSTEM IMMEDIATELY UPON INSTALLATION OF ROOF SHEETING. ANY ALTERNATIVE TEMPORARY DISCHARGE SYSTEM PROPOSED BY THE CONTRACTOR TO BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION OF ROOF SHEETING.





2. CONCRETE QUALITY TO BE:-

ELEMENT	STRENGTH GRADE (MPa)	SLUMP (mm)	MAX. SIZE AGGREGATE (mm)	PROJECT ASSESSMENT REQUIRED
SLAB ON GROUND	N25	80	20	YES

FNGINEER

4.	ALL REINFORCEMENT SH
	N DENOTES GRADE D
	R DENOTES GRADE 25
	SL/RL DENOTES WELD
	AS/NZS 4671
	REINFORCEMENT IS SHO
	DDO JECTION

ELEMENT

50mm.

	2 BARS	
•	<u></u>	ł
	50	

- 5°C AND 35°C





REINFORCED CONCRETE NOTES

1. MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF: AS3600 CONCRETE STRUCTURES.

3. CHEMICAL ADMIXTURES SHALL NOT BE USED WITHOUT THE PRIOR APPROVAL OF THE

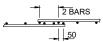
ALL BE AS INDICATED:-500N BARS TO AS/NZS 4671 50 R HOT ROLLED PLAIN BARS TO AS 4671 ED WIRE MESH GRADE D500L TO

WN DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE

5. ALL REINFORCEMENT TO BE SUPPORTED IN POSITION DURING POURING BY USE OF CHAIRS AT NOT GREATER THAN 1.0 METRE CENTRES BOTH WAYS. ALL STARTER BARS ARE TO BE POSITIONED AND TIED PRIOR TO POURING. PLACING STARTER BARS INTO WET CONCRETE IS NOT PERMITTED. UNLESS NOTED OTHERWISE PROVIDE THE FOLLOWING CLEAR CONCRETE COVER TO REINFORCEMENT:

Г	COVER (mm)
	30 TOP

6. SPLICES IN REINFORCEMENT TO BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS TO BE MADE IN ACCORDANCE WITH AS3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR. WELDING OF REINFORCEMENT NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER. FABRIC TO BE LAPPED BY TRANSVERSE BARS PLUS



7. THE REINFORCEMENT STEEL SUPPLIER MUST BE CERTIFIED BY ACRS (AUSTRALIAN STANDARDS CERTIFICATION & VERIFICATION OF REINFORCING, PRESTRESSING & STRUCTURAL STEELS) FOR THE SUPPLY OF REINFORCEMENT STEEL CURRENT ACRS CERTIFICATES ARE TO BE SUBMITTED TO THE ENGINEER PRIOR TO THE DELIVERY OF REINFORCEMENT STEEL TO SITE. REFER www.steelcertification.com

8. ALL CONCRETE TO BE COMPACTED DURING PLACEMENT BY MECHANICAL VIBRATORS

9. NO CONCRETE IS TO BE PLACED WHEN SITE TEMPERATURE IS OUTSIDE THE RANGE OF

10. CONCRETE PLACED DURING ADVERSE DRYING CONDITIONS SHALL HAVE AN EVAPORATIVE RETARDANT (SUCH AS 'MBT CONFILM' OR APPROVED EQUIVALENT) APPLIED IMMEDIATELY AFTER PLACEMENT OF CONCRETE. THIS IS NOT TO BE USED AS A CURING METHOD.

11. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE DETAILED OR SPECIFICALLY APPROVED BY THE ENGINEER

12. ALL CONCRETE SURFACES TO BE CURED BY AN APPROVED METHOD IMMEDIATELY AFTER INISHING AND CONTINUE FOR A MINIMUM OF SEVEN DAYS.

13. THE ENGINEER IS TO BE GIVEN 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE NOT TO BE DELIVERED UNTIL FINAL APPROVAL IS GIVEN.

14.BOTTOM OF ALL TRENCHES AND BORED PIERS TO BE CLEANED OF ALL LOOSE MATERIALS AND WATER.

15.NO CONCRETE IS TO BE DROPPED FROM A HEIGHT GREATER THAN 2000mm. CONCRETE TO BE PLACED USING A TREMIE PIPE OR PUMP EXTENDING TO BASE OF FOOTING OR PIER.

