



Charles O'Neill Surveyors & Planners

Chief Executive Officer
Douglas Shire Council
PO Box 723
MOSSMAN QLD 4873

Our Ref: 30728
Your Ref: 41.2014.209 (425988)
Date: 20 February 2015

Attention: Jenny Elphinstone
Email: Jenny.Elphinstone@douglas.qld.gov.au

Dear Jenny

**Re: Response to Information Request for Reconfiguration of a Lot
1L Oasis Drive, Wonga**

Reference is made to Council's Information Request dated 22 August 2014, regarding the above application. On behalf of the Applicant, Floro Pty Ltd, please accept this correspondence and its accompanying attachments as the part response to the information request in accordance with Section 278 of the Sustainable Planning Act 2009 ("the Act").

The attached response, responds to Items 1-3 of Council's Information Request. Works related to responding to Item 4 are currently being finalised. In accordance with Section 280 (2)(b) of the Act an extension is requested to the response period for a period a one (1) month to finalise the response to Item 4.

Please find enclosed one (1) electronic copy of information addressing the matters raised in the Information Request in relation to the proposed development.

Item 1 – Land Form

The attached report prepared by PDR Engineers dated 6 February 2015, demonstrates the level of fill to achieve storm tide and flood immunity for both dwelling and associated wastewater facilities. The level of fill will provide suitable building areas, while maintaining acceptable batters that will not encourage erosion and sediment issues.

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Item 2 – Traffic Management

The attached engineering plan prepared by PDR Engineers, Ref: 14810-SK01 indicates the location of possible access points for the proposed lots. Due to the low traffic volume of Oasis Drive and Bell's Reef Close, it is recommended no restrictions should be imposed on the location of access points for the lots.

Item 3 – Drainage

The report prepared by PDR Engineers demonstrates that an appropriate drainage solution can be provided for the project.

Item 4 – Onsite Wastewater Treatment

Zammataro Plumbing has been commissioned to prepare the required reports demonstrating that the proposed lots can accommodate onsite wastewater disposal systems.

An extension for a period of one (1) to the response period is requested to allow sufficient time to provide the outstanding report for Item 4. We trust that the information contained within this response will allow Council to commence the assessment of this application. At the time that the report for Item 4 is provided, Council will then be in a position to finalise the assessment.

Should you require any further clarification on this matter, please contact the undersigned on (07) 4051 6722.

Yours faithfully

A handwritten signature in black ink, appearing to read 'MT' or similar initials.

Michael Tessaro
Planner

Bc: Floro Pty Ltd

Enc: PDR Engineering Response, dated 6 February 2015



6 February 2015

PDR 14810

Floro Pty Ltd
C/- CNS
PO Box 5246
Cairns Qld 4870

Attention: Michael Tessaro

Dear Michael

RE: Reconfiguration of 1 lot into 5 for Floro Pty Ltd located at 1L Oasis Drive Wonga Beach – Request for information – Engineering issues – Council reference 41.2014.209

We refer to Douglas Shire Council's request for information dated 22nd August 2014 and advise that we have, as requested, prepared a response to items 1, 2 and 3 of that request.

The proposal consists of five allotments of minimum 2000 sqm with frontages to Oasis Drive and Bell's Reef Close Wonga Beach. There is an existing drainage path located on proposed lot 5 which will be retained and covered by an easement. This report will address issues relating to raising the levels of the lots with suitable fill material to provide immunity to Q100 flooding, traffic management issues raised in Council's request and the management of Drainage.

As part of this report we have prepared a plan, 14810 – SK1, which is attached to this report. We address the issues as follows:-

Filling of allotments:

The current levels of the allotments range between RL 2.51 to 3.15 AHD. These levels are generally below the level required for protection against inundation during a Q100 storm event. Council have not set any minimum levels in this area, however, our firm has been involved in a number of developments within Wonga Beach during which flood/storm level studies were carried out. Notably these involve the firms DHI and BMT-WBM. The BMT-WBM study was the most recent and it established Q100 flood/storm levels between RL 2.8 and 3.2 for a similar area just north of this site.

It would be uneconomical to carry out an extensive flood study for a project of this size and it is our view that the results of these studies can be used for this project. As a result we are recommending that the minimum fill level for building areas should be at RL 3.4 AHD. This is slightly conservative and ensures that habitable buildings will have a minimum floor level of 3.5. This is also above the adopted level on nearby developments.

The plan we have prepared shows how the land should be filled and the levels required. The basic approach is to provide land at RL 3.4 for the allowable habitable building areas and then taper down to the existing levels at the boundary of each lot. This will ensure proper drainage of the lots to the existing road and drainage easement which are the legal points of discharge.

Fill will be sourced from local quarries or approved sites and will be of an approved quality. Engineering drawings at final design stage will specify these requirements. In placing fill the area will be stripped of grass and topsoil, fill placed and compacted and topsoil replaced to encourage grass cover. The design slopes shown on our plan are quite flat and do not create any batters that require special treatment. All slopes used will be of mowable grade.

It is our view that the land can be filled to the desired levels in a manner that will provide suitable building areas and will not encourage erosion and sediment issues.

Traffic Management:

There are no issues regarding access points to each lot and our plan shows possible access locations. We have indicated options for each lot, however, the actual point may depend on the design of each future residence. There are no restrictions we would impose from a traffic point of view other than perhaps restricting access to lot 1 to be from either Oasis Drive or Bell's Reef Close and not the northern section of road.

The low traffic volume and speed regime in the area do not warrant any speed limitation devices or other controls. As a result no special street furniture is required. The plan also shows the proposed location of street trees required under FNQROC.

Stormwater Drainage:

The attached plan shows, in schematic form, the proposed underground drainage system that connects to the existing system flowing west from Oasis Drive. Full details and calculations relating to these pipes will be provided at final engineering design stage. The underground system will be designed for the Q5 event in accordance with QUDM and FNQROC requirements.

The drainage easement in lot 5 will contain an underground pipe placed under a formed grassed open drain. This will ensure that the area is properly drained to the legal point of discharge. This point is the drainage reserve to the west of Oasis Drive, running parallel to the beach line and discharging to the north.

Overland flow paths will be finalised at final design stage, however, inspections reveal that these are available both to the east and west of the site to areas that will not impact on upstream or downstream properties.

We are satisfied that a suitable drainage scheme complying with the requirements of FNQROC can be provided for this project.

We trust that the provision of this report and drawing satisfies your requirements and those of the Douglas Shire Council. Should you require additional details or assistance please do not hesitate to contact our office.

Yours faithfully
PDR Engineers

A handwritten signature in black ink, appearing to read 'Alan McPherson', with a long horizontal flourish extending to the right.

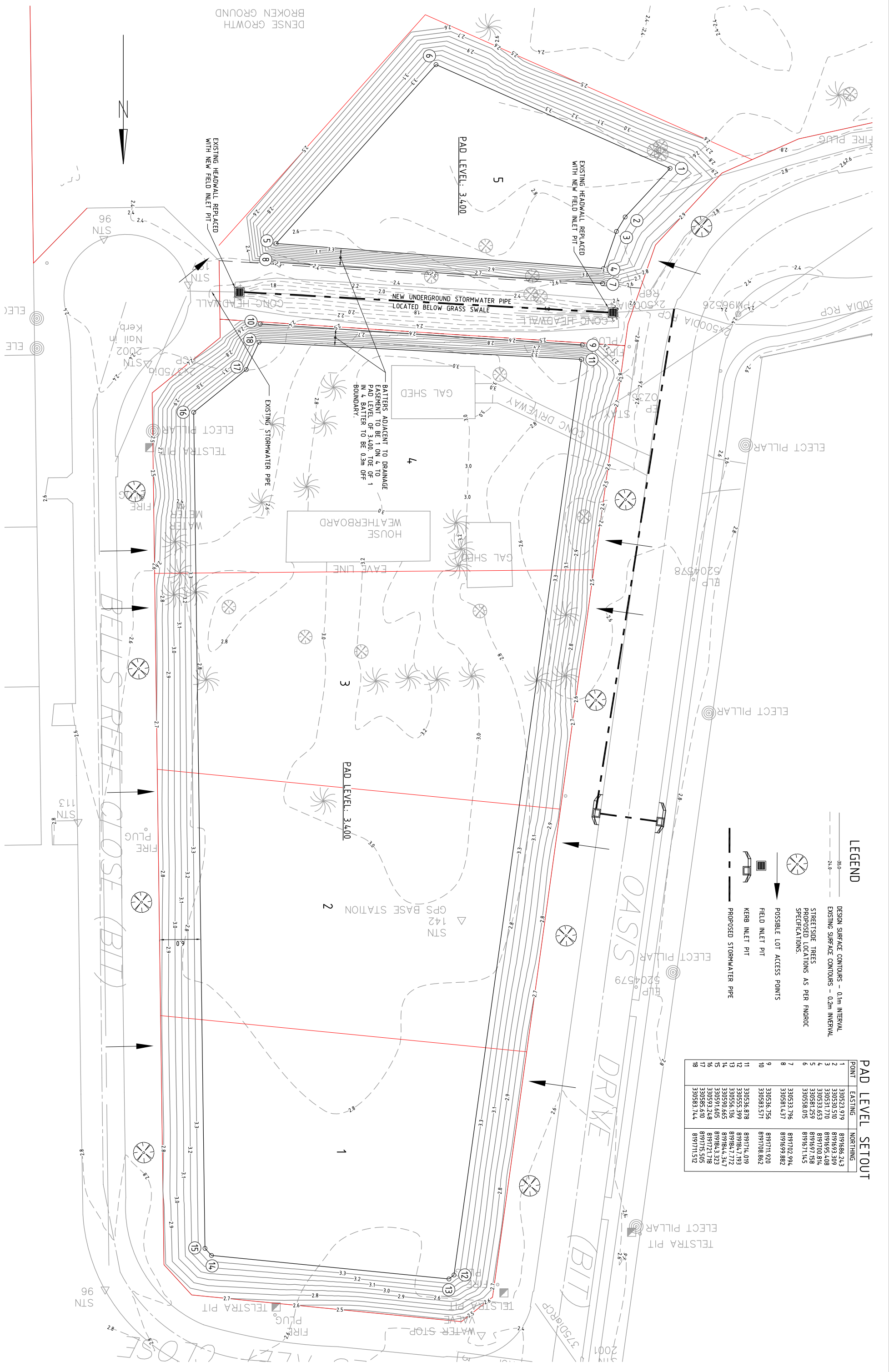
Alan McPherson
Senior Civil Engineer

LEGEND

- 0.1m — DESIGN SURFACE CONTOURS - 0.1m INTERVAL
- 0.2m — EXISTING SURFACE CONTOURS - 0.2m INTERVAL
- ⊗ STREETSIDE TREES
- ⊗ PROPOSED LOCATIONS AS PER FMROC SPECIFICATIONS
- POSSIBLE LOT ACCESS POINTS
- ◻ FIELD INLET PIT
- ◻ KERB INLET PIT
- PROPOSED STORMWATER PIPE

PAD LEVEL SETOUT

POINT	EASTING	NORTHING
1	330523.979	8191686.243
2	330530.510	8191693.309
3	330531.170	8191695.408
4	330533.653	8191700.814
5	330581.259	8191697.158
6	330558.015	8191671.145
7	330531.796	8191702.994
8	330581.437	8191699.882
9	330553.756	8191711.920
10	330583.571	8191708.862
11	330533.878	8191714.019
12	330555.399	8191847.193
13	330555.136	8191847.772
14	330590.665	8191844.347
15	330591.605	8191843.323
16	330593.248	8191721.718
17	330585.610	8191715.505
18	330583.744	8191711.512



ISSUE	DESCRIPTION	DATE
A	INFORMATION REVIEW RESPONSE	06.02.15

Drawing Status
CONCEPT

SCALE 1:250
DO NOT SCALE DRAWINGS
Scales Before Reduction
0 2.5 5 7.5 10 12.5 m

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Client
FLORO PTY. LTD.

Project
SUBDIVISION INT 5 LOTS AT OASIS DRIVE WONGA BEACH

Drawing Title
FILLING AND DRAINAGE PLAN

Drawn	DM	Designed	DM	Verified	AMCP
Approved	-	Date	FEB 2015	Revision	A
Drawing Number	14810 - SK01				