

Earthworks Strategy

Design Assumptions

- A typical 300mm Site Strip has been assumed for the whole site and is expected to comprise a variety of weathered materials and organics. Based on a site area of 35,500m² this provides a site strip volume of 10,650m³.
- As a further potential saving, the Contractor may assess and verify the suitability of reusing this material elsewhere (such as in proposed landscaped areas) though any proposal must be in accordance with the BWB earthworks specifications and Landscape Architect landscape design and specification. Any remaining topsoil material is to be exported from site.
- The ground conditions on site are assumed to be reasonable and so a minimum CBR of 5% (unless noted otherwise below) has been assumed in this strategy to inform construction depths.
- Further in-situ geotechnical investigatory works at the time of construction shall confirm this assumption.
- The formation depths from finished levels are assumed as follows.

Building

= 450mm

Access Road

= 450mm

Car Park

= 450mm

Service Yard

= 450mm

Footpaths

= 450mm

Landscaping

= 150mm

Adoptable Road

= 650mm

Adoptable Footpath

= 450mm
- All material within the top 450mm of finished surface level in trafficked areas shall be non-frost susceptible. This depth may be included within any lime / cement stabilisation works.
- Cut/Fill volumes are between site strip and formation levels.
- No bulking factors have been taken into account in calculating the estimated earthworks quantities.
- The earthworks quantities have been provided by BWB for guidance only.
- It should be noted that the earthworks volumes provided by BWB are accurate to ±5%. This margin takes account of the variations that may result through the use of Civil 3D modelling software and variations in the topographic survey.
- Pre-construction survey to be undertaken to confirm the site strip assumptions and levels ahead of earthworks activities.

Bulk Cut/Fill Earthworks

Following the site strip, the bulk earthworks required to reach formation levels is anticipated to generate:

Total Net:

Cut

21,777

Fill

7,393

Net

14,384 (Export)

Therefore the Overall Net Fill shall be taken as approx. 14,384m³ (Export)

Arisings

Construction arisings generated from drainage, foundations and services have been estimated [based on a rate of 0.075m³ per square metre of site area] at 2,663m³.

Bulk Cut/Fill Earthworks Summary

Near balance of sub-soil achieved as summarised below:

Bulk Earthworks

14,384 (Export)

Arisings

2,663 (Export)

Total Subsoil

17,047m³ (Export)

Important CDM / H&S note

The Designers would draw the readers attention to the key residual health and safety risks that have not been eliminated from the designs shown on this drawing by the design process. These key residual risks are identified below:

Existing Drainage and Service Infrastructure not to be compromised. Contractor to refer to utilities survey information prior to undertaking works.

Care to be taken around deep excavations. Plant to be kept at safe distance.

Moving plant. Care to be taken around site.

Care to be taken when working in the vicinity of existing water features and in high ground water conditions.

Any construction personnel including operatives intending to construct the designs shown on this drawing should ensure that they have been regularly and thoroughly briefed by the principal Contractor on all health and safety matters and have had sight of:

1 - The full Designers and Contractors risk assessments and risk registers.

2 - The developed construction health and safety plan.

3 - The Contractors construction method statements.

Hazards that are obvious to a competent Contractor are not shown, as are every day and low risk hazards.

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Notes

- Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
- This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
- All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
- Any discrepancies noted on site are to be reported to the engineer immediately.

Key Plan

Legend

Isopachyte Cut Contour [Minor]

Isopachyte Cut Contour [Major]

Zero Cut/Fill Contour

Isopachyte Fill Contour [Major]

Isopachyte Fill Contour [Major]

P04

15.09.23

Minor amendments as requested by client

IB

P.J.L

P03

08.09.23

Updated to suit the latest site plan

IB

K.M.J

P02

17.05.23

Updated to suit the latest masterplan

K.M.J

P.J.L

P01

26.04.23

Planning Issue

LA

CR

Rev

Date

Details of issue / revision

Drw

Rev

Issues & Revisions

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Client

Wilson Bowden

Project Title

Plot L

Kingsway Business Park

Drawing Title

Earthworks

Drawn:

L. Archer

Reviewed:

C. Ramsden

BWB Ref:

222009

Date:

Apr '23

Scale@A1:

1:500

Drawing Status

For Planning

Project - Originator - Zone - Level - Type - Role - Number

PLK-BWB-DGT-XX-DR-C-0630

Status

S8

Rev

P04