

# COMMONWEALTH OF AUSTRALIA

# Official Committee Hansard

# JOINT COMMITTEE ON PUBLIC WORKS

Reference: Proposed freight and passenger facilities at Rumah Baru, West Island, Cocos (Keeling) Islands

TUESDAY, 10 JULY 2001

COCOS (KEELING) ISLANDS

BY AUTHORITY OF THE PARLIAMENT

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# JOINT COMMITTEE ON PUBLIC WORKS

#### Tuesday, 10 July 2001

**Members:** Mrs Moylan (*Chair*), Mrs Crosio (*Vice-Chair*), Senators Calvert, Ferguson and Murphy and Mr Forrest, Mr Hollis, Mr Lindsay and Mr Ripoll

**Senators and members in attendance:** Senators Calvert and Ferguson and Mr Forrest, Mr Hollis and Mr Lindsay

# Terms of reference for the inquiry:

Proposed freight and passenger facilities at Rumah Baru, West Island, Cocos (Keeling) Islands.

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## Committee met at 2.06 p.m.

**ACTING CHAIR (Senator Ferguson)**—I declare open this public hearing into the proposed freight and passenger facilities at Rumah Baru, West Island, Cocos (Keeling) Islands. This project was referred to the Public Works Committee on 5 April 2001 for consideration and report to the parliament. In accordance with subsection 17(3) of the Public Works Committee Act of 1969, which concerns the examination and reporting on a public work, the committee will have regard to:

- (a) the stated purpose of the work and its suitability for that purpose;
- (b) the necessity for, or the advisability of, carrying out the work;

(c) the most effective use that can be made, in the carrying out of the work, of the moneys to be expended on the work;

(d) where the work purports to be of a revenue-producing character, the amount of revenue that it may reasonably be expected to produce; and

(e)the present and prospective public value of the work.

Before coming to the Cocos Islands the committee received a briefing by the department on the proposal. Earlier this morning the committee observed current procedures for transferring freight and inspected the site of the proposed work. The committee will hear evidence from the Department of Transport and Regional Services and representatives of the various organisations here on the islands.

[2.09 p.m.]

ANTHONY, Mr Haji Adam, Chairman, Congress of the Territory of Cocos (Keeling) Islands

FEYREL, Mr Haji Badlu, Chairman, Territory of Cocos (Keeling) Islands Cooperative, through Mr Haji Adam Anthony, interpreter

HAIG, Mr Cree, Congress of the Territory of Cocos (Keeling) Islands, through Mr Haji Adam Anthony, interpreter

OLBIO, Mrs Danie (Mak Juwanie), Chairperson, Kaum Ibu (Women's Group)

**ACTING CHAIR**—Thank you very much. I now invite you to make a statement before the committee. We may wish to ask some questions afterwards.

Mr Anthony—First of all, I would like to thank you for inviting us to attend this public hearing. We are confident in providing you with our information and really look forward to seeing these projects go ahead on the Cocos (Keeling) Islands, these Rumah Baru jetty constructions. On behalf of the local communities—and we have other communities—the home island local community is really confident about seeing these projects go ahead, because of the number of concerns from time to time with the current jetties on West Island. Especially we are concerned about the school children that go across every day, morning and afternoon. We are also concerned about the passengers transferring from Home Island to West Island and from West Island to Home Island. Other concerns have been raised by the local communities on the Cocos (Keeling) Islands.

Also, we are looking to have these facilities go ahead because we are concerned about the long-term job opportunities for the local community on the Cocos (Keeling) Islands. You are fully aware that the unemployment percentage on the Cocos (Keeling) Islands is very high at the moment—60 per cent plus. That is why we are really concerned about the employment situation on the Cocos (Keeling) Islands. Therefore, we really look forward to seeing these projects go ahead on West Island.

**ACTING CHAIR**—Does anyone else wish to make a statement before we ask questions?

Mr Feyrel—As the Chairman of the Cocos Island Co-Operative Society, I feel very concerned about the barge tour situation and having to travel back and forth between Home Island and West Island for the handling of procedures. It is not really acceptable in terms of the handling of the situation on the West Islands. I am concerned about the handling of the passengers and stevedoring during heavy storms and things like that. I am also concerned about the refuel barge being at the jetty during rough seas and the delivery of goods on West Island using the barge.

**ACTING CHAIR**—Does anyone else wish to make a comment?

Mrs Olbio—I have a comment to make as a mother of two girls travelling from Home Island every day to go to school on this side. During rough weather you have to be very careful in getting off the ferry. I have been travelling to and from Home for nearly 11 years. I find it is very difficult on those days. During the cyclone season, when we have a lagoon closure the kids actually miss one to three days days of school. If this facility can go ahead as soon as possible that would be a good thing.

Mr Haig—As a local resident, I am very experienced in the situation. I feel very concerned from time to time in relation to the ferry crossing from Home Island to West Island. Because we do not have the air bus to travel from Home to West Island we have to travel by ferry. I am really concerned in relation to the current jetty on West Island. I am really keen to see the new project go ahead on West Island. We are also concerned in relation to the people with children, the elderly and the people with disabilities.

**Mr Anthony**—I think the proposal we have here covers everything we require from the community point of view clearly on page three. I think that report indicates it really clearly.

**ACTING CHAIR**—Have you as a community been satisfied with the level of consultation that your community have had with the department over these proposed works?

Mr Anthony—Yes, I have been.

**ACTING CHAIR**—You are very happy with it?

**Mr Anthony**—Yes, I feel very happy with it.

**CHAIR**—Overall, in your view, you can see that there will be major benefits for your community as well?

Mr Anthony—Yes.

**Mr HOLLIS**—You have both mentioned the number of children who travel to school from Home Island to this island. How many children travel each day, roughly?

**Mrs Olbio**—Between 24 and 30 children travel every day. The majority of high school students are from Home Island.

**Mr LINDSAY**—I am advised that on about ten days a year children are not allowed to travel because is dangerous. Adults can travel but children cannot. It is that correct?

Mrs Olbio—That is during the cyclone season. When the cyclones attack Cocos Islands and the lagoon is closed, there is nothing you can do—if the lagoon is closed, everybody has to stay on Home Island. If they say it is only closed for the school kids, the adults can still travel on that day.

**Mr LINDSAY**—Are you as a community confident that the new proposal will solve the safety problems that you see for the children and the disabled, or do you think that, because it is still exposed, it will not be as safe as it should be and should be further modified?

**Mr Anthony**—We feel very confident that it will avoid the risk from the current jetty on West Island. That is why I say we really look forward to seeing this project go ahead on West Island.

**Mr LINDSAY**—So your local knowledge tells you that the new location will be much safer?

**Mr Anthony**—That is correct.

**Mr LINDSAY**—Is it your recommendation on behalf of the community that you would like to see the current jetty remain, or should it be demolished?

**Mr Haig**—According to my view, if the new jetty has been established the old jetty should be demolished because it is not really much used.

**Mr LINDSAY**—Are there any cultural matters associated with the community that should be taken into account with the design of this new facility?

Mr Anthony—No, it won't affect the Malay culture.

**Mr FORREST**—From your local knowledge, are there any other sites like Rumah Baru that could have been considered or could be better than this, or are you convinced this is the best site?

**Mr Haig**—There are no choices apart from the Rumah Baru site that we think are really safe for the project. There are other places that we have looked at, but I think there is actually a lot of work to be done in connection with the environmental impact situation.

From my point of view, this jetty design looks very safe, but I do not know whether in the future it will be really safe enough for the community—for the elderly and the disabled.

**Senator CALVERT**—Following on from the safety issue, I think Mr Badlu mentioned the safety issue not so much with children but with the workers under the current system. Have there been any accidents to these stevedores?

**Mr Feyrel**—There is no injury to the workers but there is much damage to the items, like antennas and the barge.

**Senator CALVERT**—We actually travelled back on the barge today and there was a fair amount of sea running. It was quite obvious that, if it had been any rougher, it would have been very difficult to unload the trailer. I note, as part of the community consultation process, the community favoured the inland basin option originally, which is the other option, not this one. Are you happy with the design now that has been recommended?

**Mr Haig**—I would prefer to have the current design instead of having the basins on the shore. I am not really sure which is the best one, whether the current plan or the one that is inside the shore.

**Senator CALVERT**—I think the inland basin option ruled itself out because of the movement of sand and whatever. I think this will be—and we will see later—an all-weather type of option which is more practical than the other one.

**ACTING CHAIR**—If there are no further questions, I thank you very much for appearing before the committee today. We do appreciate the views of the communities concerned and we are very keen that we have your records placed on record in *Hansard* when we are making our recommendations. To each of you, I say thank you very much for appearing before the inquiry today.

Before I call the department witnesses, I should ask whether there is anybody else who wants to give evidence but who has to catch a ferry that would preclude them from giving evidence later. If there is no-one, I now call the department witnesses to come forward.

2.28 p.m.]

HOLLAND, Mr Robert George, Deputy Administrator, Cocos (Keeling) Islands

MAHER, Mr Daniel John, Project/Site Engineer, Gutteridge Haskins and Davey Pty Ltd

SEMAN, Mr Peter Anthony, Project Manager, Cocos Capital Works Program, Gutteridge Haskins and Davey Pty Ltd

TAYLOR, Mr Noel Joseph, Senior Technical Officer, Gutteridge Haskins and Davey Pty Ltd

TAYLOR, Mr William Leonard, Administrator, Indian Ocean Territories Administration, Department of Transport and Regional Services

WEATHERSTONE, Mr John, Acting Director, Asset Management, Indian Ocean Territories, Department of Transport and Regional Services

**ACTING CHAIR**—I welcome the representatives of the Department of Transport and Regional Services. The committee has received a submission and several supplementary submissions from the department. These submissions will be made available in a volume of submissions for the inquiry and are also available on the committee's web site. Does the department wish to propose any amendments to any of the submissions that have already been made? If not, I now invite you to make your opening statements and we will proceed from there with questions.

Mr W. Taylor—First of all, can I thank you and the committee for coming to Cocos (Keeling) to carry out this formal hearing. I will make a couple of comments before I pass over to the team to make a formal visual and oral presentation. Firstly, I make the point that a decision on this is long overdue. I think this morning you have seen why it is long overdue. The system that we have at the moment is highly inefficient; it is inappropriate; it is very weather dependent and, in the extreme, it is downright dangerous—not only in terms of the stevedoring element of the passenger and freight traffic but also, indeed, as you have heard, in relation particularly to schoolchildren and passengers travelling on that ferry at times under difficult conditions. I will make an anecdotal reference to that. In the last week or so we had, potentially, a very serious accident on the West Island jetty when Pam Jones, one of the registered nurses, returning from Home Island, in fact just failed to fall down between the ferry and the wharf. The conditions were not all that bad, as I understand it, but somebody can expand on that if need be. I think it highlights the fact that it is inappropriate and at times very dangerous in terms of the transfer of personnel, particularly schoolchildren, and particularly when the weather is bad. As you have heard, in really bad conditions the lagoon is closed anyhow, but nevertheless it does not need much of a swell to make particularly on West Island jetty the conditions very dangerous. That is all I want to say by way of opening remarks. I will now hand over to the team who will make a visual presentation followed by a more detailed oral presentation.

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**ACTING CHAIR**—Thank you, Mr Taylor. Mr Weatherstone, are you going to make the presentation?

**Mr Weatherstone**—Thank you very much. On behalf of the team, I would like to start off with an overview of the presentation we intend to put to the committee today.

Overhead transparencies were then shown—

Mr Weatherstone—If we can look at the screen, I will elaborate on six major points. One is the current operations; two is why a new facility is needed; three is the consequences of not proceeding; four is the processes that have been undertaken, including environmental clearances, et cetera; five is the options proposed—there are three options available to be looked at, and then the funding program. Firstly, I would like to give a digital presentation of the conceptual design that has been put forward for the access road and offshore island at Rumah Baru. We would like now to walk through some of the features of the jetty. We can pause this at any stage.

**ACTING CHAIR**—I am not quite sure how we will get this into *Hansard*, Mr Weatherstone, but don't worry, we will proceed.

Mr Weatherstone—For the benefit of everyone here it would be helpful if we could get some idea of the concept. There has been no design stage at this phase, but we would like to give some idea of what would be involved at this section on West Island. As you lead up to the jetty you have to build up the area to cater for the storm surge. So we will be building up this hard stand area. On the left-hand side is an area for the hard stand of containers as the prime mover comes off with the container onboard.

As we go along we are going towards the current position of Rumah Baru. There will be on the left-hand side car parking facilities, a toilet block and a small office for the stevedores. There will be a car park on the right-hand side and also the original recreation ramp will be included in the design. We will need to arrange for some alteration as we come from a real level down to the lagoon level. But that will remain and be upgraded.

The access bridge is roughly 5.8 to six metres wide. There will be a pedestrian walkway with a railing that will be separated from the access bridge. On this side of the bridge there will be bollards along the entire length of the jetty. The access bridge is roughly 180 metres and the offshore island is roughly 85 metres by 55 metres.

In this area we have a recreational ramp, the barge ramp and access to the ferry. That ferry will allow access for the elderly. There will be a ramp for the disabled. It will meet all occupational health and safety standards. As we swing around a little bit you will see another set-down area for the ferry or for recreation craft. There will also be a refuelling point there. As you get off the ferry there will be a bus shelter. The whole idea is that it is a set-down area and there will be no parking permitted on the island.

The barge will offload on the southern side. You can see the fuel storage. The whole idea there is that the fuel will be underground to the fuel outlet. It is the safest location on the

offshore island simply because you have a lot of activity with container movement, passenger movement and recreational craft. The idea is to keep that as far away as possible.

As we swing around the island we do have a seawall. This is predominantly the wave angle. This design will have a full wall to that point and also a wave deflection. That level is roughly  $2\frac{1}{2}$  metres from the top of the pavement.

**ACTING CHAIR**—I should not interrupt, but what is the depth of the water where you having that?

**Mr Seman**—The water is at minus two metres in the channel—from there out—and in this swing basin it is at minus 2.5.

Mr Weatherstone—So there will be a swing apron. The swing apron for all the craft coming in is at 2.5 metres and, as you swing round the apron, the channel will head towards Home Island for 400 metres. That will be about 2.1 metres, hopefully a bit deeper if possible. On top of the offshore island you will have a wave deflector. That will assist during not only sea surge but also wind. It is fairly well protected. The whole offshore island will have lighting. It will have access for electricity. There will be a submain located on the island. There will be electrical connections. Also with the offshore island, as we keep swinging around, the access bridge does allow for complete movement of the water as a flushing agent. Basically that is the concept that we have for this proposal. I notice that someone did mention the inland proposal—that it would not allow for flushing. There would be sedimentation along the coastline—it would silt up so it would be absolutely nonfeasible to continue with it. That is why that option was not continued.

**ACTING CHAIR**—What about your other option which included not having the offshore island? Are you coming to that?

**Mr Weatherstone**—We will come to those in the presentation. This gives everyone a fair concept of just what we intend to do—the design, the angles.

**Senator CALVERT**—If the sea is coming in at that angle, wouldn't that make it difficult for the barge from which you will be unloading your containers? Will the wave action push it up against the island?

Mr Seman—The south-east trade winds come in at about that angle there—that point there—and the *Jasa* can berth either along the southern face or along the western face, which is totally protected. The barge can also berth along there. It is designed to have that flexibility. This is obviously more protected than the other faces but certainly the western face offers the greatest protection. A wave study carried out by Dr Chris Jones said that the actual location out from the shoreline was the optimum location and that the orientation likewise was suitable for both the wind and wave conditions.

**Mr Weatherstone**—I would like now to go back to our oral presentation with a Powerpoint display. I would like to go through each of the six items that we showed earlier and I will get Peter to talk about the current operations: what you saw today, what goes on and the time frame with regard to freight transport and passenger transport under current conditions.

**Mr Seman**—The first thing is shipping. Currently there is a four- to six-week cycle and there are two shipping companies that operate to the islands. With regard to freight transport, the current set-up is that the *Jasa Cocos* dumb barge is based at Home Island. Containers are transported from the ship to Home Island by the *Jasa Cocos*. Urgent fuel and freezer containers are transported by the *Biar Berjaya* from the ship to West Island, and the fuel isotainer containing petrol is actually returned to the ship on the same day prior to the ship leaving the island. Containers are then transferred individually across the lagoon to West Island on the *Biar Berjaya*, as you experienced today. The time to actually transfer all the containers in a normal freight cycle is approximately one to two weeks. The average number of containers in a freight management study done two years ago was 10 to 12 containers. The current advice is that over the last year there are now approximately 20 containers per month on a monthly cycle. Of that, 75 per cent are bound for West Island, hence the need for the facility.

I turn to passenger transport between West Island and Home Island. The West Island jetty is exposed to heavy swells and there are safety issues associated with that. As Bill was explaining, there have been some recent near accidents occurring at the West Island jetty. Prevailing marine conditions on an average of 10 to 15 days per year force the closure of the lagoon. Obviously, children and employees from Home Island are unable to come to West Island. The Home Island wharf has had recent upgrades, including the new barge ramp at the front of the wharf. That was put in recently. There has also been some fender piling work carried out. They were the major things in the most recent upgrade.

Now we will move to why the new facilities are needed. The current infrastructure and operations are inadequate. There are unsafe passenger transfers at the exposed West Island jetty and there are unsafe freight handling practices at the West Island beach landing. This is also referred to in the joint standing committee report *Delivering the goods* in February 1995. There are also inefficient freight handling operations and procedures, which are characterised by the single container movements across the lagoon on the *Biar Berjaya*. The facilities are also inadequate for transporting large or heavy plant. The current beach landing operations are both dangerous and time consuming.

**Mr W. Taylor**—One thing you may have noticed is that it is despoiling the environment as well. It is increasingly damaging the beach. Another consideration is the environmental downside of the current operation.

**Mr Weatherstone**—The current facility is roughly two kilometres from the proposed new facility. It is more exposed at the northern end and hence you get much more wave surge at that end of the island.

**Mr Seman**—The consequences of not proceeding with the proposed development will include the costly repairs and maintenance of the existing infrastructure, including obviously the need for a major upgrade of the West Island jetty. There is a limited opportunity to develop tourism and things like container movements. The bulk of any future tourist development will be based on West Island. There are obviously inefficiencies in the current operation, which are obviously causing problems. There is also an inability to transport large items across the lagoon on the *Jasa Cocos* barge and to unload at West Island, as there is no unloading facility for the *Jasa Cocos*.

**Mr Weatherstone**—I think we have also mentioned the safety issues.

Mr Seman—We will now move to the investigations and studies undertaken to date. Back in 1996 we commenced the environmental monitoring program, which is still continuing and will continue through till 18 months post the construction phase of the project. The freight management study was commissioned in 1997 to assess the current operations. A terrestrial field survey was carried out in 1997 to document existing flora and fauna at the proposed sites. There has been ongoing community consultation throughout the phases of the project, including a formal consultation phase in February 1999. A report has been issued to the committee on the outcomes of that consultation exercise.

Because of concerns associated with the inland basin, a harbour flushing study was carried out also in 1999, which confirmed the inadequate flushing characteristics of the proposed inland basin. In parallel with that a temporary groyne was constructed at the site. With the proposed inland basin there were going to be groynes put on either side of the entrance channel on the shoreline. As a result of that study, there was a huge build up of sand on the northern face of the temporary groyne within a very short period of time—something like one metre.

Following on from that, there has been a wave study and jetty assessment carried out in 2000, which led to the development of the offshore island access bridge concept. In the statement of evidence we have shown a flow chart to explain from the commencement of the monitoring how we have got to this current stage today. Finally, a notice of intent was submitted in July 2000 to determine the level of environmental impact assessments. We received approval for that in May of this year.

Alternative concepts not considered any further: the causeway ring-road because it had excessive cost and a very high environmental impact; the two-barge system because it did not address passenger transport issues; the hover barge because it was unproven technology in a remote environment and also because there were great problems with the prevailing winds and the intensity on the island; a vehicle ferry again because it did not address passenger transport issues; and a deepwater berth again because the dredging associated with the proposal had a high environmental impact from.

Alternative concepts that have been considered further include the harbour basin that we talked about earlier on. The flushing problems and the impact on sand movement within that basin have led to it being ruled out. There was the causeway similar to what we have on Home Island currently. There was high environmental impact at the near shore zone due to sand movement being blocked. Again, that was highlighted by the temporary groyne. Then there was the jetty option. The passenger jetty does not provide a sheltered anchorage for vessels. That proposal also involved shore based barge ramp groynes which again blocked the long shore sediment transport. This led to the development of the preferred concept, which is the offshore island and access bridge.

The environmental consultants for this project have determined that Rumah Baru is the preferred development site. It offers access to deeper water at low energy in a stable environment. It is not subject to the level of swell and wave action that is experienced at West Island jetty. The zoning of the site at Rumah Baru is consistent with the proposed development and, again, we have addressed the issues to do with the zoning and any approvals in the

statement of evidence. The alternative sites do not provide the above benefits, hence the selection of Rumah Baru.

**Mr FORREST**—What are the alternative sites?

**Mr Seman**—Sites have been thrown up either to the north, where you would have seen the red boat in the Two Trees area, or to the south. They were all considered at the very early stages of the project. That is also identified in the notice of intent, which was also submitted.

The environmental consultants have determined the proposal is expected to have minimal environmental impact on the marine and terrestrial environments. There are no heritage issues precluding development at Rumah Baru. There was a heritage study carried out in 1996, and that is commented in the statement of evidence. The piled access bridge does not block long shore sand movement in the active near shore zone, which was obviously the problem with the inland basin project. The final assessment of the proposal was received in May 2001 from Environment Australia. In that submission the project did not require any further level of assessment, but was subject to certain conditions. A copy of that letter and the conditions have been forwarded to the committee.

**ACTING CHAIR**—Before you go any further, I have one question. The offshore island that you are proposing is 200 metres off the shore, isn't it?

Mr Seman—Yes, 200 metres.

**ACTING CHAIR**—Why was 200 metres selected? You have to construct the jetty right out there as well. Was it considered you needed 200 metres for turnaround space for barges? Why 200 metres—it seems a fair bit?

**Mr Seman**—There was a wave study and jetty assessment carried out in which they modelled the wind and wave climate on the islands, and they determined 200 metres was the optimum location, given the proposed depth of minus two metres for the channel. So it was deemed to be the optimum solution.

# **ACTING CHAIR**—Okay.

Mr Seman—I turn now to the options proposed. Option 1 was the jetty and barge ramp with no offshore island. The estimated cost is \$10.2 million, which will be funded by an adjustment of priorities. We can talk about the funding maybe a bit later on. Its features are a 200-metre long jetty and 200-metre long dredge channel. It is not 400 metres because it has only been dredged to minus 1.5 and not two metres, as is proposed in options 2 and 3. It will provide ferry landing and barge landing alongside the jetty. Onshore facilities will include a passenger shelter, but an unsealed access road and car park.

**Mr LINDSAY**—It could have included a sealed access road and car park?

**Mr Seman**—It could have, but the scope was developed to match the \$10.2 million available funding that the department has. Later on we will talk about the costs. Also, we have included in the statement of evidence the cost of actually putting sealing onto that option. The advantage

of this option is that it matches the available funding, which is achieved by an adjustment of priorities. As I say, we can talk about that later on. The major disadvantage is that it is limited to single container movements. Also, there is no provision for unloading the *Jasa Cocos* dumb barge, and it offers limited protection to vessels berthing. There is no provision in this option for a sealed access road and car park, and the fuel tank is located on the land side—whereas in options 2 and 3 the fuel tank is located on the island. The difficulty is that that means that in option 1 the fuel lines need to be suspended from the access bridge over water. Obviously, there is potential for leaks and the like.

Option 2 is the offshore island access bridge. This is the staged option. The total estimated cost is \$18 million, and stage 1 is \$10.55 million. That includes the offshore island construction but excludes the armouring to the sea wall. All that is provided are some plastic tubes. I draw your attention to a sketch in the statement of evidence that shows that that is all that is constructed for cost reasons, in the short term, and that only has a limited life span of three to five years. We can talk about that a bit later on. It involves a 400-metre long dredge channel and, again, a 200-metre long access bridge. It has a hard stand for the mobile crane only, a barge landing ramp, onshore facilities, and—only at this stage of the option—an unsealed access road and car park.

We will move on to stage 2, which is at \$7.45 million, to get to a total of \$18 million. Stage 2 involves the construction of the armoured revetment wall, which is not included in stage 1. The onshore facilities, again, that were not included in stage 1 are the passenger shelter and the sealing of the access road and the car park. Another point is that in stage 1 it is not providing any engineering services out to the offshore island. These are provided in stage 2.

**ACTING CHAIR**—Could you explain what you mean when you refer to the hard stand for the mobile crane?

**Mr Seman**—In option 3 we were putting interlocking block paving onto the entire structure of the offshore island to provide a platform to fit four vehicles. The crane can then obviously run around throughout the island area.

**ACTING CHAIR**—This will just give you one hard stand; that is all.

**Mr Seman**—In option 2, all you have is a limited area for the crane to operate in.

**ACTING CHAIR**—I understand that.

Mr Seman—It is purely driven by the funding scenario in that situation. The advantages are that you can have multiple container movements, there is provision for unloading in the *Jasa Cocos* dumb barge, it offers sheltered protection for berthing a passenger ferry and other vessels, and it has a passenger shelter on the offshore island. The disadvantages are that the available funding is still to be confirmed, and there is a penalty of \$2 million between options 2 and 3—option 3 being \$16 million, and we will come to that in a second. The penalty is because of the cost escalation between the two separate contracts, the two separate stages, and also the loss of economies of scale in that you need to remobilise to then come out and do stage 2 down the track. They are talking about a three-to-five-year window between stages 1 and 2. That is option 2, in general terms.

Option 3 is the offshore island and access bridge, which is the full development. The estimated cost is \$16 million, and the features are that the offshore island is constructed from dredge material, there is a 400-metre long dredge channel, a 200-metre long access bridge, a hard stand for a mobile crane—but in this case it is actually fully paid in the entire offshore island—and fuel facilities are provided on the offshore island. There is a barge landing ramp, a recreational boat launching ramp, onshore facilities, including the passenger shelter, and sealed access road and car parks.

Advantages include multiple container movements, as possible; provision for unloading in the *Jasa Cocos* dumb barge; sheltered protection for berthing passenger, ferry and other vessels; and that passenger shelter is provided in the offshore island. The only disadvantage highlighted is that the available funding is to be confirmed, but it is \$2 million cheaper than option 2. Under funding and programs we have included the employment impact. There will be the creation of both long-term and short-term job opportunities for the local community. We have highlighted the estimated employment during the construction phase in the statement of evidence.

A confidential program was submitted along with the summary statement, which showed a forecast completion in early 2003, but that was subject to PWC and governmental approvals for that timetable to be met. Summarising the funding, option 1—which is the \$10.2 million option—can be funded by an adjustment of priorities. Options 2 and 3 require additional funding over and above the \$10.2 million discussed previously. Option 2 was again \$2 million more than option 3.

Mr W. Taylor—In relation to the employment impact, on this island—as you probably know—and particularly on Home Island, the unemployment rate is 64 per cent. Quite obviously, we do need jobs generated with projects like this. Our experience has been, both here and in Christmas Island, that a lot of the facilities and large expenditures that we have in the capital area do not lead in general terms to a lot of local jobs. As you know, under trade practices legislation we cannot specify the use of local labour, but I think it is worth saying that for your committee's consideration in the context of the report it would help if a firm recommendation were made of wherever possible optimising local jobs.

That would be very helpful. As the administrator, I am disappointed at times when I see these large projects going to the mainland. Whilst the groups that carry out those large projects are very competent in general terms, they tend to bring with them their own work force. I think it would be helpful if somewhere we could get injected—particularly into this program—a requirement for local employment to be enhanced.

**ACTING CHAIR**—Does that conclude the presentation?

**Mr Weatherstone**—That concludes our presentation.

**ACTING CHAIR**—Thank you very much, Mr Weatherstone. I congratulate you on your presentation, because I think it has been excellent in the information it has provided. I do not quite know how Hansard can record all these things, but at least we can see what is happening. It does help the committee to visualise the concept when you have such a professional presentation. Automatically, a couple of questions come to mind, and one particularly. Because there is only funding set aside for \$10.2 million, if it were to go ahead with option 3—and we

are looking at \$16 million—how long would you envisage the total project would take from start to completion?

Mr Weatherstone—I think we have roughly documented that it would take 18 months to two years to complete this project. As stated, we can get \$10.24 million through the capital works program. Under our capital works program we have a five-year rolling program called the Strategic Asset Management Plan. We are currently entering our third year of that five-year program, and we are intending in August to hold a complete review of our priorities in that program and look to add another two years to have it as a five-year rolling program. With this room that we are in now, when the Commonwealth Grants Commission did assess the need for an alternate facility here on West Island it was the inland basin, and the rough estimates were around the \$10 million mark.

We have moved on in time from that. It has taken a considerable time to get to this stage, basically because of the amount of environmental studies—wave studies, sedimentation studies, a whole range of studies—that needed to be carried out and approved before we could get to the next stage. We now have to review our program and our priorities and look to fund the entire program for this facility.

**ACTING CHAIR**—When was the \$10.24 million actually allocated for capital works?

Mr Weatherstone—The Commonwealth Grants Commission endorsed the program in 1999, following their report in November 1999, and that was endorsed by government. They recommended that that particular program for the Indian Ocean Territories be funded as our capital program. Government endorsed that program and that now takes us through for five years. We are in our third year, starting as of July this year.

**Mr W. Taylor**—So with judicious programming, just a little over \$10 million is available in 2001-02. The balance could be made available again with programming schedules in 2002-03.

**ACTING CHAIR**—But it has not been yet. That is the point. The only money that we know is the \$10.2 million.

**Mr W. Taylor**—That is correct.

**Mr FORREST**—Could I get a reference from the minister to conduct this inquiry for \$16 million?

**ACTING CHAIR**—I do not think there was a price put in there.

Mr FORREST—I understood that it was for \$16 million.

**ACTING CHAIR**—Sorry, we will have to find that out.

Mr FORREST—It is a nonsense to ask for \$18 million when you can do it for \$16 million.

**Mr W. Taylor**—That is the point we are making.

Mr Weatherstone—More to the point is that, in our capital program, we can find \$10.2 million. We need to look through our program further on to find the extra money. What we are saying is that if we lock in a two-staged approach to look at acquiring the additional funding over the next two years of our program—to have it as a rolling program—the penalty we incur there is an additional \$2 million. You have staged the project, and if you come back and revisit your engineering services and do your hardstanding and your car parking and a lot of the fuel facilities, you will incur a penalty of \$2 million.

**ACTING CHAIR**—The only reason that I raised that—and I just conferred with Mr Hollis, who is very experienced on this committee—is that if we get to the stage where we consider, as a committee, that option 3 is the best option, then we are actually recommending an option to which funds have not currently been allocated. That is the point I am trying to make. We might come to the view that that is by far the most economical and most feasible action, but in fact funds have not been allocated and so it may make life a bit more difficult for us. We can recommend it, but the government may not accept.

Mr Weatherstone—You are correct, and the point Bill made was right, that what we look at is the judicious management of our program. We have experienced this in the Indian Ocean Territories, where we do have savings. As you know, this has out-turned prices, so it covers all contingencies—inflation, delays, cost increases, et cetera. What we have done on some of our programs is that we have come in with a program that was worth \$4 million and, by combining services like electrical and water and dual trenching and the like, we have reduced that cost by up to 40 to 50 per cent. So with managing our funds we do tend to find that we can, in certain circumstances, manage our funds such that some costs are a lot less, and then we can put those to other funds which we know we need money for. A good example of that is the money that we saved on the dual trenching on a job on Christmas Island. It went towards the rock-fall barrier fencing and the associated works on Christmas Island, which you will see when you arrive.

**Senator CALVERT**—Mr Taylor, you mentioned the job opportunities. In the proposed development, what are the long-term and short-term job opportunities for local residents?

Mr Weatherstone—With all our tendering procedures, it is open, competitive tendering, but we do encourage contractors to use local labour. As Bill said, you get promises that people will use local labour, and then they turn up with their own work force and they tend to reduce the amount of use of local expertise. We have tried to encourage in our capital works program with everyone in the communities, both here and on Christmas Island, a full and frank openness about what contracts are coming up, what projects we have got on the books, the magnitude of the program and what is required skillwise to undertake those projects. We are trying to get in line with the Indian Ocean Group Training Association and with the local contractors to improve their ability to win even subcontracting works on these projects of the Commonwealth's. We ask that they see where opportunities are and improve the skill levels and get those skill levels in front of the contractors from the mainland. So they are reducing their costs because they do not have to pay for accommodation, they do not have to pay for travel, they do not have to pay all of the extras that go in; but they have to pay a fair and appropriate wage for those skills that are required on island.

**Mr W. Taylor**—The Cocos Malay community have a very good cross-section of trade expertise and general worker expertise, and I would see both of those elements contributing to the project.

**Senator CALVERT**—So there is a skills base here that—

Mr W. Taylor—Absolutely. Yes, there is.

**Senator CALVERT**—You mentioned earlier that there is a 60-odd per cent unemployment rate. Do you see any opportunities for a Work for the Dole project to run in conjunction with this project?

**Mr W. Taylor**—Yes. Work for the Dole is something that we would need to discuss with congress and other elements of the community but, as a matter of principle, I would think yes.

**Senator CALVERT**—I was just thinking that a lot of the peripheral stuff—landscaping and the like—would lend itself to Work for the Dole projects.

**Mr W. Taylor**—I think both trade skills and general working skills are available from the Cocos Malay community in particular.

**Senator CALVERT**—Have there ever been any Work for the Dole programs over here?

Mr W. Taylor—No, only Green Corps.

**Senator CALVERT**—You have had a Green Corps project here?

Mr W. Taylor—Green Corps on Horseburgh.

**Senator CALVERT**—That is entirely different.

Mr W. Taylor—It is different, but it is a similar sort of—

Senator CALVERT—Volunteers. I just wonder what the—

Mr Weatherstone—While we are on the contracting basis, Peter has some figures here that we have kept for the major projects that we have been doing on the island, and he might be able to give you an insight into the percentages of contracts gained on the mainland and on the islands.

Mr Seman—These are figures for the last two financial years. For 1999-2000—and these are both major and minor contracts that have been awarded on Cocos—mainland based contractors have secured seven contracts and island based contractors have secured 16. So it is 30 per cent mainland, 70 per cent local. On a dollar value it swings around: mainland based is 75 per cent, island based is 25 per cent, because typically the island based contractors win the smaller contracts. In the financial year 2000-01, just completed, mainland based was 10 contracts, island based was 11. The split is 48 per cent mainland based, 52 per cent island based. In dollar

value it is 92 per cent mainland based, eight per cent island based. The reason for the high percentage there is that there have been some very large contracts, including the vacuum sewerage project awarded just recently.

**Mr Holland**—In the short term, sure, this could provide some jobs, but I think we have got to look at the longer-term economic growth of the islands. Certainly major infrastructure like this is important to encourage investors to come here and develop, and with them they bring job opportunities. So I think, as a strategic point of view, in the long term this will certainly assist in providing more job opportunities as the islands develop.

**Senator CALVERT**—But what are the long-term opportunities for Cocos Island, apart from tourism?

**Mr Holland**—Tourism is the obvious one, but there are also opportunities perhaps in research, science and marine studies. There are also possibilities in the copra industry and the coconut plantation here. I am not saying that they are all guaranteed, but certainly there are those sorts of opportunities. Tourism is the main one, and this facility will certainly enhance our transportation system and so forth. There is quite a lot of employment possibilities in fishing too, and that sort of facility would help that.

Mr W. Taylor—I do not want to at this stage put undue weight on this but, as I discussed yesterday morning with the Administrator's Advisory Committee members, the spaceport on Christmas Island may have implications for not only Christmas Island but also Cocos in terms of job opportunities, both trades and general work, and in terms of R and R—rest and recuperation—because both islands, as you know, are like chalk and cheese. Once you have a major infrastructure like Rumah Baru, it may very well provide another avenue for freight movement inter-island as well. At the moment there would be no way that any of the material for spaceport construction could be passed through Cocos; whereas with Rumah Baru, even in a couple of years, there is the possibility that some of that could spin off into Cocos.

**ACTING CHAIR**—You may need to talk to some airlines before you go too far, so you can get some people in and out.

**Mr LINDSAY**—I turn to some engineering matters. Do you agree that the safest terminal for a ferry is in fact the inland option?

**Mr W. Taylor**—It would be the inland option. This option provides an inland option in terms of the ferry because, being on the western side of the island, it is virtually inland. So there is a very static situation in terms of the passenger ferry.

**Mr LINDSAY**—But we saw this morning the weather was coming from the south, and it would just whistle straight up at the ferry.

Mr W. Taylor—No, it would not. As Peter has pointed out, the wind and wave motion is from the south-east, which runs diagonally across the island. The ferry is in the lee of all of that, so you are not going to have any movement alongside the ferry terminal or the barge ramp, so you get optimum protection in terms of both passengers and freight.

Mr Weatherstone—An inland basin would provide the optimum solution to any sort of facility here on Cocos Island for getting on and off a ferry or landing equipment, because you are doing it from onshore. That just was not possible with all the studies that were done, so we just could not progress with that for environmental reasons, for flushing reasons and for sedimentation of the sand. But from an engineering point of view, the point with this particular location is that it is two kilometres further south than the current facility. It is more exposed. You will find today that the conditions were slightly rougher than you would have experienced, at the same level, at Rumah Baru.

**Mr LINDSAY**—Across Australia there are many examples of inland systems which flush. Why is Cocos different?

**Mr Weatherstone**—I would have to take that on notice for the expert that undertook the storm surge study, Dr Chris Jones.

**Mr LINDSAY**—But it is not a storm surge study.

**Mr Weatherstone**—It was part of the flushing and the littoral deposits along the coastline. We did put in a groyne, as was mentioned, to undertake studies on that sedimentation.

Mr LINDSAY—Who recommended against what we call an inland option? Was it GHD or was it—

**Mr Seman**—The flushing study and the temporary groyne study were carried out in 1999, following the community consultation exercise in early February of that year. As a result of those two studies, we recommended not to proceed with the inland basin.

**Mr LINDSAY**—Was it a cheaper option?

**Mr Seman**—We presented to the community consultation a figure of, I think, \$10.9 million for the inland basin at that point in time.

**Mr LINDSAY**—So are you saying to the committee you could have an inland basin, which is a safer facility, for the amount of money that you have got now, but you rejected it on the basis that it would not flush?

**Mr Seman**—It was rejected for the lack of flushing characteristics and particularly the issue of the longshore sand movement. There was a build-up—and we can provide photographic evidence of this—to about a metre on the northern face of the temporary groynes. The inland basin involved putting groyne structures at the entrance to the channel, and that build-up was phenomenal in a very short period of time.

**Mr LINDSAY**—So it builds up a metre or whatever. Why does that matter?

**Mr Seman**—The groynes are designed to prevent, obviously, a build-up on that site. Actually, even before I talk about that, in terms of the flushing characteristics the concern was that with the build-up of weed and algae and the like inside the inland basin there would have

been a smell problem, a visual problem and a number of characteristics that would not have been very pleasant.

**Mr LINDSAY**—But it does not happen in other basins around Australia, and you avoided the question about why the build-up of sand matters.

**Mr Seman**—I was not avoiding that.

Mr LINDSAY—But you did not answer it.

**Mr Seman**—We have forwarded to the committee a copy of the flushing study which was carried out by Dr Chris Jones, who is a marine engineer. The report involved modelling the flushing characteristics in the basin and recommended that in terms of flushing it was not a viable option.

**Mr LINDSAY**—We will move on now and look at the flushing study later. The diagram shows that dredging is required on both sides of the island.

**Mr Seman**—We are showing dredging in the swing basin only in that area.

**Mr LINDSAY**—Why are you showing it on the other side?

**Mr Seman**—That is just the perspective shown on the diagram. There is no dredging in that area. This is a visual presentation prepared by someone else—

Mr LINDSAY—It is wrong; is that right?

**ACTING CHAIR**—He was answering the question before you cut him off. Can we have a decent question and answer session without someone being chopped off.

**Mr Seman**—The channel is 400 metres long by 50 metres wide and comes out 400 metres in an easterly direction. The problem is because of the shadowing shown in the presentation. It is not meant to depict any dredging and I apologise if it has led to that impression.

**Mr LINDSAY**—I am still a friend; it is okay.

**Mr Seman**—But it was not mentioned as part of the presentation that we were dredging on that site.

Mr LINDSAY—You did show it in your visual as well; that satisfies me in that regard. Prior to this public hearing we had some discussions about the actual dredged depth and one of the options is to dredge a little deeper to allow for other vessels to use the facility. You have said that this facility is going to bring employment—probably through tourism or other uses—and that it could potentially be used by the Navy when they replace their Fremantles. Unfortunately we do not know what they are going to replace them with or what their draft will be. On what basis did you decide the dredge depth that you are recommending and is that good value for Cocos Island and the Commonwealth of Australia?

Mr Weatherstone—The whole idea of the two-metre level for dredging was for the freight and passenger facility and it was anticipated that any recreation craft would fit in with that concept. The other point is that we have an offshore island and what we are trying to do here is have the lowest possible cost for the Commonwealth. If we were to dredge to four or five metres or whatever the draft is required for patrol boats or other boats, there are issues there—the island would have to be much larger than it currently is and that involves a high cost. There is also the problem of the navigation of vessels in the lagoon and that is an environmental issue. One of the things we are undergoing now is to try and limit the number of bommies that have to be manoeuvred around to get into any of the facilities that are currently there. In that regard it was not considered from a cost point of view and from an environmental point of view.

**Mr LINDSAY**—So you are really putting the minimalist option to the committee? Is it possible in the years ahead, if the demand is there, to dredge deeper or is that facility not big enough for the years ahead?

Mr Weatherstone—I think this does add for the future. I am not sure how many patrol boats or how many larger vessels would want to enter Cocos lagoon but, with things such as the duty of care on the expenditure of Commonwealth funds, we thought that this was the appropriate facility for the requirements that are currently being undertaken within the island. I do not see that it could not be done in the future. I do not see why you could not lengthen and widen the offshore island and I do not see why you could not dredge down, but they are environmental issues that have not been covered to that depth.

Mr LINDSAY—You gave evidence about the longshore drift of sediment and why this satisfies the concerns about that. Will sediment go into the dredged area? If so, what is the future maintenance liability for the Commonwealth of Australia to keep that as a viable facility?

**Mr Weatherstone**—That is an operational issue. Sediment will fill the channel and it will have to be dredged. My knowledge of it is that the technology is there to dredge on a regular basis. It is not a high cost, but I am not familiar with the actual costs of it. That would be looked into as part of the design features of this project.

**Mr Seman**—The advice from our environmental consultants is that, in the normal situation, you would expect a build-up of no more than 25 millimetres per year in that channel, but they also say that, if there is any extreme storm event, you might get deposition of up to 150 millimetres in one event. So that will mean that there will need to be maintenance dredging, depending obviously on the storms, over a three- to five-year window.

**Mr LINDSAY**—In your presentation about site selection you said that the site offers access to 'deeper water at low energy, stable beach environment'. What does 'deeper water at low energy' mean?

**Mr Seman**—In talking about that we are comparing it to the West Island jetty, obviously. We are saying we have a more stable, low energy environment there than that which exists at West Island jetty, where you have got the very dynamic situation with all the northerly swells coming in.

**Mr LINDSAY**—You are talking about the energy in the water?

Mr Seman—Yes.

**Mr LINDSAY**—You made a request that we recommend—and I do not know whether it is in our power to recommend—that local jobs be considered as part of this project. Have you done any calculations as to what that might save the Commonwealth of Australia in terms of people going off income support payments and being paid by a contractor?

**Mr W. Taylor**—The answer is no. There would be an impact but it would, again, depend very much on how many jobs were generated. I think it is an imponderable, but it is a probability if in fact you have got a substantial number of people employed.

Mr LINDSAY—In relation to your evidence about the \$16 million for Option 3 you went on to say, 'There are always savings to be made.' I got a bit suspicious about that: you are asking the Commonwealth to approve \$16 million but you are also giving formal evidence saying that it is not going to cost \$16 million. Could you explain that and give us some degree of confidence?

**Mr Weatherstone**—What I am saying is that the \$16 million is the full out turn pricing mechanism that is required by the Commonwealth on any Commonwealth project. So we just gave those full costs. Currently, this option is in the design stage. We have not even gone down to the tendering stage; we have no idea of what tenders are going to come in for the various stages and we look for cost savings wherever we can make those.

**Mr LINDSAY**—If you have known since around 1996 that this project was going to be on the drawing board, why hasn't the department made provision for dollars for it? Why are we in the position where we have \$10 million but we need \$16 million?

Mr Weatherstone—We have made provision for it, and we have had it earmarked in our capital works program for a number of years. It just happened that we had not really got down to the costing side of it in full detail. Our indicative cost estimates over the last six months are that the costs have increased. To get this detailed concept, which was not on the books four years ago, those prices have increased somewhat.

Mr LINDSAY—In your Option 3 you say that the available funding is not yet confirmed. Is the committee on solid ground recommending we spend \$16 million, knowing that the funding is not confirmed?

**Mr Weatherstone**—At this stage we just do not have the funds in our capital works program. We will be bidding for those funds to continue our rolling program.

**Mr LINDSAY**—Finally, I have a couple of technical questions. There is a barge ramp there; we saw today how containers come on and off the barge. How will they come on and off under this facility?

**Mr Seman**—The *Jasa Cocos* will operate with the crane. The mobile crane will relocate from Home Island to West Island and will unload containers. When the ship comes in, it will go to West Island.

**Mr LINDSAY**—Sorry, I meant the other barge—the smaller one.

**Mr Seman**—I was just going to go through the process. In terms of the other ramp, it will be mainly used to get vehicles in a roll-on roll-off situation onto the *Biar Berjaya* to go across to Home Island. That will be its primary function.

**Mr LINDSAY**—So no containers?

**Mr Seman**—No. Containers on trailers can be operated either via the ramp or, as you saw today, you can load directly onto the *Biar Berjaya* when it is berthing and not on the ramp. So it has that flexibility to do either.

Mr LINDSAY—Okay.

Mr W. Taylor—The situation is the reverse of what you saw this morning, where all of the containers come to Home Island wharf and a large percentage of them come across the lagoon to West Island. Because *Jasa Cocos* comes straight across here, you will find that there will be a small element of those that go back to Home Island, so you have it in reverse. To go back to your question about why the budgetary provision was not made, I remind the committee that this project has been in genesis since the early 1990s. The National Capital and External Territories Committee has been considering this. The current minister was a member in 1993, to my knowledge. It has been so embryonic and conceptual that I do not think it is unreasonable for it not to have reached the budgetary provision stage until the last few years, because it has just taken so long.

Mr FORREST—Mr Taylor, a reference has been made to this committee to approve an expenditure. You must know what that reference was. We are having some discussion amongst us. I understand that it was \$16 million; that was the reference we had. But if you are asking us to tick something that is above the reference that has been made to us, we are legless. You must know.

Mr W. Taylor—Mr Weatherstone has been pointing out that you get into a bidding situation for each financial year—as you know better than most. What he is saying to you is that, in 2001-02, we have a substantive provision of \$10.2 million. Subject to the bidding process, we could reasonably expect to have the balance of the moneys provided in 2002-03. That is all we are saying.

**Mr FORREST**—Do you know what the minister's reference to us was? We do not seem to know, unfortunately.

**ACTING CHAIR**—We have the reference in our papers, but not an actual amount.

**Mr W. Taylor**—I cannot remember. I think Gillian sent us a copy of the actual reference from *Hansard*.

**ACTING CHAIR**—I think it is something we will be able to sort out in the committee at a later stage.

Mr FORREST—I am sure it is \$16 million. I would like to ask some questions on the environmental stuff. You have put a lot of effort in. Thank you for supplying answers to earlier questions. I think the people of the Cocos (Keeling) Islands have been very patient while we have been satisfying all the environmental concerns. There are a few things in Environment Australia's letter that I am interested in pursuing, because in your evidence and in what you have presented today you said they have approved it, subject to conditions, and that neither a public environment report nor an environmental impact statement are needed. I am a little worried about that. We are talking about tampering with a pristine part of Australia that is quite magnificent. You have supplied us with a lot of reading information. You might be able to help us by providing a precis of the information about the work that has been done. In their letter, Environment Australia say:

The water quality of the water lens must be monitored ...

I need to know why we are worried about the water lens—we should be if it is the only source of fresh water for West Island—and what is meant by the use of silt curtains during the dredging operations. Can Mr Weatherstone take us through some of those issues, starting with the significance of the water lens? What I am thinking of is that if we are dredging something we could create an opportunity for salt water to pervade the water lens.

**Mr Weatherstone**—I think the whole intention here is not to penetrate the water lens at any dredging stage. That has to be monitored at all levels so that they do not penetrate the water lens. With the water monitoring and the control mechanisms, if there is any effect on the water lens then curtaining has to be implemented so that there is no penetration of any silt into the water.

#### **Mr FORREST**—What is curtaining?

**Mr Weatherstone**—It is just like a membrane—a preventative measure. It is a bit like wet waste management plants where you have a membrane which lines the wet waste so that no leachate penetrates the water lens or water table.

**Mr FORREST**—It sounds a bit hit and miss to me. We ought to know before we start what the dredging profile ought to look like. Give me some confidence about that. We are not going to start dredging and then suddenly say, 'Hey, we've hit the water lens.' Surely we have a better understanding of what is down there than that.

**Mr Weatherstone**—Once we get into the design phase the whole intention is to make sure that work is undertaken in accordance with the requirements that are set out in the environment assessment and that any tendering arrangements that are undertaken include that monitoring phase prior to any dredging. It is a matter of management control.

**Mr FORREST**—How are you going to know? Are you going to go out there and drill holes and just by drilling holes—

**Mr Weatherstone**—We do have water monitoring on the island. We have a contract with Ecowise to do water monitoring on a regular basis on the island, for that very reason—to make sure that we are aware of any sediment in the water lens particularly around the fuel areas. We

have bunding in place around our fuel areas and around the power plant. Monitoring holes are in all those locations and Ecowise does a regular report on all the water monitoring on both islands.

**Mr FORREST**—Yes, I know but it takes a long time for a pollutant to transfer through a water lens. You will not pick it up until years later, maybe. That is my understanding of the way those things work. You are going to monitor over here where you extract the water, when you are going to do the digging here.

**Mr Weatherstone**—My understanding, from the reports that are coming in from Ecowise, is that they can pick up any contaminants at any location, at any stage and at any depth. And we get reports to make sure that that is monitored and that they are documented.

Mr FORREST—I am a bit unsatisfied by it. That sounds hit and miss to me.

**Mr Weatherstone**—All I can say is that I can take that on notice and provide more detailed expert advice from our water monitors prior to any design concepts that are formulated.

**Mr FORREST**—You have mentioned sediment in the lens. What about salt water? That is the last thing you would want to get in a freshwater—

**Mr Weatherstone**—Any contaminants, whether they are salt water, biofuel waste, carbon waste, et cetera.

**ACTING CHAIR**—Mr Forrest, I am wondering if we could ask Mr Weatherstone to look at your questions in detail in *Hansard* and then he might be able to allay some of your fears by taking extra advice.

**Mr Weatherstone**—I am quite happy to take on notice any of those questions that need expert advice from our environmentalists or our water monitors or whoever.

**ACTING CHAIR**—Mr Forrest raises an issue that concerns him so maybe you could have a closer look at the questions and then provide any additional information.

**Mr Weatherstone**—I am quite happy to do that.

**ACTING CHAIR**—Are you happy with that, Mr Forrest?

Mr FORREST—Yes.

**ACTING CHAIR**—Do you have further questions?

**Mr FORREST**—That was the only issue that was outstanding for me. By being here I have realised how important fresh water is.

**Mr Seman**—Can I make one comment on that?

#### **ACTING CHAIR**—Yes, Mr Seman.

**Mr Seman**—The advice—and I cannot lay my hands on it now but I will confirm it after this meeting—from Tony Falkland, who is the acknowledged water expert on the island, is that the freshwater lens extends 300 metres to the west of the proposed site and this project will have no impact on the freshwater lens. But I will get the advice and confirm that.

**Mr FORREST**—So we are at least 300 metres away for the water levels?

Mr Seman—Yes.

**ACTING CHAIR**—You would be happy if that was the case, wouldn't you, Mr Forrest?

Mr FORREST—Yes.

**Mr Seman**—I can get that bit of paper and tender it later on.

**Mr FORREST**—So Environment Australia are talking about this curtaining idea just to be super safe?

Mr Seman—We had a number of discussions with them in the lead-up to the final letter that they issued. We agreed that we would prepare a dredging management plan and a pollution control plan. We would not do those at this stage, because it is not possible, but at the 80 per cent design stage. When and if the project got approval, we would prepare them at that stage of the design process and submit them to Parks Australia and the Indian Ocean Territories Environmental Officer for their input and approval prior to finalisation for the tender document stage. That is to address all those issues raised in that letter from EA, including silk curtains and the like.

**Mr FORREST**—And you have still undertaken to provide that information to us?

**Mr Seman**—I will provide you with the information.

**Mr FORREST**—I have one other question. I am thinking about the fuel storage on the new island. That is going to be placed in fill, and I am wondering about its security way out there—fuel leaks and so forth. You are obviously going to have a lot of movement in that island over the next 20 or 30 years. Assure me that all this has been well assessed, will you? A fuel spill in that lagoon would be a disaster.

**Mr Seman**—The pollution control management plan will be addressing those issues. In case there are any spillages of fuel and the like on the actual island, there will also be petrol and oil interceptor traps included in the design. They will obviously be there to trap any spills that might occur on the actual island structure.

**Mr FORREST**—There is not a lot of room up there. A normal oil trap is a sort of dam around the whole storage area. We have underground tanks. What is the shed that is shown on the island?

**Mr Seman**—No, it is an above-ground tank. It will just be piped to the marine dispensers that will probably be in the area I am pointing to. It will just be some underground piping.

**Mr FORREST**—So are you proposing to contain the tank in a levy?

Mr Seman—It will be a bunded tank.

**Mr W. Taylor**—It will be a bit like the bunded tank that you saw at the head of the West Island jetty.

**Mr Seman**—I stress that we are only at preliminary sketch design stage. We have not designed this facility in terms of the detailed design. The fuel installation will need to comply with all relevant Australian standards and the like—obviously it will have to—and that will address the issues of bunding, trapping of spillage and the like.

**Mr FORREST**—How will it be filled? Will it be filled from the sea side?

**Mr Seman**—A big tanker that operates along Sydney Highway—

**Mr FORREST**—So by road?

**Mr Seman**—Yes. There is a road tanker that operates from the Shell tank farm that currently fills the aviation fuel, for example. It will be providing the fuel for that facility.

ACTING CHAIR—Can I follow up on the question of costs. I just heard you say, Mr Seman, that you are only in the preliminary design stage of some of the aspects of the total project, yet we have a cost estimate for each of these options. That has taken place over a long period of time since it was first proposed, and we still have not got to the final acceptance of an option. I was going to ask you how you actually arrived at the cost estimates, but I think a fairer question would be: are you confident that you could let a contract for the building of this proposed project for any one of the options that you have offered us at the price that you have at an estimate? It seems to me there are still a few unanswerables. We have the architect's design and we have the cost estimates provided by the department. I am not sure how you arrived at those cost estimates but, if you did, are you confident you could let out a contract that would come within the estimates that you are actually putting before us today?

Mr Weatherstone—I will lead in and let Peter answer how they got to those particular costs. What we do ask GHD to do is to give us an indicative cost based on their experience and knowledge of the islands and design work of a similar nature that has been undertaken in our capital program in the islands. What we do do is ask that they take into account all contingencies so that we can be pretty confident that when we go to bid for those funds and we are looking for those funds that we are not going to be caught short when it comes to tendering for the jobs and then finding that we are not going to come within our cost basis. Our experience through the rebuilding program and right through the capital works program has been that those cost estimates have been in the vicinity of plus two-minus two, so roughly at the most four per cent turnaround in costs that have been given to us as an estimate for jobs undertaken in the Indian Ocean territories. So we are pretty confident with the background

knowledge and experience of GHD, our program managers, that their cost estimates are fairly close to the mark.

ACTING CHAIR—One of the unknowns in this whole project and one of the things I would be interested to know—and maybe GHD would like to comment—is whether or not a significant amount of local labour is used. If 100 people here were employed on this project I would imagine it would cost considerably less than bringing in 100 people from somewhere else to come and work on the project. It is not like something you have on the mainland where you have actually got labour that you know you can draw your pool from. Here you have two choices: you either bring people in or you use significant amounts of local labour. I am sure that that would make a significant difference to the eventual cost to a contractor or the eventual price to the contractor. I am just wondering how it was arrived at. Was it arrived at by saying, 'These are the maximum amounts that we think could be used for bringing people in to work' or 'We think that we would use a certain amount of local contract or local labour which would reduce the cost by a certain amount'? I have no idea whether those sorts of issues were taken up.

**Mr Seman**—In terms of preparing the estimate, it is based on the assumption that you will probably have a mainland contractor as the head contractor who will enter into suitable subcontract arrangements and employ both people from the mainland and locally based. Again, because the Commonwealth cannot actually dictate that locals be employed—

#### **ACTING CHAIR**—I understand that.

Mr Seman—We have been doing contracts for a number of years on the islands. Obviously the freight element is incredibly high on this island. You can say in general terms that the cost of building on Cocos is twice the cost of building in Perth because of the freight and additional labour costs associated with it. In terms of pricing this estimate, with prices on the assumption that you will have a mainland head contractor and a mix of labour on the island, again that is based on—I am not boring you with the detail—appropriate subcontractor prices for the various components of the work.

**ACTING CHAIR**—Have there been significant works done here? I know some have been done at Christmas, but have there been significant works done here of recent times that you can compare the cost structures with?

**Mr Seman**—The most recent contract is the sewerage project. There is a new vacuum sewerage system on the islands. That is a project worth approximately \$3 million. There is also a waste treatment project that is a couple of million dollars. They are the highest priced contracts that we have had in the last four to five years.

**ACTING CHAIR**—I am not trying to put you on the spot, but you would be confident that if this committee was to recommend that option 3 was the one that was used, which is the most cost effective—at first glance it is the most cost effective—that you could let a contract for that amount of money to do the job that you have proposed in option 3? You are quite confident.

Mr Seman—The comment I make is that the estimate has been based on making appropriate allowances for things like design contingencies because we are at a preliminary sketch design stage. There has been an appropriate margin put on for that and an appropriate margin put on for

construction contingencies, which are variations during the construction phase of the project. There is also an allowance for escalation between the time the estimate was prepared and actually going to tender. Those allowances are built in as well as appropriate subcontractor prices, head contractor margins and the like. It is also what I would call a conservative estimate in that those allowances have been made appropriately, based on our experience on the island.

**ACTING CHAIR**—Thank you very much. Senator Calvert has a couple of questions.

**Senator CALVERT**—During our inspection this morning, Mr Taylor mentioned that you had an earthquake here not all that long ago, which, I believe, did not cause any damage. You also have cyclones and electrical storms from time to time. Were these things taken into account when you put together option 3 and, if so, did you have to make special allowances for any of those events?

Mr Seman—The project is designed to meet the Australian standard for cyclonic design. For example, based on certain storm events in the wave study carried out by Dr Jones, the project is designed to have marine structures of a 50-year life. That is the basis of option 3 being presented today. In terms of the earthquake, I will have to take that on notice and get you a response on that. We are certainly going to take it into consideration, but I have not got the precise answer here today.

Senator CALVERT—I was looking at the causeway—

**Mr Seman**—The access bridge.

**Senator CALVERT**—I was wondering how the access bridge pylons would stand up to a cyclone. I presume, very well?

**Mr Seman**—It has been designed in accordance with that code, so it should be able to withstand those forces.

Mr HOLLIS—I have a couple of questions on the unloading of the barge. How long have containers been brought here from the other island? Is my understanding correct that, every time the barge comes in, all the sand has to be shifted? And what sort of long-term impact is that having on that path? What happens to the sand? Does it wash away or does it recompact? I do not care who answers the question.

Mr Seman—The only comment I can make is that, yes, that is the operation. A couple of mammoth mats have been purchased to assist in that transition of the containers from the ramps up over the loose beach sand. But even with the mat, you needed to put a layer of sand on top of it to help the operation of the bulldozer and that reduced the amount of sand that was previously required. With the purchase of the new bulldozer, I do not think they need to use the mammoth mat any more but—I was not there today—they are still using that build up of sand.

**Mr HOLLIS**—How long has that process been going on?

**Mr Holland**—It is probably 10 or 20 years.

**Mr Seman**—It is a very long time.

**Mr Holland**—It was happening 10 years ago.

**ACTING CHAIR**—I have a comment from the floor that it has probably been going on ever since containers were brought to the island.

Mr HOLLIS—That defeats one of my arguments. I was a little surprised when I saw it today. I thought that it would have had a huge environmental impact, but apparently it has not. If that has been going on for a long time—and this is not to say that it should continue—it appears not to have had the environmental impact that I would have expected. I make no comment its efficiency, or its cost efficiency!

Mr Weatherstone—In my experience, it has been in that same condition for the last four years, and there are people who have been there for a lot longer than I have. Either the bulldozer compacts, or when we had the mammoth mat it compacts the sand so that it does not get shifted away or its impact on the coastline is such that it is not affecting it.

**ACTING CHAIR**—Are there any further questions? Thank you very much for your presentation today and for answering our questions. It has been a very good presentation, and it has given us some concept of the issue. I have one final question. In your graphics, I noticed a prime mover going up the jetty. How many prime movers are there on the island?

Mr Weatherstone—Just the one.

**ACTING CHAIR**—Are there likely to be more?

**Mr Weatherstone**—The whole idea is that that is required for this island.

**ACTING CHAIR**—Thank you very much for your presentation today. I ask the department not to leave just in case the next two witnesses raise questions that we might need some answers to

Mr HOLLIS—Do not leave the island!

**ACTING CHAIR**—Yes, do not leave the island.

[3.55 p.m.]

### O'GRADY, Mr Alan Vincent, Manager, Cocos Islands Cooperative Society

**ACTING CHAIR**—I welcome Mr Alan O'Grady. I invite you to make an opening statement to the committee at the conclusion of which we will ask questions.

Mr O'Grady—As manager of the Cocos Islands Cooperative Society, I represent the 60-odd Malays who work for us. We have a number of contracts on island, but I will keep to the ones that are relevant to today, which are the ferry services and the stevedoring services on island. The ferry services run under a contract with the Department of Administration. It is currently a two-year contract with a two-year renewal. Some of the aspects of the ferry services—and I will probably be going over some that have already been mentioned—are that we crew feel that sometimes it is dangerous to unload passengers; it is sometimes dangerous at night when the swell is up. We have one ferry late at night for people to go across to Home Island to the restaurant or other functions. It is very unprotected during wet weather, which means that ferry passengers have quite a long walk down to West Island jetty in the rain. There is also no shelter or seating at the current West Island jetty for passengers to wait for the ferry to arrive. It is a bit hit and miss when the bus pulls up; it pulls up in various locations and passengers have to step out in all weathers onto the sand—there are often mothers carrying babies, passengers carrying goods, et cetera. There is no proper bus parking or alighting facilities at the West Island jetty.

With the refuelling of the ferries—and we also refuel our barge at the same West Island jetty—some of the aspects are that we currently have to refuel whilst ferry passengers are waiting. That means that they are often standing by no more than six inches away from all the hoses, pipes and everything else needed to refuel the ferry. There is also the possibility of a breakage in the current pipeline that runs down the length of the West Island jetty. The engineers may recount some instances last year where we had a bad storm surge. The underside of a jetty was washed away and the piping was hanging by a few stirrups. I would be much happier if there were a separate refuelling area supplied so that we could refuel the ferry and the *Biar Berjaya* so that they do not cross over with passengers waiting.

It is also potentially dangerous. We refuel on the seaward side at the moment, so both the barge and the ferry move up and down with the swell with the hoses attached. Recently, some of the big Austral catamarans came through from Fremantle, so we refuelled an isotainer and went out and refuelled for them. Currently, we get quite a large number of yachts coming through, and the only way that they can obtain fuel at the moment is by ferrying the fuel out in drums from Home Island, which is inherently dangerous as well.

With the stevedoring, I was glad that a number of you went on the *Biar Berjaya* today and witnessed the actions on West Island. It is certainly an eye opener. In wet weather, particularly, I believe it is very dangerous. The sand really gets almost like mud and the containers on the trailers move up and down. The bulldozer is a powerful bulldozer but it really struggles sometimes when there is 16 tonnes on a container which the bulldozer is trying to drag out of almost a very muddy situation.

The Department of Territories supplies the equipment that the cooperative hires. You have probably seen two other bulldozers there that are in a sad state. The salt, the rain and the sand give them a very short lifespan. Bob Holland could probably give you the cost of the current bulldozer—probably around \$500,000—and it will be interesting to see how long that one lasts. It is hard and expensive for the cooperative to manage the equipment. It is hard on our barge—you probably saw the barge pushing up hard against the shoreline there—and we often get sand and weed intakes into the motors.

We have just recently replaced the ramp on the front there at a cost of nearly \$25,000. That ramp gets badly damaged with the bulldozer having to move on an uneven surface on and off the barge. The practice of reversing the trailers back into the barge is very hit and miss, especially on a strong swell with the barge back-end moving backwards and forwards. The containers have to be centrally located on the barge, and as near as possible, to prevent any listing. That often means a fair bit of toing-and-froing for the bulldozer if there is steel on steel with a big, heavy bulldozer moving the ramp. As well, we often bust cables which support the ramp.

It is dangerous to the staff, I believe, particularly the side lifter bulldozer movement. I do not think I need to go on too much with that today. You may have witnessed the actions of the staff there, and I think it is only because of their long, long experience at working there that nothing has happened. If we lost those very experienced staff, it would be another matter.

As for the environmental impact, over the year and a half that I have watched the process there, I have noticed the sand does shift around in that area from time to time, and Hawkins, the barge driver, knows he can see the channels there. There seems to me to be probably a 50-metre variance there where they are moving backwards and forwards. They do have to shift that sand around from time to time to meet with the bulldozer.

I think it goes without saying that it is a fairly time consuming process on West Island. Most of the containers are for West Island. That seems rather surprising, given there are currently 400 to 450 people on Home Island and 110 or so on West Island. However, given the quarantine project for land development, also the fact that the Home Islanders are rapidly running out of space to build new homes on the island, it would probably mean that any future development will be on the West Island side. I think Peter mentioned that the current rate is 20 containers a month; my records say that as well. Generally, five to six per month go on Home Island, and the rest of them, the other 13 to 15, come across to West Island. You would have noticed quite a few building projects around the place at the moment—with Rod Croxford and his house, the bed and breakfast, the current new big house on the far side and the other projects.

There is a crane required for both islands. The 50-tonne Grove is on Home Island at the moment. Once again, that is an extremely expensive piece of equipment. I do not know whether someone has considered the operational aspects of whether we need two cranes, but it is something that I have not noticed in the report that I have read. It has not been brought up. It is possible to move most of the equipment around on the island—for example, the prime mover. Any of the equipment that has been purchased for the island has generally been purchased with a view that, if it needed to go across to both islands, it would fit on to the barge. But the Grove crane will not fit. It is too large an instrument. I believe when it was brought in off the ship—and some others may correct me—it was merely loaded off on to the *Jasa Cocos* and then

driven off on a ramp on to Home Island jetty, and that is where it stayed. Most of the other equipment on the islands is able to be transferred backwards and forwards.

With the side lifter, it needs a fair bit of space. It also works best with a level access. With the way the hydraulic arms lift the containers sideways on to the actual unit itself, if it is lifting on uneven grounds, it requires a fair bit of manoeuvring of the hydraulic rams to ensure they do not bang as they come across. So with the current project, if it is on a hard stand, I think that is a lot better. The current situation in the softer sand also can be time consuming and, once again, the possibility of damaging the side lifter is always there.

We have a number of other smaller and larger craft on the island. The current situation at Home Island jetty is that it is only quite a small jetty and we have a number of craft there. They are basically moored there all the time. You would have seen the *R.J. Hawke*, the *Putri Duyong*, the barge and Colin Freshwater's other large boat on the island, and there may be a necessity for other craft to also moor. Some facility on West Island for them to moor would be preferable and is needed.

**ACTING CHAIR**—Thank you, Mr O'Grady. I noticed that one of the things you raised at the start was the fact that people have to walk along the jetty in all weather. They may have to walk a bit further under the new design, wouldn't they?

**Senator CALVERT**—They can drive a bus out.

**ACTING CHAIR**—You can drive a bus out, yes, but most people I presume will be walking out.

Mr O'Grady—The fact that that facility has a small shelter next to the ferry is a good thing. I do not know whether Peter has considered seating inside, but something like would be very handy. It is also possible for the bus to drive out onto that jetty and, hopefully, pull up alongside the small shelter so that passengers can get on and off. If we want to unload some small items at the current West Island jetty, everybody has to go up and then reverse back. Whereas on this island you can turn around and actually go back forwards. I do not think I would like it too much if we had to reverse the side lifter backwards down that jetty. Although you can put in a ramp for people to walk along, you can bet your life that there will always be somebody who will walk down the road when they should not.

**ACTING CHAIR**—Are you satisfied with the level of consultation that has taken place by the department?

Mr O'Grady—Yes. It has been a project a long time in the making and there have been many discussions on island about it. My view about that project is that it has considered all the items—electricity, refuelling, the ability for the barge to offload equipment if it needs to, the ability for the crane to load containers to go back over to Home Island, the ability for the *Jasa Cocos* to pull up alongside. I believe the ferry is in the lee on that particular part there and it should not move around too much. I do not say it will not move around in very strong weather, but for the predominant part of the time it should be very safe there. There is disability access, and I think that is a big plus. We do not have any facility at all now for disabled people to get onto the ferry.

**ACTING CHAIR**—We are always very pleased when people say there has been adequate community consultation, because more often than not people complain about there being not enough. We are very pleased to hear that.

**Mr HOLLIS**—You mentioned your concern about refuelling. How often does a ferry have to be refuelled?

Mr O'Grady—Once a day. It usually refuels at 11 o'clock.

**Mr HOLLIS**—There would be nothing to say that the refuelling could not be done early in the morning before the passengers arrive?

Mr O'Grady—That is true. The search and rescue craft, the ferry craft and the stevedoring employees all live on Home Island. They come across here. If they have to refuel, they usually do it to coincide with the ferry trip.

Mr HOLLIS—Thank you.

Mr LINDSAY—Mr O'Grady, I note your strong support for the project. Please look ahead. Is there only one berth for the ferry there at the moment? Are you likely to have more than one ferry? Is there likely to be more than one boat wanting to tie up? Is the dredging deep enough for what you might be providing in the future? Have you thought about future needs now, tried to plan for the future and have something that will work for the future?

**Mr O'Grady**—In the report it is noted that the barge is rated to carry 20 tonnes. It is a fairly good barge for the purposes that it is needed. The ferry would be adequate for the future of the island. If the Home Island Malay population do grow, they would probably grow on this land with extra houses on this island, because there is only a limited amount of land available left on Home Island. If there is a growth in the numbers of schoolchildren, they would be living on West Island so they would be able to access the school here.

As regards other craft, some of the other boat owners might say, 'Yes, we would like that jetty extended a bit longer in case we need to pull up.' I notice there is a sliding ramp there where the private craft can pull in. I do not know if that is what the engineers have planned for private craft there. Sorry, what was the other question?

## **ACTING CHAIR**—The dredging.

Mr O'Grady—The dredging does concern me a little bit in that we do not have a dredge on island. If the studies have said that it silts up only that much per year, so be it. That would be one of my concerns, the silting, but I am not qualified to really say whether it does or it does not.

**Mr LINDSAY**—Would you be prepared on behalf of your operations to say that you are reasonably satisfied with this design for the next 10 years?

**Mr O'Grady**—There has been a fair bit of publication on this project. The cooperative Malay committee—there are 12 of them—meet once a month, and probably every two to three months this project comes up because, as you can see, with the number of contracts we have got it is something dear to our hearts. No, I have never heard anything particularly adverse. I think most of the issues they have been concerned with have been raised and, to GHD's credit, they seem to have addressed them.

Mr LINDSAY—They are a very fine company.

**Senator CALVERT**—You mentioned the barge. I am no marine engineer but I had a look at that barge this morning and it looks to me like it is getting to the stage where it might need replacing. It certainly needs a makeover. If it was to be replaced would you be looking for a larger one that could take more than 20 tonnes, or wouldn't that fit into the operation of this proposal here?

**Mr O'Grady**—If the proposal went ahead this way, once again, as we said, most of the containers would come over to West Island on the *Jasa Cocos* and then there would be a smaller number of containers required to go back the other way. I do not know if it would be really necessary to replace the barge if we are doing, say, four or five containers a month going back the other way. We have spent quite a bit of money on that barge, and to replace the barge—

**Senator CALVERT**—I am talking about that one there, not the other one.

**Mr O'Grady**—The little green one.

**Senator CALVERT**—Yes, the flat one.

**Mr O'Grady**—That is it there. We have not considered replacing the barge.

**Senator CALVERT**—Right. The second question is this—and there is probably a simple answer to it—with the unloading of your barge with the bulldozer and all that, was a permanent concrete ramp considered that went well up the beach and well out into the water so that it would avoid all of those problems you have been talking about? Was that something that was considered, or wasn't it seen to be practical?

**Mr O'Grady**—The area that concerns me would be the sand drift. The barge driver picks the deepest water, and that is why they have cleared a fair bit of bush and he is moving around there. If you put a concrete ramp in one spot, I daresay in a couple of weeks—

**Senator CALVERT**—You would have to dredge it all the time, wouldn't you?

**Mr O'Grady**—Yes, so they pick and choose, and that is why they have cleared a fair bit of the bush there because of the sand drift. It seems to move around in that general area, and they push in, and the action of the barge coming up hard up against the beach with the motors actually does a bit of dredging for them as well. Maybe some others might answer whether a concrete ramp was ever considered, but not to my knowledge.

**Senator CALVERT**—One of the External Territory's reports recommended an amphibious craft of some sort back in 1995, I think it was. Do you think that is an option rather than the barge—something like a large landing craft that drew up alongside the boat that came in, that just came up on the beach and dropped everything out? I do not know what you think of that option.

**Mr O'Grady**—I did read that report; I have a copy in my office. I studied the various options that were thrown up. I think the cost of amphibious craft—or did you mean something like the *Larc* that is here, the hovercraft?

**Senator CALVERT**—No, I think it is amphibious. The other one they threw up was a hovercraft-type thing. No, I was thinking more of a large traditional landing barge—not like the one you have got but an amphibious type.

**Mr O'Grady**—I think they are options that could be considered, but my concern would be the cost of maintaining the equipment.

**ACTING CHAIR**—Thank you, Mr O'Grady, for appearing before us today.

[4.15 p.m.]

## FRESHWATER, Mr Colin Lindsay, Saltwater Adventures

**ACTING CHAIR**—Welcome. I invite you to make a statement.

Mr Freshwater—Currently we run two charter vessels on the island with the current jetty at the end of West Island. We suffer constant damage to our vessels from pounding as we tie up. We have constant concerns for the safety of our passengers getting on and off the vessels. We also suffer from congestion if we are refuelling at the time when the ferries are due to come in. We try to alleviate that by choosing our times. The new facility is quite important to our operation for those reasons. Obviously we do not want damage to our vessels and we want to have our passengers on and off safely wherever possible.

The inland basin option would have been excellent for us except that the Rumah Baru area has very large seagrass beds. That seagrass, when it is floating in the water, is a problem. The studies that they did there with the temporary groyne walls produced a huge build-up of seagrass on the seashore there. To operate our vessels going to an inland basin we would suck a lot of that seagrass up through our water intakes in the vessels, causing damage or making them inoperable when you are trying to berth. Although a good option, we could see a potential problem there.

The offshore island is good in its design. It provides us with sheltered access on the western side. As GHD has stated, it has all been conceptual at this stage. I can see that the landing area for vessels other than the ferries may need to be slightly larger and we hope that will be considered during the more detailed design stage. Also, the recreational boat access may need to be looked at. I think it was stated that the recreational boaters are required to park their vessels off the island, on the mainland. They have to put their vessel somewhere while they walk that 200 metres to go and get their car and trailer and go back and get it. Maybe that needs to be addressed as well.

**ACTING CHAIR**—You say you run a charter operation. Is that a tourist charter or a business charter?

**Mr Freshwater**—One vessel is mainly for North Keeling National Park running tourists to North Keeling. The smaller vessel does charter fishing but also does cartage of small materials between the islands as well as going on charter for scuba diving.

**ACTING CHAIR**—Are you happy, in general, with the consultation that has been taking place prior to the proposal being brought to us today?

**Mr Freshwater**—Yes, we have been so far.

**Mr FORREST**—What are your expectations about the usage that you will have of this facility? Are they that you could use it at your leisure or your choosing, or that you might have to organise it, pre-book and things like that?

**Mr Freshwater**—Access will always be a bit of a problem. Under the current design, we would be expected to give way to the ferries because of their public transport function. I can see that there are areas there that we can park in should that arise.

**Mr FORREST**—Would you envisage that you would want access to calm parking in the alcove that is provided by the jetty and the island?

**Mr Freshwater**—It is the only provided parking there. If the *Jasa Cocos* is permanently moored on that side it only leaves the western side to us for access. We would need access to that side, yes.

**Mr FORREST**—Is there any expectation about mooring up to the access way itself? There was some suggestion of that.

**Mr Freshwater**—I am assuming that that will be fairly high above the water level. You have to get your passengers on and off your vessel. I would not have thought that that was an acceptable option.

**Mr FORREST**—Do you expect to have that access free?

**Mr Freshwater**—I would assume that all things have to be paid for and charges should or would be levied accordingly.

**Mr LINDSAY**—You are recommending to the committee that an all-weather access for a craft such as yours be provided in addition to the ferry service access point?

**Mr Freshwater**—No. I think that with some minor changes to the actual access there for the ferry, we can utilise both sides of that.

**Mr LINDSAY**—We have heard some evidence that perhaps the finance may not be available in a financial year. Is your evidence that the project should be built as one, and as quickly as possible?

Mr Freshwater—Obviously, yes, it is.

**Mr LINDSAY**—You would not want to see it blow out to 2003-04?

Mr Freshwater—No. The sooner it is completed the better for all the people on the island.

**Mr FORREST**—Where do you currently pick up your charter customers?

**Mr Freshwater**—We have to come alongside the West Island jetty, just to the western side of where the ferries pull in.

**Mr FORREST**—It is pretty rough up there.

**Mr Freshwater**—Yes, it is very rough sometimes.

 $\begin{tabular}{ll} \textbf{ACTING CHAIR} — Thank you very much. \\ \end{tabular}$ 

[4.21 p.m.]

## MURRAY, Ms Wendy, Government Conservator (OIC), Parks Australia North

**ACTING CHAIR**—Welcome. I invite you to make a statement.

Ms Murray—There are a number of issues. Everybody has talked about safety. The current jetty has northerly swells. You have heard about the closure of the jetty system. It is not particularly safe. We also lose staff time when staff cannot get to work because the lagoon has been closed, so that has an impact on all the organisations on Cocos. As you have heard, the West Island container handling practices are questionable. They are definitely not satisfactory. You were talking earlier about the coral sand that is used to build up that ramp on a regular basis. We actually go through quite a lot of coral rock. The ramp has to be rebuilt every time the ship comes in. We are going through a lot of material that we need not go through if we had a permanent facility that was not requiring that ongoing fill material.

The Rumah Baru launching facilities are frequently problematic. The boat ramp gets covered in silt and sand and you usually need a four-wheel drive even to put a little boat into the water. The new facility will provide safer and more frequently accessible facilities, even for recreational fishers and people going over to Direction Island. We have a boat which is out on a mooring off Rumah Baru and we have to use our tender to get out to it, so we regularly have problems at the little ramp at Rumah Baru just getting to and from our boat. With this new facility, if we can moor our vessel right alongside the jetty, response times in search and rescue situations and all that sort of thing will be vastly increased if we can just jump into our boat and go, instead of mucking around putting in a tender and getting out to the boat. Of course, in a search and rescue operation it is often rough weather anyway, so when you have a little boat trying to get into a bigger boat that is another safety issue. If this new facility combines with being able to moor vessels alongside the jetty structure, it will improve safety, increase the speed and response times and be much more efficient.

From our point of view, the environmental concerns have been met. You have asked a lot of questions today about some of those environmental issues. One in particular was the concern about the freshwater lens. The reason that issue was raised was because it is planned that when the dredge material is taken out of the water it will be put in what is called stilling basins on dry land. Environment Australia was concerned about whether, as that water soaked down, it would affect the water lens. That was one of the issues that you were talking about. If the stilling basins are on dry land, the water lens around them will be monitored and at the sign that there is something going wrong they will be lined to prevent salt water permeating into the freshwater lens.

The second question you asked was about the use of silt curtains. Silt curtains are fine fabrics that you put out into the water. When you are dredging, you obviously get a lot of silt floating around in the water. The silt curtains help trap that silt, and they reduce the area over which that silt material gets spread. It is supposed to improve the situation downstream of that so you are not affecting more and more seagrass.

**ACTING CHAIR**—I take it that you are totally supportive of the project at the end of the day.

**Ms Murray**—Absolutely.

**ACTING CHAIR**—And you are satisfied also with the amount of consultation that has been taking place?

Ms Murray—Yes.

**ACTING CHAIR**—Are there any questions?

**Mr FORREST**—What is the purpose of the silt? Is that to prevent the turbidity disturbing phytoplankton and the algae?

Ms Murray—Yes. Basically, seagrasses can go for a certain amount of time without getting access to light, after which they start to starve to death. So the silt curtains reduce the time that the silt is floating around in the water. All the studies that have been done have said that our light conditions are good enough to not require silt curtains, and that is why the Environment Australia request says that, if it becomes obvious that the silt is not settling out as quickly as we believe it should, only then will we go to the expense of using silk curtains.

**Mr FORREST**—We had an opportunity to come in on the barge today, and we saw a huge amount of silt being disturbed by the propellers as they kept the pressure to keep it up against the banks. It seemed to extend a fair way. There had obviously been activity all day. My view would be that silt curtains would almost be mandatory, given the sensitive nature of the lagoon and so on. What is your view on that?

Ms Murray—The studies that have been done have said that they do not think it would be required. But of course everybody would be keeping an eye on it, and as soon as it went beyond what we thought was a safe limit then silt curtains would be employed. One final thing was about the longshore drift. A lot of questions have come up about that. We actually have quite an unusual situation here on Cocos. The current swings around the northern end of West Island and heads south for the first 20 metres. Twenty metres offshore the current is actually coming from south to north. That is why, if you build something extending out into the water, it is going to get trapped on the northern side for the first 20 metres and then it is going to get zipped around by the current as it comes the other way. If you have a groyne on either side, you can see that you are going to get a lot of eddying taking it into the basin or inside the two groyned areas.

**Mr FORREST**—Is that what they call littoral drift?

Ms Murray—Yes, that is what it is called. We have it from both directions. Normally when they build these marinas they build them in areas of very high water energy, so there is a lot of exchange and it keeps the water movement fresh and it keeps everything moving. If we were going to build in a similar environment here on Cocos, we would be doing it on the outer reef. You do not get those kinds of conditions on an inside quiet lagoon area, and that is why the inland basin was not seen to be a good idea. It is too quiet, too calm, it gets too smelly and it is not good enough.

**Mr LINDSAY**—I do not like it anyway. You should go and look at the Gold Coast. Just looking ahead, if the administration comes back and says, 'We need this facility to handle larger ships, so we're going to have to deepen the access channel and the swing basin,' do you see any problems ahead in getting approval to deepen those areas?

**Ms Murray**—How far are you talking about? How deep?

**Mr LINDSAY**—I do not know. The local knowledge says to me up to four metres deep.

**Ms Murray**—Four metres would require quite a lot of dredging and probably coral removal, so it would have to be assessed.

**Mr LINDSAY**—But from your perspective of the environment out in the lagoon—disregard for a moment what would happen to the dredging—would it be okay to have a four metre channel in the lagoon rather than a 2.5 metre channel?

Ms Murray—If you could get the channel without doing the dredging in the mean time, then that would be okay, but you could not. You cannot separate the two, because you would require quite a lot of dredging to get to four metres. You would also need to remove coral outcrops, and the coral outcrops here are already under a fair bit of pressure. So it would be of concern and it would need to be assessed. I am not saying that it could not happen but it would be of concern.

Mr LINDSAY—What I am trying to get to the bottom of is this: if this facility is built, will it be a functional facility now and in the years ahead? Your response to that seems to be that there would be some concerns now about deepening the channel in the swing basin, for the reasons that you gave, but that they might not necessarily stop any application in the future to deepen the thing.

Ms Murray—Yes. If that criterion were put now, that would be the sensible way, because if you were saying that we were going to have a 2½ metre channel, you might choose a completely different route than if you said, 'But we might want to make it a four metre channel in five years time.' That would probably mean that you would select a completely different at this point. So that would be something very good to have up front, because it would allow that to be taken into account now, and would put the channel in the most effective area. It might actually mean a bit more of a dogleg to get to and from Home Island, but it would provide a better channel to get out the western passage in the long term.

[4.32 p.m.]

## **CURYER, Mr Allan Robert, Marine Officer, Marine Service**

**ACTING CHAIR**—Do you have anything to add to the capacity in which you appear?

**Mr Curyer**—I work for the Cocos Co-op and we look after the ferry, the *R.J. Hawke* and the *Jasa Cocos* on behalf of the administration.

**ACTING CHAIR**—Please make a statement.

**Mr Curyer**—I have been listening to some of the reports that were given and I feel that some of them were a little bit incorrect. I am thinking of when you asked one of the Malay ladies how many children were carried on board the vessels. Last year it was in excess of 55 and this year it averages out at about 45 to 50, so it is quite a number of young children that are actually—

**ACTING CHAIR**—This is children you are talking about?

Mr Curyer—This is schoolchildren, yes. I have done a few calculations. The ferry service operates nearly 35 services per week. We are carrying nearly 6,000 to 7,000 people per month and 72,000 people per year. Over the 2½ years that I have been here, how we have not had a serious accident has really got me amazed. On our performance, I think we have been very lucky. One of my bosses came up from way back and he said that we have got a duty of care—and I assume that is a duty of care for the administration—and that if there is an accident, there could be a lot of blame directed at someone, and it could cost quite a few dollars.

On that sort of scenario, we should be looking very seriously at getting this project of the ground as soon as possible. I came on the scene  $2\frac{1}{2}$  years ago and I was amazed that the freight service and the passenger service were like they were. I actually said to GHD, 'How long has this been going on for?' They said, 'It has been in the pipeline for nearly seven years.' We are coming up for nearly 10 years, so it is about time we started looking at the safety of the passengers, and mainly the schoolchildren.

You might know that we have got the high school over this side and it is not the 13- and 14 year-old kids that come over here. We do have quite a number of younger kids, and they are like sheep—as one gets off, they just follow. If there is one who baulks or misses his step, another three or four children are going to follow him and I think they will go straight into the water. We always have one of our crew members at the landing, in between the vessel and the landing itself. He is always there and will actually pick up some of the smaller children and put them ashore. It is a very serious concern with me. Over the two and half years, I have actually closed the jetty down between 10 and 12 times for the schoolchildren. That is a little bit more than for the adults, because although I may think it is appropriate that the adults can get on and off, I think that the smaller children may not be able to anticipate the swell or the rise and fall of the vessel, so I close it down for the schoolkids.

On that point, as I said, there are probably 12 days per year that the kids will miss going to school. If there are rough conditions, I instruct my people to actually bring the boat over with all the workers on board. Because it is a tough decision to make when a lot of people rely on those dollars to be made during the working day, I make them come over and, once we get alongside the jetty, I make them stand off 10 or 15 metres so that they can see that the vessel will take a bit of a hiding coming alongside the jetty. I then wave them off. At least we have had a go, and it cannot be said that they have been given a day off for no reason. I tell them to come over just to let them see that they cannot get off and then they go back. They lose an hour, but it is better than losing a leg or an arm. That is how I feel, anyway. In that sense, I have closed the jetty to adults about four times.

I have not closed the lagoon in 2½ years. The reason is that the lagoon is not rough. It is the swell coming from the north-east to the north-west of the island that picks up some pretty big waves on a high tide, slamming my boat against the jetty. My biggest fear is that the piles might go through one of the windows and, once hooked up, who know what would happen. So it is quite dangerous. You saw it this morning when you were getting on the vessel, but that is nothing compared with when we have a big swell coming through from the north-east to the north-west. Gentlemen, I would like you to give it serious consideration. I think it is well past due date. Thank you very much for your time.

**ACTING CHAIR**—You have come with a very specific issue. I am pleased you have raised that with the committee today.

**Mr FORREST**—I am pleased that you decided to give some evidence today. I was interested in the fact that you have been handling the stevedoring operation as well. You mentioned about safety, and I was very concerned at the constraints of the Home Island site and the rest of the operation. It staggers me that there have not been any accidents there.

Mr Curyer—I confirmed that. I made a statement, and then I thought, 'Am I correct?' I went to see Warren Didean, with whom I work very closely. Warren is in charge of stevedoring but, in actual fact, being the marine officer and with the experience I have had over 35 years, if there is any problem with the vessel or crewing, I step in and organise it on their behalf. Although we are the same company, we have different roles. I find I am getting more and more involved with the stevedoring side of it. I feel that, down the track, the water side of stevedoring could be allocated to me; and Warren, who is in the office and does a lot of paperwork, could look after the shore side of it. I really think that, down the track, the seaward side of it will come under my umbrella. It has been over 2½ years since I have been here and, as I mentioned, we have not had any accidents at all with the stevedoring personnel. In 2½ years, there has been one slight accident with one of my skippers who actually jumped off the boat on a high tide to put the rope on the jetty at West Island and damaged his knee. Apart from that, in 2½ years we have been fairly lucky.

During the last cyclone we had a lot of damage done to that jetty. A couple of the big beams from the jetty's deck actually lifted up and floated away. It was just lucky that I went down there at 3 o'clock on that Friday morning to meet a boat that was coming in to take some people to an aircraft. I actually drove out there—if I had walked out there I think I would have fallen through—and I felt a few bumps. There were a couple of big logs from the decking actually

missing after the cyclone. The jetty has got to the stage now where a lot of money is going to have to be spent on it.

Getting back to the stevedoring side, there are quite a few people there. We have just put on four young trainees—16, 17 and 18-year-olds—and they are learning the trade. We have a lot of older people there who have been doing it in excess of 20 years. The saving grace is that we have the expertise and the experience to keep ourselves out of trouble. As you might have noticed, the jetty at the moment is quite cluttered. Unfortunately, we have had a lot of contractors here and there are a lot of containers here. One vessel came and had to go back to Singapore. On the next tide, half those containers will be shifted from the jetty.

**Mr FORREST**—Do you have any idea what proportion of those containers have an origin to West Island or to Home Island? We are now changing the concept with this new idea.

Mr Curyer—We are changing the concept. There are two shipping companies, as you know. There is the Asset Pioneer line and Cocos Traders and both, unfortunately, tend to throw all the cargo into the one container, whether is meant for West Island or Home Island. I think there should be a bit of education on their behalf and our behalf, so that we address our articles to Home Island or West Island. That is not what is happening. An article will just say 'Cocos Coop'. We do not know if that is Home Island or West Island until we actually get it and say, 'That has to go to West Island.'

Unfortunately, our vessel can only carry a 17-tonne payload. Some of the containers carry 24 tonnes, so we have to deconsolidate seven tonnes. That takes time and manpower and it might be necessary to empty four containers to put in one container that comes to West Island. With this new concept, I feel that, where we were waiting between one and two weeks for a container, with a bit of organisation on both sides—the Perth side and our side—we should have all containers at people's doorsteps within two days.

**Mr FORREST**—That will avoid partial destuffing of the barge?

**Mr Curyer**—Exactly. The other thing is that we do not have to destuff or deconsolidate the container of 24 tonnes, because we can carry 24 tonnes on board the *Jasa Cocos*, and we can lift 24 tonnes with a crane. If we stay with the system we have, then we would have to take X amount of cargo out of each container and give it the right weight so we do not cross over the safety loads factor.

**Mr FORREST**—I should have asked this question earlier to the department; I forgot: you will need two 50-tonne cranes now, won't you—one this side and one the other side—because you will still have to take entire containers off the barge on Home Island?

**Mr** Curyer—Yes, you are correct. I would envisage that a crane either side would be the logical scenario.

Mr FORREST—I had better check on the second crane.

**ACTING CHAIR**—Thank you very much, Mr Curyer, for appearing before us today. At the end of each inquiry it is normally our intention to call the department back but unless, Mr

Weatherstone, you have got an indication of any questions that have been raised that you want to answer, there probably is no need. Is there anything that has been raised that you want to respond to?

Mr Weatherstone—There is nothing, but we are quite happy to field any questions—

Mr FORREST—That second crane.

**ACTING CHAIR**—You had better come to the table, Mr Weatherstone.

[4.42 p.m.]

WEATHERSTONE, Mr John, Acting Director, Asset Management, Indian Ocean Territories, Department of Transport and Regional Services

**ACTING CHAIR**—There is this specific issue of the second crane that Mr Forrest has raised. Have you got any response to that?

Mr Weatherstone—I do not have it off hand. I am not sure that that was taken into consideration, but my understanding is that there would be a requirement for a crane. We have one listed in our capital program to counter for this particular scenario, but I am not quite sure of the size of the crane that we have in our books.

**Mr LINDSAY**—In the evidence that Ms Wendy Murray gave, she said that, if the channel was to be deepened in the future, the existing alignment perhaps may need to be varied. Have you taken that into account in planning the alignment of the channel?

Mr Weatherstone—Not at this stage.

**Mr LINDSAY**—Do you intend to have a look at that?

**Mr Weatherstone**—I would be quite happy to ask our program managers to look at that alternative and provide a cost estimate for it.

Mr LINDSAY—Thank you.

ACTING CHAIR—I think that draws our afternoon's inquiry to a close. Thank you to those people who have taken the time to be here with us today. I know there is a certain amount of interest in this project because it means so much to the island. As a committee, it is a delight to come to a place where we have unanimous support on environmental grounds, on social and cultural grounds and from all sorts of different areas where there has been total support for the proposed project. It makes our life much easier when we have this total support and unanimous community support. Thank you very much for your interest for attending today. We have enjoyed coming to Cocos to take evidence and to give you the chance to put your views to the committee. That is why parliamentary committees exist. I have always said it is a case of whether parliament goes to the people rather than people having to go to the parliament, which in your case is a long way away.

**Senator CALVERT**—Mr Hollis and I and, I think, the rest of the committee agree that that was probably one of the best desktop presentations we have seen since we have been in Public Works. Congratulations to those who put it together because it does make our job that much easier.

**Mr Weatherstone**—I would like to give GHD full credit in preparing the background information for today's hearing. They have put a lot of effort into the presentation, just to give

everyone—not only yourselves, but people on the island—a very detailed and visual concept of what we are trying to provide for the island.

**ACTING CHAIR**—It only remains to say, once again, thank you very much to the Administrator for being here, helping us and hosting us as well this evening. Thank you very much to everybody who has had any part to play with today's inquiry.

Resolved (on motion by **Mr Hollis**):

That, pursuant to the power conferred by section 2(2) of the Parliamentary Papers Act 1908, this committee authorises publication of the evidence given before it and submissions presented at public hearing this day.

Committee adjourned at 4.47 p.m.