PART 11 NETWORK UTILITIES, TRANSPORT AND ROADING

ELECTRIC POWER, TELECOMMUNICATIONS, GAS, WATER, SEWERAGE, ROADING

11.1 INTRODUCTION

This part of the District Plan sets out the general provisions for a wide range of network utilities and items of infrastructure. Some elements are specifically provided for in terms of designations by authorised requiring authorities and are scheduled elsewhere in the plan.

11.2 OVERVIEW

Public utilities are a significant element of the social and economic environment by providing fundamental infrastructural linkages. These features of the environment convey electric power, broadcast telecommunication and radiocommunication signals, transport of liquids and gases and roading. Such services of regional significance as well as of local importance traverse the District.

At the same time, such activities have significant environmental impacts within the District. These impacts may result in adverse environmental effects such as degradation of the visual quality of the environment.

Some controls are necessary to achieve a balance between the efficiency and cost of utility services and the maintenance of appropriate environmental standards. Such control is further suggested in Papakura District to ensure that future development and re-development acknowledges the environmental effects of transmission lines, plant and equipment. The paraphernalia associated with the transmission of electric power, telecommunications and radiocommunications signals, gas, water and sewerage tend to traverse or be located in all areas of the District, therefore consistent and comprehensive environmental controls are necessary to secure environmental quality and enhancement.

Roads throughout the urban area of the District have been classified on an hierarchical basis. The classification given is based on the characteristics and volume of traffic. The purpose of the classification is to ensure that volumes, vehicle types and speed of traffic are appropriate to any particular road and the effects of adjoining activities. Further, the classification enables activities to be planned for in recognition of the capacity of the road network.

The network of roads is shown in Schedule 11A attached to this part. Roads are classified as arterial, principal or local road. Arterial and principal roads provide for the through movement of vehicles between main activity centres. Roads lower than principal provide access to properties and some through movement in certain situations in order to link with primary roads.

Whenever a proposed subdivision of land includes new roads to be dedicated and when existing roads are upgraded, these shall in general comply with the standards contained in Schedule 9A appended to Part 9.

The improvement of the roading system relies on increasing the capacity of routes at identified pressure points. To this end, problems of this nature are under continuous review and are subject to periodic adjustment and upgrading as necessary.

The Plan sets out proposals for intersection improvement and the construction of new roads. The location of these proposed works are shown on the diagrams appended to this part of the Plan.

11.3 RESOURCE MANAGEMENT ISSUES

- The timely and co-ordinated adequate provision of network utilities and infrastructure.
- The protection and retention of environmental quality and amenity values.
- The protection and retention of views and vistas.
- The maintenance and enhancement of appropriate surface transport routes commensurate with the needs of the District.

11.4 RESOURCE MANAGEMENT STRATEGY

The resource management strategy for network utilities within the District is:

- to enable utility activities and infrastructure to be provided in a manner which is consistent with the environmental quality and development of the area in which they are located.
- to formulate specific controls relating to visual effects and the siting and bulk and location of network utilities.
- to protect amenity values in all zones in which network utilities may be located through controls on appearance and site development.
- to classify all elements in the roading network.

11.5 OUTCOMES

The purpose of this strategy is to enable the establishment of appropriate infrastructure while retaining the environmental quality of the District.

11.6 OBJECTIVES AND POLICIES

Objective

11.6.1 *To enable the provision of utility services throughout the District in a manner that does not compromise environmental quality.*

Policies

11.6.1.1 To limit the height of structures.

11.6.1.2 To require the provision of landscaping in conjunction with utility services where appropriate.

11.6.1.3 To require the screening of yards and storage areas where these face residential areas.

11.6.1.4 To require the undergrounding of all reticulated services in new urban subdivisions where practicable.

11.6.1.5 To enable the co-ordinated installation of utility services throughout the District.

11.6.1.6 To require compliance of all network utilities with all relevant New Zealand Standards.

11.6.1.7 To require the top of wastewater gully traps to be above the 50 year flood level.

Objective

11.6.2 *To ensure the provision of appropriate utility services at the time of subdivision or development of land and to enable utility networks to be extended or upgraded in response to demand.*

Policies

11.6.2.1 To require subdividers of land to ensure that an adequate standard of utility service compatible with the network to which they will be connected can and will be made available to the subdivided lots and to pay for the reasonable cost of providing the necessary utility services including street lighting.

11.6.2.2 To require utility services to a subdivision or development to be to a standard that will provide for supply to be extended to the development of adjacent land.

11.6.2.3 To require, if necessary for safety or operational reasons or for the conservation of outstanding natural landscapes the undergrounding of utility service lines.

11.6.2.4 To require subdividers of land to pay the reasonable cost of any alteration to existing utility services, including the undergrounding of lines, which is necessary to enable the subdivision or development to proceed.

11.6.2.5 To require subdividers of land to grant, at the cost of the subdivider, access easements in favour of utility operators where existing or new utility services which are or will be owned by the utility operator are located outside of vested road reserves.

Objective

11.6.3 *To establish an efficient, safe and convenient road network which relates to the distribution of activities throughout the District and which retains and enhances existing levels of amenity.*

Policies

11.6.3.1 To classify roads according to function.

11.6.3.2 To establish physical standards for roads according to their function.

11.6.3.3 To identify roading improvements where necessary.

11.6.3.4 To monitor the performance of the elements of the road network.

11.7 EXPLANATION

The principal impact of network utilities and infrastructure are the nature of above-ground facilities, road carriageways and other similar elements. Accordingly, the framework of objectives and policies set out above are designed to mitigate any adverse environmental impacts of such activities and to retain amenity values throughout the District.

11.8 RULES

11.8.1 Permitted Activities

1. Network utilities in existence at the date of public notification of the plan and their operation, maintenance and upgrading.

2. Network utilities situated on a road or road reserve.

3. All underground or in-ground network utilities, with the exception of high pressure gas lines with a gauge pressure of more than 2000 kilopascals.

4. Any above-ground network utility where the structures for that activity:
   i. have a ground coverage of less than $50m^2$; and
   ii. have a height not exceeding 7.5metres; and
   iii. are on allotments less than $200m^2$ in area

5. New lines or additions to lines for conveying electricity at a voltage up to and including 110kV with a design capacity up to and including 100 MVA per circuit, including all support structures for those lines.

6. Telecommunications and telecommunication lines, telecommunication links and radio communication provided that the maximum height of any support structure including antennae shall be 25 metres and the maximum diameter of microwave dishes shall be 5 metres. Where antennae or microwave dishes are to be attached to buildings the height of the support structure and the associated antennae or microwave dishes shall not exceed the height limit in the zone by more than 5 metres.

7. Existing roads, including their maintenance.

11.8.2 Controlled Activities

1. Radio masts and antennae in residential zones up to 13.0 metres in height, provided that:
   (i) there is only one such structure on any site;

(ii) the mast or antennae is unguyed at all times above the maximum height permitted by the bulk and location requirements for Permitted Activities within the zone;

(iii) the antennae (other than simple wire dipoles) is of a yagitype with a boom length not exceeding 6 metres and individual elements not exceeding 8 metres in length;

(iv) the mast which supports the antennae shall have a cross section diagonal measurement not greater than 226mm for a distance of 6 metres from ground level and 142mm between a height of 6 metres and the maximum permitted height;

(v) any temporarily extendable structure is nested at all times when not in use;

(vi) the centre of the structure shall be located at least 6 metres from all boundaries.

2. New substations and additions to existing substations in commercial and industrial zones provided that the substation does not adjoin a residential or recreation zone or face a residential or recreation zone across a road and contained within the projected property boundaries of the substation property.

3. Depots (including buildings) not being permitted activities, used for the maintenance, upgrading, alteration, construction or security of lines or pylons provided they are situated within a substation property.

4. The construction of new roads and associated facilities including retaining walls, culverts and bridges and traffic signs and control devices.

11.8.3 Discretionary Activities

1. Electricity substations (bulk supply substations) in residential zones subject to the development controls set out below and the assessment criteria in Part 4.16.4.2(f).

2. Telecommunication and radiocommunication masts, towers and aerials above 13 metres in height and ancillary plant and equipment in residential zones subject to the assessment criteria set out in Part 4.16.4.2(i).

3. Network utilities not otherwise provided for by way of a designation or as permitted or controlled activities.

11.8.4 Development Controls

The following controls apply District wide. Controls contained within other parts of the Plan do not apply to activities covered by this part unless specifically stated.

1. Reinstatement

Where the construction or maintenance of a network utility involves disturbance to the ground, at the completion of the work the ground shall be reinstated as far as practicable to the condition existing prior to commencement of the work.

2. Yards

(a) Except as provided in (b) below, no building or structure shall be sited closer than 1.5 metres to a site boundary of a residential zoned site unless the neighbour's consent has been given in writing to a lesser standard. This rule shall not apply to network utilities situated within any part of a dedicated road.

(b) For substations a minimum 5 metres yard shall be provided to all boundaries. No yards are required in respect of transformers.

3. Amenity Treatment

For the above ground structures, (excluding lines and support structures for lines);

(a) those areas not required for buildings, structures, operation of the facility, access, or parking shall be planted for amenity purposes.

(b) in addition to (1) above, for substations a minimum 5 metres strip of amenity treatment shall be provided around all facilities comprising a substation. Amenity treatment shall include trees and shrubs designed to achieve substantial screening of the equipment (excluding pylons, poles or termination gantries) at maturity while not compromising electrical security and/or safety.

4. Stormwater Control and Pollution Prevention

All drainage from sites, other than roof water, shall be directed through a staged interceptor or other system designed to remove as far as practicable petroleum products, dirt and grit from the stormwater.

All areas where petroleum products are used or stored shall be separately bunded with bunds of sufficient capacity to contain the largest volume of petroleum product in any one item of equipment or storage unit within that area.

5. Floodlighting

Any floodlighting shall be directed so that the spill of light will be contained within the boundaries of the site where that site adjoins a property containing a residential building. This rule does not apply to the road frontage boundary of sites fronting roads or street lighting on roads.

6. Access and Parking

Vehicle access and parking shall be provided for any site in excess of 200m^2. One park per employee, or if shift work is involved, one part per employee on each shift, will be required. For unattended or occasionally attended sites no parking is required provided that there is sufficient space for visitors to the site to park off the road. Stacked parking is permitted. The design of parking spaces shall be in accord with the rules in Part 15 of this plan.

7. Noise

The noise control standards for the zone in which the facility is located shall apply.

8. Radiofrequency Radiation

Telecommunications and radiocommunications facilities shall comply with the provisions of NZS 6609.1 and 2 1990 Radiofrequency Radiation.

9. Subdivision

Subdivision shall be permitted as a controlled activity to create an allotment of any size for the purpose of providing for an existing or proposed network utility. Subdivisional rules contained within other parts of the Plan do not apply to activities covered by this part unless otherwise specifically stated.

11.8.5 Controlled Activities – Standards and Terms

All controlled activities must meet the standards and terms set out in Rules 4.9.8.1, 4.10.8.1, 4.11.7.1, 4.12.8.1, 4.13.8.2, 4.14.8.1 and 4.15.8.2 as appropriate to the zone concerned.

In considering any application for a controlled activity, the Council may impose conditions in respect of any of the matters set out below:

1. The design, colour and amenity treatment proposed in order to minimise the visual impact of the structure on the amenities of the surrounding residential neighbourhood.

11.8.6 Discretionary Activity – Assessment Criteria

11.8.6.1 In assessing applications where it is likely that the activity will result in any significant adverse effect on the environment, the application shall follow the procedure set out in Clause 1(b) of the Fourth Schedule to the Resource Management Act 1991. The practicality, economics and feasibility of obtaining access and/or easements of the alternative options versus that proposed will be relevant considerations in the assessment.

11.8.6.2 The provisions of Rule 4.16.4 shall be used as a guide in assessing applications for telecommunication and radiocommunication and broadcasting masts above 13 metres in height and electricity substations in residential zones.

11.8.6.3 The provisions of Rule 6.15.2 shall be used as a guide in assessing a discretionary activity. In addition, the following criteria shall be used in assessing any application for a network utility.

(a) The visual impact of the network utility will be assessed in terms of the likely effect on:

(i) residential or recreational use of land in the vicinity of the proposed facility

(ii) ridge lines and view planes from public places including roads

(iii) design elements in relation to the locality, with reference to the existing character of the locality and amenity values.

In making the assessment of visual impact regard will be had to:

(i) the scale of the facility

(ii) height of structures

(iii) separation of structures to site boundaries

(iv) site location in terms of the general locality, topography, geographical features, adjoining land uses

(v) except in the case of overhead lines and support structures, planting, fencing and other amenity treatment.

(b) Regard shall be had to the noise environment of the locality in which it is proposed to site the facility and the noise sensitivity of the receiving environment.

(c) Regard shall be had to:

(i) the extent to which the intensity of lighting when viewed from a distance contrasts with the environment in which the installation is situated.

(ii) the extent to which the direction and positioning of lights may adversely affect the use and enjoyment of adjoining properties.

(d) The Council will have regard to the extent to which the installation has been designed and will be maintained to prevent as far as practicable pollution or contamination of ground or water. Techniques such as bunding, impermeable layers under bunds and interceptors are available and depending on the circumstances of the case may be required to be used. The extent of measures necessary will be determined after having regard to the sensitivity of the receiving environment and the nature of risk to the environment inherent in the facility.

11.8.7 Assessment Criteria for Telecommunication Facilities

1. The potential for visual dominance of any mast and attachments will be assessed having regard to its scale and visual appearance in the wider landscape.

2. The design, colours and amenity treatment should, to the extent that is commensurate with civil aviation and other requirements, minimise the visual impact of structures on residential neighbourhoods or landscapes of high scenic quality.

11.8.8 Subdivision Requirements

11.8.8.1 Sites for Electricity and Telecommunication Reticulation

An application for a subdivision consent or certificate of compliance must be accompanied by written confirmation from the electricity and telecommunication provider that:

a) Electricity services and telecommunication facilities can be made available to the subdivided lots from existing services or that agreement has been reached with the electricity operator and telecommunication provider for the provision of any necessary services.

b) Agreement has been reached with the electricity operator and telecommunication provider for payment (which may include the lodging of a bond with the electricity operator and telecommunication provider or registration of an encumbrance against the land) of the reasonable cost of installation of new electric services and telecommunication facilities or alteration to existing radio services and telecommunication facilities including undergrounding of electric and telecommunication lines if required to provide electric supply and telecommunication facilities to and within the subdivision.

c) If the land proposed to be subdivided is crossed by existing electric and telecommunication lines adequate provision must be made for any necessary relocation or undergrounding of such lines if required, including the granting of easements in favour of the electricity operator and telecommunication provider where required.

11.8.8.1.1 In new urban subdivisions, new or replacement electric and telecommunication lines less than 110 kV on private roads or accessways shall be underground where practicable.

11.8.8.1.2 All electric services and telecommunication facilities provided by the subdivider shall be approved by the electricity operator and telecommunication provider as suitable for connection to the network before installation.

11.8.8.1.3 Wherever necessary to ensure continued access to electric services and telecommunication facilities which are to be owned by the electricity operator and telecommunication provider and which are located outside of roads vested or to be vested in the Council, appropriate easements shall be granted by the subdivider in favour of the electricity operator and telecommunication provider at the cost of the subdivider.

11.8.8.2 Sites for Radiocommunication Activities

Sites on which telecommunication and radiocommunication facilities are to be sited do not have to meet the minimum lot size provisions for the zone in which they are to be sited. The actual lot size will be determined in an application for a controlled activity. In determining the suitability of the proposed subdivision, regard will be had to the nature of the activity itself, the need to provide sufficient buffer to neighbouring properties and permitted activities on those sites, the environmental effects of the activity including visual effects, compliance with NZS 6609, the ability to screen any structures, the need for efficient effluent disposal and on-site carparking.

11.8.9 Hierarchy of Roads

Classification	**Function**
Private Way	)
Cul-de-sac	) Access to property
Service Lane	)
Local Road	Property access and traffic collection and distribution
Principal Road	)
Arterial Road	) Through movement of traffic

SCHEDULE 11A

CLASSIFICATION OF ROADS

Primary Arterials

Beach Road	(Great South Road to motorway)
East Street	(Wellington to Queen)
Great South Road	(Papakura Stream to Queen Street, Wellington Street to Park Estate Road. The urban portion of Drury)
Hunua Road	
Queen Street	(East to Great South Road)
Wellington Street	(Great South Road to East)

Principal (Secondary Arterials)

Boundary Road	
Broadway	
Clevedon Road	
Cosgrave Road	
Croskery Road	
Dominion Road	
Elliot Street	
Great South Road	(Queen Street to Wellington Street)
Hunua Road	
Ingram Street	(Porchester to Prictor)
Manuroa Road	
Marne Road	(Clevedon to Settlement)
Opaheke Road	
O'Shannessey Street	
Porchester Road	
Prictor Street	
Settlement Road	(Great South Road to Dominion)

Local

All others

FIGURE 11A GENERAL STANDARDS FOR PRESERVATION OF TRAFFIC SIGHT LINES AT INTERSECTIONS

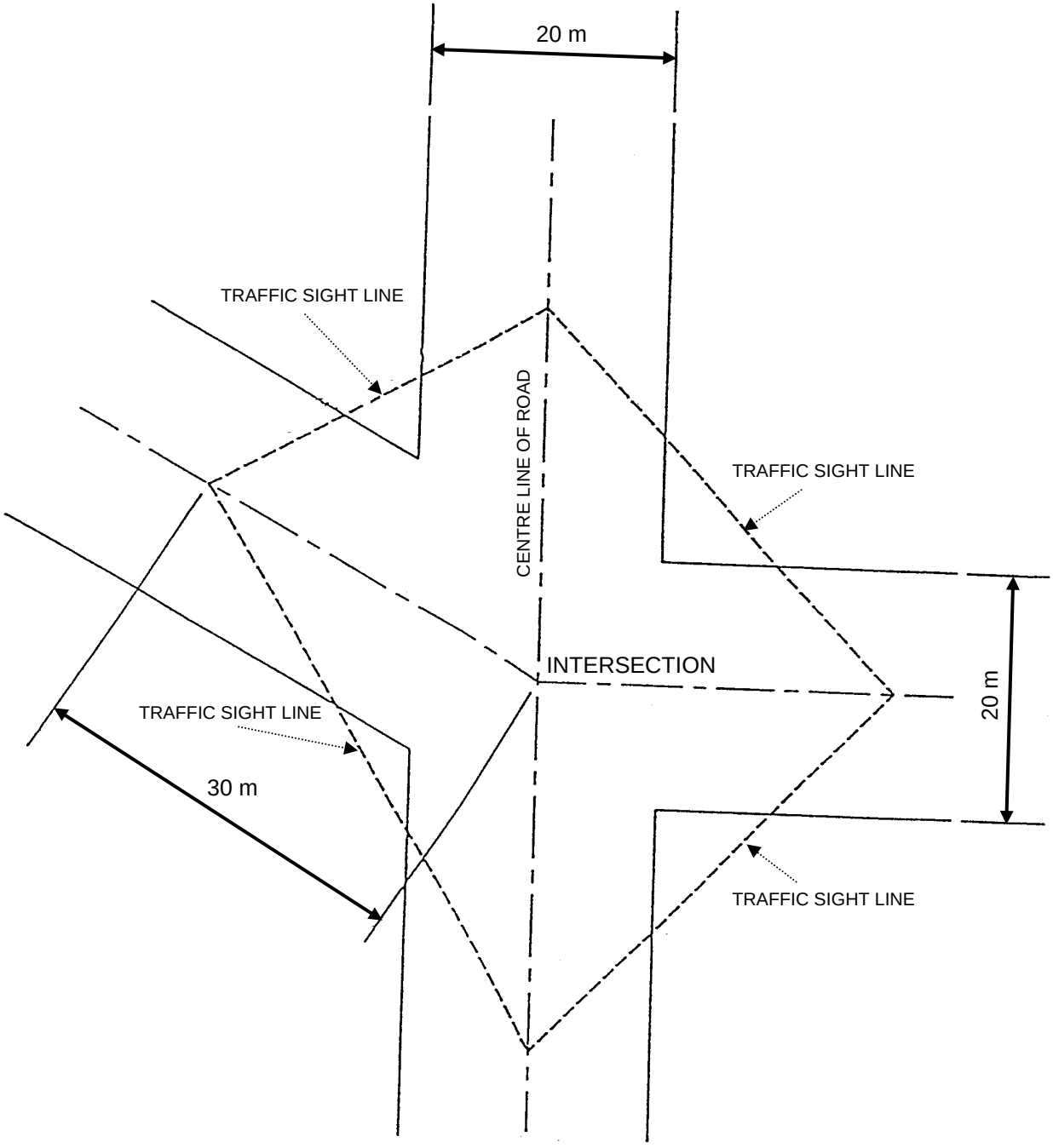


FIGURE 11B CORNER SPLAY HUNUA ROAD AND BOUNDARY ROAD

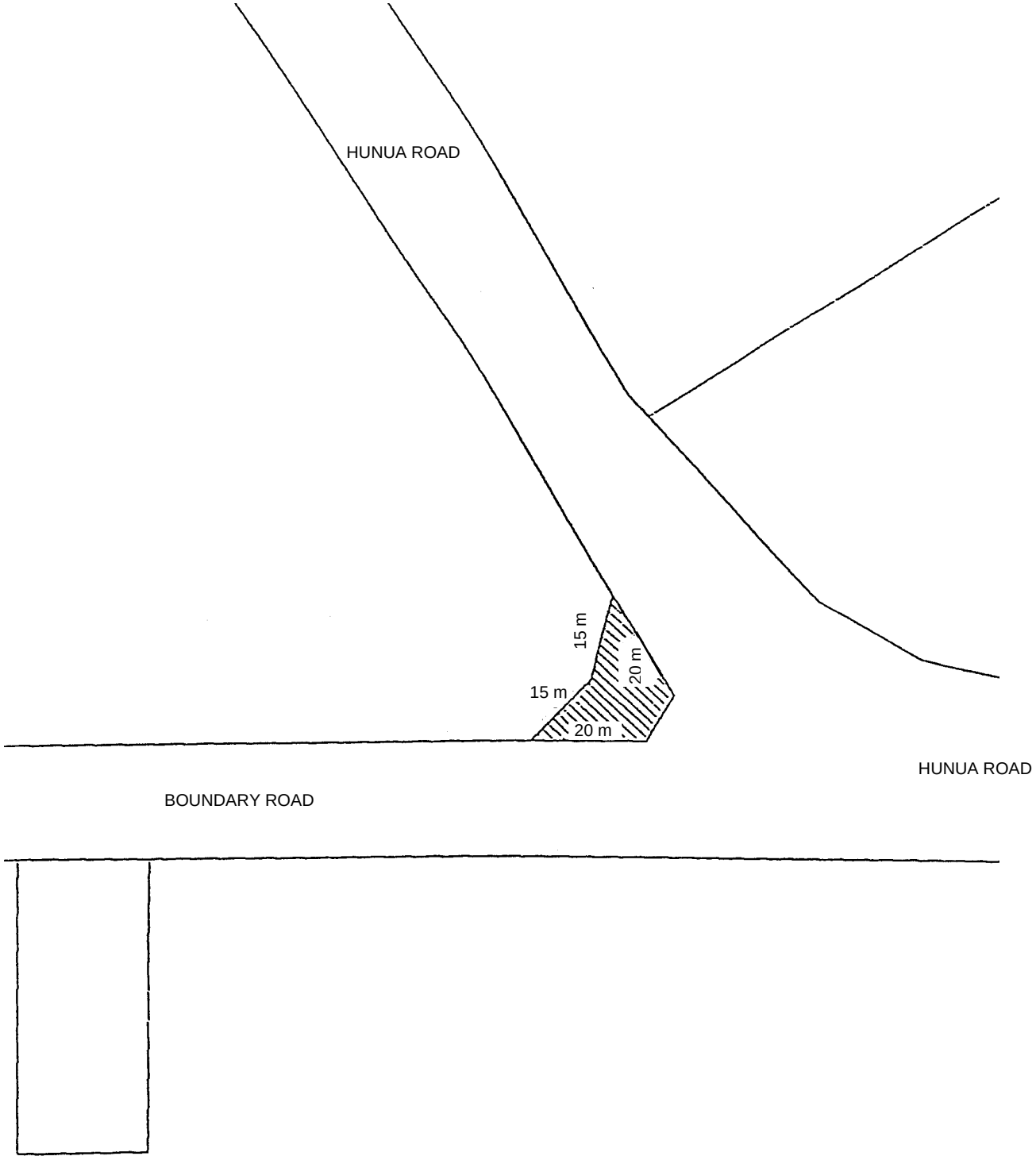
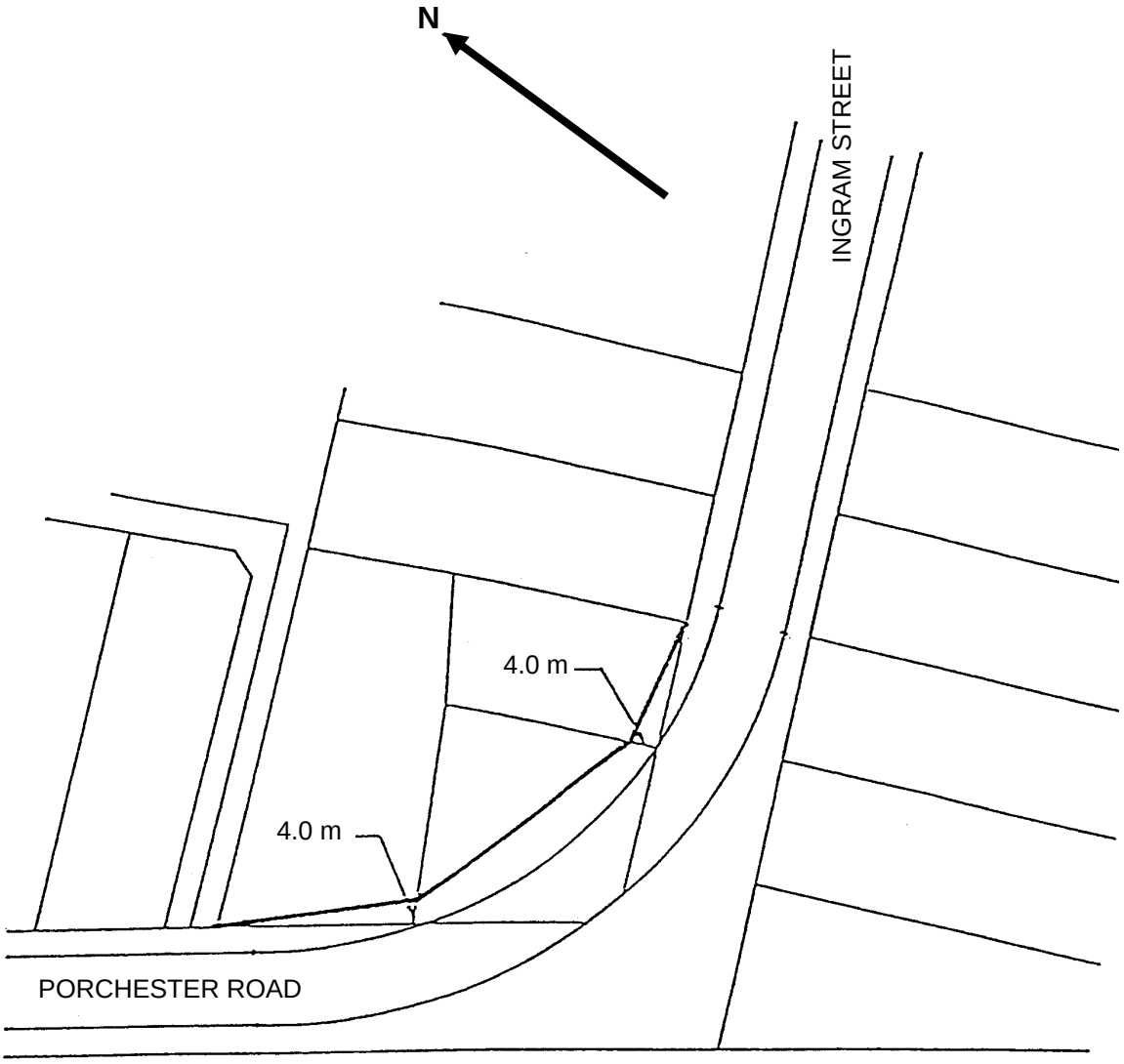


FIGURE 11C PROPOSED CORNER EASEMENT – PORCHESTER ROAD/INGRAM STREET



KEY:

EXISTING KERB

PROPOSED KERB

PROPOSED BOUNDARY

0 10 20 30 40 50

NOTE: PRELIMINARY DESIGN ONLY

FIGURE 11D CORNER SPLAY – BEACH ROAD AND CHICHESTER DRIVE

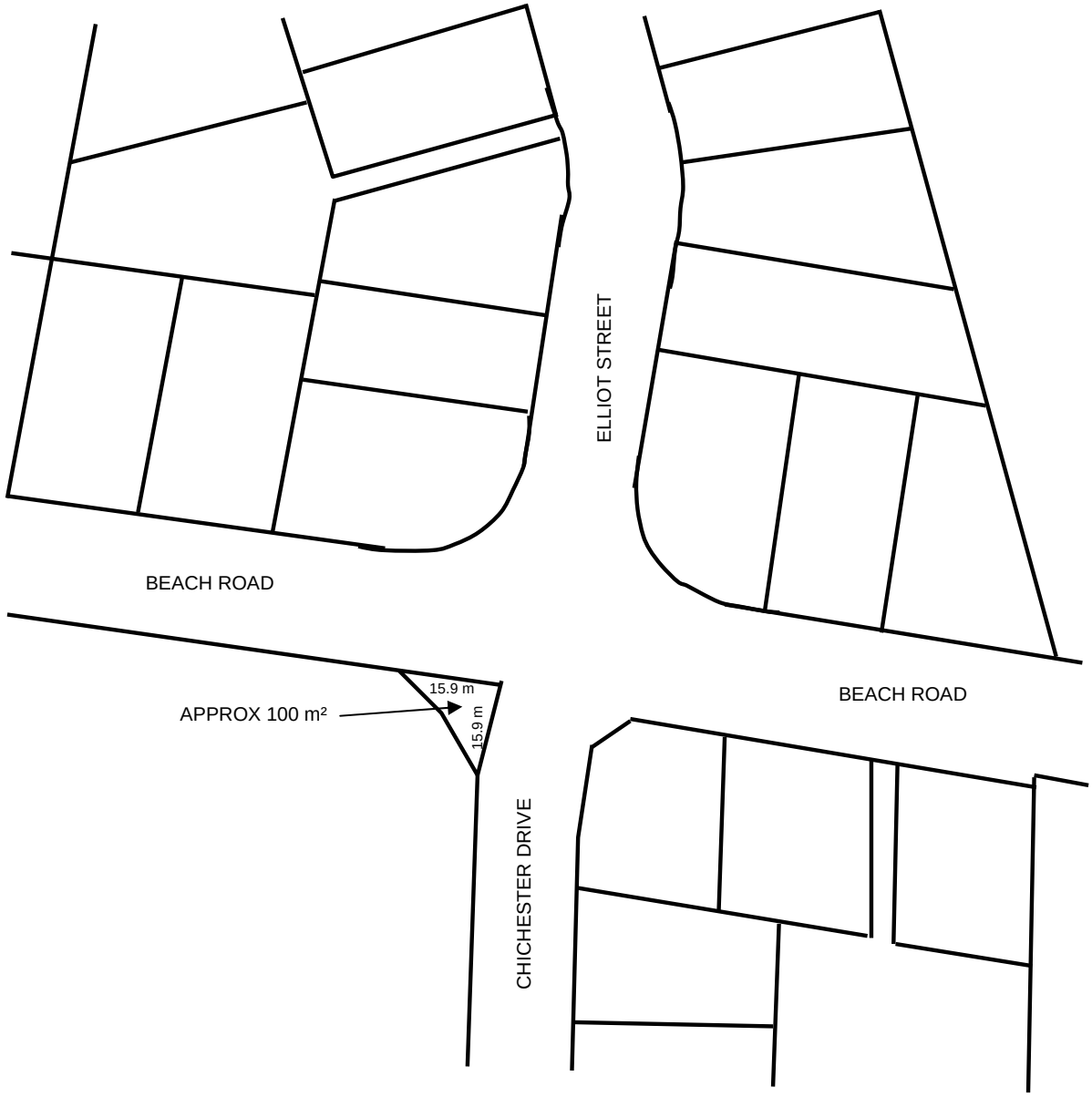


FIGURE 11E ROAD WIDENING – GREAT SOUTH ROAD

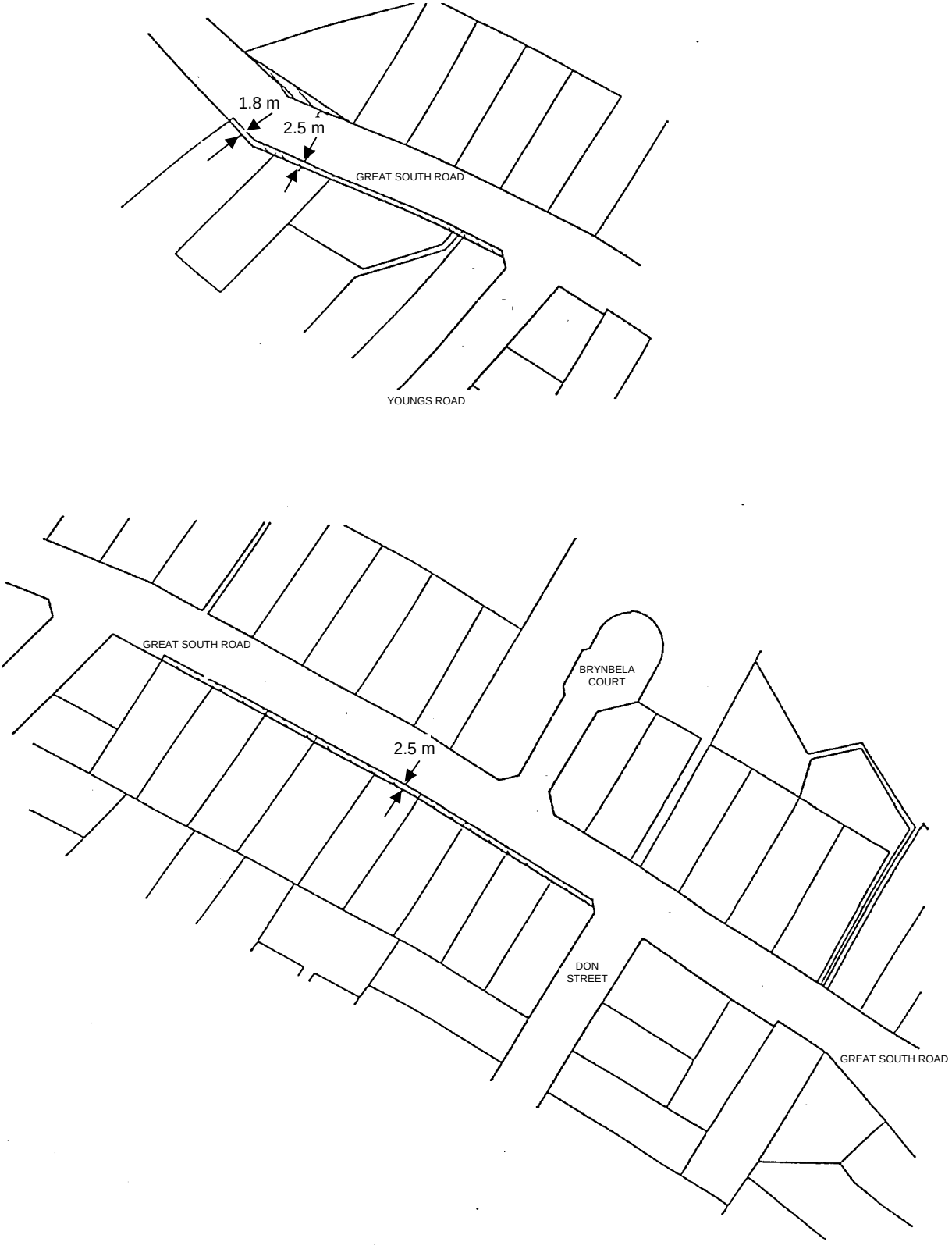


FIGURE 11F **ACCESS FROM BRYLEE DRIVE TO GREAT SOUTH ROAD**

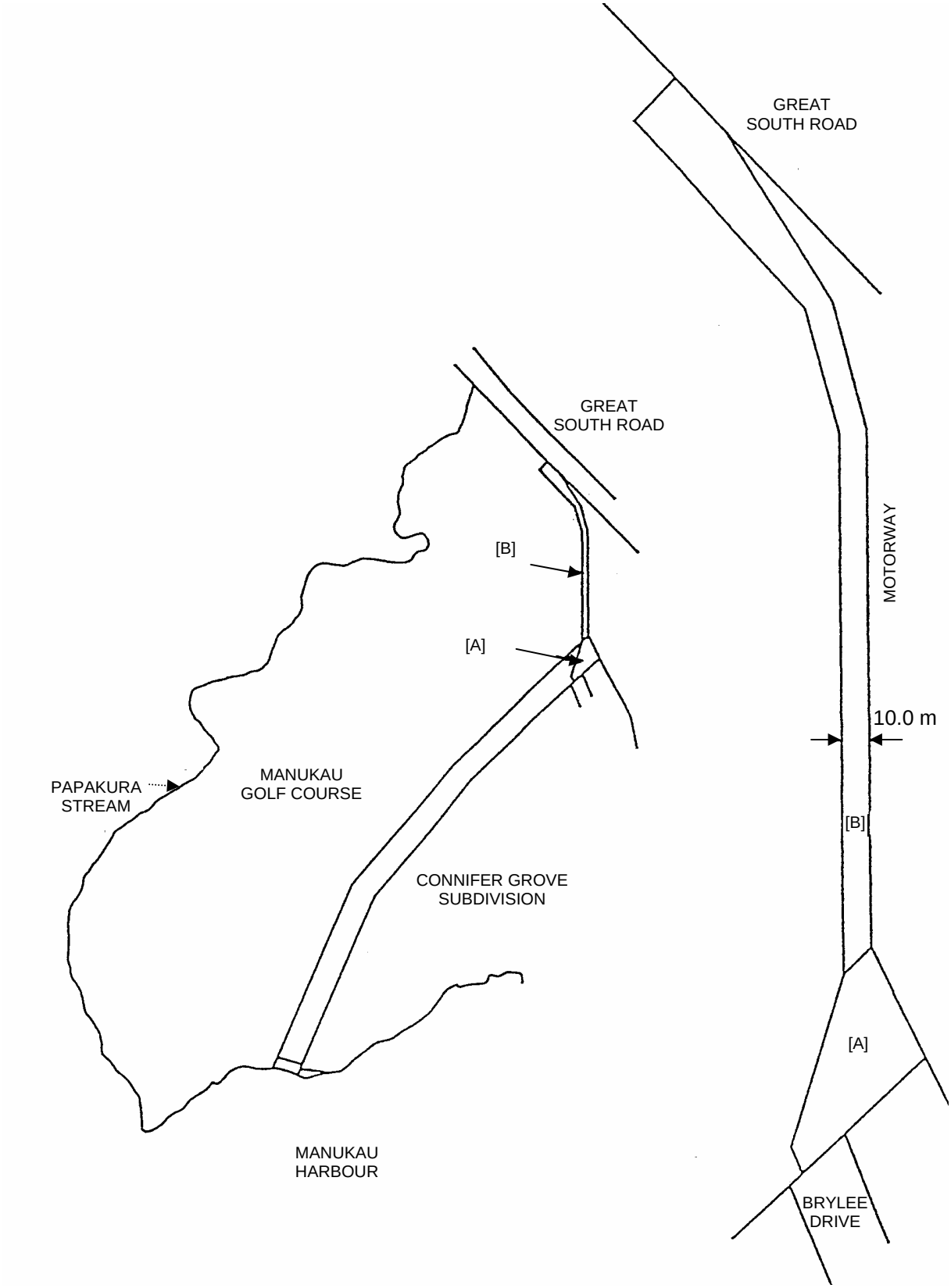
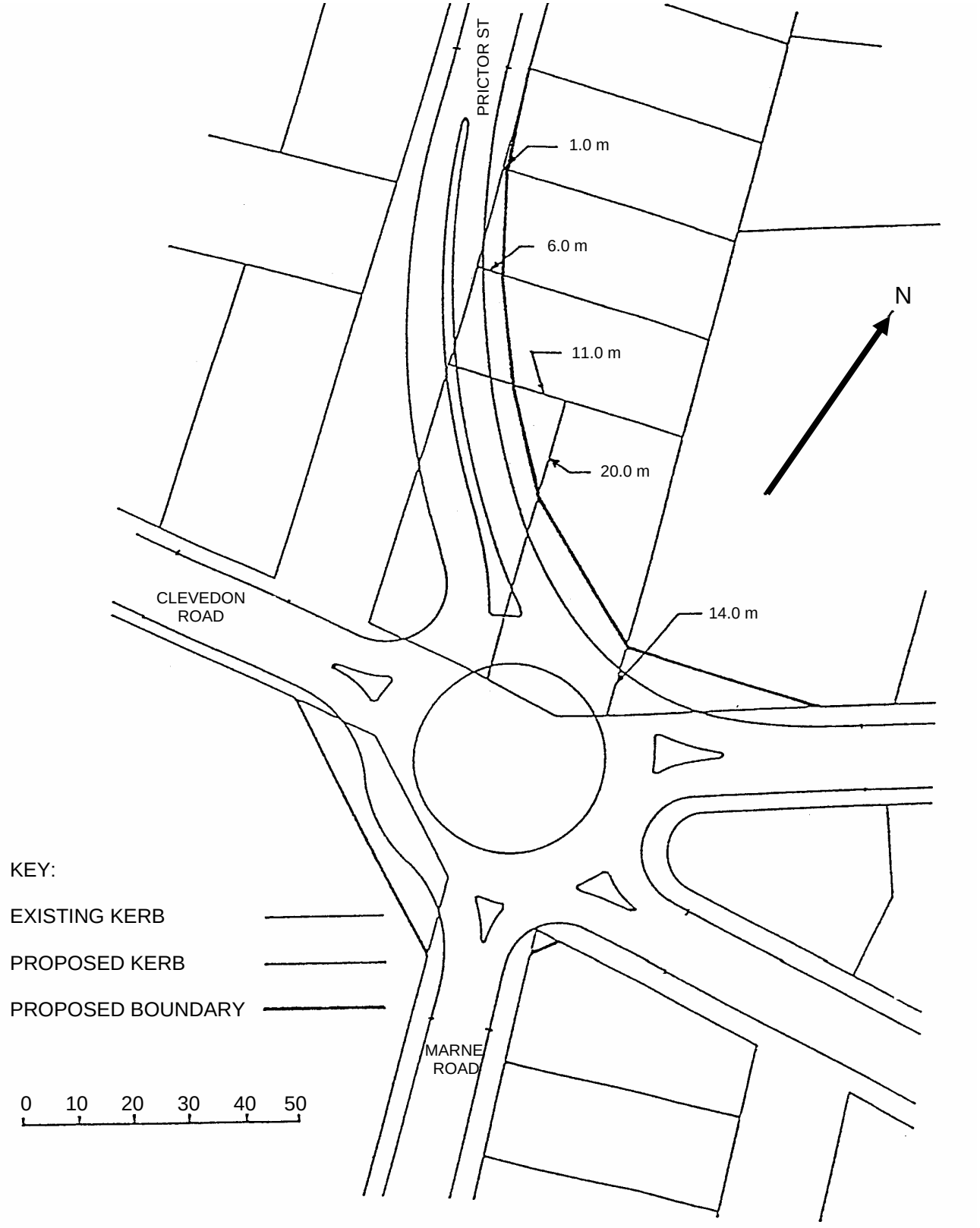


FIGURE 11G PROPOSED ROUNDABOUT CLEVEDON RD/PRICTOR ST/MARNE RD



NOTE: PRELIMINARY DESIGN ONLY

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