# **CIVIL - VEHICULAR CROSSING** DETAILS ON VEHICULAR CROSSING AT 14 KIRKWOOD ST, SEAFORTH **NSW 2092**

# **DRAWING LIST - STRUCTURAL**

- DRAWING TITLE , INDEX AND GENERAL NOTES S1
- S2 PLAN ON VEHICULAR CROSSING
- S3 LONG SECTION THROUGH DRIVEWAY
- SECTION DETAILS S4
- SECTION DETAILS S5

### GENERAL

- G1. THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER OR ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- G2. ALL DIMENSIONS ARE TO BE OBTAINED FROM THE ARCHITECT'S DRAWINGS OR FROM SITE. ENGINEER'S DRAWINGS MUST NOT BE SCALED.
- G3. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES.
- G4. ALL WORKS SHALL COMPLY WITH THE CURRENT AND RELEVANT NATIONAL CONSTRUCTION CODE (NCC), AUSTRALIAN STANDARDS AND BEST PRACTICE INDUSTRY GUIDELINES.
- G5. THE APPROVAL OF A SUBSTITUTION BY THE ENGINEER IS NOT AN AUTHORIZATION FOR AN EXTRA. ANY EXTRA INVOLVED MUST BE TAKEN UP WITH THE ARCHITECT BEFORE WORK COMMENCES.
- G7. FOUNDATION MATERIAL TO BE APPROVED BEFORE PURING CONCRETE FOR A SAFE BEARING CAPACITY OF 150 KPA

# CONCRETE

C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600. C2. CONCRETE COVER TO ALL REINFORCEMENT (FINISHES NOT INCLUDED).

ELEMENT	FORMED AND SHELTERED	FORMED AND EXPOSED	NO FORM WORK
SLAB AND WALLS	20mm	30mm	65mm

- C3. CONCRETE SIZES SHOWN DO NOT INCLUDE FINISH AND MUST NOT BE REDUCED OR HOLED IN ANY WAY WITHOUT THE ENGINEER APPROVAL
- C4. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION C5. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN. WELDING OF
- REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS C6. REINFORCEMENT SYMBOLS:-L LOW DUCTILITY BARS TO AS 4671 : 2001 N NORMAL DUCTILITY BARS TO AS 4671 : 2001 E SEISMIC (EARTHQUAKE) DUCTILITY BAR TO AS 4671 : 2001 THE NUMBER FOLLOWING
- THE BAR SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES.
- C7. CAMBER TO BEAMS AND SLABS SHALL BE 2mm FOR EVERY 1M OF SPAN UNLESS OTHERWISE NOTED.
- C8. ALL CONCRETE SHALL BE GRADE 32 MPa 100mm SLUMP,20mm MAX SIZE AGGREGATE (U.N.O.) C9. ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION SO AS NOT TO BE DISPLACED
- DURING CONCRETING ON APPROVED BAR CHAIRS AT 1.0m MAX CRS BOTH WAYS. WHERE REQUIRED PROVIDE SUPPORT BARS N16 AT 1.0M MAX CRS.
- C10. CONCRETE TO BE KEPT FREE OF SUPPORTING BRICKWORK BY TWO LAYERS OF A SUITABLE MEMBRANE (MALTHOID, ETC.), OR AS DIRECTED BY THE ENGINEER. VERTICAL FACES OF CONCRETE TO BE KEPT FREE BY 10mm THICKNESS OF BITUMINOUS CANITE.
- C11. WHERE WALLS ARE NON-LOAD BEARING AT EITHER HORIZONTAL OR VERTICAL FACES THEY SHALL BE SEPARATED FROM CONCRETE OR BRICKWORK BY 10mm THICK CANITE. C12. ALL REINFORCEMENT FOR ANY ONE POUR SHALL BE COMPLETELY PLACED AND TIED PRIOR TO
- INSPECTION BY THE ENGINEER OR ARCHITECT. NO CONCRETE SHALL BE POURED UNTIL REINFORCEMENT HAS BEEN INSPECTED AND APPROVED.



# **INSPECTION & INSPECTION CERFICATION**

THE INSPECTION AND/OR INSPECTION CERTIFICATION ARE NOT PART OF OUR DESIGN & DESIGN CERTIFICATION. THE REQUIREMENT OF INSPECTION CERTIFICATION INCLUDING STRUCTURAL ADEQUACY CERTIFICATION, IF APPLICABLE, ARE TO BE CONFIRMED BY THE CLIENT FROM THE PRINCIPAL CERTIFYING AUTHORITY (PCA) OR BUILDING SURVEYOR OR THE COUNCIL. IF REQUIRED, THIS OFFICE MUST BE BOOKED FOR INSPECTION AT LEAST 48 HOURS PRIOR. SEE FOR INSPECTION AND CERTIFICATION. AS REQUIRED WILL BE PROVIDED UPON REQUEST. THIS OFFICE WILL NOT BE ABLE TO PROVIDE ANY INSPECTION CERTIFICATION WITHOUT THE REQUIRED INSPECTION,

### EARTHWORKS NOTES

- E1. REFER TO THE GEO-TECHNICAL ENGINEERING REPORT SPECIFIED IN THE GENERAL NOTES..
- E2. STRIP SITE OF ALL TOPSOIL, VEGETATION AND DELETERIOUS MATTER TO A MINIMUM DEPTH OF 150MM.
- E3. PROOF ROLL SUB-GRADE TO REVEAL SOFT SPOTS. SOFT SPOTS TO BE REMOVED AND BACKFILLED.
- E4. MATERIAL WON FROM THE SITE TO BE INSPECTED BY THE GEO-TECHNICAL ENGINEER FOR APPROVAL PRIOR TO USE AS FILL, ANY IMPORTED FILL TO BE A MINIMUM CBR VALUE OF 4%. UNLESS THE GEOTECHNICAL REPORT NOTES OTHERWISE, COMPACT FOUNDATION MATERIAL AND FILL IN LAYERS NOT EXCEEDING 300mm TO 95% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289. PROVIDE COMPACTION TEST RESULTS FOR ENGINEER REVIEW PRIOR TO PROCEEDING
- E5. TEST CERTIFICATES ON THE FILL MATERIAL SHALL BE SUPPLIED TO THE SUPERINTENDENT FOR APPROVAL. PRIOR TO THE USE OF FILL MATERIAL.

1. THE CONTRACTOR SHALL DEVELOP, IMPLEMENT AND ADMINISTER A WORKPLACE HEALTH AND SAFETY PROGRAM THAT WILL ENSURE THAT ALL CONSTRUCTION ACTIVITIES ARE PERFORMED TO THE RELEVANT WORKPLACE HEALTH AND SAFETY REQUIREMENTS AND ANY OTHER RELEVANT STATUTORY REQUIREMENTS. THE WORKPLACE HEALTH AND SAFETY PROGRAM MUST BE CO-ORDINATED WITH ADJOINING PROPERTY OWNERS AND ALL RELEVANT PARTIES AS NECESSARY TO ENSURE A SAFE BUILDING ENVIRONMENT AT ALL TIMES.

2

# PREPARATION OF SUB-BASE FOR SLABS ON GROUND

P1. CLEAR AREA UNDER SLAB OF ALL TOP SOIL CONTAINING HUMUS & VEGETABLE MATTER (100MM MIN.) P2. PROVIDE FILL UNDER SLAB WHERE REQUIRED TO PRODUCE FINISHED LEVELS AS SHOWN ON PLANS.

- P3. FILLING USED IN CONSTRUCTION OF SLAB, EXCEPT WHERE THE SLAB IS SUSPENDED, SHALL CONSIST OF CONTROLLED FILL OR ROLLED FILL AS FOLLOWS.
- CONTROLLED FILL IN MATERIAL THAT HAS BEEN PLACED AND COMPACTED IN LAYERS BY COMPACTION EQUIPMENT WITHIN A DEFINED MOISTURE RANGE TO A DEFINED DENSITY REQUIREMENT. EXCEPT AS PROVIDED BELOW. CONTROLLED FILL SHALL BE PLACED IN ACCORDANCE WITH AS 3798.
- SAND FILL UP TO 0.8M DEEP, WELL COMPACTED IN NOT MORE THAN 0.3M THICK LAYERS BY A VIBRATING PLATE PR VIBRATING ROLLER SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. A SATISFACTORY TEST FOR SAND FILL NOT CONTAINING GRAVEL SIZED MATERIAL IS THE ACHIEVEMENT OF A BLOW COUNT OF 7 OR MORE PER 0.3M USING THE PENETROMETER TEST DESCRIBED IN AS1289.6.3.3.
- NON-SAND FILL UP TO 0.4M DEEP, WELL COMPACTED IN NOT MORE THAN 0.15M LAYERS BY A MECHANICAL ROLLER SHALL BE DEEMED ٠ TO COMPLY WITH THE REQUIREMENT. CLAY FILL SHALL BE MOIST DURING COMPACTION.
- ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR. ROLLED FILL SHALL NOT EXCEED 0.6M COMPACTED IN LAYERS NOT MORE THAN 0.3M THICK FOR SAND MATERIAL OR 0.3M COMPACTED IN LAYERS NOT MORE THAN 0.15M THICK FOR OTHER MATERIAL. NOTE: THE DEPTHS OF FILL GIVEN IN THIS CLAUSE ARE THE DEPTHS MEASURED AFTER COMPACTION.
- P4. A 50MM MIN. BASE COURSE OF PACKING SAND SHALL BE SPREAD OVER THE SUB-BASE AND TO BE THOROUGHLY ROLLED AND COMPACTED TO A SMOOTH LEVEL SURFACE. THE SAND SHALL BE MOISTENED PRIOR TO THE PLACEMENT OF A 0.2MM POLYTHENE MEMBRANE IN 3600MM MIN. WIDE SHEETS LAPPED 150MM AND JOINED WITH 75MM WIDE PRESSURE SENSITIVE TAPE. THE TAPE SHALL BE LAID UNDER ALL SLABS AND WALLS IN CONTACT WITH THE GROUND.
- P5. THE TOTAL FILL BENEATH THE SLAB PANELS MUST NOT EXCEED 300MM I.E. THE SUM OF EXISTING FILL PLUS ANY NEW FILLING PLACED TOGETHER MUST NOT EXCEED 300MM MAX.

Issue	Description	Date	Design	Check	ARCHITECT/CLIENT	CHITECT/CLIENT       PROJECT:       DETAILS ON VEHICULAR CROSSING AT       H         SAMM & CLARE       DETAILS ON VEHICULAR CROSSING AT       14 KIRKWOOD ST, SEAFORTH NSW 2092       H         TITLE:       DRAWING TITLE & INDEX       H       H	POS/PAS		۲	
0	For Review	12/10/2022	KK	KZ	SAMM & CLARE		DUS/DAS		KEVIN ZIA (MIEAust, CPEng, NER) Engineers Australia Prime Consulting Engineers Pty Ltd	6
А	For Submission	27/10/2022 K	2 KK	KZ	CARBINES		Size Scale UN.O A3 1:100	Scale U.N.O		
								THE COPY RIGHT OF THIS DRAWING REMAINS WITH PRIME		
							DWG no.	Sheet no.	CONSULTING ENGINEERS PTY. LTD.	
							C-22-320	01		



1. REFER ARCHITECT FOR WATERPROOFING DETAILS. REFER ARCHITECT FOR TERMITE PROTECTION. 2 REFER ARCHITECT FOR STEP AND FALLS IN SLABS. 3 FABRIC TO BE PLACED ON CHAIRS AT 800X800 CENTRES AND CHAIRS TO BE PLACED ON STEEL PANS. LAP FABRIC REINFORCEMENT THUS:

WHERE BEDDING SAND IS REQUIRED UNDER SAND. 6. THIS SHALL BE COMPACTED SUFFICIENTLY TO SUPPORT REINFORCEMENT PLYS 100KG/CHAIR WITHOUT VERTICAL DISPLACEMENT.

THE INSPECTION AND/OR INSPECTION CERTIFICATION ARE NOT PART OF OUR DESIGN & DESIGN CERTIFICATION. THE REQUIREMENT OF INSPECTION CERTIFICATION INCLUDING STRUCTURAL ADEQUACY CERTIFICATION, IF APPLICABLE, ARE TO BE CONFIRMED BY THE CLIENT FROM THE PRINCIPAL CERTIFYING AUTHORITY (PCA) OR BUILDING SURVEYOR OR THE COUNCIL. IF REQUIRED, THIS OFFICE MUST BE BOOKED FOR INSPECTION AT LEAST 48 HOURS PRIOR. SEE FOR INSPECTION AND CERTIFICATION. AS REQUIRED WILL BE PROVIDED UPON REQUEST. THIS OFFICE WILL NOT BE ABLE TO PROVIDE ANY INSPECTION CERTIFICATION WITHOUT THE REQUIRED INSPECTION,

# SLAB ON GROUND NOTES

# **INSPECTION & INSPECTION CERFICATION**

# **HEALTH & SAFETY**



Prime Consulting Engineers CIVIL - STRUCTURAL - HYDRAULICS A.B.N. 34 641 874 795



# PLAN OF VEHICULAR CROSSING 1:100

Issue	Description	Date	Design	Check	ARCHITECT/CLIENT	PROJECT: DETAILS ON VEHICULAR CROSSING AT 14 KIRKWOOD ST, SEAFORTH NSW 2092			۲	
0	For Review	12/10/2022	KK	ΚZ	SAMM & CLARE		DU3/DA3		KEVIN ZIA (MIEAust, CPEng, NER)	
А	For Submission	27/10/2022	KK	KZ	CARBINES		Size	Scale U.N.O	LO Experience Australia Prime Consulting Engineers Pty Lt	
В	For Submission	01/11/2022	KK	KZ			A3	A3 1:100		
						TITLE: PLAN ON VEHICULAR CROSSING	DWG no.	Sheet no.	CONSULTING ENGINEERS PTY. LTD.	
							C-22-320	02		

# Prime Consulting Engineers CIVIL - STRUCTURAL - HYDRAULICS A.B.N. 34 641 874 795

 CIVIL - STRUCTURAL - HYDRAULICS
 A.B.N. 34 641 874 795

 U 21 / 1 JORDAN STREET GLADESVILLE NSW 2111

 e: info@primeengineers.com.au
 w: www.primeengineers.com.au

 p: 02 8964 1818
 m: 0466 053 516





Issue	Description	Date	Design	Check	ARCHITECT/CLIENT	TITLE: LONG SECTION THROUGH DRIVEWAY			۲	
0	For Review	12/10/2022	KK	KZ	SAMM & CLARE CARBINES		BO3/BA3		KEVIN ZIA (MIEAust, CPEng, NER	
А	For Submission	27/10/2022	KK	KZ			Size	Scale U.N.O	Engineers Australia Prime Consulting Engineers Pty Ltd	
В	For Submission	01/11/2022	KK	KZ			A3	A3 1:100	THE COPY RIGHT OF THIS DRAWING REMAINS WITH PRIME	
							DWG no.	Sheet no.	CONSULTING ENGINEERS PTY. LTD.	
						THEE. LONG SECTION THROUGH DRIVEWAT	C-22-320	03		

Prime Consulting Engineers CIVIL - STRUCTURAL - HYDRAULICS A.B.N. 34 641 874 795

U 21 / 1 JORDAN STREET GLADESVILLE NSW 2111 e: info@primeengineers.com.au p: 02 8964 1818 w: www.primeengineers.com.au m: 0466 053 516



PILE SCHEDULE										
т	LIGS / TIES	F'c STRENGTH	EMBEDMENT	SPACING						
	R10-200	32	TO SOUND SOLID ROCK /SHALE	AS SHOWN						

w: www.primeengineers.com.au



Issue	Description	Date	Design	Check	ARCHITECT/CLIENT	PROJECT:			<u>^</u>	
0	For Review	12/10/2022	KK	KZ	SAMM & CLARE CARBINES	DETAILS ON VEHICULAR CROSSING AT 14 KIRKWOOD ST, SEAFORTH NSW 2092 TITLE: SECTION DETAILS	BO2/BA2		KEVIN ZIA (MIEAust, CPEng, NER) Prime Consulting Engineers Pty Ltd	
А	For Submission	27/10/2022	KK	KZ			Size So	Scale U.N.O		1
В	For Submission	01/11/2022	KK	KZ			A3	1:100		
							DWG no.	Sheet no.	CONSULTING ENGINEERS PTY. LTD.	
							C-22-320	05		



# Prime Consulting Engineers CIVIL - STRUCTURAL - HYDRAULICS A.B.N. 34 641 874 795

CIVIL - STRUCTURAL - HYDRAULICS A.B.N. 34 641 874 795 U 21 / 1 JORDAN STREET GLADESVILLE NSW 2111 e: info@primeengineers.com.au p: 02 8964 1818 w: 0466 053 516