

IN THE MATTER

the Resource Management
Act 1991

AND

IN THE MATTER

of appeals under section 174
of the Act

BETWEEN

MANUKAU CITY
COUNCIL

ENV-2006-AKL-000832

AND

WHITFORD RESIDENTS
AND RATEPAYERS
ASSOCIATION

AND

ENV-2006-AKL-000841

AND

SCOTT AND SANDRA
LOUDON

ENV-2006-AKL-000836

Appellants

AND

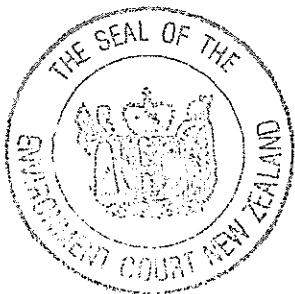
MANUKAU CITY
COUNCIL

Respondent

BEFORE THE ENVIRONMENT COURT

Environment Judge R G Whiting sitting alone under section 279 of
the Act

IN CHAMBERS at Auckland



CONSENT ORDER

Introduction

- 1 The Court has read and considered the appeals, the respondent's replies, and the memorandum of parties dated 14 March 2008 concerning the designation in respect of the Whitford Sanitary Landfill in the Manukau City Operative District Plan 2002.
- 2 Fulton Hogan Limited, Garth Cumberland, Graham Currie, Auckland Regional Council, Whitford Residents and Ratepayers Association, Scott Loudon and Sandra Loudon have given notice of an intention to become parties under s274 and have signed the memorandum setting out the relief sought.
- 3 No other person has given notice of an intention to become a party under s274 to any of the three appeals to which this consent order relates.
- 4 The Court is making this order under s279(1)(b) of the Act, such order being by consent, rather than representing a decision or determination on the merits pursuant to s297. The Court understands for present purposes that:
 - (a) All parties to the proceedings have executed the memorandum requesting this order; and
 - (b) All parties are satisfied that all matters proposed for the Court's endorsement fall within the Court's jurisdiction and conform to relevant requirements and objectives of the Act, including in particular Part 2.

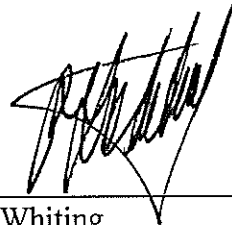
Order

- 5 Therefore the Court orders, by consent, that:
 - (a) The designation in respect of the Whitford Landfill that is the subject of this appeal is amended on the terms provided in **Appendix A**; and
 - (b) The appeals otherwise be dismissed.



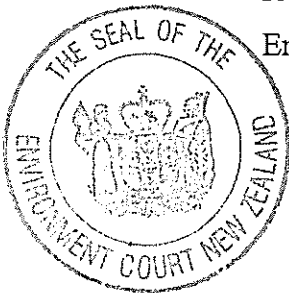
6 There is no order for costs.

DATED at Auckland this 31st day of March, 2008.



R G Whiting

Environment Judge



APPENDIX A

Final Designation Conditions



Rule 10.2.5.2 Non-Regulatory Methods

A wide range of non-regulatory methods have been adopted, and will continue to be developed by Council to address waste management issues. These methods are outlined in Council's Waste Management Strategy.

Education is an essential element of the strategy and will involve producing educational kits and information to the community and industry on a range of aspects of waste management including home composting, selective product purchasing, hazardous material substitution, waste minimisation and cleaner production.

Waste avoidance and reduction are also addressed. It is intended to progressively set individual waste minimisation goals for industry sectors through consultation. Steps to achieve this include:

- Maintaining a full-time position of waste minimisation officer.
- Developing a register of all commercial and industrial waste producers in the City.
- Quantifying and identifying any changes in the components and types of waste in the waste stream.
- Encouraging each waste producer to prepare a waste audit and annual management plan to record progress.
- Using economic instruments to encourage waste minimisation in all sectors of the community.
- Working with industry to demonstrate the financial benefits of waste minimisation and cleaner production.

In relation to its waste collection responsibilities, Council will continue to:

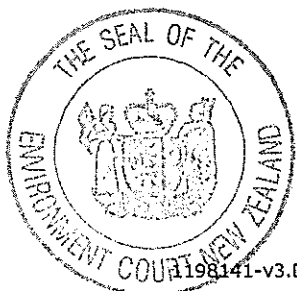
- (a) ensure the provision of weekly kerbside collection services of household waste for all domestic properties.
- (b) ensure the provision of periodic kerbside collection of inorganic wastes from households.

To minimise the volume of waste requiring disposal Council will discourage the use of large mobile garbage bins, and promote kerbside collection of garden waste by private contractors.

In terms of the provision of services, as noted above, Council promoted the establishment of a refuse transfer station in East Tamaki. At the transfer station green waste can be diverted to Pikes Point for composting. The Transfer Station also provides a drop-off facility for metal, paper, glass and aluminium cans. An economic instrument is in place at the transfer station in the form of a lower disposal charge for organic material compared to that for other waste. This acts as an incentive for people to separate their waste and to compost green material rather than having it disposed of at a landfill.

The East Tamaki Transfer Station also helped mitigate the adverse effect of traffic using the Whitford Landfill by reducing the number of private vehicles making the journey.

There is also a role for Council through advocacy in support of issues such as legislation to reduce the waste generated by consumer products and their packaging.



The Whitford Landfill and the Whitford Quarry operators have agreed to identify a single nominated person who shall be the key point of contact for members of the community and/or Council officers, to contact at all times during normal working hours. The initial point of contact will be the Landfill Site Manager, but may change from time to time following consultation between the Landfill Operator and the community. The person shall be available during normal working hours and their name shall be made known through the regular Quarry and Landfill Community Committee meetings and to the Chairperson of the Whitford Residents and Ratepayer's Association.

RULE 10.2.6 ANTICIPATED ENVIRONMENTAL RESULTS

The anticipated environmental results for the City are:

- Less waste being generated and requiring disposal.
- Minimal adverse environmental effects arising from waste management activities.

RULE 10.2.7 PROCEDURES FOR MONITORING

In order to assess the suitability and effectiveness of the objectives, policies and methods in achieving the anticipated environmental results contained in this section, the Council will develop a monitoring programme (see Chapter 1, section 1.7.3) which may include the following monitoring procedures:

Monitoring the quantities and composition of waste generated and/or brought into the City and associated disposal methods.

Monitoring complaints regarding nuisance aspects of waste management activities.

Monitoring resource consents for waste management activities including the number of applications granted consent, compliance with consent conditions, and the effectiveness of those conditions.

RULE 10.2.8 ACTIVITY RULES: DESIGNATIONS

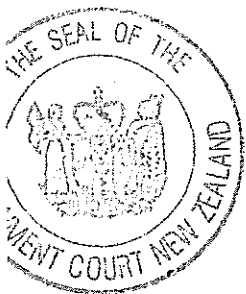
Rule 10.2.8.1 Whitford Landfill Designation Description and Explanation

The Whitford Landfill has been designated for many years. In 2005 a Notice of Requirement was sought to alter the existing designation in order to increase the life of the Landfill beyond 2014. The Council decided that the new time frame would allow landfilling for approximately 35 years, to coincide with the expiry date of ARC consents. The landfill area is shown in Figure 10.2.1.

The designation is identified by four areas which are referred to as Landfill Zones 1, 2 3 and Landfill Zone 1/Quarry. Each zone is also referred by descriptive names, such as "Excavation of Cover Material Designation".

Zone 1 and Landfill Zone 1/Quarry make provision for the disposal of refuse during the planning period having regard to the topography of the land, so that while full use can be made of material available within the area for covering refuse, the operation can be conducted with a minimum of detracting from the amenities of the neighbourhood. The combined areas currently designated at Whitford for landfill purposes (Zone 1 and Landfill Zone 1/Quarry) have a life of approximately 35 years.

The northern part of the designation, Zone 3 known as "Curries Farm", was purchased by the Council for the spray irrigation of leachate from the landfill. On 21 November 1994 Manukau



City Council granted a resource consent for the spray irrigation of treated leachate on to part of the land in the northern part of the designation.

The southern part of the designation, Zone 2 known as the "O'Brien Property" was purchased by the Council as a source of additional cover material, to the landfill, with the purpose of reducing the traffic and other effects of importing cover material from elsewhere.

Special conditions and restrictions are set out for each of the zones of the designated area for the future protection of the amenities of the area.

Council has undertaken the realignment and upgrading of sections of Ormiston Road in order to improve the principal route to the landfill and for the benefit of other road users.

The Landfill Operator also has a number of consents from the Auckland Regional Council covering aspects of the landfill activities. The rules in this Plan complement the conditions of the ARC consents and Council will take the ARC consents into account.

Recognising the need for correct loading of trucks and trailers carrying refuse through the City, access roads leading to the designated area will be patrolled at regular intervals (including weekends), by Council, and it will enforce its powers under its Bylaws and the Litter Act 1979.

Rule 10.2.8.1.1 Whitford Landfill Landfilling Designation (Zone 1): Purposes

- (a) Subject to the conditions set out in Rule 10.2.8.1.1.1, the area shown as "Zone 1" in Figure 10.2.1 may be used for the purposes of:
- A refuse landfill and for the ponding and disposal of leachate
 - Recycling and composting
 - Residents' transfer station
 - Recreational paths
 - Other activities ancillary to the above activities
- (b) In these conditions "Landfill Operator" means the Manukau City Council in its capacity as operator of the Whitford Landfill; and also includes a Local Authority Trading Enterprise (LATE) and where the LATE is not a company, the members of the LATE; or other successor or successors as operator of the Whitford Landfill.

Rule

10.2.8.1.1.1

Conditions

Restrictions on Footprint

- (a) The disposal of refuse shall be confined to the area showing the limits of refuse disposal in Figure 10.2.2 at the rear of this section.

PROVISO

No areas outside the Interim Footprint shown in Figure 10.2.2 at the rear of this section may be developed or used for refuse disposal except in accordance with the relevant parts of the Management Plan required under condition (d) and approved under condition (f)



General Requirements

- (b) The landfill and all associated activities, development and works (including post-closure aftercare) shall:
- Be designed, constructed, operated and maintained as a modern landfill in accordance with currently recognised good sanitary landfill practice
 - Be undertaken in accordance with such practice by persons appropriately qualified and experienced for the particular purpose
 - Comply in all respects with these conditions to the satisfaction of the Council's Director of Planning and Resource Management or other specified officer and any other statutory authority having regulatory jurisdiction over the matter
 - Proceed in accordance with the Management Plan referred to in condition (d) but as amended from time to time in accordance with these conditions of the designation. No development may proceed until the relevant part of the Management Plan has been approved
 - Be subject to compliance with all necessary resource consents from the Auckland Regional Council and any other applicable statutory requirements. (For the avoidance of doubt where any conditions attaching to any necessary resource consent or any other statutory requirements impose more stringent requirements on the landfill than these conditions, then the more stringent requirements shall prevail).
- (c) A residents transfer station and recycling facilities shall be established and maintained on the landfill site for so long as the site is used for refuse disposal purposes.

Management Plan

- (d) The Landfill Operator shall maintain and keep current the following plans and manuals ("the Management Plan"), the basis of which shall be the Landfill Management Plan held by the Council in its records on the Whitford Landfill and as subsequently approved by the Council. The Landfill Management Plan shall be completed no later than 3 months after the confirmation of the designation.

Plans and Manuals Comprising the Management Plan

Design Manual

Construction Manual

Monitoring Manual

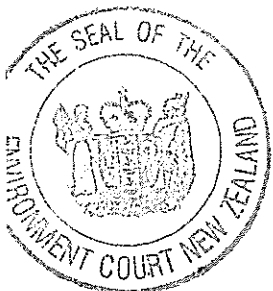
Operations Manual

Contingency Manual

Site Landscaping Plan

Post-Closure Aftercare Plan

- (e) The Management Plan (and any amendments) shall give effect to these conditions and



otherwise generally accord with the Outline Management Plan.

(f) Each part of the Management Plan (and any amendments) shall:

- Be subject to the approval of:
- The Council in consultation with the Peer Review Panel referred to in condition (j); and
- The ARC in relation to matters it is required to approve by legislation
- When so approved, be strictly adhered to at all times
- Be subject to review (including a review of the performance of the practices and procedures in the Plan) by the Peer Review Panel on an annual basis or earlier if required by the Council.

(g) Amendments shall be made to the Management Plan to incorporate:

- Requirements of the Council to ensure compliance with these conditions (including requirements made on the advice of the Peer Review Panel)
- Requirements of the ARC in relation to matters it is required to approve by legislation
- Changes sought by the Landfill Operator to give better effect to these conditions which have been reviewed by the Peer Review Panel and have the approval of the Council and the ARC where appropriate
- The requirements of any applicable enactment.

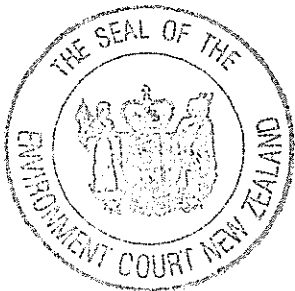
Any amendments required by this clause shall be incorporated without delay and shall form part of the approved Management Plan.

Matters to be covered in the Management Plan

(h) The Management Plan shall contain provisions dealing with the following matters:

Specific Condition References

- Waste Acceptance Criteria indicating categories of refuse accepted at the Landfill (w)
- Stages of development (-)
- The separation of existing and future areas of refuse placement (-)
- Right of access (r)
- Hours of operation (t)
- Categories of refuse accepted at the landfill (w)(x)(y)



- Liner construction (b)
- Site Access, internal roading, vehicle stacking areas and traffic management (u)
- Occupational Safety and Health (-)
- Mediation (p)
- Methods of handling and disposal of refuse including controlled waste (w)(x)(y)
- Refuse covering and capping (cc)
- Landscape amelioration, maintenance and restoration work (tt)-(xx)
- Litter control (mm)
- Recycling, residents waste transfer station and composting operations (c)
- Stormwater management (-)
- Leachate management (v)
- Landfill gas management (jj)
- Nuisance control (ll)-(pp)
- Monitoring and record keeping (qq)-(ss)
- Contingency plans (d)
- Emergency procedures (-)
- Site closure and rehabilitation (tt)-(xx)
- Aftercare requirements (yy)
- Community liaison (p)
- Cultural Heritage Sites (-)
- Such other matters as are considered appropriate from time to time by the Council (which may include matters drawn to its attention by the Peer Review Panel or the ARC) (-)



- (i) The Management Plan shall expressly require

- Compliance with these conditions

That gas wells and other permanent engineering features are located so as to be as unobtrusive as possible from adjacent land and to be compatible with the site Landscaping and Post-Closure Aftercare Plans

- That a layer of low permeability materials be constructed above the existing landfill to direct leachate from new refuse to new leachate collection drains. The layer shall be of such thickness and permeability as to ensure the minimisation of movement of leachate into the underlying refuse and the avoidance of adverse environmental effects.

Peer Review Panel

- (j) For the operating life of the landfill and such further period as the Council may require the Landfill Operator shall establish and maintain an independent Peer Review Panel

The composition of the Peer Review Panel shall be as approved by the Council's Manager - Resource Consents and Compliance, and the Auckland Regional Council following consultation with any Community Committee established under condition (p); and shall comprise not less than 3 nor more than 5 suitably qualified and experienced persons one of whom shall be the nominee of any Community Committee established under condition (p).

The objectives of the Peer Review Panel will be to ensure that the conditions of this Rule are met and to ensure that all engineering works authorised by the ARC achieve design specifications.

- (k) All reasonable costs of the Peer Review Panel in undertaking its functions set out in these conditions shall be met by the Landfill Operator.
- (l) The Peer Review Panel may co-opt other specialist members to assist in any of its functions for specified periods subject to the approval of the Council, and after consultation with the Landfill Operator. The Peer Review Panel shall appoint one of its members as convener.
- (m) The Peer Review Panel shall undertake all of the following functions save to the extent modified by the ARC in respect of matters over which it has jurisdiction:
- (i) Reviewing the adequacy of the various parts of the Management Plan prior to their initial approval by the Council and thereafter on an annual basis.
 - (ii) Being satisfied that conditions (a) and (b) are being complied with and that the landfill and all associated activities and works (including post closure aftercare) are adequate to ensure the ongoing containment of refuse and leachate.
 - (iii) Reviewing any proposed modifications to the design, construction, operation or aftercare of the landfill and all associated activities and works.
 - (iv) Taking such steps as are necessary to ensure that the following are undertaken to its satisfaction:
 - the monitoring of the construction and performance of the landfill liner



- the monitoring and testing referred to in condition (qq) the evaluation of the results of the monitoring and any consequential testing.
- (v) From time to time drawing to the Council's and the ARC's attention any changes to the management plan that it considers necessary or desirable and any other matter which, in the opinion of the Peer Review Panel, the Council or the ARC should deal with or be aware of.
 - (vi) Reporting to the Council at 6 monthly intervals, or sooner if required by the Council, on all the above matters as appropriate and otherwise describing the status of the landfill project, particularly with regard to compliance with these conditions.
 - (vii) Consulting with the Community Committee on any matters relating to the landfill at the same frequency as it is required to report to the Council and promptly providing the Committee with copies of its reports.
 - (viii) Consulting with and reporting to the Landfill Operator from time to time on the above matters.

General Duties of the Landfill Operator

- (n) The Landfill Operator shall:
 - Do all things necessary to enable the Council, any other relevant statutory regulatory authority and the Peer Review Panel to perform their functions, and without limiting that obligation, it shall supply those bodies with all information reasonably necessary for its purposes and permit access to the landfill site at all reasonable times.

Review of the Management Plan by Landfill Operator

- (o) The Landfill Operator shall undertake its own review:
 - Annually of all parts of the Management Plan for the purpose of ensuring ongoing compliance with these conditions
 - The Landfill Operator shall also report to the Council annually, summarising its annual review.

The Landfill Operator shall also prepare reports for the Council annually on:

- (i) Significant changes made to the design construction, operation or management of the landfill and all associated activities and work including aftercare.
- (ii) Environmental monitoring results in summarised form.
- (iii) Incidents involving non compliance with these conditions and actions taken to remedy them.

and five yearly on:

- (iv) Significant local or international advances made in any aspect of landfill design, construction, operation or management that may have benefits for the



Whitford Landfill, and how it is intended to incorporate them, if at all.

- (v) Details of any alternative methods of refuse disposal that could affect the future viability of the landfill operation.
- (vi) The effects of landfill traffic on the local road network that serves the landfill site taking into account overall traffic conditions at the time.

The first five yearly report shall be submitted to the Council on or as soon as practicable after 1 June 1999.

The reports shall in each case (with the exception of the report referred to in (vi)) deal with the preceding year or five years as appropriate.

Community Committee

(p) The Landfill Operator shall:

- Consult with tangata whenua and representatives of local residents (including the Whitford Residents and Ratepayers Association) to facilitate the establishment of a Community Committee comprising up to five representatives of those groups, a representative of the Landfill Operator and up to two representatives of the Council
- Ensure, as far as practicable, that those living in close proximity to the landfill and those living in the broader Whitford Community are represented on the Committee
- Discuss matters relevant to the landfill including, but without limitation, concerns and complaints of residents and aspects of non compliance and ways of alleviating them
- Disseminate information to the Committee about the landfill and about any future proposals for the landfill
- Ensure its representative attends meetings of the Committee on a quarterly basis or sooner if requested by the Council's Director of Environmental Management
- Ensure its representative attends any mediation held at the request of the Council's representative in the event of disagreement between the Landfill Operator and members of the Committee over matters relating to the landfill.

Archaeological

- (q) In the event of archaeological features being uncovered (e.g. shell midden, hangi, or oven stones, pit depressions, defensive ditches, artefact material or human bones), work is to cease in the vicinity of the discovery and the Manukau City Council, the New Zealand Historic Places Trust and the appropriate iwi authorities shall be contacted so that appropriate action can be taken. This includes such persons being given a reasonable time to record and recover archaeological features discovered before work may commence.

Right of access

- (r) Right of access to the Whitford Landfill for the purposes of refuse disposal shall be



restricted to the following users:

- (i) Refuse Vehicles
- (ii) Private vehicles of residents from within the area shown on Figure 10.2.3 at the rear of this section.

The Landfill Operator shall licence all Refuse Vehicles. All vehicles shall be required to display a registration number issued by the Landfill Operator. Vehicles not so licensed and displaying a registration number shall be prohibited from using the landfill except where a temporary licence is granted.

Return trips by Refuse Vehicles shall be limited as follows:

- During the operating life of the Quarry, while quarry product is being extracted and removed from the site, the number of return trips generated in any one year by Refuse Vehicles shall not exceed an average of 110 per day (12 month average), corresponding to a refuse quantity of 275,000 tonnes per annum.
- Once the Quarry has ceased to extract and remove rock from the site, but while final quarry remedial works are being undertaken, the combined number of return trips generated in any one year by Refuse Vehicles and quarry trucks shall not exceed an average of 210 per day (12 month average), provided, however, that the permitted number of return trips by Refuse Vehicles shall not be greater than 155 per day (12 month average), corresponding to a refuse quantity of 350 tonnes per annum.
- After completion of quarry remedial works, the number of return trips generated in any one year by Refuse Vehicles shall not exceed an average of 155 per day (12 month average), corresponding to a refuse quantity of 350,000 tonnes per annum.

- (s) The Landfill Operator shall require that all roads be fully enclosed or secured.

Hours of operation

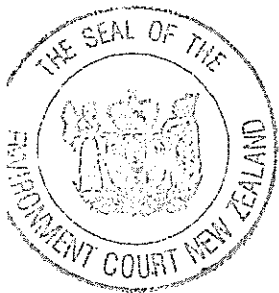
- (t) The hours of operation may not commence before 7.00am Monday - Friday, 7.30am Saturday and 11.00am on Sunday; and shall cease no later than at 6.00pm Monday to Saturday and 4.00pm on Sunday; subject to the following limitations and exceptions:

- (i) The landfill shall be closed on Good Friday, Christmas Day and New Year's Day; and where practicable on other public holidays having regard to the requirements of transfer station operations.
- (ii) The hours of operation may be extended to no later than 9.00pm (Monday to Saturday) for equipment maintenance works and office work only, except in cases of emergency.

- (iii) Delivery of refuse to the site shall be limited as follows:

Deliveries from commercial and industrial users:

Monday - Friday: 7.30am to 5.00pm



Saturday: 7.30am to 200pm, but extended to 5.00pm for Transfer Station transporters.

Proviso: On Saturdays following a week in which there is a public holiday these hours may be extended to 4.00pm for the commercial vehicles of Manukau City Councils domestic refuse contractors.

Deliveries from private users:

Monday - Sunday: 11.00am to 3.00pm

Site Access

- (u) Entrance gates across the access to the landfill shall be provided and locked outside the hours of operation of the landfill. In order to provide for circumstances where the hours of operation of the quarry do not coincide with those of the landfill, the quarry operator shall be provided with a key to the entrance gates to enable quarry vehicles to access the quarry during the quarry's hours of operation. For the avoidance of doubt, landfill trucks that are commercial and industrial users may park or "stack" on the area to be retained for stacking of vehicles shown on Figure 10.2.6 during the period shortly before 7.30am, but may not travel beyond that area until 7.30am

Initial Establishment Works

- (v) (i) The following works shall be undertaken as soon as practicable unless otherwise specified in general accordance with the relevant provisions of the Management Plan:

Earth embankment construction and screen planting along the Trig Road and Whitford-Maraetai Road frontages which shall be carried out progressively.

- (ii) In addition to v(i) above the ongoing maintenance of the following works are required:

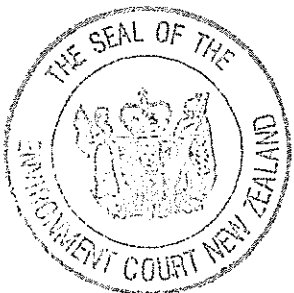
- Earth embankment construction and screen planting along the Trig Road and Whitford-Maraetai Road frontages
- Fencing of the boundaries of the designated areas shown in Figure 10.2.1 of Chapter 10.2 with a stock-proof fence.

Proviso:

Where areas abutting a boundary of the designated site are intended to be used for landfill purposes then the Council may waive this requirement in respect of the relevant part of the boundary.

- (iii) The following operational conditions shall apply:

- The retention of the existing access and entrance facilities off Whitford-Maraetai Road as indicated on Figure 10.2.2 of Chapter 10.2
- The retention of areas for stacking of refuse vehicles off public roads as indicated on Figure 10.2.6 of Chapter 10.2
- The continued upgrading of leachate treatment and storage facilities to



comply with any relevant resource consents.

Restrictions on Waste

- (w) Wastes disposed of to the Landfill must comply with the Whitford Landfill Waste Acceptance Criteria as set out in the Landfill Management Plan.
- (x) Permitted Waste - The categories of refuse permitted to be disposed of at the landfill shall be limited to the following:
 - General household, commercial or industrial refuse, but excluding prohibited waste
 - Clean fill
 - Offal and animal carcasses

Buffering

- (aa) A buffer zone of 30 metres shall be left between the landfill operations and the following boundaries of the site:
 - (i) The Whitford-Maraetai Road boundary.
 - (ii) The Trig Road boundary.
 - (iii) The boundary with Allotment 30, Maraetai Parish.

The buffer in (i) and (ii) (and in (iii) if required by the Council) shall be screened with planting and bunding and otherwise developed to present an attractive buffer and as far as possible to screen the landfill from nearby dwellings and adjoining roads; and to minimise noise generated by the landfill. The planting shall be augmented as necessary from time to time with an appropriate mix of indigenous species in order to maintain a vegetative screen at all times throughout the life of the landfill. Details of the development, planting and bunding shall be included in the Management Plans.

Refuse Placement and Cover

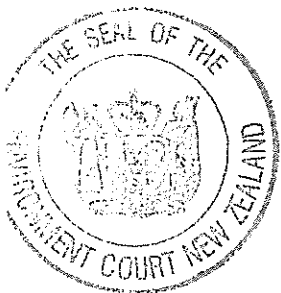
Explanatory Statement: Refuse placement and cover is controlled by a regional resource consent.

Noise

- (cc) Construction noise - construction noise from site development works and building construction on the site shall be as recommended in, and be measured and assessed in accordance with NZ 6803P" 1984 "The Measurement and Assessment of Noise from Construction, Maintenance and Demolition Work".

Construction activities shall be clearly identified in the Management Plan (Construction Manual).

- (dd) Landfill operations -The corrected noise level (L_{10}) of any landfill operations as measured at or within the notional boundary of any existing dwelling outside the landfill site shall not exceed the following limits:



Monday to Friday	7.00am – 6.00pm	55 dBA
Saturday	7.30am – 6.00pm	55 dBA
Sunday and all other times		45 dBA

Note: Notwithstanding the standards in this rule the Landfill Operator should aim at achieving a corrected L_{10} noise level of 50dBA at the notional boundary of any rural property between 7.00am and 6:00pm from Monday to Saturday, as a matter of good practice.

- (ee) The notional boundary shall be taken to be a line 20 metres from the facade of any existing dwelling or the legal boundary where this is closer to the dwelling.
- (ff) Subject to the express provisions of these conditions, noise levels shall be measured and assessed in accordance with the requirements of New Zealand Standards (NZS 6801:1991 Measurement of Sound and NZS 6802:1991 Assessment of Environmental Sound)
- (gg) The noise shall be measured with a sound level meter complying with the International Standard IEC 651 (1979): Sound Level Meters, Type I,
- (hh) A certificate from an acoustical engineer shall be given to the Council within seven days of its request and shall demonstrate that the above performance standards are being complied with. In the event of non-compliance, information shall be given to the Council setting out reduction measures to ensure compliance which shall be implemented forthwith.

Gas Emission

- (ii) A gas control system shall be installed progressively for the collection and burning or utilization of landfill gas so as to mitigate odours from gas. Details of the system shall be included in the Management Plan.

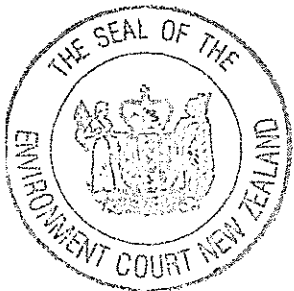
Protection of Ground Water and Containment System

- (jj) The Landfill Operator shall ensure that all necessary measures are taken to ensure ground water levels on site are controlled or other alternative measures are undertaken so as to provide in either case for the effective containment of leachate.

Nuisances

- (kk) Odour - Effective procedures to control discharges to air shall be implemented to ensure compliance with the conditions of any air discharge permit granted by the ARC under section 15 of the RMA. In particular but without limitation the following measures shall be undertaken to prevent that occurrence:

- Malodorous special wastes shall be accepted only by prior arrangement and shall be covered immediately upon acceptance. Furthermore, malodorous special waste shall only be accepted when there is sufficient fresh refuse or cleanfill available, and in any event no later than 3.00pm Monday to Friday.
- The collection and treatment of landfill gas shall be undertaken in accordance with the relevant conditions on the Air Discharge Permit granted by the ARC.



- The avoidance as far as practicable of practices which require excavation into old refuse
- The use of cover material as set out in condition (cc)
- The implementation of a policy of liaison with the producers of potentially odorous loads to minimise the occurrence of problems
- The use of odour neutralising or masking sprays.

(II) Litter - Effective procedures shall be implemented by the Landfill Operator to:

- Prevent the escape of litter from the landfill
- Ensure all reasonable steps are taken to keep the roads leading to the landfill and properties adjacent to the landfill free from litter
- Promptly clean up any materials dumped in the vicinity of the site entrance, including Trig Road
- Promptly, if so requested by the Council, remove any litter that appears to have come from the landfill operations.

(mm) Vermin, Insects, and Birds - Effective control and eradication procedures shall be implemented at the site to minimise the incidence of birds, rodents, insects and any other form of potential nuisance. Full details shall be set out in the Management Plan.

(nn) Dust and Mud Control - Effective control procedures including the following shall be implemented:

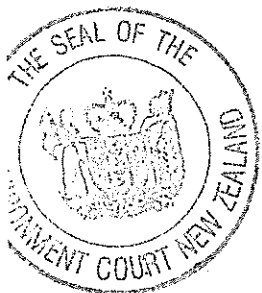
On site:

- Sealing the entrance road
- Sealing heavily trafficked permanent roads
- Cleaning roads where required
- The use of water sprays and water carts
- Maintain a permanent wheel wash and hose down facilities at an appropriate location

Off site:

- Cleaning of roads leading to the landfill to remove mud emanating from the landfill.

(oo) Fires - The intentional burning of refuse and any other material apart from the landfill gas is prohibited. The Landfill Operator shall maintain and operate a fire protection system to the satisfaction of the Council and any other relevant statutory authority having regulatory control over the matter.



Monitoring and Records

(pp) The Management Plan shall provide for a monitoring programme which shall be carried out by the Landfill Operator. The programme shall accord with the provisions of the Outline Management Plan on monitoring and provide for the monitoring and testing of the following during the landfill life and the aftercare period:

- Construction and performance of the landfill liner
- Ground and surface water
- Leachate
- Landfill gas
- Noise
- Other things or matters required to be monitored by the Council or the ARC.

Monitoring and testing shall be carried out with such regularity as is required by the conditions of the ARC consents provided that if there are no such consents applicable then the monitoring and testing should be carried out with such regularity as the Council or other relevant statutory regulatory authority requires.

Persons undertaking monitoring and testing for the Landfill Operator shall be approved by the Council or other relevant statutory regulatory authority after consultation with the Peer Review Panel.

The Landfill Operator shall permit the Council to have access to the landfill at all reasonable times for the purpose of any inspection or monitoring the Council might wish to undertake.

(qq) The Landfill Operator shall keep detailed records on the following:

- All monitoring activities and results including non-standard results
- Engineering works including civil, mechanical and electrical (which records shall include "as-built" drawings)
- Quantities of refuse (including details according to type) delivered to the site and/or removed from the site
- Placement of controlled waste disposed of on-site according to type and quantity
- Complaints
- Fires
- Special waste
- Test results
- Pest control
- Emergencies



- The contingency plan and its effectiveness
 - Failures or events contrary to these conditions or the Management Plan and the actions taken to alleviate the consequences.
- (rr) The Landfill Operator shall report to the Peer Review Panel monthly on the matters listed in (rr), and promptly comply with any request by the Panel or the Council or other relevant statutory regulatory authority for copies of the records required by condition (rr).

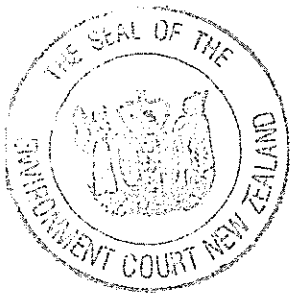
Completion Works and Closure Report

- (ss) All structures no longer required for the landfill shall be removed at the earliest practical opportunity on completion of their functions.

Prior to landfilling above RL90m within the shaded area indicated on Figure 10.2.5, ("the Shaded Area"), the Landfill Operator shall submit to the Peer Review Panel a report prepared in accordance with best industry practice that, amongst other things: (a) analyses historical settlement at the Landfill, (b) predicts the rate of settlement in the shaded area based on historical Landfill settlement patterns, and (c) identifies a fill sequence and pre-settlement fill contour plan for the Shaded Area that allows for a degree of over-filling. If the Peer Review Panel accepts the report and advises the Manager – Compliance Enforcement and the Whitford Landfill Community Liaison Committee in writing that it confirms the conclusions reached in that report then a degree of over-filling shall be permitted in the Shaded Area to allow for ongoing settlement. The degree of over-filling shall relate to the predicted rate of settlement identified in the report and ensure a settled profile in the Shaded Area will be achieved at or about the contour levels shown in Figure 10.2.5 within 5 years of final waste placement.

Each completed Landfill stage shall, as soon as practicable after completion of refuse placement in that stage be capped, topsoiled and landscaped so as to render the site suitable for an end use for public recreational and open space purposes. Subject to ARC permit conditions relating to the clay cap, any trees or shrubs to be planted on the finished Landfill shall be selected and located so that generally they will not grow to a height exceeding RL120 metres.

- (tt) As part of the Site Landscaping and Post-Closure Aftercare Plans, the Landfill Operator shall include detailed provisions, prepared in consultation with the Council, the Community Committee and owners of adjacent sites to give effect to the above requirements to the satisfaction of the Council.
- (uu) Capping shall be a minimum of 600mm depth of clay-based material and shall be compacted in at least 2 layers to achieve a permeability generally in the range of 10^{-7} to 10^{-8} m/second, or such alternative equivalent design as the Landfill Operator may propose, to the approval of the Auckland Regional Council, or through a resource consent. Capping in areas where plants are to be located must be sufficient to ensure that root systems do not penetrate the cap.
- (vv) The preparation of areas of rehabilitated landfill that are to be planted shall be adequate to ensure healthy planting and growth of grass, shrubs or trees or a combination thereof. Details shall be provided in the Management Plan.
- (ww) A closure report shall be prepared to the satisfaction of the Council and the ARC and submitted no later than 6 months after the last refuse is placed on the landfill site.



Time Frame

- (xx) The settled contours of the Landfill shall be within the envelope shown on Figure 10.2.5 (which shall be entitled "Whitford Landfill Post Settlement Contours"). With the exception of final restoration work, all landfilling on the site shall cease by the end of 2041 or such earlier year as specified in an ARC consent unless the period is extended by a resource consent. Final restoration work shall be completed as soon as practicable.

Post-Closure Aftercare

- (yy) The Landfill Operator shall:

- Be responsible on a continuing basis for:
 - the control of groundwater and stormwater
 - the collection and disposal of leachate and landfill gas, and
 - the post-closure aftercare of the landfill
 - for a period of 30 years or such longer period as the Council and/or the ARC require.
- Prepare a post closure plan to the satisfaction of the Manager – Compliance Enforcement, at least 10 years before the anticipated closure of the Landfill which will describe the measures that will be taken to prepare the Landfill for its future use. The plan will include an estimate of ground levels, planting/landscaping and final use proposals, estimate of truck numbers, and measures to control gas and leachate.
- Prepare a post closure aftercare completion report to ensure and demonstrate to the satisfaction of the Council, the ARC and any other appropriate regulatory authority that the Landfill is in a state that does not present or have the potential to present any risk or adverse effect on or to the environment, and that there is no need for any further control, treatment or measures of any kind to ensure the continuation of that state.

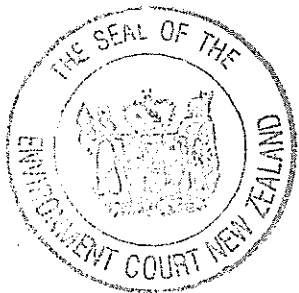
Post-Closure Aftercare Fund

Bond

- (aaa) Any person or body other than the Council which is involved as Landfill Operator of the landfill shall forthwith upon any written request of the Council enter into and maintain a cash (or equivalent) bond in favour of the Council and the Auckland Regional Council and drawn in terms satisfactory to the bond holders to provide security for early closure, environmental remediation, and post-closure aftercare; and

to ensure compliance with these conditions, the conditions of any resource consents and with the Management Plan and to provide security for the Council's costs and charges relating to these conditions.

The bond shall be for an initial sum of up to \$2.1 million, which sum shall be incremented by up to \$3.00 per tonne of refuse deposited at the landfill after 1 April



1994, up to a total sum not exceeding \$12.6 million. Both the bond fund and the increments shall be adjusted annually according to the Works Construction Cost Index, or other suitable alternative approved by the Council's Manager - Resource Consents and Compliance, and the Auckland Regional Council.

The actual amounts of the initial sum, the increments, and the total sum shall be fixed by the Council having regard to the proportionate interest of the relevant person or body in the operation of the Whitford Landfill.

Proviso as to review:

The maximum amounts of the initial sum, the increments and the total sum may be subject to review at the time of any review of the district plan or pursuant to any change to the district plan to ensure that those limits provide adequate security for the above purposes. In the event of any change in any of the above mentioned sums, the bond shall be amended accordingly.

Monitoring Charge

(bbb) The Landfill Operator shall pay the Council's reasonable monitoring charges relating to the conditions in this Ordinance as they fall due.

Community Fund

(ccc) The landfill operator shall from 1 July 1997 contribute to a Trust established by the Council for the benefit of the local community within the vicinity of the Whitford Landfill. Such contribution shall be a levy of:

- 50 cents per tonne for each tonne of refuse received from the District of Manukau and
- \$1 per tonne for refuse received from outside the District of Manukau.

These levies shall be reviewed by the Council at five yearly intervals with the first review to be made on 1 July 2011. The review may take into account, among other factors, any changes to the Consumer Price Index, with the Reference Index being the June Quarter of 2006.

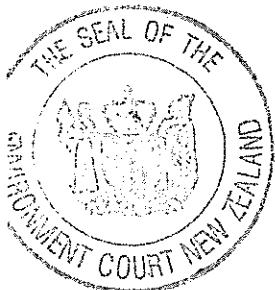
Maintenance of Internal Access Roads

(ddd) The existing sealed access road within the Joint Landfill/Quarry Area shall be maintained at all times to minimise the potential of body rattle due to uneven road surfaces. This access road shall be inspected on a 6 monthly basis as part of a detailed walkover with an engineer who shall report to the Landfill Community Committee on the works (if any) that may be necessary to minimise the potential for body rattle. The works shall be undertaken by the Landfill Operator in an expeditious manner and to the satisfaction of the Manager - Compliance Enforcement.

Rule 10.2.8.1.2 Whitford Landfill Excavation of Cover Material Designation (Zone 2): Purposes

Subject to the conditions in Rule 10.2.8.1.2 the area shown as Zone 2 in Figure 10.2.1 may be used for the purposes of:

- mineral extraction other than topsoil complying with the provisions of Rule 10.2.8.1.2.1 except that mineral resources extracted from the designated site may not be transported



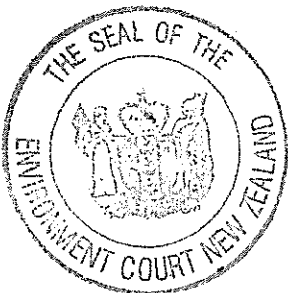
off the designated site.

Rule

10.2.8.1.2.1

Conditions

- (a) Before commencing any operations the Landfill Operator shall furnish an Excavation Management Plan to the Council which shall include the following information in plan form and in explanatory material:
- (i) demarcation of the area to be excavated
 - (ii) existing contours
 - (iii) final contours including proposals for the coordination of final levels of adjoining land
 - (iv) ultimate drainage of quarried lands
 - (v) an indication of the period over which quarrying will continue, and of staged development
 - (vi) location of buildings and plant
 - (vii) provision for the disposal and/or stockpiling of overburden, waste and excavated material, including the areas to be used for stockpiling
 - (viii) areas for stockpiling of topsoil
 - (ix) provision for screening unsightly features from public view and fencing dangerous or potentially dangerous features
 - (x) description of methods to be employed to prevent contamination of air or natural water and to comply with the noise provisions of these conditions
 - (xi) provision for the progressive restoration of the site such that the land will be left in a condition suitable for the establishment of those uses to which the land may subsequently be put
 - (xii) a landscape plan indicating the uses the excavated areas will be put to once the excavation has been completed.
- (b) The Excavation Management Plan and any amendments shall be subject to the approval of the Council and the ARC (in relation to matters required to be approved by ARC) in consultation with the Peer Review Panel referred to in Condition (j) of Rule 10.2.8.1.1.1 and when so approved shall be strictly adhered to at all times.
- (c) No excavation shall occur prior to an Archaeological Management Plan being approved by the Manager — Resource Consents and Compliance. The Archaeological Management Plan shall demonstrate that all necessary authorities under Historic Places Act 1993 have been granted by the Historic Places Trust.
- (d) No topsoil shall be disposed of by sale or otherwise permanently removed from the site except as may be specified in the Excavation Management Plan and approved by the Council.



- (e) No blasting shall occur on the site.
- (f) The excavated area and haul roads shall be wetted down on a regular basis during dry/windy conditions to the approval of the Council's Manager - Resource Consents and Compliance to mitigate any dust nuisance.
- (g) Noise conditions - The corrected noise level (L_{10}) of any excavation operations as measured at or within the notional boundary of any rural dwelling outside the site shall not exceed the following limits:

Monday to Friday	7.00am – 6.00pm	55 dBA
Saturday	7.30am – 6.00pm	55 dBA
Sundays and all other times		45 dBA

- (i) The notional boundary shall be taken to be a line 20 metres from the facade of any existing dwelling or the legal boundary where this is closer to the dwelling.
- (ii) The noise levels shall be measured and assessed in accordance with the requirements of New Zealand Standards (NZS 6801: 1991 Measurement of Sound and NZS 6802: 1991 Assessment of Environmental Sound)
- (iii) The noise shall be measured with a sound level meter complying with the International Standard IEC 651 (1979): Sound Level Meters, Type I.

Rule 10.2.8.1.3 Whitford Landfill Spray Irrigation Designation (Zone 3): Purposes

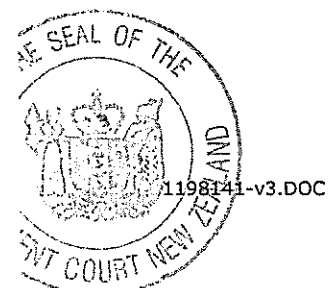
Subject to the conditions set out for each activity in Rule 10.2.8.1.3 the area shown as Zone 3 in Figure 10.2.1 may be used for the following purposes:

Rule 10.2.8.1.3.1

Conditions

- (a) The spray irrigation of treated leachate including the construction and operation of a leachate storage pond.
 - (i) The above activities shall be carried out in accordance with Land Use Consent 1360 granted by Manukau City Council and the technical information and plans B11/134 held by the Council.
- (b) Stormwater management and the construction of treatment facilities, ponds and wetlands.
 - (i) The above activities shall be carried out in compliance with resource consents granted by the ARC dated 5 December 1994 being Permit Nos. 939343, 939345, 939346, and 939348 -939357.
- (c) Mineral extraction
 - (i) The above activities shall be carried out in compliance with the provisions of Rule 10.2.8.1.2.1

Rule 10.2.8.1.4 Conservation Covenant



There shall be no activities inconsistent with the Conservation Covenant within the area subject to a Conservation Covenant (indicated as "Bush Protection Area" on Figure 10.2.1)

After the Quarry operations and remedial works have ceased the Requiring Authority shall, to the satisfaction of the Manager – Compliance Enforcement, in the Conservation Covenant area implement the weed and pest-animal control programme that has been established and approved in accordance with the Quarry Notice of Requirement, subject to any additions and alterations inserted by the Manager – Compliance Enforcement.

Explanation

In accordance with condition 2(d) of the Whitford Quarry Notice of Requirement a Conservation Covenant applies to the areas noted and identified as "Bush Protection Area" identified in Figure 10.2.1 in perpetuity to the effect that any native bush in that area shall not be damaged or destroyed ("the Conservation Covenant").

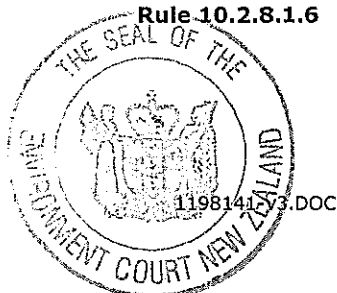
It is to be noted that the area to which the Conservation Covenant applies includes land designated as Landfill that is to be protected in order to mitigate the effects of the Quarry, not the effects of the Landfill.

Rule 10.2.8.1.5 Management of Cultural Heritage

The Landfill Management Plan shall incorporate suitable measures for monitoring of and avoiding adverse effects on cultural heritage sites, including but not limited to:

- (i) measures to protect the pa site RI 1/333 to the southwest of the Whitford Quarry extension area from damage from landfilling activities and any encroachment of heavy machinery, in accordance with accepted archaeological practice.
- (ii) involvement of Ngai Tai Umupuia in the identification and management of cultural heritage sites
- (iii) ceasing work in the immediate vicinity if subsurface archaeological evidence is unearthed during construction (e.g. intact shell midden, hangi, storage pits relating to Maori occupation, or cobbled floors, brick or stone foundation, and rubbish pits relating to Maori occupation), and contacting the Manukau City Council, Historic Places Trust and tangata whenua so that appropriate action can be taken. This includes such persons being given a reasonable time to record and recover archaeological features discovered before work commences.
- (iv) applying for an Authority to Modify under Section 11 of the Historic Places Act 1991, in addition to any required approval of the Manukau City Council, if modification of an archaeological site is necessary. (Note that this is a legal requirement).
- (v) in the event of human remains being uncovered ceasing work in the immediate vicinity and contacting the tangata whenua, Historic Places Trust and NZ Police so that appropriate arrangements can be made.

Rule 10.2.8.1.6 Outline Plan for O'Brien Block



An outline plan for work in the O'Brien block (Part Allotment 35 DP 15031 CT 778/186) in terms of s176A of the Resource Management Act 1991 will be required prior to the commencement of work. The plan shall include but not be limited to information about the depth of excavations for cover material, a plan of the excavation, proposals for protecting slope stability adjacent to the pa site and the covenanted area.

Note that if excavation is proposed on the O'Brien Block, including to the east of the Hog Hill Stream, a resource consent will be needed from the Auckland Regional Council.

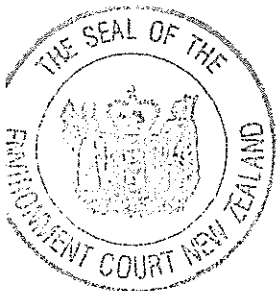
Rule 10.2.8.1.7 Coordination between the Quarry and The Landfill

Appropriate procedures shall be incorporated into the Landfill Management Plan to deal with coordination between the Quarry and the Landfill over issues including but not limited to, stormwater, noise and dust, and the Landfill Manager or other person responsible for the day to day operating of the Landfill, will be the first point of contact.

Rule 10.2.8.1.8 Height of Existing Water Tank Ridge

Landfill activities shall not lower the height of the existing water tank ridge / saddle immediately south of Contour Plan U (the area to be defined by a survey of the land undertaken in consultation with the owners of the property at 382 Ara Kotinga Road, Whitford, within 6 months of the designation being confirmed).

Additional screen planting shall be undertaken along this saddle in consultation with the owner of the property at 382 Ara Kotinga Road, Whitford, within 24 months of the designation being confirmed.



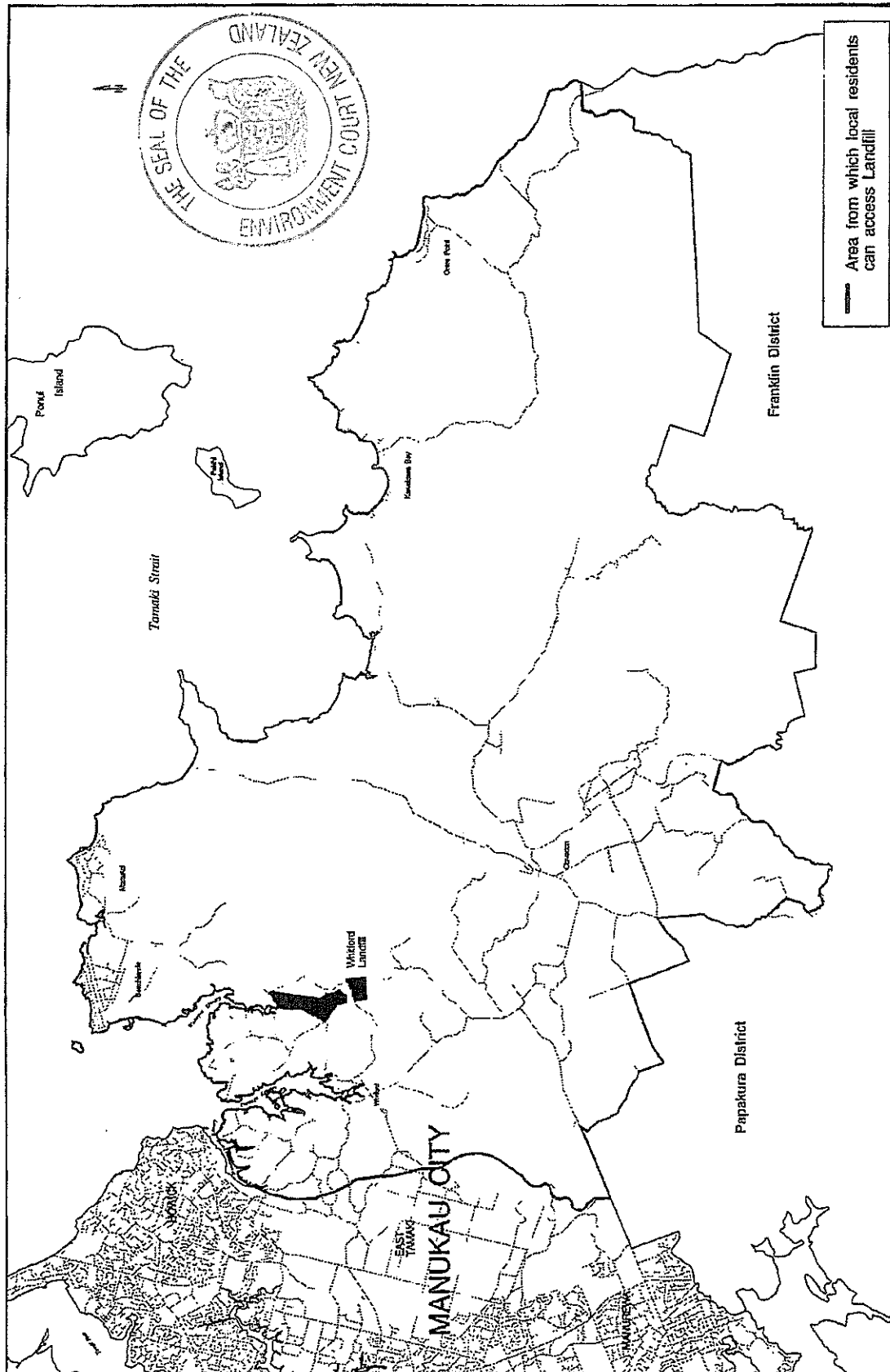


FIGURE 10.2.3 - AREA FROM WHICH LOCAL RESIDENTS CAN ACCESS LANDFILL

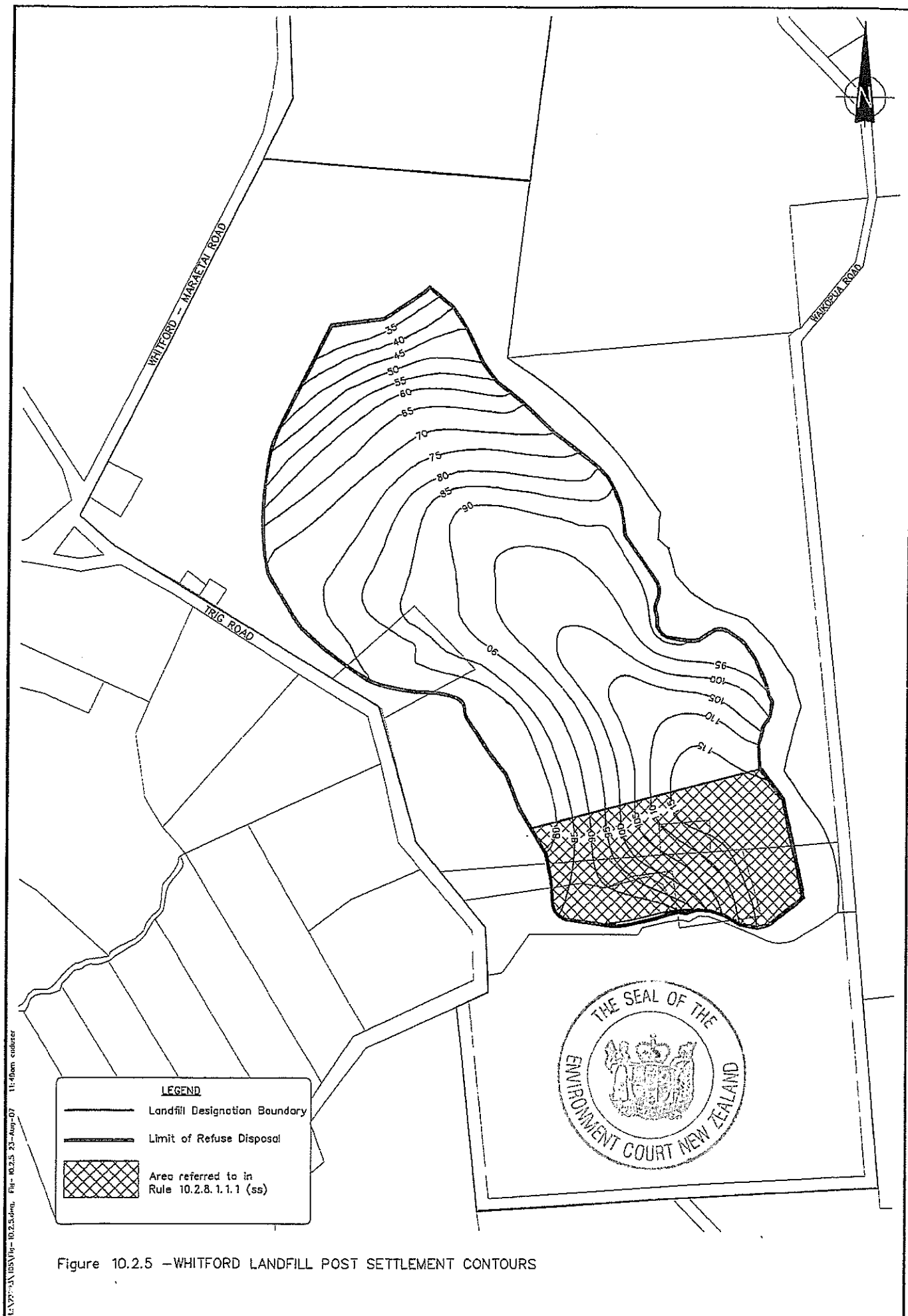
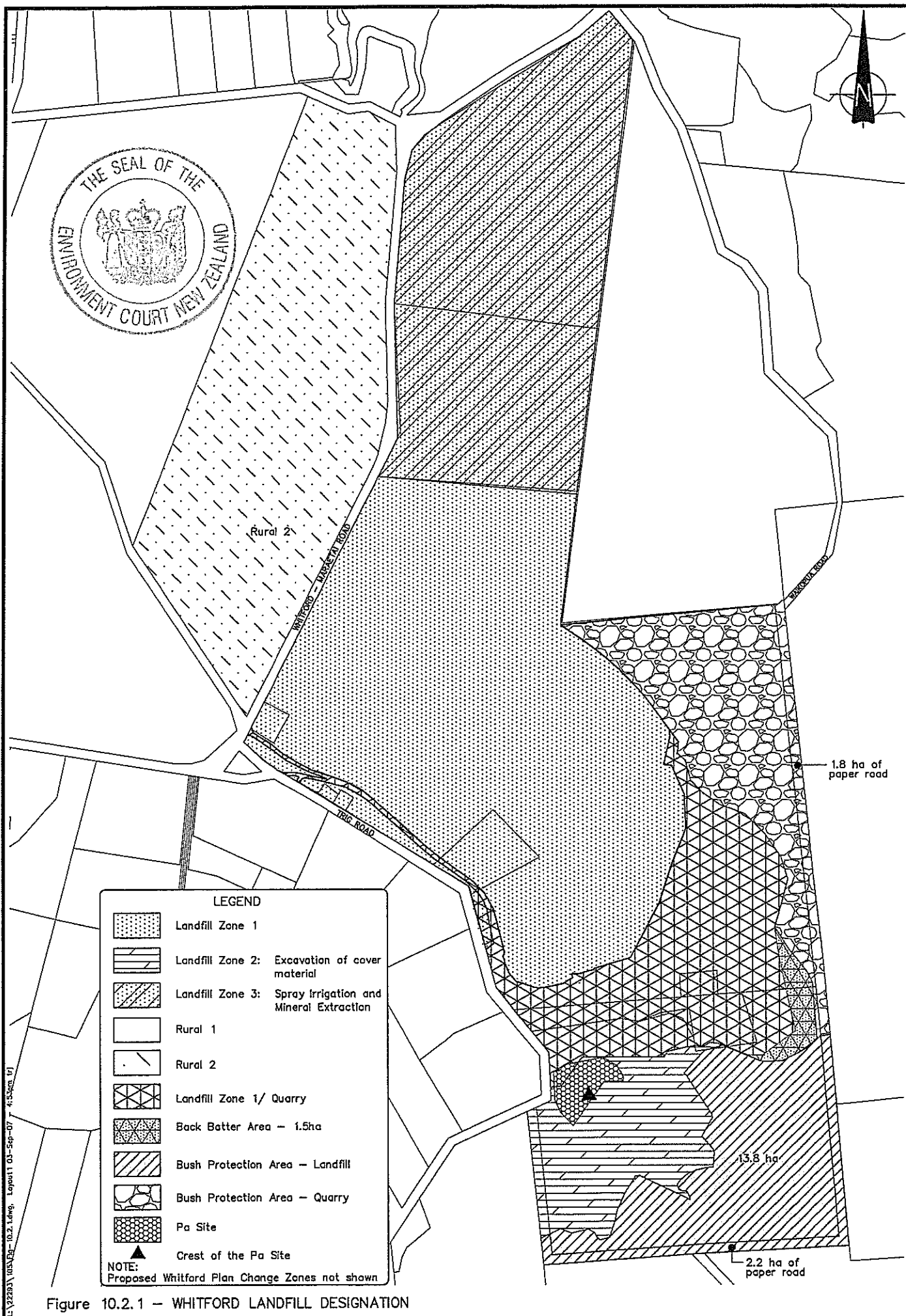


Figure 10.2.5 - WHITFORD LANDFILL POST SETTLEMENT CONTOURS



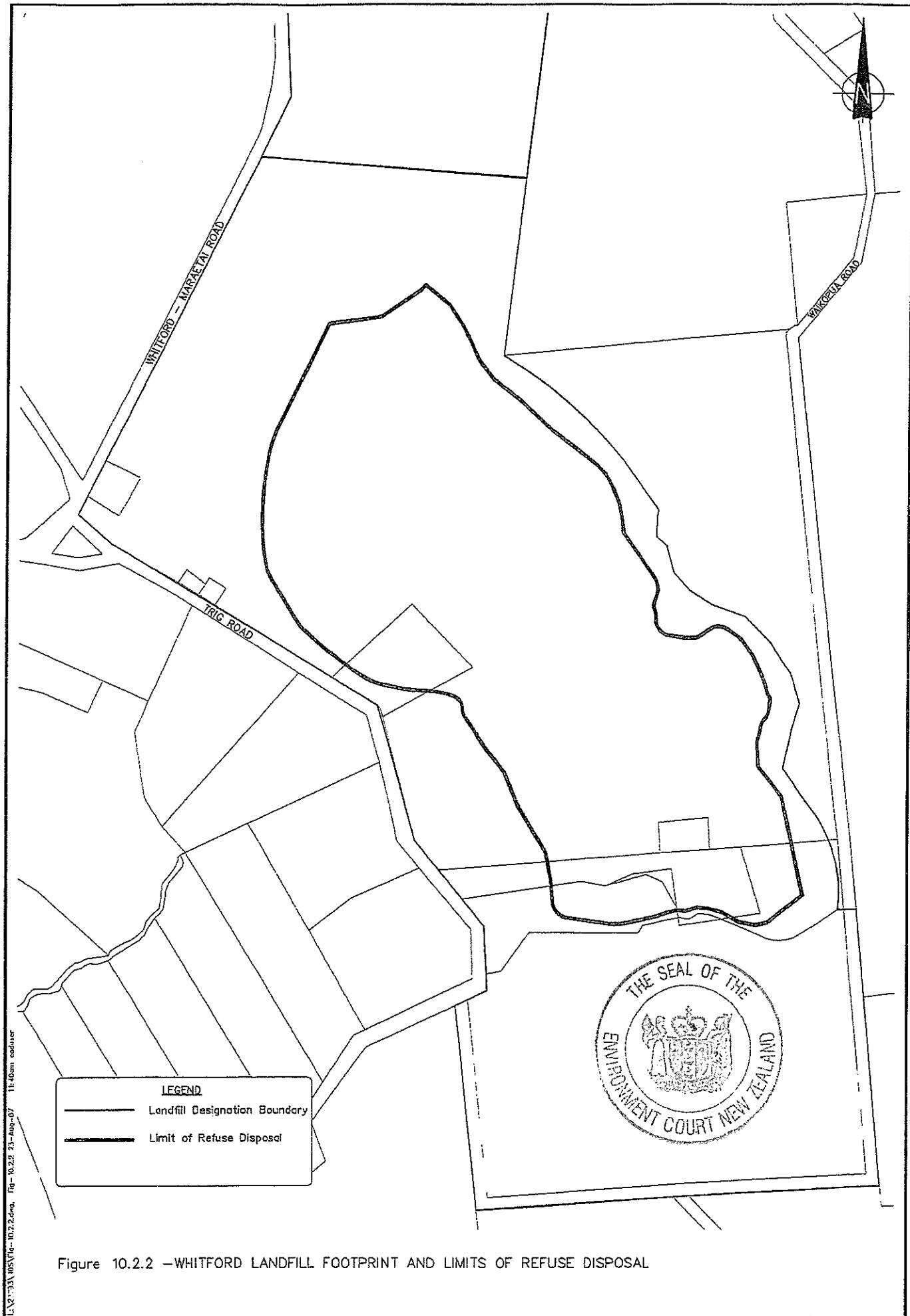


Figure 10.2.2 –WHITFORD LANDFILL FOOTPRINT AND LIMITS OF REFUSE DISPOSAL

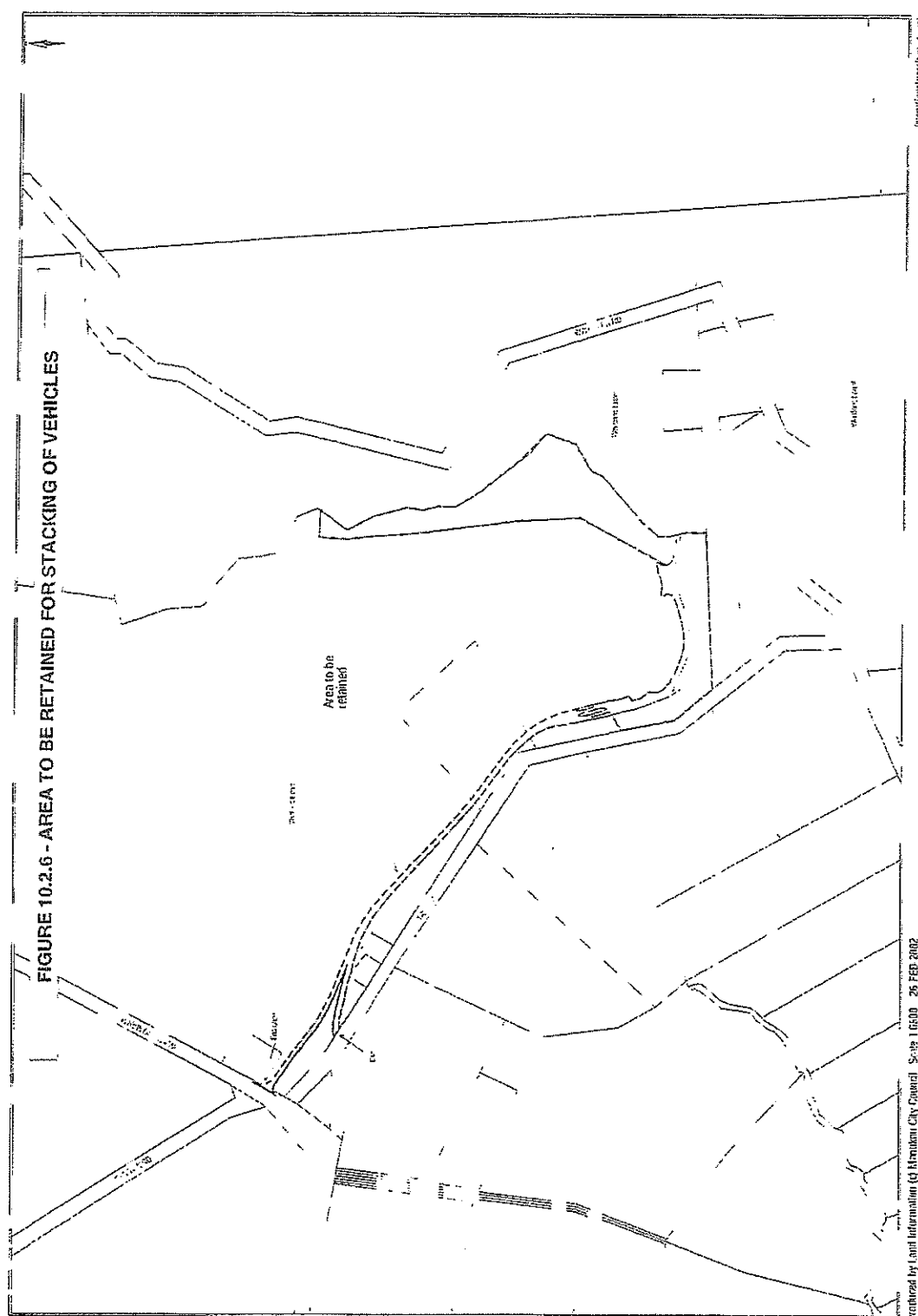


FIGURE 10.2.6 - AREA TO BE RETAINED FOR STACKING OF VEHICLES



