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Illustration Of Advanced Flood Control Management Techniques for Flood Area Using Non-Working Model

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Abstract– *Due to increase in the population, improper planning is observed in urban infrastructure and paved surface which is one of the causes which lead to poor flood management. In this study modeling is done the represent the various flood management techniques to understand various advance technologies to explore all characteristics and the nature of flood various socio-economic aspects of flood.*

Key Words: *Flood control techniques, model*

1.INTRODUCTION

In natural disaster it is generally observed that the primary effects of flooding include loss of life and building damages in other structures which include roadways, sewer systems

Bridges, canals. Flood also has potential to frequently damage power transmission lines. In this project model were made based on flood disaster management to demonstrate the various flood management techniques.

Floods also frequently damage power transmission and sometimes power generation, which then has knock-on effects caused by the loss of power.

2.OBJECTIVE

- ❖ To understand flood management and advance flood control technique.
- ❖ To analyze material required for project model regarding advance flood control management.
- ❖ To demonstrate non-working model regarding to advance flood control technique.
- ❖ To create awareness about flood control management.

3.SCOPE OF THE PROJECT

- Students should get knowledge & benefits about flood control management in area.
- Future modifications in the model by adding some methods of flood controlling will be increasing the control and recovery rate**4.MANUAL DESIGNS**

4.FLOOD CONTROL TECHNIQUES

4.1SAND MASTER Sand master uses power of Hydraulics, San Master works by plowing straight into the sand to fill its empty bags already securely locked and tied to the device the filled bags are then carried to the drop-off location where they needed. This technique is very economical.

4.2DAM EASY Dam easy has a unique patented pneumatic pump action seal, which inflates a tube right around the outsides of the barrier completely sealing the area and leaving it water tight. One flood gate has the ability to extend from 780mm to 1100mm. This flood protection barrier provides reliable flood protection at fingertips as it can be installed in under 5 minutes.

4.3WATER BLOC The water block is effective stopping any and all encroaching water dead in its this highly efficient flood barrier is used to protect homes woodlands cemeteries or even entire neighborhoods.

Water block is made of high strength PVC fabrics designed to maximize puncture resistance tensile and tear strength the water block is a tube-shaped structure incorporating an internal baffle port within the baffle allow the water that's pumped into the tube to be equally distributed throughout both chambers. The water block is generally used as a semi-permanent barrier against the potential for lakes rivers.

4.4FLOOD BREAK When floodwaters strike the rising water creates hydrostatic pressure this water pressure floats a buoyant hollow aluminum beam to raise the flood barrier into its protected position. The rising water also activates self-sealing rubber gaskets that keep the water from seeping through the barrier. When the barrier reaches a 90-degree upright position the flood waters hold the gate firmly in place. When the water recedes, the gate falls lovely back into its recessed location allowing vehicle and pedestrian traffic to resume thoroughly tested and

built flood break floodgates have made a major impact in flood protection technology.

4.5NOAQ NOAQ is designed to be automatically ballasted and kept in place by the weight of the flood water itself, making them self-anchoring and stable. NOAQ weigh less than 1% of a corresponding sandbag like, and are 100 times faster to build. This product is easy to deploy and recover by a single person NOAQ barriers are barriers that can be erected much faster using less manpower designed for the urban. It is a free-standing flood barrier that uses the weight of the flood water to anchor itself in place made of lightweight easily transportable box sections it can be erected by a single person.

4.6FLOW DEFENSE FLOOD BARRIER This flood barrier also requires no human intervention for activation like the pedestrian and roadway gates from the barriers from flow defense also use rising floodwaters to create the hydrostatic pressure required to activate and raise the gate but instead of rising at an angle from the roadway or walkway the flow defense barriers rise from beneath the surface vertically to achieve the water pressure required to raise the barrier. The flow defense system uses a small grate that's positioned flush with the surface in front of the hidden barrier assembly as floodwaters flow into the grade they fill the barrier with enough water to float the barrier upward into its raised position

4.7RAPID DAM Rapid Dam is quickly deployable flood protection product if flooding suddenly increasing the rapid dam gives residents and emergency personnel, it is better chance of protecting homes businesses and critical infrastructure. Available as the freestanding and bulk down versions the rapid dam is made special PVC cloth which is rolled out and erected by only two to three people. Once the upper barrier section is raised the leading edge is secured by special screw anchors when the flood arrives the weight of the water holds the barrier

4.8FLOOD BLOCK Flood block is used to form water reservoirs or to encircle an entire home and business in addition to its weighted connection keys flood blocks modules are held place by the weight of rising floodwaters used by several other innovative flood barriers. This technique keeps the modules firmly anchored to the ground the flood blocks modular design allows it to be deployed at a moment's notice. The flood blocks modules are lightweight stackable and can be retrieved and deployed amazingly fast. With it's convenient Portability and configurable design the flood blocks stand ready to block the water whenever or wherever it appears.

5. MATERIAL USED FOR A TECHNIQUE

5.1 SAND MASTER

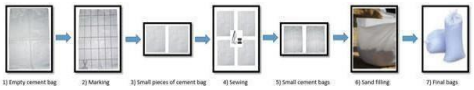

FIG. NO 1 SAND MASTER MODEL PREPARATION

5.2 DAM EASY

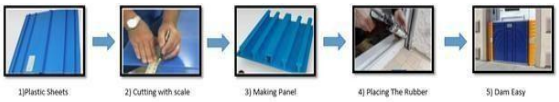

FIG. NO.2 DAM EASY

5.3 FLOOD BREAK

FIG. NO. 3 FLOOD BREAK

5.4 NOAQ

FIG.NO.4 NAOQ

5.5 WATER BLOCK

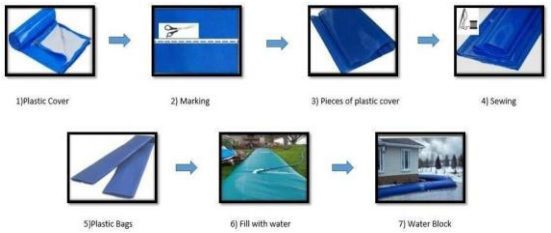

FIG.NO.5 WATER BLOCK

5.6 FLOW DEFENCE FLOOD BARRIER

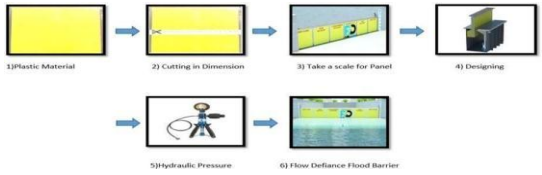

FIG. NO. 6 FLOW DEFENCE FLOOD BARRIER

5.7 RAPID DAM

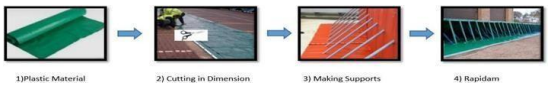

FIG. NO. 7 RAPIDAM

5.8 FLOOD BLOCK

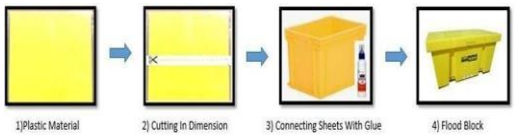

FIG. NO. 8 FLOOD BLOCK

CONCLUSIONS

It is important to every civil engineer to understand the basic concept and detail information about the detail in construction activities. Knowledge about theory activity can be acquired easily but practical knowledge and experience can be acquired from site-visits and illustration through models. In this project we provide information about Various flood management techniques and the equipment used in them.

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