Attachment 4 Visual Impact Assessment

### **Section 16 Planning Application**

for Proposed Minor Relaxation of Plot Ratio and Building Heightfor
Information Technology and Telecommunication Industries (Data Centre)
Use at 7-11 Wing Kin Road, Kwai Chung, New Territories

### **VISUAL IMPACT ASSESSMENT**



Prepared by

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#### 1. Background

1.1 This application is submitted on behalf of OXO YW Limited, the registered owner of 7-11 Wing Kin Road, Kwai Chung, to seek the Town Planning Board's permission for the proposed minor relaxation of plot ratio restriction from 9.5 to 11.4 and building height restriction from 105mPD to 109.55mPD for permitted information technology and telecommunication industries (data centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories (Kwai Chung Town Lot 145) and adjoining Government Land at Wing Chong Street (i.e., the application site).

#### 2. Assessment Methodology

- 2.1 The assessment of visual impacts is prepared with reference to the Town Planning Board Guidelines No. 41, which includes the following procedures:
  - a. Identify the visual context and character in the vicinity of the application site;
  - b. Identify and select viewpoints (VPs) to assess the visual impact. The VPs should be easily accessible and popular with the public and/or visitors. Important viewpoints, such as popular areas used by the public for outdoor activities, recreation, special landmarks, valued landscape features etc., should be assessed where possible.
  - c. Illustrate the visual impact of the proposed development by using computergenerated photomontages.
  - d. Appraise the visual changes in respect of the aspects, including visual composition, visual obstruction, effect on public viewers and visual resources.
  - e. Evaluate the overall visual impact of the existing condition with the planned/committed developments ie. the existing condition and with the proposed development. Any design features or mitigation measures that help alleviate the visual impact will be proposed.

#### 3. Assessment Area

- 3.1 The application site is located southwest of the Kwai Chung industrial area.
- 3.2 The visual envelope of the proposed development defines the assessment area for the visual impact assessment. The visual envelope generally covers an area of about 303m in radius from the proposed development (i.e. about three times the proposed building height). Major sensitive viewers in direct sight of the Proposed Development are identified for visual impact assessment (Figure 1). Kwai Chung Sports Ground and Tsing Yi Waterfront Promenade though located outside the 350m radius assessment area are included in this visual impact assessment due to their popular use by the public for outdoor activities.

3.3 To the west of the application site located the Tsuen Wan Chinese Permanent Cemetery, and southwest, the Kwai Chung Crematorium. A cluster of industrial buildings, with building height ranging from 22mPD to 132mPD, is situated east of the application site across Tsuen Wan Road, while the Kwai Chung Sports Ground is further southeast and Kwai Chung Park to the south.

#### 4. Proposed Development

4.1 The application site, with an area of about 964.2m², is proposed to redevelop an existing industrial building into an information technology and telecommunication industries (data centre). The proposed building is about 109.55mPD with 2 basement levels for parking and M&E facilities. In addition, a 3.7m full-height building setback fronting Wing Kin Road, a 2.859m-2.916m building set back fronting Wing Chong Street from G/F to 1/F and a 6.53m building setback from 6/F and above facing Wing Chong Street are proposed with the provision of planters and vertical greening to enhance visual amenities.

### 5. Viewing Points

- 5.1 A total of nine VPs are selected for this visual impact assessment. The nine VPs, same as those selected under the previous approved planning application (A/KC/496), are selected from different directions and distances (**Figure 1**). These VPs represent views from key pedestrian nodes, popular areas used by the public for outdoor activities and public open spaces:
  - a. VP1: Wing Kin Road
  - b. VP2: Wing Chong Street
  - c. VP3: Tsuen Wan Chinese Permanent Cemetery
  - d. VP4: Kwai Chung Crematorium
  - e. VP5: Footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road
  - f. VP6: Kwai Chung Sports Ground
  - g. VP7: Former Wing Kei Road Trucks Car Park
  - h. VP8: Temporary Cricket Gound in Kwai Chung Park
  - i. VP9: Tsing Yi Waterfront Promenade

#### 6. Visual Assessment

- 6.1 VP1: Wing Kin Road (Figure 2)
- 6.1.1 VP1, located around 20m from the application site, is a short-distance view. VP1 consists of a 2-storey industrial building at the application site, situated between two existing industrial buildings, i.e. Global Trade Centre and Hou Feng Industrial Building. Since VP1 is

- a short-distance view, only the lower portions of the existing industrial buildings are visible. Therefore, industrial buildings dominate this VP1 without key visual resources. It represents a typical view of workers in the area. As the viewer population is low and the duration of view is short, the sensitivity of this VP is considered low.
- 6.1.2 As shown in the photomontage (Figure 2), only the lower portion of the proposed development will be visible from this VP. The proposed development will not cause any visual obstruction or create any visual incompatibility with the surroundings. Hence the effects on public viewers are considered negligible. With the replacement of the old industrial building by a modern-day development, the provision of a full length canopy as a shading element, planters and vertical greening on the lower floors, there will be a visual enhancement in the area. The planters and vertical greening as visual amenity would soften the building edge.
- 6.1.3 Based on the comparison between the existing condition and the proposed scenario, there will be visual enhancement as stated in the aforesaid. However, there will also be an increase in building bulk due to the proposed development. The visual impact from this VP is therefore considered partly enhanced/partly adverse.
- 6.2 VP2: Wing Chong Street (Figure 3)
- 6.2.1 VP2, located around 20m from the application site, is a short-distance view. VP2 consists of a 1-storey structure at the application site with Hou Feng Industrial Building at the back. A portion of the sky view and tree plantings in Kwai Chung Park are visible at the end of Wing Chong Street, the key visual resource. Similar to VP1, VP2 represents a typical view of workers in the industrial area. However, as the viewer population is low and the duration of view is short, the sensitivity of this VP is considered low.
- 6.2.2 Similar to VP1, only the lower portion of the proposed development will be visible from the photomontage of VP2 (Figure 3). The proposed development will shield a part of the Hou Feng Industrial Building. There will be no changes to the visual composition and resources, i.e. the sky view and park trees. As shown in the photomontage, the proposed development will replace the old industrial building structure with a modern-day building and vertical greening, considered a visual enhancement in the area.
- 6.2.3 Based on the comparison between the existing condition and the proposed scenario, there will be visual enhancement as stated in the aforesaid. However, there will also be an increase in building bulk due to the proposed development. With the proposed vertical greening along the building façade, there will be a visual enhancement along Wing Chong Street. Therefore, the visual impact from this VP is considered partly enhanced/partly adverse.
- 6.3 VP3: Tsuen Wan Chinese Permanent Cemetery (Figure 4)

- 6.3.1 VP3 provides a distant view at around 300m west of the application site. The photo of VP3 is taken from the Tsuen Wan Chinese Permanent Cemetery, which provides a view overlooking the graveyard and existing tree plantings, the industrial buildings in the background, such as Kerry Tc Warehouse 2, Global Trade Centre, Mei Kei Industrial Building. In addition, a small portion of the mountain top near Woodland Villas is visible from this VP with an open sky view as a backdrop. Grave sweepers and graveyard keepers usually visit where VP3 is located. However, considering visitors to the cemetery are generally limited to short stays, mainly during the Ching Ming and Chung Yeung Festivals, the visual sensitivity of this VP is considered low.
- 6.3.2 As shown in the photomontage (Figure 4), the proposed development will partially block a portion of the Wonderland Villas, a small portion of the mountain top and a very insignificant portion of the open sky view. Nevertheless, the proposed development of 109.55mPD blends well with the existing built environment and is visually compatible with the surrounding industrial developments. The proposed development will be of comparable height to the Kerry Tc Warehouse 2 (108.58mPD), Global Trade Centre (93.4mPD), Mei Kei Industrial Building (91.58mPD), and Ever Gain Plaza (140.4mPD). Though the proposed development will block a very small portion of the open sky view, such a blockage is considered slight with insignificant visual changes. Furthermore, the effects on the public viewers i.e. grave sweepers and graveyard keepers, are considered slight due to their short stay. Based on the comparison between the existing condition and the proposed scenario, the visual impact from this VP is considered negligible to slightly adverse.
- 6.4 VP4: Kwai Chung Crematorium (Figure 5)
- 6.4.1 VP4 provides a medium-range view at about 170m to the southwest of the application site. The photo is taken in front of the Kwai Chung Crematorium building. Industrial buildings with roadside trees in the foreground dominate the view. A portion of an open sky view and the roadside trees are the key visual resources in this VP. VP4 is normally visited by those who attended funerals. The viewer population is low, and the duration of view is generally short. Therefore, the visual sensitivity of this VP is considered low.
- 6.4.2 As shown in the photomontage (Figure 5), only the middle portion of the proposed development can be seen from this VP. The proposed development will be largely blocked by Valid Industrial Centre and Wing Loi Industrial Building. Nevertheless, the proposed development will inevitably block a small portion of the sky view, reduce visual permeability and depth of view. The proposed development blends in well with the surrounding development with moderate visual changes on public viewers. Based on the comparison between the existing condition and the proposed scenario, the visual impact from this VP is considered moderately adverse.
- 6.5 VP5: Footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road (Figure 6)

- 6.5.1 VP5 is taken at the footbridge connecting Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road. The views along Kwai Fuk Road towards the application site are either blocked by roadside plantings or existing buildings, thus, the view from the footbridge is chosen because it is the closest means for pedestrians coming and leaving the area. VP5 is located about 160m to the east of the application site. A portion of open sky view is visible from this VP. A portion of the Tsuen Wan Road flyover with Kwai Hei Street underneath and roadside plantings can be viewed in the foreground. Industrial Buildings are situated further back behind Tsuen Wan Road. The view from this footbridge is limited, and the duration of the view is short. Therefore, the visual sensitivity of this VP is considered low.
- 6.5.2 As shown in the photomontage (Figure 6), the proposed development will be entirely blocked by the existing industrial developments and roadside plantings. There will be no visual changes due to the proposed development. Based on the comparison between the existing condition and the proposed scenario, the overall visual impact is rated negligible.
- 6.6 VP6: Kwai Chung Sports Ground (Figure 7)
- 6.6.1 VP6 is located about 720m to the southeast of the application site. Kwai Chung Sports Ground is one of the major sports grounds in the Kwai Tsing District, providing facilities for track and field and football. Since there is a covered grandstand, the Sports Ground is also popular for school sports days. This VP is dominated by the football ground and running track with an open sky view. Clusters of industrial buildings are located behind the Sports Ground. The running track of the sports ground is opened for the public in the morning. Athletes and the public frequently visit it; hence, the viewer population is considered medium. Since the park users are normally occupied with different sports activities, the view duration is short. Therefore, the visual sensitivity of this VP is considered medium.
- 6.6.2 As shown in the photomontage (Figure 7), the proposed development is not visible from this VP since it is blocked by Kingsford Industrial Building (99.5mPD). There will be no visual changes due to the proposed development. Based on the comparison between the existing condition and the proposed scenario, the overall visual impact is rated negligible.
- 6.7 VP7: Former Wing Kei Road Trucks Car Park (Figure 8)
- 6.7.1 VP7 is located about 320m to the north of the application site. The former trucks car park site is currently under works. It is zoned "OU (Columbarium)" and intended to be used as columbarium and garden of remembrance in future. VP7 represents the viewer of the columbarium users in future. This view is predominated by the vacant ground in the foreground and industrial buildings with a sky view at the back. Similar to the Tsuen Wan Chinese Permanent Cemetery, visitors to the columbarium are generally limited to short stays and mainly during the Ching Ming and Chung Yeung Festivals. Therefore, the sensitivity of this VP is considered low.
- 6.7.2 As shown in the photomontage (Figure 8), only the upper portion of the proposed development is visible from this VP. Apart from blocking a small part of the sky view, there will be slight visual changes caused by the proposed development. The proposed

development is of comparable height as the adjacent industrial buildings such as Kai Bo 22 (105mPD) and Kerry TC Warehouse 2 (108.58mPD). Since the duration of view is short, the effect on visual changes is considered not significant. Based on the comparison between the existing condition and the proposed scenario, the proposed development blends in well with the surroundings. Therefore, the overall visual impact is rated slightly adverse.

- 6.8 VP8: Temporary Cricket Ground in Kwai Chung Park (Figure 9)
- 6.8.1 VP8 is located at about 300m to the south of the application site. This VP is taken from the temporary cricket ground in Kwai Chung Park. VP8 represents the users of the cricket ground. This view is dominated by the cricket field in the foreground with industrial buildings and open sky view in the back. This VP represents recreational users including cricket players hence the viewer population is considered low. Since the viewer is in transient nature, the sensitivity of this VP is considered medium.
- 6.8.2 As shown in the photomontage (Figure 9), the proposed development will be blocked by the existing industrial buildings in the area. Only the upper portion of the proposed development is visible from this VP. Apart from blocking a small part of the sky view, there will be insignificant visual changes caused by the proposed development. The proposed development is of comparable height as the adjacent industrial buildings such as Citic Telecom Tower (132.365mPD) and Kerry TC Warehouse 2 (108.58mPD). Based on the comparison between the existing condition and the proposed scenario, the proposed development blends in well with the surrounding buildings. Therefore, the overall visual impact is rated slightly adverse.
- 6.9 VP9: Tsing Yi waterfront Promenade (**Figure 10**) (1100m)
- 6.9.1 VP9 is taken from the Tsing Yi waterfront promenade across Rambler Channel. It provides a long-range view at about 1,100m to the west of the application site. The promenade is a popular place for leisure walk, jogging or sightseeing by the public and the residents in the area. The sea and an open sky view dominate the visual context of this VP. High-rise development such as Metro Plaza (173.4mPD) and Wonderland Villas (233.3-339.2mPD) can be viewed behind the Tsuen Wan Chinese Permanent Cemetery and Kwai Chung Park. View duration would be long as people would stop by the waterfront and enjoy the sea view. Therefore, the viewer population is high and visual sensitivity is considered high.
- 6.9.2 As shown in the photomontage (Figure 8), the proposed development will be completed shielded by the Tsuen Wan Chinese Permanent Cemetery. Based on the comparison between the existing condition and the proposed scenario, there will be no visual changes due to the proposed development. Therefore, the overall visual impact is rated negligible.

#### 7. Evaluation of Overall Visual Impact

A total of 9 VPs are selected for this visual impact assessment (Table 1). Based on the comparison between the existing condition and the proposed scenario, one will cause a moderately adverse visual impact by the proposed development, two cause a slightly adverse visual impact, two cause partly enhanced/partly adverse, one has negligible to slightly adverse and three have negligible visual impact. The overall visual impact is therefore envisaged to be ranging from partly enhanced/partly adverse to moderately adverse. Nevertheless, there is only one VP that will cause a moderately adverse visual impact by the proposed development. Thus, the proposed development would unlikely induce significant adverse effects on the visual character of the surrounding townscape.

Table 1: Summary of visual impact assessment evaluation

Public Viewing Points	Visual Impact Ratings
VP 1	Partly enhanced/partly adverse
VP 2	Partly enhanced/partly adverse
VP 3	Negligible to slightly adverse
VP 4	Moderately adverse
VP 5	Negligible Negligible Negligible
VP 6	Negligible Negligible Negligible
VP 7	Slightly adverse
VP 8	Slightly adverse
VP 9	Negligible

7.2 The massing and disposition of the proposed development will not create a significant visual blockage or cause significant changes for public viewers. The proposed building height has been reduced by about 5% from 115.2mPD to 109.55mPD as compare to the previous approved scheme (A/KC/496). In conclusion, the scale and building height of the proposed development is considered visually compatible with the surrounding industrial developments. Furthermore, vertical greening and planters at lower levels of the building façade are proposed to minimise the likely visual impact and soften the proposed building structure. The area's street environment and visual amenities will be enhanced by replacing the old industrial building with a modern-day development and greening provision.

# **Figures**



### Legend

- VP1 Wing Kin Road (20m)
- VP2 Wing Chong Street (**20m**)
- VP3 Tsuen Wan Chinese Permanent Cemetery (300m)
- VP4 Kwai Chung Crematorium (170m)
- VP5 Footbridge connecting Kwai Chung Park and Kwai Fuk Rd across Tsuen Wan Rd (160m)
- VP6 Kwai Chung Sports Ground (650m)
- VP7 Former Wing Kei Road Trucks Car Park (320m)
- VP8 Temporary Cricket Ground in Kwai Chung Park (300m)
- VP9 Tsing Yi waterfront Promenade (**1100m**)



**Application Site** 

---- Visual Envelope



#### Job Title:

Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

### **Drawing Title:**

Figure 1: Site Location with Viewing Points and Visual Envelope





**Hou Feng** Industrial Building **Global Trade Centre** 

**Proposed Development** 

**Existing Condition** 

With Proposed Development

### Job Title:

Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

# **Drawing Title:**

Figure 2: Photomontage of VP1 - Wing Kin Road







**Application Site** 

Hou Feng Industrial Building





**Proposed Development** 

With Proposed Development

### Job Title:

**Global Trade Centre** 

Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

# **Drawing Title:**

**Global Trade Centre** 

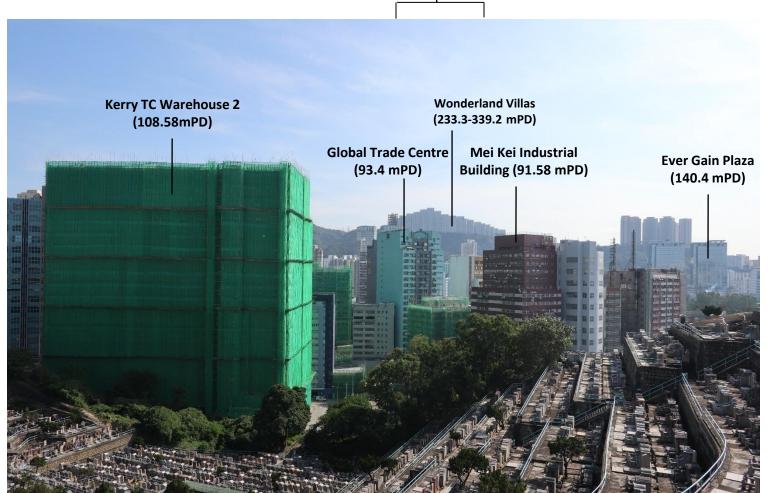
Figure 3: Photomontage of VP2 - Wing Chong Street



Hou Feng Industrial Building







**Application Site** 

Proposed Development
(109.55 mPD)

Building Height
Restriction (105 mPD)
Wonderland Villas
(233,3-339,2 mPD)
Mei Kei Industrial
Building (91.58 mPD)

Ever Gain Plaza
(140.4 mPD)

**Existing Condition** 

With Proposed Development

### Job Title:

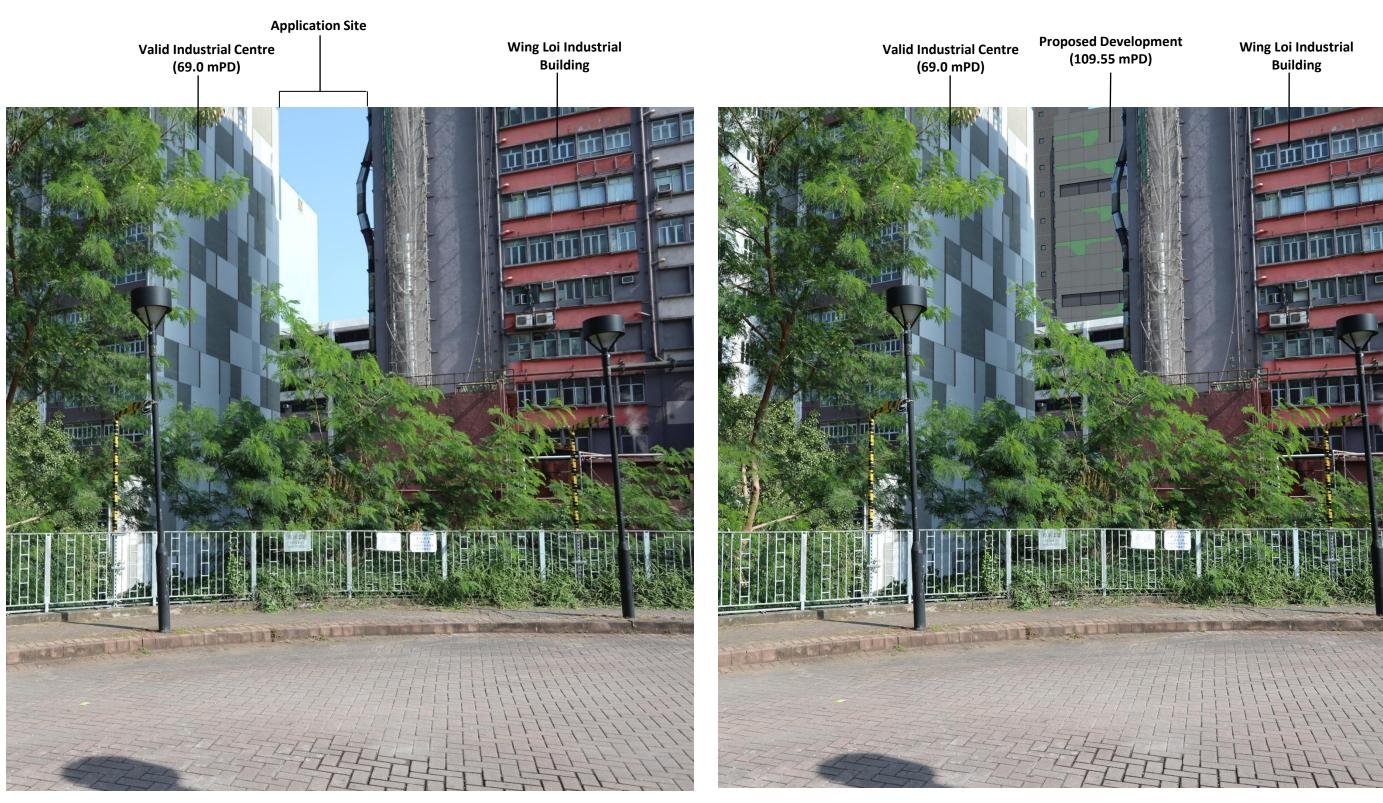
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

# **Drawing Title:**

Figure 4: Photomontage of VP3 - Tsuen Wan Chinese Permanent Cemetery







**Existing Condition** 

With Proposed Development

Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

### **Drawing Title:**

Figure 5: Photomontage of VP4 - Kwai Chung Crematorium









**Existing Condition** 

With Proposed Development

Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

# **Drawing Title:**

Figure 6: Photomontage of VP5 - Footbridge linking Kwai Chung Park and Kwai Fuk Road across Tsuen Wan Road







**Existing Condition** 



Yee Lim Industrial Building

With Proposed Development

### Job Title:

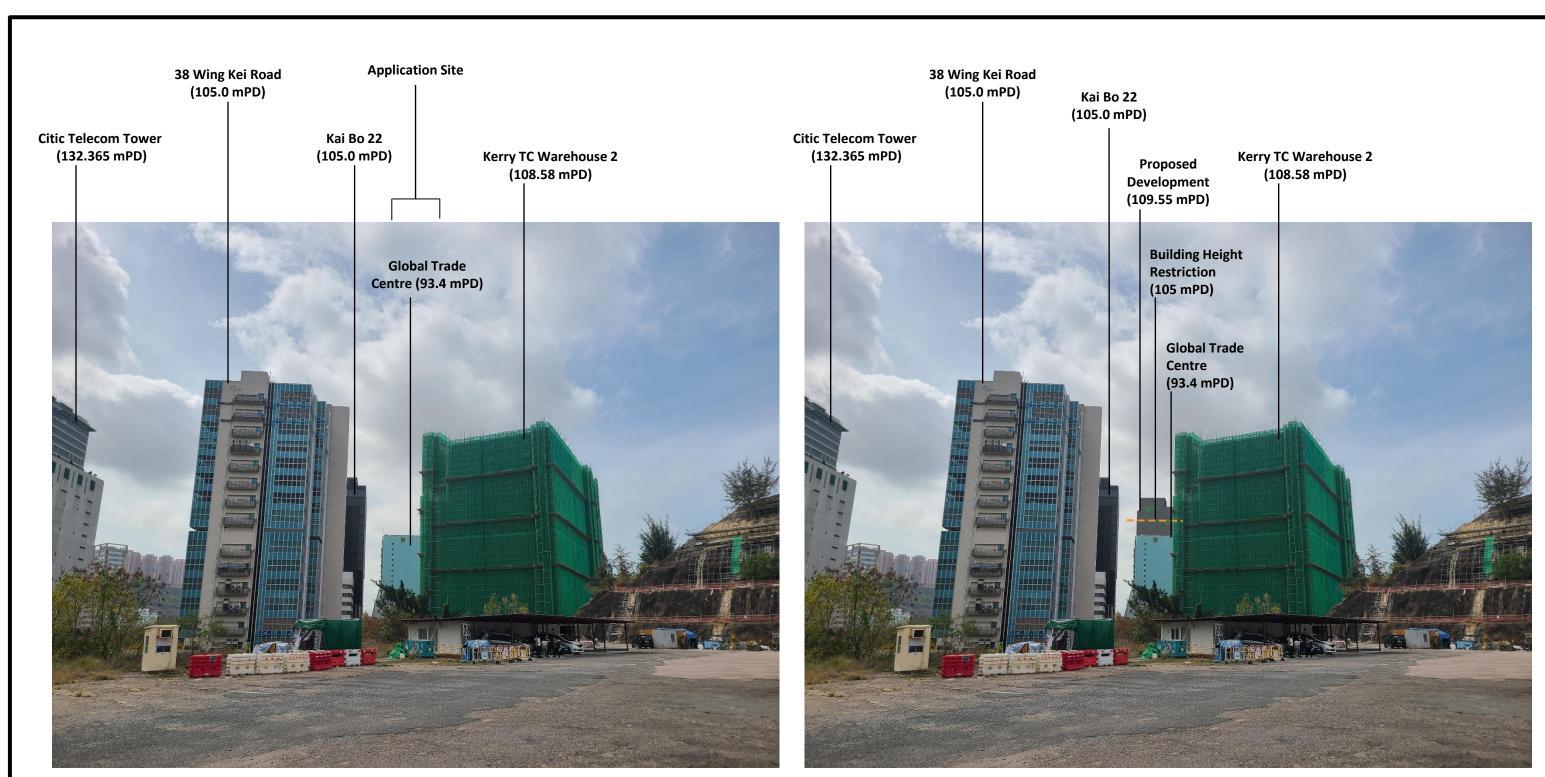
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

# **Drawing Title:**

Figure 7: Photomontage of VP6 - Kwai Chung Sports Ground







**Existing Condition** 

With Proposed Development

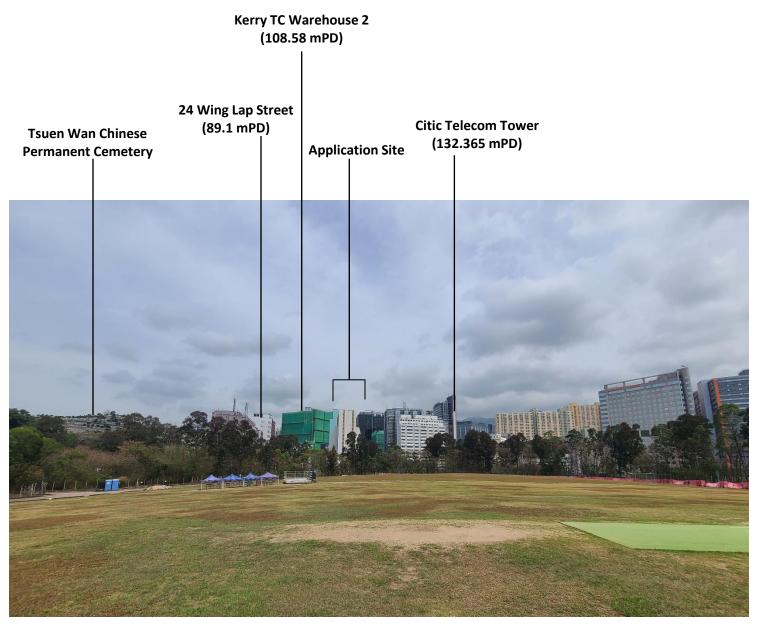
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

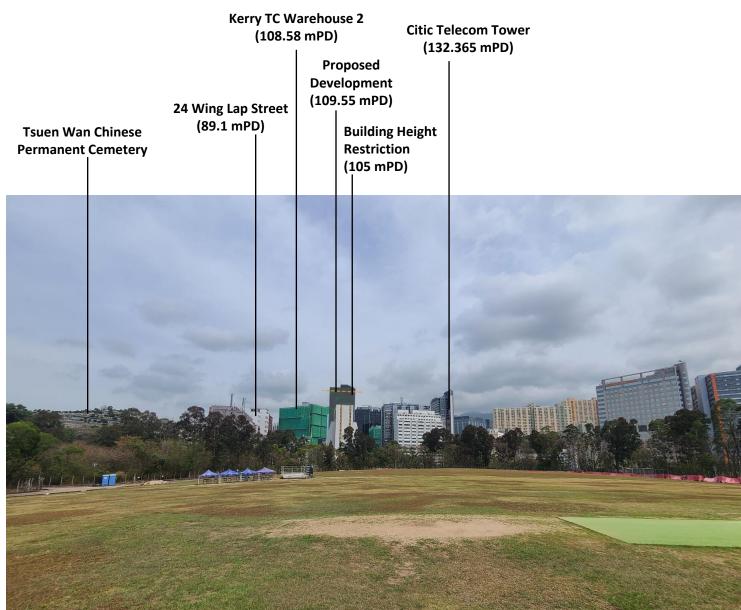
# **Drawing Title:**

Figure 8: Photomontage of VP7 – Former Wing Kei Road Trucks Car Park









**Existing Condition** 

With Proposed Development

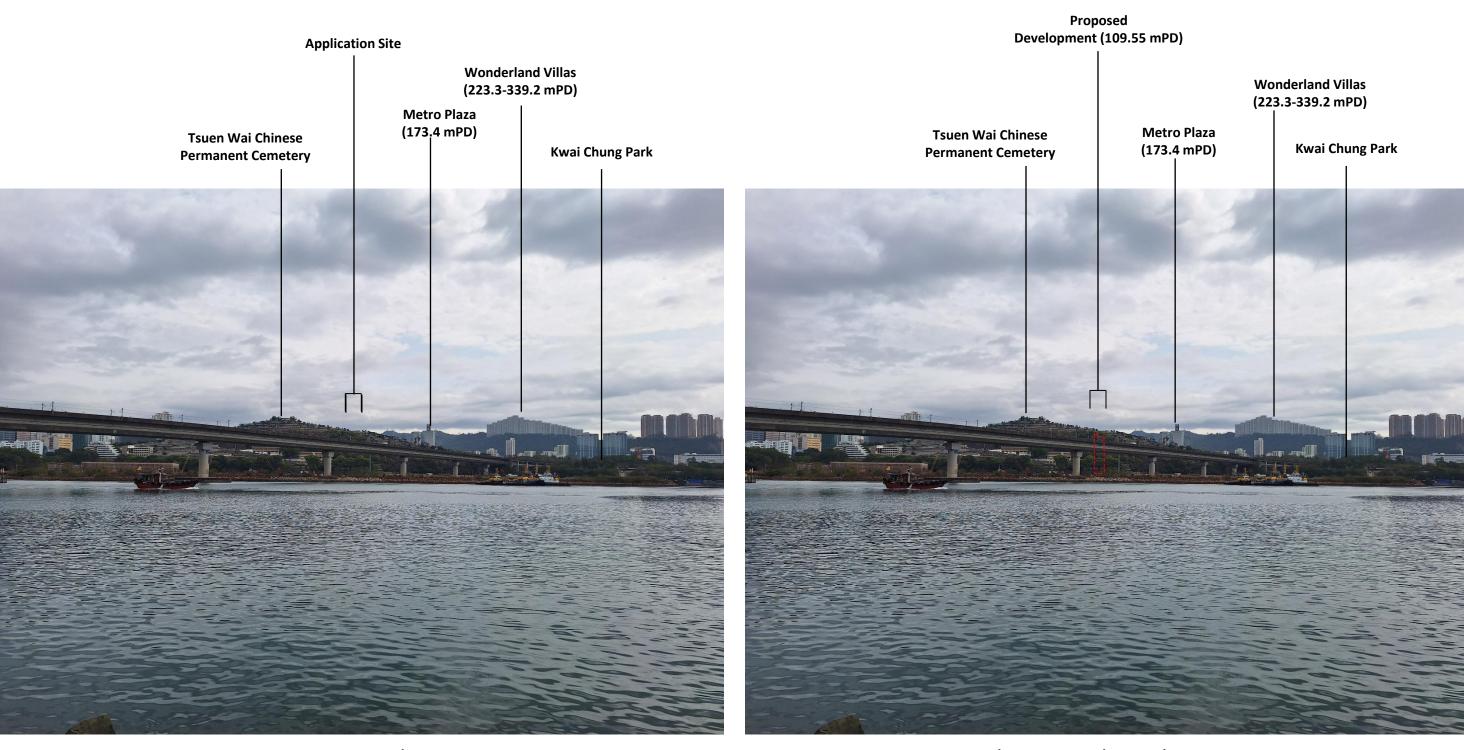
Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

## **Drawing Title:**

Figure 9: Photomontage of VP8 – Temporary Cricket Ground in Kwai Chung Park







**Existing Condition** 

With Proposed Development

Section 16 Planning Application for Proposed Minor Relaxation of Plot Ratio and Building Height for Permitted Information Technology and Telecommunications Industries (Date Centre) at 7-11 Wing Kin Road, Kwai Chung, New Territories

# **Drawing Title:**

Figure 10: Photomontage of VP9 - Tsing Ying Waterfront Promenade



