

THE TYPES OF SHORE MEET WHILE OPERATING WITH SPECIAL DISASTER DEVELOPED BOAT

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Abstract: This paper present a analyze of different type of shore while operating with special disaster developed boat, designing the access ramp for people, animals or defereent vehicles.

Key words: special boat, disaster, access, shore.

1. THE STUDY OF DIFFERENT TYPES OF SHORES AND WATER BOTTOM NEEDED FOR DEVELOPMENT OF THE MOORING SYSTEM AND THE ACCESS ON AND OFF THE SPECIAL BOAT.

This study was imposed by the necessity of designing the access system to a special disaster intervention boat.

The boat is part of a complex intervention system, consisting of:

- a transportation vehicle capable of towing on the shore an intervention boat with the crew and the needed materials;
- a boat capable of floating on shallow water and rivers, transporting people, animals and goods from the disaster areas, and also the transportation vehicle, to get to the disaster areas. This boat must ensure transportation over natural water and the ones from disasters.

Involving unknown areas with all kind of field, the study was based that the boat must ensure the safe access on and off the boat for people, animals and the transportation vehicle, in all conditions.

The operations must be made in safe conditions, although it implies transportation of socked people, under heavy rain, night or day and in unknown areas often with high vegetation, reducing the visibility but also the access.

There are two essential elements that must be analyzed:

- the shore to dock the boat. There were analyzed shapes and geometrical features, tilt angle, physical, resistance, adherent and accessibility properties which can be meet.
- the water bottom next to the shore. There were considered two extreme situations: the one with small inclination and corrugated, natural or flooding resulted form and the steep one.

Between these extreme forms there are lots of other intermediate forms that can be meeting in the interventions areas.

These main features forms are presented down bellow:



Fig.2.1

Corrugated water bottom, with small inclination or in stairs, with flat hard shore.



Fig.2.2

Corrugated water bottom, with small inclination or in stairs, with flat shore made of natural soft ground with little adhesion coefficient, naturally wet.

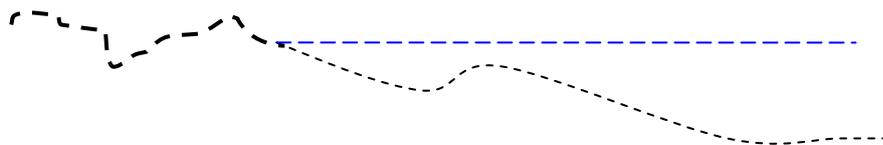


Fig.2.3.

Corrugated water bottom, with small inclination or in stairs, with flat bumpy shore made of natural soft ground with little adhesion coefficient, especially wet.

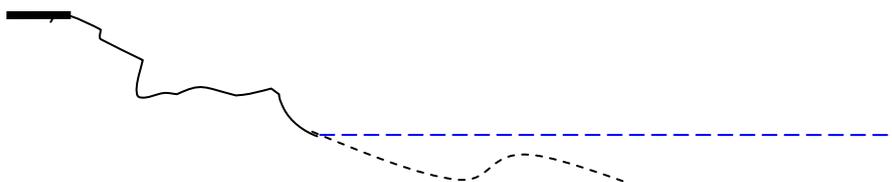


Fig.2.4

Corrugated water bottom, with small inclination or in stairs, with flat bumpy shore made of natural soft ground with little adhesion coefficient, especially wet and far access road.

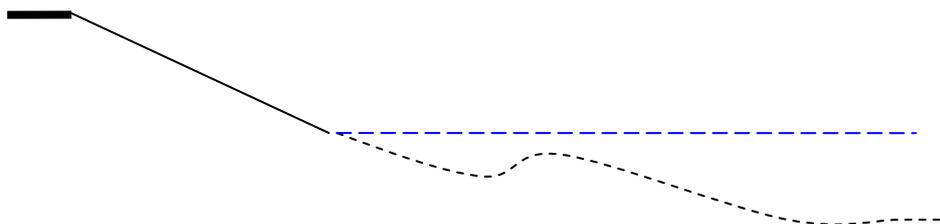


Fig.2.5

Corrugated water bottom, with small inclination or in stairs, with flat hard shore made of natural ground with little adhesion coefficient especially wet and far access road (safety dam).

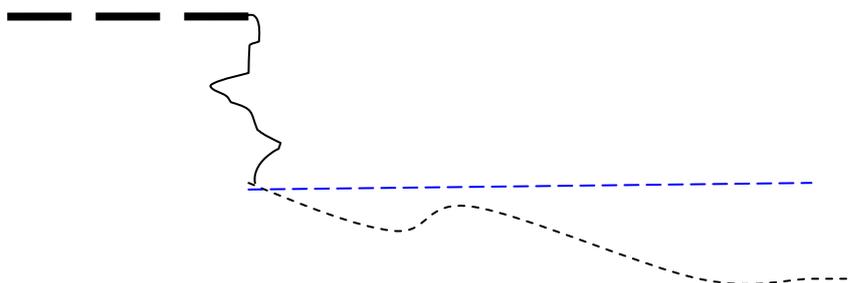


Fig.2.6

Corrugated water bottom, with small inclination or in stairs, with steep shore and terrace access. țărm abrupt și acces la terasă made of natural soft ground with little adhesion coefficient, especially wet and far access road.

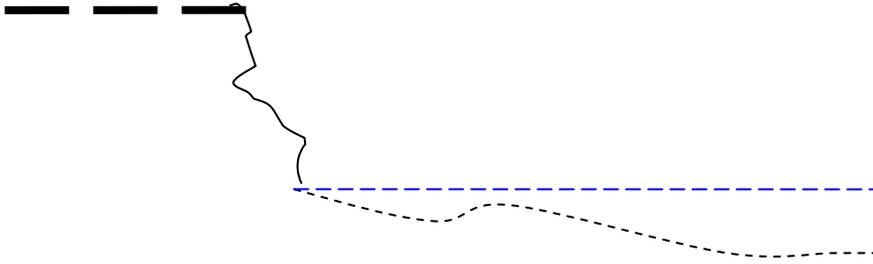


Fig.2.7

In steps corrugated bottom water with steep shore and natural compacted ground, rock, with good and very good adhesion coefficient terrace access

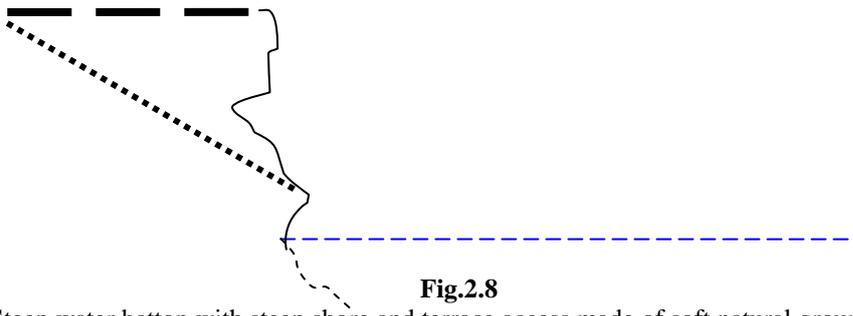


Fig.2.8

Steep water bottom with steep shore and terrace access made of soft natural ground with little adhesion coefficient especially wet and far road access; the access is made by ramp.

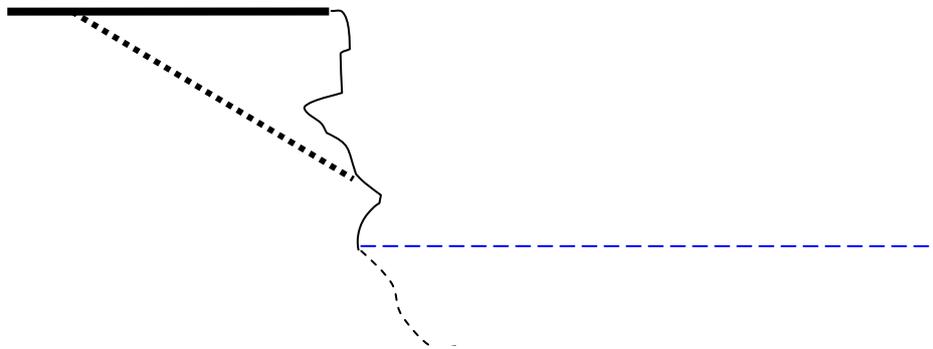


Fig.2.9

Steep water bottom with steep shore and terrace access made of natural compacted ground, rock, with good and very good adhesion coefficient; the access is facilitate by ramp



Fig.2.10

Steep water bottom with flat hard shore (ground road, paved road, asphalt road with short distance access)

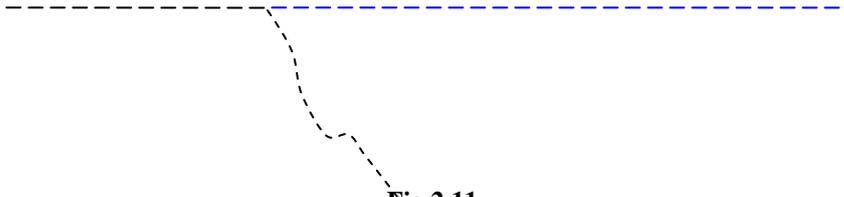


Fig.2.11

Steep water bottom with flat shore made of natural soft ground or with little adhesion coefficient especially wet

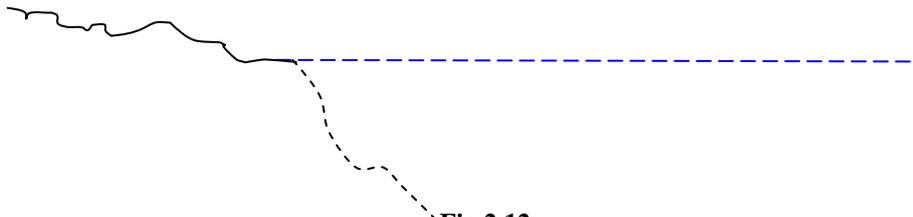


Fig.2.12

Steep water bottom with flat shore made of natural soft ground often swampy, with small bearing and very small adhesion coefficient.

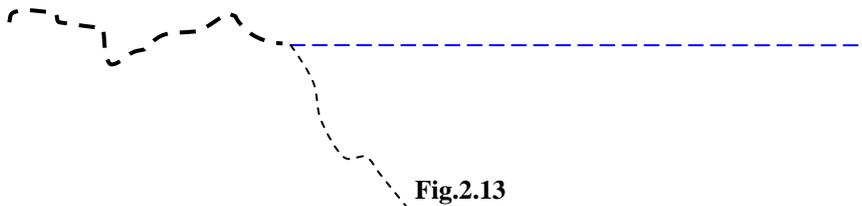


Fig.2.13

Steep water bottom with flat, tilt, bumpy, soft natural ground shore, with little adhesion coefficient, especially wet.

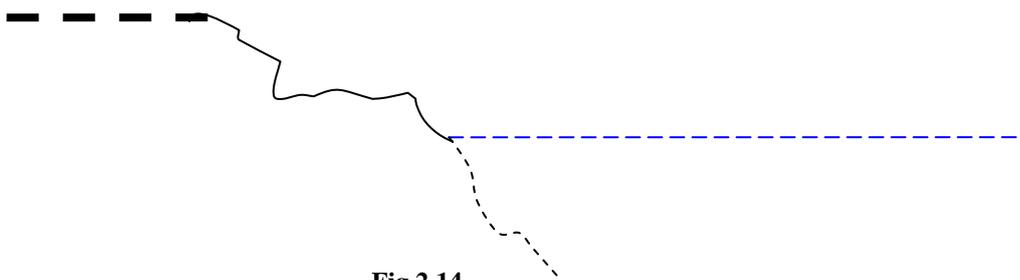


Fig.2.14

Steep water bottom with bumpy tilt shore made of soft natural ground with small adhesion coefficient, especially and quite far access road.

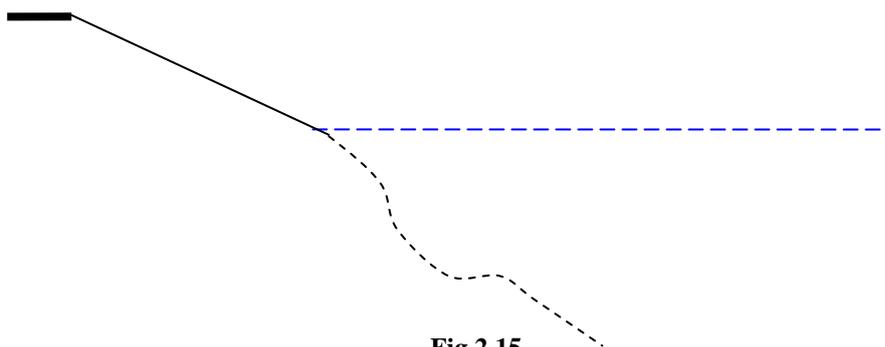


Fig.2.15

Steep water bottom with hard tilt shore made of natural ground with small adhesion coefficient, especially wet and far access road (safety dam).

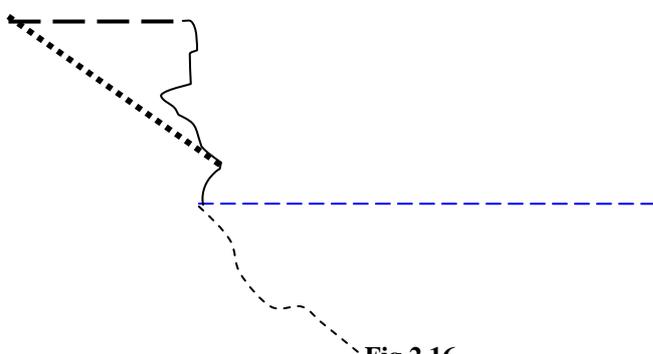


Fig.2.16

Steep water bottom with steep shore and terrace access made of natural soft swampy ground, with small bearing and small adhesion coefficient, especially wet, and far access road with dug ramp.

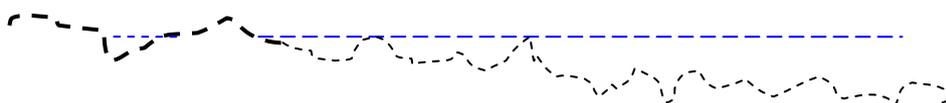


Fig.2.17

Irregular swampy water bottom with flat undefined shore made of natural soft ground with small bearing and small adhesion coefficient.

2. ADDER SPECIFIC PROBLEM IN WATER, AFTER DISASTERS.

In addition to these there are other features like:

- the existence or not of specific wetlands vegetation;
- the existence or not of large trees, as a result of deforestation or breaking down by flooding;
- the existence or not of some shrubs in the shore area or water, partially or totally under water;
- the existence or not of some rocks or hard corps, remains of trees, hubs or other different corps as a result of human activities, floating after flooding;
- the existence or not of some cables, steel wires, floating after flooding;
- the existence or not of some agricultural machinery or others human daily used machinery floating after flooding;