



$$u_y = u_y(t)$$

$$K = 8333 \text{ kN/m}^2$$

$$G = 3486 \text{ kN/m}^2$$

$$c_0 = 100 \text{ kN/m}^2$$

$$H = -10 \text{ kN/m}^2$$

$$\Phi = 20^\circ$$

$$\Psi = -10^\circ, 0^\circ, 20^\circ$$

$$K_w = 50000 \text{ kN/m}^2$$

$$k = 0.0001 \text{ m/s}$$

$$n = 0.33$$

$$\rho_s = 2700 \text{ kg/m}^3$$

$$\rho_w = 1000 \text{ kg/m}^3$$

$$\Gamma_1: u_x = 0$$

$$\Gamma_2: u_y = 0$$

$$\Gamma_3: \text{Free}$$

$$\Gamma_4: u_y = u_y(t)$$

$$\Gamma_5: p_w = 0$$