



Date: 21<sup>th</sup> July 2021  
Client: Nicole Keogh

Job No. 200831  
Engineer: CMcL/CJ

**Site: 1031 BARRENJOEY ROAD, PALM BEACH**

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At the request of Nicole Keogh, Cameron Jones & Chris Mclean of Northern Beaches Consulting Engineers P/L carried out a site inspection at the above property on the 21<sup>st</sup> June 2021. The purpose of the visit was to inspect and comment on the structural adequacy of the recently constructed pergola and deck structure, as detailed on the works as executed architectural plans by 'o2architecture' (dated 15<sup>th</sup> June 2021).

The assessment was limited to the constructed deck & pergola structure and consisted of a walk over style inspection. The pergola and deck were of timber framed construction and extend out from the existing two storey clad building, currently operating as a café.

## ASSESSMENT

- At the time of inspection, the deck structure was not accessible for inspection. Therefore, Northern Beaches Consulting Engineers P/L cannot currently certify the deck structure. Certification of the deck structure may be considered if the builder can provide clear, detailed photographs of the deck under construction (subject to engineering review) and a statutory declaration.
- At the time of inspection, the extension to the existing roof structure was deemed not compliant with the relevant Australian standards. The following amendments need to be made to the roof structure to achieve compliance with Australian Standards.

## STRUCTURAL REQUIREMENTS

Please refer to the following structural requirements as detailed on the attached SK01 & SK02.

1. Provide triple grips or min 2 x 12-gauge bugles to connect rafters to beam supports (every rafter).
2. Provide a full span rafter (R1) between the existing timber beams (ERB1 & ERB2) refer attached SK01. Currently, the rafters for the new extension are spliced onto the existing rafters at midspan location and are not adequate.
3. Provide 45 x 45 F7 timber plate (PL1) bugled to bottom of (EJR1) (1 x 12 gauge bugles at 200 centers). Refer to sk02 for detail.



Please note that this certification does not cover any defects to the structure or structural/non-structural items that were not included for assessment at the time of inspection. In the event that defects are uncovered or become apparent after, then the engineer should inspect the areas of concern and prepare a specification for remedial works (These works will be carried out at hourly rates). The procedure above in no way relieves the builder of their usual construction obligations.

If the proposed works are to be certified in accordance with this report, they must be inspected by Northern Beaches Consulting Engineers while exposed. An additional fee applies.

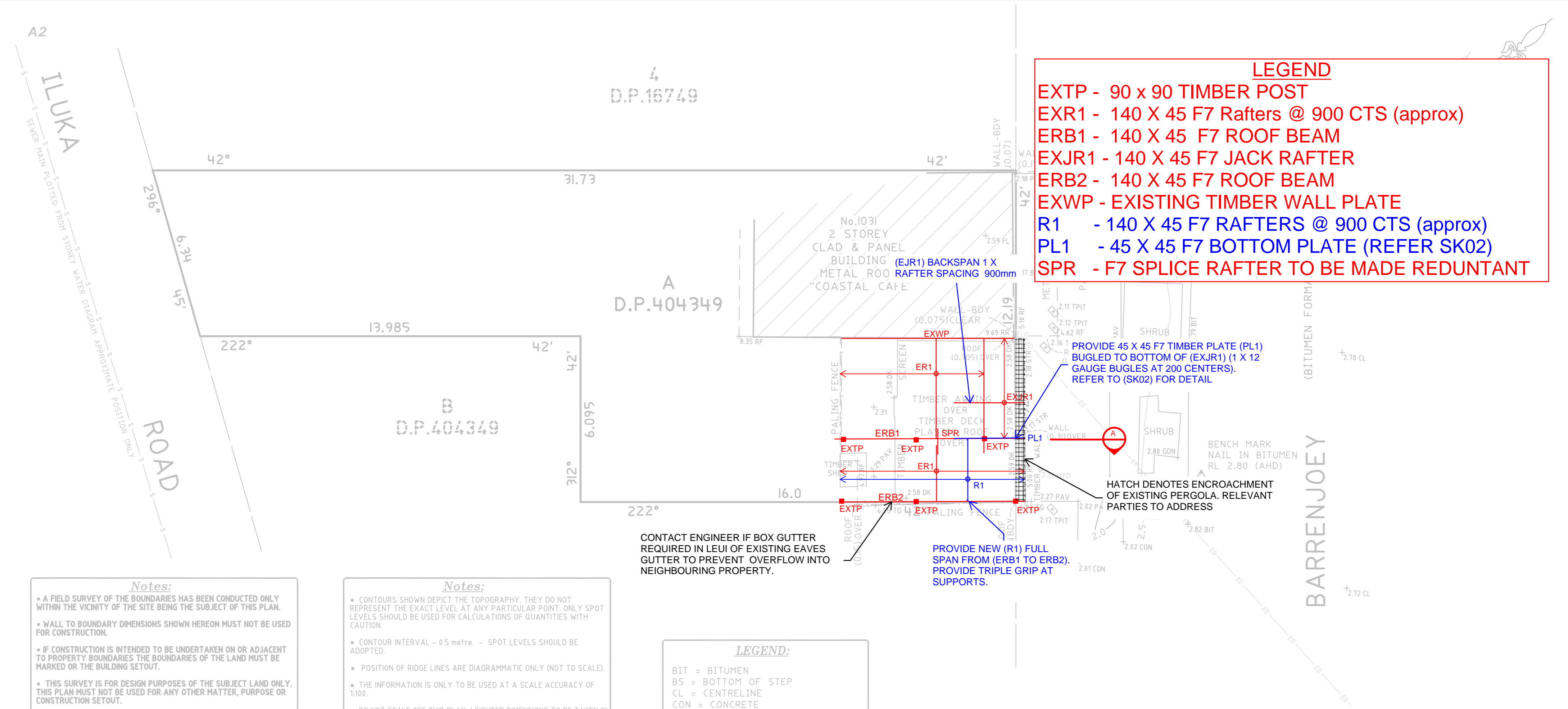
Yours sincerely,

**NORTHERN BEACHES CONSULTING ENGINEERS P/L**

**Stewart McGeady**

BE MIEAust Director

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**LEGEND**

- EXTP - 90 x 90 TIMBER POST
- EXR1 - 140 X 45 F7 Rafters @ 900 CTS (approx)
- ERB1 - 140 X 45 F7 ROOF BEAM
- EXJR1 - 140 X 45 F7 JACK RAFTER
- ERB2 - 140 X 45 F7 ROOF BEAM
- EXWP - EXISTING TIMBER WALL PLATE
- R1 - 140 X 45 F7 RAFTERS @ 900 CTS (approx)
- PL1 - 45 X 45 F7 BOTTOM PLATE (REFER SK02)
- SPR - F7 SPLICE RAFTER TO BE MADE REDUNTANT

**Notes:**

- A FIELD SURVEY OF THE BOUNDARIES HAS BEEN CONDUCTED ONLY WITHIN THE VICINITY OF THE SITE BEING THE SUBJECT OF THIS PLAN.
- WALL TO BOUNDARY DIMENSIONS SHOWN HEREON MUST NOT BE USED FOR CONSTRUCTION.
- IF CONSTRUCTION IS INTENDED TO BE UNDERTAKEN ON OR ADJACENT TO PROPERTY BOUNDARIES THE BOUNDARIES OF THE LAND MUST BE MARKED OR THE BUILDING SETOUT.
- THIS SURVEY IS FOR DESIGN PURPOSES OF THE SUBJECT LAND ONLY. THIS PLAN MUST NOT BE USED FOR ANY OTHER MATTER, PURPOSE OR CONSTRUCTION SETOUT.
- TREE SIZES ARE ESTIMATES ONLY.
- THIS PLAN HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF NICKI KEOGH.
- RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES IS DIAGRAMMATIC ONLY. WHERE OFFSETS ARE CRITICAL THEY SHOULD BE CONFIRMED BY FURTHER SURVEY.
- EXCEPT WHERE SHOWN BY DIMENSION LOCATION OF DETAIL WITH RESPECT TO BOUNDARIES IS INDICATIVE ONLY.
- ONLY VISIBLE SERVICES HAVE BEEN LOCATED. UNDERGROUND SERVICES HAVE NOT BEEN LOCATED. DIAL BEFORE YOU DIG SERVICES (ph 1100) SHOULD BE USED AND A FULL UTILITY INVESTIGATION, INCLUDING A UTILITY LOCATION SURVEY, SHOULD BE UNDERTAKEN BEFORE CARRYING OUT ANY CONSTRUCTION ACTIVITY IN OR NEAR THE SURVEYED AREA.
- SEWER MAIN PLOTTED FROM SYDNEY WATER SEWER DIAGRAM. LOCATION SHOULD BE MARKED ON SITE IF CRITICAL.
- CRITICAL SPOT LEVELS SHOULD BE CONFIRMED WITH SURVEYOR.

**Notes:**

- CONTOURS SHOWN DEPICT THE TOPOGRAPHY. THEY DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT. ONLY SPOT LEVELS SHOULD BE USED FOR CALCULATIONS OF QUANTITIES WITH CAUTION.
- CONTOUR INTERVAL - 0.5 metre. - SPOT LEVELS SHOULD BE ADOPTED.
- POSITION OF RIDGE LINES ARE DIAGRAMMATIC ONLY (NOT TO SCALE).
- THE INFORMATION IS ONLY TO BE USED AT A SCALE ACCURACY OF 1:100.
- DO NOT SCALE OFF THIS PLAN / FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED READINGS.
- COPYRIGHT © CMS SURVEYORS 2021.
- NO PART OF THIS SURVEY MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM, WITHOUT THE WRITTEN PERMISSION OF THE COPYRIGHT OWNER EXCEPT AS PERMITTED BY THE COPYRIGHT ACT 1968.
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- THIS NOTICE MUST NOT BE ERASED.

*Karl Robertson*  
 KARL ROBERTSON  
 REGISTERED SURVEYOR BOSSI NUMBER 7835.....

CONTACT ENGINEER IF BOX GUTTER REQUIRED IN LEU OF EXISTING EAVES GUTTER TO PREVENT OVERFLOW INTO NEIGHBOURING PROPERTY.

PROVIDE NEW (R1) FULL SPAN FROM (ERB1 TO ERB2). PROVIDE TRIPLE GRIP AT SUPPORTS.

PROVIDE 45 X 45 F7 TIMBER PLATE (PL1) BUGLED TO BOTTOM OF (EXJR1) (1 X 12 GAUGE BUGLES AT 200 CENTERS). REFER TO (SK02) FOR DETAIL

HATCH DENOTES ENCROACHMENT OF EXISTING PERGOLA. RELEVANT PARTIES TO ADDRESS

**LEGEND:**

- BIT = BITUMEN
- BS = BOTTOM OF STEP
- CL = CENTRELINE
- CON = CONCRETE
- DK = DECK
- ELO = ELECTRICITY LINE OVERHEAD
- FL = FLOOR LEVEL
- GDN = GARDEN
- HYD = HYDRANT
- PAV = PAVING
- RF = TOP OF ROOF
- RR = ROOF RIDGE
- SMH = SEWER MAN HOLE
- STR = STAIRS
- TG = TOP OF GUTTER
- TPIT = TELSTRA PIT
- EO = ELECTRICITY OVERHEAD
- S = SEWER UNDERGROUND
- TREE SPREAD-DIAMETER-HEIGHT

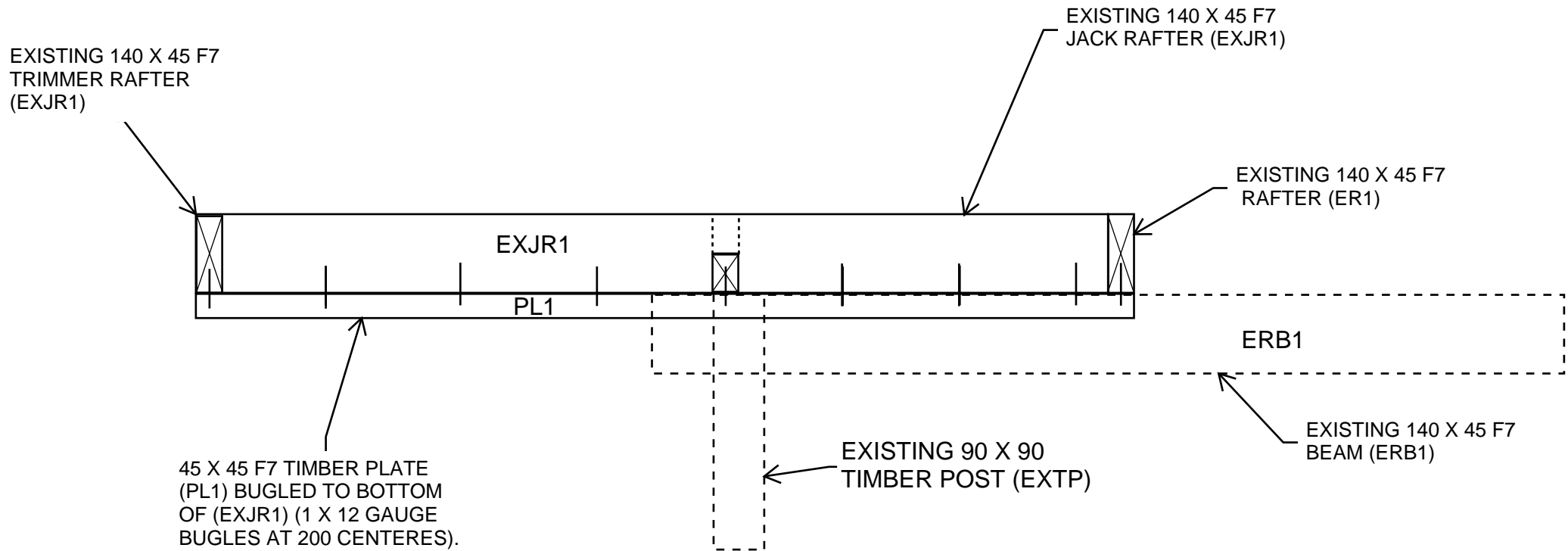


TITLE INDICATES THAT LOT A IN D.P.404 - RESERVATIONS AND CONDITIONS IN THE CROWN

**NB Consulting Engineers**  
 STRUCTURAL - CIVIL - STORMWATER - REMEDIAL  
 Suite 207 / 30 Fisher Road, Dee Why NSW 2099  
 Ph: (02) 9984 7000  
 Email: nb@nbconsulting.com.au

Job #: 200831      DWG#: SK01  
 Date: 21/07/2021      Engineer: CMcL/CJ

<b>HORIZONTAL DATUM:</b> CO-ORDINATE SYSTEM: ASSUMED MARKS ADOPTED: N/A LGA: NORTHERN BEACHES	<b>VERTICAL DATUM:</b> DATUM: AUSTRALIAN HEIGHT DATUM (AHD) B.M. ADOPTED: PM 16498 R.L. 2.002 (CLASS LC) SOURCE: S.C.I.M.S. (11/05/2021)	<b>CLIENT:</b> <b>NICKI KEOGH</b> No.C/- TURNBULL PLANNING, 2301/4 DAYDREAM STREET WARRIEWOOD, NSW, 2102	<b>BOUNDARY IDENTIFICATION AND DETAIL &amp; LEVEL SURVEY OVER LOT A IN DP404349</b> No.1031 BARRENJOEY ROAD PALM BEACH, NSW, 2108	<b>C.M.S. Surveyors Pty Limited</b> ACN: 096 240 201 PO Box 463 Dee Why NSW 2099 2/99A South Creek Road, Dee Why NSW 2099 Telephone: (02) 9971 4802 Facsimile: (02) 9971 4822 E-mail: info@cmsurveyors.com.au	<table border="1"> <tr> <td>SURVEYED HC</td> <td>DRAWN ABS</td> <td>CHECKED HC</td> <td>APPROVED DR</td> </tr> <tr> <td>SURVEY INSTRUCTION 20386</td> <td>SCALE 1:100 @ A2</td> <td colspan="2">DATE OF SURVEY 11/06/21</td> </tr> <tr> <td colspan="3">DRAWING NAME 20386detail</td> <td>SHEET 1 OF 1</td> </tr> <tr> <td colspan="3">CAD FILE 20386detail.l.dwg</td> <td>ISSUE 1</td> </tr> </table>	SURVEYED HC	DRAWN ABS	CHECKED HC	APPROVED DR	SURVEY INSTRUCTION 20386	SCALE 1:100 @ A2	DATE OF SURVEY 11/06/21		DRAWING NAME 20386detail			SHEET 1 OF 1	CAD FILE 20386detail.l.dwg			ISSUE 1
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DRAWING NAME 20386detail			SHEET 1 OF 1																		
CAD FILE 20386detail.l.dwg			ISSUE 1																		



**SECTION A**  
SCALE  
NTS

**NB Consulting Engineers**

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Job #: 200831      DWG#: SK02

Date: 21/07/2021      Engineer: CMcL/CJ