



WEST COAST HIGHWAY STUDY

REPORT OF THE ENVIRONMENTAL PROTECTION AUTHORITY

to the

MINISTER FOR CONSERVATION AND THE ENVIRONMENT

13 July 1976

BULLETIN No. 14





ENVIRONMENTAL PROTECTION AUTHORITY

RP HOUSE,

1 MOUNT STREET, PERTH WESTERN AUSTRALIA 6000

Telephone 22 2477

HON. MINISTER FOR CONSERVATION
AND THE ENVIRONMENT

BJOB:SA

WEST COAST HIGHWAY STUDY

1. On 6 November 1973 Hon. R. Davies, M.L.A., then Minister for Town Planning, on the request of the Metropolitan Region Planning Authority, referred to the Environmental Protection Authority the long-standing controversy about a route for the West Coast Highway in the Swanbourne-Cottesloe area. The referral letter is given as Attachment 1.
2. The Environmental Protection Authority now desires to make recommendations to you to convey to Hon. Minister for Town Planning its resolution of the issue, which has come from a \$150,000 consultants' study, public and technical assessment thereof, and our own deliberations.
3. The comprehensive nature of the total studies involved is such that they surpass greatly any previous highway analysis in this State. The public was involved to an extent that can never be challenged, with a logical sequential interrelation summarised in Attachment 2. This was essential because the issue was largely a social one. The study was financed by the Federal Government (for \$100,000), the Metropolitan Region Planning Authority (for \$50,000), and the State Government, local authorities and others through their varied contributions. The EPA acknowledges with thanks the fiscal and technical support of many, but accepts fully the responsibility for the recommendations which follow.
4. The consultants were guided throughout the study by a senior group comprising the Chairman of the EPA (as Chairman), the Town Planning Commissioner, the Director General of Transport and the Commissioner of Main Roads. The final consultants' report and recommendations, however, were the consultants' responsibility alone. However, the senior group has given the assurance that there are no significant technical errors of fact in the two-volume report which contains nearly 250 pages of data.

5. The EPA has been assured that, apart from several minor errors, most of an editorial nature, which do not materially affect the outcome, the consultants' report is technically correct. We thank those who have assisted us in this assessment (Attachment 3).
6. The issue, which largely resolves into sociological and environmental matters, brought home very forcibly a broad range of human concerns. On the one hand we were faced with the human problems of those in Servetus Street. Their lives and emotions and memories are bound up in their dwellings as homes. Any contemplated demolitions would be viewed by them as like a dreadnought of technology and population pressure, devastating in its potency and nihilistic in its bureaucratic process of compensation under the Public Works Act 1902. There can be no fiscal compensation for the dreams and memories with which a human surrounds his dwelling and his home. We considered whether, for example, we should recommend the appointment of a special arbitrator and conciliator to assist in detailed personal assessment of the problems of those whose homes may be resumed. But we are forced to accept that the law is a fair one, and we can only recommend that it be implemented with compassion. The personal submissions we have received should assist in this regard, and, with the permission of the authors, can be made available.
7. But on the other hand we have encountered vituperation and ill-will towards the consultants and towards some residents from some persons and organisations. We have examined each accusation and conclude each is unfounded. The consultants had a difficult job to do. They discharged their responsibilities well. The fact that nine out of the 12 private (non-Council) members of the Citizens' Liaison Committee publicly thanked the EPA ('West Australia' 3 July, 1976) and three did not is a measure of the divisiveness of the issue. The tone of many press reports and some other letters to newspapers are further evidence.
8. During the course of the study, the Nedlands City Council constructed a park area in the region where the consultants had assessed a Marmion Street option to avoid the existing Allen Park area. The Council thereby sought to justify its own proposal of a Marmion Street route across the existing Allen Park, which the consultants found undesirable inter alia because of sand-dune and recreational value considerations. We don't criticise Nedlands City Council for creating a new reserve while the controversial study was actually going on - after all, the study was overdue and the Council had been waiting for resolution for some time. But equally we don't criticise the consultants for not adjusting their study parameters against their best technical judgement simply because a local council sought, perhaps inadvertently, to limit their options.

9. Allegations of bias in the consultants have been made. No written allegation was made before the report was produced, although ample opportunity existed over the ten months. We consider that our conclusion of lack of bias is self-evident.
10. A major factor in all the study is that finally we have achieved a technical and policy comment from the Commonwealth Department of Defence, whose occupancy of land has proved a formidable barrier to previous planning. The Commonwealth had earlier consistently refused to comment until it had a specific proposal advanced. The consultants' report met that proviso, and the conclusion from the Department of Defence was -

"The Department of Defence considers the report to be a well researched document which appears to offer the best solution to the complex problem of providing an adequate major traffic artery through the Swanbourne Area with the minimal environmental impact."

The importance of this view in helping resolve this long-standing problem will not be underestimated by those familiar with the complexities of negotiations with the Commonwealth.

11. We have received over 400 individual and group submissions regarding Volumes I and II of the consultants' report. We made about 270 copies of the reports available at no cost to individuals, groups and libraries because we wished the public participation to continue throughout. But, with minor detailed exceptions, there has been no suggested course of action which was not investigated by the consultants, whether it was a 'no-build' option or a split of Marmion Street and Servetus Street as one-way streets, or other varied suggestions.
12. Numerous technical comments were made in various submissions. These ranged over broad issues, such as the community severance that would result from a Marmion Street option, to questions of valuations now and in the future, to a mixture of engineering doubts by some on a Marmion Street option (e.g. with regard to noise-bunding and turning areas without resumptions) and by others on a Servetus Street option (e.g. with regard to grades and crossovers). These have all been reviewed, many of them with the assistance of the consultants and technical experts from other Government Departments.
13. In terms of numbers of technical comments, the submissions of the Nedlands City Council, the Servetus Street Action Group and the Cottesloe Community Association of Ratepayers were the most prominent, but many others contain important elements that had to be assessed. It must be appreciated that *the consultants were not asked to design a highway*, and criticism of their reports on many specific details in this context are more properly a matter for the later engineering design (see Recommendation below).

14. The consultants were asked to prepare feasible options and then to examine economic, social, engineering and environmental aspects of each alternative option. The consultants report was not intended to be a final engineering plan for a highway. Rather it was intended to set out a scenario from which satisfactory detailed engineering construction design could begin. We are advised by experts that it meets this aim. The subsequent responsibility, should the Government accept our recommendations, is that the Government itself makes specific engineering design and in doing so, takes account of the technical submissions received by us.
15. Similarly, should it be decided that resumptions should occur, we recommend that the appropriate authorities take due account of the many personal and private submissions on consequential hardship presented to us.
16. Further, the consultants did look into the broader regional aspects, as we have. For example, we distributed copies of the reports to the Mayors, Shire Clerks and libraries of ten Councils, viz. - Cottesloe, Nedlands, Perth, Claremont, Subiaco, Mosman Park, Fremantle, Stirling Wanneroo, and Peppermint Grove. We include a regional recommendation below. We add that we are disappointed that the only Councils to respond were Claremont, Cottesloe and Nedlands.
17. In a regional basis; the consultants concluded (Vol. II, Section 1.5.2) that the various regional possibilities, which might be justified on a metropolitan scale, are not the solution to the Swanbourne problem. It is therefore not desirable, in our view, to defer once more a decision on this issue simply because regional aspects such as the proposed Stephenson Highway are unresolved.
18. In any assessment of the merit of one option or another it would be conceivable to allocate*weighting factors. One could have a rating for the cost of resumptions; another for the loss of say, portion of a rifle range, or part of Cottesloe golf links, or part of Claremont golf course, or other recreational amenity. (Indeed an incidental outcome of the study was the importance of preserving the current recreational facilities). One could have tabulated the value of this shop or that to the community, or the social sectionalism that a heavily-trafficked road can cause.
19. In all, the consultants took account of more than 200 specific sociological, environmental, traffic and economic parameters (Attachment 4). Not all were equally important. But it is clearly quite an artificial exercise to attempt to quantify the demerits of each route for each parameter, and then recommend the route with the minimum number of demerits. *It is important to note that none of the more than 400 submissions has suggested such a course of action*

20. No other proposals have been anywhere near as comprehensive or as subject to such public exposure and critical assessment. There is no point therefore in attempting in this EPA report an item-by-item discussion of a report which is itself 250 pages long and very comprehensive.
21. Instead, we have had to assess all these parameters and use our judgement as to what is the least obnoxious and the most desirable route. We came to the same conclusion as did the consultants, and we believe that close objective scrutiny of their study can lead to no other conclusion.
22. The EPA is not unaware of State and Local Government political concern about what we might recommend, but, as in the past, our recommendations are apolitical. The issue has been unresolved for too long and continued procrastination can only cause broad public anguish and uncertainty amongst residents of many streets. We are aware that the residents of Rochdale Road, for example, may have much to gain from any of our recommendations just as the residents of Servetus Street may have their homes to lose. We are firmly of the belief that the matter should be resolved and resolved quickly, for the sake of the community as well as efficient planning. We look to local authorities in particular not to be so embittered and parochial that they should seek only to divert a highway into another Shire. This issue is one which understandably promotes selfishness, but we look to the Shires to have a true sense of their responsibility to the community at large, of which they are an integral part. Realistically, we expect to be disappointed, but we hope not to be.
23. In the press, the issue has tended to focus around the question of "Servetus Street or Marmion Street?" The issue is of course far more complex and important and the press debate has obscured this. The residents of Rochdale for example, have nothing to lose and much to gain by any course of action other than that of 'no-build'. The Scarborough residents and others must be concerned about highway activities in the north of the study area (south of Karringup Road) and although they have been quiet to date, we make recommendations for their area also.
24. Two quotations from Volume II, Section 2.7 ("Public Opinion") of the consultants' report epitomise the EPA's recommendation for prompt action, viz. -
 - (a) *"The existing West Coast Highway situation in Swanbourne is seen to represent an indefensible lack of continuity in the city's road network", and*
 - (b) *"many residents added to their comments ... an insistence that it was important that a decision be made, and made quickly: 'this business has dragged on much too long'."*

25. This particular issue should be resolved quickly so that residents know where they stand. But the lessons of the study should also be used to the full, and we therefore support the concept, which has sprung from the study, without political motivation but from personal and professional concern, wherein the officers in charge of responsible Government Departments and instrumentalities pool their knowledge and prepare a "green paper" for advice to the Government on the perplexities of traffic and transportation for Perth itself.
26. The Environmental Protection Authority therefore, having assessed the consultants' report and the submissions and analyses thereof, and having taken into account the social environmental, recreational, traffic and economic considerations involved, hereby

RECOMMENDS

acceptance by the Government of the consultants' recommended route on the western side of Servetus Street - linking with Challenger Drive via Army land.

27. The EPA, having noted the extensive detailed technical comments on the consultants' report

RECOMMENDS

that the Main Roads Department in its specific detailed engineering design of any consequential highway route examine all these technical comments.

28. The EPA, having noted the numerous submissions relating to the personal inconvenience and hardship which may be suffered by those residents whose houses are to be resumed

RECOMMENDS

that should the intention to resume be announced these submissions, with the permission of the authors, should be provided by the Department of Conservation and Environment to the arm of the Government charged with negotiating the details of resumption.

29. The EPA, having noted the inconvenience presently being experienced by residents of Curtin Avenue and having noted other submissions of further inconvenience, particularly in regard to traffic noise, that might result should the above recommendation be expedited, hereby

RECOMMENDS

that the Main Roads Department in their detailed engineering design -

- (a) pay particular attention to utilisation for road purposes

of as much of the railway reserve in the Curtin Avenue vicinity as is practicable including possible relocation of the SEC and Police establishments,

and

- (b) examine in detail noise bunding or other devices to attenuate traffic noise in Curtin Avenue residences.

- 30. The EPA, having noted the consultants' response to potential traffic problems north of Challenger Drive but south of Karrinyup Road

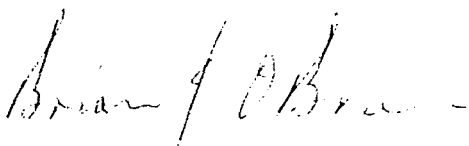
RECOMMENDS

that attention be given to up-grading to a four-lane highway status the West Coast Highway north of City Beach with a view to it joining Marmion Avenue at Karrinyup Road and doing so with a minimum of inconvenience to the residents and to the school on the eastern side of the regional open space south of Karrinyup Road but also with minimum ecological severance and bisection of that regional open space. In other words, the West Coast Highway should join Marmion Avenue at Karrinyup Road as close to the eastern boundary of the regional open space reserve as engineering constraints permit.

- 31. The EPA, having noted the considerable period of time that has elapsed since the dispute in the Swanbourne/Cottesloe area first became public, and having noted also the considerable social and community divisiveness of the issue and the inconvenience suffered by the community through lack of resolution of the problem before this date hereby

RECOMMENDS

to Hon. Minister for Conservation and the Environment that he convey the EPA recommendations to his colleague Hon. Minister for Urban Development and Town Planning as expeditiously as possible with a view to an early Government decision on the matter.



Brian J. O'Brien
CHAIRMAN

13 July, 1976



ATTACHMENT 1

MINISTER FOR TOWN PLANNING.

PERTH.

WESTERN AUSTRALIA. 6000

6th November, 1973.

DIRECTOR,
ENVIRONMENTAL PROTECTION AUTHORITY.

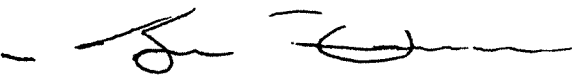
At the request of the Metropolitan Region Planning Authority the question of West Coast Highway in the area of the Swanbourne Rifle Range is being referred to the Environmental Protection Authority under Section 57.1 of the legislation.

With regard to West Coast Highway, the Metropolitan Region Planning Authority at its last meeting held on 31st October, 1973 resolved that:

1. A detailed study of future traffic requirements should be made for the whole corridor bordered by the Indian Ocean, Swan River, Mitchell Freeway and Karrinyup Road, insofar as it affects the requirements for a coastal route.
2. A study of economic, environmental and social factors should be made of the effects of any coastal route.
3. As a matter of urgency, an environmental report be obtained on the effect of alternative coastal routes through the Commonwealth area now occupied by the Department of the Army.
4. In accordance with the provisions of the State Environmental Protection legislation this matter be referred to the Environmental Protection Authority, with a suggestion that, in association with the MRPA and other interested parties, a brief be prepared and an independent firm or firms of consultants be appointed to carry out the studies referred to above. Prior to any studies being commenced it would be essential that the consultant(s), brief, and subsequent recommendations arising from the studies be accepted by all interested authorities.

I suggest that an early meeting be arranged between yourself, the Town Planning Commissioner and the Commissioner of Main Roads to discuss a brief and consultant(s).

Attached are copies of a report to the MRPA on the West Coast Highway, and a Press Statement issued by the Chairman of the Metropolitan Region Planning Authority, Mr Neil Hawkins, following the last meeting of the Authority.


MINISTER FOR TOWN PLANNING

Att.

INVOLVEMENT OF THE PUBLIC IN THE STUDY

Because the issue has been a matter of public controversy since 1962 it was quite clear at the outset that the public would have to be deeply involved in all stages of the study and subsequent evaluation. The following major aspects of public and community involvement illustrate this point.

1. The public was invited to comment on the draft terms of reference of the consultants' brief.
2. Advertisements were placed seeking public comment.
3. A Citizens' Liaison Committee of 15 was appointed by the consultants.
4. The consultants opened a site office which was visited by an estimated 1,000 persons.
5. The two progress reports of the consultants during the study were made available for public comment and these and relevant maps were displayed at the site office and at various meetings.
6. A series of meetings was held with the three relevant local councils, namely Nedlands, Claremont and Cottesloe, with community action groups and groups of interested individuals. The meetings included one large public meeting with an estimated attendance of over 300 people.
7. A Search conference was held on 2 and 3 August (see Volume II, Section 2.2). A total of about 200 individuals were involved in the course of arranging the conference.
8. Numerous surveys took place e.g. water sports destinations, shopping trips and journeys to school.
9. A severance survey questionnaire was distributed both generally and to schools.
10. A household survey of 1,544 households with a questionnaire response of 904 was carried out with a personal follow-up and door knock of the whole survey area.
11. Visitors to the site office were invited to fill out a simple questionnaire and 337 complete questionnaires were returned.

12. A survey was carried out of the origin and destination of traffic including questioning into the purpose for which the travel was taking place. The surveys were carried out both in winter and in summer on a Wednesday and Saturday.
13. Almost 8,000 people were interviewed in relation to use of recreational facilities at the Lake Claremont Recreational Complex, the beach areas, Allen Park and the Swanbourne Army land facilities (see Volume II, Section 5.1).
14. About 200 copies of Volume I and 70 copies of Volume II were distributed at no cost with copies going to the Mayor and Libraries of 10 local councils, copies being sent to interested action groups both those of a formal nature and those of an ad hoc nature, libraries of tertiary institutions, and to as many of those individuals who contacted the Department of Conservation and Environment as was possible. Generally, copies were made available as freely as possible to the community at large at no cost and over 400 submissions have subsequently been received during the period for comment which closed nominally on 7 July 1976 but in point of fact was extended to include those submissions received also since that date.

ACKNOWLEDGEMENTS

Technical assistance throughout the study itself and/or in subsequent assessments was given by :-

Director General of Transport (Office of)
Main Roads Department
Town Planning Department
Department of Defence
Department of Lands and Surveys
Local Governments and individuals
Department of Agriculture
Consultants - Scott & Furphy
Public Health Department
Department of Fisheries & Wildlife

MAJOR PARAMETERS INVOLVED IN THE STUDY1. TRAFFIC

Travel Characteristics : Origins and Destinations -
regional, local, internal
Trip Purposes
Volume - Winter and Summer
Vehicle Class - Cars
Light Goods Vehicles
Heavy Goods Vehicles
Semi-trailers
Buses
Motor Cycles
Motorists' Routes

Highway Options : Regional - Marmion Ave
Stephenson Freeway
Brockway Rd/Selby St
West Coast Highway
Local - No-Build
Marmion St
Servetus St
Davies Rd
Davies Rd + restraint

Future Traffic : No-Build
Regional Possibilities
Local Options

Public Transport : Overseas Experience
Population Densities
Central Business District
Conventional Trains
Trams
Monorail
Jitneys (Shared Taxis)
Personal Rapid Transit
Car Pooling
Conventional Bus
Dial-a-Bus
Express Buses
Patronage
Car Parking Charges
Fares
Running Times
Frequency

Commercial Vehicles : Existing
Detrimental Effect Reduction -
Movement Restriction
Road Improvements
Legislative Restrictions
Physical Limitations
Operating Costs
Future
Regional Growth
Attraction from other Areas

2. SOCIAL

The Search Conference topics as listed on five pages of the consultants' report (Vol. II, Section 2) are indicative of the vast and complex range of social issues that received attention.

3. ENVIRONMENT & LANDSCAPE

- Dune Dynamics
- Tolerance
- Foredune Vegetation
- Mobile Dune Vegetation
- Stable Dune Vegetation
- Closed Scrub
- Open Woodland
- Tuart/shrubby
- Tuart/grassy
- Tuart, Jarrah, Marri/grassy
- Wetland
- Vegetation Condition
- Effect of Disturbance
- Fire
- Regeneration
- Fauna
- Domestic Animals
- Landform
- Aesthetics
- Lake Claremont
- Effects of Road Options

4. TRAFFIC NOISE

- Loudness
- Effect - Subjective
 - Speech Interference
 - Sleep Interference
 - Task Performance
 - Steady Noise
 - Intermittent Noise
 - High Frequency
 - General Health
 - Mental Health
- Standards - Australian
 - Residential Areas
 - W.A. Legislation
 - International
 - OECD
 - USA
 - UK
- Noise Climate
- Existing Noise Levels - Intersection Noise
 - Urban Traffic
- Public Transport
- Freeflowing Traffic
- Noise Propagation
- Meteorology - Wind
 - Turbulence
 - Temperature Profiles
 - Rain, Fog
 - Humidity

Traffic Parameters
Vehicle Parameters
Noise Barriers
House Insultation - Windows
Walls
Doors
Air Vents
Eaves
Roofs

Compensation

5. RECREATION

Golf
Tennis
Swimming - Pool
Ocean
Adventure Playgrounds
Cricket
Football
Soccer
Hockey
Athletics
Casual
Clubs
Schools
Sources of Users
Motor Scramble
Rifle Range
Fishing
Sailing
Surfing
Watching
Picnicking
Visiting
Netball
Access Routes
Duration of Visit
Attendance Pattern
Walkers
Bicycles
Local Users
Non-local Users

6. REAL ESTATE VALUATION

Effect of Options on Value
Compensation
Acquisition Costs
Replacement or making good public land
Compensation for Commonwealth
Effect on properties not acquired.

7. ECONOMIC EVALUATION

Cost-Benefit Analysis
Tax revenue
Operating costs
Time costs - private cars
business cars
trucks

Discount parameters
Changes to property values
Victoria Street bridge benefits