MINUTES OF MEETING BETWEEN THE DEPARTMENT AND

CSR - READYMIX. 11 OCTOBER 1995 - 9.30 AM

A meeting was arranged to discuss CSR's plans to construct two on-stream lakes on the Brisbane River at Sapling Pocket. The authorisation of these works are subject to the issue of Waterworks Licences. Licence application Nos.56526 and 56527 in relation to these proposed works were received by the Department on 11 April 1994.

Present at this meeting were:-

Mr Tim Smith - Regional Director, South East Region. D.P.I., (Telephone Link).
Mr Peter Noonan - General Manager, Water and Catchment Management, D.P.I.
Mr Jim Dale - District Manager, Resource Management. Brisbane District, D.P.I.
Mr Bruce Brogan - Eng.Licencing and Quarry Materials. Brisbane District, D.P.I.
Mr Tony Howe - Divisional Manager, Brisbane and Gold Coast Quarries, CSR-Readymix
Mr Rowly Bendall - Development Manager, CSR-Readymix

Mr Noonan opened the meeting by advising CSR-Readmix representatives that for a number of reasons the Waterworks License applications would not be approved. He advised that if they wished a formal refusal could be given, or on the other hand discussions could take place regarding works that the Department may authorise.

Mr Howe advised the Meeting that he would be happy to discuss alternatives, but would still reserve the right to take legal action against the Department's decision if so desired. Mr Noonan agreed that these discussions would not prejudice the Company's right of appeal to the Land Court.

The discussions then revolved around the extent of extractions that may be considered by the Department to be acceptable. Mr Noonan said that the Department would be prepared to consider a benching of the two areas under consideration to a level of approximately four metres above water level during times of standard releases from Wivenhoe Dam. Mr Smith agreed that this approach may be acceptable.

Mr Bendall replied that this was totally unacceptable to the Company as most of the valuable gravel deposits were below water level, however as a compromise asked whether extraction below water could take place on the condition that the extraction pit be filled to a desirable bench level as the operation progressed. Mr Noonan agreed that as long as the area was stabilised at a certain level above water level this may be an acceptable alternative.

Mr Dale advised the Company representatives that revegetation was an important issue which should be addressed in any future plans. Mr Smith concurred with these remarks.

During discussions it became evident that the future of the downstream proposal was uncertain due to a recent resurvey of the property which has reduced the area of Crown Land, being watercourse. In other words the resurvey has changed the tenure of the land where

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extractions have and are taking place, from Crown Land to freehold land owned by the Company.

Mr Bendall advised that The Extractive Industry Permit relating to this site, issued by the Local Authority, allowed extractions only from Crown Land and therefore there was a problem that would have to be addressed.

In summing up Mr Noonan advised that the Company should submit details of the new proposal to this Department who would then advise the other relevant authorities of the details of these proposals and ask for comment. Mr Noonan did not commit the Department as to the outcome of any decision on the new proposal.

Mr Bendall advised that he would arrange for the new proposal to be submitted to this Department for consideration as soon as possible.

B.W. BROGAN

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CSR - WATERWORKS LICENCE APPLICATION

SUMMERVILLES LAND/SAPLING POCKET

Date of Application:
The application was received and advertised on 12 May 1994. One objection was lodged by the Pine Mountain Progress Association. There was some disquiet from staff in Ipswich City Council (prior to the merger) and from the Department of Environment and Heritage.

Studies:
The hydraulic study was completed in July 1994 and the department responded in March 1995 requiring more information. This was duly provided by August 1995. Quite independently of this process, CSR commissioned a consultant to undertake an economic analysis of sand and gravel resource availability from both the tidal and non tidal sections of the river.

DPI Consultation:
There was considerable disquiet over this proposal within DPI given the corporate direction towards sustainability and integrated catchment decision making with regard to sand and gravel extraction. The recently released study of sediment transport in the upper reaches of the Brisbane River valley suggest that annual suspended sediment transport was of the order of 100 000 Tonne above Wivenhoe Dam and below the dam in the reference area, this was all but negligible.

In the absence of any better measure, the annual movement of sediment has been adopted as a measure of the amount of material that can be extracted on a sustainable basis.

It was obvious that the quantum of the proposal greatly exceeded even the most optimistic estimate of sustainability, and posed a decision making dilemma quite apart from any hydraulic and water quality concerns.

The issue was discussed at a meeting on 2 August with the General Manager (Water and Catchment Management) together with the Regional Manager (Water Commercial) and various policy and technical advisory staff. The consensus was that DPI shouldn't allow the proposal to proceed in full measure.

CSR was advised that DPI wished to consider a lesser option and the General Manager (Water and Catchment Management) together with the Regional Director (SE Region) put a proposal to the company to the effect that certain amounts of extraction would be permitted at each site, but the extent of this would be determined by the residual profile of the site in completion of the operation. For each location this was negotiated viz.

Summerville Location
Bench in horizontally from the top of the high bank to the bottom of the batter below Summervilles fence (about 4m above low flow level). Remove the sand and pebble material to a maximum depth of 4 metres below the low flow water level and backfill and level off with the overburden.
Progressively rehabilitate.

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Sapling Pocket Location
Starting from a point about 4 m above the low flow channel, excavate to a maximum depth of 4 metres below water level and backfill with spoil to an even batter from this RL to the edge of the property boundary. (Remove what is left of the residual high bank). Progressively rehabilitate.

CSR considered this and sought an additional meeting on 24 August to discuss some of the detail. In the interim the company's legal advice was that the Sapling Pocket material still belonged to the Crown despite the recent resurvey of the area.

Here it was agreed that -

- DPI would provide detail of what it required with regard to rehabilitation
- DPI would be paid royalties for all material removed from the Sapling Pocket location
- District Manager, Brisbane would talk the issue through with -
  - DEH (NPWS)
  - DEH (EPA)
  - Pine Mountain Progress Association
- CSR would be willing to rehabilitate the area to DPI's satisfaction.

District Manager, Brisbane arranged for DEH (EPA) staff to visit the site to seek their views and requirements. Doug Carey (DEH) visited the site with DPI staff and advised that the existing operation, and the new proposals as verbally described to him appeared to comply with likely requirements under the Environmental Protection Act, and could see no reason why CSR would not be issued with a permit.

The District Manager (DEH) Central and Moreton was generally satisfied that the operation as described to him would not impact on the NPWS' management of Cameron's Scrub, and seemed relieved that the tentative recreation development proposals for Sapling Pocket had been withdrawn in favour of full rehabilitation.

The Secretary of Pine Mountain Progress Association was also extremely happy that the on-stream lake proposals and the attendant loss of the riverine vegetation had been averted. It would appear that this single element of the proposal was the group's major concern, having come to terms with the heavy traffic that moves daily between the site and the Tivoli plant.

General Analysis
Essentially the decision only involved 'off stream' extraction and was thus beyond the parameters of the sediment transport study. The department could thus be consistent with proposed directions in the upper reaches of the river.

Apart from the potential for inconsistency in approach upstream and downstream of Wivenhoe Dam, DPI's reasons for refusing the Waterworks Licence applications in their requested form were as follows :-

- The proposal was considered to have the capacity to substantially interfere with existing flow regimes

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- The proposal would eliminate the riparian vegetation from this whole section of the river, and potentially substantially alter the benthic fauna populations that this vegetation supported.
- The proposal gave serious cause for concern with regard to the quality of water that might result.

DISTRICT MANAGER
RESOURCE MANAGEMENT **10 October 1995**

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Release

The Readymix Group
CSR limited
A.C.N. 000 001 278
Mt. Crosby Road
Tivoli QLD 4305
Australia

PO Box 25
Ipswich QLD 4305

Telephone (07) 281 2944
Facsimile (07) 202 4899

29 .5 . 95 Encl:
Mrs Jean Bray
The Mayor
Esk Shire Council
P.O.Box 117
Esk. Qld. 4312

Dear Lady Mayor

Re: CSR Readymix Extractive Operations Esk Shire.

Further to my meeting with yourself and some of your Senior Adminstrative Officers on March 21st in relation to the above please be advised of the following developments with our applications.

1. **Brisbane River Lot 2 RP 131238 Sahl. Waterworks licence Application 56527**

Meetings between ourselves the QWRC and the DEH have identified further areas of the EIS from Kinhill that need more detail and these are currently being prepared. Other than the licencing requirement for a Category 1 operation DEH do not wish to duplicate involvement with this application and the downstream application on our own property within Ipswich City.

We would appreciate your Councils advice as to whether you consider that a new Extractive Industry Permit is required because of the now proposed scale of works. A copy of the existing Moreton Shire Permit is enclosed for your information.

Once an agreed final plan is conceived by the two State Regulatory bodies we will advise your Council to ensure that the plans are satisfactory to yourselves.

Hills Crossing Site,

We would wish to be considered in any plans your Council may have for the development of this site.

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2.

73(2)Irrelevant

Enclosed please find a copy of the Video footage as promised, whilst I would appreciate the return of the Video there is no rush so please use it as you need to.

Yours faithfully

R.G.Bendall.
Development Manager.
Brisbane Metro & Gold Coast Quarries.

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FACSIMILE TRANSMISSION

file

DPI
QUEENSLAND
DEPARTMENT OF PRIMARY INDUSTRIES
SOUTH EAST REGION

DATE: 4 AUGUST 1995

TO: CSR READYMIX

ATTENTION: ROWLY BENDALL

FACSIMILE NO.: 2024899

FROM: JIM DALE

Telephone: (07) 224 2928 Facsimile: (07) 224 2933

NO. OF PAGES (INCLUDING COVER):

MESSAGE SAPLING POCKET WATERWORKS LICENCE

Thank you for agreeing to meet with Mr Noonan and Mr Smith to discuss alternatives to the full measure of this proposal.

I confirm our appointment for 9.30 am on Friday 11 August on Floor 13, Mineral House.

49-Sch4 - Signature

JIM DALE

DNRM RTI DL Release

Enquiries to:
Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

BRISBANE DISTRICT OFFICE

DEPARTMENT OF PRIMARY INDUSTRIES

BRIEFING NOTE

DATE: 28 July 1995

REF. NO.: **(Our Ref.: 85671)**

FROM: A/District Manager (Resource Management)

TO: A/Regional Manager (Resource Management), South East Region
A/General Manager, (Water And Catchment Management)

SUBJECT: **ISSUE OF CONTROLLED QUARRY MATERIAL PERMIT CSR/READYMIX SAPLING POCKET**

RECOMMENDATION

It is recommended that

- No Waterworks Licence be issued.
- The Department adopt a policy which recognises that all sand and gravel removal downstream of Wivenhoe Dam be phased out over the next three years.

KEY POINTS

Sustainability

The Department of Primary Industries has committed itself to the concept of ecologically sustainable development as part of its corporate direction. Current thinking is that when this concept is applied to riverine sand and gravel the annual sustainable removal should be limited to the 'increment' or sediment yield added in from the catchment each year. The proposed removals are considered to be very much larger than this amount.

Effect of Wivenhoe Dam

The major accumulation of sand and gravel into the Brisbane River from natural fluvial processes occurs above Wivenhoe Dam by virtue of the size of the upstream catchment and the barrier effect of the dam. Downstream between Wivenhoe Dam and Sapling Pocket natural aggradation of sand and gravel would be minimal by comparison. All removals between the high banks at Sapling Pocket are in effect mining the active bed load which can only be replaced by excessive bank erosion in another part of the river.

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Consistency in Approach

In its development of working papers for the management of the resource upstream of Wivenhoe Dam, departmental opinion is firming to the view that extractions should be commensurate with the sediment yield of the river.

If the Sapling Pocket proposal was to proceed, it would be difficult to sustain this argument in the upstream area.

BACKGROUND

Sand and gravel has been removed from the Sapling Pocket area for many years, mostly from below the high banks, but more recently beyond the high bank and into Summerville's property. These operations have already scalped the large gravel bars within the two large river bends that are part of this licence application. Setting aside the material that might be available beyond the high banks however there is very little material left that can be extracted under the provisions of a controlled quarry materials permit without significantly affecting the current river flow.

The proposal to extract 250 000 m^3/a over twelve years seeks approval to completely remove these gravel bars to below water level, with a significant incursion beyond the high banks into Summerville's property and land currently owned by CSR-Readymix. Two large lagoons would ultimately replace these banks. The applicant has submitted a comprehensive proposal to support the licence application, and provided additional detail in response to specific queries raised by this office.

The applicant's submission deals adequately with the operational aspects of the proposal, but there are still departmental concerns with the removal of active bed loads and subsequent increases in stream velocity.

CONSULTATION

The applicant has had a number of formal and informal meetings with district, regional and specialist staff about the progress and detail of its proposal. An undertaking was given to provide an answer within a month of our receipt of the latest submission. I have extended this date to 4 August.

Informal discussions with Esk Shire representatives (West bank - Summerville property) suggest that Council will support which ever decision is made. The indications from Moreton Shire however are that Council will object to the decision to issue a waterworks licence on its side of the river.

DISCUSSION

CSR/Readymix is considering a significant upgrade of its Tivoli plant to counter local nuisance claims. Without the Sapling Pocket resource, this upgrading would not be viable, and if future access were to be denied, the plant would close with the loss of forty local jobs. CSR/Readymix is seeking a timely response either way to progress its planning.

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OPTIONS

Three options are apparent.

- Refuse the licence application and don't issue any further CQM permits.

  Consequences: Local loss of jobs, difficulties for the company in finding and setting up land based resources. Difficult for Department of Primary Industries to defend an argument of unfair treatment.

- Refuse the licence, but offer CQM permits for a further three years for reducing amounts of material.

  Consequences: Tivoli may have to close eventually but the company will have time to plan offstream harvesting. There will be further mining of active bed loads and possibly some difficulty in getting the company to fulfil its rehabilitation obligations at the finish.

- Approve the licence.

  Consequences: Department of Primary Industries will be compromising its management objectives upstream of Wivenhoe Dam given the size and duration of the proposal. There will be local objection to the increased heavy road traffic. The decision would likely be eschewed by the Brisbane River Management Group, and attract an objection from Moreton Shire Council.

Option 2 is preferred and if accepted the opportunity should be taken to phase out all existing downstream CQM permits over this period. No Controlled Quarry Material permits should be issued to new applicants.

DNRM RTI DL Release

J A Dale
DISTRICT MANAGER
RESOURCE MANAGEMENT

DEPARTMENT OF PRIMARY INDUSTRIES
OFFICE MEMO

Your Ref.: **Our Ref.:** 85671 (JD:KS)
Author: J Dale **Telephone:** (07) 224 2937 **Facsimile:** (07) 224 2933

DATE: 20 July 1995

TO: Distribution

FROM: A/District Manager (Resource Management)

SUBJECT: **CQM LICENCE APPLICATION - CSR / READYMIX SAPLING POCKET**

COMMENT

The consultants for the applicant will be meeting with resource management staff on Friday 21 July to ascertain our response to their most recent submission. Subject to our acceptance of these details, the applicant has been promised that a decision will be made within a month.

Normally such a decision would be made within the district, but in this case it is considered that there is a fundamental policy implication riding on the outcome.

With this in mind the A/General Manager (Water and Catchment Management) has requested I convene a meeting to clarify this department's stance given the potential flow on implications for other CQM applications within this and other districts.

This meeting will be convened on 2 August at 2.00pm in the 4th floor conference room in Mineral House and you are invited to attend.

J A Dale
A/DISTRICT MANAGER
(RESOURCE MANAGEMENT)

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SAPLING POCKET WATERWORKS LICENCE

MEETING

Present

P. Noonan, C. Robson, R. Spiers (Department of Environment and Heritage), A. Murray, R. Drury, B. Brogan, G. Eades, W. Poplawski, P. Johnston, G. Burgess

Date

2 August 1995

ISSUE 1 - DEVELOPMENT OF A STATE-WIDE POLICY

Resolution:

- There is a pressing need to develop either a broad statement of intent or a set of parameters for continued controlled quarry material extractions.
- Such a document would need to be approved by Cabinet.

Timing:

- By 31 October (3 months).
- To coincide with the release of Department of Primary Industries' position in response to the submissions received from the paper 'Sand and Gravel Resources of the Upper Brisbane and Lockyer Valleys - A Technical Information Paper'.

Responsibility:

Mr Johnston, (could Mr Mortiss be made available to begin collating these submissions please?).

ISSUE 2 - CSR-READYMIX WATERWORKS LICENCE APPLICATION

Resolution:

- This decision must be consistent with the Department of Primary Industries' approach upstream above Wivenhoe Dam.
- We have an obligation to advise CSR-Readymix of our response by 4 August.

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- The application in toto is 'not on' in terms of the volume to be extracted and current thinking with regard to sustainability.

- The concept of phase out needs to be addressed (no objection to the proposal for 3 years was voiced).

Timing:

- On 4 August advise Mr Bendall that

  * the full measure of the proposal will not be allowed

  * Department of Primary Industries would like to discuss lesser alternatives.

Responsibility:

Mr Dale to organise meeting with Mr Bendall, Mr Smith and Mr Noonan as soon as practicable. (Try for Friday 11 August, 9:30 a.m.).

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ISSUE 3 - REASONS FOR REFUSAL OF FULL LICENCE

Resolution:

- Department of Primary Industries' reasons for refusal are as follows

  * Sediment balance

  * Water quality

  * Effects on the environmental values of this part of the river

  * Likely inconsistencies with policy development outcomes through the Brisbane River Management Group

  * Objection by Pine Mountain Progress Association.

Timing:

- Inadvisable to release these to CSR-Readymix before discussing alternatives with the company.

- There needs to be an early consolidation of these arguments. (A current issues briefing for the Minister commissioned by Mr Noonan?)

Responsibility: Mr Poplawski, Mr Moller.

Meeting Closed: 4:15 p.m.

Release

MINUTES OF MEETING BETWEEN THE DEPARTMENT AND

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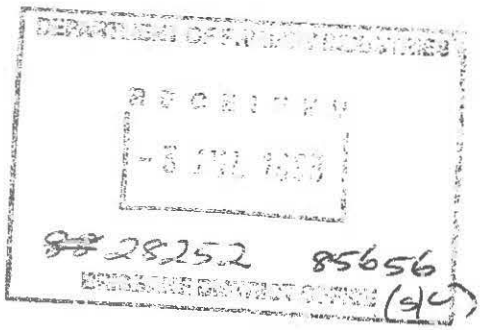
49-Sch4 - Signature

B.W. BROGAN

DNRM RTI DL Release

KINHILL CAMERON McNAMARA

Kinhill Cameron McNamara
Pty Ltd
ACN 009 865 927
299 Coronation Drive
PO Box 1197 Milton
Queensland 4064 Australia
Telephone (07) 368 9228
Facsimile (07) 368 9229



BC4608.503

27 June 1995

Department of Primary Industries
Water Resources
4th Floor
100 George Street
BRISBANE QLD 4001

Attention: Mr J Tibaldi

Dear Sir

RE: PROPOSED OPERATIONS AT SAPLING POCKET - FURTHER STUDIES

As discussed, attached is a draft report for a review by Water Resources prior to preparation of the final document.

Please contact me on 368 9201 re further progress with the report.

Yours faithfully

49-Sch4 - Signature

David Houghton
Manager, Environmental Studies

Enc: 1 copy Draft Report (Rev B)

c.c. Mr R Bendall, CSR Readymix

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Kinhill Cameron McNamara Pty Ltd
ACN 009 865 927

KINHILL CAMERON McNAMARA

TRANSMITTAL OF DOCUMENTS RECORD

Ref no. 28006

Project Additional Sapling Pocket Studies

Project number BC4608

To DPI - Water Resources

4th Floor 100 George St

(Organization's name and address)

Attention Mr. J. Tibaldi (Name of recipient)

Please find enclosed the following documents:

Quantity	Particulars	Document code	Rev. code
1	Draft Report	BC4608-503	B

DNRM RTI DL Release

These have been sent for: ☐ Approval ☐ Construction ☐ For comment ☐ Other ☐ Preliminary ☐ Quality assurance ☐ As requested ☐ Tender ☐ Use ☑ Information

Comments

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Delivered by Date

Received by Date

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PINK COPY TO ORIGINATOR
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System P1-11 Form P1-11-3 Rev. 1 (6/94)

Kinhill Cameron McNamara Pty Ltd
ACN 009 865 927

KINHILL CAMERON McNAMARA

TRANSMITTAL OF DOCUMENTS RECORD

Ref no 28006

Project Mitchell Sapling Pocket Studies

Project number 2 C 9 6 0 2

To DPI - Water Resources

4th Floor 100 George St

(Organization's name and address)

Attention Mr. J. Tibaldi

(Name of recipient)

Please find enclosed the following documents

Quantity	Particulars	Document code	Rev code
1	Draft Report	R 960-02	B

DNRM RTI DL Release

These have been sent for ☐ Approval ☐ Construction ☐ For comment ☐ Other ☐ Preliminary
☐ Quality assurance ☐ As requested ☐ Tender ☐ Use ☑ Information

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Kinhill's office of origin

49-Sch4 - Signature

Sent by Date 27/6/95

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Brisbane City Council
GPO Box 1434
Brisbane Qld 4001
Facsimile 229 1168

Brisbane City

Contact Name: Mr S. Bagraith
Telephone: (07) 225 6952
Fax: (07) 225 6765
Your Ref:
Our Ref: SB:TT

DEPARTMENT OF PRIMARY INDUSTRIES
RECEIVED
- 5 MAY 1995
27065 85656
BRISBANE DISTRICT OFFICE

28 April 1995

A.D. Murray
District Manager
DPI - Water Resources
GPO Box 2692
BRISBANE Q 4001

49-Sch4 - Signature

Attention: Mr J Tibaldi

Dear Sir,

DNRM RTI DL Release

Proposed Extraction Operations at Sapling Pocket, Brisbane River - CSR Readymix

Reference is made to your letter dated 1 February 1995 inviting comments from Council on the CSR Readymix application for a proposed Waterworks Licence and Controlled Quarry Material Permit at Sapling Pocket, Brisbane River.

As you are aware Council has a major water treatment plant at Mt Crosby which is only some 20 kilometres downstream of the proposed CSR Readymix operation. The extraction operation has the potential to significantly degrade the Brisbane River water quality particularly in respect to river water turbidity and increase the cost of water treatment at the Mt Crosby plant. Other threats to Council's operations at Mt Crosby may be posed through inadequate management of on-site storage of petrol, oil and other chemicals at the proposed CSR-Readymix operation.

If a Waterworks Licence is to be granted for this site then it is suggested that conditions be imposed on the permit to minimise the risks to Council's water treatment operation at Mt Crosby. Some conditions to achieve this goal are discussed below.

- A water sampling programme to monitor turbidity levels immediately upstream (baseline) and downstream of the CSR-Readymix operation. The programme to continue for the full life of the project and some time beyond the complete rehabilitation of the work site's.

- The allowable increase in downstream turbidity levels of 25 to 50 NTU suggested by Kinhill Cameron McNamara (page 40) would seem to be very high for an assumed upstream ambient turbidity level of 5 NTU. A better approach may be to develop acceptance criteria in terms of permissible increase in downstream turbidity as a percentage of the ambient turbidity level. It is suggested this permissible percentage increase should be kept below 20% at approximately 2km downstream from the proposed CSR-Readymix working.

- Any increase in turbidities resulting from the gravel extraction will cause an increase in cost of water treatment at the Mt Crosby Water Supply Treatment Plant. These costs are listed below:

Turbidity Range in NTU units	**Cost per unit NTU increase per megalitre of Plant output**
0 to 10	$ 0.50
10 to 25	$ 0.25
25 to 50	$ 0.15
50 to 100	$ 0.05

It is therefore a Council requirement that CSR Readymix be required to meet any increase in treatment costs and that this extra cost be assessed using the above tabulation, indexed for CPI.

- It is important that compliance with the Permit conditions be monitored by DPI Water Resources or a contractor independent of the Licence Operator and penalties be defined for any violation of the conditions. Stop Work and Rehabilitation Work requests should form part of these penalties.

- The frequency of the inspections should be irregular, unannounced and over an extended period average at least once a month. On these visits the inspectors should also take the opportunity to inspect for good management of the site with respect to storage of petrol, oil and any other chemicals that may be used by the operator.

- The proposed 1:3 batters in the extraction area are considered steep and my lead to excessive erosion during flood flows. Slopes of 1:4 or greater may be more appropriate.

Other concerns include:-

- The proposal has failed to adequately address the impact on sand cut-off from future downstream supply in respect to long term river bed degradation below the CSR-Readymix operations.

- The weirs proposed will need to function for a significant period beyond the excavation period. Who would fund ongoing maintenance/removal?

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- The proposed Advisory Body which will consist of CSR Readymix personnel, the environment and hydrological consultants and representatives from various government bodies and the local community appears to lack a clear charter defining its powers and objectives. It may also be appropriate to have an Executive Body composed of technical representatives of Department of Primary Industries, Environment and Heritage, Brisbane City Council and Esk Shire Council to receive recommendation from the Advisory Board and the Monitoring Agency. This Executive Body having the power to order cessation of works, the imposition of penalties and the implementation of rehabilitation works. These issues should be addressed prior to the granting of a Permit.

- The obtaining of bank guarantees for an amount of money that would cover some level of rehabilitation and all monitoring expenses.

Should you wish to discuss these proposals further or propose new alternatives that may help to reduce the risk to Councils operations at Mt Crosby Water Treatment Plants please contact Mr Jack Clerke on 225 4492.

Yours faithfully,

49-Sch4 - Signature

Rod Jackson
A/Director of Planning and Design
DEPARTMENT OF WATER SUPPLY AND SEWERAGE

DNRM RTI DL Release

IPSWICH CITY COUNCIL

Administration Building 50 South Street Ipswich Queensland

IPSWICH

HERITAGE CITY

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BRISBANE DISTRICT OFFICE

Your Reference:
Our Reference: F. 3806/3, 6570 L.502387, 502736 MJO:VML
Contact Officer: Rob Hooper
Telephone No.: 280 7863 (Yamanto Office)

49-Sch4 - Signature

27 April 1995

Dear Mr Drury

Re: Proposed Extractive Industry at Sapling Pocket By CSR-Readymix

I refer to the proposed extractive industry at Sapling Pocket by CSR-Readymix.

Following Council's consideration of this matter at its meeting held on the 26 April 1995 I wish to advise that Council has now received legal advice that new Council approvals are required for the proposed CSR-Readymix extraction operations at Sapling Pocket covered by Waterworks Licence Application Numbers 56526 and 56527.

Yours faithfully

49-Sch4 - Signature

Cec Forbes
SHIRE ENGINEER

DNRM RTI DL Release

Mr R J Drury
District Manager
Department of Primary Industries
Water Resources, Brisbane District
GPO Box 2692
BRISBANE QLD 4001

Please Address All Correspondence to:
CHIEF EXECUTIVE OFFICER
IPSWICH CITY COUNCIL
PO BOX 191 IPSWICH QLD 4305
TELEPHONE: (07) 810 6666 • FAX: (07) 810 6731

IPSWICH - AN ENVIRONMENT & HERITAGE CONSCIOUS CITY

IPSWICH CITY COUNCIL

Administration Building 50 South Street Ipswich Queensland

IPSWICH

HERITAGE CITY

DEPARTMENT OF PRIMARY INDUSTRIES
RECEIVED
-2 MAY 1995
26976 85656
BRISBANE DISTRICT OFFICE

Your Reference: 85656
Our Reference: F.3806/2, L.502829 MJO:VML
Contact Officer: Rob Hooper
Telephone No.: (07) 280-7855 (Yamanto Office)
Fax: 07 280 7802

49-Sch4 - Signature

28 April 1995

Dear Mr Drury

Re: Proposed Onstream Lakes - Sapling Pocket, Brisbane River

I refer to your letter dated 27 March 1995 addressed to CSR-Readymix Limited on their Waterworks Application No's. 56526 and 56527 to form onstream lakes at Sapling Pocket on the Brisbane River.

Following Council's consideration of this matter at its meeting held on the 26 April 1995 I wish to advise that your comments to CSR-Readymix on its Sapling Pocket proposal have been noted and that Council requests to be kept advised of any further developments in this matter.

Yours faithfully,

49-Sch4 - Signature

for CEC FORBES
Shire Engineer

DNRM RTI DL Release

Mr R J Drury
District Manager
Department Primary Industries
Water Resources
GPO Box 2692
BRISBANE QLD 4001

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IPSWICH CITY COUNCIL
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Queensland
Department of
Environment and Heritage

Southeastern Region
64-70 Mary Street • Brisbane Queensland • GPO Box 2771 • BRISBANE QLD 4001
Telephone (07) 224 5520 • Fax (07) 224 5411

Enquiries to D. Jones
Telephone (07) 202 0234
Your reference 113152
Our reference 156106

13 April 1995

Memorandum A. Don, Regional Manager (QNPWS/CS)

Subject CSR - Proposed extraction operations at Sapling Pocket.

DNRM RTI DL Release

In response to the issues raised in the DPI Water Resources (DPIWR) letter of 6 March 1995, I advise the following:

Statutory issues:

The Moreton Shire Council has written to DPI WR objecting to the proposal, advising it has very serious concerns over the proposed extraction operations and the possible need for new Town Planning Consent or at least a new Extractive Industry Permit because of the variation in the nature and scope of the works.
Council has advised that: "Approvals have been granted previously by Moreton Shire Council for extractive industry operations on the two parcels of land. However, the scope of works for which approval was originally given is to be significantly extended under this current proposal".

The amalgamation of Ipswich and Moreton councils has resulted in the proposed extraction area being bisected by the Brisbane River into the new council areas of Ipswich City and Esk Shire. New approvals from both local authorities are now required by DPIWR.

Water Quality:

Under the provisions of the new Environmental Protection legislation the proposal must be licensed as an Environmentally Relevant Activity level 1.

General Layout:

Further to my comments in memo of 17 February 1995, the Moreton Shire Council has raised similar concerns regarding embankment slopes.

Proposed Rehabilitation / Landscaping Measures:

No further comment can be made without the detailed rehabilitation program.

.../2.

Release

Future Maintenance Responsibilities:

DPIWR require all future maintenance responsibilities to rest with the applicant through conditions of the Licence. No detail is given on licence surrender following extraction and rehabilitation works (17 years). Additionally, the matters of future land use and management are not addressed.

Flora and Fauna:

DEH was requested to comment on the assessment study, not on whether the licence should be issued by DPIWR. The study clearly identified significant disturbance to the habitat and in-stream biota without providing detail on how the impacts were to be mitigated. Without this detail, the level of impact cannot be appropriately assessed, thus drawing the conclusion that the works should not proceed. However, this is a decision for DPIWR to make.

Land Use / Recreation:

Licence conditions generally only apply for the duration of the licence. Long term land use initiatives are not adequately considered in the proposal and would not normally be subject to an expired Water Works Licence or Controlled Quarry Material (CQM) Permit.

Extraction Works Effects:

The study makes mention of the temperature moderating effect of riparian vegetation overhanging the watercourse. This is the singularly most important issue as the riparian vegetation not only filters water inflow, stabilises the erosion and siltation dynamics, and provides essential features of the habitat structure, but it also regulates insolation penetrating the aquatic system and reradiation of heat to the night sky. A large shallow expanse of water with no canopy protection from sunlight or the night sky is subject to significant temperature and light variations, resulting in stratification of the water, proliferation of light seeking water plants and an inhospitable environment for aquatic fauna.

DNRM RTI DL Release

With respect to the recommendations:

1. One hundred metre wide buffer zone:

The extractive operations will subject the riparian vegetation to impacts on both the river and the terrestrial fringes. The natural processes of the river cause erosion and accretion of the banks resulting in diminution and regeneration of vegetation while non-natural interference from human activity, vermin and weeds tend to degrade the riparian areas.

The impacts of the extractive operations abutting the riparian zone cause:

- removal of coexisting forest types;
- fragmentation of habitat;
- noise, dust, vibration;
- introduction of weeds and pests (native and exotic);
- access for human activity; and,
- increased potential for erosion.

.../3.

Release

The 100 metre wide buffer therefore takes into account the fringe effects on each side of the river and is the suggested minimum buffer width between activity areas and water courses as detailed in the "Exploration and Mining in Watercourses" Guideline prepared by the Department of Minerals and Energy. (copy attached as appendix 1).

The guideline identifies the proposed activity as "very high impact potential" for:

- damming or watercourse diversion;
- excavation of or near banks;
- extensive riparian clearing;

and as "high impact potential" for

- large scale works;
- long term (>6 months) works; and,
- significant riparian clearing.

As part of the State Planning Policy on Nature Conservation, the draft document titled "Corridor Guidelines for Nature Conservation" addresses suitable corridor widths in the context of land availiability and adjacent land uses while suggesting widths greater than 100 metres are desirable. (copy attached as appendix 2).

The paper titled "Riparian Zone Management in Queensland and the Northern Territory: Policy and Practice" by Paul Sattler, DEH, provides clear guidelines and justification for riparian zone protection and recommends stream buffer widths of 100 - 250 metres from the top bank of the outer stream channel. (copy attached as appendix 3).

Recent and proposed amendments to legislation in Queensland concerning protection of riparian lands suggest that new legislation will determine the land use options for all riparian zones including those areas that previously had no protection whatsoever.

A 100 metre wide buffer each side of the river channel is therefore reasonable for the protection of riparian values.

2. Cessation of Works on the northern end of Sapling Pocket:

It is uncertain what approvals were granted for this activity. DPIWR should advise on the permits pertaining to the area.

The Extractive Industry Permit issued by Moreton Shire permitted excavation down to a level of 2 metres minimum above normal river height with the area of extraction limited to the Crown land adjacent to Portion 495. The Extractive Industry Permit was issued in accordance with these parameters and did not include excavationtion to or below water level. The approvals for the Summerville's land again were for extraction from a specific area, to a depth of not lower than 4 metres above normal river height.

3. Measures to protect the riparian zone:

As the proposed extraction activity will remove a significant portion of the existing riparian zone with the threat of destabilising the remaining vegetation, outright refusal of the licence application must be considered.

49-Sch4 - Signature

Des Jones
District Manager (Central Moreton)

DNRM RTI DL Release

27 March 1995

The Readymix Group
CSR Limited
PO Box 25
IPSWICH QLD 4305

Attention: R G Bendall

Dear Sir

PROPOSED ONSTREAM LAKES - SAPLING POCKET, BRISBANE RIVER WATERWORKS LICENCE APPLICATION NUMBERS 56526 AND 56527

The Environmental and Hydraulic Assessment Studies which your Company submitted to support the above waterworks licence applications have been assessed by this Department and other relevant agencies. As detailed below, serious concerns have been expressed in relation to the potential environmental impacts of the proposal, and further information would be needed before a final decision on the licence applications could be made.

You should be aware that supplying the further information requested does not imply that the licences will be issued. Compelling evidence to show that the proposal will not cause unacceptable environmental impacts would be needed for approvals to be given.

Following is a summary of the further information required. This Department is prepared to meet with your representatives and your hydraulic and environmental consultants to discuss these requirements. Such a meeting can be arranged by contacting Mr John Tibaldi on 224 2724.

DNRM RTI DL Release

1.0. Proposal Justification and Evaluation of Alternative Options

As discussed at a recent meeting with you at Nambour, it would also be of assistance to the Department in its deliberations if information could be provided regarding the economic significance of the material proposed for extraction, alternatives for obtaining this material from other sites and the economic impacts and implications of refusal of the licence applications.

2.0 Local Authority Requirements

It is strongly recommended that relevant approvals from the new Ipswich City Council and the Esk Shire Council be sought as soon as is practical to allow your application to be further considered by this Department.

Enquiries to: Mr J Tibaldi Telephone: (07) 224 2724 Your Ref: Our Ref: 85656
Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

WATER RESOURCES
BRISBANE DISTRICT

Release

3.0 Hydraulic Model

3.1 Sensitivity Analysis

The estimates of velocity contained in the report are somewhat higher than expected, especially for the lower flows.

A possible explanation for the high estimates of velocities is the assumed distribution of flow between the main channel and the overbank sections of the River. The report has adopted Mannings roughness coefficients of 0.040 for the main channel and 0.070 for the overbank sections. A sensitivity analysis of the relative roughness between the main channel and the overbank sections may indicate more suitable flow distributions and estimates of velocities in the main channel that are more realistic.

The assumption of flow distribution between the main channel and the overbank sections is important in the design of the proposed weirs. The present configuration may underestimate flow in the overbank sections, whilst overestimating the carrying capacity of the main channel. Additional sensitivity tests need to be conducted using a hydraulic model in regard to the relative roughness of main channel and overbank sections. Ranges of roughness coefficient from 0.030 to 0.080 could be examined in combination for both the main channel and the overbank sections.

DNRW FTI DL Release

3.2 Failure to Adequately Model Proposed Weirs

The proposed weirs A and B are central to the proposal, and yet it appears that they have not been properly taken into account in the hydraulic model. Figure 4.4 in the report shows unusual water surface profiles with water levels increasing downstream over several hundred metres for the two, five and ten year ARI events. This seems to indicate that the cross section inputs into the hydraulic model are too widely spaced around the proposed weirs. Cross sections immediately upstream, immediately downstream and at the weir itself normally need to be input to properly model the effect of weirs. This issue needs to be addressed.

It also appears that the flow breakout at the weirs has not been adequately modelled for dry weather flow and for the two to ten year ARI events. It is also unclear whether the flow separation routine in HEC2 was used. Both of these issues need to be addressed.

4.0 Sedimentation

The proposal is likely to have a major impact on the transport of sediment in the River, and yet the report has provided little comment on this issue. A fluvial process model needs to be used to determine how areas of the River upstream and downstream of the site will respond to the extraction. The impact of Wivenhoe Dam which has depleted the sediment supply in this reach of the River needs to be accounted for in these investigations.

Release

It is quite likely that the bed will tend to erode to find a new equilibrium when the works are complete, and this important issue needs to be addressed.

5.0 Overall Stability of the Finished Works

The report has not adequately examined the overall stability of the finished works. The stability of the following areas needs to be investigated and, if necessary, erosion protection works need to be included as part of the overall proposal.

5.1 Upstream Areas

An increase in the water slope at the entrance of the proposed lakes will increase the power of the River to erode its bed. This type of erosion may occur up to several kilometres upstream of the site. The possibility of such upstream erosion (also referred to as headcutting or "knick point" migration) needs to be examined, and if necessary remedial measures to combat these effects are to be outlined.

5.2 Downstream Areas

It is expected that aggradation will occur in the lakes due to a large decrease in velocity during flood events. As a result the downstream reach will be sediment deficient, thereby upsetting the sediment transportation-supply equilibrium. The River will then tend to cause degradation/erosion downstream of the lake in order to satisfy this deficiency. These issues must be examined and addressed.

5.3 Proposed Weirs

It appears that the proposed weirs are designed for a two year ARI event, with a head drop of 0.2 m and 0.9 m for Weirs A and B respectively. However the modelling results show that up to 2m of drop is possible. (See Section 4.3.6). This issue needs to be addressed.

Also, the weirs are located at the direct path of "knick point" migration and this process cannot be modelled using HEC2, as most of the erosion is done by secondary/eddy flows. This issue needs to be addressed.

5.4 Critical Areas at Adjoining Properties

With the proposed change in the flow alignment during high flows, the areas in the vicinity of Cross Section 4 (Left Bank), Cross Sections 20 and 21 (Right Bank) may be vulnerable to bank erosion (refer to Figure 3.5 of the report for locations). Depending upon the stability of the bank ~~and~~, some protection may be necessary. This issue needs to be addressed.

DNRM RTI Dc Release

Release

5.5 Narrow strips of Land proposed between the Lakes and the Existing Low Flow Channel

Whilst these parcels of land are left unexcavated for their conservation values, the stability of these areas must be questioned during the passage of any subsequent floods as these areas lie in the path of maximum velocity. This issue needs to be addressed.

5.6 Batter Slopes

A justification for the batter slopes proposed needs to be provided.

6.0 Proposed Rehabilitation/Landscaping Measures

The aims of the rehabilitation of the proposed lake banks are not specifically stated, but the inference is to have planting densities and plant species which reflect the existing vegetative cover. This is not appropriate as rehabilitation should occur to a standard which promotes stable river banks and creates viable habitats for flora and fauna which is in keeping with the undisturbed native vegetation of the site.

A rehabilitation program needs to be submitted which details a planting strategy to achieve an appropriate riparian vegetation zone around the entire lake frontages. Behind this zone there should be a buffer of at least 30 metres of vegetation which is native to the area and reflects the remnant species present on site.

Additionally, it is not acceptable to use a weed species (Rhodes grass) to stabilise the batters as specified in the report.

The rehabilitation program should also include details for excluding stock from the works area entirely. If this causes problems with access for stock for water then provision for offstream watering or for dedicated watering access to the River should be provided.

7.0 Topography and Landscape Features

Following completion of the proposed work, the final landform and stream form should be such that the River retains its basic characteristics. These characteristics are represented in Figure 3.5 of the report which details existing rapids, pools and runs between the rapids. The proposed arrangement on "Sapling Pocket" would appear to be satisfactory as it does not greatly change the low flow path or form, but creates a lake/backwater off the main channel. However the proposed final form of the "Sommerville's Land area" would produce an area which is significantly different from the existing channel by creating a large on stream lake, where previously there were rapids, runs and pools. This is not acceptable and an alternative proposal needs to be submitted which retains the existing rapids, pools and runs of the normal flow channels at both locations.

DNRM RTI Release

8.0 Flora

The section on flora contained in the report lacks supporting evidence for claims of areas of lesser or greater significance of conservation value. There is need for reasons for reaching these findings to be further presented.

9.0 Fauna

The Nature Conservation (Wildlife) Regulation 1994 does not list the short-necked tortoise (*Emydura signata*) in any of the categories under the Act. Therefore there is no specific management plan in place for this species. There is however a duty of care to ensure that there is as little impact as possible upon all species present on the site. A fauna management plan to outline proposed actions to manage these impacts needs to be presented.

Platypus (*Ornithorhynchus antinus*) is declared a 'Common Wildlife' for which the Act states a Declared Management Intent which 'includes ensuring governments have regard to the special cultural significance of the wildlife and the management requirements needed to conserve existing populations of the wildlife'. Therefore all due care should be taken to ensure the platypus identified on site are not threatened in any way by the proposed operation. This issue must be addressed.

10.0 Environmental Management Plan (EMP)

If this project is to proceed there must be specific management plans developed which spell out exactly what is proposed to be done, including timing, materials, plant species, maintenance and all other matters such that some measures of success can be determined and monitored. Details of some of the major components for this plan follow. It is suggested that a framework and more detailed guidelines for the development of an EMP could be obtained by contacting the Department of Minerals and Energy in regard to their environmental management system (EMOS/Plan of Operations).

10.1 Future Maintenance

All responsibility for future maintenance of the site will be with the waterworks licence holder, and not with the Department of Primary Industries as stated in the report. A plan specifying how future maintenance of the works is to be addressed must be submitted. Specific emphasis must be given to providing a maintenance program for the works proposed to "flush" the lakes.

10.2 Contingency Plans

As failure of the weirs or bunds, or the severe deterioration of water quality in the finished lakes may have major adverse environmental impacts, contingency plans to address these issues should be contained in the EMP.

DNRM ETI DL Release

Release

10.3 Monitoring

A plan for monitoring water quality, stability of bed and banks, flora, fauna and habitat creation must be presented. The plan should include details of remedial measures should monitoring indicate unacceptable impacts.

I trust the above will be of assistance to you in proceeding with your licence applications. Please contact John Tibaldi if you need any further assistance.

Yours faithfully

49-Sch4 - Signature

R J Drury
DISTRICT MANAGER

B/C: Esk Shire Council
PO Box 117
ESK QLD 4312

B/C: Moreton Shire Council
Locked Bag No 1
YAMANTO QLD 4306

DNRM RTI DL Release

FACSIMILE TRANSMISSION

DPI
QUEENSLAND
DEPARTMENT OF
PRIMARY INDUSTRIES
SOUTH EAST
REGION

DATE: 18 APRIL 1995

TO: CSR READYMIX

ATTENTION: R. BENDALL

FACSIMILE NO.: 202 4899

FROM: J. TIBALDI

Water Resources, Brisbane District
Telephone: (07) 224 2928 Facsimile: (07) 224 2933

NO. OF PAGES (INCLUDING COVER): 7

MESSAGE FOLLOWING IS THE INFORMATION YOU REQUESTED FOR YOUR MEETING WITH DEH.

I HAVE DISCUSSED THIS MATTER WITH MR A. DON ON A NUMBER OF OCCASIONS, AND HE CAN BE CONTACTED FOR FURTHER ADVICE BY PHONING 07 224 7075.

49-Sch4 - Signature

DNRM RTI DL Release

Queensland Department of Environment and Heritage

Southeastern Regional Office • 56-62 Mary Street • Brisbane Queensland • GPO Box 2771 • BRISBANE QLD 4001
Telephone (07) 224 5641 • Facsimile (07) 225 8723

Enquiries to Mr Don
Telephone (07) 224 7075
Your reference 85671
Our reference 113152

28 February 1995

Mr A.D. Murray
District Manager (Brisbane District)
Water Resources
Department of Primary Industries
GPO Box 2692
Brisbane Q 4001

Dear Sir

Re: Proposed extraction operations, Brisbane River

Your letter of 19 January 1995, and my discussions with Mr John Tibaldi refer.

Attached are comments on the assessment study for the proposed Sapling Pocket extraction operations from the Region's Conservation staff. Comments from the Environment Division are still in preparation. I have asked that they be completed as soon as possible, knowing that your Department is keen to complete assessment of inputs from other agencies. As soon as the comments are available, I will have them brought to your office.

Yours faithfully

49-Sch4 - Signature

Alan Don
Regional Manager
Queensland National Parks & Wildlife
Service/Conservation Strategy
Southeastern Region

DNRW RTI DL Release

March 1995

The Readymix Group
CSR Limited
PO Box 25
IPSWICH QLD 4305

Attention: R G Bendall

Dear Sir

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DNRMRTIDL Release

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WATER RESOURCES
BRISBANE DISTRICT

Release

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DRAFT DE Report

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DNRM RTI DL Release

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DNRM RTI DL Release

Release

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DNRW01D Release

Release

10.3 Monitoring

A plan for monitoring water quality, stability of bed and banks, flora, fauna and habitat creation must be presented. The plan should include details of remedial measures should monitoring indicate unacceptable impacts.

I trust the above will be of assistance to you in proceeding with your licence applications. Please contact John Tibaldi if you need any further assistance.

Yours faithfully

49-Sch4 - Signature

R J Drury
DISTRICT MANAGER

B/C: Esk Shire Council
PO Box 117
ESK QLD 4312

B/C: Moreton Shire Council
Locked Bag No 1
YAMANTO QLD 4306

DNRM RTI DL Release

DNRM RTI DL Release

Readymix

Setting the Standard

With Compliments 23-3-95

JOHN

COPIES OF CORRESPONDENCE RE SAPLING POCKET & SUMMERVILLES.
HIGH LEVEL MEETING WITH DEH NOW SET FOR APRIL 19TH. FINANCIAL IMPLICATION REPORT SHOULD BE OUT BY EASTER. REGARDS

The Readymix Group
CSR limited
A.C.N. 000 001 276
Mt. Crosby Road
Tivoli QLD 4305
Australia

PO Box 25
Ipswich QLD 4305

Telephone (07) 281 2944
Facsimile (07) 202 4899

49-Sch4 - Signature

DEPARTMENT OF PRIMARY INDUSTRIES
RECEIVED
24 MAR 1995
26586 85656
BRISBANE DISTRICT OFFICE

Wilderness Escapes PTY. LTD.
A.C.N. 061 002 337
"Escape to Adventure"

COPY ONLY

23rd February, 1995

Mr R. G Bendall
Development Manager
The Readymix Group
P.O. Box 25
Ipswich Qld 4306

Dear Rowly,

Thank you for the time given to me by Clarry Hoffman and your self during our recent meeting and tour of your operations. I found our discussions most informative and wish to congratulate you on your efforts in ensuring that CSR's extractive operation on the upper reaches of the Brisbane River are conducted with the aim of minimum impact to the riverine environment while maintaining an efficient and cost effective operation.

It is unfortunate that owing to time restraints for television segments, that my original interview on the 7.30 report was edited and that CSR Readymix appeared to be the main offender or culprit in the past damage or future threat to the river. I also truly believe this was not the ABC's intention either ,as the overall aim of the segment was to highlight the damage done in the past and the very real threat to its future by all operations. Some of which have never shown or are likely to (with out considerable pressure) any concerns for the impact their operations have on the surrounding and downstream environment and eco - systems. I deeply regret that the one company (CSR) that is attempting to 'do the right thing' appeared to be the only villain. Perhaps one day I can assist in setting the record straight.

My unedited interview would show that I said and **do honestly believe** that extractive mining plays an important roll in our economy and is vital for the progress and building of our country, but all such activities should be done with respect and minimum impact to our environment. Also for the record, I at no stage mentioned your company and all filming was done from the river for which we have a permit. The only place we landed and filmed was the section just down river from Hills Crossing which was not being worked at the time. This section was used as an overall example as it was readily accessible and was used on weekends by the general public, in particularly children. As it was neither signposted as private property or had any warning signs concerning safety or the danger of the banks collapsing and fulfilled our requirements in general of the main method of extraction which is proven to be the most damaging to the river eco system. This site was also selected because it could **not** be readily connected with any particular company from its television image.

My desire to protect and preserve this river and its eco system (and my reason for appearing on the 7.30 Report) is based on the belief that enough damaged has been done already. The Brisbane River is one of the oldest rivers on earth (500 million years) and besides being Brisbanes water supply, its value to the people of Sth East Queensland for sport recreation and tourism and sheer natural beauty and abundant exotic wildlife far out way its use solely for extractive mining. I do honestly believe there is a need and room for both but neither one at the expense of the other.

DNRW RTI DL Release

P.O. Box 340, Lutwyche, Qld. 4030 Mobile: 018 067 222 Phone: (07) 359 3486

I also believe we are both aware that the pressure to develop the upper fresh water reaches of the Brisbane River from industry will increase as existing areas on the lower reaches are worked out or closed down due to pressure from environmental groups or government. Since the 7.30 Report, overall public awareness on the threat to the river has increased and numerous conservation groups are now taking an interest in the preservation of the upper reaches and its eco systems. I feel that CSR's and your effort in conducting your operations will meet with favourable response and the success of the rehabilation projects we discussed will result in CSR being used as a positive example of how such extractive industry can indeed work on and be of a long term benefit to the upper Brisbane River.

In the near future our company will be conducting a workshop on the upper reaches comprising of a two day kayak trip from Wivenhoe Dam to Kholo, This work shop will be attended by representives of various Government Depts, Councils, Conservation Groups such as Greening Australia and Tourism Industry representives with the view of both preserving the river and developing its potential for sport, recreation and tourism. Areas up for discussion will include such topics as Current Use, previous ecological damage, wildlife habitat preservation, Government Grants and Funding available for rehabilitation projects or developing existing camping and picnic facilities Developing a low impact eco tourism strategy and hopefully establishing the best canoe trail in the world. I feel that as CSR is currently the largest company involved in extractive mining and is the only one to commence effective rehabilation and environmental preservation of its existing works and area inherited through mergers etc. That not only should you be given the opportunity of putting your case but the workshop would also make an excellent forum for your company to display its environmental awareness. I would therefore like to invite you or a representitive of CSR to partake in the workshop. I will contact you in a few days by telephone to discuss the workshop. and will keep you posted on developments as the workshop is finalised.

In regards to the matter of a key to allow us access to the river via your road access, I would like to re interate that this key would be used to gain emergency access to the river in the event of and accident and would only be used during an emergency situation after hours (eg weekends public holidays) We are more than happy to sign an agreement stating the above and releasing CSR of any liability, we would also guarantee never to lend the key or allow access to unauthorised personnel to or through your land or leases.

Once again , I thank you for the time and the tour of your plant and look forward to your assistance in ensuring that the development of the upper Brisbane River is not only ecologically sound but meets the requirements of the wildlife, the people and industry.

Kind Regards

49-Sch4 - Signature

Steve Parsons

DNRM RTI DR Release

COPY ONLY

The Readymix Group
CSR limited
A.C.N. 000 001 276
Mt. Crosby Road
Tivoli QLD 4305
Australia

PO Box 25
Ipswich QLD 4305

Telephone (07) 281 2944
Facsimile (07) 202 4899

14 . 2 . 95

John Bisset
Queensland Canoe Federation
P.O. Box 79
Sherwood
Q. 4075

COPY ONLY

DNRM RTI DL Release

Dear John

Shown below is the suggested sign we are to have made and erected upstream of our haul road bridge at Sapling Pocket. If you consider the sign is suitable please advise what Federation Logo you would wish us to put on it as well as the size and position that the logo should be on the sign.

DANGER

BRIDGE AHEAD

DISEMBARK AND PORTAGE UNDER BRIDGE RECOMMENDED

'LOGO OF QUEENSLAND CANOE FEDERATION.'

Yours faithfully

Sent 14.2.95

R.G.Bendall.

Release

10 . 3 . 95

Vim Balachandran
The Shire Engineer
Esk Shire Council
P.O.Box 117
Esk. Qld. 4312

The Readymix Group
CSR limited
A.C.N. 000 001 276
Mt. Crosby Road
Tivoli QLD 4305
Australia

PO Box 25
Ipswich QLD 4305

Telephone (07) 281 2944
Facsimile (07) 202 4899

Dear Vim,

Re:- CSR Readymix Lease Area from Summerville & Bernitt
Lot 2 RP 131238 Parish of Sahl County of Stanley
Waterworks Licence application 56527 April 1994

Further to my telephone conversation with you this week and our planned meeting at 11am on Tuesday 21st. March 1995 at the Esk Shire Office I wish to confirm the purpose of the meeting.

CSR Readymix and its wholly owned subsiduary Sellars Holdings have for the past 30 years extracted sand and gravel from side and point bars within Crown Land in the defined bed and banks of the Brisbane River. This extraction of material has taken place under the authority of a Controlled Quarry Material Permit or a Waterworks Licence issued by the Water Resources Commission. Royalty is paid to that Commission on a monthly basis.
Moreton Shire Council issued an Extractive Industry Permit in relation to the Extraction in 1978 and it was renewed in 1988. A Road Maintenance Levy is paid on an annual basis to Moreton Shire. This whole operation and the operation of the Tivoli crushing and screening plant is now under threat because of pressure group media contact and it's political effect.

I wish to explain to your Professional Staff and your Council the reality of the situation as it exists at Lot 2 RP 131238 Parish Of Sahl in order to ensure that a balanced judgement is made in relation to the application currently before the Water Resources Commisssion .
This application has been outstanding for some twelve months.

I will bring to the meeting the relevant details and correspondence in relation to the proposal and I look forward to meeting with you then.

Yours faithfully

COPY ONLY

R.G.Bendall.
Development Manager.
Brisbane Metro & Gold Coast Quarries.

DNRM RTI DL Release

KINHILL CAMERON McNAMARA

Kinhill Cameron McNamara
Pty Ltd
ACN 009 865 927
299 Coronation Drive
PO Box 1197 Milton
Queensland 4064 Australia
Telephone (07) 368 9228
Telex AA41529
Facsimile (07) 368 9229

BC4608

DH/sv

9 September 1994

The District Manager
Water Resources - Brisbane District
Department of Primary Industries
41 George Street
BRISBANE QLD 4001

ATTENTION: Mr Bruce Brogan

Dear Sir,

RE; WATERWORKS LICENCE NUMBER 56526 and 56527

Please find enclosed three (3) copies of a report on environmental and hydraulic assessment studies for the proposed extraction operatons at Sapling Pocket by CSR Readymix.

Should you have any queries in regard to the above please do not hesitate to contact me on (07) 368 9201.

Yours faithfully

49-Sch4 - Signature

D Houghton.

enc - 3 Reports
Ao film copies (3 x)

DNRM RTI DL Release

DEPARTMENT OF PRIMARY INDUSTRIES
OFFICE MEMO

Your Ref.: **Our Ref.:** 85656 (JT:AL)
Author: Mr John Tibaldi **Telephone:** (07) 224 2724 **Facsimile:** (07) 224 2933

DATE: 6 March 1995

FROM: District Manager (Water Resources), Brisbane

TO: Regional Manager (Water Resources), South East
General Manager (Water Resources)
Mr Glen Moller, Overview Planning Group, Water Resources Division
Dr Wai Tong Wong, Water Quality Group, Water Resources Division
Mr Robert Ayres, Surface Water Group, Water Resources Division

SUBJECT: **PROPOSED ONSTREAM LAKES**
SAPLING POCKET, BRISBANE RIVER
WATERWORKS LICENCE APPLICATION
NUMBERS 56526 AND 56527

COMMENT

Attached is the proposed response to CSR, Readymix in relation to the above Licence applications.

John Tibaldi will contact you shortly to arrange a meeting to discuss this draft response.

49-Sch4 - Signature

A Murray
DISTRICT MANAGER (WATER RESOURCES), BRISBANE

DNRM RTI DL Release

9 March 1995 DRAFT

The Readymix Group
CSR Limited
PO Box 25
IPSWICH QLD 4305

Attention: R G Bendall

Dear Sir

PROPOSED ONSTREAM LAKES - SAPLING POCKET, BRISBANE RIVER WATERWORKS LICENCE APPLICATION NUMBERS 56526 AND 56527

The Environmental and Hydraulic Assessment Studies which your Company submitted to support the above waterworks licence applications have been assessed, and further information is required prior to this Department making a decision on the applications.

The information required is summarised below, and this Department is prepared to meet with your representatives to discuss these requirements. Such a meeting can be arranged by contacting Mr John Tibaldi on 224 2724.

DNRM RTI DL Release

Local Authority Requirements

Relevant approvals from the new Ipswich City Council and the Esk Shire Council need to be obtained prior to the issue of the Licences.

Hydraulic Model

Sensitivity Analysis

The estimates of velocity contained in the report are somewhat higher than expected, especially for the lower flows.

A possible explanation for the high estimates of velocities is the assumed distribution of flow between the main channel and the overbank sections of the River. The report has adopted Mannings roughness coefficients of 0.040 for the main channel and 0.070 for the overbank sections. A sensitivity on the relative roughness between the main channel and the overbank sections may indicate more suitable flow distributions which may lead to estimates of velocities in the main channel that are more realistic.

Enquiries to: Mr J Tibaldi Telephone: (07) 224 2724 Your Ref: Our Ref: 85656
Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

Release

The assumption of flow distribution between the main channel and the overbank sections is important in the design of the proposed weirs. The present configuration may be underestimating flow in the overbank sections, whilst overestimating the carrying capacity of the main channel. Therefore additional sensitivity tests must be conducted on the HEC2 hydraulic model in regard to the relative roughness of main channel and overbank sections. Ranges of roughness coefficient from 0.030 to 0.080 to be examined in combination for both the main channel and the overbank sections.

Failure to Adequately Model Proposed Weirs

The proposed weirs A and B are central to the proposal, and yet it appears that they have not been properly taken into account in the hydraulic model. Figure 4.4 in the report shows unusual water surface profiles with "kinks" for the two, five and ten year ARI, and this anomaly needs explanation.

It also appears that the flow breakout at the weirs has not been adequately modelled for dry weather flow and for the two to ten year ARI. It is also unclear whether the flow separation routine in HEC2 was used. Both of these issues must be addressed.

Sedimentation

The proposal is likely to have a major impact on the transport of sediment in the River, and yet the report has provided little comment on this issue. A HEC6 model or similar must be used to determine how areas of the River upstream and downstream of the site will respond to the extraction. The impact of Wivenhoe Dam which has depleted the sediment supply in this reach of the River must also be accounted for in these investigations.

It is quite likely that the bed of the existing Brisbane River will tend to erode to find its equilibrium when the works are complete, and this important issue must be addressed.

Overall Stability of the Finished Works

The report has not adequately examined the overall stability of the finished works. The stability of the following areas needs to be investigated and, if necessary erosion protection works need to be designed for construction as part of the overall proposal.

Upstream Areas

An increase in the water slope at the entrance of the proposed lakes will increase the power of the River to erode the River bed. This type of erosion may occur up to several kilometres upstream of the site. The possibility of such upstream erosion (also referred to as headcutting or "knick point" migration) must be examined, and if necessary remedial measures to combat these effects are to be outlined.

Downstream Areas

It is expected that aggradation will occur in the lakes due to a large decrease in velocity during a flood event. As a result the downstream reach will be sediment deficient, thereby upsetting the sediment transportation-supply equilibrium. The River will then tend to cause degradation/erosion downstream of the lake in order to satisfy this deficiency. These issues must be examined and addressed.

DNRM RTI D.L. Release

Release

Proposed Weirs

Adequacy of protection for Weir A and Weir B.

It appears that the proposed weirs are only designed for a two year ARI event, with a head drop of 0.2 m and 0.9 m for Weirs A and B respectively. However the HEC2 modelling results show that up to 2 m of drop is expected. This leaves the weirs very vulnerable to any larger floods, and must be addressed.

The weirs are located at the direct path of "knick point" migration and this process cannot be modelled using HEC2, as most of the erosion is done by secondary/eddy flows. This issue must also be addressed.

Critical Areas at Adjoining Properties

With the proposed change in the flow alignment during high flows, the areas in the vicinity of Cross Section 4 (Left Bank), Cross Sections 21 and 20 (Right Bank) are vulnerable to bank erosion (refer to Figure 3.5 of the report for locations). Depending upon the stability of the bank, some protection may be necessary. This issue must be addressed.

Bunds between the Proposed Lake and the Existing Low Flow Channel

Whilst this parcel of land is left unexcavated for its conservation values, its stability must be questioned during the passage of any subsequent floods as it lies in the path of maximum velocity. Additionally there is no justification for the batter slopes chosen. These issues must be addressed.

Proposed Rehabilitation/Landscaping Measures

The aims of the rehabilitation of the proposed lake banks are not specifically stated, but the inference is to have planting densities and plant species which reflect the existing vegetative cover. This is not appropriate as rehabilitation must occur to a standard which promotes stable river banks and creates viable habitats for flora and fauna which is in keeping with the undisturbed native vegetation of the site.

A rehabilitation program must be submitted which details a planting strategy to achieve an appropriate riparian vegetation zone around the entire lake frontages. Behind this zone there should be a buffer of at least 30 metres of vegetation which is native to the area and reflects the remnant species present on site.

Additionally, it is not acceptable to use a weed species (Rhodes grass) to stabilise the batters as specified in the report. The rehabilitation program should also include details for excluding stock from the works area entirely. If this causes problems with access for stock for water then provision for offstream watering or for dedicated watering access to the River should be provided.

DNRM RTI ED Release

Release

Topography and Landscape Features

Following completion of the proposed work, the final landform and stream form should be such that the River retains its basic characteristics. These characteristics are represented in Figure 3.5 of the report which details existing rapids, pools and runs between the rapids. The proposed arrangement on "Sapling Pocket" would appear to be satisfactory as it does not greatly change the River flow path or form, but creates a lake/backwater off the main channel. However the proposed final form of the "Sommerville's Land area" would produce an area which is significantly different from the existing channel by creating a large on stream lake, where previously there were rapids, runs and pools. This is not acceptable and an alternative proposal must be submitted.

Flora

The section on flora contained in the report lacks supporting evidence for claims of areas of lesser or greater significance of conservation value. If such claims are to be made and believed there is need for reasons for reaching these findings to be presented so that it does not appear to be convenient for the proponent.

Fauna

The Nature Conservation (Wildlife) Regulation 1994 does not list the short-necked tortoise (*Emydura signata*) in any of the categories under the Act. Therefore there is no specific management plan in place for this species. There is however a duty of care to ensure that there is as little impact as possible upon all species present on the site. A management plan to outline proposed actions needs to be presented.

Platypus (*Ornithorhynchus antimus*) is declared a 'Common Wildlife' for which the Act states a Declared Management Intent which 'includes ensuring governments have regard to the special cultural significance of the wildlife and the management requirements needed to conserve existing populations of the wildlife'. Therefore all due care should be taken to ensure the platypus identified on site are not threatened in any way by the proposed operation. This issue must be addressed.

DNRWRTI D. Release

Environmental Management Plan (EMP)

The information presented in this chapter of the current report is generally higher level concepts and parenthood statements. If this project is to proceed there must be specific management plans developed which spell out exactly what is proposed to be done, including timing, materials, plant species, maintenance and all other matters such that some measures of success can be determined and monitored. Details of some of the major components for this plan follow, although the DME environmental management system (EMOS/~~EMP~~ may provide ~~suitable~~ useful guidelines in this instance. Plan of Operations)

Future Maintenance

All responsibility for future maintenance of the site will be with the waterworks licence holder, and not with the Department of Primary Industries as stated in the report. A plan specifying how future maintenance of the works is to be addressed must be submitted. Specific emphasis must be given to providing a maintenance program for the works proposed to "flush" the lakes.

Release

Contingency Plans

As failure of the weirs or bunds, or the severe deterioration of water quality in the finished lakes may have major adverse environmental impacts, contingency plans to address these issues should be contained in the EMP.

Monitoring

A plan for monitoring water quality, erosion, flora, fauna and habitat creation must be presented. The plan should include details of remedial measures should monitoring indicate unacceptable impacts.

I trust the above will be of assistance to you in proceeding with your licence applications. Please contact either myself or John Tibaldi if you need any further assistance.

Yours faithfully

A D Murray
DISTRICT MANAGER

DNRM RTI DL Release

Release

FACSIMILE TRANSMISSION

DPI
QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES
SOUTH EAST REGION

DATE: 22/3/95

TO: NATIONAL PARKS

ATTENTION: ALAN DON

FACSIMILE NO.: 225 8723

FROM: JOHN TIBALDI

Water Resources, Brisbane District
Telephone: (07) 224 2928 Facsimile: (07) 224 2933

NO. OF PAGES (INCLUDING COVER):

MESSAGE I APOLOGISE IF YOU WERE NOT AWARE THAT YOUR 100 METRE WIDE BUFFER ZONE RECOMMENDATION IMPLIED REFUSAL OF THE LICENCE APPLICATION, HOWEVER I DRAW YOUR ATTENTION TO MY LETTER OF 6 MARCH BELOW.

ALSO, AS DISCUSSED, OFFICERS OF DEH COULD BE CALLED TO APPEAR IN THE LAND COURT TO SUPPORT YOUR DEPARTMENT'S RECOMMENDATIONS IF THIS WERE APPROPRIATE.

DNRM RTI DL Release

1. **One hundred metre wide buffer zone.**

   This condition implies outright refusal of the Licence application. While this Department is prepared to take this action on your Department's advice, refusal of the Licence application could be appealed by the Licence applicant in the Land Court. Accordingly, could you advise whether your Department is prepared to support this action in the Land Court. Also could you please supply some background information explaining how this one hundred metre width was adopted and how it might relate to existing extractive industry, cultivation practices and subdivision arrangements along the River.

49-Sch4 - Signature

6 March 1995

Regional Manager
Queensland National Parks and Wildlife Service/Conservation Strategy
Queensland Department of Environment and Heritage
GPO Box 2771
BRISBANE QLD 4001

Attention: Mr Alan Don

Dear Sir

CSR - PROPOSED EXTRACTION OPERATIONS AT SAPLING POCKET ON THE BRISBANE RIVER

Thank you for your comments relating to the above. This Department's action in relation to your comments are summarised below. Further information has and will be requested from the Licence applicant and will be forwarded to your Department when available.

Statutory Issues

The Moreton Shire Council has provided comments on the proposal. Approval from both the new Ipswich City Council and the Esk Shire Council is required prior to issue of the Licences.

Water Quality

Turbidity issues are being addressed specifically by the Brisbane City Council. I understand that they are developing a water quality testing program for the proposal.

General Layout

These aspects are being investigated by hydraulic engineers within the Department of Primary Industries. Your concerns regarding the overall stability of the proposal and the maintenance issues with the proposed flushing pipes have been noted. Further information is being requested from the Licence applicant in regard to these issues.

Proposed Rehabilitation/Landscaping Measures

A detailed rehabilitation program is to be requested from the Licence applicant. This will be forwarded to your Department for comment when available.

DNRM RTI DL Release

Enquiries to: Mr J Tibaldi Telephone: (07) 224 2724
Your Ref: 113152 Our Ref: 85656
Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

WATER RESOURCES
BRISBANE DISTRICT

Release

Future Maintenance Responsibilities

All future maintenance responsibilities will be with the Licence applicant. This will be covered by conditions on the Licence if a Licence is issued. A contingency plan to account for potential problems is to be requested from the Licence applicant. This will be forwarded to your Department for comment when available.

Flora and Fauna

Your comments are noted, however it is unclear whether or not you are requesting that the Licence be refused on the issues you have raised or whether you require further information on these issues. Would you please clarify your comments in this regard.

Land Use/Recreation

Your comments regarding stock access have been noted and will be covered by conditions on the Licence if a Licence is issued. Your comments regarding recreational activities indicate that such activities should be actively discouraged at this site. Accordingly specific Licence conditions can be applied as specified by your Department.

Extraction Works Effects

See General Layout comments.

Overall Management Strategy

Your comments have been noted with regard to the Advisory Panel, and it is agreed that this structure will be adopted should such a panel be formed

Recommendations

1. **One hundred metre wide buffer zone.**

   This condition implies outright refusal of the Licence application. While this Department is prepared to take this action on your Department's advice, refusal of the Licence application could be appealed by the Licence applicant in the Land Court. Accordingly, could you advise whether your Department is prepared to support this action in the Land Court. Also could you please supply some background information explaining how this one hundred metre width was adopted and how it might relate to existing extractive industry, cultivation practices and subdivision arrangements along the River.

2. **Cessation of works on the Northern End of Sapling Pocket.**

   It is suggested that a site meeting be arranged to investigate the works to which you refer. John Tibaldi of this office will contact you shortly to arrange this meeting.

3. **Measures to protect the riparian zone.**

   Any measures suggested by your Department can be imposed as conditions on any issued Licence. It should be noted however that such conditions can be appealed in the Land Court by the Licence applicant.

DNRM RTI DL Release

Please contact me if you have any queries regarding the above, otherwise I will forward to you further information from the Licence applicant as it becomes available.

Yours faithfully

49-Sch4 - Signature

A D Murray
DISTRICT MANAGER

DNRM RTI DL Release

MORETON SHIRE COUNCIL

Warwick Road, Yamanto
Locked Mail Bag No. 1 Yamanto 4306
Telephone: (07) 280 7888 Fax: (07) 280 7802

DEPARTMENT OF PRIMARY INDUSTRIES
MORETON SHIRE
RECEIVED
27 FEB 1995
26313 67 85761
BRISBANE DISTRICT OFFICE

Enquiries: Mr. R. Hooper,
Telephone: (07) 280-7855,
Ref: 6570, 1/24/35, (L.413983, 414185, 406123) WCM 31 - 2/95

22 February 1995

District Manager
Department of Primary Industries
Water Resources
Brisbane District
GPO Box 2692
BRISBANE QLD 4001

Attention: Mr. J. Tibaldi

Dear Sir,

Re: Readymix Group
Controlled Quarry Material Permit Application
Sapling Pocket - Brisbane River

I refer to your letter of 8th December, 1994, enclosing a copy of the study report on Proposed Extraction operations at Sapling Pocket by CSR-Readymix, and requesting advice as to whether it is in accordance with Council requirements.

This matter has now been considered by Council and in reply I wish to advise that Council objects to the proposal as it has very serious concerns over these proposed extraction operations. Furthermore, Council is presently seeking legal advice as to the need for CSR-Readymix to obtain new Town Planning Consent or a new Extractive Industry Permit because of the variation in the nature and scope of the works on the site. You will be further notified when this advice is received.

DNRM RTI/IP Release

Yours faithfully,

49-Sch4 - Signature

C D FORBES
Shire Engineer

MAMcN

Queensland Department of Environment and Heritage

Southeastern Regional Office • 56-62 Mary Street • Brisbane Queensland • GPO Box 2771 • BRISBANE QLD 4001
Telephone (07) 224 5641 • Facsimile (07) 225 8723

Enquiries to Mr Don
Telephone (07) 224 7075
Your reference 85671
Our reference 113152

28 February 1995

Mr A.D. Murray
District Manager (Brisbane District)
Water Resources
Department of Primary Industries
GPO Box 2692
Brisbane Q 4001

Dear Sir

Re: Proposed extraction operations, Brisbane River

Your letter of 19 January 1995, and my discussions with Mr John Tibaldi refer.

Attached are comments on the assessment study for the proposed Sapling Pocket extraction operations from the Region's Conservation staff. Comments from the Environment Division are still in preparation. I have asked that they be completed as soon as possible, knowing that your Department is keen to complete assessment of inputs from other agencies. As soon as the comments are available, I will have them brought to your office.

Yours faithfully

49-Sch4 - Signature

Alan Don
Regional Manager
Queensland National Parks & Wildlife
Service/Conservation Strategy
Southeastern Region

DNRMRTI DL Release

Readymix

The Readymix Group
CSR Limited
A.C.N. 000 001 276
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Tivoli QLD 4305
Australia

PO Box 25
Ipswich QLD 4305

Telephone (07) 281 2944
Facsimile (07) 202 4899

13.2.95

JOHN (CAMORRA ON 7.30 REPORT)

THIS GUY WANTED TREES AND BRANCHES LEFT LYING IN THE WATERS EDGE FOLLOWING EXTRACTION I SAID I'D PASS THE INFO ON WHICH IS WHAT I'VE DONE. NO FURTHER ACTION UNLESS YOU THINK APPROPRIATE REQUIRED. COPY OF LETTER FOR YOUR FILE.

With Compliments

49-Sch4 - Signature

DNRM RTI DL - Release

The Readymix Group
CSR limited
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Australia

PO Box 25
Ipswich QLD 4305

Telephone (07) 281 2944
Facsimile (07) 202 4899

13 . 2 . 95

Mr. S. Parsons
Wilderness Escapes

49-Sch4

Qld. 4053

Dear Steve,

Re: Matters discussed at site meeting Tivoli 20.1.95

Further to your visit to our Tivoli Plant and the subsequent site inspection we wish to advise you of progress on the various matters discussed and agreed at that meeting.

- The need for retaining tree branches and vegetation on waters edge for wildlife refuge has been passed on to the various regulatory authorities who control the way we leave a site.

- Warning sign for canoeists upstream of the Sapling Pocket haul Bridge. A draft copy of a suitable sign wording as discussed has been sent to John Bisset of the Qld. Canoe Federation for approval and Logo.

- Key supplied to your Company for access to the River via our haul roads. This is not available at this stage due to safety and public liability issues however the matter is under review and should a way to address these issues be found you will be advised accordingly.

Thankyou for the opportunity to show you round our plant and some of our extractive sites on the Brisbane River should there be any further matters you wish to discuss please do not hesitate to contact Clarry Hoffmann or myself on the telephone number above.

Yours faithfully

49-Sch4 - Signature

CC John Tibaldi DPI WRC
Clarry Hoffmann CSR

R.G.Bendall.
Development Manager.
Brisbane Metro & Gold Coast Quarries.

DNRM RTI DL Release

DEPARTMENT OF PRIMARY INDUSTRIES
RECEIVED
23 JAN 1995
BRISBANE DISTRICT OFFICE

DEPARTMENT OF PRIMARY INDUSTRIES

OFFICE MEMO

Your Ref: 85656 (JT:AL) **Our Ref:** 94/24801
Author: Dr W T Wong **Telephone:** 22 47268 **Facsimile:** 22 47219

DEPARTMENT OF PRIMARY INDUSTRIES
RECEIVED
24 JAN 1995
BRISBANE DISTRICT OFFICE

DATE: 23 January 1995

FROM: Manager (Water Quality)

TO: District Manager WR, Brisbane

CC: General Manager, Water Resources Division
Regional Manager WR, South East
Manager (Resource Management Group, WRD)

SUBJECT: **PROPOSED EXTRACTION OPERATIONS AT SAPLING POCKET (CSR READYMIX)**

ENRM RTI DL Release

RECOMMENDATION

That the issues of concern raised in this memorandum be addressed prior to the approval being given, and that appropriate conditions be placed on the licence.

TEXT

In response to your memorandum of 14 December 1994, the above report has been critically reviewed and the following comments are offered.

The applicant proposes to extract material from both the bed (up to depth of 5 m excavation) and bank, thereby creating two large on-stream lakes on the Brisbane River. The two extraction sites are located on the inside bend of two adjacent meanders. On average, an annual extraction rate of 250,000 m^3 is proposed over a 12 year period, resulting in about 3 million cubic metres of material.

This proposal constitutes a large scale operation, and changes the existing river geometry substantially by widening and deepening. In addition the alignment of the river, under both normal low flow and high flow conditions, is modified and hence its morphology.

The 5 m deep of bed extraction is probably the first of its kind proposed in South East Queensland, and hence caution should be exercised.

There are several areas of concern and would require further consideration by the applicant or consultant.

Release

Issues of Concern:

(1) Inadequate assessment on the effect of extraction to the river morphology.

There is very little comment as to how the reach of the river (including areas upstream and downstream of site) will respond to the extraction, particularly with the location of Wivenhoe Dam which would deplete the sediment supply to its downstream reaches.

It is quite likely that the bed of the existing Brisbane River will tend to erode to find its equilibrium with the adjoining deeper section when the bunds are removed.

(2) Erosion to upstream area.

Possibility of headcutting or "knickpoint" migration upstream due to an increase in the water slope at the entrance into the lake which results in increase stream power to erode the bed. The erosion may occur up to several kilometres upstream. This is an important issue and must be further addressed by the applicant. Such a phenomenon has been observed overseas and is documented in the literature.

(3) Erosion to downstream area.

Page 34 (Para 4, last sentence) states that "..not possible to say whether the channel at this location will tend to aggrade or degrade .. and to a limited extent". This statement is not giving a true representation of the fluvial processes.

It is expected that aggradation will occur in the lakes due to a large decrease in velocity during a flood event. As a result the downstream reach will be sediment deficient, thereby upsetting the sediment transportation-supply equilibrium. The flow will tend to cause further degradation/erosion downstream of lake in order to satisfy this deficiency.

(4) Adequacy of protection for Weir A and Weir B.

These weirs are only designed for a 2 Year ARI event, with head drop of 0.2m and 0.9m for Weirs A and B respectively (Section 2.4.4). However the HEC2 modelling results show that up to 2m of drop is expected. This leaves the weirs very vulnerable to any larger floods.

The weirs are located at the direct path of "knick point" migration and this process cannot be modelled using HEC2, as most of the erosion is done by secondary/eddy flows.

The report places a heavy reliance on the integrity of the weirs to work and has not given any emergency plans in case of any weir failure. The existing rapids, popular with canoeists may be affected in case of weir failure.

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(5) No protection for critical areas at adjoining properties.

With the change in the flow alignment during high flows, the areas in the vicinity of Cross Section 4 (Left Bank), Cross Sections 21 and 20 (Right Bank) are vulnerable to bank erosion - refer to Fig. 3.5 for location. Depending upon the stability of the bank, some protection may be necessary.

(6) Stability of a narrow strip of land at Sapling Pocket Site (Fig.3.3).

Whilst this parcel of land is left unexcavated for its conservation values, its stability must be questioned during the passage of any subsequent floods as it lies in the path of maximum velocity.

(7) Possibility of incorrect hydraulic modelling.

Figure 4.4 shows unusual water surface profiles with "kinks" for the 2, 5, and 10 Year ARI. Although Weirs A and B are important controls, they are not taken into account by HEC2.

It appears that the flow breakout at both sites is not adequately modelled by HEC2 for the dry weather flow and 2 to 10 Year ARI. It is unclear in the Report whether the flow separation routine in HEC2 was used or not.

(8) Future maintenance responsibility.

Section 2.4.6 states that DPI will be responsible for future maintenance of the site after 5 years from cessation of operation. This may be an unacceptable risk for the Department, particularly that the weirs are only designed for 2 Years ARI.

(9) Water quality during removal of bund.

A reasonable amount of emphasis has been given to this aspect of bund removal in the Report (Pages 39 & 40).

Although the report states that the turbidity at Kholo Crossing ranges from 4 - 1,200 NTU, the higher turbidities are generated by the flood events as evident in Table 3.2. It should be noted that the turbidity <u>during dry flow</u> is relatively low, and averages about 12 NTU.

The baseline value for turbidity is <u>not</u> defined on Page 40 (Para 4). This baseline value (yet to be adopted) for operational purposes should reflect the <u>dry flow</u> since the bunds are presumably removed during dry weather condition.

(10) Inadequate emphasis on monitoring.

Figure 2.7 indicates that monitoring be carried out only towards the **end** of the extraction at both sites.

In order to adequately monitor the stability of the bed and banks of the

DNRM RTI DL Release

Release

extraction sites and adjacent areas (both 2 km upstream and downstream), cross sectional surveys should be carried out. The extent and location of such survey will need to be discussed.

These surveys should be carried out at a frequency of once a year from the commencement of extraction and immediately (when possible) after any significant flow event. Sections that experienced significant bank erosion should also be surveyed as directed by DPI. The cross sections (taken at different times) should be overlayed and plotted to an appropriate scale and forwarded to the Department.

(11) Rapids not preserved.

With the proposed arrangement, the rapid just upstream of Bridge at Summervilles Paddock will not be preserved (Fig. 3.5).

In a recent discussion, Mr J Tibaldi has indicated that this rapid will be preserved.

(12) Errata

Page 41 (Line 5) - Should read "Remedial works will be carried out as necessary *to the satisfaction of DPI*".

Figure 4.8 - Discharge of 12.0 m^3/s at upstream end should read $20m^3/s$

Figure 4.7 - Diagram should strictly not be titled "5 YR ARI Flood Velocity Vectors" if the magnitude of the velocity is not given. An indication of the corresponding magnitudes for the vectors shown should be provided (also Fig. 4.8).

DNRM FOI DL Release

Condition of Licence

Given the scale of the operation, morphological changes of the river to this extraction and the environmental sensitivity of the area, the following conditions should be placed on the issuing of licence to CSR Readymix:

- an appropriate bond to cover rehabilitation costs, remedial works or any unforeseen expenses (e.g. additional surveys) incurred by the Department.

- extraction to cease at any time should there be any detrimental effect to the river stability, including areas upstream and downstream. Resumption of extraction only be allowed until those damages are satisfactorily repaired or the problem rectified, which may include modification to the amount of extraction.

- cross sectional surveys be carried out as specified in (10) and/or as directed by DPI, particularly at reaches where instability has occurred after a flood event. All costs to be borne by extractor.

49-Sch4 - Signature

MANAGER/WATER QUALITY

B/C Director Manager (Water Resources)
Brisbane

DNRM RTI DL Release

Release

DEPARTMENT OF PRIMARY INDUSTRIES
RECEIVED
16 JAN 1995
25865 35671
BRISBANE DISTRICT OFFICE

DPI
QUEENSLAND
DEPARTMENT OF PRIMARY INDUSTRIES
SOUTH EAST REGION

13 January, 1995

Chief Executive Officer
Moreton Shire Council
Locked Mail Bag No. 1
YAMANTO QLD 4306

Dear Mr Craswell

GRAVEL EXTRACTION - BRISBANE RIVER

I refer to your recent letter (20.12.94 - your ref 4/7/5 (L.414183) om 43(2)-12/94) on this subject seeking advice on proposals for large sand and gravel operations in the Pine Mountain area.

The Department is currently considering a proposal by CSR Readymix expanding its current sand and gravel extraction operation on the Brisbane River at Sapling Pocket, in the vicinity of Pine Mountain.

To proceed the proposal will require issue of waterworks licenses and controlled quarry material permits by the Department under the provisions of the Water Resources Act. The waterworks license applications were advertised on 13 May 1994 in the Qld Times.

At the request of the Department, a detailed study has been undertaken on the proposal, and the study report is now being circulated for comment within the Department, to Dept of Environment and Heritage and to your Council.

Comments from your Council were sought in a letter from the Departments District Manager (Water Resources) Brisbane dated 8 December 1994, with a copy of the study report attached.

This letter was sent to your Council's representative on the Dredging and other Extractive Activities working group of the Brisbane River Management Group, Mr Rob Hooper.

If you would like further information on this matter please do not hesitate to contact me again.

Yours faithfully

49-Sch4 - Signature

for C Robson
REGIONAL MANAGER - WATER RESOURCES

Enquiries to: Your Ref: Our Ref: (81/45,90/35 :)
Floor 1, 144 Currie Street, PO Box 5165 Sunshine Coast Mail Centre, Nambour Q 4560
Telephone (074) 76 0277 Facsimile (074) 76 0570 Telex AA

REGIONAL OFFICE
NAMBOUR

DNRMRTIDL Release

17 January 1995

Regional Director
South East Region
Department of Environment and Heritage
PO Box 2771
BRISBANE QLD 4001

Dear Sir

PROPOSED EXTRACTION OPERATIONS BRISBANE RIVER

Following discussions with Mr Alan Don of your office, attached is a copy of an assessment study which your Department may wish to comment on prior to the Department of Primary Industries making a decision on the proposal.

The study is currently being assessed by Environmental Scientists and other officers with specialist expertise within the Department of Primary Industries, however, comment from your Department may also be necessary to finalise the Licences and Permits associated with the proposal.

Could you please confirm whether your Department will be providing comment. Due to time constraints associated with this Department's approval process, such comment will be required by mid-February. Any further details you may require can be obtained by contacting Mr John Tibaldi on telephone 224 2724.

Yours faithfully

49-Sch4 - Signature

A D Murray
DISTRICT MANAGER

C/C: Regional Manager
Water Resources
NAMBOUR

DNRM FOI DL Release

Enquiries to: Mr J Tibaldi Telephone: (07) 224 2724 Your Ref: Our Ref: 85671
Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

WATER RESOURCES
BRISBANE DISTRICT

DEPARTMENT OF PRIMARY INDUSTRIES
OFFICE MEMO

Your Ref.: 94/ **Our Ref.:** 85671 (JT:LM)
Author: J Tibaldi **Telephone:** (07) 224 2724 **Facsimile:** (07) 224 2933

DATE: 3 January 1995

FROM: District Manager (Water Resources), Brisbane

TO: Bob Geddes, Manager (Civil Design)

SUBJECT: **PROPOSED OFFSTREAM LAKES**
BRISBANE RIVER - SAPLING POCKET

As discussed, could you please arrange to have design checks carried out on the control structures associated with the above proposal.

A copy of the Hydraulic Assessment Study containing the control structure design details is attached. The specific design details of the control structures is contained in Section 2.4.4 of the report commencing on page 8. The hydraulic aspects of the report have already been checked by the Surface Water Assessment Group.

Any queries regarding this matter should be directed to John Tibaldi on Ext. 42724. The vote code to charge your time for this project is 16 795 EFC, alternatively you may invoice this office when the work is completed if this is the method of payment you prefer.

49-Sch4 - Signature

DISTRICT MANAGER (WATER RESOURCES), BRISBANE

DNRM RTI DL Release

1 February 1995

The Town Clerk
Brisbane City Council
GPO Box 1434
BRISBANE QLD 4001

Attention: Mr Jack Clerke

Dear Sir

PROPOSED EXTRACTION OPERATIONS BRISBANE RIVER

Following discussions with Mr Jack Clerke of your office, attached is a copy of an assessment study which your Council may wish to comment on prior to the Department of Primary Industries making a decision on the proposal. Attached also for your information is previous facsimiled comments on this proposal from your Council.

The study is currently being assessed by Environmental Scientists and other officers with specialist expertise within the Department of Primary Industries, however, comment from your Department may also be necessary to finalise the Licences and Permits associated with the proposal.

Could you please confirm whether your Council will be providing comment. Due to time constraints associated with this Department's approval process, such comment will be required by late February. Any further details you may require can be obtained by contacting Mr John Tibaldi on telephone 224 2724.

Yours faithfully

49-Sch4 - Signature

A D Murray
DISTRICT MANAGER

DNRM RTI DL Release

Enquiries to: Mr J Tibaldi Telephone: (07) 224 2724 Your Ref: Our Ref: 85656
Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

WATER RESOURCES
BRISBANE DISTRICT

Facsimile transmission from

BRISBANE CITY COUNCIL

Department of Water Supply & Sewerage

Scientific Services Branch

Brisbane City Council
Department of Water Supply & Sewerage
Scientific Services Branch
Donaldson Road
Rocklea
BRISBANE QLD 4106

Date 25 / 5 / 94

To	Facsimile No.
INVESTIGATION AND PLANNING SEPW	225 6765
Attention JACK CLERKE	**No. of Pages (including this page)** 1
From M LEVER	**Facsimile No.** (07) 875 8646

Re GRAVEL EXTRACTION – BRISBANE RIVER

As discussed, Scientific Services section recommends that conditions be applied by Water Resources / DPI on the Redbank Group's application to ensure that there is no increase in the costs of water treatment- ie/ Mends Creek and no deterioration in water quality e.g. Turbidity.

- In the past it has been agreed with Water Resources that dredge extraction from the river, ie from below the water surface, would be prohibited.
- In addition, any washing facilities for the extracted gravel should have the wash waters treated in settlement ponds before returning the clean water to the river
- Finally, any cut in from the artificial lakes to the river should be very closely supervised to avoid disturbance of silt or discharge of solid particles.

PLEASE PHONE (07) 875 8611 IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION

Regards

49-Sch4 - Signature

dass c:\wp51\docs

DNRM RTI DL Release

Facsimile transmission from

BRISBANE CITY COUNCIL

69 Ann Street
Brisbane
Queensland
GPO Box 1434
Brisbane
Australia 4001
Brisbane City Facsimile: 229 1168

Date 26-5-94

To DEPARTMENT OF PRIMARY INDUSTRIES	Facsimile No. 224 2933
Attention N. JEFFERS	No. of Pages (including this page) 2
From J. CLERKE – B.C.C. Phone No 2254492	Facsimile No. 225 6765
Re READYMIX GRAVEL EXTRACTION PROPOSAL	

Nigel

Further to our telephone discussion, I have attached for your information, copy of faxed comments on the above proposal from our Scientific Services Branch.

Regards

49-Sch4 - Signature

DNRM RTI DL Release

DEPARTMENT OF PRIMARY INDUSTRIES

OFFICE MEMO

Your Ref: **Our Ref:** 94/
Author: Mr G I Moller **Telephone:** 22 47613 **Facsimile:** 22 48359

DATE: 9 January 1995

FROM: Manager, Overview Planning (Water Resources Division)

TO: District Manager (Water Resources), Brisbane

SUBJECT: **CSR READYMIX - PROPOSED EXTRACTION OPERATIONS AT SAPLING POCKET, BRISBANE RIVER.**

TEXT:

The Overview Planning Group has reviewed the *"Environment and Hydraulic Assessment Studies"* for the above project and provides the following comment.

Appendix A Guidelines.

The guidelines provided to the proponent and reproduced in this report are inadequate to obtain a full assessment of the potential impacts of such a large development on a major river over such a long period of time.

To adequately determine these potential impacts the appropriate process would be to call for an impact assessment report under the State Development and Public Works Organisation Act allowing for full public input to review and assessment of the proposal.

In this case it would appear that the applicant considered that there were important issues which needed to be addressed beyond those requested in the study guidelines provided by Water Resources.

It is also pointed out that there is a group in the department which has the expertise to advise your District on procedures for undertaking impact assessment studies and an extensive network across the department of well qualified professionals who can provide advice on all aspects of biology, hydrology, landuse and other issues. The first point of call to contact this network is through Mr G Guinea at the Nambour Regional Office or through Water Resources Division the Overview Planning Group can assist. Failing these options Mr T

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Loos Principal Manager (Environment) in Landuse and Fisheries is the Departmental Co-ordinator.

General

From a general environmental point of view the concept of extracting sand and gravel from a source offstream has significant advantages over extraction within a stream. This position is however qualified in that the extraction process offstream should be carried out in such a way that potential impacts of this process on the instream and riparian environments adjacent to and downstream of the site are minimal. Therefore on this particular site the concept of retention of the diversity of stream habitat types (rapids and pools) within the Brisbane River and the retention of the existing stream banks and riparian vegetation through the proposed works area is strongly supported.

This being the suggested management approach for the river there is disagreement between this approach and the proposal provided by CSR READYMIX (ie to remove bunds along the works area at completion of operations).

Section 2.4..1 General Layout

A batter slope of 1V:3H is presented as the configuration for lake bank slopes to be achieved on site. The reason for the selection of this slope is not presented which raises questions as to the suitability of such a slope from both soil mechanics requirements for a stable slope and from a biological concern for providing the most suitable batter slope to promote the rehabilitation of riparian and aquatic habitat. There should be supporting evidence provided that this slope is the most suitable for both situations.

During proposed operation the bunds are to be in place to prevent the flooding too regularly of the excavation area and to minimise the discharge of silt to the river. However there is no discussion presented concerning the potential for these bund to be washed away during floods of the river or of any management plan to reinstate the bunds should they be removed. Should these bunds fail there would be trees washed into the river which would cause alteration of the flowpath and possibly encourage erosion of the river bed and banks.

There should be appropriate design of the proposed extraction process to ensure that the bunds are of suitable size and configuration to ensure that they do not erode and fail during flooding or any other time. This information should be provided and become part of the environmental management plan for the project.

DNRW RTI DL Release

2.4.4 Specific Design Details of Control Structures

The report pays significant attention to the stabilisation of the upstream inflow areas to the proposed extraction areas ie. the weirs. However the proposal for extraction would leave two very significant holes within the flood plain of the river. The processes by which these holes would be likely to fill in and the potential impact of this process have not been addressed. There is potential for erosion of the river bed and banks to occur both upstream and downstream of this site through high flows. The potential impacts of these processes should be assessed in both physical terms and ecological terms and presented before final decisions are made on this project.

2.4.5 Proposed Rehabilitation/Landscaping Measures

The aims of the rehabilitation of the proposed lake banks are not specifically stated, but the inference is to have planting densities and plant species which reflect the existing vegetative cover. It is suggested that this is not the most appropriate aim and that it would be better to rehabilitate to a standard which promotes stable river banks and viable habitats for flora and fauna which is in keeping with the undisturbed native vegetation of the site.

To achieve this aim it would not be acceptable to use a weed species (Rhodes grass) to stabilise the batters, and the most important measure which could be employed would be to exclude stock from the works area entirely. If this causes problems with access for stock for water then provision of offstream watering points or dedicated watering access to the river should be provided.

Planting strategy should be to achieve an appropriate riparian vegetation zone around the entire lake frontages which reflects the existing high quality areas or mimics the native vegetation which could be expected to have occurred there before disturbance. Behind this zone there should be a buffer of at least 30 metres of vegetation which is native to the area and reflects the remnant species present on site.

3.1 Topography and Landscape Features

As indicated previously it is strongly suggested that the final landform and stream form should be such that the river retains its basic characteristics. These characteristics are represented in Figure 3.5 with rapids, pools and possibly runs between the rapids. The proposed final lake on "Sapling Pocket" would appear to be satisfactory as it does not change greatly the river flow path or form, but creates a lake/backwater off the main channel. However the proposed final form of the "Sommerville's Land" would produce an area which is significantly different from the existing channel by creating a large on stream lake, where previously there were rapids, runs and pools.

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It is therefore strongly suggested that the proposal to remove the bund upstream of the main access track across the river should not be allowed to proceed. By doing this the stream habitat types would remain largely as they are now and the ecology of the river would be less likely to be changed radically. This would also assist in retaining the recreational experience, discussed in Section 3.7, fairly much as it is, plus providing the enhancement presented in the report.

3.4 Flora

Riparian vegetation - the implication that is put forward in this section that a selected site is depauperate of riparian vegetation, Point D, and therefore not worth preserving and the rest of an area can be disposed of, cannot be supported. The more appropriate approach is to attempt to rehabilitate the depauperate section and encourage better riparian zones.

This section also lacks supporting evidence for claims of areas of lesser or greater significance of conservation value. If such claims are to be made and believed there is need for reasons for reaching these findings to be presented so that it does not appear to be convenient for the proponent.

3.5 Fauna

The Nature Conservation (Wildlife) Regulation 1994 does not list the short-necked tortoise (*Emydura signata*) in any of the categories under the Act. Therefore there is no specific management plan in place for this species. There is however a duty of care to ensure that there is as little impact as possible upon all species present on the site.

Platypus (*Ornithorhynchus antinus*) is declared a 'Common Wildlife' for which the Act states a Declared Management Intent which 'includes ensuring governments have regard to the special cultural significance of the wildlife and the management requirements needed to conserve existing populations of the wildlife'. Therefore all due care should be taken to ensure the platypus, identified on site are not threatened in any way by the proposed operation.

6.0 Environmental Management Plan

The information presented in this chapter is generally higher level concepts and parenthood statements. If this project is to proceed there should be specific management plans developed which spell out exactly what is proposed to be done, including timing, materials, plant species, maintenance and all other matters such that some measure of success can be determined and monitored.

If it is possible the introduction of a bond, scaled against cost of rehabilitation to be carried out, should be required to ensure that the river can be rehabilitated before the proponant leaves the site, or that there is no cost to the government

DNRM RTI DL Release

Release

should the applicant abandon the site without rehabilitation works being carried out. The system used by the Department of Minerals and Energy might be a good model for imposing a bond.

Conclusion

There are significant outstanding questions relating to the potential impacts of this project on the proposed development site and adjacent environment that warrant further investigation prior to a decision on the acceptability of such a project on this site. Suggested amendments to the final landforms and rehabilitation of the river/lake banks should be taken on board and be subject to the outcomes of the further investigations which are required.

In addition the Brisbane River should be retained as intact as possible such that the channel habitats are preserved and every possible chance given for aquatic species to be left untouched.

49-Sch4 - Signature

MANAGER, OVERVIEW PLANNING

DNRM RTI DL Release

8 December 1994

Chief Executive Officer
Moreton Shire Council
Locked Mail Bag No. 1
YAMANTO QLD 4306

Attention: Mr Rob Hooper

Dear Sir

READYMIX GROUP - CONTROLLED QUARRY MATERIAL PERMIT APPLICATION - BRISBANE RIVER

The Readymix Group recently applied to this Department for authorisation to extract some 3 million cubic metres of material adjacent to the Brisbane River over approximately fourteen years, to form two off-stream lakes. A copy of an environmental and hydraulic assessment undertaken by Consultants on behalf of the Readymix Group is attached for your information.

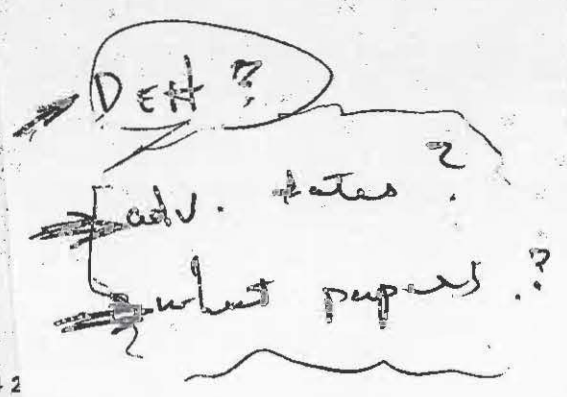
The attached report has been examined by the Hydraulic Assessment Unit within this Department, and the environmental aspects of the proposal are currently being assessed by officers within the Department with appropriate expertise.

Could you please examine this proposal and notify this Department whether or not the proposal has the necessary authorisations required by your Council and is in accordance with Council requirements.

Yours faithfully

49-Sch4 - Signature

R J Drury
DISTRICT MANAGER



DIRWRITTEN Release

Enquiries to: Mr J Tibaldi Telephone: (07) 224 2
Mineral House, 4th Floor, 41 George Street, GPO E
Telephone (07) 224 2928 Facsimile (07) 224 29

ATER RESOURCES
RISBANE DISTRICT

F30 1194

Pine Mountain & Districts Progress Association Inc.

President: Mrs L. Livingstone
Phone (07) 2017057

Secretary: Mrs L. Walker
49-Sch4
PINE MOUNTAIN Q 4306

DEPARTMENT OF PRIMARY INDUSTRIES WATER RESOURCES
RECEIVED
- 6 DEC 1994
25482 856=6
BRISBANE DISTRICT OFFICE

Hon. M. Robson MLA
Minister for Environment and Heritage
160 Ann Street
BRISBANE QLD 4000

The Executive Director
DPI Water Resources
41 George Street
BRISBANE QLD 4000

30 November 1994

For your information

Dear Ms Robson

49-Sch4 - Signature

Lyn Livingstone

Re: Waterworks Licence Application by CSR Readymix Group - Sapling Pocket

The Pine Mountain and Districts Progress Association lodged an objection with DPI Water Resources to the granting of Waterworks Licences to CSR Readymix Group for the extraction of gravel from the Brisbane River at Sapling Pocket. Grounds for the objection were:

WATER RECORDS
Document Received
- 5 DEC 1994
File No. 21084
File Location 4000 - WR(6)RM - 30/11/94
Action By DAO(WR)(6)RM
MOVEMENT INSTRUCTIONS MUST BE SHOWN ON FRONT COVER.

- Incompatibility with the area's potential for National Park;
- Destruction of riparian vegetation;
- Modification to the amenity of the Brisbane River;
- Impact on the recreational value of the river;
- Impact on water quality during and after gravel extraction operations; and,
- Consequence of long term rehabilitation at taxpayers' expense.

The proposal put forward by CSR Readymix is:

> 'Excavation of 1000m of right bank for extractive industry purposes to form an onstream lake for recreational purposes on the Brisbane River. 1000m long, 500m wide and 3m deep; and,
>
> Excavation of 1400m of left bank for extractive industry purposes to form an onstream lake for recreational purposes on the Brisbane River. 1400m long, 320m wide and 3m deep'.

Extractive industry projects of this magnitude have not previously been assessed by the DPI Water Resources. The only development of similar type is the Colleges Crossing cesspool approved by the previous Department of Harbours and Marine and the Moreton Shire Council. This tragic decision is now costing ratepayers approximately $50 000 per year in maintenance of the lake.

At a meeting held with a DPI Water Resources engineer on 21 November 1994, Association members were told that the engineering specifications for the construction of the lakes on completion of gravel extraction were adequate and no environmental problems would arise. As a good engineering solution can be found for every environmental problem, a consultancy report prepared on behalf of the applicants gave the assurance that all environmental values were

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DNRM RTI DL Release

safeguarded. It was further claimed that DPI Water Resources environmental staff and the Queensland National Parks and Wildlife Service have no objection to the proposal.

This Association therefore has serious concerns about the process of assessment and the significance of a number of nature conservation issues that we believe have not been adequately addressed. Without access to the consultancy report it is difficult to ascertain the extent to which these and other issues have been considered.

Issues of conservation concern are:

• Incompatibility with the area's potential for National Park

The Pine Mountain and Districts Progress Association has lobbied for many years to have Camerons Scrub and Sapling Pocket declared a National Park. Exploitation of the area's natural resources would be totally incompatible with the conservation values of the notophyll vine forest, river verges and associated biological communities. Extractive industry resulting in "recreational lakes" with consequential environmental modification should not occur for this reason alone.

• Destruction of riparian vegetation

Vegetation along the riverbanks comprises eucalypt species (predominantly Queensland Blue Gum *E. tereticornis*), callistemons and smaller mid-stratum species that supports a large variety of wildlife including koalas, raptors and the short beaked Echidna. The Brisbane Saw-shell (*Emydura signata*), listed as a RARE species in Queensland also inhabits the waters of Sapling Pocket. In excess of 100 bird species occur in the area, many of which are totally dependent on the riverine environment for food, breeding and shelter. Destruction of this riparian vegetation and subsequent widening of the river will therefore severely affect the existing ecology.

• Modification to the amenity of the Brisbane River

The river at Sapling Pocket is in a relatively undisturbed state with overhanging trees in some places forming a closed canopy above the water. Gravel extraction of the magnitude proposed will create an even greater cataclysm than has occurred in the Coomera and Pine Rivers where exploitation of gravel resources has altered the river courses and left large expanses of partly submerged, weed infested wasteland. The end result of the workings at Colleges Crossing also offers no commendation for a similar exercise to be undertaken at Sapling Pocket.

• Impact on water quality during and after gravel extraction operations

Although CSR Readymix would be required to take precautions to minimise the impact on water quality, considerable increased turbidity would still occur if the extractive operation is permitted to breach the river banks. The likelihood of flooding would also contribute to the risk of diminished water quality downstream and siltation of the offstream sections of any proposed lake. Widening the watercourse by a factor of ten times will unquestionably reduce water velocities by a similar increment resulting in the sediment load carried by the water being deposited within the lake.

../3.

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Release

• **Consequence of long term rehabilitation at taxpayers' expense**

Upon completion of gravel extraction, CSR Readymix propose to surrender the inundated area to the State Government. A large financial burden for rehabilitation and maintenance could accompany this handover, as once the company has vacated the site, no amount of government red tape could bind it to fulfilling its obligation to restoration works under any permit or deed of agreement. This is clearly evidenced by the coal mining scars around Ipswich and the sandmining scars that dot the Queensland coastline. Replenishment and stabilisation of riparian vegetation may take 20 years to achieve on undulating riverbanks. The CSR proposal has a bank batter of 1 in 3 for a height of up to 20 metres! Stabilisation of this batter in the face of intermittent floods is extremely optimistic at best.

By reviewing the experience of the Colleges Crossing redevelopment, it is obvious that artificial lake environments, even with major funding and intensive management, just **do not work** and have the potential to become stagnant cesspools that cause environmental and public health risks. Westlake in the Centenary suburb is another example where recurrent major expenditure is required to rectify nutrification and sedimentation problems.

• **Effects on wildlife habitat**

The lakes will severely modify waterfowl habitat. Wood ducks will breed and congregate around the banks in large numbers. Nearby properties growing lucerne and oats will offer attractive grazing sites to support large flocks. The economic viability of local farmers will be severely affected by a public resource under the control of DPI Water Resources. Moreover, crop destruction will be a major management problem for QNPWS who will be obliged to issue Damage Mitigation Permits for farmers to destroy marauding wildlife. In essence, the natural balance of the area would be totally upset.

The Brisbane River at Sapling Pocket is a recognised platypus habitat. Modification of the banks, removal of riparian vegetation, diminished water velocities, stagnation, siltation and nutrification of the ponded water and increased turbidity resulting from the proposed extraction works will severely impact on the viability of the species in this location.

• **Lack of responsible environmental planning**

Members of this Association feel that the proponent's environmental impact assessment of the proposed development is totally inadequate with the project having the potential to cause significant degradation of the Brisbane River upstream of Mount Crosby Weir. We therefore seek your urgent advice to the following:

. the role of the Department of Environment and Heritage in assessing the proposal;

. the input the Queensland National Parks and Wildlife Service has had to the proposal;

. the responsibility of the Brisbane River Management Group in assessing the proposal; and,

. the significance of the Sapling Pocket section of the Brisbane River with respect to its proximity to Camerons Scrub and the nature conservation values of the riverine environment.

.../4.

DNRM RTI D. Release

Release

Conclusion

This Association is of the opinion the project should not proceed. The river and its banks are a valuable public resource that should not be exploited for the sake of a quick financial return to the proponents and a royalty payment to the government. Winning of extractive materials from the adjoining freehold lands is a different issue as the landholder maintains accountability for future restoration works; but extraction of the greatest possible amount of material and then surrendering the area to the government for future management is a totally unacceptable notion.

This Association will be satisfied with nothing less than a 50 metre buffer along the entire existing riverbank with no encroachment of the extractive industry into this riparian zone. Existing extraction from the river bed and bank at Sapling Pocket should cease immediately with a 50 metre revegetated buffer created between the river and any extraction area on freehold land.

It is clearly evident the Waterworks Licence Applications are **not** for the purpose of developing a recreational lake but are being promoted in this manner so as to placate the community concern that an extractive industry is occurring in a very sensitive section of the Brisbane River. As the adjoining land is presently held in freehold tenure and is not accessible to the public, there is no indication that the development would be of any benefit to the community or the environment. Exploitation and modification of this natural resource by a private organisation should therefore not be permitted.

Your advice regarding the issues raised by this Association would be appreciated.

Yours sincerely

49-Sch4 - Signature

Lyn Livingstone
PRESIDENT

DNRM RTI DL Release

3 October 1994

The Secretary
Pine Mountain & Districts Progress Association Inc.

49-Sch4

PINE MOUNTAIN QLD 4306

Dear Madam

I refer to your letter of 23 September 1994 regarding Waterworks Licence Application numbers 56526 and 56527.

No decision has been made on these applications and you will be contacted before the matter is finalised.

Should you require further information regarding this Department's involvement in the investigation of these applications please contact Mr Bruce Brogan on (07) 224 7373 who will assist you in any way possible.

Yours faithfully

49-Sch4 - Signature

for A D Murray
DISTRICT MANAGER

DNRMRTI DL Release

Enquiries to: Mr B Brogan Telephone: (07) 224 7373 Our Ref: 85656 (24682)
Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

WATER RESOURCES
BRISBANE DISTRICT

Pine Mountain
& Districts Progress Association Inc.

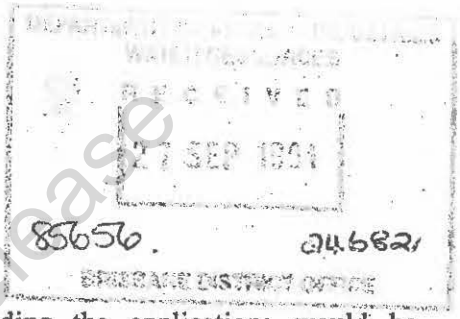
President: Mrs L. Livingstone
Phone (07) 2017057

Secretary: Mrs L. Walker
49-Sch4
PINE MOUNTAIN Q 4306

49-Sch4

The Executive Director
DPI Water Resources
Brisbane District Office
GPO Box 2692
BRISBANE QLD 4001

23 September 1994



Dear Sir

Re: Waterworks Licence Applications 56526 and 56527

Our letter of objection dated 30 May 1994 refers.

Your advice of any decision or anticipated outcome regarding the applications would be appreciated.

Yours sincerely

49-Sch4 - Signature

Lyn Livingstone
PRESIDENT

DNRM RTI DL Release

DEPARTMENT OF PRIMARY INDUSTRIES
OFFICE MEMO

Your Ref.: **Our Ref.:** 85656 (BB:AL)
Author: Mr Bruce Brogan **Telephone:** (07) 224 7373 **Facsimile:** (07) 224 2933

DATE: 13 September 1994

FROM: District Manager (Water Resources), Brisbane

TO: Manager, Surface Water Assessment Group
Water Resources Division

SUBJECT: **PROPOSED ONSTREAM LAKES**
BRISBANE RIVER - SAPLING POCKET

COMMENT

CSR Readymix propose construction of onstream lakes on the Brisbane River at Sapling Pocket and have submitted the attached environmental and hydraulic assessment study.

The document is attached for your appraisal and comments.

49-Sch4 - Signature

A Murray
DISTRICT MANAGER (WATER RESOURCES), BRISBANE

DNRM RTI DL Release

23 June 1994

Pine Mountain & Districts Progress Association Inc.
Secretary
Mrs L Walker

49-Sch4

PINE MOUNTAIN QLD 4306

Dear Madam

WATERWORKS LICENCE APPLICATION NUMBERS 56526 & 56527
THE READYMIX GROUP - CSR LIMITED

Your letter objecting to the abovementioned applications for a (1) 56526 - 1000m long x 500m wide x 3m deep excavation on right bank of Portion 495 located on Brisbane River and (2) 56527 - 1400m long x 320m wide x 3m deep on left bank of Lot 2 RP131238 located on Brisbane River.

This matter will be investigated and you will be further advised.

Yours faithfully

49-Sch4 - Signature

for R J Drury
DISTRICT MANAGER

5/8/94.
Discussion with D. Smith, DPI
David Houghton (K.K.M.)
re: Study a proposal in general.
maybe forthcoming in 1 months.
RJD. 5/9/94

Study received,
BB, forwarded to G. Hamster
for comment 14/9/94

49-Sch4 - Signature

49-Sch4 - Signature

BV to BB - 14/12/94

Enquiries to: Miss S Hunter Telephone: (07) 224 8406 Your Ref: Our Ref: 85656

Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

WATER RESOURCES
BRISBANE DISTRICT

DNRM RTI/IPOL Release

23 June 1994

The Readymix Group - CSR Limited
PO Box 25
IPSWICH QLD 4305

Dear Sir/Madam

WATERWORKS LICENCE APPLICATION NUMBERS 56526 & 56527

I advise that objections have been received to the abovementioned application for a Licence for a (a) 56526 - 1000m long x 500m wide x 3m deep excavation on right bank of Lot 495 Plan CH31514 located on Brisbane River and (b) 56527 - 1400m long x 320m wide x 3m deep excavation on left bank of Lot 2 RP131238 located on Brisbane River.

This matter will be investigated and you will be further advised.

Yours faithfully

49-Sch4 - Signature

for R J Drury
DISTRICT MANAGER

DNRM RTI DL Release

Enquiries to: Miss S Hunter Telephone: (07) 224 8406 Your Ref: Our Ref: 85656

Mineral House, 4th Floor, 41 George Street, GPO Box 2692, Brisbane Q 4001
Telephone (07) 224 2928 Facsimile (07) 224 2933

WATER RESOURCES
BRISBANE DISTRICT

Pine Mountain and Districts Progress Association Incorporated

DEPARTMENT OF PRIMARY INDUSTRIES
WATER RESOURCES
RECEIVED
- 7 JUN 1994
23420 85656
BRISBANE DISTRICT OFFICE

Secretary: Mrs L. Walker
49-Sch4
PINE MOUNTAIN QLD 4306

The Executive Director
DPI Water Resources
Brisbane District Office
GPO Box 2692
BRISBANE QLD 4001

30 May 1994

Dear Sir

Re: Waterworks Licence Applications 56526 and 56527

The Pine Mountain and Districts Progress Association hereby lodges an objection to the granting of Waterworks Licences to CSR Readymix Group in relation to applications 56526 and 56527. The Association represents the residents of Pine Mountain, Burtons Pocket, Borallon and Blacksoil areas and is actively involved in the interests of the riparian landholders of Sapling Pocket including CSR Readymix.

The applications should be refused on the following grounds:

- **Incompatibility with the area's potential for National Park**

The Pine Mountain and Districts Progress Association has lobbied for many years to have Camerons Scrub and Sapling Pocket declared a National Park. Development of the area for a recreational lake would be totally incompatible with the natural values of the notophyll vine forest, river verges and associated biological communities. Extractive industry resulting in a recreational lake with consequential environmental modification should not occur for this reason alone.

- **Destruction of riparian vegetation**

Vegetation along the riverbanks comprises eucalypt species (predominantly Queensland Blue Gum *E. tereticornis*), callistemons and smaller mid-stratum species that supports a large variety of wildlife including koalas and the short beaked Echidna. The Brisbane Saw-shell (*Emydura signata*), listed as a RARE species in Queensland also inhabits the waters of Sapling Pocket. In excess of 100 bird species occur in the area, many of which are totally dependent on the riverine environment for food, breeding and shelter. Destruction of this riparian vegetation and subsequent widening of the river will therefore severely affect the existing ecology of the area.

- **Modification to the amenity of the Brisbane River**

The river at Sapling Pocket is in a relatively undisturbed state with overhanging trees in some places forming a closed canopy above the water. Gravel extraction of the magnitude proposed will create an even greater cataclysm than has occurred in the Coomera and Pine Rivers where exploitation for gravel resources has altered the river courses and left large

.../2.

DNRM RTI DL Release

expanses of partly submerged, weed infested wasteland. The end result of the workings at Colleges Crossing also offers no commendation for a similar exercise to be undertaken at Sapling Pocket.

- **Impact on the recreational value of the river**

Since construction of the Wivenhoe Dam, recreational river canoeing has been restricted in the Brisbane River to the stretch from Lowood to Kholo. As this recreational pastime is very limited in South East Queensland yet increasing in popularity, every effort should be made to protect the few remaining sites where this activity can occur. Sapling Pocket contains some of the most significant sections of rapids that still exist along the river.

- **Impact on water quality during and after gravel extraction operations**

Although CSR Readymix would be required to take precautions to reduce the impact on water quality, considerable increased turbidity would still occur during and after the extractive operations. The likelihood of flooding would also contribute to the risk of diminished water quality down stream and siltation of the off-stream sections of any proposed lake.

- **Local ratepayers could suffer the long term consequence of maintaining an artificial lake**

Upon completion of gravel extraction, CSR Readymix would wish to dispose of the site. If the area were handed over to the Moreton Shire Council for recreational purposes, a large financial burden in development and maintenance would result. By reviewing the experience of the Colleges Crossing redevelopment, it is obvious that artificial lake environments, even with major funding, just **do not work** and have the potential to become stagnant cesspools with associated environmental and public health risks. Westlake in the Centenary suburb is another example where recurrent major expenditure is required to rectify nutrification and sedimentation problems.

Conclusion

It is clearly evident the Waterworks Licence Applications are **not** for the purpose of developing a recreational lake but are being promoted in this manner so as to placate the community concern that an extractive industry is occurring in a very sensitive section of the Brisbane River. As the adjoining land is presently held in freehold tenure and is not accessible to the public, there is no indication that the development would be of any benefit to the community or the environment. Although the river itself would remain accessible for public use and enjoyment, exploitation and modification of this natural resource by a private organisation should not be permitted as proposed.

Your favourable consideration to the views expressed by this Association is therefore sought.

Yours sincerely

49-Sch4 - Signature

Lyn Livingstone
PRESIDENT

DNRM RTI DA Release

Facsimile transmission from
BRISBANE CITY COUNCIL

Brisbane City Council
Brisbane City

Date
26-5-94

To
DEPARTMENT OF PRIMARY INDUSTRIES

Facsimile No.
224 2983

Attention
N. JEFFERS

No of Pages (including this page)
2

From
J. CLERKE — B.C.C.

Phone No
2254692

Facsimile No
225 6765

Re
READYMIX GRAVEL EXTRACTION PROPOSAL

DNRM RTI DL Release

Nigel

Further to our ~~telephone~~ discussion, I have attached for your information, copy of faxed comments on the above proposal from our Scientific Services Branch

Regards

49-Sch4 - Signature

Phone 30/5/94
Des Jones, local progress Assoc.

21.1
22.1

49-Sch4 - Signature

Facsimile transmission from

BRISBANE CITY COUNCIL

Department of Water Supply & Sewerage

Scientific Services Branch

Brisbane City Council
Department of Water Supply & Sewerage
Scientific Services Branch
Donaldson Road
Rocklea
BRISBANE QLD 4106

Date 25 / 5 / 94

To INVESTIGATION AND PLANNING SEPW	Facsimile No. 225 6765
Attention JACK CLERKE	No. of Pages (including this page) 1
From M LEVER	Facsimile No. (07) 875 8646

Re GRAVEL EXTRACTION – BRISBANE RIVER

As discussed, Scientific Services section recommends that conditions be applied by Water Resources / DPI on the Redbank Group's application to ensure that there is no increase in the costs of water treatment at Mount Crosby and no deterioration in water quality e.g. Turbidity.

- On the past it has been agreed with Water Resources that direct extraction from the river, ie from below the water surface, would be prohibited.
- In addition, any washing facilities for the extracted gravel should have the wash waters treated in settlement ponds before returning the clean water to the river
- Finally, any cut in from the artificial lakes to the river should be very closely supervised to avoid disturbance of silt or discharge of solid particles.

PLEASE PHONE (07) 875 8611 IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION

Regards

49-Sch4 - Signature

dass c:\wp51\docs

DNRM RTI DL Release

Facsimile transmission from

BRISBANE CITY COUNCIL

69 Ann Street
Brisbane
Queensland

GPO Box 1434
Brisbane
Australia 4001

Brisbane City Facsimile 229 1168

Date 26-5-94

To DEPARTMENT OF PRIMARY INDUSTRIES		Facsimile No. 224 2933
Attention N. JEFFERS		No. of Pages (including this page) 2
From J. CLERKE - B.C.C.	Phone No. 225 4492	Facsimile No. 225 6765
Re READYMIX GRAVEL EXTRACTION PROPOSAL		

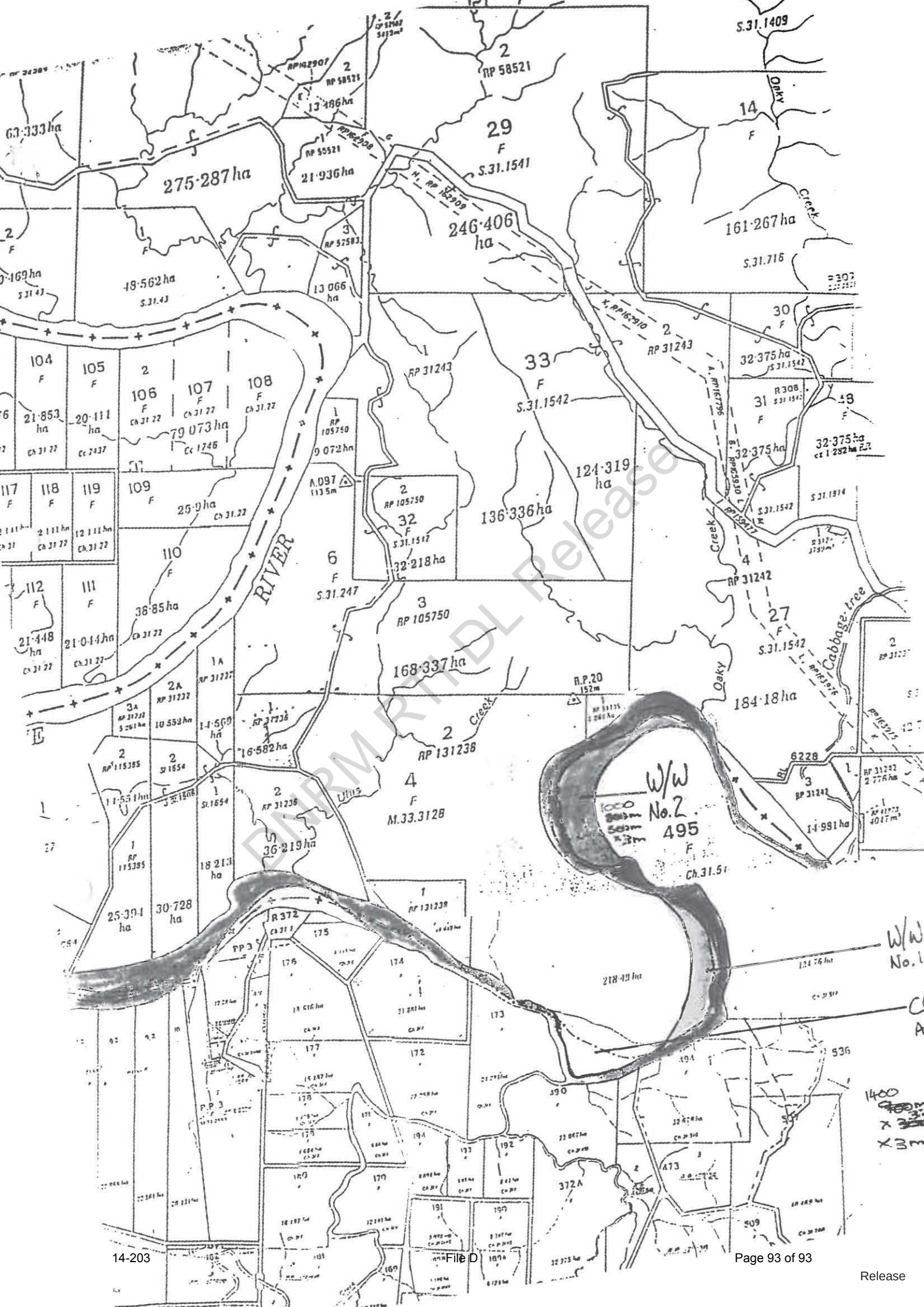
Nigel

Further to our telephone discussion, I have attached for your information, copy of faxed comments on the above proposal from our Scientific Services Branch.

Regards

49-Sch4 - Signature

DNRM RTI DE Release



DNRM RTI DL Release

Release