Precast Retaining Wall

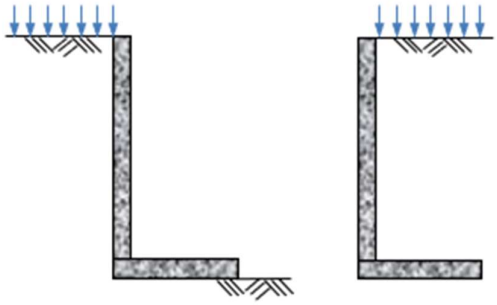
(ref:NI-RW-2604-3800 Rev 1)

DESIGN PARAMETERS

Designed in accordance with BS EN 1990:2002 'Basis of structural design', EN 1997-1:2004 'Geotechnical design' and BS EN 1992-1-1:2004 'Design of concrete structures'.

LOADING CONDITIONS

The precast concrete retaining wall units are designed to be loaded from either face.
Condition: Level fill with top of the wall and a variable surcharge of 10kN/m^2.



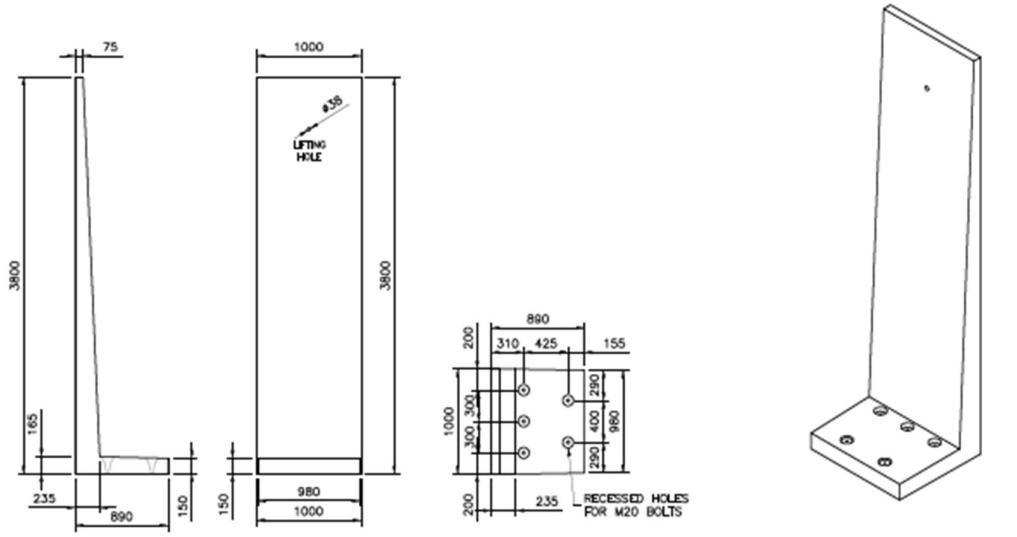
SOIL PARAMETERS

Density of soil – 18kN/m^3
Soil shear resistance – 30°
The units are to be bolted down to a suitable concrete base.

Backfilling immediately behind the wall should be a free draining well graded granular material such as a class 6N. Water pressure has not been considered as it is assumed suitable drainage would be provided.

SECTION PROPERTIES

Concrete: C40/50
Cement: CEMI
Chemical resistance: Class DC4z
Reinforcement: Grade B500B or B500C to BS 4482 or BS 4449
Exposure class: XD2 BS8500 50-year design life
Concrete cover: min 30mm
Wall Height (mm): Upto 3800mm
Water vapour permeability: NPD



SIDE ELEVATION ELEVATION PLAN ON TOE ISOMETRIC VIEW