



23 February 2024

Douglas Shire Council
64 – 66 Front Street
Mossman QLD 4873

Attention: Neil Beck

Dear Neil,

**OP 2023_5560 – 368-380 PORT DOUGLAS ROAD, PORT DOUGLAS – BULK EARTHWORKS
RESPONSE TO REQUEST FOR INFORMATION**

This letter aims to respond to the Request for Information from Douglas Shire Council [Council Ref: OP 2023_5560/1 (1204830) in relation to the proposed development at 368-380 Port Douglas Road, Port Douglas. For clarity, the requests have been reproduced below with the response following in *blue italicised text*.

Operational Works – General

1. Council seeks clarification on the intent of the bulk earthworks application. The application provides a single plan with no reflection that existing features of site, clearing, pond removal and filling or removal of driveway given the footprint of the works as nominated. An Erosion and sediment control plan has not been provided despite the content of the Statement of Compliance.

The proposed works shown on the plan indicate that the “bulk earthworks” appears to be more consistent with a finished surface earthworks plan normally provided with a full subdivision operational works application. That is, final lot levels for finished lot grading and full footprint of the site.

The volume of material to complete the earthworks surface is nominated by the applicant to be over 3000m³ of material (assumed to be solid placed fill) to be imported to site.

Is it intended to import the required material (> 3000 m³) as one earthworks exercise, or is the intent that material will be imported to the site on an “as available” basis?

The earthworks comprises approximately 4500m³ of fill material imported to site. As of now the fill is stockpiled on site and no further fill is proposed to be imported for the bulk filling. The bulk earthworks will be conditioned, placed and compacted as one earthworks exercise.

2. The applicant is requested to confirm the maximum length of time that the exposed spoil piles will be on site before controlled filling and placement will be undertaken in accordance with FNQROC Development Manual specifications.

In the event that this period of time is greater than three months, the applicant is required to determine the size of stages of the works where filling can be completed and the area final trimmed and revegetated within a three-month window.

The earthworks activity, the subject of this Operational Works application, is expected to be completed within 1 month of Operational Works Approval.

3. With regards to the placement of fill and its suitability for future residential purposes, Officers seek further information on how the current uncontrolled fill will be addressed. This includes:
- How is the potentially varying soil quality being addressed in the application to ensure appropriate handling and treatment to meet the FNQROC Development Manual requirements?
 - What testing is required to verify the quality of the material currently on the site and proposed to be imported to site;
 - It is not clear if stripping of the grass and topsoil and preparation of the subgrade prior to importing the earthworks was undertaken, how will this be addressed in the proposed bulk earthworks processes currently being undertaken on site;
 - How is subgrade preparation being addressed? This is not addressed in the application material;
 - How will moisture control of the stockpiled material be addressed prior to placement given the recent (and ongoing) rainfall events;

The fill will be placed and compacted in accordance with the FNQROC Development Manual Specification. Testing of each material type, varying in characteristics, will be undertaken in accordance with the FNQROC Development Manual to determine compaction and moisture content requirements.

The material will be tested in accordance with AS 3798 section 4.3 "Suitable Materials" to determine its suitability prior to incorporation.

It is acknowledged that the topsoil has been stripped and stockpiled already (refer below image). The contractor/applicant will ensure that the stripping of topsoil has been carried out in accordance with AS3798 Section 6.1.5.

Fill material will be placed in layers not exceeding 300mm in depth. Moisture will be controlled throughout the conditioning and placement activities. In the event that there is too much moisture in the fill material, it will be worked and spread to reduce the amount of moisture prior to compaction. It is noted that minimum compaction requirements will not be reached if the fill is overly saturated.

The requirements listed above will need to be satisfied in order for the RPEQ engineer to certify the works.



Image 1 - stripped topsoil with stockpile in the North-western corner

4. The applicant is to confirm that the material currently placed along the eastern extent of the site is not within the drainage path or impacting the normal flow of rainfall runoff in the local area.

The fill material placed along the Eastern boundary is located above the high bank of the drainage path and does not impact the capacity of the channel or normal flow of the drainage channel. Refer to images below.





5. Filling of the existing pond will be required to construct the footprint of the works (filling in future Lot 3 and part of Lot 2). How does this application propose to ensure that the finished works are suitable for residential uses?

The Applicant is requested to clarify what geotechnical treatment costs are required to suitably stabilise these areas, including but not limited to, advice from an RPEQ Geotechnical Engineer.

The footprint of the bulk earthworks has been revised. As a result, the footprint does not cover the existing pond. Notwithstanding, the pond will be filled and compacted in layers, in accordance with the FNQROC Development Manual. i.e. maximum 300mm layers compacted to 95% MDD.

6. Officers seek supporting information to clarify the volume of imported fill nominated in the Price Schedule, (3100m³). Council Officers noted up to 1m of fill in places and assessments of the depth of fill nominated at the boundary of the development indicates the average fill depth may be in the order of 0.6m.

With a development footprint in the order of 10,000m², this indicates an approximate volume of imported fill of 6,000m³.

The Applicant is requested to confirm the nominated volume (3100m³) of imported fill with appropriate earthworks modelling volume calculations.

The extent of earthworks has been amended to reflect the volume of fill material stockpiled on site, being 4200m³. The average depth of fill is 0.8m over an area of 5156m².

7. The Applicant is requested to review and provide an RPEQ certification that the Price Schedule accurately reflects the cost of the works. Officers review noted as a number of items normally required for this type of work do not appear to have been considered. These include:
 - a. Establishment of construction site access does not appear to be included;
 - b. Erosion and Sediment Control measures do not appear to be included;
 - c. Revegetation of the bulk earthworks does not appear to be included;
 - d. Costs for removal and disposal of the large tree and an existing garden bed located within the building pad of proposed Lot 4.
 - e. Removal of the pond and ground surface treatments following removal;
 - f. cost to demolish, remove and dispose of unsuitable materials from the development site, including but not limited to, concrete, rock, and bituminous materials.

To address this item, Council requests that the schedule be amended to clarify the items, associated unit rates, and total cost of erosion and sediment controls shown on ARO Drawing ARO0188-C01, including but not limited to, stabilised construction access or accesses, the length of sediment fencing, number of check dams, and volume of temporary rock protection.

The Applicant is also requested to clarify any items and costs associated with creation of temporary accesses required to facilitate construction of the proposed bulk earthworks and/or maintain access from the existing residence to Port Douglas Road.

Please find attached the amended price schedule for the revised scope. It is noted that the contractor, Gregg Constructions, has provided a quote for \$60,000 to construct the earthworks, which includes:

- *Mobilisation and Demobilisation;*
- *Erosion and Sediment Control Measures;*

- *Stripping and reinstatement of topsoil;*
- *Material testing;*
- *removal of unsuitable material; and*
- *moisture conditioning, placement and compaction of fill.*

8. The Applicant is requested to identify where the topsoil stockpile is to be located on site.

The topsoil stockpile is located in the North-western corner of the site. However, this will be relocated to the south side of the site so as not to interfere with the earthworks.

9. The Applicant is requested to clarify how access will be provided to the existing building contained within proposed Lot 5 during the construction phase and post bulk earthworks, noting that the current driveway appears to enter the building on its southwest side. The applicant is to provide advise on how suitable sealed access arrangements will be provided (potentially including advice on timing of Road A) noting the existing driveway and building arrangement does not enable the use of the existing sealed driveway.

The Scope of the earthworks has been revised reflect the quantity of fill to be placed on the site. Accordingly, the revised earthworks footprint does not include the existing access to the dwelling. Access will not be affected by these works.

10. The applicant is requested to amend the plans to include a buffer between any bulk earthworks and the property boundary. This reflect that the Reconfiguration plan indicates that a future retaining wall is required along a number of boundaries. The information provided for the bulk earthworks does not indicate that any retaining elements are proposed under this application.

The retaining wall works will be constructed as part of these works which will provide finish at least 400mm above the adjacent finished earthworks level. The earthworks will be battered back at 1V:4H.


11. The applicant is requested to provide advice on cover to existing services along the western boundary of the development, including the reduced cover to facilitate construction of the cut drain conveying stormwater runoff from Road A to the existing swale within the Port Douglas Road, road reserve.

The earthworks have been amended to remove any cutting adjacent to the western property boundary. Cover to the existing services along the western boundary will not be reduced.

12. Supporting material is to include a statement addressing the conditions attached to the subdivision approval to the extent relevant to the proposed works in addition to a statement against the applicable codes of the Planning Scheme relating to such works.

Refer attached.

Yours sincerely
ARO INDUSTRIES



Andrew Armstrong
Civil Engineer
RPEQ 21116

Encl: Drawings ARO0188-C01(REV2)
Price Schedule
Development Condition Statement

Development Condition Statement

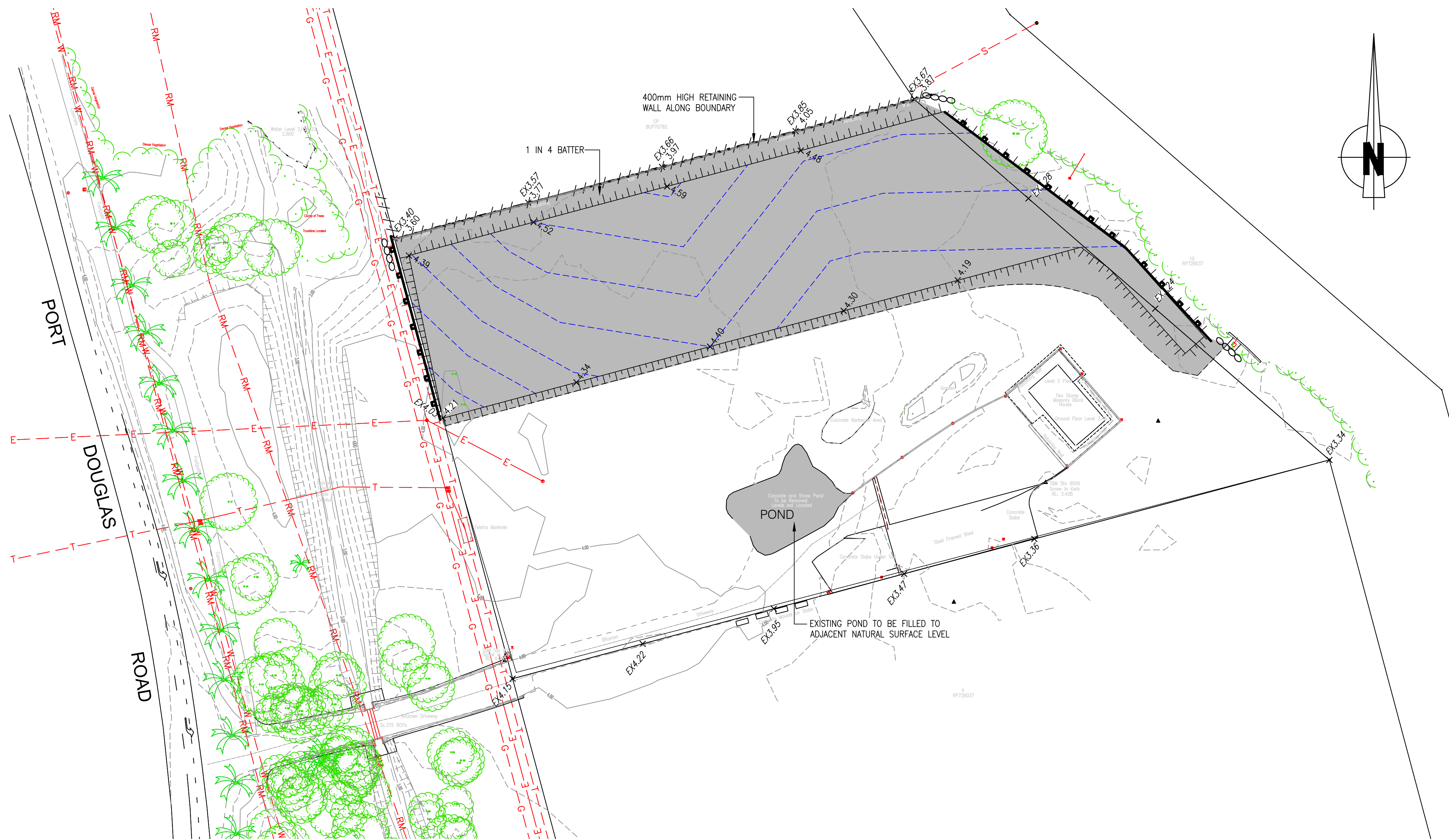
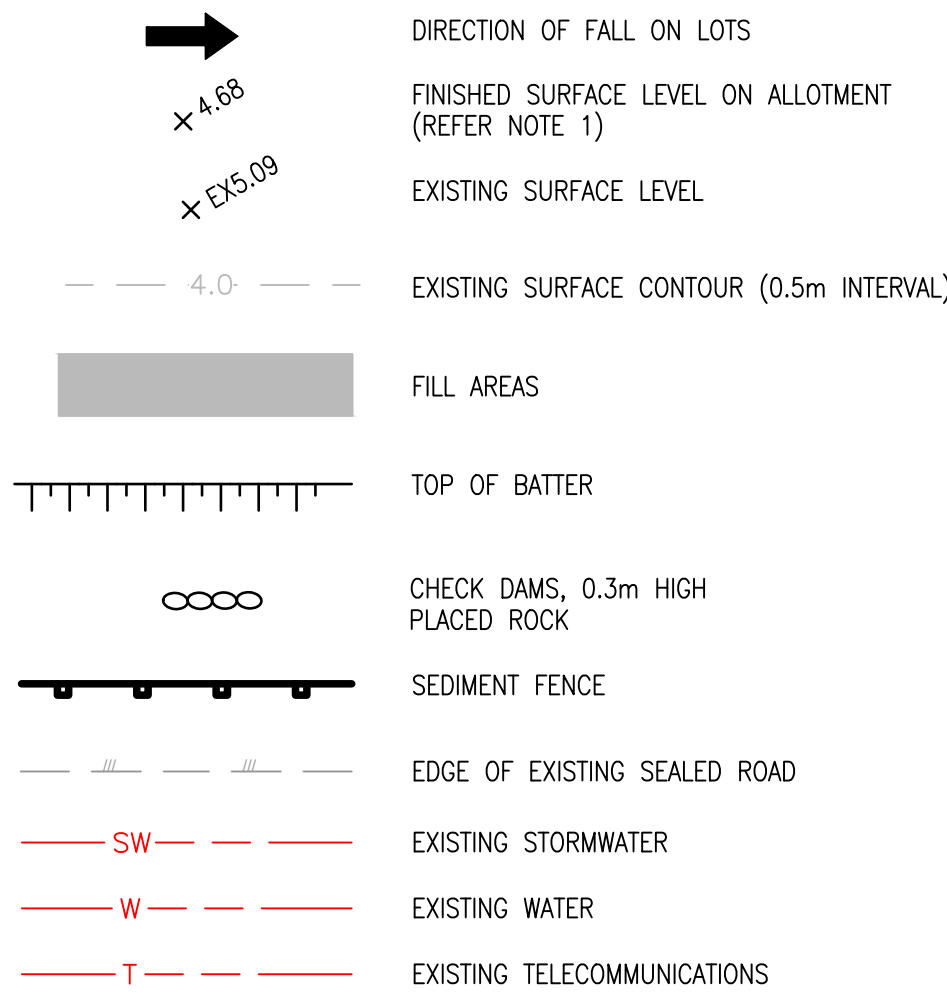
Development Approval Condition		Response
1	Conditions	Noted
2	Timing of Effect	Noted
3	Street Layout and Design	Not applicable for these works
4	Crossover and Driveway to Lot 4 on RP729037	Not applicable for these works. Access to Lot 4 will be unaffected by these works
5	Clearance to Ergon Power Lines	Not applicable for these works
6		Not applicable for these works
7	Retaining Walls and Structures	Noted. The retaining wall will be raised 400mm and provide for discharge of runoff to the front and rear of the lot.
8	Sewer Easement – Non-standard alignment.	Not applicable for these works
9	Access to Lots	Not applicable for these works
10		Not applicable for these works
11	Intersection Alignment	Not applicable for these works
12	Offsets of Driveway	Not applicable for these works
13	Ramping	Not applicable for these works
14	Reinstatement of Verge	Not applicable for these works
15	Flooding	Not applicable for these works
16	Bulk Earthworks	Noted. All earthworks batters are graded at 1 in 4.
17	Impact on Existing Infrastructure	Noted. Filling is not proposed over public utilities.
18	Roads and Footpaths	Not applicable for these works
19	Retain Footpath	Not applicable for these works
20	New Footpath	Not applicable for these works
21	Kerb Ramps	Not applicable for these works
22	Provision for On-Street Parking	Not applicable for these works
23	Water Supply and Sewerage Works External	Not applicable for these works
24	Water Supply and Sewerage Works Internal	Not applicable for these works
25	Sewer and Water Work	Not applicable for these works
26	Removal of Existing Septic System	Not applicable for these works
27	Site Based Stormwater Management Plan	Noted. Erosion and Sediment Control measures are detailed on the drawing. A Site Based Stormwater Management Plan will be prepared as part of the subsequent full Operational Works application.
28	Local Drainage Study	Noted. The impact of these works on the local drainage network is negligible. The local drainage study will be reviewed and updated for any change to the ultimate development prior to subsequent Operational Works applications.
29	Drainage Design	Not applicable to these works. Discharge from the site is generally unchanged. Stormwater is discharged to the drain at the front of the lot and the field inlet pit at the rear of the lot.
30	Lawful Point of Discharge	Noted.
31	Existing Creek and Drainage Areas	Noted.
32	Electricity and Telecommunications	Not applicable for these works
33		Not applicable for these works
34	Street Lighting	Not applicable for these works
35	Road Traffic Noise Attenuation	Not applicable for these works
36	Acid Sulfate Soils Investigation	Not applicable for these works. An Acid Sulfate Soils Investigation report will be provided prior to an Operational Works application requiring any excavation.
37	Stockpiling and Transportation of Fill Material	Noted
38		Noted
39	Storage of Machinery and Plant	Noted
40	Construction Access	Noted
41	Landscape Plan	Not applicable. Exposed earthworks will be grass seeded
42	Wildlife	Not applicable. No trees are proposed to be removed as part of these works.
43	Notification of Vegetation Clearing	Not applicable. No trees are proposed to be removed as part of these works.
44	Neighbouring waterway Protection	Noted
45	Existing Creek and Drainage Systems	Noted
46	Provision of fencing to neighbouring lots	Not applicable for these works
Referral Agency Conditions		Response
1		Not applicable for these works
2		Not applicable for these works
3		Not applicable for these works
4		Not applicable for these works
5		Not applicable for these works
6		Not applicable for these works
7		Noted
8		Noted
9		Noted
10		Noted
11		Noted



Price Schedule
368-380 Port Douglas Road, Port Douglas

The Pricing Schedule Sum shall include prices exclusive of GST, the GST applicable and the GST inclusive price. Include on the Schedule below **ALL** items necessary for the completion of the Works.

Item	Description	Unit	Qty	Rate Ex GST	
1	PRELIMINARIES			\$	30,000
1.01	Site establishment and disestablishment	Item	1	\$10,000.00	\$ 10,000
	Construction Supervision	Days	30	\$500.00	\$ 15,000
	Compliance Testing of fill material	P.S	1	5000	\$ 5,000
2	CIVIL			\$	201,074
2.01	Earthworks - Cut to Fill	m3	500	\$30.00	\$ 15,000
2.02	Earthworks - Imported Fill	m3	4000	\$30.00	\$ 120,000
2.03	Remove and replace unsuitable materail (Provisional quantity, if ordered)	m3	50	\$100.00	\$ 5,000
2.04	Stripping of Topsoil and replacing (Nominal 50mm depth)	m2	7700	\$5.00	\$ 38,500
2.05	Erosion and Sediment Control	Item	1	\$6,000.00	\$ 6,000
2.06	Grass seeding	m2	8287	\$2.00	\$ 16,574
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
ITEM SUBTOTALS					
1	PRELIMINARIES			\$	30,000
2	CIVIL			\$	201,074
				SUBTOTAL	\$ 231,074
				GST	\$ 23,107
				TOTAL INCLUDING GST	\$ 254,181

**LEGEND****PLAN**
SCALE 1:500**BULK EARTHWORKS NOTES**

- ALL WORKS AND MATERIALS TO BE IN ACCORDANCE WITH FNQROC DEVELOPMENT MANUAL GUIDELINES AND SPECIFICATIONS.
- DESIGN SURFACE LEVELS SHOWN ARE AFTER ALL EARTHWORKS ARE COMPLETED, INCLUDING 75mm TOPSOILING.
- BATTERS SHALL BE (UNLESS NOTED OTHERWISE):
 - ROAD FRONTAGE OF LOTS: 1 ON 4 (MAX.)
 - SIDES AND REAR OF LOTS (FILL): 1 ON 2
- ALL DESIGN SURFACE LEVELS ARE TO BE GRADED EVENLY BETWEEN SHOWN LEVELS UNLESS OTHERWISE SHOWN.
- LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION BY CONTRACTOR THROUGH LIAISON WITH RELEVANT AUTHORITIES.
- TRIM AND DRILL SEED ALL FOOTPATHS/ROAD VERGES, BATTERS >0.5m TO BE HYDROMULCHED AFTER FINAL EARTHWORKS AND TOPSOILING IS COMPLETED.
- TOPSOIL STOCKPILE TO BE LOCATED AT SITE ACCEPTABLE TO SUPERINTENDENT.

EROSION AND SEDIMENT CONTROL NOTES

NO WORKS TO COMMENCE ON SITE UNTIL CONTRACTORS EROSION AND SEDIMENT CONTROL PLAN IS APPROVED BY DOUGLAS SHIRE COUNCIL.

- ALL WORKS AND MATERIALS TO BE IN ACCORDANCE WITH FNQROC DEVELOPMENT MANUAL GUIDELINES AND SPECIFICATIONS.
- CONTRACTOR TO NOTE REQUIREMENTS AND RESPONSIBILITIES FOR SEDIMENT AND EROSION CONTROL AS PER FNQROC & CONTRACT SPECIFICATION.
- TOPSOIL STOCKPILES TO BE LOCATED AT SITE ACCEPTABLE TO SUPERINTENDENT AND SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE APPROVED ACCORDINGLY.
- MOVEMENT OF CONSTRUCTION EQUIPMENT SHALL BE LIMITED TO THE AREA OF WORK AND EXISTING ROADS.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED AND MAINTAINED AFTER EACH STORM EVENT AND AT REGULAR INTERVALS.
- EACH LOT TO HAVE SINGLE ACCESS POINT ONLY UNLESS DIRECTED OTHERWISE BY SUPERINTENDENT.
- CONTOURS SHOWN ARE NATURAL SURFACE CONTOURS PRIOR TO ANY BULK EARTHWORKS TAKING PLACE.
- PROVIDE MULCH TO TOP OF BATTERS.
- CATCH DRAINS AND SEDIMENT TRAPS TO BE CONSTRUCTED PRIOR TO COMMENCEMENT OF WORKS.
- ALL VEHICLES LEAVING THE SITE MUST EXIT VIA WASHDOWN FACILITY.
- DEPTHS FOR CLEARING, GRUBBING AND STRIPPING TO BE CONFIRMED DURING THE EARLY STAGES OF SITE CLEARING. ANY VARIATIONS TO THE DEPTHS NOMINATED ON THE ENGINEERING DRAWINGS TO BE APPROVED BY THE SUPERINTENDENT.

SCHEDULE OF MEASURES**DRAINAGE CONTROL**

- D1. CATCH DIRTY WATER RUNOFF AND DIVERT TO SEDIMENT CONTROL DEVICES: - CONSTRUCT CATCH DRAIN AS SHOWN.

EROSION CONTROL

- E1. BATTERS >0.5m HIGH ARE TO BE REVEGETATED AT COMPLETION OF EARTHWORKS (BONDED FIBRE MATRIX HYDROMULCH TO BE USED).
- E2. CONSTRUCT CHECK DAMS AT 40m CENTRES ALONG FUTURE ROAD CORRIDORS AS SHOWN.

SEDIMENT CONTROL

- S1. CONSTRUCT STABILISED ENTRY POINTS.
- S2. CONSTRUCT SEDIMENT FENCE DOWNSTREAM OF SITE AND STOCKPILES WHERE SHOWN ON DRAWING.

APPROVAL ISSUE

Revisions	No.	Description	Reviewed	Approved	Date
	2	ISSUED TO COUNCIL			01/03/2024
	1	ISSUED TO CLIENT			23/11/2023

Client Logo

Client

JOHN DONALD

LOT 3, PORT DOUGLAS ROAD, PORT DOUGLAS

BULK EARTHWORKS PLAN

Drawing No.

ARO0188-C01

Drawn

MS

Designed

MS

Approved

Drawing Check

Design Check

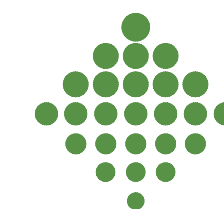
RPEQ

Date

Scale (A1 size)

1:500

Drawing is not to be used for construction unless approved.

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Revision

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