



STAFF REPORT

TO: Environment & Planning Subcommittee
Commissioner Hearing

FROM: Leif Pigott – Consent Planner Natural Resources

REFERENCES: RM080594– Discharge of Stormwater to Land and Water

SUBJECT: **RICHMOND BAPTIST CHURCH - REPORT EP08/09/04** - Report prepared for hearing of 15 September

1. DESCRIPTION OF THE PROPOSED ACTIVITY

Richmond Baptist Church has lodged two resource consent applications relating to a development of its site on Salisbury Road, a landuse consent and a stormwater discharge consent. The development is in the Tourist Services Zone.

The following report assesses application RM080594. The application is to divert and discharge collected stormwater from buildings, roads, and other hardstand areas to land and surface waterbodies from the development described above (Application RM0080157). Several methods are proposed to maintain the run off from the site to the existing open drainage ditch and adjoining wetland at their 2008 (pre new development) levels. This development is likely to occur over ten to fifteen years and the applicant is proposing that the run off calculations and stormwater mitigation shall be prepared in accordance with the Tasman District Council Engineering Standards and Policies at the time.

The applicant considers that there is enough area on site to allow all the run off to be treated in a wetland/pond in similar manner to the next door site (Aquatic Centre).

2. PROPOSED TASMAN RESOURCE MANAGEMENT PLAN (PTRMP) ZONING, AREAS AND RULES AFFECTED

The application site is zoned Tourist Services. The diversion and discharge of stormwater from the development is not permitted under rule 36.4.2 of the PTRMP and requires a resource consent under rule 36.4.4. The discharge is therefore a discretionary activity.

3. SUBMISSIONS

None of the submitters raised issues relating the diversion and discharge of stormwater from the site.

4. PRINCIPAL ISSUES

The principal issue associated with the applications is:

- a) The increases in hard surfaces (roofs, parking etc.) will result in a greater peak discharge of stormwater that may result in localized downstream flooding.

5. STATUTORY PROVISIONS

The application is a discretionary activity in the Tourist Services Zone. The Council must consider the application pursuant to Section 104, 105 and 107 of the Resource Management Act 1991.

The matters for the Council to address in Section 104 are:

- Part II matters;
- the actual and potential effects on the environment of allowing the activity (Section 104 (1)(a));
- relevant objectives and policies in the Tasman Regional Policy Statement, and the Proposed Tasman Resource Management Plan (Section 104 (1) (b));
- any other matter the Council considers relevant and reasonably necessary to determine the application (Section 104 (1)(c));

The matter for the Council to have regard to in Section 105 are:

- the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
- the applicant's reasons for the proposed choice and
- any possible alternative methods of discharge, including discharge into any other receiving environment.

The Council may not grant a resource consent if after reasonable mixing the contaminant or the water discharged is likely to give rise to all or any the effects listed 107 (1) (c) to (g).

5.1 Resource Management Act Part II Matters

In considering an application for resource consent, Council must ensure that if granted, the proposal is consistent with the purpose and principles set out in Part II of the Act.

Section 5 sets out the **purpose** of the Act which is to promote the sustainable management of natural and physical resources. "Sustainable management" means:

"Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while -

- *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*

- *avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Sections 6, 7 and 8 set out the **principles** of the Act:

Section 6 of the Act refers to matters of national importance that the Council shall recognise and provide for in achieving the purpose of the Act. The matters relevant to this application are:

- The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development.
- The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna

Section 7 of the Act identifies other matters that the Council shall have particular regard to in achieving the purpose of the Act. Relevant matters to this application are:

- 7(d) intrinsic values of ecosystems
- 7(f) maintenance and enhancement of the quality of the environment, and
- 7(g) any finite characteristics of natural and physical resources

Section 8 of the Act shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). I understand that the applicant has consulted with iwi. I do not anticipate that there are any relevant issues for this application in respect of Section 8.

If consent is granted, the proposed activity must be deemed to represent the sustainable use and development of a physical resource and any adverse effects of the activity on the environment are avoided, remedied or mitigated. *The critical issue of this consent is whether the increase in peak stormwater discharge is controlled so the cumulative adverse effects are no more than minor.*

These principles underpin all relevant Plans and Policy Statements, which provide more specific guidance for assessing this application.

5.2 Tasman Regional Policy Statement

The Regional Policy Statement seeks to achieve the sustainable management of land, water and coastal environment resources. Objectives and policies of the Policy Statement clearly articulate the importance of protecting land resources from inappropriate land use and development.

Because the Proposed Tasman Resource Management Plan was developed to be consistent with the Regional Policy Statement, it is considered that an assessment under the Proposed Plan will satisfy an assessment against Policy Statement principles.

5.3 Proposed Tasman Resource Management Plan (PTRMP)

The most relevant Objectives and Policies to this application are contained in:

- Chapters 30 and 33

The most relevant Rules which follow from these imperatives are contained in Chapters 36.

Details of the assessment of the proposed activity in terms of these matters are addressed through the assessment of actual and potential effects in paragraph 6.1 below and analysis and discussion on the relevant policies and objectives in paragraph 6.2 of this report.

6. ASSESSMENT

Pursuant to Section 104(1)(a) of the Resource Management Act, the following effects assessment has been set out:

6.1 Actual and Potential Environmental Effects

6.1.1 Proposal Summary

The development of land with buildings, roads, parking and other impermeable surfaces inevitably alters their drainage characteristics. Typically, such developments cause an increase in both the volume and peak flow rate of stormwater discharges that occur out of the catchment during and following rainstorm events. Unattenuated stormwater discharges from such catchments can cause flooding and damage to the environment and property downstream, and thus there is an expectation within the PTRMP's policies and objectives that such impacts are avoided, remedied or mitigated wherever possible.

Post development stormwater run off quantities leaving the site from this catchment / property will not increase above the current flows. To attenuate the stormwater discharges to this level there are numerous methods that can be used. In the worst case a pond can be used but the applicant would like to use low impact design where appropriate as per the Council's Engineering Standards and Policies 2008.

The applicant has shown that in the worst case they could mitigate the stormwater via detention ponds. Given the area of the proposed development 350 cubic metres of detention would be required. The applicant has stated that a shallow ponding area that could be used as a sports field or a planted wetland with the required volume. The site is large and an area of this size can be accommodated on site.

The applicant has tested the soakage rates and found them to be very low. Preliminary calculations have indicated that the soakage to ground is not an appropriate means of stormwater disposal in this instance.

The existing stormwater discharge from the existing buildings will continue unaltered at its present location, which is the northwest corner of the property. From this point the existing drainage network takes the runoff along the southern side of the Richmond Devotion via a grassed swale westward to the culvert passing under the highway. This swale is heavily grassed and shows no sign of erosion or instability.

This project has a long time line. The project could take up to 15 years to complete, with the auditorium and associated car parking not likely to be constructed for another eight to ten years (funding dependent).

The applicant has requested that they supply detailed engineering designs and calculations for the stormwater when each building consent is sought. They have volunteered to design to the Council's Engineering Standards and Policies that are current at the time when the design is done. These plans and calculations will be submitted to Council's Engineering Manager for approval.

The three initial buildings being constructed on site will have rain water harvesting systems to use of water from roofs for non potable uses within these buildings such as toileting, laundry and garden watering. This should avoid any increase in peak discharge from the additional roof area.

6.1.2 Stormwater Diversion, Damming and Discharge Assessment

Stormwater Attenuation Assessment

The applicant has shown by using a detention pond that they can keep the off site stormwater discharge to its current level. They would like to use a wider variety of treatment techniques on site and the use of impact design follows the policy directions set down in the PTRMP.

The applicant is volunteering to use the Council's Engineering Standards and Policies that are operative at the time they apply for each building consent. This should result in techniques used and systems installed that are the current best practice. Given the long lead in time to this work it is considered to be an appropriate option. While the Council could not normally place such a condition in a resource consent it has been volunteered by the applicant and thus can be placed as a condition of consent.

The risks from sedimentation of run off during earthworks has been identified and mitigation measures will be included as part of the building works. Emphasis will be placed on preventing runoff from being contaminated with sediment so the treatment of sediment- laden runoff is kept to a minimum. Treatment methods such as silt fences and placement of geofabric over sumps may be used.

Given the relatively flat nature of the site and the large land area available it is considered that very good levels of protection against damage caused by stormwater runoff during rainstorm events are achievable.

Runoff Quality Assessment

The applicant's report did discuss the effects of the proposed development on the quality of stormwater discharged from the subject site. Expected contaminants in

runoff include suspended solids, increased biochemical oxygen demand (BOD₅), pathogens, metals, hydrocarbons, toxic trace organics, nutrients and litter.

The most probable source of contaminates in runoff is water flowing from areas used for car parking. The applicant has accepted the need for treatment devices from this area. The specific device(s) and their configuration will be determined as part of the design process. These could include rain gardens, grassed swales, and vegetation strips as they are all currently accepted methods for removing contaminates from car parking.

Overall, it is considered that the stormwater discharges resulting from the proposed development will not adversely affect water quality to no more than a minor degree.

6.1.3 Summary of Assessment of Effects

In summary, potential adverse effects on the environment, in terms of the diversion, damming and discharge of stormwater at the proposed site, are in my opinion minor and the proposal is generally consistent with the objectives and policies in the Tasman Resource Management Plan.

6.2 Relevant Objectives and Policies of the PTRMP

The following Policies and Objectives have been considered relevant for this proposal:

Objectives and Policies
<p>Objectives and policies related to stormwater diversion, damming and discharge</p> <p>30.1.0 Objective</p> <ol style="list-style-type: none"> 1. The maintenance, restoration and enhancement, where necessary, of water flows and levels in water bodies that are sufficient to: <ol style="list-style-type: none"> (a) preserve their life-supporting capacity (the mauri of the water); (b) protect their natural, intrinsic, cultural and spiritual values, including aquatic ecosystems, natural character, and fishery values including eel, trout and salmon habitat, and recreational and wildlife values; and (c) maintain their ability to assimilate contaminants. 2. The maintenance, restoration and enhancement where possible, of the quality and extent of wetlands in the District. <p>30.1.17 Policies</p> <p>To avoid, remedy or mitigate the adverse effects of water damming either by itself or cumulatively with other dams, including adverse effects on:</p> <ol style="list-style-type: none"> (a) the flow regime or water levels in rivers, lakes and wetlands; (b) passage of fish and eels; (c) other water users; (d) aquatic ecosystems and riparian habitat; (e) water quality; (f) groundwater recharge; and (g) adverse effects of dam failure on (a) to (f) above. <p>33.3.0 Objective</p> <p>Stormwater discharges that avoid, remedy or mitigate the actual and potential adverse environmental effects of downstream stormwater inundation, erosion, water contamination, and on</p>

Objectives and Policies

aquatic ecosystems.

Policies

33.3.1 To require all owners, particularly the Council as stormwater asset manager, of all or part of any stormwater network to avoid, remedy, or mitigate adverse effects of stormwater discharges.

33.3.2 To advocate works to restore and protect stream or coastal habitats and improve and protect water quality affected by stormwater and drainage water discharges.

33.3.3 To manage the adverse effects of stormwater flow, including primary and secondary flow management, and the potential for flooding and inundation.

33.3.4 To avoid, remedy or mitigate the potential for erosion and sedimentation arising from stormwater run off.

33.3.5 To avoid, remedy or mitigate the adverse effects of stormwater on water quality and the potential for contamination.

33.3.6 To maintain or enhance stormwater infiltration to enhance groundwater recharge.

33.3.7 To require all owners of all or part of any stormwater drainage network to avoid, remedy, or mitigate the adverse effects of stormwater discharges.

33.3.8 To encourage an integrated whole-catchment approach to the management and discharge of stormwater.

33.3.9 To require the use of low impact design in the management of stormwater discharges in any new development where practicable.

33.3.10 To encourage the restoration and rehabilitation of stormwater drainage networks where natural drainage networks have been significantly modified.

33.3.11 To take into account the long-term management of stormwater drainage in consideration of land development, including subdivision and land-use changes.

7. SUMMARY

7.1 Principal Issues

The principal issue of whether the additional stormwater from the proposed development can be adequately controlled on site so the effects on the environment will be no more than minor.

7.2 Statutory Provisions

The application is a Controlled activity under the provisions of Chapters 31 and 36 of the TRMP at the time the application was lodged.

- Part II matters
- Objectives and Policies of the Proposed Tasman Resource Management Plan
- Actual and Potential Environmental Effects
- Other Matters

7.3 Overall Conclusion

Overall the writer's assessment is that the actual adverse effects on the environment are minor and the proposal is generally consistent with the objectives and policies, and matters of discretion in the PTRPM.

8. RECOMMENDATION

The recommendation to grant or decline these applications for the diversion discharge of stormwater is dependent upon the Commissioner's decision whether or not to grant the landuse consent.

Having considered the application in detail, having visited the site, and drawing on the Council's staff experiences of stormwater issues, it is the writer's view that the adverse environmental effects of the proposed activity will be no more than minor, and that there is no reason why resource consent for the diversion, damming and discharge of stormwater should not be granted subject to the following recommended conditions.

9. RECOMMENDED CONDITIONS

1. The Consent Holder shall ensure that all works are carried out in general accordance with the application and plans dated 26 June 2008 and further information supplied on the 5 August 2008, unless inconsistent with the conditions of this consent, in which case the conditions shall prevail.

General

2. The Consent Holder shall ensure that the post development stormwater flows discharged from the site shall not exceed the predevelopment flows.
3. Stormwater generated by a 1:20 year (5% AEP) shall be accommodated within the primary stormwater management system in a way that does not cause damage to, or nuisance effects on people, or property.
4. Stormwater generated by a 1:50 year (2% AEP) shall be accommodated with secondary stormwater management systems in a way that does not cause damage to, or nuisance effects on people, or property.
5. Secondary flow path(s) on the site shall be identified and protected such that overland flows, produced by rainfall events of an AEP of $\leq 5\%$, are able to be disposed of without contravening the conditions of this consent.
6. The stormwater disposal systems will be designed in accordance with the Tasman District Council's Engineering Standards that are current at the time of application. Design plans and calculations shall be submitted the Council's Manager of Engineering Services for approval. The Consent Holder shall submit a "Stormwater Discharge Design Report" prepared by a suitably qualified and experienced person to the Council's Engineering Manager for approval. This report shall provide evidence of how the design and performance requirements imposed by this consent are met. The design must be approved before Building Consent is submitted.

7. The discharge or diversion shall not cause or contribute to erosion of land, including the bed of any stream or drain. Bare ground shall be revegetated as soon as practical to minimise the generation of sediment.

Roof runoff

8. The three buildings proposed as part of the initial construction shall have water tanks to collect rainwater from roofs and this water will be used on site for non-potable purposes. The overflow from the tanks shall discharge to a primary stormwater management system (swale, watertable, etc) and be constructed to avoid flooding and erosion.

Advice Note:

Low impact design for stormwater management on each of these properties is encouraged. The soils found in this area have poor drainage, thus soakage methods of disposal are unlikely to be effective.

Roading and Parking

9. The stormwater run off from the parking and roading shall be treated to remove contaminants including, but not limited to waste oil, zinc, copper, lead and sediment.

Water Quality

10. The discharge or diversion shall not cause the production of conspicuous oil or grease films, scums or foams, or floatable or suspended material in any receiving water.

Maintenance

11. All systems associated with the discharge (such as the interceptors, connecting drains and rain gardens) shall be maintained in effective, operational order at all times. This shall be undertaken by the owner of the property where the system is located.
12. All systems shall be checked on a regular basis as required, but not less than once every year, to prevent carryover of contaminants into the receiving environment.

Review of Consent Conditions

13. The Council may, during the month of April each year, review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:
 - a) to deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
 - b) to require the Consent Holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the discharge; and/or

- c) to review the contaminant limits, loading rates and/or discharge volumes and flow rates of this consent if it is appropriate to do so; and/or
- d) to review the frequency of sampling and/or number of determinands analysed if the results indicate that this is required and/or appropriate;
- e) to require consistency with any relevant Regional Plan, District Plan, National Environmental Standard or Act of Parliament.

Expiry

14. This resource consent expires on XXXXXXXXXXXX.

ADVICE NOTES

1. Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.
2. The Consent Holder should meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts. Building consent will be required for these works.
3. Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.
4. All reporting required by this consent should be made in the first instance to the Council's Co-ordinator Compliance Monitoring.
5. Council draws your attention to the provisions of the Historic Places Act 1993 that require you in the event of discovering an archaeological find (eg, shell, midden, hangi or ovens, garden soils, pit, depressions, occupation evidence, burials, taonga) to cease works immediately, and tangata whenua, the Tasman District Council and the New Zealand Historic Places Trust should be notified within 24 hours. Works may recommence with the written approval of the Council's Environment & Planning Manager, and the New Zealand Historic Places Trust.
6. This resource consent only authorises the activity described above. Any matters or activities not referred to in this consent or covered by the conditions must either:
 - a) comply with all the criteria of a relevant permitted activity rule in the Proposed Tasman Resource Management Plan (PTRMP);
 - b) be allowed by the Resource Management Act; or
 - c) be authorised by a separate resource consent.

7. Plans attached to this consent are (reduced) copies and therefore will not be to scale and may be difficult to read. Originals of the plans referred to are available for viewing at the Richmond office of the Council. Copies of the Council Standards and documents referred to in this consent are available for viewing at the Richmond office of the Council.

Leif Pigott
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