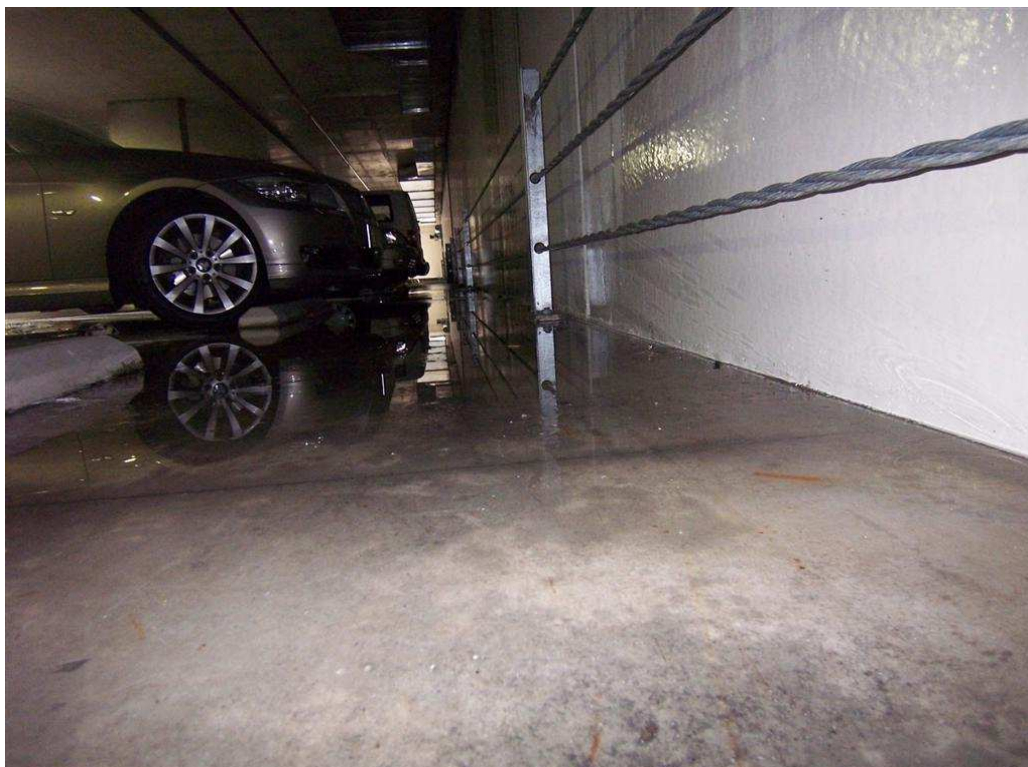


FLOODING OF THE GENERAL MANAGER'S "FINELY TUNED" MONA VALE POST OFFICE CAR PARK

Extensive flooding occurs in the Mona Vale Post Office Car Park in Bungan Lane, when it rains, which is a regular occurrence in Mona Vale ! This results in not just wet concrete but flowing floodwaters through the car park, creating "unsafe situations" for the public walking through the car park.



Rainwater entering car park





The following “*unsafe situations*” have been created in this new Pittwater Council car park.

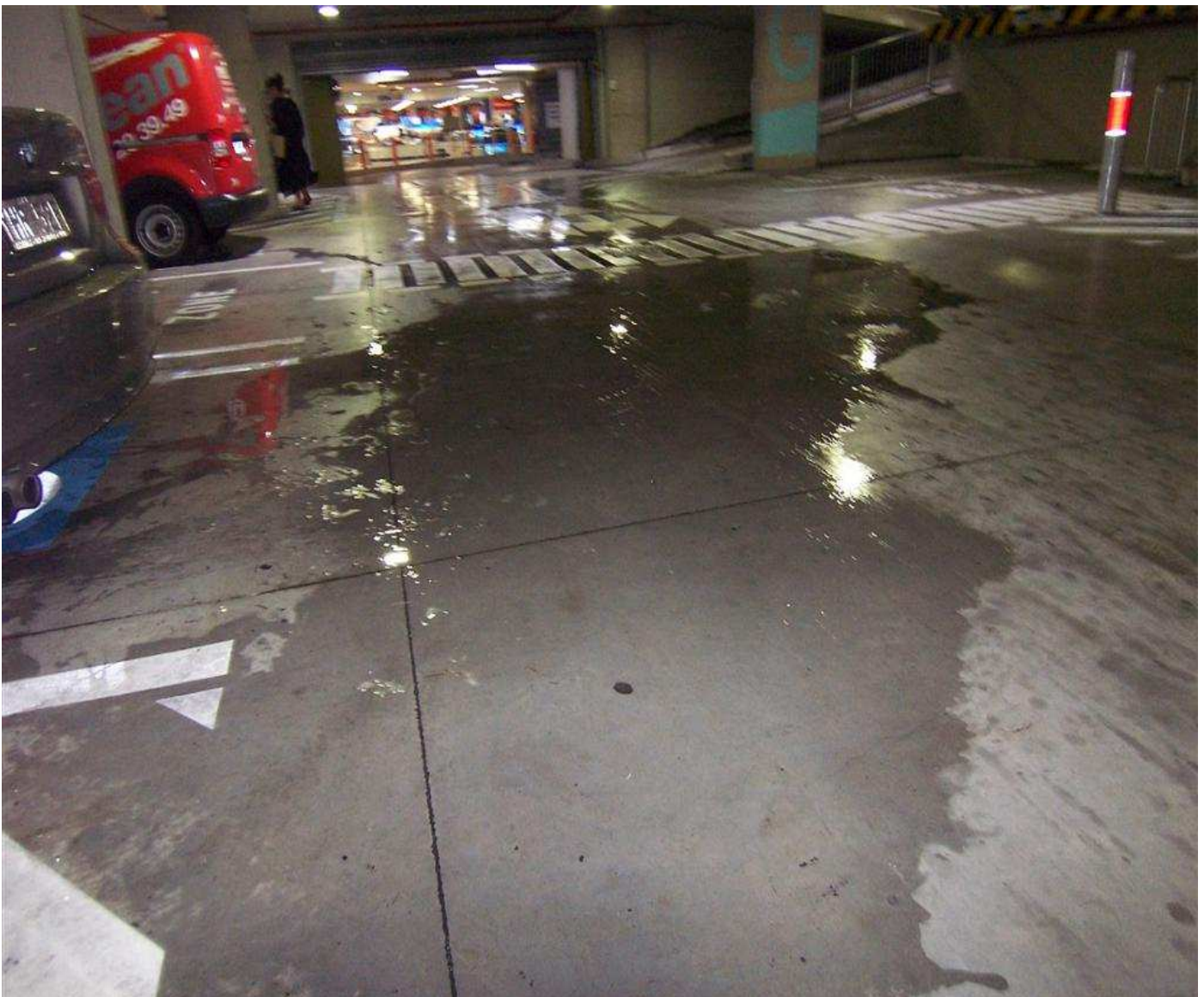
Flowing Water on: -

- 1) The smooth finished car park areas
- 2) The steep, tiled steps and landing accessing the adjoining Aurora Building (Salvo’s Shop)
- 3) The Disabled Access ramp
- 4) The internal stairs
- 5) The internal vehicular ramps, which are used extensively by pedestrians

1) The smooth finished car park areas

The car park floors have been constructed with a smooth steel trowel finish which when covered with water creates a dangerous situation for slipping, similar to trying to walk on an “ice skate rink”.

The photo below shows the regular puddle where one of our committee members slipped with both feet on this smooth finish level concrete resulting in a back injury.



2) The steep, tiled steps and landing accessing the adjoining Aurora Building (Salvo's Shop)

When the following photo was taken a conversation between two women walking toward the Salvation Army Steps was overheard: -

"Look at all the water there, really well built this place, really well done Pittwater Council".

This water remains here for weeks after a rain event.



The photos above and below show the regular puddle of water at the top of the stairs and the water on top of the tiled stairs and landing.





The next photo shows water flowing from above on the inside and outside of the building above the entrance to the Aurora Building.



3) The Disabled Access Ramp.

The main pedestrian exit / entry ramp to the lower ground level is extensively flooded whenever it rains



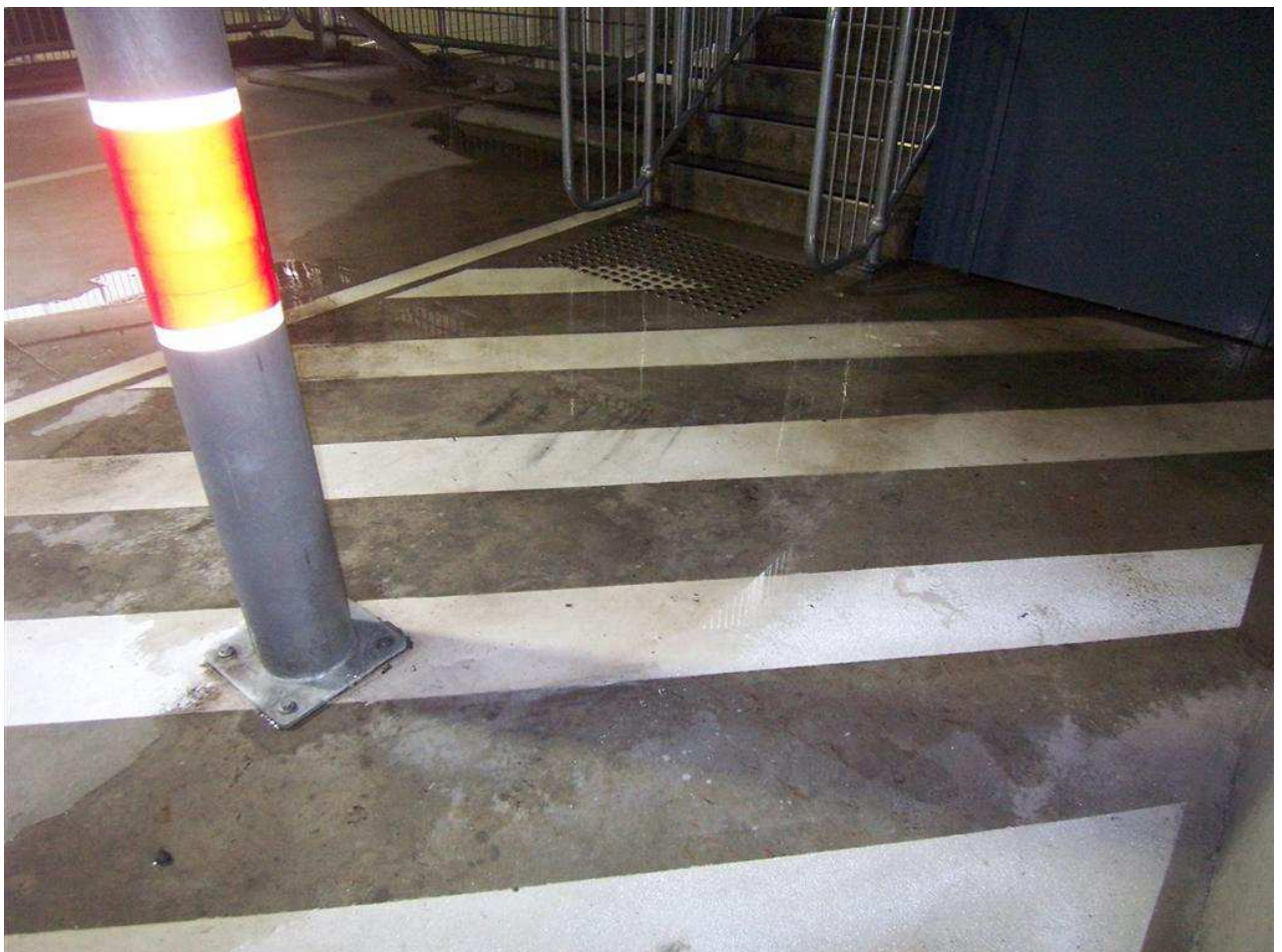
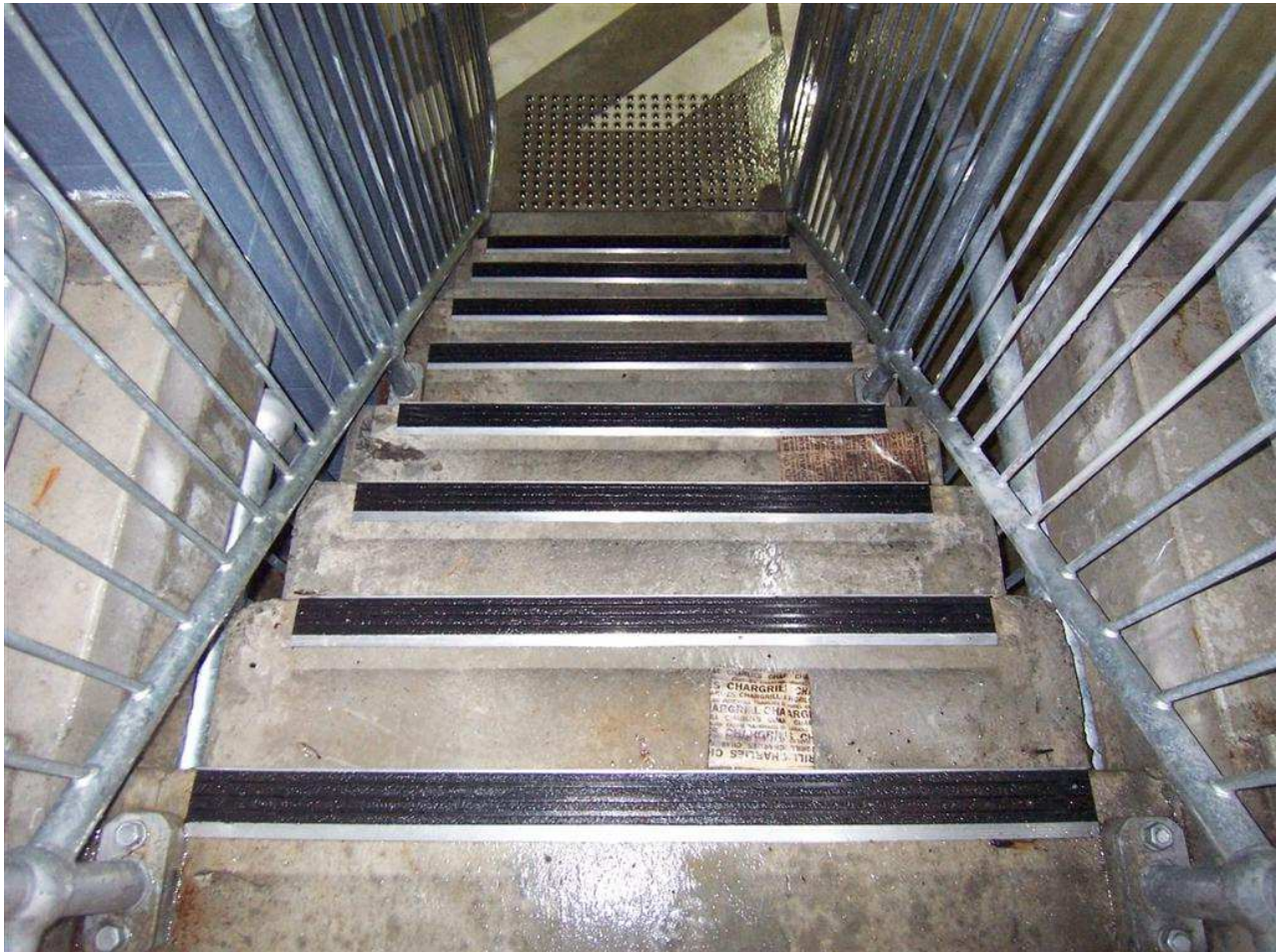
4) The Internal Stairs

Water floods into the car park from the roof top level



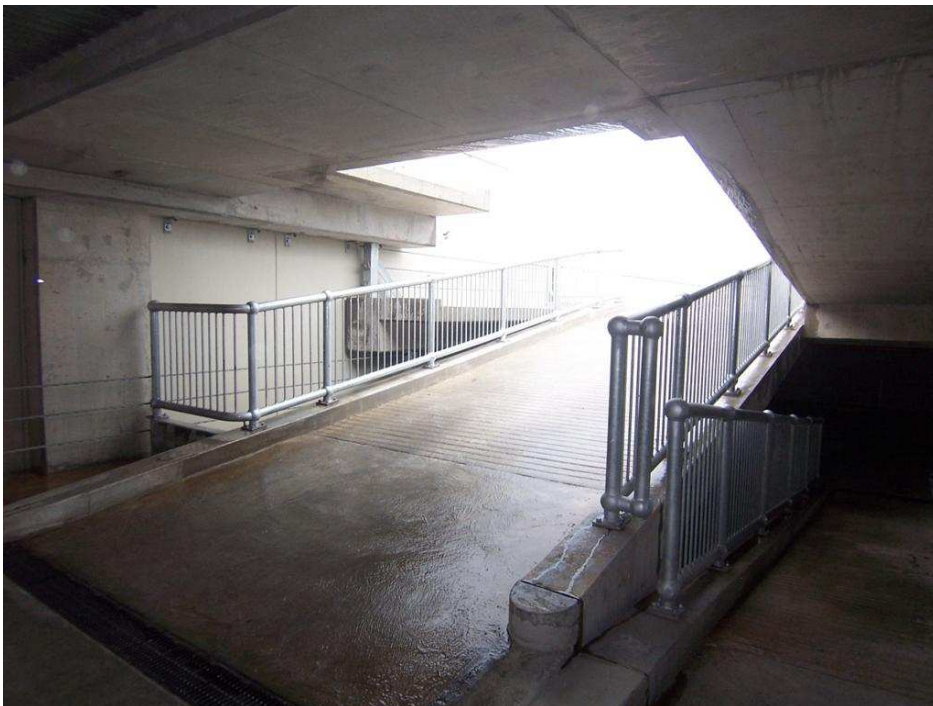
This results in the “*unsafe situation*” of steps on each level of the car park being wet.







- 5) The internal vehicular ramps, which become flooded are “*unsafe situations*” as they are used extensively by pedestrians.





The Causes of the Flooding

The car park has been constructed with post-tensioned slab over hanging the two columns, canter levering out 4 metres.

Structurally the canter levers on each of the car park floors have sunk, directing water from the canter levered areas away from the central drains, out to the edges of each level and hence to the floors below.

Assuming the Engineering and post tensioning are correct, the canter lever collapses are due to the early stripping of formwork and insufficient back propping while the concrete was curing.

A levels survey of the roof top upper level shows in one cross section the collapse of both canter levers.

		Heights mm		
-5	0	-31	-1	-18mm
Bungan Lane Edge	Column	Central Drain	Column	Eastern Edge
		Expected Heights mm		
40	0	-31	0	40mm

The builders have obviously been aware of this problem and have installed two extra drains along the eastern edge of the upper roof top level as shown below.



A levels survey of the roof top lower level, north western corner shows the collapse of the center level.

	Heights mm	
-20	0	-40mm
North West Corner	Column	Central Drain
	Expected Heights mm	
40	0	-40mm

As a result of the levels shown in the survey above, the photo below shows the roof top flooding in the north west corner of the lower roof top level.



A levels survey of the roof top lower level, south eastern corner shows the collapse of the canter lever causing the major flooding over the landing and steps into the Aurora Building (Salvo's Store).

	Heights mm		
-7	-30	0	-24mm
Top of Exit Ramp	Central Drain	Column	Eastern Edge
	Expected Heights mm		
0	-30	0	40mm

As a result of the levels shown in the survey above, the roof top flooding shown in the photo immediately below, results in the flooding of the entrance to the Aurora Building shown in the next photo below (the piece of wood shown is floating)



Flooding due to low level top of exit ramp (-7mm as indicated in the levels survey)



There is no flashing between the exterior walls and the car park floors, (which would not have been so necessary if the canter levers had not collapsed).



There is no flashing between the plant rooms and the exterior wall



There is no flashing between the car park exterior wall and the Aurora Building



The photo shows looking up, the gap between the car park and the Aurora Building



Conclusion

In the construction of this car park Pittwater Council has created these **“unsafe situations”** of water ingress and is on notice to rectify them as an urgent priority for public safety.

It looks like the General Manager has a little more **“Fine Tuning”** to do on this car park.

The flooding issue is just another, added to the long list of issues already raised in regards to this car park and its construction.

- No Lift
- No Pedestrian Ramps
- No Access to Post Office
- No Public Toilets
- Non Complying Sight Lines at Exit
- Cutting of Structural Beams to Achieve Complying Head Height
- Danger of Bollards at Entry and Exit
- Non Complying Vehicle Turning Circles / Swept Paths
- The Fine Tuning of the Ramps and Handrails including the Mayor’s “Enliven Sculpture”
- And Now,.... The Flooding Safety Issue

- And There’s Still More to Come !

Yours Faithfully

Phil Walker