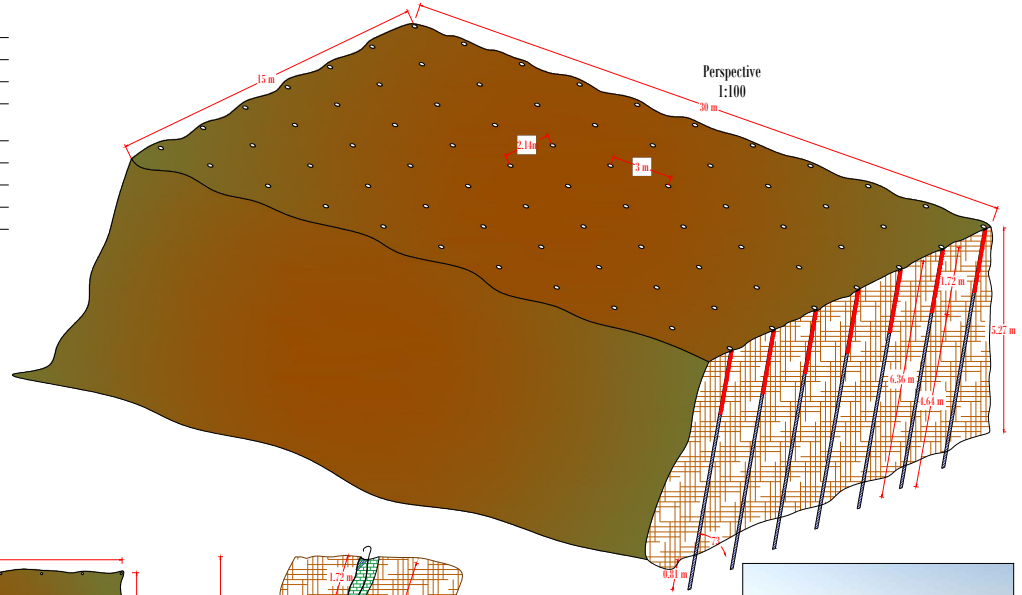


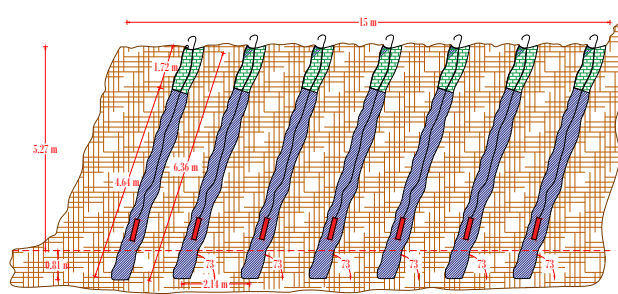
Front view
1:100

Legend

Hole	○
Cortex	—
Detonator	■
Detonating cord	—
Safety cord	—
Freeface	—
Primer	■
Anfo	■
Stemming	■



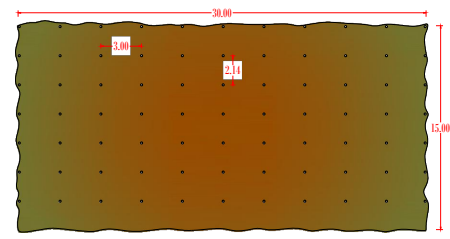
Perspective
1:100



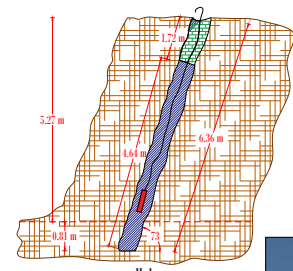
Right view
1:100



plan of hole

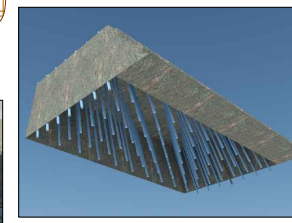


Plan
1:100



Hole
1:100

3D view



Higher education complex of zarand

Project : Bench blasting in an open-pit mine
 Master : Dr Seyed Mehdi Moosavinasab
 Scale : 1:100
 Designer : Mohammadreza rezaei
 Date : November 2021

Output information

Description	amount	units
Burden	2.14	m
Spacing	3	m
Sub-drilling	0.81	m
Stemming	1.72	m
Powder factor	2.07	kg/m ³
Specific drilling factor	0.19	m/m ³
Density of Anfo	3.5	gr/cm ³
Number of holes	77	—
Drilling pattern	Rectangle	—

Cost information

Description	amount	units	cost per unit (oman)	total cost (oman)
detonator	77	—	15000	1,155,000
Anfo	5205.2	kg	3400	17,697,680
Dynamite	38.5	kg	14000	539,000
Total	—	—	—	19,391,680

Input information

Description	amount	units
Bench height	5.27	m
Length	30	m
Width	15	m
Diameter	0.1016	m
Condition	dry	—

