

Richard Brimmell, P.Eng.

971 Bank St., Victoria, BC V8S 4B1

Ph: 592-SOIL (7645) Mobile: 889-3080

Fax: 592-7640

*Road
certification
&
as built's.*

FIELD REVIEW REPORT

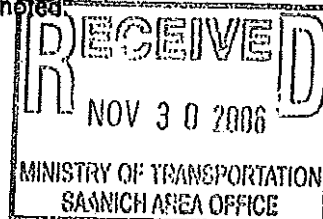
PROJECT:	Crystal Dawn	No:	4	IN ATTENDANCE:
LOCATION:	Sooke Lake Road, Cobble Hill	DATE:	Aug 9/08	Dan Parker-Oryx Richard Brimmell
CONTRACTOR(S):	Oryx Construction	PROJECT No:	05-85	
OWNER:	637651 B.C. Ltd.			
CONTRACT REF:	Dan Parker	TIME:	morning	WEATHER: clear

ASPECT(S) OF PROJECT REVIEWED:

Reprofiling of the main subdivision road from Sooke Lake Road upslope to the bulb at its northwesterly end.

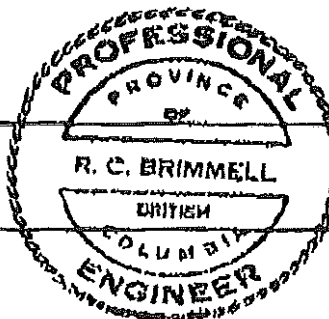
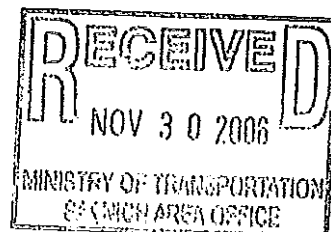
OBSERVATIONS:

The alignment has been gravelled in preparation for paving. Roller compaction has just been completed. Both sides of the alignment were proofrolled with a loaded dumptruck. No deflection was noted.



REMARKS / RECOMMENDATIONS:

Today's satisfactory proofrolling, in conjunction with my observations during road construction as discussed in previous reports, indicate that the alignment is satisfactory for paving to proceed.



RECOMMENDED TIMING OF NEXT SITE VISIT:

Should not be necessary for the roadway.

COPIES PROVIDED TO:

Dan Parker/D.R. Carrier-JEA

R. C. Brimmell

Richard Brimmell, P.Eng.

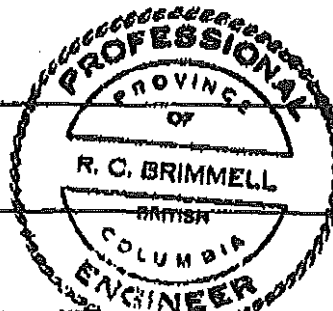
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FIELD REVIEW REPORT

PROJECT:	Cougar Ridge	No:	5	IN ATTENDANCE:
LOCATION:	Sooke Lake Road, Cobble Hill	DATE:	Aug 11/06	Dan Parker-Oryx Richard Brimmell
		PROJECT No:		
CONTRACTOR(S):	Oryx Construction		05-85	
OWNER:	037651 B.C. Ltd.			
CONTRACT REF:	Dan Parker	TIME:	morning	WEATHER: clear
ASPECT(S) OF PROJECT REVIEWED:				
Confirmation of gravel depths, prior to paving.				
OBSERVATIONS:				
In order to confirm that sufficient gravel has been placed, a series of test holes were excavated by hand along the edges of the road. A total of 8 holes were reviewed, showing at least 150 mm of 25 mm minus, crushed, sandy gravel; overlying at least 150 mm of 75 mm minus, crushed, sandy gravel.				
REMARKS / RECOMMENDATIONS:				
Gravel depths are accordance with the design for the subdivision road. That information, in conjunction with the satisfactory proofrolling of August 9, indicate that a satisfactory base course has been prepared for support of the asphaltic concrete.				
RECOMMENDED TIMING OF NEXT SITE VISIT:				
Should not be necessary for the roadway.				
COPIES PROVIDED TO:				
Dan Parker/D.R. Carrier-JEA				



A handwritten signature of R. C. Brimmell, written in black ink, positioned below the professional seal.

C.N. Kyzuk & Associates Ltd.

Asphalt Concrete Mix Analysis Report

CLIENT: Oryx Construction Ltd.
(fax: 478-0469)

FILE: 8-1285-10
COPIES: J.R. Anderson & Assoc. (fax: 727-3305)

Attention: Mr. T. Mogensen

PROJECT: Cougar Ridge Development
Shawnigan Lake, BC

Post-it Fax Note 7671E

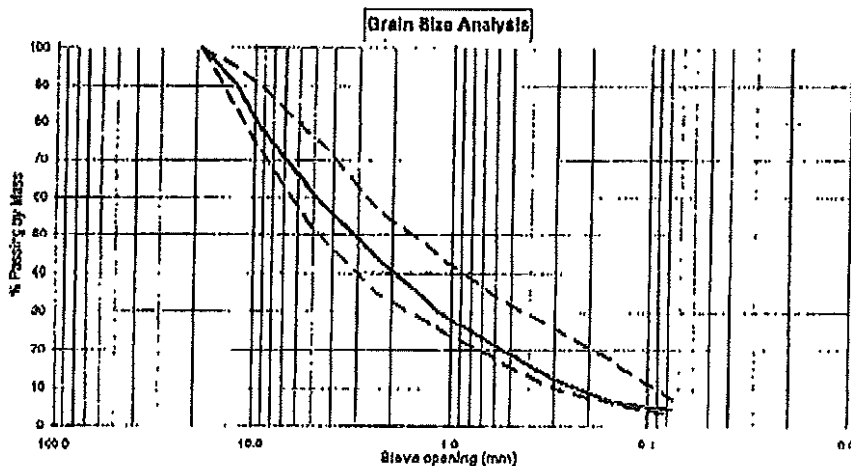
To: Ross @ HOT	Date: Dec 10/06	Pages: 2
Co./Dept: Your file 22736	From: S.D. Carver	
Phone: Pass-copy of asphalt tests	Co:	
Fax #: for your file	Phone:	
	Fax:	chairs.

SAMPLE INFORMATION

Date Sampled:	14-Aug-06	Sample I.D.:	OGL AU14-1	Sample Temperature:	150 °C
Truck Number:	G. Martman #26-1	Sample Time:	12:50	Ambient Temperature:	-- °C
Contractor/Supplier:	Island Asphalt Ltd.	Sampled By:	IAL (DAS)	Date Tested:	14-Dec-06
Mix Class:	MoT				
Sample Location:	Single pull, at driveway to Lot #16.				

MARSHALL MIX ANALYSIS

TEST RESULTS		SPECIFICATION	TEST DATA	
Asphalt Cement %(dry agg. mass)	5.65		Asphalt Cement Type:	Imperial 80-100
Asphalt Cement %(mass of mix)	6.29		Blows, Each face:	76
Voids in Mineral Aggregate (%)	15.4	Minimum 14	Relative Density - Asphalt Cement:	1.040
Voids filled with Asphalt (%)	77.6		Bulk Relative Density - Aggregates:	2.832
Total Air Voids (%)	3.5	2.8 to 4.5	Asphalt Absorption (%):	0.42
Density (kg/m ³)	2531		Temperatures:	Mixing 154 °C
Stability (N)	11870	minimum 8000	Compaction	143 °C
Flow Index (0.25mm)	8.7	0 to 14	Testing	60 °C



Sieve Size (mm)	Percent Passing	Specification	
		Low	Hi
19.0	100	100	100
12.5	80	84	95
9.5	70	73	90
4.75	60	50	76
2.36	44	36	57
1.18	30	26	45
0.600	21	18	34
0.300	12	10	26
0.150	6	6	17
0.075	4.5	3	7

COMMENTS: Aggregate bulk specific gravities supplied by Island Asphalt Ltd.
MoT Class #1 Fine Asphalt Specifications.

should be medium??
B

Per *[Signature]*

Reporting of these test results constitutes a testing service only. Engineering interpretation or evaluation is provided only on written request.

Asphalt Core Density Report

Attn: Mr. D. Carter

**PROJECT: Cougar Ridge Development
Shawnigan Lake, BC**

CORE NUMBER	CORE LOCATION	THICKNESS (mm)		CORE DENSITY(kg/m³)	MARSHALL DENSITY(kg/m³)	COMPACTION (%)	SPECIFIED COMPACTION(%)
		CORED	TESTED				
1	Cull-de-sac, 3.2m from west edge, 20m from north end of main road.	51	51	2413	2631	95.3	97
2	120m from north end of road, 2.3m from east edge.	54	54	2410	2531	98.2	
3	220m from north end of road, 2.4m from west edge.	51	51	2437	2631	96.3	
4	320m from north end of road, 1.2m from east edge.	45	45	2301	2531	94.1	
5	420m from north end of road, 1.8m from west edge.	58	58	2413	2631	95.3	
6	528m from north end of road, 2.6m from east edge.	45	45	2422	2631	95.7	
7	630m from north end of road, 1.1m from west edge.	57	57	2440	2631	96.7	
8	740m from north end of road, 2.2m from east edge.	52	52	2419	2631	95.8	
	AVERAGE	52			AVERAGE	95.6	
		COMMENTS:					
DATE CORED	December 14, 2006						
CORED BY	CNRA						
TECHNICIAN	PM						