

VC06 ROADSIDE VEGETATION SPRAYING

General

Roadside Vegetation Spraying is defined as the herbicide spraying of roadside and edge vegetation.

Work to be completed in accordance with the specific requirements set out below and the NZTA C21:1997 specification.

Scope of Work

The following sets out the scope and extent of work that is expected when undertaking this activity.

Extent of work

As detailed below, spraying will be carried out at the Engineer's discretion which may be subject to climatic and financial constraints. The Contractor will supply all chemicals, labour and equipment to perform the requirements of this specification and be a certified spray applicator.

Spraying is to be carried out in three periods repeated yearly at an average of 2m from edge of seal, or edge of formed road and shall include watertable or side drains. The three periods are to be agreed in the annual programme.

Schedule of Spraying Zones

- The Contractor will develop a schedule of spraying zones populated into the RAMM UDT table within the first 6 months of the Date of Acceptance. The Engineer will provide an initial list of zones. The Contractor shall recommend and get approval for the UDT data structure from the Engineer.
- The final schedule in RAMM shall be approved by the Engineer and then used to create the future dispatches for Weed Spraying.

Roadside spraying

Control of roadside vegetation is required for several reasons which include driver safety, visibility, unobstructed roadside furniture (such as guard/sight rails) and roadside drainage. If the frontage is maintained by the property owner to Council's satisfaction and marking the areas with 'NO SPRAY' signs or marker posts or designated green RPPMs, these areas are not to be sprayed.

Chemical control is excluded from use in the following areas:

- Where erosion of the bare surface is proven to be a problem, for example in

watertables or on embankments.

- Banks either above or below the road which have vegetation growth to retain stability or have been hydroseeded shall not be sprayed.

The Engineer reserves the right to vary the quantities and scheduled roads.

The Contractor is to ensure that vegetation around guard/sight rails and the inside of curves are to be eradicated according to the standard outlined in **Figure 4** below:

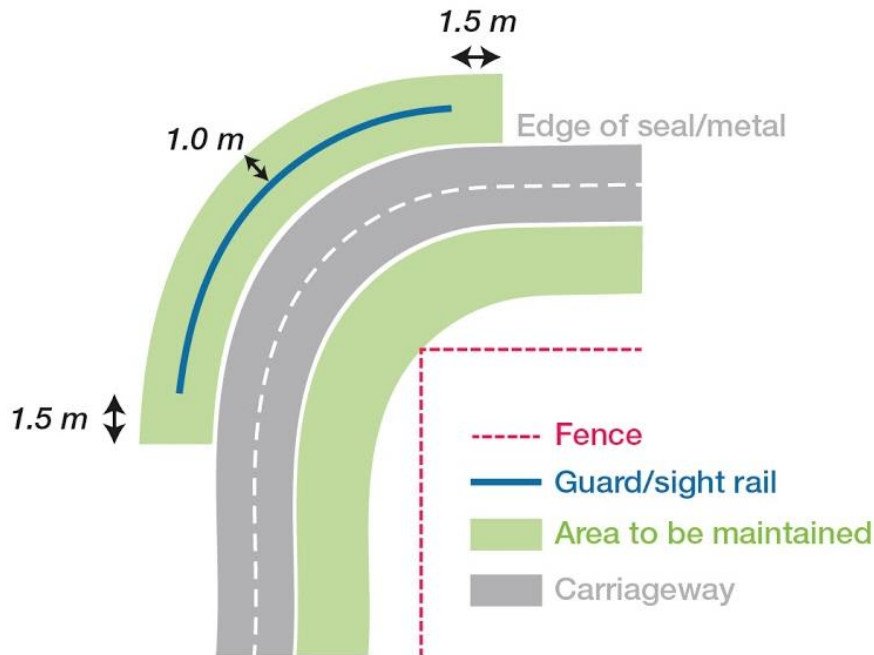


Figure 6: Vegetation control around guard/sight rails and sight distance on insides of curves

- **Rural Areas Shall Include:**
 - Roadside Spraying
 - All sealed and unsealed roads will be sprayed a minimum width of 2m from the seal edge extending out to the back of the watertable.
 - Roadside furniture within the spray area, including guardrails, sight rails, sign posts, delineators and traffic islands will be sprayed around in such a way so that they are clearly visible to the motorist. Tra
 - All watertables adjacent to the roadside are to be sprayed.
 - All culvert inlets and outlets are to be sprayed in the same operation as the watertables
 - Edge Spraying
 - Behind kerb and channel, a 50 -100mm width will be sprayed from the back edge of the kerb to reduce grass growing into the channel.

- Where there is no kerb and channel, edges will be sprayed for 200 mm width along the seal edge, if the frontage is not maintained by the property owner.
- **Urban Areas Shall Include:**
 - Roadside Spraying
 - Roadside furniture within the spray area, including guardrails, sight rails, sign posts, delineators and traffic islands will be sprayed around in such a way so that they are clearly visible to the motorist.
 - Spraying will be required to 2m width if the frontages have not been developed and are not being maintained.
 - Any areas within the road shoulder that are not maintained by the residents and become untidy due to excessive vegetation growth.
 - Edge Spraying
 - Behind kerb and channel, a 50mm width will be sprayed from the back edge of the kerb unless adequately maintained by adjacent resident.
 - The grass encroaching on footpaths is to be sprayed 50mm width along their edges and expansion joints if un-maintained. This includes any weed growth on the footpath against buildings or street furniture in shopping areas
 - Where there is no kerb and channel, edges will be sprayed for 200 mm width along the seal edge, if the frontage is not maintained by the property owner.

Application

Chemical Application

To provide total vegetation control, the Contractor shall use chemicals that will be least toxic to the environment and be appropriate to the vegetation type for 100% kill.

The application rate shall be as per the manufacturer's recommendations.

Plant and Equipment

The Contractor shall provide and maintain all plant and equipment to fulfil the Contract requirement to the satisfaction of the Engineer.

Should the Engineer at any time decide that an item of plant or equipment is unsuitable for the type of work being carried out, or is unserviceable, he shall direct that it be removed from the site until repaired, modified or replaced.

The spraying vehicle shall meet the following requirements:

1. Minimum spray tank capacity of 1000 litres.
2. It shall be capable of delivering by accurate computer controlled application the appropriate spray rate per hectare at low pressures (up to 210 kPa).
3. It shall have an approved amber flashing light on top of the cab and shall carry a warning notice in accordance with the "International WT Series" symbol road signs with the words "Weed Spraying".
4. It shall be equipped with a tank agitation system which will ensure that all chemicals, including wettable powders, remain in suspension at all times.
5. It shall be equipped with a suitable tank filling pump.

Programming

Before any work is to be undertaken, the Contractor shall notify the Engineer of his spraying programme for all of the areas. At least 24 hours prior notice to the Engineer is required before the commencement of any work. Information about the type of chemicals to be used will be required.

Notes:

- **Damages**

The Contractor shall be liable for all damages that may occur as a result of his actions under this Contract. The Contractor shall undertake reasonable reparations as agreed with the affected property owner.

It shall be the Contractor's responsibility to protect all drainage facilities, traffic aids and the like during the course of the contract. Traffic aids include signs, edge marker posts, bridges and hazard markers.

The Contractor's failure to reinstate traffic aids or culvert marker pegs, etc removed or damaged during spraying operations will result in the Engineer arranging for this work to be carried out, with all costs being recovered from payments owing to the Contractor.

Any damage caused which is directly attributable to the Contractor's operation shall be made good at the Contractor's expense.

- **Public Relations**

All work is to be carried out with due regard to members of the public and the Contractor is to ensure that the image of Council is maintained at all times by ensuring that all spray use is as safe as practically possible for the applicator, public, adjoining property owners and animals.

Spraying shall not be undertaken in any manner which could cause the chemicals to fall on areas other than the areas specified to be sprayed.

No herbicides shall be applied directly upwind of and/or within 5 m of people or animals at any time.

No herbicides shall be applied in shopping areas during business hours.

The Contractor shall place a public notice in the local newspaper at least one week

prior to his operations commencing and a contact telephone number for any enquiries.

- **Public Notification:**

Public notices of weed control spray programmes will be published in a local community newspaper by the Contractor, generally twice per month and at least one week prior to the commencement of any work. The notices will specify the area where the weed control programme is to be carried out, the types of chemicals to be applied, the period of application (subject to weather conditions permitting) and the vegetation to be treated. Prior notification is to be approved by the Engineer.

- **Policy**

In consideration of growing public concern, the Contractor is to comply with the Resource Management Act and the following items:

1. The use of sprays will be limited to areas where in the opinion of the Engineer it is not practical or economical to carry out manual, mechanical or other methods of pest and weed control.
2. In selecting herbicides and pesticides, the Contractor shall endeavour to use only unscheduled or low toxicity chemicals which are available on the market.
3. In particular, grass berms in urban built up areas, will not be sprayed, except by a hand operated sprayer and controlled to avoid spray-drift, adjacent to hotmix or chip sealed - roads, footpaths, adjacent to kerbs and the edge of the channel where it meets the carriageway.
4. Council will continue to publicly encourage residents to keep the berms outside their properties weed free and tidy, in order to reduce Council's use of herbicides. General spraying in gully areas, walkways, and open drainage channels will be undertaken where essential.
5. Public places where the public congregate in numbers will be sprayed only when essential. In such cases warning signs will be erected notifying the intention to spray and these signs shall remain in place after spraying until all spray is dry on the foliage.
6. In respect of schools, kindergartens, day-care centres and other public buildings where children congregate:
 - a. If a substance has any class 6 class substances associated with it (human toxicity) as per the EPA website; <https://www.epa.govt.nz/database-search/approved-hazardous-substances-with-controls/> it may only be applied within one hundred metres of any such facility if the application is carried out by hand operated knapsack sprayers and only when these facilities are not in use, eg outside school hours.
 - b. Hydraulic spray application subject to the possibility of spray drift shall not be applied within 500 metres of any such facility.
7. The Contractor are to adhere to the safety requirements and correct

application procedures as set out by this document and in the product label provisions and the provisions of the SANZ Draft Code of Practice for the Use of Herbicides in Urban Amenity Areas.

8. Only Contractor employees and operators that have undergone a suitable training course outlining the correct application procedures and safety requirements will use herbicides and pesticides.
9. Spraying will not be carried out in wind velocities exceeding 10 kph, or when weather conditions indicate that rain or drizzle could follow within two to six hours from the time of application.
10. Properties not to be sprayed because of personal preference by the owner or occupier are marked by the owners as such. For these properties the Contractor is not use chemical methods of weed control, subject to the owners/occupiers maintaining the berm to Council's satisfaction and by marking the areas with approved marker's or signs as stated in the 'NO SPRAY' guidelines.
11. Daily records of all spray used on Council roads will be kept and will include details of time, date, location, products, applicators, and wind speeds, updated every three hours during the day.
12. The Contractor shall be responsible for liaison between Engineer and the public in respect of sprays and for investigating any complaints arising from spray use by the Contractor.

Performance Criteria

Roadside Vegetation Spraying shall meet the following criteria to the satisfaction of the Engineer:

1. The work is completed in accordance with the material specifications
2. A 100% kill shall be achieved by the Contractor to all vegetation in the areas specified within a six-week period from the date of spraying.
3. The Contractor shall re-spray all areas where a "kill" has not be achieved within two months from the date of the original spray at his cost.

Basis of Payment

1. Roadside Spraying

Payment for work under this item shall be made by way of an all-inclusive rate per kilometre sprayed. The payment will be full compensation for all expenses incurred by the Contractor in fulfilling his obligations under this activity.

2. Edge Spraying

Payment for work under this item shall be made by way of an all-inclusive rate per kilometre sprayed. The payment will be full compensation for all expenses incurred by the Contractor in fulfilling his obligations under this activity.

VC07 SPOT VEGETATION SPRAYING

General

This section sets out the requirements for management of Spot Vegetation Spraying and associated physical work. Spot Vegetation Spraying is defined as the herbicide spraying of noxious weed vegetation.

Work to be completed in accordance with the specific requirements set out below and the NZTA C21:1997 specification.

Scope of Work

The following sets out the scope and extent of work that is expected when undertaking this activity:

All the requirements specified under the heading **Application in VC06**, shall apply to this work.

- A noxious weed management plan for the road reserve has been formulated. This programme is in addition to the cyclic roadside spraying already being undertaken. An annual plan of the year's work is to be submitted to the Engineer in July of each year than can be done within the budget.
- The focus of the weed spraying will be on broom, Taiwan cherry, cotoneaster, wilding conifers, privet and wild ginger. Gorse occurring in isolated patches must also be treated.
- Spraying will be carried out at the Engineer's discretion which may be subject to climatic and financial constraints. The Contractor will supply all chemicals, labour and equipment to perform the requirements of this specification and be a certified spray applicator.

Performance Criteria

Spot Vegetation Spraying shall meet the following criteria to the satisfaction of the Engineer:

1. The work is completed in accordance with the material specifications.
2. A 100% kill shall be achieved by the Contractor to all vegetation in the areas specified within a six-week period from the date of spraying.
3. The Contractor shall re-spray all areas where a "kill" has not be achieved within two months from the date of the original spray at his cost.