Project Administration Handbook for Civil Engineering Works

2022 Edition

AMENDMENT NO. 4/2024

CHAPTER 1 PROJECT PLANNING

PARAGRAPH 1 OVERVIEW

(a) Para. 1.5 Replace "WBTC No. 16/2000" with "paragraph 5.4.3 of Chapter 3

of PAH" for "Survey and Mapping Office (SMO) of Lands Dept

(LandsD)".

PARAGRAPH 7 SOURCES OF INFORMATION

(b) Para. 7.4.6 **Replace "WBTC No. 16/2000 – Provision and Collation of Land**

Survey and Mapping Data" with "paragraph 5.4.3 of Chapter 3 of

PAH" in the second paragraph of item (b).

PARAGRAPH 9 REFERENCES

(c) **Delete the following reference:**

WBTC No. 16/2000 Provision and Collation of Land Survey and

Mapping Data

CHAPTER 3 LAND MATTERS

PARAGRAPH 3 MAIN PROCEDURES FOR PROVISION OF LAND

(d) Para. 3.5.2 **Replace** "reusme" with "resume" after "the requirements of the project and not to" in the fifth paragraph of item (a).

PARAGRAPH 4 SUBSIDIARY PROCEDURES FOR PROVISION OF LAND

(e) Para. 4.2.2 **Replace** "Appendix 3.11C, which is under review by LandsD" with "LandsD's memo ref (11) in LD LAD/LAR/1-145/2 Pt. 6 dated

27.11.2023 which is attached in Appendix 3.11C" in item (d).

PARAGRAPH 5 MANAGEMENT OF SITES

(f) Para. 5.4.2 **Delete** "See WBTC No. 16/2000 for details." **in the second last paragraph**.

Add the following paragraph after paragraph 5.4.2:

5.4.3 Collation of Survey, Mapping and Geospatial Data

For enhancing the effectiveness of Geospatial Data sharing with the Survey and Mapping Office (SMO) of Lands Department (LandsD), Works Departments should follow the following requirements and arrangement for collation of survey, mapping and geospatial data from capital works projects.

The requirements and arrangement will take effect on 24 August 2024. For capital works projects tendered or commenced before the effective date, Works Departments are encouraged to follow the new requirements as far as practicable.

Works Departments should also make reference to DEVB TC(W) No. 2/2021 "Adoption of Building Information Modelling for Works Projects in Hong Kong" or their latest versions in data sharing.

During the course of delivering capital works projects, Geospatial Data generated at different stages will be useful for the updating work of digital map of SMO. If such data can be collated timely and in the suitable format, it will greatly enhance the efficiency of the digital map updating work.

Class of Geospatial Data

Geospatial Data from capital works projects ("Geospatial Data") covers the following classes of data -

- (a) Geographic Information System (GIS) data;
- (b) Building Information Modelling (BIM) model;
- (c) drawing in Computer-Aided Drafting (CAD) format; and
- (d) associated georeferenced photo image and point cloud data collected from land based or airborne platforms (e.g. vehicle mobile mapping system, unmanned aerial vehicle, etc.), and models so derived.

For the avoidance of doubt, geospatial data includes topographic features (e.g. slope) and infrastructures above and below ground.

Requirements and Arrangement of Geospatial Data Submission

Works Departments shall submit geospatial data of approved design and as-built surveys to SMO according to the format and requirements as set out in Appendix 3.30. SMO will oversee the submission process and carry out compliance checking. The general workflow is illustrated at Appendix 3.31.

For works entrusted to organisations outside the Government (e.g. Housing Authority, Hospital Authority, Airport Authority, MTR Corporation Limited, private developers, etc.), subvented capital works projects and works undertaken by private parties to be handed over to the Government for maintenance, Works Departments shall encourage these organisations to follow the requirements in this Chapter to submit Geospatial Data.

Should there be genuine difficulties in compliance with the new requirements, Works Departments may obtain approval for exemption from the D2 or above Officers and the justifications should be properly documented. SMO should be duly informed of any such exemption.

Works Departments should incorporate the Geospatial Data sharing requirements as set out in Appendix 3.32 into consultancy brief or works contract.

PARAGRAPH 7 REFERENCES

(g) Delete the following reference:

WBTC No. 16/2000 Provision and Collation of Land Survey and Mapping Data

APPENDICES

(h) Appendices 3.30, 3.31 Add the new appendices give in Annexes A to C to this & 3.32 Amendment.

CHAPTER 4 PROJECT DESIGN AND ESTIMATES

PARAGRAPH 3 DETAILED DESIGN AND ASSOCIATED ADMINISTRATION

(i) Para. 3.3.7 **Replace** "as built plans in graphical or in digital form" with "geospatial data" after "Works departments should also provide all" and replace "WBTC No. 16/2000" with "see paragraph 5.4.3 of Chapter 3 of PAH" after "centralised land survey and mapping information (" in the second paragraph.

PARAGRAPH 6 REFERENCES

(j) Delete the following reference:

WBTC No. 16/2000 Provision and Collation of Land Survey and Mapping Data

CHAPTER 5 CONTRACT DOCUMENTS

PARAGRAPH 9 SPECIAL TOPICS

(k) Para. 9.31 **Replace "and 1.2.2023" with ", 1.2.2023 and 10.4.2024" in the heading.**

Replace "1 October 2023" with "1 May 2024" after "to be invited on or after" in the third paragraph.

PARAGRAPH 12 REFERENCES

(l) Add the following reference:

SDEV's memo ref. Addition of "Painting", "Metal Work",

() in DEVB(W) "Structural Steelwork", "Horticultural
Works", "Arboriculture Works" and "Skyrise
Greenery Works" as Designated Trades under
the Registered Specialist Trade Contractors
Scheme of the Construction Industry Council

APPENDICES

(m) Appendices 5.6 Replace "and 6.9.2023" with ", 6.9.2023 and 10.4.2024" in the heading.

Delete the following paragraphs in item (a):

["Gondola (Permanent)" and "Gondola (Temporary)" mean the trade of "gondola (permanent)" and "gondola (temporary)" respectively under the RSTCS as promulgated by the Construction Industry Council from time to time.]8

["Levelling and Setting Out" means the trade of "levelling and setting out" under the RSTCS as promulgated by the Construction Industry Council from time to time.]

Delete the following paragraph at the end of item (a):

["Painting", "Metal Work", "Structural Steelwork", "Horticultural Works", "Arboriculture Works" and "Skyrise

Greenery Works" mean the trade of "painting", "metal work", "structural steelwork", "horticultural works", "arboriculture works" and "skyrise greenery works" respectively under the RSTCS as promulgated by the Construction Industry Council from time to time.]9

Replace "[10, except [9 [8 Gondola (Permanent) and Gondola (Temporary),]8 Levelling and Setting Out,]9 Building Maintenance and Interior Fitting-out,]10" with "[9, except [8 Building Maintenance and Interior Fitting-out,]8 Painting, Metal Work, Structural Steelwork, Horticultural Works, Arboriculture Works and Skyrise Greenery Works]9" in item (b)(iii).

Replace "[10, except [9] [8] Gondola (Permanent) and Gondola (Temporary),]8 Levelling and Setting Out,]9 Building Maintenance and Interior Fitting-out,]10" with "[9, except [8] Building Maintenance and Interior Fitting-out,]8 Painting, Metal Work, Structural Steelwork, Horticultural Works, Arboriculture Works and Skyrise Greenery Works,]9" in item (c)(iii).

Delete "Three more trades, i.e. (12) Truss Out Scaffolding, (13) Gondola (Permanent) and (14) Gondola (Temporary), have been included since 1 January 2023." and replace "With effect from 1 October 2023, two new trades, i.e. (16) Building Maintenance and (17) Interior Fitting-out," with "Two more trades, i.e. (13) Building Maintenance and (14) Interior Fitting-out have been included since 1 October 2023. With effect from 1 May 2024, six new trades, i.e. (15) Painting, (16) Metal Work, (17) Structural Steelwork, (18) Horticultural Works, (19) Arboriculture Works and (20) Skyrise Greenery Works" before "will be added to the Register of Specialist Trade Contractors" in item 2 of the Internal Notes.

Replace "1 October 2023" with "1 July 2024" after "will be invited on or after", add ", Group 1 (Advanced)" after "Group 1", delete "Gondola (Permanent), Gondola (Temporary), except Levelling and Setting Out,", add ", except Painting, Metal Work, Structural Steelwork, Horticultural Works, Arboriculture Works and Skyrise Greenery Works" after "Building Maintenance and Interior Fitting-out", replace "1.12.2022" with "6.9.2023" after "SDEV's memo ref. DEVB(W) 510/94/02 dated" in item 8 of the Internal Notes.

Replace "1 December 2023" with "1 February 2025" after "will be invited on or after", add ", Group 1 (Advanced)" after "the tender limits of Group 1", replace "Levelling and Setting Out, Building Maintenance, and Interior Fitting-out" with "Painting, Metal Work and Structural Steelwork while the tender limits of Group 1 and Group 2 should be observed for all trades including Horticultural Works, Arboriculture Works and Skyrise Greenery Works.", replace "1.2.2023" with "10.4.2024" after "SDEV's memo ref. DEVB(W) 510/94/02 dated" in item 9 of the Internal Notes.

Delete item 10 of the Internal Notes.

Appendices 5.6A (n) Table 1

Replace "17" with "20" after "RSTCS covers", delete "Truss Scaffolding, (13) Gondola (Permanent), (Temporary)" after "(12)" and replace "(16) Building Maintenance and (17) Interior Fitting-out" with "(13) Building Maintenance, (14) Interior Fitting-out, (15) Painting, (16) Metal Work, (17) Structural Steelwork, (18) Horticultural Works, (19) Arboriculture Works and (20) Skyrise Greenery Works" after "Levelling and Setting Out," in note (3).

Replace "17" with "20" after "set by CIC for the" in note (4).

(o) 5.6D

Appendices 5.6B and Delete the following paragraphs in item (1) under Additional **Conditions of Contract:**

> ["Gondola (Permanent)" and "Gondola (Temporary)" mean the trade of "gondola (permanent)" and "gondola (temporary)" respectively under the RSTCS as promulgated by the Construction Industry Council from time to time.]³

> ["Levelling and Setting Out" means the trade of "levelling and setting out" under the RSTCS as promulgated by the Construction Industry Council from time to time.]4

> Add the following paragraph at the end of item (1) under **Additional Conditions of Contract:**

> ["Painting", "Metal Work", "Structural Steelwork", "Horticultural Works", "Arboriculture Works" and "Skyrise Greenery Works" mean the trade of "painting", "metal work", "structural steelwork", "horticultural works", "arboriculture works" and "skyrise greenery works" respectively under the RSTCS as promulgated by the Construction Industry Council from time to time.]4

> Delete "[3 Gondola (Permanent) and Gondola (Temporary),]3 Levelling and Setting Out,]4", add "Painting, Metal Work, Structural Steelwork, Horticultural Works, Arboriculture Works and Skyrise Greenery Works,]4" after "Fitting-out,]3" and replace "Group 2" with "Group 1 (Advanced) or Group 2, and if the value of relevant subcontract exceeds the tender limit of Group 1 (Advanced), the Subcontractor has been admitted into Group 2," in sub-item (iii) of item (2) and item (3) under **Additional Conditions of Contract.**

Delete "Three more trades, i.e. (12) Truss Out Scaffolding, (13) Gondola (Permanent) and (14) Gondola (Temporary), have been included since 1 January 2023.", replace "(15)" with "(12)" and replace "With effect from 1 October 2023, two new trades, i.e. (16) Building Maintenance and (17) Interior Fitting-out" with "Two more trades, i.e. (13) Building Maintenance and (14) Interior Fitting-out have been included since 1 October 2023. With effect from 1 May 2024, six new trades, i.e. (15) Painting, (16) Metal Work, (17) Structural Steelwork, (18) Horticultural Works, (19) Arboriculture Works and (20) Skyrise Greenery Works" in item 1 of Internal Notes.

Replace "1 October 2023" with "1 July 2024", add ", Group 1 (Advance)" after "Group 1", delete "Gondola (Permanent) and Amd No. 7/2023 Gondola (Temporary), except Levelling and Setting Out" add "except Painting, Metal Work, Structural Steelwork, Horticultural Works, Arboriculture Works and Skyrise Greenery Works" after "Interior Fitting-out" and replace "1.12.2022" with "6.9.2023" in item 3 of Internal Notes.

Replace "1 December 2023" with "1 February 2024", add ", Group 1 (Advance)" after "Group 1", delete "Levelling and Setting Out, Building Maintenance, and Interior Fitting-out" add "Painting, Metal Work and Structural Steelwork while the tender limits of Group 1 and Group 2 should be observed for all trades including Horticultural Works, Arboriculture Works and Skyrise Greenery Works." and replace "1.2.2023" with "10.4.2024" in item 4 of Internal Notes.

Delete item 5 of Internal Notes.

(p) Appendices 5.6C and 5.6E Table 1

Replace "17" with "20" after "RSTCS covers", delete "(12) Truss Out Scaffolding, (13) Gondola (Permanent), Gondola (Temporary)" and replace "(15) Levelling and Setting Out, (16) Building Maintenance and (17) Interior Fitting-out" with "(12) Levelling and Setting Out, (13) Building Maintenance, (14) Interior Fitting-out, (15) Painting, (16) Metal Work, (17) Structural Steelwork, (18) Horticultural Works, (19) Arboriculture Works and (20) Skyrise Greenery Works" in note (3).

Replace "17" with "20" after "set by CIC for the" in note (5).

CHAPTER 7 PROJECT DESIGN AND ESTIMATES

PARAGRAPH 18 DETAILED DESIGN AND ASSOCIATED ADMINISTRATION

(q) Para. 18.3.6

Replace "WBTC No. 16/2000" with "paragraph 5.4.3 of Chapter 3 of PAH" before "and DEVB TCW No. 2/2021" in the first paragraph.

PARAGRAPH 21 MISCELLANEOUS

(r) Para. 21.14.3 **Replace "and 1.12.2022" with ", 1.12.2022, 6.9.2023, 1.2.2023** and 10.4.2024" in the heading.

Add the following paragraphs after the last paragraph:

Addition of "Painting", "Metal Work", "Structural Steelwork", "Horticultural Works", "Arboriculture Works" and "Skyrise Greenery Works" as Designated Trades under the RSTCS of the CIC

"Painting", "Metal Work", "Structural Steelwork", "Horticultural Works", "Arboriculture Works" and "Skyrise Greenery Works" have been included as one of the designated trades under the RSTCS starting from 1 May 2024.

To cater for the above change, the whole set of NTT, SCC, ACC, as well as the appendices to SCC and ACC, have been updated (at Annex A of SDEV's memos ref. () in DEVB(W) 510/94/02 dated 10.4.2024). This set of updated tender documents shall be adopted for tenders to be invited on or after 1 May 2024.

Same as the earlier arrangement for other designated trades, a grace period of 9 months has been allowed for those larger "Painting", "Metal Work" and "Structural Steelwork" subcontractors to be admitted to Group 1 (Advanced) and Group 2. Also, a grace period of 9 months has been allowed for those larger "Horticultural Works", "Arboriculture Works" and "Skyrise Greenery Works" subcontractors to be admitted to Group 2. As such, the requirement to engage Group 1 (Advanced) or Group 2 subcontractors when the tender limit of Group 1 is exceeded, and Group 2 subcontractors when the tender limit of Group 1 (Advanced) is exceeded, shall be adopted for tenders to be invited on or after 1 February 2025 (the "full implementation date"). In other words, no tender limit in respect of the engagement of "Painting", "Metal Work", "Structural Steelwork", "Horticultural Works", "Arboriculture Works" and "Skyrise Greenery Works"

subcontractors under RSTCS will be imposed on tenders to be invited prior to the full implementation date.

PARAGRAPH 22 REFERENCES

(s) **Delete the following reference:**

WBTC No. 16/2000 Provision and Collation of Land Survey and

Mapping Data

(t) Add the following reference:

SDEV's memo ref. Addition of "Painting", "Metal Work", () in DEVB(W) "Structural Steelwork", "Horticultural

510/94/02 dated Works", "Arboriculture Works" and "Skyrise 10.4.2024 Greenery Works" as Designated Trades under

the Registered Specialist Trade Contractors Scheme of the Construction Industry Council

CHAPTER 8 TERM CONTRACT WORKS

PARAGRAPH 5 TERM CONTRACTS

(u) Para. 5.2.2 **Replace** "27.7.2020" with "22.9.2023" after "SDEV's memo ref. () in DEVB(W) 546/83/01 dated 27.7.2020" in the heading.

Replace "and" with "." after "WBTC No. 16/2002 should also be noted" and add "and SDEV's memo ref. () in DEVB(W) 546/83/01 dated 22.9.2023 further increases the threshold of the constraints on the power of the Engineer to order variation and the related matters from \$800,000 to \$1,000,000" after "from \$300,000 to \$800,000" in the fourth paragraph.

PARAGRAPH 6 REFERENCES

(v) **Delete the following reference:**

SDEV's memo ref. Threshold of the Constraints on the Power of the Contract Administrator to Order Variation

546/83/01 dated and the Related Matters

27.7.2020

(w) Add the following reference:

SDEV's memo ref. Threshold of the Constraints on the Power of the Contract Administrator to Order Variation

546/83/01 dated and the Related Matters

22.9.2023

APPENDICES

(x) Appendix 8.3A Replace "HK\$800,000" with "HK\$1,000,000" in the second and third paragraph of item 2(1)(b) of "APPENDIX TO FORM OF TENDER – P. 3".

Technical Secretariat Unit Civil Engineering and Development Department 24 May 2024

APPENDIX 3.30 REQUIREMENT OF SUBMISSION OF GEOSPATIAL DATA

Submission Requirements with respect to Project Estimates

1. Geospatial Data originated from both approved design and as-built surveys should be sent to Survey and Mapping Office (SMO). Requirements of submitting Geospatial Data with different project estimates are summarised in the following table –

| Form of Geospatial Data Works Project Estimates | GIS data | BIM model | Drawing in CAD format | Photo, image, point cloud and derived model |
|--|-------------------|--|--------------------------|--|
| above \$30 million | ✓ | √ | not applicable | ✓ (if available) |
| not more than \$30 million | not applicable | (submit either BIM model or drawing in CAD format) | | ✓ (if available) |

2. If the scope of a works project does not involve any change of the position or alignment of features as shown on the LandsD's 1:1000 Basic Map, submission of Geospatial Data is not required.

Specifications of Geospatial Data

3. Geospatial Data shall be prepared according to the specifications summarised in the following table –

| Form of Geospatial Data | Specifications | |
|---|---|--|
| GIS data | 1:1000 Basic Mapping Specifications promulgated by LandsD | |
| BIM model | BIM data standard under DEVB's policy on BIM adoption ³⁰ | |
| CAD drawing | CAD Standards for Works Projects (CSWP) | |
| Photo, image, point cloud and derived model | The specifications of these miscellaneous Geospatial Data are in LandsD website | |

4. Geospatial Data originated from both approved design and as-built surveys should be submitted to SMO according to the following timeline –

³⁰ Details refer to DEVB TC(W) No. 2/2021 "Adoption of Building Information Modelling for Capital Works Projects in Hong Kong" or its latest version.

| Geospatial Data | Submission timeline |
|--|---|
| Geospatial Data originated from approved design | Before commencement of construction works of each works contract under a project |
| Geospatial Data originated from as-built surveys | Upon completion of construction works of each works contract ³¹ under a project or not later than the corresponding infrastructure / area is open for use whichever is earlier |

5. Works departments can refer to LandsD website below for detailed procedures of Geospatial Data submission.

https://www.landsd.gov.hk/en/survey-mapping/collation-of-geospatial-data.html

³¹ If the works are carried out in different sections, Geospatial Data should be submitted upon each sectional completion.

APPENDIX 3.31 WORKFLOW FOR COLLATION OF SURVEY, MAPPING AND GEOSPATIAL DATA

Subject Officer³² from Works Department or its consultant/ contractor to submit and **certify** the submitted Geospatial Data are in compliance with the requirements in Section 5.4.3 of this Project Administration Handbook.



SMO to compile register and conduct spot checking on the submitted Geospatial Data against the requirements in Section 5.4.3 of this Project Administration Handbook.



SMO to request the Works Department or its consultant/ contractor to correct the submitted Geospatial Data, if required, to ensure their compliance with the requirements in Section 5.4.3 of this Project Administration Handbook.



SMO to acknowledge receipt of Geospatial Data which conform to the requirements in Section 5.4.3 of this Project Administration Handbook.

³² The subject officer from WD or its consultant/ contractor, who is responsible for certifying the submitted Geospatial Data of the project, should be professional staff.

APPENDIX 3.32 SAMPLE CLAUSE FOR CONSULTANCY BRIEF OR WORKS CONTRACTFOR COLLATION OF SURVEY, MAPPING AND GEOSPATIAL DATA FROM CAPITAL WORKS PROJECTS IN CAPITAL WORKS PROGRAMME

The following provision to be included in the Deliverable clause of the consultancy brief or works contract:

With a view to facilitating efficient digital map updating by the Survey and Mapping Office (SMO) of the Lands Department, the Consultant/ Contractor shall follow Section 5.4.3 of Chapter 3 of the Project Administration Handbook to submit the required Geospatial Data to SMO.