

13 Utilities

Introduction

In order for the district to function efficiently and effectively it is important that provision is made for utilities. Placement or siting of buildings, structures or the carrying out of work, such as excavation, can have adverse effects on the environment which must be avoided, managed or mitigated.

The provisions of this Chapter apply to all activity areas. Utilities are not required to comply with the provisions of Chapters 4, 5, 6 excluding 6C to the extent that it applies to telecommunication facilities supported on the tower of the existing administration building on the Avalon Studios site, 7, 8, 9, 10, and 14I. However, utilities must comply with other provisions of the Plan.

13.1 Issue, Objective and Policies

13.1.1 Provision for Utilities

Issue

Utilities are essential for the proper functioning of the district and it is important provision is made for them. Establishment, operation and maintenance of utilities can have adverse effects on the environment and these must be avoided, managed or mitigated.

Objective

To enable utilities to be established throughout the district in a manner that adverse effects on the environment are avoided, managed or mitigated as far as practicable.

Policies

- (a) Where practicable, economic and technically feasible, utilities should be established within roads and road reserves.
- (b) To ensure where practicable, economic and technically feasible, utilities such as pipeworks and cabling, are established underground.
- (c) Where practicable, economic and technically feasible, to ensure utilities which have to be established above ground level are sited in locations where they are not obtrusive visually and do not detract from amenity values of the area.
- (d) Where practicable, economic and technically feasible, to encourage the co-siting and sharing of facilities.
- (e) To co-ordinate the placement of utility services.
- (f) To ensure that utility services are sited so that they do not affect adversely the health and safety of residents, occupiers, road users, and the general public.

- (g) Where utility services are no longer required the sites should be left in a safe and tidy condition.
- (h) In the case of above ground utilities or major underground utilities, the Special, River and Passive Recreation Activity Areas and the coastal environment as shown in Map Appendices 2A, 2B, and 2C are environmentally sensitive areas and as far as reasonably practicable, should be avoided.
- (i) Ensure that a suitable site is available for wastewater treatment and water services to meet the needs of the community.
- (j) Ensure the provision of an appropriately sized and located site for the construction and operation of a booster pumping station adjacent to the line of the existing main outfall sewer.
- (k) Where practicable, economic and technically feasible, electricity transformers and water pumping stations should not be located within the Primary or Secondary River Corridor of the Hutt River.

Explanation and Reasons

Utilities are essential for the proper functioning of the district and the region. Therefore, it is important that there are district-wide provisions for utilities in the Plan. Utilities can have adverse effects that must be avoided, managed and mitigated.

Many utility services are located within roads and road reserves and it is desirable that Council encourage this approach. In most cases the placing of utility services within road or road reserves will have less adverse effects on the environment than other locations.

Utilities placed above ground can have adverse effects on the amenity values of an area. This is especially the case where there are a large number of utilities located above ground that visually can clutter up an area. To enhance the appearance of areas it is important that utilities are placed underground where this is practicable and technically feasible and the natural character of the area is not affected adversely.

Where utilities cannot be placed within roads and/or underground it is important they are placed in locations that are not obtrusive visually. Where possible substantial structures in prominent locations, such as ridge tops, should be avoided as these can have adverse effects on the amenity values of an area. Careful evaluation should be made of alternative sites and/or routes in determining the location of utilities.

Where practicable and technically feasible the co-siting of utility services can help reduce adverse effects on the environment and lead to a more efficient use of land.

It is desirable to co-ordinate the placement of utility services in order to control congestion of services and reduce the disruption caused by construction and maintenance.

Some utilities can have adverse effects on health and safety and/or be a nuisance to residents and occupiers. It is important that these utilities are sited appropriately or placed such that adverse effects are managed and controlled.

With the lack of maintenance the visual appearance of disused or abandoned utilities above ground can detract from the amenity values of an area and could pose a health and safety hazard to residents. It is important such disused utility services are kept in a tidy and safe condition.

Utilities in certain environmentally sensitive locations, such as the Special, River and Passive Recreation Activity Areas, and the identified coastal environment, can have adverse effects which need to be managed and controlled. It is important that all proposals are assessed carefully and that special criteria apply to ensure that there are no adverse effects on the environment. It is generally inappropriate for electricity transformers and water pumping stations to be located within the Primary and Secondary River Corridors of the Hutt River, to minimise the possibility of disruption to service after a flood event.

The provision of a suitable site for full treatment of wastewater and ancillary activities is essential for the development of an upgraded wastewater system for the Hutt Valley in a way that avoids, remedies or mitigates adverse effects.

The provision of a suitable site for the booster pumping station is an integral part of the development of an upgraded wastewater system for the Hutt Valley. It will allow the conveyance of treated wastewater in a way that avoids, remedies or mitigates adverse effects.

A comprehensive Assessment of Environmental Effects has been prepared for the wastewater treatment plant and the pumping station. This report includes the measures that need to be undertaken to avoid, remedy or mitigate any adverse effects.

13.2 Rules

13.2.1 Permitted Activities

The rules listed below apply to utilities in all activity areas. Therefore the provisions of Chapters 4, 5, 6 excluding 6C to the extent that it applies to telecommunication facilities supported on the tower of the existing administration building on the Avalon Studios site, 7, 8, 9, 10 and 14I do not apply to utilities. However, utilities must comply with other provisions of the Plan.

- (a) In all activity areas, underground utilities in roads or road reserves, except high pressure gas lines with a gauge pressure of more than 2000 kilopascals.
- (b) In all activity areas, except in the Special, Passive and River Recreation Activity Areas, and the identified coastal environment, all underground utilities (except high pressure gas lines with a gauge pressure of more than 2000 kilopascals).
- (c) In all activity areas, utilities listed below which are above ground level and within roads and road reserves:
 - (i) Street lighting poles,
 - (ii) Traffic signals and equipment (including surveillance cameras),
 - (iii) Traffic signs
 - (iv) Street furniture,
 - (v) Parking meters and parking control equipment, including "Pay and Display Booths",
 - (vi) Those utilities associated with and required for the proper functioning of roads.
 - (vii) Equipment cabinets associated with and required for the proper functioning of underground telecommunication lines.
- (d) In all Residential, Commercial, Rural Residential, General Recreation, and Community Health Activity Areas, and at the Melling Substation site (Pt Sec 37 Hutt District, SO 18961) any above ground utility (excluding above ground lines; in the area shown in Appendix Central Commercial 1 of the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, masts and antenna for telecommunication, radiocommunication and broadcasting; and in the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, antenna utilised for network utility purposes and their attachment structures where attached to an existing building) where buildings and structures:
 - (i) Have a ground coverage of less than 50m², and
 - (ii) Have a height up to and including 3m.

- (e) In the Avalon Business Activity Area Sub-Area 1, and the General Business Activity Area, except as shown on Appendix General Business 1, all above ground utilities including lines above ground conveying electricity, and lines as defined by Section 2 (1A) of the Telecommunications Act 1987 and radio communications, where buildings and structures:

- (i) Have a ground coverage not exceeding 200m²; and
- (ii) Have a height up to and including 15m.

This shall include all pole mounted equipment such as transformers, fuses, switches, cable boxes, reclosers and the like.

In the Avalon Business Activity Area Sub-Area 2, and the Special Business Activity Area, all above ground utilities including lines above ground conveying electricity, and lines as defined by Section 2 (1A) of the Telecommunications Act 1987 and radio communications, where buildings and structures:

- (i) Have a ground coverage not exceeding 500m²;
- (ii) Have a height up to and including 20m for the Special and Extraction Activity Areas and Avalon Business Activity Area Sub-Area 2 (Avalon Studios site); and
- (iii) Have a height up to and including 15m for the Avalon Business Activity Area Sub-Area 2 (National Film Unit site).

This shall include all pole mounted equipment such as transformers, fuses, switches, cable boxes, reclosers and the like.

- (f) In the area shown in Appendix Central Commercial 1 of the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, masts and antenna for telecommunication, radiocommunication and broadcasting purposes providing they:
- (i) have a height up to and including 30m; and
 - (ii) are a minimum distance of 50m from a residential activity area.
- (g) In the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, antenna utilised for network utility purposes and their attachment structures where attached to an existing building.
- (h) In all activity areas except the River Recreation Activity Area, recycling depots on roads with a speed limit not exceeding 50 kph.
- (i) In all activity areas any culvert.
- (j) In all activity areas, irrigation systems, open drains and channels for the conveyance of water.
- (k) In all activity areas, footways, cycleways, accessways, and service lanes.
- (l) In all activity areas, existing utilities plus their operation, maintenance, minor upgrading and removal. This condition does not apply to roads (see rule (m) below).

For the purposes of this provision, minor upgrading means an increase in the carrying capacity, efficiency or security of electricity, telecommunication and radiocommunication facilities utilising the existing support structures or structures of a similar scale or character, and includes:

- (i) the addition of circuits, conductors and cabinets not exceeding 1.2m in height and 1m²;
- (ii) the reconditioning of the line with higher capacity conductors;
- (iii) the resagging of conductors;
- (iv) the addition of longer or more efficient insulators;

- (v) the addition of earthwires which may contain telecommunication lines, earthpeaks and lightning rods;
- (vi) the replacement and alteration of existing antennas, masts, poles and associated structures;
- (vii) additional or relocated pole transformers (up to 200kVA), fuses, switches, cable boxes, reclosers and the like;
- (viii) additional low voltage (not exceeding 400 volts) conductors up to five in total for electricity distribution on existing overhead line routes;
- (ix) up to three additional high voltage (not exceeding 11,000 volts) conductors;
- (x) overhead lines and associated support structures, extended by not more than 100m in length from that existing as at 5 December 1995;
- (xi) The replacement of an existing overhead line with another overhead line having a maximum diameter no greater than that line being replaced; and
- (xii) An additional service lead to the number existing on 20 March 2003, from the local network to a property, that lead having a maximum diameter of 8.0mm.

Minor upgrading shall not include:

- (i) an increase in the voltage of the line unless the line was originally constructed to operate at the higher voltage but has been operating at a reduced voltage; and
- (ii) anything that will have more than minor adverse effects on the environment.

Maintenance shall include the replacement of poles, masts, stays, conductors, and other such items with items that are of a similar character, scale and height.

- (m) In all activity areas, all roads and utilities associated with the proper functioning of roads in existence as at 5 December 1995 plus their operation, maintenance, upgrading and resealing where the level of the existing road does not increase by more than a maximum of 500mm above the level existing as at 5 December 1995.
- (n) The construction, operation and maintenance of a wastewater treatment plant including sludge treatment and/or transfer, and ancillary activities including pumping facilities, offices, workshops, storage, staff and visitor amenities, vehicle parking, odour treatment and linkages to existing facilities on Lots 1 and 2 DP 86588, Section 1 SO 36823, Section 58 SO 24480, Sections 56, 57 and 58 SO 24480, Section 3 SO 23252, Section 48 SO 24045, and Section 47 SO 24045.
- (o) The construction, operation and maintenance of a wastewater treatment plant including sludge treatment and/or transfer, and ancillary activities including pumping facilities, offices, workshops, storage, staff and visitor amenities, vehicle parking, odour treatment and linkages to existing facilities on Sections 68 and 69 SO 30304, and Section 1 SO 37930.
- (p) The construction, operation and maintenance of a booster pumping station and ancillary activities including standby power generation equipment, storage, staff facilities and amenities, and vehicle parking on Section 1 SO 20401, Section 1 SO 20400, Part Section 103 SO 20015 and Part Section 48 SO 10686.
- (q) In the General Rural Activity Area, but excluding the identified coastal environment, all above ground utilities including lines above ground conveying electricity, and lines as defined by Section 2 (1A) of the Telecommunications Act 1987 and radio communications, where buildings and structures:

- (i) Have a ground coverage not exceeding 200m²; and
- (ii) Have a height up to and including 20m.

This shall include all pole mounted equipment such as transformers, fuses, switches, cable boxes, reclosers and the like.

13.2.1.1 Permitted Activities - Conditions

- (a)
 - (i) Where the construction, maintenance and upgrading involves the disturbance to the ground, at the completion of the work the ground shall be reinstated, as far as is reasonably practical, to the condition existing prior to the commencement of the work.
 - (ii) Where the removal of a network utility involves disturbance to the ground, at the completion of the work that ground shall be reinstated as far as practicable to the condition of the immediately surrounding ground.
 - (iii) Where removal is proposed all storage areas for goods, materials, plant, machinery or equipment, and solid waste associated with the utility, shall be stacked in a tidy manner and all waste material shall be disposed of off the site.
- (b) Where any utility is to be sited or placed on Council land, the utility operator must provide Council with detailed plans of the proposed work. The work must be in accordance with any reasonable conditions prescribed by Council.
- (c) Utilities must comply with the relevant maximum noise standards for the activity areas where they are located. This condition does not apply to roads.
- (d) With the exception of activities allowed by Rule 13.2.1(l), utility structures or buildings located above ground and not on road or road reserves must be sited at least 1.5m from any residential dwelling and comply with the appropriate recession plane requirements.
- (e) Any floodlighting must be directed away from adjoining properties, be predominantly contained within the boundaries of the site. This condition does not apply to utilities located or sited on road and road reserves.
- (f) For the wastewater treatment plant and ancillary activities the maximum height of buildings is 20m.
- (g) For the booster pumping station and ancillary activities the following conditions apply:
 - (i) The maximum height of buildings is 8m.
 - (ii) Buildings and structures must be designed so as to soften the impact on the surrounding area. In this respect special attention needs to be paid to the shape, scale and external appearance (including colour and materials used) of buildings and structures.

13.2.2 Controlled Activities and Restricted Discretionary Activities

13.2.2.1 Controlled Activities

- (a) In all activity areas, including roads and road reserves, underground pipes for the transmission of natural or manufactured gas at a gauge pressure exceeding 2000 kilopascals, including compressor stations and ancillary equipment.
- (b) In all Residential, Commercial, Rural Residential, General Recreation and Community Health Activity Areas utilities above ground (excluding, above ground lines; in the area shown in Appendix Central Commercial 1 of the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, masts and antenna for telecommunication, radiocommunication and broadcasting; and in the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, antenna utilised for network utility purposes and their attachment structures where attached to an existing building) where all buildings and structures:
 - (i) Have a ground coverage not exceeding 200m², and
 - (ii) Where the height exceeds 3m but is up to and including 8m.
- (c) Underground utilities in the Special, Passive and River Recreation Activity Areas, and identified coastal environment.
- (d) In all activity areas, except the Special and Passive Recreation Activity Areas, and identified coastal environment, any grade separated facility where a structure is used to separate roadways, railways, footways, cycleways or bodies of water.
- (e) In all activity areas, except the Special and Passive Recreation Activity Areas, and identified coastal environment, any viaduct or tunnel.
- (f) In all activity areas, except the Special and Passive Recreation Activity Areas, and identified coastal environment, any bridges for roads, tramways, railways and underpasses.
- (g) In all Residential, Commercial, and Rural Activity Areas, recycling depots with a gross floor area not exceeding 10m² and 3m in height.
- (h) In the Avalon Business Activity Area Sub-Area 1, and the General Business Activity Area, except as shown on Appendix General Business 1, all above ground utilities including lines above ground conveying electricity, and lines as defined by Section 2 (1A) of the Telecommunications Act 1987 and radio communications, where buildings and structures:
 - (i) Have a ground coverage exceeding 200m², and
 - (ii) Where the height exceeds 15m but is up to and including 20m.

13.2.2.2 Restricted Discretionary Activities

- (a) In all Residential, Commercial, Rural Residential, General Recreation and Community Health Activity Areas and Appendix General Business 1, new lines or additions to lines above ground conveying electricity where the height of buildings and structures does not exceed 20m. This shall include all pole mounted equipment such as transformers, fuses, switches, cable boxes, reclosers and the like.
- (b) In all Residential, Commercial, Rural Residential, General Recreation, and Community Health Activity Areas and Appendix General Business 1, new lines as defined by Section 2 (1A) of the Telecommunications Act 1987 and radio communications

provided the maximum height of any supporting structure including antenna does not exceed 20m in height with satellite dishes not exceeding 5m in diameter.

- (c) In all Residential, Commercial, Rural Residential, General Recreation and Community Health Activity Areas and Appendix General Business 1, all utilities (excluding, above ground lines; in the area shown in Appendix Central Commercial 1 of the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, masts and antenna for telecommunication, radiocommunication and broadcasting; and in the Central Commercial Activity Area and in Area 2 of the Petone Commercial Activity Area, antenna utilised for network utility purposes and their attachment structures where attached to an existing building), where buildings and structures:
 - (i) have a ground coverage exceeding 200m², and
 - (ii) where the height exceeds 8m but is up to and including 20m.
- (d) In the General Rural Activity Area, but excluding the identified coastal environment, all above ground utilities including lines above ground conveying electricity, and lines as defined by Section 2 (1A) of the Telecommunications Act 1987 and radio communications, where buildings and structures:
 - have a ground coverage exceeding 200m².
 - This shall include all pole mounted equipment such as transformers, fuses, switches, cable boxes, reclosers and the like.
- (e) Radiocommunications, telecommunications and broadcasting facilities and associated structures, equipment and equipment buildings which are not otherwise provided for and which fail to comply with the specified Permitted Activity Conditions.

13.2.2.3 Matters in which Council Seeks to Control or Restrict its Discretion for Controlled and Restricted Discretionary Activities

- (a) **Design and External Appearance of Buildings and Structures:**

Buildings and structures should be designed so as to soften the impact on the surrounding area. In this respect special attention must be paid to the shape, scale and external appearance (including colour and materials used) of buildings and structures.
- (b) **Site Layout:**
 - (i) Buildings and structures located above ground level, not more than 10m in height and not within roads or road reserves must be set back at least 3m from any residential dwelling.
 - (ii) Buildings and structures located above ground level, more than 10m in height and not within roads or road reserves must be set back at least 5m from a residential dwelling.
- (c) **Amenity Values:**
 - (i) In placing or siting utilities care must be taken to ensure earthworks carried out do not alter significantly the existing natural landform of the area.
 - (ii) Where practicable the alignment must follow the contour of the land.
 - (iii) Where practicable utilities should be placed or sited to avoid areas covered in bush or where there are significant trees.
 - (iv) Where practicable areas of high ecological value should be avoided.
 - (v) Where practicable prominent skyline or ridgeline areas should be avoided.

- (vi) Where the construction or maintenance of the utility involves disturbance of the ground, at the completion of the work the ground must be reinstated, as far as reasonably practical, to the condition existing prior to the commencement of the work.
 - (vii) The extent to which adverse effects on the amenity values of adjacent working and living areas of buildings can be avoided, remedied or mitigated.
- (d) Landscaping and Screening:**
- Where practicable utilities above ground level or at ground level and not on road or road reserves must be landscaped and screened from adjoining properties. Particular attention must be paid where utilities adjoin or face living or working areas of buildings.
- (e) Health and Safety:**
- (i) All utilities shall comply with NZS 2772.1:1999 Radiofrequency Fields: Part 1 - Maximum Exposure Levels 3kHz - 3000GHz, and with NZS 6609.2:1990 - Radiofrequency Radiation: Part 2: Principles and Methods of Management 300kHz -100GHz or any subsequent standard.
 - (ii) Compliance with the Hazardous Facilities Screening Procedure (HFSP) standards is required.
 - (iii) Utilities which produce electromagnetic fields shall be sited or designed to comply with the maximum reference levels of electromagnetic fields as tabulated below:
 - Electric field Strength 5 kV/m
 - Magnetic flux Density 100 microtesla (also expressed as 1,000 miligauss)
- (f) Noise:**
- Utilities must comply with the relevant maximum noise standards for the activity area where they are located.
- (g) Lighting:**
- Any floodlighting must be directed away from adjoining properties, be predominantly contained within the boundaries of the site.
- (h) Odour:**
- Odour emitted must have no adverse effects on surrounding residents and occupiers.

13.2.3 Discretionary Activities

- (a) In all activity areas, the construction of new roads including roads within the meaning of section 43 of the Transit New Zealand Act 1989 and other associated facilities.
- (b) In all activity areas, including the Special, Passive and River Recreation Activity Areas and the identified coastal environment all above ground lines for conveying electricity where buildings and structures exceed 20m in height.

This shall include all pole mounted equipment such as transformers, fuses, switches, cable boxes, reclosers and the like.
- (c) In all activity areas, recycling depots on roads with a speed limit exceeding 50kph.
- (d) In all activity areas, including the Special, Passive and River Recreation Activity Areas and the identified coastal environment all new lines as defined by Section 2 (1A) of the Telecommunications Act 1987 and radio communications where the height of all

buildings and structures including antennas exceeds 20m with satellite dishes exceeding 5m in diameter.

This shall include all pole mounted equipment such as transformers, fuses, switches, cable boxes, reclosers and the like.

- (e) In all activity areas, including the Special and Passive Activity Areas, and identified coastal environment, utilities not listed as Permitted, Controlled or Restricted Discretionary Activities.
- (f) Utilities listed as Permitted Activities but failing to comply with the specified conditions, but excluding radiocommunications, telecommunications, broadcasting facilities and associated structures, equipment and equipment buildings which are otherwise provided for.
- (g) In the Special, Passive and River Recreation Activity Areas, and identified coastal environment, all utilities listed as Controlled and Restricted Discretionary Activities.
- (h) In all activity areas, electricity transformers and water pumping stations in the Primary or Secondary River Corridor of the Hutt River.

13.2.3.1 Assessment Matter for Discretionary Activities

Applications for Discretionary Activities will be assessed against the matters contained in sections 104 and 105, and in Part II of the Act shall apply as well as the following matters:

- (a) The proposed location, site and route.
- (b) The external appearance and design of structures and buildings.
- (c) The availability and feasibility of alternative sites and routes, including underground locations.
- (d) Reasons for the particular choice of the site and route.
- (e) The likely adverse effects on the health and safety of residents/occupiers in the district.
- (f) The impact the amount of earthworks has on the existing natural landform of the area and the extent to which amenity treatment can ameliorate the effects of earthworks.
- (g) The landscaping and screening provided to screen proposed buildings or structures.
- (h) The effect on amenity values, especially visual amenities. The matters that will be taken into account include the scale of the facility, the height of the buildings and structures, the separation of buildings and structures from adjoining properties, the impact on ridgelines and view planes from public places.
- (i) The noise generated and the impact on adjoining properties.
- (j) The odour likely to be emitted and the impact on surrounding properties.
- (k) The effect on Maori cultural values.
- (l) The likely adverse effects of any lighting on adjoining properties.
- (m) The adverse effects on existing trees, vegetation or bush areas.
- (n) The adverse effects on the natural and physical resources, ecosystems and their constituent parts including people and communities.
- (o) The extent to which the installation has been designed and will be maintained to prevent pollution or contamination of ground or water bodies.
- (p) The adverse effects on the natural character of the area.
- (q) The likely impact on electricity transformers and water pumping stations, and therefore the provision of those services to the City, in a flood event.
- (r) The likely impact of new roads on floodplain management.

13.2.4 Non-Complying Activities

- (a) In all activity areas all utilities not listed as Permitted, Controlled, Restricted Discretionary or Discretionary Activities.

13.3 Anticipated Environmental Results

The purpose of this section is to enable utilities to be established and operated in an efficient manner and at the same time ensure adverse effects are avoided, managed or mitigated. The following environmental outcomes are anticipated:

- (a) Where practicable and technically feasible utilities will be in road reserves and/or placed underground.
- (b) There will be greater co-ordination in the placement of utility services.
- (c) Environmentally sensitive areas, such as the Special and Passive Recreation Activity Areas, will be avoided and where this is not possible appropriate mitigation measures will be adopted.
- (d) Where practicable and technically feasible utility services established above ground level and not sited in roads or road reserves will be established in locations where they are not obtrusive visually and significant adverse effects will be managed or mitigated.