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GROUND DAM SLOPE STABILITY ASSESSMENT

Son of Suyunov Abdugani Shavkat
National Research University
"TIIAME" Assisent of the institute of counter- irrigation and agrotechnologies.

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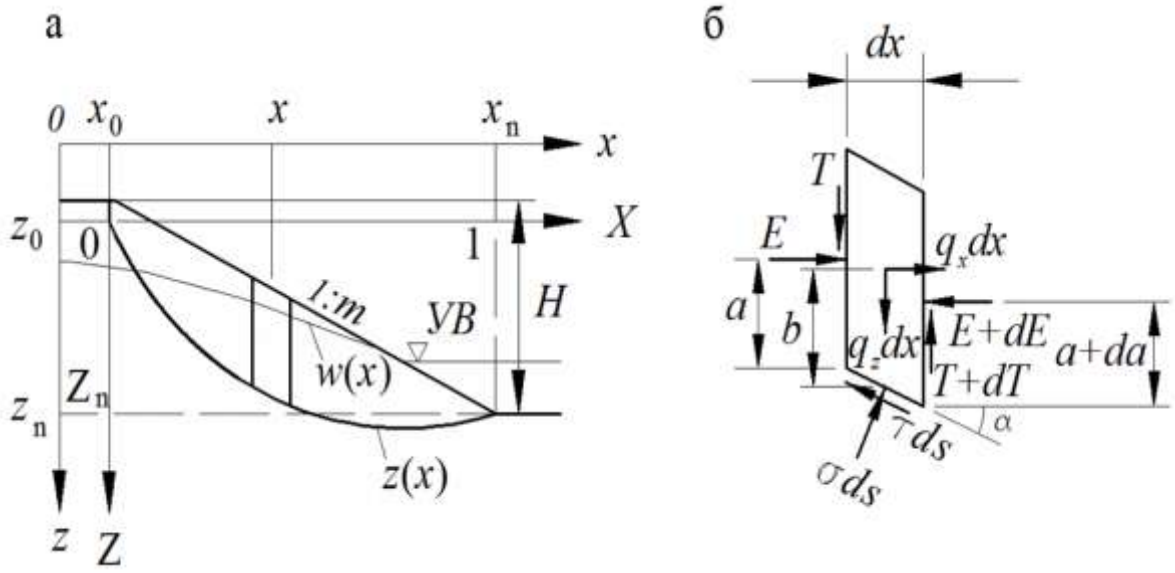
Abstract:

Determining the influence of various factors in assessing the stability of Grunt dam slopes a metod using the Coulomb consistency criterion was chosen when conducting a study for.

Determining the influence of various factors in assessing the stability of Grunt dam slopes a metod using the Coulomb consistency criterion was chosen when conducting a study for. This criterion limits urination forces to define boundary values: $T \le T_{cheg=f\sigma+c}$ where $f = tg\varphi$, c- is the parameters of the mechanical strength of the grunt. φ-grunt normal bulges to slip sites at the corresponding points of the slope as well as grunt with the slope surface profile, the dam slope is at the intersection points of the collapse surface profile limints the strains and directions of intersections. Current calculation method today the day is the only method of the group under consideration, in which all the laws of mechanics Coulomb is fulfilied by following the Morning strength criterion.

To determine the next process, the same slope is considered, its constructive scheme the spontaneous dam slope is shown in Figure 1 with a collapse surface profile.



1 figure. Accounting scheme. a-slope profile and sliding surface. b- effect on the embedded element destructive forces.

Vertical element in the embedded cordinata system, width *dx in three dimensions*, height *h*, and the equilibrium equations for a dam slope collaps surface with unit size the system has the following appearance.

$$\sum X = 0: \quad q_x dx - dE + z'\sigma dx - \tau_k dx = 0 \qquad (1.1)$$

$$\sum Z = 0: \quad q_z dx - dT - \sigma dx - z'\tau_k dx = 0 \qquad (1.2)$$

$$\sum M = 0: \quad mdx - dM + z'Edx - Tdx = 0 \qquad (1.3)$$

where $q_x dx$, $q_z dx$ - the components of the resulting surface and volume; $m = q_x b$ - q_x- intensive horizontal loading moment relative to middle of the dam base of the element; *E,T*- the normal and urunal bulges acting on the

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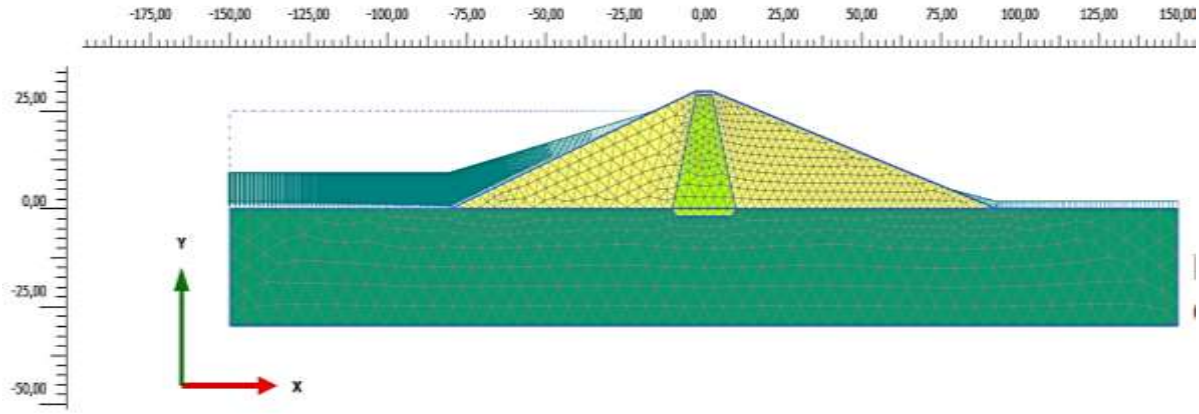
vertical surface of the element are respectively components of the interaction forces between the resulting elements. $M=Ea$- dam E-Force moment in relation to the base element. $\tau_k=f_k\ \sigma+c_k$, σ - corresponding to the boundary balance bulge components on the dam slope collapse surface; $Z=z(x)$ – dam slope collapse surface function describing the profile. $z'-(x_o;x_n)$ in the interval is the derivative of $z(x)$ over x.

In this system of marginal equilibrium equations, the five unknown functions are E, T, M, σ, z and a number of parameters are included that determine the stock size. Therefore, the issue is statistical unspecified.

Substantiation of the above- mentioned Coulomb Morning Theory of the mezzanine of strength assessment of the grunt dam in the PLAXIS 2D program processes were considered.



1-figure. Grunt dam accounting scheme.

In Figure 1, grunt made an accounting scheme with the inclusion of the initial parameters of the dam is obtained.

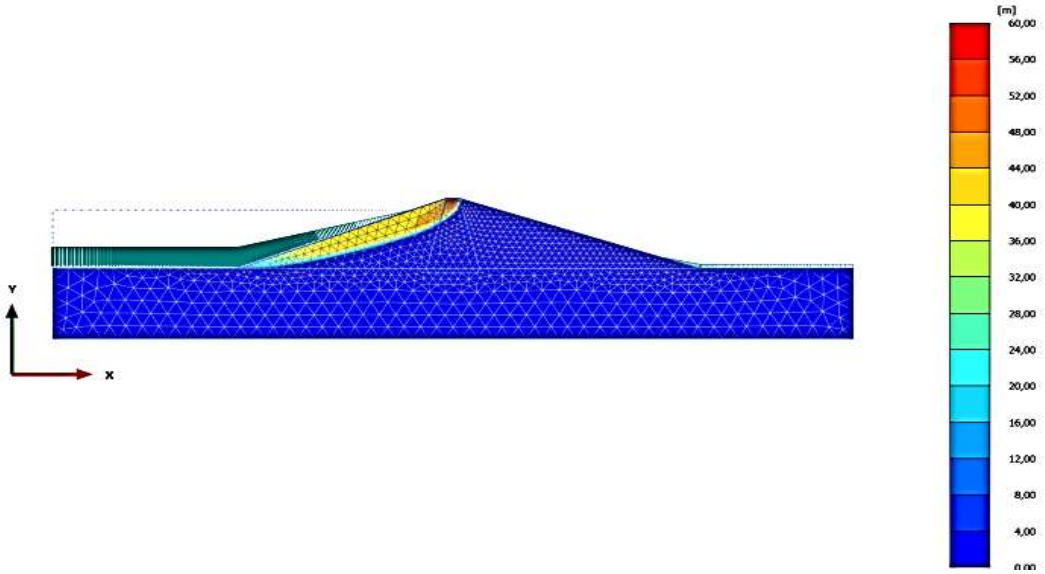


Figure 2. Result of physical and mechanical properties of grunts.

Figure 2 shows the physical and mechanical properties of grunts present in the base, body and core of the grunt dam take as a result of the input analytical result.

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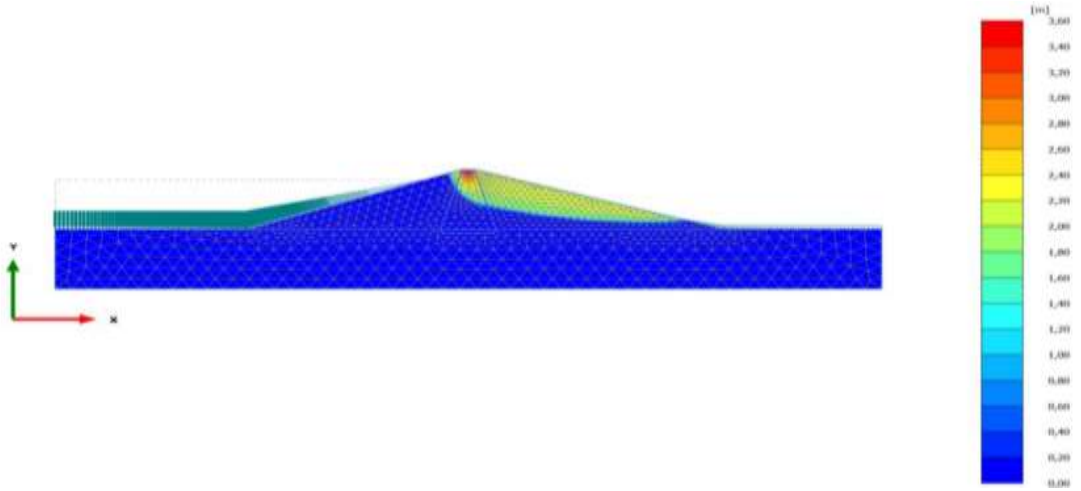

Figure 3. Deformation process taking into account static forces in the case where the staik forces are tahen into account in the process presented in this figure, grunt is in the dams we can evaluate the deformation processes that form.

CONCLUSION

The processes of assessment of the result of the account with analytical results brought by the Kulon Mor method are positive gave results. Evaluation of the slopes of grunt dams, rational States of the core the implementation of processes in software is a much more efficient method

BIBLIOGRAPHY

1. Mirsaidov M.M., Sultanov T.Z. Structures earthquake fraternity.- T.: «subject»,2012.- 240 p.
2. Mirsaidov M.M., T.Sultanov T.Z. Earthquake Fellowship of structures (tutorial). T.: Classical Word, 2013.- 244 p.
3. Mkirtychev O.V, Jinchvelashvili G.A in earthquake resistance theory, linearities are accounting problems. M; MGSU, 2014 – 192 p.