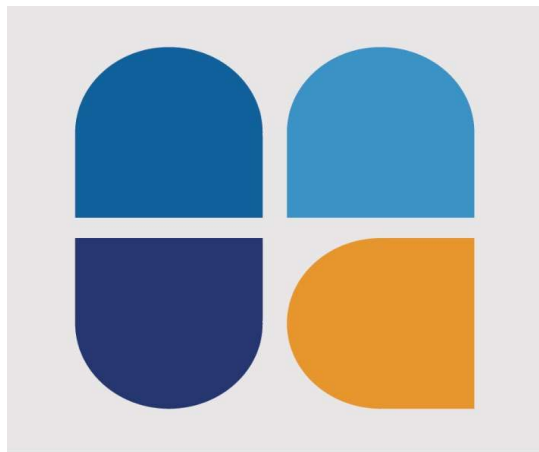




BRIGHT PLAN CIVILS

Project No: D2240
Project Name: Land West of Pagham Rd, Pagham
Sheet No: 1 SYSTEM 8 BASIN - S37

BASIN LINER HYDROSTATIC UPLIFT ANALYSIS FOR SOFT CONSTRUCTION (@BED LEVEL)

Level Data:

Ground Level = 5 m
Depth to Groundwater = 0.7 m
Invert of Basin = 3.425 m
Level of Liner = 2.175 m

Thickness of surfacing layers above Liner:

[GW@4.30m AOD](#)

Topsoil = 150 mm
Clay = 1000 mm
Sand = 100 mm
TOTAL = 1250 mm

Depth between
groundwater & Liner = 2.13 m

Hydrostatic Uplift = 21.19 kN/m²

Factor of Safety = 1.2

Min' downward force required = 25.42 kN/m²

NOTE: GROUNDWATER AT 4.30 AT POND LOCATION, HOWEVER AT 3.1 TO 3.2 ACROSS REST OF SOUTH SITE - POSSIBLE ANOMALY DUE TO PERCHED GROUNDWATER, TO BE VERIFIED WITH FURTHER TESTING

DMRB, CD 350 (Highway Structures, for Dead loads = 1.32)

Densities:

Top Soil = 15.7 kN/m³
Clay = 22 kN/m³
Sand = 14 kN/m³

Weight of Topsoil = 2.36 kN/m²
Weight of Clay = 22.00 kN/m²
Weight of Sand = 1.40 kN/m²

Downward force of layers over liner = 25.76 kN/m²

Make-up over Liner OK

Anchor Trench:

Dimension =
Pond area = 0 m²
(Base exl sides)

Width	Height	Total Length
0	0	0

Weight of Clay = 0.00 kN

Total min downward force required over pond area = 0 kN

Total downwards force over pond area from layers over liner = 0 kN
Total downward force from anchor trenches = 0.00 kN

Total resisting force = 0.00 kN

Design Sufficient