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REINFORCED EARTH WATER STRUCTURES

ჯებირებისა და საყრდენი კედლების სახეობები და გამოყენების სფეროები

- ჯებირებისა და საყრდენი კედლების სახეობები
 - მიმართველი კედლები
 - დამცავი კედლები
 - ნავმისადგომის კედლები
- გამოყენების სფეროები
 - დინარეები
 - ზღვები
 - ჯებირები

Reinforced Earth ® (არმირებული მიწა) არის ტრადიციული სამშენებლო მეთოდების დადასტურებული ალტერნატივა და ჰპოვა ფართე გამოყენება საზღვაო სტრუქტურების აგებაში, მათ შორის ზღვის სიახლოვესა და კაშხლებზე გამავალი გზებისა და რკინიგზის მშენებლობაში.

მსოფლიოს მასშტაბით Reinforced Earth ® (არმირებული მიწის) მეთოდი გამოიყენება როგორც თანამედროვე მშენებლობის სტანდარტული ტექნოლოგია და მას გააჩნია შემდეგი უპირატესობები:

- თვითღირებულება, რომელიც მცირდება სტრუქტურის სიმაღლის ზრდასთან ერთად;
- სისტემის მოქნილობა და ადაპტირება ნებისმიერი ტიპის ნიადაგზე მშენებლობისას;
- კედლების მშენებლობის სისწრაფე და კედლის უკანა სივრცის ამოვსება ნიადაგით.

BREAKWATERS

Country : Ireland
Project : Dun Laoghaire Marina /
Promenade, Dublin I : 500 m
h : 5 m

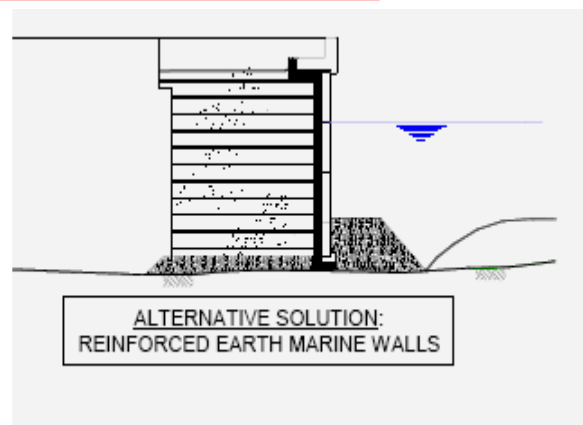




REINFORCED EARTH WATER STRUCTURES

CANALS

Country : UAE
Project : Majaz Canal/Sharjah
l = 1400 m h = 6 m





REINFORCED EARTH WATER STRUCTURES

TRAINING WALLS

Country : France:
Project : L'isle Adam Semovam h=4m



Country : Belgium
Project : Den Bosch 24 Buizen

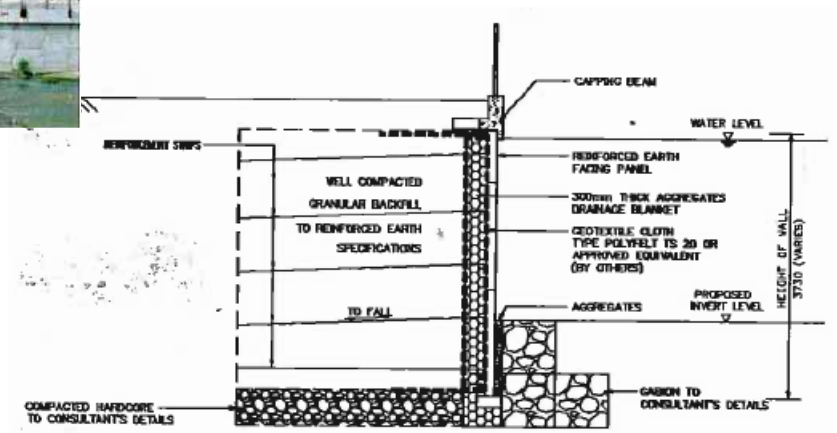
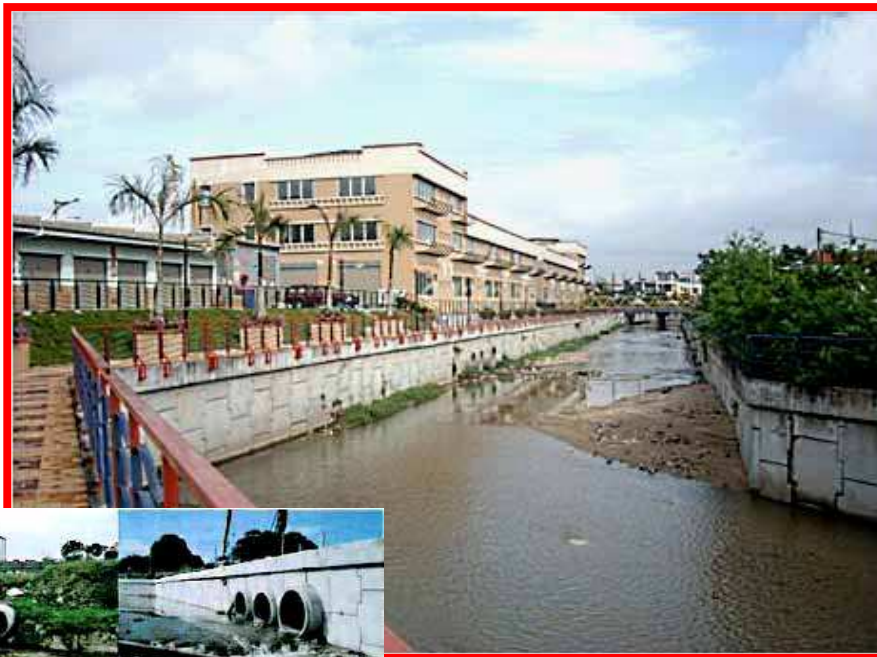


Training walls are associated with rivers and estuaries where the need is to stabilise the river bank and direct the river flow. Vertical Reinforced Earth walls provide a robust and durable structure with minimal land resumption.



REINFORCED EARTH WATER STRUCTURES

Country : Malaysia
Project : Ampang/Kuala Lumpur



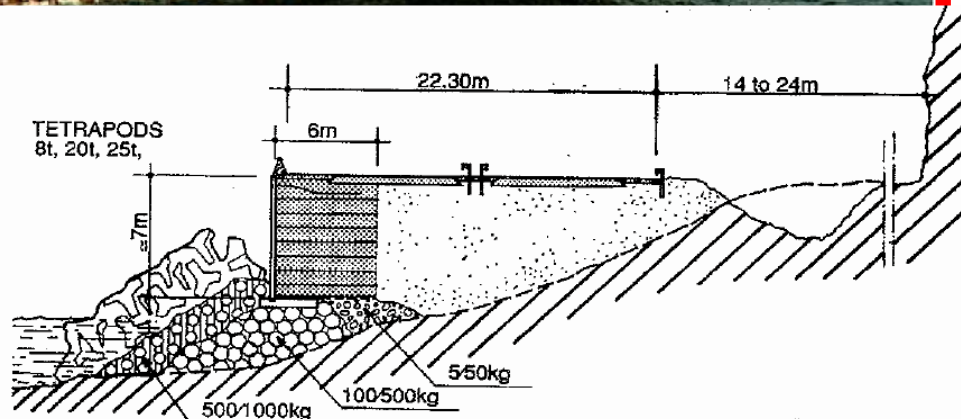


REINFORCED EARTH WATER STRUCTURES

Country : Reunion Islands
Project : l=11000 m h=9 m

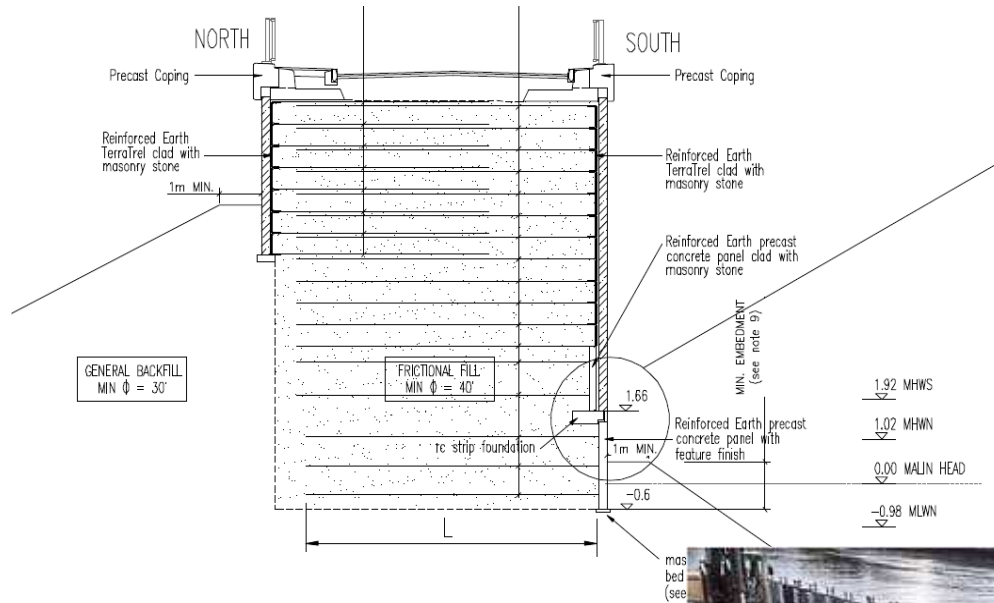
The largest Reinforced Earth marine structure in the world supports and protects a coastal highway on Reunion Island in the Indian Ocean.

Built during 1974 and 1975, this 11 km long wall (72,000 m² of facing) has withstood the punishment of five cyclones.



REINFORCED EARTH WATER STRUCTURES

Country : Ireland
Project : Cork River





REINFORCED EARTH WATER STRUCTURES

Country : France
Project : A43-LOTM5-MS216-4/217-1/217-3
Maurienne l=1051m h=7,70 m



Country : France





REINFORCED EARTH WATER STRUCTURES





REINFORCED EARTH WATER STRUCTURES





REINFORCED EARTH WATER STRUCTURES

PROTECTION WALLS

Country : Canada
Project : Gapse Peninsula



Protection walls are typically for coastal protection where wave loading, scouring and overtopping are key factors.

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REINFORCED EARTH WATER STRUCTURES

Country : Canada
Project : RN 90,2002 h=7,35 m



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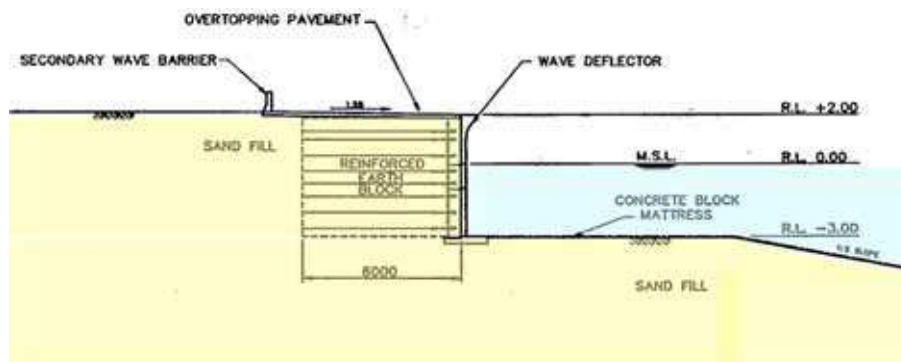
REINFORCED EARTH WATER STRUCTURES

Country : Australia
Project : Sydney Airport



The new runway at Sydney Airport is 2,400 metres long and parallel to the main runway. The vertical seawalls minimise the environmental impact and do not provide a habitat for wading or roosting birds. The total length of walling is approximately 8.5 kilometres, varying in height between 4 and 6 metres and totalling 40,000 square metres. The walls are vertical and in some areas incorporate a wave deflector profile at the top of the wall.

The Seawall panels are designed as buttressed panels. Maximum panel weight is 3.5 tonne (without wave deflector) and 5 tonne (with wave deflector). The main advantage of these panels was stability during construction, which allowed for more efficient construction of the Reinforced Earth.



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REINFORCED EARTH WATER STRUCTURES

WHARF/QUAY WALLS

Country : USA
Project : Omaha, Nebraska



Wharves and quays generally require a vertical wall to allow for berthing of water vessels. Loading from impact, mooring forces, craneage and storage are key factors.



REINFORCED EARTH WATER STRUCTURES

Country : Canada



Country : Malaysia



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REINFORCED EARTH WATER STRUCTURES

Country : Australia, Sdney PRP



Country : Australia, Bing Bong



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REINFORCED EARTH WATER STRUCTURES

Country : USA,Owensboro-Kentucky



Country : UK,Owensboro-Knabb Rock Swansea



In 1983, a parking area and boat launching ramp were built directly on Reinforced Earth walls at the port of Swansea on the southern coast of Wales in Great Britain.

The maximum height of these walls is 10m; the tide can rise as high as 9.9m. It was assumed that at ebb tide the difference between the level of the sea and the level of the water inside the structure was 2.5m, corresponding to one hour of tidal change.

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REINFORCED EARTH WATER STRUCTURES

DAM/DAM RISING

Country : USA
Project : Coon Creek Baraji, Monticello, KS



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REINFORCED EARTH WATER STRUCTURES

Country : UAE
Project : Al-Rufaysan Dam



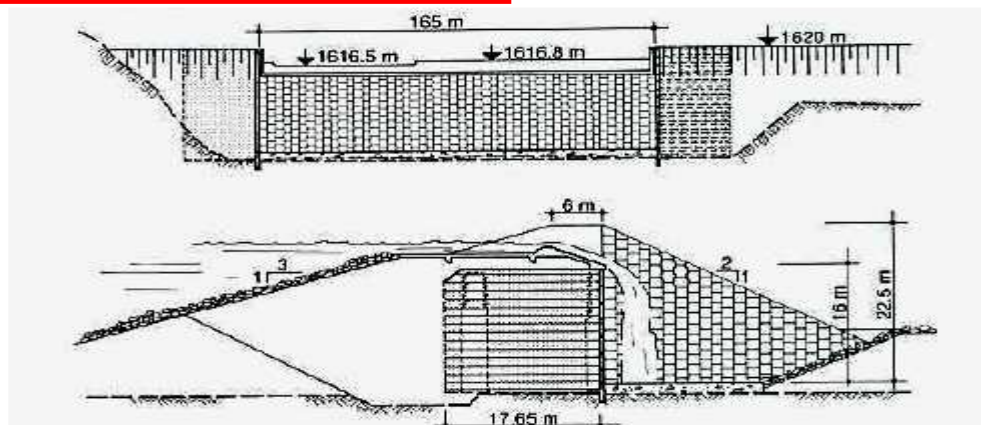
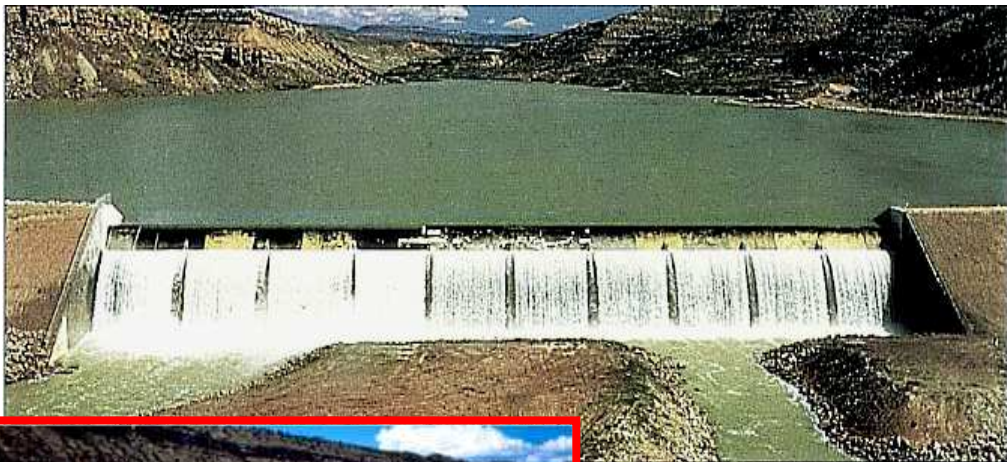
Country : Japan



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REINFORCED EARTH WATER STRUCTURES

Country : USA
Project : Taylor Draw Dam ,Colorado





REINFORCED EARTH WATER STRUCTURES

Country : USA
Project : Prado Dam, California



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REINFORCED EARTH WATER STRUCTURES

Country : South Africa
Project : Hartbeesport Dam Rising



Country : South Africa
Project : Kromellemboog Dam Rising



