SECTION B - NATURAL ELEMENTS

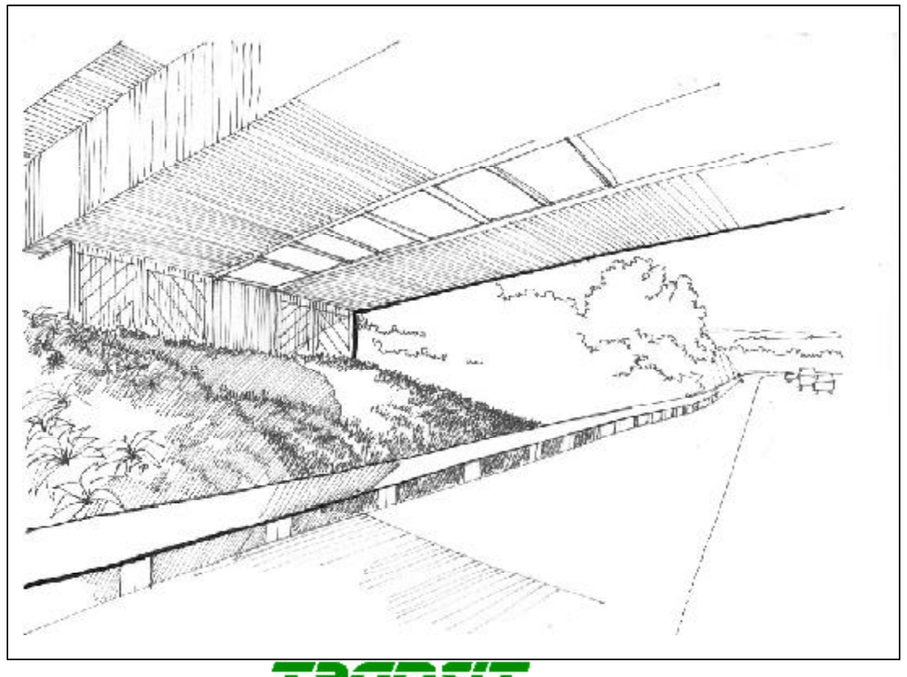
EMBANKMENTS AND CUTTINGS

AIM:

Where natural environments or soft edges are desired, design embankments and cuttings which, whilst achieving functional requirements, also contribute positively towards a consistent and coherent CMI design theme

KEY CONSIDERATIONS:

- embankments and cuttings should contribute to a consistent design theme and sense of place within the CMI
- consider long-term maintenance costs as a key consideration
- judicious selection of retaining walls may give a better outcome for land development opportunities
- variations in colour and form can be achieved with careful planting
- where appropriate, consider the use of sensitively designed earthworks in preference to retaining walls



GUIDELINES:

- batter slopes at a maximum of 3 H:1 V in order to sustain plant growth and allow maintenance
- grade earthworks to relate to the natural form of the surrounding topography
- fully landscape all batters

LANDSCAPE PLANTING

AIM:

Provide for landscaping which contributes to a consistent design theme and sense of place both within the nine separate precints and the CMI overall

KEY CONSIDERATIONS:

- landscaping is a very important element of the CMI in terms of visual impact. Ensure views and vistas are retained and/or enhanced
- consider the use of appropriate planting themes that contribute to a consistent design theme and sense of place for the CMI overall
- existing planting is dominated by exotic species, particularly acacia longifolia, which is recognised as environmentally damaging. In addition, much of the planting is becoming over-mature, and there is likelihood of widespread disturbance during construction
- pohutukawa is strongly associated with Auckland and the northern coastal areas. It is also adapted to cope with the openness and poor soils often associated with urban conditions
- forest with a northern sub-tropical character formerly covered Grafton Gully. Canopy species included puriri, titoki, karaka, kohekohe and rewarewa
- the indigenous flora community could be abstracted by replanting rewarewa as the dominant species. Rewarewa has a particularly distinctive spire-like form. It is quick growing and hardy to the conditions associated with motorway fringes. There are a handful of young trees in the disturbed vegetation near the motorway
- the lava field forests on the slopes of Mt Eden are characterised by a lush, sub-tropical character and include typical species mahoe, karaka, kohekohe, titoki and an understorey of astelia
- use accent planting (specimen trees) at key locations
- trees are one means of landmarking key locations such as exits, gateways or junction nodes
- most areas available for planting will be protected from carriageways by vehicle barriers. Planting will therefore be able to be planted relatively close. However, setbacks are still required from barriers. It is important this edge be planted with shrub species to limit weed infestation
- the techniques recommended to reduce maintenance include:
  - use of hardy species adapted to conditions
  - mass planting
  - planting with small grade plants, without irrigation
  - simplifying planting patterns
  - mulching
  - avoid planting batters of cuttings; plant batters of embankments or create recessed areas for planting
  - on-going maintenance programme
  - plant compositions which have relative longevity and have the ability to be self-sustaining
  - use hardy native nurse crop to establish rapid low canopy cover

GUIDELINES:

- use species adapted to growing conditions similar to those found within the CMI. All native species should be endemic to the Tamaki ecological district and eco-sourced where possible
- fill batters should be 1 in 3 maximum to facilitate planting
- all planting should have a minimum 250-300 mm of top soil
- avoid planting cut batters
- where cut batters are unavoidable, give consideration to the practicability of establishing planting versus grassing
- mass plant using appropriate techniques and performance based contracts
- irrigation is not envisaged
- plants will be mulched
- cultivate planting areas
- all planting areas are successfully established, canopy closure is achieved, and long-term growth and health is assured
- follow Transit NZ's Guidelines for Safety for Planting
- all compaction resulting from motorway construction should be alleviated by deep (min 400 mm) ripping prior to planting
- where mulch is unsuitable due to steep grades, bio/photo-degradable mats or geotextiles should be used

SECTION C - DEVELOPMENT OPPORTUNITIES

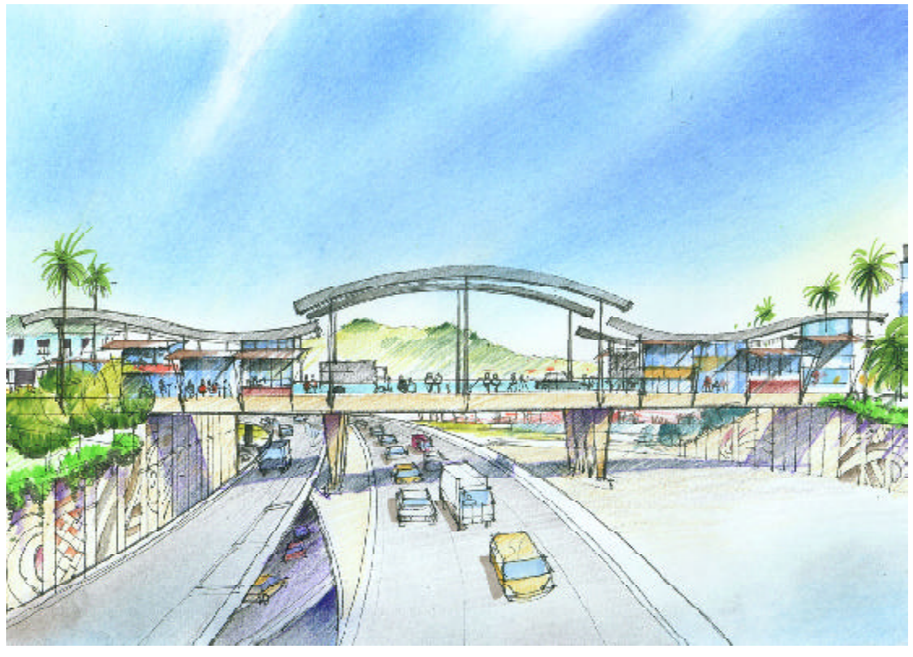
BUILDINGS

AIM:

Where possible encourage the development of buildings that are located at the perimeter of the development parcel, are outward facing (continuous wherever possible), provide a clear distinction between public and private realms and cater for a wide range of uses over time

KEY CONSIDERATIONS:

- buildings can contribute towards a consistent design theme and sense of place within the nine separate precincts and within the CMI overall
- buildings should contribute positively towards the existing surrounding urban fabric (both natural and built)
- buildings should assist towards the provision of natural surveillance / security over the public realm
- where necessary, buildings should provide pedestrian protection from the natural elements
- commercial buildings can offset investment required
- consider the development of buildings within appropriate 'air-rights' locations (both above and below the motorway corridor)
- consider the development of buildings within appropriate 'left-over' parcels of corridor designation
- development can assist regional land use intensification objectives



GUIDELINES:

- design buildings that assist towards the strengthening of a local identity / 'sense of place'
- wherever possible, design buildings that are located at the perimeter of the development envelope
- design buildings that create a clear distinction between public and private realms
- ensure buildings provide a high degree of natural surveillance over the surrounding public realm
- ensure buildings provide clearly visible pedestrian entry points
- design buildings that are able to cater for a wide range of appropriate uses over time

OPEN SPACE

AIM:

Where possible, encourage the development of multi - functional open spaces (both hard and soft), that are both secure and clearly defined from the private realm

KEY CONSIDERATIONS:

- open spaces both hard and soft, can contribute positively towards a consistent design theme and sense of place within the nine seperate precints and the CMI overall
- these spaces should form part of a continuous open space network
- left-over parcels of open land should be used in such a manner as to benefit surrounding uses
- development of left-over open space for multi-functional uses including stormwater control and public amenity should be encouraged
- open spaces can be used to provide improved vehicular, pedestrian and cycle linkages
- consider, where appropriate, the use of 'left-over' parcels of motorway land for public open space uses

GUIDELINES:

- where possible, encourage the formation of through vehicular, pedestrian and pedal cycle linkages
- ensure that natural surveillance over these spaces is possible
- ensure that the detailed design of these spaces (including landscaping elements) does not restrict the opportunity for multi-functional use
- design these spaces to enhance the visual amenity for both users of the motorway system and neighbours
- design these spaces as an integral part of the overall CMI design theme
- ensure these spaces contribute positively towards the strengthening of a local identity / 'sense of place'
- wherever possible, ensure that these open spaces are not isolated from the overall public open space network