8.0 INFRASTRUCTURE AND SERVICES

8.5.1 DOMESTIC EFFLUENT DISPOSAL

8.5.1.1 DISCUSSION, PURPOSE AND REASONS

(1) ON-SITE DISPOSAL

Where there is no public reticulated sewerage system available all existing and future development must be capable of satisfactorily treating and disposing of sewage on-site, or through small scale community based schemes, in accordance with the requirements of the Waikato Regional Council.

(2) RETICULATED SYSTEMS

Reticulated sewerage systems are available in most of the urban areas in the District. Subdivision is an appropriate time for the sewer connections to be made to the lot(s). Alternatively, where there is no subdivision the connections need to be made at the time of development.

8.5.1.2 ENVIRONMENTAL RESULTS

(1) To allow residential and other development in those areas which are not serviced by a public sewerage system, but only in a manner that protects the water and land from contamination and does not create a risk to health or a detraction to the amenity of the area through smell.

(2) To ensure that where a reticulated sewerage system is available to lots where domestic effluent needs to be disposed of, the system is provided in a manner which is safe, efficient, economic, environmentally acceptable, meets consumer demand and improves public health.

8.5.1.3 STANDARDS

(1) In all *zones*, where a reticulated sewerage system is not available an on-site domestic effluent disposal system shall be provided for the discharge of *domestic effluent*.

Note: Applications for *subdivision* consents may be required to show the details and layout of the proposed domestic effluent treatment system (eg. for steep *sites* with slip potential) including evidence that the system either complies with the *permitted activity* standards of the Waikato Regional Plan or a regional consent has been obtained.

(2) In all *zones*, where a reticulated sewerage system is available, for any *subdivision* which results in additional *allotments* to be used for urban purposes or where any new or additional development is proposed, provision shall be made for *domestic effluent* to be disposed of as follows:

(a) The installation or upgrading of a sewer main and/or pump station(s) extending from the Trunk Wastewater System to serve all the proposed *allotments* in the *subdivision* or the subject land;

(b) The installation of a connection from the sewer main into the body of each proposed *allotment,* or to each individual *dwelling*/development*,* to accommodate any increase in *domestic effluent* likely to arise from the *subdivision* or *dwelling*/development in accordance with the specifications in the *HDC Engineering Manual*.

8.5.1.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.1.2 of the Standards in Rule 8.5.1.3 for which compliance is not met and the following relevant matters:

(a) Whether the proposed design meets the maximum potential demand arising from likely *development* of the land as permitted in accordance with this District Plan.

(b) Whether the new sewer main and/or sewer connections are designed, located and constructed to allow relatively easy operation, cleaning, inspection and maintenance, as well as:

(i) Minimising any risk to the *environment* or to public health through contamination of water or the ground.

(ii) Minimising any loss of enjoyment and/or potential *development* of *lots* as a result of the sewer main and/or connection location.

(iii) Enabling the individual connections to be readily made to the existing reticulated sewerage system.

(c) Whether the proposed sewerage system is constructed to have a design life that will not require substantial maintenance in the future. As a guide, reticulated sewerage systems should be designed to have a minimum life of 100 years.

(d) The extent to which the capacity, efficiency and sustainability of upstream and downstream infrastructure will be compromised.

8.5.2 NON-DOMESTIC EFFLUENT DISPOSAL

8.5.2.1 DISCUSSION, PURPOSE AND REASONS

(1) Care in the siting of: treatment plants, ponds and effluent disposal systems for non-human wastes (including stock truck effluent disposal systems) and/or effluent disposal systems of a scale greater than "domestic", is important to avoid unreasonable smell nuisance or any health risk for the occupants of neighbouring properties and dwellings.

(2) In some cases the amenities of neighbouring properties will not be affected by a closer distance due to variable factors, such as prevailing and seasonal weather conditions, topography, method of treatment and type and quantity of effluent. For this reason the buffer distance can be reduced between an isolated rural dwelling and the effluent disposal area, with the written consent of the affected owners and occupiers and by a restricted discretionary activity consent.

(3) The responsibilities of the Waikato Regional Council with respect to the design, location, treatment and disposal methods are requirements to protect the water, land and air from the detrimental effects of discharging contaminants into the environment.

(4) The purpose of this performance standard in the District Plan is to protect the amenity values of neighbouring properties.

8.5.2.2 ENVIRONMENTAL RESULTS

(1) To allow for the disposal of non-domestic effluent from activities in a location that avoids or reduces, to an acceptable level, any detrimental amenity effects of the effluent disposal process.

8.5.2.3 STANDARDS

(1) In any *zone*, all plants, ponds or effluent disposal systems (including disposal onto the land by way of spray or trickle irrigation) used for the disposal of non-human wastes and/or wastes of a scale greater than "domestic" shall comply with the following:

(a) The plant or ponds including the area onto which the effluent is being discharged or disposed of shall meet the buffer distances set out in the tables below.

For the purpose of compliance with the buffer distances specified in the tables, distances shall be measured from the nearest perimeter of the area used for handling or disposal of effluent.

Buffer Distance for *Non-Domestic Effluent* Treatment Systems & Disposal Areas (Excluding Pig Effluent Disposal)	
	Distance
Any boundary of the *holding*	50 metres
Boundary of any other *zone*	150 metres
Any *dwelling* and any *minor dwelling unit*	150 metres
Community facility located within a *rural area*	100 metres

Buffer Distance for *Non-Domestic Effluent* Treatment Systems & Disposal Areas for Pig Effluent Disposal			
	Minimum Distance in Metres		
	Land Spreading		**Subsoil injection Aerobic Lagoon**
	Anaerobic Lagoon (refer to (i) below)	**Anaerobic Lagoon (refer to (ii) below)**	
(1) Boundary of Residential and Low Density Residential Zones	1500m	2000m	500m
(2) Boundary of Marae Development, Town Centre, Industrial, Township, Reserve (Passive) and Reserve (Active) Zones	500m	1000m	200m
(3) Any *dwelling,* any *minor dwelling unit* or *community facility* outside the *zones* referred to in (1) and (2) above (refer to (iii) below)	250m	500m	150m

(i) Effluent for surface spreading that has been stored anaerobically without treatment for less than 48 hours.

(ii) Effluent for surface spreading that has been stored anaerobically without treatment for more than 48 hours.

(iii) For the purpose of this standard the following definitions shall apply:

Any Dwelling and Any Minor Dwelling Unit

Means any habitable dwelling, any *minor dwelling unit* or any form of *visitor accommodation* which has been lawfully established (not including dwellings, *minor dwelling units* or *visitor accommodation* on the *holding* on which non-human waste and/or wastes of a scale greater than "domestic" are being discharged or disposed of).

Community Facility

Refer to definition in Section 4.0.

(2) Where any effluent or manure (liquids, solids or slurry) is taken across a property boundary or along public *roads*, it shall be in enclosed containers or pipes so as to avoid a nuisance.

Note: Any required resource consent for the *non-domestic effluent* discharge will also need to be obtained from the Waikato Regional Council.

8.5.2.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.2.2 of the Standards in Rule 8.5.2.3 for which compliance is not met and the following relevant matters:

(a) Whether the method (including type and quantity) of effluent treatment and disposal is such that effects such as smell are not created.

(b) The extent to which there are prevailing and seasonal weather conditions (particularly wind direction and intensity, number of calm days) around the *site* that ensure the detrimental effects of the effluent disposal method are dealt with to a degree which would allow reduced buffer distances.

(c) Whether the topography between the area used for handling or disposal of effluent and the land or *building* to which the buffer distance applies creates a barrier which ensures the detrimental effects are prevented or contained.

(d) Whether the nature of existing and likely *development* between the area used for handling or disposal of effluent and the land or *building* to which the buffer distance applies, is such that the effects of the disposal system will not be noticeable or objectionable.

(e) Whether the disposal of effluent from the pig farm is being carried out in accordance with the New Zealand Pork Industry Board – Environmental Management Systems.

8.5.3 WATER SUPPLY

8.5.3.1 DISCUSSION, PURPOSE AND REASONS

(1) The provision of an adequate and potable water supply is required for public health, commercial and industrial consumption, and for the safety of the community (eg fire fighting purposes).

(2) In some parts of the District there is no urban or rural water supply that a subdivision or development can connect into. Also, where rural water supplies are available, there is no requirement that connection has to be made to the supply. For all those situations, adequate water supply can be obtained from rainwater storage, bores or a combination of both. This is not a District Plan matter, but rather can be addressed at the time of building consent. As part of a building or land use consent, evidence of the system to provide an adequate water supply will need to be included with the consent application. Due to the manner in which the rural water supply systems were set up and financed, connection to the supply cannot be required.

(3) Where an urban water supply is provided, connection to that system is required to enable the community to meet its social, economic and health needs. Subdivision is an appropriate time for the water supply connections to be made to the lot(s). Alternatively, where there is no subdivision the connections need to be made at the time of development.

(4) In parts of Paeroa, Waihi and on the Hauraki Plains, Council is unable to guarantee the water supply pressure due to the height of the land in relation to the reservoir and the draw off of water for dairy farming purposes. This limitation is noted on the Property Information Database and will be drawn to the attention of prospective purchasers and developers at the time of purchasing the property or undertaking building on the property through Land Information Memoranda (LIM) or Project Information Memoranda (PIM).

8.5.3.2 ENVIRONMENTAL RESULTS

(1) To allow development in a manner that does not create a risk to human safety, health and wellbeing.

8.5.3.3 STANDARDS

(1) In any *zone* in an *urban area*, where a potable water reticulation system is available, for any *subdivision* which results in additional *allotments,* or where any new or additional development is proposed, provision shall be made for water supply as follows:

(a) The installation or upgrading of a water main extending from the Trunk Water Supply System to serve all the proposed *allotments* in the *subdivision* or the subject land;

(b) The installation of a connection from the water main to each proposed *allotment* or to each individual *dwelling*/development to accommodate any increase in water demand likely to arise from the *subdivision* or *dwelling*/development in accordance with the specifications in the *HDC Engineering Manual*.

(2) In any *urban area* or *rural area* where a potable water supply is not available and/or the developer chooses not to connect to a *rural area* water supply scheme, then evidence of a satisfactory water supply system shall be provided as part of the building consent application.

8.5.3.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.3.2 of the Standards in Rule 8.5.3.3 for which compliance is not met and the following relevant matters:

(a) Whether the proposed design meets the maximum potential demand arising from likely development of the land as permitted in accordance with this District Plan.

(b) Whether the water supply reticulation is designed, located and constructed to allow relatively easy operation and maintenance, as well as:

(i) Minimising any loss of enjoyment and/or potential development of *lots* as a result of the reticulation location.

(ii) Enabling the individual connections to be readily connected to the existing reticulation system.

(c) Whether the water system is constructed to have a design life that will not require substantial maintenance in the future. As a guide, reticulated water systems should be designed to have a minimum life of 100 years.

(d) The extent to which the capacity, efficiency and sustainability of upstream and downstream infrastructure will be compromised.

8.5.4 STORMWATER DRAINAGE

8.5.4.1 DISCUSSION, PURPOSE AND REASONS

(1) Control and disposal of stormwater is important in the Hauraki District for different reasons in different areas of the District. Reasons include the low-lying nature of some land, areas of high rainfall (eg Waihi) and the increase in impermeable surfaces as a result of higher density urban development in the towns.

(2) The control and disposal of stormwater assists in enabling land use activities to establish and operate, and also ensures that people and communities are protected from the social and economic disruption that flooding due to inadequate stormwater disposal can produce.

(3) Stormwater needs to be disposed of before it can become contaminated by other effluent (eg septic tank), chemicals, oils or pesticides, and in a manner which causes minimal, if any, detriment to the environment (ie both the quality and quantity of stormwater needs to be addressed).

(4) There are a number of means available to control and dispose of stormwater including on-site soakage, roadside channels, soakage into reserves or open areas, piping to existing streams or other water bodies and connecting to established stormwater systems. The technique to use for stormwater drainage will need to be assessed for each individual situation at the time of subdivision or development. However, the disposal needs to avoid causing flooding downstream, erosion or instability to the land.

8.5.4.2 ENVIRONMENTAL RESULTS

(1) To dispose of stormwater in a manner that is compatible with the natural environment, as well as ensuring that the risks to the community as a result of flooding and/or contamination of stormwater are avoided.

8.5.4.3 STANDARDS

(1) In an *urban area*, all stormwater from hardstand and impervious surfaces shall be provided with stormwater treatment in accordance with the *HDC Engineering Manual*.

(2) In an *urban area*, where there is a reticulated stormwater system available (either piped or open), for any *subdivision* which results in additional *allotments,* or where any new or additional development is proposed, provision shall be made for stormwater treatment as follows:

(a) The installation or upgrading of a stormwater main extending from the Trunk Stormwater System to serve all the proposed *allotments* in the *subdivision* or the subject land; and

(b) The installation of a connection from the stormwater system to each proposed *allotment* or to each individual *dwelling*/development to accommodate any increase in stormwater discharge likely to arise from the *subdivision* or *dwelling*/development in accordance with the specifications in the *HDC Engineering Manual*.

(3) All public drains required to be created at the time of *subdivision* or development shall be covered by an easement in gross or shall vest as "Local Purpose Reserve (Drainage)" in the Hauraki District Council on the survey plan of *subdivision*.

(4) All easements and reserves shall be of sufficient width to include the drain and to enable access for maintenance and replacement work (for open drains refer to Diagram HDC400, and for piped drains refer to TS410 in the *HDC Engineering Manual*.

(5) All easements and reserves shall be unencumbered by any physical *structures*.

(6) All secondary stormwater flow paths created at the time of *subdivision* or development shall be covered by an easement in gross.

(7) All reticulated stormwater infrastructure that is to become a public asset is to be designed so as to allow for Climate Change. This figure is to be 20% (factor of 1.2).

8.5.4.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.4.2 of the Standards in Rule 8.5.4.3 for which compliance is not met and the following relevant matters:

(a) Whether the design capacity of the system is sufficient to cope with the stormwater surface flows.

(b) The degree to which the facilities are designed, located and constructed to allow relatively easy operation, cleaning, inspection and maintenance. In particular:

(i) Pipelines, access chambers and pumping station inverts should be designed to be self cleansing under normal operations.

(ii) All materials, fittings and other equipment should be compatible or readily adaptable to the existing reticulation system to enable future connections to that system to be achieved.

(iii) Inspection and access points should be readily accessible, especially in the event of emergencies.

(c) Whether the stormwater disposal system is designed to minimise any detriment to the *environment*, particularly with respect to the contamination of natural water, erosion of land or subsequent instability of that land, and downstream flooding.

(d) The extent to which the stormwater design has been developed with the outcome of coping with additional stormwater flows which may be added to the system in the future, including an allowance for Climate Change. As a guide, stormwater facilities should be able to cope with stormwater disposal requirements anticipated in the next 100 years.

(e) The extent to which the capacity, efficiency and sustainability of upstream and downstream infrastructure will be compromised.

(f) Whether the stormwater disposal system is constructed to have a design life that will not require substantial maintenance in the future. As a guide, stormwater systems should be designed to have a minimum life of 100 years.

8.5.5 DRAINS

8.5.5.1 DISCUSSION, PURPOSE AND REASONS

(1) As part of development and/or subdivision in the rural areas, it may be necessary to ensure the continued ability for water to drain from one allotment to another to provide access to a Council drain. Although there is "common law" relating to the responsibilities of disposing and accepting water, the opportunity should be taken to legalise the situation by creating an easement over the drain.

(2) In addition, for some developments, drainage is an integral part of ensuring that the activity can establish and continue to operate. Hauraki District Council's Bylaw on Land Drainage provides for the setback of buildings and other structures from the edge of drains to ensure they do not inhibit the ability of public drains to be accessed and maintained (refer to Section 8.2.1).

(3) Where drainage easements are required to be set aside and drains formed as part of a subdivision or development, they need to be of sufficient dimensions to ensure that they function correctly, and can be serviced and maintained.

(4) Where land is within a Council land drainage district, it is a requirement for each new lot to be provided with an outlet to the Council drain.

8.5.5.2 ENVIRONMENTAL RESULTS

(1) That the resource investment in rural developments is protected from the effects of anticipated floods, water ponding and significant variations to ground water tables.

8.5.5.3 STANDARDS

(1) For land within the *rural area* covered by a *Council* Drainage District, every new *allotment* created by *subdivision* shall be provided with a land drainage outlet to a *Council* drain at the boundary of the *allotment*.

(2) In the *rural area*, all required drains shall be designed and constructed in accordance with the requirements of the "Drain design" diagram HDC400 set out in the *HDC Engineering Manual*.

(3) Easements shall be created which cover the drain and shall be of a minimum width of 8 metres from the top edge of the open drain along one side to allow for access of maintenance equipment and deposition of spoil removed from the drain.

8.5.5.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) *Council* will restrict the exercise of its discretion to the ability of the activity or development to achieve the particular environmental result in Section 8.5.5.2 of the Standards in Rule 8.5.5.3 for which compliance is not met and the following relevant matters:

(a) Whether the scale or other characteristics of the land, activity or *subdivision* are such that the drain type can be lesser than that which would normally be required, or no drain is required at all.

(b) Whether there are other works in the area that when carried out will remove or reduce the need for a drain to be provided.

(c) Whether there are physical, legal or other impediments that would make compliance with the drain type standard or drainage easement width unreasonable or impracticable to provide, and whether an alternative to the standard still substantially achieves a similar level of operation.

8.5.6 TELECOMMUNICATIONS AND POWER

8.5.6.1 DISCUSSION, PURPOSE AND REASONS

(1) In a similar way to water supply, the provision of telecommunication and power services assists in enabling a community to meet its social, economic and cultural needs.

(2) The physical process of providing the services can have a detrimental effect on the environment. These effects can be minimised by installing all services to the allotment(s) at the time of subdivision construction. Providing services in an ad hoc manner after the subdivision is completed can be wasteful of resources. Where necessary easements will be required to ensure continued access by the various utility operators to reticulated services and equipment.

(3) In the urban areas, it is appropriate that both power and telecommunication connections are provided to each lot at the time of subdivision in conjunction with the provision of other service connections and to minimise land disturbance. In the rural areas it is appropriate that power connections are provided to each lot at the time of subdivision, as the reticulated supply is the standard means of obtaining this service. The provision of telecommunication connections can appropriately be determined by the subdivider, given the range of non-reticulated alternatives available for the provision of telecommunication services, and the significant costs that can arise in providing reticulated telecommunication services in the rural area.

(4) The Council is seeking to encourage underground reticulation of new distribution lines for telecommunication and power wherever possible for visual and safety reasons. Council recognises that for technical and other reasons, undergrounding may not always be possible.

8.5.6.2 ENVIRONMENTAL RESULTS

(1) To ensure telecommunication and power supply is provided to the community in a coordinated way and in sufficient quality, quantity and reliability to meet the community demands, while ensuring any detriment to the environment is minimised to an acceptable level. New distribution lines for power and telecommunication will generally be expected to be located underground in urban areas.

8.5.6.3 STANDARDS

(1) In any *zone*, power shall be provided to the boundary of each proposed *allotment* at the time of *subdivision* in accordance with:

(a) The requirements of the relevant supply provider, including any necessary easements, except that where only one proposed *allotment* requires a connection, installation is not required at the time of *subdivision*, where the supply provider has confirmed in writing that the connection is available at the standard fee;

(b) The requirements of the *HDC Engineering Manual*.

(2) In any *urban area* telecommunications shall be provided to the boundary of each proposed *allotment* at the time of *subdivision* in accordance with:

(a) The requirements of the relevant supply provider, including any necessary easements, except that where only one proposed *allotment* requires a connection, installation is not required at the time of *subdivision,* where the supply provider has confirmed in writing that the connection is available at the standard fee;

(b) The requirements of the *HDC Engineering Manual*.

Notes:

(i) Written confirmation from the relevant supply provider shall be required to be obtained to confirm that supply can be adequately provided.

(ii) Where the subdivider chooses not to provide telecommunication and power connections to new *allotments* the *Council* will seek to impose a section 221 notice to advise owners of the non-availability of the reticulated service.

8.5.6.4 RESTRICTED DISCRETIONARY ACTIVITY MATTERS

(1) The *Council* will restrict the exercise of its discretion to the ability of the activity or *development* to achieve the particular environmental result in Section 8.5.6.2 of the Standards in Rule 8.5.6.3 for which compliance is not met and the following relevant matters:

(a) Whether the proposed design meets the maximum potential demand arising from likely development of the land as permitted under this District Plan.

(b) Whether the services are located and installed in a manner that minimises any potential hazard or risk.

(c) The degree to which the facilities are designed, located and installed to allow relatively easy maintenance, access (particularly in emergency situations) and connection to individual *lots*.

(d) Whether the systems are constructed to have a design life that will not require substantial maintenance in the future. As a guide, telecommunication and power supplies should be designed to have a minimum life of 100 years.

(e) Whether in the circumstances telecommunications or power services provided by means other than by reticulated distribution *lines* (eg. Solar power, wind power, cellphone/satellite phone) is appropriate and is of sufficient quality, quantity and reliability to meet the expected demand in an environmentally sustainable manner.