




**Proposed Karting Track in D.D.134,
Lung Kwu Sheung Tan, Tuen Mun**

**Project Profile
for Application of an
Environmental Impact Assessment
Study Brief**

September 2005

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| Reviewed by (PM): | Checked by: | Approved by: |

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| Report Version: <u>1</u> | Date of Submission: <u>29 September 2005</u> |
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The information contained in this report is, to the best of our knowledge, correct at the time of printing. The interpretation and recommendations in the report are based on our experience, using reasonable professional skill and judgment, and based upon the information that was available to us. These interpretations and recommendations are not necessarily relevant to any aspect outside the restricted requirements of our brief. This report has been prepared for the sole and specific use of our client and MEMCL accepts no responsibility for its use by others.

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1. BASIC INFORMATION

Project Title

1.1 Proposed Karting Track in D.D.134, Lung Kwu Sheung Tan, Tuen Mun

Purpose and Nature of the Project

1.2 The purpose of the Project is to provide an outdoor karting track at Lung Kwu Sheung Tan, Tuen Mun. The location of the proposed karting track is shown in **Drawing No. 1.1**.

1.3 The proposed karting track serves both recreational and sports purposes. The karting track will be co-managed by the Project Proponent and the Hong Kong Kart Club. Hong Kong Kart Club is a member of the Sports Federation and Olympic Committee of Hong Kong, China and as well as one of the sporting organizations under the subvention of the Leisure and Cultural Services Department.

1.4 The proposed karting track is for running with petrol karts. The design of the proposed karting track satisfies the international standard for kart racing as well as the safety. The overall track length is about 900m. The karting track will operate from Monday to Sunday with operating hours from 0930 to 1900. The proposed track can hold a maximum population of 200 visitors with about 20 staff. The maximum number of karts allowed to run on the track is 40 at any time.

1.5 The layout plan of the Project is shown in **Drawing No. 1.2**. The existing 2 storey high village house within the site boundary will be used as an office for the karting track. The Tsz Tong (Lau's ancestral hall) falls into the site boundary will be kept within the karting track area.

1.6 Other than the running track, the following facilities are to be included in the proposed karting track area:

| Facility | Number |
|-----------------------------|--------|
| Office | 1 |
| Kart maintenance/store room | 12 |
| Mobile toilet | 4 |

1.7 The Project overview is shown in **Drawing No. 1.2**.

Name of Project Proponent

1.8 HGH Limited

Location and Scale of Project

1.9 The Project site is located at various lots in D.D.134, Lung Kwu Sheung Tan, Tuen Mun. Location of the site is shown in **Drawing No. 1.1**. The total site area is about 1.8 ha. The Project site was used historically as agricultural land. It is dominated by wasteland currently.

Number and Type of Designated Project Covered by the Project Profile

1.10 The Project involves a motor racing circuit and is therefore classified as a designated project (DP) under Schedule 2 Part I – Category O.4 of the Environmental Impact Assessment Ordinance (EIAO) Cap. 499.

Name and Telephone Number of Contact Person(s)

1.11 The contact persons for this Project are shown below:

Mr. Joe Cheung

HGH Limited

23B, 367 King's Road, North Point, Hong Kong
Tel: 852-3591 5687
Fax: 852-2519 8578

Mr. Alex Mui

Hong Kong Kart Club Limited
Room 1030, Sports House,
1 Stadium Path, So Kon Po,
Causeway Bay, Hong Kong
Tel: 852-2504 8293
Fax: 852-2577 8885

2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

Implementation and Planning of the Proposed Project

- 2.1 HGH Limited will design and plan the proposed Project. The karting track will be co-managed by HGH Limited and the Hong Kong Kart Club. Major construction activities will be site formation, track paving and planting. A contractor will be commissioned by HGH Limited to construct the Project in accordance with both the statutory standard and other guidelines. The construction works for the Project will be planned and constructed under environmentally friendly manner to minimize construction nuisance.

Tentative Project Timetable

- 2.2 The tentative programme of the proposed work are as follows:

| | |
|--------------------------------|-------------------------|
| Planning and Design | up to March 2006 |
| Construction and Commissioning | March 2006 – April 2006 |
| Operation | May 2006 |

- 2.3 All construction works will be carried out during daytime, i.e. from 0700 to 1900.

Interactions with Other Projects

- 2.4 No other major project was identified to be carried out concurrently in the vicinity of the proposed project.

3. MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

General Description

- 3.1 The proposed karting track area is located at Lung Kwu Sheung Tan which is far from any sensitive receiver. The area is currently not under any zoning category according to Planning Department's latest information. Representative photographs of the Project site are given in **Appendix 1**.
- 3.2 The site area leased to the Project Proponent by the landlord included a Tze Tong (Lau's ancestral hall) and a vacant village house. The Tsz Tong will be kept within the karting track area.
- 3.3 The village house is proposed for the use as an office of the karting track without any modification of the structure. Permission of changing the use of the village house from residential to office was sought from Lands Department.
- 3.4 According to the information provided by the representatives of Lung Kwu Tan Village, Mr. Lau Wong Fat and Mr. Chris C.S. Lau, the Tze Tong is a private place and would be visited by the Lau's family members of Lung Kwu Tan Village only. The Tze Tong is not opened to the public and unauthorized entry is strictly prohibited. In view of this situation, the Tze Tong is not a place of public worship. Hence it is not considered as a sensitive receiver in terms of air quality or noise impacts.
- 3.5 The west side of the site boundary lies adjacent to the Lung Kwu Tang Road. The other side of the Road is Lung Kwu Sheung Tan area. Currently a large part of this area is occupied by several plastics recycling factories and an open storage for construction use powered mechanical equipment. At about 300m to the northwest of proposed track area is a store for Category 7 dangerous goods. At about 120m to the west of proposed track area is a store for Category 5 dangerous goods. The locations of the dangerous goods stores are shown in **Drawing No. 1.3**. A concrete batching plant is located further, at about 350m, to the west of the Project site. Two canteens were found in the area. One is located at about 220m to the west of the site. One is about 130m to the southwest of the proposed track area.
- 3.6 North of the site is the Lung Kwu Sheung Tan Outfall Chamber. East of the site is the mountain area of Lung Kwu Sheung Tan. South of the site is an open storage area. Southwest of the site, separated by the Lung Kwu Tan Road, is an open storage area of construction materials. The location of the site is shown in **Drawing No. 1.1**.

Existing and Planned Sensitive Receivers

- 3.7 The existing air sensitive receivers (ASRs) identified are the container offices of the plastic recycling factories and open storage areas in the surrounding. No ASR in residential use was identified within 500m from the site boundary of the proposed track area. With reference to the information of the latest Lot Index Plan from Lands Department, no planned residential use was identified within 500m from the Project site boundary. A representative ASR was selected with details shown in **Table 3.1**. The location of the ASR is shown in **Drawing No. 3.1**.

Table 3.1 Details of representative Air Sensitive Receiver

| Air Sensitive receiver | Description | Distance between sensitive receiver and nearest track location (m) |
|------------------------|---|--|
| ASR1 | Container office of a plastic recycling factory | 88 |

- 3.8 The container offices of the plastic recycling factories and open storage areas in the surrounding are air-conditioned. No existing noise sensitive receiver (NSR) was identified within 300m from the site boundary of the proposed track area. With reference to the information of the latest Lot Index Plan from Lands Department, no planned residential use was identified within 300m from the Project site boundary. Hence no NSR was identified for this Project.
- 3.9 The nearest water quality sensitive receiver would be the ungazetted beach at Lung Kwu Upper.

- 3.10 Ecological baseline for the proposed works area and areas adjacent to the Site Boundary (hereafter referred to as the Study Area) was determined through a review of relevant literature and a broad scoping survey of the Study Area conducted in July 2005. Representative photographs of the Study Area are given in **Appendix 1**, and a description of baseline ecological conditions in the Study Area is given in the following paragraphs:

Areas of Recognised Conservation Importance

- 3.11 There are no areas of recognised conservation importance within or close to the Study Area. The nearest such area is Sha Chau and Lung Kwu Chau Marine Park, which lies over 3 km to the south west of the proposed development site, off the Deep Bay coastline.

Habitats & Vegetation

- 3.12 The proposed development site was used historically as agricultural land, but has more recently been filled with soil, sand and construction waste. Consequently, the site is largely devoid of vegetation, with only a few, weedy ruderal species such as *Ageratum conyzoides* recorded during the recent scoping survey. Habitats adjacent to the proposed development site included highly eroded grassland/low shrubland on the hillsides to the east of the site. The lower slopes of the hills adjacent to the site have been planted with fruit trees including Longan (*Euphoria longan*) and Banana (*Musa paradisiaca*). Abandoned agricultural land lies to the north of the site, wasteland to the south, and the western boundary of the site lies adjacent to Lung Kwu Tan Road.

Fauna

- 3.13 Given the highly disturbed nature of the Study Area, it is unlikely the proposed development site or adjacent habitats support faunal species or communities of conservation importance. Fauna recorded during the scoping survey was restricted to species typical of disturbed habitats including avifauna (Crested Myna, *Acridotheres cristatellus*; Black-necked Starling, *Sturnus nigricollis*; Tree Sparrow, *Passer montanus*), butterflies (Pale Grass Blue, *Zizeeria maha*) and the dragonfly *Pantala flavescens*.
- 3.14 In accordance with the *EIAO-TM Annex 8* criteria, the ecological importance of habitats in the Study Area has been evaluated in **Table 3.2** below.

Table 3.2 Ecological Value of Habitats in the Study Area

| Criteria | Ecological Value |
|------------------------------------|---|
| Naturalness | Habitats are highly disturbed. |
| Size | The proposed development site is small in size (approximately 1.8ha) |
| Diversity | Very Low |
| Rarity | No rare flora, fauna or habitats recorded or likely to occur in the Study Area. |
| Recreatability | High. |
| Fragmentation | N/a |
| Ecological linkage | Study area is not functionally or structurally linked to any ecologically important resources in any significant way. |
| Potential value | Low-Moderate. |
| Nursery ground | No significant records. |
| Age | N/a. |
| Abundance/ Richness of Wildlife | Low. |
| Ecological value | Low. |

- 3.15 In accordance with the *EIAO-TM Annex 8* criteria, the ecological importance of habitats in the Study Area has been evaluated as low ecological value.

4. POSSIBLE IMPACT ON THE ENVIRONMENT

Construction Phase

Dust

- 4.1 The potential air quality impact during the construction phase of the Project will be dust emission from site formation, compacting, track paving works, planting and fence installation. Temporary stockpiling of excavated material on site would generate dust but only minor localised air quality nuisance is expected. The kart maintenance/store rooms are to be built by modified containers. No dust emission will be expected arising from building the kart maintenance/store rooms and fence installation. Given that the small scale of construction works and long distance from the air sensitive receivers (ASRs), the potential dust impacts at the ASRs would be minimal.
- 4.2 To ensure compliance with the Hong Kong Air Quality Objectives (AQOs) at the ASR at all time, good site practices are recommended in Section 5.1 to minimise the dust impact.

Noise

- 4.3 Construction noise would be generated mainly by activities including excavation, compacting, track paving and fence installation works.
- 4.4 Generally, the construction activities of the Project would be carried out in non-restricted hours (0700 – 1900 hours).
- 4.5 The number of construction equipment and its on-time usage would be limited as the scale of construction work on site is small. The equipment would involve a 20 ton bulldozer, a 20 ton excavator and a dump truck for the construction activity of site formation. An asphalt paver and a road roller would be involved for the construction activity of track paving.
- 4.6 As no noise sensitive receiver (NSR) was identified, noise impact due to construction would not be anticipated.

Water Quality

- 4.7 Water quality impacts of the Project would be associated with site runoff and wastewater and sewage generated from construction activities. With the implementation of good site practices and the recommended mitigation measures in Section 5, adverse water quality impact during the construction phase would not be anticipated.

Wastes

- 4.8 Wastes that would likely be generated during the construction phase include general refuse such as packaging and container wastes, workforce waste, construction wastes such as excavated material and chemical wastes including oil and lubricant from construction plant. In view of the small scale of the Project, no adverse waste impact would be anticipated.
- 4.9 With the proper implementation of good site practices and the recommended mitigation measures in Section 5, the potential environmental impacts resulting from the storage, handling and transportation of general site wastes would be minimal.

Ecology

- 4.10 Please see paragraphs 4.23 to 4.26 for ecological impacts resulting from both construction and operational phase activities.

Landscape and Visual Impact

- 4.11 In considering that the existing land uses of the Lung Kwu Sheung Tan area are mainly plastic recycling factories and open storage, no landscape and visual impact is expected.

Operational Phase

Air Quality

4.12 The karts to be running on the track are powered by Rotax Max FR125 2-stroke single cylinder engines with displacement of 125 c.c. (Further information may find at: www.maxchallenge-rotax.com). Normal unleaded fuel would be used. In view of the small displacement, minimal emission from the kart engines would be expected.

4.13 The general operation of the karting track is as follows:

Table 4.1 General Operation of the Karting Track

| Event | Maximum number of karts allowed on the track | Time for each run | Time break between each run |
|-------------------------|--|-------------------|-----------------------------|
| Training/ Rental Run | 40 | 15 minutes | 15 minutes |
| Match | 34 | 15 minutes | 15 minutes |

4.14 In view of the minimal emission from the kart engines and the operation characteristics, the air quality impact would be anticipated to be insignificant during operational phase.

4.15 Potential petrol odour would come from incomplete combustion or fuel leakage by the kart engine or during petrol refilling. To avoid incomplete combustion or fuel leakage, the kart engines will undergo regular maintenance to maintain a good operation condition. For the case of petrol refilling, the fuel tank capacity of the kart is small (about 3L) and the refilling time would be very short in comparing with that of ordinary vehicle, the odour issue arisen from refilling should be minimal.

4.16 According to Hong Kong Planning Standards and Guidelines (HKPSG), odour sources should be sited away from the main urban centres and a buffer area from nearby sensitive uses is required. Acceptable uses in the buffer area include industrial areas, godowns, cold storages, carparks, amenity areas and open space uses.

4.17 Since the proposed track area is located in an open area and the locations of the identified ASRs fall into the acceptable use as buffer area, odour impact is expected to be insignificant during the operational stage.

4.18 As stipulated in HKPSG, sufficient buffer distance between the road and air sensitive use area is recommended. Lung Kwu Tan Road is classified as a local distributor. For local distributor, a buffer distance of at least 5m is recommended. In our proposed layout design, the kart maintenance/store rooms along the west side of the Project site are located from 5 to 10m to the nearest kerb of Lung Kwu Tan Road. The proposed office is located at a distance of 38m from Lung Kwu Tan Road. As the requirement of HKPSG for the air sensitive use are met, adverse air quality impact from the traffic of Lung Kwu Tan Road is not expected.

Noise

4.19 As no noise sensitive receiver (NSR) was identified, no adverse noise impact would be anticipated during the operational phase.

Water Quality

4.20 Portable chemical toilets will be provided for the visitors. A licensed contractor would be responsible for appropriate disposal and maintenance of these facilities. No adverse water quality impact would be anticipated.

4.21 To control surface water run-off from the proposed karting circuit, a proper drainage system with peripheral channel, sediment trap and petrol interceptor would be provided.

Wastes

4.22 For both environmental protection and safety reason, routine maintenance of the karts will be carried out to ensure no leakage of lubricant and petrol would occur. Used engine lubricant and effluent via the petrol–interceptor will be collected by a licensed disposal agent. Mitigation and control requirements for chemical wastes are detailed in Section 5. Provided that the handling, storage and disposal of chemical wastes are in accordance with these requirements, adverse environmental impacts would not be expected.

Ecology

Potential Sources of Environmental Impacts

4.23 Several potential ecological impacts resulting from construction and operational phase activities have been identified. These would include:

- Permanent direct impact to approximately 1.8 ha of wasteland due to construction of Kart Track and associated facilities.
- Indirect impacts to habitats and associated fauna adjacent to works areas resulting from increased human activity and disturbance from noise-generating construction plant during construction phase.
- Indirect impacts to habitats and associated fauna adjacent to works areas resulting from increased human activity and disturbance from noise-generating karts during operation phase.

Prediction and Evaluation of Impacts

4.24 Potential ecological impacts resulting from construction/operation phase activities have been evaluated according to *Table 1 of Annex 8* of the *EIAO-TM*, and are summarised in **Table 4.2** below.

Table 4.2 Overall Impact Evaluation to Habitats in the Study Area

| Evaluation Criteria | Overall Impact Evaluation |
|----------------------------------|--|
| Habitat quality | Low. |
| Species | No species of conservation importance recorded or likely to occur in the Study Area. |
| Size/Abundance | Approximately 1.8 ha of wasteland directly impacted by the proposed works. |
| Duration | Direct impacts would be permanent. |
| Reversibility | Direct impacts would be irreversible. |
| Magnitude | Very Minor. |
| Overall impact conclusion | Low. |

4.25 Direct impacts resulting from the proposed development would be restricted to the loss of approximately 1.8 ha of highly disturbed wasteland habitat. Direct ecological impacts are therefore considered negligible.

4.26 As there are no ecological sensitive receivers in the vicinity of the proposed development site, indirect impacts to habitats adjacent to the site are expected to be minor during both the construction and operation phases.

Landscape and Visual Impact

4.27 The proposed karting track development is located in a remote section of Lung Kwu Sheung Tan, Tuen Mun. It is currently covered with heavily disturbed bare soil with occasional rubbish dumps and wild grasses. There are only a few small existing self-sown trees along a narrow verge adjacent to

Lung Kwu Tan Road. The site will be mostly screened by hills of Tai Lang Shui, which the Firing Range is found. It is only visible from Lung Kwu Tan Road to the west. But most vehicles, except trucks, will not drive into this northern section of Lung Kwu Tan Road; the only major group of village houses is found more than one kilometer to the south.

- 4.28 The only concern is infrequent visitors of an existing Lau's ancestral hall fall within the site boundary. The hall belongs to the landlord, who leases out the land for the karting track development. Impacts to these visitors are expected to be minimal.
- 4.29 Given the poor quality of the existing site, the proposed development will have a beneficial landscape and visual impacts. A proposed landscape plan is shown in **Drawing No. 4.1**.

Traffic Generation

- 4.30 Shuttle bus service will be provided by the Project Proponent for the visitors. A 45 person bus will run between Tuen Mun Town Centre and the karting track site. There will be one trip per hour. No carparks will be provided in the karting track site for visitors. The karting track will operate from Monday to Sunday with operating hours from 0930 to 1900. Hence the traffic generation is estimated to be 10 bus trips per day. Adverse impact to the surrounding environment due to the minimal traffic generation would not be expected.

Hazard to life

- 4.31 The proposed karting track is designed to satisfy the international standards of safety. All personnel riding on petrol karts in the site must have a licence issued by the Hong Kong Kart Club. The licence is issued under the condition that adequate training on kart driving and safety is obtained. Players in the track area have to follow standard safety regulations of kart racing.
- 4.32 Extinguishers and fire-fighting sand will be located along the running track every 100m. The locations of the extinguishers are shown in **Drawing No. 1.2**. Should there be an accident with fire, all the activity inside the track area would be stopped compulsorily and staff inside will perform fire fighting with the extinguisher and/or the sand.
- 4.33 Extinguishers are also provided in the kart service area and the office.
- 4.34 The location of petrol refilling and storage would be within the service area as shown in **Drawing No. 1.2**. The petrol would be stored in a standard 18L safety petrol tank. A licensed dangerous goods (DG) vehicle would come to the site daily to unload a petrol tank in the service area. The service area is enclosed by chain link fence. Karts will be fuelled by a hand pump within the area. If the petrol in the container is used up, another petrol tank will be unloaded for fuelling. The DG vehicle will leave the site after fuelling. No more than one 18L petrol tank would be left in the service area during daytime. The DG vehicle will go to the site to collect the petrol tank after the service time of the karting track.
- 4.35 A DG store for Category 7 dangerous goods (strong supporters of combustion) is located at about 300m in northwest direction to the proposed karting track site. Another DG store for Category 5 dangerous goods (substance giving off inflammable vapour) is located at about 120m in northwest direction to the proposed karting track site. It is considered that the possible fire incidents occurred in the karting track would not pose significant risk to the DG stores due to the distance between the two facilities and separation by the Lung Kwu Tan Road. Provided that the operation of the DG stores strictly follow the guidelines and licence conditions of Fire Services Department, it is considered that the possible accidents occurred in the DG store would not pose significant risk to the proposed karting track.

5. ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED IN THE DESIGN AND ANY FURTHER ENVIRONMENTAL IMPLICATIONS

Construction Phase Control Measures

Dust

5.1 In order to minimize the air quality impact during the construction of the Project, the dust mitigation measures stipulated in the Air Pollution Control (Construction Dust) Regulation should be implemented. Major control measures relevant to this Project are listed below:

- Installation of temporary fencing board;
- Frequent watering for particularly dust static construction areas and areas close to air sensitive receivers;
- Dusty materials stockpiled on site should be covered;
- Tarpaulin covering the load of dusty materials carried by vehicle transported to, from and between site location;
- Where feasible, routing of vehicles and positioning of construction plant should be at the maximum possible separation distance from air quality sensitive receivers.

Noise

5.2 Although no adverse noise impact is anticipated during construction, it is still recommended to carry out the good site practices listed below during the construction phase of the Project:

- Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme.
- Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction programme.
- Mobile plant, if any, should be sited as far away from NSRs as possible.
- Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.
- Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.
- Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities.
- Contractor shall comply with and observe the Noise Control Ordinance (NCO) and its subsidiary regulations.

Water Quality

5.3 The practices outlined in ProPECC PN 1/94 Construction Site Drainage will be adopted during the construction of the Project where appropriate. Water quality impact will be minimized during construction stage with the adoption of good site management practices.

Construction Waste Management

5.4 The Contractors will be required to observe and comply with the Waste Disposal Ordinance and its subsidiary regulations, as well as good waste management practices.

Ecology

- 5.5 Standard good site practice measures should be implemented throughout the construction phase. The measures should include:
- Placement of equipment or stockpile in designated works areas and access routes selected on existing disturbed land.
 - Construction activities should be restricted to work areas that should be clearly demarcated.
 - Waste skips should be provided to collect general refuse and construction wastes. The wastes should be disposed of timely and properly off-site.
 - General drainage arrangements should include sediment and oil traps to collect and control construction site run-off.
 - Open burning on works sites is illegal, and should be strictly prohibited.
 - Temporary works areas would be re-instated following the completion of construction phase activities.
 - Disturbance to existing vegetation should be minimised wherever possible. In particular, adequate protection should be provided for trees located within or adjacent to proposed works areas.

Operational Phase Control Measures

Air Quality

- 5.6 No mitigation measure would be required during the operation phase.

Noise

- 5.7 No mitigation measure would be required during the operation phase.

Water Quality

- 5.8 A licensed contractor should be employed for the appropriate disposal and maintenance of the portable chemical toilets.
- 5.9 A proper drainage system with peripheral channel, sediment trap and petrol interceptor should be provided to control surface water run-off. The design of the drainage system should be in accordance with the requirements of ProPECC Note No. 5/93. The amount of impervious surface should be reduced as far as practicable to reduce the amount of surface runoff, with consideration given to maximizing the amount of green area or vegetated porous surfaces. Nevertheless, hard paving should be provided at appropriate locations, such as the kart parking and maintenance areas, to avoid potential land contamination due to petrol or oil leaks from vehicles or machinery.

Wastes

- 5.10 If chemical wastes are generated during the operation of the karting track, the Project Proponent would be required to register with the EPD as a Chemical Waste Producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste. The Project Proponent shall use a licensed collector to transport and dispose of the chemical wastes, to either the Chemical Waste Treatment Centre at Tsing Yi, or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.

- 5.11 Paved surfaces should be provided at the petrol storage area and kart maintenance areas to avoid potential soil contamination.

Ecology

- 5.12 No adverse ecological impact was identified during the operational stage and no mitigation measure is therefore required.

Hazard to life

- 5.13 During the operational stage, the following mitigation measures are proposed:

- Smoking is prohibited within the site area.
- Extinguishers and fire-fighting sand are located along the track every 100m.
- Extinguishers are provided in the office and the kart service area.
- Fuelling will be conducted in the service area enclosed by a chain link fence.
- Petrol is stored in a safety petrol tank with maximum quantity of 18L.
- Only one tank of petrol is stored in the service area of the site.
- No petrol would be stored overnight.
- Karts will undergo regular maintenance to prevent petrol leakage.

- 5.14 Should there be an accident with fire, all the activity inside the track area would be stopped compulsorily and staff inside will perform fire fighting with the extinguisher and/or the fire fighting sand.

Duration of Environmental Effects

- 5.15 The duration of construction of the Project is expected to be completed in about two months. In addition to limited scale of construction work, no adverse residual impacts on air quality, noise, water quality, waste and ecology are predicted during construction phase with the implementation of mitigation measures described above.

Comment on Further Implications

- 5.16 During operation of the Project with the implementation of the proposed mitigation measures, no unacceptable environmental impacts including air quality, noise, water quality, wastes, ecology and hazard to life would be expected.

6. USE OF PREVIOUSLY APPROVED EIA REPORTS

- 6.1 No previously approved Environmental Impact Assessment reports are found to be relevant to this Project.

DRAWINGS



黑角咀
Black Point
(Lan Kok Tsui)

SITE LOCATION



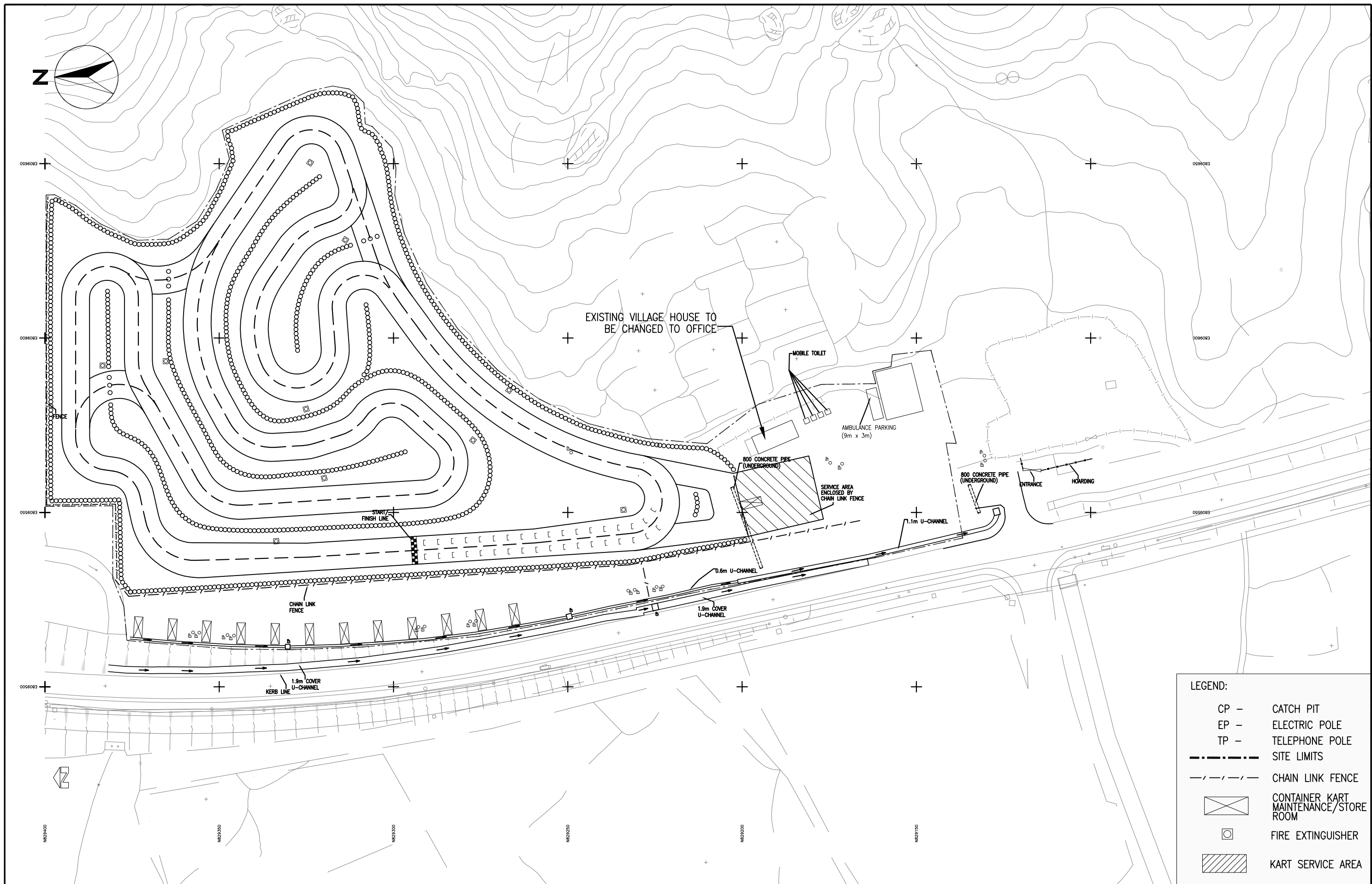
MAUNSELL | AECOM

Maunsell Environmental
Management Consultants Ltd

PROPOSED KARTING TRACK IN D.D. 134, LUNG KWU SHEUNG TAN, TUEN MUN

SITE LOCATION PLAN

| | | | |
|---------|-----------|-------------|--------|
| SCALE | A3 1:9000 | DATE | SEP 05 |
| CHECK | FKKN | DRAWN | CCCM |
| JOB No. | A05005 | DRAWING No. | 1.1 |
| | | REV | - |

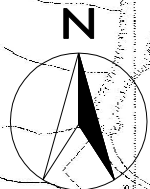


MAUNSELL | AECOM
 Maunsell Environmental
 Management Consultants Ltd

PROPOSED KARTING TRACK IN D.D. 134, LUNG KWU SHEUNG TAN, TUEN MUN

SITE LAYOUT PLAN

| | | | |
|---------|-----------|-------------|----------|
| SCALE | A3 1:1000 | DATE | SEP 2005 |
| CHECK | FKKN | DRAWN | CCCM |
| JOB No. | A05005 | DRAWING No. | 1.2 |
| | | REV | — |



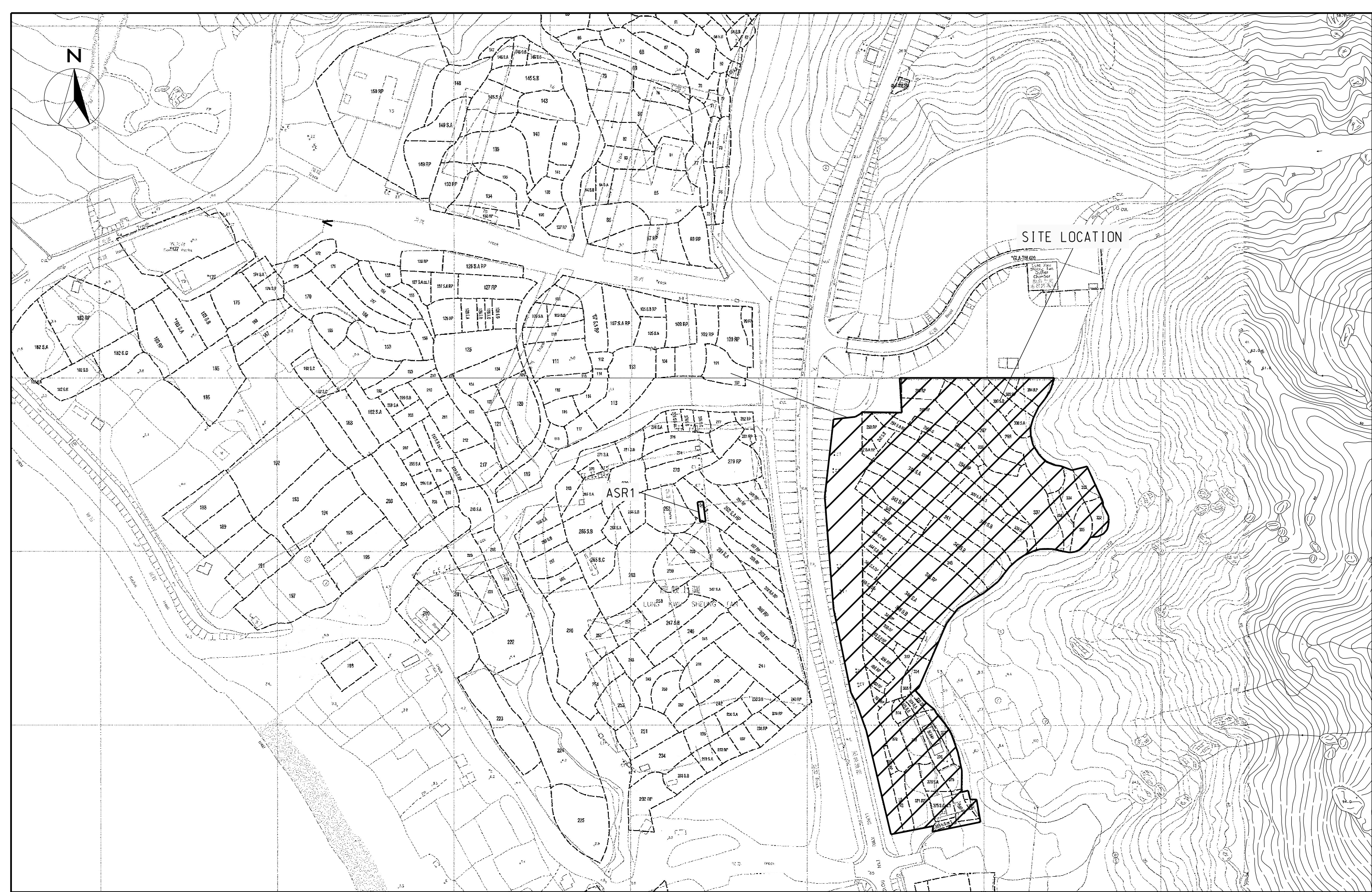
CATEGORY 7
DANGEROUS
GOODS STORE

CATEGORY 5
DANGEROUS
GOODS STORE

SITE LOCATION

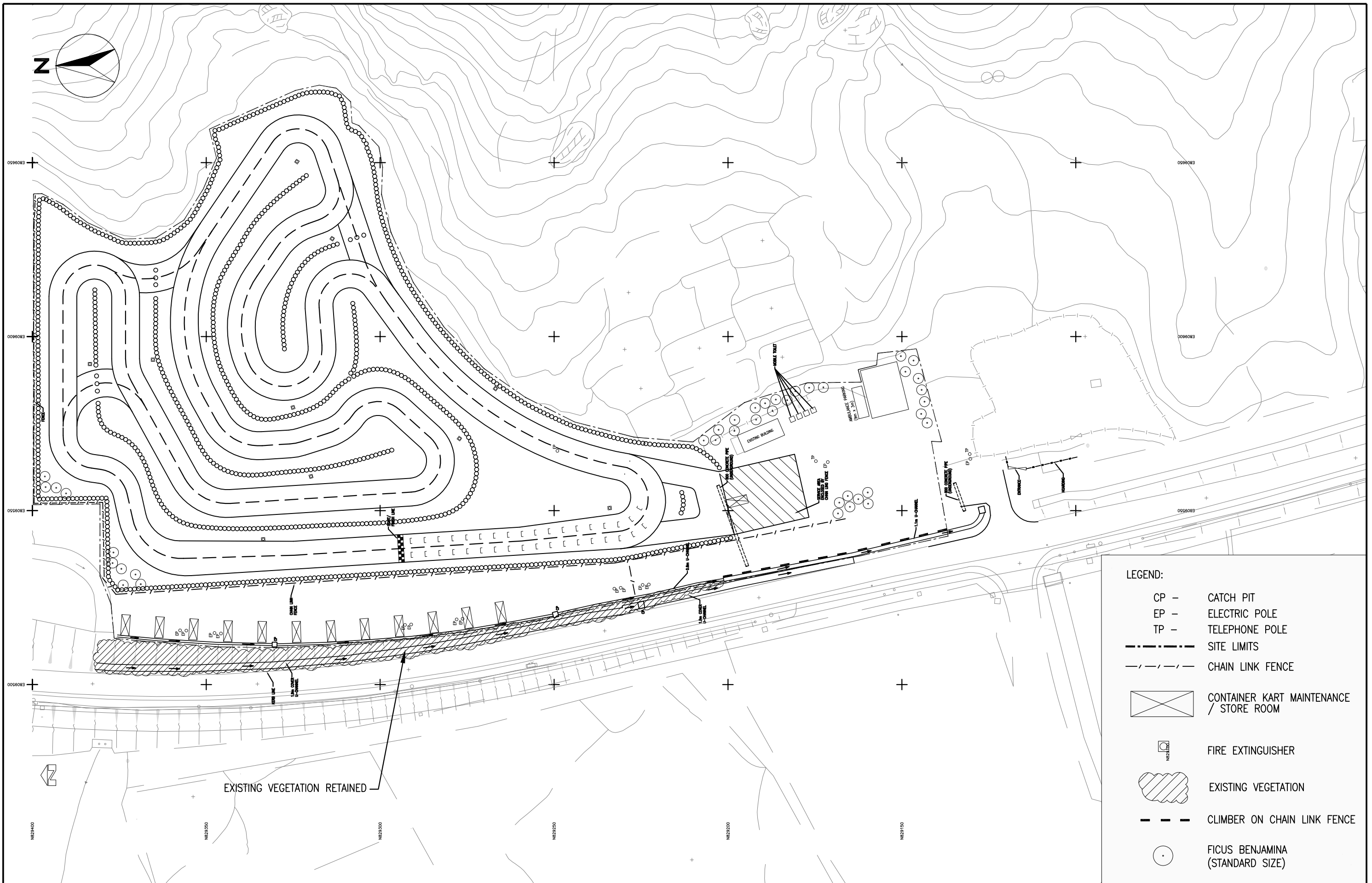


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|---------|-----------|-------------|----------|
| SCALE | A3 1:2000 | DATE | SEP 2005 |
| CHECK | FKKN | DRAWN | CCCM |
| JOB No. | A05005 | DRAWING No. | 1.3 |
| | | REV | - |



在屯門龍鼓上灘大量約份134號(D. D. 134)內擬建小型塞車場
具代表性的空氣質素敏感受體位置圖

| | | | |
|---------|-----------|-------------|----------|
| SCALE | A3 1:2000 | DATE | SEP 2005 |
| CHECK | FKKN | DRAWN | CCCM |
| JOB No. | A05005 | DRAWING No. | 3.1 |
| | | REV | - |



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 Maunsell Environmental
 Management Consultants Ltd

PROPOSED KARTING TRACK IN D.D. 134, LUNG KWU SHEUNG TAN, TUEN MUN

PROPOSED LANDSCAPE PLAN

| | | | |
|---------|-----------|-------------|----------|
| SCALE | A3 1:1000 | DATE | SEP 2005 |
| CHECK | FKKN | DRAWN | CCCM |
| JOB No. | A05005 | DRAWING No. | 4.1 |
| | | REV | — |

APPENDIX 1

Representative Photographs of the Project Site



The proposed development site is dominated by wasteland
(View towards north)



Grassland / lowshrubland habitat to the east of the development site
(View towards east)

| | | | | | |
|---|---|---------|--------|-------------|--------|
| MAUNSELL AECOM Maunsell Environmental Management Consultants Ltd | Proposed Karting Track in D.D.134, Lung Kwu Sheung Tan, Tuen Mun Representative Photographs of the Study Area | SCALE | N.T.S. | DATE | Jul-05 |
| | | CHECK | | DRAWN | DAVIDG |
| | | JOB NO. | A05005 | DRAWING No. | A1.1 |



Abandoned agricultural land to the north of the development site



View towards south at north of the development site

| | | | | | |
|--|---|---------|--------|-------------|-------------|
| MAUNSELL AECOM Maunsell Environmental Management Consultants Ltd | Proposed Karting Track in D.D.134, Lung Kwu Sheung Tan, Tuen Mun Representative Photographs of the Study Area | SCALE | N.T.S. | DATE | Jul-05 |
| | | CHECK | | DRAWN | DAVIDG/FKKN |
| | | JOB NO. | A05005 | DRAWING No. | A1.2 |



View towards south from the development site



View towards Lung Kwu Tan Road from the development site

| | | | | | |
|--|---|---------|--------|-------------|--------|
| MAUNSELL AECOM Maunsell Environmental Management Consultants Ltd | Proposed Karting Track in D.D.134, Lung Kwu Sheung Tan, Tuen Mun Representative Photographs of the Study Area | SCALE | N.T.S. | DATE | Jul-05 |
| | | CHECK | | DRAWN | FKKN |
| | | JOB NO. | A05005 | DRAWING No. | A1.3 |



Existing vacant village house within the development site
(To be used as an office for the Proposed Karting Track)



Tze Tong located at the south of the development site

| | | | | | |
|--|---|---------|--------|-------------|--------|
| MAUNSELL AECOM Maunsell Environmental Management Consultants Ltd | Proposed Karting Track in D.D.134, Lung Kwu Sheung Tan, Tuen Mun Representative Photographs of the Study Area | SCALE | N.T.S. | DATE | Jul-05 |
| | | CHECK | | DRAWN | FKKN |
| | | JOB NO. | A05005 | DRAWING No. | A1.4 |



Lung Kwu Tan Road along the site boundary west
(View towards north)



Plastic recycling factory and open storage area to the west of the
development site

| | | | | | |
|---|---|---------|--------|-------------|--------|
| MAUNSELL AECOM Maunsell Environmental Management Consultants Ltd | Proposed Karting Track in D.D.134, Lung Kwu Sheung Tan, Tuen Mun Representative Photographs of the Study Area | SCALE | N.T.S. | DATE | Jul-05 |
| | | CHECK | | DRAWN | FKKN |
| | | JOB NO. | A05005 | DRAWING No. | A1.5 |