



KERR WOOD LEIDAL
consulting engineers

Greater Vancouver
200 - 4185A Still Creek Drive
Burnaby, BC V5C 6G9
T 604 294 2088
F 604 294 2090

Ocean Boulevard Pump Station Protection Plan

Report #1 Flood Hazard Assessment and Mitigation Options – Revision 1
July 2016
KWL Project No. 2617-006-300

Prepared for:



City of Colwood



Contents

1.	Introduction	1
1.1	Background	1
1.2	Glossary and Abbreviations	1
1.3	References	2
2.	Pump Station Description	3
3.	Flood Hazard and Risk Assessment	5
4.	Mitigation Options	6
4.1	Introduction	6
4.2	Mitigation Strategies	7
4.3	Additional Considerations.....	14
5.	Summary and Recommendations	16
5.1	Summary	16
5.2	Recommendations	17
5.3	Report Submission	18

Figures

Figure 1-1: Location Plan	1
Figure 1-2: Ocean Boulevard Pump Station, Wet Well in Foreground	1
Figure 1-3: Pump Station as Seen From the Sea	1
Figure 2-1: Station Site Cross-section	4
Figure 4-1: Riprap Slope Protection	7
Figure 4-2: Concrete Seawall	7
Figure 4-3: Bioengineered Slope Protection	8
Figure 4-4: Protection Berm	10
Figure 4-5: Moving the Pump Station.....	13
Figure 4-6: Sand and Gravel Escarpment South of the Coburg Peninsula.....	14

Tables

Table 2-1: Key Data for the Ocean Boulevard Pump Station.....	3
Table 4-1: Broad Flood Hazard Mitigation Options.....	6
Table 4-2: Flood Construction Levels	12

Appendices

- Appendix A: Flood Hazard and Risk Assessment
- Appendix B: Cost Estimates