

Time Allowed 2:00 hrs

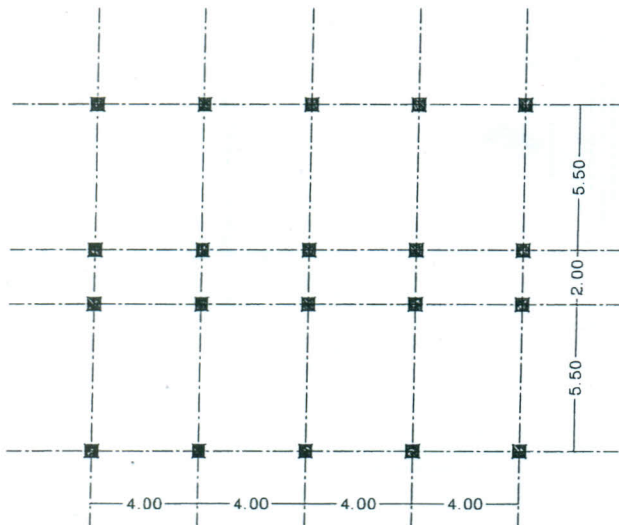
- Attempt all questions using neat sketches
- Any missing data may be reasonably assumed

Part II: Foundation Design

1. i- What are the factors which affecting the soil bearing capacity? 10%
 ii- A 5-story school building is shown in Fig. 1, and the boring logs at the site are shown in Fig.2,
 It is required to design its foundation
 - a) the foundation level 10%
 - b) the net allowable bearing capacity, 10%
 - c) the type of foundation, and its concrete dimension only. 20%

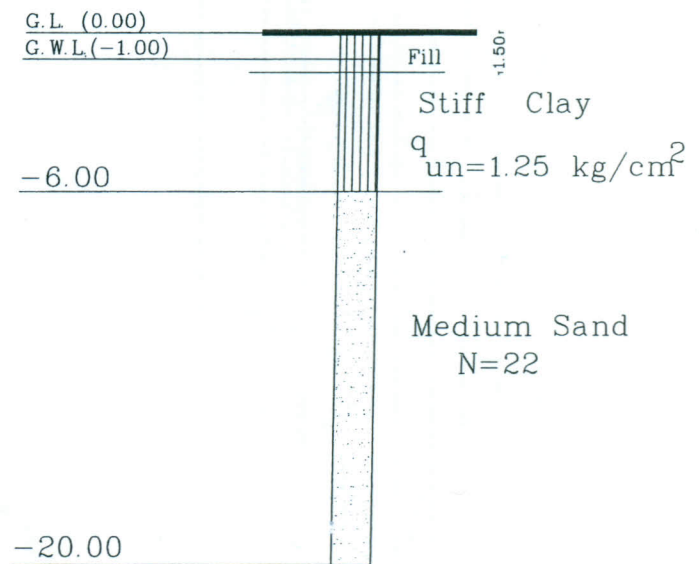
2. i- Check the stability of the structure shown in Fig.3. The allowable soil bearing capacity is 1.50 Kg/cm^2 20%
 ii- Check the stability of the slope shown in Fig.4. 20%

3. It is required to design the foundation of the columns shown in Fig. 5, showing all details. The allowable bearing capacity of the site is 1.25 kg/cm^2 at depth 1.25 m. under the ground level. 20%



PLAN

Fig(1)

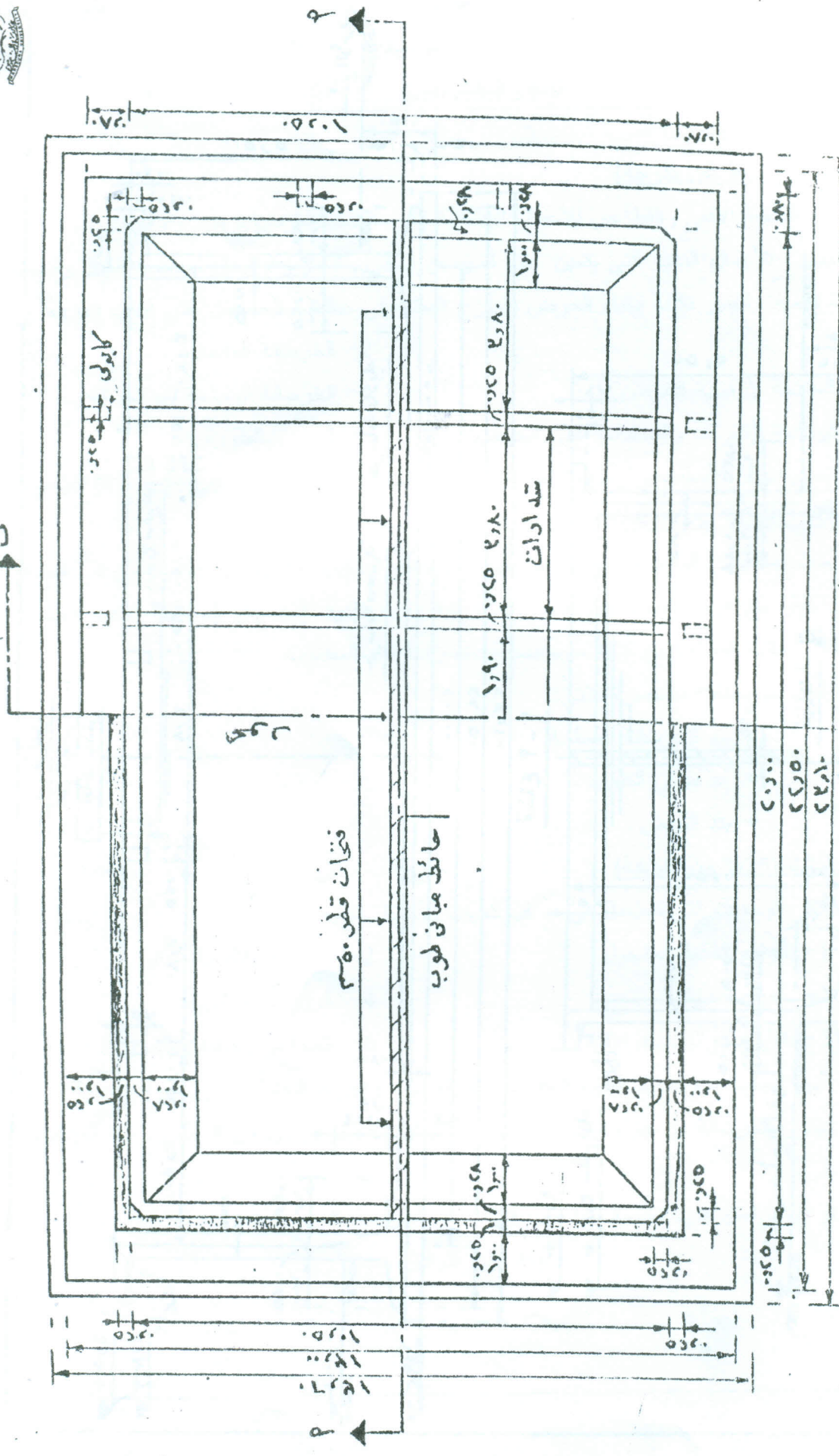


Soil Profile

Fig(2)



حوض ترسيب
مقياس الرسم - 1:100
الإعداد بالهندسة



مستطراً أفقياً - د. النصف الأيسر أزيلت الكوة العليا والشطارات

