10 LAND USE IMPACT

10.1 Introduction

10.1.1 Land use implications have been reviewed in detail in the Report on Land Requirements which provides a consolidated assessment of the land and planning implications of the proposed Route 9 alignment. It also provides an overview of the existing and planned development context of the areas along and adjacent to the proposed alignment and the possible land use and planning interface issues that may arise with the proposed alignment.

10.1.2 Land issues associated with the construction of a new highway alignment can be potentially complicated, with issues such as land resumption, clearance and reprovisioning works forming critical elements of the highway alignment design. In the case of Route 9, these issues are somewhat clear cut, with a highway reserve having been identified on the relevant statutory plans on Tsing Yi Island, Stonecutters Island and the West Kowloon Reclamation. However, with the continually changing pattern of land uses in Hong Kong, physical interface issues may arise which will need to be resolved prior to implementation of the proposed alignment.

10.1.3 In tandem with land requirement plans that show the extent of land requirements for Route 9, the Report on Land Requirements also provides a basic justification for land resumption and preliminary explanation of resumption and clearance procedures for the various types of land lots affected by the proposed alignment.

10.1.4 In this section of the EIA long and short term implications for land uses in the vicinity of the Project (including works areas) are also assessed in the context of environmental impacts of R9 and the method of assessment of the development potential of adjacent areas is based on the key noise and air quality impacts.

10.1.5 Attention has been focused on identification of constraints imposed on the development potential of land within 300m of the proposed alignment of the Project. Where land issues warrant, mitigation measures to minimise the adverse effects identified have been considered.

10.1.6 Compared with Stonecutters Island the existing development context at Tsing Yi and the northern West Kowloon Reclamation create more constraints for a Route 9 alignment because of the presence of existing and proposed residential, industrial and commercial developments. Examples include residential developments located to the north of the Tsing Yi Island and oil depots to the south. Environmentally sensitive receivers such as residential developments and educational facilities are also located to the north of CT9 slip roads in eastern Tsing Yi. Similarly proposed CDA developments in the Northern West Kowloon Reclamation also require careful consideration.

10.1.7 Based on the current alignment the R9, main carriageways will be well away from the main concentrations of sensitive receivers. However, the R9/CT9 slip roads will pass sufficiently close to some existing and proposed land uses to require mitigation to be considered with respect to noise or air quality impacts.

10.1.8 Physical structures and private land lots are situated along the proposed alignment, indicating that land clearance and resumption are likely to be necessary to allow for implementation of R9. Land lot numbers are referred to in parentheses.

10.2 Land Use Impacts on Tsing Yi

North West Tsing Yi Interchange to Western Portal of Nam Wan Tunnel

10.2.1 The western extremity of R9 will dovetail with R3. The gradient of the road from the Nam Wan Tunnel Portal to R3 will determine the elevation of the portal. Whereas formerly there were two options being explored, which comprised varying the elevation of the portal either above or below Tsing Yi Road, the elevation with the western portal below Tsing Yi Road is now considered to be optimal. At present all the land beneath the proposed viaduct(s) is zoned industrial and currently occupied by short-term tenancies and temporary Government Land Allocations. There is some open storage and a bus depot.

10.2.2 The Report on Land Requirements notes that permanent development of the bus depot was recommended to be postponed until improvement works on the oil depots are implemented. It is also noted that Shell and Caltex may look to redevelop their sites in the medium to long term for housing purposes, if their depot facilities can be relocated. At this time, residential long term land use scenarios for this area seem impractical since the oil depot areas would be severely impacted by other adjacent cargo handling uses as well as R9 which will introduce significant traffic noise interfaces in addition to the existing heavy traffic noise and industrial impacts.

10.2.3 The future use of the land beneath viaducts for industrial purposes would not be affected by noise from R9. However, at some locations and heights close to the westbound tunnel portal, the air quality is predicted to exceed the air quality objectives therefore there would be constraints on air sensitive uses in these areas. Discussions with the relevant departments currently indicate that there is no intention to change the land uses in northwest Tsing Yi. If the areas of concern remain for industrial use they would not be air sensitive. Therefore there would be no constraint for the currently intended land use.

Sai Tso Wan Road

10.2.4 The existing Sai Tso Wan Road traverses into the Route 9 reserve area. DPO/TKS is currently considering realigning this road to avoid direct conflict with the proposed Route 9 alignment. No environmental impacts on long term land use are anticipated.

10.2.5 A steep hillside, zoned 'GB' on the OZP and 'A' on the ODP is located at the proposed intersection between Route 9 and Route 3. This hillside is not considered suitable for urban development. If the area is currently used for passive recreational purposes, it may be affected by the construction of Route 9 but long term environmental impacts on land use are not anticipated.

Tsing Yi Road

10.2.6 Tsing Yi Road runs roughly around the circumference of southern Tsing Yi Island. The proposed Route 9 alignment will interface with Tsing Yi West Road near the north-western Tsing Yi Interchange. Route 9 is proposed to pass under the Tsing Yi West Road in a tunnel and an underground alignment will only have a temporary construction impact on the adjacent land and there will be no permanent landtake requirements and long term environmental impacts on land use are not anticipated.

Central Tsing Yi and Nam Wan Tunnel

10.2.7 Central Tsing Yi comprises a mountainous area. R9 is proposed to be in the Nam Wan Tunnel throughout this area, which with two portals located to the west and south-east, will convey traffic on R9 under Nam Wan.

10.2.8 The western tunnel portal at Sai Tso Wan (North West Tsing Yi Interchange) is located on the steep hillslope close to the temporary bus depot, while the eastern portal is located at Nam Wan Kok in south-east Tsing Yi.

10.2.9 The central part of Tsing Yi is classified as a no borrow area within which borrowing and alteration to natural landform is prohibited. As R9 is in tunnel through this part of Tsing Yi, this will not pose any significant problem.

10.2.10 Ecological, landscape and visual impacts at the portals have been considered separately (sections 6 and 5). Should vent shafts be required land use in the vicinity of the shafts will be impacted and would require some security buffer to prevent interference and some access road for maintenance vehicles. The elevation and likely scale of the shafts indicates that land use constraints would be small to insignificant.

Eastern Portal and Viaducts

10.2.11 The eastern end of the Nam Wan Tunnel will emerge through a portal, which will be at about 64mPD. As such it will be over 40m above the ground level container handling areas and industrial buildings.

10.2.12 A private agricultural lot, fishponds and orchards, some of which have been abandoned, are located near the eastern portal. Resumption and compensation to the landowners will be necessary if R9 directly passes over these areas of land.

10.2.13 Individual graves are also located on the hilly area near to the eastern portal. If the graves conflict with the proposed alignment of R9, they can be removed subject to payment of ex-gratia allowance, if any, as will be determined by the District Lands Officer, Kwai Tsing.

10.2.14 Land use impacts in the vicinity of the portal will involve permanent changes to the existing green belt areas. The land immediately to the south east of the portal has been used for horticulture and small-scale fruit farming. Construction impacts for the viaduct piers will require the removal of vegetation and will degrade this land use and mitigation is proposed in section 5 to make residual impacts acceptable.

10.2.15 The area immediately adjacent to the portal is recommended to be designed so that the necessary cut slopes can be revegetated. As such the bench designs should allow sufficient room for planting while at the same time seeking to minimise the areas of cut and fill.

10.2.16 The design of the construction access road has been recommended to select a route which will minimise the areas of cut and fill. By following the natural contours as far as possible and provisions have been recommended to replant the disturbed areas to maintain the green appearance of the hillside as far as possible (Sections 5 and 6).

10.2.17 Air quality impact assessment (Section 3) has indicated that the tunnel portal emissions to the east, when superimposed on the road traffic emissions will exceed the AQO over a narrow area at some heights. Whereas to date no ventilation shafts have been designed

the dispersion of the tunnel emissions to a higher level would appear unnecessary given the narrow area of influence. Air quality impacts on land use are therefore limited to potential no build zones above the tunnel and in the vicinity of the portals.

10.2.18 The future use of the land beneath viaducts for industrial purposes would not be affected by noise from R9. However, at some locations, very close to the eastbound tunnel portal, the air quality is predicted to exceed the air quality objectives therefore there would be constraints on air sensitive uses in these areas.

Industrial Areas in Southeast Tsing Yi

10.2.19 At present all the industrial land beneath the proposed viaduct(s) is used for predominantly for open storage. The future use of the land may be constrained by the high viaduct structure and some resumptions are assumed to be required.

10.2.20 Route 9 is proposed to pass over and near to several industrial areas in the south-eastern part of Tsing Yi. The industrial (storage) site to the west of Tsing Yi Road has been granted a short-term tenancy for open storage purposes (STT3328K&T).

10.2.21 Two industrial buildings are located on the eastern side of the road, close to the proposed Route 9 alignment. The Tai Tung Industry Equipment Ltd (TYTL68) is located to the north of the road alignment and Outboard Marine Asia Ltd (TYTL128) is located to the south. Another industrial building, the Dow Chemical (HK) Ltd, is located opposite Outboard Marine Asia Limited to the west of the road.

10.2.22 The proposed Route 9 passes through the central portion of Lot TYTL128, which is currently used for manufacture and assembly of internal combustion engines, and open storage on a portion of the site. Several structures also fall within the Route 9 reserve including, amongst others, a warehouse, a pump-house and refuse collection point.

10.2.23 In order for R9 to be implemented, the private land lot (TYTL128) will need to be resumed and cleared. Provisions have been made in the lease conditions of TYTL 128 to reserve Government's right to resume a portion of the lot (now designated as a non-building area) for the Route 9 project.

10.2.24 Long term environmental impacts on land use are not anticipated and major adjustments to the current road alignment would create additional interface issues in this part of Tsing Yi. The current alignment puts R9 reasonably distant from several existing industrial buildings located near to the proposed alignment and does not create any major impacts in terms of noise or air quality.

CT9 Slip Roads

10.2.25 Slip roads leading to and from the eastern end of Stonecutters Bridge on CT9, are planned to extend in a northerly direction towards the north-western edge of the proposed CT9, terminating at a major roundabout. Due to the elevation of this highway and the level of R9 at the eastern portal (approximately 64mPD), this slip road will have visual impacts on the existing and planned land uses in this part of Tsing Yi, which have been evaluated in Section 5.

10.2.26 The alignment of the slip road encroaches slightly on two areas of land zoned 'I' and 'GB' and may involve both a permanent and temporary land take. The 'I' site is occupied under a short term tenancy (STT3329K&T). A large area of land to the east of

the slip road was originally occupied by an oil depot. It is currently zoned 'OU' on the OZP and is designated for container-related uses. It is anticipated that this site will generate significant vehicular traffic proceeding to R9 (southbound) when CT9 9 becomes operational, however the impacts are not severe, as discussed in sections 2 and 3.

10.2.27 To the north and north-west of the slip road are residential and G/IC areas. These include Mayfair Gardens and Hong Kong Technical College (Tsing Yi) and staff quarters to the north-west. These developments are regarded as noise sensitive receivers that would be affected by the proposed R9 slip road.

10.2.28 Experience would suggest that these developments will be affected by the operation of CT9 and its related uses and that the proposed slip road of Route 9 will further exacerbate the noise and air pollution problems in and around the area. However the impacts are not severe, as discussed in sections 2 and 3. Whereas the adjacent CT9 container-related operations are also potential noise sources, a commercial development has been proposed, adjacent to the slip road, which will act as a noise and visual screening structure and act as a means of mitigating some of the potential environmental impacts of the container terminal and the eastern end of the CT9 slip road. The screen buildings on the site will be located directly west of Tsing Yi Road as a development package associated with the operation of CT9 9.

10.2.29 The site, located in Area 22 to the south of the Sewage Treatment Plant has been rezoned from 'I' to 'C' on the Tsing Yi OZP Plan No S/TY/12 and will serve as a buffer to screen potential noise and glare from the proposed CT9 and to reduce the impact of CT9 on the nearby residential developments. Under the OZP, development is permitted to a maximum non-domestic plot ratio of 9.5 and a commercial scheme is currently being planned for this site, although there is no development programme for its implementation as yet.

10.2.30 Cheung Ching Estate and part of Mayfair Gardens will therefore be screened from some of the worst noise sources in the area and are ignored as noise sensitive receivers that would be affected for purposes of the R9 noise assessment.

10.2.31 Mayfair Gardens is a private residential estate comprising eight blocks. The residential blocks are located around a large central landscaped area. To the south-east of the development is an area of open space (zoned 'O' on the OZP), serving as a buffer to the existing Tsing Yi East Road.

10.2.32 The Hong Kong Technical College (Tsing Yi) is situated adjacent to Mayfair Gardens. This comprises four academic blocks and newly completed visiting staff quarters. If the currently proposed R9 alignment is retained the slip road will be equivalent to Tsing Yi Road as a noise source. The road traffic noise will exceed the EIAO TM criterion. Therefore measures to mitigate the potential noise and air pollution that will be generated by vehicles travelling along the R9 slip road and Tsing Yi Road have been elaborated in Section 2.

10.2.33 Proposals to construct a commercial development between Mayfair Gardens/Hong Kong Technical College to mitigate noise from the future container terminal have been considered. Whereas such a development would certainly have a beneficial effect in terms of reducing noise and other impacts from CT9 and broader considerations may indicate the need to provide some form of 'screen barrier' between CT9 and these

sensitive receivers, such measures are not required solely on the grounds of mitigating the contribution from the CT9 slip roads.

10.2.34 If implemented, such a building would need to be fairly high to be effective and would restrict views to the completed Stonecutters Bridge. Such views are evaluated in Section 5 and are generally believed to present a potential benefit to the visual context of the area and to have an overall positive effect. If mitigation is required for CT9 activities then the measures implemented should be designed in a broader environmental context to produce the best overall environment in terms of all potential environmental impacts and a mixture of on and off-site, direct and indirect measures may be required. These issues should be reviewed again in the detailed design phase of CT9.

'OU' Sites in Southeast Tsing Yi

10.2.35 The proposed alignment of R9 will have a direct interface with the back-up areas for the future CT9. However, the CT9 development schedule is subject to confirmation.

10.2.36 Three OU sites adjacent to CT9 are planned to be the back-up areas for the terminal. They are mostly reclaimed lands and part of the reclamation will be completed in early 1998. Some engineering works and infrastructure development are also proceeding at this stage (Tsing Yi Development Programme, 1996). By the time all the construction works are completed, the areas will be used for container lorry parking, cargo working area for mid-stream operations and other port related uses. An area is reserved for the R9 to cross these back-up areas in the OZP. It is located immediately at the periphery of the container terminal.

10.2.37 If CT9 and the related back-up areas are developed prior to R9 commencing construction, there may be interface issues arising from an operational container lorry park. Moreover, with the development of CT9, there may be changes of the existing container related uses, which might create additional interface problems.

10.2.38 No long term environmental impacts on land use are anticipated and any major adjustments to the current road alignment may create additional interface issues near to the proposed alignment.

Container Terminal 9 (CT 9)

10.2.39 Original plans called for the construction of a container terminal with four berths covering a land area of some 60ha, however, this has since been expanded to four container berths and two feeder berths, covering an area of some 68 ha. The proposed R9 will not pass through the southern part of CT9 and therefore CT9 will not be directly affected by the road alignment other than for the requirements for piers and the Stonecutters Bridge substructural elements.

10.2.40 No long term environmental impacts on land use are anticipated given the current R9 alignment.

10.3 Land Use Impacts, Stonecutters Island

Existing and Proposed Developments on Stonecutters Island

10.3.1 Stonecutters Island is designated as a military site and the majority of the island is used for a range of military proposes. Under the current Stonecutters Island OZP (Plan No.

S/SC/2), there are only three types of land use on the island: Government/Institution and Community (G/IC), Industrial (I) and Other Specified Uses (OU). Apart from military-related uses, very little other development exists on the island. Container Terminal 8 (CT8) is located on reclamation to the north side of the island. Most of the interface issues relating to the proposed R9 alignment will be associated with CT9.

10.3.2 There are two sites zoned 'I(B)' in the vicinity. They are located to the north, adjacent to the Lai Wan Interchange on the West Kowloon Reclamation. The OZP specifies that they are to be used for low density industrial developments, constructed to a maximum plot ratio of 2.5. No environmental impacts are anticipated for these sites.

10.3.3 Most of the 'OU' sites are designated for container terminals and container-related uses. In addition to the existing CT6 and CT7 located to the north of the island, a large portion of reclamation on the western and north-western shore is zoned for container-related uses associated with the newly developed CT8. Most construction activity has been completed and CT8 is already operational. It is expected that the land reserved for container-related uses can cater for demand arising from CT8 as well as helping to alleviate the existing short-fall of land for such purposes in Kwai Chung.

10.3.4 There are no new developments proposed on Stonecutters Island currently, except for land at alongside the West Kowloon Reclamation, which now connects the island with the West Kowloon hinterland. R9 is proposed to run over the container related uses located to the north of Container Port Road South to the north of the islands former shoreline.

10.3.5 No long term environmental impacts on land use are anticipated given the current R9 alignment other than the land take for the R9 viaduct pier construction.

OU Sites Adjacent to CT 8

10.3.6 The proposed Route 9 alignment crosses over four sites zoned 'OU' (container-related uses) sites adjacent to CT8 on Stonecutters Island. The sites are currently used for the storage of containers, parking and repairing of container vehicles and warehouses. They are predominantly used as back-up facilities for CT8.

10.3.7 Several back up areas located close to the coastline are undergoing engineering works and reclamation for mid-stream operations. According to the Tsing Yi Development Programme, 1996, these works are scheduled to be completed in early 1998. An area has been reserved at these sites for the proposed R9 alignment on the OZP.

10.3.8 No long term environmental impacts on land use are anticipated given the current R9 alignment other than the land take for the R9 viaduct pier construction. There may, however, be some temporary impact for these back up areas when R9 commences construction.

Sewage Treatment Plant

10.3.9 An 'OU' site earmarked for sewage treatment works is located to the west of the proposed R9 alignment. The site is reserved for two sewage treatment plants, earmarked for different treatment schemes servicing Northwest Kowloon and the east Kowloon area.

10.3.10 The current alignment of R9 runs along the Container Port Road and passes over the site without encroaching into it. However, temporary land-take may be needed along the R9

route during construction. Encroachment should be minimised to avoid significant impact to operation of the treatment plants. As the treatment plants are not environmental sensitive receivers, R9 is unlikely to create other additional negative impacts in this part of the alignment.

10.3.11 No long term environmental impacts on land use are anticipated given the current R9 alignment other than the land take for the R9 viaduct pier construction.

10.4 Land Use Impacts in Northern West Kowloon Reclamation

Lai Wan Interchange

10.4.1 At the Lai Wan Interchange, direct connections between R9/R16, R9/WKH are expected. These land issues have been reviewed in the context of noise and air quality impacts in sections 2 and 3 are currently under investigation in the context of the cumulative effects of the composite road network on land resources in the vicinity.

10.4.2 The Lai Wan Interchange is planned to be a major traffic interchange on the WKR. Later on R16 will bring the traffic from eastern New Territories and the WKH will provide connections from the new airport at Chek Lap Kok and Lantau Island. The proposed R9 will therefore complete the strategic link between the New Territories, Chek Lap Kok and Tsing Yi. As R9 and R16 jointly form this strategic road link, connecting at the Lai Wan Interchange, it is preferable that R9 is completed as soon as possible after R16, which is currently scheduled to be operational in 2004.

10.4.3 The cumulative air quality impacts of WKH, P1, R9 link roads and the Lai Wan Interchange may have implications for the land parcels which have recently been proposed for residential and school uses, subject to availability of further detailed designs and study of potential noise and air quality impacts which are presented in sections 2 and 3.

Existing and Proposed Development on the West Kowloon Reclamation (WKR)

10.4.4 The WKR was planned and developed to accommodate the transport infrastructure network linking the urban area and the new airport at Chek Lap Kok, as well as provide additional land for urban development in Kowloon.

10.4.5 R9 is planned to connect with other local and district distributors at the Lai Wan Interchange on the northern section of the reclamation. It is anticipated that there may be a land use interface between R9, the future West Rail, proposed land uses and several highways at the Lai Wan Interchange and on adjacent development sites.

10.4.6 The Government of the Hong Kong Special Administrative Region is currently identifying additional sites to provide for housing. To this end Territory Development Department (TDD) began a study in mid-1997 to conduct a 'Review of Land Use in the Northern Part of the West Kowloon Reclamation'. This study assessed the potential for rezoning a number of industrial and container-related sites to CDA and residential sites, supported by G/IC facilities. A revised OZP was planned to be gazetted in March 1998 which will include the rezoning of 10 sites on the reclamation. When considering the development schedule of these proposals, it is anticipated that interface problems with adjacent developments on Sites 10 and 6 will arise during the construction and operation of Route 9.

Site 6 (Sites 4.22, 4.23, 4.24 & 4.26 on the South West Kowloon ODP)

10.4.7 To the south of the Lai Wan Interchange at road D4, the proposed alignment is currently designed to connect with the existing road network at-grade. Site 6, located to the east of the proposed alignment, has been zoned 'CDA' ons the South West Kowloon OZP and is earmarked for public housing (Home Ownership Scheme). There will be a community hall, public light goods vehicle parking, and other G/IC facilities related to development. The earlier proposal for a primary school has been dropped.

10.4.8 The development potential of Site 6 is constrained by the noise and air quality impacts arising from the traffic along the West Kowloon Highway. The R9 eastbound slip road to WKH will exacerbate this problem and potentially reduce development opportunities unless appropriate mitigation measures can be developed in the designs to mitigate and minimise the cumulative effects of all infrastructure projects in the area. Particular attention should be paid to noise and air quality impacts for the environmentally sensitive elements. In this respect the school G/IC and residential facilities must be located as far away from the roads as possible to ensure good air quality. Noise and air quality impacts resulting from the R9 proposals are summarised in sections 2 and 3. Mitigation measures appropriate to the R9 sliproads must be considered as an integrated package with measures to mitigate noise and air quality impacts from all adjacent sources, if the full development potential of Site 6 is to be achieved.

Site 10 (Sites 3.7, 3.8, 3.12, 3.13 & 3.14 on the South West Kowloon ODP)

10.4.9 According to the South West Kowloon OZP, site 10 has already been zoned 'CDA' and is earmarked for public housing (Home Ownership Scheme), 2 secondary schools and one primary school, and other supporting G/IC facilities related to the housing development. The proposed indoor recreation centre and the Urban Council theatre complex have been deleted. A Feasibility Study was carried out for the site. The proposals for the production of 4,800 flats was endorsed by the Tsuen Wan, Kwai Tsing and Sham Shui Po District Planning Conference in February 1999. According to the development programme, the first phase of the development at Site 10 will be completed by late 2002.

10.4.10 Noise impacts on Site 10 will potentially be severe and impacts from air pollution generated by traffic travelling along the adjacent transport networks, particularly the Lai Wan Interchange and West Kowloon Highway may bring about any exceedance of the AQOs at the boundary of site 6 and site 10. The link from R16 to WKH will also be an additional impact.

10.4.11 If the sites 6 and 10 are to be developed for housing and educational purposes, some impacts are anticipated from the composite transport infrastructure and the impact of R9 and the surrounding traffic network will need to be taken account of in the designs. Measures to minimise noise impacts will be a key consideration and building design will need to ensure that sources of air for ventilation are not contaminated with vehicle emissions which could lead to the AQO being exceeded.

Sewage Pumping Station (Site 3.2 on the South West Kowloon ODP)

10.4.12 Located along road D3, this site is zoned 'G/IC' on the South West Kowloon Outline Zoning Plan No S/K5/13. Under the South West Kowloon Central Section ODP, it is earmarked for the development of a sewage pumping station. There is currently no proposal for a change of use on this site.

10.4.13 The future R9, if implemented, will link up with the proposed R16 to form a dual three lane strategic road, passing alongside this site. Some temporary landtake may be needed during the construction stage. No long term environmental impacts on land use are anticipated given the current R9 alignment other than the land take for the R9 viaduct pier construction.

Port Rail Terminal (Site 2.11D on the South West Kowloon ODP)

10.4.14 The WKR Northern Section ODP has earmarked the proposed Port Rail Terminal (PRT) on Site 2.11D, comprising an area of about 147,800 sq m, abutting the northeastern boundary of CT8. It is zoned as 'Other Uses - Container Related Uses (Port Rail Terminal)'. This area is currently used for open container storage. It is understood that the development of the PRT would result in a loss of some storage space for CT8.

10.4.15 The current proposal for construction of the PRT is to commence in 2021. However, construction will take place in phases, depending on the level of freight demand. It is envisaged that the full extent of land take will need to be re-established at a later date.

10.4.16 As construction of R9 is scheduled to begin in 2002, it is expected that the PRT will not be affected by construction. No long term environmental impacts on land use are anticipated.

Land Adjacent to Proposed PRT (Sites 2.19, 2.20 & 2.21 South West Kowloon ODP)

10.4.17 The proposed design of R9 passes close to three Government land lots located to the south of the PRT. Site No. 2.19 is zoned 'OU(CR)' and is planned for disposal in 1998. Site No. 2.20 is zoned 'G' (Sewage Pumping Station) and is currently under construction. Site No 2.21, zoned 'OU' (Refuse Transfer Station) is already in operation. As these three sites are not environmentally sensitive receivers, they will not be affected by Route 9 unless there is any encroachment onto the land.

Container-Related, South of Lai Wan Interchange (Site 2.22 South West Kowloon ODP)

10.4.18 Site No 2.22 is located to the south of the Lai Wan Interchange. It is zoned 'OU' on the South West Kowloon ODP and is designated for container related uses in the current OZP. However, it is understood that the Planning Department is considering using this site as a bus depot. The development programme for this site may be important if it is to be used as a temporary works area for Route 9. No long term environmental impacts on currently anticipated land uses are anticipated.

Southwest of Lai Wan Interchange (Sites 2.10, 2.13, 2.15 & 2.12 S.W. Kowloon ODP)

10.4.19 Four sites, currently zoned 'OU' on the Southwest Kowloon ODP are located to the northeast of the proposed Port Rail Terminal. Site No. 2.12 is reserved for a KCRC traction substation; Site Nos. 2.10 and 2.15 are designated for container lorry parking, providing about 1,400 parking spaces for the three adjacent container terminals; and Site No. 2.13 is earmarked for a petrol station.

10.4.20 Consultation has indicated that there are no plans to change the use of any of these sites, or are there development programmes, although parts of this area may be used as temporary works areas for R16 and R9. No long term environmental impacts on currently anticipated land uses are anticipated. There is a possibility of the petrol station

requiring to be reprovisioned if R9 encroaches into this site. No long term environmental impacts on currently anticipated land uses are anticipated.

Proposed Regional Stadium (Site 3.1 on the South West Kowloon ODP)

10.4.21 A Regional Stadium has been proposed for a 5.88ha site located to the east of Mei Foo Sun Chuen and Lai Chi Kok Park Stage III. It is zoned 'G' on the Southwest Kowloon ODP Northern Section. Although there is no development programme for the stadium, the Broadcasting, Culture and Sport Bureau has indicated that this is only one of two sites available in the SAR for the development of a 400m running track. The stadium is only at its preliminary feasibility design stage and the established target is for a 50,000 persons capacity stadium, the Bureau will not be able to confirm the capacity requirements until the end of 1998. For purposes of the noise modelling a structure up to 30mPD has been assumed near to the R9/WKH elevated link.

10.4.22 Current estimates assume completion of the Stadium in 2001/2002 at the very earliest, if there is private sector involvement in the proposal. However, a temporary Government land allocation was granted to the Urban Services Department for grassy football pitches and an ancillary service building on a 2.86ha site in the southern portion of the site (GLATNK1024) in early December 1996 for a period up to July 31st 2001. By August 2001, part of this site will be required for construction of R16.

10.4.23 Short-term tenancies have been granted on two land lots in the northern portion of Site for container parking only. Another lot has been leased to Adam's Parking for the exclusive parking of container tractors or trailers. The Kowloon Motor Bus' vehicle washing facilities, situated at the corner of Po Lun Street and Yuet Lun Street on lot KX 877, are also located here and the DPO/TKS has advised that a short-term tenancy has similarly been granted for the operation of this facility.

10.5 Summary of Key Planning and Land Use Interface Issues

10.5.1 R9 is proposed as a major strategic road link between Northwest Tsing Yi and West Kowloon. Geographically, it spans over a large land area that is covered by three Outline Zoning Plans and a number of departmental plans. The Land Requirements Report has summarised the above impacts in the context of planning the proposed R9 alignment. They include the lots directly affected by the alignment and the lots located within 10m from R9, which is assumed as the maximum extent of the temporary works area required during construction. Landuse constraints are shown in Figure 10.1.

10.5.2 Although an overall reserve for the road has been largely demarcated on the relevant statutory plans, indicating the broad clearance limit required for construction and operation of Route 9, it is inevitable that other land use interface issues may arise if there are further changes to the land use planning in Tsing Yi, Stonecutters Island and the West Kowloon Reclamation. Interfaces with existing and proposed uses have been minimised to a great extent by the choice of alignment. The overall environmental impact of R9 has been shown to be acceptable after the inclusion of certain mitigation measures to control impacts due to noise, air quality, water quality, ecological landscape and visual issues. Whereas the long-term operational impacts on landuse are acceptable given some minor limitations to land use in the vicinity of the tunnel portals, construction impacts will be managed by the statutory controls and the Environmental Monitoring and Audit process. Further fine-tuning of the vertical component of the alignment is still in progress and, as

far as practicable, options are being adopted which will further reduce the environmental impacts.