

8018234
STAR BOX

Tauranga District Council

FILE NUMBER:

6482-39

Title *Mauao Slope Stability Study*

Date Opened ___/___/___ Date Closed ___/___/___

Previous File

Subsequent File

ARCHIVE DATE _____ DESTROY DATE _____

Also see: 1880-10-99

6
4
8
2
3
9

fax



Tauranga City

FXED

FILE

TO Excell
ATTENTION Gary Wilton
FAX NO. Auto
c.c: John Scott
FROM Mark Bruhn: Area Facilities/Reserves Officer:
Mount Maunganui/Papamoa

Willow Street
Private Bag
Tauranga 3001
New Zealand
Ph (07) 577 7000
Fax (07) 577 7099

DATE 31 January 2002

FILE NO. 1880-68-98
P260-1-10
6482-39

Overseas callers use
New Zealand Country Code
64 7 577 7099

NO. OF PAGES 1 (including this page)

If all pages not received, please contact Facilities/Reserves Receptionist on 07 577 7217

INCIDENT REPORT – MAUAO 25 JANUARY 2002

Gidday Gary

Thanks for your fax with a copy of your incident report.

1. Please ensure in future instances of this nature (ie deliberate acts of wilful damage and potential criminal matters) are reported to the police ASAP. TDC officers should then be advised of situation and action taken.
2. Mauao is an extinct volcano and is prone to falling rocks. Please advise TDC officers of rocks that are potentially dangerous (as your staff find them) and I will arrange for an independent geologist opinion on their risk potential.
3. We note that the rock was deliberately pushed and it is highly unlikely your staff (or anyone else, including TDC) could have foreseen this as a potential hazard that can be managed (ie it is no different in my opinion to someone throwing a stone at a vehicle).

Kind regards

Mark Bruhn
AREA FACILITIES/RESERVES OFFICER
MOUNT MAUNGANUI/PAPAMOA
mb:ae

CONFIDENTIALITY

The information contained in this document/report/facsimile message and any accompanying documents may be legally privileged and confidential. The information is intended only for the recipient(s) named or identified in this message. If the reader of this message is not the intended recipient you are notified that any use, disclosure, copying or distribution of the information is prohibited. If you have received this message in error, please notify the writer immediately, and either return or destroy the document. Thank you.

FACSIMILE TRANSMISSION

DATE 30/1/02
FAX No
TO Mark Burkes
ATTENTION T.D.C.
FROM Garry Wilton
No of Pages (including cover)

FACILITIES/RESERVES
30 JAN 2002



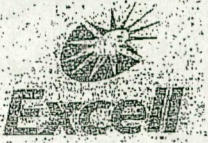
Excell Corporation Limited
305 Chadwick Road
Greerton
PO Box 147
Tauranga
New Zealand
Ph: (07) 571 8867
Fax: (07) 578 8303

Copy of Incident Report
and
Hazard ID Report

F.Y.I
"Ta"

Garry

SEE JOHN SCOTT.



Notice of Record of Incident/Accident/Serious Harm

ACC

Pages 1, 2 and 3 to be faxed within 24 hours to the Health and Safety Manager

Personal Information

Employee Number:

Name: Travis Taitte

Accident / Incident Details

Date: 25/1/02

Time: 4:45

Witnessed by: Travis

Report Details

Date reported: 25/1/02

Time: 4:50

Reported to: Garry Wilton

Organisation Details

Division: OSM

Supervisors Name: Garry Wilton

Work Location: Mount base track

Accident Location: " " "

Notice of Record of Incident/Accident/Serious Harm (cont'd)

NAC

Cause and Effect of Accident

Severity:

- Incident (no injury)
- Minor
- Moderate
- Serious

Treatment:

- None
- Self-care
- First Aid
- Doctor
- Hospital

Shift:

- Day

- Afternoon

- Night

Mechanism of Accident / Serious Harm

- Fall, trip or slip
- Sound or pressure
- Body stressing
- Biological Factors
- Mental stress
- Hitting objects with part of the body
- Being hit with moving objects
- Heat, radiation or energy
- Chemicals or other substances
- Non-work related

Body Part Injured:

- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Arm | <input type="checkbox"/> Shoulder |
| <input type="checkbox"/> Back | <input type="checkbox"/> Back, lower |
| <input type="checkbox"/> Back Upper | <input type="checkbox"/> Chest |
| <input type="checkbox"/> Eyes | <input type="checkbox"/> Fingers |
| <input type="checkbox"/> Foot | <input type="checkbox"/> Multiple |
| <input type="checkbox"/> Hand | <input type="checkbox"/> Internal organs |
| <input type="checkbox"/> Head | <input type="checkbox"/> Left |
| <input type="checkbox"/> Leg | <input type="checkbox"/> Right |
| <input type="checkbox"/> Neck | <input checked="" type="checkbox"/> None |
| <input type="checkbox"/> Toes | |

Agency of Accident / Serious Harm

- Machinery or (mainly) fixed plant
- Mobile plant or transport
- Powered equipment, tool or appliance
- Non-powered handtool appliance or equipment
- Chemical or chemical product
- Material or substance
- Environmental exposure (eg dust, gas)
- Animal, human or biological agency (other than bacteria, virus)
- Bacteria or virus

Nature of Injury or Disease:

SPECIFY ALL

- | | |
|---|--|
| <input type="checkbox"/> Fracture of spine | <input type="checkbox"/> Puncture wound |
| <input type="checkbox"/> Other fracture | <input type="checkbox"/> Poisoning or toxic effects |
| <input type="checkbox"/> Dislocation | <input type="checkbox"/> Multiple injuries |
| <input type="checkbox"/> Sprain or strain | <input type="checkbox"/> Damage to artificial aid |
| <input type="checkbox"/> Head injury | <input type="checkbox"/> Disease, nervous system |
| <input type="checkbox"/> Internal injury of trunk | <input type="checkbox"/> Disease, musculoskeletal system |
| <input type="checkbox"/> Amputation, inc eye | <input type="checkbox"/> Disease, skin |
| <input type="checkbox"/> Open wound | <input type="checkbox"/> Disease, respiratory system |
| <input type="checkbox"/> Superficial injury | <input type="checkbox"/> Disease, infectious or parasite |
| <input type="checkbox"/> Bruising or crushing | <input type="checkbox"/> Disease, respiratory system |
| <input type="checkbox"/> Foreign body | <input type="checkbox"/> Disease, circulatory system |
| <input type="checkbox"/> Burns | <input type="checkbox"/> Tumour (malignant or benign) |
| <input type="checkbox"/> Nerves or spinal cord | <input type="checkbox"/> Mental disorder |
| | <input checked="" type="checkbox"/> None |

Significant Hazards Involved:

- | | |
|---|--|
| <input type="checkbox"/> Biological | <input type="checkbox"/> Chemical |
| <input type="checkbox"/> Ergonomical | <input checked="" type="checkbox"/> Physical |
| <input type="checkbox"/> Psychological | <input type="checkbox"/> Radiation |
| <input checked="" type="checkbox"/> Other | |

Description of Accident

4 young males above base track dislodged large boulder and pushed over edge.

Travis was working on base track underneath and witnessed the boulder fly passed him at speed, missing him by only metres while Travis was in slight shock the youths managed to get away.

~~might~~

If this had hit Travis or any other person there would be no doubt that they may not have survived the incident very close call. A shame the people were not caught.

Other Parties

Other Persons Involved:

Any Property or Material Damage *[Signature]*

Has OSH been advised Y N

a) by telephone or facsimile Y/N

b) in writing within 7 days Y/N

Employee Signature: *J. Jank*

Date: 29.1.02

Supervisor's Signature: *[Signature]*

Date: 29.1.02

Supervisor's Name: G. WILTON

Workplace Inspection Report / Register

SAFETY FACILITIES/RESERVES
30 JAN 2002

Inspected by: G. WILTON
 Areas Inspected: Tracks of Mountain MT MAUGHANUI
Oranline track side.
 Comments on Inspection:

Many cracks within rock faces, could become very dangerous at any time, needs to be looked into further, significant hazard to anyone working etc. in area.

Item No.	Hazard Identified	New	Existing	Unsafe Condition / Action
	Loose boulders on rock faces		✓	Suggestion of inspection by safety officers maybe action by means of blasting rock faces.

This form must be handed to Safety Officer to ensure:

- New hazards are entered in hazard register, and assessment and control action is commenced.
- The unsafe condition/action can be remedied forthwith

Refer to Safety Officer by _____

All new hazards have been listed in hazard register. Management have been fully advised on any unsafe conditions/actions, and recommendations to achieve a safe workplace.

Safety Officer's Signature _____

Memorandum



To: Mark Bruhn
Facilities/Reserves Officer
MOUNT MAUNGANUI/PAPAMOA

cc: Jill Brightwell
Assistant Facilities/Reserves Officer
MOUNT MAUNGANUI/PAPAMOA

From: Linda Bonner
Assistant Facilities/Reserves Officer
MOUNT MAUNGANUI/PAPAMOA

Subject: MAUAO STABILITY TOUR

Date: 16 August 2001

In Reply Please Quote: 6482-39
P260-1-10

Further to our site inspection with John Scott on July 24th 2001.

We walked the Mauao base track starting from Pilot Bay; issues raised are in the order we found them.

Issues we discussed were

- Planting Pohutukawas in the gabion baskets at the start of the base track to help with erosion issues and discourage people from walking on this area to go fishing. Plant with smaller grade plants so they will fit into the cracks. Could look at bringing in top soil then planting and covering with dute for extra protection, the idea being that the soil will fill the cracks and the roots will follow.
- Look at planting up gully areas as these are natural watercourses and in heavy rain these areas carry a lot of water. These gullies are old slips.
- We should look at alternative tracks in this area in case of a slip.
- Make an issue of keeping the drains clear at all times, this is essential for erosion control.
- In one area where there is a slip in the clay we discussed planting a buffer to try to slow down any soil that may slip.
- Where we have slips near the track (both above and below) we discussed planting appropriate species. On a very steep clay shady bank an idea was kawakawa in cells (the smaller the better). We also discussed covering the slope areas with dute or hydroseeding or using a shade tolerant grass species.
- Alternative tracks should be discussed in this area as there seems to be a lot of land movement here.

- The pohutukawas below the track could be underplanted with appropriate species.
- Planting top side of the track with specimen Pohutakawas similar to the planting's on the ocean beach side, also incorporating patches of native revegetation in some areas.
- The slip site that was recently repaired should be planted up.
- Any loose boulders above the track under the pohutukawas should be crowbarred down in a controlled situation.
- There is a large rock that protrudes out on to the track on ocean side. This boulder should be photographed and monitored regularly to check for signs of movement.
- There are several old slip sites next to each other before you get to the campground these areas should be planted up.
- The steps up to the stone steps follow a gully and this area could pose a risk. The plan would be to plant a buffer of maybe flax at the bottom of this area to slow down a slip if possible. We should also put in pockets of revegetation in this area and plant plenty of pohutukawa trees; we must also consider the issue of public safety in this area and not have any planting that is too dense.
- The area above the camp ground could use more planting's especially on the steeper bits below the older reveg sites. This area is one of the priorities.

Order of Works

- 1) Discuss with local Iwi works that need to be done and offer them an opportunity for their input.
- 2) Extend plantings above camp ground.
- 3) Plant area up to stone steps.
- 4) Plant historic slip areas and revegetation. Locate alternative tracks in high risk areas in case of slips.
- 5) Plant specimen Pohutukawas on harbour side of Mauao.
- 6) Underplant existing planting on Harbour Side to help stabilise this area.

Linda Bonner
ASSISTANT FACILITIES/RESERVES OFFICER
MOUNT MAUNGANUI/PAPAMOA

~~ALC~~
Suzanne Peter

6482-39 sections
Resource Mgmt Land stability
Maui slope stability study.

Catchal if you would set
up a Maui survey network
file and place this information
on it. There will be occasional
re-surveys and this information
will serve as the data.

Thanks

Scott, 12/4

111 Cameron Road, PO Box 231, Tauranga, New Zealand.
Phone 07-577 6069 • Fax 07-577 6065
Email sl.tga@xtra.co.nz

Our Ref: 14795

MT MOTOR CAMP

CONTROL SURVEY

Equipment

Set 2000 No. 18949

Procedure

RM4 SO 59650 has been held as fixed with its coordinate and heights taken from SO 59650.

Orientation was fixed on the line RM4 SO 59650 to RM5 SO 59650.

A traverse was run from RM4 to FLAT to KNOB and back to RM4. This traverse closed 0.002 in the horizontal plan and 0.001 in the vertical plane.

From each of the traverse stations RM4, FLAT and KNOB the other 2 marks were observed (TOP and TREE).

The final coordinates and heights of TOP and TREE were calculated by meaning the adjusted observations from the traverse stations. TOP coordinates had a spread of 0.006 m in the horizontal plane and 0.011 m in the vertical pane.

TREE coordinates had a spread of 0.009 m in the horizontal plane and 0.014 m in the vertical plane.

Marks

RM4 and RM5 are brass plaques set into the channel.

All other marks are 750 mm long iron bars 12 mm in diameter set flush into the ground with a concrete collar poored insitu.



Bruce Robinson
Registered Surveyor

28 March 2000

FILE

~~IB~~ / A. S. J. 171400.

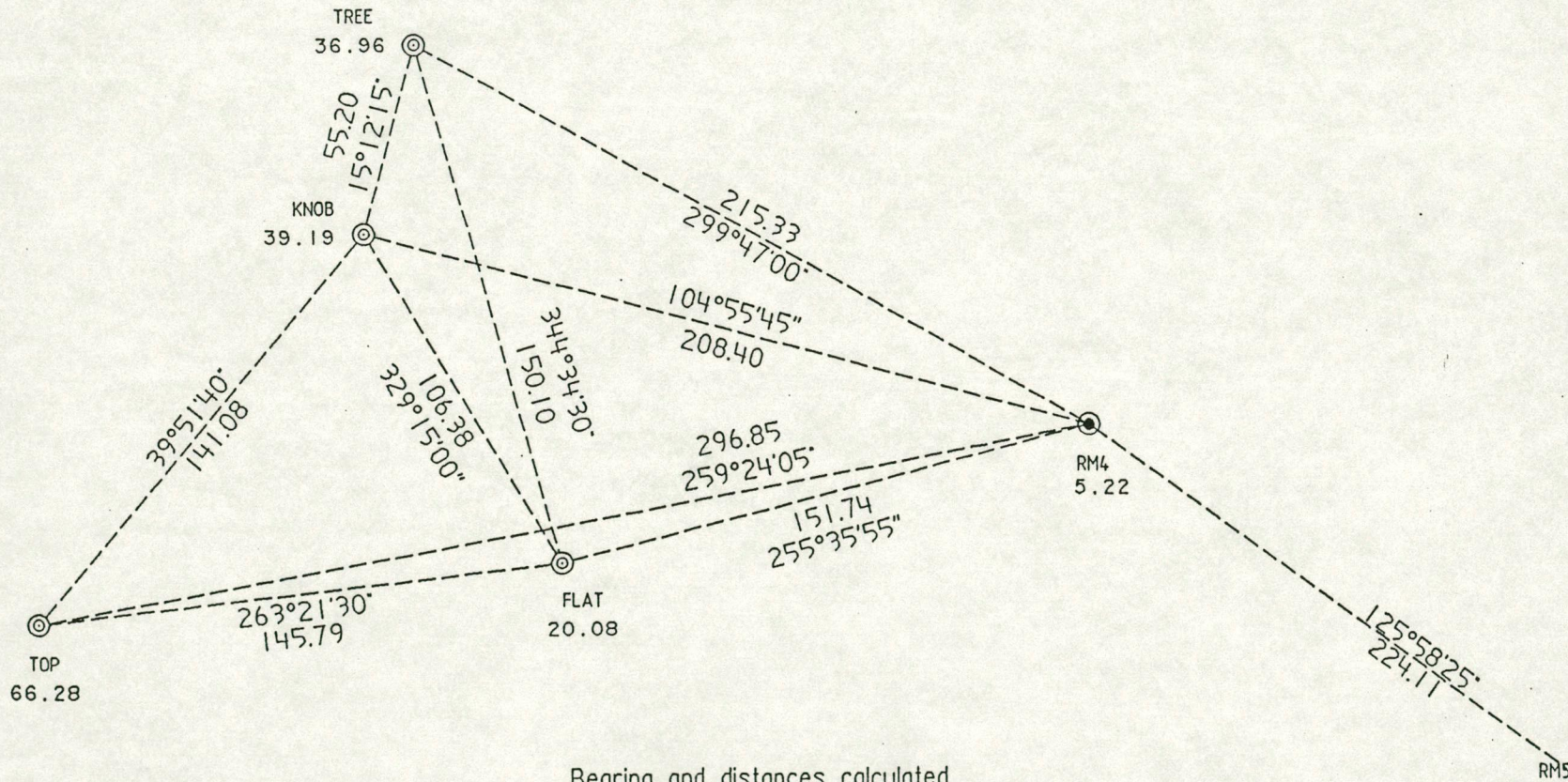
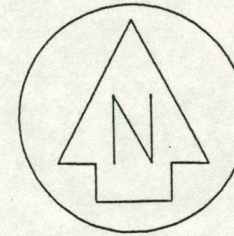
For your info. Please
return. (Re: reveg locations)

NB Advise Jan Parkes.

Smy.

CLASSIC

-X-	-Y-	-Z-	Code
274470.97	714172.29	5.224	RM4
274324.00	714134.55	20.080	FLAT
274269.60	714225.98	39.187	KNOB
274179.18	714117.69	66.281	TOP
274284.08	714279.25	36.959	TREE



Bearing and distances calculated from final coordinates and rounded to 5' for direction, 0.01 for distance and 0.01 for height

SCALE 1:2000

OXD	Revision	Date
	Name	Date
Surveyed		
Designed		
Drawn		
Checked		
Approved		

REFERENCES

SHRIMPTON & LIPINSKI LTD
 REGISTERED SURVEYORS
 CONSULTING ENGINEERS
 TOWN PLANNERS

111 Cameron Road, Tauranga, N.Z.
 P.O. Box 211 Ph: (07) 577-1069
 Fax: (07) 577-6065

TITLE
 MAUAO
 DEFORMATION SURVEY

Copyright in this drawing is reserved	
ORIGINAL SCALES	DATE
DRAWING No	METRIC
14795-02	
	DESIGN

LOCATON OF MARKS AS
SEEN FROM RM4





RM4



FLAT

KNOB





TREE

TOP



Laurie Richards



The Old School House • Swamp Rd • Ellesmere
RD5 Christchurch • New Zealand

Rock Engineering Consultant

Ph: +64 3 329 5663 • Fax: +64 3 329 5661
email: LaurieRichards@Compuserve.com

20 March 1999

Paul Baunton
Tauranga District Council
Private Bag
Tauranga

TAURANGA DISTRICT COUNCIL		
FILE No..	6482-39	FILE:
REC.: 23 MAR 1999		
NAME	DATE	SIGN
M. Batchelor		
Paul Baunton		

Dear Paul

I am returning with thanks the copy of the Tauranga geology book. It's a bit of a worry when both the Hall thesis and this book consistently refer to the height of Mauao as 252m whereas the rest of the world thinks it's only 232m. I guess that's just academic exaggeration – but what else might be wrong?

Best regards



Laurie Richards