Appendix 6

Visual Impact Assessment (VIA)

Visual Impact Assessment

Prepared by DeSPACE (International) Limited

Contents

1.	Introduction	3
2.	Proposed Development	4
3.	Visual Context and the Surroundings	5
4.	Analysis of Visual Elements and Assessment Area	6
5.	Viewpoint Identifications	7
6.	Visual Impact Assessment	10
7.	Conclusion	13

1. Introduction

- 1.1 This Visual Impact Assessment ("VIA") is prepared on behalf of Turbo Regal Limited (hereinafter referred to "the Applicant"), in support of a Section 16 Planning Application for proposed social welfare facility (Residential Care Home for the Elderly (RCHE)) in Lot 669 S.A ss.2 RP (part) and Lot 669 S.B RP (part) in D.D. 117, Wong Nai Tun Tsuen, Yuen Long (hereinafter referred to "the Site").
- 1.2 The Applicant is the sole registered land owner of the private lots. The proposal of the subject application is to develop a block of 8-storey RCHE comprising 300-360 bed spaces with a total gross floor area (GFA) not exceeding 12,000 sq.m.
- 1.3 The Site is zoned as "Village Type Development" ("V") and "Other Specified Uses" annotated "Rural Use" ("OU (Rural Use)") under the Approved Tai Tong Outline Zoning Plan No. S/YL-TT/20 ("the OZP"). According to the Notes of the OZP, the proposed RCHE is a 'Social Welfare Facility' use in town planning term. According to the Notes of the OZP regarding both zones, "Social Welfare Facility" falls into Column 2 use which requires planning permission from the TPB with or without conditions.
- 1.4 A VIA is prepared in accordance with the 'Town Planning Board Guidelines No. 41 Guidelines on Submission of Visual Impact Assessment for Planning Applications to the Town Planning Board' ('TPB PG-No. 41') in order to evaluate the degree of visual impacts on visual sensitive receivers ("VSR") from major public viewpoints ("VPs") due to the proposed development. Planning and design merits/ mitigation measures to be adopted in the proposed development will also be incorporated.
- 1.5 The outline of this VIA is set out as follows:
 - Section 2 sets out the Site and the proposed development
 - Section 3 describes the visual context and the surrounding area
 - Section 4 defines the Assessment Area
 - Section 5 identifies relevant types of receivers and viewpoints
 - Section 6 conducts an analysis on the visual impacts with mitigation measures
 - as necessary
 - Section 7 concludes the VIA

2. Proposed Development

- 2.1 The Applicant is the sole registered owner of the private lots. The Site with a site area of about 2,244 sq.m is fenced-off, hard-paved and largely vacant. Located in the southern part of Yuen Long near Wong Nai Tun Tsuen, the Site is abutting on and accessible from Wong Nai Tun Tsuen Road to its east. There is an existing 2-storey structure at the centre of the Site.
- 2.2 The proposed development is to develop a block of 8-storey RCHE comprising 300-360 bed spaces with a total gross floor area (GFA) of not exceeding 12,000 sq.m.
- 2.3 The key development parameters of the proposed development are summarized below in **Table 1**:

Table 1 – Major Development Parameters					
Major Development Parameters	Proposed Scheme				
Site Area	2,244 sq.m (about)				
Total Gross Floor Area (GFA)	Not exceeding 12,000 sq.m				
	(NB: The current scheme is about 8,940 sq.m with				
	double GFA counting for G/F; GFA counting for				
	covered car park, outdoor balconies and garden.)				
Plot Ratio (PR)	4 (about)				
Site Coverage	80% (about)				
Building Height	46.75 mPD (about)				
	(or not exceeding 31m for the absolute building				
	height)				
	(NB: Mean Street Level is +15.45mPD)				
No. of Storeys	8				
Total No. of beds	318 beds (or within a range from 300 to 360)				
Provision of parking facilities:					
Private car parking spaces	18 (including 2 disabled car parking spaces)				
Light Bus Space	1 (3m x 8m)				
Loading & unloading bay	1 (3.5m x 7m)				

3. Visual Context and the Surroundings

- 3.1 The Site with a site area of about 2,244 sq.m is situated in the southern part of Yuen Long New Town and at the fringe of Tai Lam Country Park and surrounded by rural settings in Wong Nai Tun Tsuen, Tai Tong. The Site is currently fenced-off, hard-paved and largely vacant. There is an existing 2-storey structure at the centre of the Site.
- 3.2 It is primarily rural in nature, with low-rise village houses typically 2 to 3 storeys high and car park/parking of vehicles, vacant land/structures and agricultural land, with scattered open storage/storage yards in the locality. To the east of the Site is an open nullah flanked by Wong Nai Tun Tsuen Road and Kiu Hing Road. To the immediate west of the Site is an agricultural land. The Site is also bounded by two local tracks to its south and north connecting Wong Nai Tun Tsuen Road and the residential dwellings.
- 3.3 With regard to the Yuen Long South ("YLS") Development in the proximity, the surrounding area in the long-run is predominantly residential in nature with residential developments of different development intensities and supported by commercial uses, community and recreational facilities and the required public utilities.
- 3.4 A stepped building height and development intensity profile decreasing gradually from north to south is adopted, where Yuen Long New Town centre comprises mainly high-rise and high-density developments up to 40 storeys while medium-intensity residential developments of around 20 storeys are in the southern part. YLS being segregated from Yuen Long New Town by Yuen Long Highway is currently occupied by low-density and low-rise (2-3 storeys) buildings and village housing.
- 3.5 Upon completion of YLS development, the development intensity will decrease gradually from the highest plot ratio of up to 5 in Yuen Long New Town to 2.4 in the south. It will allow better integration with denser development in the north while facilitating transition and blending in with the rural setting and the Tai Lam Country Park in the south.
- 3.6 The Site is situated outside of and adjacent to the planning area of "LOHAS living" aiming to provide an urban experience that promotes a Lifestyle of Health and Sustainability in association with a plot ratio of 2.4-4 with natural and rural settings.
- 3.7 According to the Revised Recommended Outline Development Plan ("Revised RODP") of YLS development, to the immediate north and west of the Site is an area zoned as "Residential Zone 3" within the Third Phase of YLS Development, where the BHR is 60mPD.

4. Analysis of Visual Elements and Assessment Area

- 4.1 With the purpose to protect public views and reconcile the visual impacts of the proposed development, an Assessment Area, or visual envelope, is identified in accordance with TPG PG-NO.41 to cover the area of visual influence within which the proposed development is pronouncedly visible or likely to be pronouncedly visible from key visual sensitive receivers.
- 4.2 The general guideline for settling out the size of the initial Assessment Area as stated in TPB PG-No.41 should be equal to approximately 3 times the height of the proposed development. As the building height is about 31m measured from the mean site formation level, the initial visual envelope for this VIA has a minimum radius of approximately 93m (i.e. 31 x 3) from the closest point of the proposed development. Please refer to **Figure 1** for the visual envelope.
- 4.3 The local context of the Site is therefore rural in nature. It is situated in a low-lying flat topography surrounded by low-rise developments including village houses at the east, south and north and open storage yards and warehouses at the west. To the immediate east of the Site is an open nullah flanked by Wong Nai Tun Tsuen Road and Kiu Hing Road which acts as a major visual element in the area. The Site can be observed by the public in a close distance from public viewpoints along major roads nearby, but it is difficult to be seen in a medium to long-range distance where the existing low-rise buildings, village housing and temporary structures are predominant.
- 4.4 View corridors and breezeways are designated along the blue-green network and main roads. Two key corridors are running north-south along the revitalized Yuen Long Nullah and between the Yuen Long Park Aviary Pagoda and Tai Lam Country Park.
- 4.5 There are only a few open spaces in the area. A local public park, namely Shui Tsiu San Tsuen Road Sitting-out Area, is found in proximity. A pavilion, elderly fitness equipment, children play equipment and benches are provided for active and passive activities.
- 4.6 It is well noted that the Site has the natural backdrop of Tai Lam Country Park at the south and west with the high point at Ma Shan Mountain Peak (about 290m). Due to low topography in the vicinity of the Site, the hillslopes are regarded as visual features in the locality. Important visual attractors, and local attractions, such as landmark buildings, sea views or old and valuable trees are not identified in the vicinity.

5. Viewpoint Identifications

- 5.1 To achieve a comprehensive visual appraisal, long-range, medium-range and close-range views from publicly accessible locations in all directions within the visual envelope are normally considered. Distinctive viewpoints visible by the VSRs such as public gathering places, activity nodes or parks and major junctions are the primary locations for selection of viewpoints.
- 5.2 Four VPs have been identified for the subject VIA as shown in **Figure 1**. One is short range, two are medium range and one is long range. The selected viewpoints are set in different directions and different distance towards the Site to better represent the visual effects likely to be brought by the proposed development. The nature of the VSRs is varied to include static and kinetic activities.
- 5.3 The locations of the four VPs are identified as follows:
 - VP1 View looking northwest along Kiu Hing Road
 - VP2 View looking northwest near Wong Nai Tun Tsuen Village Council
 - VP3 View looking south at a minibus stop along Kung Um Road
 - VP4 View looking southwest from Shui Tsiu San Tsuen Road Sitting-out Area
- 5.4 **Table 2** below analyses the Visual Sensitivity ("**VS**") based on the VSRs.

Table 2 – Analysis of Visual Sensitivity					
Viewpoint (VP) & Visual Sensitive Receivers (VSR)	Approx. Viewing Distance	Degree of Visibility (Full/Partial/ Glimpsed/None)	VSR Population (Very Many/Many/Few) & Duration/Viewing Frequency to the Proposed Development (Frequent/Occasional/Rare)	Visual Sensitivity	
VP1 View looking northwest along Kiu Hing Road Travellers – Mainly the pedestrians and drivers along Kiu Hing Road, such as the nearby residents in Wong Nai Tun Tsuen.	About 90m (short- range)	Full – The VP offers an open view across the nullah. Almost the whole portion of the proposed development can be observed.	There are Few VSRs. It is an Occasional View that most of the VSRs are transient in nature or short duration of stay. Some may stop for a while when walking or driving pass to and from Wong Nai Tun Tsuen.	Medium	
VP2 View looking northwest near Wong Nai Tun Tsuen Village Council Travellers – Mainly the pedestrians and drivers along Kiu Hing Road, such as the nearby residents in Wong Nai Tun Tsuen, and the passengers of the nearby bus terminus. Recreational users – Mainly the recreational users of Wong Nai Tun Tsuen Village Council which provides passive and active activities.	About 170m (medium- range)	Partial – The presence of village houses is situated forefront in this view, blocking a portion of the proposed development.	There are Many VSRs. The bus terminus is the major public transportation facility in the area. There is also a high frequency of users in Wong Nai Tun Tsuen Village Council. There may be longer duration of stay, so it can be considered a Frequent View .	Medium	

VP3 View looking south at a minibus stop along Kung Um Road Travellers – Mainly the passengers of the minibus stop and the pedestrians and drivers along Kung Um Road.	About 310m (medium- range)	Partial – Due to the planned YLS housing development and the roadside trees in the vicinity, the proposed development is largely blocked from sight.	There are Few VSRs. Most of the activities for the VSRs, such as road crossing and waiting for public transport, are transient in nature or of short duration. The view towards the proposed development will be distracted by the moderate traffic on these roads. Hence, it is considered an Occasional View .	Low
VP4 View looking southwest from Shui Tsiu San Tsuen Road Sitting-out Area Recreational users - Mainly the recreational users of Shui Tsiu San Tsuen Road Sitting- out Area which provides passive and active activities.	About 730m (long- range)	None – The proposed development will be completely shielded by the mature tree groups in front.	There are Many VSRs in the park. However, it is a Rare View , given its long distance from the proposed development which is shielded off from sight. The park has many trees and groundcovers with amenity values, which could serve as an alternative view for those VSRs.	None

6. Visual Impact Assessment

6.1 The Photomontages in **Figures 2-5** are prepared to demonstrate the visual changes due to the proposed development at the proposed viewpoint locations. They mainly compare the existing condition with the proposed development.

VP1 - View looking northwest along Kiu Hing Road

- 6.2 The VP1 is a short-range viewpoint located along Kiu Hing Road across the nullah, with around 90m from the Site (**Figure 1**). As shown in **Figure 2**, VP1 falls within the Visual Envelop. Kiu Hing Road, open nullah and low-rise village houses are formed in the foreground, scattering with trees and weeds. The lower portion of the proposed development is hidden behind. It is an occasional view that most of the VSRs are transient in nature or short duration of stay. Some may stop for a while when walking or driving pass to and from Wong Nai Tun Tsuen.
- 6.3 With the view that the existing land uses do not fully utilise the development potentials of the private lots, the subject proposal grasps this opportunity to develop a RCHE, resulting in a proposed building height of 8 storeys. It is inevitable that it will affect a partial open sky view from this VP. However, given a proximity to the planned medium-intensity residential developments in "Residential Zone 3" under the Revised RODP, there will be a visual backdrop of a maximum of 60mPD-high building blocks (see **Figure 2**). The proposed development of 46.75mPD high will not impose additional visual impact to the VSRs, but will enhance the visual amenity instead.
- 6.4 The proposed terraced building frontage descends gradually from north to south and from R/F to 1/F, resulting in a noticeable recess that adds depth and dimension to its overall building appearance. This distinctive architectural feature can serve multiple purposes to reduce the potential visual impact to nearby residential dwellings. It not only lightens the perceived building mass, but also provides an opportunity for edge planters, thereby creating a harmonious connection with the surrounding rural settlements. Situated between the medium-density residential development and the low-rise village housing, the proposed development successfully acts as a connector to blend in and strengthen the urban-rural connectivity of Yuen Long South with the surroundings.
- 6.5 With aim of reducing the visual impacts, various visual mitigation measures will be proposed. For instance, the architectural design will avoid using curtain walls or full-height glass walls to harmonise with the surrounding village houses. Subject to the detail design stage, the colour and texture will be carefully chosen, such as using earth tones or muted colours, to blend in with the existing panorama. Landscape opportunities will also be maximised at the open space of the Site, such as the landscaped gardens on G/F, 4/F and R/F.
- 6.6 In this connection, the visual impact arising from the proposed development is anticipated to be **Negligible**, after implementation of visual mitigation measures.

VP2 – View looking northwest near Wong Nai Tun Tsuen Village Council

- VP2 is located next to Wong Nai Tun Tsuen Village Council and the bus terminus (Figure 1). As demonstrated in Figure 3, large part of the view is formed by the hard-paved road and the traffic of Kiu Hing Road in the foreground, with village houses, the nullah and the Paifang of Wong Nai Tun Tsuen on the two sides in the middle ground. Pedestrians and drivers along Kiu Hing Road, and the recreational users of Wong Nai Tun Tsuen Village Council are the VSRs. The lower portion of the proposed development is shielded by the village houses.
- 6.8 It is noteworthy that this VP is a bus terminus and next to the village council. It is considered a hub of Wong Nai Tun Tsuen with many VSRs. The potential VSRs, including passengers waiting for mini-bus services and the recreational users, may choose to glance at the open view. Several covered seatings are discovered at the bus stop and the village council, meaning that their eyesight towards the proposed development is frequent. VSRs will also do passive and active activities here, so the duration of this VP is anticipated to be long.
- 6.9 With reference to the photomontage, it is acknowledged that a certain sky view will be compromised mainly due to the presence of the planned YLS residential development. The proposed development of 46.75mPD high is lower than the residential buildings of 60mPD high. Therefore, it will not impose additional visual obstruction to the VSRs. Instead, it will enhance the visual amenity because of the innovative terraced building frontage which blends in well with the urban-rural setting. This building design not only breaks the building mass fronting the adjacent village houses, but also ensure the privacy of both the villagers and residents of the proposed development. It successfully creates a more inviting and welcoming gesture to passers-by, and enhances the vibrancy of the pedestrian environment in the area.
- 6.10 Improvement and delicate façade design on form and colour could be adopted in later detailed design stage in a hope that the proposed development will further minimize the visual bulk and lead a harmonious integration into the current site context. In this connection, it will result in a **Negligible** visual change in this VP, after implementation of visual mitigation measures.

VP3 - View looking south at a minibus stop along Kung Um Road

- 6.11 VP3 is a medium-range viewpoint of approximately 310m to the north of the Site (**Figure 1**). As shown in **Figure 4**, the view of this VP is dominated by the nullah at the foreground, and village houses at the middle. Tai Lam Country Park becomes the mountain backdrop at this VP.
- 6.12 Since VP3 is situated at the minibus stop along Kung Um Road where the passengers of the minibus and the pedestrians and drivers along Kung Um Road are the potential VSRs of this VP. Most of the activities for the VSRs, such as road crossing and waiting for public transport, are transient in nature or of short duration. The view towards the proposed development will be distracted by the moderate traffic on Kung Um Road. Hence, it is considered an occasional view.
- 6.13 The maximum building height of the proposed development is 8 storeys, which is partly visible from VP3, due to the screen of the 60mPD-high planned residential development

- of YLS. The proposed development is not insurmountably intrusive to block the skyline and a large portion of open sky view is still allowed. Due to a building setback of the proposed development from the road kerb of Wong Nai Tun Tsuen Road for 5m, the nullah to the east of the Site being the visual corridor and breezeway is not blocked.
- 6.14 Given a combination of the scale of the proposed development relative to its location and the surrounding developments (i.e. the urban setting of medium-rise development and low-rise rural setting), the visual sensitivity is much reduced. Landscape opportunities will also be maximised at the open space of the Site, such as the landscaped gardens on G/F, 4/F and R/F. After all, the resultant visual impact from the proposed development in this VP is Slightly Adverse.

VP4 - View looking southwest from Shui Tsiu San Tsuen Road Sitting-out Area

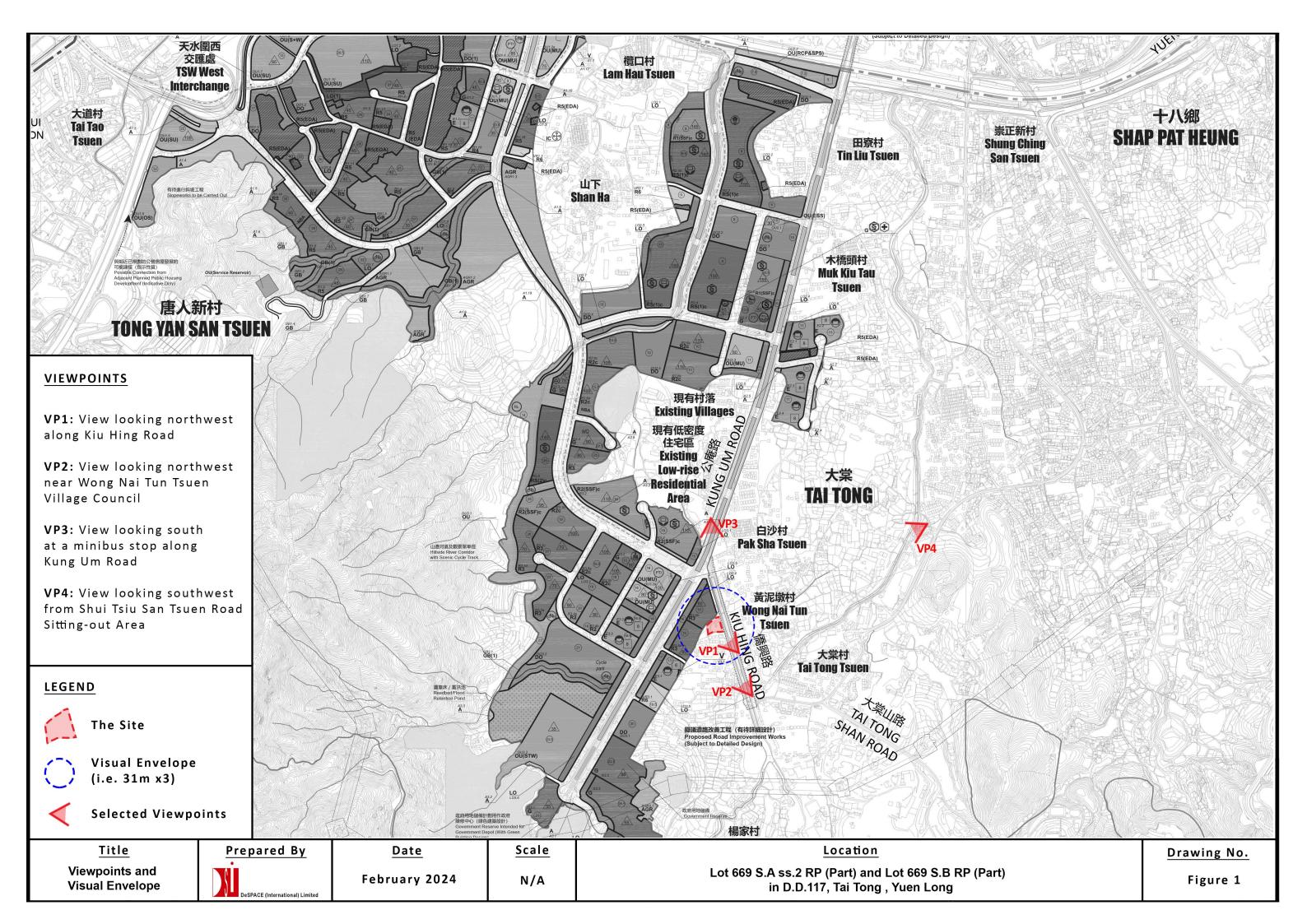
- 6.15 VP4 is a long-range viewpoint taken at the Shui Tsiu San Tsuen Road Sitting-out Area situated to the east of the proposed development with about 730m distance (**Figure 1**). Referring to **Figure 5**, the dominant view from this VP is formed by a pavilion, elderly fitness equipment, children play equipment and benches are provided for active and passive activities. A mass of deciduous and evergreen trees with groundcovers is planted with the open sky serving as the backdrop. As illustrated by the photomontage, the proposed development is totally hidden behind the mature tree group and hence there are no effect on visual composition.
- 6.16 Being an open space in the assessment area, VP4 represents the static view from mainly the recreational users of Shui Tsiu San Tsuen Road Sitting-out Area which provides passive and active activities. As the proposed development is not visible from this VP, many trees and groundcovers with amenity values serve as an alternative view for those VSRs.
- 6.17 Due to the small scale of the proposed development, it will not block any visual elements from this VP and therefore, the important visual resources such as the existing green features and the open sky view will not be affected. Since the proposed development is completely shielded, the visual impact for VP4 is regarded as **Negligible**.

7. Conclusion

- 7.1 The VIA is prepared in support of a Section 16 Planning Application to develop an 8-storey RCHE at Lot 669 S.A ss.2 RP (part) and Lot 669 S.B RP (part) in D.D. 117, Wong Nai Tun Tsuen, Yuen Long.
- 7.2 The visual impact of the proposed development on the surroundings has been appraised, by comparing it against the existing condition. The proposed development has taken into account the effect on the overall local character, visual elements and key public visual sensitive receivers. The perceived development bulk, proposed building height and disposition of the current scheme have been specially designed, with an aim to avoid a long-lasting effect on the visual impacts to the VSRs.
- 7.3 Four (4) VPs have been identified in the subject VIA and the respective visual sensitivity and magnitude of visual changes of the VPs was examined. In summary, after implementing visual mitigation measures, the corresponding visual impact of the respective VPs is summarized in **Table 3**. The visual mitigation measures include sensitive architectural designs of a terraced building frontage, and appropriate materials and colours for the façade, as well as landscape treatments on the garden at G/F, 4/F and R/F. All the above measures not only can effectively reduce the visual impact caused by the proposed development, but also to a certain degree, add visual interest and improve the public realm benefiting the general public.
- 7.4 Besides, it is worth mentioning that the applicant takes into account the adjacent villages and residents to the south. The building disposition is specially designed to maintain a certain distance from them by avoiding an additional building mass at the southern site boundary. Sufficient buffer is provided with the nearby village houses to ensure privacy of both the proposed RCHE and neighbouring residents, and to minimize any visual impact.
- 7.5 The planned YLS residential development with a maximum building height of 60mPD plays an important role in shaping the visual context of the area. The 46.75mPD-high proposed RCHE situated between the medium-rise development and the existing 2-3 storeys village houses will not impose additional visual impact, but will blend in briskly in the urban-rural setting instead.
- 7.6 To conclude, visual impact of the proposed development is considered acceptable. It is anticipated that the overall visual impact inherent in the proposed development to the surroundings will be **negligible to slightly adverse**.

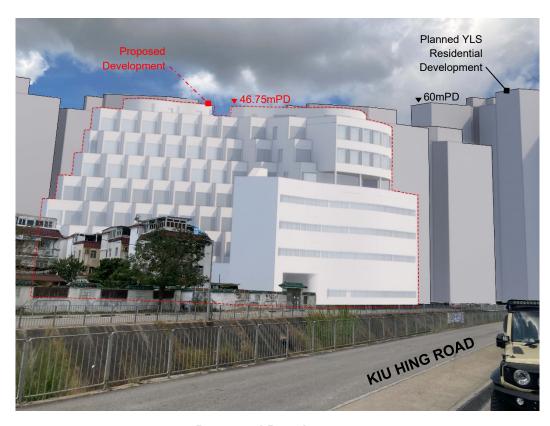
Table 3 – Summary of Visual Impact from Different Viewpoints					
Viewpoints assessed	Visual Sensitivity	Resultant Visual Impact [1]			
VP1 View looking northwest along Kiu Hing Road	Medium	Negligible			
VP2 View looking northwest near Wong Nai Tun Tsuen Village Council	Medium	Negligible			
VP3 View looking south at a minibus stop along Kung Um Road	Low	Slightly Adverse			
VP4 View looking southwest from Shui Tsiu San Tsuen Road Sitting-out Area	None	Negligible			

^[1] The resultant visual impact is weighted by considering both the visual sensitivity, the magnitude of visual changes after implementation of visual mitigation measures together.





Existing Situation



Proposed Development

Figure Title

<u>Date</u>

Prepared by

FIGURE 2

VP1 - View looking northwest along Kiu Hing Road





Existing Situation



Proposed Development

Figure Title

<u>Date</u>

Prepared by

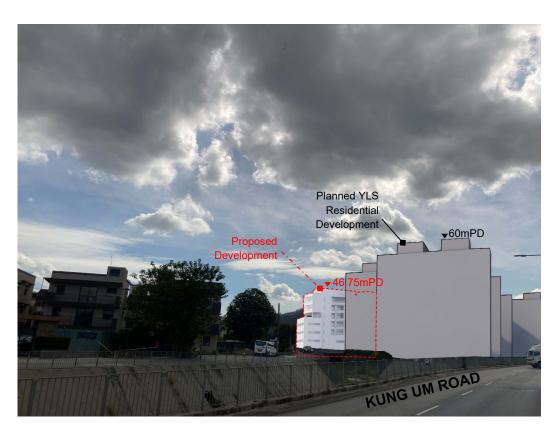
FIGURE 3

VP2 - View looking northwest near Wong Nai Tun Tsuen Village Council





Existing Situation



Proposed Development

Figure Title

<u>Date</u>

Prepared by

FIGURE 4

VP3 - View looking south at a minibus stop along Kung Um Road





Existing Situation



Proposed Development

Figure Title

Date

Prepared by

FIGURE 5

VP4 - View looking southwest from Shui Tsiu San Tsuen Road Sitting-out Area

