

Flood Protection Project *Assignments*

- I) It is required to develop the IDF Curve for Bani Swaif using the available rainfall data here below and the attached data of Ber Eraida rainfall station.

[illegible]

AIN SHAMS UNIVERSITY, FACULTY OF ENGINEERING
IRRIGATION & HYDRAULICS DEPARTMENT

IRRIGATION & HYDRAULICS NETWORKS PROJECT

Year	January	February	March	April	May	June	July	August	September	October	November	December
2004	0.1	0.1	0	0	0	0	0	0	0	0	0	0.1
2005	0.1	1.8	1.5	0.9	0	0	0	0	0	0	0	0
2006	1.2	0	3	0	0	0	0	0	0	0	0	0.1
2007	0	0.7	0	0	0	0	0	0	0	0	0	0
2008	1	0	0	0	0	0	0	0	0	0	0	0
2009	0	0.6	0	0	0	0	0	0	0	0	0	0
2010	0	0.5	0	0	0	0	0	0	0	0	0	0
2011	1.2	0	0	0.1	0	0	0	0	0	0	0.1	0
2012	0.1	0	0	0	0	0	0	0	0	0	0.1	0
2013	0.1	0	0	0	0	0	0	0	0.1	0	0	0.7
2014	15.6	1.2	0.1	0.1	0	---	---	---	---	---	---	---

II) Draw to scale 1:100 plan, Section elevation and 2 Side views for the 2 vent box culvert (2m depth x 3 m width) located at the intersection between a highway and a main wadi according to the below information;

- Road level = (12.00)
- Road width = [16m width road with a median of 2m at the middle]
- Road embankment slopes = 2:1
- Land level at wadi centerline = (8.00)
- Wadi cross section can be presented by a V section with side slopes (H:V = 500:1)
- Concrete thickness is 30 cm
- The crossing is at an angle of 80°.

Drawings should include all the above-mentioned dimension and information, necessary protection for stream scour (i.e. Riprap on the bed and side slopes) and should be submitted in 2 hard copies 1.As a manual drawing, 2. As an AutoCAD drawing.