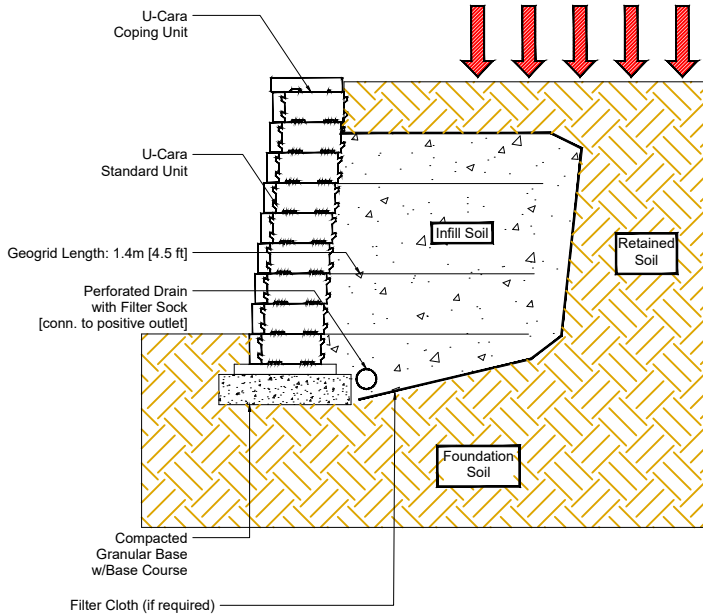


## RETAINING WALL GEOGRID SECTION

1420mm (4.66ft) Site: Surcharge - Clays Infill: Granular



### Design Specific Geometric Information

|  |   |                                   |                    |
|--|---|-----------------------------------|--------------------|
| Retaining Wall System                    | U-Cara w/ Geogrid                               | Geogrid Type and Manufacturer     | See Notes          |
| Maximum Height mm (in)                   | 1420 (55)                                       | Minimum Geogrid LTDS kN/m (lb/ft) | See Notes          |
| Maximum Slope                            | Horizontal                                      | Maximum Slope Below Wall          | None               |
| Max. Surcharge Above Wall kPa (lb/sq.ft) | 12 kPa (250 lb/sq.ft)<br>(Traffic) Offset 2.0ft | Depth of Embedment mm (in)        | 150 (6)            |
| Batter of Wall                           | 5.5 °   | Compacted Base Dimension mm (in)  | 656 x 150 (26 x 6) |

### Design Specific Soil Information

|                                      | Soil Region  |   |  |  |  |
|--------------------------------------|--|---|--|--|--|
|                                      | Infill   | Retained  | Foundation   | Base   | Drainage   |
| Description (by USCS)                | GW<br>Well graded, free draining Granular            | CL<br>Inorganic Clays Low Plasticity                | CL<br>Inorganic Clays Low Plasticity                 | GW<br>Well graded, free draining Granular            | see infill   |
| Effective Internal Friction Angle    | 35 °   | 28 °  | 28 °   | 39 °   | NR   |
| Moist Unit Weight kN/cu.m (lb/cu.ft) | 22 (140)   | 20 (127)  | 20 (127)   | 22 (140)   | NR   |
| Effective Cohesion kPa (lb/sq.ft)    | NR   | NR  | NR   | NR   | NR   |
| Soil Notes                           | Placed in 150mm (6") lifts and compacted to 95% SPD. | Undisturbed dense soil or well compacted Eng. fill. | Allowable bearing cap. must exceed 50kPa (1050 psf). | Crushed Gravel (free draining) compacted to 98% SPD. | Gravel infill must be well graded, angular, free drain w/max. 8% fines |

NR - Not Required

#### Notes:

1. This Preliminary Design was analyzed in accordance with the National Concrete Masonry Association Design Manual for Segmental Retaining Walls, Second Edition. All minimum required Factors of Safety have been met or exceeded given the Design Parameters noted on this Drawing. This is a Typical, Non-Site Specific Design and is to be used for Estimation and Feasibility purposes only.
2. No analysis of Global Stability, total or differential settlement, or seismic effects has been performed.
3. This Preliminary Design is only provided to illustrate the General Arrangement of the SRW Structure for Preliminary costing and feasibility purposes. This Drawing is not for Construction. A qualified Engineer, licensed in the applicable Province/State, must be retained to provide a Final Design prior to Construction.
4. Structures such as handrails, guardrails, fences, terraces, and site conditions such as High Water level, Drainage, and Soil Conditions, additional live and dead loads, etc, have significant effects on the Wall Design and have not been taken into account in this Typical Section. When accounted for in the Final Design, other conditions and elements may result in additional Design Measures (geogrid, drainage, etc) and Cost.
5. For Geogrid Reinforced Structures, a minimum Long Term Design Strength of 1800 lb/in.ft was assumed.

Contact your manufacturer for a list of approved Geogrid Reinforcements.