

# Higher safety factor for hillslope projects

By Nuradzimmah Daim  
streets@nstp.com.my

**KUALA LUMPUR:** Under new guidelines for hillslope development announced by the Federal Territories and Urban Wellbeing Ministry yesterday, such projects will still be allowed but they must meet the engineering requirements.

In announcing the guidelines, ministry secretary-general Datuk Ahmad Phasal Talib said developers in the city must now observe a higher factor of safety (FOS) of 1.5 from the previous 1.4 for disturbed (touched) hillslopes which was previously set by the Housing and Local Government Ministry.

The FOS is calculated based on the slope height and the buffer zone (distance from the nearest properties).

The hillslopes are categorised into five classes — Class I hillslope with a gradient of less than 15 degrees; Class II (between 15 and not more than 25 degrees), Class III (between 25 and not more than 35 degrees) and Class IV (35 degrees and more).

Phasal said the new guidelines take effect from Oct 1.

"A hillslope unit will also be set up in City Hall. The matter is being looked into by the Public Service Department. We hope it will be ready by the time the guidelines take effect.

"We may work with the Public

Works Department's hillslope unit in ensuring that developers observe the guidelines.

"The guidelines also include the maintenance of the hillslope areas by the developers after the areas have been developed," he said.

The guidelines, which replaced the previous one set by the Housing and Local Government Ministry, also listed the requirements for the building of retaining walls and the allowed number of berms (levels) on hillslopes.

The height of the retaining walls would depend on the distance to the nearest building.

For instance, a retaining wall of more than 10m tall must be built if the buffer zone is 5m.

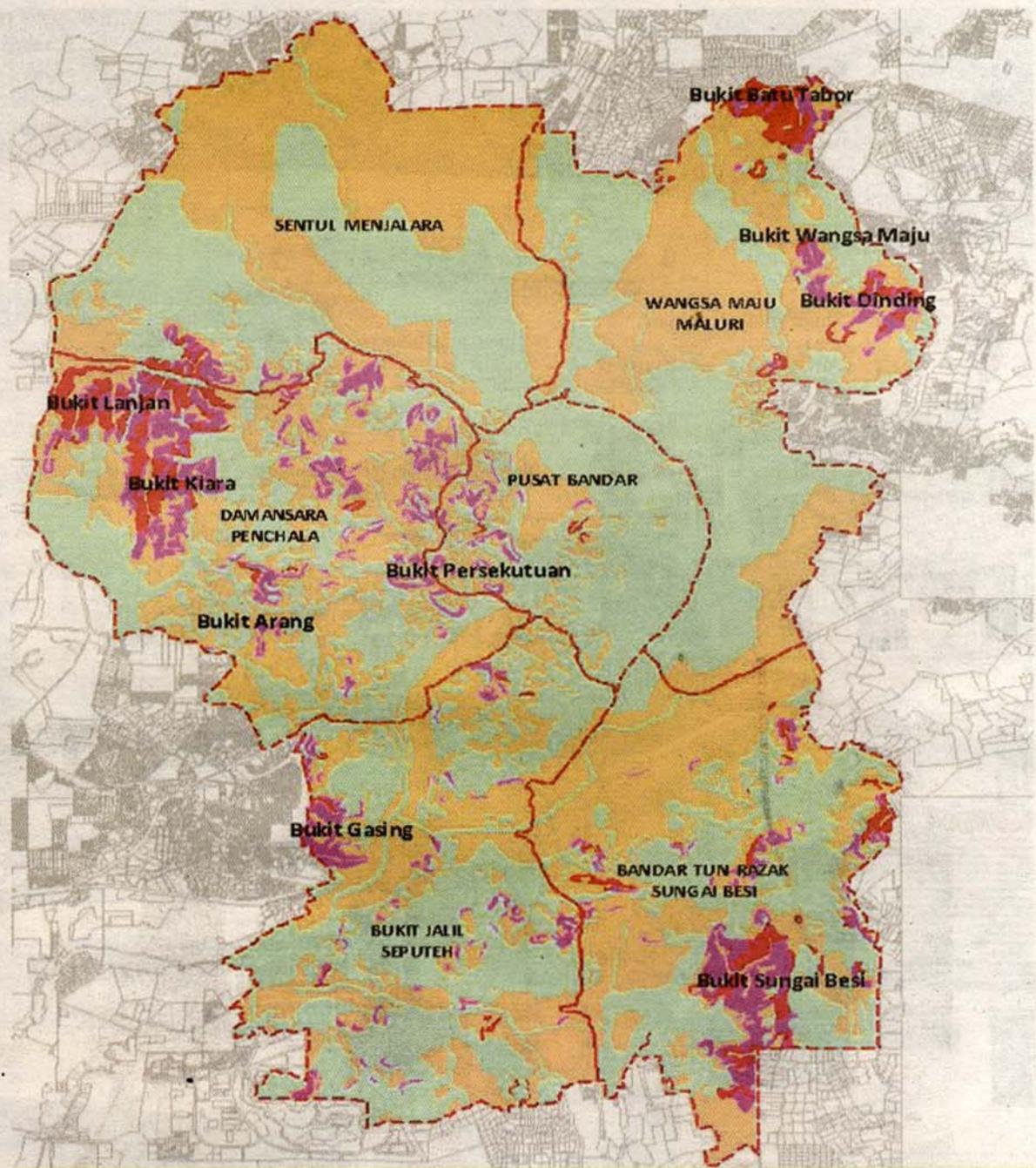
The guidelines stated that there should not be more than six berms on a Class III and IV hillslope.

The guidelines, however, are only applicable to new developments that have yet to obtain approvals.

Mayor Datuk Seri Ahmad Fuad Ismail said it would be the responsibility of developers to ensure that the hillslope area that they were developing met the safety standards through the use of technical solutions.

"There is RM7 billion worth of private land in Kuala Lumpur that can be developed and we can't afford to acquire them all and turn them into

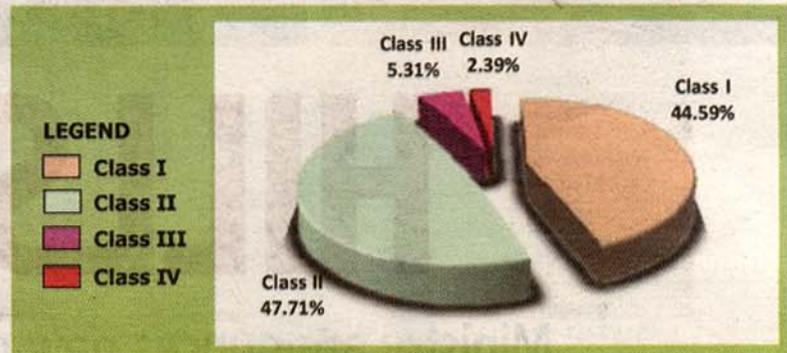
Distribution of hilly areas in Kuala Lumpur



open space as some people have suggested.

"It's ratepayers' money which we can use for other purposes including recreational facilities and public amenities," said Fuad.

A representative from the Board of Engineers Malaysia pointed out that



## DEFINITION OF HILLSLOPE AND HILLY AREAS

SLOPE CLASS	Area (Hectares)	%
Class I (<15 degrees)	10,800.94	44.59
Class II (≥ 15 degrees - < 25 degrees)	11,555.99	47.71
Class III (≥ 25 degrees - < 35 degrees)	1,295.43	5.31
Class IV (≥ 35 degrees)	579.36	2.39
<b>TOTAL</b>	<b>24,221.05</b>	<b>100.00</b>

pipng and drainage should not be underground in hillslope areas, as some of the landslips were caused by underground pipe leakage or water seeping through the drainage.

On Class III projects with gradients between 26 and 35 degrees that were frozen since 2008, Phasal said a separate announcement would be made soon.

He was referring to the Damansara 21 project in Medan Damansara and two other projects in Bukit Gasing and Bukit Ceylon.

Meanwhile, responding to the announcement on the guidelines, Medan Damansara Residents' Association secretary Peter Raiappan said residents would like to know about approved hillside development projects including Damansara 21.

"This is because the new guidelines are only applicable to new projects. We want to know the status of our objections to the Damansara 21 project and whether it will proceed. Why can't we just leave the hillslopes alone?"