



ACEGrid® Reinforced Structures for Slope Stabilization in Iran

Location: Bouali, Iran

Application: Reinforcement Wall and Slope

Problem :

An unsafe gravity retaining wall protected the untreated slope toe which adjoins the highway, and the crest of slope is adjacent to the residential buildings. Furthermore, Iran is located on the frequent earthquake zone, and therefore the adverse conditions lead the slope in unstable situation. The collapse of building downslope and traffic disruption of highway could occur once the slope slip. The investor was expected to strength the backfill slope behind the existing RC wall with a small amount of excavation due to the height of unstable slope is almost 25 meters.



Solution :

Consider to the prerequisite of safe and cost from the variety of designs, the designer selected a cost and working efficiency method of ACEGrid® reinforced structure to stabilize the slope and backfill behind the RC wall. The safety factor of backfill mass was increased because the interaction between ACEGrid® and soil offer the internal stability of structure. The upper reinforced slope with the gradient of 1:0.3 (V: H) is secure the foundation of buildings. The highest reinforced slope is 25 meters and adopted the geogrid warping face to the vegetation purpose.