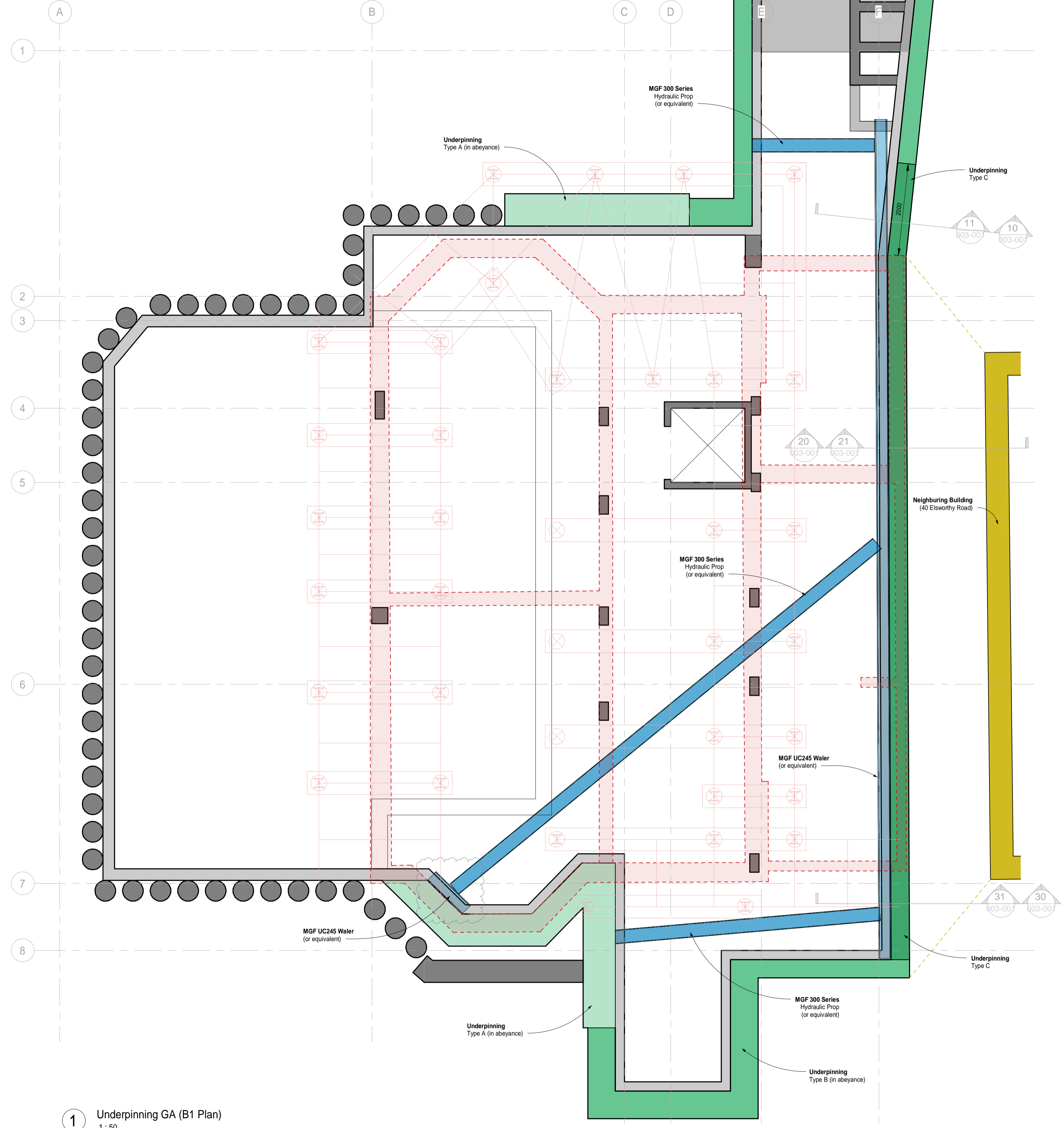


Critical RC Requirements:

- Vertical and horizontal rebar must be lapped for both neighboring and top/bottom underpinning portions
- LGF slab to be tied into underpinning wall thru starter bars
- Stage 2 underpinning wall not to have rebar dowelling into mass concrete foundation



100mm long @ A1 or 50mm long @ A3

Notes:

- This drawing to be read in conjunction with all relevant Architects & Engineers drawings & the Specifications.
- The contractor is to be responsible for all dimensions & for the correct setting out of the work on site.
- Do not scale from this drawing. To check drawing has been printed to the intended scale the above bar should be 100mm long @ A1 or 50mm long @ A3.

All dimensions in mm (UNO)
This drawing supercedes WBD drawing 2022113DRW-001-007

Underpinning Type C

Sequence of Works:

- Install stage 1 underpinning, drypacking and sacrificial mass concrete pads in hit and miss sequence (see Axiom drawing 21142-ASL-ZZ-B1-DR-S-0096-C3 and following revisions):
 - Dig the first section of stage 1 underpinning (max 1.2m)
 - Further horizontal excavation 550mm protruding past the underpinning face to host sacrificial foundation)
 - Fix underpinning starter bars (allow lap length for stage 2 underpinning)
 - Pour sacrificial foundation using mass concrete
 - Complete steel fixing for stage 1 underpinning
 - Pour stage 1 underpinning
 - Dry pack
- Backfill to existing ground level after every underpin installation
- Install needling system as per WBD report 2022113-WBD-TW-REP003 P06 and following revisions
- Install LGF slab and tie into underpin
- Excavate to level +44.900m AOD
- Install gallow brackets through localised dig
- Install Water Beam and Props

Install stage 2 underpinning, drypacking and mass concrete pads in hit and miss sequence (see Axiom drawing 21142-ASL-ZZ-B1-DR-S-0096-C3 and following revisions).

NOTE: mass concrete foundation from stage 1 underpinning to be partially removed at this stage following the same hit and miss sequence:

 - Dig the first section of stage 2 underpinning (max 1.2m).
 - Carefully break down corresponding section of stage 1 mass concrete foundation while digging; portion protruding into neighbouring property to be left in place (sacrificial).
 - Complete underpinning section
- Backfill to level +44.900m AOD after every underpin installation. Use 6F2 crush (or similar) when backfilling in front of the toe.
- Excavate to formation level (+42.450m AOD)
- Install B1 slab
- Remove Water Beam and Props
- Continue with regular installation of permanent structures
- Remove needling system as per WBD report 2022113-WBD-TW-REP003 P06 and following revisions

RC Minimum Requirements in Temp State:

- Minimum concrete grade C32/40
- Maximum concrete cover 75mm

RC400 Underpinning (typical)

- Vertical Rebar (soil facing face): H16-200mm c/c
- Vertical Rebar (inner face): H12-200mm c/c
- Horizontal: H12-200mm c/c

Underpinning walls top 700mm portion (e.g. upstand top of Type C)

- Minimum 150mm thickness
- Vertical Rebar (both faces): H12-200mm c/c
- Horizontal: H12-200mm c/c
- Max concrete cover 35mm
- Adopt PW requirements if larger
- Rebar to have full anchorage into underpinning wall

Connection to LGF slab (top of underpinning)

- Slab to be tied into underpinning in the temp state
- Provide H16-200 c/c horizontal starter bars rebar with full anchorage into underpinning wall

P02	04.04.23	QMP	As clouded
P01	27.03.23	QMP	Issued for Information
Rev	Date	By	Amendments

Drawing Status
FOR INFORMATION

WBD STRUCTURES

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Project Title
42 ELSWORTHY ROAD

Drawing Title
Underpinning Layout & Type C Details

Project Number 2022113	Date 04/04/23
Scale: 1 : 50 [A1]	Checked By JN
Drawn By QMP	Revision P02

Drawing Number
2022113-DRW-003-001

The information presented on this drawing is colour-coded for clarity and therefore should be printed or copied in colour.