CALLING ATTENTION NOTICE TABLED BY SHRI MAUVIN GODINHO, MLA, AS FOLLOWS:

"Fear and grave anxiety in the minds of the people of Saferant, Adarshanagar and Assoi in Dabolim Constituency in regard to collapse of the road side retaining walls along with part of the road being washed due to heavy rains that lashed Goa at Saferant near Sai Baba Temple in Vaddem at Adarshnagar near Vidyamandir School, Airport road and at Assoi opposite Helber service station in Chicalim thereby exposing the remaining parts of the roads, temple and the people residing in the vicinity to imminent danger to their lives and property. Steps the Government intends to take to immediately repair reconstruct the retaining walls at all the three locations and ensure overall safety of the temple, motorist and the people. ".

R E P L Y:

Vide the above 'calling attention notice' the following issues are raised:

1) Collapse of retaining wall near Vidya Mandir school, Adarsh Nagar, Vaddem, Vasco.
2) Collapse of retaining wall near Sai baba Temple, Saferant, Vaddem .
3) Collapse of new embankment under construction at Assoi, Chicalim.

1) COLLAPSE OF RETAINING WALL NEAR VIDYA MANDIR SCHOOL, ADARSH NAGAR, VADDEM, VASCO

The collapse of retaining wall is located in between two properties belonging to Vidya Mandir High School on the Lower side & River Height Apartments on the upper side, adjacent to each other.

The entire locality of Vaddem is located on sloping hillock, as such all the buildings are constructed in stepped formation. The Plot/Building of River Height Apartments is located at upper level and the Plot / Building of Vidya Mandir School is located on Lower Side with a vertical level difference of 4.00m.

There was a make-shift retaining wall of inadequate design, constructed of laterite stone masonry serving as retaining wall cum compound wall on underlying hard rock strata. Subsequently, a sewage pipeline along with chambers were constructed on the upper side belonging to River Height Apartments and the extra mud was dumped along the edge of the boundary, thus over loading a already weak retaining wall, which has thus collapsed during the first showers of monsoons.

This wall is located on the boundary between 2 private properties and the same is 26.00m away from the public road.

On inquiry with the member of river-height Apartments, it was informed that the School Management has agreed to reconstruct the said collapsed portion of retaining wall at their own Cost being a private property.

Notwithstanding the above facts, the length of the retaining wall is 20.00 meters and the retention height is 4.00 meters.

Also the said collapse is located at a horizontal distance of more than 4 meters from both adjoining structures; as such there no further threat to life and property.

The approximate cost of construction of a conventional Cement Concrete Retaining wall of 20.00 m length and 4.00 m height will be Rs 5.00 lacs approximately.

2) **COLLAPSE OF RETAINING WALL NEAR SAI BABA TEMPLE, SAFERANT, VADDEM, VASCO** .

The site is located in Saferant in sloping area where plots including roads were developed by a private Developer.

The collapse road portion is located on steep slope having almost vertical cut. There is a make-shift retaining wall constructed out of laterite stone masonry with only 600 mm thickness. The thickness is inadequate for the retained height, which is 7.00 to

10.00 meters. The portion of this retaining wall adjacent to Saibaba Temple, located in the valley has collapsed, spreading the debris into Saibaba Temple premises partially, which is now cleared. This locality is thickly populated with continuous houses located on either side of the road.

The height of collapsed portion is between 7 to 10.00 meters and is 15.00 m long. The nature of strata is basically hard rock interspersed with loose soil and filler material. The loose soil filling has now collapsed along with the wall. Also the said road is further showing distress in form of cracks, which may result in major landslide in ensuing monsoons, resulting in closure of the road which serves as only access to around eighty houses and also resulting in loss of life and property.

The solution for the said collapse is to construct a full-fledged conventional RCC retaining wall to support the said portion. However, only 2.00 m to 4.00 meter wide portion is available between the edge of road to the wall of Saibaba temple, which is inadequate to accommodate the base slab of the foundation of retaining wall. As such other alternative solution such as “nailed soil wall” can be adopted, through the specialized agencies, which do not require such foundation.

The approximate cost of the above solutions is as follows:-

1) **Conventional RCC retaining wall with 5.00 m foundation slab :- Rs 27 lacs.**
2) **Nailed soil wall with concrete facia:- Rs 13 lacs.**

It is also opined that for a long term solution, the length of wall has to be extended to entire stretch where the height varies from 20.00 meter to 0 meters in a length of 250 meters and the approximate cost would be :-

(1) Conventional RCC retaining wall with 5.00 m foundation slab :- Rs 4.50 crores.
(2) Nailed soil wall with concrete facia:- Rs 2.25 crores.

3) COLLAPSE OF NEW EMBANKMENT UNDER CONSTRUCTION AT ASSOI, CHICALIM.

There is a collapse of embankment of road under construction, which is located opposite to Helber Service Center. The Construction of new road i.e."The Construction of Road and drain from Adolph house to Mahadev Gaude house, Assoi in VP Chicalim in Dabolim Constituency" is in progress.

The said road is in embankment and passes parallel to an existing nallah. The starting 100 meters of road abuts the said nallah which is 4.00 m deep. Due to additional filling of 1.50

meters the retention height of the nallah is increased to 5.50 meters, which has collapsed as the available random rubble masonry is of inadequate capacity and also due to overflow of water during monsoon.

It is seen that a retaining wall of retention height of around 6.00 meters and 40.0 meters length is required to protect the road embankment from overflow of water during monsoon.

The cost of such retaining wall is approximately Rs 60 lacs.

With the above initiatives there should not be fear and grave anxiety in the minds of the people.