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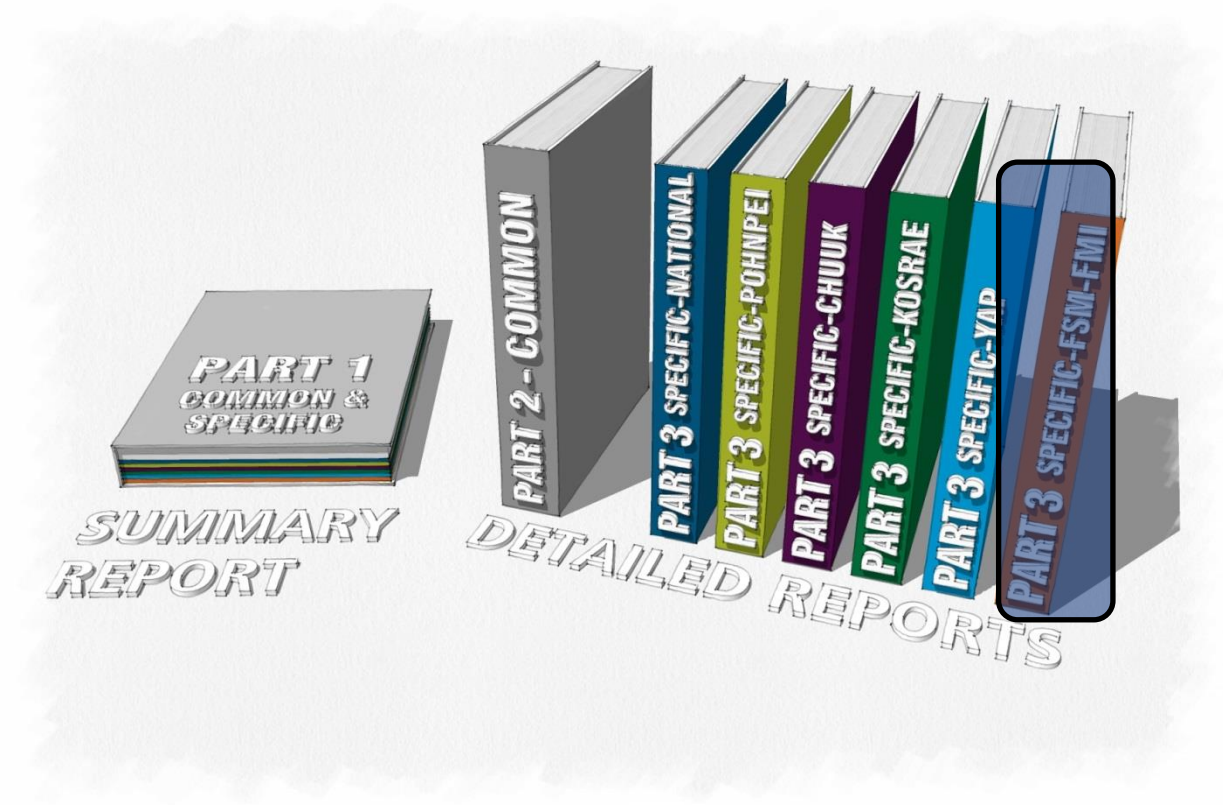
Report

College of Micronesia - FSM Space Utilization and Facilities Master Plan Study, Part 3 - Detailed Report for the FSM-FMI Campus

Prepared for the College of Micronesia - FSM

Prepared by Beca International Consultants Ltd (Beca)

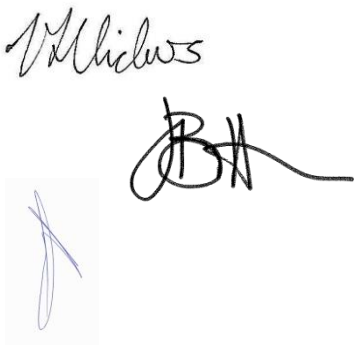
28 February 2014



Revision History

Revision Nº	Prepared By	Description	Date
1	**Annette Jones**	Draft, for review by PCG	31/10/2013
2	**Annette Jones**	Final issue for the Board of Regents meeting on the 2nd December 2013	28/11/2013
3	**Annette Jones**	Final report	28/02/2014

Document Acceptance

Action	Name	Signed	Date
Prepared by	**Annette Jones, Mark Wilson, Warren Perkins, Mark James, Paul Leman, Claire Green.** **Wilson Hess /James Mulik from Sandy Pond Associates (Contributors of the Classroom Utilization Study)**		28/02/2014
Reviewed by	**Fraser Vickers** **Joe Briffa – Energy Audit** **Mark Wilson – Condition Assessment**		28/02/2014
Approved by	**Fraser Vickers**		28/02/2014
on behalf of	Beca International Consultants Ltd		

Contents

Appendices

1 FSM-FMI Campus Development

1.1 FSM-FMI Campus 2013

As outlined in the COM-FSM website “The FSM Fisheries and Marine Institute (FSM-FMI) is located on the island of Yap, occupying the facilities built in the late 1960’s for the Loran Station operated by the United States Coast Guard. The Institute is situated some six miles north of the capital, Colonia.

There are three majors offered at FSM-FMI: Navigation, Marine Engineering and Fishing Technology. Currently, these fields of studies or programs normally run for two years, and anyone completing one of them is awarded an Advanced Certificate of Achievement in each of them, and an industry Certificate of Competency as Master of vessels of not over 200 gross tonnage (or Class 5 Master) for a Navigation major; or a Certificate of Competency as Marine Engineer of vessels of not over 500 kilowatts total propulsion power (or Class 5 Marine Engineer) for a Marine Engineering major.”

No./	Building Description
A	Administration/Student Services and Living Quarters/Mess Hall
B	Staff housing
C	Classrooms, Library and Shops
D	Maintenance office
E	Shower House
F	Security Post

1.2 Long Term Vision

The FSM-FMI campus will have facilities to support the following:

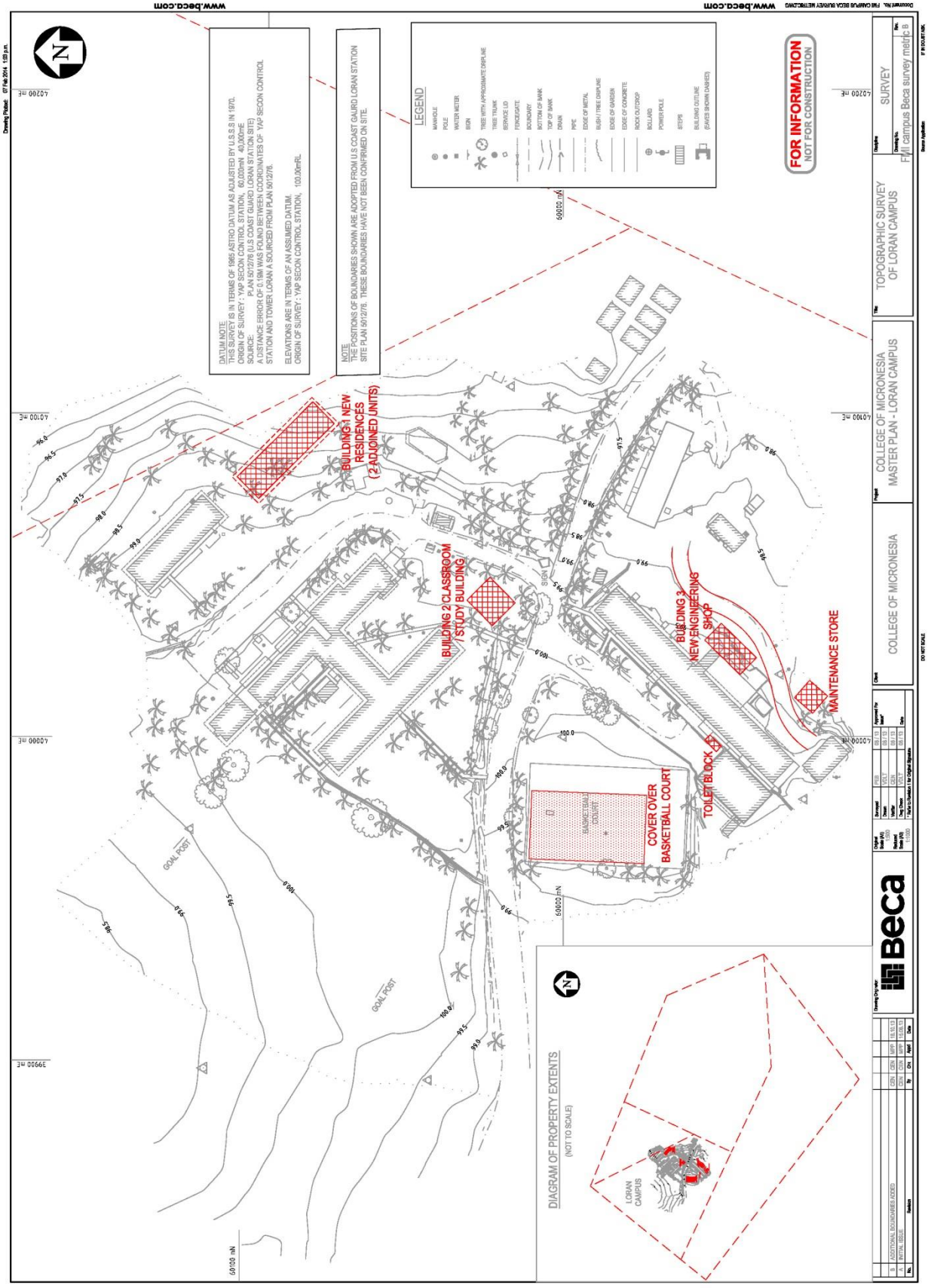
- A consolidated campus with its own access road
- An ability to provide courses beyond the three majors that are offered - Navigation, Marine Engineering and Fishing Technology. This could be block courses or non-credit courses.
- Wi-Fi capability
- Renewable energy and incorporate sustainability measures
- Buildings that have a reduced maintenance and operational cost through design and selection of materials
- Increased access for women cadets

Key Moves

1. Review provision of a stand-alone instructors residence (2 units) in the residential zone
2. Move instructors residence out of Building A to enable relocate women's quarters to be relocated into the north – eastern end of the Administration building. Upgrade shower amenities and toilets. Increase the size of the administration area by creating a conference room space
3. Provide covered access over classroom doors to Building C, new cadet toilet block next to Seaman's shelter and rationalise location of the access path
4. New classroom/ study space with covered access connecting to residential quarters
5. Improve shop areas by constructing a stand-alone engineering shop area
6. Work with State Government to investigate rerouting the main road to the south of the classroom Building C

The following plan depicts the proposed layout with the new buildings identified in red. The accommodation schedules listing the functions and areas for the spaces within these buildings are contained in Chapter 3.4.2.

The stages to reach this Long Term Vision are described in the staging plans and the program at the end of this chapter.


FOR INFORMATION
NOT FOR CONSTRUCTION
TOPOGRAPHIC SURVEY OF LORAN CAMPUS
COLLEGE OF MICRONESIA
MASTER PLAN - LORAN CAMPUS
COLLEGE OF MICRONESIA
SURVEY
FMI campus Beca survey metric.dgn
LEGEND
NOTE
THE POSITIONS OF BOUNDARIES SHOWN ARE ADOPTED FROM U.S COAST GAURD LORAN STATION SITE PLAN 5012/76. THESE BOUNDARIES HAVE NOT BEEN CONFIRMED ON SITE.
DATUM NOTE:
THIS SURVEY IS IN TERMS OF 1966 ASTRO DATUM AS ADJUSTED BY U.S.S.S IN 1970.
ORIGIN OF SURVEY : YAP SECON CONTROL STATION, 60,000mN, 40,000mE
SOURCE: PLAN 5012/76 (U.S COAST GUARD LORAN STATION SITE)
A DISTANCE ERROR OF 0.19M WAS FOUND BETWEEN COORDINATES OF YAP SECON CONTROL STATION AND TOWER LORAN A SOURCED FROM PLAN 5012/76.
ELEVATIONS ARE IN TERMS OF AN ASSUMED DATUM.
ORIGIN OF SURVEY : YAP SECON CONTROL STATION, 100.00mRL
BUILDING 1 NEW RESIDENCES (2 ADJOINED UNITS)
BUILDING 2 CLASSROOM / STUDY BUILDING
BUILDING 3 NEW ENGINEERING SHOP
MAINTENANCE STORE
TOILET BLOCK
COVER OVER BASKETBALL COURT
GOAL POST
GOAL POST
DIAGRAM OF PROPERTY EXTENTS
(NOT TO SCALE)
LORAN CAMPUS
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1.3 5 year period - to 2018

5 year period to 2018

01 Address provision of fire fighting facilities

02 New duplex residence for instructors in the residential zone

03 Relocate women's quarters into the north eastern end of Administration Building A and add conference room and administration office to area vacated by the residence

04 Remove wall between men's and previous women's quarters. Move men's quarters to the north and utilise the southern quarters as library study space

05 Increase computer room to incorporate former library space in Building C

06 Separate server room from IT office (within existing building envelope)

07 Provide covered access over classroom doors to Building C, new cadet toilet block next to Seaman's shelter and rationalise location of the access path

08 Upgrade below ground services - drainage and water supply

09 Storage for maintenance materials (potentially a container type facility)

10 Address the current sewage system and leaching field

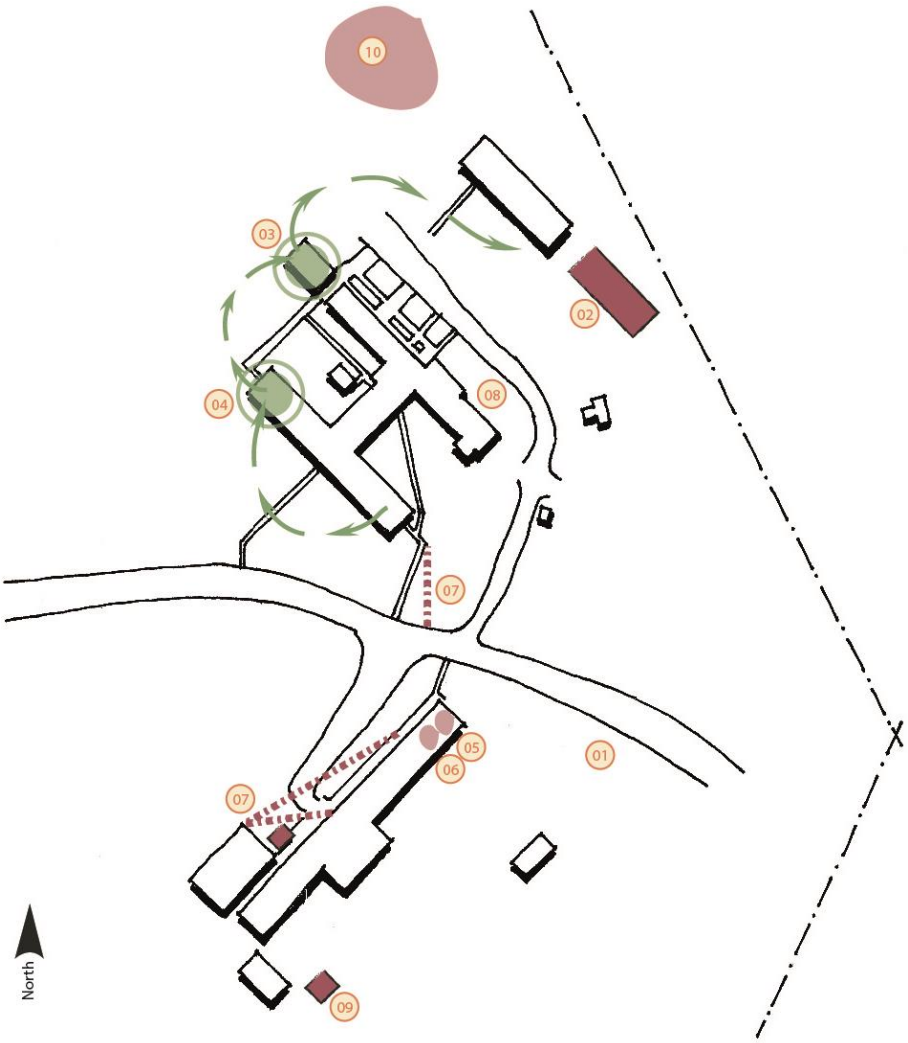
Further projects (not in order of priority)

- Provide facility for on site water supply

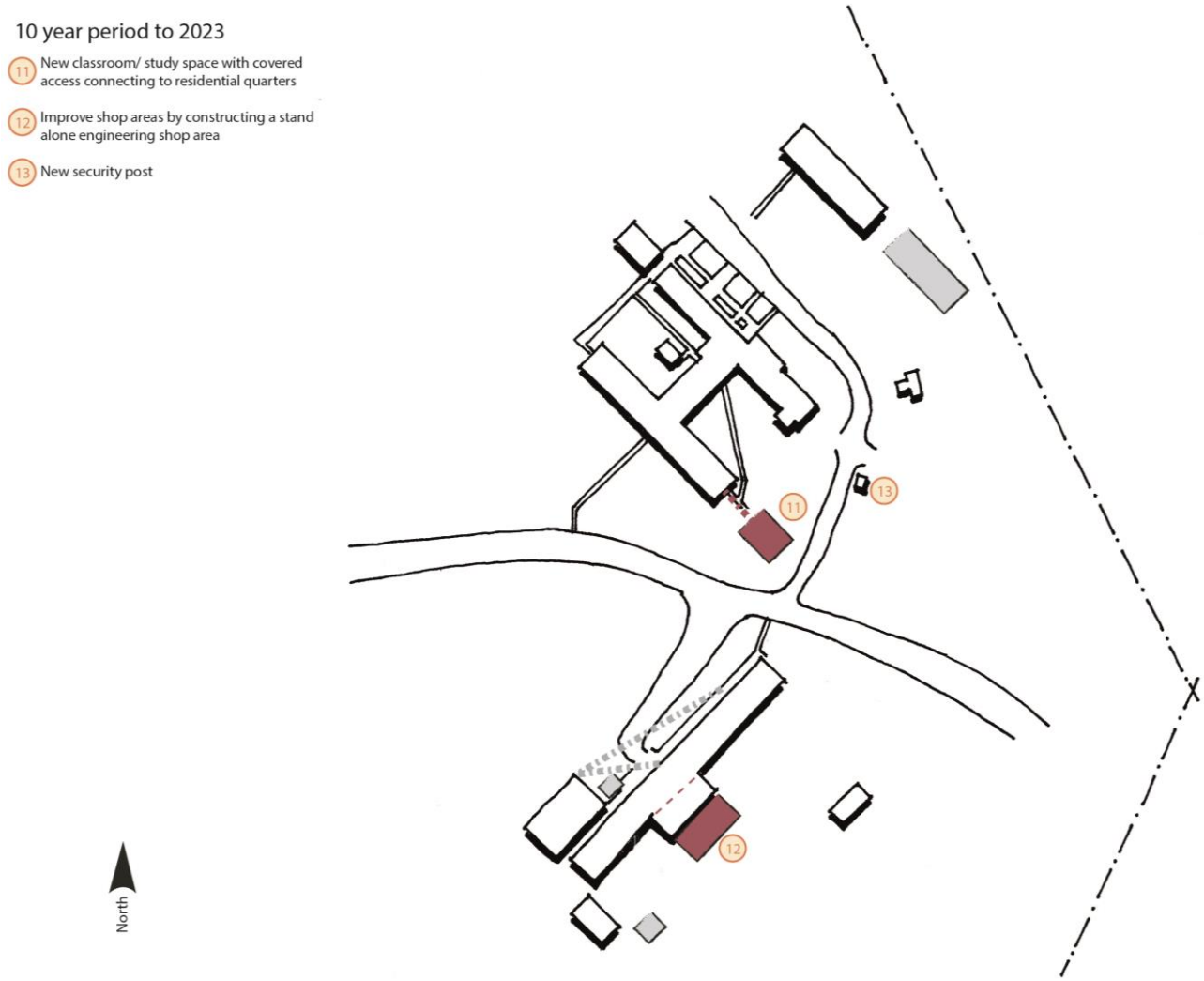
- Solar power generation

- Works to increase drainage capacity - swales and subsoil drainage

- New overhead power connection to residences



1.4 10 year period - to 2023



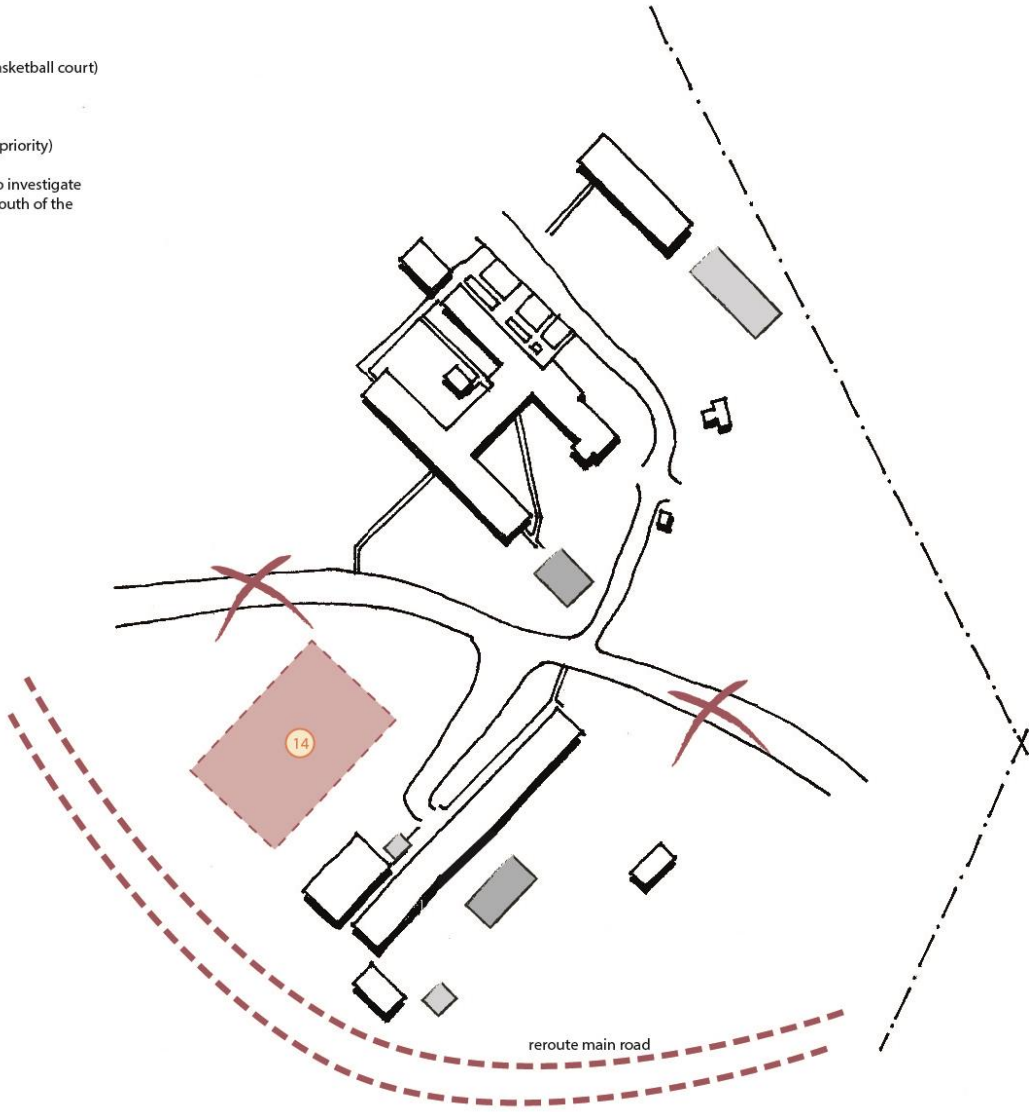
1.5 Long Term Vision - Beyond 2023

Beyond 2023

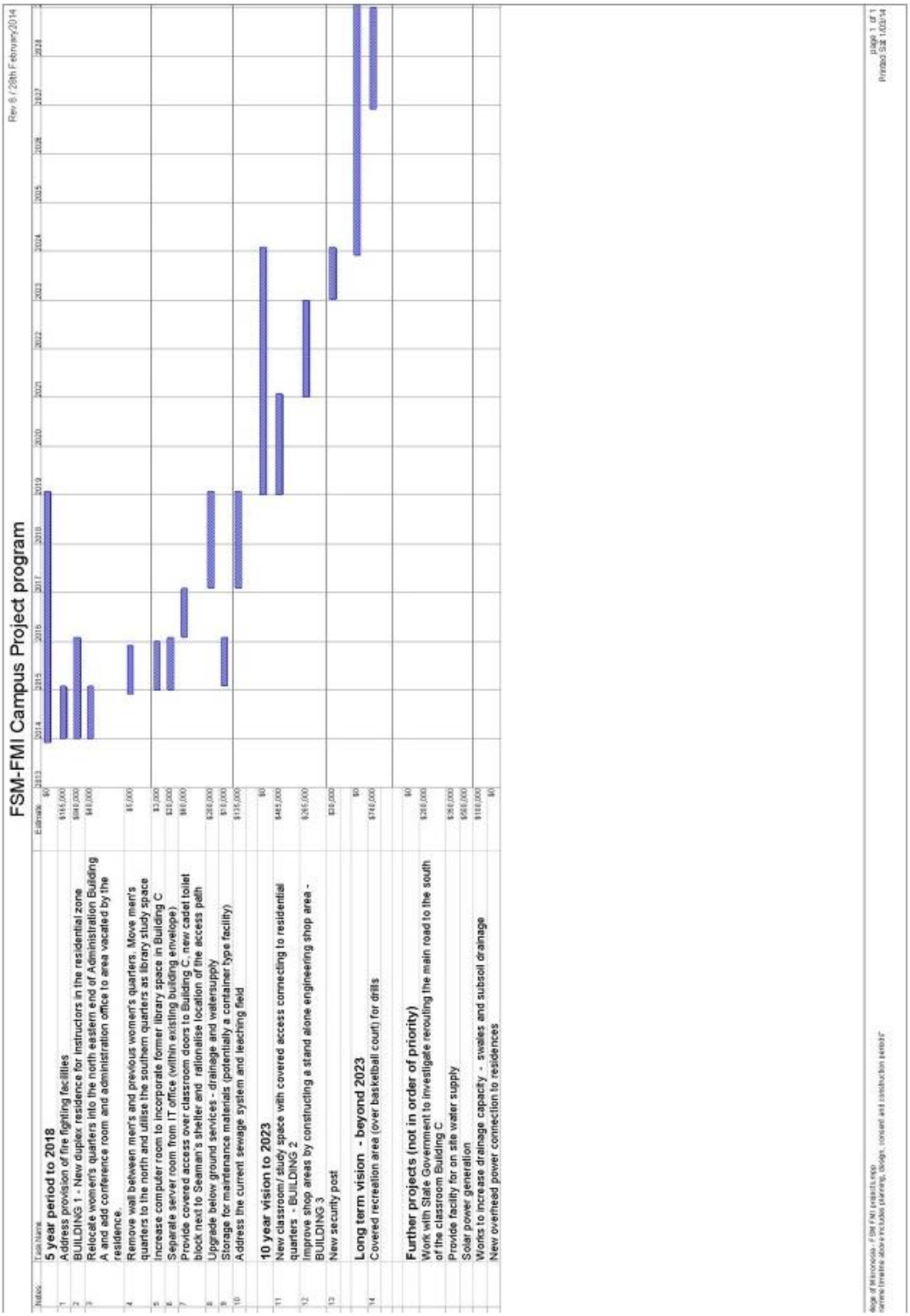
(14) Covered recreation area (over basketball court) for drills

Further projects (not in order of priority)

- Work with State Government to investigate rerouting the main road to the south of the classroom Building C



1.6 Development Staging and Program – Implementation



2 Educational Component

2.1 Key Considerations

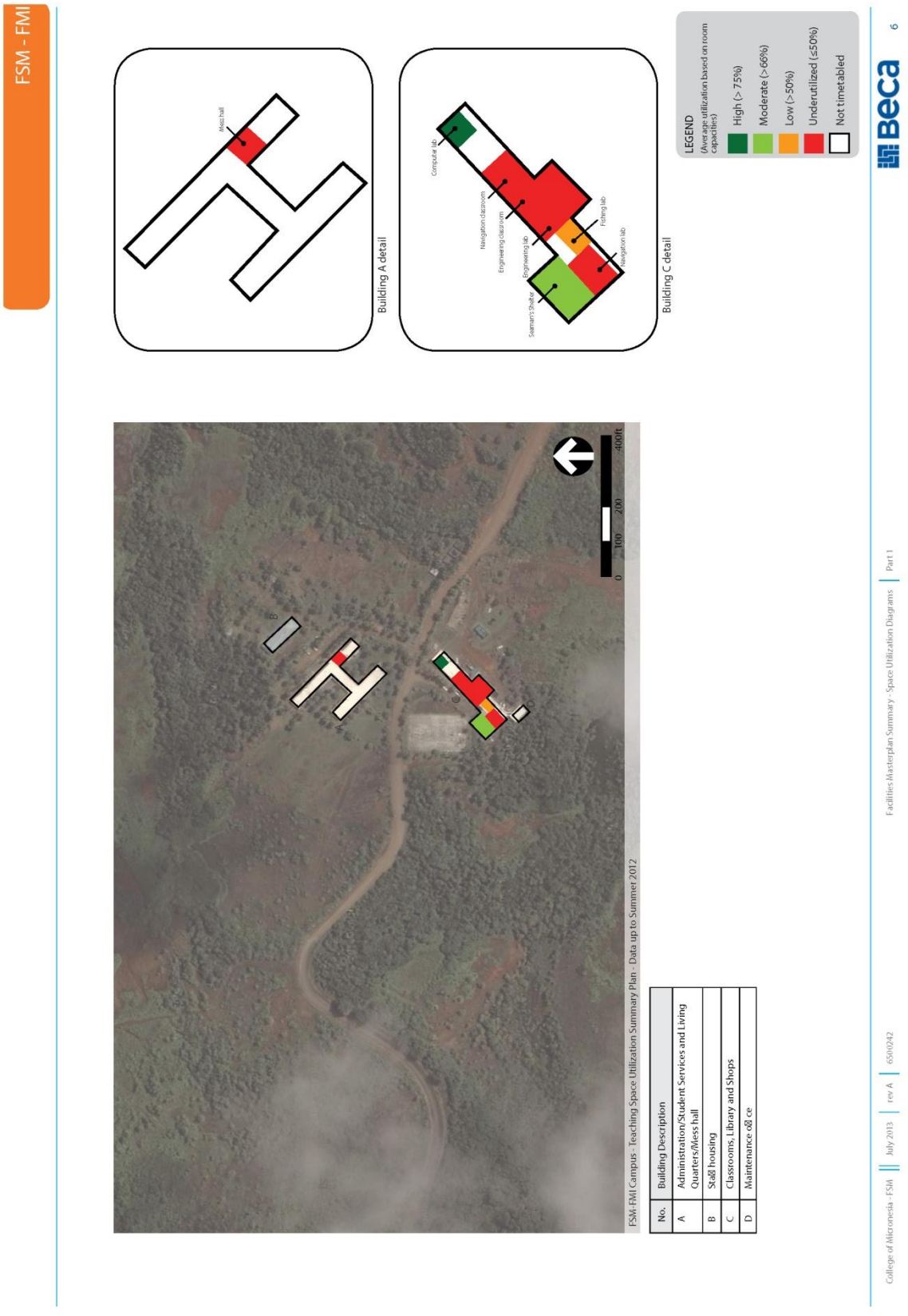
- By the nature of its programs, which tend to be short term and intensive, the FMI Campus is an outlier for utilization analysis (see Table 2.2.1). Its use is episodic, making data unsuitable for quantitative analysis for classroom utilization or enrolment projections.
- The opportunity represented by this campus' capacity for offering specialized technical programs, developing specialized immersion programs, and hosting visiting scientific and academic interests ought to be more fully developed and explored.

2.2 Space Utilisation

2.2.1 COM-FSM Campus Utilization Levels (2008-2012)

Utilization Levels	Chu'uk	FMI	Kosrae	National	Pohnpei	Yap	All Campuses
High (>75%)	0%	13%	11%	33%	76%	25%	35%
Moderate (>66%)	36%	0%	33%	33%	0%	25%	21%
Low (>50%)	55%	25%	44%	21%	24%	25%	30%
Underutilized (<=50%)	9%	63%	11%	13%	0%	25%	15%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

2.2.2 Space Utilisation Summary Plan



3 Spatial Review

Key points for the Facilities Study

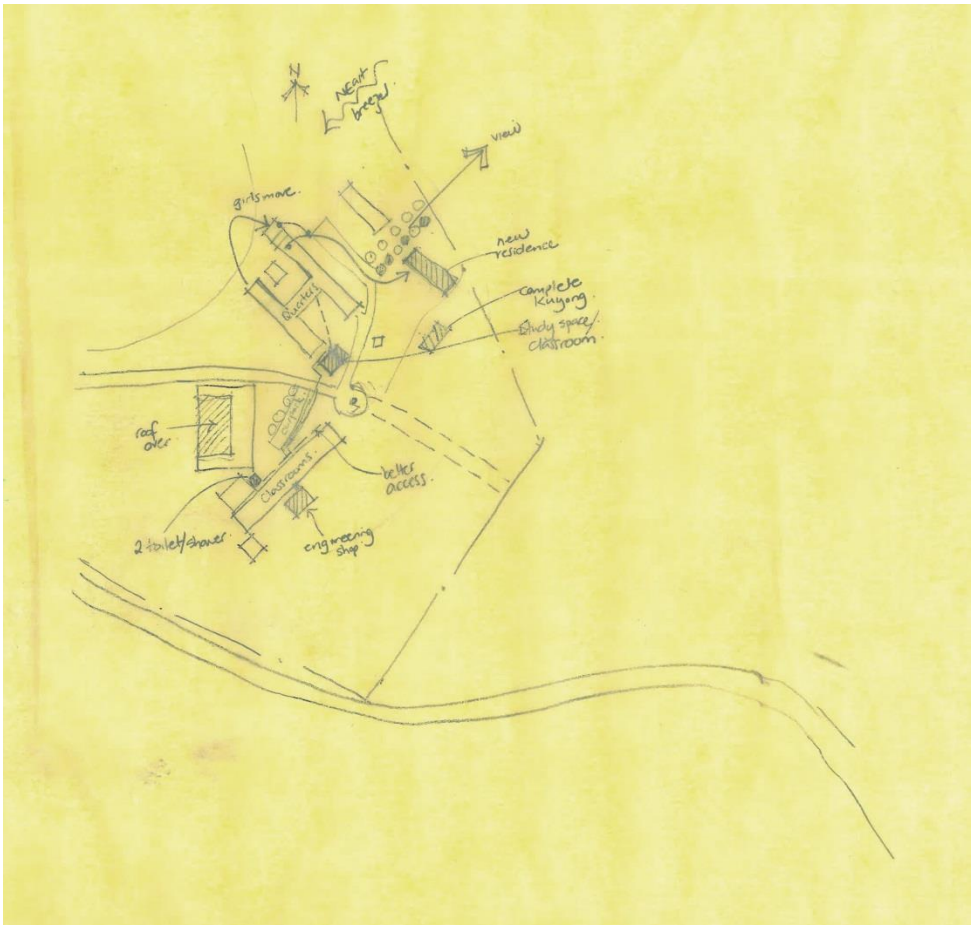
1. Move the women's quarters within the campus and review provision and number of instructor's residences
2. Provide a dedicated study space
3. Increase computer lab space and provide Wi-Fi across the campus
4. Relocate main road out of the centre of the campus

3.1 Design Concept Plans

The design concept plans prepared during the site visit in August/September illustrate the option developed. They have been derived from a combination of the input received from students, faculty and staff, the site visit observation and key messages from the utilization study. These broad concepts show the design moves prior to project costing and evaluation against projects identified for all other campuses. Refer to Part 2 – Common Report for the full schedule of projects across all campuses.

The concept drawing considers the following inputs from the spatial review:

- Activity zones
- Range of people spaces on campus
- Circulation - pedestrian and vehicular
- Building and landscape character
- Infrastructure including energy efficiency



3.2 Focus Group Summary

3.2.1 Student focus group

A student focus group was held between 12pm and 1pm on Friday the 23st of August. This session provided an opportunity for students to discuss positive features of the campus and any issues with regard to facilities on site. Eleven male cadets attended.

A one page question outline was provided as a prompt for discussion. This sheet provided an opportunity for students to leave any further comments. Three questionnaires were received.

Positive attributes commented on was the separation of the campus from the Kolonia and the ability to concentrate on studies.

Issues raised in order of priority were:

1. The need for Wi-Fi on site

2. *Provision of sports equipment*

3. Short of a navigation instructor so share teaching space (2 class levels with one teacher)

4. Need for a dedicated study space

5. Classroom – the mess hall is used as a teaching space

6. *Not enough computers in the laboratory*

7. Room quarters ventilation is not adequate – sleep on the floor, *existing mattresses are an issue*

Information gleaned from focus group questionnaires completed by students also included:

8. The use of the cafeteria used as a classroom was seen as negative although not elaborated on why.

9. *The washing facilities are too expensive and some students wash their clothes by hand to avoid the cost.*

10. *Transportation between the campus and the living compound is not provided.*

11. Library equipment deemed to be of low quality and insufficient for the number of students.

12. Basketball court fencing

13. Need for a Koyeng shade structure for study during the day

Note: Items in italics are noted but sit outside the scope of the facilities development

A further separate meeting was held with female cadets. Items raised in this discussion were:

- These are the second year of upcoming graduates – would be good to have a choice of shared quiet recreational and outdoor seating areas. Currently have a bench outside - would be good to have a small koyeng to use
- No toilets on the classroom side for students
- Need for another classroom
- Need for a separate study area
- No shelter outside the classroom doors for rain protection
- *Mattress condition*
- Inadequate bedroom ventilation

3.2.2 Faculty staff and staff focus group

A combined staff focus group was meeting was held between 3.30pm and 5pm on Wednesday the 21st of August. A similar format was followed to the student focus group. Sixteen staff and faculty staff attended and thirteen completed questionnaires were received.

Positive attributes commented on was the move to using the land to grow food on site and compost food scraps on site. The opportunity to extend this further for livestock including pigs and goats was raised as a means for further campus sustainability.

A comment on the distance from Kolonia was also made as being a positive feature as it is perceived to enable students to concentrate on their studies better.

Issues raised for Facilities Study consideration in order of priority were:

1. Lack of cover for fire – fire hydrant and hoses or mobile pump as hoses from the reservoir

2. Rats in the mess hall

3. Road through the center of the campus

4. No restroom on the classroom side of the campus for students

5. Status of the fire extinguishers

6. Staff facilities

7. Recreation room for students - either ping pong or television watching not compatible to have both activities at the same time

8. Covered recreation area - P.E. is cancelled in torrential rain and there would be enhanced use for squads to compete against each other

9. Investigate opportunities for solar power – consideration would be needed to means to secure these in a typhoon event.

A summary of key points from the questionnaire are:

- Flooding of the footpath access to the classroom building
- A new building to provide for cadet and staff meetings which could also serve as a cadet study hall.
- The main road to Gagil runs through the center of the campus. This should be relocated for the safety of all campus and road users.
- More parking spaces which are allocated or separate parking areas for staff, cadets, and faculty members. Have parking on both sides of the campus. A bus or coach for transporting cadets to and from study sites.
- Offices are too small and in poor condition
- Private space needed for counselling cadets one on one
- Crossing the main road outside the school is hazardous for all campus users
- The number of toilets are insufficient for campus users and the locations are illogical particularly with no toilets near the classrooms
- Lack of general maintenance has left buildings looking tired.
- Roofs leak.
- Classroom sizes are too small and too few in number for the 3 programmes and other safety courses offered at this campus.
- Sound echo is very bad in classrooms
- Library is too small
- Computer lab is too small with insufficient numbers of computers (Note: could be remedied with computers island in the center of the room similar to the Yap Learning Resource Center)
- Parking should be formalised as campus users currently park anywhere on campus
- Relocate water services and relay drain pipe
- Engineering lab, particularly the welding area needs roof repairs/replacement and to be made considerably larger to house equipment and to provide for safe use by the cadets doing training.
- School cars needs replacing/repair
- Underground services need to be replaced
- Betel nut chewing areas need to be controlled or eliminated
- Fence around the campus perimeter
- Build new buildings so the wiring, water and sewer lines are easier to maintain
- Plant more trees, flowers and grow vegetables
- Sewerage line and water pipes need replacing.
- Emergency evacuation exit points from buildings very limited.

- The LRC and the computer lab are too small with some students wanting to study not able to do so comfortably or at all.
- The computer lab extension is leaking badly and needs walls to keep the rain and unwanted visitors out.
- Doors need replacing for security reasons
- Install doors and windows in open areas
- Install shelter over the sidewalks outside the labs and classrooms and improve drainage for pedestrians in the rainy season.
- "The campus should look more attractive and alive" and outdoor areas should be better maintained
- Pave footpaths, car parks and roads and install signage to indicate parking and pick-up/drop-off points
- Parking areas should have shelters over the top.
- A gymnasium

Further meetings were held with Matthias Ewarmai (Director), Alex Raiuklur (Acting Instructional coordinator), Clotida Dugwen (Fiscal officer) and the Maintenance Supervisor (Christopher Igem) along with informal discussions with other staff on the site walk over. Further to this an exit meeting was held with Matthias, Ces (SSC), and Penijamini Nailati (Chief mate) and Cecilia (Student Services)

A summary of points relevant to the Facilities Study are outlined below:

- Need to provide for accommodation on site ideally in its own area rather than being mixed with administration function
- Girls quarters only have one egress point in a fire - a better location would be further from the main road
- Fire fighting capability and ensuring sensible distance between surrounding vegetation and the campus buildings
- There is not enough room in the navigation room to layout all the charts required for study. These are shared for instruction, however need to be able to have space to layout own chart for examination.
- Floor of the Kuyong next to the security shed remains unfinished and therefore sheltered area remains unused
- Underground drains will require replacement at some stage
- No separate volleyball court
- The road through the middle of the campus becomes an issue in the weekends. People from the nightclub drive through the campus and park up on the other side - this is sometimes a security issue.
- Catchment from the overland flow from the basketball court ponds at the classroom entry – sometimes ankle deep
- Note enough welding booths - with one booth provided there is a limitation on the practical time available to each student
- The campus runs as a combination of theory in the morning and practical classes in the Labs in the afternoon so should be assessed on that basis. Labs will remain unused in the mornings as all cadets are being taught theory subjects in the classrooms.
- Limit of 60 cadets due to residential capacity, however, there is opportunity to provide short course diesel mechanic courses for others
- The engineering shop area has open sides with the backup generator exposed to the weather in typhoon event
- Dedicated parking area at the classroom side of the campus

- No conference room space – ability to video-conference with other campuses in the future, provision of online tutorials
- Ideally be able to house six instructors on site - preferred option
- IT office is too small – cupboard size
- Roof deterioration is the largest maintenance issue
- Need for maintenance storage
- Shutters need to be upgraded for typhoon preparedness. The facility is used as a community shelter in an event
- Residences need two access doors
- The campus is set up to simulate operations on a ship and therefore runs on a tight schedule. Exercise is held for cadets at 6.30am before class starts at 8.30am. Classes run for till 4.30pm with a break for lunch. There are two hours of study at night. Shore leave is given on a Saturday with a requirement to be back at 6.30pm on campus.

Key issues raised in the Focus Groups to inform the development strategy

1. Facilities issue – Provide for addition study and classroom area instead of mess hall
2. Infrastructure issue – Need to review and upgrade leaching field, drainage on site, fire fighting capability, electrical supply as the existing site infrastructure is over 40 years old
3. Site layout issue – Relocate the main road out of the centre of the campus
4. Educational outcomes – Provide dedicated areas for small group and quiet study instead of using quarters for study. Along with this increase the computer lab space and Wi-Fi.

3.3 Spatial Analysis

A review of the existing components that contribute to the physical environment and the look and feel of the campus are outlined in the following tables. Divided into different aspects these include the contextual response to the site, activity zones, building function and form, open space and circulation. This analysis forms one of the inputs into the concept development and project identification.

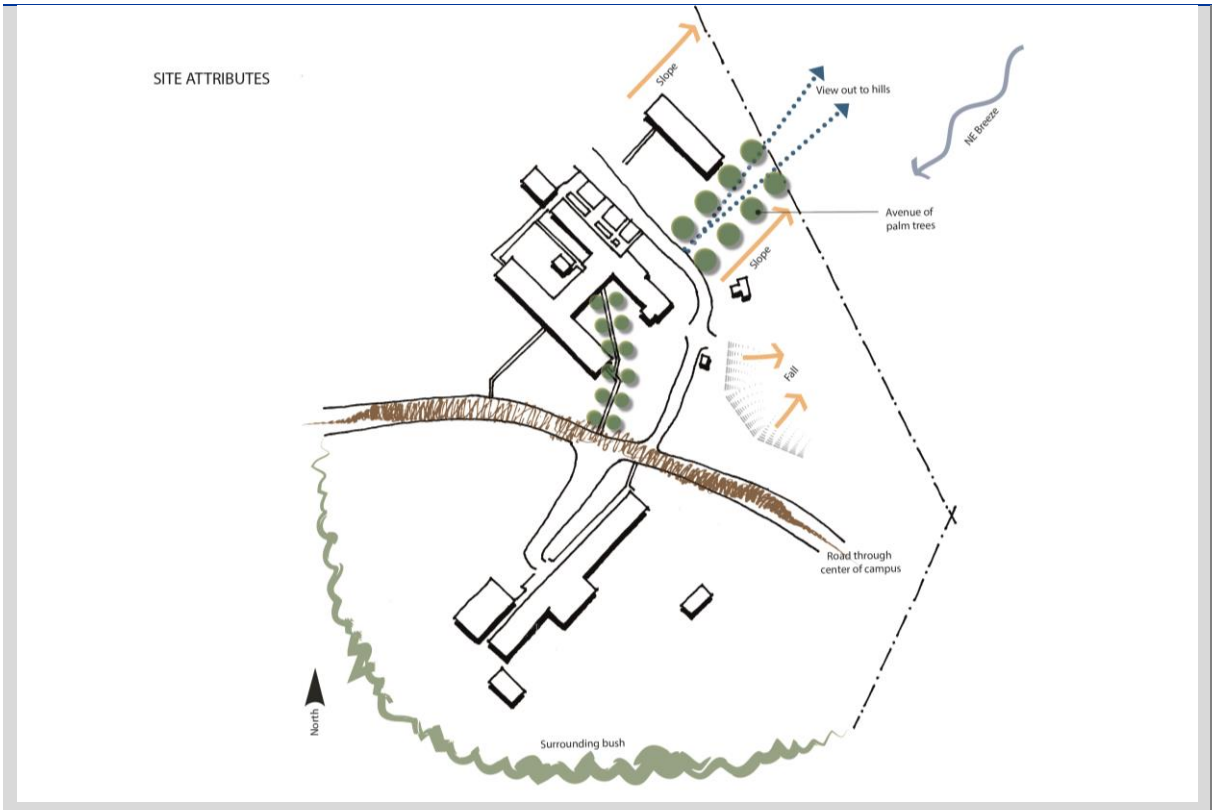
Context and response – Identifying the existing site features

Key attributes

- Chain fences delineate the campus edges
- View out to the hills through and avenue of coconut trees
- Residential area on a lower level on the site to the main building
- Open space with under a field of coconut trees on one side of the campus
- Level open space for baseball pitch and basketball court
- Key entry point

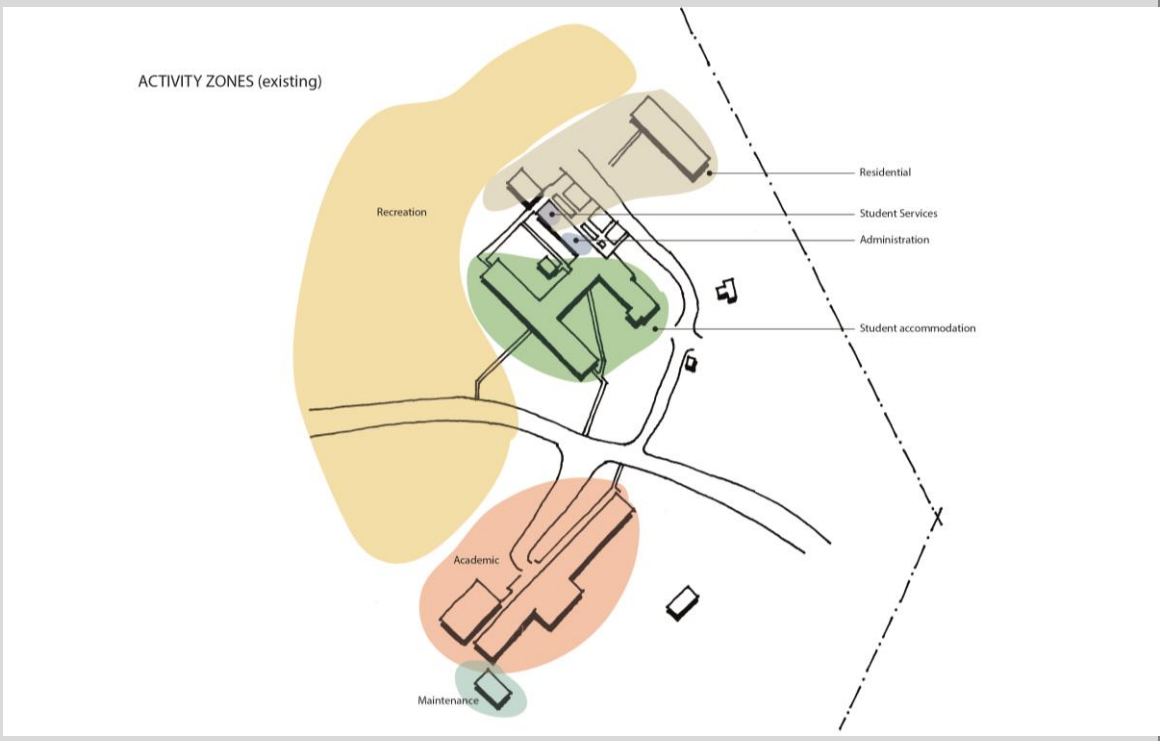
Main entry onto the campus on the main road from Colonia is clearly visible.

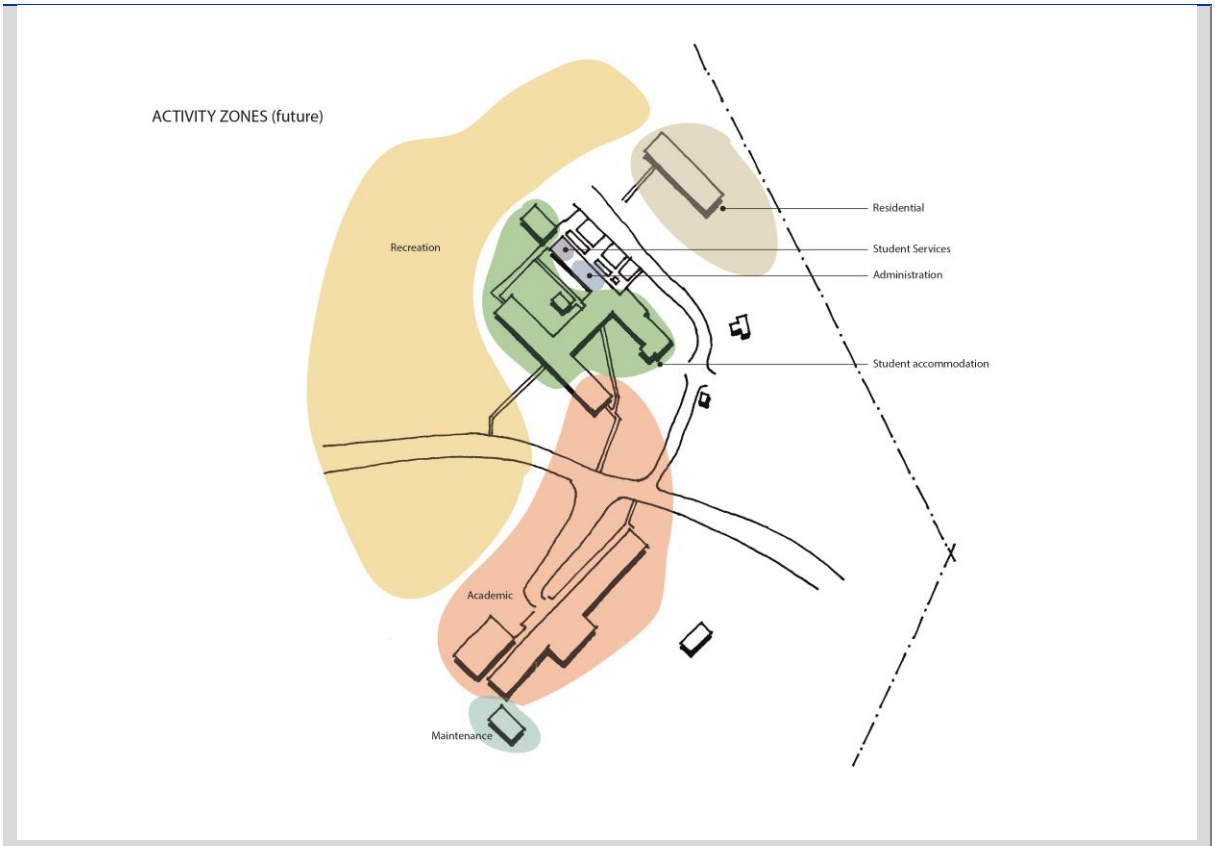
Level open area for baseball and exercise



Activity zones – grouping areas with common functions together

- Accommodation and academic zones are clearly separated
- Maintenance and instructor residence are located on the edges of the site

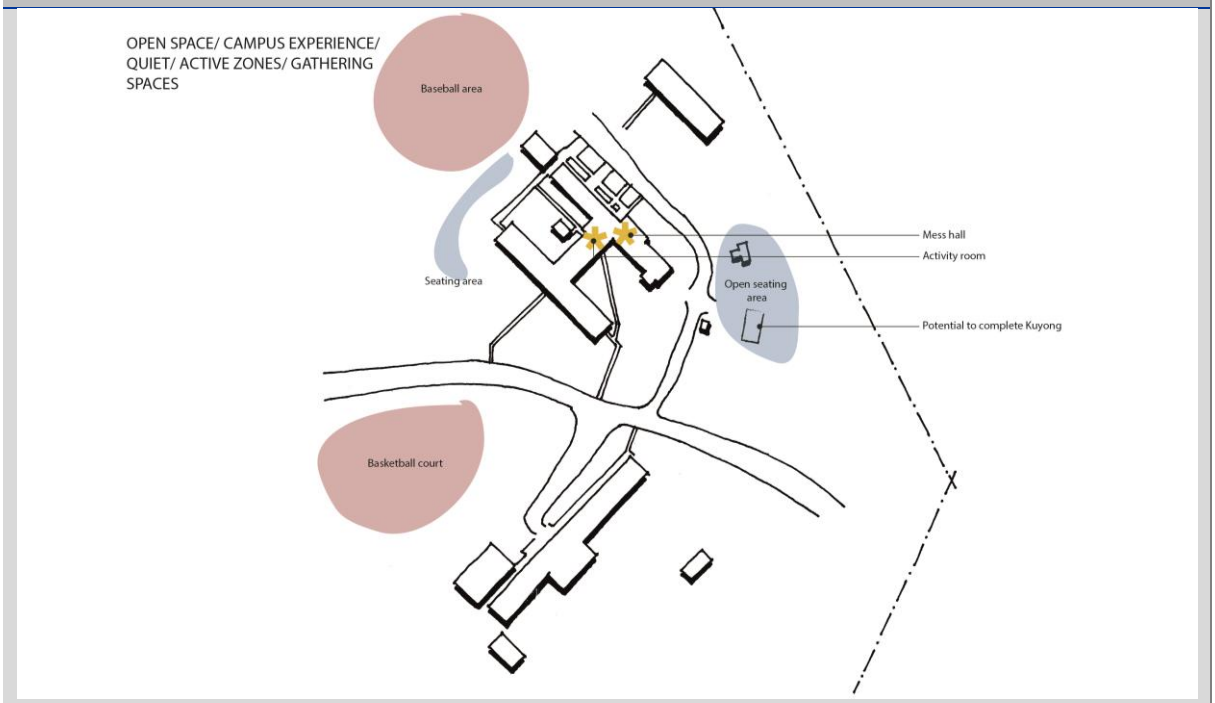




Points to consider in future planning

- Provide for an overlap between academic and residential zone to provide for study areas/ additional open plan meeting space

Types of people spaces – individual, small groups or communal gathering spaces



Circulation – the way vehicles access the site and how pedestrians move around the site

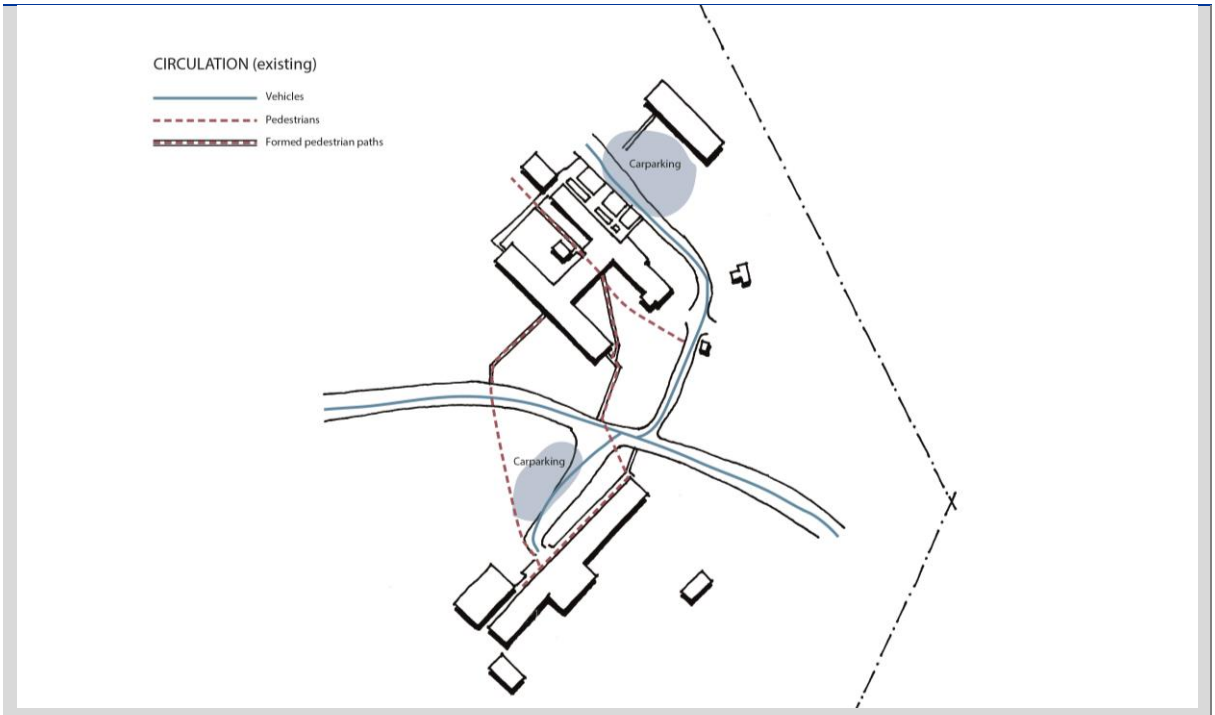
- Paths are not continuous
- Need to cross main road that runs through the middle of the campus

View across the road looking towards the southern wing of the male living quarters. Provide a formed walkway and rain shelter between both sides of the campus

Informal path being formed to the security post - provide a formed walkway

No link to a formed walkway on the classroom side of the campus

View alongside the classroom building looking towards the road



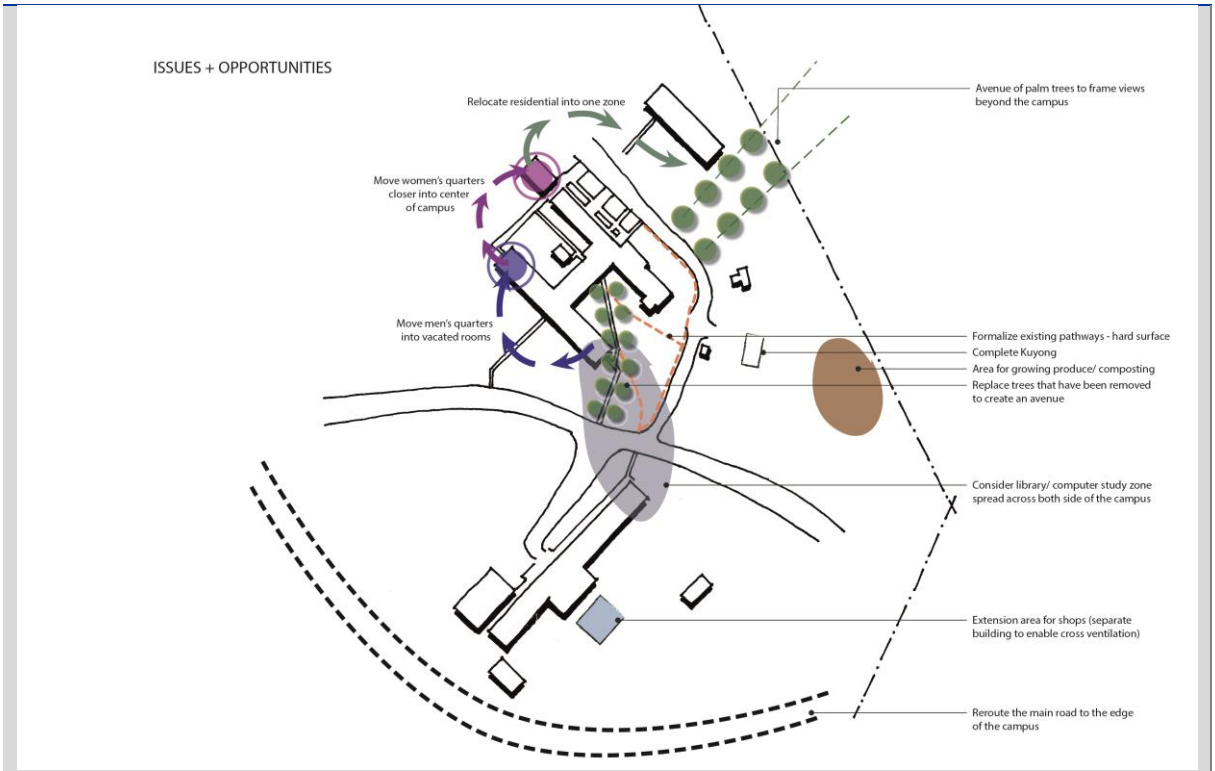
Points to consider in future planning

- Provide a dedicated car park area for the classroom area
- Provide a clear parking area for residences

Building and landscape character – look and feel of the campus

- Large building footprint
- Monopitch rooves
- Paths lead to building entries
- Coconut trees line entries with kuyong in between

	
Coconut trees often line pathways. Replant coconut trees where they have	Avenue of coconut trees framing the hills beyond. Retain this open space and recreation area (volleyball area). Any buildings to be located outside of this zone.



Infrastructure - theservices that enable the campus to operate

- Town supply water
- Waste water to leaching fields
- Lighting provided on buildings only
- Emergency generator located in the mechanical shop
- Underground mains power terminates at the corner of the mess hall – need to provide for direct power supply and metering for instructors residences
- No firefighting capability to the residential area
- Water catchment from basketball court and water reservoir no longer in use – available for fire-fighting
- Areas of ponding and flooding particularly on low lying areas

Drainage issues around the northern residential courtyard

Potential to compost to reduce the amount of kitchen waste

3.3.1 Existing building profile and considerations

Building	Outline
A – Administration/ student services/ residential quarters and mess hall  **Points to consider in future planning** Remove the staff residential use out of this building to provide for a separate girls living quarters and sheltered outdoor area	Building A is approached from the main entry through the security post. The administration occupies the eastern wing along with student services, the mess hall and two residences. Car park spaces are provided directly outside this building. The western wing contains the cadet living quarters. Foot paths are provided from this building towards the classroom building however there is no cover at entry doors or covered walkways to provide rain protection. Location for its function – adjacent to the security post Quality and suitability of spaces for its function – Contains a range of uses and there is potential to relocate functions. The office space is small with currently no conference facility provided Disabled access - Not consistently provided for on campus Teaching spaces – One teaching space identified - mess hall is used for first year classes 880ft Amenities, toilets - one unisex toilet in administration, 2 WC for women's quarters, 4 for mens quarters Building condition points: Targeted regular maintenance and cleaning. Reseal or replace roofing and fix ponding issues immediately. Replace typhoon shutters to rooms used in emergencies. Upgrade toilet and sanitary plumbing facilities immediately (to prepare for use in emergencies). Building age – 50 years – circa 1964
B – Staff housing  **Points to consider in future planning** Provide a dedicated car parking area	The staff housing lies to the north of the administration building. Private area for residents is provided on the gently sloping grounds to the north of this building and car park space to the south as seen in the photo. Location for its function – in a separate zone at the edge of the campus Quality and suitability of spaces for its function – Focus groups expressed need for 2 doors to each unit Disabled access - None provided – only if required by resident Building condition points: Repair roof leaks immediately. Treat and spot Prime rusted roofing immediately. Building age – 17 years - late 1990s
C – Classroom building – Library, computer lab, classrooms and workshops	The classroom building is located to the south of the main road and is where the cadets come for theory and practical classes. Access is provided along the western side of the building facing the basketball court. Location for its function – in a separate activity zone from the residential facilities Quality and suitability of spaces for its function – The library space is too narrow for its function, the IT room is

Building	Outline
 **Points to consider in future planning** Provide a toilet building for students and a shower amenity for staff Provide cover at least over the entry doors Increase the shop area and cover over the emergency generator	not sufficient in area for its function and the engineering faculty office is also not of a size to fit 4 instructors. Removing a function may provide the opportunity to relocate rooms. The space in the shop limits the ability to provide more than one welding bay Disabled access - None provided – there are tripping hazards along the access walkway Amenities, toilets - one toilet for staff and faculty Building condition points: Targeted regular maintenance and cleaning. Reseal or replace membrane roof areas. Replace rusted roof to Seaman's shelter immediately. Building age – 50 years – circa 1964 
D – Maintenance office  **Points to consider in future planning** Indicate potential for further storage space dependent on the result of an equipment review and any layout efficiencies that can be made within the existing area.	The maintenance office is located on the south west corner of the classroom building with access from the southern side of the building. Location for its function – in an appropriate location at the edge of the campus Quality and suitability of spaces for its function – provision of additional storage space would be beneficial for the storage of replacement materials and fixtures Amenities, toilets - none - have use of the adjacent classroom building facility Building condition points: Targeted regular maintenance and cleaning. Targeted replacement of rusted roofing and cladding immediately. Building age – 17 years - late 1990s

3.4 Accommodation Review

3.4.1 Facilities ratios

Item	
Fall 2013 enrolment	60 (of which there are 4 women cadets). Residential capacity is restricted to the rooms provided. It is assumed there will be no room expansion. This will limit the number of women attending the FSM-FMI campus. The demand for places for women needs to be assessed on an on-going basis.
Number of faculty and staff (from general catalogue 2013 - 2014)	15 in catalogue (26 attended focus group meetings)

Following is a summary of the target spatial allowance per person for different room uses that has been provided by COM-FSM. Areas where the space provided does not meet the needs of the number of users or function are summarised at the end of the table. This summary forms an input into the future accommodation planning and the projects identified for the campus.

Item	COM-FSM standard target	Provided on FMI campus
Parking area	Parking for 75% of staff, no parking required for cadets	Adequate parking provision on site
Toilets	Two indicators 1. Aim is for toilet block at each teaching building 2. From 2006 – 2012 strategic plan – 1 female toilet for every 30 students, 1 male toilet for every 40 students. Reference taken from American Institute of Architects 10th edition.	No toilets provided for students at the classroom building Adequate provision of shower and toilet facilities at the cadets quarters
Drinking water	Accessible drinking water	Provided from mess hall
Teaching space per person	25ft^2 per student (AIA is 30ft^2)	2 large classrooms 1100ft2 (100msq) 2 medium sized classrooms area 700ft2 (65msq) 2 small seminar spaces 320ft2 (30msq)
Computer Laboratory	25ft^2 per student (AIA is 40ft^2) (2.4msq)	Computer lab is 380sqft – room for 15 students only **Require space double this size**

Item	COM-FSM standard target	Provided on FMI campus
Small group study/ study carrells	25ft^2 per student (AIA is 50sqft for reading rooms)	Library is 345sqft. Assume 50% for stacks = 175sqft (room for 7 cadets) **Require space double this size**
Shops/ vocational rooms	50ft^2 per student (4.7msq)	Engineering shop is 820sqft - space for 16 cadets **Adequate size provided for current education delivery**
Private office	100ft^2 per person (9.3msq)	IT office is 70 sqft (require larger size and separate server room) IC office in Building C is 100sqft - adequate size **Business office 1 & 2 in Administration Building A are 120sqft - adequate size**
Work station	60ft^2 per person (5.6msq)	
Faculty work station with side chair	80ft^2 per person (7.43msq)	Navigation fishing faculty office in Building C is 450sqft – room for 5 faculty, currently 4 - adequate size Instructors office in engineering shop is less that 200sqft - space for 2 instructors - currently 4
Spatial assessment summary		Computer lab and library combined require additional 700sqft IT office/ server room requires additional 60sqft Engineering shop instructors office requires additional 200sqft

3.4.2 Accommodation schedules – new buildings

No	Building 1 – Residential building (two units) Room name for Unit 1	Area (sqft)
1.01	Living room	250
1.02	Kitchen	130
1.03	Bedroom	150
1.04	Bedroom	150
1.05	Third room	150
1.06	Bathroom	150
1.07	Storage	100
	Subtotal - rounded	1080
	Circulation and wall thickness @20%	300
	TOTAL (rounded)	**1400**
	Unit 1 and 2 combined	**2800**

No	Building 2 – Classroom/ study building Room name	Area
2.01	Study room	500
2.02	Computer space off study area – bifold doors	500
	Subtotal	1000
	Circulation and wall thickness @20%	200
	TOTAL	**1200**

No	Building 3 – New Engineering Shop Room name	Area
3.01	Shop office (area for 2 people)	200
3.02	Engineering shop	750
3.03	Storage area	200
	Subtotal	1150
	Circulation and wall thickness @20%approx	250
	TOTAL	**1400**

3.4.3 Building area changes over five year periods

Existing square feet (Fall 2013)	Remove buildings to 2018 (sqft)	Add buildings to 2018 (sqft)	Area in 2018
22,400		Residences (2800)	25,200

Existing square feet (Fall 2018)	Remove buildings 2018 – 2023 (sqft)	Add buildings 2018 – 2023 (sqft)	Area in 2023
25,200		Classroom (1200) Engineering (1400)	27,800

4 Condition Assessment

Key Points

The Operational budget for Years 1-10 for the FSM - FMI campus is recommended to be in the order of $US3.05M ($305,000 average per annum). The operational cost equates to 4.71% of the estimated 2013 replacement value which is higher than expected and this reflects the existing poor condition of the assets.

4.1 FSM-FMI Campus Building Condition Review

4.1.1 Introduction

Beca International Consultants Limited (Beca) carried out an Asset Condition Assessment of the existing buildings and site infrastructure located on the FSM - FMI campus for COM in June 2013.

The purpose of this Asset Condition Assessment Report is to record the existing condition of the COM-FSM assets (buildings and site infrastructure) so that:

1. The indicative cost of operating the COM-FSM assets through a 10, 20 and 30 year life cycle is identified and,

2. Decisions to either renew/upgrade or to demolish/replace the existing assets can be made.

This Asset Condition Assessment chapter gives each asset an indicative condition grade, identifies the asset replacement cost, and the cost of operating (renewing and maintaining) them. This chapter read as part of the overall Facilities Study is intended for use as the base reference for campus planning decisions. It should be noted that the costs presented in this Asset Condition Assessment chapter assume that the existing assets will be renewed, refurbished and maintained (with the exception of some buildings which are demolished). Any buildings which are replaced by the current campus planning process (and subsequent changes in annual operating costs) are not included in this Asset Condition Assessment Report

The findings of this report are based on the on-site Condition Assessment conducted by Beca in June 2013. It should be noted that a visual assessment only has been carried out and that no in-depth investigations have been possible. No detailed structural or seismic strength investigations have been undertaken.

4.1.2 Scope of Condition Assessment and Key Outputs

The scope of the Condition Assessment covers 6 No. existing buildings (excluding minor support structures and buildings) and site infrastructure located within the FSM - FMI COM-FSM campus. The key tasks undertaken to complete this report include:

- The FSM - FMI campus was visited in June 2013 to photograph and record visual defects in the buildings and site infrastructure.
- Data gathering and making observations.

- Grading the condition of each building asset (against a pre-determined set of criteria) and collating this to establish an overall condition grade for each asset.
- Assess the physical condition of the built assets (i.e. buildings and site infrastructure). Establish baseline condition to enable Life Cycle cost analysis.

The key outputs of this report include:

- A general overview of the current condition of the assets.
- A condition appraisal of each building (with the exception of minor structures) and the site wide infrastructure – Refer Appendix 'B' – Asset Condition Assessment Dashboard.
- Site observations and records of the existing site infrastructure
- Estimate of the potential replacement cost of each asset.
- Estimate the Operational Cost (Asset Renewals plus maintenance) of the assets as they currently exist. NOTE: the Operational Cost contained in this Condition Assessment assumes that all current assets are retained and maintained. Alternative Operational Costs for the proposed campus re-development are noted separately in this overall report
- Provision of an indicative Maintenance and Asset Renewal Plan. This gives indicative regular maintenance activities, timeframes for asset renewals and estimated costs (Note: costs indicated for maintenance and asset renewals exclude escalation and should not be used for budgeting purposes). Refer to Appendix 'C' for details on the Indicative Maintenance and Asset Renewal plans.

4.1.3 Reference to Part 2 Detailed Report – Common to all campuses

Additional (and more general) information pertaining to the FSM - FMI Campus Asset Condition is contained in the "College of Micronesia – FSM Space Utilization and Facilities Master Plan Study Part 2 Detailed Report – Common to all Campuses". This report contains (but is not limited) to the following information;

- Scope of condition assessment and key outputs,
- Definitions,
- Methodology of condition assessment and information collection,
- Condition grading system and building elements assessed,
- Forecast operational costs,
- Escalation and economic assessment
- Results/findings and conclusions/recommendations.

4.1.4 Forecast of Operational Costs

The forecast Operational Costs have been prepared as follows;

1. Develop the Maintenance Cost Plan. This is the cost of annual routine maintenance and includes building washing, painting, repairs and maintaining building services (mechanical, electrical fire etc.). This cost has been established by multiplying quantities (e.g. wall area) by an appropriate $/ft2 rate for washing or painting. To this an allowance for general overheads (e.g. supervision, vehicle running expenses etc.) has been added.

2. Develop the cost of periodic element Renewals. From the condition grade assessment and amount of remaining life in the building element the date and cost of renewal is determined (e.g. a roof with 10 years life remaining has been budgeted for replacement in 2023). For the COM-FSM campuses the cost of renewals has been viewed over 10, 20 and 30 year periods.

3. The forecast Operational Cost is established (by adding annual maintenance and periodic element renewal costs). This is annualised or averaged over a 30 year period (i.e. the total operational cost over 30 years divided by 30. It should be recognized that for cash-flow purposes actual operational costs will vary from year to year (depending on the amount of actual renewals required in that specific year). Detailed monitoring and management of the operational cost cash flow on an annual basis will be required by COM-FSM.

4.1.5 Escalation

Escalation over a 30 year period of asset renewals and maintenance is a significant cost. Because of the significant impact of escalation two sets of cost, one which excludes escalation (i.e. present day 2013 costs) and the other which includes escalation have been presented at the main summary level. Escalation has been assumed to be 3.4% per annum for the next 30 years. This is based on an assessment of historical data provided by Mundi (refer web-site address below);

http://www.indexmundi.com/federated_states_of_micronesia/#Economy

It is critical for long term funding purposes that the allowances for escalation are included in all budgets and funding applications.

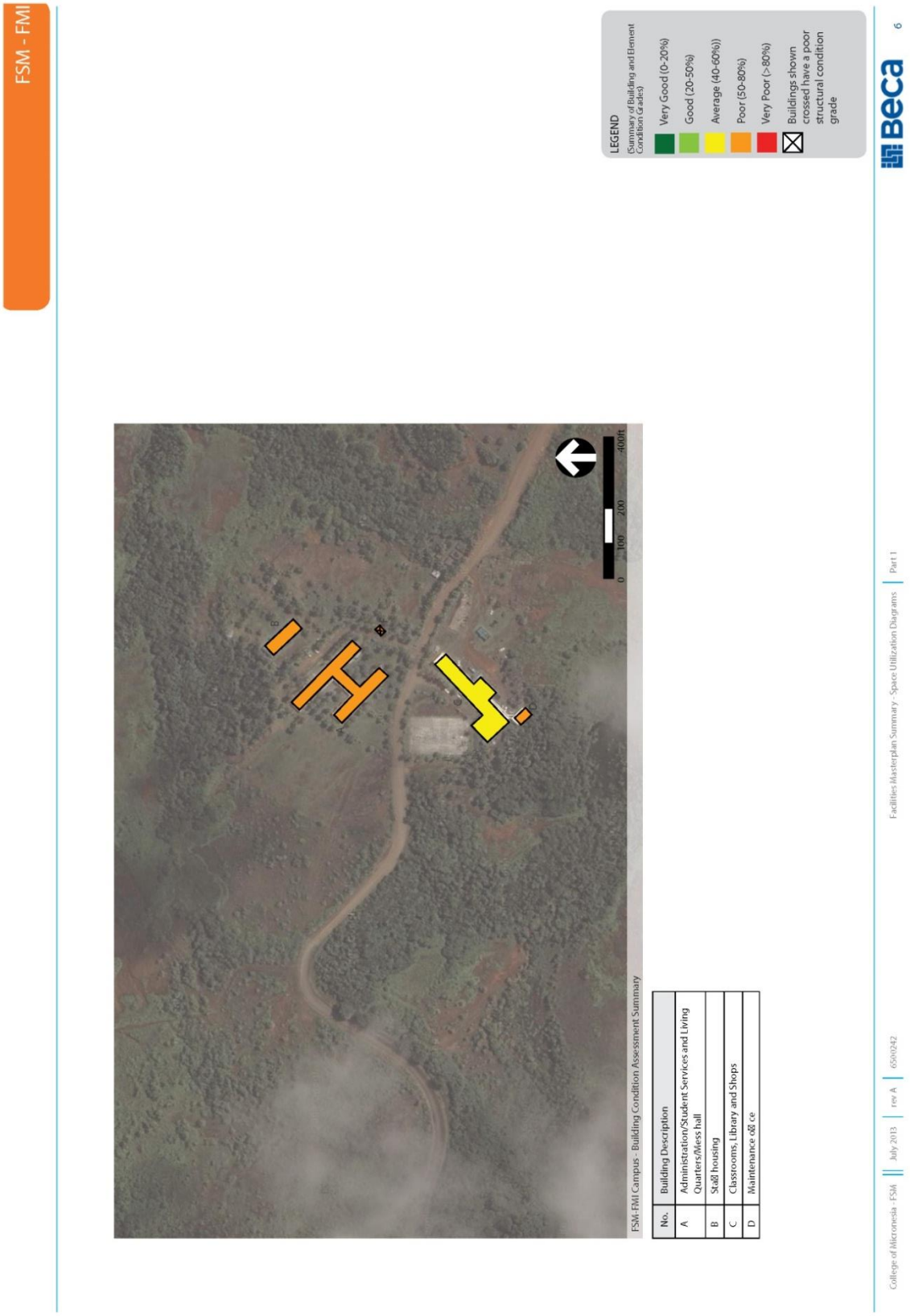
4.1.6 Results/Findings, Conclusions and Recommendations

4.1.6.1 Condition Grade Assessment Results

The following is a summary of the condition grade of the building assets across the Chuuk campus.

Asset	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A – Administration/Student Services / Living Quarters / Mess Hall				✓	
B- Staff Housing				✓	
C – Classrooms, Library & Shops			✓		
D - Maintenance				✓	
E – Shower House				✓	
F – Security Post				✓	
Site Infrastructure	N/A	N/A	N/A	N/A	N/A
Total	**0**	**0**	**1**	**5**	**0**

4.1.6.2 Campus condition grading summary plans



From our condition assessment of the FSM - FMI campus we observe the following:

4. Refer to Appendix B – Asset Condition Assessment Dashboards for a summary of the asset renewal costs and the top five items, on each building or site infrastructure element, needing urgent maintenance, renewal or replacement

5. Five (of the six) buildings are rated as condition grade 4 which means that these assets are in poor condition and are showing significant signs of failure. Targeted regular maintenance on all of the assets is required to extend their life. A clear, well organised asset renewal and routine maintenance plan needs to be developed and this needs to be implemented. An indicative maintenance and asset plan has been included in Appendix C.

6. Maintenance is being carried out but the current Operational budget ($150,000 per annum for all of the six COM-FSM campuses) is insufficient to meet both maintenance and the periodic renewal of building element requirements. There is a significant amount of deferred asset renewals and maintenance which is increasing the amount of deterioration in the assets.

7. Unless the current Operational budget is increased the condition of the assets will continue to deteriorate and the number of buildings requiring replacement (and consequently additional capital replacement funding) will increase.

8. The Operational budget for Years 1-10 for the FSM - FMI campus is recommended to be in the order of $US3.05M ($305,000 average per annum). The operational cost equates to 4.71% of the estimated 2013 replacement value which is higher than expected and this reflects the existing poor condition of the assets.

9. Regular monitoring and review of the asset renewal and routine maintenance plan needs to be carried out

4.1.6.3 Forecast Operational Costs Results

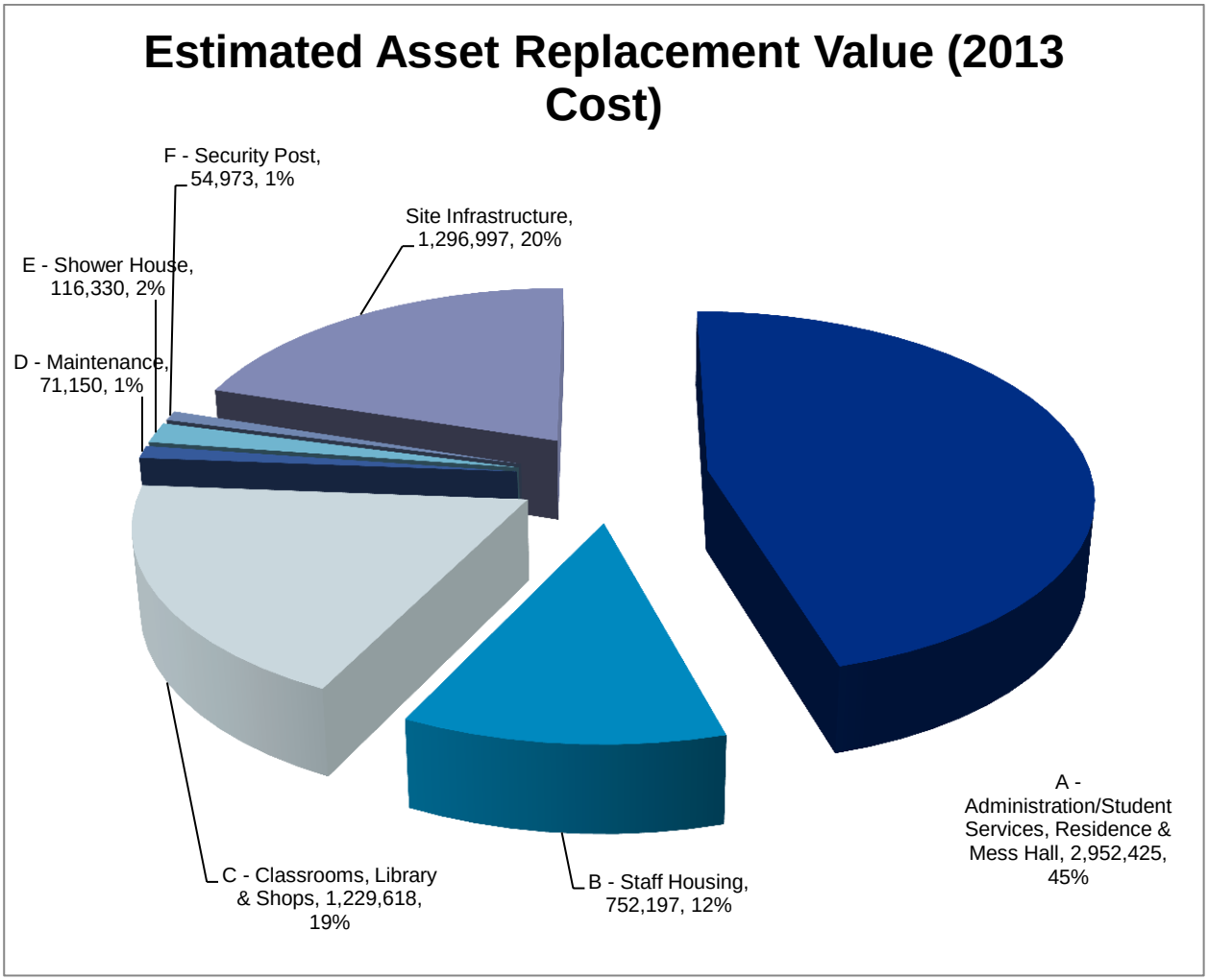
Outlined below are forecast operational costs split into 10 year sections over a 30 year period. Note that costs including and excluding escalation are identified. Funding of the operational costs should be based on the costs that include escalation.

Forecast Operational Costs

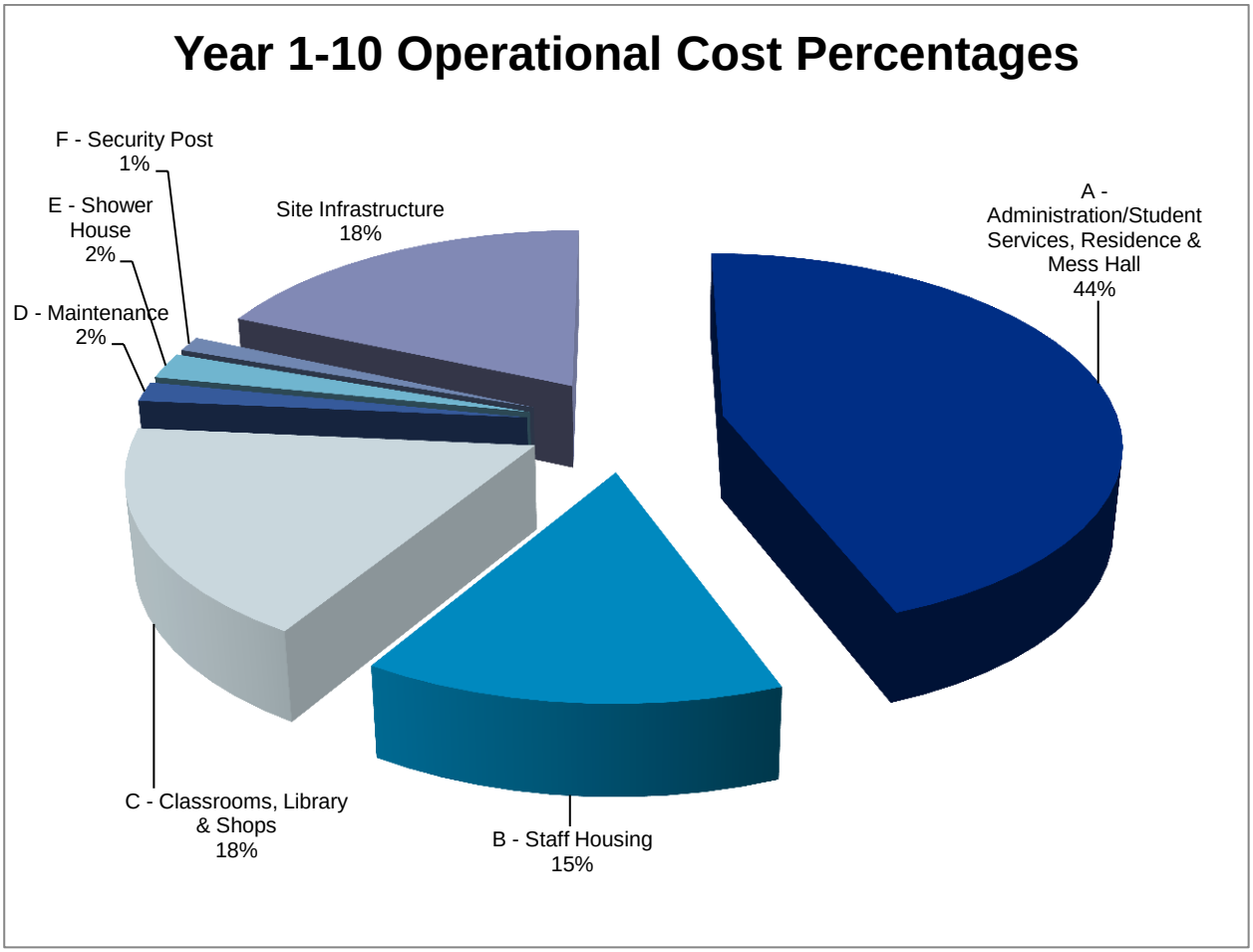
Ref	Asset Description	Replacement Cost Cost ($ USD)	Year 1 - 10 Asset Renewal Cost ($ USD)	Year 11 - 20 Asset Renewal Cost ($ USD)	Year 21 - 30 Asset Renewal Cost ($ USD)	Total 30 Year Asset Renewal Cost ($ USD)	Annualised Total Operational Cost	Total Year 1-10 Operational Cost ($USD)	Total Year 11-20 Operational Cost ($USD)	Total Year 21-30 Operational Cost ($USD)
1.00	A - Administration/Student Services, Residence & Mess Hall	2,952,425	688,489	767,912	867,360	2,323,761	93,403	847,932	927,355	1,026,803
2.00	B - Staff Housing	752,197	231,519	99,928	243,088	574,534	23,674	276,747	145,156	288,316
3.00	C - Classrooms, Library & Shops	1,229,618	266,880	243,693	430,233	940,806	38,690	340,176	316,988	503,529
4.00	D - Maintenance	71,150	24,516	18,222	23,747	66,485	2,961	31,969	25,675	31,200
5.00	E - Shower House	116,330	28,435	24,687	32,892	86,014	4,242	42,180	38,431	46,636
6.00	F - Security Post	54,973	17,115	18,015	7,627	42,757	2,149	24,353	25,254	14,866
7.00	Site Infrastructure	1,296,997	209,611	920,212	157,999	1,287,821	57,230	352,632	1,063,233	301,020
	TOTALS EXCLUDING ESCALATION	6,473,690	1,466,564	2,092,668	1,762,945	5,322,178	222,348	1,915,988	2,542,092	2,212,369
	Escalation Allowance		348,095	1,511,599	2,344,760	4,204,454	218,810	1,134,707	2,298,210	3,131,371
	TOTALS INCLUDING ESCALATION (3.4% per annum assumed)		1,814,659	3,604,267	4,107,705	9,526,631	441,158	3,050,695	4,840,302	5,343,741

The forecast Operational Costs (including escalation) as outlined in the above table are suggested for funding and budgeting purposes. Annualised costs are the total operational costs spent over a 30 year period (divided by 30).

The estimated replacement cost (2013 costs) of the COM-FSM assets on the FSM - FMI campus is approximately $US6.473M (excluding land, loose furniture and equipment). Outlined below is the breakdown of the estimated asset replacement cost for the campus.



The Operational Cost and Percentages table (below) highlights where COM-FSM needs to invest in asset renewal and routine maintenance to maximise the life of the existing capital assets, to prevent deterioration and to avoid additional capital replacement expenditure.



The forecast operational costs ($US3, 050,695 for Years 1-10) equates to approximately $US305, 000 per year average) identified above are significantly higher than what is currently being budgeted for maintenance by COM-FSM ($150, 000 per annum total for all 6 campuses). We consider that the forecast operational costs as outlined above are necessary to operate and maintain the capital investment already made by the COM-FSM on the Chuuk campus.

4.1.7 Limitations of the Condition Assessment

The life cycle and renewal/replacement projections used in our report are indicative only as they are predictions of future circumstances, which cannot be assured. Actual results may vary from the projections and these variations may be significantly more or less favorable than assumed herein. The findings in this report are current as at the date of inspection (June 2013) and not as the date of this report.

All estimated asset/capital replacement costs are high-level and indicative with an accuracy range of +/- 30%. Please note that these costs exclude all Government Goods and Services Taxes, Import/Customs Duties, Design/Procurement Costs, etc.

All estimated operational costs reflect capital replacement and maintenance works only of the buildings and site infrastructure.

All costs are detailed in the data sheets and spreadsheets (refer appendices) are current as at June 2013. Escalation of the Operational Costs have been added to the overall cost summaries. Escalation is assumed to be 3.4% per annum.

This assessment is not a health and safety audit. Beca does not accept liability for any client health and safety issues whether reported or not. Any issues arising from the possible presence of contaminated or potentially toxic materials onsite, (i.e. asbestos) are excluded from this report. This report does not constitute an environmental audit and no allowance has been made for the presence of any such materials should they exist at the subject property.

Our building condition audit is based on a visual assessment of the buildings and site infrastructure only. Furthermore the visual assessment was not a detailed engineering survey of the assets. Cursory observations have been made of the following specialist elements however our report will not include for detailed investigation reports such as:

- Building Code of Compliance issues
- Building structures (e.g. Structural integrity, building subsidence, structural decay, etc.)
- Health and safety issues (e.g. asbestos, contaminated fill, leaky buildings, etc.)
- Mechanical services such as heating and ventilation
- Electrical services such as power, lighting and building management systems
- Information & technology and communication systems
- Sanitary plumbing and drainage
- Water reticulation
- Fire services
- Vertical transportation such as lifts and escalators
- Security

Whilst each building's structure was inspected for defects such as settlement, spalling, cracking and bowing, etc. it should be noted that this was an exterior visual assessment of the exposed parts of the building structures for the purpose of assigning condition grades and was not a structural engineering assessment of the buildings.

The building condition audit does not include for the inspection of sub-floor voids, roof/ceiling voids, plenum spaces or other areas that are difficult to access or could trigger health and safety issues. Our report will include a condition assessment of the roof surfaces, however these will be observed from ground level. No underground services have been able to be assessed, No detailed inspections (e.g. removal of wall linings etc.) have been carried out.

The building condition audit will not include for destructive testing of building elements which is normally associated with identifying extensive damage as a result of weather tightness issues. Problems potentially relating to leaky buildings and weather tightness will be flagged for further investigation.

The preparation of this report does not imply in any way that Beca has audited the financial statements, management accounts, engineering or other records of the COM-FSM Where another party has supplied information for use in this report, it is assumed to be reliable.

This report should not be reproduced or used for any other purpose without Beca's prior written permission in each instance.

Beca reserves the right, but not the obligation, to review all calculations included or referred to in this report and, if considered necessary, to revise its opinion in the light of any information existing at the site visit which becomes known after

4.1.8 Assumptions Made in the Condition Assessment

It has been assumed that:

- The rate of escalation over the next 30 years will be an average of 3.4% per annum.
- The existing buildings will be retained (this ignores the possible re-development of buildings as proposed by the facilities development plan)

4.1.9 Exclusions from the Condition Assessment and Forecast Operational Costs

The following has been excluded from the Condition Assessment and forecast Operational Costs:

- Replacement of loose furniture, fittings and equipment has been excluded.
- The cost of renewal or maintenance of buildings that are leased is excluded (it is assumed that the building owners will carry out renewals and maintenance)
- This assessment excludes all other College operating costs such as energy bills, teaching & administration staff salaries and expenses, disposables, vehicles, tools, machinery, rental equipment, property/building leasing costs, travel costs, insurances etc.
- Taxes, duties and government charges.

Appendix A

Topographical Survey Plan and Title Information

39900 mE
40000 mE
40100 mE
40200 mE
60100 mN
60000 mN

PIN 107
60111.05 mN
39897.58 mE
100.86 mRL

PIN 108
60115.09 mN
39971.48 mE
99.53 mRL

PIN 109
60119.84 mN
40034.10 mE
99.70 mRL

PIN 110
60143.57 mN
40052.70 mE
98.63 mRL

PIN 111
60101.87 mN
40082.54 mE
98.57 mRL

PIN 112
60025.72 mN
40059.54 mE
99.92 mRL

PIN 113
60015.95 mN
40108.17 mE
96.63 mRL

PIN 101
60000.00 mN
40000.00 mE
100.00 mRL

PIN 102
59994.43 mN
40047.09 mE
99.58 mRL

PIN 103
59925.69 mN
39980.64 mE
99.31 mRL

PIN 104
59933.02 mN
40019.24 mE
98.61 mRL

PIN 105
59961.11 mN
40069.84 mE
98.49 mRL

PIN 106
60041.62 mN
39893.80 mE
99.40 mRL

GOAL POST
GOAL POST
SIGN
BASKETBALL COURT

96.0 96.5 97.0 97.5 98.0 98.5 99.0 99.5 100.0

DATUM NOTE
THIS SURVEY IS IN TERMS OF 1965 ASTRO DATUM AS ADJUSTED BY U.S.S.S IN 1970.
ORIGIN OF SURVEY : YAP SECON CONTROL STATION, 60,000mN 40,000mE
SOURCE: PLAN 5012/76 (U.S COAST GUARD LORAN STATION SITE)
A DISTANCE ERROR OF 0.19M WAS FOUND BETWEEN COORDINATES OF YAP SECON CONTROL STATION AND TOWER LORAN A SOURCED FROM PLAN 5012/76.

ELEVATIONS ARE IN TERMS OF AN ASSUMED DATUM.
ORIGIN OF SURVEY : YAP SECON CONTROL STATION, 100.00mRL

NOTE
THE POSITIONS OF BOUNDARIES SHOWN ARE ADOPTED FROM U.S COAST GAURD LORAN STATION SITE PLAN 5012/76. THESE BOUNDARIES HAVE NOT BEEN CONFIRMED ON SITE.

LEGEND

- MANHOLE
- POLE
- WATER METER
- SIGN
- TREE WITH APPROXIMATE DRIPLINE
- TREE TRUNK
- SERVICE LID
- FENCE/GATE
- BOUNDARY
- BOTTOM OF BANK
- TOP OF BANK
- DRAIN
- PIPE
- EDGE OF METAL
- BUSH / TREE DRIPLINE
- EDGE OF GARDEN
- EDGE OF CONCRETE
- ROCK OUTCROP
- BOLLARD
- POWER POLE
- STEPS
- BUILDING OUTLINE (EAVES SHOWN DASHED)

DIAGRAM OF PROPERTY EXTENTS

(NOT TO SCALE)

LORAN CAMPUS

FOR INFORMATION
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
B	ADDITIONAL BOUNDARIES ADDED	CEN	CEN	MPP	18.10.13
A	INITIAL ISSUE	CEN	CEN	MPP	15.08.13

Drawing Originator: Beca

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Surveyed	PEB	08 / 13	Approved For Issue*
Drawn	VDLT	08 / 13	
Verifier	CEN	08 / 13	
Dwg Check	VDLT	08 / 13	Date

* Refer to Revision 1 for Original Signature

Client: COLLEGE OF MICRONESIA

Project: COLLEGE OF MICRONESIA MASTER PLAN - LORAN CAMPUS

Title: TOPOGRAPHIC SURVEY OF LORAN CAMPUS

Discipline: SURVEY

Drawing No.: 6500242 GS001

Rev.: B

DO NOT SCALE

Source Application

IF IN DOUBT ASK.

Appendix B

Building Condition Assessments

FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE

A - ADMINISTRATION/STUDENT SERVICES, LIVING QUARTERS/MESS HALL

		Condition Grading		Condition Gauge					Asset Renewal Cost					
				VG	G	A	P	VP						
ID Code	Element	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	Total Sub-Structure	3	50%						0	0	0	0	332,619	0.0%
2.00	Total Frame	3	50%						0	0	0	0	495,437	0.0%
3.00	Total Structural Walls	3	50%						0	0	0	0	424,835	0.0%
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%
5.00	Total Roof	4	70%						259,502	6,072	259,502	525,076	265,574	197.7%
6.00	Total External Walls & Finishes	0	0%						0	0	0	0	0	0.0%
7.00	Total Windows & Doors	4	70%						0	77,418	223,905	301,323	301,323	100.0%
A	TOTAL STRUCTURE	4	70%						259,502	83,490	483,407	826,399	1,819,789	45.4%
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%
9.00	Total Internal Walls/Partitions	0	0%						0	0	0	0	0	0.0%
10.00	Total Internal Doors	3	50%						0	0	69,828	69,828	69,828	100.0%
11.00	Total Floor Finishes	5	90%						137,936	0	115,166	253,101	137,936	183.5%
12.00	Total Wall Finishes	5	90%						36,432	101,307	0	137,739	137,739	100.0%
13.00	Total Ceiling Finishes	3	50%						0	93,964	0	93,964	93,964	100.0%
14.00	Total Fixed Joinery Units	3	50%						0	160,782	0	160,782	160,782	100.0%
B	TOTAL INTERNAL FIT-OUT	4	70%						174,368	356,053	184,994	715,414	600,249	119.2%
15.00	Total Sanitary Plumbing	4	70%						91,080	0	0	91,080	91,080	100.0%
16.00	Total Mechanical Services	1	10%						69,575	50,600	104,995	225,170	69,575	323.6%
17.00	Total Fire Services	3	50%						31,321	0	31,321	62,643	31,321	200.0%
18.00	Total Electrical Services	3	50%						0	277,769	0	277,769	277,769	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						62,643	0	62,643	125,286	62,643	200.0%
C	TOTAL BUILDING SERVICES	3	50%						254,619	328,369	198,959	781,947	532,388	146.9%
	TOTAL BUILDING	4	70%						688,489	767,912	867,360	2,323,761	2,952,425	78.7%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Vinyl Floor Finishes	Evidence of water stains, lifting, marks, tears, worn through, etc.
Tiled Floor Finishes	Evidence of impact damage, lifting tiles, loose grout, marks, stains, generally unclean
Tiled Wall Finishes	Stained tiles, stained grout, very unclean by appearance
Membrane Roof Cladding	Evidence of leaks internally and ponding on roof. Re-seal (or replace) and re-level roof
Timber Window Shutters	Evidence of decay, corroded fixings/hardware, poor workmanship, missing/detached shutters. Replace typhoon shutters.
Overall Recommendation/Action	Targeted regular maintenance and cleaning. Re-seal or replace roofing and fix ponding issues immediately. Replace typhoon shutters to rooms used in emergencies. Upgrade toilet and sanitary plumbing facilities immediately (to prepare for use in emergencies). Refurbish floor and wall finishes by 2023. Regularly maintain and replace sanitary plumbing, mechanical, fire and special services by 2023.

FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE

B - STAFF HOUSING

		Condition Grading		Condition Gauge					Asset Renewal Cost					
				VG	G	A	P	VP						
ID Code	Element	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	Total Sub-Structure	3	50%						0	0	0	0	85,279	0.0%
2.00	Total Frame	3	50%						0	0	0	0	140,444	0.0%
3.00	Total Structural Walls	3	50%						0	0	0	0	46,269	0.0%
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%
5.00	Total Roof	4	70%						56,687	0	0	56,687	56,687	100.0%
6.00	Total External Walls & Finishes	3	50%						0	0	26,604	26,604	26,604	100.0%
7.00	Total Windows & Doors	4	70%						0	13,836	43,377	57,213	57,213	100.0%
A	TOTAL STRUCTURE	4	70%						56,687	13,836	69,981	140,505	412,496	34.1%
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%
9.00	Total Internal Walls/Partitions	3	50%						0	0	0	0	15,677	0.0%
10.00	Total Internal Doors	3	50%						0	0	15,180	15,180	15,180	100.0%
11.00	Total Floor Finishes	5	90%						30,270	0	24,216	54,487	30,270	180.0%
12.00	Total Wall Finishes	4	70%						44,440	19,664	28,046	92,150	64,105	143.8%
13.00	Total Ceiling Finishes	3	50%						0	0	53,866	53,866	53,866	100.0%
14.00	Total Fixed Joinery Units	3	50%						37,950	15,054	380	53,383	53,383	100.0%
B	TOTAL INTERNAL FIT-OUT	4	70%						112,661	34,718	121,688	269,067	232,481	115.7%
15.00	Total Sanitary Plumbing	4	70%						24,668	0	0	24,668	24,668	100.0%
16.00	Total Mechanical Services	4	70%						29,095	20,240	20,240	69,575	20,240	343.8%
17.00	Total Fire Services	5	90%						5,045	0	5,045	10,090	5,045	200.0%
18.00	Total Electrical Services	3	50%						0	31,134	22,770	53,904	53,904	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						3,363	0	3,363	6,727	3,363	200.0%
C	TOTAL BUILDING SERVICES	4	70%						62,171	51,374	51,418	164,963	107,220	153.9%
	TOTAL BUILDING	4	70%						231,519	99,928	243,088	574,534	752,197	76.4%

Element	Observed Deterioration/Recommendations
Vinyl Floor Finishes	Evidence of water stains, lifting, marks, tears, worn through, etc.
Tiled Floor Finishes	Stained appearance
Tiled Wall Finishes	Stained appearance
Air-Conditioning – Window Mounted Unit	Evidence of corrosion and grit
Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of leaks internally, flaking of protective coating or corrosion
Overall Recommendation/Action	Targeted regular maintenance and cleaning. Repair roof leaks immediately. Treat and spot prime rusted roofing immediately. Review roof and replace by 2023. Replace roof before 2023. Refurbish floor and wall finishes by 2023. Regularly maintain and replace sanitary plumbing, mechanical, fire and special services by 2023.

FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE

C - CLASSROOMS, LIBRARY & SHOPS

				Condition Gauge											
		Condition Grading		VG	G	A	P	VP	Asset Renewal Cost					
ID Code	Element	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	Total Sub-Structure	3	50%						0	0	0	0	156,199	0.0%
2.00	Total Frame	3	50%						0	0	0	0	193,308	0.0%
3.00	Total Structural Walls	4	70%						49,386	0	0	49,386	206,954	23.9%
4.00	Total Upper Floors	2	30%						0	0	0	0	12,650	0.0%
5.00	Total Roof	4	70%						100,520	3,036	100,520	204,076	103,556	197.1%
6.00	Total External Walls & Finishes	0	0%						0	0	0	0	0	0.0%
7.00	Total Windows & Doors	3	50%						0	0	198,807	198,807	198,807	100.0%
A	TOTAL STRUCTURE	4	70%						149,906	3,036	299,327	452,269	871,474	51.9%
8.00	Total Stairs Balustrades & Handrails	2	30%						0	0	0	0	4,048	0.0%
9.00	Total Internal Walls/Partitions	3	50%						0	0	0	0	7,377	0.0%
10.00	Total Internal Doors	3	50%						0	0	21,252	21,252	21,252	100.0%
11.00	Total Floor Finishes	4	70%						25,123	0	23,074	48,197	25,123	191.8%
12.00	Total Wall Finishes	4	70%						4,099	0	11,066	15,165	15,165	100.0%
13.00	Total Ceiling Finishes	3	50%						0	10,930	13,061	23,991	23,991	100.0%
14.00	Total Fixed Joinery Units	3	50%						1,012	37,950	6,705	45,667	44,655	102.3%
B	TOTAL INTERNAL FIT-OUT	4	70%						30,234	48,880	75,157	154,271	141,610	108.9%
15.00	Total Sanitary Plumbing	3	50%						0	6,009	0	6,009	6,009	100.0%
16.00	Total Mechanical Services	2	30%						61,985	30,993	30,993	123,970	30,993	400.0%
17.00	Total Fire Services	0	0%						0	6,189	0	6,189	6,189	100.0%
18.00	Total Electrical Services	3	50%						0	148,587	0	148,587	148,587	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						24,756	0	24,756	49,512	24,756	200.0%
C	TOTAL BUILDING SERVICES	3	50%						86,741	191,777	55,749	334,267	216,533	154.4%
	TOTAL BUILDING	3	50%						266,880	243,693	430,233	940,806	1,229,618	76.5%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Reinforced Concrete Block Masonry Walls with Painted Finishes - Externally (Poor Areas - 40%)	Evidence of cracking, settlement
Membrane Roof Cladding	Evidence of leaks internally, tearing of membrane or detachment. Re-seal or replace membrane to concrete roof. Replace corroded roof to Seaman's shelter
Vinyl Floor Finishes	Evidence of water stains, lifting, marks, tears, worn through, etc.
Tiled Floor and Wall Finishes	Tired and stained grout; unclean by appearance
Mechanical Services	4No. fan coil units require immediate replacement.
Overall Recommendation/Action	Targeted regular maintenance and cleaning. Re-seal or replace membrane roof areas. Replace rusted roof to Seaman's shelter immediately. Refurbish floor and wall finishes by 2023. Regularly maintain and replace mechanical and special services by 2023 (4No. fan coil units require immediate replacement).

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D - MAINTENANCE

				Condition Gauge										
		Condition Grading		VG	G	A	P	VP	Asset Renewal Cost					
ID Code	Element	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	Total Sub-Structure	3	50%						0	0	0	0	9,563	0.0%
2.00	Total Frame	3	50%						0	0	0	0	6,831	0.0%
3.00	Total Structural Walls	0	0%						0	0	0	0	0	0.0%
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%
5.00	Total Roof	4	70%						6,831	0	0	6,831	6,831	100.0%
6.00	Total External Walls & Finishes	4	70%						8,197	0	0	8,197	8,197	100.0%
7.00	Total Windows & Doors	3	50%						0	0	12,524	12,524	12,524	100.0%
A	TOTAL STRUCTURE	4	70%						15,028	0	12,524	27,552	43,946	62.7%
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%
9.00	Total Internal Walls/Partitions	3	50%						0	0	0	0	2,186	0.0%
10.00	Total Internal Doors	3	50%						0	0	1,518	1,518	1,518	100.0%
11.00	Total Floor Finishes	0	0%						0	0	0	0	0	0.0%
12.00	Total Wall Finishes	3	50%						0	0	4,645	4,645	4,645	100.0%
13.00	Total Ceiling Finishes	3	50%						0	740	0	740	740	100.0%
14.00	Total Fixed Joinery Units	3	50%						0	4,428	0	4,428	4,428	100.0%
B	TOTAL INTERNAL FIT-OUT	3	50%						0	5,168	6,163	11,331	13,517	83.8%
15.00	Total Sanitary Plumbing	3	50%						0	1,265	0	1,265	1,265	100.0%
16.00	Total Mechanical Services	4	70%						8,855	4,428	4,428	17,710	4,428	400.0%
17.00	Total Fire Services	0	0%						0	0	0	0	0	0.0%
18.00	Total Electrical Services	3	50%						0	7,362	0	7,362	7,362	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						633	0	633	1,265	633	200.0%
C	TOTAL BUILDING SERVICES	4	70%						9,488	13,055	5,060	27,602	13,687	201.7%
	TOTAL BUILDING	4	70%						24,516	18,222	23,747	66,485	71,150	93.4%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of corrosion. Treat rust, repaint and clean regularly
Metal Gutters	Evidence of corrosion. Rust treat and repaint. Repair sections of gutter as needed.
Metal Down Pipes	Evidence of corrosion. Replace as necessary
Profiled Metal Sheet Wall Cladding (Pre-Finished)	Evidence of corrosion and rusted out areas. Patch and repair
Air-Conditioning - DX/Split System	Evidence of Corrosion on Condenser unit. Assumed functioning. Check, clean and service regularly
Overall Recommendation/Action	Targeted regular maintenance and cleaning. Targeted replacement of rusted roofing and cladding immediately. Replace roof and wall cladding by 2023. Regularly maintain and replace mechanical by 2023

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E - SHOWER HOUSE

				Condition Gauge										
		Condition Grading		VG	G	A	P	VP	Asset Renewal Cost					
ID Code	Element	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	Total Sub-Structure	3	50%						0	0	0	0	10,525	0.0%
2.00	Total Frame	3	50%						0	0	7,558	7,558	13,706	55.1%
3.00	Total Structural Walls	3	50%						0	0	0	0	20,038	0.0%
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%
5.00	Total Roof	3	50%						0	7,558	0	7,558	7,558	100.0%
6.00	Total External Walls & Finishes	3	50%						0	0	7,681	7,681	7,681	100.0%
7.00	Total Windows & Doors	0	0%						0	0	0	0	0	0.0%
A	TOTAL STRUCTURE	3	50%						0	7,558	15,240	22,798	59,508	38.3%
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%
9.00	Total Internal Walls/Partitions	0	0%						0	0	0	0	0	0.0%
10.00	Total Internal Doors	4	70%						0	3,036	0	3,036	3,036	100.0%
11.00	Total Floor Finishes	4	70%						7,286	0	0	7,286	7,286	100.0%
12.00	Total Wall Finishes	4	70%						21,149	0	6,394	27,543	21,149	130.2%
13.00	Total Ceiling Finishes	0	0%						0	0	0	0	0	0.0%
14.00	Total Fixed Joinery Units	0	0%						0	0	0	0	0	0.0%
B	TOTAL INTERNAL FIT-OUT	4	70%						28,435	3,036	6,394	37,865	31,471	120.3%
15.00	Total Sanitary Plumbing	3	50%						0	13,283	11,259	24,541	24,541	100.0%
16.00	Total Mechanical Services	0	0%						0	0	0	0	0	0.0%
17.00	Total Fire Services	0	0%						0	0	0	0	0	0.0%
18.00	Total Electrical Services	3	50%						0	810	0	810	810	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	0	0%						0	0	0	0	0	0.0%
C	TOTAL BUILDING SERVICES	3	50%						0	14,092	11,259	25,351	25,351	100.0%
	TOTAL BUILDING	4	70%						28,435	24,687	32,892	86,014	116,330	73.9%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Timber Door - Single	Evidence of impact damage, marks, etc.
Tiled Floor Finishes	Odd missing tile, generally untidy/unclean by appearance
Tiled Wall Finishes	Odd missing tile, generally untidy/unclean by appearance
Timber Frame (Truss)	Evidence of decay
Profiled Metal Sheet Roof Cladding (Pre-Finished)	Debris on roof, protective coating is fading
Overall Recommendation/Action	Targeted regular maintenance and cleaning. Replace decaying timber work immediately. Refurbish floor and wall finishes by 2023.

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F - SECURITY POST

				Condition Gauge										
		Condition Grading		VG	G	A	P	VP	Asset Renewal Cost					
ID Code	Element	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	Total Sub-Structure	3	50%						0	0	0	0	6,736	0.0%
2.00	Total Frame	3	50%						0	0	4,591	4,591	4,591	100.0%
3.00	Total Structural Walls	3	50%						0	0	0	0	8,516	0.0%
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%
5.00	Total Roof	5	90%						4,591	0	0	4,591	4,591	100.0%
6.00	Total External Walls & Finishes	0	0%						0	0	0	0	0	0.0%
7.00	Total Windows & Doors	4	70%						0	11,833	0	11,833	11,833	100.0%
A	TOTAL STRUCTURE	4	70%						4,591	11,833	4,591	21,015	36,267	57.9%
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%
9.00	Total Internal Walls/Partitions	0	0%						0	0	0	0	0	0.0%
10.00	Total Internal Doors	0	0%						0	0	0	0	0	0.0%
11.00	Total Floor Finishes	5	90%						1,771	0	1,771	3,542	1,771	200.0%
12.00	Total Wall Finishes	0	0%						0	0	0	0	0	0.0%
13.00	Total Ceiling Finishes	3	50%						0	2,103	0	2,103	2,103	100.0%
14.00	Total Fixed Joinery Units	4	70%						9,488	1,265	0	10,753	10,753	100.0%
B	TOTAL INTERNAL FIT-OUT	4	70%						11,259	3,368	1,771	16,398	14,627	112.1%
15.00	Total Sanitary Plumbing	0	0%						0	0	0	0	0	0.0%
16.00	Total Mechanical Services	0	0%						0	0	0	0	0	0.0%
17.00	Total Fire Services	0	0%						0	0	0	0	0	0.0%
18.00	Total Electrical Services	3	50%						0	2,815	0	2,815	2,815	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						1,265	0	1,265	2,530	1,265	200.0%
C	TOTAL BUILDING SERVICES	3	50%						1,265	2,815	1,265	5,345	4,080	131.0%
	TOTAL BUILDING	4	70%						17,115	18,015	7,627	42,757	54,973	77.8%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence severe corrosion, hurricane damage, etc.
Vinyl Floor Finishes	Evidence marks, tears, worn through, etc.
Timber/Metal Framed Windows & Doors	Evidence of decay and corrosion
Metal Security Screens	Evidence of corrosion
Security Booth	Outdoors, tired but OK (serves purpose)
Overall Recommendation/Action	Targeted regular maintenance and cleaning. Replace roof and refurbish joinery and internal finishes 2023

FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE | **SITE INFRASTRUCTURE**

				Condition Gauge										
		Condition Grading		VG	G	A	P	VP	Asset Renewal Cost					
ID Code	Element	Condition Grade	% Deter.	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Total	Full Replace	% Full Replace
1.00	Total Roading	4	70%						3,036	3,036	1,518	7,590	1,518	500.0%
2.00	Total Car Parks	4	70%						3,036	3,036	1,518	7,590	1,518	500.0%
3.00	Total Foot Paths & Collection Areas	3	50%						0	0	0	0	49,783	0.0%
4.00	Total Fences & Gates	5	90%						10,626	0	0	10,626	10,626	100.0%
5.00	Total Structures	5	90%						170,775	398,020	0	568,795	568,795	100.0%
6.00	Total Retaining Walls	0	0%						0	0	0	0	0	0.0%
7.00	Site Drainage	3	50%						18,975	12,650	93,610	125,235	99,935	125.3%
8.00	Total Electrical Infrastructure	3	50%						0	490,820	0	490,820	490,820	100.0%
9.00	Total Water Services	3	50%						3,163	0	61,353	64,515	61,353	105.2%
10.00	Total Site Furniture	3	50%						0	12,650	0	12,650	12,650	100.0%
	TOTAL SITE INFRASTRUCTURE								209,611	920,212	157,999	1,287,821	1,296,997	99.3%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Gravel roads	Trim and grade gravel roads to falls, fill pot holes and ruts
Drainage	Monitor and clean swales, sumps and septic tanks. Underground pipework not assessed.
Fencing	Mesh to basketball court missing - replace
Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life.

Appendix C

Indicative Asset Renewal and Maintenance Cost Plan

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

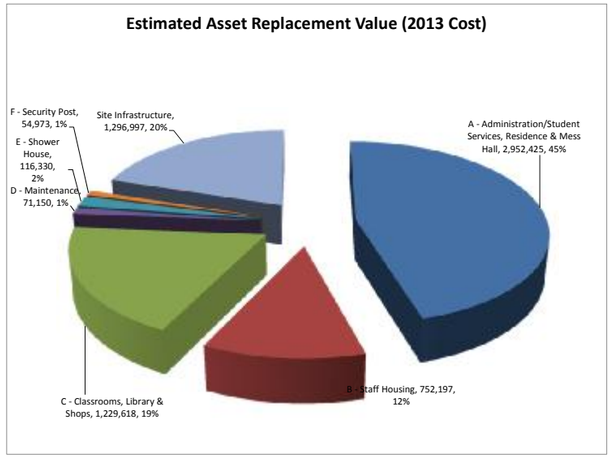
SUMMARY OF COST OF ASSET RENEWAL AND MAINTENANCE

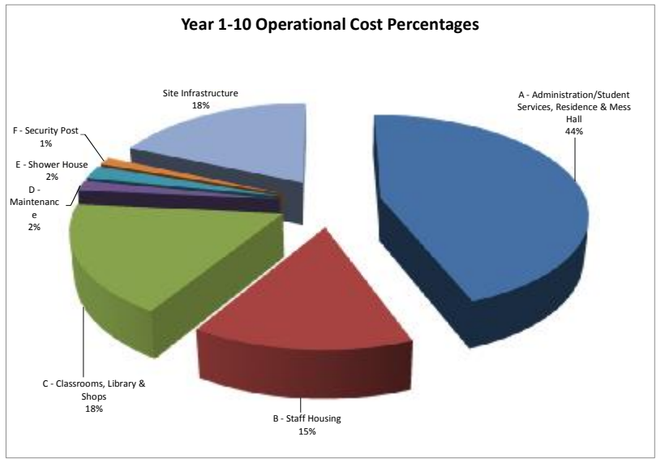
Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

								Year 1 - 10 Asset Renewal Cost vs Full Replacement Cost		Year 11 - 20 Asset Renewal Cost vs Full Replacement Cost		Year 21 - 30 Asset Renewal vs Full Replacement Cost				Operational Cost (Cost of Renewal and Maintenance)					
		Condition Grade	Key Metric Data		Replacement Cost			Year 1 - 10 Asset Renewal Cost ($ USD)	% of Full Replacement Cost	Year 11 - 20 Asset Renewal Cost ($ USD)	% of Full Replacement Cost	Year 21 - 30 Asset Renewal Cost ($ USD)	% of Full Replacement Cost	Total 30 Year Asset Renewal Cost ($ USD)	% of Full Replacement Cost	Annualised Asset Renewal Cost	Annualised Maintenance Cost	Annualised Total Operational Cost	Total Year 1-10 Operational Cost ($USD)	Total Year 11-20 Operational Cost ($USD)	Total Year 21-30 Operational Cost ($USD)
Ref	Asset Description	Rank 1 - 5	GFA (ft2)	GFA (m2)	Build Rate (ft2)	Build Rate (m2)	Cost ($ USD)															
1.00	A - Administration/Student Services, Residence & Mess Hall	4	13,326	1,238	222	2,385	**2,952,425**	**688,489**	23%	**767,912**	26%	**867,360**	29%	**2,323,761**	79%	77,459	15,944	**93,403**	**847,932**	**927,355**	**1,026,803**
2.00	B - Staff Housing	4	2,862	266	263	2,829	**752,197**	**231,519**	31%	**99,928**	13%	**243,088**	32%	**574,534**	76%	19,151	4,523	**23,674**	**276,747**	**145,156**	**288,316**
3.00	C - Classrooms, Library & Shops	3	5,266	489	233	2,513	**1,229,618**	**266,880**	22%	**243,693**	20%	**430,233**	35%	**940,806**	77%	31,360	7,330	**38,690**	**340,176**	**316,988**	**503,529**
4.00	D - Maintenance	4	388	36	184	1,976	**71,150**	**24,516**	34%	**18,222**	26%	**23,747**	33%	**66,485**	93%	2,216	745	**2,961**	**31,969**	**25,675**	**31,200**
5.00	E - Shower House	4	344	32	338	3,635	**116,330**	**28,435**	24%	**24,687**	21%	**32,892**	28%	**86,014**	74%	2,867	1,374	**4,242**	**42,180**	**38,431**	**46,636**
6.00	F - Security Post	4	188	18	292	3,141	**54,973**	**17,115**	31%	**18,015**	33%	**7,627**	14%	**42,757**	78%	1,425	724	**2,149**	**24,353**	**25,254**	**14,866**
7.00	Site Infrastructure						**1,296,997**	**209,611**	16%	**920,212**	71%	**157,999**	12%	**1,287,821**	99%	42,927	14,302	**57,230**	**352,632**	**1,063,233**	**301,020**
	TOTALS EXCLUDING ESCALATION		**22,374**	**2,079**			**6,473,690**	**1,466,564**	**23%**	**2,092,668**	**32%**	**1,762,945**	**27%**	**5,322,178**	**82%**	**177,406**	**44,942**	**222,348**	**1,915,988**	**2,542,092**	**2,212,369**
	Escalation Allowance							348,095		1,511,599		2,344,760		4,204,454		140,148	78,661	**218,810**	1,134,707	2,298,210	3,131,371
	TOTALS INCLUDING ESCALATION (3.4% per annum assumed)							**1,814,659**		**3,604,267**		**4,107,705**		**9,526,631**		**317,554**	**123,604**	**441,158**	**3,050,695**	**4,840,302**	**5,343,741**





Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

ASSET RENEWAL DETAILED EXPENDITURE

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Ref	**Asset Description**	**Cost Split Summary**	**2013 ($ USD)**	**2014 ($ USD)**	**2015 ($ USD)**	**2016 ($ USD)**	**2017 ($ USD)**	**2018 ($ USD)**	**2019 ($ USD)**	**2020 ($ USD)**	**2021 ($ USD)**	**2022 ($ USD)**	**2023 ($ USD)**	**2024 ($ USD)**	**2025 ($ USD)**	**2026 ($ USD)**	**2027 ($ USD)**	**2028 ($ USD)**	**2029 ($ USD)**	**2030 ($ USD)**	**2031 ($ USD)**	**2032 ($ USD)**	**2033 ($ USD)**	**2034 ($ USD)**	**2035 ($ USD)**	**2036 ($ USD)**	**2037 ($ USD)**	**2038 ($ USD)**	**2039 ($ USD)**	**2040 ($ USD)**	**2041 ($ USD)**	**2042 ($ USD)**	**Total ($ USD)**
1.00	A - Administration/Student Services, Residence & Mess Hall	Annual Asset Renewal Cost	0	115,166	59,202	0	0	259,502	35,420	0	91,080	128,119	0	0	0	35,420	439,543	0	0	0	0	292,949	35,420	115,166	0	0	293,733	259,502	0	35,420	0	128,119	**2,323,761**
		Year 1 - 10 Asset Renewal Cost	688,489										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	767,912										-	-	-	-	-	-	-	-	-	-	**-**
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	867,360										**-**
2.00	B - Staff Housing	Annual Asset Renewal Cost	3,795	29,261	36,996	0	1,898	0	0	0	119,305	40,264	3,795	0	5,693	0	50,451	0	8,855	0	0	31,134	4,175	29,261	5,693	8,855	140,925	0	0	22,770	0	31,409	**574,534**
		Year 1 - 10 Asset Renewal Cost	231,519										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	99,928										-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	243,088										
3.00	C - Classrooms, Library & Shops	Annual Asset Renewal Cost	0	119,950	30,993	0	0	0	0	1,012	6,148	108,777	0	0	0	0	57,924	0	30,993	0	0	154,776	5,693	119,950	1,012	30,993	244,187	0	0	0	0	28,399	**940,806**
		Year 1 - 10 Asset Renewal Cost	266,880										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	243,693										-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	430,233										
4.00	D - Maintenance	Annual Asset Renewal Cost	0	0	4,428	0	0	0	0	0	15,028	5,060	0	0	0	0	6,433	0	4,428	0	0	7,362	0	0	0	4,428	18,687	0	0	0	0	633	**66,485**
		Year 1 - 10 Asset Renewal Cost	24,516										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	18,222										-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23,747										
5.00	E - Shower House	Annual Asset Renewal Cost	0	0	0	0	0	0	0	0	22,041	6,394	0	0	0	0	23,877	0	0	0	0	810	11,259	0	0	0	15,240	0	0	0	0	6,394	**86,014**
		Year 1 - 10 Asset Renewal Cost	28,435										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	24,687										-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32,892										
6.00	F - Security Post	Annual Asset Renewal Cost	0	1,771	4,591	0	0	0	0	0	9,488	1,265	0	0	0	0	15,201	0	0	0	0	2,815	0	1,771	0	0	4,591	0	0	0	0	1,265	**42,757**
		Year 1 - 10 Asset Renewal Cost	17,115										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	18,015										-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,627										
7.00	Site Infrastructure	Annual Asset Renewal Cost	0	3,036	0	0	194,051	0	3,036	0	0	9,488	0	3,036	0	0	914,140	0	3,036	0	0	0	0	3,036	0	0	145,475	0	0	0	0	9,488	**1,287,821**
		Year 1 - 10 Asset Renewal Cost	209,611										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	920,212										-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157,999										
	Total Campus Annual Asset Renewal Cost (Excluding Escalation)		**3,795**	**269,184**	**136,209**	**0**	**195,949**	**259,502**	**38,456**	**1,012**	**263,090**	**299,367**	**3,795**	**3,036**	**5,693**	**35,420**	**1,507,569**	**0**	**47,311**	**0**	**0**	**489,845**	**56,546**	**269,184**	**6,705**	**44,275**	**862,837**	**259,502**	**0**	**58,190**	**0**	**205,707**	**5,322,178**
	Year 1 - 10 Asset Renewal Cost (Excluding Escalation)		**1,466,564**										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Year 11 - 20 Asset Renewal Cost (Excluding Escalation)		-	-	-	-	-	-	-	-	-	-	**2,092,668**										-	-	-	-	-	-	-	-	-	-	
	Year 21 - 30 Asset Renewal Cost (Excluding Escalation)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1,762,945**										**-**
	Total Campus Annual Asset Renewal Cost (Including Escalation)		**3,924**	**287,800**	**150,580**	**0**	**231,603**	**317,150**	**48,597**	**1,322**	**355,458**	**418,225**	**5,482**	**4,535**	**8,792**	**56,563**	**2,489,346**	**0**	**83,524**	**0**	**0**	**956,025**	**114,111**	**561,697**	**14,466**	**98,776**	**1,990,409**	**618,978**	**0**	**148,396**	**0**	**560,873**	**9,526,631**
	Year 1 - 10 Asset Renewal Cost (Including Escalation)		**1,814,659**										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Year 11 - 20 Asset Renewal Cost (Including Escalation)		-	-	-	-	-	-	-	-	-	-	**3,604,267**										-	-	-	-	-	-	-	-	-	-	
	Year 21 - 30 Asset Renewal Cost (Including Escalation)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**4,107,705**										**-**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

SUMMARY OF BUILDING & ELEMENT RENEWAL COSTS

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

Ref	Building	Cost Period	Sub-Structure	Frame	Structural Walls	Upper Floors	Roof	External Walls & Finishes	Windows & Doors	Structure	Stairs Balus. & Handrails	Internal Walls & Partitions	Internal Doors	Floor Finishes	Wall Finishes	Ceiling Finishes	Fixed Joinery Units	Internal Fit-Out	Sanitary Plumbing	Mech. Services	Fire Services	Electrical Services	Vertical Transport	Special Services	Building Services	Building
1.00	A - Administration/Student Services, Residence & Mess Hall	Year 1 - 10 Asset Renewal Cost ($ USD)	0	0	0	0	259,502	0	0	**259,502**	0	0	0	137,936	36,432	0	0	**174,368**	91,080	69,575	31,321	0	0	62,643	**254,619**	**688,489**
		Year 11 - 20 Asset Renewal Cost ($ USD)	0	0	0	0	6,072	0	77,418	**83,490**	0	0	0	0	101,307	93,964	160,782	**356,053**	0	50,600	0	277,769	0	0	**328,369**	**767,912**
		Year 21 - 30 Asset Renewal Cost ($ USD)	0	0	0	0	259,502	0	223,905	**483,407**	0	0	69,828	115,166	0	0	0	**184,994**	0	104,995	31,321	0	0	62,643	**198,959**	**867,360**
		Total ($ USD)	**0**	**0**	**0**	**0**	**525,076**	**0**	**301,323**	**826,399**	**0**	**0**	**69,828**	**253,101**	**137,739**	**93,964**	**160,782**	**715,414**	**91,080**	**225,170**	**62,643**	**277,769**	**0**	**125,286**	**781,947**	**2,323,761**
2.00	B - Staff Housing	Year 1 - 10 Asset Renewal Cost ($ USD)	0	0	0	0	56,687	0	0	**56,687**	0	0	0	30,270	44,440	0	37,950	**112,661**	24,668	29,095	5,045	0	0	3,363	**62,171**	**231,519**
		Year 11 - 20 Asset Renewal Cost ($ USD)	0	0	0	0	0	0	13,836	**13,836**	0	0	0	0	19,664	0	15,054	**34,718**	0	20,240	0	31,134	0	0	**51,374**	**99,928**
		Year 21 - 30 Asset Renewal Cost ($ USD)	0	0	0	0	0	26,604	43,377	**69,981**	0	0	15,180	24,216	28,046	53,866	380	**121,688**	0	20,240	5,045	22,770	0	3,363	**51,418**	**243,088**
		Total ($ USD)	**0**	**0**	**0**	**0**	**56,687**	**26,604**	**57,213**	**140,505**	**0**	**0**	**15,180**	**54,487**	**92,150**	**53,866**	**53,383**	**269,067**	**24,668**	**69,575**	**10,090**	**53,904**	**0**	**6,727**	**164,963**	**574,534**
3.00	C - Classrooms, Library & Shops	Year 1 - 10 Asset Renewal Cost ($ USD)	0	0	49,386	0	100,520	0	0	**149,906**	0	0	0	25,123	4,099	0	1,012	**30,234**	0	61,985	0	0	0	24,756	**86,741**	**266,880**
		Year 11 - 20 Asset Renewal Cost ($ USD)	0	0	0	0	3,036	0	0	**3,036**	0	0	0	0	0	10,930	37,950	**48,880**	6,009	30,993	6,189	148,587	0	0	**191,777**	**243,693**
		Year 21 - 30 Asset Renewal Cost ($ USD)	0	0	0	0	100,520	0	198,807	**299,327**	0	0	21,252	23,074	11,066	13,061	6,705	**75,157**	0	30,993	0	0	0	24,756	**55,749**	**430,233**
		Total ($ USD)	**0**	**0**	**49,386**	**0**	**204,076**	**0**	**198,807**	**452,269**	**0**	**0**	**21,252**	**48,197**	**15,165**	**23,991**	**45,667**	**154,271**	**6,009**	**123,970**	**6,189**	**148,587**	**0**	**49,512**	**334,267**	**940,806**
4.00	D - Maintenance	Year 1 - 10 Asset Renewal Cost ($ USD)	0	0	0	0	6,831	8,197	0	**15,028**	0	0	0	0	0	0	0	**0**	0	8,855	0	0	0	633	**9,488**	**24,516**
		Year 11 - 20 Asset Renewal Cost ($ USD)	0	0	0	0	0	0	0	**0**	0	0	0	0	0	740	4,428	**5,168**	1,265	4,428	0	7,362	0	0	**13,055**	**18,222**
		Year 21 - 30 Asset Renewal Cost ($ USD)	0	0	0	0	0	0	12,524	**12,524**	0	0	1,518	0	4,645	0	0	**6,163**	0	4,428	0	0	0	633	**5,060**	**23,747**
		Total ($ USD)	**0**	**0**	**0**	**0**	**6,831**	**8,197**	**12,524**	**27,552**	**0**	**0**	**1,518**	**0**	**4,645**	**740**	**4,428**	**11,331**	**1,265**	**17,710**	**0**	**7,362**	**0**	**1,265**	**27,602**	**66,485**
5.00	E - Shower House	Year 1 - 10 Asset Renewal Cost ($ USD)	0	0	0	0	0	0	0	**0**	0	0	0	7,286	21,149	0	0	**28,435**	0	0	0	0	0	0	**0**	**28,435**
		Year 11 - 20 Asset Renewal Cost ($ USD)	0	0	0	0	7,558	0	0	**7,558**	0	0	3,036	0	0	0	0	**3,036**	13,283	0	0	810	0	0	**14,092**	**24,687**
		Year 21 - 30 Asset Renewal Cost ($ USD)	0	7,558	0	0	0	7,681	0	**15,240**	0	0	0	0	6,394	0	0	**6,394**	11,259	0	0	0	0	0	**11,259**	**32,892**
		Total ($ USD)	**0**	**7,558**	**0**	**0**	**7,558**	**7,681**	**0**	**22,798**	**0**	**0**	**3,036**	**7,286**	**27,543**	**0**	**0**	**37,865**	**24,541**	**0**	**0**	**810**	**0**	**0**	**25,351**	**86,014**
6.00	F - Security Post	Year 1 - 10 Asset Renewal Cost ($ USD)	0	0	0	0	4,591	0	0	**4,591**	0	0	0	1,771	0	0	9,488	**11,259**	0	0	0	0	0	1,265	**1,265**	**17,115**
		Year 11 - 20 Asset Renewal Cost ($ USD)	0	0	0	0	0	0	11,833	**11,833**	0	0	0	0	0	2,103	1,265	**3,368**	0	0	0	2,815	0	0	**2,815**	**18,015**
		Year 21 - 30 Asset Renewal Cost ($ USD)	0	4,591	0	0	0	0	0	**4,591**	0	0	0	1,771	0	0	0	**1,771**	0	0	0	0	0	1,265	**1,265**	**7,627**
		Total ($ USD)	**0**	**4,591**	**0**	**0**	**4,591**	**0**	**11,833**	**21,015**	**0**	**0**	**0**	**3,542**	**0**	**2,103**	**10,753**	**16,398**	**0**	**0**	**0**	**2,815**	**0**	**2,530**	**5,345**	**42,757**
		Total - Year 1 - 10 Asset Renewal Cost ($ USD)	**0**	**0**	**49,386**	**0**	**428,131**	**8,197**	**0**	**485,714**	**0**	**0**	**0**	**202,386**	**106,120**	**0**	**48,450**	**356,956**	**115,748**	**169,510**	**36,366**	**0**	**0**	**92,660**	**414,284**	**1,256,954**
		Total - Year 11 - 20 Asset Renewal Cost ($ USD)	**0**	**0**	**0**	**0**	**16,666**	**0**	**103,087**	**119,754**	**0**	**0**	**3,036**	**0**	**120,972**	**107,737**	**219,478**	**451,222**	**20,556**	**106,260**	**6,189**	**468,476**	**0**	**0**	**601,481**	**1,172,457**
		Total - Year 21 - 30 Asset Renewal Cost ($ USD)	**0**	**12,150**	**0**	**0**	**360,022**	**34,286**	**478,613**	**885,070**	**0**	**0**	**107,778**	**164,227**	**50,151**	**66,927**	**7,084**	**396,167**	**11,259**	**160,655**	**36,366**	**22,770**	**0**	**92,660**	**323,710**	**1,604,947**
		Grand Total ($ USD)	**0**	**12,150**	**49,386**	**0**	**804,820**	**42,483**	**581,700**	**1,490,538**	**0**	**0**	**110,814**	**366,613**	**277,242**	**174,664**	**275,011**	**1,204,345**	**147,562**	**436,425**	**78,922**	**491,246**	**0**	**185,319**	**1,339,474**	**4,034,357**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

SUMMARY OF SITE INFRASTRUCTURE RENEWAL COSTS

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

Ref	Building	Cost Period	Roading	Car Parks	Foot Paths & Circulation Areas	Fences & Gates	Structures	Retaining Walls	Site Drainage	Electrical Infrastructure	Water Services	Site Furniture	Total
1.00	Site Infrastructure	Year 1 - 10 Asset Renewal Cost ($ USD)	3,036	3,036	0	10,626	170,775	0	18,975	0	3,163	0	**209,611**
		Year 11 - 20 Asset Renewal Cost ($ USD)	3,036	3,036	0	0	398,020	0	12,650	490,820	0	12,650	**920,212**
		Year 21 - 30 Asset Renewal Cost ($ USD)	1,518	1,518	0	0	0	0	93,610	0	61,353	0	**157,999**
		Total ($ USD)	**7,590**	**7,590**	**0**	**10,626**	**568,795**	**0**	**125,235**	**490,820**	**64,515**	**12,650**	**1,287,821**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

SUMMARY OF BUILDING & ELEMENT CONDITION GRADES

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

Ref	Building	Sub-Structure	Frame	Structural Walls	Upper Floors	Roof	External Walls & Finishes	Windows & Doors	Structure	Stairs Balus. & Handrails	Internal Walls & Partitions	Internal Doors	Floor Finishes	Wall Finishes	Ceiling Finishes	Fixed Joinery Units	Internal Fit-Out	Sanitary Plumbing	Mech. Services	Fire Services	Electrical Services	Vertical Transport	Special Services	Building Services	Building
1.00	A - Administration/Student Services, Residence & Mess Hall	3	3	3	0	4	0	4	**4**	0	0	3	5	5	3	3	**4**	4	1	3	3	0	3	**3**	**4**
2.00	B - Staff Housing	3	3	3	0	4	3	4	**4**	0	3	3	5	4	3	3	**4**	4	4	5	3	0	3	**4**	**4**
3.00	C - Classrooms, Library & Shops	3	3	4	2	4	0	3	**4**	2	3	3	4	4	3	3	**4**	3	2	0	3	0	3	**3**	**3**
4.00	D - Maintenance	3	3	0	0	4	4	3	**4**	0	3	3	0	3	3	3	**3**	3	4	0	3	0	3	**4**	**4**
5.00	E - Shower House	3	3	3	0	3	3	0	**3**	0	0	4	4	4	0	0	**4**	3	0	0	3	0	0	**3**	**4**
6.00	F - Security Post	3	3	3	0	5	0	4	**4**	0	0	0	5	0	3	4	**4**	0	0	0	3	0	3	**3**	**4**

Condition Grade O = N/A	Not present or not applicable
Condition Grade 1 = Very Good	The building/element is new and is functioning as required.
Condition Grade 2 = Good	The building/element is functioning as required.
Condition Grade 3 = Average	The building element is approaching the end of its serviceable life but is still functioning as required. Maintenance is required to extend serviceable life.
Condition Grade 4 = Poor	The building element is showing signs of failure and deterioration. Extensive maintenance is required or the item should be considered for replacement.
Condition Grade 5 = Very Poor	The building element has failed and has deteriorated significantly beyond the point of repair. The item must be replaced

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

MAINTENANCE COST PLAN (BUILDINGS)

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

		Gross Floor Area (GFA)		External Wall Area (EWA)		Roof Area (RA)		Door & Window Area (DWA)		Internal Wall Area (IWA)	
Ref	**Building**	**ft2**	**m2**	**ft2**	**m2**	**ft2**	**m2**	**ft2**	**m2**	**ft2**	**m2**
1.00	A - Administration / Student Services, Residence & Mess Hall	13,326	1,238	10,979	1,020	16,986	1,578	2,196	204	9,291	863
2.00	B - Staff Housing	2,862	266	2,461	229	3,870	360	492	46	2,223	207
3.00	C - Classrooms, Library & Shops	5,266	489	5,253	488	6,579	611	1,051	98	4,598	427
4.00	D - Maintenance	388	36	775	72	388	36	164	15	310	29
5.00	E - Shower House	344	32	568	53	643	60	0	0	284	26
6.00	F - Security Post	188	18	403	37	391	36	81	7	0	0
	Total	**22,374**	**2,079**	**20,439**	**1,899**	**28,856**	**2,681**	**3,983**	**370**	**16,707**	**1,552**

Ref	Element	Structure							Internal Fit-Out					Services									
	Maintenance Task	Building Wash	External Wall Painting	Protective Coatings to Roof	Wall Cladding Repairs	Roof Cladding Repairs	Door & Window Repairs	Misc Repairs	Floor Finishes Cleaning & Repairs	Internal Wall Painting	Ceiling & Soffit Painting	Internal Door Repairs	Misc Repairs	Fire Suppress. Detection & Alarm Systems	Mechanical Ventillation	A/C Systems	Hot Water Generation	Electrical Services	Hydraulic Services	Comm. Systems	Vertical Transport	Misc Repairs	
	Unit	ft2	ft2	ft2	ft2	ft2	ft2	LS Allow	ft2	ft2	ft2	No.	LS Allow	ft2	LS Allow	No.	LS Allow	ft2	No.	LS Allow	LS Allow	LS Allow	
	Rate/Cost ($ USD)	0.01	0.65	0.93	0.05	0.05	0.25	250.00	0.03	0.56	0.65	25.00	250.00	0.05	100.00	50.00	500.00	0.05	25.00	250.00	2,500.00	250.00	
	Frequency (Years)	0.50	5.00	7.00	1.00	1.00	1.00	1.00	1.00	12.00	12.00	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00	1.00	1.00	1.00	
1.00	**Quantity**	27,965	10,979	16,986	10,979	16,986	2,196	3	13,326	29,562	0	46	3	13,326	1	16	0	13,326	32	3	0	3	
	Total Cost Per Occurrence ($ USD)	280	7,140	15,780	549	849	549	750	400	16,478	0	1,150	750	666	100	800	0	666	800	750	0	750	**Total**
	Annualised Maint. Budget ($ USD)	**559**	**1,428**	**2,254**	**549**	**849**	**549**	**750**	**400**	**1,373**	**0**	**1,150**	**750**	**666**	**100**	**1,600**	**0**	**666**	**800**	**750**	**0**	**750**	**15,944**
					6,939						**3,673**							**5,333**					**52.0%**
2.00	**Quantity**	6,331	2,461	3,870	2,461	3,870	492	1	2,862	6,907	2,862	10	1	2,862	0	8	0	2,862	9	1	0	1	
	Total Cost Per Occurrence ($ USD)	63	1,600	3,595	123	193	123	250	86	3,850	1,861	250	250	143	0	400	0	143	225	250	0	250	**Total**
	Annualised Maint. Budget ($ USD)	**127**	**320**	**514**	**123**	**193**	**123**	**250**	**86**	**321**	**155**	**250**	**250**	**143**	**0**	**800**	**0**	**143**	**225**	**250**	**0**	**250**	**4,523**
					1,650						**1,062**							**1,811**					**14.8%**
3.00	**Quantity**	11,832	5,253	6,579	5,253	6,579	1,051	2	5,266	14,450	3,716	14	2	5,266	0	7	0	5,266	3	2	0	2	
	Total Cost Per Occurrence ($ USD)	118	3,416	6,113	263	329	263	500	158	8,054	2,417	350	500	263	0	350	0	263	75	500	0	500	**Total**
	Annualised Maint. Budget ($ USD)	**237**	**683**	**873**	**263**	**329**	**263**	**500**	**158**	**671**	**201**	**350**	**500**	**263**	**0**	**700**	**0**	**263**	**75**	**500**	**0**	**500**	**7,330**
					3,147						**1,881**							**2,302**					**23.9%**
4.00	**Quantity**	1,163	775	388	775	388	164	0	388	1,395	0	1	0	0	0	1	0	388	0	0	0	1	
	Total Cost Per Occurrence ($ USD)	12	504	360	39	19	41	0	12	778	0	25	0	0	0	50	0	19	0	0	0	250	**Total**
	Annualised Maint. Budget ($ USD)	**23**	**101**	**51**	**39**	**19**	**41**	**0**	**12**	**65**	**0**	**25**	**0**	**0**	**0**	**100**	**0**	**19**	**0**	**0**	**0**	**250**	**745**
					275						**101**							**369**					**2.4%**
5.00	**Quantity**	1,211	568	643	568	643	0	1	344	1,137	0	2	1	0	0	0	0	344	10	0	0	1	
	Total Cost Per Occurrence ($ USD)	12	370	598	28	32	0	250	10	634	0	50	250	0	0	0	0	17	250	0	0	250	**Total**
	Annualised Maint. Budget ($ USD)	**24**	**74**	**85**	**28**	**32**	**0**	**250**	**10**	**53**	**0**	**50**	**250**	**0**	**0**	**0**	**0**	**17**	**250**	**0**	**0**	**250**	**1,374**
					494						**363**							**517**					**4.5%**
6.00	**Quantity**	793	403	391	403	391	81	0	188	403	188	0	1	0	0	0	0	188	0	0	0	1	
	Total Cost Per Occurrence ($ USD)	8	262	363	20	20	20	0	6	224	123	0	250	0	0	0	0	9	0	0	0	250	**Total**
	Annualised Maint. Budget ($ USD)	**16**	**52**	**52**	**20**	**20**	**20**	**0**	**6**	**19**	**10**	**0**	**250**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**250**	**724**
					180						**285**							**259**					**2.4%**
	Total Quantity	49,295	20,439	28,856	20,439	28,856	3,983	7	22,374	53,853	6,767	73	8	21,454	1	32	0	22,374	54	6	0	9	
	Total Annualised Maint. Budget ($ USD)	986	2,658	3,830	1,022	1,443	996	1,750	671	2,502	367	1,825	2,000	1,073	100	3,200	0	1,119	1,350	1,500	0	2,250	**30,640**
					12,684						**7,364**							**10,591**					**100.0%**
	Labour Portion (%)	80%	50%	50%	60%	60%	50%	50%	80%	60%	60%	50%	50%	50%	70%	70%	70%	70%	70%	70%	40%	50%	
	Labour Cost ($ USD)	789	1,329	1,915	613	866	498	875	537	1,501	220	913	1,000	536	70	2,240	0	783	945	1,050	0	1,125	**17,804**
	Labour Hours (Based on $3/Hour)	263	443	638	204	289	166	292	179	500	73	304	333	179	23	747	0	261	315	350	0	375	**5,935**
																					Number Maintenance Staff Required (Based on 1,800 Hours/PA)		**3.3**
	Plant Portion (%)	10%	10%	10%	10%	10%	0%	0%	10%	10%	10%	0%	0%	0%	10%	10%	10%	10%	10%	0%	20%	0%	
	Material Cost ($ USD)	99	266	383	102	144	0	0	67	250	37	0	0	0	10	320	0	112	135	0	0	0	**1,925**
	Material Portion (%)	10%	40%	40%	30%	30%	50%	50%	10%	30%	30%	50%	50%	50%	20%	20%	20%	20%	20%	30%	40%	50%	

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

MAINTENANCE COST PLAN (BUILDINGS)

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

		Gross Floor Area (GFA)		External Wall Area (EWA)		Roof Area (RA)		Door & Window Area (DWA)		Internal Wall Area (IWA)	
Ref	**Building**	**ft2**	**m2**	**ft2**	**m2**	**ft2**	**m2**	**ft2**	**m2**	**ft2**	**m2**

Element	**Structure**							**Internal Fit-Out**					**Services**								
Maintenance Task	Building Wash	External Wall Painting	Protective Coatings to Roof	Wall Cladding Repairs	Roof Cladding Repairs	Door & Window Repairs	Misc Repairs	Floor Finishes Cleaning & Repairs	Internal Wall Painting	Ceiling & Soffit Painting	Internal Door Repairs	Misc Repairs	Fire Suppress. Detection & Alarm Systems	Mechanical Ventillation	A/C Systems	Hot Water Generation	Electrical Services	Hydraulic Services	Comm. Systems	Vertical Transport	Misc Repairs	
Unit	ft2	ft2	ft2	ft2	ft2	ft2	LS Allow	ft2	ft2	ft2	No.	LS Allow	ft2	LS Allow	No.	LS Allow	ft2	No.	LS Allow	LS Allow	LS Allow	
Rate/Cost ($ USD)	0.01	0.65	0.93	0.05	0.05	0.25	250.00	0.03	0.56	0.65	25.00	250.00	0.05	100.00	50.00	500.00	0.05	25.00	250.00	2,500.00	250.00	
Frequency (Years)	0.50	5.00	7.00	1.00	1.00	1.00	1.00	1.00	12.00	12.00	1.00	1.00	1.00	1.00	0.50	1.00	1.00	1.00	1.00	1.00	1.00	
Material Cost ($ USD)	**99**	**1,063**	**1,532**	**307**	**433**	**498**	**875**	**67**	**750**	**110**	**913**	**1,000**	**536**	**20**	**640**	**0**	**224**	**270**	**450**	**0**	**1,125**	**10,911**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

MAINTENANCE COST PLAN (SITE INFRASTRUCTURE)

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

Ref	Location	Total Buildings No.	Total Building Area ft2	Total Building Area m2	Total Hard Surface Areas ft2	Total Hard Surface Areas m2	Total Green Surface Areas ft2	Total Green Surface Areas m2	Site Area ft2	Site Area m2
1.00	FSM-FMI (Fisheries & Maritime Institute), Gagil, Yap State	6	22,374	2,079	6,052	562	1,541,891	143,245	1,570,317	145,886

Element	Grounds Keeping				Car Parks, Roads & Pavements			Fences & Gates		Structures			Site Drainage			Electrical Infrastructure		Water Services	Site Furniture	Telecom Services	
Maintenance Task	Mowing	Spraying	General Grounds Keeping	Pruning & General Tree Maint.	Regrade, Relevel & Compact Gravel Surface	Pot/Crack Fill Asphalt Surface	Pot/Crack Fill Concrete Surface	Repaint Fences & Gates	Fence & Gate Repairs	Minor Building Structures Wash	Minor Building Structures General Repairs	Minor Building Structures Repaint	Site Stormwater Drainage Maint.	Building Stormwater Drainage Maint.	Building Sewer Drainage Maint.	General Electrical Maint.	General Electrical Servicing	General Water Services Maint.	General Site Furniture Maint.	General Telecom Services	
Unit	LS Allow / Green Area	LS Allow / Green Area	LS Allow / Green Area	LS Allow.	LS Allow / Area	LS Allow / Area	LS Allow / Area	LS Allow.	LS Allow.	LS Allow / GFA	LS Allow / Building No	LS Allow / GFA	LS Allow.	LS Allow / Building	LS Allow / Building	LS Allow / Building	LS Allow	LS Allow / Building	LS Allow.	LS Allow / Building	
Rate/Cost ($ USD)	0.00023	0.00012	0.00046	2,500.00	0.28	0.05	0.05	2,000.00	500.00	0.01	100.00	0.65	1,000.00	50.00	50.00	100.00	1,000.00	25.00	1,000.00	25.00	
Frequency (Years)	0.08	0.50	0.25	1.00	1.00	1.00	1.00	5.00	1.00	0.50	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Quantity	462,567	462,567	462,567	1	12,917	0	6,052	0	1	2,289	3	2,289	1	6	6	6	1	6	1	6	
Total Cost Per Occurrence ($ USD)	107	54	215	2,500	3,600	0	303	0	500	23	300	1,488	1,000	300	300	600	1,000	150	1,000	150	**Total**
Annualised Maint. Budget ($ USD)	**1,289**	**107**	**859**	**2,500**	**3,600**	**0**	**303**	**0**	**500**	**46**	**300**	**298**	**1,000**	**300**	**300**	**600**	**1,000**	**150**	**1,000**	**150**	**14,302**
	4,756				**3,903**			**500**		**643**			**1,600**			**1,600**		**1,300**			
Labour Portion (%)	**70%**	**35%**	**50%**	**70%**	**30%**	**30%**	**30%**	**70%**	**80%**	**70%**	**50%**	**60%**	**50%**	**50%**	**50%**	**50%**	**50%**	**50%**	**50%**	**50%**	
Labour Cost ($ USD)	**902**	**38**	**430**	**1,750**	**1,080**	**0**	**91**	**0**	**400**	**32**	**150**	**179**	**500**	**150**	**150**	**300**	**500**	**75**	**500**	**75**	**7,301**
Labour Hours (Based on $3/Hour)	**301**	**13**	**143**	**583**	**360**	**0**	**30**	**0**	**133**	**11**	**50**	**60**	**167**	**50**	**50**	**100**	**167**	**25**	**167**	**25**	**2,434**
																					Number Maintenance Staff Required (Based on 1,800 Hours/PA) **1.4**
Plant Portion (%)	**30%**	**30%**	**25%**	**30%**	**50%**	**50%**	**50%**	**0%**	**0%**	**20%**	**20%**	**10%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**0%**	**30%**	
Material Cost ($ USD)	**387**	**32**	**215**	**750**	**1,800**	**0**	**151**	**0**	**0**	**9**	**60**	**30**	**300**	**90**	**90**	**180**	**300**	**45**	**0**	**45**	**4,484**
Material Portion (%)	**0%**	**35%**	**25%**	**0%**	**20%**	**20%**	**20%**	**30%**	**20%**	**10%**	**30%**	**30%**	**20%**	**20%**	**20%**	**20%**	**20%**	**20%**	**50%**	**20%**	
Material Cost ($ USD)	**0**	**38**	**215**	**0**	**720**	**0**	**61**	**0**	**100**	**5**	**90**	**89**	**200**	**60**	**60**	**120**	**200**	**30**	**500**	**30**	**2,517**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

A - ADMIN/STUDENT SERVICE, RESIDENCE/MESS HALL

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

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						Condition Gauge																							
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	**Sub-Structure**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.01	Reinforced Concrete Foundations Beams	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**129,030**	**0.0%**
1.03	Reinforced Concrete Slab on Grade	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**203,589**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.00	**Total Sub-Structure**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**332,619**	**0.0%**
2.00	**Frame**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.01	Concrete Roof Slab (Main Building)	Not inspected - Refer also to Roof	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**494,299**	**0.0%**
2.02	Timber Roof Frame (Laundry)	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**1,139**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.00	**Total Frame**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**495,437**	**0.0%**
3.00	**Structural Walls**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.01	Reinforced Concrete Block Masonry Walls with Painted Finishes - Externally	Evidence of cracking/damage in isolated areas	Fill, repair and repaint	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**206,448**	**0.0%**
3.02	Reinforced Concrete Block Masonry Walls with Painted Finishes - Internally	Evidence of cracking/damage in isolated areas	Fill, repair and repaint	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**218,387**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.00	**Total Structural Walls**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**424,835**	**0.0%**
4.00	**Upper Floors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Total Upper Floors**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Roof**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.01	Membrane Roof Cladding	Evidence of leaks internally	Patch and repair isolated damage (if not done so already) Consider full re-application of membrane cladding	4	70%						0	0	0	0	0	257,035	0	0	0	0	**514,071**	**257,035**	**0**	**257,035**	**514,071**	**257,035**	**200.0%**
5.02	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of corrossion	Rust treat, repaint and clean regulalry	4	70%						0	0	0	0	0	2,467	0	0	0	0	**4,934**	**2,467**	**0**	**2,467**	**4,934**	**2,467**	**200.0%**
5.02	Metal Down Pipes	OK. Quantity assumed	Repair, Replace, Clean, Wash Comments:	3	50%						0	0	0	0	0	0	0	0	0	0	**6,072**	**0**	**6,072**	**0**	**6,072**	**6,072**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Total Roof**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**259,502**	**0**	**0**	**0**	**0**	**525,076**	**259,502**	**6,072**	**259,502**	**525,076**	**265,574**	**197.7%**
6.00	**External Walls & Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.01	None - See Structural Walls for Painted Finishes			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.00	**Total External Walls & Finishes**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Windows & Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.01	Timber Doors (Solid/No Glazing)	Tired but functional	Repair, repaint, clan regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**22,770**	**0**	**0**	**22,770**	**22,770**	**22,770**	**100.0%**
7.02	Metal Louvres	OK	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**7,590**	**0**	**0**	**7,590**	**7,590**	**7,590**	**100.0%**
7.03	Timber Window Shutters	Evidence of decay, orroded fixings/hardware, poor workmanship, missing/detached shutters, etc	Reinstate missing shutters, repaint, clean regulalry	4	70%						0	0	0	0	0	0	0	0	0	0	**25,806**	**0**	**25,806**	**0**	**25,806**	**25,806**	**100.0%**
7.04	Timber Mesh Screens	Evidence of decay, orroded fixings/hardware, poor workmanship, missing/detached screens, etc	Reinstate missing screens, repaint, clean regulalry	4	70%						0	0	0	0	0	0	0	0	0	0	**51,612**	**0**	**51,612**	**0**	**51,612**	**51,612**	**100.0%**
7.05	Aluminium Framed Windows & Doors	OK	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**193,545**	**0**	**0**	**193,545**	**193,545**	**193,545**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Total Windows & Doors**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**301,323**	**0**	**77,418**	**223,905**	**301,323**	**301,323**	**100.0%**
A	**TOTAL STRUCTURE**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**259,502**	**0**	**0**	**0**	**0**	**826,399**	**259,502**	**83,490**	**483,407**	**826,399**	**1,819,789**	**45.4%**
8.00	**Stairs, Balustrades & Handrails**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**

Project: **COLLEGE OF MICRONESIA - FSM**

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A - ADMIN/STUDENT SERVICE, RESIDENCE/MESS HALL

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																						
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
8.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
8.00	**Total Stairs Balustrades & Handrails**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	0	0.0%
9.00	**Internal Walls/Partitions**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.01	None - See Structural Walls			0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.00	**Total Internal Walls/Partitions**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	0	0.0%
10.00	**Internal Doors**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.01	Timber Door - Single	Evidence of impact damage, marks, etc	Repair, Repaint, Clean Regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	69,828	0	0	69,828	69,828	69,828	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.00	**Total Internal Doors**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	69,828	0	0	69,828	69,828	69,828	100.0%
11.00	**Floor Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.01	Vinyl Floor Finishes	Evidence of water stains, lifting, marks, tears, worn through, etc	Replace	5	90%						0	115,166	0	0	0	0	0	0	0	0	230,331	115,166	0	115,166	230,331	115,166	200.0%
11.02	Tiled Floor Finishes	Evidence of impact damage, lifting tiles, loose grout, marks, stains, generally unclean	Replace	5	90%						0	0	22,770	0	0	0	0	0	0	0	22,770	22,770	0	0	22,770	22,770	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.00	**Total Floor Finishes**			**5**	**90%**						**0**	**115,166**	**22,770**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	253,101	137,936	0	115,166	253,101	137,936	183.5%
12.00	**Wall Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.01	Plywood Wall Linings with Painted Finishes	Evidence of impact damage, water damage, etc (Note: Quantity Assumed)	Repair, Paint, Clean	4	70%						0	0	0	0	0	0	0	0	0	0	101,307	0	101,307	0	101,307	101,307	100.0%
12.02	Tiled Wall Finishes	Stained tiles, stained grout, very unclean by appearance	Replace	5	90%						0	0	36,432	0	0	0	0	0	0	0	36,432	36,432	0	0	36,432	36,432	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.00	**Total Wall Finishes**			**5**	**90%**						**0**	**0**	**36,432**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	137,739	36,432	101,307	0	137,739	137,739	100.0%
13.00	**Ceiling Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.01	Proprietary Suspended Ceilings (Exposed Grid Suspension System)	Evidence of leaks internally, damaged/marked/stained, some rust on suspension grid, ceiling tiles, generally OK	Refix/replace damaged ceiling tiles/grid sections, clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	93,964	0	93,964	0	93,964	93,964	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.00	**Total Ceiling Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	93,964	0	93,964	0	93,964	93,964	100.0%
14.00	**Fixed Joinery Units**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.01	Toilet Partitions	Evidence of impact damage, water damage, delaminating panels, marks	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	12,144	0	12,144	0	12,144	12,144	100.0%
14.02	Built-in Joinery - Bench Unit	Evidence of impact damage, marks, etc	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	25,300	0	25,300	0	25,300	25,300	100.0%
14.03	Built-in Joinery - Shelving Unit	Evidence of impact damage, marks, etc	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	25,300	0	25,300	0	25,300	25,300	100.0%
14.03	Built-in Joinery - Other Generally	Evidence of impact damage, marks, etc	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	25,300	0	25,300	0	25,300	25,300	100.0%
14.04	Built-in Joinery - Kitchen (Small)	Evidence of impact damage, marks, etc	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	9,488	0	9,488	0	9,488	9,488	100.0%
14.05	Built-in Joinery - Kitchen (Large)	Evidence of impact damage, marks, etc	Clean regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	63,250	0	63,250	0	63,250	63,250	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.00	**Total Fixed Joinery Units**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	160,782	0	160,782	0	160,782	160,782	100.0%
B	**TOTAL INTERNAL FIT-OUT**			**4**	**70%**						**0**	**115,166**	**59,202**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	715,414	174,368	356,053	184,994	715,414	600,249	119.2%
15.00	**Sanitary Plumbing**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
15.01	WC	Functional but tired and unclean by appearance (Quantity assumed from photographs)	Consider ealry replacement	4	70%						0	0	0	0	0	0	0	0	37,950	0	37,950	37,950	0	0	37,950	37,950	100.0%
15.02	WHB (Single)	Functional but tired and unclean by appearance (Quantity assumed from photographs)	Consider ealry replacement	4	70%						0	0	0	0	0	0	0	0	15,180	0	15,180	15,180	0	0	15,180	15,180	100.0%
15.03	Shower	Functional but tired and unclean by appearance (Quantity assumed from photographs)	Consider ealry replacement	4	70%						0	0	0	0	0	0	0	0	37,950	0	37,950	37,950	0	0	37,950	37,950	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%

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Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																					
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
15.00	**Total Sanitary Plumbing**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**91,080**	**0**	**91,080**	**91,080**	**0**	**0**	**91,080**	**91,080**	**100.0%**
16.00	**Mechanical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.01	Air-Conditioning - DX/Split System				0%						0	0	0	0	0	0	35,420	0	0	0	**141,680**	**35,420**	**35,420**	**70,840**	**141,680**	**35,420**	**400.0%**
16.02	Air-Conditioning - Window Mounted Unit)				0%						0	0	0	0	0	0	0	0	0	15,180	**45,540**	**15,180**	**15,180**	**15,180**	**45,540**	**15,180**	**300.0%**
16.03	Ventilation - Kitchen Extract	Unsure whether in operation	Test, repair and service regulalry	3	50%						0	0	0	0	0	0	0	0	0	18,975	**37,950**	**18,975**	**0**	**18,975**	**37,950**	**18,975**	**200.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.00	**Total Mechanical Services**			**1**	**10%**						**0**	**0**	**0**	**0**	**0**	**0**	**35,420**	**0**	**0**	**34,155**	**225,170**	**69,575**	**50,600**	**104,995**	**225,170**	**69,575**	**323.6%**
17.00	**Fire Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.01	Fire/Smoke Detection & Alarm Systems	Unsure whether in operation	Test, repair and service regulalry	3	50%						0	0	0	0	0	0	0	0	0	31,321	**62,643**	**31,321**	**0**	**31,321**	**62,643**	**31,321**	**200.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.00	**Total Fire Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**31,321**	**62,643**	**31,321**	**0**	**31,321**	**62,643**	**31,321**	**200.0%**
18.00	**Electrical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.01	Main Distribution Boards	Assumed functioning sufficiently	Service regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**9,488**	**0**	**9,488**	**0**	**9,488**	**9,488**	**100.0%**
18.02	Sub-Main Distribution Boards	Assumed functioning sufficiently	Service regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**17,710**	**0**	**17,710**	**0**	**17,710**	**17,710**	**100.0%**
18.03	Electrical Wiring/Reticulation	Assumed functioning sufficiently	Service regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**46,982**	**0**	**46,982**	**0**	**46,982**	**46,982**	**100.0%**
18.04	General Power	Assumed functioning sufficiently	Service regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**62,643**	**0**	**62,643**	**0**	**62,643**	**62,643**	**100.0%**
18.05	Lighting (External)	Assumed functioning sufficiently	Service regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**15,661**	**0**	**15,661**	**0**	**15,661**	**15,661**	**100.0%**
18.06	Lighting (Internal)	Assumed functioning sufficiently	Service regulalry	3	50%						0	0	0	0	0	0	0	0	0	0	**125,286**	**0**	**125,286**	**0**	**125,286**	**125,286**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.00	**Total Electrical Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**277,769**	**0**	**277,769**	**0**	**277,769**	**277,769**	**100.0%**
19.00	**Vertical Transportation**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.00	**Total Vertical Transportation**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Special Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.01	Telecommunication/Data Network	Assumed functioning sufficiently	Service regulalry	3	50%						0	0	0	0	0	0	0	0	0	62,643	**125,286**	**62,643**	**0**	**62,643**	**125,286**	**62,643**	**200.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Total Special Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**62,643**	**125,286**	**62,643**	**0**	**62,643**	**125,286**	**62,643**	**200.0%**
C	**TOTAL BUILDING SERVICES**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**35,420**	**0**	**91,080**	**128,119**	**781,947**	**254,619**	**328,369**	**198,959**	**781,947**	**532,388**	**146.9%**
	TOTAL BUILDING			**4**	**70%**						**0**	**115,166**	**59,202**	**0**	**0**	**259,502**	**35,420**	**0**	**91,080**	**128,119**	**2,323,761**	**688,489**	**767,912**	**867,360**	**2,323,761**	**2,952,425**	**78.7%**

688,489

Year 1 - 10 Consolidated Capital Replacement Cost

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

B - STAFF HOUSING

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

		Condition Assessment		Condition Grading		Condition Gauge					1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG 0-20 %	G 20-40 %	A 40-60 %	P 60-80 %	VP 80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	**Sub-Structure**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.01	Reinforced Concrete Foundations Beams	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**41,555**	**0.0%**
1.02	Reinforced Concrete Slab on Grade	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**43,724**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.00	**Total Sub-Structure**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**85,279**	**0.0%**
2.00	**Frame**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.01	Timber Frame (Truss)	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**63,671**	**0.0%**
2.02	Reinforced Concrete Columns & Beams	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**76,773**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.00	**Total Frame**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**140,444**	**0.0%**
3.00	**Structural Walls**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.01	Reinforced Concrete Brick/Block Masonry Walls	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**46,269**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.00	**Total Structural Walls**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**46,269**	**0.0%**
4.00	**Upper Floors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Total Upper Floors**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Roof**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of leaks internally, flaking of protective coating or corrosion	Rust Treat, Repaint, Wash Regularly	4	70%						0	0	0	0	0	0	0	0	45,479	0	**45,479**	**45,479**	**0**	**0**	**45,479**	**45,479**	**100.0%**
5.02	Metal Gutters	Evidence of corrosion	Repair, Replace, Clean, Wash Comments:	4	70%						0	0	0	0	0	0	0	0	11,208	0	**11,208**	**11,208**	**0**	**0**	**11,208**	**11,208**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Total Roof**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**56,687**	**0**	**56,687**	**56,687**	**0**	**0**	**56,687**	**56,687**	**100.0%**
6.00	**External Walls & Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.01	Solid Plaster Cladding with Painted Finishes	Evidence of cracks (crazed or structural); Dirty needs wash	Repair, Repaint, Wash Regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**26,604**	**0**	**0**	**26,604**	**26,604**	**26,604**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.00	**Total External Walls & Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**26,604**	**0**	**0**	**26,604**	**26,604**	**26,604**	**100.0%**
7.00	**Windows & Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.01	Timber Doors (Solid/No Glazing)	Evidence of decay, corroded fixings/hardware, flaking paint finishes	Repaint, Wash	4	70%						0	0	0	0	0	0	0	0	0	0	**7,590**	**0**	**7,590**	**0**	**7,590**	**7,590**	**100.0%**
7.02	Timber Security Screens	Evidence of decay, corroded fixings/hardware, flaking paint finishes	Repaint, Wash	4	70%						0	0	0	0	0	0	0	0	0	0	**6,246**	**0**	**6,246**	**0**	**6,246**	**6,246**	**100.0%**
7.03	Aluminium Framed Windows (Combination of Louvered & Fixed)	OK	Wash	3	50%						0	0	0	0	0	0	0	0	0	0	**43,377**	**0**	**0**	**43,377**	**43,377**	**43,377**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Total Windows & Doors**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**57,213**	**0**	**13,836**	**43,377**	**57,213**	**57,213**	**100.0%**
A	**TOTAL STRUCTURE**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**56,687**	**0**	**140,505**	**56,687**	**13,836**	**69,981**	**140,505**	**412,496**	**34.1%**
8.00	**Stairs, Balustrades & Handrails**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.00	**Total Stairs Balustrades & Handrails**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.00	**Internal Walls/Partitions**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

B - STAFF HOUSING

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																					
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
9.01	Timber Framed Partition Walls	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,677	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.00	**Total Internal Walls/Partitions**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	15,677	0.0%
10.00	**Internal Doors**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.01	Timber Door - Single	Evidence of impact damage, marks, etc	Repair, Repaint, Clean	3	50%						0	0	0	0	0	0	0	0	0	0	15,180	0	0	15,180	15,180	15,180	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.00	**Total Internal Doors**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	15,180	0	0	15,180	15,180	15,180	100.0%
11.00	**Floor Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.01	Vinyl Floor Finishes	Evidence of water stains, lifting, marks, tears, worn through, etc	Replace	5	90%						0	24,216	0	0	0	0	0	0	0	0	48,433	24,216	0	24,216	48,433	24,216	200.0%
11.02	Tiled Floor Finishes	Generally dirty, grout stained and unsanitary by appearance	Replace	5	90%						0	0	6,054	0	0	0	0	0	0	0	6,054	6,054	0	0	6,054	6,054	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.00	**Total Floor Finishes**			**5**	**90%**						**0**	**24,216**	**6,054**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	54,487	30,270	0	24,216	54,487	30,270	180.0%
12.00	**Wall Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.01	Plasterboard/Hardboard Wall Linings with Painted Finishes	Evidence of impact damage, water damage, marks	Repair, Paint, Clean	3	50%						0	0	0	0	0	0	0	0	0	28,046	56,092	28,046	0	28,046	56,092	28,046	200.0%
12.02	Solid Plaster Wall Lining with Painted Finishes	Evidence of impact damage, cracks, water damage	Repair, Paint, Clean	3	50%						0	0	0	0	0	0	0	0	0	0	19,664	0	19,664	0	19,664	19,664	100.0%
12.03	Tiled Wall Finishes	Generally dirty, grout stained and unsanitary by appearance	Replace	5	90%						0	0	16,394	0	0	0	0	0	0	0	16,394	16,394	0	0	16,394	16,394	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.00	**Total Wall Finishes**			**4**	**70%**						**0**	**0**	**16,394**	**0**	**0**	**0**	**0**	**0**	**0**	**28,046**	92,150	44,440	19,664	28,046	92,150	64,105	143.8%
13.00	**Ceiling Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.01	Plywood Ceiling Lining with Painted Finish	Evidence of leaks internally, but OK	Repair, Paint, Clean	3	50%						0	0	0	0	0	0	0	0	0	0	31,952	0	0	31,952	31,952	31,952	100.0%
13.02	T&G Timber Board Ceiling Lining with Clear Finish	OK	Repair, Paint, Clean	3	50%						0	0	0	0	0	0	0	0	0	0	21,914	0	0	21,914	21,914	21,914	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.00	**Total Ceiling Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	53,866	0	0	53,866	53,866	53,866	100.0%
14.00	**Fixed Joinery Units**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.01	White Boards	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	380	0	0	380	380	380	100.0%
14.02	Mirrors	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	1,139	0	1,139	0	1,139	1,139	100.0%
14.03	Built-in Joinery - Bench Unit	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	2,530	0	2,530	0	2,530	2,530	100.0%
14.04	Built-in Joinery - Shelving Unit	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	1,265	0	1,265	0	1,265	1,265	100.0%
14.05	Built-in Joinery - Wardrobe	OK	Clean and repaint	3	50%						0	0	0	0	0	0	0	0	0	0	3,795	0	3,795	0	3,795	3,795	100.0%
14.06	Built-in Joinery - Kitchen (Medium)	Functional but tired	Clean and repaint	4	70%						0	0	0	0	0	0	0	0	37,950	0	37,950	37,950	0	0	37,950	37,950	100.0%
14.07	Sundry Other Built-in Joinery	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	6,325	0	6,325	0	6,325	6,325	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.00	**Total Fixed Joinery Units**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**37,950**	**0**	53,383	37,950	15,054	380	53,383	53,383	100.0%
B	**TOTAL INTERNAL FIT-OUT**			**4**	**70%**						**0**	**24,216**	**22,448**	**0**	**0**	**0**	**0**	**0**	**37,950**	**28,046**	269,067	112,661	34,718	121,688	269,067	232,481	115.7%
15.00	**Sanitary Plumbing**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
15.01	WC	Functional but tired	Consider early replacement	4	70%						0	0	0	0	0	0	0	0	9,488	0	9,488	9,488	0	0	9,488	9,488	100.0%
15.02	WHB (Single)	Functional but tired	Consider early replacement	4	70%						0	0	0	0	0	0	0	0	5,693	0	5,693	5,693	0	0	5,693	5,693	100.0%
15.03	Shower	Functional but tired	Consider early replacement	4	70%						0	0	0	0	0	0	0	0	9,488	0	9,488	9,488	0	0	9,488	9,488	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
15.00	**Total Sanitary Plumbing**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24,668**	**0**	24,668	24,668	0	0	24,668	24,668	100.0%

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

B - STAFF HOUSING

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																					
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
16.00	**Mechanical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.01	Air-Conditioning - DX/Split System	Evidence of Corrosion and grit	Repair, Service, Clean	4	70%						0	0	8,855	0	0	0	0	0	0	8,855	**35,420**	**17,710**	**8,855**	**8,855**	**35,420**	**8,855**	**400.0%**
16.02	Air-Conditioning - Window Mounted Unit)	Evidence of Corrosion and grit	Repair, Service, Clean	3	50%						0	0	0	0	1,898	0	0	0	0	0	**5,693**	**1,898**	**1,898**	**1,898**	**5,693**	**1,898**	**300.0%**
16.03	Air-Conditioning - Window Mounted Unit)	Evidence of Corrosion and grit	Replace	5	90%						3,795	0	0	0	0	0	0	0	0	0	**11,385**	**3,795**	**3,795**	**3,795**	**11,385**	**3,795**	**300.0%**
16.04	Air-Conditioning - Window Mounted Unit)	Evidence of Corrosion and grit	Repair, Service, Clean	4	70%						0	0	5,693	0	0	0	0	0	0	0	**17,078**	**5,693**	**5,693**	**5,693**	**17,078**	**5,693**	**300.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.00	**Total Mechanical Services**			**4**	**70%**						**3,795**	**0**	**14,548**	**0**	**1,898**	**0**	**0**	**0**	**0**	**8,855**	**69,575**	**29,095**	**20,240**	**20,240**	**69,575**	**20,240**	**343.8%**
17.00	**Fire Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.01	Smoke Detection & Alarm Systems	Hardwired but not connected	Replace	5	90%						0	5,045	0	0	0	0	0	0	0	0	**10,090**	**5,045**	**0**	**5,045**	**10,090**	**5,045**	**200.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.00	**Total Fire Services**			**5**	**90%**						**0**	**5,045**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10,090**	**5,045**	**0**	**5,045**	**10,090**	**5,045**	**200.0%**
18.00	**Electrical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.01	Main Distribution Boards	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	**9,488**	**0**	**0**	**9,488**	**9,488**	**9,488**	**100.0%**
18.02	Sub-Main Distribution Boards	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	**13,283**	**0**	**0**	**13,283**	**13,283**	**13,283**	**100.0%**
18.03	Electrical Wiring/Reticulation	Assumed OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**10,090**	**0**	**10,090**	**0**	**10,090**	**10,090**	**100.0%**
18.04	General Power Outlet	Assumed OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**13,454**	**0**	**13,454**	**0**	**13,454**	**13,454**	**100.0%**
18.05	Lighting (External) - Incandescent	OK - Missing bulbs in places	Replace bulbs	3	50%						0	0	0	0	0	0	0	0	0	0	**1,265**	**0**	**1,265**	**0**	**1,265**	**1,265**	**100.0%**
18.06	Lighting (Internal) - Incandescent	OK - Missing bulbs in places	Replace bulbs	3	50%						0	0	0	0	0	0	0	0	0	0	**6,325**	**0**	**6,325**	**0**	**6,325**	**6,325**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.00	**Total Electrical Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**53,904**	**0**	**31,134**	**22,770**	**53,904**	**53,904**	**100.0%**
19.00	**Vertical Transportation**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.00	**Total Vertical Transportation**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Special Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.01	Telecommunication/Data Network	Assumed In Operation	None	3	50%						0	0	0	0	0	0	0	0	0	3,363	**6,727**	**3,363**	**0**	**3,363**	**6,727**	**3,363**	**200.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Total Special Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,363**	**6,727**	**3,363**	**0**	**3,363**	**6,727**	**3,363**	**200.0%**
C	**TOTAL BUILDING SERVICES**			**4**	**70%**						**3,795**	**5,045**	**14,548**	**0**	**1,898**	**0**	**0**	**0**	**24,668**	**12,218**	**164,963**	**62,171**	**51,374**	**51,418**	**164,963**	**107,220**	**153.9%**
	TOTAL BUILDING			**4**	**70%**						**3,795**	**29,261**	**36,996**	**0**	**1,898**	**0**	**0**	**0**	**119,305**	**40,264**	**574,534**	**231,519**	**99,928**	**243,088**	**574,534**	**752,197**	**76.4%**

231,519

Year 1 - 10 Consolidated Capital Replacement Cost

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

C - CLASSROOMS, LIBRARY & SHOPS

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																					
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	**Sub-Structure**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.01	Reinforced Concrete Foundations Beams	Not Inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**75,742**	**0.0%**
1.02	Reinforced Concrete Slab on Grade with Painted Finish	OK	Repaint	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**80,457**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.00	**Total Sub-Structure**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**156,199**	**0.0%**
2.00	**Frame**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.01	Concrete Roof Slab	Not Inspected - See roof covering observations	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**193,308**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.00	**Total Frame**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**193,308**	**0.0%**
3.00	**Structural Walls**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.01	Reinforced Concrete Block Masonry Walls with Painted Finishes - Externally (Poor Areas - 40%)	Evidence of cracking, settlement	Review by Structural Engineer, Replace	5	90%						0	0	0	0	0	0	0	0	0	49,386	**49,386**	**49,386**	**0**	**0**	**49,386**	**49,386**	**100.0%**
3.02	Reinforced Concrete Block Masonry Walls with Painted Finishes - Externally (Good Areas - 60%)	Evidence of cracking	Review by Structural Engineer, Repair, Repaint, Wash	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**74,078**	**0.0%**
3.03	Reinforced Concrete Block Masonry Walls with Painted Finishes - Internally	Evidence of cracking	Review by Structural Engineer, Repair, Repaint	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**83,490**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.00	**Total Structural Walls**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49,386**	**49,386**	**49,386**	**0**	**0**	**49,386**	**206,954**	**23.9%**
4.00	**Upper Floors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.01	Timber Framed Upper Floor (Mezzanine Floors)	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**12,650**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Total Upper Floors**			**2**	**30%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12,650**	**0.0%**
5.00	**Roof**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.01	Membrane Roof Cladding	Evidence of leaks internally, tearing of membrane or detachment	Replace, Wash Regularly	5	90%						0	100,520	0	0	0	0	0	0	0	0	**201,040**	**100,520**	**0**	**100,520**	**201,040**	**100,520**	**200.0%**
5.02	Metal Down Pipes	OK	Cleanout, Wash	3	50%						0	0	0	0	0	0	0	0	0	0	**3,036**	**0**	**3,036**	**0**	**3,036**	**3,036**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Total Roof**			**4**	**70%**						**0**	**100,520**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**204,076**	**100,520**	**3,036**	**100,520**	**204,076**	**103,556**	**197.1%**
6.00	**External Walls & Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.00	**Total External Walls & Finishes**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Windows & Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.01	Aluminium Framed Windows	OK	Wash Regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**92,598**	**0**	**0**	**92,598**	**92,598**	**92,598**	**100.0%**
7.02	Metal Doors - Single (Solid/No Glazing)	Evidence of flaking protective and impact damage	Repair, Wash Regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**12,650**	**0**	**0**	**12,650**	**12,650**	**12,650**	**100.0%**
7.03	Metal Doors - Double (Solid/No Glazing)	Evidence of flaking protective and impact damage	Repair, Wash Regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**7,590**	**0**	**0**	**7,590**	**7,590**	**7,590**	**100.0%**
7.04	Metal Garage Door (Roller	OK - Needs Cleaning	Wash Regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**8,855**	**0**	**0**	**8,855**	**8,855**	**8,855**	**100.0%**
7.05	Metal Security Screens	OK	Wash Regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**77,114**	**0**	**0**	**77,114**	**77,114**	**77,114**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Total Windows & Doors**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**198,807**	**0**	**0**	**198,807**	**198,807**	**198,807**	**100.0%**
A	**TOTAL STRUCTURE**			**4**	**70%**						**0**	**100,520**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49,386**	**452,269**	**149,906**	**3,036**	**299,327**	**452,269**	**871,474**	**51.9%**
8.00	**Stairs, Balustrades & Handrails**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.01	Timber Framed Ladder (To Mezzanine Floor)	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**633**	**0.0%**

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ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
8.02	Timber Framed Balustrades (To Mezzanine Floor)	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**3,416**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.00	**Total Stairs Balustrades & Handrails**			**2**	**30%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,048**	**0.0%**
9.00	**Internal Walls/Partitions**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.01	Timber Framed Partition Walls (Under Mezzanine Floors)	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**7,377**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.00	**Total Internal Walls/Partitions**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,377**	**0.0%**
10.00	**Internal Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.01	Timber Door - Single	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**21,252**	**0**	**0**	**21,252**	**21,252**	**21,252**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.00	**Total Internal Doors**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21,252**	**0**	**0**	**21,252**	**21,252**	**21,252**	**100.0%**
11.00	**Floor Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
11.01	Vinyl Floor Finishes (Computer Lab)	Good Condition, Minor Marks	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	3,643	**7,286**	**3,643**	**0**	**3,643**	**7,286**	**3,643**	**200.0%**
11.02	Vinyl Floor Finishes (Generally Elsewhere)	Evidence of water stains, lifting, marks, tears, worn through, etc	Replace	5	90%						0	19,430	0	0	0	0	0	0	0	0	**38,861**	**19,430**	**0**	**19,430**	**38,861**	**19,430**	**200.0%**
11.03	Tiled Floor Finishes	Tired and stained grout; unclean by appearance	Consider replacement	4	70%						0	0	0	0	0	0	0	0	2,049	0	**2,049**	**2,049**	**0**	**0**	**2,049**	**2,049**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
11.00	**Total Floor Finishes**			**4**	**70%**						**0**	**19,430**	**0**	**0**	**0**	**0**	**0**	**0**	**2,049**	**3,643**	**48,197**	**25,123**	**0**	**23,074**	**48,197**	**25,123**	**191.8%**
12.00	**Wall Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
12.01	Plywood Wall Linings with Painted Finishes	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**11,066**	**0**	**0**	**11,066**	**11,066**	**11,066**	**100.0%**
12.02	Tiled Wall Finishes	Tired and stained grout; unclean by appearance	Consider replacement	4	70%						0	0	0	0	0	0	0	0	4,099	0	**4,099**	**4,099**	**0**	**0**	**4,099**	**4,099**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
12.00	**Total Wall Finishes**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,099**	**0**	**15,165**	**4,099**	**0**	**11,066**	**15,165**	**15,165**	**100.0%**
13.00	**Ceiling Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
13.01	Plywood Ceiling Lining with Painted Finishes	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**5,313**	**0**	**0**	**5,313**	**5,313**	**5,313**	**100.0%**
13.02	Timber Ceiling Sarking with Painted Finishes	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**7,748**	**0**	**0**	**7,748**	**7,748**	**7,748**	**100.0%**
13.03	Proprietary Suspended Ceilings (Exposed Grid Suspension System)	OK	Reset loose tiles; clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**10,930**	**0**	**10,930**	**0**	**10,930**	**10,930**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
13.00	**Total Ceiling Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23,991**	**0**	**10,930**	**13,061**	**23,991**	**23,991**	**100.0%**
14.00	**Fixed Joinery Units**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
14.01	Pin Board	OK	None	3	50%						0	0	0	0	0	0	0	1,012	0	0	**2,024**	**1,012**	**0**	**1,012**	**2,024**	**1,012**	**200.0%**
14.02	White Boards	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	**5,693**	**0**	**0**	**5,693**	**5,693**	**5,693**	**100.0%**
14.03	Built-in Joinery - Bench Unit	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**25,300**	**0**	**25,300**	**0**	**25,300**	**25,300**	**100.0%**
14.04	Built-in Joinery - Shelving Unit	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**12,650**	**0**	**12,650**	**0**	**12,650**	**12,650**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
14.00	**Total Fixed Joinery Units**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,012**	**0**	**0**	**45,667**	**1,012**	**37,950**	**6,705**	**45,667**	**44,655**	**102.3%**
B	**TOTAL INTERNAL FIT-OUT**			**4**	**70%**						**0**	**19,430**	**0**	**0**	**0**	**0**	**0**	**1,012**	**6,148**	**3,643**	**154,271**	**30,234**	**48,880**	**75,157**	**154,271**	**141,610**	**108.9%**
15.00	**Sanitary Plumbing**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
15.01	WC	Functioning but tired	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**3,163**	**0**	**3,163**	**0**	**3,163**	**3,163**	**100.0%**
15.02	Floor Waste	Unclean by appearance	Install grate and clean out regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**949**	**0**	**949**	**0**	**949**	**949**	**100.0%**
15.03	WHB (Single)	Functioning but tired	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**1,898**	**0**	**1,898**	**0**	**1,898**	**1,898**	**100.0%**

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											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
15.00	**Total Sanitary Plumbing**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6,009	**0**	6,009	**0**	6,009	6,009	**100.0%**
16.00	**Mechanical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.01	Air-Conditioning - DX/Split System	Functioning but tired. Francesco advised 4No. Fancoil units require replacement	Service, clean regularly	4	70%						0	0	8,855	0	0	0	0	0	0	8,855	**35,420**	**17,710**	**8,855**	**8,855**	**35,420**	**8,855**	**400.0%**
16.02	Air-Conditioning - DX/Split System	Outdoor condenser units have corroded casings	Consider replacement	4	70%						0	0	22,138	0	0	0	0	0	0	22,138	**88,550**	**44,275**	**22,138**	**22,138**	**88,550**	**22,138**	**400.0%**
16.03	Air-Conditioning - DX/Split System (Missing Units - 3No. - Assumed Redundant)	Assumed redundant	None	0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.04	Air-Conditioning - Window Mounted Unit (Missing Units - 8No. - Assumed Redundant)	Assumed redundant	None	0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.00	**Total Mechanical Services**			**2**	**30%**						**0**	**0**	**30,993**	**0**	**0**	**0**	**0**	**0**	**0**	**30,993**	**123,970**	**61,985**	**30,993**	**30,993**	**123,970**	**30,993**	**400.0%**
17.00	**Fire Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.01	Alarm Systems	Unsure if in operation	Test and repair if required	0	0%						0	0	0	0	0	0	0	0	0	0	**6,189**	**0**	**6,189**	**0**	**6,189**	**6,189**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.00	**Total Fire Services**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6,189	**0**	6,189	**0**	6,189	6,189	**100.0%**
18.00	**Electrical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.01	Main Distribution Boards	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	0	9,488	**0**	9,488	**0**	9,488	9,488	**100.0%**
18.02	Sub-Main Distribution Boards	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	0	30,993	**0**	30,993	**0**	30,993	30,993	**100.0%**
18.03	Electrical Wiring/Reticulation	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	0	18,567	**0**	18,567	**0**	18,567	18,567	**100.0%**
18.04	General Power Outlet	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	0	24,756	**0**	24,756	**0**	24,756	24,756	**100.0%**
18.05	3 Phase Power Outlet	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	0	30,945	**0**	30,945	**0**	30,945	30,945	**100.0%**
18.06	Lighting (External) - Incandescent	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	0	1,265	**0**	1,265	**0**	1,265	1,265	**100.0%**
18.07	Lighting (External) - Fluorescant	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	0	2,530	**0**	2,530	**0**	2,530	2,530	**100.0%**
18.08	Lighting (Internal) - Incandescent	Assumed operating satisfactorily	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	4,744	**0**	4,744	**0**	4,744	4,744	**100.0%**
18.09	Lighting (Internal) - Fluorescant	Assumed operating satisfactorily	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	25,300	**0**	25,300	**0**	25,300	25,300	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.00	**Total Electrical Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	148,587	**0**	148,587	**0**	148,587	148,587	**100.0%**
19.00	**Vertical Transportation**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.00	**Total Vertical Transportation**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Special Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.01	Telecommunication/Data Network	Assumed operating satisfactorily	None	3	50%						0	0	0	0	0	0	0	0	0	24,756	49,512	24,756	**0**	24,756	49,512	24,756	200.0%
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Total Special Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	24,756	49,512	24,756	**0**	24,756	49,512	24,756	200.0%
C	**TOTAL BUILDING SERVICES**			**3**	**50%**						**0**	**0**	30,993	**0**	**0**	**0**	**0**	**0**	**0**	55,749	334,267	86,741	191,777	55,749	334,267	216,533	154.4%
	TOTAL BUILDING			**3**	**50%**						**0**	119,950	30,993	**0**	**0**	**0**	**0**	1,012	6,148	108,777	940,806	266,880	243,693	430,233	940,806	1,229,618	76.5%

266,880

Year 1 - 10 Consolidated Capital Replacement Cost

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

D - MAINTENANCE

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																						
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	**Sub-Structure**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.01	Reinforced Concrete Foundations Beams	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**4,554**	**0.0%**
1.02	Reinforced Concrete Slab on Grade	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**5,009**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.00	**Total Sub-Structure**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9,563**	**0.0%**
2.00	**Frame**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.01	Structural Steel Frame (Portal)	Evidence of corrosion	Wire brush, rust treat and repaint	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**6,831**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.00	**Total Frame**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,831**	**0.0%**
3.00	**Structural Walls**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.00	**Total Structural Walls**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Upper Floors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Total Upper Floors**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Roof**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of corrosion	Rust treat and repaint, clean regularly	4	70%						0	0	0	0	0	0	0	0	4,554	0	**4,554**	**4,554**	**0**	**0**	**4,554**	**4,554**	**100.0%**
5.02	Metal Gutters	Evidence of corrosion	Rust treat and repaint, clean regularly	4	70%						0	0	0	0	0	0	0	0	1,518	0	**1,518**	**1,518**	**0**	**0**	**1,518**	**1,518**	**100.0%**
5.03	Metal Down Pipes	Evidence of corrosion	Rust treat and repaint, clean regularly	4	70%						0	0	0	0	0	0	0	0	759	0	**759**	**759**	**0**	**0**	**759**	**759**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Total Roof**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,831**	**0**	**6,831**	**6,831**	**0**	**0**	**6,831**	**6,831**	**100.0%**
6.00	**External Walls & Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.04	Profiled Metal Sheet Wall Cladding (Pre-Finished)	Evidence of corrosion and rusted out areas	Cut and replace damage sheets, rust treat, repaint and clean regularly	4	70%						0	0	0	0	0	0	0	0	8,197	0	**8,197**	**8,197**	**0**	**0**	**8,197**	**8,197**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.00	**Total External Walls & Finishes**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8,197**	**0**	**8,197**	**8,197**	**0**	**0**	**8,197**	**8,197**	**100.0%**
7.00	**Windows & Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.01	Timber Doors (Solid/No Glazing)	OK but dirty	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**1,898**	**0**	**0**	**1,898**	**1,898**	**1,898**	**100.0%**
7.02	Aluminium Framed Windows & Doors	OK but dirty	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**6,831**	**0**	**0**	**6,831**	**6,831**	**6,831**	**100.0%**
7.03	Metal Garage Door	OK but dirty	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**3,795**	**0**	**0**	**3,795**	**3,795**	**3,795**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Total Windows & Doors**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12,524**	**0**	**0**	**12,524**	**12,524**	**12,524**	**100.0%**
A	**TOTAL STRUCTURE**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15,028**	**0**	**27,552**	**15,028**	**0**	**12,524**	**27,552**	**43,946**	**62.7%**
8.00	**Stairs, Balustrades & Handrails**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.00	**Total Stairs Balustrades & Handrails**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.00	**Internal Walls/Partitions**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

D - MAINTENANCE

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																					
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
9.01	Timber Framed Partition Walls	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,186	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.00	**Total Internal Walls/Partitions**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	2,186	0.0%
10.00	**Internal Doors**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.01	Timber Door - Single	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	1,518	0	0	1,518	1,518	1,518	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.00	**Total Internal Doors**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1,518	0	0	1,518	1,518	1,518	100.0%
11.00	**Floor Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.00	**Total Floor Finishes**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	0	0.0%
12.00	**Wall Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.01	Plywood/Hardboard Wall Linings with Painted Finishes	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	4,645	0	0	4,645	4,645	4,645	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.00	**Total Wall Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4,645	0	0	4,645	4,645	4,645	100.0%
13.00	**Ceiling Finishes**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.05	Plywood/Hardboard Ceiling Lining with Painted Finishes	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	740	0	740	0	740	740	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.00	**Total Ceiling Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	740	0	740	0	740	740	100.0%
14.00	**Fixed Joinery Units**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.06	Built-in Joinery - Generally, Benches, Shelves, Storage, etc	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	4,428	0	4,428	0	4,428	4,428	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.00	**Total Fixed Joinery Units**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4,428	0	4,428	0	4,428	4,428	100.0%
B	**TOTAL INTERNAL FIT-OUT**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	11,331	0	5,168	6,163	11,331	13,517	83.8%
15.00	**Sanitary Plumbing**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
15.01	Generally - Sink, CW Supply and Drainage	Assumed OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	1,265	0	1,265	0	1,265	1,265	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
15.00	**Total Sanitary Plumbing**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1,265	0	1,265	0	1,265	1,265	100.0%
16.00	**Mechanical Services**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
16.01	Air-Conditioning - DX/Split System	Evidence of Corrosion on Condenser unit. Assumed functioning	Service, clean regularly	4	70%						0	0	4,428	0	0	0	0	0	0	4,428	17,710	8,855	4,428	4,428	17,710	4,428	400.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
16.00	**Total Mechanical Services**			**4**	**70%**						**0**	**0**	**4,428**	**0**	**0**	**0**	**0**	**0**	**0**	**4,428**	17,710	8,855	4,428	4,428	17,710	4,428	400.0%
17.00	**Fire Services**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
17.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
17.00	**Total Fire Services**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	0	0.0%
18.00	**Electrical Services**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
18.01	Main Distribution Boards	Assumed functioning	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	1,898	0	1,898	0	1,898	1,898	100.0%
18.03	Electrical Wiring/Reticulation	Assumed functioning	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	1,366	0	1,366	0	1,366	1,366	100.0%
18.04	General Power Outlet	Assumed functioning	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	1,822	0	1,822	0	1,822	1,822	100.0%

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

D - MAINTENANCE

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																						
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
18.06	Lighting (External)	Assumed functioning	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	455	0	455	0	455	455	100.0%
18.09	Lighting (Internal)	Assumed functioning	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	1,822	0	1,822	0	1,822	1,822	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
18.00	**Total Electrical Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7,362	0	7,362	0	7,362	7,362	100.0%
19.00	**Vertical Transportation**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
19.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
19.00	**Total Vertical Transportation**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	0	0.0%
20.00	**Special Services**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
20.01	Telecommunication/Data Network	Assumed functioning	None	3	50%						0	0	0	0	0	0	0	0	0	633	1,265	633	0	633	1,265	633	200.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
20.00	**Total Special Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**633**	1,265	633	0	633	1,265	633	200.0%
C	**TOTAL BUILDING SERVICES**			**4**	**70%**						**0**	**0**	4,428	**0**	**0**	**0**	**0**	**0**	**0**	5,060	27,602	9,488	13,055	5,060	27,602	13,687	201.7%
	TOTAL BUILDING			**4**	**70%**						**0**	**0**	4,428	**0**	**0**	**0**	**0**	**0**	15,028	5,060	66,485	24,516	18,222	23,747	66,485	71,150	93.4%
	TOTAL BUILDING			4	70%						0	0	4,428	0	0	0	0	0	15,028	5,060	66,485	24,516	18,222	23,747	66,485	71,150	93.4%

24,516
Year 1 - 10 Consolidated Capital Replacement Cost

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

E - SHOWER HOUSE

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

		Condition Assessment		Condition Grading		Condition Gauge					1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG 0-20 %	G 20-40 %	A 40-60 %	P 60-80 %	VP 80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	**Sub-Structure**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.01	Reinforced Concrete Foundations Beams	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**6,072**	**0.0%**
1.03	Reinforced Concrete Slab on Grade	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**4,453**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.00	**Total Sub-Structure**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10,525**	**0.0%**
2.00	**Frame**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.01	Timber Frame (Truss)	Evidence of decay	Repair locally and clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**7,558**	**0**	**0**	**7,558**	**7,558**	**7,558**	**100.0%**
2.02	Reinforced Concrete Columns & Beams	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**6,148**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.00	**Total Frame**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,558**	**0**	**0**	**7,558**	**7,558**	**13,706**	**55.1%**
3.00	**Structural Walls**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.01	Reinforced Concrete Brick/Block Masonry Walls	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**20,038**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.00	**Total Structural Walls**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20,038**	**0.0%**
4.00	**Upper Floors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Total Upper Floors**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Roof**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Debris on roof, protective coating is fading	Clear debris and clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**7,558**	**0**	**7,558**	**0**	**7,558**	**7,558**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Total Roof**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,558**	**0**	**7,558**	**0**	**7,558**	**7,558**	**100.0%**
6.00	**External Walls & Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.02	Solid Plaster Cladding with Painted Finishes	OK	Wash regularly and repaint on maintenance programme	3	50%						0	0	0	0	0	0	0	0	0	0	**7,681**	**0**	**0**	**7,681**	**7,681**	**7,681**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.00	**Total External Walls & Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,681**	**0**	**0**	**7,681**	**7,681**	**7,681**	**100.0%**
7.00	**Windows & Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Total Windows & Doors**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
A	**TOTAL STRUCTURE**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22,798**	**0**	**7,558**	**15,240**	**22,798**	**59,508**	**38.3%**
8.00	**Stairs, Balustrades & Handrails**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.00	**Total Stairs Balustrades & Handrails**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.00	**Internal Walls/Partitions**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.01	None - See Structural Walls			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.00	**Total Internal Walls/Partitions**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**

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						Condition Gauge																					
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
10.00	**Internal Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.01	Timber Door - Single	Evidence of impact damage, marks, etc	Repaint and clean regularly	4	70%						0	0	0	0	0	0	0	0	0	0	**3,036**	**0**	**3,036**	**0**	**3,036**	**3,036**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.00	**Total Internal Doors**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3,036	**0**	3,036	**0**	3,036	3,036	**100.0%**
11.00	**Floor Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
11.01	Tiled Floor Finishes	Odd missing tile, generally untidy/unclean by appearance	Acid clean or consider early replacement	4	70%						0	0	0	0	0	0	0	0	7,286	0	**7,286**	**7,286**	**0**	**0**	**7,286**	**7,286**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
11.00	**Total Floor Finishes**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7,286	**0**	7,286	7,286	**0**	**0**	7,286	7,286	**100.0%**
12.00	**Wall Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
12.01	Plastered wall finishes with painted finishes	OK, needs cleaning	Wash regularly and repaint on maintenance programme	3	50%						0	0	0	0	0	0	0	0	0	6,394	**12,788**	**6,394**	**0**	**6,394**	**12,788**	**6,394**	**200.0%**
12.02	Tiled Wall Finishes	Odd missing tile, generally untidy/unclean by appearance	Acid clean or consider early replacement	4	70%						0	0	0	0	0	0	0	0	14,755	0	**14,755**	**14,755**	**0**	**0**	**14,755**	**14,755**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
12.00	**Total Wall Finishes**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	14,755	6,394	27,543	21,149	**0**	6,394	27,543	21,149	**130.2%**
13.00	**Ceiling Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
13.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
13.00	**Total Ceiling Finishes**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
14.00	**Fixed Joinery Units**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
14.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
14.00	**Total Fixed Joinery Units**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
B	**TOTAL INTERNAL FIT-OUT**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	22,041	6,394	37,865	28,435	3,036	6,394	37,865	31,471	**120.3%**
15.00	**Sanitary Plumbing**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
15.01	WC	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**7,590**	**0**	**7,590**	**0**	**7,590**	**7,590**	**100.0%**
15.01	Shower	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**5,693**	**0**	**5,693**	**0**	**5,693**	**5,693**	**100.0%**
15.02	Urinal (Stall)	OK	Clean regularly	2	30%						0	0	0	0	0	0	0	0	0	0	**6,831**	**0**	**0**	**6,831**	**6,831**	**6,831**	**100.0%**
15.04	WHB	OK	Clean regularly	2	30%						0	0	0	0	0	0	0	0	0	0	**4,428**	**0**	**0**	**4,428**	**4,428**	**4,428**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
15.00	**Total Sanitary Plumbing**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	24,541	**0**	13,283	11,259	24,541	24,541	**100.0%**
16.00	**Mechanical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.00	**Total Mechanical Services**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.00	**Fire Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.00	**Total Fire Services**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.00	**Electrical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.03	Lighting	OK, missing light bulb	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**810**	**0**	**810**	**0**	**810**	**810**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**

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E - SHOWER HOUSE

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						Condition Gauge																						
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
18.00	**Total Electrical Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**810**	**0**	**810**	**0**	**810**	**810**	**100.0%**
19.00	**Vertical Transportation**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
19.00	**Total Vertical Transportation**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Special Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
20.00	**Total Special Services**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
C	**TOTAL BUILDING SERVICES**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25,351**	**0**	**14,092**	**11,259**	**25,351**	**25,351**	**100.0%**
	TOTAL BUILDING			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22,041**	**6,394**	**86,014**	**28,435**	**24,687**	**32,892**	**86,014**	**116,330**	**73.9%**

28,435

Year 1 - 10 Consolidated Capital Replacement Cost

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

F - SECURITY POST

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

		Condition Assessment		Condition Grading		Condition Gauge					1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG 0-20 %	G 20-40 %	A 40-60 %	P 60-80 %	VP 80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
1.00	**Sub-Structure**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.01	Reinforced Concrete Foundations Beams	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**4,301**	**0.0%**
1.02	Reinforced Concrete Slab on Grade	Not inspected	None	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**2,435**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.00	**Total Sub-Structure**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,736**	**0.0%**
2.00	**Frame**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.02	Timber Frame (Truss)	OK	None	3	50%						0	0	0	0	0	0	0	0	0	0	**4,591**	**0**	**0**	**4,591**	**4,591**	**4,591**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.00	**Total Frame**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,591**	**0**	**0**	**4,591**	**4,591**	**4,591**	**100.0%**
3.00	**Structural Walls**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.01	Reinforced Concrete Block Masonry Walls with Painted Finishes	OK	Wash regularly and repaint on maintenance programme	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**8,516**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.00	**Total Structural Walls**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8,516**	**0.0%**
4.00	**Upper Floors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Total Upper Floors**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Roof**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence severe corrosion, hurricane damage, etc	Replace	5	90%						0	0	4,591	0	0	0	0	0	0	0	**4,591**	**4,591**	**0**	**0**	**4,591**	**4,591**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Total Roof**			**5**	**90%**						**0**	**0**	**4,591**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,591**	**4,591**	**0**	**0**	**4,591**	**4,591**	**100.0%**
6.00	**External Walls & Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.01	None - See Structural Walls			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.00	**Total External Walls & Finishes**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Windows & Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.01	Timber/Metal Framed Windows & Doors	Evidence of decay and corrosion	Repair, Repaint or consider early replacement	4	70%						0	0	0	0	0	0	0	0	0	0	**8,043**	**0**	**8,043**	**0**	**8,043**	**8,043**	**100.0%**
7.02	Timber Doors (Solid/No Glazing)	Evidence of decay	Repair, Repaint or consider early replacement	4	70%						0	0	0	0	0	0	0	0	0	0	**1,898**	**0**	**1,898**	**0**	**1,898**	**1,898**	**100.0%**
7.03	Metal Security Screens	Evidence of corrosion	Wire brush clean, rust treat, repaint or consider early replacement	4	70%						0	0	0	0	0	0	0	0	0	0	**1,892**	**0**	**1,892**	**0**	**1,892**	**1,892**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Total Windows & Doors**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11,833**	**0**	**11,833**	**0**	**11,833**	**11,833**	**100.0%**
A	**TOTAL STRUCTURE**			**4**	**70%**						**0**	**0**	**4,591**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21,015**	**4,591**	**11,833**	**4,591**	**21,015**	**36,267**	**57.9%**
8.00	**Stairs, Balustrades & Handrails**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.00	**Total Stairs Balustrades & Handrails**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.00	**Internal Walls/Partitions**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**

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F - SECURITY POST

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																					
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
9.00	**Total Internal Walls/Partitions**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.00	**Internal Doors**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.00	**Total Internal Doors**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
11.00	**Floor Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
11.02	Vinyl Floor Finishes	Evidence marks, tears, worn through, etc	Replace	5	90%						0	1,771	0	0	0	0	0	0	0	0	**3,542**	**1,771**	**0**	**1,771**	**3,542**	**1,771**	**200.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
11.00	**Total Floor Finishes**			**5**	**90%**						**0**	**1,771**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,542**	**1,771**	**0**	**1,771**	**3,542**	**1,771**	**200.0%**
12.00	**Wall Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
12.01	None - See Structural Walls			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
12.00	**Total Wall Finishes**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
13.00	**Ceiling Finishes**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
13.01	Plywood Ceiling Lining with Painted Finishes	OK	Repaint and clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**2,103**	**0**	**2,103**	**0**	**2,103**	**2,103**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
13.00	**Total Ceiling Finishes**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,103**	**0**	**2,103**	**0**	**2,103**	**2,103**	**100.0%**
14.00	**Fixed Joinery Units**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
14.07	Built-in Joinery - Bench Unit	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**633**	**0**	**633**	**0**	**633**	**633**	**100.0%**
14.08	Built-in Joinery - Shelving Unit	OK	Clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**633**	**0**	**633**	**0**	**633**	**633**	**100.0%**
14.09	Security Booth	Outdoors, tired but OK (serves purpose)	Consider replacement or maintain	4	70%						0	0	0	0	0	0	0	0	9,488	0	**9,488**	**9,488**	**0**	**0**	**9,488**	**9,488**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
14.00	**Total Fixed Joinery Units**			**4**	**70%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9,488**	**0**	**10,753**	**9,488**	**1,265**	**0**	**10,753**	**10,753**	**100.0%**
B	**TOTAL INTERNAL FIT-OUT**			**4**	**70%**						**0**	**1,771**	**0**	**0**	**0**	**0**	**0**	**0**	**9,488**	**0**	**16,398**	**11,259**	**3,368**	**1,771**	**16,398**	**14,627**	**112.1%**
15.00	**Sanitary Plumbing**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
15.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
15.00	**Total Sanitary Plumbing**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.00	**Mechanical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
16.00	**Total Mechanical Services**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.00	**Fire Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
17.00	**Total Fire Services**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.00	**Electrical Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
18.01	Sub-Main Distribution Boards	Assumed functioning OK	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**1,265**	**0**	**1,265**	**0**	**1,265**	**1,265**	**100.0%**
18.02	Electrical Wiring/Reticulation	Assumed functioning OK	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**443**	**0**	**443**	**0**	**443**	**443**	**100.0%**
18.03	General Power	Assumed functioning OK	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	**443**	**0**	**443**	**0**	**443**	**443**	**100.0%**

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Audit Date: October 2013

Revision: Final

		Condition Assessment		Condition Grading		Condition Gauge					1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG 0-20 %	G 20-40 %	A 40-60 %	P 60-80 %	VP 80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
18.04	Lighting (External)	Assumed functioning OK	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	221	0	221	0	221	221	100.0%
18.05	Lighting (Internal)	Assumed functioning OK	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	0	443	0	443	0	443	443	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
18.00	**Total Electrical Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2,815	0	2,815	0	2,815	2,815	100.0%
19.00	**Vertical Transportation**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
19.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
19.00	**Total Vertical Transportation**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	0	0	0	0	0	0.0%
20.00	**Special Services**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
20.01	Telecommunication/Data Network	Assumed functioning OK	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	633	1,265	633	0	633	1,265	633	200.0%
20.02	Security Services (Alarms)	Assumed functioning OK	Service regularly	3	50%						0	0	0	0	0	0	0	0	0	633	1,265	633	0	633	1,265	633	200.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
20.00	**Total Special Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1,265	2,530	1,265	0	1,265	2,530	1,265	200.0%
C	**TOTAL BUILDING SERVICES**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1,265	5,345	1,265	2,815	1,265	5,345	4,080	131.0%
	TOTAL BUILDING			**4**	**70%**						**0**	1,771	4,591	**0**	**0**	**0**	**0**	**0**	9,488	1,265	42,757	17,115	18,015	7,627	42,757	54,973	77.8%

17,115
Year 1 - 10 Consolidated Capital Replacement Cost

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

SITE INFRASTRUCTURE

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																						
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deter.	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Total	Full Replace	% Full Replace
1.00	**Roading**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.01	Gravel Roads	Poor	Import, spread and compact new gravel	4	70%						0	1,518	0	0	0	0	1,518	0	0	0	**7,590**	**3,036**	**3,036**	**1,518**	**7,590**	**1,518**	**500.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
1.00	**Total Roading**			**4**	**70%**						**0**	**1,518**	**0**	**0**	**0**	**0**	**1,518**	**0**	**0**	**0**	**7,590**	**3,036**	**3,036**	**1,518**	**7,590**	**1,518**	**500.0%**
2.00	**Car Parks**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.01	Gravel Car Parks	Poor	Import, spread and compact new gravel	4	70%						0	1,518	0	0	0	0	1,518	0	0	0	**7,590**	**3,036**	**3,036**	**1,518**	**7,590**	**1,518**	**500.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
2.00	**Total Car Parks**			**4**	**70%**						**0**	**1,518**	**0**	**0**	**0**	**0**	**1,518**	**0**	**0**	**0**	**7,590**	**3,036**	**3,036**	**1,518**	**7,590**	**1,518**	**500.0%**
3.00	**Foot Paths & Circulation Areas**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.02	Reinforced Concrete Foot Paths & Circulation Areas	OK	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**49,783**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
3.00	**Total Foot Paths & Collection Areas**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49,783**	**0.0%**
4.00	**Fences & Gates**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.02	Chain Link Fences (Basket Ball Pavement)	Missing mesh	Replace	5	90%						0	0	0	0	10,626	0	0	0	0	0	**10,626**	**10,626**	**0**	**0**	**10,626**	**10,626**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
4.00	**Total Fences & Gates**			**5**	**90%**						**0**	**0**	**0**	**0**	**10,626**	**0**	**0**	**0**	**0**	**0**	**10,626**	**10,626**	**0**	**0**	**10,626**	**10,626**	**100.0%**
5.00	**Structures**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.01	Generator/Transformer Building (Connected to Building C)			4	70%						0	0	0	0	0	0	0	0	0	0	**254,720**	**0**	**254,720**	**0**	**254,720**	**254,720**	**100.0%**
5.02	Carport (Connected to Building C)			4	70%						0	0	0	0	0	0	0	0	0	0	**121,440**	**0**	**121,440**	**0**	**121,440**	**121,440**	**100.0%**
5.03	Storage Shed (Connected to Building C)			4	70%						0	0	0	0	0	0	0	0	0	0	**21,859**	**0**	**21,859**	**0**	**21,859**	**21,859**	**100.0%**
5.04	Basketball Court			5	90%						0	0	0	0	170,775	0	0	0	0	0	**170,775**	**170,775**	**0**	**0**	**170,775**	**170,775**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
5.00	**Total Structures**			**5**	**90%**						**0**	**0**	**0**	**0**	**170,775**	**0**	**0**	**0**	**0**	**0**	**568,795**	**170,775**	**398,020**	**0**	**568,795**	**568,795**	**100.0%**
6.00	**Retaining Walls**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.01	None			0	0%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
6.00	**Total Retaining Walls**			**0**	**0%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Site Drainage**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.01	Swales	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**6,325**	**0.0%**
7.02	Soak Pits	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	12,650	0	0	0	0	0	**37,950**	**12,650**	**12,650**	**12,650**	**37,950**	**12,650**	**300.0%**
7.03	Manholes	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**25,300**	**0**	**0**	**25,300**	**25,300**	**25,300**	**100.0%**
7.04	Inground Piped Sewer Drainage	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**37,950**	**0**	**0**	**37,950**	**37,950**	**37,950**	**100.0%**
7.05	Sceptic Tanks	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**11,385**	**0**	**0**	**11,385**	**11,385**	**11,385**	**100.0%**
7.06	Pumps	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	6,325	**12,650**	**6,325**	**0**	**6,325**	**12,650**	**6,325**	**200.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
7.00	**Site Drainage**			**3**	**50%**						**0**	**0**	**0**	**0**	**12,650**	**0**	**0**	**0**	**0**	**6,325**	**125,235**	**18,975**	**12,650**	**93,610**	**125,235**	**99,935**	**125.3%**
8.00	**Electrical Infrastructure**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.01	Temporary Generators & Fuel Storage	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**379,500**	**0**	**379,500**	**0**	**379,500**	**379,500**	**100.0%**
8.02	Transformers	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**44,275**	**0**	**44,275**	**0**	**44,275**	**44,275**	**100.0%**

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

SITE INFRASTRUCTURE

Document: **CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN**

Audit Date: October 2013

Revision: Final

						Condition Gauge																						
		Condition Assessment		Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10		Asset Renewal Cost					
ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deter.	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	2013 ($ USD)	2014 ($ USD)	2015 ($ USD)	2016 ($ USD)	2017 ($ USD)	2018 ($ USD)	2019 ($ USD)	2020 ($ USD)	2021 ($ USD)	2022 ($ USD)	Total ($ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Total	Full Replace	% Full Replace
8.03	HV/LV Electrical Reticulation	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**56,925**	**0**	**56,925**	**0**	**56,925**	**56,925**	**100.0%**
8.04	Lighting Poles	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**10,120**	**0**	**10,120**	**0**	**10,120**	**10,120**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
8.00	**Total Electrical Infrastructure**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**490,820**	**0**	**490,820**	**0**	**490,820**	**490,820**	**100.0%**
9.00	**Water Services**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.01	Incoming Water Mains	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**25,300**	**0**	**0**	**25,300**	**25,300**	**25,300**	**100.0%**
9.02	Water Reticulation	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**15,180**	**0**	**0**	**15,180**	**15,180**	**15,180**	**100.0%**
9.03	Meters	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**7,590**	**0**	**0**	**7,590**	**7,590**	**7,590**	**100.0%**
9.04	Water Storage Tanks	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**6,325**	**0**	**0**	**6,325**	**6,325**	**6,325**	**100.0%**
9.05	Pumps	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	3,163	**6,325**	**3,163**	**0**	**3,163**	**6,325**	**3,163**	**200.0%**
9.06	Hydrants	Assumed operating satisfactorily	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**3,795**	**0**	**0**	**3,795**	**3,795**	**3,795**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
9.00	**Total Water Services**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,163**	**64,515**	**3,163**	**0**	**61,353**	**64,515**	**61,353**	**105.2%**
10.00	**Site Furniture**										0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.01	Site Furniture Generally	OK	Maintain	3	50%						0	0	0	0	0	0	0	0	0	0	**12,650**	**0**	**12,650**	**0**	**12,650**	**12,650**	**100.0%**
											0	0	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**	**0**	**0**	**0.0%**
10.00	**Total Site Furniture**			**3**	**50%**						**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12,650**	**0**	**12,650**	**0**	**12,650**	**12,650**	**100.0%**
	TOTAL SITE INFRASTRUCTURE										**0**	**3,036**	**0**	**0**	**194,051**	**0**	**3,036**	**0**	**0**	**9,488**	**1,287,821**	**209,611**	**920,212**	**157,999**	**1,287,821**	**1,296,997**	**99.3%**

209,611

Year 1 - 10 Consolidated Capital Replacement Cost

Project: **COLLEGE OF MICRONESIA - FSM**

Campus: **FSM-FMI (FISHERIES & MARITIME INSTITUTE), GAGIL, YAP STATE**

Document: **BUILDING, SERVICES & SITE INFRASTRUCTURE QUESTIONNAIRE**

Auditor:

Audit Date:

Note to Questionnaire: The majority of the questions have been geared towards answering on a building by building basis and each comment should be included in the building column to which it relates. Site Infrastructure questions that are more geared site wide, you are to note in brackets (site wide) and then your answer to the question in the column closest to the left. Several abbreviations have been used below and we note the main ones used are as follows: FM=Facilities Manager/Facilities Management Team, H&S=Health and Safety, AC=Air Conditioning.

Beca/FM Meeting Date:	
Discussion With:	
Position:	
Phone:	
Email:	

Ref	Category	Questionnaire	Building A Administration/Student Services & Residence/Mess Hall	Building B Staff Housing	Building C Classrooms, Library & Shops	Building D Maintenance	Building E Shower House	Building F Security Post	Outbuildings i.e. Generator Buildings, etc
1	**Campus Particulars**	How many students are on site?	59 (housing capacity is sixty)						
		How many teachers are on site?	10						
		Is there a Caretaker on-site? Part time or Full time? (please circle)	security and faculty and staff leaving on campus.						
		What are the campus Operating Hours - Week Days	8:00 am to 5:00 pm						
		What are the campus Operating Hours - Weekends	Closed (except for the dining hall)						
		What are the campus Operating Hours - Public Holidays (If applicable)	Closed (except for the dining hall)						
2	**Energy Records**	What is the Monthly or Annual Energy Consumption Cost for Power, Gas, Electrical (State All) - Copies of Bills Required (By Building or Whole Campus) One meter forall the campus and the campus uses about 9140 kwh/month.	9140 for all buildings on campus.						
3	**Building Particulars**	What is the approximate age of the buildings. Also state approximate date of last refurbishment (Comment in adjacent cells):	40 plus years	17 years	40 plus years	17 yes	10 years	40 years plus	
		Who constructed the building structures (i.e. America, Japan or Local)	US contractors	LOCAL	US contractors	Local Conractor			
		Have any major repair works been recently undertaken e.g. Concrete crack/patch repairs, replacement of timber framing damaged by termites, replacing corroded steel elements, painting, services overhaul, etc and the like.	Painting painting and portion of interior. Ceramic tile replacement.	Exteriror Painting and minor repairs.	Painting painting and portion of interior.	Building frames steel structure are beginning to rust.	Painting, plumbing and builing minor repairs.	Exteriror and interior Painting and minor repairs.	
		Have you taken any photos previously and/or can provide photos showing roof cladding (Note: Only roof cladding that is not visible from ground level), sub floor framing/sub-floor void and ceiling cavity/roof framing for each or some of the buildings located on the campus?	None	NO Photo but roofing sheets are rusted.	None	None	Roof structure is in good condition	Roofing sheets are deteriorating and may need replacement soon.	
		In addition to the above, are there any other 'intrusive' photos of buildings (such as of wall cavities) that have been taken of any of the buildings and can you provide these?	None	None	None	None	None	none	
		Has any of the cladding recently been removed to inspect the condition of framing to either the floor, walls, ceiling or roof of a building on the campus? If so please explain and provide photos if possible.	No	No	No	No	no	No	
		Please list any current known problems with the campus buildings (List problems below and note which buildings are affected in the adjacent cells and where): e.g. Subsidence issues, water leaks, Termite attack, cracking or spalling concrete, exposed reinforcing steel, corrosion, Hurricane/Typhoon Damage, AC/Ventilation plant problems, electrical problems, water supply problems, sewer blockages, etc	Resealing of roof and typhoon shutters needs to be replaced.	May need roofing sheet replacement.Center half of the roof is developing rust.	Resealing of roof, Need to replace the old AC units.	Building frames steel structure are beginning to rust.	Roof structure is in good condition	Roofing sheets are developing rust will soon needs replacement	
4	**Programmed Maintenance**	Is there programmed maintenance for the following: (Mark answer in adjacent building cells or comment in general)							
		Building Washing (By FM or Sub-Contract)	Who does it: Facility Maintenance staff	Who does it: Facility Maintenance staff	Who does it: Facility Maintenance staff	Who does it: Facility Maintenance staff	Who does it: Facility Maintenance staff		
			What is done: Water Pressure washing	What is done: Water Pressure washing	What is done: Water Pressure washing	What is done: Water Pressure washing	What is done: Water Pressure washing		
			Frequency: AS needed basis	Frequency: AS needed basis	Frequency: AS needed basis	Frequency: AS needed basis	Frequency: AS needed basis		
		Termite Protection (By FM or Sub-Contract)	Who does it: Never been done	Who does it: Never been done	Who does it: Never been done	Who does it: Never been done	Who does it: Never been done		
			What is done: By Contractor if ncessary	What is done: By Contractor if ncessary	What is done: By Contractor if ncessary	What is done: By Contractor if ncessary	What is done: By Contractor if ncessary		
			Frequency: As Required	Frequency: As Required	Frequency: As Required	Frequency: As Required	Frequency: As Required		
		Painting Programme (By FM or Sub-Contract)	Who does it: Contractor and Facility Maintenance Staff	Who does it: Contractor and Facility Maintenance Staff	Who does it: Contractor and Facility Maintenance Staff	Who does it: Contractor and Facility Maintenance Staff	Who does it: Contractor and Facility Maintenance Staff		
			What is done: Pressure wash building exterior, srape and paint.	What is done: Pressure wash building exterior, srape and paint.	What is done: Pressure wash building exterior, srape and paint.	What is done: Pressure wash building exterior, srape and paint.	What is done: Pressure wash building exterior, srape and paint.		
			Frequency:AS needed basis	Frequency:AS needed basis	Frequency:AS needed basis	Frequency:AS needed basis	Frequency:AS needed basis		
		Minor Building Repair Works (By FM or Sub-Contract)	Who does it:By FacilityMaintenance staff	Who does it:By FacilityMaintenance staff	Who does it:By FacilityMaintenance staff	Who does it:By FacilityMaintenance staff	Who does it:By FacilityMaintenance staff		
			What is done: Replacement of doors, interior touch-up paint, wall repairs, ceiling repairs,etc..	What is done: Replacement of doors, interior touch-up paint, wall repairs, ceiling repairs,etc..	What is done: Replacement of doors, interior touch-up paint, wall repairs, ceiling repairs,etc..	What is done: Replacement of doors, interior touch-up paint, wall repairs, ceiling repairs,etc..	What is done: Replacement of doors, interior touch-up paint, wall repairs, ceiling repairs,etc..		

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Beca/FM Meeting Date:	
Discussion With:	
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			Building A	Building B	Building C	Building D	Building E	Building F	Outbuildings
Ref	**Category**	**Questionnaire**	**Administration/Student Services & Residence/Mess Hall**	**Staff Housing**	**Classrooms, Library & Shops**	**Maintenance**	**Shower House**	**Security Post**	**i.e. Generator Buildings, etc**
			Frequency: Monthly inspection followed by repairs as needed.	Frequency: Monthly inspection followed by repairs as needed.	Frequency: Monthly inspection followed by repairs as needed.	Frequency: Monthly inspection followed by repairs as needed.	Frequency: Monthly inspection followed by repairs as needed.		
		HVAC Servicing and Filter Changes (By FM or Sub-Contract)	Who does it:By FacilityMaintenance staff	Who does it:By FacilityMaintenance staff	Who does it:By FacilityMaintenance staff	Who does it:By FacilityMaintenance staff			
			What is done: Wash and reinstall	What is done: Wash and reinstall	What is done: Wash and reinstall	What is done: Wash and reinstall			
			Frequency: Monthly.	Frequency: Monthly.	Frequency: Monthly.	Frequency: Monthly.			
		Servicing of Security Services (By FM or Sub-Contract)	Who does it: N/A	Who does it: N/A	Who does it: N/A	Who does it: N/A			
			What is done: N/A	What is done: N/A	What is done: N/A	What is done: N/A			
			Frequency: N/A	Frequency: N/A	Frequency: N/A	Frequency: N/A			
		Servicing of Fire Protection Services (By FM or Sub-Contract)	Who does it:	Who does it:	Who does it:	Who does it:			
			What is done:	What is done:	What is done:	What is done:			
			Frequency:	Frequency:	Frequency:	Frequency:			
		Plumbing and Drainage Maintenance (By FM or Sub-Contract)	Who does it: Facility Maintenance staff	Who does it: Facility Maintenance staff	Who does it: Facility Maintenance staff	Who does it: Facility Maintenance staff			
			What is done: Repairs and as needed.	What is done: Repairs and as needed.	What is done: Repairs and as needed.	What is done: Repairs and as needed.			
			Frequency: As needed basis	Frequency: As needed basis	Frequency: As needed basis	Frequency: As needed basis			
		Other: (Please State below)	Who does it:	Who does it:	Who does it:	Who does it:			
			What is done:	What is done:	What is done:	What is done:			
			Frequency:	Frequency:	Frequency:	Frequency:			
5	**Air Conditioning Services**	What is the AC Type - DX/Split System, VRF System, Water Cooled System, Other	Split Units and window mount	Split Units and window mount	Split Units and window mount	Split Units and window mount	None	none	
		Are there any Complaints about the Services from Users? (Note Examples)	none	none	none	none	N/A	N/A	
		Are Plant Systems Manual or Automated? Are Systems left on when not needed?	Not applicable	Not applicable	Not applicable	Not applicable	N/A	N/A	
		What is the maintenance history? (i.e. what has been done and when)	Not available	Not available	Not available	Not available	N/A	N/A	
		Are there any As-Built Drawings / O&M Manuals	N/A	N/A	N/A	N/A	N/A	N/A	
		Are there any Upcoming Works or Planned Upgrades?	replacement of old units with R410 A refrigerant units.	replacement of old units with R410 A refrigerant units.	replacement of old units with R410 A refrigerant units.	replacement of old units with R410 A refrigerant units.	N/A	N/A	
		Are there any systems installed that are not used?	None	None	None	None	N/A	N/A	
		Is their Local Control (Y/N)	individual unit controls only	individual unit controls only	individual unit controls only	individual unit controls only	N/A	N/A	
		Is there a Timer or Central Controller (Y/N)	individual unit timers only	individual unit timers only	individual unit timers only	individual unit timers only	N/A	N/A	
		What are the Operating Hours	Normally from 8:00 am to 5:00 pm	Normally from 8:00 am to 5:00 pm	Normally from 8:00 am to 5:00 pm	Normally from 8:00 am to 5:00 pm	N/A	N/A	
		Is there a Out of Hours Button (Y/N)	No	No	No	No	N/A	N/A	
		Are there any Temperature Set points	No	No	No	No	N/A	N/A	
6	**Ventilation Services**	What is the Ventilation Type - Supply, Extract, W/C Extract, Kitchen Extract, Other	None	None	None	None	None	None	
		Are there any Complaints about the Services from Users? (Note Examples)	N/A	N/A	N/A	N/A	N/A	N/A	
		Are Plant Systems Manual or Automated? Are Systems left on when not needed?	N/A	N/A	N/A	N/A	N/A	N/A	

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		What is the maintenance history? (i.e. what has been done and when)	N/A	N/A	N/A	N/A	N/A	N/A	
		Are there any As-Built Drawings / O&M Manuals	N/A	N/A	N/A	N/A	N/A	N/A	
		Are there any Upcoming Works or Planned Upgrades?	N/A	N/A	N/A	N/A	N/A	N/A	
		Are there any systems installed that are not used?	N/A	N/A	N/A	N/A	N/A	N/A	
		Is there Local Control (Y/N)	N/A	N/A	N/A	N/A	N/A	N/A	
		Is there a Timer or Central Controller (Y/N)	N/A	N/A	N/A	N/A	N/A	N/A	
		What are the Operating Hours	N/A	N/A	N/A	N/A	N/A	N/A	
		Is there an Out of Hours Button (Y/N)	N/A	N/A	N/A	N/A	N/A	N/A	
		Are Filters present in the Ventilation system(Y/N)	N/A	N/A	N/A	N/A	N/A	N/A	
		What is the Filter Condition (Poor/Good)	N/A	N/A	N/A	N/A	N/A	N/A	
		Do the Filters get cleaned? If so how often?	N/A	N/A	N/A	N/A	N/A	N/A	
		How often do the Filters get replaced?	N/A	N/A	N/A	N/A	N/A	N/A	
7	**Lighting**	What is the Lighting Type - Incandescent, Fluorescent, LED, Other	Flourescent tubes T12 fixtures and compact flourescent light bulbs.	Flourescent tubes T12 fixtures and compact flourescent light bulbs.	Flourescent tubes T12 fixtures and compact flourescent light bulbs.	Flourescent tubes T12 fixtures and compact flourescent light bulbs.	Compact flourescent light bulbs.	Compact flourescent light bulbs.	
		Is lighting left on when not needed?	none except for unattended lights.	none except for unattended lights.	none except for unattended lights.	none except for unattended lights.	none except for unattended lights.	none	
		What is the maintenance history? (i.e. what has been done and when)	Replacement of most light fixtures were made done in 2010	Replacement of most light fixtures were made done in 2010	Replacement of most light fixtures were made done in 2010	Replacement of most light fixtures were made done in 2010			
		Are there any Upcoming Works or Planned Upgrades?	Replacement of light fixtures with energy efficient light fixtures, installation of daylight controlled swtiches.	Replacement of light fixtures with energy efficient light fixtures, installation of daylight controlled swtiches.	Replacement of light fixtures with energy efficient light fixtures, installation of daylight controlled swtiches.	Replacement of light fixtures with energy efficient light fixtures, installation of daylight controlled swtiches.			
		Are there any As-Built Drawings / O&M Manuals	none	none	none	none	none	none	
		Is the Lighting all Operating & In Use (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	
		Is the light Manual Switching (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	
		Is there a Timer (Y/N)	none	none	none	none	none	none	
		Is there an Out of Hours Button (Y/N)	no	no	no	no	no	no	
		Is there any Daylight Sensing (Y/N)	none	none	none	none	none	none	
8	**Power**	In terms of equipment listed below what is being powered in each building:							
		Computers (Y/N)	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Printers/Photocopiers (Y/N)	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Servers (Y/N)	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		LCD/LED/Plasma Televisions (Y/N)	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Hot Water Cylinders (Y/N)	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Domestic Appliances such as Fridges, Microwaves, Ovens, Dish Washers, etc (Y/N)	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Other (Please state):	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Other (Please state):	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Other (Please state):	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Other (Please state):	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
		Other (Please state):	Approximate Number:	Approximate Number:	Approximate Number:	Approximate Number:			
9	**Plumbing**	Any Hot Water Systems (Y/N)	none	none	none	none	none		
		Any Hot Water Pumps (Y/N)	none	none	none	none	none		
		Any Solar Hot Water (Y/N)	none	none	none	none	none		
		Any Cold Water (Y/N)	yes	yes	yes	yes	yes		

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		Any Cold Water Storage (Y/N)	none	none	none	none	none		
		Any Cold Water Pump (Y/N)	none	none	none	none	none		
		Any Hot Water Temperature Controls (Y/N)	none	none	none	none	none		
		Any Timer Central Controller (Y/N)	none	none	none	none	none		
		Any Out of Hours Button (Y/N)	none	none	none	none	none		
10	**Electrical Infrastructure**	What are the age of the electrical installations i.e. approximately when was the Electrical works undertaken?	30 plus years						
		How is Island power generated?	Public power sytem						
		What is the reliability of electrical supply?	reliable						
		Is mains power available to all parts of the site 24/7?	Yes						
		What is the Electrical usage over normal 24 hour period?	One meter for a all the building Monthly usage for the whole campus is 9140 kilo watt hours.						
		What are the Electrical Operating Costs?	Cost of electricity by the power company is $0.78 cents per kilo watt hour.						
		Is there any Network & Distribution Cabling (i.e. Overhead & Underground Installations)?	Yes, underground 240 volts, three phase						
		Are there any Underground Cabling Issues? (e.g. cable trenching difficulties, backfilling around cables and cable derating issues).	No test have been done to underground.						
		Are there any Overhead Cabling Issues (e.g. Salt laden environment, cyclones, etc)	not on this site						
		What is the Age of electrical installations?	40 years and older						
		Who maintains the Electrical installations and how frequently?	Low voltage by FSMI staff and high voltage by the utility company.						
		What is the availability of alternative electrical sources (Diesel genset, wind generators, solar panels, storage batteries)?	Diesel Generator						
		Are there any other installations of solar and wind power?	none						
		Are there any restrictions of connecting alternative energy sources to the grid?	not sure						
		What is the Electrical Source Capacities (kVA) - Does the Campus demand exceed supply	125 KVA						
		Are there any back-up/temporary power generators on site (Y/N). If so what is the capacity	yes						
		Is there any Sourcing & bulk storage of fuel for back-up/temporary power generators?	none						
		Network Distribution Type (i.e. MEN, Floating Neutral, Earth Returns)?	not sure						
		Distribution Voltages (Multi & Single Phase Configurations)?	Single and three phase						
		What are the applicable Regulation Standards for the Islands electrical installations (i.e. AU, NZ UK, US, European or International)?	US National Electric Code						
		How and whom are new Electrical Installations sourced and installed?							
		Are there any current H&S issues or concerns?	none						
		Are there electrical contractors on the island and what is their capacity for work?	Low voltatge electrical contractors and high voltage is available with the public utility company.						
		What is the availability of existing electrical infrastructure information (i.e. As-Built Documentation)?	No as-built drawing available on campus.						
11	**Water Supply**	Who is responsible for the public water supply?	YSPUC water and electrical utility company.						
		What is the source of drinking water?	Public water system						
		What is the site connection status (i.e. is mains water available 24/7 or do they run out of water, are there seasonal impacts, etc)?	Water is available 24/7						
		Is it satisfactory for the current college operation?	Yes						
		Is there any additional water treatment on site?	None						
		How many connections?	One main						
		What is the incoming pipe size?	2"PVC pipe						
		What is the condition of the pipework i.e. does it leak (visible leaks)? Do they know what the pipes pressure rating is? Pipework outside of the buildings?	No system leaks except for fixture leaks. Pipe are old galvanize pipes and may need to be replaced with PVC.						
		What valves are present on-site? Can they isolate each building?	Yes						
		Are there water meters? If so how many?	Yes, one main meter.						
		Are there water usage records? Y/N What is the consumption per day or month?	Yes, 261,450 gallons per month.						
		Are there issues of non-continuous service (i.e. less than 24 hour availability) Is this a problem for the college?	None						
		Is there adequate water flow/pressure/quality when the supply is operating	None						

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		Water quality - Are there issues, bacterial or chemical status.	None						
		Is the college concerned with the H&S of the available water?	No						
		Are lab tests available?	Yap EPA office can provide water quality test if necessary.						
		What treatment does the municipal water receive?	Yes, chlorination						
		Are there additional water sources on site (e.g. roof water, run-off, stream, river, etc)	Yes but for fire fighting system training use.						
		Are there any meters on site? Estimate of Daily Water Use? Estimate of peak use?	Yes , one main meter for the whole campus facilities.						
		Previous reports on water system, water demand, equipment upgrades, water analyses?	Plans include installation of water meters on staf for housing.						
		Existing documentation for pipes, pumps, tanks, etc showing location?	None on campus.						
		Are there any Reservoirs/Tanks on site (i.e. above ground, in ground, concrete, steel, plastic covered, uncovered) Note: Mark on Plan where located and size	Yes,rain water catchment tanks are used for fire fighting training.						
		Are the Reservoirs/Tanks interconnected or associated with particular college areas? If so what size are these?	no						
		How is water pressure maintained? (i.e. pump, header tank) Is it adequate?	header tanks system						
		Whole site pressurisation or individual buildings?	Whole site						
		Fire fighting - Is this provided from the college internal water supply or separate reservoir?	Rain water is collected from the roof of the buildings and used for fire fighting training and for campus use.						
		Are there sprinkler systems, fire hydrants or irrigation systems? (If so where - show on plan)	None						
12	**Waste Water Systems**	Does Municipal sewer system connect to College?	no						
		How is waste water collected? Is there any Piped reticulation	campus sewer collection system						
		Are there designated toilet blocks or are there toilets within each building.?	toilets for each building and one designated toilet andshower building.						
		Is there on site accommodation i.e. dormitories ?	Yes						
		Is wastewater piped to one disposal point or several for each site.?	Two separate septic tanks and open leaching field.						
		Is wastewater treated? If so how? (i.e. septic tank, treatment plant, etc) Or does it just get piped into the ground to soak away?	Yes, septic tank and leach field. Leaching field has been disconnected.						
		If treated where is the treatment plant for each site, what condition is it in?	On site						
		Any Odour apparent on-site? Structure and general integrity of waster water disposal systems?	None						
		Where does wastewater end up treated or untreated. i.e. effluent disposed to ground, stream, river or a gulley?	Leaching field under ground						
		Is saltwater used for flushing?	none						
		Is freshwater flushing using the same source as the drinking water supply?	yes						
		Are sewers adequate?	yes						
		Is there a case of Regular Overflows?	occasional						
		Is the number of toilets sufficient?	yes						
13	**Communications**	Are there any radio towers? (If so how many?)	yes, one						
		Are there any satellite dishes? (If so how many?)	none						
		Do you have IT connections & where are these located and installed?	Yes, located at building C classroom and shop building.						
		Does the Campus use wireless? Is this specific to certain buildings only?	no						
		Is there a server room?	no server at FSM-FMI						
		Who is the Telco supplier?	FSM Telecommunication Corporation.						
		How is Telco distributed?	Under ground fiber optic and copper cables.						
		What is the Standard of telecommunications installations?	IT&E standards						
		Where are the points of supply located?	Along the mainpublic roads.						
14	**Gas Services**	Is the supply from town or gas bottle?	Gas bottles						
15	**Car Parks and Access Roads**	Carparks needed _____ No. Carparks available _____ No.							
		Is there sufficient access to the site from the main road (i.e. is there traffic congestion at points of entry)? (Yes/No)	no						
		Are these sealed i.e. asphalt or chip seal? If sealed when were they last sealed.?	Not on campus						

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		If not sealed are they metaled (Gravel road)?	Yes						
		If metaled do they have potholes?	yes						
		If metaled do they have corrugations i.e. transverse commonly on the inside of steep corners?	Yes corrosive						
		Do they have ruts i.e. longitudinal that the water runs down?	yes						
		How thick is the metal? Does it have any compacted basecourse/subgrade?	no						
		Are there stormwater culverts /bridges over streams or watercourses? Do they have sufficient capacity in a storm or does water flow over them?	no						
		Are there formed drains along side the edge of roads etc, or kerb and channel?	yes						
		Where does stormwater go from the roads?	On the ground						
16	**Storm Water**	Are there any nearby streams that flood and do the banks overtop (Yes/No) - If yes then where (mark on site plan)	no						
		Do the car parks flood (Yes/No) - If yes then where (mark on site plan)	no						
		Does the site flood (Yes/No) - If yes then where (mark on site plan)	no						
		Is there any stormwater discharged straight into the sea (Yes/No/NA) - If yes then what is the condition (i.e. affects of corrosion) and is this affected by tide?	no						
		Are there any roof gutters? (Yes/No)	yes						
		Is the roof water collected for drinking? (Yes/No)	No						
		When roof gutters overtop or if there aren't gutters present, where does the water flow once its on the ground?- Is there a clear flowpath or is it sheet flow. ?	On the ground						
		If gutters and downpipes are present what happens when they reach capacity. i.e. does stormwater flow overtop gutters or do the downpipes go into an open pipe and discharge across the ground when there isn't enough capacity in the pipe?	Over flows to ground						
		Does stormwater cause scour at any locations? Is stormwater concentrated at any one / or several locations. Where are these? (mark on site plan)	Goes down locations beyond campus grounds.						
		Does stormwater cause flooding i.e. around doorways and walkways ? if so which ones? (mark on site plan)	yes, at buildings B &C						
		Does stormwater flow into basements, if any? (mark on site plan)	n/a						
		Does stormwater flow under buildings? i.e. if buildings are on piles (mark on site plan)	no						
		Where does stormwater ultimately end up.? i.e. stream, gully, sea. Are there any signs of scour (abrasive damage to ground) at these locations. Photos of outlet(s) is there any discolouration present?	none						
		What is the Building proximity to banks or slopes? Are there any buildings considered to be too close?	5 feet to 300feet and none,						

Appendix D

Energy Use Analysis

Project: College of Micronesia
FMI Campus

Date of Inspection: April 2013
Report by: JGB

Building System Descriptions	
HVAC System	AC Split-Units to provide cooling. No extract or supply system. Natural ventilation by open windows/spaces.
Plumbing System	Metered connection to town water main, cold water only
Electrical System	Underground metered connection to town main. Single and Three Phase

Plant Item	Description	Location	Operation	Condition	Current maintenance	Recommendations	Current Operational Status
Mechanical Systems							
AC Units	Split-units	Internal	Manual Operation	Poor	Monthly filter cleaning, quarterly condenser unit cleaning	Replace damaged units with higher efficiency units.	
AC Units	Split-units	Internal	Manual Operation	Average	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units 24degC.	
General AC Units	Some outdoor units have debris in their filters.	External		Poor		These units require immediate filter cleaning.	
General AC Units	Some outdoor units are heavily rusting.	"		Poor		Consider replacing old/damaged units with more efficient ones.	
General AC Units	Some outdoor units have been vandalized	"		Poor		The units require cleaning or replacement.	
General AC Units	Dirty outdoor units	External		Poor		Wipe down to avoid excess dirt getting into filters.	
General	Room Infiltration			Average		Properly seal all holes into the building and close doors to AC spaces	
General	Roof insulation.			Average		Replace insulation where missing	
Lighting	Internal lighting during the day.	Internal		Good		Turn off lights when not required	
General	Closed curtains/blinds during daylight hours.	Internal		Average		Open curtains to increase natural lighting.	
Electrical	Workshop equipment	Internal	-	Good	-	Regularly service equipment and turn off after hours	

Recommendation Key	
	Plant operating efficiently
	Improvements possible with minimal capital expenditure
	Capital investment recommended to improve system within 2-5years
	Plant requires significant maintenance or replacement
	Potential Health and Safety Hazard
Potential for Future Improvement	An opportunity to improve the standard of servicing in the site - for consideration in future stages.

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Plant Item	Description	Location	Operation	Condition	Current maintenance	Recommendations	Current Operational Status
A Administration/Student Services & Residence/Mess Hall							
AC Units	Split-units	Internal	Manual Operation	Poor	Monthly filter cleaning, quarterly condenser unit cleaning	Replace damaged units with higher efficiency units.	
AC Units	Split-units	Internal	Manual Operation	Average	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units 24degC.	
Lighting	Fluorescent tubes & compact fluorescent bulbs	All areas	Manual operation	Average	To replace magnetic ballast fluorescent fixtures with electronic	Turn lights off when not in use.	
General	Roof insulation	Internal	-	Average	-	Install and replace insulation and ceiling tiles as needed	
General	Window shade	Internal	-	Poor		Replace broken windows with higher quality tinted or provide window curtain	
General	Kitchen Extract Hood	Internal	-	Average		Clean grilles and check ductwork for blockages	
General	Door infiltration	Internal	-	Poor	-	Repair or replace door frame and install self closing mechanism	
B Staff Housing							
AC Units	Split-units	Internal	Manual Operation	Poor	Monthly filter cleaning, quarterly condenser unit cleaning	Replace damaged units with higher efficiency units.	
AC Units	Split-units	Internal	Manual Operation	Average	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units 24degC.	
General	Roof insulation	Internal	-	Average	-	Install and replace insulation and ceiling tiles as needed	
Electrical	Appliance standby	Internal	manual operation	Average		Switch off after hour, Replace broken appliances with higher efficiency equipment.	
General	Door infiltration	Internal	-	Poor	-	Repair or replace door frame and install self closing mechanism	
C Classrooms, Library & Shops							
AC Units	Split-units	Internal	Manual Operation	Poor	Monthly filter cleaning, quarterly condenser unit cleaning	Replace damaged units with higher efficiency units.	
AC Units	Split-units	Internal	Manual Operation	Average	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units 24degC.	
Lighting	Fluorescent tubes & compact fluorescent bulbs	All areas	Manual operation	Good	To replace magnetic ballast fluorescent fixtures with electronic	Turn lights off when not in use.	
General	Roof insulation	Internal	-	Average	-	Add insulation where missing.	
General	Door infiltration	Internal	-	Poor	-	Repair or replace door frame and install self closing mechanism	
General	Air compressor	Internal	-	Good	-	Repair air leaks and service regularly	
Electrical	Workshop equipment	Internal	-	Good	-	Regularly service equipment and turn off after hours	
D Maintenance							
AC Units	Split-units	Internal	Manual Operation	Poor	Monthly filter cleaning, quarterly condenser unit cleaning	Replace damaged units with higher efficiency units.	
AC Units	Split-units	Internal	Manual Operation	Average	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units 24degC.	
Lighting	Fluorescent tubes & compact fluorescent bulbs	All areas	Manual operation	Average	To replace magnetic ballast fluorescent fixtures with electronic	Turn lights off when not in use	
General	Roof insulation	Internal	-	Average	-	Add insulation where missing.	
General	Door infiltration	Internal	-	Poor	-	Repair or replace door frame and install self closing mechanism	
Electrical	Workshop equipment	Internal	-	Good	-	Maintain equipment and turn off after hours	
E Shower House							
Lighting	Fluorescent tubes & compact fluorescent bulbs	All areas		Average		Turn off lights when not in use. Consider using facility during daylight hours only	
Roof Insulation	Roof insulation	Internal	-	Average	-	Add insulation where missing.	
General	Room infiltration	Internal	-	Average	-	Install window curtains on A/C spaces	
General	Rust on fan blades	Internal	-	Average	-	Replace old/damaged fans with new ones to improve efficiency.	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	
Electrical	Appliance standby	Internal	manual operation	Average		Switch off after hours	
F Security Post							

Lighting	Fluorescent tubes & compact fluorescent bulbs	All areas	Manual operation	Average	To replace magnetic ballast fluorescent fixtures with electronic	Turn lights off when not in use.	
Outbuildings							
Lighting	Fluorescent tubes & compact fluorescent bulbs	All areas		Good		Turn off lights when not in use. Consider using facility during daylight hours only	

Recommendation Key	
	Plant operating efficiently
	Improvements possible with minimal capital expenditure
	Capital investment recommended to improve system within 2-5years
	Plant requires significant maintenance or replacement
	Potential Health and Safety Hazard
Potential for Future Improvement	An opportunity to improve the standard of servicing in the site - for consideration in future stages.