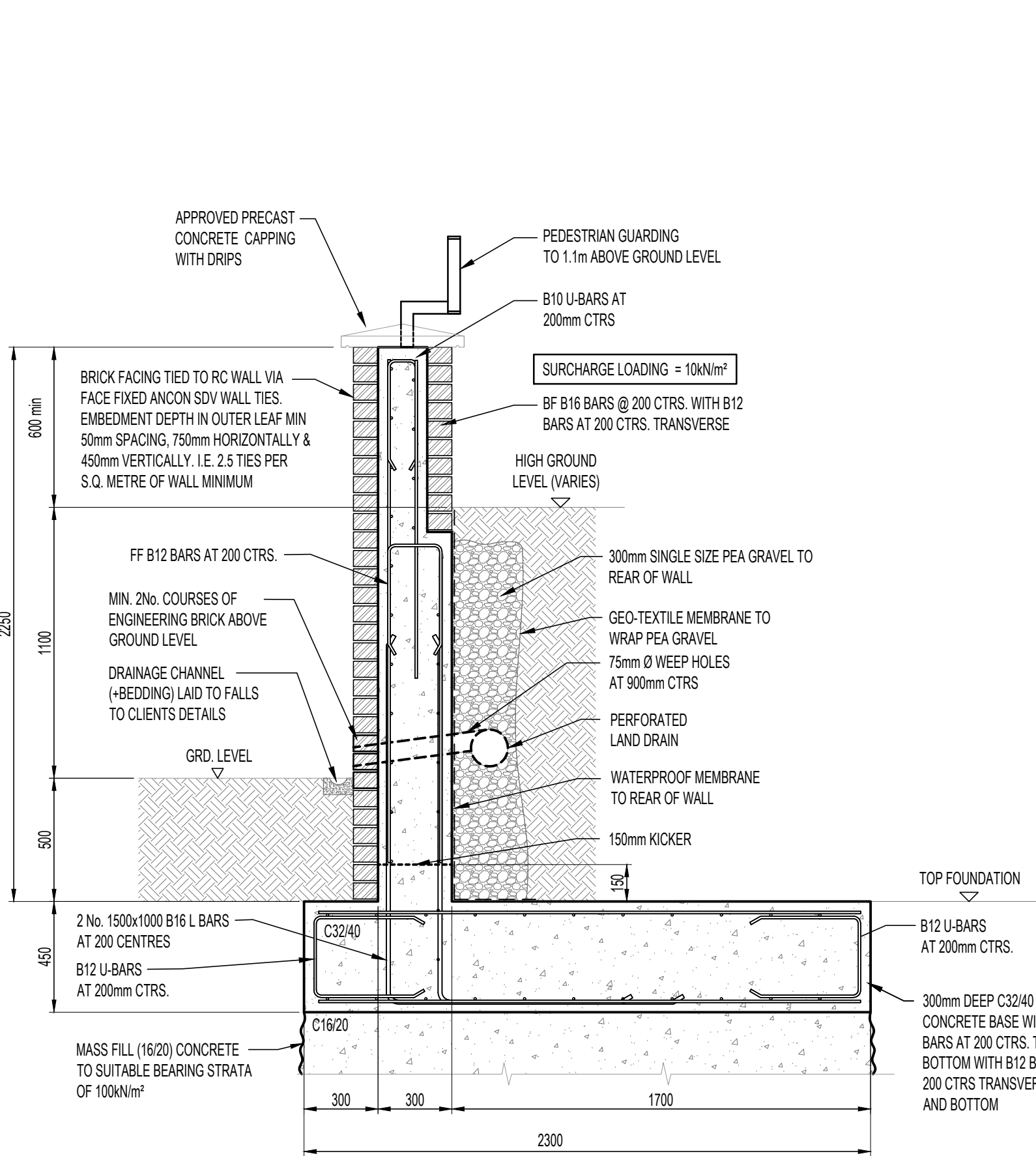
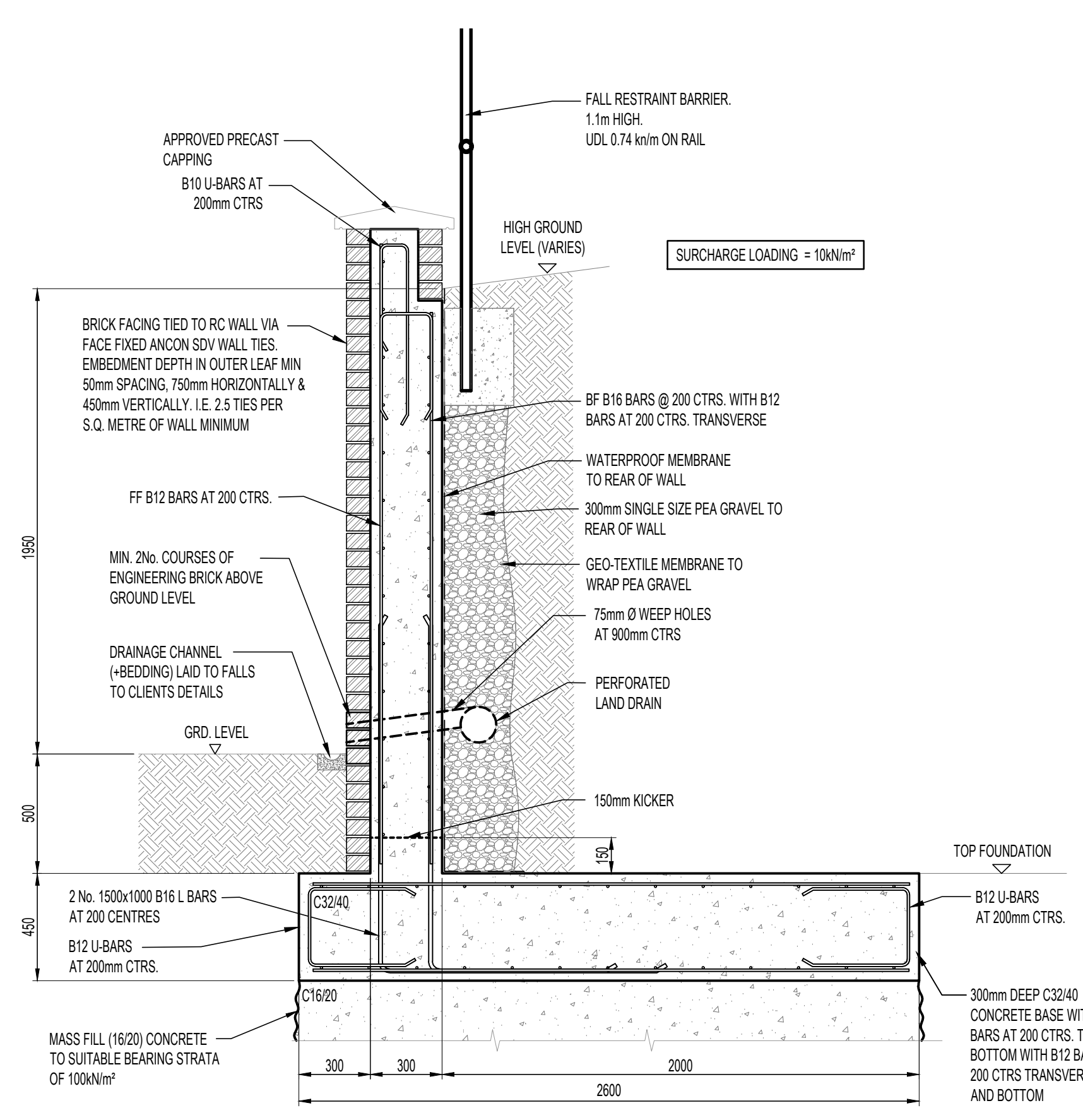
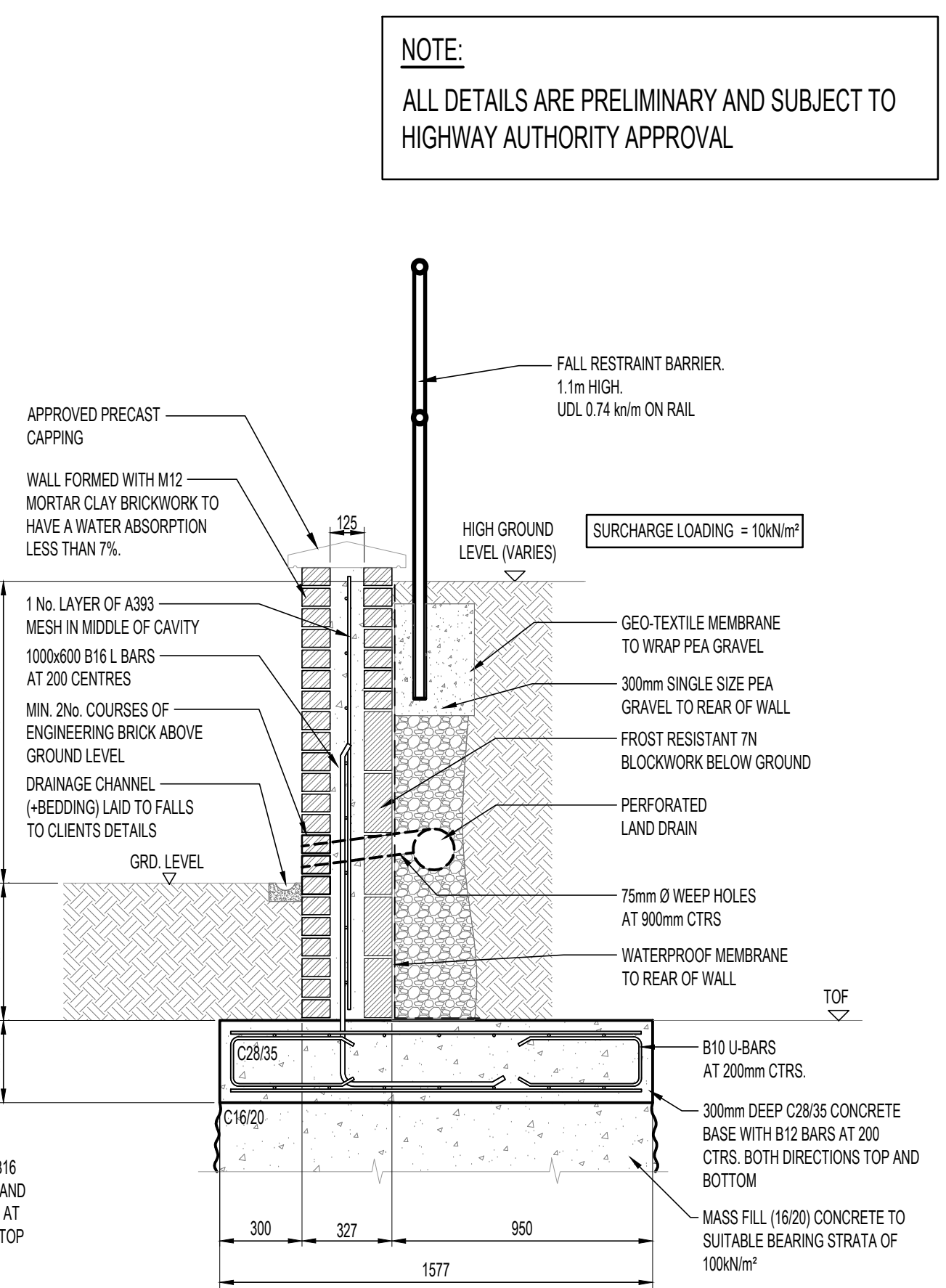




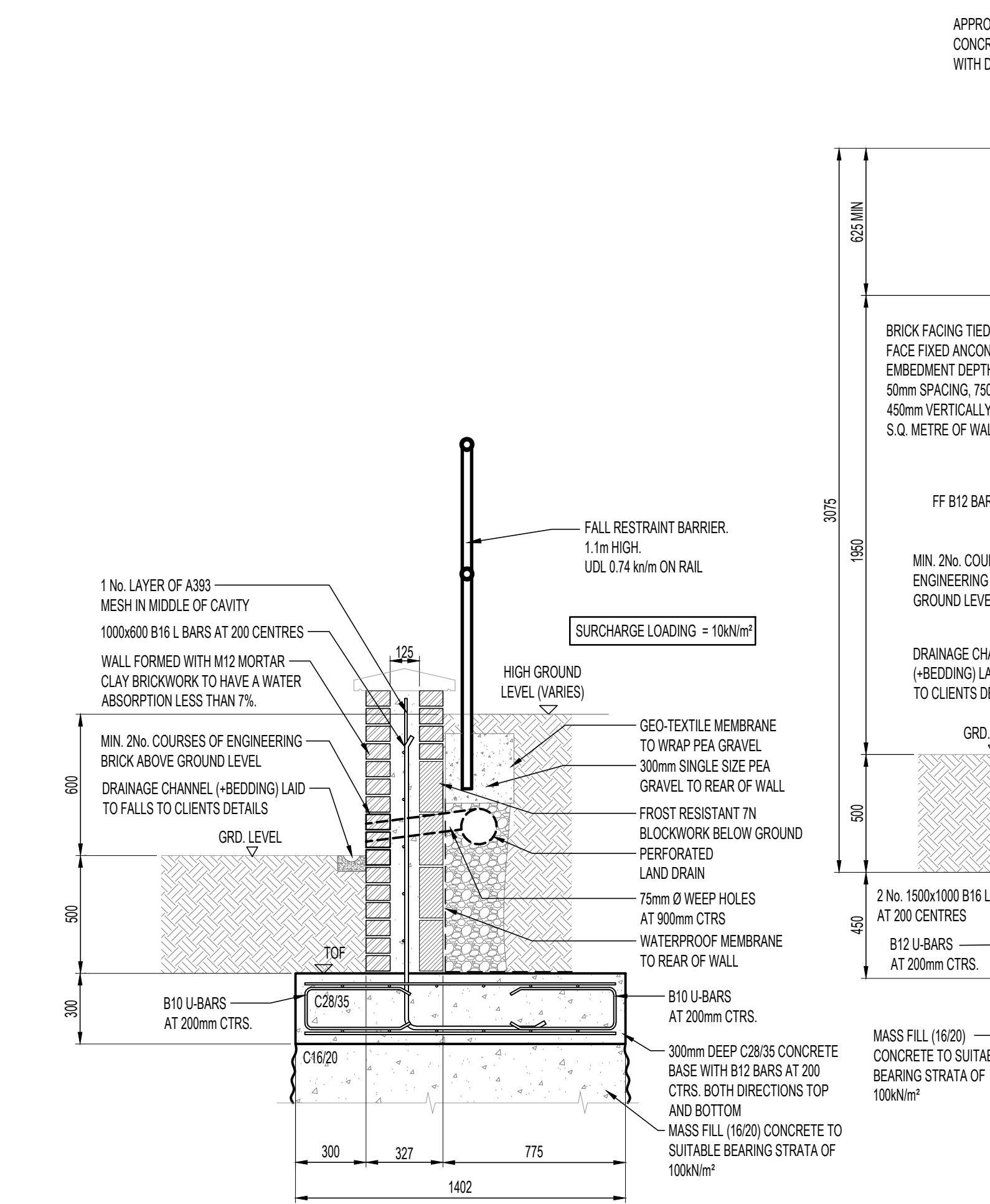
HIGHWAY WALL TYPE 1 (HW 1)
TYPICAL RETAINING WALL SECTION
(RETAINED HEIGHT = 1100mm)
(SCALE 1:20)



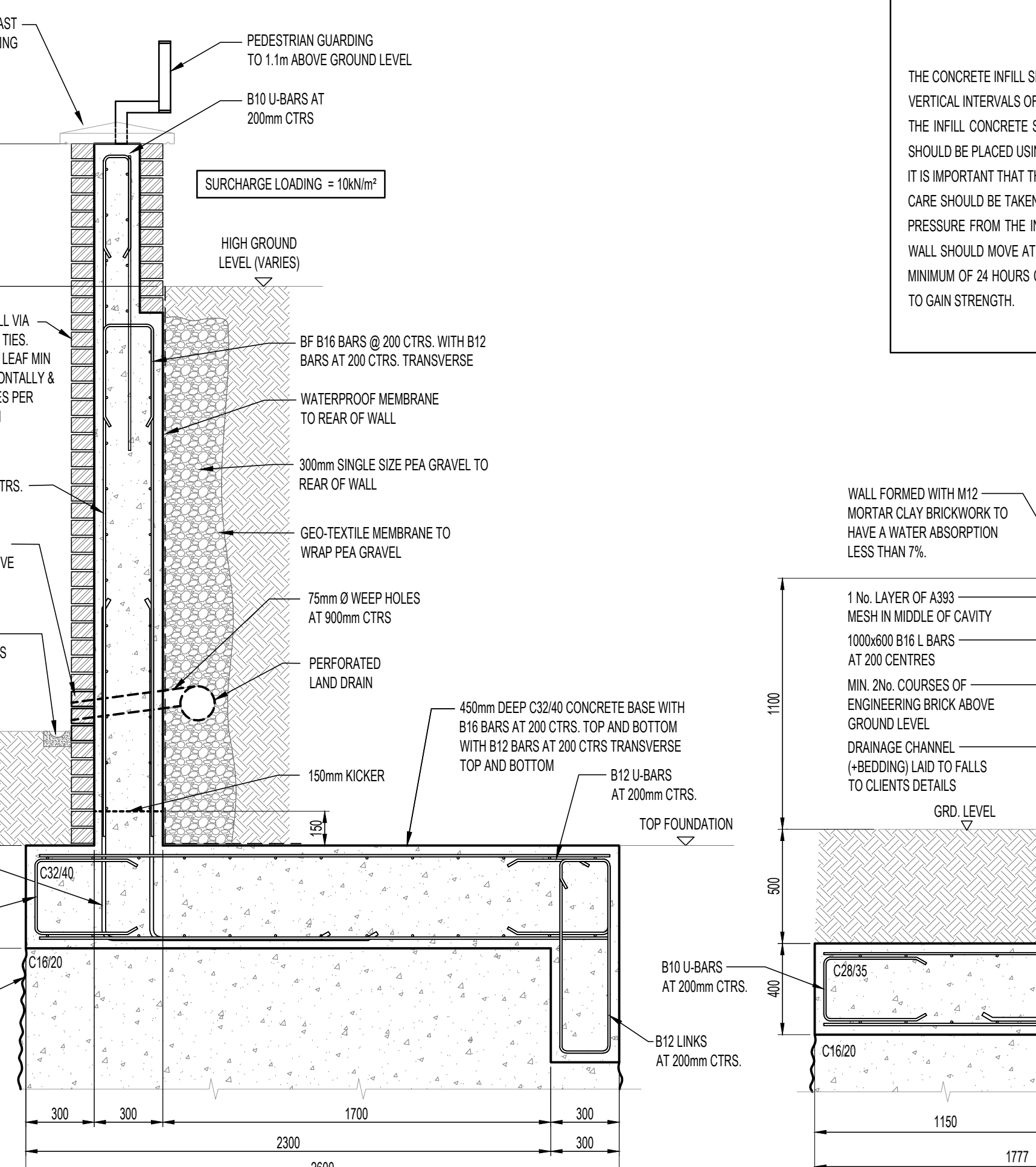
HIGHWAY WALL TYPE 2 (HW 2)
TYPICAL RETAINING WALL SECTION
(RETAINED HEIGHT = 2000mm)
(SCALE 1:20)



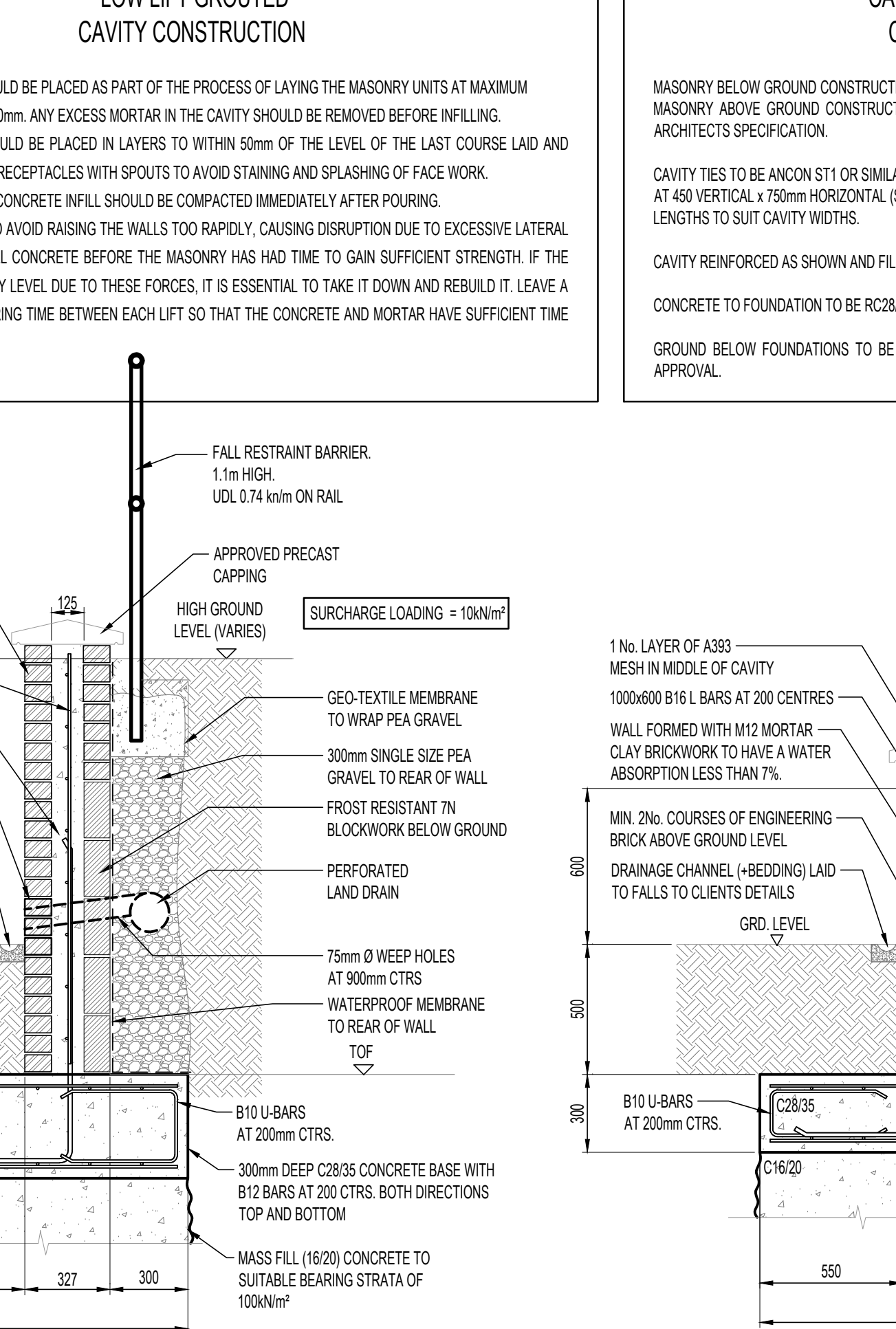
HIGHWAY WALL TYPE 3 (HW 3)
TYPICAL MASONRY RETAINING WALL SECTION
(RETAINED HEIGHT = 1100)
(SCALE 1:20)



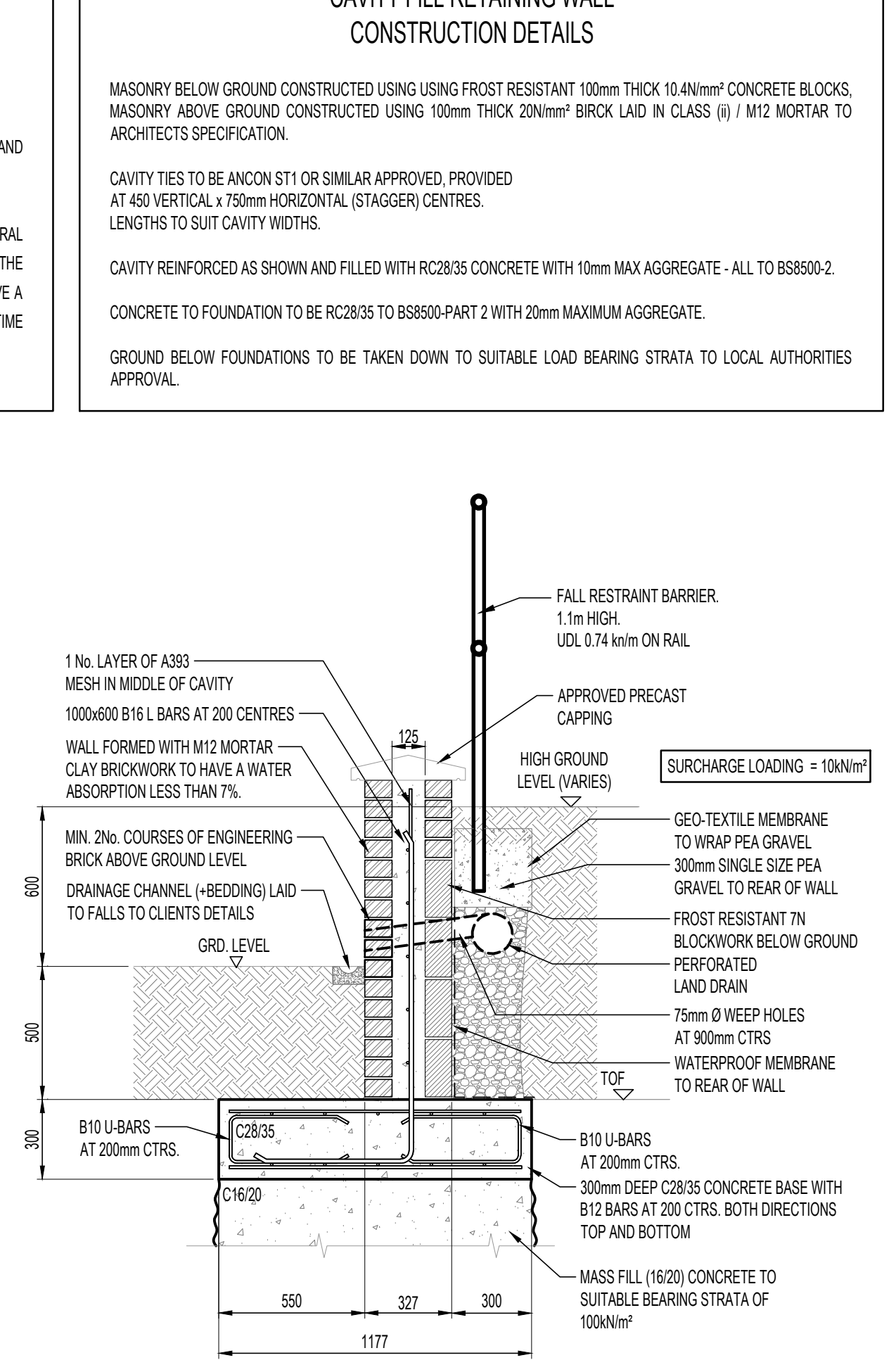
HIGHWAY WALL TYPE 4 (HW 4)
TYPICAL MASONRY RETAINING WALL SECTION
(RETAINED HEIGHT = 600)
(SCALE 1:20)



HIGHWAY WALL TYPE 5 (HW 5)
TYPICAL RETAINING WALL SECTION
(RETAINED HEIGHT = 1950mm)
(SCALE 1:20)



HIGHWAY WALL TYPE 6 OR 7 A (HW 6 OR HW 7)
TYPICAL MASONRY RETAINING WALL SECTION
(RETAINED HEIGHT = 1100)
(SCALE 1:20)



HIGHWAY WALL TYPE 6 OR 7 B (HW 6 OR HW 7)
TYPICAL MASONRY RETAINING WALL SECTION
(RETAINED HEIGHT = 600)
(SCALE 1:20)

NOTE:
ALL DETAILS ARE PRELIMINARY AND SUBJECT TO
HIGHWAY AUTHORITY APPROVAL

GENERAL NOTES

DO NOT SCALE OFF THIS DRAWING

THIS DRAWING TO READ IN CONJUNCTION WITH ALL RELEVANT STRUCTURAL AND ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR / FABRICATOR PRIOR TO COMMENCEMENT OF WORKS.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

ALL WORKS TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE ENGINEER'S SPECIFICATIONS, RELEVANT BRITISH STANDARDS, STATUTORY HEALTH AND SAFETY/C.D.M. REGULATIONS, RELEVANT CODES OF PRACTICE AND THE CURRENT EDITION OF THE BUILDING REGULATIONS.

FOR FINAL SETTING OUT INFORMATION RELATING TO GRID LINES AND WALL POSITIONS REFER TO THE ARCHITECT'S DRAWINGS.

RETAINING WALLS (REINFORCED MASONRY)

REINFORCED MASONRY RETAINING WALLS TO BE CONSTRUCTED BY THE MAIN CONTRACTOR (MC) IN ACCORDANCE WITH ENGINEER'S DRAWINGS & DETAILS. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH STATUTORY HEALTH AND SAFETY/C.D.M. REGULATIONS, RELEVANT CODES OF PRACTICE AND THE CURRENT EDITION OF THE BUILDING REGULATIONS.

THE MC IS TO BE SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL TEMPORARY WORKS, SHORING & FORMWORK.

RETAINING WALL BASE TO BE FOUNDED ONTO COMPETENT BEARING STRATA, CAPABLE OF GBP 100 kN/m².

BACKFILL TO COMPRISE WELL GRADED, FREE DRAINING GRANULAR MATERIAL SUCH AS CLASS 8N OR CLASS 8P, AS DESCRIBED IN THE EARTHWORK 600 SERIES OF MANUAL FOR CONTRACT HIGHWAY WORKS (MCHW).

150mm POROUS LAND DRAIN TO BE INSTALLED ON TOP OF THE RETAINING WALL BASE AND WRAPPED IN GEOTEXTILE TO PREVENT THE MIGRATION OF FINES.

WEEPHOLES TO BE 75mm IN DIAMETER AND PLACED ABOVE THE LEVEL OF THE LAND DRAIN. WEEPHOLE CENTRES TO BE 1m HORIZONTALLY.

MOVEMENT JOINTS IN OUTER LEAF TO BE POSITIONED AT MAXIMUM 6m CENTRES IN BLOCKWORK/STONEMWORK AND 12m CENTRES IN BRICKWORK.

RETAINED SOIL HEIGHT NOT TO EXCEED THE DIMENSIONS NOTED ON DRAWINGS. MAX DEPTH OF SOIL EXCAVATION IN FRONT OF RETAINING WALL TOE, AFTER CONSTRUCTION, TO BE LIMITED TO 500mm U.N.O. TO AVOID DESTABILISING THE WALL.

REINFORCED MASONRY TO BE CONSTRUCTED FROM MASONRY STRENGTHS & STEEL REINFORCEMENT AS NOTED ON PLAN. WALL TIES TO BE STAINLESS STEEL AND TO COMPLY WITH WITH BS EN 845-1 AND PD-6897. WALL TIES TO BE TYPE 2 WITH 50MM MINIMUM EMBEDMENT INTO EACH LEAF.

CONCRETE INFILL CORE TO BE GRADE C28/35 MINIMUM CEMENT CONTENT 320 kg/m³ WATER/CEMENT RATIO OF 0.6 MAXIMUM AGGREGATE SIZE 10mm

MORTAR ABOVE GRD TO BE 1:1/4 (ii) / M6
MORTAR BELOW GRD TO BE 1:3 (i) / M12

RETAINING WALLS (REINFORCED CONCRETE)

REINFORCED CONCRETE RETAINING WALLS TO BE CONSTRUCTED BY THE MAIN CONTRACTOR (MC) IN ACCORDANCE WITH ENGINEER'S DRAWINGS & DETAILS. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH STATUTORY HEALTH AND SAFETY/C.D.M. REGULATIONS, RELEVANT CODES OF PRACTICE AND THE CURRENT EDITION OF THE BUILDING REGULATIONS.

THE MC IS TO BE SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL TEMPORARY WORKS, SHORING & FORMWORK.

RETAINING WALL BASE TO BE FOUNDED ONTO COMPETENT BEARING STRATA, CAPABLE OF GBP 100 kN/m².

BACKFILL TO COMPRISE WELL GRADED, FREE DRAINING GRANULAR MATERIAL SUCH AS CLASS 8N OR CLASS 8P, AS DESCRIBED IN THE EARTHWORK 600 SERIES OF MANUAL FOR CONTRACT HIGHWAY WORKS (MCHW).

150mm POROUS LAND DRAIN TO BE INSTALLED ON TOP OF THE RETAINING WALL BASE AND WRAPPED IN GEOTEXTILE TO PREVENT THE MIGRATION OF FINES.

WEEPHOLES TO BE 75mm IN DIAMETER AND PLACED ABOVE THE LEVEL OF THE LAND DRAIN. WEEPHOLE CENTRES TO BE 1m HORIZONTALLY.

IF RC RETAINING WALL IS CLAD WITH BRICKWORK OR STONE, THIS LEAF SHOULD BE TIED BACK TO REINFORCED CONCRETE STEM WITH FACE FIXED ANCON SDV WALL TIES (OR SIMILAR APPROVED). EMBEDMENT DEPTH IN OUTER LEAF TO BE MINIMUM 50mm SPACING 750mm HORIZONTALLY AND 450mm VERTICALLY I.E. 2.5 TIES PER SQ. METRE OF WALL MINIMUM.

MOVEMENT JOINTS IN OUTER LEAF TO BE POSITIONED AT MAXIMUM 6m CENTRES IN BLOCKWORK/STONEMWORK AND 12m CENTRES IN BRICKWORK.

RETAINED SOIL HEIGHT NOT TO EXCEED THE DIMENSIONS NOTED ON DRAWINGS. MAX DEPTH OF SOIL EXCAVATION IN FRONT OF RETAINING WALL TOE, AFTER CONSTRUCTION, TO BE LIMITED TO 500mm U.N.O. TO AVOID DESTABILISING THE WALL.

REINFORCED CONCRETE (C32/40)

DESIGN SULFATE CLASS: DS-1
ACEC CLASSIFICATION: AC-15
DESIGN CHEMICAL CLASS: DC-1

REINFORCED CONCRETE TO BE GRADE C32/40 MINIMUM CEMENT CONTENT 300 kg/m³ WATER/CEMENT RATIO OF 0.55 MAXIMUM AGGREGATE SIZE 20mm.

MINIMUM CONCRETE COVER TO BE 50mm TOP, 50mm BTM AND SIDES UNLESS NOTED OTHERWISE.

ALL REINFORCEMENT TO BE GRADE B500B OR B500C TO COMPLY WITH BS4449 AND TO BE CUT AND BENT TO BS 8666.

CONTRACTOR TO USE APPROVED SPACER BLOCKS & REBAR SAFETY CAPS. CONTRACTOR MUST ENSURE ANY PROTRUDING BARS ARE TO HAVE SAFETY CAPS FITTED TO ENDS PRIOR TO NEXT LIFT/POUR/CONNECTION.

REINFORCEMENT MINIMUM LAPS FOR C32/40
BOTTOM LAYER (GOOD BOND CONDITIONS):
B8 : 300mm B10 : 400mm
B12 : 520mm B16 : 760mm
B20 : 1000mm B25 : 1300mm
B32 : 1650mm B40 : 2250mm

TOP LAYER (POOR BOND CONDITIONS):
B8 : 420mm B10 : 580mm
B12 : 740mm B16 : 1080mm
B20 : 1420mm B25 : 1650mm
B32 : 2360mm B40 : 3210mm

ALL LAPS AND INTERSECTIONS OF BARS SHALL BE SECURELY CONNECTED WITH MALLEABLE IRON WIRE OF A SUITABLE SIZE OR OTHER APPROVED METHOD OF FIXING.

ALL REINFORCEMENT SHALL BE ACCURATELY PLACED, SECURED AND MAINTAINED IN POSITION. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY STOOLS, CHAIRS AND SPACERS REQUIRED TO SUPPORT AND RESTRAIN REINFORCEMENT.

MESH REINFORCEMENT TO HAVE A MINIMUM LAP OF 450mm UNLESS NOTED OTHERWISE.

ALL CONCRETE TO BE ADEQUATELY VIBRO COMPACTED (ON PLACING) TO ENSURE THAT ALL VOIDS ARE REMOVED.

DRAWING REFERENCE

REFER TO DRAWING 34129-SUT-ZZ-XX-DR-S-2502 FOR PLAIN CONCRETE (C16/20) AND REINFORCED CONCRETE (C28/35) NOTES

P02	GUARDING DETAILS AND HEIGHTS	28.02.25	GS	GS
Rev	PRELIMINARY ISSUE	13-01-25	SH	GS
Rev	Description	Date	By	Chkd

Drawing Status

PRELIMINARY



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Client

RP TYSON

Project

DYE HOUSE
PRESCOT

Drawing Title

PROPOSED HIGHWAY
RETAINING WALL DETAILS

Date JAN. 25	Drawn By SH	Checked By GS		
Scale at A1 AS SHOWN	Project Number 34129	Status S4	Revision P02	

Sheet Number

34129-SUT-ZZ-XX-DR-S-2504