



# United States Department of the Interior

OFFICE OF THE SECRETARY Washington, DC 20240



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Nikolao Pula Chairman, JEMFAC United States Government

Kino Kabua Member, JEMFAC Government of the R.M.I

William R. Steiger Member, JEMFAC United States Government Casten Nemra Member, JEMFAC Government of the R.M.I.

Alcy Frelick Member, JEMFAC United States Government

#### Dear JEMFAC members:

Please find attached, copies of two resolutions passed unanimously on August 27, 2008 at the JEMFAC meeting held in Washington, D.C.

Sincerely,

Tom Bussanich

Director

Division of Budget and Grants Management

Office of Insular Affairs

Attachment: JEMFAC Resolutions 2008 01-02

Resolution JEMFAC 2008-01

Special Grant Terms and Conditions

RESOLVED, the following special grant terms and conditions shall be added to the Fiscal Year 2009 Sector Grants:

#### Education

- 1. Within 90 days of the grant award, the GRMI shall present a plan for expedited implementation of the procurement of, and training in the use of, textbooks for the primary and secondary education system with the goal of having textbooks for core courses for each student by 2010.
- 2. During Fiscal Year 2009, in accordance with the expedited plan and in addition to the amount of \$391,831 identified in the FY 2009 MOE Portfolio for textbooks, supplies and materials, no less than \$500,000 of unallocated Fiscal Year 2009 funding shall be used to purchase textbooks for the primary and secondary education systems and related instructional materials.

#### Health

1. The sum of \$325,000 is provided for solid waste collection services by Majuro Atoll Waste Company (MAWC). The funds may be administered by the Ministry of Finance for that purpose.

### Public Sector Infrastructure

1. Funds may not be requested for reimbursement from amounts previously approved by JEMFAC for the hospital project until questions and concerns raised by the Office of Insular Affairs have been addressed satisfactorily (memo attached hereto- "Comments on Majuro Hospital Master Plan and Design Concept, April 30, 2008). The Ministry of Health shall report on progress to OIA by November 1, 2008, and in each fiscal year 2009 quarterly performance report thereafter until OIA certifies that the Government of the Marshall Islands has final approval to proceed.

Nikolao Pula, Chairman, JEMFAC Alcy Frelick, JEMFAC William R. Steiger, JEMFAC Casten Nemra, JEMFAC Kino Kabua, JEMFAC

## Resolution JEMFAC 2008-02

## Fiscal Year 2009 Grant Funding Allocations

RESOLVED, the following amounts are approved for use of Fiscal Year 2009 Compact of Free Association grant funding, subject to the terms and conditions of Resolution JEMFAC 2008-01:

\$12,457,410	Education
\$ 7,404,620	Health
\$ 5,000,000	Infrastructure (College of the Marshall Islands)
\$ 425,000	Public Sector Capacity Building
\$ 3,536,134	Ebeye Special Needs (Section 211 b.1)
\$ 236,735	Kwajalein Environmental Impact (211b.3)
\$ 228,138	Disaster Assistance Emergency Fund
\$ 29,288,037	

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Office of Insular Affairs US Department of the Interior April 30, 2008

# Comments on Majuro Hospital Master Plan and Design Concept (EMPSCO)

#### Using the Existing Site Makes for Protracted Staging

The term, "reconstruction," is used to describe the project but this seems a misnomer since the master plan and design calls for demolishing and rebuilding approximately 75% of the buildings currently occupied by the Ministry of Health. The only facilities remaining untouched would be the three JICA buildings that house hospital and public health administration, ambulatory or primary care clinics, medical records, the laboratory, radiology, and the emergency room.

Because plans call for using the land on which the hospital currently sits, the hospital's wards must remain habitable while demolition and construction take place. The current plan indicates that construction will occur through six stages in order to cause the least disruption to patient care. As a consequence, design work and project staging conceivably could stretch over a period of three years or more.

Flipping the design to use the vacant land between the new government conference facility (the remnants of the old baseball field) and the underutilized parking lot for the JICA buildings could have allowed for the construction of new hospital wards without displacing existing patient care. The demolition of the old buildings could occur after transferring the services to the new facility. The stages of construction could have been whittled down from six to, say, three. Moreover, the design could have avoided the need to have three freestanding two-storied "wards" in favor of a more efficient and larger contiguous multi-functional building that eliminate obvious space redundancies. Relocating the hospital closer to the main road also could have minimized vehicular congestion into residential and pedestrian areas. During the project conception phase, a determination should have been made regarding the availability of this vacant land for the hospital project.

### Use of Evidence-Based Health Profile to Plan Hospital Doubtful

The call for expansion seemingly was accepted without being adequately backed by a solid health profile and good projection data. Plans call for expanding the current hospital from an estimated 86 to 127 beds, an increase of forty-one (41) beds, at a time when: (1) the hospital's average daily census is running only about 60-70%, and (2) the

Ministry has reorganized its divisions to put a greater emphasis on primary care. This reinvigoration of primary care is predicated on the belief that better community-based care will decrease bed demand from certain types of patients, namely the number of diabetics hospitalized with complications who now make up the majority of in-patients.

One reason given for increasing the number of in-patient beds was the canvassing of staff medical specialists who stated they wanted dedicated beds for their patients. Whether or not they could fill the beds apparently was either not asked or adequately vetted. Similarly, the same can be said about the design that calls for grouping four specialty beds together instead of having patients in mixed medical, surgical, pediatric, and obstetrics/gynecology settings.

Another reason stated for increasing the bed number was the Ministry's intent to market medical services to neighboring islands. The aspiration is marginally viable but studies were not done ahead of time to predict the number of beds that could be filled with offshore referrals or the types of patients that could be attracted to Majuro from Kiribati, Kosrae, and other islands. Population growth was yet another unsupported reason given for increasing the hospital's capacity, even though increasing numbers of Marshallese are choosing to migrate to the United States.

A careful analysis of types of off-island referrals should have been done to determine what kind of conditions could and should be handled at Majuro Hospital, and under what kind of circumstances (in terms of patient acuity, specialized equipment, staff expertise, staff loading and the like). It was not. These findings could have supported some of the medical specialists' call to increase the number of beds dedicated only for their patients.

## EMPSCO Cost Figures Only Estimate Demolition and Actual Construction

EMPSCO<sup>1</sup> estimates that the cost of the six-stage project will be \$31,043,321.20, a sum that very closely approximates the amount authorized in an earlier internal RMI Cabinet paper. The projection covers site construction-only costs: demolition; architectural and structural work; mechanical and plumbing; electrical; and shipping and freight.

## Excluded from the estimate are:

- 1. Fittings, fixtures, and equipment (FFE; includes all medical equipment)
- 2. Public infrastructure upgrades such as to roads, power, water, sewer, phones
- 3. Land purchase or lease
- 4. Work on the existing administration building
- 5. Taxes, duties, fees, and charges
- 6. Project funding costs
- 7. Preference fees for Marshallese contractors

These items appear as an asterisk to the quote.

<sup>&</sup>lt;sup>1</sup> A Guam-based architectural and engineering firm retained by the Ministry of Health for project design and construction management.

To eyes that look for the bottom line, EMPSCO's "total cost" quotation is deceptive. Because the construction design spatially expands and significantly extends the service capacity of Majuro Hospital, it seems irresponsible to exclude an estimate for fittings, fixtures, furniture and medical equipment. Similarly, public infrastructure upgrades should not be de-linked from demolition and reconstruction work. When these costs are factored in, they will raise the project's actual cost to an amount well in excess of \$31 million.

## Grasping Future Needs and Costs of Operating and Maintaining an Expanded Hospital

Very little thought has been given to the kinds of adjustments in staffing that an expanded 127-bed hospital will require. Already burdened by hard-to-fill vacancies of doctors and nurses and faced with the need to upgrade the skills of managers, technicians, and other staff, the Ministry of Health must simultaneously come to grips with doing new workforce projections and initiating plans to bring even more qualified staff on board. Just how many additional nurses will be needed to cover forty additional beds and which medical specialty areas should be developed and to what extent are just some of the questions that should be asked and answered. The expertise for doing this kind of work is not available.

No one has yet posed the question, "What kind of hospital can we afford?" No group has been tasked with projecting how much money it would take to operate the expanded hospital. Faced with the prospect that its annual budget will likely shrink over time, the Ministry would need to estimate how much additional revenue it requires to operate the facility at maximum capacity. Knowing maintenance has been long neglected and wishing to rectify the situation, the Ministry needs to calculate how much money it would take, realistically, to maintain a facility with new built-in sophistication in terms of equipment and fittings, medical and otherwise.

## Should the Master Plan and Design Concept Report Be Modified?

EMPSCO not only came to Majuro with hard copies of its master plan and design concept in hand, but with a 3-D model of the reconstructed hospital. The master plan contained four different options for the Ministry to choose from. The model, now on public display in the JICA-constructed building, is a representation of option #3 -- the design that was supposedly selected by the Ministry at the close of the firm's presentation.

Ministry of Health and EMPSCO/AIDEA, PHILS INC officials officially "signed off" on option #3 even though Ministry representatives specifically asked (at the meeting) that the old administration building be demolished and relocated on the second floor of one of the buildings to be reconstructed. In addition, they had questioned aspects of the design, including the placement of a morgue that requires post mortem patients to be transported

by ambulance from the wards or the emergency room. Ministry representatives also requested EMPSCO to incorporate into the design construction an apartment to house nursing staff.

Making these adjustments undoubtedly will alter EMPSCO's cost estimate and design. Will, how, and when the firm do another presentation to show the adjusted design and cost?

#### Perplexing Design Elements

- 1. EMPSCO states that its major design intent is to achieve a "residential" character and the transformation of the existing hospital into a "health park" or "medical hotel." Did the acceptance signatures of the Ministry of Health representatives also unwittingly endorse a concept that seems ill suited to its own vision? Can the Ministry afford to outfit the patient rooms accordingly and landscape the grounds to resemble a green shady plaza?
- 2. The design shows a sprawling collection of segregated buildings, including three separate two-storied inpatient facilities, connected by uncovered (or so it appears) walk ways. This layout is inefficient in terms of employee (and ambulatory patient) navigation from one point of the campus to another and it does little to minimize unnecessary traffic (flow of people) and the mixing of well and sick populations.
- 3. EMPSCO was told by an official in the Ministry of Health that 196 was the actual number of beds needed for surges or swings in capacity arising from mass casualties and emerging infections. The firm's proffered design accommodates this "stated desire" by including day rooms at the end of each patient floor that can be converted to house 63 more beds.
  - The plan begs the question of how the Ministry really intends to use these day rooms, especially since the existing hospital does not now have designated lounge facilities for leisurely family and patient interactions, and existing policies discourage extended visitation. The plan also assumes that the hospital, now only averaging 65% capacity, will be full at the time of a "surge" and that the spaciously redesigned wards cannot be shifted, combined or otherwise repurposed in emergencies. It does not proffer the availability of space such as provided by wide interior hallways to accommodate emergency cots and beds (a customary practice).
- 4. The facility for internal medicine in-patients (medical ward) is two-storied but there is no plan to install an elevator or ramp to make for easier patient transport upon admission or discharge, in the event of medical emergencies requiring transfers to another part of the hospital, to delivery patient meals, to restock supplies, or to move portable medical equipment. Disabled visitors would be

unable to access the second floor. Even if the design were to have called for elevators, history does not speak of well maintained and fully functional elevators in Majuro.

EMPSCO also has designated the first floor to house both isolation patients and a small intensive care ward, and proposes a general medicine ward on the second floor. Whether this would the best arrangement for air flow management and minimizing the potential for cross contamination is open to debate.

- 5. The facility for surgical (lst floor) and pediatric (2<sup>nd</sup> floor) patients is another stand alone building. Again, the only way to move patients, staff, and equipment from floor to floor is by stairs, and from one building to the next is by gurney or wheel chair using open walk ways.
- 6. Surgery (both ambulatory or "day stay" and hospitalized patients) is on the first floor and the nursery, maternity and obstetrics are on the second floor of the third free standing building. Four operating rooms are included on the first floor but whether or how the daily surgical load/schedule would use all four efficiently remains have not been clearly articulated. Recovered post-surgical in-patients would have to be transported to the building next door to complete their hospitalization.
- 7. The requirements and limitations inherent in operating three stand-alone patient care facilities are costly. Separate buildings do little to reduce space redundancies or maximize the use of functional adjacencies. The sprawling design may even increase the need for increasing staff size over and above what would be necessary to cover the expansion in bed capacity.
- 8. EMPSCO includes a much bigger building to accommodate lecture and examination rooms, offices, and exercise and kitchen facilities for the Diabetes Wellness Program. The program's director has told EMPSCO that he even would like to include space for "wall-i-ball" (a combination of racket ball and volleyball).

EMPSCO proposes to build a very small annex in the open space between the middle JICA building and the new wards to accommodate both the US Department of Energy medical program and the Four Atoll Health Care Program's (also known as the 177 Health Care Program) administrative office and out-patient medical clinic. The scale of that building seems to be only about 1¾ times the size of a four-bed medical ward cubicle and its placement an afterthought to the original design.

All three programs are funded through extramural resources. The Diabetes Wellness Program is run by Canvasback under a grant from the US Department of Defense. The programs for nuclear affected populations are funded by the US Departments of Energy and the Department of the Interior. While the Four Atoll

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Health Care Program is an annual discretionary grant to the Republic of the Marshall Islands, the other projects are run by non-Marshallese organizations. There is no indication that the Ministry of Health has developed contingency plans or budget in the advent external funding disappears (especially for the Wellness Program) or that it has thought about recouping indirect costs or other kinds of financial offsets from DOE and Wellness Center grantees in the interim.

- 9. The Wellness Center Program is proposed to be located in a mixed use building. Its space is abutted by the Infectious Disease Program, rehabilitation (presumably for both out-patients and in-patients), the decompression chamber treatment facility, and the hospital morgue. The combination of uses is odd: (a) the building is situated in a way that the transport of bodies to the morgue is possible only via a long outdoor walk or by ambulance; (2) mixing the flow of infectious disease clientele with diabetics needs to be rethought; (3) placing the morgue right next to the Wellness Program seems almost an oxymoron; and (4) other options are needed to move patients who have been prescribed physical therapy from the medical ward to rehabilitation. According to the design, the only recourse is to maneuver them down the stairwell and along the sidewalk.
- 10. The master plan includes a new public cafeteria but whether the Ministry asked for this addition or has given thought as to who will operate this concession is debatable.
- 11. The master plan has visitors and soon-to-be admitted patients entering the hospital into a large and almost grandiose foyer with seating, a little floral shop, a reception desk, and an off-to-the-side pharmacy. These are certainly not existing features of the current hospital and make "more work" for the Ministry.

A section designated for "administration" is clearly identifiable off the lobby. Did the Ministry agree to relocate hospital administration and pharmacy from their space in the JICA buildings or were these insertions unnoticed by the reviewers? If the relocation was contemplated, the repurposed use of the vacated space should have been mentioned in the master plan and reconstructed buildings accommodating programs or activities should have been eliminated from the conceptual design.

Excluded from the hospital "administration" area are staff rooms and the offices of the chief of staff and chief nurse. These facilities are found abutting engineering and housekeeping in the conceptual design.

- 12. The master plan's ground flow depicts a common hallway that only links the reception area (lobby) to the day surgery/surgical building and to the surgical ward. The other patient areas are accessible only via open walk ways.
- 13. The master plan and conceptual design show solar panels installed over two parking lots (one at the main hospital entrance and one fronting the JICA

buildings) and the mixed use Diabetes Wellness Center. Solar panels also would be installed on the roofs of the three stand-alone patient ward buildings and the Wellness Center. While the extensive use of alternative energy is admirable, adequate maintenance to keep the panels functional will become at a tremendous issue and potentially unaffordable. The master plan does not include a preliminary electrical power load profile for the overall project.

- 14. The design calls for the roofs of the new buildings and the existing JICA buildings to act as rain water catchments for underground storage. There is an ambitious idea to have the hospital have its own sewage treatment plant so that water can be recycled for flushing toilets, irrigation, and fire suppression. There is nothing in the plan, however, that speaks to a purification system that will provide potable water for patients and visitors.
- 15. Given that the patient areas are not contiguous or otherwise connected by shared hallways with the JICA buildings, it would seem appropriate to relocate laboratory and x-ray closer to the patient core, to better serve and be more accessible to an expanded in-patient population. Similarly, should not the emergency room (now at the back of the third JICA building) be physically resituated to be closer to areas where transported patients will need to be hospitalized?
- 16. Since the Ministry of Health has asked to relocate its Ministry-wide administration offices to the second floor of the Diabetes Wellness Center, EMPSO now must also relocate the Reproductive Health office.