

**Crystal Water Beach Association
Roads Sub-committee Report
July, 2003**

Purpose of Sub-committee

To review Crystal Water Beach private lanes and roads and recommend improvement measures where deemed necessary. Private lanes and roads include Sylvia, Crystal and Roberts Drives south of Waters Road as well as Holiday Lane from Sylvia to Roberts Drives.

To review 1999 report authored by Cam Scott ("the Scott Report") on the same subject and consider its applicability to present conditions.

Considerations/limitations

The committee considered the following factors, in random order, in connection with its recommendations:

- Cost of recommendations relative to availability of funds.
- Surface quality
- Aesthetics and community ambiance
- Emergency vehicle access
- Speed and safety
- Dust

The Scott Report

The committee reviewed the Scott Report and determined that the options presented therein were still relevant, subject to updating costs. The most expensive options (paving and green space) were rejected at the present time as being too expensive in the short run.

Physical Inspection of Private Roads and Lanes.

The committee inspected all the road surfaces on July 19, 2003 and observed the following:

Sylvia Drive

Sylvia Drive contains some potholes and shows effects of erosion by runoff down the centre of the road surface. The lane is located in a corner of the plat where drainage improvements have yet to be implemented. The proposed "pink" drain should improve the surface erosion problem when it is completed. The road surface is a composite of residual tar and gravel as well as compacted gravel. Sufficient room exists on either side of the road centerline for opposing traffic to pass as the 40 foot road allowance has no ditches to narrow its effective width.

Crystal Drive

Crystal Drive also has a designated 40 foot width but with ditches and encroachments of vegetation its effective width has been narrowed to approximately 12 feet. The surface is potholed and in need of surface repair. A complication to repair are some residual sections, particularly on the shoulders of certain parts, of an old tar and gravel surface. The existence of this material will interfere with attempts to resurface the road and will probably need to be removed. The road width interferes somewhat with the ability of opposing traffic to pass easily.

Robert Drive

Robert Drive is actually in the best condition of all the lanes. Some minor repairs to potholes and some reshaping of the runoff at the south foot where it intersects with Holiday Lane are required. This lane has numerous encroachments on the roadway causing a curvature in the road centerline which enhances the aesthetics but which may be a potential impediment to large emergency vehicles. Notwithstanding the encroachments, sufficient room exists, for the most part, on either side of the road centerline for opposing traffic to pass without difficulty as this lane also has a 10 foot road allowance and no ditches. The committee unanimously agreed that Robert Drive typifies the "country lane" aesthetics which it considers to be a desirable attribute.

Holiday Lane

This lane is, by design, considerably narrower than the north-south lanes. A measurement between fences at the foot of Crystal Drive on Holiday Lane (west) determined that actual clearance was 21 feet 8 inches. This presents some problems for large emergency vehicles attempting to turn onto Holiday Lane (east or west bound) from Crystal Drive. Passage of opposing vehicles is made difficult by the design width of the road. This problem is exacerbated by vehicles parked on the road allowance. In some cases, parked vehicles would completely impede access of a large emergency vehicle. The lane surface is similar to the other roads and requires some minor repairs to potholes and grading to direct water runoff to existing drains.

Recommendations

1. Crystal Drive from Waters Road to Holiday Lane should be restricted to one-way traffic southbound. Signage would be required for the north and south ends designating the traffic flow restrictions. All other private lanes would remain open to two way traffic. The committee recommends that implementation of this measure, if accepted, should be for a period of not less than two years (with a review of its effectiveness after the first year). The intention of this recommendation is to reduce traffic on Crystal Drive and acknowledge the effect of the narrower road width on opposing traffic, while retaining the aesthetics of a "country" road. There are five cottages on Crystal Drive which don't have alternate road access. The committee feels that it is important the occupants/owners of these cottages (of which one is a road committee member) must be thoroughly consulted and brought into agreement with these changes prior to implementation.

An alternate to this recommendation would be to implement a one way restriction only during the period May 1st to September 30th with appropriate changes to signage indicating the effective date.

2. Potholes on all lanes should be repaired by August 17, 2003 using crushed limestone material. The committee recommends that a volunteer work party could accomplish this in approximately four hours. A gas powered road tamper should be rented to compact the repaired surface thus improving its durability. The community also has a roller donated by Allan Buim which could be used on this project. Reshaping of south foot runoff routes for all North-South roads where necessary could be addressed during this work party.
3. Subject to the refinement of total project costs, Crystal Drive from Waters Road to Holiday Lane should be resurfaced (top dressed) not before September 1, 2003 and not later than May 31, 2004. Historically gravel has been used for private road maintenance in Crystal Water Beach. The committee recommends using crushed limestone material instead of gravel. This material is used extensively by various public works in the greater Vancouver area for pathways and light traffic roads in park, etc. and has the potential to provide a more durable surface with, possibly, less dust, than gravel. The use of this

material for Crystal Drive would be a test for evaluation surface durability before extending the recommendation to other roads. The committee's preliminary work estimates include rental of a backhoe/front end loader and operator to remove residual tar and gravel sections and to prepare the sub-surface for new material. The committee feels that surfacing labour could be provided by a volunteer work party and, therefore, the costs would be restricted to the cost of surface preparation, the crushed limestone material, and incidental equipment rental costs if needed. The new surface should be crowned and connected with drainage runoff channels to the existing ditches in order to minimize winter erosion.

4. The Executive Committee should present at the 2004 Annual General Meeting a capital plan and schedule for drainage system completion and road improvements including financial budgets.
5. The Executive Committee should present at the 2004 Annual General Meeting a maintenance plan with corresponding budget. The maintenance plan should address necessary work and costs required, on the three to five year recurring schedule, to maintain roads, drains, stairs to the beach, and other matters of common interest which require upkeep.

Other Recommendations

1. A sign post and large fence post at the foot of Crystal Drive may impede large emergency vehicle access to Holiday Lane. The committee urges the Executive to review this matter from a safety perspective.
2. During the physical inspection of the Crystal Drive it was noted that tree branches extended onto the roadway over the South East corner of Crystal Drive and Waters Road. The branches significantly impede visibility at the intersection and present a hazard for pedestrians, cyclists, and vehicles. The committee urges the Executive to review this matter from a safety perspective.
3. Parking should be discouraged on the Holiday Lane road allowance to ensure emergency vehicle.

Submitted on behalf of the Roads Sub-committee.

Don Rathborne
July 29, 2003

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Retyped by kwatts to put on web site for informational reference by committee members.