



INTEGRAL CONSULTANTS

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NEWSLETTER

JUNE, 2009

TOO MUCH WATER TOO SOON



The complex was approximately 16 - 18 years old at the time of our inspection and the perimeter drainage system is Big O pipes. Big O piping is a flexible 6 inch pipe that can collapse with pressure from land movement or roots over the years.

Ground water enters the residence behind the furnace on the front foundation wall. Over the years there have been several attempts to rectify the problem with no success. Repairing perimeter drainage to the front of this residence could become an expensive proposition as they have had cameras inserted in the drains in the past and blockage had been blasted by water pressure to remove it. The water still pools in front of the entry screening and the drains cannot handle the volume. The most economical solution is to divert the water out to the main road where a catch basin and the main drain are a short distance away.

Although there has been some ground puddling from rain runoff around entrances, the overall drainage in the complex is generally good. Once the gutters and catch basins have been addressed, this should alleviate any further problems with puddling. If any of the puddling reoccurs it should be dealt with on an individual basis

The driveways slope towards the residences and there is a gravel catch basin located at the bottom in the center of the driveway. Gutters and down spouts are also drained into these catch basins. During heavy rain storms these basins may not be able to handle the volume of water and consequently the water can run under the garage door into the garage and on into the basement through the garage entry door. Upon inspection of these catch basins it was observed that they are full of silt. Since these types of catch basins

are not connected to the drainage system but drain directly into a gravel pit in the ground, they should be cleaned out at least once a year.

The solution to this one was simple. Although ideally it would be better to have these catch basins connected to the main road drains, they should be cleaned and the crushed gravel renewed annually. After each maintenance session has been done, a member of the strata council should keep a watch on them for performance after heavy rain storms and if the solution is not working, then the next step would be to connect them to the storm drains that run throughout the complex's road systems.

When we inspected the roof cover, gutter system, drainage systems, and catch basin in this complex, we found that the roof cover is an interlocking shingle roof that has been installed over a pre existing strip shingle and the replacement shingles overlap about half way into the gutters which is a correct application. However the upper roofs drain onto the lower roofs without any control which will shorten the life expectancy of the roof cover as well as cause a breach of the building envelope.

Gutters and down spouts are critical to preserving the integrity of the building envelope. They are a controlled method to transport rain water from the roof, down the exterior wall and either into a storm sewer system or a wash away. If they do not function correctly then the breach of the building envelope is inevitable and will result in water damage.

Gutters have a life expectancy of anywhere between 10 and 30 years depending on the materials used, workmanship, building design, and application. They should be regularly cleaned and checked for damage, wear and tear, etc. - once in the late fall and once in the late spring. When the building is more than one storey, downspouts from the upper roofs, should be extended on the surface of the lower roofs to the lower roof gutters to control flow of water from upper roofs as soon as possible. Roofs of this nature should be monitored to observe volumes of water ascending into lower gutters to determine if they are sufficient to handle large controlled volumes of water.

Although constructed to building code at the time of construction, the lower gutters are too small to cope with the volume of water and they are too small for an overlap of an interlocking shingle and therefore should be replaced with a larger size.

The complex has 48 units with damage in each unit although at different stages. The perimeter drainage can be corrected by replacing the Big O drain tile with perforated PCV pipe and connecting it to the main storm sewer, changing the lower gutters, adding extensions to the downspouts from the upper story, and changing the catch basins with a strip basin across the front of the garage door and connecting them to the storm drains for all units. A special assessment was collected for the sum of \$ 480,000 to correct the construction deficiencies and upgrade the building code requirements from the time of original construction.

BUILDING REPRODUCTION APPRAISAL REPORTS

We are please to introduce combined RCR/ODF Insurance Appraisal Report for underwriters, brokers and the consumer and our Loss Appraisal Report for adjusters in the event of a loss. This appraisal provides a Replacement Cost Reproduction (RCR) Appraisal based upon Reproduction Costs for *Replacement Cost Value* using the Calculator Method by means of the Marshall Valuation format or the R. S. Means Cost Guides for contractors and they will incorporate Physical and Functional factors in the Depreciation segment for *Actual Cash Value*. This report is designed for a total loss or to determine co-insurance for both RCV and ACV.

The Underwriting Format provides the following Recommended Individual Policy Limits; Replacement Cost (RCV) or (RCT); Occupancy Design Fixtures (ODF); Bylaw Coverage (BC); Demolition & Debris Removal

(DDR); Guaranteed Replacement Cost (GRC); Blanket Insurable Value (BIV); and Depreciation Applicable (ACV) in the form of a percentage for underwriting reports and the actual cash value for claims reports.

Occupancy Design Fixtures (ODF) is now incorporated into the format and can be added for an additional cost. Incidental Occupancy Design Fixtures such as free standing appliances for apartment buildings are included in a RCR Appraisal Report for no additional cost.

Occupancy uses with sizeable ODF requirements such as Security Equipment, Janitorial, Cash Registers, Checkroom Equipment, Business Offices, Laboratories, Mortuaries, Medical Offices, Dental Offices, Motels, Lobby and Reception Area Furniture & Equipment, Residential, Automotive – Repair & Service, Automotive – Tire Retreading, Automotive – Spray Booths, Barber and Beauty Shops, Photo Labs, Laundry and Dry Cleaning, Laundromats, Billiard Rooms, Amusement Arcades/Casinos, Health Clubs, Bowling Centers, Restaurants and Soda Fountains, Snack Bars, Retail Stores, Bakeries, Food and Beverage Markets, Churches, Stage/Theater Equipment, Chimes and Carillons, Organs, Theater Seats, Schools, Libraries, Warehousing, Hazardous Material Storage, Shipping Docks, etc will not be included unless requested as part of the appraisal.

BUILDING DAMAGE ASSESSMENT REPORTS

This report is designed to establish value for a partial loss to a building that provides a Scope of Damage and a Damage Assessment for both RCV and ACV. Since every loss is not a total loss, the rates will reflect costs for cutting and patching to existing construction; dust protection; material handling & storage; protection of existing finishes, shift work requirements; temporary shoring & bracing; equipment usage curtailment; and work inside secure premises, where applicable. All of these conditions are associated with retrofitting replacement material for partial losses.

Logistics have been changed with added or revised sections which now include Ceiling Height, Building Shape, Basement, Building Height, Building Size, Green Construction, Hillside Location, Shortages, High Wind Areas, Weather Extremes, Congested Areas, Resort/Remote Areas, Retrofitting Construction, Seismic Construction, Current Cost, and Location.

FILE AUDITS

So you think you have done everything right. There was an assigned approved insurance contractor to complete the restoration and the project was put out to bid. But why did the costs escalate and the insured is not happy with the results? There are a number of reasons why. Outside influences such as government bodies can directly impact the how the restoration process is going to take place. There really is no control over these situations and inevitably the construction costs are directly impacted by decisions a government body can make concerning the restoration process.

We offer peace of mind through knowledge and expertise, call us at (778) 239 – 6308 or email us at integral@shaw.ca for more information, as our audit reports start at \$ 125.00 and our full reports start at \$ 375.00 plus GST.

This newsletter is designed to inform adjusters, brokers, underwriters, and consumers of risks regarding real property whether it is simply existing conditions of a property or actual loss of property. This publication is distributed by subscription or appointment only to over 5,000 subscribers.

Please feel free to pass this newsletter on to your staff or others as well.