

# **ENGINEERING INFRASTRUCTURE REPORT**

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## **Proposed Subdivision**

**133-139 Dulguigan Road, Dulguigan**

**Lot 8 on DP755685, Lot 1 on DP364474, Lot 1  
on DP410859, Lot 1 on DP328107, Lot 1 on  
DP376131 & Lot A on DP174886**


For John Tilton c/- B & P Surveys

08 May 2024

File No: OSK6539-0003

## DOCUMENT CONTROL SHEET

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<b>Project Manager:</b>	Thomas Watt
<b>Author:</b>	Ethel Simoni
<b>Client:</b>	John Tilton c/- B & P Surveys
<b>Client Contact:</b>	John Tilton
<b>Client Reference:</b>	133-139 Dulguigan Road, Dulguigan
<b>Synopsis:</b>	This report examines the existing infrastructure and future engineering impacts for the proposed development of the site, including the availability of services and the provision of water and sewerage servicing the development site and determines the demand on these systems from the proposed development.

Reviewed by RPEQ	Reg. No.	Signed	Date
Thomas Watt	16222		08 May 2024

Revision/Checking History			
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## APPENDICES

Appendix A:	B & P Surveys, Proposed Subdivision Plan (Ref: 25464-B)
Appendix B:	OSKA Consulting Group; Preliminary Roadworks Plan (Ref: OSK6539/P005/A); Preliminary Roadworks Details (Ref: OSK6539/P006/A); Preliminary Roadworks Longitudinal Sections – Sheet 1 of 2 (Ref: OSK6539/P007/A) and Preliminary Roadworks Longitudinal Sections – Sheet 2 of 2 (Ref: OSK6539/P008/A)

## 1.0 INTRODUCTION

### 1.1 Background

OSKA Civil Consultants has been commissioned by John Tilton c/- B & P Surveys to prepare an Engineering Infrastructure Report (EIR) to support a Development Application (DA) to Tweed Shire Council for the proposed Subdivision situated at 133-139 Dulguigan Road, Dulguigan. The subject site is described as Lot 8 on DP755685, Lot 1 on DP364474, Lot 1 on DP410859, Lot 1 on DP328107, Lot 1 on DP376131 & Lot A on DP174886.

The purpose of this report is to demonstrate that the proposed development can be connected to Dulguigan Road.

## 2.0 SITE DESCRIPTION

### 2.1 Location

The subject site is located on 133-139 Dulguigan Road, Dulguigan. The site fronts Dulguigan Road to the south and is surrounded by rural properties to the north, east and west. The site covers a total combined area of 100.5ha, with details as summarised in Table 1 and as located in Figure 1.

Table 1: Site Description

Client	Lot and Property Description	Street Address
John Tilton c/- B & P Surveys	Lot 8 on DP755685, Lot 1 on DP364474, Lot 1 on DP410859, Lot 1 on DP328107, Lot 1 on DP376131 & Lot A on DP174886	133-139 Dulguigan Road, Dulguigan



Figure 1: Locality Plan (Source: Nearmap)



## 2.2 Site Topography

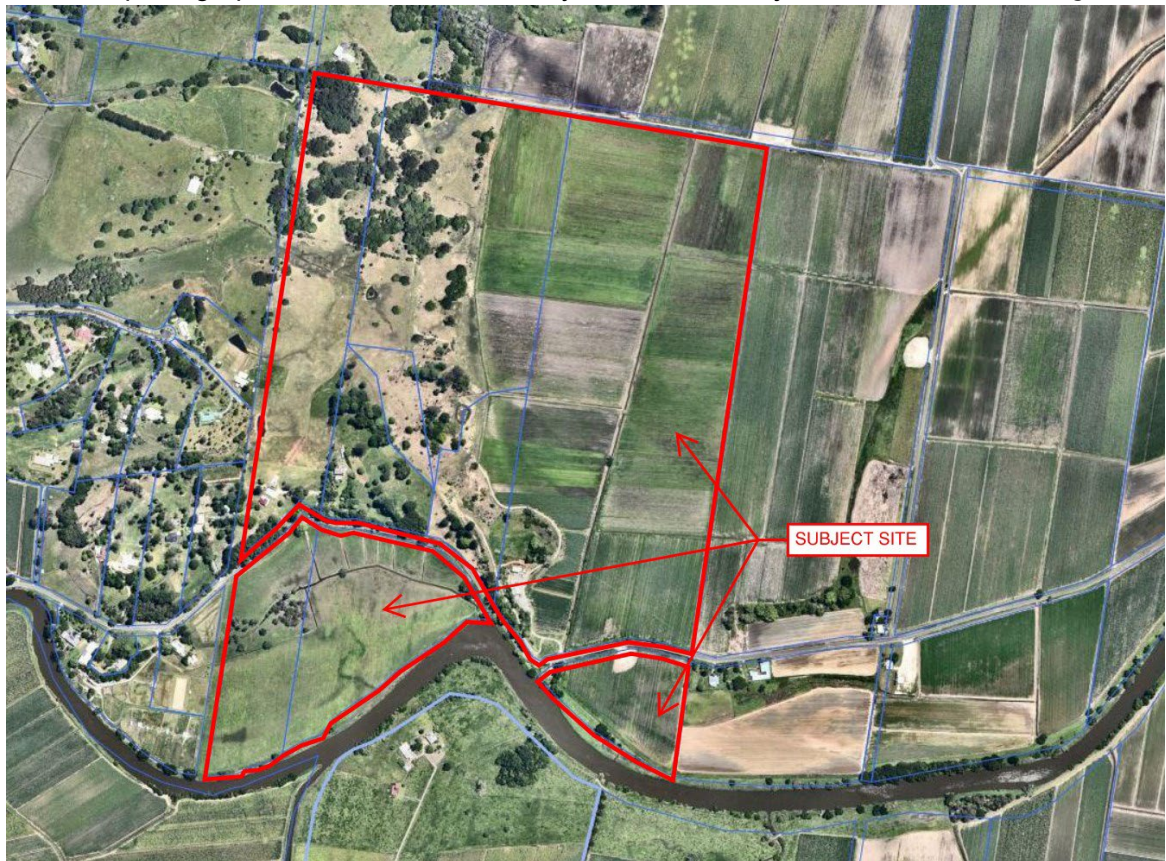
The western area of the existing site is relatively steep with spot heights ranging from approximately RL 47m AHD to 1m AHD. The eastern and southern areas are relatively flat with spot heights ranging from approximately RL 3m AHD to 1m AHD. The site generally slopes in three directions, to the north, west and south. Based on the provided survey and aerial information, any stormwater runoff ultimately drains to the existing North Arm Tweed River to the south.

Further information of the site survey has been provided by B & P Surveys, Proposed Subdivision Plan (Ref: 25464-B) included as Appendix A.

## 2.3 Vegetation and Land Use

The subject site currently consists of grass/open space to the west and south, and farmland to the east. There is an existing channel that runs from the northeastern corner of the site to the existing North Arm Tweed River to the south. Access to the site is gained via Dulguigan Road to the south.

An aerial photograph taken on the 22 January 2024 of the subject site is included in *Figure 2*.



**Figure 2: Aerial Image of the Site (Source: Nearmap – Image taken 22 January 2024)**

## 2.4 Proposed Development

The proposed development for the site consists of a 6 lot subdivision. Access to the lots will be gained via Dulguigan Road and internal accesses.

Refer to Appendix A for the proposed subdivision layout prepared by B & P Surveys, Proposed Subdivision Plan (Ref: 25464-B).

## 3.0 ROADWORKS

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The proposed development will be accessed from Dulguigan Road to the south using the existing driveway for lots 8 on DP755685, 1 on DP328107 and 1 on DP660569. In accordance with Tweed Development Control Plan – Section A5: Subdivision Manual, rural dwellings must have a sealed driveway from the road to 3m inside the property boundary and therefore it is proposed to upgrade the existing driveway access to proposed lots 2 and 6 and construct a new driveway access for proposed lot 1. It is also required that any access through a property benefiting 3 to 5 lots to be minimum 4.5m wide. The existing driveway in lot 2 will be upgraded to a 4.5m wide driveway to give access to lots 3, 4 and 5.

For further details, see schematic drawing showing the proposed access to the lots as illustrated in the OSKA Consulting Group; Preliminary Roadworks Plan (Ref: OSK6539/P005/A); Preliminary Roadworks Details (Ref: OSK6539/P006/A); Preliminary Roadworks Longitudinal Sections – Sheet 1 of 2 (Ref: OSK6539/P007/A) and Preliminary Roadworks Longitudinal Sections – Sheet 2 of 2 (Ref: OSK6539/P008/A) included as Appendix B.

## 4.0 STORMWATER

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It is proposed that the site's captured stormwater will maintain the existing drainage regime, i.e., to convey any flows to the existing North Arm Tweed River via existing drainage paths.

For further details, see OSKA Consulting Group, Conceptual Stormwater Management Plan (Ref: OSK6539-0002).

## 5.0 WATER SUPPLY

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There is no reticulated water supply available to the subject site. Therefore, in accordance with Tweed Development Control Plan – Section A5: Subdivision Manual, each dwelling must be provided with rainwater tanks with minimum 20,000L of storage. The tanks must be accessible to fire fighting vehicles and equipment and be equipped with an outlet or access hatch compatible with NSW Rural Fire Service equipment.

## 6.0 SEWERAGE

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There is no reticulated sewerage system available to the subject site. On site sewerage management will be provided for each lot, in accordance with Tweed Development Control Plan – Section A5: Subdivision Manual. For further details, refer to HMC Environmental Consulting, On-site Sewerage Management Plan.

## 7.0 CONCLUSIONS

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OSKA Civil Consultants has been commissioned by John Tilton c/- B & P Surveys to prepare an Engineering Infrastructure Report (EIR) to support a Development Application (DA) to Tweed Shire Council for the proposed Subdivision situated at 133-139 Dulguigan Road, Dulguigan. The subject site is described as Lot 8 on DP755685, Lot 1 on DP364474, Lot 1 on DP410859, Lot 1 on DP328107, Lot 1 on DP376131 & Lot A on DP174886.

This Engineering Infrastructure Report has detailed the existing infrastructure and civil engineering parameters and design intents for the proposed subdivision. It demonstrates that civil engineering works including driveway access and on-site water supply will be provided in accordance with the requirements of Tweed Shire Development Control Plan: Section A5. This report should be read in conjunction with the On-site Sewerage Management Plan prepared by HMC Environmental.

APPENDIX

**A**

B & P Surveys,  
Proposed Subdivision Plan  
(Ref: 25464-B)



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THE PROPOSED BOUNDARIES AS SHOWN HEREON ARE PRELIMINARY ONLY AND ARE SUBJECT TO FINAL DESIGN, LOCAL AUTHORITY APPROVAL AND REGISTRATION WITH NSW LAND REGISTRY SERVICES.

DIMENSIONS & AREAS SHOWN HEREON ARE SUBJECT TO FIELD SURVEY AND LOCAL AUTHORITY APPROVAL.

CONTOUR INTERVAL - 1m



CONTOURS HAVE BEEN DERIVED FROM NSW SPATIAL SERVICES 1m LIDAR DATA GATHERED APRIL 14.

LOT 8 1N DP755685,  
LOT 1 1N DP364474,  
LOT 1 1N DP410859,  
LOT 1 1N DP328107,  
LOT 1 1N DP376131,  
& LOT A 1N DP174886

DULGUIGAN ROAD  
DULGUIGAN

Parish of BERWICK County of Rous

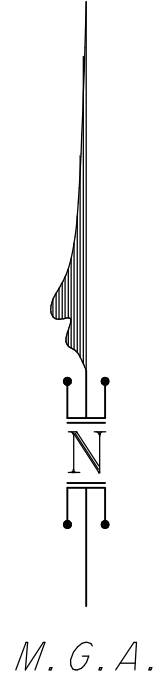
**B & P SURVEYS**  
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**A QUALITY ASSURED COMPANY**  
  
Homepage: [www.bpsurveys.com.au](http://www.bpsurveys.com.au)  
Tweed Heads  
Ph. (07) 55363611

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ONLY  
29/8/2023



PRELIMINARY  
ONLY  
29/8/2023

Revision		Chk
Client:		
MR JOHN TILTON		
IMPORTANT NOTES :		
THE PROPOSED BOUNDARIES AS SHOWN HEREON ARE PRELIMINARY ONLY AND ARE SUBJECT TO FINAL DESIGN, LOCAL AUTHORITY APPROVAL AND REGISTRATION WITH NSW LAND REGISTRY SERVICES.		
DIMENSIONS & AREAS SHOWN HEREON ARE SUBJECT TO FIELD SURVEY AND LOCAL AUTHORITY APPROVAL.		
CONTOUR INTERVAL - 1m		
CONTOURS HAVE BEEN DERIVED FROM NSW SPATIAL SERVICES 1m LIDAR DATA GATHERED APRIL 14.		
PROPOSED SUBDIVISION PLAN		
LOT 8 IN DP755685, LOT 1 IN DP364474, LOT 1 IN DP410859, LOT 1 IN DP328107, LOT 1 IN DP376131 & LOT A IN DP174886		
DULGUIGAN ROAD DULGUIGAN		
Parish of BERWICK County of Rous		
B & P SURVEYS CONSULTING SURVEYORS ACN 01017236 142 Murwillumbah Street MURWILLUMBAH NSW 2484 Australia Telephone: (02) 66721924 Facsimile: (02) 66722618 Email: mbah@bpsurveys.com.au Offices Also At : Nerang Ph: (07) 55960370 Tweed Heads Ph: (07) 55563611		
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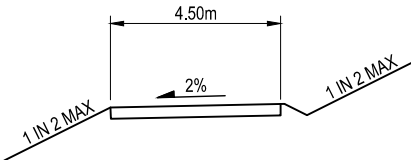
APPENDIX

**B**

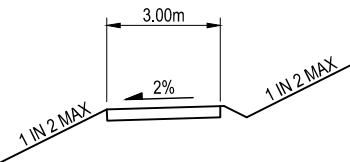
OSKA Consulting Group;  
Preliminary Roadworks Plan  
(Ref: OSK6539/P005/A);  
Preliminary Roadworks Details  
(Ref: OSK6539/P006/A);  
Preliminary Roadworks Longitudinal Sections –  
Sheet 1 of 2  
(Ref: OSK6539/P007/A)  
and  
Preliminary Roadworks Longitudinal Sections –  
Sheet 2 of 2  
(Ref: OSK6539/P008/A)

ROADWORKS LEGEND

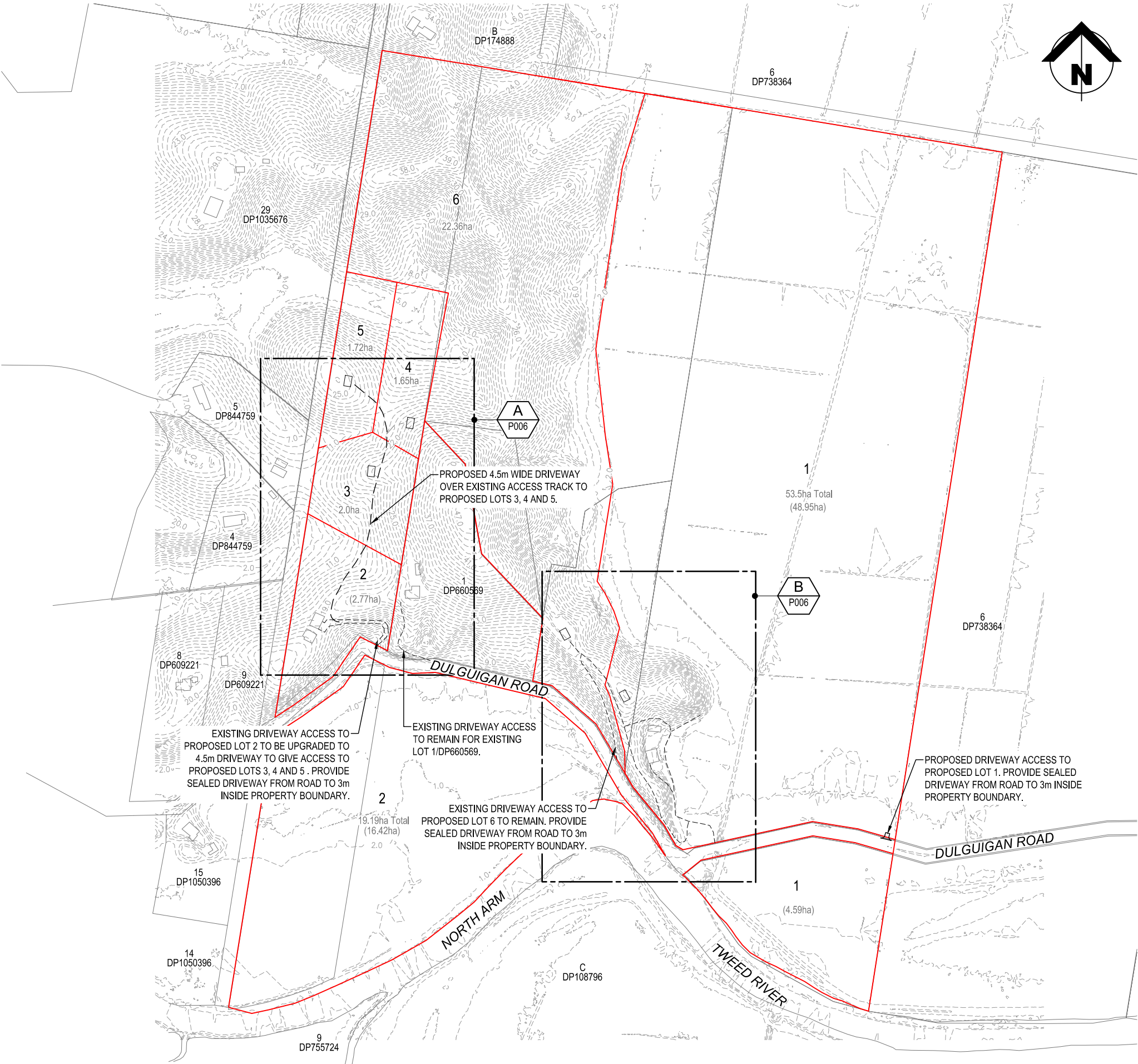
- PROPOSED DRIVEWAY ACCESS
- EXISTING DRIVEWAY ACCESS
- EXISTING SURFACE CONTOURS
- SITE BOUNDARY



TYPICAL DRIVEWAY CROSS SECTION - LOTS 2, 3, 4 AND 5  
SCALE: 1:100 AT A1



TYPICAL DRIVEWAY CROSS SECTION - LOTS 1 AND 6  
SCALE: 1:100 AT A1



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ES

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ES

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SCALE  
1:3000 AT A1  
1:6000 AT A3  
0 100m

CLIENT  
JOHN TILTON  
c/- B & P SURVEYS

PROJECT  
PROPOSED SUBDIVISION  
133-193 DULGUIGAN ROAD  
DULGUIGAN, NSW, 2484

STAGE / PHASE  
FOR INFORMATION ONLY

TITLE  
PRELIMINARY ROADWORKS  
PLAN

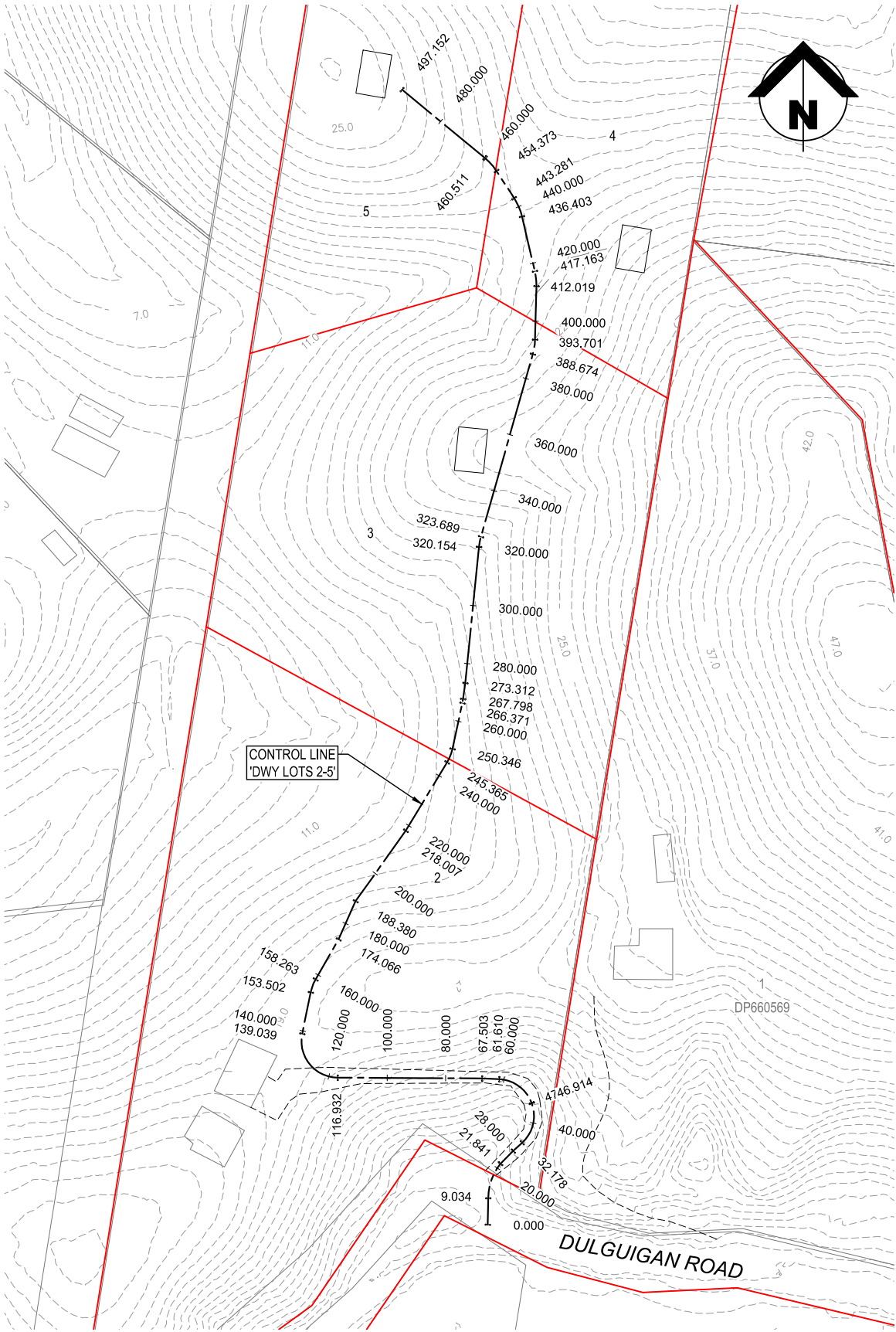
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ROADWORKS LEGEND

- DRIVEWAY CONTROL LINE
- EXISTING DRIVEWAY ACCESS
- EXISTING SURFACE CONTOURS
- SITE BOUNDARY



INSET A  
SCALE 1:1000 AT A1



INSET B  
SCALE 1:1000 AT A1

REV	DESCRIPTION	DRAWN	DATE	DATE
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SCALE

1:1000 AT A1  
1:2000 AT A3

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PROJECT

PROPOSED SUBDIVISION  
133-193 DULGUIGAN ROAD  
DULGUIGAN, NSW, 2484

STAGE / PHASE

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TITLE

PRELIMINARY ROADWORKS  
DETAILS

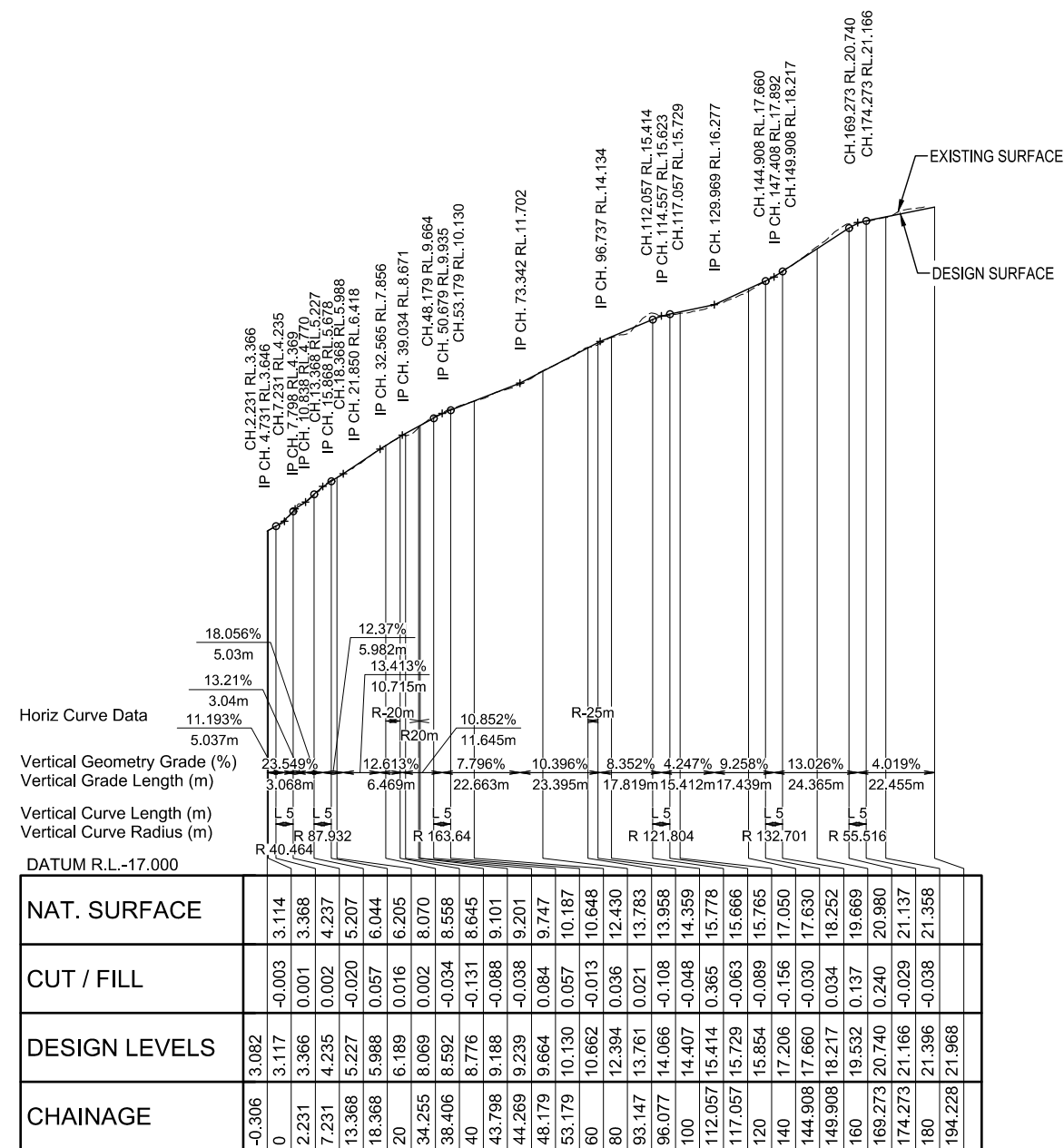
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REV	DESCRIPTION		DRAWN	DATE		DATE		STAGE / PHASE <b>FOR INFORMATION ONLY</b> NOT FOR CONSTRUCTION	DRAWING NUMBER <b>OSK6539-P008</b>	REVISION <b>1</b>