To: CPTF **Sept. 1, 2017.**

Harbour Cove Urgent IGUs: A short and a long term strategy.

A. Short term strategy

1. Background information.

1.1 As of Aug. 31, 2017, we have the following self reported data on "urgent" cases of IGU failure.

1450	46 windows	21 suites	2.19 per suite
1470	65	18	3.6
1490	35	10	3.5
Total	146	49	2.98

There were also approximately 20 suites reporting additional problems, such as warped frames, loose handles, air leakage, mold and so on.

1.2 The Beck estimates indicate an average cost per IGU, including minor hardware fixes, of less than $600. For our purposes, this number probably would be less because the estimate includes work we probably will not need to do, such as adjusting several patio doors and replacing a great deal of hardware, fewer bosun drops, and so on.

1.3 I understand that council has some surplus funds that could be applied to this project immediately.

2. Suggested Recommendations by CPTF to Council

2.1 Recommend site visits to the reporting suites guided by an evaluation check list. (I suggest we offer to prepare the check list.)

2.2 Recommend that Council allocate whatever funds can be immediately made available for the replacement and minor hardware remediation of the 146 IGUs reported by owners.

2.3 Recommend that Council institute an annual survey to determine urgent foggy IGUs and include appropriate funding for this in the operating budget.

2.4 Recommend that Council (as much as possible) suspend the above initiatives whenever a window assembly replacement is programmed to occur within that area in the following two years.

B. Long term strategy.

1. Background information.

1.1 The two largest cost factors in the depreciation report are the window assemblies and the roof of the parkade (also called podium or plaza membrane).

1.2 The replacement of window assemblies can be deferred for a time but, because of the competing demands for funding and the construction time required, the window assembly projects should be started sooner rather than later. It will take many years, probably at least a decade, to complete all three buildings. The parkade roof can continue to be patched for an indefinite time but if a major failure occurs, which could happen at any time, it would require urgent remediation and a great deal of money (RJC estimates up to $7 million).

1.3 The most cost efficient way to proceed with these two programs would be to replace the window assemblies in an entire building, and repair an entire podium, at one time.

2. Recommendations

2.1 The selection and timing of long term depreciation priorities should only be established after meeting with representatives of RJC to discuss the rationale for their recommendations and priorities. The

technical issues are too complex for us to proceed further without speaking to the professionals who wrote the report.

2.2 In the meantime, it will be useful to study some cost projection alternatives. For example, the attached spreadsheet shows that if the recommendations of the RJC report are implemented without any modification, and if we assume the RJC cost projections are accurate, it would be necessary to raise an average of approximately 2.8 million dollars a year for the programs recommended for the first 13 years – 2016-28. (This is does NOT include requirements for emergencies and regular repairs and maintenance.) Other scenarios can easily be examined using this spreadsheet by modifying the scope, timing, and sequencing of various projects.

(Editors Note: The above mentioned spreadsheet can be provided upon request).

Carl Meilicke, Sept 1, 2017.