



APPLICATION FORM FOR A RESOURCE CONSENT

PLEASE FILL IN ALL THE FIELDS

Application details

I/We **Norman and Julie Firth**

(must be the FULL name(s) of an individual or an entity registered with the New Zealand Companies Office. Family Trust names and unofficial trading names are not acceptable: in those situations, use the trustee(s) and director(s) names instead) hereby apply for:

☒ Land Use Consent ☐ Subdivision Consent

I opt out of the fast-track consent process: Yes ☒ No

(only applies to controlled activities under the district plan, where an electronic address for service is provided)

Brief description of the proposed activity:

The removal of the scheduled oak tree (T402) on our property.

Have you applied for a Building Consent? Yes, Building Consent Number ABA

☒ No

Site location/description

I am/We are the: (☒ owner, occupier, lessee, prospective purchaser etc) of the site (tick one)

Street address of site: **2 Montecillo Lane, Mornington, Dunedin 9011**

Legal description: **LOT1 DP477748, LOT 19 DP477748 1/17 SH0.6HA**

Certificate of Title: **662696**

Contact details

Name: **Julie Firth**

(☒ applicant agent (tick one))

Address: **2 Montecillo Lane**

Mornington

Postcode: **9011**

Chosen contact method (this will be the first point of contact for all communications for this application)

I wish the following to be used as the address for service (tick one): ☒ Email ☐ Post ☐ Other:

Ownership of the site

Who is the current owner of the site? **Norman and Julie Firth**

If the applicant is not the site owner, please provide the site owner's contact details:

Address:

Postcode:

Phone (daytime):

Email:



DUNEDIN | kaunihera
CITY COUNCIL | a-rohe o
 ōtepoti

Planning Application Fees Payment Details (Who are we invoicing)

THIS FORM MUST BE COMPLETED FOR ALL PLANNING APPLICATIONS THAT ATTRACT A FEE. ALL FIELDS ARE MANDATORY.

This information is required to assist us to process resource consent invoices and refunds at lodgement and the end of the process. If you have any queries about completing this form, please email planning@dcc.govt.nz

Deposit Payment Payee Details:

Full Name of Deposit Payee (Person or Company): Norman and Julie Firth

Mailing Address of Deposit Payee (please provide PO Box number where available):

2 Montecillo Lane

Mornington 9011

Email Address of Deposit Payee: julieandnorm@yahoo.co.nz

Daytime contact phone number: 02902036117

Important Note: The Payee will automatically be invoiced for the deposit and/or any additional costs. Should a portion of the deposit be unspent, it will be refunded to the payee.

Fees

Council recovers all actual and reasonable costs of processing your application. Most applications require a deposit and costs above this deposit will be recovered. A current fees schedule is available on www.dunedin.govt.nz or from Planning staff. Planning staff also have information on the actual cost of applications that have been processed. This can also be viewed on the Council website.

Development contributions

Your application may also be required to pay development contributions under the Council's Development Contributions Policy. For more information please ring 477 4000 and ask to speak to the Development Contributions Officer, or email development.contributions@dcc.govt.nz.

Occupation of the site

Please list the full name and address of each occupier of the site:

As above

Monitoring of your Resource Consent

To assist with setting a date for monitoring, please estimate the date of completion of the work for which Resource Consent is required. Your Resource Consent may be monitored for compliance with any conditions at the completion of the work. (If you do not specify an estimated time for completion, your Resource Consent, if granted, may be monitored three years from the decision date).

October 2023

(month and year)

Monitoring is an additional cost over and above consent processing. You may be charged at the time of the consent being issued or at the time monitoring occurs. Please refer to City Planning's Schedule of Fees for the current monitoring fee.

Detailed description of proposed activity

Please describe the proposed activity for the site, giving as much detail as possible. Where relevant, discuss the bulk and location of buildings, parking provision, traffic movements, manoeuvring, noise generation, signage, hours of operation, number of people on-site, number of visitors etc. Please provide proposed site plans and elevations.

Removal of scheduled tree T402.

Description of site and existing activity

Please describe the existing site, its size, location, orientation and slope. Describe the current usage and type of activity being carried out on the site. Where relevant, discuss the bulk and location of buildings, parking provision, traffic movements, manoeuvring, noise generation, signage, hours of operation, number of people on-site, number of visitors etc. Please also provide plans of the existing site and buildings. Photographs may help.

Private residence.

(Attach separate sheets if necessary)

District plan zoning

What is the District Plan zoning of the site? **Residential**

Are there any overlaying District Plan requirements that apply to the site e.g. in a Landscape Management Area, in a Townscape or Heritage Precinct, Scheduled Buildings on-site etc? If unsure, please check with City Planning staff.

No

Breaches of district plan rules

Please detail the rules that will be breached by the proposed activity on the site (if any). Also detail the degree of those breaches. In most circumstances, the only rules you need to consider are the rules from the zone in which your proposal is located. However, you need to remember to consider not just the Zone rules but also the Special Provisions rules that apply to the activity. If unsure, please check with City Planning staff or the Council website.

Affected persons' approvals

I/We have obtained the written approval of the following people/organisations and they have signed the plans of the proposal:

Name: Melanie and Isaac Gutschlag

Address: 29C Patrick Street, Mornington 9011

Name: Marianne and Michael Parks

Address: 1 Montecillo Lane, Mornington, 9011

Please note: You must submit the completed written approval form(s), and any plans signed by affected persons, with this application, unless it is a fully notified application in which case affected persons' approvals need not be provided with the application. If a written approval is required, but not obtained from an affected person, it is likely that the application will be fully notified or limited notified.

Assessment of Effects on Environment (AEE)

In this section you need to consider what effects your proposal will have on the environment. You should discuss all actual and potential effects on the environment arising from this proposal. The amount of detail provided must reflect the nature and scale of the development and its likely effect. i.e. small effect equals small assessment.

You can refer to the Council's relevant checklist and brochure on preparing this assessment. If needed there is the Ministry for the Environment's publication "A Guide to Preparing a Basic Assessment of Environmental Effects" available on www.mfe.govt.nz. Schedule 4 of the Resource Management Act 1991(RMA) provides some guidance as to what to include.

In our opinion the tree presents a safety risk and there are no realistic options mitigating these risks due to the poor arborial treatment over time and the tree no longer has the aesthetic appeal it once had and other options are not feasible. The tree is no longer healthy, is structurally unsound and several large branches (most recently a 10m long branch) have fallen in recent years, which due to its location, places our property and adjoining property at risk of damage and risk of injury to owners/occupiers. When the last branch fell in March 2023 it fell onto our neighbour's property narrowly missing a window at 29C Patrick Street, Mornington. The removal of the tree will have minimal impact on the visual or physical impact in the neighbourhood and minimal impact on the habitat of wildlife.

Please see the attached report from Valley Arborist.

(Attach separate sheets if necessary)

The following additional Resource Consents from the Otago Regional Council are required and have been applied for: Yes No

Water Permit Discharge Permit Coastal Permit Land Use Consent for certain uses of lake beds and rivers ☒ Not applicable

Assessment of Objectives and Policies

In this Section you need to consider and assess how your application proposal aligns with the relevant objectives and policies in the District Plan relating to your activity. If your proposal is a discretionary or non-complying activity under the District Plan more attention to the assessment will be necessary as the objectives and policies of the District Plan may not always be in support of the proposed activity.

N/A

Declaration

I certify that, to the best of my knowledge and belief, the information given in this application is true and correct.

I accept that I have a legal obligation to comply with any conditions imposed on the Resource Consent should this application be approved.

Subject to my/our rights under section 357B and 358 of the RMA to object to any costs, I agree to pay all the fees and charges levied by the Dunedin City Council for processing this application, including a further account if the cost of processing the application exceeds the deposit paid.

Signature of: ☒ Applicant Agent (tick one):



Date: 16-7-2023

Privacy—Local Government Official Information and Meetings Act 1987

You should be aware that this document becomes a public record once submitted. Under the above Act, anyone can request to see copies of applications lodged with the Council. The Council is obliged to make available the information requested unless there are grounds under the above Act that justify withholding it. While you may request that it be withheld, the Council will make a decision following consultation with you. If the Council decides to withhold an application, or part of it, that decision can be reviewed by the Office of the Ombudsmen.

Please advise if you consider it necessary to withhold your application, or parts of it, from any persons (including the media) to (tick those that apply):

- Avoid unreasonably prejudicing your commercial position
- Protect information you have supplied to Council in confidence
- Avoid serious offence to tikanga Māori or disclosing location of waahi tapu

What happens when further information is required?

If an application is not in the required form, or does not include adequate information, the Council may reject the application, pursuant to section 88 of the RMA. In addition (section 92 RMA) the Council can request further information from an applicant at any stage through the process where it may help to a better understanding of the nature of the activity, the effects it may have on the environment, or the ways in which adverse effects may be mitigated. The more complete the information provided with the application, the less costly and more quickly a decision will be reached.

Further assistance

Please discuss your proposal with us if you require any further help with preparing your application. The Council does provide pre-application meetings without charge to assist in understanding the issues associated with your proposal and completing your application. This service is there to help you.

Please note that we are able to provide you with planning information but we cannot prepare the application for you. You may need to discuss your application with an independent planning consultant if you need further planning advice.

City Planning Staff can be contacted as follows:

IN WRITING: Dunedin City Council, PO Box 5045, Dunedin 9054

IN PERSON: Customer Services Centre, Ground Floor, Civic Centre, 50 The Octagon

BY PHONE: (03) 477 4000

BY EMAIL: planning@dcc.govt.nz

There is also information on our website at www.dunedin.govt.nz

Information requirements

- Completed and Signed Application Form
- Description of Activity and Assessment of Effects
- Site Plan, Floor Plan and Elevations (where relevant)
- Written Approvals
- Payee details
- Application fee (cash, eftpos, direct credit or credit card (surcharge may apply))
- Certificate of Title (less than 3 months old) including any relevant restrictions (such as consent notices, covenants, encumbrances, building line restrictions)
- Forms and plans and any other relevant documentation signed and dated by Affected Persons

In addition, subdivision applications also need the following information:

- Number of existing lots
- Number of proposed lots
- Total area of subdivision
- The position of all new boundaries

In order to ensure your application is not rejected or delayed through requests for further information, please make sure you have included all of the necessary information. A full list of the information required for resource consent applications is in the Information Requirements Section of the District Plan.

OFFICE USE ONLY

Has the application been completed appropriately (including necessary information)? Yes No ☐

Application: Received Rejected

Received by: Counter Post Courier Other:

Comments:

(Include reasons for rejection and/or notes to handling officer)

Planning Officer:

Date:

Samuel Ritchie - Valley Arborist
12 Montague Street
North East Valley
Dunedin 9010
NEW ZEALAND



Re: Assessment and report on Oak Tree T402

27 June 2023

Julie and Norm Firth
2 Montecillo Lane
Mornington
Dunedin 9011

Dear Julie and Norm,

As per your 2/06/23 in-person request, I herein provide an assessment report and comment on the protected Oak tree, *Quercus robur*, on your property at 2 Montecillo Lane. The tree is listed in schedule 25.3 of the district plan as tree number T402, at 79 Eglington Road, now a newly developed subdivision on Montecillo Lane.

The purpose of this report is to assess the tree's condition and safety, and provide recommendations for management into the future. Figures referenced are added pages at the end of the report.

Background

In the past decade or so, tree T402 has had quite an active history of arboricultural work, as well as work done within its drip line. It is important to lay out this history as a part of a detailed report on the tree's condition, as impacts on the tree from construction or ground works within the rooting zone, or pruning activities, can manifest in the tree many years later. Knowing this history is important when discussing future management options and assessing safety. Below is what I've gleaned from reports and consent applications regarding the tree:

- Prior to 2013, during the existence of the Montecillo War Veterans home, the canopy spread of T402 appears greater than it is now. An aerial photo from prior to 2013 (Figure 1) shows a much larger canopy, particularly in its southern half, when compared to photos after 2013 (Figures 2 and 3). The War Veterans home was demolished by 2013 and it appears by looking at photos of the site from a 2013 report, clearance of vegetation and excavation works for a planned development had started in earnest.

- In 2013, an application was submitted (LUC-2013-294) by Morclarke Developments Ltd for resource consent to remove T402 for a new residential development. It was hoped the tree could be retained, and it was, but it is unclear if the consent was granted for its removal or if the developer chose to retain the tree.
- A June 2013 Arborist's report (Peter Collingwood, Delta Ltd) filed with the consent application has photos which show very fresh large cuts low in the trunk (Figure 4), and a large amount of surrounding vegetation having been cleared, including a large tree 3.5m away to the NE (see figure 5) for which stump removal was planned. This stump has been retained. The report also notes that at sometime in the past, the ground around the base of the tree on the west side had been built up to form, or extend, a parking area, and a retaining wall built and back filled with crusher dust and metal with the tree having been used as part of the retaining wall (see figures 5 and 6), increasing the soil level by approximately 300 - 400mm on that west side at the base of the tree.
- Between 2013 and 2016, residential development on the site proceeded and a house, driveway, general accessway, retaining wall and pedestrian access were all constructed within 10m of T402, presumably within the drip line (see aerial photos). Large lower branches removed c.2013 as mentioned above look to have reduced the T402's canopy spread significantly.
- In September 2016, consent for pruning works was applied for and granted (LUC-2016-366), by the same applicant as the above application for removal. A very brief accompanying arborist's report (Treescape Environmental Ltd, August 2016) states the tree to be in average condition due to soil levels being raised around the base of the tree. LUC-2016-366 stipulates crown thinning by 10%, deadwooding, and crown raising to 4m. It is unclear when or whether this consented work went ahead.
- In March 2019, consent for pruning works was applied for by the new owners of the new house at 2 Montecillo Lane. The consent was granted (LUC-2019-93), and stipulated crown reduction by up to 30%. The accompanying Roberts Consulting Arborist report states that the tree was in good condition with vitality within the normal range for the species and age, but notes that there were indications of potential disturbances in the rooting area, specifically:

“original soil levels had been changed to accommodate housing and access; earthworks and tree removal (including the possible stump removal) appeared to have taken place under the drip-line of the tree; signs of mechanical damage on the lower trunk; 25 to 30% of rooting area now covered by hard-surface (impermeable surface), and pre the construction of the Montecillo Lane subdivision the entire rooting area appeared to be covered by vegetation (a permeable organic surface); and over 20% of the root protection area as described in the Dunedin Second Generation Plan (being the area under a tree canopy defined by the outer circumference of the tree's branches or a distance from the trunk equivalent to half the height of the tree, whichever is the greater) appears to have

been compromised during the construction of 2 Montecillo Lane.” (Roberts Consulting report, March 2019)

- The crown reduction stipulated in this 2019 consent was argued for on the basis that it would reduce leverage on the tree and presumably reduce the risk of failure, particularly given its top-weighted ('lions tailed') form, its recent exposure (from having sheltering surrounding vegetation cleared), and the issues potentially arising from the disturbances and possible damage to the root system of the tree within the root protection area. It appears from comparison of the tree now with photos of the tree at the time (see photos 7 and 8) that this crown reduction work was not carried out, however wind damage has reduced the north stem to approximately the pruning line stipulated in the report.
- At some point in time, perhaps between 2016 and now, there has been significant pruning work carried out on the tree.

Observations

- The tree was visually inspected from the ground on 26th May, and again on the 14th of June. On the 26th of May there was a strong and gusty westerly wind, but otherwise fine and clear. On the 14th of June the weather was fine and calm.
- The tree appeared healthy with normal vitality for its species and age, as indicated by inspection of fallen leaves and leaves on epicormic shoots. There didn't appear to be signs of extensive dieback or decline in the canopy. There are 3 old large cuts in the lower trunk that have not healed over well (see figure 9), and the sapwood portion of the cuts have begun to rot back to form cavities.
- The tree is approximately 15-18m high and situated approximately 3-4m from the northern boundary of 2 Montecillo Lane and the southern boundary of 29c and 33 Patrick St. The trunk diameter is approximately 1.1m measured at chest height, which is singular until it splits into 2 main stems at approximately 3.5m height. The union at this juncture appears sound, with no closed union or bark inclusion apparent. Measured approximately from the base of the trunk: the northeast corner of the house is 6m away to the southwest; a retaining wall and stairs are 3-4m away to the west; the driveway for 2 Montecillo Lane is 2m away; a fence to the northeast is 2.5m away; and a turning bay/parking area for Montecillo Lane is 7-8 m away.
- The canopy is unsymmetrical, and spreads approximately 7-8m N-S and approximately 10-11m W-SW. The northern edge of the crown extends over towards the house at 29c Patrick St, and a portion of the SW edge of the crown extends over the NE corner of the house at 2 Montecillo Lane.

- In general, the tree has a messy, tortured appearance, with 3 or 4 major wind broken stubs (see figure 8), particularly on the NE and W sides, that all appeared to have occurred relatively recently, within the last 5 years. An approximately 150mm branch had recently been broken off by wind and was sitting where it had landed in the garden, but it was unclear from the ground where on the tree it had come from. There are many old pruning cuts both high in the crown and low in the trunk system, and they vary in quality and age; some look as though they have been made in accordance with arboricultural standards, while others do not and are left as stubs or are poorly made. The tree, by wind or by pruning, has had all of its lower branches, large and small, removed to a height of approximately 12m, and therefore growth is concentrated mostly in its uppermost portion, i.e. a 'lion's tail' form. Where there is other growth, it is in the form of numerous epicormic shoots that cover the trunk and main stems (see figure 9).
- The root crown of the tree appeared normal, with good trunk taper and root flare at the base, and under the very windy conditions, the root plate appeared stable. However, recent activities within the rooting area* indicate disturbances of the rooting system that must be noted:
 - The construction of a house and related excavation
 - The building up of soil levels around the western base of the tree by 300-400mm
 - Excavation for driveways and installation of driveways and roads that are impermeable surfaces.
 - Piling for hard landscaping - retaining wall, stairs, and a fence.
- On the 26th of May when I inspected the tree for the first time, there was a strong and gusty Westerley, and the tree's branches were whipping around vigorously, making it straightforward to see why so much wind damage had occurred in recent years. The tree did not appear to be abating wind energy in a distributed fashion, and it did not feel safe standing under it.

**see page 5 for descriptions of the rooting area*

Comments and assessment

- It is apparent that a lot of activity has occurred within the original drip line or root zone of T402, including excavation and construction activities and the installation of impermeable surfaces (driveways and a lane) where before there was an organic permeable surface.
- Soil levels have been built up 300-400mm on the western side of the tree, presumably prior to 2013 based on old photos, for the purposes of a parking/yard area.
- According to Australian (AS4970:2009) and British (BS5837:2012) arboricultural standards for the protection of trees on development sites, the Tree Protection Zone

(TPZ), or Root Protection Area (RPA) is the area around a tree that requires protection and should be isolated from construction disturbance, in order that the tree remains viable into the future. It is a circle centred on the trunk that has a radius equal to 12 times the diameter of the trunk at chest height. For T402, this radius is 13.2m based on a trunk diameter of approximately 1.1m. Using this, 45-50% of the tree protection zone for T402 has been compromised including the installation of impermeable surfaces. If we were to include the raising of the soil levels on the west side of the tree, this figure would be higher

- The root protection area as described in the Dunedin Second Generation Plan (2GP) is the area of a circle of radius equal to half the height of the tree, or the area within the outer circumference of the canopy, whichever is greater. For T402, based on a height of 18m, these radiuses are roughly the same, at approximately 9m. Using this definition of the root protection area, I estimate 35-40% of the root protection area has been compromised by construction activities including the installation of impermeable surfaces (driveways/access lanes). Please note these are approximate figures based on my approximate estimation of the height of the tree.
- The Structural Root Zone (SRZ) is an area required for tree stability and is a circle centred on the trunk and included in the tree protection area. For T402 the radius of the SRZ is approximately 3.5m. Within this zone for T402, piling for a fence and stairs has been installed, as well as the installation of the driveway 2 m away. I estimate a minimum of 15% of the SRZ has been compromised by construction activities; if the raising of the soil level on the entire west side of the tree were to be included in this, the figure would possibly be over 50%.
- Since c. 2013, T402's canopy spread or 'dripline' has been reduced significantly, by wind damage and pruning, possibly by up to 50%, resulting in an upright 'lions tail' form. Surrounding vegetation has also been removed, particularly on the north and east sides, exposing T402 to wind directions from which it had previously been more sheltered. Due to this, T402 likely didn't develop the structural characteristics required to dissipate wind energy from those directions.
- The extensive compromise of the rooting area, including in the SRZ of T402 as described above, combined with the loss of the lower parts of the crown over the years, puts the tree at a higher risk of whole tree failure, particularly in windy conditions. This is due to the high leverage caused by its top-heavy form, acting on a severely compromised root system. No indications of imminent whole tree failure were observed during my inspections, however, in my opinion, the precarious structural condition of the tree must be considered a major factor when assessing this tree for safety.
- T402 is well within falling distance of 3 occupied houses (2 Montecillo Lane and 29 and 33c Patrick St) and in the event of whole tree failure, could cause significant damage to

any of them. Driveways, a parking area, and Montecillo Lane are also within falling distance.

- This assessment of the tree was motivated by the breaking out of a large branch from high in the crown. Given the form and exposed nature of the tree and its inability to absorb wind energy in a distributed fashion, large and small wind breaks will continue to happen, creating a significant hazard for the safety of the occupiers of the 3 surrounding houses and the users of the driveways, parking area and the lane.
- It appears the impacts of the compromise of the root protection area and the structural root zone haven't yet manifested in the above ground tree. It is therefore possible that the tree will enter decline and its structural condition will worsen into the future and the tree will become unviable, particularly in regards to safety.

Conclusions and recommendations

Based on the history of activity in extensive areas of the rooting zone, combined with the way in which the tree has been pruned and lost branches to wind damage, *I consider T402 to have a moderate risk of whole tree failure, and a high risk of further branch or stem failure. The likelihood of either type of failure striking nearby targets and causing damage to property is high.*

In my opinion, given the structural condition of the tree, options for properly addressing these safety issues are limited:

- To reduce leverage, the crown could be reduced by 30-40%, however this could impact the overall health of a tree that has already lost a significant portion of its crown, and lead to decline in the future.
- To provide additional support to branches and stems, a dynamic bracing system could be installed between the major stems and their branches. It would require a number of bracing lines, and add to the tortured appearance of the tree
- To remove the hazard entirely, the tree could be removed, however large trees have a value that is difficult to replace with anything but another large tree. If this option is pursued, I recommend the planting of a new well-selected specimen tree in its place or somewhere within its vicinity, for the benefit of future generations.

Any future management actions for T402 will have to balance the safety issues outlined above, against the intrinsic amenity and ecological value the tree provides, as already recognised by its protected status under the district plan. Does a tree have as much amenity value when its hazard is continually felt by those living within the fall zone?

In the meantime, I recommend that this tree be monitored closely by a qualified arborist for any structural and/or physiological changes that could inform decisions about the management of the hazard.

These comments and opinions in regard to T402 are based only on what I observed visually at the time of the inspections, as well as what is laid out in several arboricultural reports since 2013. As trees are dynamic living systems, in order monitor changes in their condition, inspections by a qualified arborist should take place regularly and after extreme weather events.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'S. Ritchie', with a stylized flourish at the end.

Samuel Ritchie

Reference

Standards Australia (2009): *Australian Standard for protection of trees on development sites, AS4970:2009*. Copyright Standards Australia

British Standards Institution (2012): *Trees in relation to design, demolition and construction - Recommendations, BS5837:2012*. Fourth Edition, Copyright British Standards Institution.

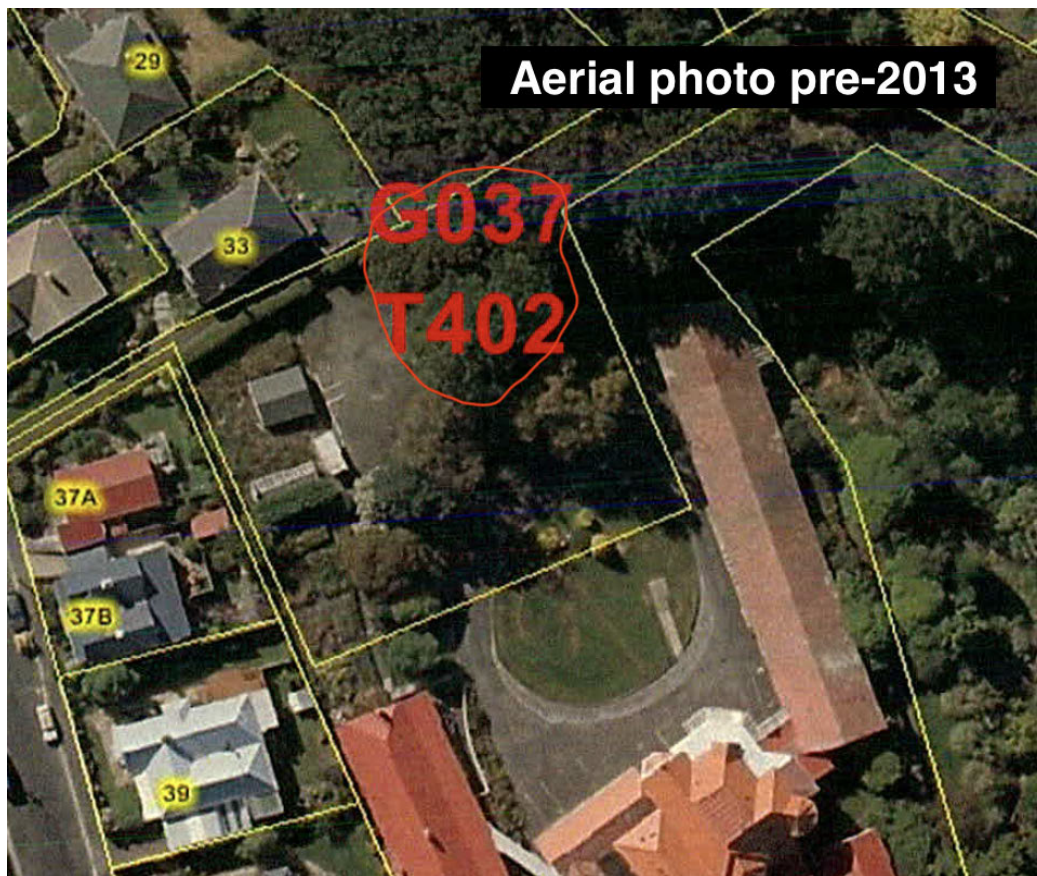


Figure 1: Aerial photo showing the old Montecillo Veterans' home buildings, T402, and surrounding vegetation



Figure 2: An aerial photo taken during the construction of the new subdivision on Montecillo Lane. Note the reduction in the canopy of T402 compared to figure 1 and the earthworks within its vicinity.



Figure 3: Most recent aerial photograph of the area showing the newly completed subdivision.

June 2013; looking N



Figure 4: 2013 Photo of T402 looking north, note the fresh cuts as indicated by the pink arrows.

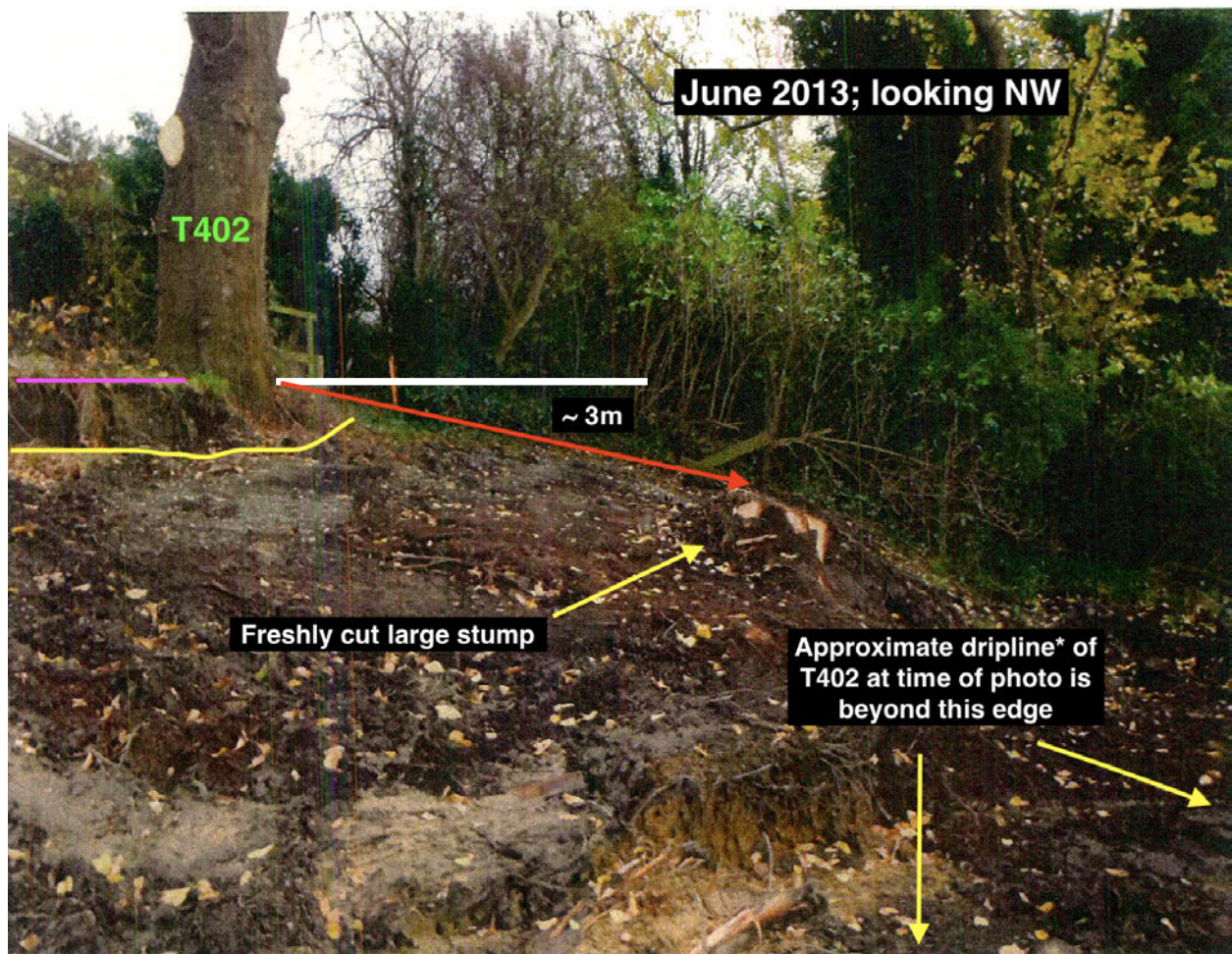


Figure 5: View of the ground to the east of T402. Note the excavated ground and the difference in height of ground levels indicated by the pink and yellow lines around the base of T402. Photo credit Peter Collingwood, annotations are my own.

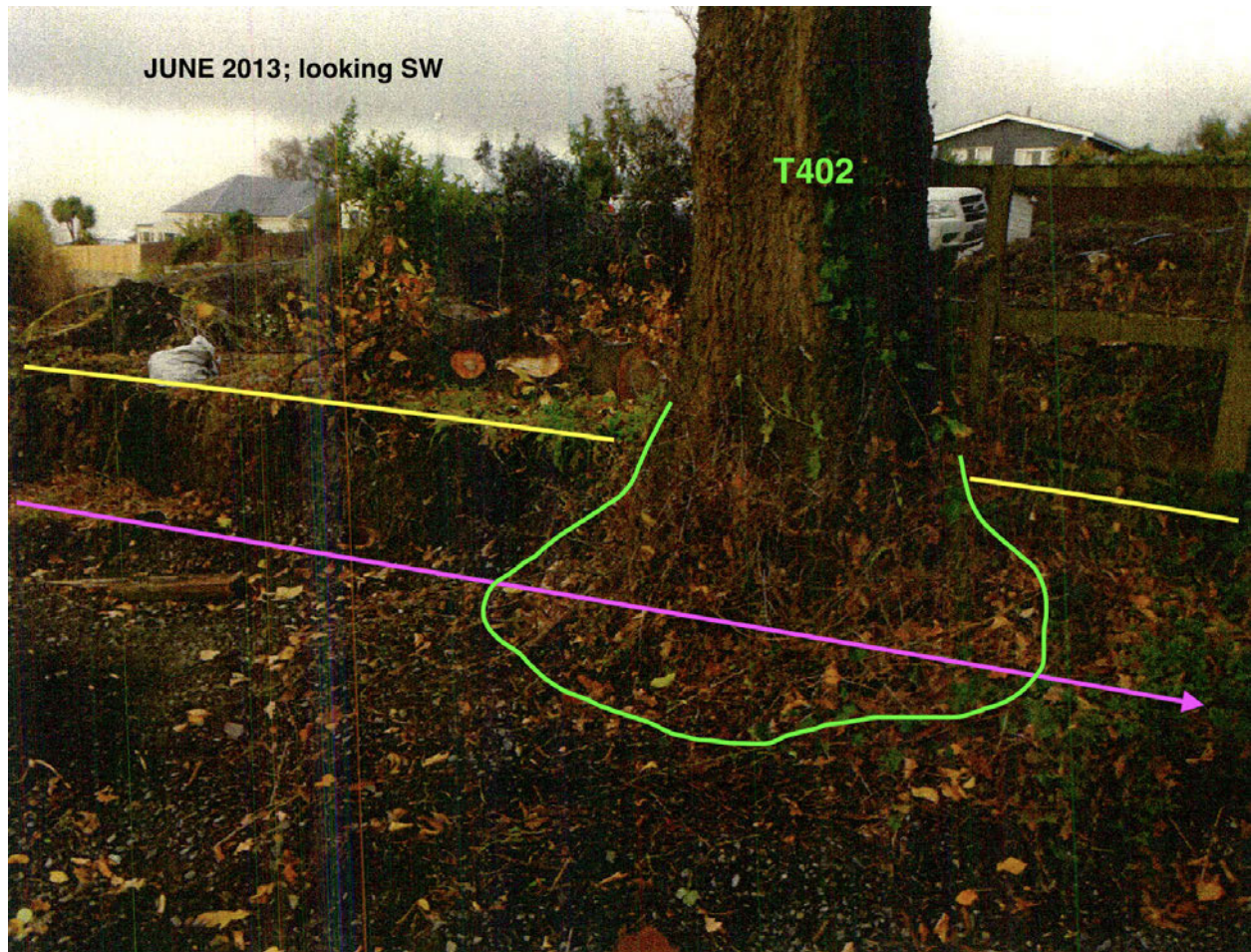


Figure 6: 2013 Photo showing the built up ground level on the western side of T402 as indicated by the yellow (higher ground) and pink (lower ground) lines. Green line indicated the approximate root crown of T402. Photo credit Peter Collingwood, annotations are my own.

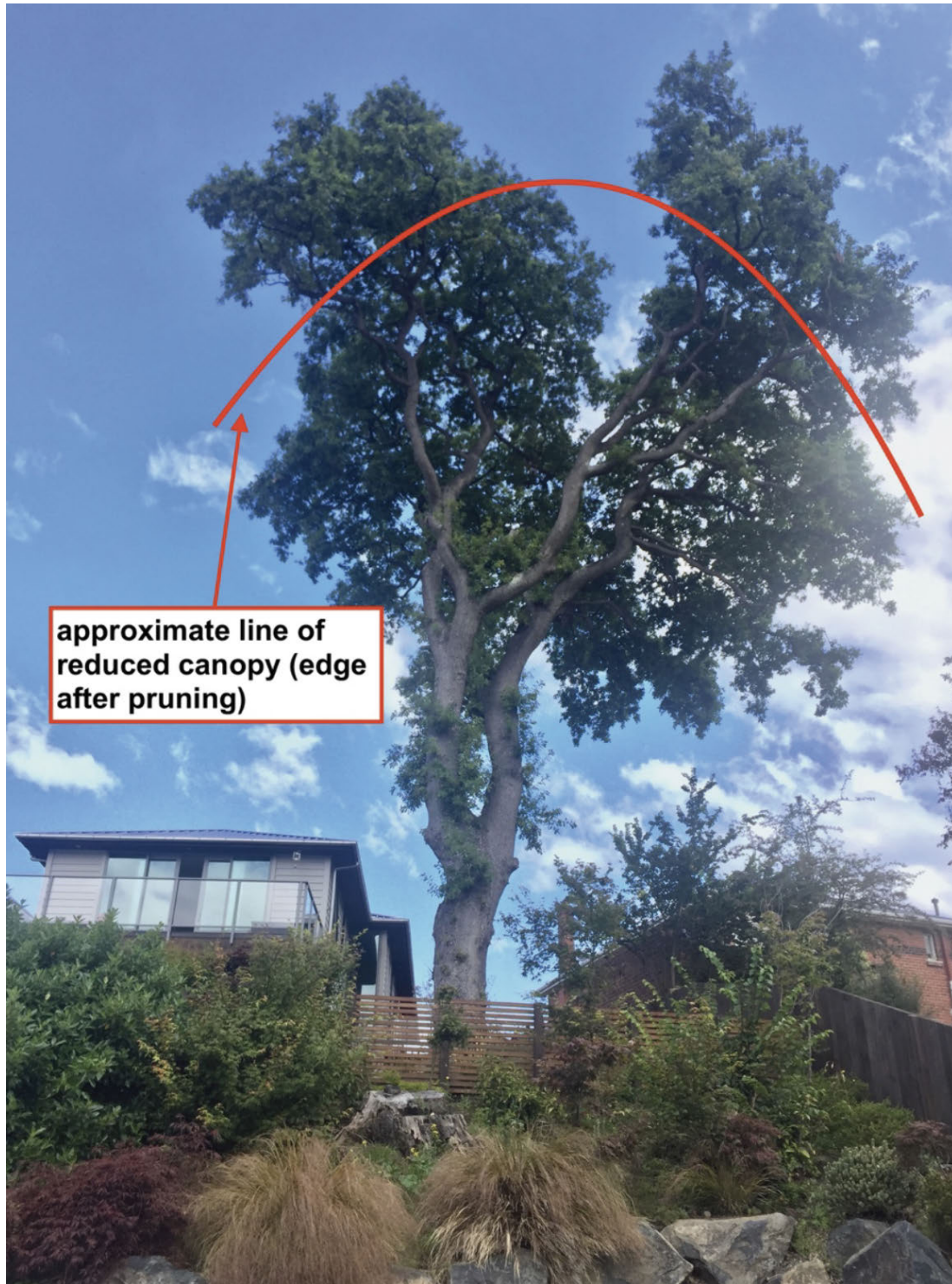


Figure 7: 2019 view of T402 from the east, showing shape of crown and recommendation for 30% crown reduction. Compare to figure 8 to see changes over the last 3 years. Photo credit and annotations Mark Roberts.



Figure 8: 2023 photo from east showing the current shape of crown; note the loss of the crown on the northern side when compared to figure 7.



Figure 9: 2023 photo looking east showing old cuts and cavity development and epicormic growth in the lower trunk of T402.