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NOTES

1. GENERAL:

IN ORDER TO PROVIDE A STANDARD CALCULATION PACKAGE WHICH WOULD SERVE THE MAJORITY OF THE STORY HOMES SITE LOCATIONS, THE KNOWN SITE SPECIFIC VARIABLES WERE CONSIDERED - FROM THE WIND LOADING CALCULATIONS INDICATED IN THE CALCULATION PACKAGES A DESIGN WIND LOAD (qp) OF 1.1kN/m² HAS BEEN ASSUMED. FOR THOSE SITES WHERE WIND LOAD EXCEEDS 1.1kN/m², THE EFFECTS OF THE INCREASED WIND LOAD ON THE RETAINING WALLS IS TO BE ASSESSED ON A SITE BY SITE BASES BY A STRUCTURAL ENGINEER. FENCE PANELS ARE ASSUMED TO HAVE ZERO POROSITY.

2. BRICKWORK:

- a) ALL CLAY BRICK UNITS TO BE TO BS EN 771:1.
- b) FOR RETAINING WALLS:
WALLS SHALL BE CONSTRUCTED IN **STRETCHER BOND** IN WORK AS FOLLOWS (UNLESS AGREED OTHERWISE BY THE ARCHITECT):
- A. COPING TO TOP OF WALL TO BE STORY HOMES STANDARD BRICKS OF MINIMUM 35N STRENGTH AND DURABILITY CLASSIFICATION F2/S2 SHALL BE USED. IF THE EARTH FACE IS WATERPROOFED, THE REAR STEM OF THE WALL CAN BE F1/S1. ALL COPING BRICKS MUST REMAIN F2/S2.
- B. WATERPROOF THE BACK OF THE RETAINED FACE OF WALL WITH PERMAGUARD PERMASEAL DAMP PROOF PAINT.
- C. PROTECT THE WATERPROOFING WITH FIBRE BOARD OR SIMILAR BEFORE BACKFILLING.
- D. INSTALL CONTINUOUS SHEET OF STAINLESS STEEL "EXMET" BED JOINT REINFORCEMENT AT 300mm CENTRES VERTICALLY PLACED ALONG EVERY LEAF OF BRICKWORK/BLOCKWORK.
- E. WALL TIES TO BE STAINLESS STEEL IN ACCORDANCE WITH BS5628, INSTALLED AT 450mm CENTRES VERTICALLY AND 900mm CENTRES HORIZONTALLY (STAGGERED).

3. MORTAR:

- a) ALL MORTAR TO BE TO BS EN998-2.
- b) FOR RETAINING WALLS:
MORTAR DESIGNATION CLASS M12.

4. DESIGNATED CONCRETE MIXES:

- a) UN-REINFORCED BASE - GEN3 FOR LOW SULPHATE CONDITIONS. FND 1/2/3 FOR HIGHER SULPHATE CONDITIONS.
- b) REINFORCED BASE - RC28/35 FOR DC1 GROUND CONDITIONS. FND 1/2/3 FOR HIGHER SULPHATE CONDITIONS.
- c) BLINDING AND ANY ADDITIONAL DEPTH OF FOUNDATION TO BASE. GEN1 FOR LOW SULPHATE CONDITIONS. FND 1/2/3 FOR HIGHER SULPHATE CONDITIONS.

5. FOUNDATIONS:

- a) THE WALL IS TO BE FOUNDED ON APPROVED FORMATION HAVING A MINIMUM SAFE BEARING CAPACITY OF 50kN/m².
- b) CONCRETE IN FOUNDATIONS TO BE CAST AGAINST TRIMMED EXCAVATION FACES.
- c) WHERE FOUNDATIONS ARE CONSTRUCTED ON SITES WITH CLAY SUBSTRAT OR OTHER IN SHRINKABLE SOILS, THEY MUST BE CONSTRUCTED IN ACCORDANCE WITH NHBC STANDARDS 4.2 BUILDING NEAR TREES. (CLAYMASTER AND DEEPENED FOUNDATIONS MAY BE NECESSARY IF INFLUENCED BY TREES. CONTACT THE ENGINEER FOR GUIDANCE).
- d) WHERE RETAINING WALLS ARE CONSTRUCTED IN CLOSE PROXIMITY TO A PLOT, THE FOUNDDING LEVEL FOR BOTH THE RETAINING WALL AND PLOT MUST BE EQUAL TO AVOID UNDERMINING THE FOUNDATIONS (RETAINING WALL FORMATION LEVEL TO BE LEVEL WITH THE LOWEST OF EITHER ADJACENT PLOT)

6. BACKFILLING:

- a) THIS SHALL NOT COMMENCE UNTIL AT LEAST 14 DAYS AFTER COMPLETION OF THE WALL.
- b) WHERE RELEVANT - BACKFILLING SHALL PROCEED EVENLY ON EITHER SIDE OF THE WALL.
- c) SULPHATE FREE BACKFILL SHALL BE USED AND SHALL BE FREE FROM LIME, PLASTER, COMPRESSIBLE ORGANIC AND CHEMICALLY ACTIVE OR OTHER DELETERIOUS MATERIAL

AND SUBSTANTIALLY FREE FROM FINES.

7. DRAINAGE:

- a) 75Ø WEEPHOLES SHALL BE POSITIONED AT MAXIMUM 1000mm HORIZONTAL SPACING AND POSITIONED 150mm ABOVE GROUND LEVEL.
- b) BLINDING CONCRETE SHALL BE PLACED IMMEDIATELY BELOW THE WEEPHOLES OR PIPES AND IN CONTACT WITH THE BACK OF THE WALL.
- c) 500mm WIDE STRIP OF TERRAM ® FILTER MEMBRANE SHALL BE PLACED HORIZONTALLY AGAINST THE SOIL FACE TO PREVENT SOIL LEACHING THROUGH THE WEEPHOLES.
- d) PROVIDE A MINIMUM 100mm WIDE BAND OF SINGLE SIZED AGGREGATE HARDCORE AGAINST THE REAR FACE OF THE WALL WITH A VERTICAL TERRAM ® FILTER MEMBRANE BETWEEN THE AGGREGATE BAND AND THE FACE OF THE EARTH TO PREVENT SOIL LEACHING INTO THE DRAINAGE BAND.

8. MOVEMENT JOINTS:

- a) THESE SHALL BE:
BRICK RETAINING WALL - 19mm AEROFIL BOARD SEALED WITH 25mm DEEP VERTISEAL, BOTH FACES.
COMPOSITE RETAINING WALL - 15mm PRECOMPRESSED COMPRIBAND OR POLYETHYLENE ROPE WITH POLYMER SEALING MASTIC 20mm DEEP.
STEPOC RETAINING WALL - 10mm PRECOMPRESSED COMPRIBAND OR POLYETHYLENE ROPE WITH POLYMER SEALING MASTIC 20mm DEEP.
- b) MOVEMENT JOINT SPACING TO BE NOT GREATER THAN:
 - * BEARING PRESSURE 75kN/m² = 12m AND MAXIMUM OF 6m FROM THE END OF THE WALL OR A CORNER.
 - * BEARING PRESSURE 50kN/m² = 6m AND A MAXIMUM OF 3m FROM THE END OF THE WALL OR A CORNER.
- c) A 500mm WIDE STRIP OF TERRAM ® FILTER MEMBRANE SHALL BE PLACED VERTICALLY AGAINST THE SOIL FACE TO PREVENT LEACHING THROUGH THE GAP (ALSO BEHIND WEEPHOLES).
- d) JOINTS IN THE COPINGS SHALL BE AT SPACINGS NOT GREATER THAN 6m.
- e) JOINTS TO BE TIED WITH 40mm x 1.5mm x 225mm LONG FLAT STAINLESS STEEL WALL TIES AT 225mm VERTICAL CENTRES, WITH ONE SIDE DEBONDING SLEEVE.

9. DESIGN:

- a) MORTAR AND CONCRETE MIXES (ref. NOTES 3 AND 4) ARE BASED ON SITE CONDITIONS HAVING THE FOLLOWING PARAMETERS (AS DESCRIBED IN BRE SPECIAL DIGEST 1: 2005 - "CONCRETE IN AGGRESIVE GROUND):-
 - * DESIGN SULPHATE CLASS DS-1.
 - * ACEC CLASS AC-1.
- b) IF SITE CONDITIONS ARE MORE AGGRESIVE THAN THESE CLASSIFICATIONS, COAST CONSULTING ENGINEERS ARE TO BE CONTACTED FOR FURTHER ADVICE.
- c) RETAINING WALLS HAVE BEEN DESIGNED FOR 10/20kN/m2 SURCHARGE ON THE RETAINED SIDE (GAREN/PATHS AND DRIVEWAYS/ROADS).

10. CAPPINGS/COPINGS AND DPC's:

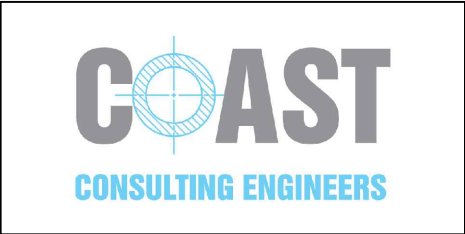
- a) POLYTHENE DPC MATERIAL SHALL NOT BE USED.
- b) PITCH/BITUMEN POLYMER HIGH BOND DPC SHALL BE USED.
- c) ALTERNATIVELY HIGH LEVEL DPC MAY CONSIST OF TWO COURSES OF SLATES TO BS 743; FULLY HALF LAPPED AND BEDDED IN M12 MORTAR.
- d) ALL CONCRETE COPINGS TO CONFORM WITH BS 5645:2.
- e) BRICKWORK CAPPING TO BE STORY HOMES STANDARD BRICKS WITH DURABILITY CLASSIFICATION F2/S2.
- f) POSTS TO BE INSTALLED INTO 225mm DIAMETER PIPES AT CENTRES TO SUIT THAT OF THE FENCE. POSTS TO HAVE A MINUMUM 525mm EMBEDMENT WITH CONCRETE SURROUND TO FILL VOIDS LEFT BY BRICK/BLOCK COURSING. PIPES ALSO TO BE FILLED WITH CONCRETE AFTER POSTS ARE INSTALLED.

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C1	09.10.24	CONSTRUCTION ISSUE	KS
Issue	Date	Description	By



7 Silvertown Court, Northumberland Business Park, NE23 7RY
0191 5977879

Client

STORY HOMES LTD

Job Title

STANDARD RETAINING WALLS

Drawing Title

GENERAL NOTES

Scale at A3

N/A

Drawing Status

CONSTRUCTION

Drawing No

SD-250-A-019

Issue

C1