

Section B: Regulatory Design Guidelines

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B. REGULATORY DESIGN GUIDELINES

This section includes those Regulatory Design Guidelines prepared and approved by Council under the Resource Management Act 1991.

B.1 The North East Industrial Design Guide

B.1.1 Introduction

The North East Industrial Design Guide was prepared by Council and included within the District Plan as part of the North East Industrial Zone in June 2004. The North East Industrial Design Guide is a regulatory document and must be considered by Plan users as required by the provisions contained within section 12A and section 7 of Volume One of the District Plan.

B.1.2 Purpose

The purpose of the North East Industrial Design Guide is to establish a recommended approach to design that helps to achieve an integrated design vision for the North East Industrial Zone. The Guide aims to protect and enhance rural amenity values and to create an attractive, integrated industrial landscape within the North East Industrial Zone. Measures are incorporated within the Design Guide to mitigate the potential adverse impacts of 'unmanaged' industrial development, and to provide for environmental opportunities during the development of the Zone.

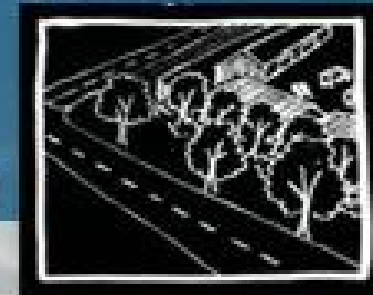
B.1.3 District Plan Volume One: Cross-Reference

The provisions outlined in section 12A and section 7, Volume One of the District Plan require all developments and resource consent applications within the North East Industrial Zone to be consistent with the North East Industrial Design Guide provisions.

NORTH EAST INDUSTRIAL DESIGN GUIDE



Palmerston North



June 2004

SECTION ONE

*North East Industrial Zone Design Guide
Palmerston North City Council
June 2004*

Preface

Industrial areas are a very important component of the economic well-being and development of the City. Palmerston North has established itself as a centre for manufacturing and distribution. The continued development and growth of industrial areas to meet the City's current and future needs is required if the City is to successfully compete with other regional centres and maintain its economic vitality.

On 24 July 2003 the Palmerston North City Council publicly notified Plan Change 14 and Variation 32 to the District Plan to enable the establishment and development of a new industrial zone in the north eastern sector of Palmerston North City (the North East Industrial Zone). The Plan Change and Variation signal a change from previous industrial area developments in that the Council recognises the need to have more environmentally focused and integrated industrial developments.



Future industrial development needs to take environmental considerations into account as part of its establishment.

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Purpose

This Design Guide has been prepared for the North East (NE) Industrial Zone. It establishes a recommended approach to design that helps to achieve an integrated design vision for the NE Industrial Zone. The Guide aims to protect and enhance rural amenity values and to create an attractive, integrated industrial landscape within the NE Industrial Zone. Measures are incorporated within this Design Guide to mitigate the potential adverse impacts of “unmanaged” industrial development, and to provide for environmental opportunities during the development of the Zone. These guidelines are to be used:

1. To provide people with information about the industrial and environmental needs and requirements for the NE Industrial Zone.
2. To provide both general and technical information for planning and design consultants assessing or preparing development plans and consents.
3. To provide decision makers with the necessary information to guide their assessments of development proposals.
4. To build on to and add greater depth of understanding and meaning to the NE Industrial Zone’s objectives and policies.

Target User Groups

The Design Guide is intended to be used by those seeking to develop within the NE Industrial Zone, and by Council officers and decision-makers considering and assessing proposals. It will also assist surrounding property owners and other parties to understand the intended environmental outcomes for the area.

This document has been developed specifically for the following user groups:

1. Wider community
2. Developers of the NE Industrial Zone
3. Developers of individual sites within the NE Industrial Zone
4. Councillors and Council officers
5. Resource Management Hearing Committees and Commissioners

Users of this document are encouraged to contact the City Council’s Development Services Division to discuss their development ideas or proposals at the earliest possible point in the planning and design process for development.

How was the Design Guide Developed?

The guidelines contained in this document, as well as District Plan objectives and policies, have emerged through a number of avenues of consultation with Councillors, professional practitioners, developers, and the general community. Information was gathered through the following sources:

1. Public open days
2. North east community public workshops
3. City wide and community consultation
4. Research & analysis
5. Discussions with developers, planners and designers

Design principles within these guidelines are based on sustainability objectives, best practices, and input received from community consultation. Principles and mitigation techniques proposed are those that promote an industrial area that is visually appealing, ecologically sensitive, protective of neighbouring amenity values, efficient, and mindful of the likely growth industries of Palmerston North.

Do I have to follow the Design Guide?

Throughout the Design Guide you will see black highlighted bullet points. The highlighted bullet points repeat key rules which are already included in the District Plan. These bullet points have been included in the Design Guide to ensure that the Design Guide and District Plan are applied consistently. Bullet points that are not highlighted refer to guidelines which offer suggestions and preferred means of ensuring that development achieves objectives and policies in the District Plan.

How will the Design Guide be used to Assess my Development Proposal?

Generally, the Council will be looking for consistency of applications with both the Design Guide and the Structure Plan. Assessments will seek to identify the extent to which the qualities and characteristics of a proposed development align with the industrial and rural values highlighted in this document. However, there may be good reasons for a different approach. An applicant would need to demonstrate the reasons for a departure from this approach and outline why an alternative approach would be preferred.

How Does the Design Guide Fit in Relation to Other Strategic City Plans and Documents?

This Design Guide has been designed to positively contribute to achieving the wider goals and principles of the Council's Strategic Plan, City Vision, and Economic Development Strategy. Specific goals include having a growing economy, livable urban environment, and a well managed physical environment.

Regional Identity

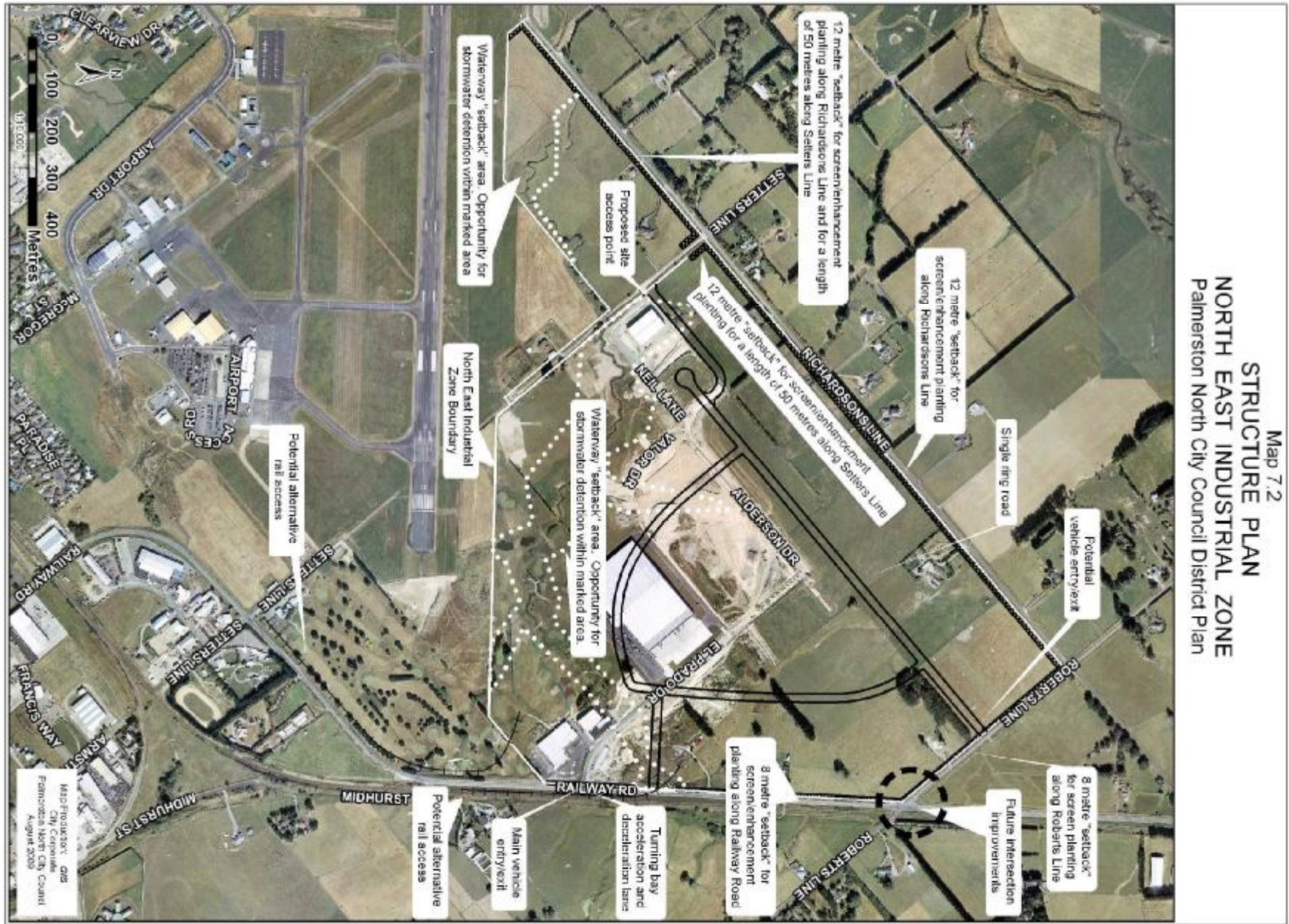
The City and regional identity of "Young Heart Easy Living" builds on the development of nine widely held community values and principles. The concept of Easy Business is captured in the decision to develop industrial zones for Palmerston North in that it will provide greater opportunities for current and new businesses to more easily meet their requirements.

How Does the Design Guide Relate to the City's District Plan?

The Design Guide is part of the City's District Plan and is linked to the Plan as part of resource consent compliance for certain controlled activities. The Design Guide is referred to in a number of the subdivision and land use policies in the District Plan. When a resource consent is needed, the Design Guide may be referred to in reaching decisions. It is one of the "other matters" referred to in section 104 of the Resource Management Act 1991 (RMA) under which decisions are made. Any changes and/or amendments to this Design Guide will be dealt with through the process set out in the First Schedule of the RMA.

What is the Structure Plan and How does it Affect my Development?

The Structure Plan is a subcomponent of the City's District Plan and sets out a mandatory development framework for the NE Industrial Zone. Components of the Structure Plan include a single internal ring road, buffer setback areas, stormwater detention area, and specified access requirements. The Structure Plan is illustrated on the following page.



Contact the Development Services Division of the Palmerston North City Council if you have any questions about this Design Guide and your proposed development.

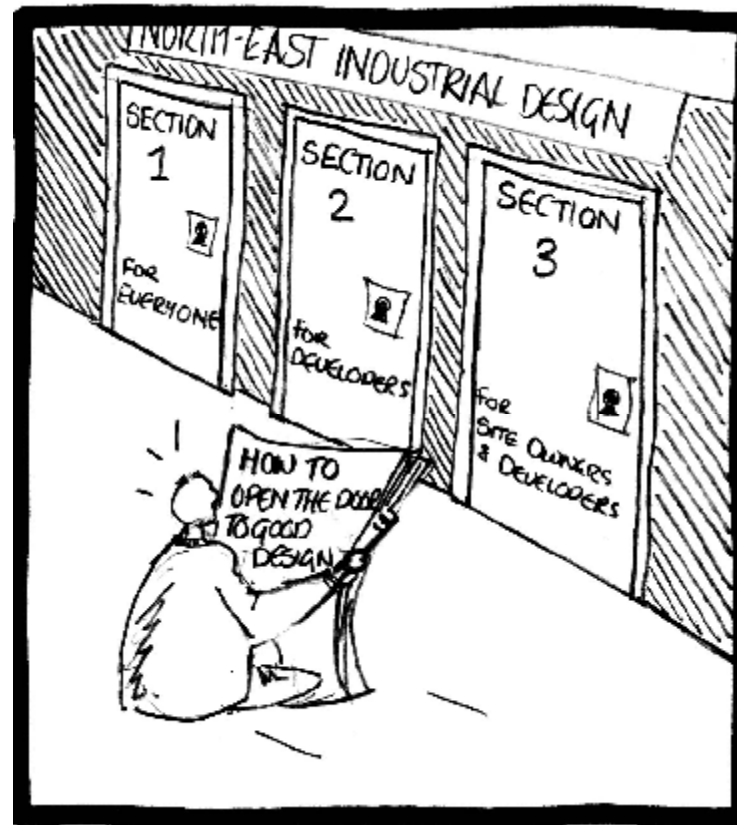
How to Use the Design Guide

The Design Guide has been developed and set out to provide user friendly, informative, and practical design guidelines that provides the widest range of opportunities for developers to meet their development needs while positively reinforcing wider community and environmental values.

The document is set out in three distinct sections. Each section of the Design Guide serves a different purpose.

Section 1

Section 1 provides necessary information for all user groups of the Design Guide. This section sets out NE Industrial Zone principles, values, goals, and objectives for the development of the NE Industrial Zone. It provides instructions on how to use the document and sets out a development vision statement.



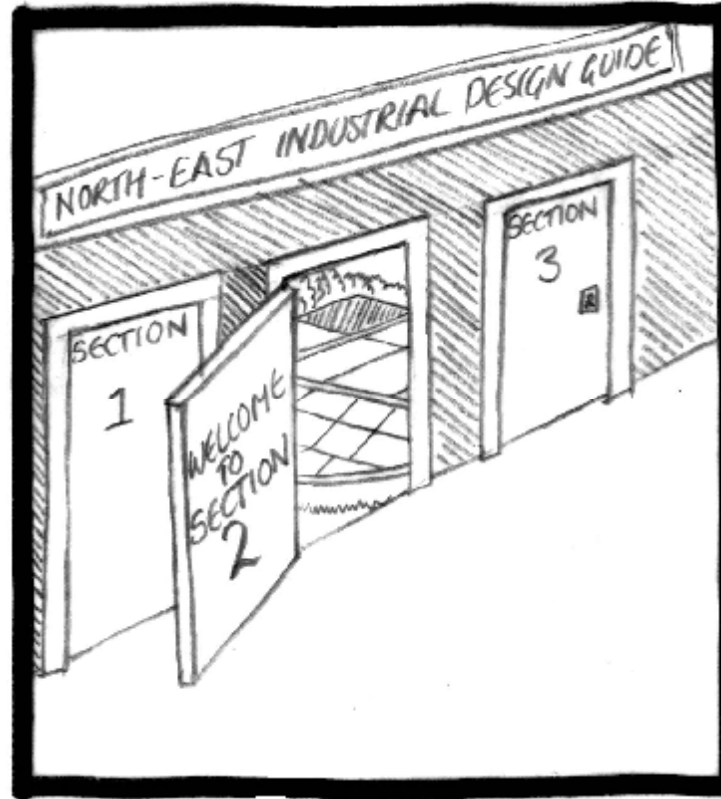
There are three sections to the NE Industrial Design Guide.

Section 2

Section 2 of the document is aimed primarily at developers, planning and design professionals, Council officers and other decision makers. Section 2 focuses on area (not individual sites) related design and development issues of the NE Industrial Zone.

Development issues and elements included in Section 2 relate to:

- Site and road layout
- NE Industrial Zone access
- Waterways
- Stormwater
- Boundary setback areas
- Planting
- Site contouring
- City Image and Experience
- Signage
- Pavement and furniture
- Lighting
- Fencing

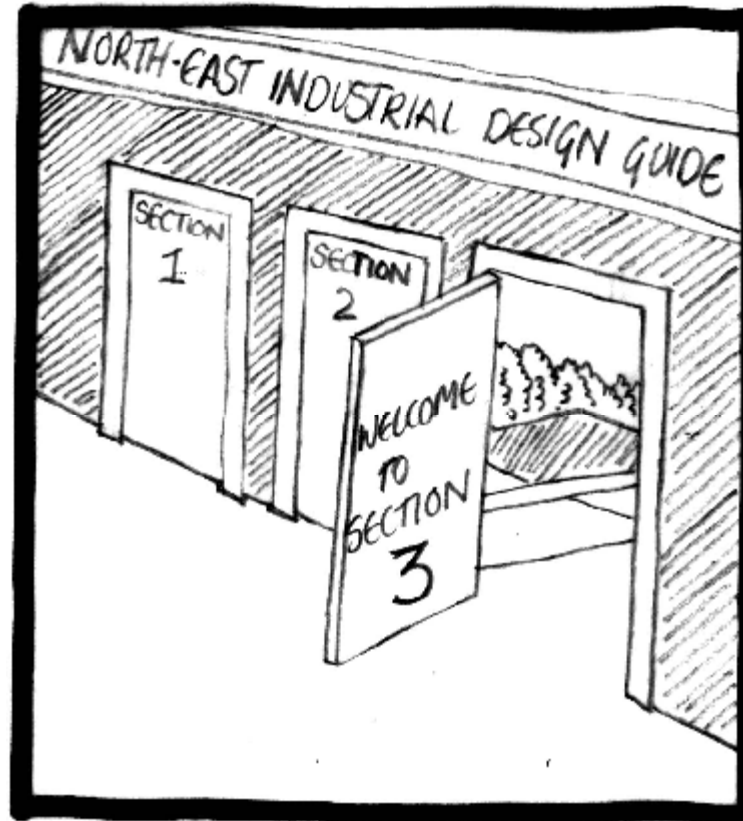


Section 2 of the Design Guide focuses on area related design and development issues.

Section 3

Section 3 is specifically oriented towards the developers of single sites within the wider development zone itself. Section 3 issues include:

- Stormwater
- Waterways
- Boundary setback areas
- Planting
- Site contouring
- Building site layout
- Building design
- Parking
- Signage
- Pavement and furniture
- Lighting
- Fencing



Individual site developers should refer to Section 3 of the Design Guide.

Sketches and Illustrations

The Design Guide uses a series of sketches and illustrations to provide greater clarity and meaning to the statements within the Design Guide, the policies and objectives of the District Plan, and the Structure Plan for the NE Industrial Zone. Illustrations are not intended to suggest that there are clear 'right' and 'wrong' solutions to development issues. Each development proposal brings with it, its own development circumstances, issues, and opportunities that require a unique set of design solutions that will work for a proposed development and the wider NE Industrial Zone.

For more Information

Council officers can help to answer any questions you may have on this Design Guide and how information it contains relates to your development.

For more information on this Design Guide please contact:

**Development Services Division
Palmerston North City Council
Telephone (06) 356 8199**



Illustrations are used throughout the Design Guide to provide greater clarity and meaning for users of the document.

NE Industrial Area Design Guide Development Vision Statement

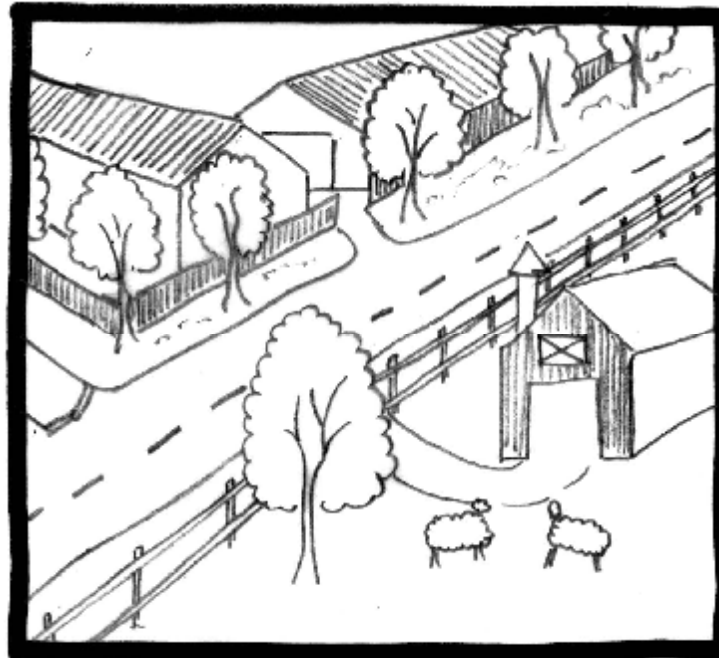
The development vision statement defines the essence and general “attitude” of the NE Industrial Zone design objectives. Collectively, the guidelines provided in this Design Guide work towards achieving this outcome.

Key Design Objectives

The key design considerations highlighted in this guide are:

- Designing an industrial area that is sympathetic to rural character and the amenity values of those living in the rural area
- Providing safe and efficient rail and road services to the site
- Providing a simple and efficient internal road layout
- Providing for large-lot industrial uses
- Providing adequate ‘setbacks’ with screen planting to mitigate adverse effects on surrounding rural values
- Protect and enhance existing waterways

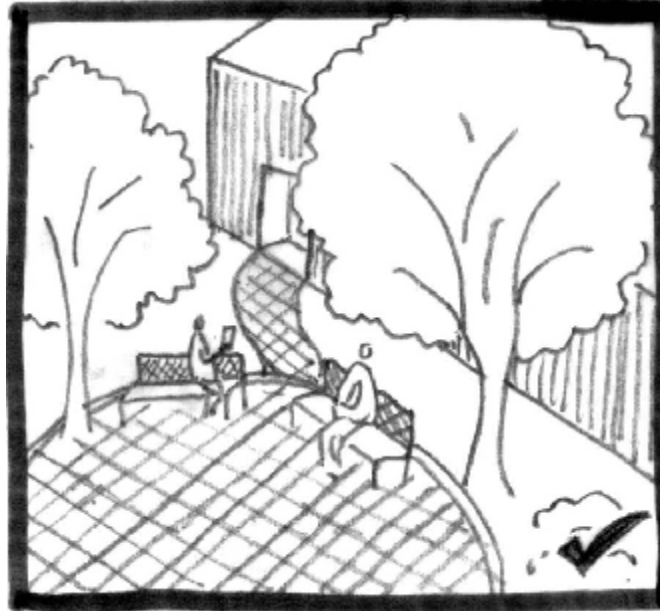
***“To Create a Functional Industrial
Development Area that is Integrated with,
Reflects, and Complements, Surrounding
Rural Amenity Values”***
*North East Industrial Zone Design Guide
Development Vision Statement*



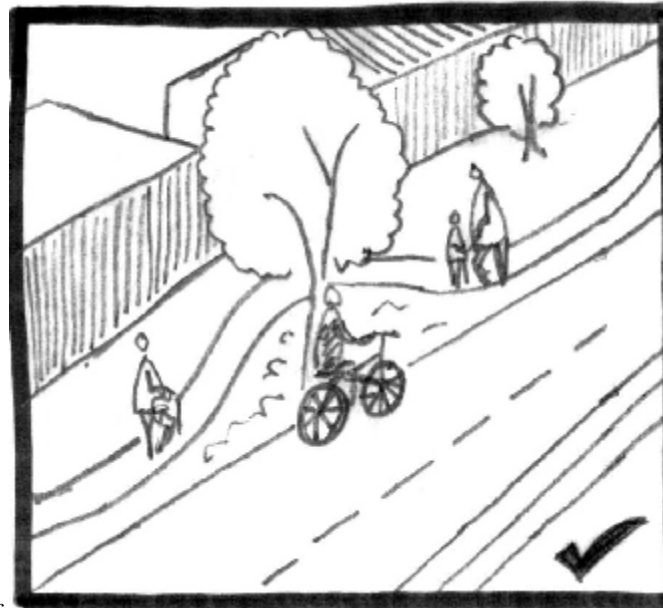
The development vision statement describes, in general terms, the type or nature of development that the Design Guide is trying to promote.

Key Design Objectives continued...

- Providing for stormwater detention within the Zone
- Designing buildings that are visually unobtrusive in the rural landscape
- Siting buildings to complement noise buffering
- Providing appropriate 'in-zone' planting and landscape treatment to maintain or enhance rural and industrial amenity values
- Providing outdoor/lunch/recreation space for workers and
- Providing opportunities for cycle and pedestrian access.



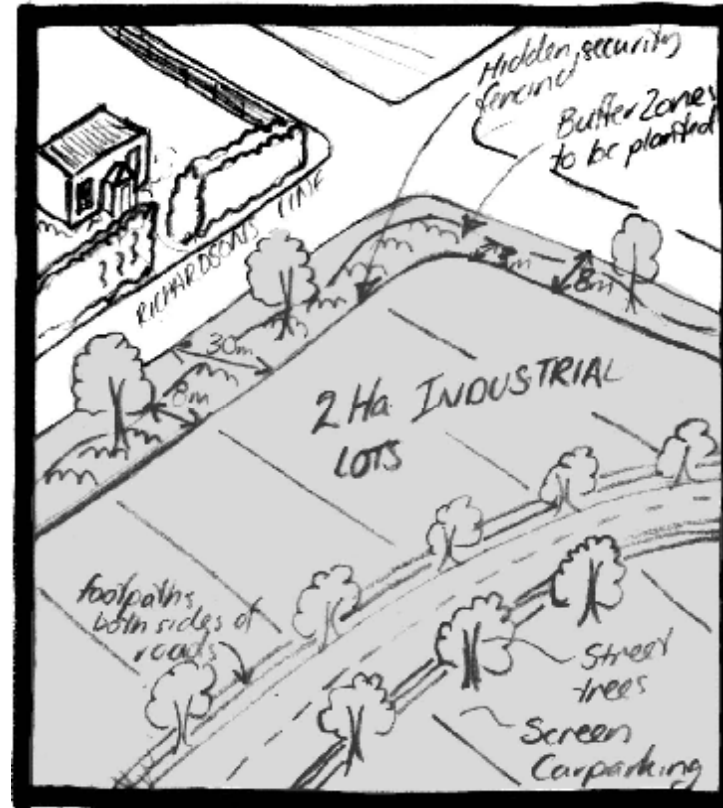
The design objectives promote opportunities for recreation, pedestrian and cycle access.



How will this Development Vision Statement be Achieved?

The strategy in this Design Guide is one that seeks to strengthen or enhance the principal values associated with both rural and industrial environments. Specific design strategies adopted to achieve this are:

- To visually contain conflicting industrial related elements and activities as much as practicable
- To strengthen key rural values by incorporating within the industrial development key elements and characteristics that lie at the heart of the rural character
- To primarily focus on the internal areas of the development site to achieve industrial development goals
- To promote development solutions that complement or enhance the key elements and characteristics associated with rural and industrial area values.



Ultimately, the development vision statement for the NE Industrial Zone will be achieved by developers who apply the principles and recommendations set out in this Design Guide.

How do we know if this Design Guide is Working?

Measuring the success of the Design Guide for the NE Industrial Zone will be determined through the day to day administration and monitoring of the District Plan. Assessing the nature and quality of applications and subsequent developments against anticipated environmental outcomes will help highlight the success or weaknesses of the Design Guide. This approach will also help guide the direction of the ongoing development and updating of the Design Guide to ensure that development goals, wider development, and environmental goals are being met.



The effectiveness of the Design Guide will be highlighted through ongoing monitoring and administration of the District Plan.

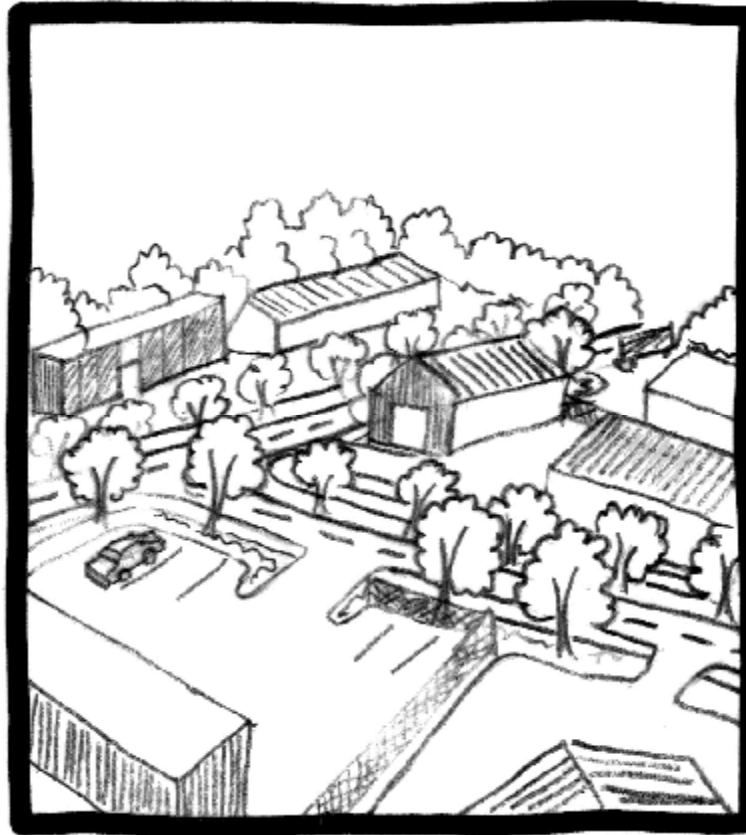
Principal Values, Key Elements, and Characteristics

The success of the NE Industrial Zone's development and operation depends on the extent to which the principal values of industrial areas and the surrounding rural values are sustained. This Design Guides encourages an approach to industrial development that helps to sustain both sets of values and to help to mitigate, avoid or remedy any adverse effects where values have the potential to conflict with one another.

Key Values Associated with Industrial Areas

Efficiency and function are the foremost values associated with industrial areas. To be successful, the NE Industrial Zone requires:

- Easy access to roading, rail, and other transportation corridors
- Safe, legible internal roading network
- Indoor and outdoor storage areas
- Medium density building sites, signs, car parking
- Adaptable, flexible modern buildings and building sites
- Extended and flexible operating hours
- Minimum lot area of 2 hectares



Rural values and industrial development values are equally important.

Key Values Associated with Rural Areas

The area surrounding the NE Industrial Zone is predominantly rural in character with rural residential 'lifestyle' lots. Within this area there are a number of key elements and characteristics that work together to create the rural environment and experiences that people value. These elements include:

- Open paddocks with intermittent belts of shelter trees (mostly exotic) along lineal property boundaries
- Mostly large sites and long continuous property boundaries
- Low density building development (or perception of) rural/industrial architecture
- Predominant application of rural/industrial building materials and colours, e.g. wood, wire fences, corrugated iron cladding
- Narrow roads, informal unformed footpaths
- Low level of related rural activity sounds, e.g. animals, tractors, farm bikes
- Views of the Ruahine and Tararua Ranges
- The presence of, and access to, 'natural' elements, e.g. native bush, water bodies, drainage areas.



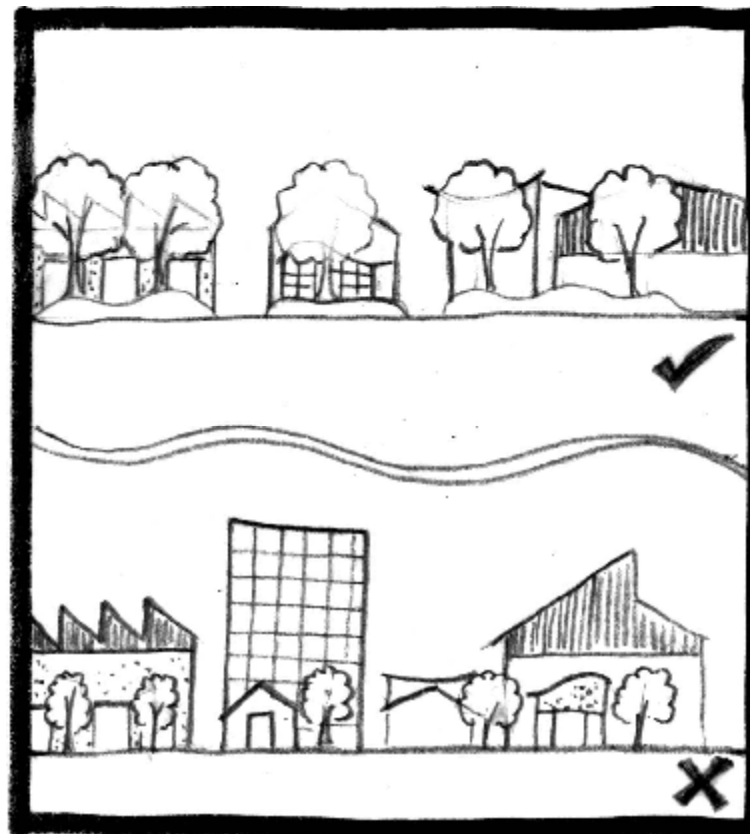
Rural character arises from the use and application of open space, plant materials, structures and building materials and design.

Key Aspects of Design

There are three key aspects of design that have the potential to significantly affect surrounding rural amenity values. These are:

- Building design, scale, and profile
- Use of building materials
- Use and application of plant materials and earthworks.

Successful development solutions within the NE Industrial Zone are those that are able to positively align these aspects of design with rural amenity values. Sections 2 and 3 of this Design Guide provide such solutions.



“Building scale and design can significantly alter its effect on surrounding amenity values”

How will Rural Amenity Values be Mitigated?

Amenity values of the surrounding area would be primarily maintained by:

- buffer set back areas comprising screen planting;
- limit on the placement and number of access points into the area;
- controls on building design and appearance, signage, landscape design.

The Design Guide and Structure Plan incorporate principles for the internal appearance of the NE Industrial Zone to enhance its look and amenity. Design principles have been outlined for site layout, building design and landscape treatments. There are also potential opportunities to enhance local amenity of the surrounding environment including:

- Management of water flow and water quality of upper tributaries of the Mangaone Stream
- Greater landscaping and screening of existing adverse views
- Providing a positive city image and experience
- Incorporating recreational routes such as walking/cycling paths where practically possible



Planting buffers and setback areas help to maintain surrounding rural amenity values.

SECTION TWO

***North East Industrial Zone Design Guide
Palmerston North City Council
June 2004***

young heart...easy living

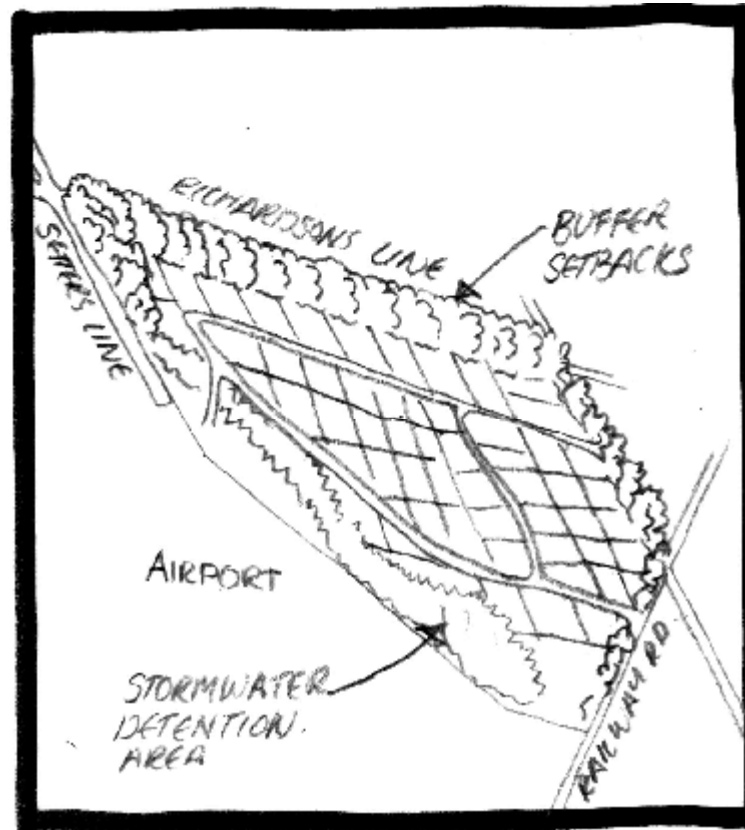
Section Two Introduction

Owners and developers of the NE Industrial Zone, including the Palmerston North City Council, will have a particular interest in this section of the NE Industrial Zone Design Guide.

This section of the Design Guide provides information that primarily relates to the layout and design of the wider NE Industrial Zone itself. This includes the layout and design of such integral components as buffer areas, stormwater detention areas, external road linkages, internal roading, and subdivision of industrial allotments.

If you have any questions about any part of the Design Guide, contact:

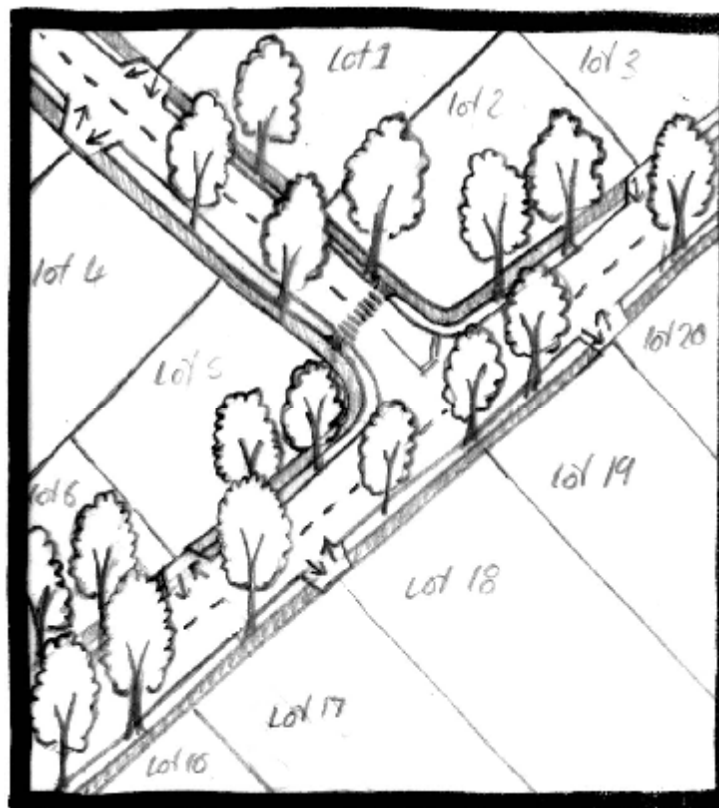
**Development Services Division,
Palmerston North City Council,
Telephone (06) 356 8199.**



Section 2 of the Design Guide provides design solutions for the wider NE Industrial area.

Site/Road Layout

- **Lots are to be a minimum size of 2 hectares.**
- Lots that contain waterways and gullies should be created in such a way that there is sufficient developable land for future land uses.
- **Road layout should be in general accordance with the Structure Plan (refer Section 1).**
- Plan the site comprehensively (i.e. in an integrated manner) so that the location of utility structures, services and spaces are part of an overall scheme.
- Provision of cycleways and pedestrian walkways are encouraged within the NE Industrial Zone along areas that are publicly accessible and safe.
- Footpaths and cycleways are to be paved to enable permanent all-weather access and easy maintenance.
- **Footpaths need to be provided along both sides of the internal road, in addition to any paths provided in amenity areas.**
- Connect internal footpaths and cycleways with local linkages or paths outside the industrial area where appropriate.

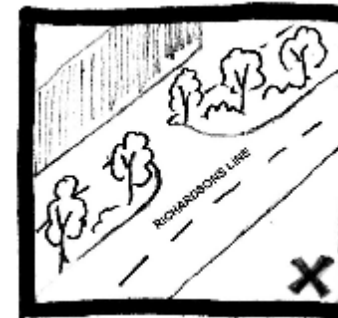
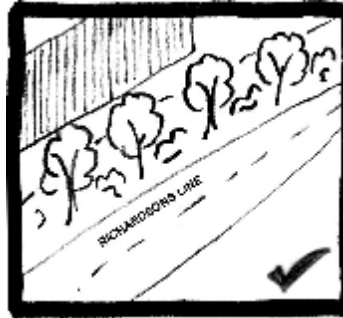


Development needs to meet Council's "Engineering Standards for Subdivision".

For further information on these standards, contact City Networks, Palmerston North City Council.

NE Industrial Zone Access

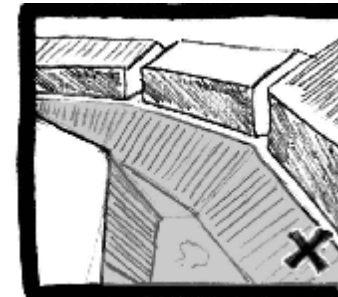
- The Provision of access to Richardsons Line and Setters Line (North) from the NE Industrial Zone requires assessment under Rule 12A.10.2 (non-complying activity)
- A minimum of two road entry/exit points must be provided. The preferred option for site access is off Railway Road. Alternative access off Roberts Line could also be considered.
- A single rail access off the railway line, crossing Setters Line (south) or Railway Road, is appropriate.
- Avoid creating level road rail crossings.



Developers need to refer to the Structure Plan for the NE Industrial Zone when designing access to the area.

Waterways

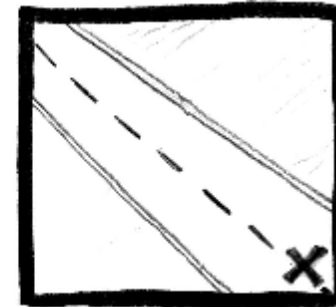
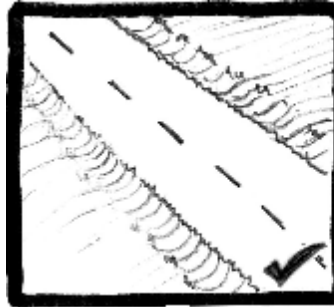
- Existing waterways are to be retained and enhanced as an attractive feature of the area as far as practicable, and are to be maintained by owners of industrial lots.
- A 10 metre setback [from its annual fullest flow] is to be provided for all activities along both sides of existing waterways.
- Public access within the waterway setback is encouraged where an adequate level of public safety and maintenance is achievable.



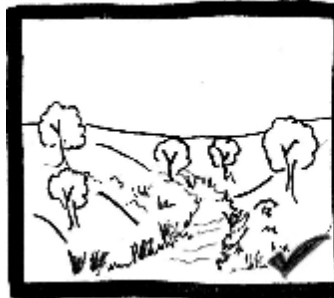
Enhancement of existing waterways will contribute towards achieving the key design objectives for the area.

Stormwater

- An on-site stormwater detention area is to be provided, in general accordance with the Structure Plan, to control water flow entering the Mangaone Stream and to enhance water quality. (Refer also to Rule 12A.8.3 Stormwater Detention Area).
- The stormwater detention basin is best designed to enhance local biodiversity. Refer to Plant Species List (Appendix 1).
- Stormwater from development areas could be diverted to the stormwater detention area via swales.
- Use grassed swales or 'layby' gutters to direct road runoff instead of concrete kerb and gutters within the industrial area.
- Use on-site vegetation areas to slow down run off rates and improve water filtration.



Grassed swales are preferred instead of concrete kerb and gutters.



Onsite vegetation slows run off and improves water infiltration.

Boundary "Setback" Areas

- The following "setback" areas are to be provided along these roads:

- 30m along Richardsons Line
- 20m along Setters Line (from Richardson's Line immediately south)
- 8m along Railway Road and Roberts Line

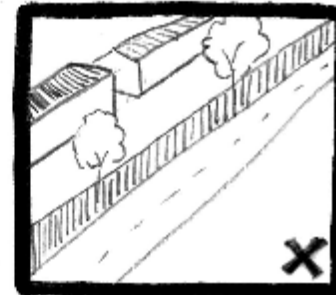
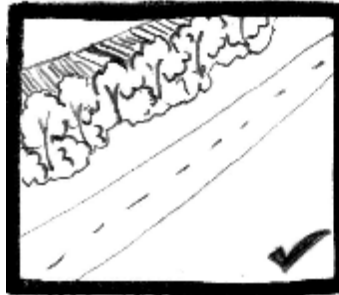
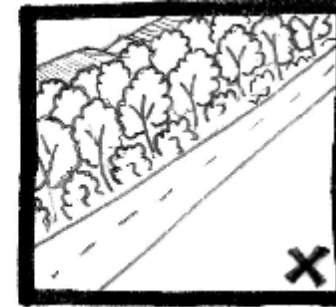
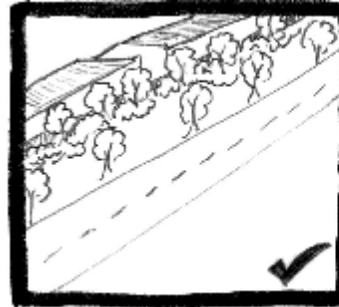
- All "setback" areas are to be planted with vegetation of an adequate depth and height to screen the industrial buildings from the adjoining rural properties. Such planting will be required to be done at the time of subdivision. Specific requirements will be incorporated in conditions of consent.

- The following standards are recommended as a minimum for screen planting in the buffer setback areas:

Height: trees to reach a minimum height at maturity of 9 metres; shrubs to reach a minimum height at maturity of 4 metres.

Width: Railway Road and Roberts Line: minimum width of 3 metres; Richardsons Line and Setters Line (North): minimum width of 8 metres.

- Open grassed areas (or areas with low vegetation only) of varying depth are desirable within the setback areas in front of the screen planting.



Buffer setback areas seek to provide a visual and amenity buffer between the industrial areas and nearby residents in the vicinity of the North East Industrial Zone.

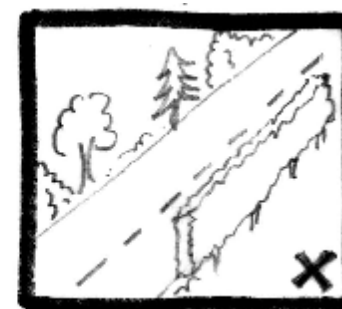
Buffer areas should consist of a mixture of planting and open space areas.

North East Industrial Design Guide

- Species selection is to comprise both fast growing species for initial screening, and suitable longer lasting species (refer to Plant Species List, Appendix 1).
- Setback areas need to be designed in consideration of traffic safety sightlines, provision of services, and other specific requirements at site access points.

Planting

- Employ a consistent landscape theme throughout the NE Industrial Zone, as promoted in this Design Guide. Preferred species are listed in the Plant Species List (Appendix 1).
- **Within the Airport Protection Surface (refer to District Plan Rule 20.4.10.1), use plant species with a mature height and habit consistent with the height restrictions.**
- Street planting is required along both sides of all public internal roads. Species are to be selected from the Plant Species List (Appendix 1).
- Planting design at intersections, crossings and other points of conflict requires consultation with the Roading Section of Council to ensure good sightlines are achieved.
- Use locally native species, particularly in areas such as the waterway setback areas, to add natural character and encourage local biodiversity.



Develop a consistent landscape theme



Seek to add natural character and local biodiversity.

North East Industrial Design Guide

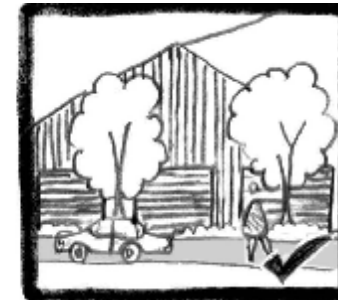
- Rural shelterbelt species are generally considered appropriate for use in boundary setbacks, however, alternative planting palettes will be considered on a case by case basis.
- All planting is to be maintained to a high standard by the owners of the industrial lots.
- Keep dense vegetation, structures and other visual obstructions well clear of footpaths and cycleways.
- Planting (in accordance with the Plant Species List, Appendix 1) is to be included in amenity areas, such as lunchtime areas, and along publicly accessible routes.
- Existing vegetation could be retained and incorporated into the layout of the industrial area as part of a site landscape plan (pest species excepted).



Dense vegetation can make footpaths unsafe for pedestrians

Site Contouring

- Existing natural landforms could be changed (or modulated) to create berms screening industrial buildings from view, enhance water detention/water quality and, visually separate areas or enhance areas within the NE Industrial Zone.
- Earth mounds may also be used within boundary setback areas to reduce noise impacts.



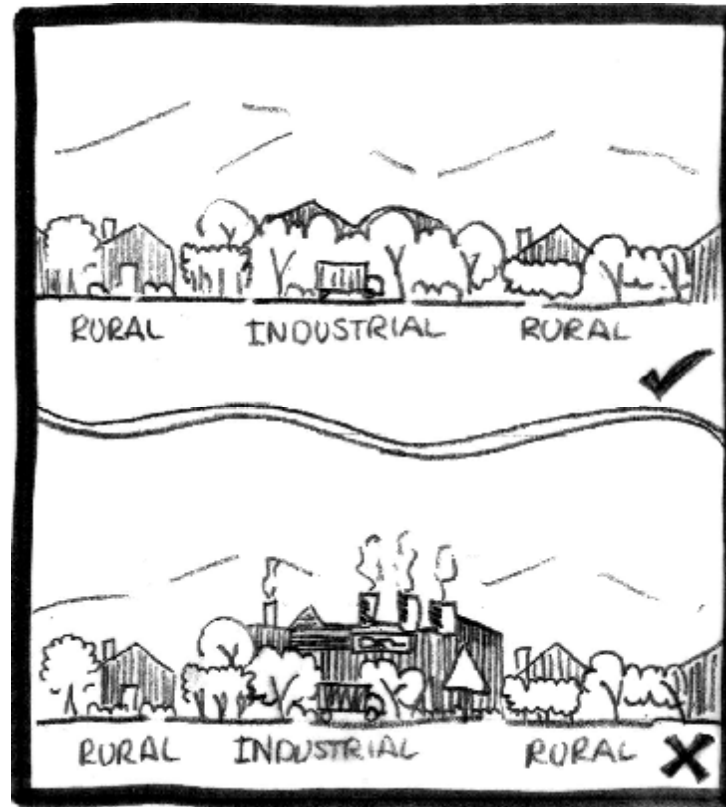
Site contouring can help screen buildings and car parks from view.

City Image and Experience

All public roadways are important generators of people's perception of a city's image and experience. Landscape treatments, including setbacks along the entrance roads to the City, e.g. Railway Road and Roberts Line, will influence how well the NE Industrial Zone fits in with, and contributes to, a single and cohesive city image and experience.

Important considerations to take into account regarding City Image and Experience include:

- Setback distances
- Depth of planting
- Species selection and composition
- Consistency of appearance of plant species.

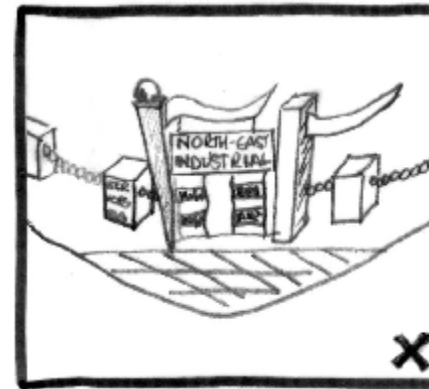
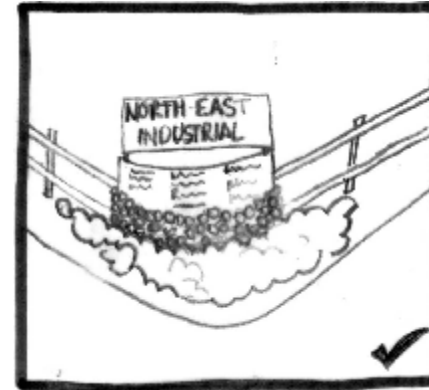


Well integrated industrial area

Poorly integrated industrial area

Signage

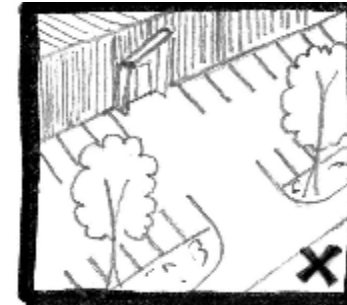
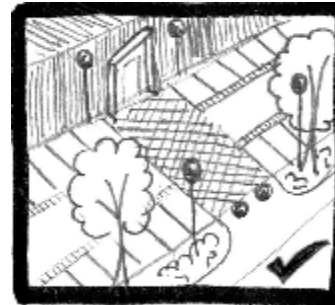
- Entry signage to the NE Industrial Zone may be appropriate to create a 'gateway'. Use of local materials, colours and textures that enhance the 'fit' of the gateway into the rural environment is appropriate.



Design entry signage to fit with the surrounding rural environment.

Pavement and Furniture

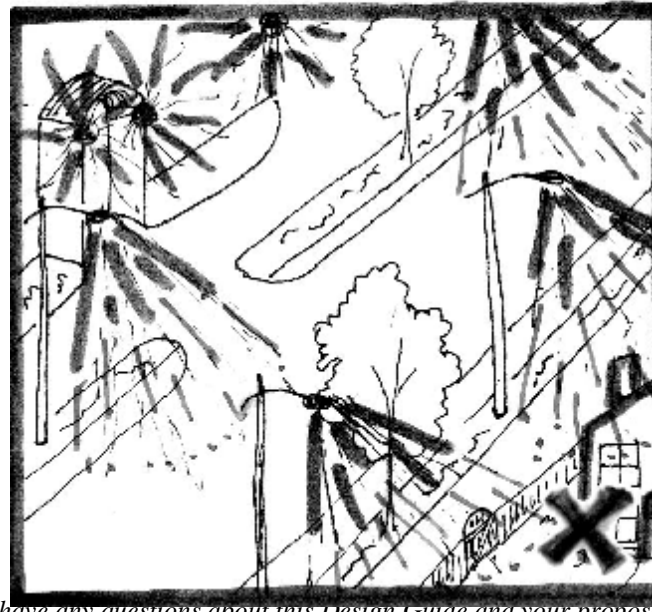
- Landscape treatments in the form of paving, bollards and furniture are appropriate to improve the function and appearance of the NE Industrial Zone.
- Coordinated paving for footpaths that creates interest with pattern, texture, and colour is encouraged, in place of large expanses of concrete.



Use furniture and coloured paving treatments to soften the appearance of industrial sites

Lighting

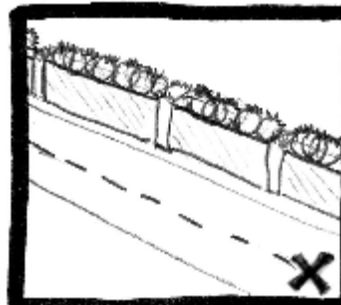
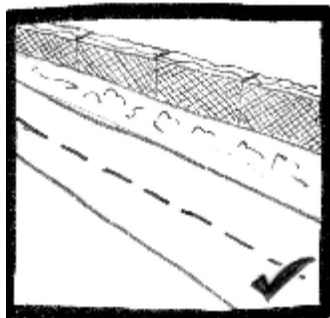
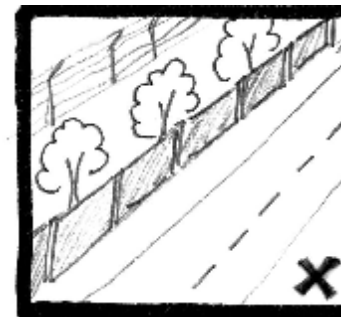
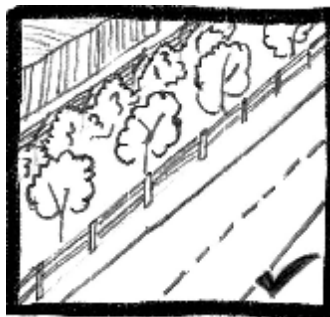
- Provide lighting for all public roads and footpaths for site safety and security.
- Ensure lighting is aimed toward the area in need of illumination.
- Avoid over lighting.
- Lighting is not to adversely affect the Airport, nearby dwellings, or the safe and efficient operation of the roading network.
- A coordinated theme of colours and styles of lighting poles in public areas are encouraged that are of scale and character appropriate to the rural character.
- Lighting design shall be in accordance with the AS/NZS 1158 series of standards.



Lighting needs to be designed to ensure adverse effects within and outside of the industrial area are not created.

Fencing

- Fencing along external boundaries (i.e. that follow buffer setback areas) shall complement local rural fence design and shall be no higher than 1.2 metres in height.
- Security fencing is not to be visible from external roads.
- Walls and solid fencing used along property boundaries should be of a design that complements the high quality image of the NE Industrial Zone.
- Hedges and shelterbelts may be used in place of fencing, and may be incorporated within planting, where there are no issues of public safety.
- Fencing, where required, along publicly accessible boundaries is to be visually permeable to enhance public safety, promote an open character and visual quality within the NE Industrial Zone.
- Where security fencing is required, visually permeable fencing is preferred, e.g. chain-link fencing.



Careful design of fencing will ensure adverse visual and safety effects are appropriately addressed.

SECTION THREE

***North East Industrial Zone Design Guide
Palmerston North City Council
June 2004***

young heart...easy living

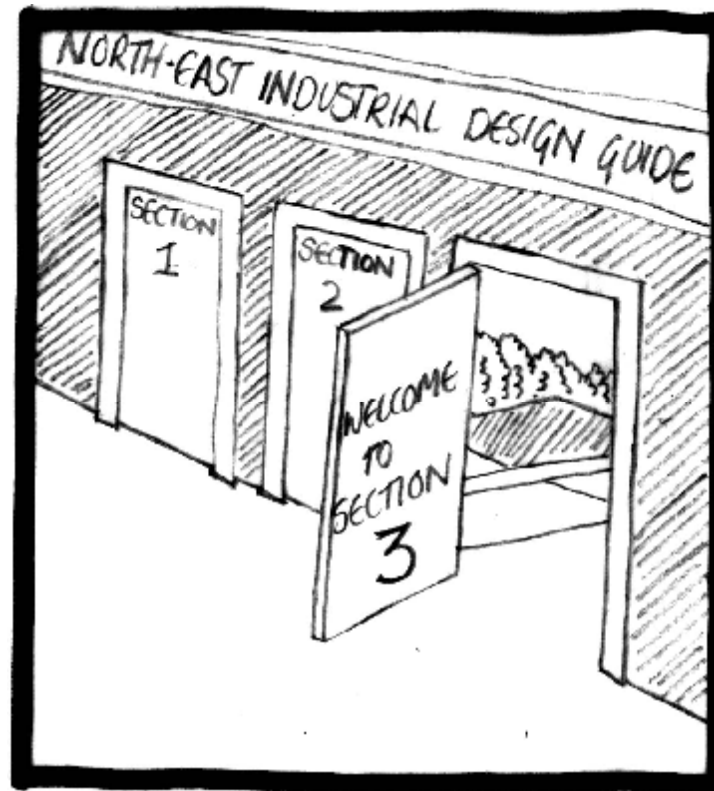
Section Three Introduction

The owners, developers, and operators of individual sites within the NE Industrial Zone will have a particular interest in this section of the Design Guide.

This section of the Design Guide provides information that primarily relates to the detailed layout and design of individual sites and their relationship to the wider NE Industrial Zone and surrounding external rural areas. This includes the layout and design of carparks, landscape treatments, fencing, signs, building location and design, outdoor storage and parking areas.

If you have any questions about any part of this section of the Design Guide, contact:

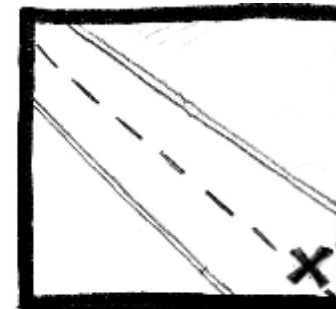
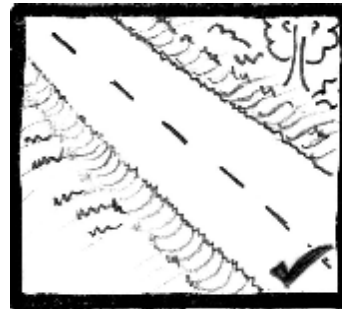
**Development Services Division,
Palmerston North City Council,
Telephone (06) 356 8199.**



Section 3 of the Design Guide provides information related to the design of individual industrial sites.

Stormwater

- Alterations in the storage capacity of the stormwater detention area are subject to Rule 12A.8.3 of the District Plan.
- Stormwater from lots is best diverted to the waterway via swales.
- Grassed swales or 'layby' gutters are preferred to direct road runoff.
- A minimum 10% permeable surface area is desirable to allow for some on-site infiltration of runoff and adequate 'landscape' area within each site. Permeable surfaces could be used for infrequently used hard surface areas or gardens.
- It is preferred that all permeable surfaces are treated (such as through grassing, planting, porous paving) to prevent wind blown dust.
- Use on-site vegetation areas to slow down run off rates and improve water filtration.



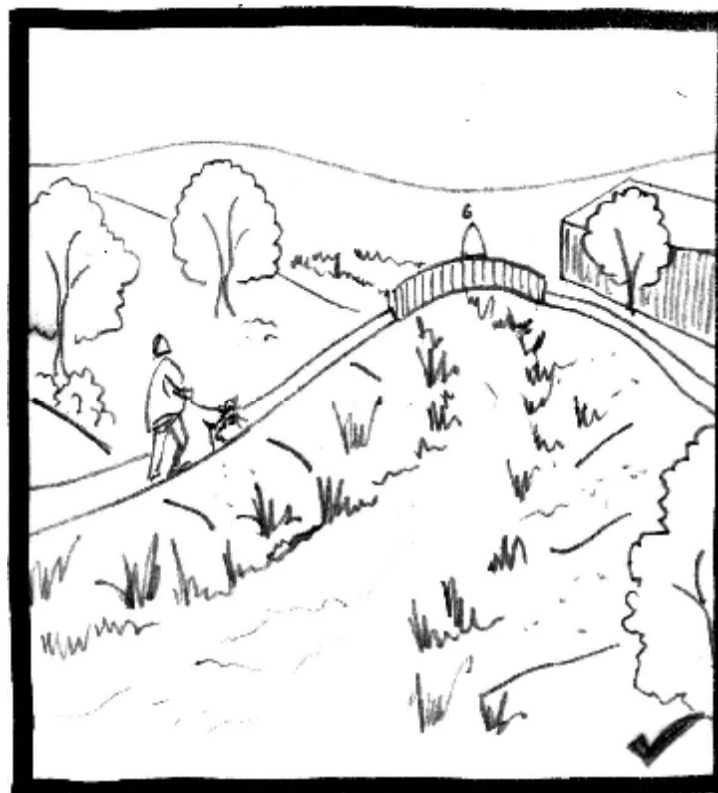
Grassed swales are preferred instead of concrete kerb and gutters



Onsite vegetation slows run off and improves water infiltration.

Waterways

- A 10 metre “setback” from the banks of the waterway at its annual fullest flow is encouraged for all activities, along both sides of the waterway.
- Public access within the waterway “setback” area is encouraged where an adequate level of public safety and maintenance is achievable.
- The waterway and its associated “setback” is to be maintained by the owners of industrial lots.

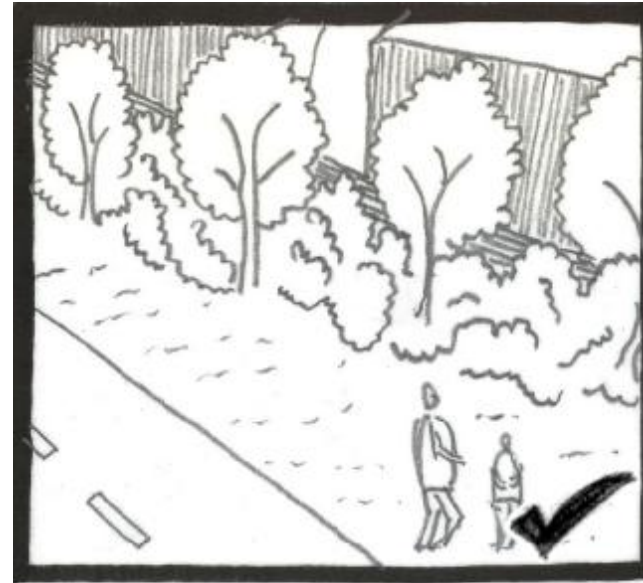


Setback areas along waterways should be considered as part of the design of industrial sites.

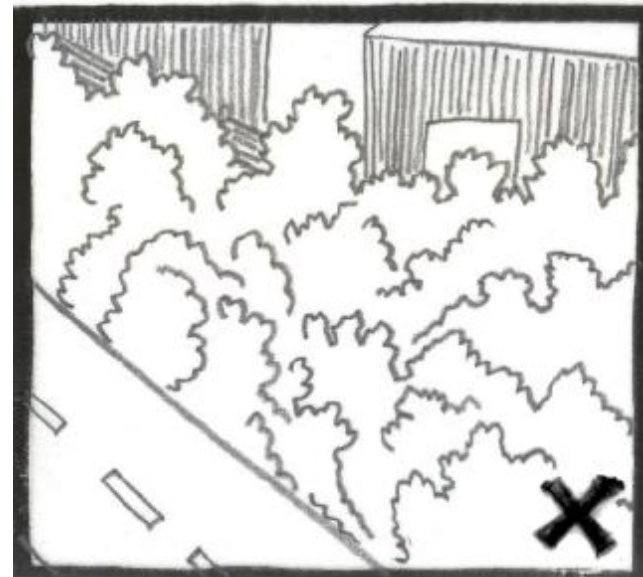
Public access with the waterway setback area is encouraged.

Boundary "Setback" areas

- The following "setback" areas are to be provided along these roads:
 - 30m along Richardsons Line
 - 20m along Setters Line (from Richardson's Line immediately south)
 - 8m along Railway Road and Roberts Line
- All "setback" areas are to be planted with vegetation of an adequate depth and height to screen the industrial buildings from the adjoining rural properties. Such planting will be required to be done at the time of subdivision. Specific requirements will be incorporated in conditions of consent.
- Walls and fences may be used along the internal boundary of the "setback".
- The following standards are recommended as a minimum for screen planting in the buffer setback areas:
 - Height:** trees to reach a minimum height at maturity of 9 metres; shrubs to reach a minimum height at maturity of 4 metres.
 - Width:** Railway Road and Roberts Line: minimum width of 3 metres; Richardsons Line and Setters Line (North): minimum of 8 metres.
- Species selection is to comprise both fast growing species for initial screening, and suitable longer lasting species.



Buffer setback areas seek to provide a visual and amenity buffer between the industrial areas and nearby residents in the vicinity of the NE Industrial Zone.



Buffer areas are to consist of a mixture of planting and open space areas.

North East Industrial Design Guide

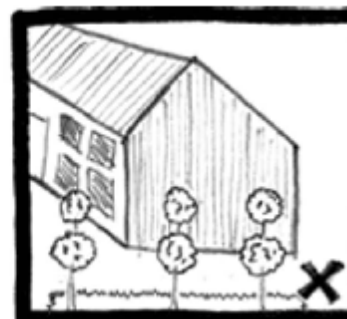
- “Setback” areas would need to be designed in consideration of traffic safety sightlines, provision of services, and other specific requirements at site access points.
- Open space is to be provided between roads and screen plantings.
- All “setback” areas are to be maintained to a high standard by the owners of the industrial lots. Specific requirements will be specified in conditions of consent.

Planting

- Employ a consistent landscape theme throughout the NE Industrial Zone (refer to Appendix 1 for Plant Species List).
- Planting within lots is encouraged to break up the mass of buildings and paving, and screen outdoor storage areas from view. Using trees of a similar height to buildings is desirable.
- **Within the Airport Protection Surface (refer to District Plan Rule 20.4.10.1), use plant species with a mature height and habit consistent with the height restrictions.**
- Planting may be used to highlight individual site entrances, and gardens within individual industrial lots are encouraged.
- Ensure planting areas do not compromise public safety. Use plants with growth characteristics that allow views between 0.5m – 2.5m above ground level to promote visibility and public safety.



Design plantings to allow good sightlines at intersections and crossings.



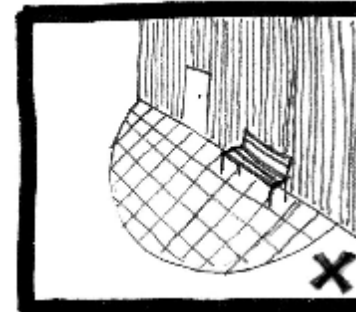
Use trees of a similar height to buildings.

North East Industrial Design Guide

- Planting design is to allow good sightlines at intersections, crossings and other points of potential conflict.
- Use locally native species, particularly in areas such as the waterway setback areas, to add natural character and encourage local biodiversity.
- All planting is to be maintained to a high standard by the owners of the industrial lots.
- Planting is to be included in amenity areas, such as lunchtime areas, and along public accessways.
- Keep dense vegetation, structures and other visual obstructions well clear of footpaths and cycle ways.
- Existing vegetation (individual trees and shelterbelts) could be retained and incorporated into the site layout as part of a site landscape plan (pest species excepted).



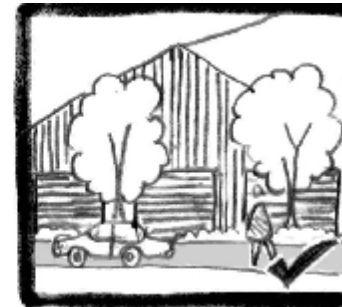
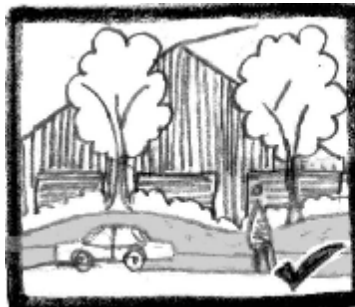
Use locally native species to add natural character.



Include planting in amenity areas and public access ways.

Site Contouring

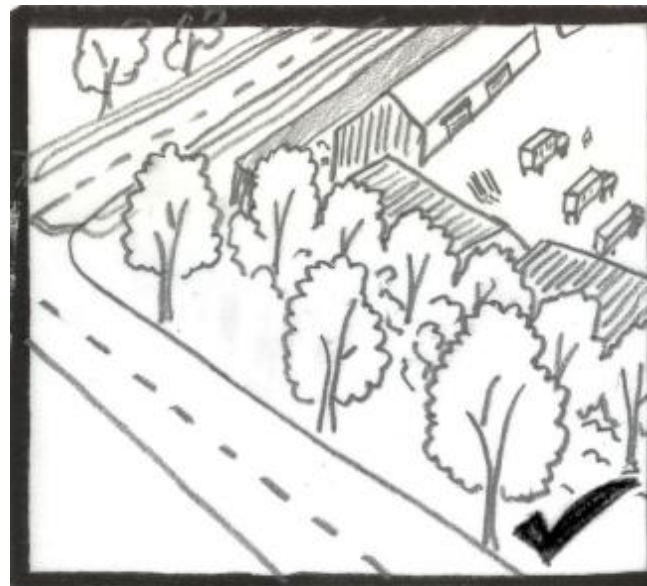
- Existing natural landforms could be changed (or modulated) to create berms screening industrial buildings from view, enhance water detention/ water quality, and visually separate areas or enhance areas within the NE Industrial Zone.
- Earth mounds may also be used within boundary setback areas to reduce noise impacts.



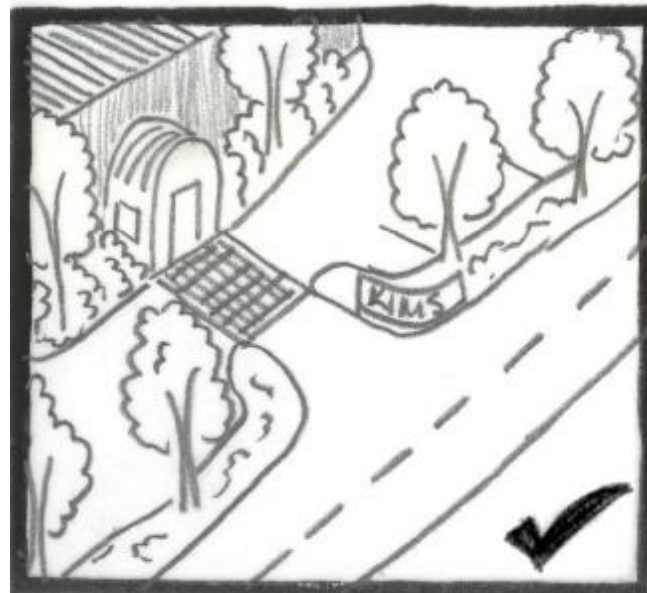
Low mounding can help screen industrial buildings and activities

Building Site Layout

- Position perimeter buildings carefully to reduce noise impacts upon adjoining rural residences.
- For perimeter sites, uses and activities such as loading bays, vehicle turning areas, and outdoor covered areas with forklift activity, are to be located on the inward side of buildings (away from the perimeter) to reduce noise impacts.
- A co-ordinated approach is encouraged between neighbouring lots that includes layout of built form and open space within a single design concept.
- Areas accessible by visitors and service areas need to be clearly legible within each site.
- Informal safety surveillance can be created by providing clear sightlines between public and private areas.
- Position entrances, cafeterias, and other “inhabited” spaces of buildings to overlook public areas.
- Lunchtime (informal recreation) areas within industrial sites are encouraged. Lunchtime areas are to have access to sunlight and shade.



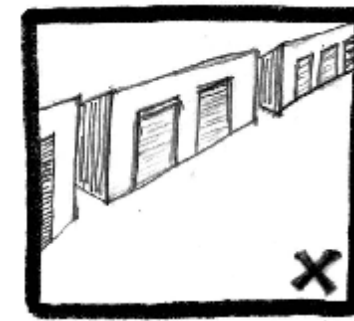
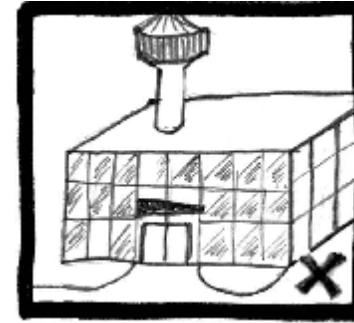
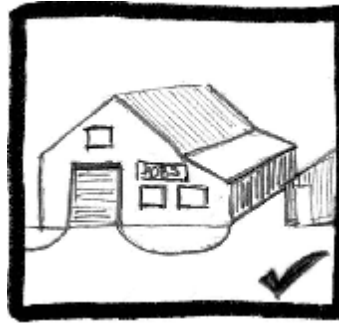
Keep activity areas away from the perimeter of industrial sites.



Create clearly legible entrances.

Building Design

- Building styles that use materials, colour and/or texture to help integrate the building with the rural surroundings are appropriate.
- Materials that avoid or limit glare are encouraged (especially in relation to the airport and nearby houses).
- Ensure building entrances are visible from the street.
- Where activities are anticipated that involve potentially high levels of noise, building design to reduce noise impact is required. Design features to be considered include: building cladding, insulation, size and orientation of ventilation openings, and wall or roof penetrations.
- To encourage building scale that is not significantly larger than typical rural structures.
- Building profile and rooflines should be consistent with rural architecture.

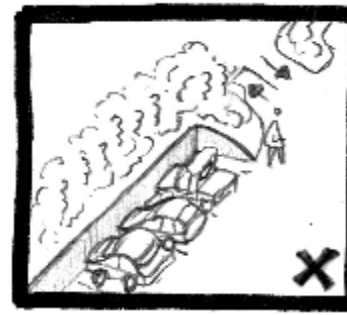
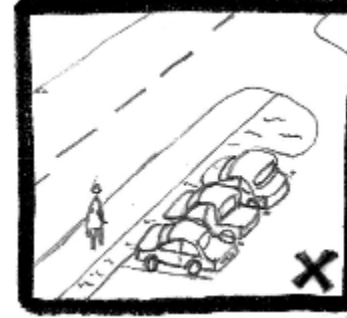
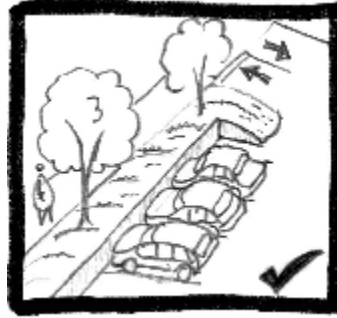


Building design and use of materials that fit in with the surrounding rural area are encouraged.

Ensure entrances to buildings are visible from the street and can be easily found by visitors.

Parking

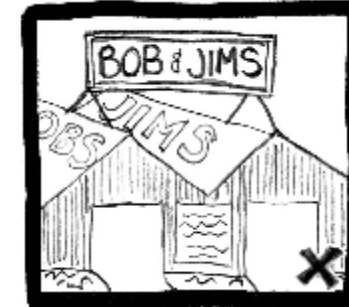
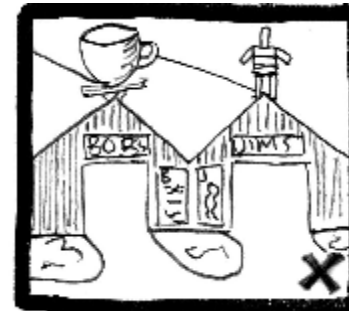
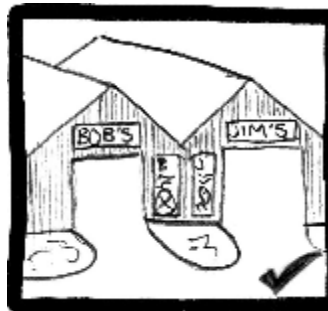
- Parking areas need to comply with Section 20 of the District Plan.
- Off road parking is required within lots to reduce visual clutter at the roadside and improve the visible public address of the NE Industrial Zone.
- Parking areas could be concealed through ground modulation and additional planting, where appropriate, or designed to be incorporated within buildings.
- Parking areas are to have a permanent dust free (non metal) surface to prevent wind borne dust.
- Overflow parking areas may be surfaced with reinforced turf or porous pavement.



Planting that allows views into parking areas reduces visual clutter and helps create safe environments.

Signage

- Signs shall not be located in the buffer setback areas which are:
 - 30m along Richardsons Line
 - 20m along Setters Line (from Richardson's Line immediately south)
 - 8m along Railway Road and Roberts Line
- Well-designed and located signs are appropriate to communicate business identity and unify the image of the NE Industrial Zone, complementing a positive site appearance and character.
- Simple, uncluttered signage is encouraged to avoid adverse effects on the surrounding environment.
- Ensure signage is publicly visible but unobtrusive.
- Roof signage is not encouraged.



Signage needs to be carefully designed to ensure adverse visual effects are mitigated within the NE Industrial Zone and adjoining rural areas.

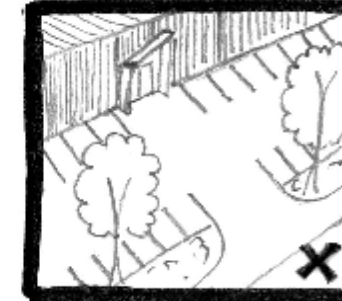
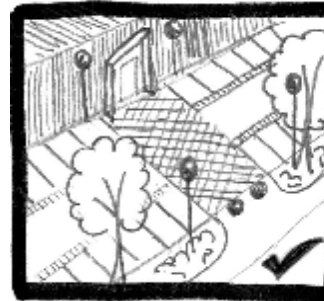
Well designed signs are proportioned to ensure industrial developments are not dominated by overly large or obtrusive signs.

Pavement and Furniture

- Landscape treatments in the form of paving, bollards and furniture, used to improve the function and appearance of the industrial site are appropriate.
- Coordinated paving in place of large expanses of concrete that creates interest with pattern, texture, and colour is encouraged.
- Hard surface treatments that incorporate coloured pigments is appropriate to 'soften' the appearance of individual sites.



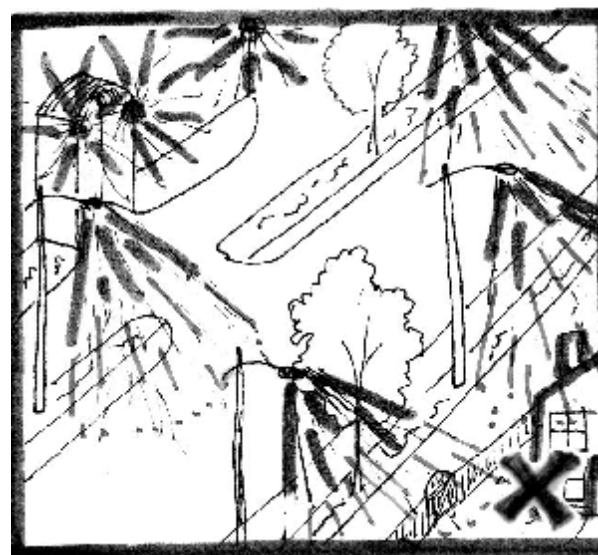
Co-ordinate landscape treatments.



Use furniture and coloured paving treatments to add character and 'soften' the appearance of industrial sites.

Lighting

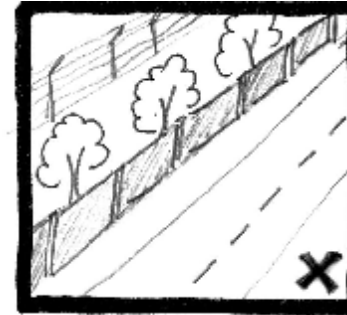
- Provide lighting for all public roads and footpaths for site safety and security.
- Ensure lighting is aimed toward the area in need of illumination.
- Avoid over lighting.
- Lighting is not to adversely affect the airport or nearby dwellings.
- A coordinated theme of colours and styles of lighting poles (in public areas) that are of scale and character appropriate to the rural character are encouraged.
- Lighting design shall be in accordance with the AS/NZS 1158 series of standards.



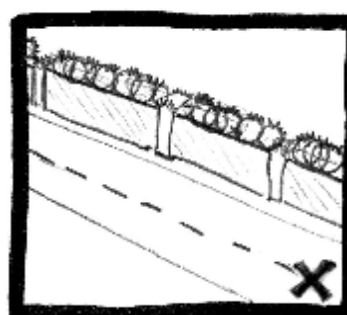
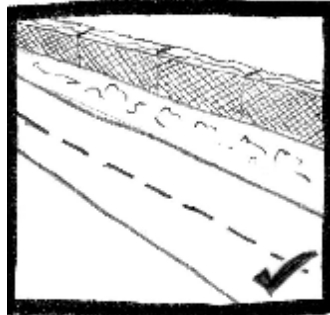
Lighting needs to be designed to ensure adverse effects are not created within or outside of the NE Industrial Zone.

Fencing

- Fencing along external boundaries should complement local rural fence designs and should be no higher than 1.2m in height.
- Walls and solid fences along the internal boundary of buffer “setback” areas can be used to help reduce noise impacts to adjoining rural residences.
- Walls and fences or dense planting of vegetation (1.8m in height) is required for outdoor storage areas (refer to Rule 12A.6.1(viii) of the District Plan).
- Hedges and shelterbelts may be used in place of fencing, and fencing may be incorporated within planting, where there are no issues of public safety.
- Fencing along publicly accessible boundaries is to be visually permeable to enhance public safety, promote an open character and visual quality within the industrial area.
- Where security fencing is required, visually permeable type fencing is preferred e.g. chain-link fencing.



Design external boundary fencing to complement local rural fence designs.



Visually permeable fencing is preferred for security fences.

Design Guide Appendix 1: Planting Species List

NE Industrial Zone Planting Species List

Framework species - for inclusion in buffer areas along lot boundaries and internal roads

Trees (suitable as street trees)

Sophora microphylla - Kowhai

Alectryon excelsior - Titoki

Podocarpus totara - Totara

Metrosideros excelsa - Pohutukawa

Eucalyptus species - Gum

Fraxinus oxycarpa 'Raywood' - Claret Ash

Betula papyrifera - Paperbark birch

Groundcovers suitable for planting under trees

Arthropodium cirrhatum - Renga Renga lily

Parahebe species and cultivars

Hebe species & cultivars

Carex species & cultivars

Setback shrubs, to be used adjacent to buildings as screening only

Pittosporum tenuifolium

Phormium tenax - Flax

Pseudopanax species & cultivars

Corokia cultivars

Griselinia lucida & G littoralis

Hoheria populnea - Lacebark

Myoporum Laetum - Ngaio

Olearia species

Plagianthus Regius - Ribbonwood

Cordyine australis - Cabbage tree

Waterway areas

Sophora microphylla & S. tetraptera -Kowhai

Podocarpus totara - Totara

Phormium cookianum and cultivars-Flax

Coprosma species

Hebe species and cultivars

Carex species and cultivars

Arthropodium cirrhatum - Renga Renga lily

Libertia species

Podocarpus totara -Totara

Metrosideros excelsa - Pohutukawa

Parahebe species and cultivars

Gardens within lots can consist of any plants that can be contained on the lot.