

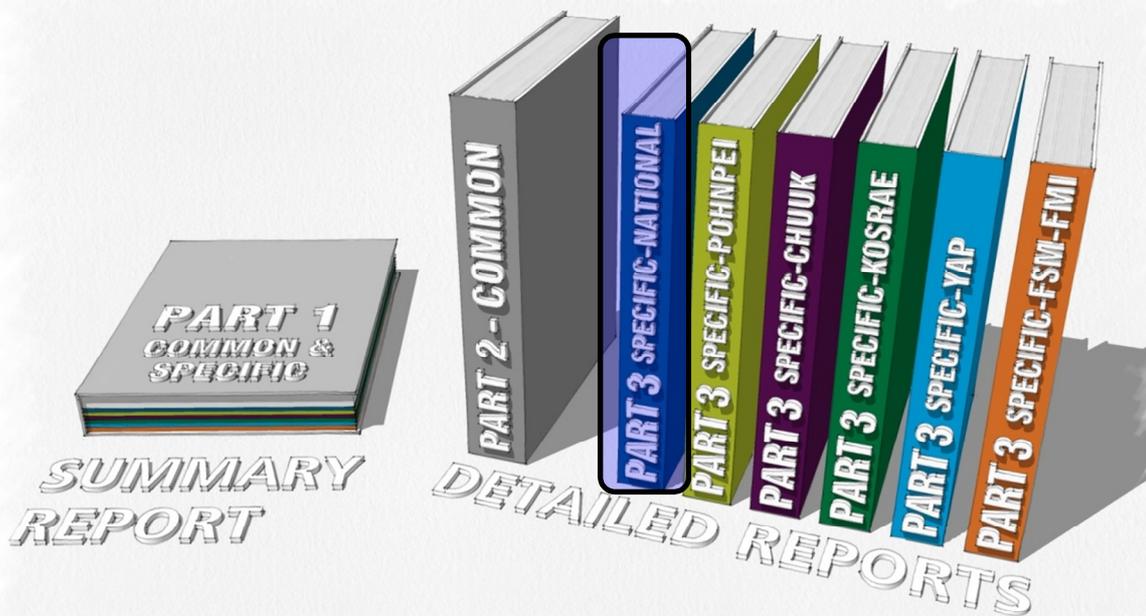
Report

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

Prepared for the College of Micronesia - FSM

Prepared by Beca International Consultants Ltd (Beca)

28 November 2013



Revision History

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2	Annette Jones	Final issue for Board of Regents meeting on the 2 nd December 2013	28/11/2013
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4			
5			

Document Acceptance

Action	Name	Signed	Date
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on behalf of	Beca International Consultants Ltd		

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Contents

1	National Campus Development.....	1
1.1	National Campus 2013.....	1
1.2	Long Term Vision	2
1.3	5 year period – to 2018	5
1.4	10 year period – to 2023	6
1.5	Long Term Vision – beyond 2023	7
1.6	Development Staging and Program - Implementation	8
2	Educational Component	9
2.1	Key Considerations	9
2.2	Space Utilisation.....	9
3	Spatial Review.....	12
3.1	Design Concept Plans.....	12
3.2	Focus Group Summary	13
3.3	Spatial Analysis	16
3.4	Accommodation Review.....	29
4	Asset Condition Assessment – National Campus	35
4.1	National Campus Building Condition Review.....	35
5	Energy Audit	44
5.1	Energy Efficiency Recommendations	44

Appendices

Appendix A

Topographical Survey Plan & Title Information

Appendix B

Building Condition Assessments

Appendix C

Indicative Asset Renewal and Maintenance Cost Plan

Appendix D

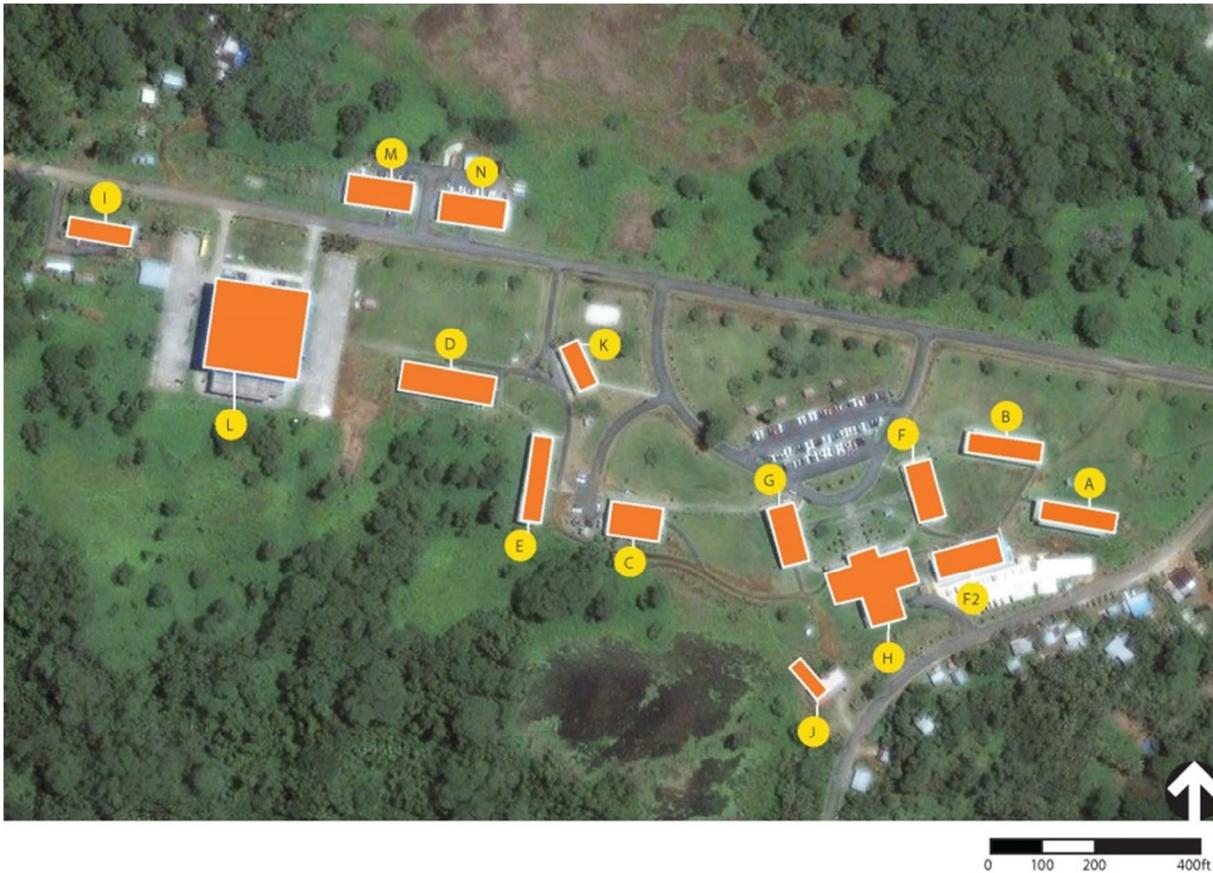
Energy Use Analysis

Appendix E

Planting Palette

1 National Campus Development

1.1 National Campus 2013



The National campus is located on 73 acres near Pailikir in Pohnpei. The campus provides degree courses and has a boarding facility on site. The campus is 6 miles from the Pohnpei Career and Technical Education Centre in Kolonia.

The Fall 2013 National campus enrolment (headcount) is 1017. The maximum number enrolled occurred in Fall 2011 at 1018 with this figure not reached since then.

A headcount of 1136 has been provided by the space utilization study as the projected headcount in 2018. This 5 year projection figure has been used as the basis for the design figure for assessing future facilities requirements.

No.	Building Description	Remarks
A	Specialized classrooms (Building A)	Two levels
B	Standard classrooms (Building B)	Two levels

No.	Building Description	Remarks
C	Dining Hall	
D	Men's Residence Hall	Two levels
E	Women's Residence Hall	Two levels
F	Faculty Offices (old)	
F2	Faculty Office (new)	
G	Administration	Two levels
H	Learning Resources Centre & MITC	Two levels with a lift
I	Agriculture	
J	A + Centre & Art Classroom	Converted into Public Health education for Fall 2013 semester
K	Bookstore, Dispensary	Student services added from Fall 2013 semester
L	FSM-China Friendship Sports Centre	
M	Security, Weights Room, IT Shop	
N	Maintenance CRE, Music Classroom	

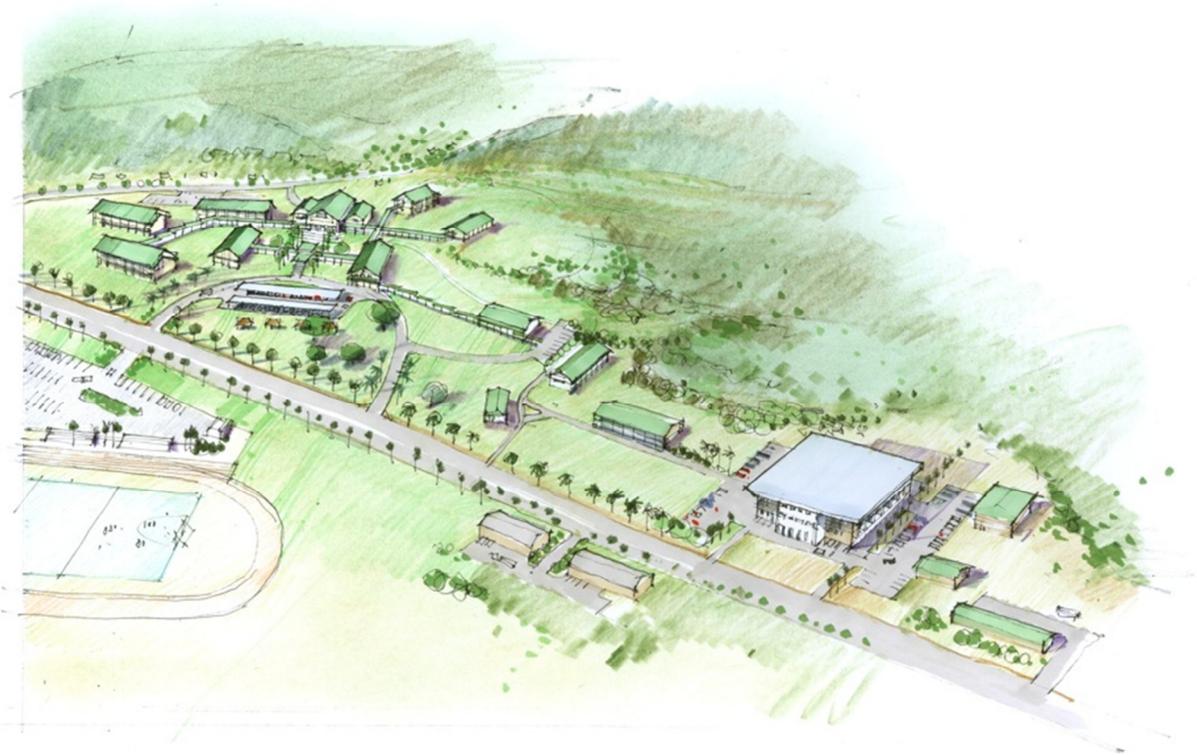
1.2 Long Term Vision

The National campus will have facilities to support the following;

- Increased sharing of courses and facilities with the Technical and Education Centre in Kolonia - moving towards being one campus – two locations
- A place on the campus where students can go to during the day that supports campus life
- A strengthened community interface on the southern boundary
- Buildings that have a reduced maintenance and operational cost through design and selection of materials
- Renewable energy and incorporate sustainability measures

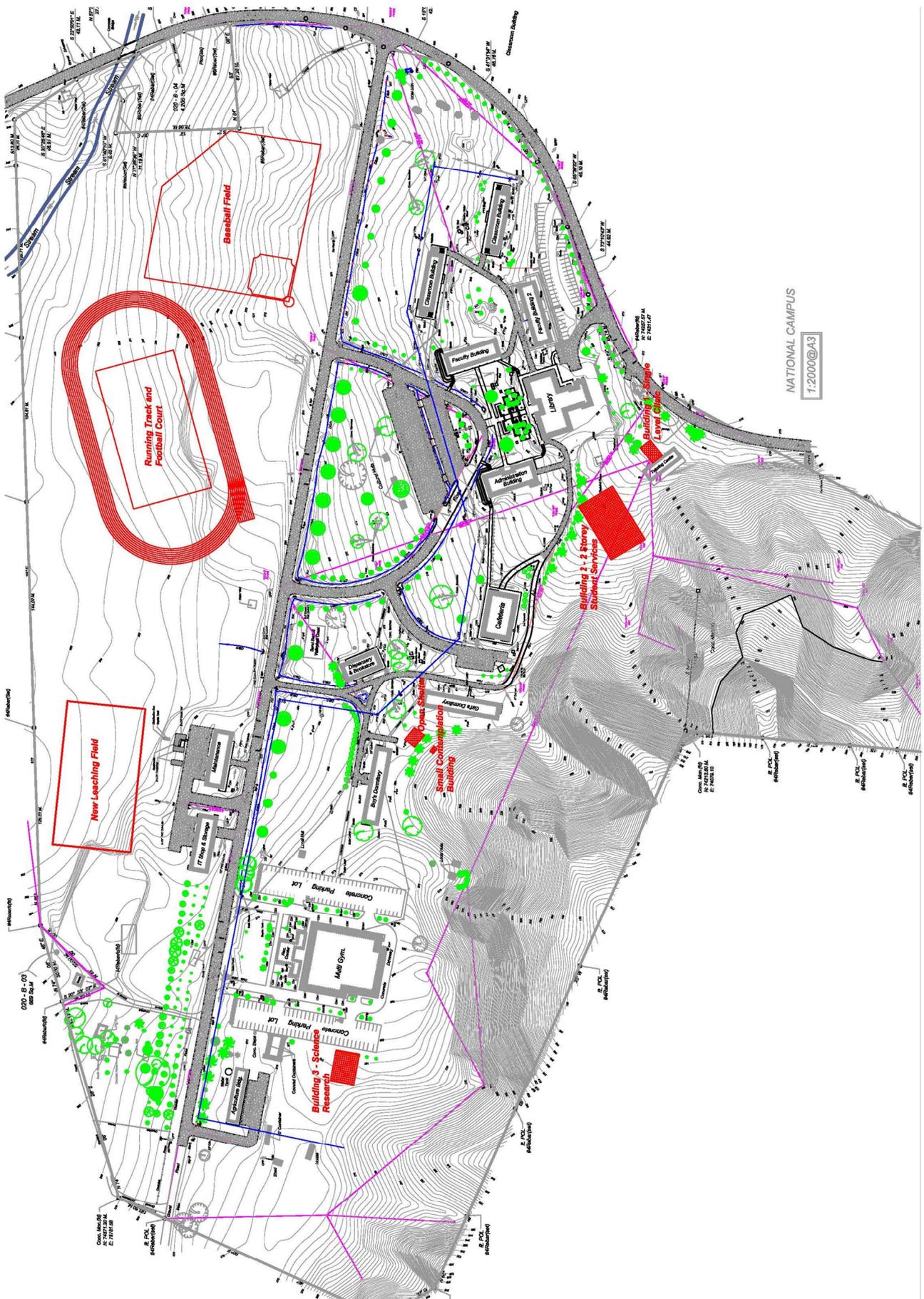
Key Moves

1. Review the impact on the National campus facilities with a one campus - two location approach
2. Support campus life, the student experience and learning outcomes with increased focussed study areas, student centre, communal outdoor area for the residential facilities
3. Look at ways to gain space efficiencies by moving functions within existing buildings – for example swapping Public Health and Student Services in Fall 2013, using mobile shelving or an additional storage building to gain more space for administration staff
4. Increase the recreational facilities with completion of athletics track and baseball pitch in the long term



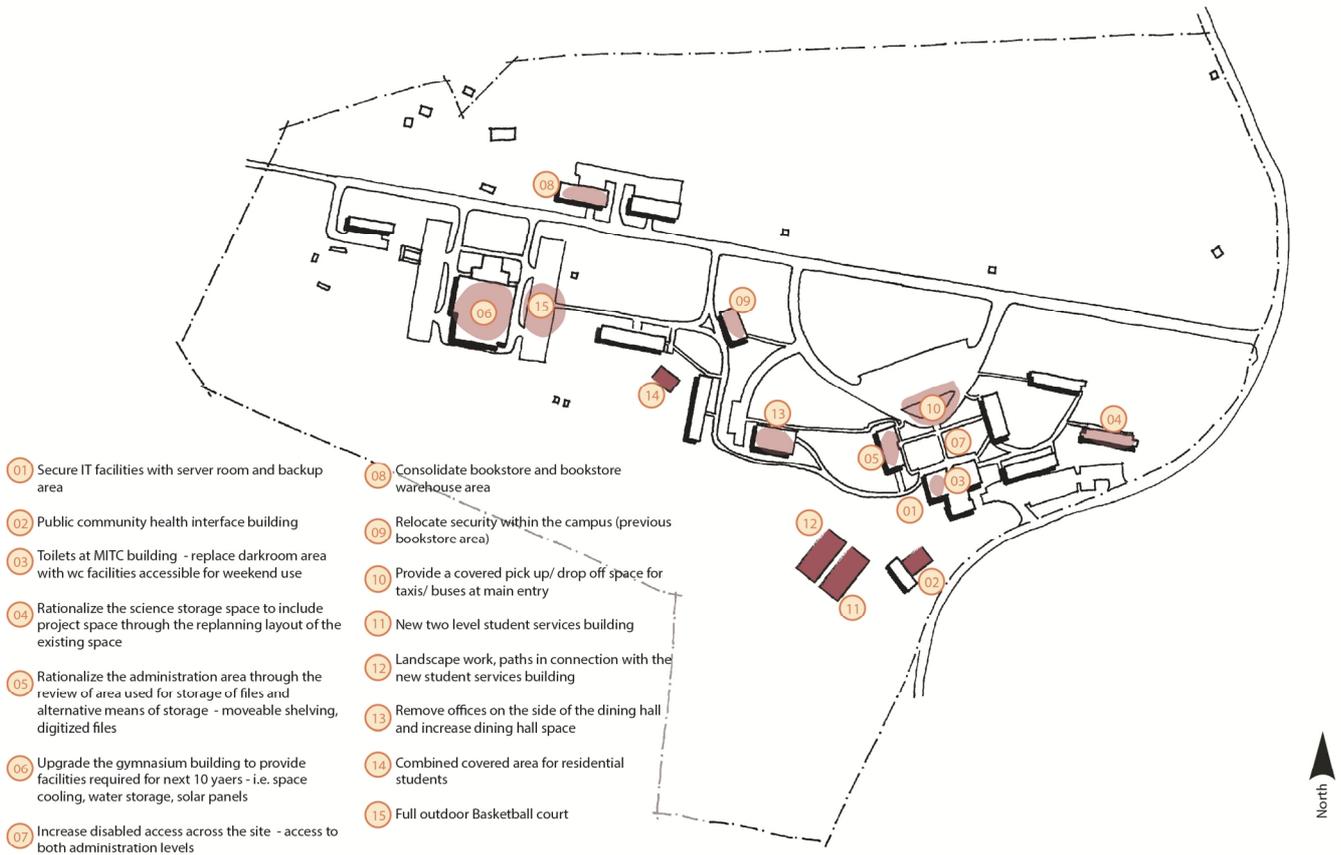
The following plan depicts the proposed layout with the new buildings identified in red. The accommodation schedules listing the functions and areas for the spaces within these buildings are contained in Chapter 3.4.2.

The stages to reach this long term vision are described in the staging plans and the program at the end of this chapter.



1.3 5 year period – to 2018

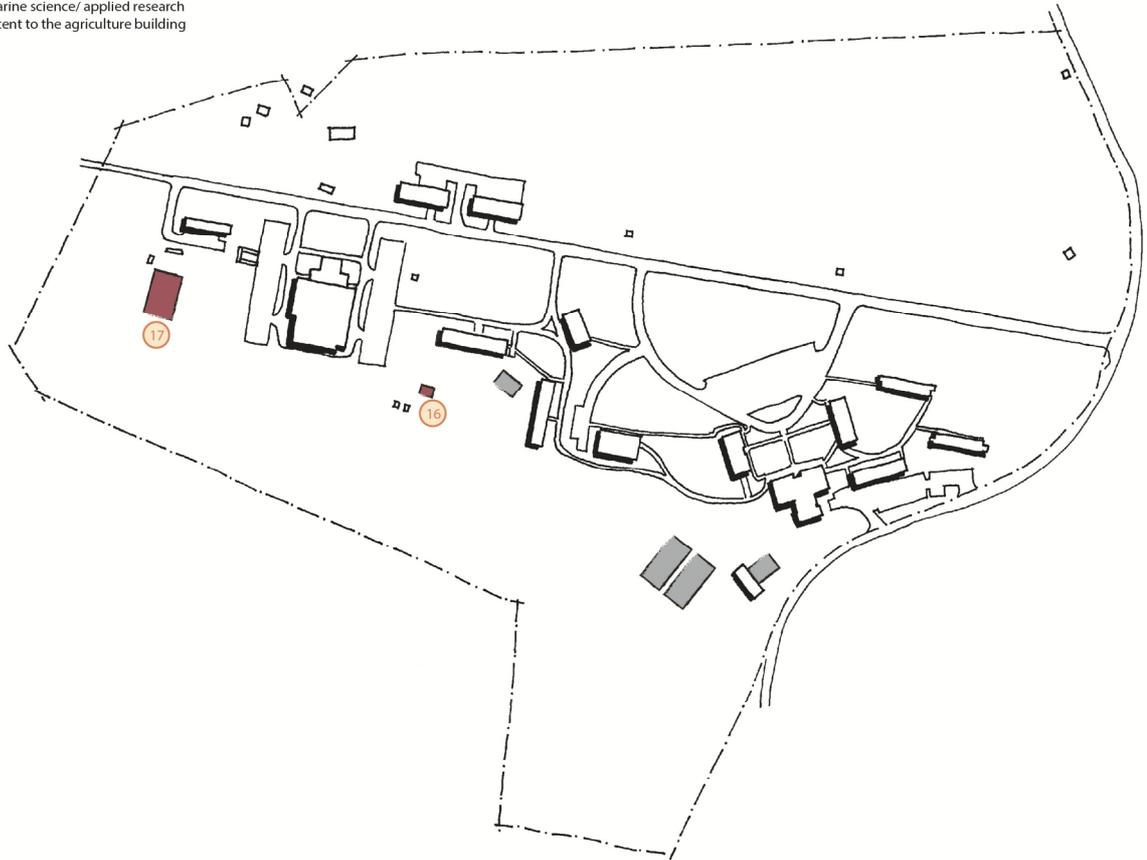
5 year period to 2018



1.4 10 year period – to 2023

10 year period to 2023

- 16 Quiet contemplation place for residential students - pastoral care
- 17 Two storey marine science/ applied research building adjacent to the agriculture building



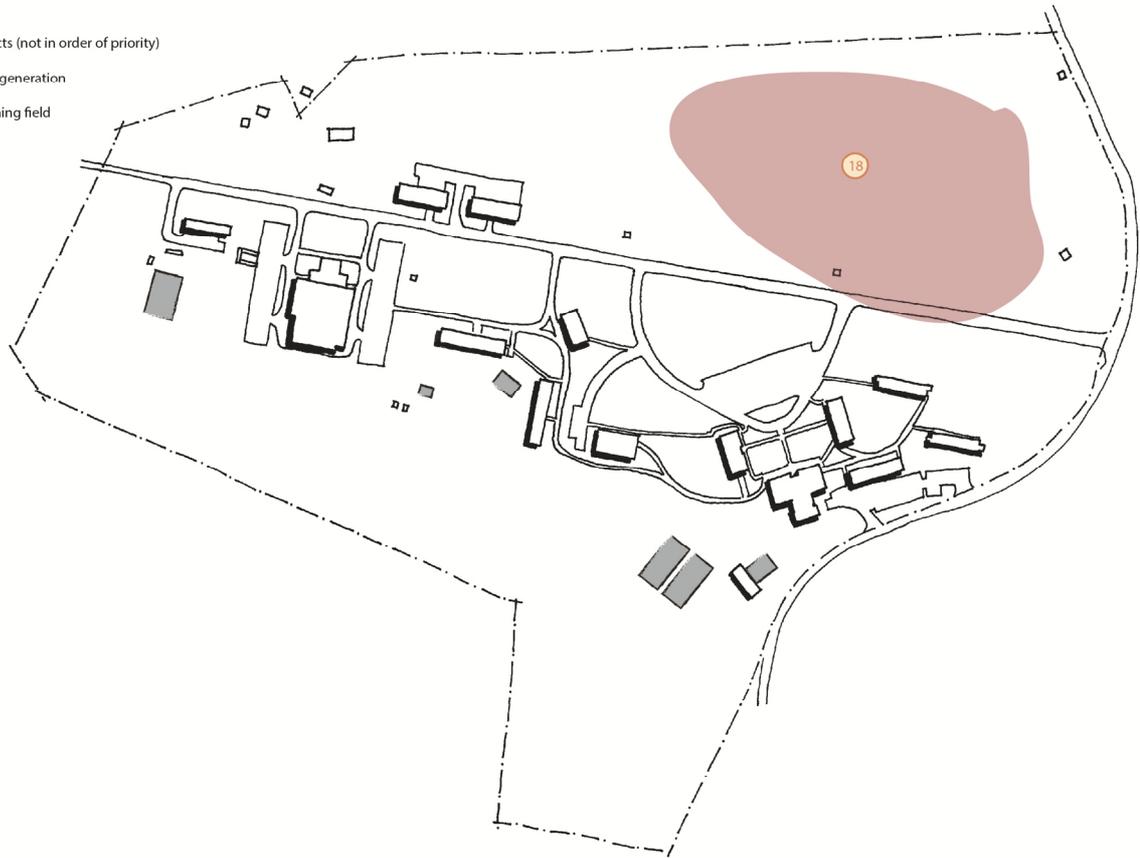
1.5 Long Term Vision – beyond 2023

Beyond 2023

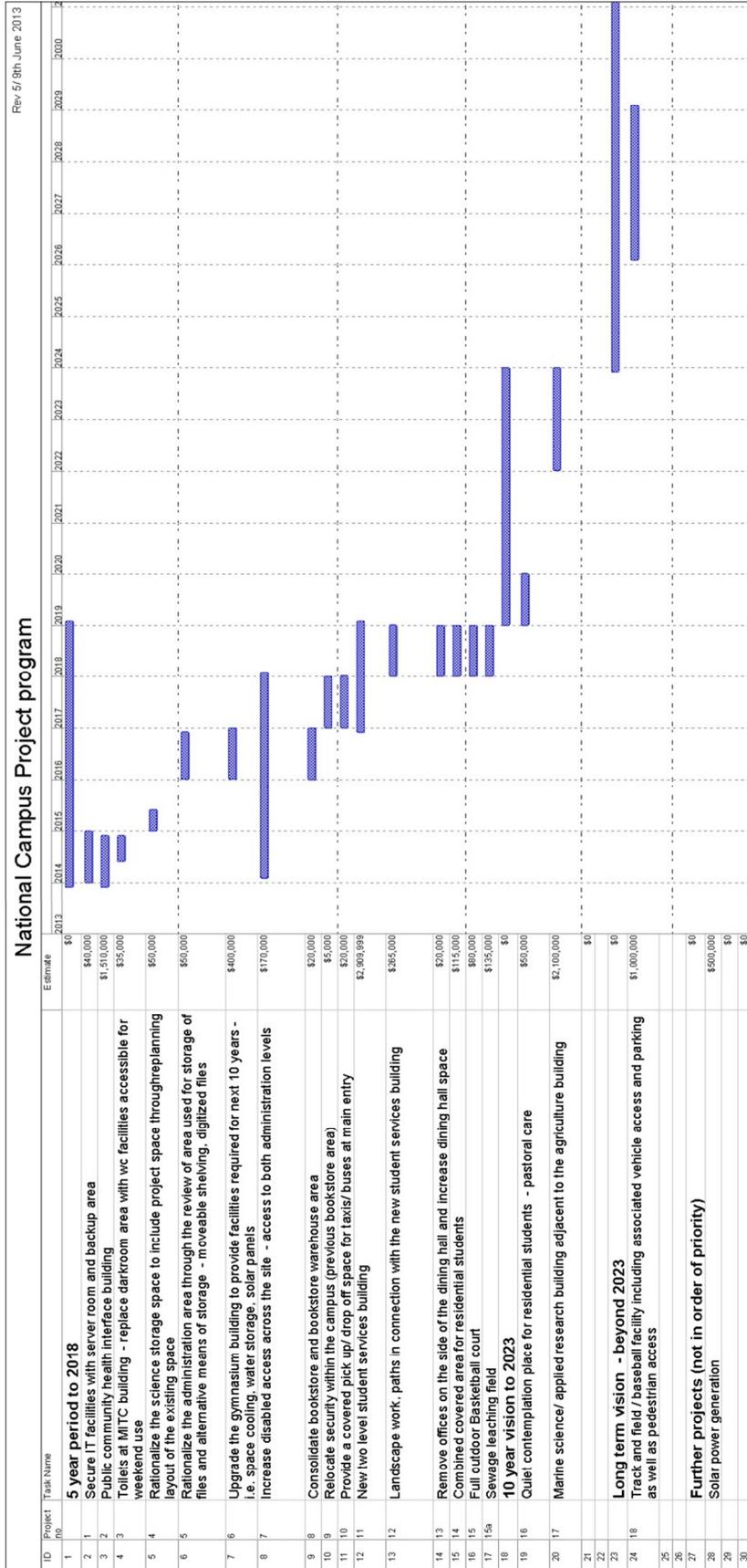
- 18 Track and field / baseball facility including associated vehicle access and parking as well as pedestrian access

Further projects (not in order of priority)

- Solar power generation
- Extend leaching field



1.6 Development Staging and Program - Implementation



2 Educational Component

2.1 Key Considerations

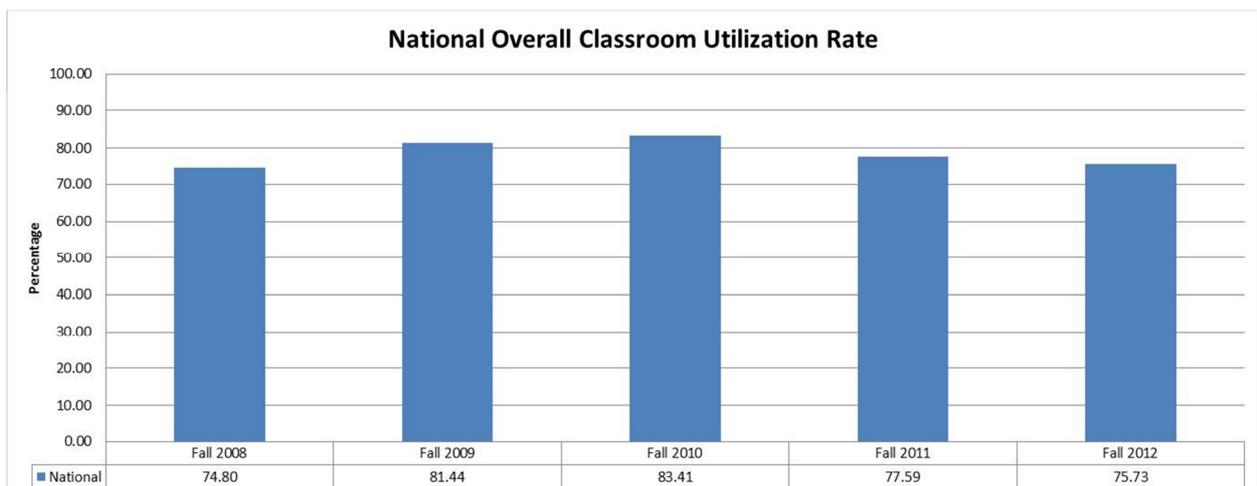
- Classroom utilization levels and utilization rates are in the moderate-to-high range, but have been trending downward from a 2010 peak (see Tables 2.2.1 and 2.2.2)
- Enrolment projections, though complicated by recent declines, still suggest a trend of modest growth through 2023 (see Chart 2.2.3). Enrolment could reach the peak levels of 2011 again by 2015, but still remain within an acceptable “high utilization” range through 2023.
- Together these data indicate an effective utilization of existing capacity while allowing adequate room for modest enrolment growth over the ten year planning horizon.

2.2 Space Utilisation

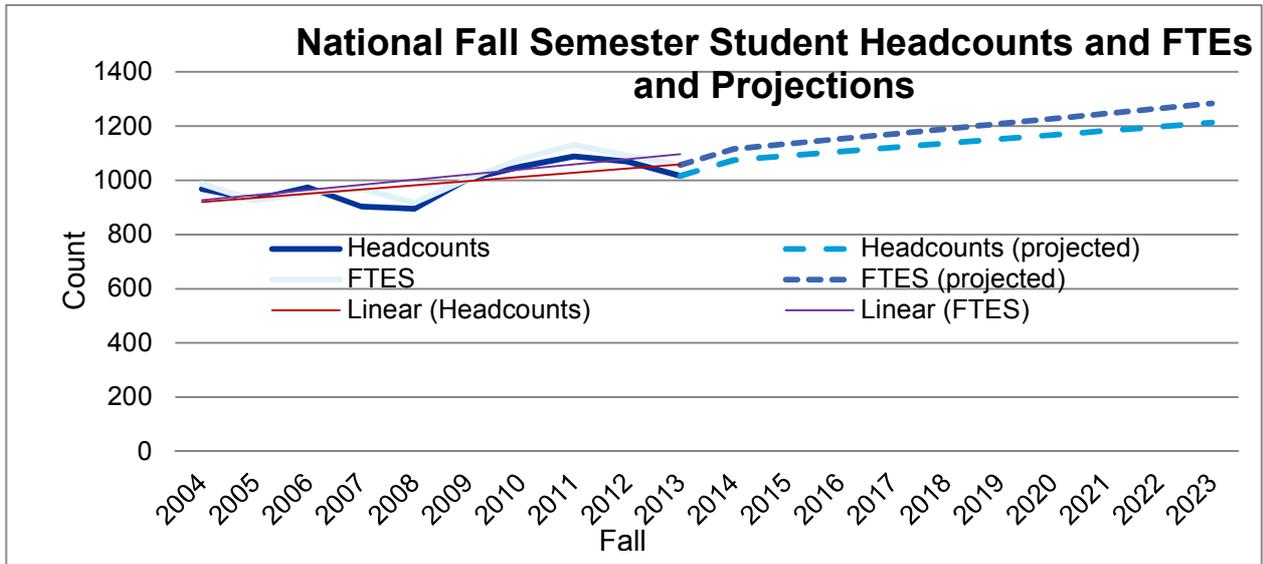
2.2.1 National Campus Utilization Levels (2008-2012)

High (>75%)	33%
Moderate (>66%)	33%
Low (>50%)	21%
Underutilized (<=50%)	13%
Total	100%

2.2.2 National Overall Classroom Utilization Rate



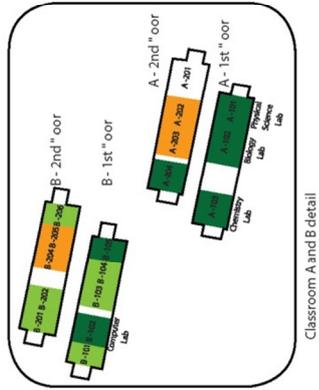
2.2.3 National Campus Historic and Projected Enrolment Trends



Historic Enrolment										
Semester	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013
Headcount	968	929	974	903	895	1005	1051	1088	1069	1017
FTE	987	924	955	968	917	1005	1080	1131	1092	1056
Projected Enrolment										
Semester	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
Headcount	1075	1090	1106	1121	1136	1152	1167	1183	1198	1214
FTE	1115	1134	1153	1171	1190	1209	1228	1247	1265	1284

2.2.4 Space Utilization Summary Plan

National Campus

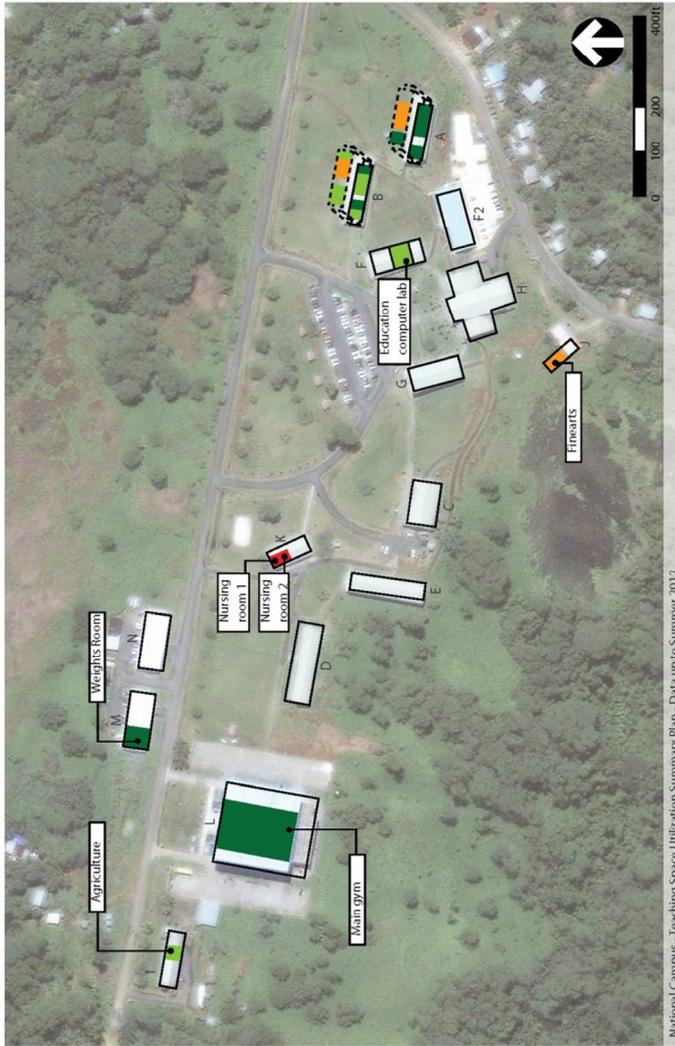


Classroom A and B detail

NOTE:
This plan shows the Sandy Pond utilization assessment in Summer 2012. Nursing teaching spaces have been moved into Building J for the start of Fall Semester 2013.

LEGEND
(Average utilization based on room capacities)

- High (> 75%)
- Moderate (> 66%)
- Low (> 50%)
- Underutilized (≤ 50%)
- Not timetabled



National Campus - Teaching Space Utilization Summary Plan - Data up to Summer 2012

No.	Building Description	Utilization Level
A	Specialized classrooms (Building A)	High (> 75%)
B	Standard classrooms (Building B)	High (> 75%)
C	Dining Hall	Low (> 50%)
D	Men's Residence Hall	Low (> 50%)
E	Women's Residence Hall	Low (> 50%)
F	Faculty Offices (old)	Underutilized (≤ 50%)
F2	Faculty Offices (new)	Underutilized (≤ 50%)
G	Administration	Underutilized (≤ 50%)
H	Learning Resources Center and MITC	Underutilized (≤ 50%)
I	Agriculture	Not timetabled
J	A + Center and Art Classroom	Not timetabled
K	Book store, Dispensary, Student Services	Not timetabled
L	FSM - China Friendship Sports Center	Not timetabled
M	Security, Weights Room, IT Shop	Not timetabled
N	Maintenance, CRE, Music Classroom	Not timetabled

3 Spatial Review

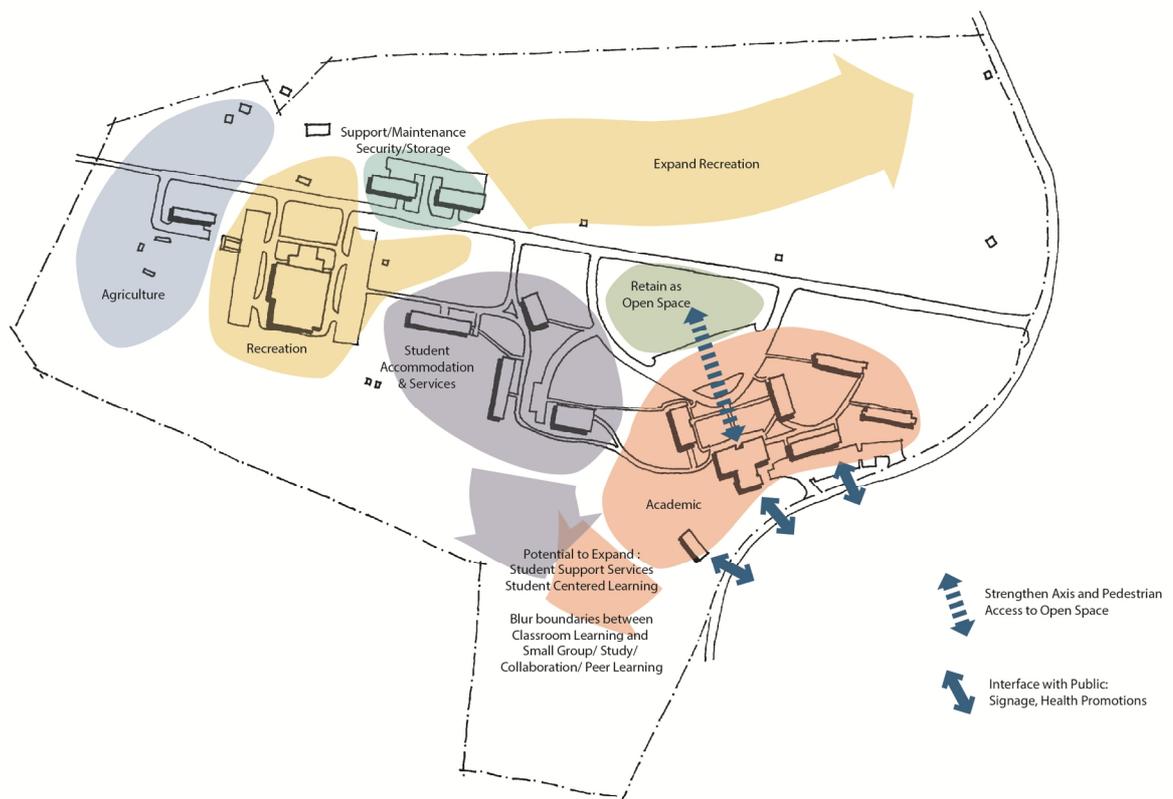
3.1 Design Concept Plans

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 campus'. 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

SPATIAL APPROACH



3.2 Focus Group Summary

3.2.1 Student focus group

A student focus group was held between 12pm and 1pm on Wednesday 4th of September. This session provided an opportunity for students to discuss positive features of the campus and any issues with regard to facilities on site. Eighteen student representatives attended the meeting.

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

Issues raised in this session not listed in order of priority were:

- A positive attribute was the campus environment and the caring attitude of staff for students was remarked on
- Covered walkway from the dining hall to continue to the residence hall, then gym and agriculture classroom
- Provide a marked basketball court
- Track and field facilities
- More transportation to/from Pohnpei campus
- Need to provide pick up/drop off facilities for taxis i.e. shelter, seats
- Wifi drops off within the residential halls - better reception directly outside
- Need for more tutoring spaces
- Need for a student meeting space to support student life – radio station, a place where you know you can meet other students, a place for student representative meetings
- An interdenominational meditation space would be good especially for residents
- Provide lighting at night on key routes
- Need for more computer lab space
- A day-care centre for children of students attending the College

A summary of key points received in the questionnaires received from students are;

- More facilities
- Library gets crowded – too small
- Student lockers
- Walkways needed to every classroom
- Drinking fountains
- Student centre – study and relax
- Library computer lab needs to be bigger
- Walkway to be extended down to the Resident Hall and to the agriculture school.
- Residents Hall needs fan or AC
- Campus needs more huts outside
- Cafeteria closes after lunch so there is no access to water
- Drinking fountains
- More buses for transporting students – to avoid using taxi's all the time - expensive
- Environment needs to be more organised and peaceful for any kind of activity
- Campus should be bigger – more space
- Transport to campus very difficult, taxis are very expensive
- Dining hall to allow students to take food away for later
- More places to sit and study – inside and out side
- Better footpaths
- Residential hall needs furniture

- Water tanks for instances where the water main fails – particularly when there is a power cut. This is particularly problematic in the residents hall
- Washing machines should be free
- Covered walkways
- More space for studying as groups particularly in the library
- Designated drop-off area
- More computers needed
- Place to exercise – track and field
- Coffee shop
- more parking
- more venues for socialising
- playing fields
- the 'Quad' (student hall) should be an open building rather than an enclosed space “use nature for cooling”
- Not many opportunities for quiet study, library too small
- Back-up power for each building

3.2.2 Faculty focus group

A faculty focus group meeting was held between 1pm to 2pm on Monday the 2nd of September.

This session provided an opportunity for faculty to discuss positive features of the campus and any issues with regard to facilities on site. Fourteen faculty staff attended the meeting.

The issues raised from this group were:

- Need to increase level of electrical fit out – exposed wiring etc.
- Wifi needs to be better
- Need to move to self-sufficiency in power - solar power
- Need facilities for student services
- A place to display artwork from students would be an asset as well as a place for music/ performance – support in the facilities for the cultural aspect of the College
- Need for more quiet study areas
- Need for a dedicated place to study in the residence halls

3.2.3 Staff focus group

A staff focus group meeting was held between 2pm and 3pm on Wednesday 4th of September. A similar format was followed to the faculty focus group. Sixteen staff attended and six completed questionnaires were received.

Issues raised for the facilities study were:

- Need for restrooms in the MITC especially for weekend/ afterhours use
- Need for larger bookstore display area and bookstore/ warehouse to be adjacent to each other
- Need for a walk in freezer for kitchen – this would enable more bulk buying of produce
- Security could be closer to the middle of the campus rather than the edge to reduce response time
- Better accessibility needs to be provided around the campus – handrails, level changes
- Need more space in the women's residential hall for the office so that there is enough space for student and supervisor to sit and talk in private
- Need for drinking water in the residential halls
- Be ideal to have an outdoor space that residential students could meet, cut hair, do laundry outside, barbecue – a space for 30 people would be ideal

A summary of key points received in the questionnaires received from faculty and staff are:

- More buildings to accommodate growing student population
- Exterior study areas need to be provided
- Exterior lighting should be powered with solar capability
- Install water tank system for capturing rainwater
- Use solar power for powering buildings where possible
- More lighting needed to deter any unwanted activity
- Campus security for 24/7 activity i.e. CCTV
- Weights room
- More storage space needed
- A bigger book store building
- Centralise the PA system
- Reliable source of electricity
- Build an IT building and equip accordingly with IT technology – e-books, e-services, digital archives
- Existing IT space insecure – flood risk (bottom of hill), old building (roof leaks), no flat roof for better Wi-Fi equipment.
- Track and field facilities
- More places to socialise

Key issues raised in the Focus Groups to inform the Facilities Development Plan:

1. Spatial issue - common to more than one group was the lack of space for small groups to study, quiet study space, one on one counselling and a place where larger groups could come together
2. Infrastructure issue - A secure space for servers and wifi access particularly at the residential hall was raised
3. Recreation issue – the potential for the baseball and track and field facility

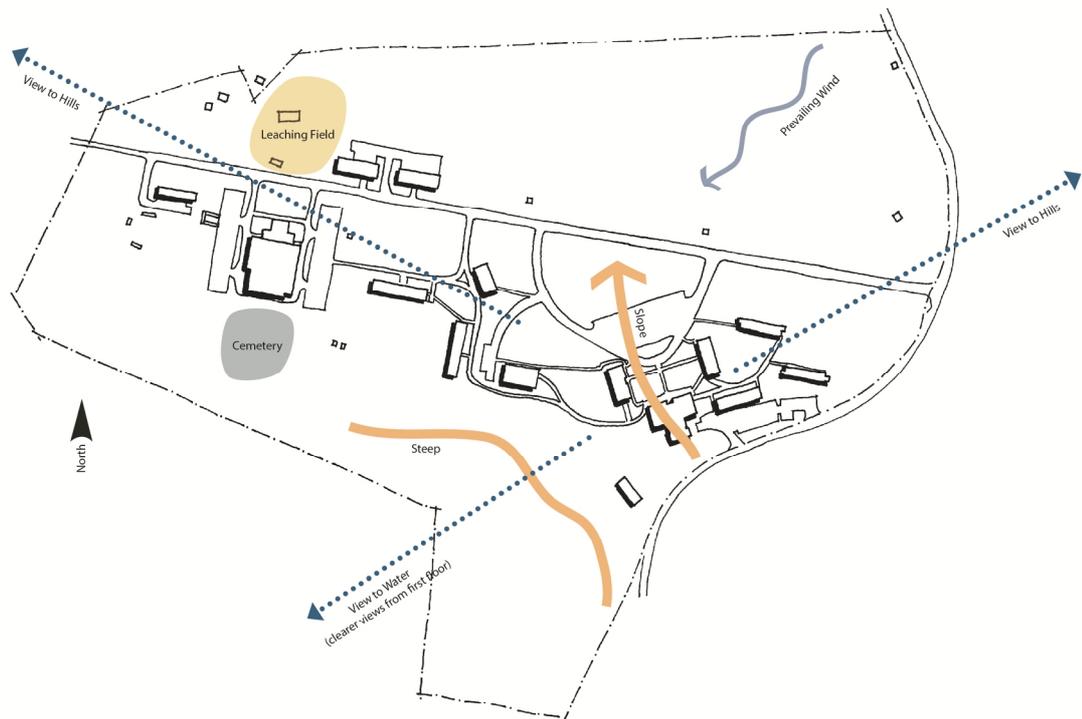


3.3 Spatial Analysis

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. Broken 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

CONTEXT AND RESPONSE



Key attributes

- Site is generous in size, generously landscaped with a clear building layout that is easy to understand.
- There are key views to surrounding hills
- There are ocean views to the south west visible from the second floor of the administration building
- Central spine road access provides a clear entry to the site



Views to the hills in to the north -east



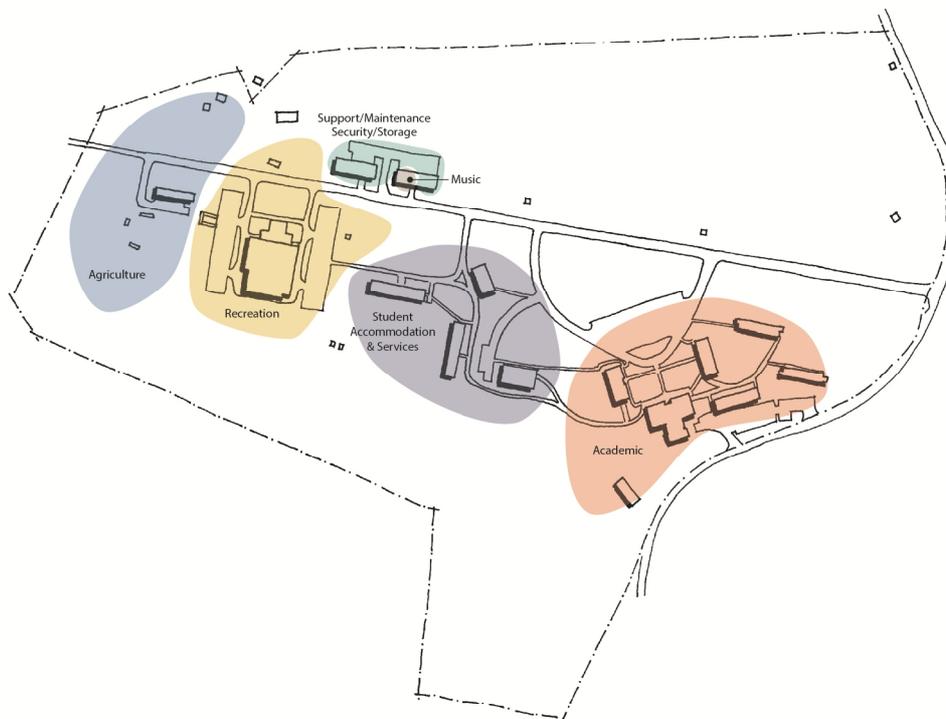
Vies out to the ocean from the second floor of the administration building

Activity zones – grouping areas with common functions together

Existing

- Clear and logical hierarchy from the highest point of the site with the academic zone then the student , recreation and agriculture zone at the lowest point
- Vehicle circulation and parking is kept to the edges of the site with the benefit that pedestrians have priority within the campus

ACTIVITY ZONES



Points to consider for future planning

- Identify where these zones can expand in the future on the campus

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

- Shaded areas under narra trees and thatched shelters for small groups to study – no power and only suitable when it is not raining
- No larger outdoor covered study areas
- Wide range of recreational activities are currently provided for – indoor recreation and outdoor volleyball/ basketball courts and football pitches



Seating areas alongside the new covered canopies in the academic zone



Shelters in front of the main car park area



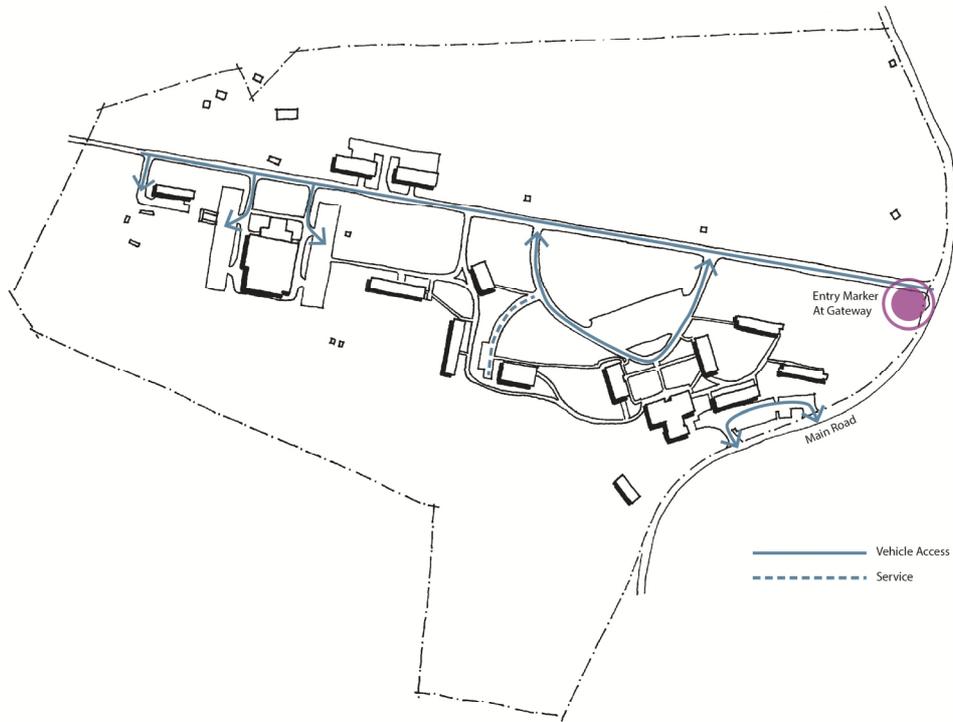
Football training in front of the men's residence hall



Volleyball played in the area between the entry road and the residence halls

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

CIRCULATION

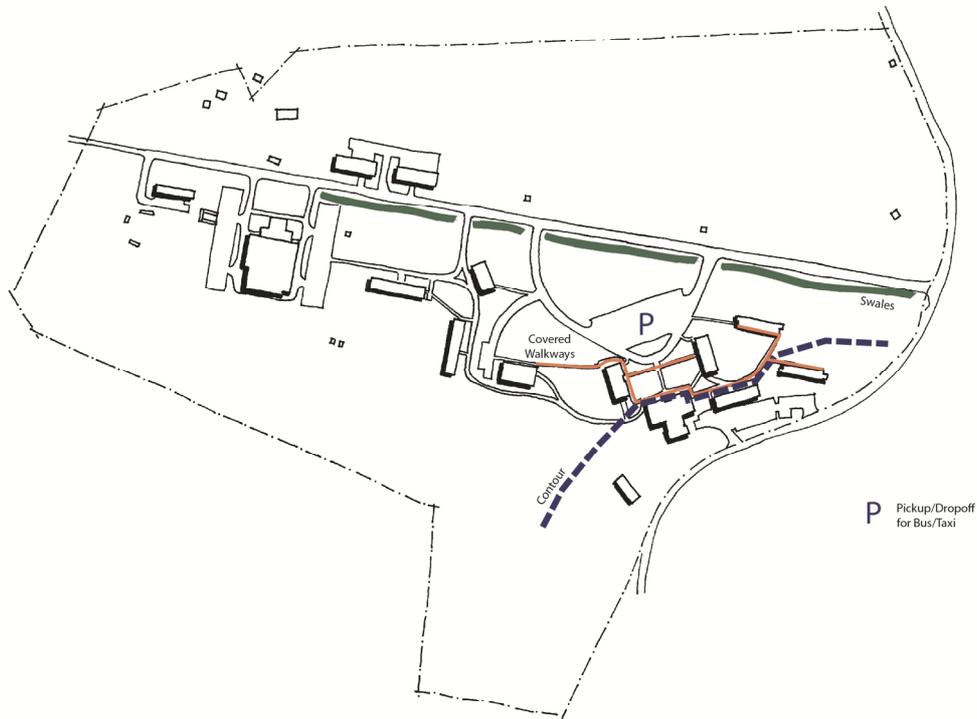


Front main car park with solar panel structure providing dual function of shade and power generation



Separation of pedestrian and vehicle routes

PEDESTRIAN AMENITY



- Clear entry and exit to main car parks
- No cars within the main campus area is an attribute
- The covered walkways provide not only cover for this area which is subject to rain generally 20 days a month.
- The academic zone is designed across the contours enabling pedestrians to generally remain on the same level apart from the time they go to the dining hall

Points to consider for future planning

- Aim to locate new buildings along the contour (blue dashed line in the drawing)
- Formalise a pick-up/drop off point for buses on the site at the main entrance particularly with increasing travel between this campus and the Career and Technical Education Centre in Kolonia



Swales alongside the entry road – bridging across at points make students access the front lawn area more



Main entry - provision for disabled access, additional seating and cover for pick up drop off area requested through the focus group discussions

Building and landscape character – look and feel of the campus

- The academic zone buildings have a consistent gable end design with similar roof pitch
- The sloped area in front of the main car park is a significant open space



Large expansive grassed areas and simple gable ended two level buildings



The planting of the palms in front of the LRC building show how the use of indigenous planting can be successfully implemented on the campuses

Points to consider for future planning

- New buildings should be designed to be sympathetic to the existing architecture
- The sloping entry lawn area should be kept free of buildings as the campus expands to maintain importance of the academic buildings

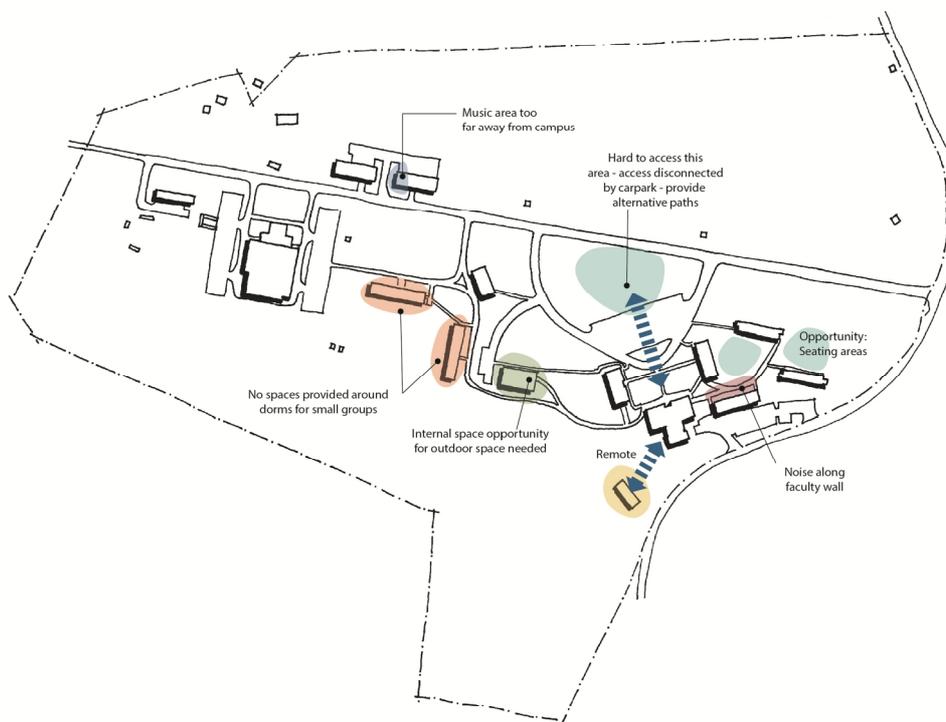
Infrastructure - the services that enable the campus to operate

- The backup server room is located in the lower part of the campus , an area that could be subject to flooding. Ideally this backup serving all campuses would be located in a more secure location.
- A pump is connected to the water well so water can be provided to the campus in case of power outage
- There is a diesel generator for emergency power supply

Points to consider for future planning

- Need to expand the leaching field – location identified is west of the existing maintenance buildings
- Identify a location for a relocated backup server

ISSUES AND OPPORTUNITIES



3.3.1 Existing building profile and future planning considerations

Building	Outline
<p>A – Specialized Classroom</p>	<p>Building A is a two storey classroom building with specialist biology and chemistry classrooms on the ground floor</p> <p>Location for its function – Well located in the academic zone</p> <p>Quality and suitability of spaces for its function – Adequate space in the classrooms for the class sizes – a range of classroom layouts were observed from desks in rows to a semicircle layout showing the versatility of the classroom spaces.</p>

Building	Outline
 <p>Points to consider for future planning – look at options to create more floor space in the science store room for needed project space by using mobile shelving samples, references</p>	<p>Disabled access - not provided to the second floor</p> <p>Teaching spaces -</p> <p>Amenities, toilets - Toilets on the ground floor at each end of the building – 2 mens/ 2womens</p> <p>Building condition points -Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime balustrades immediately. Re-paint roof immediately</p> <p>Building age – 17 years</p>
<p>B – Standard Classrooms</p> 	<p>Building B is a two storey classroom</p> <p>Location for its function - Well located in the academic zone</p> <p>Quality and suitability of spaces for its function - Adequate space in the classrooms for the class sizes – a range of classroom layouts were observed from desks in rows to a semicircle layout</p> <p>Disabled access - not provided to the second floor</p> <p>Teaching spaces -</p> <p>Amenities, toilets - Toilets on the ground floor at each end of the building– 2 mens/ 2womens</p> <p>Building condition points - Evidence of a couple leaks to upper floor. Repaint roof immediately</p> <p>Building age -17 years</p>
<p>C – Dining Hall</p>  <p>Points to consider for future planning – Remove the</p>	<p>Building C is a dining hall and kitchen with offices along the northern side</p> <p>Location for its function – Well located between the accommodation and academic zone with service access to the kitchen</p> <p>Quality and suitability of spaces for its function – the dining hall is adequate in size for current roll but would need to be larger for an increased roll</p> <p>Disabled access - level access into the building. Stairs at the administration building are a barrier for access for people with disabilities</p> <p>Teaching spaces - nil</p> <p>Amenities, toilets - along the northern side –one mens/ one womens</p> <p>Building condition points -Treat rust and spot prime corroded gutters immediately. Check roof for rust and treat if necessary and re-paint immediately. Repair water damage/leaks to ceiling/soffit immediately.</p>

Building	Outline
<p>partitions to increase the floor area and open up the northern side to cross ventilation and views across the site. Consider outdoor seating</p>	<p>Building age -17 years</p>
<p>Building D – Men’s Residence Hall</p>  <p>Points to consider for future planning – Increase access to wifi connection - currently patchy connection available</p>	<p>Building D is the two storey men’s residence hall</p> <p>Location for its function – Well located in the accommodation zone adjacent to the basketball hard-court area and the soccer field to the north and the student services facilities</p> <p>Quality and suitability of spaces for its function – The rooms were designed for four students. This has been revised in practice to three students. There are 29 rooms with an ability to accommodate 87 students</p> <p>Disabled access - access only to the ground floor, toilets/showers not designed to be accessible</p> <p>Amenities, toilets - 8 toilets in total</p> <p>Building condition points - Treat rust and spot prime corroded gutters and re-paint roof immediately. Check roof for rust and treat if necessary. Repair water damage/leaks to ceiling/soffit immediately. Refurbish floor finishes by 2023. Regularly maintain and replace mechanical, fire and special services by 2023</p> <p>Building age -17 years</p>
<p>Building E - Women’s Residence Hall</p>  <p>Points to consider for future planning – Provide a place where students can meet with matrons to discuss private issues</p>	<p>Building E is the two storey women’s residence hall</p> <p>Location for its function - Well located in the accommodation zone adjacent to the student services facilities</p> <p>Quality and suitability of spaces for its function - – The rooms were designed for four students. This has been revised in practice to three students. There are 19 rooms with an ability to accommodate 57 students</p> <p>Disabled access - access only to the ground floor, toilets/showers not designed to be accessible</p> <p>Amenities, toilets - 8 toilets in total</p> <p>Building condition points - Targeted regular maintenance and cleaning to extend asset life. Repair water damage/leaks to ceiling/soffit immediately. Repair leaking AC unit and treat corrosion immediately. Refurbish floor finishes by 2023. Regularly maintain and replace mechanical, fire and special services by 2023</p> <p>Building age -17 years</p>

Building	Outline
<p>Building F - Faculty Offices (old)</p> 	<p>Building F is a faculty and administration building (Human Resources). It is broken down into seven individual spaces 600sqft in size. These are one lounge and six faculty spaces (400sqft of open office area and a 180sqft faculty head office)</p> <p>Location for its function – Located in a good location within the academic zone</p> <p>Quality and suitability of spaces for its function – Spaces allow for adaptation and function changes - The human resources team have moved into the previous Public Health faculty area in Fall 2013. More open spaces could be created by removing portion of the wall between rooms, also a change in furniture layout to long desks instead of angled desks would increase the number of people who could be accommodated. These spaces could also be converted to seminar rooms if required.</p> <p>Disabled access - Level access</p> <p>Teaching spaces - nil</p> <p>Amenities, toilets - toilets for faculty</p> <p>Building condition points - Evidence of damaged/marked/stained ceiling</p> <p>Tiles Air-Conditioning - DX/Split System Most not used, some not working Profiled Metal Sheet Roof Cladding (Pre-Finished) Evidence of faded paint – re-paint immediately</p> <p>Building age -17 years</p>
<p>Building F2 - Faculty Offices (new)</p> 	<p>Building F2 is a faculty building for language and literature and maths and science.</p> <p>Location for its function - Located in a good location within the academic zone</p> <p>Quality and suitability of spaces for its function – The spaces are more open in the literature area than the cellular layout of the old faculty building. The lounge area is well located at the main entrance as a meeting place and for the exchange of ideas. This is a good layout for any further faculty buildings.</p> <p>Disabled access - Ramp at the rear of the building</p> <p>Teaching spaces - nil</p> <p>Amenities, toilets - toilets for faculty</p> <p>Building condition points - Evidence of settlement walking along hallway, targeted regular maintenance and cleaning to extend asset life.</p> <p>Building age -9 years</p>

Building	Outline
<p>Building G – Administration</p> 	<p>Building G is the administration building with admission and records, financial aid, VP and Presidents office and administration.</p> <p>Location for its function - In a good location within the academic zone – close to the main entry and car park</p> <p>Quality and suitability of spaces for its function – Has the ability to move functions within the space. Well laid out floor plan that enables students to access the ground floor for services. The server room and computer facilities may need expansion</p> <p>Disabled access - No access to the second floor is an issue and the stairs should ideally have wider treads as the pitch is steeper than anticipated for a general use stair</p> <p>Teaching spaces - nil</p> <p>Amenities, toilets - 2 mens/ 2 womens</p> <p>Building condition points - Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime corroded gutters immediately. Replace roof by 2023. Refurbish floor, wall and ceiling finishes by 2023. Replace 1-2 AC window mounted units immediately.</p> <p>Building age – 17 years</p>
<p>Building H - Learning Resources Centre and MITC</p> 	<p>Building H is the LRC building with the library, computer lab and MITC.</p> <p>Location for its function – The central location at the top of the hill give this function primacy in the campus.</p> <p>Quality and suitability of spaces for its function – The MITC is often used by others so the addition of toilets accessible after hours located where the current darkroom is would make this area work better for users</p> <p>Disabled access -Two disabled car parks directly behind the building, lift provided to the second floor, access to the other buildings is provided but not as direct as the covered walkways</p> <p>Teaching spaces – nil, two rooms with a partition in the MITC area are available for use but not timetabled</p> <p>Amenities, toilets - 2mens/2womens/2 unisex</p> <p>Building condition points - Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime corroded roofing and re-paint immediately. Repair wheel chair lift (Health & safety issue). Review membrane roofing repair/installation requirements to canopies.</p> <p>Building age – 17 years</p>

Building	Outline
<p>Building I – Agriculture</p> 	<p>Building I is the Agriculture building</p> <p>Location for its function – Located adjacent to the agriculture area</p> <p>Quality and suitability of spaces for its function - Adequate</p> <p>Disabled access - level access</p> <p>Teaching spaces - one</p> <p>Amenities, toilets - 1mens/1women's</p> <p>Building condition points - Replace severely corroded sections of roof and missing/damaged gutters immediately. Review remainder of roof treat rust and roof or replace immediately. Treat borer damage to doors immediately</p> <p>Building age – 17 years</p>
<p>Building J – A + Centre and Art Classroom</p> 	<p>Building J is was formerly the A+ Centre but is now used for Public Health education after an extension in Fall 2013</p> <p>Location for its function – The building is located next to the interface with the public road building on the potential to be an exchange point between the community and the College.</p> <p>Quality and suitability of spaces for its function -</p> <p>Disabled access - Accessible by ramp</p> <p>Teaching spaces – not identified in this study (assume 2 spaces)</p> <p>Amenities, toilets - 1mens/1women's</p> <p>Building condition points - Treat and repair termite/borer damage immediately. Check and repair water damage/leaks to soffit and light fittings immediately. Re-paint roofing immediately.</p> <p>Building age – 4 years</p>
<p>Building K – Book store, Dispensary</p>  <p>Points to consider for future planning – Locate the bookstore, storage and inward goods areas in one place</p>	<p>Building K is the Book store and dispensary</p> <p>Location for its function – The bookstore is separated from the storage area which is not ideal. At the start of the year operations are relocated to the bulk store in Building M to issue resources to students.</p> <p>Quality and suitability of spaces for its function - Book store is not large enough</p> <p>Disabled access - level access</p> <p>Teaching spaces - nil</p> <p>Amenities, toilets - 2 mens/2 womens</p> <p>Building condition points - Review flaking roof paint and re-paint roof immediately</p> <p>Building age – 17 years</p>

Building	Outline
<p>Building L – FSM – China Friendship Sports Centre</p>  <p>Points to consider for future planning – Targeted improvements required including making the meeting space more visible (signage/ landscaping) and improving the internal fit out and upgrading the exterior</p>	<p>Building L is the Sports Centre</p> <p>Location for its function – Located in its own area with large surrounding car park</p> <p>Quality and suitability of spaces for its function – The smaller hall at the back of the building is remote however due to the size of the building any modifications would be sizeable and so improving the building finishes rather than moving functions around would be of more benefit</p> <p>Disabled access -</p> <p>Teaching spaces -</p> <p>Amenities, toilets - 8 men’s wc/ 9 urinals/ 5 showers 8 womens WC/ 5 showers 1 disabled WC</p> <p>Building condition points - Windows and doors In very poor condition. This is a major health and safety risk as window/glazing may fall out. Replace immediately. PVC Down Pipes and metal rain water heads Rain water heads corroding and leaking. Downpipes in poor condition, some are missing and others damaged. Repair & replace to prevent staining of external walls Solid Plaster Cladding with Painted Finishes Evidence of leaking/cracks with significant amount of mould growing on external walls. Repair leaks and clean Insitu Concrete Slab Roof Without Any Apparent Membrane Waterproofing Roughly placed with poor quality finish, cracks in places. Install new roof membrane immediately to prevent further damage/deterioration Building age -12 years, early 2000s</p>
<p>Building M – Security, Weights Room, IT Shop</p>  <p>Points to consider for future planning – Security could move to a more central location to reduce response time. Potential for file storage facility - overflow from the administration</p>	<p>Building M has a range of uses and has been converted into IT shop, weights room and security area</p> <p>Location for its function – The security function works closely with the maintenance staff in the adjacent building</p> <p>Quality and suitability of spaces for its function – Provides an open space which can be subdivided into a range of functions - an asset on a campus of this size</p> <p>Disabled access - level access</p> <p>Teaching spaces - nil</p> <p>Amenities, toilets - nil</p> <p>Building condition points - Some minor concrete spalling needs repair. Replace corroded roofing immediately and consider re-painting roof. Gutters and downpipes need replacing. Building age – 17 years, mid 1990s</p>

Building	Outline
<p>Building N – Maintenance, CRE, Music Classroom</p> 	<p>Building N is the maintenance area, CRE and music room</p> <p>Location for its function – The music room seems disconnected from the rest of the campus - a location in the academic zone in a suitably acoustically treated space would seem more appropriate</p> <p>Quality and suitability of spaces for its function – Wide span building suits the maintenance function</p> <p>Disabled access - level access</p> <p>Teaching spaces - nil</p> <p>Amenities, toilets - 1 mens/ 1 womens</p> <p>Building condition points - Localized roof, gutter and soffit repairs or rust treatment required immediately</p> <p>Building age – 17 years, mid 1990s</p>

3.4 Accommodation Review

A review of the COM-FSM standard spatial target has been completed. Where this COM-FSM target figure differs from the American Institute of Architects standard this is noted.

The spatial assessment summary in the shaded box at the end of the table outlines the additional space required. This area is incorporated into the new building accommodation schedules at the end of the chapter.

3.4.1 Facilities ratios

Item	Number
Number of students	1017
Number of faculty and staff (from general catalogue 2013 - 2014)	184
2018 design figure (informed by the projected headcount in the space utilization review – Chapter 2 of this report)	1136

Item	COM-FSM standard target	Provided on National campus
Parking stalls	1 stall for each faculty, 1 stall for each staff member and 10% of students	<p>Aim is up to 190 faculty and staff parks and 110 student parks.</p> <p>A previous study has identified that the college is capable to accommodate up to 279 vehicles at one time throughout the day. Here is the breakdown</p> <p>1.Faculty Building Parking area - 52 vehicles</p>

Item	COM-FSM standard target	Provided on National campus
		<p>2. Front main Parking - 79 vehicles 3. Cafeteria Parking - 7 vehicles 4. China/FSM Friendship Gym Parking - 129 vehicles 5. Agriculture Classroom - 9 vehicles</p> <p>Sourced from http://wiki.comfsm.fm/Committees/Planning_and_Resources_Committee/Parking_Plan</p> <p>There is a shortfall of 20 parks in the long term. Note that the approximate 20 car park spaces around the maintenance building have not been included in the above count.</p> <p>Adequate car parking space provided. Due to the function of the proposed health centre this building should consider car parks immediately adjacent</p>
Toilets	<p>Two indicators</p> <p>1. Aim is for toilet block at each teaching building</p> <p>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.</p>	<p>Residential facilities</p> <p>Men’s – 87 students, require 3 toilets, 8 provided in the building</p> <p>Women’s 81 students, require 3 toilets as a minimum, 8 provided in the building</p> <p>Academic zone</p> <p>Target is based on higher than the current number (1200 students and staff). Assume 1300 students and staff require 22 women’s toilets and 17 men’s toilets.</p> <p>Number currently provided in the academic zone is: 13 womens toilets and 13 mens toilets</p> <p>Sports Centre and Agriculture building at the southern end of the campus provides for a further 9 womens toilets and 9 mens toilets.</p> <p>TOTAL on site accessible for both staff and students is 22 women’s toilets and 22 men’s toilets.</p> <p>With further toilets planned in a future student services building and retrofitted into the MITC building there will be adequate toilet provision for the future projected headcount</p>
Drinking water	Accessible drinking water	Provided at the LRC building , administration , faculty and dining hall as water cooler dispensers
Teaching space per person	25ft ² per student (AIA is 30ft ²)	7 large classrooms (700-800sqft)

Item	COM-FSM standard target	Provided on National campus
		<p>12 standard sized classrooms 550 - 700sqft</p> <p>2 seminar room 400sqft</p> <p>Other spaces - weight room and gymnasium</p>
Computer Laboratory	25ft ² per student (AIA is 40ft ²) (2.4msq)	<p>Computer labs are 730sqft (3off), The Library computer lab is 650sqft.</p> <p>Space for 115 students, aim is one for every 10 students so need additional computer labs for any headcount increase beyond 1150 students</p> <p>Adequate space currently provided</p>
Small group study / study carrels	25ft ² per student (AIA is 50ft ² for reading rooms)	<p>Library open space (excludes offices, archives) is 6500sqft 3500sqft on second floor - = 10000sqft in total. Assuming 50% in stacks there is study space for 200 students.</p> <p>Adequate space currently provided for a 1:10 ratio. To attain a 1:5 ratio require an additional 1500sqft</p>
Shops/ vocational rooms	50ft ² per student (4.7msq)	nil
Private office	100ft ² per person (9.3msq)	<p>Individual rooms on the ground floor of administration building are 100sqft</p> <p>Adequate sized space currently provided for current uses</p>
Private office with meeting area	150ft ² per person (14msq)	<p>Individual offices on the second floor of the administration are 120sqft. Faculty head office in old Faculty building are 130sqft.</p> <p>Adequate sized spaces currently provided for current uses</p>
Work station	60ft ² per person (5.6msq) Common filing area 60ft ² per person (5.6msq)	<p>A schedule of faculty requiring workstations needs to be completed to ascertain parity across faculties. Occupy current spaces or spaces vacated by functions moving to new buildings.</p>
Faculty work station with side chair	80ft ² per person (7.43msq)	<p>Faculty area in old Faculty building is 410sqft, space for 6 people. With more efficient storage organisation and furniture layout can provide for additional common filing areas</p> <p>Adequate sized spaces currently provided for current</p>

Item	COM-FSM standard target	Provided on National campus
		uses
IT space, server room and area to fix machines	Require 500sqft for a state campus - separate secure server room, IT office and area to fix computer equipment. Ideally an additional storage area adjacent if space allows	Computer workroom (130sqft), computer office (110sqft), server room (100sqft), IT storage and backup server room (840sqft) 1200sqft provided – larger pace as this has the central server for all campuses'. Quality and location of space for back-up server needs improvement
Spatial assessment summary		Small group study - require an additional 1500sqft New location for back-up server and computer services

3.4.2 Accommodation schedules – new buildings

Building 1 – Health Clinic		
No	Room name	Area
1.01	Consultation rooms	300
1.02	Record room	150
1.04	Pharmacy	200
1.05	Waiting room	300
1.06	Laboratory	150
1.07	Restrooms	120
1.08	Observation room	200
1.09	Utility room/ electrical	100
1.10	Classrooms	1400
1.11	Restrooms	120
	Subtotal	3040
	Circulation and wall thickness @25%	760
	TOTAL (rounded)	3800

Building 2 – New student center – informed by recently completed Yap campus Student Center sizes and proposed Kosrae multi-purpose building (two level building)		
No	Room name	Area
2.01	Peer counselling	200
2.02	Study area	600
2.03	Director of Student Affairs	200
2.04	Student Body Association meeting room and separate office	400

Building 2 – New student center – informed by recently completed Yap campus Student Center sizes and proposed Kosrae multi-purpose building (two level building)		
No	Room name	Area
2.05	Tutoring	600
2.06	Counsel	150
2.07	Counsel	150
2.08	Counsel	150
2.09	Female Toilets (3 WC one being disabled access, 2 basins)	300
2.10	Male Toilets (2 WC one being disabled access, 3 urinals, 2 basins)	300
2.11	Open multipurpose area	3000
2.12	Electrical cpd	150
2.13	Server room	100
2.14	IT office	200
2.15	IT work shop/store	200
2.16	Cleaner	40
2.17	Store	60
	Subtotal - rounded	6800
	Circulation and wall thickness @20% - circulation on ground floor included in multipurpose area	1300
	TOTAL (rounded)	8100

Building 3 – New Marine science/ Applied research building (two level building)		
No	Room name	Area
3.01	General office	250
3.02	Office	100
3.03	Office	100
3.04	Preparation room and loading dock	150
3.05	Toilets (2 separate toilets and shared washbasin in lobby – disabled access)	150
3.06	Lab	650
3.07	Lab	650
3.08	Project space	500
3.09	Classroom	650
3.10	Classroom	650
3.11	Storage area	500
3.12	Office	200
	Subtotal	4500
	Circulation and wall thickness @25%approx	1200
	TOTAL	5700

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
124,700	-	Health centre(3800) Student centre (8100)	136,600

Existing square feet (Fall 2018)	Remove buildings 2018 – 2023 (sqft)	Add buildings 2018 – 2023 (sqft)	Area in 2023
136,600	-	Marine science (5700)	142,300

4 Asset Condition Assessment – National Campus

Key Points

The forecast operational costs (\$US12.244M for Years 1-10) equates to approximately \$US1,224,000 per year average identified above are significantly higher than the what is currently being budgeted for maintenance by CoM-FSM (\$150,00 per annum total for all 6 campuses)

If the Sports Center operational costs can be reduced from the estimated 31% (or approximately \$US380,000 per annum) by strategic renewals and funding then the long-term the overall National operational budget would be more sustainable.

4.1 National 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 National campus for COM-FSM 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 15 No. existing buildings (excluding minor support structures and buildings) and site infrastructure located within the National COM-FSM campus. The key tasks undertaken to complete this report include:

- The National 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 National 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

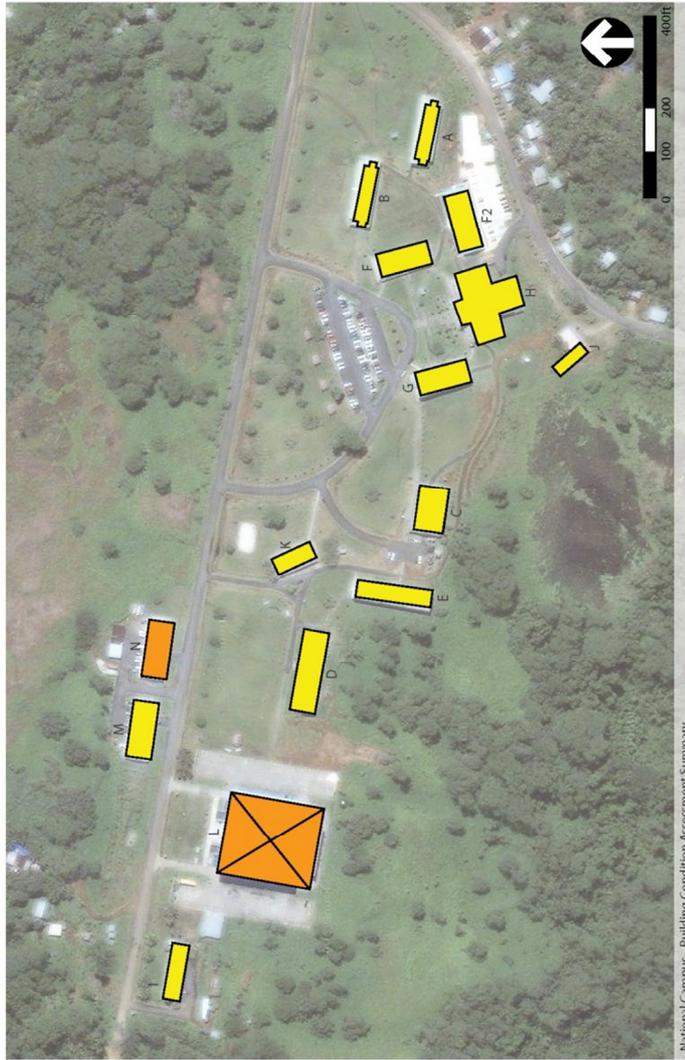
4.1.7 Condition Grade Assessment Results

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

Asset	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
A – Specialized Classroom			✓		
B- Standard Classrooms			✓		
C – Dining Hall			✓		
D – Men’s Residence Hall			✓		
E – Women’s Residence Hall			✓		
F – Facilities Office (Old)			✓		
F2 – Facilities Office (New)			✓		
G - Administration			✓		
H – Learning Resource Centre & MITC			✓		
I - Agriculture			✓		
J – A+ Centre & ARE Classroom			✓		
K – Bookstore, Dispensary, Student Services			✓		
L – FSM – China Friendship Sports Centre				✓	
M – Security, Weight Room, Bookstore & IT			✓		
N – Maintenance CRE, Music Classroom				✓	
Site Infrastructure	N/A	N/A	N/A	N/A	N/A
Total	0	0	13	2	0

4.1.8 Campus condition grading summary plans

National Campus



National Campus - Building Condition Assessment Summary

No.	Building Description	Grade
A	Specialized classrooms (Building A)	Very Good (0-20%)
B	Standard classrooms (Building B)	Very Good (0-20%)
C	Dining Hall	Very Good (0-20%)
D	Men's Residence Hall	Very Good (0-20%)
E	Women's Residence Hall	Very Good (0-20%)
F	Faculty O&S ces (old)	Very Good (0-20%)
F2	Faculty O&S ces (new)	Very Good (0-20%)
G	Administration	Very Good (0-20%)
H	Learning Resources Center and MITC	Very Good (0-20%)
I	Agriculture	Very Good (0-20%)
J	A + Center and Art Classroom	Very Good (0-20%)
K	Book store, Dispensary, Student Services	Very Good (0-20%)
L	FSM - China Friendship Sports Center	Poor (50-80%)
M	Security, Weights Room, IT Shop	Very Good (0-20%)
N	Maintenance, CRE, Music Classroom	Very Good (0-20%)

From our condition assessment of the National campus we observe the following:

1. China Friendship Sports Centre. 31% of the operational costs are dedicated to this building which has a condition grade 4 highlighting that it is in poor condition and is showing signs of significant failure. Replacement windows (a health and safety issue) and the repair of leaks are required urgently. This asset needs specific funding to prevent deterioration and to extend its life.
2. 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
3. The majority of the buildings are rated as condition grade 3 which means that these assets are reaching the end of their serviceable life, but they are still functioning as intended. 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.
4. Maintenance is being carried out but the current Operational budget (\$US150,000 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.
5. 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.
6. The Operational budget for Years 1-10 for the National campus is recommended to be in the order of \$US12.244M (\$US1,224,000 average per annum). The operational cost equates to 2.5% of the estimated 2013 replacement value which is in the expected order of cost. If the Sports Centre operational costs can be reduced from the estimated 31% (or approximately \$US380, 000 per annum) by strategic renewals and funding then the long-term the overall National operational budget would be more sustainable.
7. Regular monitoring and review of the asset renewal and routine maintenance plan needs to be carried out

4.1.8.1 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.

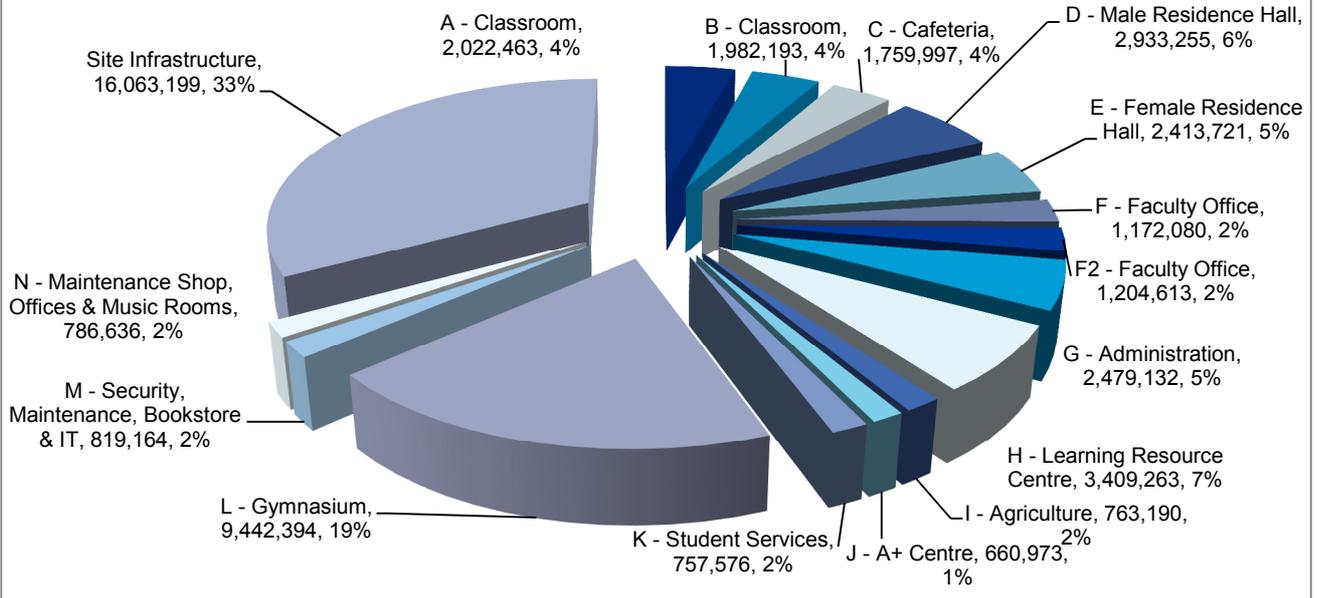
Forecast Operational Costs

Ref	Asset Description	Replacement Cost	Year 1 - 10 Asset	Year 11 - 20 Asset	Year 21 - 30 Asset	Total 30 Year Asset	Annualised Total Operational Cost	Total Year 1-10	Total Year 11-20	Total Year 21-30
		Cost (\$ USD)	Renewal Cost (\$ USD)	Renewal Cost (\$ USD)	Renewal Cost (\$ USD)	Renewal Cost (\$ USD)		Operational Cost (\$USD)	Operational Cost (\$USD)	Operational Cost (\$USD)
1.00	A - Classroom	2,022,463	242,141	694,659	314,803	1,251,602	51,323	338,170	790,688	410,833
2.00	B - Classroom	1,982,193	143,920	486,806	238,681	869,407	36,768	221,795	564,681	316,556
3.00	C - Cafeteria	1,759,997	223,780	387,547	357,018	968,345	42,148	322,478	486,245	455,716
4.00	D - Male Residence Hall	2,933,255	138,784	321,799	423,665	884,247	42,300	267,033	450,049	551,914
5.00	E - Female Residence Hall	2,413,721	113,963	304,218	353,203	771,384	35,588	212,716	402,972	451,957
6.00	F - Faculty Office	1,172,080	150,386	238,043	316,820	705,249	29,150	206,803	294,459	373,237
7.00	F2 - Faculty Office	1,204,613	66,564	520,030	338,666	925,260	38,427	142,413	595,879	414,515
8.00	G - Administration	2,479,132	345,333	516,687	549,112	1,411,131	59,615	471,107	642,461	674,586
9.00	H - Learning Resource Centre	3,409,263	393,055	1,485,258	659,207	2,537,520	108,769	634,907	1,727,111	901,060
10.00	I - Agriculture	763,190	166,102	144,345	133,161	443,607	18,872	206,953	185,196	174,012
11.00	J - A+ Centre	660,973	65,844	202,866	210,826	479,536	20,630	112,301	249,323	257,283
12.00	K - Student Services	757,576	86,560	314,013	163,050	563,624	23,841	137,092	364,545	213,581
13.00	L - Gymnasium	9,442,394	1,902,290	2,147,690	270,557	4,320,537	175,673	2,218,838	2,464,238	587,104
14.00	M - Security, Maintenance, Bookstore & IT	819,164	157,041	273,586	114,789	545,415	24,294	218,177	334,722	175,925
15.00	N - Maintenance Shop, Offices & Music Rooms	786,636	152,379	274,314	89,725	516,418	22,600	206,238	328,173	143,585
16.00	Site Infrastructure	16,063,199	759,424	617,520	2,700,357	4,077,302	186,449	1,264,817	1,122,912	3,205,750
	TOTALS EXCLUDING ESCALATION	48,669,850	5,107,564	8,929,380	7,233,639	21,270,583	916,447	7,181,838	11,003,654	9,307,913
	Escalation Allowance		1,431,388	6,241,045	9,432,814	17,105,247	933,228	5,061,916	9,871,574	13,063,343
	TOTALS INCLUDING ESCALATION (3.4% per annum assumed)		6,538,952	15,170,425	16,666,453	38,375,831	1,849,675	12,243,754	20,875,228	22,371,256

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).

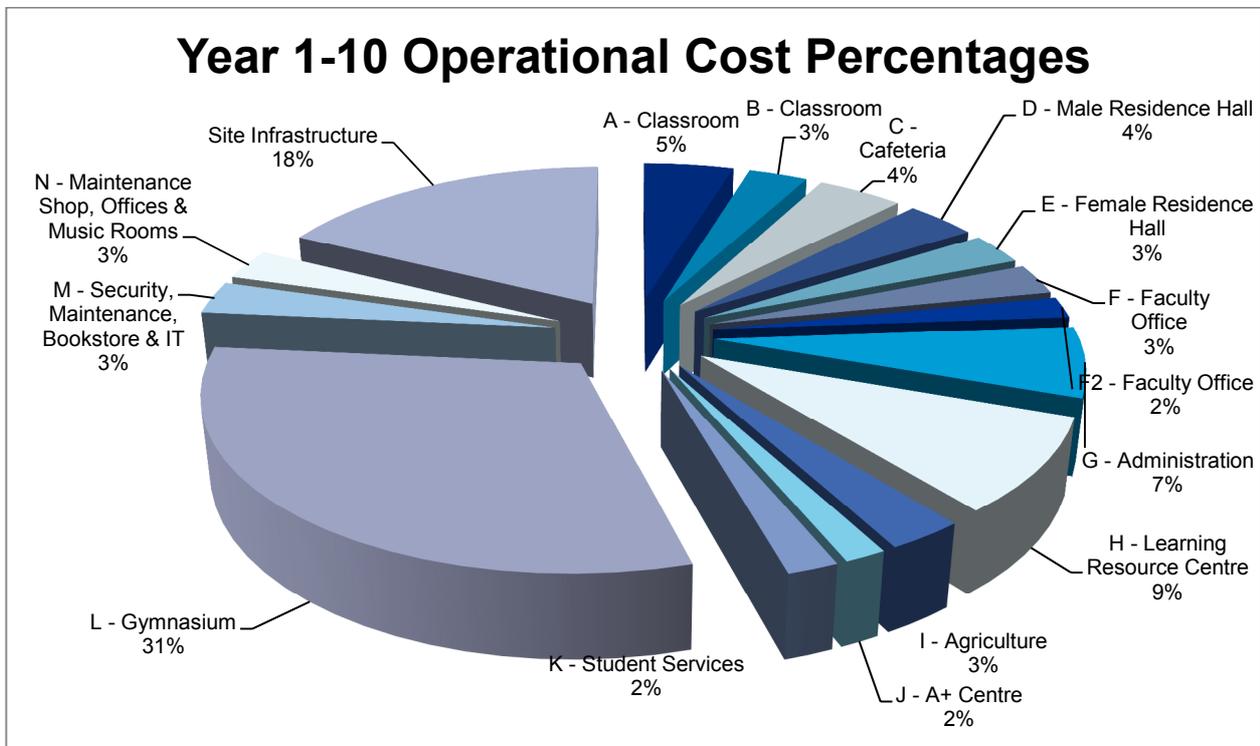
The estimated replacement cost (2013 costs) of the COM-FSM assets on the National campus is approximately \$US48.67M (excluding land, loose furniture and equipment). Outlined below is the breakdown of the estimated asset replacement cost for the campus.

Estimated Asset Replacement Value (2013 Cost)



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.

Year 1-10 Operational Cost Percentages



Most of the estimated asset replacement values to operational cost ratios, when compared on a percentage basis are very similar and so the estimated allowances made for Operational costs appear to be appropriate. The exception is the Sports Centre which has an estimated asset replacement value of 19% versus 31% of the Operational cost. The operational cost to estimated replacement value ratio highlights that the Sports Centre is uneconomic to operate in the long-term. Strategic funding is required to reduce the long-term high operational cost of this asset. .

The forecast operational costs (\$US12.244M for Years 1-10) equates to approximately \$US1,224,000 per year average identified above are significantly higher than the what is currently being budgeted for maintenance by COM-FSM (\$150,00 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 National campus.

4.1.9 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

4.1.10 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 current facilities development plan)

4.1.11 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.

5 Energy Audit

Campus Summary

Although the energy usage over recent years has been falling, the National Campus still uses more energy per unit of floor area than other sites.

Promoting energy efficiency across the site, and ensuring plant is kept running efficiently will be key to sustaining the downward trend in energy use.

As the campus has several high energy use areas such as server rooms and a cafeteria, the higher energy use is not surprising, and it offers the potential for energy savings

The cafeteria and gym areas have a very high energy usage per unit area- these buildings may benefit from a solar hot water heater to reduce electricity consumed in generating hot water.

The National Campus has by far the best record keeping and energy metering across all campuses, and this should be used as an example to other sites. Provision of metering in all campuses to a similar level as that present at National Campus is highly recommended

As with many sites, the permanently occupied areas (e.g. offices) account for a large amount of energy use, and these would be good areas to target first with energy efficiency measures

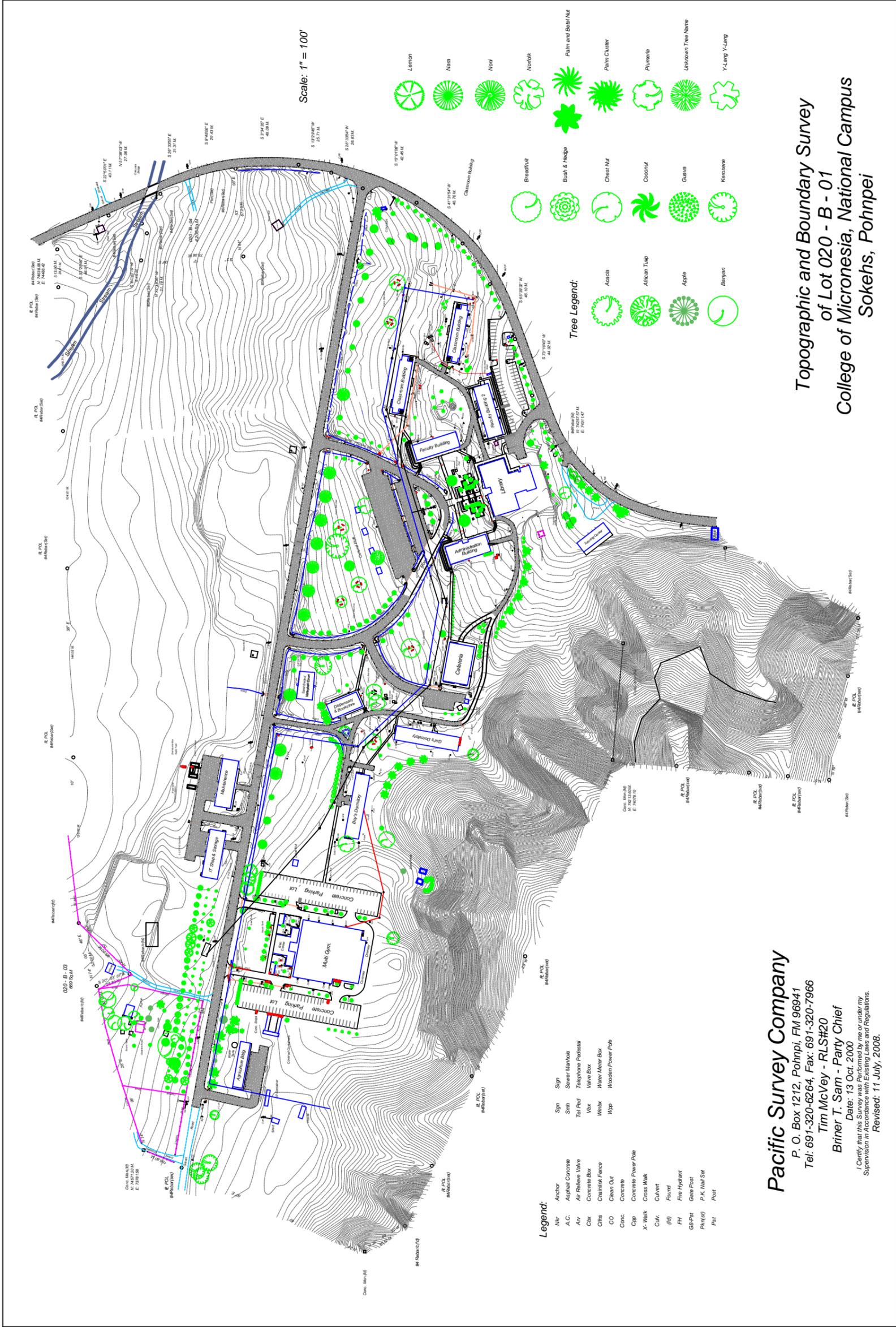
5.1 Energy Efficiency Recommendations

1. Adjust the set point control of the AC units to 24 or 25°C
2. Turn units off cooling units when spaces are un-occupied
3. Ensure units are free from obstructions, filters are clean, and pipework runs are straight to reduce loads on units
4. Provide occupancy sensor lighting control where appropriate, with linked control of cooling units
5. Close windows to air conditioning spaces when systems are operating
6. Seal holes and penetrations from conditioned areas to outside or non-air conditioned areas
7. Keep doors leading to AC spaces closed - employ automatic door closers where possible
8. Turn off lights when leaving a room
9. Replace ceiling insulation where missing, improve insulation thickness in new build areas.
10. Provide insulation below the roof of any occupied areas without roof insulation

Appendix A

Topographical Survey Plan & Title Information





Pacific Survey Company
 P. O. Box 1212, Pohnpei, FM 96941
 Tel: 691-320-6264, Fax: 691-320-7966
Tim McVey - RLS#20
Briner T. Sam - Party Chief
 Date: 13 Oct. 2000
(Certify that this Survey was performed in accordance with the laws and regulations of the State of Pohnpei, Federated States of Micronesia)
 Supervision in Accordance with Existing Laws and Regulations.
 Revised: 11 July, 2008.

**Topographic and Boundary Survey
 of Lot 020 - B - 01
 College of Micronesia, National Campus
 Sokehs, Pohnpei**

Appendix B

Building Condition Assessments



NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

A – SPECIALIZED CLASSROOM



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT		
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	3	50%						0	0	0	0	145,390	0.0%		
2.00	Total Frame	2	30%						0	0	0	0	320,448	0.0%		
3.00	Total Structural Walls	2	30%						0	0	0	0	128,303	0.0%		
4.00	Total Upper Floors	2	30%						0	0	0	0	180,210	0.0%		
5.00	Total Roof	3	50%						0	97,168	0	97,168	97,168	100.0%		
6.00	Total External Walls & Finishes	3	50%						0	0	73,774	73,774	73,774	100.0%		
7.00	Total Windows & Doors	3	50%						6,415	0	31,715	38,130	153,578	24.8%		
A	TOTAL STRUCTURE	3	50%						6,415	97,168	105,489	209,072	1,098,870	19.0%		
8.00	Total Stairs Balustrades & Handrails	3	50%						0	0	39,468	39,468	64,768	60.9%		
9.00	Total Internal Walls/Partitions	3	50%						0	0	0	0	65,456	0.0%		
10.00	Total Internal Doors	3	50%						0	0	13,662	13,662	13,662	100.0%		
11.00	Total Floor Finishes	4	70%						110,098	0	31,569	141,667	110,098	128.7%		
12.00	Total Wall Finishes	3	50%						0	118,098	0	118,098	118,098	100.0%		
13.00	Total Ceiling Finishes	3	50%						0	104,602	0	104,602	104,602	100.0%		
14.00	Total Fixed Joinery Units	3	50%						2,378	100,694	3,137	106,209	103,831	102.3%		
B	TOTAL INTERNAL FIT-OUT	4	70%						112,476	323,394	87,836	523,706	580,515	90.2%		
15.00	Total Sanitary Plumbing	3	50%						0	78,683	0	78,683	78,683	100.0%		
16.00	Total Mechanical Services	4	70%						46,299	46,173	46,299	138,771	46,299	299.7%		
17.00	Total Fire Services	3	50%						18,788	8,855	15,626	43,269	18,156	238.3%		
18.00	Total Electrical Services	3	50%						0	140,387	1,392	141,778	141,778	100.0%		
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%		
20.00	Total Special Services	3	50%						58,162	0	58,162	116,324	58,162	200.0%		
C	TOTAL BUILDING SERVICES	3	50%						123,249	274,097	121,478	518,824	343,078	151.2%		
	TOTAL BUILDING	3	50%						242,141	694,659	314,803	1,251,602	2,022,463	61.9%		
															Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime balustrades immediately. Re-paint roof immediately Repair fans that are not working immediately. Refurbish windows & doors, floor finishes and joinery fittings by 2023. Regularly maintain and replace mechanical, fire and special services by 2023.

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

B – STANDARD CLASSROOMS



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					Full Replace		Observed Deterioration/Recommendations
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace		
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	3	50%						0	0	0	0	150,745	0.0%	Timber Doors (Solid/No Glazing)	Evidence of termite damage
2.00	Total Frame	2	30%						0	0	0	0	405,541	0.0%		
3.00	Total Structural Walls	3	50%						0	0	0	0	238,204	0.0%	Ceramic Tiled Floor Finishes	Impact damage, broken tiles
4.00	Total Upper Floors	3	50%						0	0	0	0	194,611	0.0%		
5.00	Total Roof	3	50%						0	64,479	23,504	87,983	87,983	100.0%	Concrete Screed Floor Finish	Evidence of cracking
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	97,689	0.0%		
7.00	Total Windows & Doors	3	50%						11,625	0	38,190	49,815	190,373	26.2%	Ceiling Mounted Fan	Large number of fan not working
A	TOTAL STRUCTURE	3	50%						11,625	64,479	61,694	137,797	1,365,146	10.1%		
8.00	Total Stairs Balustrades & Handrails	3	50%						0	0	39,468	39,468	64,768	60.9%	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of a couple leaks to upper floor. Re-paint roof immediately
9.00	Total Internal Walls/Partitions	3	50%						0	0	0	0	7,651	0.0%		
10.00	Total Internal Doors	3	50%						0	0	7,590	7,590	7,590	100.0%	Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Treat/repair termite damage, repair roof leaks and fans that are not working immediately. Re-paint roof immediately. Refurbish windows & doors, floor finishes and joinery fittings by 2023. Regularly maintain and replace mechanical, fire and special services by 2023.
11.00	Total Floor Finishes	4	70%						13,821	39,960	10,064	63,846	53,781	118.7%		
12.00	Total Wall Finishes	3	50%						0	120,438	0	120,438	120,438	100.0%		
13.00	Total Ceiling Finishes	3	50%						0	91,887	0	91,887	91,887	100.0%		
14.00	Total Fixed Joinery Units	3	50%						2,378	7,084	2,378	11,840	9,462	125.1%		
B	TOTAL INTERNAL FIT-OUT	4	70%						16,200	259,369	59,501	335,069	355,577	94.2%		
15.00	Total Sanitary Plumbing	3	50%						0	24,035	0	24,035	24,035	100.0%		
16.00	Total Mechanical Services	4	70%						41,872	37,318	41,872	121,061	41,872	289.1%		
17.00	Total Fire Services	3	50%						13,098	2,530	13,098	28,727	15,628	183.8%		
18.00	Total Electrical Services	3	50%						0	99,076	1,392	100,467	118,810	84.6%		
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%		
20.00	Total Special Services	3	50%						61,126	0	61,126	122,251	61,126	200.0%		
C	TOTAL BUILDING SERVICES	3	50%						116,095	162,958	117,487	396,540	261,470	151.7%		
	TOTAL BUILDING	3	50%						143,920	486,806	238,681	869,407	1,982,193	43.9%		

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Timber Doors (Solid/No Glazing)	Evidence of termite damage
Ceramic Tiled Floor Finishes	Impact damage, broken tiles
Concrete Screed Floor Finish	Evidence of cracking
Ceiling Mounted Fan	Large number of fan not working
Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of a couple leaks to upper floor. Re-paint roof immediately
Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Treat/repair termite damage, repair roof leaks and fans that are not working immediately. Re-paint roof immediately. Refurbish windows & doors, floor finishes and joinery fittings by 2023. Regularly maintain and replace mechanical, fire and special services by 2023.

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

C – DINING HALL



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grandn Renewal Total	Full Replace	% Full Replace
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %						
1.00	Total Sub-Structure	2	30%						0	0	0	0	166,789	0.0%
2.00	Total Frame	2	30%						0	0	0	0	456,316	0.0%
3.00	Total Structural Walls	2	30%						0	0	0	0	78,626	0.0%
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%
5.00	Total Roof	3	50%						1,500	95,798	7,084	104,382	102,882	101.5%
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	45,210	0.0%
7.00	Total Windows & Doors	3	50%						8,590	0	125,681	134,270	172,906	77.7%
A	TOTAL STRUCTURE	3	50%						10,090	95,798	132,765	238,652	1,022,729	23.3%
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%
9.00	Total Internal Walls/Partitions	2	30%						2,000	0	0	2,000	94,814	2.1%
10.00	Total Internal Doors	3	50%						0	0	16,698	16,698	16,698	100.0%
11.00	Total Floor Finishes	4	70%						130,348	5,797	1,366	137,511	136,145	101.0%
12.00	Total Wall Finishes	2	30%						0	0	114,008	114,008	114,008	100.0%
13.00	Total Ceiling Finishes	3	50%						0	59,353	10,825	70,179	70,179	100.0%
14.00	Total Fixed Joinery Units	3	50%						0	72,738	2,277	75,015	75,015	100.0%
B	TOTAL INTERNAL FIT-OUT	3	50%						132,348	137,888	145,175	415,411	506,859	82.0%
15.00	Total Sanitary Plumbing	3	50%						0	34,788	0	34,788	39,948	87.3%
16.00	Total Mechanical Services	4	70%						64,642	5,693	64,642	134,976	64,642	208.8%
17.00	Total Fire Services	3	50%						13,701	1,898	12,436	28,035	12,436	225.4%
18.00	Total Electrical Services	4	70%						1,000	111,483	0	112,483	111,483	100.9%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						2,000	0	2,000	4,000	2,000	200.0%
C	TOTAL BUILDING SERVICES	4	70%						81,343	153,861	79,078	314,281	230,409	136.4%
	TOTAL BUILDING	3	50%						223,780	387,547	357,018	968,345	1,759,997	55.0%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Tiled Floor Finishes	To café, kitchen, student offices, WC's and Store - marked and stained with some loose tiles
Air-Conditioning - Window Mounted or "Through the Wall" Type	Manual remote control - day time use only, office unit not working but others are in OK condition
Profiled Metal Sheet Roof Cladding (Pre-Finished)	Paint fading, black marks/stains evident. Re-paint roof immediately
Metal Gutters	Metal flaking and rust spots starting to appear
Fibre Cement Ceiling/Soffit Lining with Painted Finishes	Marked with evidence of humidity or moisture damage
Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime corroded gutters immediately. Check roof for rust and treat if necessary and re-paint immediately. Repair water damage/leaks to ceiling/soffit immediately. Refurbish windows & doors and floor finishes by 2023. Regularly maintain and replace mechanical, fire and special services by 2023

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

D – MEN’S RESIDENCE HALL



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %						
1.00	Total Sub-Structure	2	30%						0	0	0	0	251,000	0.0%
2.00	Total Frame	2	30%						0	0	0	0	208,170	0.0%
3.00	Total Structural Walls	2	30%						0	0	0	0	280,628	0.0%
4.00	Total Upper Floors	2	30%						0	0	0	0	210,598	0.0%
5.00	Total Roof	3	50%						0	12,338	110,163	122,502	122,502	100.0%
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	27,628	0.0%
7.00	Total Windows & Doors	2	30%						0	0	0	0	270,204	0.0%
A	TOTAL STRUCTURE	3	50%						0	12,338	110,163	122,502	1,370,729	8.9%
8.00	Total Stairs Balustrades & Handrails	2	30%						0	0	0	0	53,320	0.0%
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	86,418	0.0%
10.00	Total Internal Doors	2	30%						0	0	0	0	133,584	0.0%
11.00	Total Floor Finishes	4	70%						109,436	0	85,744	195,180	109,436	178.4%
12.00	Total Wall Finishes	3	50%						0	15,939	0	15,939	664,181	2.4%
13.00	Total Ceiling Finishes	4	70%						0	63,406	21,436	84,842	84,842	100.0%
14.00	Total Fixed Joinery Units	2	30%						0	0	19,481	19,481	19,481	100.0%
B	TOTAL INTERNAL FIT-OUT	3	50%						109,436	79,345	126,661	315,441	1,151,262	27.4%
15.00	Total Sanitary Plumbing	3	50%						0	37,950	107,525	145,475	145,475	100.0%
16.00	Total Mechanical Services	3	50%						25,553	1,898	25,553	53,004	25,553	207.4%
17.00	Total Fire Services	2	30%						3,795	21,846	4,428	30,069	22,479	133.8%
18.00	Total Electrical Services	3	50%						0	84,211	49,335	133,546	133,546	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	2	30%						0	84,211	0	84,211	84,211	100.0%
C	TOTAL BUILDING SERVICES	3	50%						29,348	230,116	186,841	446,305	411,264	108.5%
	TOTAL BUILDING	3	50%						138,784	321,799	423,665	884,247	2,933,255	30.1%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Vinyl Floor Finishes	Evidence of lifting, marks, tears, and worn flooring
Tiled Floor Finishes	Evidence lifting tiles, loose grout, marks, stains, etc.
Plywood Soffit Lining with Painted Finish	Evidence of leaks internally, cracks, impact damage, etc.
Plywood Ceiling linings with Painted Finishes	Evidence of leaks internally, cracks, distortion in sheets, etc.
Metal Gutters and Roofing	Evidence of corrosion in gutter – spot prime and repair immediately. Re-paint roof and gutters immediately
Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime corroded gutters and re-paint roof immediately. Check roof for rust and treat if necessary. Repair water damage/leaks to ceiling/soffit immediately. Refurbish floor finishes by 2023. Regularly maintain and replace mechanical, fire and special services by 2023

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

E – WOMAN'S RESIDENCE HALL



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					Full Replace		Observed Deterioration/Recommendations
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	% Full Replace			
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	2	30%						0	0	0	0	201,560	0.0%	Element	Observed Deterioration/Recommendations
2.00	Total Frame	2	30%						0	0	0	0	172,451	0.0%		
3.00	Total Structural Walls	2	30%						0	0	0	0	213,001	0.0%	Vinyl Floor Finishes	Evidence of impact damage, lifting tiles, loose grout, marks, etc.
4.00	Total Upper Floors	2	30%						0	0	0	0	168,688	0.0%		
5.00	Total Roof	3	50%						0	9,871	76,288	86,158	86,158	100.0%	Plaster and Paint finish	Evidence of impact damage
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	97,968	0.0%		
7.00	Total Windows & Doors	2	30%						0	0	0	0	225,803	0.0%	Plywood Soffit Lining with Painted Finish and Metal roofing	Evidence of leaks internally, cracks, impact damage, etc to soffit. Re-paint roof immediately.
A	TOTAL STRUCTURE	3	50%						0	9,871	76,288	86,158	1,165,628	7.4%		
8.00	Total Stairs Balustrades & Handrails	3	50%						0	0	0	0	53,320	0.0%	Air-Conditioning - Window Mounted Unit)	Corrosion, mould at wall unit junction. Mould indicates leaking from unit.
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	69,758	0.0%		
10.00	Total Internal Doors	2	30%						0	0	0	0	72,864	0.0%	Plywood Ceiling linings with Painted Finishes	Evidence of leaks internally, cracks, distortion in sheets, etc.
11.00	Total Floor Finishes	4	70%						90,181	0	66,488	156,669	90,181	173.7%		
12.00	Total Wall Finishes	3	50%						0	15,939	0	15,939	478,827	3.3%	Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Repair water damage/leaks to ceiling/soffit immediately. Repair leaking AC unit and treat corrosion immediately. Refurbish floor finishes by 2023. Regularly maintain and replace mechanical, fire and special services by 2023
13.00	Total Ceiling Finishes	4	70%						0	61,486	21,436	82,922	82,922	100.0%		
14.00	Total Fixed Joinery Units	2	30%						0	0	17,204	17,204	17,204	100.0%		
B	TOTAL INTERNAL FIT-OUT	3	50%						90,181	77,425	105,128	272,734	865,077	31.5%		
15.00	Total Sanitary Plumbing	3	50%						0	37,950	104,363	142,313	142,313	100.0%		
16.00	Total Mechanical Services	4	70%						19,987	1,898	19,987	41,872	19,987	209.5%		
17.00	Total Fire Services	2	30%						3,795	18,235	4,428	26,457	18,867	140.2%		
18.00	Total Electrical Services	3	50%						0	91,453	43,010	134,463	134,463	100.0%		
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%		
20.00	Total Special Services	2	30%						0	67,387	0	67,387	67,387	100.0%		
C	TOTAL BUILDING SERVICES	3	50%						23,782	216,922	171,787	412,491	383,017	107.7%		
	TOTAL BUILDING	3	50%						113,963	304,218	353,203	771,384	2,413,721	32.0%		

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

F - FACULTY OFFICE (OLD)



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT		
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	3	50%						0	0	0	0	176,662	0.0%	Overall Recommendation/Action Targeted regular maintenance and cleaning to extend asset life. Repair water damage/leaks to ceiling/ immediately. Re-paint roof immediately. Regularly maintain and replace mechanical, fire and special services by 2023	
2.00	Total Frame	3	50%						0	0	0	0	236,602	0.0%		
3.00	Total Structural Walls	2	30%						0	0	0	0	154,158	0.0%		
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%		
5.00	Total Roof	3	50%						0	79,072	0	79,072	79,072	100.0%		
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	45,089	0.0%		
7.00	Total Windows & Doors	2	30%						0	0	0	0	56,363	0.0%		
A	TOTAL STRUCTURE	3	50%						0	79,072	0	79,072	747,946	10.6%		
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	15,180	15,180	15,180	100.0%		
11.00	Total Floor Finishes	2	30%						0	33,634	3,348	36,982	36,982	100.0%		
12.00	Total Wall Finishes	2	30%						0	0	112,498	112,498	112,498	100.0%		
13.00	Total Ceiling Finishes	3	50%						5,268	29,829	15,923	51,021	51,021	100.0%		
14.00	Total Fixed Joinery Units	2	30%						0	0	4,681	4,681	4,681	100.0%		
B	TOTAL INTERNAL FIT-OUT	3	50%						5,268	63,463	151,630	220,361	220,361	100.0%		
15.00	Total Sanitary Plumbing	2	30%						0	0	29,728	29,728	29,728	100.0%		
16.00	Total Mechanical Services	4	70%						115,115	53,130	61,985	230,230	61,985	371.4%		
17.00	Total Fire Services	2	30%						10,943	3,795	11,575	26,313	11,575	227.3%		
18.00	Total Electrical Services	3	50%						0	38,583	42,843	81,425	81,425	100.0%		
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%		
20.00	Total Special Services	3	50%						19,060	0	19,060	38,120	19,060	200.0%		
C	TOTAL BUILDING SERVICES	3	50%						145,118	95,508	165,191	405,816	203,773	199.2%		
	TOTAL BUILDING	3	50%						150,386	238,043	316,820	705,249	1,172,080	60.2%		

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

F2 - FACULTY OFFICE (NEW)



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT		
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	3	50%						0	0	0	0	136,415	0.0%		
2.00	Total Frame	2	30%						0	0	0	0	145,319	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	3	50%						0	83,636	16,239	99,875	99,875	100.0%		
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	65,149	0.0%		
7.00	Total Windows & Doors	3	50%						0	7,590	0	7,590	80,131	9.5%		
A	TOTAL STRUCTURE	3	50%						0	91,226	16,239	107,465	526,889	20.4%		
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%		
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	67,665	0.0%		
10.00	Total Internal Doors	3	50%						0	0	24,288	24,288	24,288	100.0%		
11.00	Total Floor Finishes	3	50%						0	48,851	0	48,851	48,851	100.0%		
12.00	Total Wall Finishes	3	50%						0	69,623	0	69,623	124,612	55.9%		
13.00	Total Ceiling Finishes	3	50%						0	30,983	3,980	34,963	61,978	56.4%		
14.00	Total Fixed Joinery Units	3	50%						0	4,250	6,021	10,272	10,069	102.0%		
B	TOTAL INTERNAL FIT-OUT	3	50%						0	153,707	34,289	187,996	337,464	55.7%		
15.00	Total Sanitary Plumbing	3	50%						0	21,252	8,855	30,107	30,107	100.0%		
16.00	Total Mechanical Services	2	30%						53,130	218,863	164,785	436,778	165,733	263.5%		
17.00	Total Fire Services	3	50%						13,434	5,060	13,434	31,928	13,434	237.7%		
18.00	Total Electrical Services	2	30%						0	0	101,064	101,064	101,064	100.0%		
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%		
20.00	Total Special Services	2	30%						0	29,921	0	29,921	29,921	100.0%		
C	TOTAL BUILDING SERVICES	3	50%						66,564	275,096	288,138	629,799	340,260	185.1%		
	TOTAL BUILDING	3	50%						66,564	520,030	338,666	925,260	1,204,613	76.8%		
															Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Regularly maintain and replace mechanical, fire and special services by 2023

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

G - ADMINISTRATION



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT		
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	3	50%						0	500	0	500	169,772	0.3%	Overall Recommendation/Action Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime corroded gutters immediately. Replace roof by 2023. Refurbish floor, wall and ceiling finishes by 2023. Replace 1-2 AC window mounted units immediately. Regularly maintain and replace mechanical, fire and special services by 2023.	
2.00	Total Frame	2	30%						0	0	0	0	576,210	0.0%		
3.00	Total Structural Walls	3	50%						0	0	0	0	162,436	0.0%		
4.00	Total Upper Floors	2	30%						0	0	0	0	231,505	0.0%		
5.00	Total Roof	3	50%						15,805	75,348	17,070	108,223	109,780	98.6%		
6.00	Total External Walls & Finishes	3	50%						0	0	66,192	66,192	66,192	100.0%		
7.00	Total Windows & Doors	2	30%						0	0	0	0	169,334	0.0%		
A	TOTAL STRUCTURE	3	50%						15,805	75,848	83,261	174,915	1,485,229	11.8%		
8.00	Total Stairs Balustrades & Handrails	3	50%						0	0	8,880	8,880	34,180	26.0%		
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	164,647	0.0%		
10.00	Total Internal Doors	2	30%						0	0	0	0	53,130	0.0%		
11.00	Total Floor Finishes	3	50%						81,109	4,440	81,109	166,659	85,550	194.8%		
12.00	Total Wall Finishes	3	50%						3,000	14,117	184,398	201,516	198,516	101.5%		
13.00	Total Ceiling Finishes	4	70%						61,132	16,243	0	77,375	77,075	100.4%		
14.00	Total Fixed Joinery Units	3	50%						0	10,500	5,946	16,445	15,433	106.6%		
B	TOTAL INTERNAL FIT-OUT	3	50%						145,241	45,300	280,333	470,875	628,531	74.9%		
15.00	Total Sanitary Plumbing	4	70%						600	23,403	1,265	25,268	24,668	102.4%		
16.00	Total Mechanical Services	3	50%						114,483	212,836	114,483	441,801	115,431	382.7%		
17.00	Total Fire Services	3	50%						19,373	3,795	18,741	41,909	18,741	223.6%		
18.00	Total Electrical Services	4	70%						500	122,348	9,488	132,336	131,836	100.4%		
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%		
20.00	Total Special Services	4	70%						49,330	33,156	41,541	124,028	74,697	166.0%		
C	TOTAL BUILDING SERVICES	4	70%						184,286	395,538	185,517	765,341	365,372	209.5%		
	TOTAL BUILDING	3	50%						345,333	516,687	549,112	1,411,131	2,479,132	56.9%		

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

H - LEARNING RESOURCE CENTER AND MITC



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT		
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	2	30%						0	0	0	0	243,611	0.0%	Insitu Reinforced Concrete Upper Floor - Canopy	Good condition but not sealed/ protected
2.00	Total Frame	2	30%						0	0	0	0	426,882	0.0%		
3.00	Total Structural Walls	2	30%						0	0	0	0	171,799	0.0%		
4.00	Total Upper Floors	3	50%						0	0	0	0	375,923	0.0%		
5.00	Total Roof	3	50%						50,855	244,161	82,967	377,983	327,128	115.5%		
6.00	Total External Walls & Finishes	3	50%						0	0	98,721	98,721	98,721	100.0%	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Minor rust damage and paint deterioration. Re-paint roof immediately
7.00	Total Windows & Doors	3	50%						0	0	7,590	7,590	121,281	6.3%		
A	TOTAL STRUCTURE	3	50%						50,855	244,161	189,278	484,294	1,765,345	27.4%	Membrane Roof Cladding	Required to canopy to protect concrete
8.00	Total Stairs Balustrades & Handrails	3	50%						0	0	14,231	14,231	39,531	36.0%		
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	186,297	0.0%	Metal Framed Balustrades (with Metal Infill Panels or Balusters)	Paint chipping of metal otherwise ok
10.00	Total Internal Doors	3	50%						0	0	71,498	71,498	71,498	100.0%		
11.00	Total Floor Finishes	3	50%						159,248	7,934	159,248	326,429	167,181	195.3%	Passenger Lifts	Wheel chair lift - working order, internal panel missing
12.00	Total Wall Finishes	3	50%						0	227,012	15,370	242,382	242,382	100.0%		
13.00	Total Ceiling Finishes	3	50%						0	133,164	9,780	142,944	142,944	100.0%	Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Treat rust and spot prime corroded roofing and re-paint immediately. Repair wheel chair lift (Health & safety issue). Review membrane roofing repair/installation requirements to canopies. Replace roof by 2023. Refurbish floor finishes by 2023. Regularly maintain and replace mechanical, fire and special services by 2023
14.00	Total Fixed Joinery Units	3	50%						0	27,413	4,200	31,612	31,208	101.3%		
B	TOTAL INTERNAL FIT-OUT	3	50%						159,248	395,522	274,326	829,096	881,040	94.1%		
15.00	Total Sanitary Plumbing	3	50%						0	30,740	18,975	49,715	49,715	100.0%		
16.00	Total Mechanical Services	3	50%						139,783	269,445	139,783	549,010	143,578	382.4%		
17.00	Total Fire Services	3	50%						43,170	15,180	36,845	95,195	39,375	241.8%		
18.00	Total Electrical Services	3	50%						0	334,707	0	334,707	334,707	100.0%		
19.00	Total Vertical Transportation	3	50%						0	63,250	0	63,250	63,250	100.0%		
20.00	Total Special Services	2	30%						0	132,254	0	132,254	132,254	100.0%		
C	TOTAL BUILDING SERVICES	3	50%						182,953	845,575	195,603	1,224,131	762,878	160.5%		
	TOTAL BUILDING	3	50%						393,055	1,485,258	659,207	2,537,520	3,409,263	74.4%		

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

I - AGRICULTURE



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					Full Replace		Element	Observed Deterioration/Recommendations
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace			
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %									
1.00	Total Sub-Structure	2	30%						0	0	0	0	97,013	0.0%	Element	Observed Deterioration/Recommendations	
2.00	Total Frame	2	30%						0	0	0	0	182,513	0.0%			
3.00	Total Structural Walls	2	30%						0	0	0	0	95,786	0.0%	Profiled Metal Sheet Roof Cladding (Galv)	Rusted sections need replacing. Repaint or replace remainder of roof immediately	
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%	PVC Gutters	Lengths missing, remaining gutter is damaged	
5.00	Total Roof	5	90%						54,999	0	0	54,999	54,999	100.0%	PVC Downpipes	Lengths missing, remaining DP's damaged	
6.00	Total External Walls & Finishes	4	70%						0	28,129	0	28,129	28,129	100.0%	Timber Doors (Solid/No Glazing)	Evidence of damage, borer etc.	
7.00	Total Windows & Doors	4	70%						18,596	759	0	19,355	58,519	33.1%	Vinyl Floor Finishes	Edges lifting, surface marking and worn areas	
A	TOTAL STRUCTURE	4	70%						73,594	28,888	0	102,482	516,957	19.8%	Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Replace severely corroded sections of roof and missing/damaged gutters immediately. Review remainder of roof treat rust and roof or replace immediately. Treat borer damage to doors immediately. Refurbish windows and doors and floor finishes by 2023. Regularly maintain and replace mechanical, fire and special services by 2023	
9.00	Total Internal Walls/Partitions	0	0%						0	0	0	0	0	0.0%			
10.00	Total Internal Doors	2	30%						0	0	1,518	1,518	4,554	33.3%			
11.00	Total Floor Finishes	5	90%						35,658	0	17,602	53,260	35,658	149.4%			
12.00	Total Wall Finishes	4	70%						10,753	0	0	10,753	10,753	100.0%			
13.00	Total Ceiling Finishes	4	70%						17,002	30,432	0	47,434	47,434	100.0%			
14.00	Total Fixed Joinery Units	2	30%						0	14,042	52,719	66,760	66,760	100.0%			
B	TOTAL INTERNAL FIT-OUT	3	50%						63,412	44,473	71,839	179,724	165,159	108.8%			
15.00	Total Sanitary Plumbing	3	50%						0	6,831	3,795	10,626	10,626	100.0%			
16.00	Total Mechanical Services	4	70%						25,933	48,070	25,933	99,935	25,933	385.4%			
17.00	Total Fire Services	4	70%						3,163	3,163	1,581	7,906	1,581	500.0%			
18.00	Total Electrical Services	3	50%						0	9,488	30,014	39,501	39,501	100.0%			
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%			
20.00	Total Special Services	2	30%						0	3,433	0	3,433	3,433	100.0%			
C	TOTAL BUILDING SERVICES	3	50%						29,095	70,984	61,322	161,401	81,073	199.1%			
	TOTAL BUILDING	3	50%						166,102	144,345	133,161	443,607	763,190	58.1%			

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

J - A+ CENTER & ARE CLASSROOM



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %						
1.00	Total Sub-Structure	2	30%						0	0	0	0	106,516	0.0%
2.00	Total Frame	2	30%						0	0	0	0	87,311	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	3	50%						0	6,679	49,092	55,772	55,772	100.0%
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	63,474	0.0%
7.00	Total Windows & Doors	3	50%						3,036	0	0	3,036	35,130	8.6%
A	TOTAL STRUCTURE	3	50%						3,036	6,679	49,092	58,808	348,203	16.9%
8.00	Total Stairs Balustrades & Handrails	2	30%						0	0	0	0	8,135	0.0%
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	8,382	0.0%
10.00	Total Internal Doors	2	30%						0	0	0	0	4,554	0.0%
11.00	Total Floor Finishes	2	30%						0	18,405	6,202	24,607	24,607	100.0%
12.00	Total Wall Finishes	3	50%						0	49,056	0	49,056	49,056	100.0%
13.00	Total Ceiling Finishes	4	70%						2,088	13,463	18,343	33,894	33,894	100.0%
14.00	Total Fixed Joinery Units	3	50%						3,795	0	22,201	25,996	25,996	100.0%
B	TOTAL INTERNAL FIT-OUT	3	50%						5,883	80,925	46,745	133,553	154,624	86.4%
15.00	Total Sanitary Plumbing	3	50%						0	3,795	11,765	15,560	15,560	100.0%
16.00	Total Mechanical Services	3	50%						46,805	85,008	46,805	178,618	49,588	360.2%
17.00	Total Fire Services	2	30%						0	4,175	1,265	5,440	5,440	100.0%
18.00	Total Electrical Services	3	50%						10,120	11,132	55,154	76,406	76,406	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	2	30%						0	11,153	0	11,153	11,153	100.0%
C	TOTAL BUILDING SERVICES	3	50%						56,925	115,262	114,989	287,176	158,146	181.6%
	TOTAL BUILDING	3	50%						65,844	202,866	210,826	479,536	660,973	72.6%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT	
Element	Observed Deterioration/Recommendations
Timber Door - Single	Evidence of impact damage, insect attack (termites/borer)
Fibre Cement Soffit Lining with Painted Finishes. Metal Roofing	Evidence of stains/ leaks. Re-paint roof immediately
Fibre Cement soffits to patio	Evidence of stains
Lighting (External) - Fluorescent	Evidence of water ingress
Built-in Joinery - Vanity Unit to toilets	Evidence of impact damage, marks, etc.
Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Treat and repair termite/borer damage immediately. Check and repair water damage/leaks to soffit and light fittings immediately. Re-paint roofing immediately. Refurbish ceilings and joinery fittings by 2023. Regularly maintain and replace mechanical, electrical and special services by 2023

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

K – BOOKSTORE, DISPENSARY, STUDENT SERVICES



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT		
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	2	30%						0	0	0	0	92,554	0.0%	Overall Recommendation/Action Targeted regular maintenance and cleaning to extend asset life. Review flaking roof paint and re-paint roof immediately. Refurbish floor finishes by 2023. Regularly maintain and replace mechanical, electrical and special services by 2023	
2.00	Total Frame	3	50%						0	0	0	0	80,576	0.0%		
3.00	Total Structural Walls	3	50%						0	0	0	0	49,590	0.0%		
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%		
5.00	Total Roof	3	50%						0	63,579	0	63,579	63,579	100.0%		
6.00	Total External Walls & Finishes	2	30%						0	0	0	0	22,811	0.0%		
7.00	Total Windows & Doors	3	50%						0	0	46,491	46,491	46,491	100.0%		
A	TOTAL STRUCTURE	3	50%						0	63,579	46,491	110,070	355,602	31.0%		
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%		
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	64,515	0.0%		
10.00	Total Internal Doors	3	50%						0	0	15,180	15,180	16,951	89.6%		
11.00	Total Floor Finishes	4	70%						30,445	0	24,362	54,808	30,445	180.0%		
12.00	Total Wall Finishes	3	50%						0	71,698	0	71,698	71,698	100.0%		
13.00	Total Ceiling Finishes	4	70%						0	14,099	0	14,099	32,370	43.6%		
14.00	Total Fixed Joinery Units	3	50%						0	31,246	0	31,246	31,246	100.0%		
B	TOTAL INTERNAL FIT-OUT	4	70%						30,445	117,042	39,542	187,030	247,225	75.7%		
15.00	Total Sanitary Plumbing	3	50%						0	37,950	0	37,950	37,950	100.0%		
16.00	Total Mechanical Services	3	50%						34,977	53,130	34,977	123,085	34,977	351.9%		
17.00	Total Fire Services	3	50%						7,605	2,530	7,605	17,740	7,605	233.3%		
18.00	Total Electrical Services	3	50%						0	39,782	20,902	60,684	60,684	100.0%		
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%		
20.00	Total Special Services	3	50%						13,533	0	13,533	27,066	13,533	200.0%		
C	TOTAL BUILDING SERVICES	3	50%						56,115	133,392	77,017	266,524	154,749	172.2%		
	TOTAL BUILDING	3	50%						86,560	314,013	163,050	563,624	757,576	74.4%		

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

L – FSM – CHINA FRIENDSHIP SPORTS CENTER



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT		
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %								
1.00	Total Sub-Structure	3	50%						0	0	0	0	598,673	0.0%	PVC Down Pipes and metal rain water heads	Rain water heads corroding and leaking. Downpipes in poor condition, some are missing and others damaged. Repair & replace to prevent staining of external walls
2.00	Total Frame	4	70%						0	285,035	0	285,035	2,131,948	13.4%		
3.00	Total Structural Walls	3	50%						0	0	0	0	1,032,384	0.0%		
4.00	Total Upper Floors	3	50%						0	0	0	0	1,488,012	0.0%		
5.00	Total Roof	5	90%						518,648	0	0	518,648	518,648	100.0%		
6.00	Total External Walls & Finishes	4	70%						0	395,747	0	395,747	395,747	100.0%	Solid Plaster Cladding with Painted Finishes	Evidence of leaking/cracks with significant amount of mould growing on external walls. Repair leaks and clean
7.00	Total Windows & Doors	5	90%						516,192	0	0	516,192	516,192	100.0%		
A	TOTAL STRUCTURE	4	70%						1,034,841	680,782	0	1,715,623	6,681,605	25.7%	Insitu Concrete Slab Roof Without Any Apparent Membrane Waterproofing	Roughly placed with poor quality finish, cracks in places. Install new roof membrane immediately to prevent further damage/deterioration
8.00	Total Stairs Balustrades & Handrails	3	50%						0	0	162,806	162,806	289,306	56.3%		
9.00	Total Internal Walls/Partitions	3	50%						0	0	0	0	268,686	0.0%		
10.00	Total Internal Doors	4	70%						0	45,540	0	45,540	45,540	100.0%	Windows and Doors	In very poor condition. This is a major health and safety risk as window/glazing may fall out. Replace immediately
11.00	Total Floor Finishes	4	70%						0	99,681	0	99,681	99,681	100.0%		
12.00	Total Wall Finishes	4	70%						740,091	0	0	740,091	740,091	100.0%	Concrete Screed Floor Finish	Worse for wear, cracks and chips
13.00	Total Ceiling Finishes	3	50%						0	544,552	0	544,552	544,552	100.0%		
14.00	Total Fixed Joinery Units	4	70%						9,488	78,506	0	87,993	87,993	100.0%	Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Replace roof and windows (Health & safety issue) immediately. Repair wall leaks/cracks, gutters and downpipes immediately. Regularly maintain and replace sanitary plumbing, mechanical and fire services by 2023
B	TOTAL INTERNAL FIT-OUT	4	70%						749,579	768,280	162,806	1,680,664	2,075,850	81.0%		
15.00	Total Sanitary Plumbing	4	70%						7,590	99,303	0	106,893	106,893	100.0%		
16.00	Total Mechanical Services	4	70%						105,221	123,970	105,221	334,412	105,221	317.8%		
17.00	Total Fire Services	3	50%						5,060	10,120	2,530	17,710	7,590	233.3%		
18.00	Total Electrical Services	4	70%						0	465,236	0	465,236	465,236	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	4	70%						117,871	698,629	107,751	924,251	684,940	134.9%		
	TOTAL BUILDING	4	70%						1,902,290	2,147,690	270,557	4,320,537	9,442,394	45.8%		

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

M - SECURITY, WEIGHTROOM, BOOKSTORE & IT



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %						
1.00	Total Sub-Structure	1	10%						0	0	0	0	112,105	0.0%
2.00	Total Frame	2	30%						0	9,102	0	9,102	143,919	6.3%
3.00	Total Structural Walls	3	50%						4,910	0	0	4,910	31,056	15.8%
4.00	Total Upper Floors	2	30%						0	0	0	0	44,781	0.0%
5.00	Total Roof	5	90%						31,570	81,070	0	112,640	95,921	117.4%
6.00	Total External Walls & Finishes	3	50%						19,487	2,657	9,317	31,460	32,034	98.2%
7.00	Total Windows & Doors	5	90%						28,502	16,192	569	45,263	42,694	106.0%
A	TOTAL STRUCTURE	4	70%						84,468	109,020	9,886	203,375	502,509	40.5%
8.00	Total Stairs Balustrades & Handrails	1	10%						0	0	0	0	10,120	0.0%
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	24,504	0.0%
10.00	Total Internal Doors	3	50%						900	0	6,831	7,731	6,831	113.2%
11.00	Total Floor Finishes	3	50%						14,330	7,286	14,330	35,946	38,417	93.6%
12.00	Total Wall Finishes	3	50%						0	22,458	46,551	69,009	69,009	100.0%
13.00	Total Ceiling Finishes	3	50%						19,392	0	9,108	28,500	33,965	83.9%
14.00	Total Fixed Joinery Units	4	70%						9,488	1,898	0	11,385	11,385	100.0%
B	TOTAL INTERNAL FIT-OUT	3	50%						44,110	31,642	76,820	152,572	194,231	78.6%
15.00	Total Sanitary Plumbing	3	50%						0	0	253	253	253	100.0%
16.00	Total Mechanical Services	4	70%						19,608	37,318	19,608	76,533	19,608	390.3%
17.00	Total Fire Services	2	30%						1,265	1,265	633	3,163	633	500.0%
18.00	Total Electrical Services	4	70%						0	81,615	0	81,615	81,615	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						7,590	12,726	7,590	27,906	20,316	137.4%
C	TOTAL BUILDING SERVICES	3	50%						28,463	132,923	28,083	189,469	122,424	154.8%
	TOTAL BUILDING	3	50%						157,041	273,586	114,789	545,415	819,164	66.6%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT	
Element	Observed Deterioration/Recommendations
Metal Gutters	Rusted and needs replacing
Metal Down Pipes	7 of 8 have corroded and need replacing
Profiled Metal Sheet Wall Cladding (Pre-Finished)	Flaking paint and corrosion, especially at back. Replace corroded roofing immediately and consider re-painting roof (roof due for replacement by 2023)
Timber Doors (Solid/No Glazing)	Leafs in poor condition. Frames need repairs in places
Profiled Metal Sheet Soffit Lining (Pre-Finished)	Corrosion to fixings and edges.
Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Some minor concrete spalling needs repair. Replace corroded roofing immediately and consider re-painting roof. Replace roof, gutters, downpipes, windows and doors by 2023. Repair wall cracks and repaint by 2023, Regularly maintain and replace mechanical, fire and special services by 2023

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

N - MAINTENANCE CRE, MUSIC CLASSROOM



ID Code	Element	Condition Grading		Condition Gauge					Asset Renewal Cost					
		Condition Grade	% Deterioration	VG	G	A	P	VP	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %						
1.00	Total Sub-Structure	1	10%						0	0	0	0	113,224	0.0%
2.00	Total Frame	2	30%						0	9,201	0	9,201	145,488	6.3%
3.00	Total Structural Walls	2	30%						0	0	0	0	31,309	0.0%
4.00	Total Upper Floors	0	0%						0	0	0	0	0	0.0%
5.00	Total Roof	4	70%						14,952	81,908	0	96,861	96,861	100.0%
6.00	Total External Walls & Finishes	3	50%						11,135	2,657	0	13,791	23,184	59.5%
7.00	Total Windows & Doors	5	90%						27,243	63,961	1,943	93,147	91,204	102.1%
A	TOTAL STRUCTURE	4	70%						53,330	157,726	1,943	212,999	501,269	42.5%
8.00	Total Stairs Balustrades & Handrails	0	0%						0	0	0	0	0	0.0%
9.00	Total Internal Walls/Partitions	2	30%						0	0	0	0	61,555	0.0%
10.00	Total Internal Doors	3	50%						600	0	13,662	14,262	13,662	104.4%
11.00	Total Floor Finishes	3	50%						21,950	0	21,950	43,901	38,867	113.0%
12.00	Total Wall Finishes	2	30%						0	0	15,389	15,389	15,389	100.0%
13.00	Total Ceiling Finishes	4	70%						24,158	21,076	0	45,234	45,234	100.0%
14.00	Total Fixed Joinery Units	3	50%						0	4,807	759	5,566	4,807	115.8%
B	TOTAL INTERNAL FIT-OUT	3	50%						46,708	25,883	51,760	124,351	179,513	69.3%
15.00	Total Sanitary Plumbing	3	50%						0	0	759	759	759	100.0%
16.00	Total Mechanical Services	4	70%						40,101	19,608	22,391	82,099	22,391	366.7%
17.00	Total Fire Services	2	30%						1,265	1,265	1,898	4,428	1,898	233.3%
18.00	Total Electrical Services	3	50%						0	69,832	0	69,832	69,832	100.0%
19.00	Total Vertical Transportation	0	0%						0	0	0	0	0	0.0%
20.00	Total Special Services	3	50%						10,975	0	10,975	21,950	10,975	200.0%
C	TOTAL BUILDING SERVICES	3	50%						52,341	90,704	36,022	179,067	105,854	169.2%
	TOTAL BUILDING	4	70%						152,379	274,314	89,725	516,418	786,636	65.6%

TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT

Element	Observed Deterioration/Recommendations
Metal Doors (Solid/No Glazing)	Two severely corroded on face, edges and hinges. Others show signs of corrosion beginning. Frames Ok but need maintenance.
Profiled Metal Sheet Soffit Lining (Pre-Finished)	Corrosion to fixings and edges.
Metal Gutters	Evidence of corrosion, some holes visible.
Profiled Metal Sheet Wall Cladding (Pre-Finished)	Corrosion established in several places. Holes and damage also evident. Repair /replace roofing in selected areas and consider re-painting roof (roof due for replacement by 2023)
Aluminium Framed Windows	More recently installed. Some broken glass, frames faded but OK
Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Localised roof, gutter and soffit repairs or rust treatment required immediately. Consider re-painting roof. Replace roof, gutters, downpipes, windows and doors by 2023. Refurbish internal door, wall and ceiling finishes by 2023, Regularly maintain and replace mechanical, fire and special services by 2023

NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE	SITE INFRASTRUCTURE
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		Condition Gauge					Asset Renewal Cost					Full Replace		% Full Replace		TOP 5 MAJOR ELEMENTS REQUIRING URGENT MAINTENANCE, RENEWAL OR REPLACEMENT	
ID Code	Element	Condition Grade	% Deter.	Condition Gauge					Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Total	Full Replace	% Full Replace	Element	Observed Deterioration/Recommendations	
				0-20 %	20-40 %	40-60 %	60-80 %	80-100 %									
1.00	Total Roding	3	50%						5,793	342,557	2,897	351,246	1,001,101	35.1%	Concrete roads and footpaths	Some areas of damage observed. Replace damaged sections	
2.00	Total Car Parks	3	50%						0	134,994	318,517	453,511	866,193	52.4%	Agricultural Research, Recreational, Rest Area buildings, toilet to Maintenance building and sundry site structures (e.g.	A number of buildings/structures observed are run-down and require demolition/replacement and/or consideration on Campus master-plan	
3.00	Total Foot Paths & Collection Areas	3	50%						581	10,054	22,704	33,339	333,571	10.0%	Drainage	Septic tank and leaching field needs expanding within 5 years (preferably earlier). Monitor and clean swales, sumps and septic tanks. Underground pipework not assessed.	
4.00	Total Fences & Gates	3	50%						1,518	0	0	1,518	65,587	2.3%	Main electrical and sub-main Campus switchboards	Corrosion to roof and meter cabinets. Repair and weather proof	
5.00	Total Structures	3	50%						475,762	0	518,618	994,380	9,649,455	10.3%	Fire hydrants	Uncertain if these are functioning – service and test regularly, consider replacement	
6.00	Total Retaining Walls	3	50%						0	0	13,460	13,460	230,786	5.8%	Overall Recommendation/Action	Targeted regular maintenance and cleaning to extend asset life. Repair damaged areas of concrete roading and footpaths. Building and structures that are run-down need to be considered for replacement in Campus master-plan. Repair corrosion to electrical cabinets and weather-proof enclosures. Service fire hydrants	
7.00	Site Drainage	3	50%						189,750	0	262,772	452,522	2,000,347	22.6%			
8.00	Total Electrical Infrastructure	3	50%						74,003	126,500	1,437,040	1,637,543	1,637,543	100.0%			
9.00	Total Water Services	3	50%						0	0	8,223	8,223	114,483	7.2%			
10.00	Total Site Furniture	3	50%						12,018	3,416	116,127	131,560	164,134	80.2%			
TOTAL SITE INFRASTRUCTURE									759,424	617,520	2,700,357	4,077,302	16,063,199	25.4%			

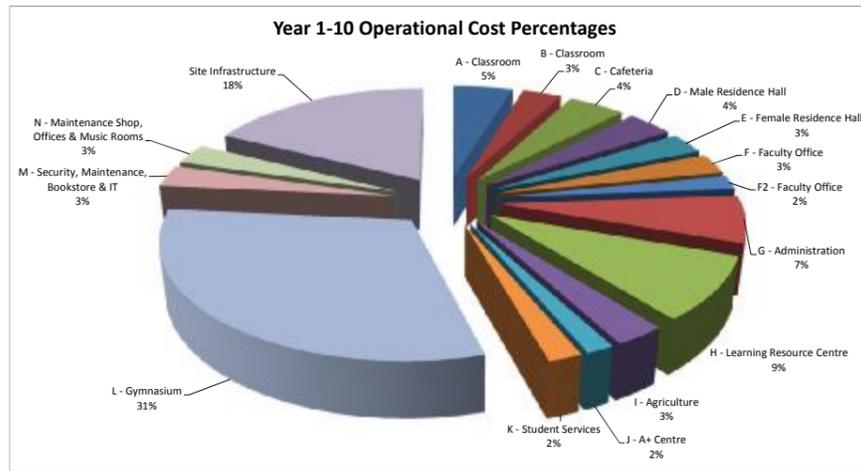
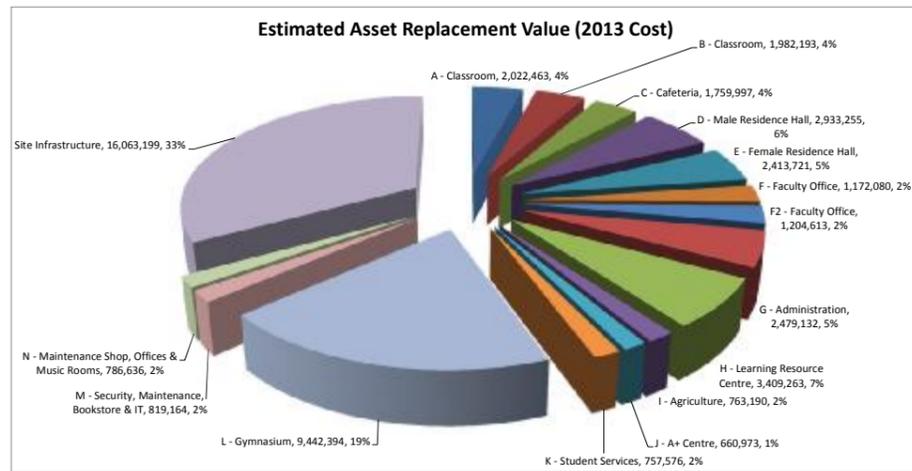
Appendix C

Indicative Asset Renewal and Maintenance Cost Plan





Ref	Asset Description	Condition Grade	Key Metric Data					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 Cost vs Full Replacement Cost		Operational Cost (Cost of Renewal and Maintenance)								
			Rank 1 - 5	GFA (ft2)	GFA (m2)	Build Rate (ft2)	Build Rate (m2)	Cost (\$ USD)	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)
1.00	A - Classroom	3	7,070	657	286	3,079	2,022,463	242,141	12%	694,659	34%	314,803	16%	1,251,602	62%	41,720	9,603	51,323	338,170	790,688	410,833	
2.00	B - Classroom	3	7,430	690	267	2,872	1,982,193	143,920	7%	486,806	25%	238,681	12%	869,407	44%	28,980	7,787	36,768	221,795	564,681	316,556	
3.00	C - Cafeteria	3	6,517	605	270	2,907	1,759,997	223,780	13%	387,547	22%	357,018	20%	968,345	55%	32,278	9,870	42,148	322,478	486,245	455,716	
4.00	D - Male Residence Hall	3	10,240	951	286	3,083	2,933,255	138,784	5%	321,799	11%	423,665	14%	884,247	30%	29,475	12,825	42,300	267,033	450,049	551,914	
5.00	E - Female Residence Hall	3	8,192	761	295	3,172	2,413,721	113,963	5%	304,218	13%	353,203	15%	771,384	32%	25,713	9,875	35,588	212,716	402,972	451,957	
6.00	F - Faculty Office	3	4,055	377	289	3,112	1,172,080	150,386	13%	238,043	20%	316,820	27%	705,249	60%	23,508	5,642	29,150	206,803	294,459	373,237	
7.00	F2 - Faculty Office	3	4,750	441	254	2,730	1,204,613	66,564	6%	520,030	43%	338,666	28%	925,260	77%	30,842	7,585	38,427	142,413	595,879	414,515	
8.00	G - Administration	3	8,837	821	281	3,020	2,479,132	345,333	14%	516,687	21%	549,112	22%	1,411,131	57%	47,038	12,577	59,615	471,107	642,461	674,886	
9.00	H - Learning Resource Centre	3	17,313	1,608	197	2,120	3,409,263	393,055	12%	1,485,258	44%	659,207	19%	2,537,520	74%	84,584	24,185	108,769	634,907	1,727,111	901,060	
10.00	I - Agriculture	3	2,726	253	280	3,014	763,190	166,102	22%	144,345	19%	133,161	17%	443,607	58%	14,787	4,085	18,872	206,953	185,196	174,012	
11.00	J - A+ Centre	3	2,372	220	279	2,999	660,973	65,844	10%	202,866	31%	210,826	32%	479,536	73%	15,985	4,646	20,630	112,301	249,323	257,283	
12.00	K - Student Services	3	2,879	267	263	2,833	757,576	86,560	11%	314,013	41%	163,050	22%	563,624	74%	18,787	5,053	23,841	137,092	364,545	213,581	
13.00	L - Gymnasium	4	30,935	2,874	305	3,286	9,442,394	1,902,290	20%	2,147,690	23%	270,557	3%	4,320,537	46%	144,018	31,655	175,673	2,218,838	2,464,238	587,104	
14.00	M - Security, Maintenance, Bookstore & IT	3	6,423	597	128	1,373	819,164	157,041	19%	273,586	33%	114,789	14%	545,415	67%	18,180	6,114	24,294	218,177	334,722	175,925	
15.00	N - Maintenance Shop, Offices & Music Rooms	4	4,952	460	159	1,710	786,636	152,379	19%	274,314	35%	89,725	11%	516,418	66%	17,214	5,386	22,600	206,238	328,173	143,585	
16.00	Site Infrastructure						16,063,199	759,424	5%	617,520	4%	2,700,367	17%	4,077,302	25%	135,910	50,539	186,449	1,264,817	1,122,912	3,205,760	
TOTALS EXCLUDING ESCALATION							48,669,850	5,107,564	10%	8,929,380	18%	7,233,639	15%	21,270,583	44%	709,019	207,427	916,447	7,181,838	11,003,654	9,307,913	
Escalation Allowance								1,431,388		6,241,045			9,432,814		570,175	363,053	933,228	5,061,916	9,871,574	13,063,343		
TOTALS INCLUDING ESCALATION (3.4% per annum assumed)								6,538,952		15,170,425			16,666,453		1,279,194	570,480	1,849,675	12,243,754	20,875,228	22,371,255		



Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 ASSET RENEWAL DETAILED EXPENDITURE
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013
 Revision: Final

Ref	Asset Description	Cost Split Summary	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	Total (\$ USD)					
			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)						
11.00	J - A+ Centre	Annual Asset Renewal Cost	0	0	2,088	45,540	14,421	0	0	0	3,795	0	35,420	0	0	72,356	48,538	0	0	35,420	0	11,132	107,602	0	0	0	46,805	0	0	56,419	0	0	479,536					
		Year 1 - 10 Asset Renewal Cost	65,844										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	202,866										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210,826													
12.00	K - Student Services	Annual Asset Renewal Cost	0	0	0	27,830	0	24,362	0	0	7,348	27,020	26,565	0	0	1,265	218,572	0	0	26,565	1,265	39,782	0	0	0	1,265	88,236	24,362	0	22,167	0	27,020	563,624					
		Year 1 - 10 Asset Renewal Cost	86,560										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	314,013										-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	163,050													
13.00	L - Gymnasium	Annual Asset Renewal Cost	0	43,236	132,849	61,985	518,722	0	0	0	1,142,968	2,530	61,985	36,355	0	0	1,550,894	0	0	61,985	0	436,471	0	43,236	0	0	227,321	0	0	0	0	0	4,320,537					
		Year 1 - 10 Asset Renewal Cost	1,902,290										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	2,147,690										-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270,557													
14.00	M - Security, Maintenance, Bookstore & IT	Annual Asset Renewal Cost	1,898	569	52,331	17,710	47,583	14,330	0	0	9,488	13,133	19,608	4,428	0	20,012	124,907	0	0	17,710	0	86,921	1,898	569	0	0	86,970	14,330	3,432	0	0	7,590	545,415					
		Year 1 - 10 Asset Renewal Cost	157,041										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	273,586										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	114,789													
15.00	N - Maintenance Shop, Offices & Music Rooms	Annual Asset Renewal Cost	4,428	2,530	32,827	0	33,044	4,726	0	0	23,557	51,268	759	0	0	0	176,180	0	17,710	0	0	79,665	15,389	0	0	17,710	16,951	5,485	0	1,265	0	32,925	516,418					
		Year 1 - 10 Asset Renewal Cost	152,379										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	274,314										-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89,725													
16.00	Site Infrastructure	Annual Asset Renewal Cost	0	0	12,258	291	191,268	0	0	2,897	76,950	475,762	0	0	474,654	9,764	129,916	0	0	2,897	291	0	1,561,666	0	5,933	291	284,454	0	77,165	0	770,849	4,077,302						
		Year 1 - 10 Asset Renewal Cost	759,424										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
		Year 11 - 20 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	617,520										-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Year 21 - 30 Asset Renewal Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,700,357													
Total Campus Annual Asset Renewal Cost (Excluding Escalation)			11,936	64,996	469,704	439,246	946,649	258,268	0	28,488	1,545,926	1,342,353	419,423	119,213	499,322	718,825	4,858,067	0	71,599	414,654	92,636	1,735,642	2,812,666	61,407	56,191	88,208	1,745,956	335,509	100,300	369,772	112,060	1,551,570	21,270,583					
Year 1 - 10 Asset Renewal Cost (Excluding Escalation)			5,107,564										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Year 11 - 20 Asset Renewal Cost (Excluding Escalation)			-	-	-	-	-	-	-	-	-	-	8,929,380										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Year 21 - 30 Asset Renewal Cost (Excluding Escalation)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,233,639														
Total Campus Annual Asset Renewal Cost (Including Escalation)			12,342	69,491	519,261	502,099	1,118,901	315,641	0	37,224	2,088,687	1,875,306	605,869	178,061	771,165	1,147,918	8,021,795	0	126,403	756,930	174,851	3,387,434	5,676,094	128,136	121,238	196,789	4,027,605	800,272	247,374	942,995	295,491	4,230,460	38,375,831					
Year 1 - 10 Asset Renewal Cost (Including Escalation)			6,538,952										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Year 11 - 20 Asset Renewal Cost (Including Escalation)			-	-	-	-	-	-	-	-	-	-	15,170,425										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Year 21 - 30 Asset Renewal Cost (Including Escalation)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,666,453														

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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 - Classroom	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	6,415	6,415	0	0	0	110,098	0	0	2,378	112,476	0	46,299	18,788	0	0	58,162	123,249	242,141	
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	97,168	0	97,168	0	0	0	0	118,098	104,602	100,694	323,394	78,683	46,173	8,855	140,387	0	0	274,097	694,659	
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	73,774	31,715	105,489	39,468	0	13,662	31,569	0	0	3,137	87,836	0	46,299	15,626	1,392	0	58,162	121,478	314,803	
		Total (\$ USD)	0	0	0	0	97,168	73,774	38,130	209,072	39,468	0	13,662	141,667	118,098	104,602	106,209	523,706	78,683	138,771	43,269	141,778	0	116,324	518,824	1,251,602
2.00	B - Classroom	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	11,625	11,625	0	0	0	13,821	0	0	2,378	16,200	0	41,872	13,098	0	0	61,126	116,095	143,920	
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	64,479	0	64,479	0	0	0	39,960	120,438	91,887	7,084	259,369	24,035	37,318	2,530	99,076	0	0	162,958	486,806	
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	23,504	0	38,190	61,694	39,468	0	7,590	10,064	0	0	2,378	59,501	0	41,872	13,098	1,392	0	61,126	117,487	238,681
		Total (\$ USD)	0	0	0	0	87,983	0	49,815	137,797	39,468	0	7,590	63,846	120,438	91,887	11,840	335,069	24,035	121,061	28,727	100,467	0	122,251	396,540	869,407
3.00	C - Cafeteria	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	1,500	0	8,590	10,090	0	2,000	0	130,348	0	0	0	132,348	0	64,642	13,701	1,000	0	2,000	81,343	223,780
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	95,798	0	95,798	0	0	0	5,797	0	59,353	72,738	137,888	34,788	5,693	1,898	111,483	0	0	153,861	387,547	
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	7,084	0	125,681	132,765	0	0	16,698	1,366	114,008	10,825	2,277	145,175	0	64,642	12,436	0	0	2,000	79,078	357,018
		Total (\$ USD)	0	0	0	0	104,382	0	134,270	238,652	0	2,000	16,698	137,511	114,008	70,179	75,015	415,411	34,788	134,976	28,035	112,483	0	4,000	314,281	968,345
4.00	D - Male Residence Hall	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	0	0	109,436	0	0	0	109,436	0	25,553	3,795	0	0	0	29,348	138,784	
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	12,338	0	12,338	0	0	0	0	15,939	63,406	0	79,345	37,950	1,898	21,846	84,211	0	84,211	230,116	321,799	
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	110,163	0	110,163	0	0	0	85,744	0	21,436	19,481	126,661	107,525	25,553	4,428	49,335	0	0	186,841	423,665	
		Total (\$ USD)	0	0	0	0	122,502	0	122,502	0	0	0	195,180	15,939	84,842	19,481	315,441	145,475	53,004	30,069	133,546	0	84,211	446,305	884,247	
5.00	E - Female Residence Hall	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	0	0	90,181	0	0	0	90,181	0	19,987	3,795	0	0	0	23,782	113,963	
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	9,871	0	9,871	0	0	0	0	15,939	61,486	0	77,425	37,950	1,898	18,235	91,453	0	67,387	216,922	304,218	
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	76,288	0	76,288	0	0	0	66,488	0	21,436	17,204	105,128	104,363	19,987	4,428	43,010	0	0	171,787	353,203	
		Total (\$ USD)	0	0	0	0	86,158	0	86,158	0	0	0	156,669	15,939	82,922	17,204	272,734	142,313	41,872	26,457	134,463	0	67,387	412,491	771,384	
6.00	F - Faculty Office	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	0	0	0	0	0	5,268	0	5,268	0	115,115	10,943	0	0	19,060	145,118	150,386
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	79,072	0	79,072	0	0	0	33,634	0	29,829	0	63,463	0	53,130	3,795	38,583	0	0	95,508	238,043	
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	0	15,180	3,348	112,498	15,923	4,681	151,630	29,728	61,985	11,575	42,843	0	19,060	165,191	316,820	
		Total (\$ USD)	0	0	0	0	79,072	0	79,072	0	0	15,180	36,982	112,498	51,021	4,681	220,361	29,728	230,230	26,313	81,425	0	38,120	405,816	705,249	
7.00	F2 - Faculty Office	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53,130	13,434	0	0	0	66,564	66,564	
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	83,636	0	7,590	91,226	0	0	0	48,851	69,623	30,983	4,250	153,707	21,252	218,863	5,060	0	0	29,921	275,096	520,030
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	16,239	0	0	16,239	0	0	24,288	0	0	3,980	6,021	34,289	8,855	164,785	13,434	101,064	0	0	288,138	338,666
		Total (\$ USD)	0	0	0	0	99,875	0	7,590	107,465	0	0	24,288	48,851	69,623	34,963	10,272	187,996	30,107	436,778	31,928	101,064	0	29,921	629,799	925,260
8.00	G - Administration	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	15,805	0	0	15,805	0	0	0	81,109	3,000	61,132	0	145,241	600	114,483	19,373	500	0	49,330	184,286	345,333
		Year 11 - 20 Asset Renewal Cost (\$ USD)	500	0	0	0	75,348	0	0	75,848	0	0	0	4,440	14,117	16,243	10,500	45,300	23,403	212,836	3,795	122,348	0	33,156	395,538	516,687
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	17,070	66,192	0	83,261	8,880	0	0	81,109	184,398	0	5,946	280,333	1,265	114,483	18,741	9,488	0	41,541	185,517	549,112
		Total (\$ USD)	500	0	0	0	108,223	66,192	0	174,915	8,880	0	0	166,659	201,516	77,375	16,445	470,875	25,268	441,801	41,909	132,336	0	124,028	765,341	1,411,131

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Audit Date: October 2013
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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
9.00	H - Learning Resource Centre	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	50,855	0	0	50,855	0	0	0	159,248	0	0	0	159,248	0	139,783	43,170	0	0	0	182,953	393,055
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	244,161	0	0	244,161	0	0	0	7,934	227,012	133,164	27,413	395,522	30,740	269,445	15,180	334,707	63,250	132,254	845,575	1,485,258
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	82,967	98,721	7,590	189,278	14,231	0	71,498	159,248	15,370	9,780	4,200	274,326	18,975	139,783	36,845	0	0	0	195,603	659,207
		Total (\$ USD)	0	0	0	0	377,983	98,721	7,590	484,294	14,231	0	71,498	326,429	242,382	142,944	31,612	829,096	49,715	549,010	95,195	334,707	63,250	132,254	1,224,131	2,537,520
10.00	I - Agriculture	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	54,999	0	18,596	73,594	0	0	0	35,658	10,753	17,002	0	63,412	0	25,933	3,163	0	0	0	29,095	166,102
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	28,129	759	28,888	0	0	0	0	0	30,432	14,042	44,473	6,831	48,070	3,163	9,488	0	3,433	70,984	144,345	
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	0	1,518	17,602	0	0	52,719	71,839	3,795	25,933	1,581	30,014	0	0	0	61,322	133,161
		Total (\$ USD)	0	0	0	0	54,999	28,129	19,355	102,482	0	0	1,518	53,260	10,753	47,434	66,760	179,724	10,626	99,935	7,906	39,501	0	3,433	161,401	443,607
11.00	J - A+ Centre	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	3,036	3,036	0	0	0	0	0	2,088	3,795	5,883	0	46,805	0	10,120	0	0	56,925	65,844
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	6,679	0	0	6,679	0	0	0	18,405	49,056	13,463	0	80,925	3,795	85,008	4,175	11,132	0	11,153	115,262	202,866
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	49,092	0	0	49,092	0	0	0	6,202	0	18,343	22,201	46,745	11,765	46,805	1,265	55,154	0	0	114,989	210,826
		Total (\$ USD)	0	0	0	0	55,772	0	3,036	58,808	0	0	0	24,607	49,056	33,894	25,996	133,553	15,560	178,618	5,440	76,406	0	11,153	287,176	479,536
12.00	K - Student Services	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	0	0	0	30,445	0	0	0	30,445	0	34,977	7,605	0	0	13,533	56,115	86,560
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	0	0	0	63,579	0	0	63,579	0	0	0	0	71,698	14,099	31,246	117,042	37,950	53,130	2,530	39,782	0	0	133,392	314,013
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	46,491	0	0	46,491	0	0	15,180	24,362	0	0	0	39,542	0	34,977	7,605	20,902	0	13,533	77,017	163,050
		Total (\$ USD)	0	0	0	0	63,579	0	46,491	110,070	0	0	15,180	54,808	71,698	14,099	31,246	187,030	37,950	123,085	17,740	60,684	0	27,066	266,524	563,624
13.00	L - Gymnasium	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	518,648	0	516,192	1,034,841	0	0	0	0	740,091	0	9,488	749,579	7,590	105,221	5,060	0	0	0	117,871	1,902,290
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	285,035	0	0	0	395,747	0	680,782	0	0	45,540	99,681	0	544,552	78,506	768,280	99,303	123,970	10,120	465,236	0	0	698,629	2,147,690
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	0	0	162,806	0	0	0	0	0	0	162,806	0	105,221	2,530	0	0	0	107,751	270,557
		Total (\$ USD)	0	285,035	0	0	518,648	395,747	516,192	1,715,623	162,806	0	45,540	99,681	740,091	544,552	87,993	1,680,664	106,893	334,412	17,710	465,236	0	0	0	924,251
14.00	M - Security, Maintenance, Bookstore & IT	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	4,910	0	31,570	19,487	28,502	84,468	0	0	900	14,330	0	19,392	9,488	44,110	0	19,608	1,265	0	0	7,590	28,463	157,041
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	9,102	0	0	81,070	2,657	16,192	109,020	0	0	0	7,286	22,458	0	1,898	31,642	0	37,318	1,265	81,615	0	12,726	132,923	273,586
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	0	9,317	569	9,886	0	0	6,831	14,330	46,551	9,108	0	76,820	253	19,608	633	0	0	7,590	28,083	114,789
		Total (\$ USD)	0	9,102	4,910	0	112,640	31,460	45,263	203,375	0	0	7,731	35,946	69,009	28,500	11,385	152,572	253	76,533	3,163	81,615	0	27,906	189,469	545,415
15.00	N - Maintenance Shop, Offices & Music Rooms	Year 1 - 10 Asset Renewal Cost (\$ USD)	0	0	0	0	14,952	11,135	27,243	53,330	0	0	600	21,950	0	24,158	0	46,708	0	40,101	1,265	0	0	10,975	52,341	152,379
		Year 11 - 20 Asset Renewal Cost (\$ USD)	0	9,201	0	0	81,908	2,657	63,961	157,726	0	0	0	0	0	21,076	4,807	25,883	0	19,608	1,265	69,832	0	0	90,704	274,314
		Year 21 - 30 Asset Renewal Cost (\$ USD)	0	0	0	0	0	0	1,943	1,943	0	0	13,662	21,950	15,389	0	759	51,760	759	22,391	1,898	0	0	10,975	36,022	89,725
		Total (\$ USD)	0	9,201	0	0	96,861	13,791	93,147	212,999	0	0	14,262	43,901	15,389	45,234	5,566	124,351	759	82,099	4,428	69,832	0	21,950	179,067	516,418
Total - Year 1 - 10 Asset Renewal Cost (\$ USD)			0	0	4,910	0	688,329	30,622	620,198	1,344,058	0	2,000	1,500	796,625	753,844	129,040	27,526	1,710,535	8,190	893,506	158,455	11,620	0	221,776	1,293,547	4,348,140
Total - Year 11 - 20 Asset Renewal Cost (\$ USD)			500	303,337	0	0	995,108	429,189	88,502	1,816,636	0	0	45,540	265,989	724,378	1,214,576	353,175	2,603,659	436,678	1,214,355	103,711	1,699,331	63,250	374,240	3,891,565	8,311,860
Total - Year 21 - 30 Asset Renewal Cost (\$ USD)			0	0	0	0	382,406	248,004	252,179	882,589	264,853	0	186,107	523,383	488,214	110,831	141,003	1,714,390	287,282	934,320	146,121	354,592	0	213,987	1,936,303	4,533,282
Grand Total (\$ USD)			500	303,337	4,910	0	2,065,843	707,814	960,879	4,043,283	264,853	2,000	233,147	1,585,997	1,966,436	1,454,447	521,705	6,028,585	732,150	3,042,181	408,287	2,065,543	63,250	810,002	7,121,414	17,193,281

Project: **COLLEGE OF MICRONESIA - FSM**
 Campus: **NATIONAL CAMPUS AT PALIKIR, POHNPEI 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)	5,793	0	581	1,518	475,762	0	189,750	74,003	0	12,018	759,424
		Year 11 - 20 Asset Renewal Cost (\$ USD)	342,557	134,994	10,054	0	0	0	0	126,500	0	3,416	617,520
		Year 21 - 30 Asset Renewal Cost (\$ USD)	2,897	318,517	22,704	0	518,618	13,460	262,772	1,437,040	8,223	116,127	2,700,357
		Total (\$ USD)	351,246	453,511	33,339	1,518	994,380	13,460	452,522	1,637,543	8,223	131,560	4,077,302

Project: **COLLEGE OF MICRONESIA - FSM**
 Campus: **NATIONAL CAMPUS AT PALIKIR, POHNPEI 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 - Classroom	3	2	2	2	3	3	3	3	3	3	3	4	3	3	3	4	3	4	3	3	0	3	3	3
2.00	B - Classroom	3	2	3	3	3	2	3	3	3	3	3	4	3	3	3	4	3	4	3	3	0	3	3	3
3.00	C - Cafeteria	2	2	2	0	3	2	3	3	0	2	3	4	2	3	3	3	3	4	3	4	0	3	4	3
4.00	D - Male Residence Hall	2	2	2	2	3	2	2	3	2	2	2	4	3	4	2	3	3	3	2	3	0	2	3	3
5.00	E - Female Residence Hall	2	2	2	2	3	2	2	3	3	2	2	4	3	4	2	3	3	4	2	3	0	2	3	3
6.00	F - Faculty Office	3	3	2	0	3	2	2	3	0	0	3	2	2	3	2	3	2	4	2	3	0	3	3	3
7.00	F2 - Faculty Office	3	2	0	0	3	2	3	3	0	2	3	3	3	3	3	3	3	2	3	2	0	2	3	3
8.00	G - Administration	3	2	3	2	3	3	2	3	3	2	2	3	3	4	3	3	4	3	3	4	0	4	4	3
9.00	H - Learning Resource Centre	2	2	2	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	3	3
10.00	I - Agriculture	2	2	2	0	5	4	4	4	0	0	2	5	4	4	2	3	3	4	4	3	0	2	3	3
11.00	J - A+ Centre	2	2	0	0	3	2	3	3	2	2	2	2	3	4	3	3	3	3	2	3	0	2	3	3
12.00	K - Student Services	2	3	3	0	3	2	3	3	0	2	3	4	3	4	3	4	3	3	3	3	0	3	3	3
13.00	L - Gymnasium	3	4	3	3	5	4	5	4	3	3	4	4	4	3	4	4	4	4	3	4	0	0	4	4
14.00	M - Security, Maintenance, Bookstore & IT	1	2	3	2	5	3	5	4	1	2	3	3	3	3	4	3	3	4	2	4	0	3	3	3
15.00	N - Maintenance Shop, Offices & Music Rooms	1	2	2	0	4	3	5	4	0	2	3	3	2	4	3	3	3	4	2	3	0	3	3	4

Condition Grade 0 = 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: NATIONAL CAMPUS AT PALIKIR, POHNPEI 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		Total Hard Surface Areas		Total Green Surface Areas		Site Area	
			ft2	m2	ft2	m2	ft2	m2	ft2	m2
1.00	National Campus at Palikir, Pohnpei State	15	124,691	11,584	323,488	30,053	2,853,895	265,133	3,177,382	295,186

Element	Grounds Keeping				Car Parks, Roads & Pavements			Fences & Gates		Structures			Site Drainage			Electrical Infrastructure		Water Services	Site Furniture	Telecom Services	
	Mowing	Spraying	General Grounds Keeping	Pruning & General Tree Maint.	Regrade, Relevel & Compact Gravel Surface	Pot/Crack Fill Asphalt Surface	Pot/Crack Fill Concrete Surface	Repair 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	2,853,895	2,853,895	2,853,895	2	17,590	172,632	116,033	2	2	18,219	10	18,219	1	15	15	15	1	15	1	15	
Total Cost Per Occurrence (\$ USD)	663	331	1,326	5,000	4,903	8,632	5,802	4,000	1,000	182	1,000	11,848	1,000	750	750	1,500	1,000	375	1,000	375	
Annualised Maint. Budget (\$ USD)	7,954	663	5,303	5,000	4,903	8,632	5,802	800	1,000	364	1,000	2,370	1,000	750	750	1,500	1,000	375	1,000	375	
	18,919				19,336			1,800		3,734			2,500			2,500		1,750			
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)	5,568	232	2,651	3,500	1,471	2,589	1,740	560	800	255	500	1,422	500	375	375	750	500	188	500	188	
Labour Hours (Based on \$3/Hour)	1,856	77	884	1,167	490	863	580	187	267	85	167	474	167	125	125	250	167	63	167	63	
	Number Maintenance Staff Required (Based on 1,800 Hours/PA)																				4.6
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)	2,386	199	1,326	1,500	2,451	4,316	2,901	0	0	73	200	237	300	225	225	450	300	113	0	113	
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	232	1,326	0	981	1,726	1,160	240	200	36	300	711	200	150	150	300	200	75	500	75	
	Total																				50,539
	Total																				24,664
	Total																				8,221
	Total																				17,313
	Total																				8,562

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 A - CLASSROOM
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013

Revision: Final

ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
											2013 (\$ USD)	2014 (\$ USD)	2015 (\$ USD)	2016 (\$ USD)	2017 (\$ USD)	2018 (\$ USD)	2019 (\$ USD)	2020 (\$ USD)	2021 (\$ USD)	2022 (\$ USD)							
C	TOTAL BUILDING SERVICES			3	50%						0	0	0	25,300	1,898	22,264	0	0	3,163	70,625	518,824	123,249	274,097	121,478	518,824	343,078	151.2%
	TOTAL BUILDING			3	50%						0	0	78,530	25,300	1,898	22,264	0	8,793	3,163	102,194	1,251,602	242,141	694,659	314,803	1,251,602	2,022,463	61.9%
											242,141																
											Year 1 - 10 Consolidated Capital Replacement Cost																



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						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)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	
1.00	Sub-Structure																										
1.01	Reinforced Concrete Foundations Beams	Not inspected	None	2	30%																				69,186	0.0%	
1.02	Reinforced Concrete Slab on Grade	Good condition	None	3	50%																				81,559	0.0%	
1.00	Total Sub-Structure			3	50%																				150,745	0.0%	
2.00	Frame																								0	0.0%	
2.01	Timber Frame Roof trusses	Good condition, no evidence of insect attack	None	2	30%																				193,437	0.0%	
2.02	Reinforced Concrete Columns & Beams	Good condition	Wash, clean and protect corners of columns from impact damage	2	30%																				212,104	0.0%	
2.00	Total Frame			2	30%																				405,541	0.0%	
3.00	Structural Walls																								0	0.0%	
3.01	Reinforced Concrete Masonry Walls	Good condition	Wash down	3	50%																				238,204	0.0%	
3.00	Total Structural Walls			3	50%																				238,204	0.0%	
4.00	Upper Floors																								0	0.0%	
4.01	In situ Reinforced Concrete Upper Floor	Evidence of cracking	Repair cracks	3	50%																				194,611	0.0%	
4.00	Total Upper Floors			3	50%																				194,611	0.0%	
5.00	Roof																								0	0.0%	
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of a couple leaks to upper floor	Replace panels where lesks occurung, wash down and repaint	3	50%																64,479	0	64,479	0	64,479	64,479	100.0%
5.02	PVC Downpipes	Good condition	Clean and wash	2	30%																11,739	0	11,739	11,739	11,739	100.0%	
5.03	Metal Gutters	Good condition, no evidence of leaks noted	None	2	30%																11,765	0	11,765	11,765	11,765	100.0%	
5.00	Total Roof			3	50%																87,983	0	64,479	23,504	87,983	87,983	100.0%
6.00	External Walls & Finishes																								0	0.0%	
6.01	Solid Plaster Cladding with Painted Finishes	Good condition	Wash down	2	30%																				97,689	0.0%	
6.00	Total External Walls & Finishes			2	30%																				97,689	0.0%	
7.00	Windows & Doors																								0	0.0%	
7.01	Timber Framed Doors with glazed top light over	Evidence of marks and impact damage	Wash and repaint. Install door stops where note present.	3	50%																26,565	0	26,565	26,565	26,565	100.0%	
7.02	Timber Doors (Solid/No Glazing)	Evidence of termite damage	Replace termite damaged doors	5	90%									3,795	0	0	0	0	0	0	3,795	3,795	0	0	3,795	3,795	100.0%
7.03	Timber Doors (Solid/No Glazing)	Evidence of marks and impact damage	Wash down and repaint doors. Install door stops and/or closers where not present	3	50%									0	0	0	0	0	0	0	3,795	0	3,795	3,795	3,795	100.0%	
7.04	Timber framed windows	No evadence of damage, normal wear and tear	Wash down glazing and frames	2	30%									0	0	0	0	0	0	0	0	0	0	0	1,579	0.0%	
7.05	Aluminium Louvre type windows	Generally in good condition.	Wash down and replace missing louvres. Ease and adjust.	2	30%									0	0	0	0	0	0	0	0	0	0	0	146,810	0.0%	
7.06	Window Glazing Treatments - metal bars	Peeling of paint finish	Wash and repaint	3	50%									0	0	0	0	7,830	0	0	15,660	7,830	0	7,830	15,660	7,830	200.0%
7.00	Total Windows & Doors			3	50%									3,795	0	0	7,830	0	0	49,815	11,625	0	38,190	49,815	190,373	26.2%	
A	TOTAL STRUCTURE			3	50%									3,795	0	0	7,830	0	0	137,797	11,625	64,479	61,694	137,797	1,365,146	10.1%	



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge					Asset Renewal Cost																
				Condition Grade	% Deterioration	0-20	20-40	40-60	60-80	80-100	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						%	%	%	%	%	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
8.00	Stairs, Balustrades & Handrails																		0	0	0	0	0	0	0.0%		
8.01	Insitu Reinforced Concrete Stairs	Good condition, general wear and tear	Wash down, repair cracks and paint finish	3	50%														0	0	0	0	0	25,300	0.0%		
8.02	Metal Framed Balustrades (with Metal Infill Panels or Balusters)	Corrossion present	Remove rust, wash and repaint	3	50%														0	0	36,432	36,432	36,432	36,432	100.0%		
8.03	Metal Handrails	Corrossion present	Rust removal	3	50%														0	0	3,036	3,036	3,036	3,036	100.0%		
8.00	Total Stairs Balustrades & Handrails			3	50%														0	0	39,468	39,468	64,768	60.9%			
9.00	Internal Walls/Partitions																		0	0	0	0	0	0.0%			
9.01	Blockwork partition walls to toilets and Janitors	Good condition	Wash down	3	50%														0	0	0	0	7,651	0.0%			
9.00	Total Internal Walls/Partitions			3	50%														0	0	0	0	7,651	0.0%			
10.00	Internal Doors																		0	0	0	0	0	0.0%			
10.01	Timber Door - Single	Impact damage	Clean and repair	3	50%														0	0	7,590	7,590	7,590	100.0%			
10.00	Total Internal Doors			3	50%														0	0	7,590	7,590	7,590	100.0%			
11.00	Floor Finishes																		0	0	0	0	0	0.0%			
11.01	Vinyl Floor Finishes	No evadence of damage, normal wear and tear	None	3	50%														0	0	10,064	10,064	10,064	200.0%			
11.02	Ceramic Tiled Floor Finishes	Impact damage, broken tiles	Remove and replace	5	90%														0	0	3,757	3,757	3,757	100.0%			
11.03	Concrete Screed Floor Finish	Evidence of cracking	Repair cracks	4	70%														0	0	39,960	39,960	39,960	100.0%			
11.00	Total Floor Finishes			4	70%														0	0	53,775	53,775	53,775	118.7%			
12.00	Wall Finishes																		0	0	0	0	0	0.0%			
12.01	Solid Plaster Wall Lining with Painted Finishes	Little impact damage, normal wear and tear	Clean, strip and repaint where damaged	3	50%														0	0	103,463	103,463	103,463	100.0%			
12.02	Tiled Wall Finishes	Good condition	Wash down	3	50%														0	0	15,028	15,028	15,028	100.0%			
12.03	Feature brick veneer wall to upper floor store	Good condition	Wash down	3	50%														0	0	1,947	1,947	1,947	100.0%			
12.00	Total Wall Finishes			3	50%														0	0	120,438	120,438	120,438	100.0%			
13.00	Ceiling Finishes																		0	0	0	0	0	0.0%			
13.01	Painted ply soffit Lining with Painted Finishes	Good condition	Wash down	3	50%														0	0	24,636	24,636	24,636	100.0%			
13.02	Other: Painted ply ceiling finish	Some evidence of damage	Replace damaged section - wash and repaint	3	50%														0	0	56,759	56,759	56,759	100.0%			
13.03	Painted timber rails to soffit	Some evidence of damage	Replace damaged section - wash and repaint	3	50%														0	0	10,492	10,492	10,492	100.0%			
13.00	Total Ceiling Finishes			3	50%														0	0	91,887	91,887	91,887	100.0%			
14.00	Fixed Joinery Units																		0	0	0	0	0	0.0%			
14.01	Toilet Partitions doors	General wear and tear	Wash and repaint	3	50%														0	0	2,530	2,530	2,530	100.0%			
14.02	Pin Board	General wear and tear	None	3	50%														0	0	2,378	2,378	2,378	200.0%			
14.03	White Boards	General wear and tear	None	3	50%														0	0	3,795	3,795	3,795	100.0%			
14.04	White Boards with projector screen	General wear and tear	None	3	50%														0	0	759	759	759	100.0%			
14.00	Total Fixed Joinery Units			3	50%														0	0	11,840	11,840	9,462	125.1%			



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Asset Renewal Cost																	
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
B	TOTAL INTERNAL FIT-OUT			4	70%						0	0	3,757	0	0	0	0	2,378	0	10,064	335,069	16,200	259,369	59,501	335,069	355,577	94.2%	
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	Generally ok	Needs clean up	3	50%						0	0	0	0	0	0	0	0	0	0	12,650	0	12,650	0	12,650	12,650	100.0%	
15.02	WHB (Single)	Generally ok	Needs clean up	3	50%						0	0	0	0	0	0	0	0	0	0	7,590	0	7,590	0	7,590	7,590	100.0%	
15.03	Cleaners basin	Generally ok	Needs clean up	3	50%						0	0	0	0	0	0	0	0	0	0	3,795	0	3,795	0	3,795	3,795	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	24,035	0	24,035	0	24,035	24,035	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	Tired by appearance.	Service, overhaul or consider replacement	3	50%						0	0	0	17,710	0	0	0	0	0	0	0	70,840	17,710	35,420	17,710	70,840	17,710	400.0%
16.02	Air-Conditioning - Window Mounted Unit)	OK, not in use	Service, overhaul or consider replacement	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	Ceiling Mounted Fan	Large number of fan not working	Repair or replace broken fans, services remained including cleaning blades, treatment maybe required to	4	70%						0	0	0	0	0	22,264	0	0	0	0	44,528	22,264	0	22,264	44,528	22,264	200.0%	
											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	0	17,710	1,898	22,264	0	0	0	0	121,061	41,872	37,318	41,872	121,061	41,872	289.1%	
17.00	Fire Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
17.01	Smoke Detection & Alarm Systems	Check if working	None	3	50%						0	0	0	0	0	0	0	0	0	13,098	26,197	13,098	0	13,098	26,197	13,098	200.0%	
17.02	Fire Hose Reel	Good condition	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%	
											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	13,098	28,727	13,098	2,530	13,098	28,727	15,628	183.8%	
18.00	Electrical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
18.01	Main Distribution Boards	OK condition		1	10%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,488	0.0%		
18.02	Sub-Main Distribution Boards	OK condition		1	10%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,855	0.0%		
18.03	Electrical Wiring/Reticulation	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	26,197	0	26,197	0	26,197	26,197	100.0%	
18.04	General Power Outlet	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	34,929	0	34,929	0	34,929	34,929	100.0%	
18.05	Lighting (External) - Incandescent	Some bulbs missing from fittings, no grille or cover	Replace missing or blown bulbs. Clean bulbs and install cover/grille	3	50%						0	0	0	0	0	0	0	0	0	0	6,325	0	6,325	0	6,325	6,325	100.0%	
18.06	Lighting (External) - Floodlights	Appear to be in good condition located at high level on road elevation of building	Wash external covers and monitor	2	30%						0	0	0	0	0	0	0	0	0	0	1,392	0	0	1,392	1,392	100.0%		
18.07	Lighting (Internal) - Fluorescant	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	31,625	0	31,625	0	31,625	31,625	100.0%	
											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	100,467	0	99,076	1,392	100,467	118,810	84.6%	
19.00	Vertical Transportation										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
19.01	No lifts present to this building			0	0%						0	0	0	0	0	0	0	0	0	0	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%		
20.00	Special Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
20.01	Telecommunication/Data Network	Average condition	Service and fix loose outlets and wiring	3	50%						0	0	0	0	0	0	0	0	0	34,929	69,858	34,929	0	34,929	69,858	34,929	200.0%	
20.02	Security Services	Modern and functioning	Service and fix loose outlets and wiring	3	50%						0	0	0	0	0	0	0	0	0	26,197	52,393	26,197	0	26,197	52,393	26,197	200.0%	
											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	61,126	122,251	61,126	0	61,126	122,251	61,126	200.0%	
C	TOTAL BUILDING SERVICES			3	50%						0	0	0	17,710	1,898	22,264	0	0	0	74,224	396,540	116,095	162,958	117,487	396,540	261,470	151.7%	
	TOTAL BUILDING			3	50%						0	0	3,757	17,710	5,693	22,264	0	10,208	0	84,288	869,407	143,920	486,806	238,681	869,407	1,982,193	43.9%	

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 B - CLASSROOM
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013
 Revision: Final



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost														
						1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace			
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
										143,920															
										Year 1 - 10 Consolidated Capital Replacement Cost															

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

C - CAFETERIA

Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN

Audit Date: October 2013

Revision: Final



ID Code	Element	Condition Assessment	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge					Asset Renewal Cost																
					Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
							VG	G	A	P	VP	2013 (\$ USD)	2014 (\$ USD)	2015 (\$ USD)	2016 (\$ USD)	2017 (\$ USD)	2018 (\$ USD)	2019 (\$ USD)	2020 (\$ USD)	2021 (\$ USD)	2022 (\$ USD)							
1.00	Sub-Structure				2	30%													0	0	0	0	0	0	0	0.0%		
1.01	Reinforced Concrete Foundations Beams	Unseen - assume OK	n/a		2	30%													0	0	0	0	0	0	67,228	0.0%		
1.03	Reinforced Concrete Slab on Grade	Level and looks OK	n/a		2	30%													0	0	0	0	0	0	99,560	0.0%		
1.00	Total Sub-Structure				2	30%													0	0	0	0	0	0	166,789	0.0%		
2.00	Frame																		0	0	0	0	0	0	0	0.0%		
2.03	Reinforced Concrete Columns & Beams	Minor chipping to columns	Clean, repair chips, repaint		2	30%													0	0	0	0	0	0	226,562	0.0%		
2.02	Timber Roof Trusses and Beams, etc)	Generally OK	None		2	30%													0	0	0	0	0	0	229,755	0.0%		
2.00	Total Frame				2	30%													0	0	0	0	0	0	456,316	0.0%		
3.00	Structural Walls																		0	0	0	0	0	0	0	0.0%		
3.01	Reinforced Concrete Block Masonry Infill Walls	Good condition	Clean down		2	30%													0	0	0	0	0	0	78,626	0.0%		
3.00	Total Structural Walls				2	30%													0	0	0	0	0	0	78,626	0.0%		
4.00	Upper Floors																		0	0	0	0	0	0	0	0.0%		
4.01	None	n/a	n/a		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%		
5.00	Roof																		0	0	0	0	0	0	0	0.0%		
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Paint fading, black marks/stains evident but generally OK	Waterblast clean and repaint		3	50%													87,980	0	87,980	0	87,980	87,980	100.0%			
5.07	PVC Downpipes	Vertical runs consealed in columns. Exposed portion (sloped to gutter) dirty but OK	Clean		2	30%													7,084	0	0	7,084	7,084	7,084	100.0%			
5.08	Metal Gutters	Metal flaking and rust spots starting to appear	Waterblast clean, treat rust and paint		3	50%													9,318	1,500	7,818	0	9,318	7,818	119.2%			
5.00	Total Roof				3	50%													104,382	1,500	95,798	7,084	104,382	102,882	101.5%			
6.00	External Walls & Finishes																		0	0	0	0	0	0	0	0.0%		
6.02	Solid Plaster Cladding with Painted Finishes	Good condition generally with some minor marking	Clean and repaint		2	30%													0	0	0	0	0	0	45,210	0.0%		
6.00	Total External Walls & Finishes				2	30%													0	0	0	0	0	0	45,210	0.0%		
7.00	Windows & Doors																		0	0	0	0	0	0	0	0.0%		
7.01	Unglazed Timber Framed Windows with Plastic Coated Steel Mesh Infill	To Dry Store addition only. Timber work OK but mesh showing signs of wear	Clean down and maintain		3	50%													20,145	0	0	20,145	20,145	20,145	100.0%			
7.02	Timber Doors (Solid/No Glazing)	Some marks and impact damage but generally OK	Clean and repaint		3	50%													13,283	0	0	13,283	13,283	13,283	100.0%			
7.06	Aluminium Framed Opening Glass Louvre Windows & Fixed Glazed Doors	Some missing louvres, minor scratches to metal	Replace louvres and clean		3	50%													87,664	2,000	0	85,664	87,664	85,664	102.3%			
7.10	Metal Louvre Vents - High Level	Hard to see - look OK from the ground	Clean		2	30%													0	0	0	0	0	0	47,225	0.0%		
7.11	Window Glazing Treatments - Insect Screens	Generally OK	Clean		3	50%													13,179	6,590	0	6,590	13,179	6,590	200.0%			
7.00	Total Windows & Doors				3	50%													134,270	8,590	0	125,681	134,270	172,906	77.7%			
A	TOTAL STRUCTURE				3	50%													238,652	10,090	95,798	132,765	238,652	1,022,729	23.3%			
8.00	Stairs, Balustrades & Handrails																		0	0	0	0	0	0	0	0.0%		



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Asset Renewal Cost																												
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grandn Renewal Total	Full Replace	% Full Replace												
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)											
8.01	None	n/a	n/a	0	0%						0	0	0	0	0	0	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	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	0	0	0	0	0	0	0	0	0	0	0.0%
9.03	Reinforced Concrete Block Masonry Walls	Good condition	Clean down	2	30%						0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	0	2,000	2,000	0	0	2,000	94,814	2,1%							
9.00	Total Internal Walls/Partitions			2	30%						0	0	0	0	2,000	0	0	0	0	0	0	0	0	0	2,000	2,000	0	0	2,000	94,814	2.1%								
10.00	Internal Doors										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
10.01	Timber Door - Single	Impact damage, minor paint chips etc	Clean and repaint	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,626	0	0	10,626	10,626	10,626	100.0%								
10.07	Timber Door - Half Height Timber Louvre WC door	Minor impact damage but generally OK	Clean and refinish	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,072	0	0	6,072	6,072	6,072	100.0%								
10.00	Total Internal Doors			3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	16,698	0	0	16,698	16,698	16,698	100.0%									
11.00	Floor 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%		
11.02	Vinyl Floor Tiles	To kitchen office only - marked and stained	Good clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	1,366	2,732	1,366	0	1,366	2,732	1,366	200.0%									
11.05	Tiled Floor Finishes	To café, kitchen, student offices, WC's and Store - marked and stained with some loose tiles	Good clean and replace damaged or missing tiles	4	70%						0	0	0	0	0	0	0	0	0	0	0	128,982	0	128,982	128,982	128,982	128,982	128,982	100.0%										
11.07	Bare Concrete, U3 Machine Finish	Evidence of impact damage, lifting tiles, loose grout, marks, poor workmanship, etc	Repair, Replace, Clean Comments:	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	5,797	0	5,797	0	5,797	5,797	100.0%										
11.00	Total Floor Finishes			4	70%						0	0	0	0	0	0	0	0	0	0	0	128,982	1,366	137,511	130,348	5,797	1,366	137,511	136,145	101.0%									
12.00	Wall 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%		
12.03	Solid Plaster Wall Lining with Painted Finishes	Good condition generally with some minor marks and stains	Clean and repaint where necessary	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	114,008	0	0	114,008	114,008	114,008	100.0%									
12.00	Total Wall Finishes			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	114,008	0	0	114,008	114,008	114,008	100.0%									
13.00	Ceiling 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%		
13.02	Fibre Cement Soffit Lining with Painted Finishes	Generally in good condition	Clean	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	10,825	0	0	10,825	10,825	10,825	100.0%									
13.04	Fibre Cement Ceiling Lining with Painted Finishes	Marked with evidence of humidity or moisture damage	Good clean and repair any damage	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	36,378	0	36,378	0	36,378	36,378	100.0%									
13.06	Proprietary Suspended Ceilings (Exposed Grid Suspension System) with Tiles	Marked tiles with some damage and ill-fitting tiles	Re-fit all tiles, clean or paint	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	22,975	0	22,975	0	22,975	22,975	100.0%									
13.00	Total Ceiling Finishes			3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	70,179	0	59,353	10,825	70,179	70,179	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	0	0	0	0	0	0	0	0	0.0%		
14.05	Mirrors	To WC's - all good	Clean	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	2,277	0	0	2,277	2,277	2,277	100.0%									
14.07	Built-in Joinery - Bench Unit	To dry store - chipped and marked top, damage to doors	Repair damage, clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	9,488	0	9,488	0	9,488	9,488	100.0%									
14.11	Large Commercial Kitchen	Stainless steel OK, tiled tops looking worn and tired	Good clean, repair damage	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	63,250	0	63,250	0	63,250	63,250	100.0%									
14.00	Total Fixed Joinery Units			3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	75,015	0	72,738	2,277	75,015	75,015	100.0%									
B	TOTAL INTERNAL FIT-OUT			3	50%						0	0	0	0	2,000	0	0	0	0	128,982	1,366	415,411	132,348	137,888	145,175	415,411	506,859	82.0%											
15.00	Sanitary Plumbing										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
15.01	WC	Generally OK, rusted pan fixings	Replace fixings, clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	18,975	0	18,975	0	18,975	18,975	100.0%									
15.04	WHB (Single)	Generally OK	Clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	13,283	0	13,283	0	13,283	13,283	100.0%									
15.07	Hot Water System	Generally OK	Clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	2,530	0	2,530	0	2,530	2,530	100.0%									



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																	
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
1.00	Sub-Structure																											
1.01	Reinforced Concrete Foundations Beams	Not inspected. Assumed OK and present to external walls/ internal load bearing walls		2	30%																						76,840	0.0%
1.02	Reinforced Concrete Block Foundation Walls	Not inspected. Assumed OK and present to external wall only		2	30%																						17,768	0.0%
1.03	Reinforced Concrete Slab on Grade	Not inspected due to floor finishes. Assumed OK		2	30%																						156,392	0.0%
																											0	0.0%
1.00	Total Sub-Structure			2	30%																						251,000	0.0%
2.00	Frame																										0	0.0%
2.01	Reinforced Concrete Columns & Beams	OK		2	30%																						208,170	0.0%
																											0	0.0%
2.00	Total Frame			2	30%																						208,170	0.0%
3.00	Structural Walls																										0	0.0%
3.01	Reinforced Concrete Brick/Block Masonry Walls	Structurally OK, evidence of marks, paint flaking, graffiti	Repaint, Wash	2	30%																						280,628	0.0%
																											0	0.0%
3.00	Total Structural Walls			2	30%																						280,628	0.0%
4.00	Upper Floors																										0	0.0%
4.01	Pre-cast/Insitu Reinforced Concrete Upper Floor	Not inspected due to floor finishes. Assumed OK.		2	30%																						210,598	0.0%
																											0	0.0%
4.00	Total Upper Floors			2	30%																						210,598	0.0%
5.00	Roof																										0	0.0%
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Not inspected. Assumed OK.	Repaint, clean regularly	2	30%																						95,002	100.0%
5.02	PVC Downpipes	Paint flaking at visible areas, internal so difficult to assess	Repaint, clean out regularly	2	30%																						15,162	100.0%
5.03	Metal Gutters	Evidence corrosion	Replace damaged sections, clean our regularly	3	50%																						12,338	100.0%
																											0	0.0%
5.00	Total Roof			3	50%																						122,502	100.0%
6.00	External Walls & Finishes																										0	0.0%
6.01	Plaster and Paint finish	OK	Repaint and wash	2	30%																						25,806	0.0%
6.02	External Glassblock wall to stairwell	OK		2	30%																						1,822	0.0%
																											0	0.0%
6.00	Total External Walls & Finishes			2	30%																						27,628	0.0%
7.00	Windows & Doors																										0	0.0%
7.01	Timber Doors (Solid/No Glazing)	Aged but OK	Paint; maintain with regular washing programme	2	30%																						7,590	0.0%
7.02	Aluminium Framed Windows & Doors	Evidence of flaking protective coating or corrosion, poor workmanship, etc	Maintain with regular washing programme	2	30%																						258,060	0.0%
7.04	Metal Louvre Screens	OK		2	30%																						4,554	0.0%
																											0	0.0%
7.00	Total Windows & Doors			2	30%																						270,204	0.0%
A	TOTAL STRUCTURE			3	50%																						122,502	8.9%
8.00	Stairs, Balustrades & Handrails																										0	0.0%
8.01	Pre-cast/Insitu Reinforced Concrete Stairs	OK	Clean regularly	2	30%																						37,950	0.0%
8.02	Metal Framed Balustrades	Evidence of flaking protective coating and corrosion	Rust treat, repaint and clean regularly	2	30%																						15,370	0.0%

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

D - MALE RESIDENCE HALL

Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN

Audit Date: October 2013

Revision: Final



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																					
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace					
						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)	2023 (\$ USD)											
8.00	Total Stairs Balustrades & Handrails			2	30%						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	Internal Walls/Partitions										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.01	Conc Block Partition Walls	OK	None	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.02	Aluminium Framed Windows	OK	Maintain with regular washing programme	2	30%						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			2	30%						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	Internal Doors										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.01	Timber Door - Single	Some evidence of impact damage and misuse.	Wash down and paint. Recommend installing kickplates and push plates to prevent further damage	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.02	Timber doors to WCs - fixed to blockwork walls of similar appearance to bedroom doors	Some evidence of impact damage and misuse.	Wash down and paint. Recommend installing kickplates and push plates to prevent further damage	2	30%						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			2	30%						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	Floor Finishes										0	0	0	0	0	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 lifting, marks, tears, worn through, poor workmanship	Remove and replace	4	70%						0	0	0	0	0	85,744	0	0	0	0	0	0	0	171,487	85,744	0	85,744	171,487	85,744	200.0%		
11.02	Tiled Floor Finishes	Evidence lifting tiles, loose grout, marks, stains, etc	Replace and clean regularly	4	70%						0	0	0	0	0	0	0	0	23,692	0	23,692	0	0	23,692	23,692	0	23,692	23,692	100.0%			
11.00	Total Floor Finishes			4	70%						0	0	0	0	0	85,744	0	0	23,692	0	195,180	109,436	0	85,744	195,180	109,436	109,436	178.4%				
12.00	Wall Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
12.01	Tiled Wall Finishes	Evidence lifting tiles, loose grout, marks, stains, etc	Repair and clean regularly	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	15,939	0	15,939	0	15,939	15,939	100.0%		
12.02	Plaster and Paint finish	Evidence of impact damage and poor workmanship	Repaint and clean regularly	2	30%						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			3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	15,939	0	15,939	0	15,939	664,181	2.4%		
13.00	Ceiling Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
13.01	Plywood Soffit Lining with Painted Finish	Evidence of leaks internally, cracks, impact damage, poor workmanship, etc	Replace and clean regularly	4	70%						0	0	0	0	0	0	0	0	0	0	0	0	0	15,344	0	15,344	0	15,344	15,344	100.0%		
13.02	Plywood Ceiling linings with Painted Finishes	Evidence of leaks internally, cracks, distortion in sheets, poor workmanship, etc	Repair, Replace, Paint, Wash Comments:	4	70%						0	0	0	0	0	0	0	0	0	0	0	0	0	48,062	0	48,062	0	48,062	48,062	100.0%		
13.03	Plaster and Paint finish to underside of 1st floor conc slab	OK	Paint, clean	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	21,436	0	0	21,436	21,436	100.0%			
13.00	Total Ceiling Finishes			4	70%						0	0	0	0	0	0	0	0	0	0	0	0	0	84,842	0	63,406	21,436	84,842	84,842	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	0	0	0.0%	
14.02	Built-in Joinery - Bench Unit	Ok		2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	16,129	0	0	16,129	16,129	16,129	100.0%		
14.03	Folding shower seats (assume only 1 per bathroom)	Evidence of marks and staining	Wash thoroughly, remove mats left on top and paint finish	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,075	0	0	1,075	1,075	100.0%		
14.04	Stainless steel shower rail with curtain	Some evidence of misuse of shower curtains	Wash and clean thoroughly and regularly	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,277	0	0	2,277	2,277	100.0%		
14.00	Total Fixed Joinery Units			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	19,481	0	0	19,481	19,481	19,481	100.0%		
B	TOTAL INTERNAL FIT-OUT			3	50%						0	0	0	0	0	85,744	0	0	23,692	0	315,441	109,436	79,345	126,661	315,441	1,151,262	27.4%					
15.00	Sanitary Plumbing										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
15.01	WC	Operating	Clean regularly	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	37,950	0	0	37,950	37,950	37,950	100.0%		
15.02	WHB (Single)	Dirty appearance with some showing signs of bettenut saliva. Ok just needs a thorough clean	Clean thoroughly and often	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	45,540	0	0	45,540	45,540	45,540	100.0%	
15.03	Shower	Corrosion, poor workmanship, shower heads missing	Replace missing shower heads and rusted pipes.	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	37,950	0	37,950	0	37,950	37,950	100.0%		
15.05	External cold water tap	Operating and well used	Clean and service taps	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	6,325	0	0	6,325	6,325	6,325	100.0%		



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge					Asset Renewal Cost																			
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace			
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)		
15.06	Bathroom floor waste	Dirty appearance and grime buildup evident	Clean and wash thoroughly.	2	30%														15,813	0	0	15,813	15,813	15,813	100.0%					
15.07	Cleaners Sink	Operating/In Use	Clean regularly	2	30%														1,898	0	0	1,898	1,898	1,898	100.0%					
15.00	Total Sanitary Plumbing			3	50%														145,475	0	37,950	107,525	145,475	145,475	100.0%					
16.00	Mechanical Services																		0	0	0	0	0	0.0%						
16.01	Air-Conditioning - Window Mounted Unit	Corrosion	Repair and clean filters	3	50%									1,898	0	0	0	0	5,693	1,898	1,898	1,898	5,693	1,898	300.0%					
16.02	Ceiling Mounted Fan	Corrosion, poor wiring- exposed	Replace and service/ clean regularly	3	50%									0	0	0	0	0	23,656	23,656	0	23,656	47,311	23,656	200.0%					
16.00	Total Mechanical Services			3	50%									1,898	0	0	0	0	23,656	53,004	25,553	1,898	25,553	53,004	25,553	207.4%				
17.00	Fire Services																		0	0	0	0	0	0.0%						
17.01	Smoke Detection & Alarm Systems	Smoke detectors and manual fire alarm system in use, assume hardwired system	Service	2	30%									0	0	0	0	0	18,051	0	18,051	0	18,051	18,051	100.0%					
17.02	Fire Hose Reel	Present, assumed to be functional	Service	2	30%									0	0	0	0	0	2,530	0	0	2,530	2,530	2,530	100.0%					
17.03	Fire Extinguishers	Present, assumed to be functional	Service	2	30%									0	0	0	1,898	0	9,488	3,795	3,795	1,898	9,488	1,898	500.0%					
17.00	Total Fire Services			2	30%									0	0	0	1,898	0	30,069	3,795	21,846	4,428	30,069	22,479	133.8%					
18.00	Electrical Services																		0	0	0	0	0	0.0%						
18.01	Main Distribution Boards	Not inspected but assumed ok		2	30%									0	0	0	0	0	9,488	0	0	9,488	9,488	9,488	100.0%					
18.02	Sub-Main Distribution Boards	Main Distribution board not inspected, assumed no submain distribution boards to this building		0	0%									0	0	0	0	0	0	0	0	0	0	0	0.0%					
18.03	Electrical Wiring/Reticulation	Operating and in use. However loose wiring identified to ceiling fans and missing cover plates also.	Rectify loose and exposed wiring to ceiling fans. Reinstall missing cover plates	3	50%									0	0	0	0	0	36,090	0	36,090	0	36,090	36,090	100.0%					
18.04	General Power Outlet	Some evidence of impact damage and misuse. Surface mounted wall units showing signs of corrosion to box.	Service. Clean and reinstate faceplates. Paint or cover exposed metal boxes.	3	50%									0	0	0	0	0	48,121	0	48,121	0	48,121	48,121	100.0%					
18.05	Lighting (External) - Covered incandescent light fitting with cage and cover	Assumed operating and in use. Daylight sensors in use.	Clean covers	2	30%									0	0	0	0	0	8,223	0	0	8,223	8,223	8,223	100.0%					
18.06	Lighting (Internal) - Incandescent	Operating	Clean bulbs, replace any blown or damaged fittings	2	30%									0	0	0	0	0	6,958	0	0	6,958	6,958	6,958	100.0%					
18.07	Lighting (Internal) -Double Fluorescent	Operating and without diffusers	Service and clean tubes and install diffusers.	2	30%									0	0	0	0	0	24,668	0	0	24,668	24,668	24,668	100.0%					
18.08	Emergency lighting	Mixture of older "Grey" type externally and newer "white" type internally. Assume operational.	Service, wash down and check backup batteries to units internally.	2	30%									0	0	0	0	0	30,075	0	30,075	0	30,075	30,075	100.0%					
18.00	Total Electrical Services			3	50%									0	0	0	0	0	133,546	0	84,211	49,335	133,546	133,546	100.0%					
19.00	Vertical Transportation																		0	0	0	0	0	0.0%						
19.01	None			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%						
20.00	Special Services																		0	0	0	0	0	0.0%						
20.01	Telecommunication/Data Network	operating but some loose and untidy wiring evident.	Tidy up loose wiring recommend installing conduit to enclose/tidy wiring mounted to walls	2	30%									0	0	0	0	0	48,121	0	48,121	0	48,121	48,121	100.0%					
20.02	Security Services	Security cameras evident in hallways and main entrance. Assume all operational	Monitor. Recommend having a backup power supply to cameras if not already.	2	30%									0	0	0	0	0	36,090	0	36,090	0	36,090	36,090	100.0%					
20.00	Total Special Services			2	30%									0	0	0	0	0	84,211	0	84,211	0	84,211	84,211	100.0%					
C	TOTAL BUILDING SERVICES			3	50%									0	0	0	1,898	1,898	0	0	0	1,898	23,656	446,305	29,348	230,116	186,841	446,305	411,264	108.5%
	TOTAL BUILDING			3	50%									0	0	0	1,898	1,898	85,744	0	0	25,590	23,656	884,247	138,784	321,799	423,665	884,247	2,933,255	30.1%

138,784
 Year 1 - 10 Consolidated Capital Replacement Cost

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 E - FEMALE RESIDENCE HALL
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013
 Revision: Final

ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						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)	2023 (\$ USD)						
15.05	External cold water tap	Dirty appearance and grime buildup evident	Clean and wash thoroughly.	2	30%						0	0	0	0	0	0	0	0	0	0	3,163	0	0	3,163	3,163	3,163	100.0%
15.06	Bathroom floor waste	Operating/In Use	Clean regularly	2	30%						0	0	0	0	0	0	0	0	0	0	15,813	0	0	15,813	15,813	15,813	100.0%
15.07	Cleaners Sink	Operating/In Use	Clean regularly	2	30%						0	0	0	0	0	0	0	0	0	0	1,898	0	0	1,898	1,898	1,898	100.0%
15.00	Total Sanitary Plumbing			3	50%						0	0	0	0	0	0	0	0	0	0	142,313	0	37,950	104,363	142,313	142,313	100.0%
16.00	Mechanical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
16.01	Air-Conditioning - Window Mounted Unit	Corrosion, mould at wall unit junction. Mould indicates leaking from unit.	Repair and clean filters	4	70%						0	0	1,898	0	0	0	0	0	0	0	5,693	1,898	1,898	1,898	5,693	1,898	300.0%
16.02	Ceiling Mounted Fan	Corrosion, poor wiring- exposed	Replace and service/ clean regularly	4	70%						0	0	0	0	0	18,090	0	0	0	0	36,179	18,090	0	18,090	36,179	18,090	200.0%
16.00	Total Mechanical Services			4	70%						0	0	1,898	0	0	18,090	0	0	0	0	41,872	19,987	1,898	19,987	41,872	19,987	209.5%
17.00	Fire Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
17.01	Smoke Detection & Alarm Systems	Operating	Replace batteries	2	30%						0	0	0	0	0	0	0	0	0	0	14,440	0	14,440	0	14,440	14,440	100.0%
17.02	Fire Hose Reel	Present, assumed to be functional	Service	2	30%						0	0	0	0	0	0	0	0	0	0	2,530	0	0	2,530	2,530	100.0%	
17.03	Fire Extinguishers	Present, assumed to be functional	Service	2	30%						0	0	0	1,898	0	0	0	0	1,898	0	9,488	3,795	3,795	1,898	9,488	1,898	500.0%
17.00	Total Fire Services			2	30%						0	0	0	1,898	0	0	0	0	1,898	0	26,457	3,795	18,235	4,428	26,457	18,867	140.2%
18.00	Electrical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
18.01	Main Distribution Boards	Not inspected but assumed ok		2	30%						0	0	0	0	0	0	0	0	0	0	9,488	0	0	9,488	9,488	100.0%	
18.02	Sub-Main Distribution Boards	Main Distribution board not inspected, assumed no submain distribution boards to this building		0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
18.03	Electrical Wiring/Reticulation	Operating and in use. However loose wiring identified to ceiling fans and missing cover plates also.	Rectify loose and exposed wiring to ceiling fans. Reinstall missing cover plates	3	50%						0	0	0	0	0	0	0	0	0	0	28,880	0	28,880	0	28,880	28,880	100.0%
18.04	General Power Outlet	Some evidence of impact damage and misuse. Surface mounted wall units showing signs of corrosion to box.	Service. Clean and reinstate faceplates. Paint or cover exposed metal boxes.	3	50%						0	0	0	0	0	0	0	0	0	0	38,507	0	38,507	0	38,507	38,507	100.0%
18.05	Lighting (External) - Covered incandescent light fitting with cage and cover	Assumed operating and in use. Daylight sensors in use.	Clean covers	2	30%						0	0	0	0	0	0	0	0	0	0	6,958	0	0	6,958	6,958	100.0%	
18.06	Lighting (Internal) - Incandescent	Operating	Clean bulbs, replace any blown or damaged fittings	2	30%						0	0	0	0	0	0	0	0	0	0	6,325	0	0	6,325	6,325	100.0%	
18.07	Lighting (Internal) -Double Fluorescent	Operating and without diffusers	Service and clean tubes and install diffusers.	2	30%						0	0	0	0	0	0	0	0	0	0	20,240	0	0	20,240	20,240	100.0%	
18.08	Emergency lighting	Mixture of older "Grey" type externally and newer "white" type internally. Assume operational.	Service, wash down and check backup batteries to units	2	30%						0	0	0	0	0	0	0	0	0	0	24,067	0	24,067	0	24,067	24,067	100.0%
18.00	Total Electrical Services			3	50%						0	0	0	0	0	0	0	0	0	0	134,463	0	91,453	43,010	134,463	134,463	100.0%
19.00	Vertical Transportation										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%	
19.00	Total Vertical Transportation			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%	
20.01	Telecommunication/Data Network	operating but some loose and untidy wiring evident.	Tidy up loose wiring recommend installing conduit to enclose/tidy wiring mounted to walls	2	30%						0	0	0	0	0	0	0	0	0	0	38,507	0	38,507	0	38,507	38,507	100.0%
20.02	Security Services	Security cameras evident in hallways and main entrance. Assume all operational	Monitor. Recommend having a backup power supply to cameras if not already.	2	30%						0	0	0	0	0	0	0	0	0	0	28,880	0	28,880	0	28,880	28,880	100.0%
20.00	Total Special Services			2	30%						0	0	0	0	0	0	0	0	0	0	67,387	0	67,387	0	67,387	67,387	100.0%
C	TOTAL BUILDING SERVICES			3	50%						0	0	1,898	1,898	0	18,090	0	0	1,898	0	412,491	23,782	216,922	171,787	412,491	383,017	107.7%
	TOTAL BUILDING			3	50%						0	0	1,898	1,898	0	84,578	0	0	25,590	0	771,384	113,963	304,218	353,203	771,384	2,413,721	32.0%

113,963
 Year 1 - 10 Consolidated Capital Replacement Cost

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 E - FEMALE RESIDENCE HALL
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013

Revision: Final



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						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)							



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																	
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
1.00	Sub-Structure																											
1.01	Reinforced Concrete Foundations Beams - External	Not observed	Monintor	2	30%																					34,239	0.0%	
1.02	Reinforced Concrete Foundations Beams - internal	Not observed	Monintor	2	30%																					40,826	0.0%	
1.03	Reinforced Concrete Slab on Grade	Missing area of floor slab in one room	Repair damaged floor slab	3	50%																					63,091	0.0%	
1.04	Reinforced Concrete Slab on Grade to covered walkway	Not observed	Monintor	2	30%																					15,736	0.0%	
1.05	Reinforced concrete pad	Not observed	Monintor	2	30%																					22,770	0.0%	
1.00	Total Sub-Structure			3	50%																					176,662	0.0%	
2.00	Frame																										0	0.0%
2.01	Timber Frame Trusses	Good condition	Monintor	2	30%																						145,728	0.0%
2.02	Reinforced Concrete Columns & Beams	Good condition	Wash down	2	30%																						66,664	0.0%
2.03	Reinforced Concrete Roof	Not inspected		3	50%																						24,209	0.0%
2.00	Total Frame			3	50%																					236,602	0.0%	
3.00	Structural Walls																										0	0.0%
3.01	Reinforced Concrete Brick/Block Masonry Walls - External assumed 200 thick	Good condition	Wash and paint	2	30%																						78,416	0.0%
3.02	Reinforced Concrete Brick/Block Masonry Walls - Internal assumed 150 thick	Good condition	Wash and paint	2	30%																						75,742	0.0%
3.00	Total Structural Walls			2	30%																						154,158	0.0%
4.00	Upper Floors																										0	0.0%
4.01	No upper floors to this building			0	0%																						0	0.0%
4.00	Total Upper Floors			0	0%																						0	0.0%
5.00	Roof																										0	0.0%
5.01	Profiled Metal Sheet Roof Cladding (Pre-Finished)	Evidence of faded paint	Wash and repaint	3	50%																					54,798	100.0%	
5.02	Box Gutters	Evidence of faded paint	Wash down and repaint	3	50%																					21,845	100.0%	
5.03	PVC Downpipes	Evidence of stains	Wash and paint	3	50%																					2,429	100.0%	
5.00	Total Roof			3	50%																					79,072	100.0%	
6.00	External Walls & Finishes																										0	0.0%
6.01	Solid Plaster with Painted Finishes	Good condition	Wash	2	30%																						45,089	0.0%
6.00	Total External Walls & Finishes			2	30%																						45,089	0.0%
7.00	Windows & Doors																										0	0.0%
7.01	Timber Doors (Solid/No Glazing)	Generally ok. Cracks on door to utility room	Wash and paint, Replace door to utility room	2	30%																						15,180	0.0%
7.02	Aluminium Framed Windows	Generally ok. Rubber seal to one of the windows has come off	Repair rubber seal	2	30%																						41,183	0.0%
7.00	Total Windows & Doors			2	30%																						56,363	0.0%
A	TOTAL STRUCTURE			3	50%																						79,072	10.6%

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 F - FACULTY OFFICE
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013
 Revision: Final

ID Code	Element	Condition Assessment		Condition Grading					Condition Gauge										Asset Renewal Cost														
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace						
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)											
8.00	Stairs, Balustrades & Handrails																			0	0	0	0	0	0	0.0%							
8.01	No stair and balustrade to this building			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%							
9.00	Internal Walls/Partitions																			0	0	0	0	0	0	0.0%							
9.01	All walls are blockwork			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%							
10.00	Internal Doors																			0	0	0	0	0	0	0.0%							
10.01	Timber Door - Single	Evidence of stains,	Wsh and paint	3	50%															0	0	0	0	0	0	12,144	0	0	12,144	12,144	12,144	100.0%	
10.02	Timber Door - Single	Evidence of stains, impact damage	Repair affected door and Wash and Repaint rest	3	50%															0	0	0	0	0	0	1,518	0	0	1,518	1,518	1,518	100.0%	
10.03	Timber Door - Single	Evidence of , insect attack (termites borer) to door jamb	Repair affected door and Wash and Repaint rest	3	50%															0	0	0	0	0	0	1,518	0	0	1,518	1,518	1,518	100.0%	
10.00	Total Internal Doors			3	50%															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%	
11.01	Vinyl Floor Finishes	Generally ok.	Wash	2	30%															0	0	0	0	0	0	33,634	0	33,634	0	33,634	33,634	100.0%	
11.02	Tiled Floor Finishes	Generally ok	Wash	2	30%															0	0	0	0	0	0	3,348	0	0	3,348	3,348	3,348	100.0%	
11.00	Total Floor Finishes			2	30%															0	0	0	0	0	0	36,982	0	33,634	3,348	36,982	36,982	100.0%	
12.00	Wall Finishes																			0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
12.03	Solid Plaster Wall Lining with Painted Finishes	Generally ok	Wash	2	30%															0	0	0	0	0	0	104,545	0	0	104,545	104,545	104,545	100.0%	
12.04	Tiled Wall Finishes	Generally ok	Wash	2	30%															0	0	0	0	0	0	7,952	0	0	7,952	7,952	7,952	100.0%	
12.00	Total Wall Finishes			2	30%															0	0	0	0	0	0	112,498	0	0	112,498	112,498	112,498	100.0%	
13.00	Ceiling Finishes																			0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
13.01	Fibre Cement Soffit Lining with Painted Finishes	Evidence of marks	Clean and Repaint	3	50%															0	0	0	0	0	0	8,756	0	8,756	0	8,756	8,756	100.0%	
13.02	Timber framed vents to soffits	Evidence of stains	Clean, Paint	2	30%															0	0	0	0	0	0	2,606	0	0	2,606	2,606	2,606	100.0%	
13.03	Plywood Ceiling Linings with Painted Finishes	Evidence of marks, Moulds	Wash down , remove mould and repaint	3	50%															0	0	0	0	0	0	3,028	0	0	3,028	3,028	3,028	100.0%	
12.04	Solid Plaster with Painted Finishes to soffits of covered walkway	Evidence of marks	Wash and repaint	2	30%															0	0	0	0	0	0	10,289	0	0	10,289	10,289	10,289	100.0%	
13.05	Proprietary Suspended Ceilings (Exposed Grid Suspension System)	Evidence of damaged/marked/stained ceiling tiles	Replace	5	90%															0	0	5,268	0	0	0	0	5,268	5,268	0	0	5,268	5,268	100.0%
13.06	Proprietary Suspended Ceilings (Exposed Grid Suspension System)	Generally ok	Monintor	3	50%															0	0	0	0	0	0	21,073	0	21,073	0	21,073	21,073	100.0%	
13.00	Total Ceiling Finishes			3	50%															0	0	0	0	0	0	51,021	5,268	29,829	15,923	51,021	51,021	100.0%	
14.00	Fixed Joinery Units																			0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
14.01	Toilet Partitions	Generally ok	Monintor	2	30%															0	0	0	0	0	0	2,024	0	0	2,024	2,024	2,024	100.0%	
14.02	White Boards	Generally ok		1	10%															0	0	0	0	0	0	1,898	0	0	1,898	1,898	1,898	100.0%	
14.03	Mirrors	Generally ok		1	10%															0	0	0	0	0	0	759	0	0	759	759	759	100.0%	
14.00	Total Fixed Joinery Units			2	30%															0	0	0	0	0	0	4,681	0	0	4,681	4,681	4,681	100.0%	
B	TOTAL INTERNAL FIT-OUT			3	50%															0	0	5,268	0	0	0	0	220,361	5,268	63,463	151,630	220,361	220,361	100.0%



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																	
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
15.00	Sanitary Plumbing			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
15.01	WC	General wear and tear	wash	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
15.02	WHB (Single)	General wear and tear	wash	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
15.03	Shower	General wear and tear	wash	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
15.04	Cold Water			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
15.05	Floor Waste	General wear and tear		2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
15.00	Total Sanitary Plumbing			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
16.00	Mechanical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
16.01	Air-Conditioning - DX/Split System	Most not used, some not working	Service and clean	4	70%						0	0	53,130	0	0	0	0	0	0	0	53,130	212,520	106,260	53,130	53,130	212,520	400.0%	
16.02	Ventilation - W/C Extract	General wear and tear	Service and clean	3	50%						0	0	0	0	0	0	0	0	0	0	1,898	3,795	1,898	0	1,898	3,795	200.0%	
16.03	Ceiling Mounted Fan	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	6,958	13,915	6,958	0	6,958	13,915	200.0%	
16.00	Total Mechanical Services			4	70%						0	0	53,130	0	0	0	0	0	0	0	61,985	230,230	115,115	53,130	61,985	230,230	371.4%	
17.00	Fire Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
17.01	Smoke Detection & Alarm Systems	Old hard wired type, but operating	Service and clean	3	50%						0	0	0	0	0	0	0	0	0	0	7,148	14,295	7,148	0	7,148	14,295	200.0%	
17.02	9lb Carbon Dioxide Fire Extinguisher	Good condition	Cheek expiry dates	1	10%						0	0	0	0	1,898	0	0	0	0	0	1,898	9,488	3,795	3,795	1,898	9,488	500.0%	
17.03	Fire Hose Reel	Good condition		2	30%						0	0	0	0	0	0	0	0	0	0	2,530	0	0	2,530	2,530	100.0%		
17.00	Total Fire Services			2	30%						0	0	0	0	1,898	0	0	0	0	0	9,045	26,313	10,943	3,795	11,575	26,313	227.3%	
18.00	Electrical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
18.01	Main Distribution Boards	Not inspected		2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
18.02	Electrical Wiring/Reticulation	Good condition	Tidy up loose wiring	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
18.03	General Power Outlet	Good condition	Tidy up loose wiring	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
18.04	Lighting (External) - Incandescent	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
18.05	Lighting (Internal) - Incandescent	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
18.06	Lighting (Internal) - Fluorescant	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
18.00	Total Electrical Services			3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.0%		
19.00	Vertical Transportation										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
19.01	Not applicable			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%		
20.00	Special Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%		
20.01	Telecommunication/Data Network	Good all working	Tidy up loose wiring	3	50%						0	0	0	0	0	0	0	0	0	0	19,060	38,120	19,060	0	19,060	38,120	200.0%	
20.00	Total Special Services			3	50%						0	0	0	0	0	0	0	0	0	0	19,060	38,120	19,060	0	19,060	38,120	200.0%	
C	TOTAL BUILDING SERVICES			3	50%						0	0	53,130	0	1,898	0	0	0	0	0	90,090	405,816	145,118	95,508	165,191	405,816	203,773	199.2%
	TOTAL BUILDING			3	50%						0	0	58,398	0	1,898	0	0	0	0	0	90,090	705,249	150,386	238,043	316,820	705,249	1,172,080	60.2%

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 F - FACULTY OFFICE
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013

Revision: Final



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
						1	2	3	4	5	6	7	8	9	10	Total	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace					
		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
											Year 1 - 10 Consolidated Capital Replacement Cost																



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Asset Renewal Cost																
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
15.06	Cold Water	Good condition		2	30%														8,855	0	0	8,855	8,855	8,855	100.0%		
15.00	Total Sanitary Plumbing			3	50%														30,107	0	21,252	8,855	30,107	30,107	100.0%		
16.00	Mechanical Services																		0	0	0	0	0	0.0%			
16.01	Air-Conditioning - DX/Split System	Good condition	Service and clean	2	30%								53,130						212,520	53,130	106,260	53,130	212,520	53,130	400.0%		
16.02	Air-Conditioning - Ducted system	Working condition but not used due to energy cost of running whole system.		1	10%														223,309	0	111,655	111,655	223,309	111,655	200.0%		
16.03	Ventilation - W/C Extract	Good condition	Boys toilet only	2	30%														949	0	949	0	949	949	100.0%		
16.00	Total Mechanical Services			2	30%								53,130						436,778	53,130	218,863	164,785	436,778	165,733	263.5%		
17.00	Fire Services																		0	0	0	0	0	0.0%			
17.01	Smoke Detection & Alarm Systems	Working condition	Service and monitor	3	50%												8,374		16,748	8,374	0	8,374	16,748	8,374	200.0%		
17.02	9lb Carbon Dioxide Fire Extinguisher	Good condition	Cheek expiry dates	2	30%							2,530					2,530		12,650	5,060	5,060	2,530	12,650	2,530	500.0%		
17.03	Fire Hose Reel	Working condition	Service and monitor	2	30%														2,530	0	0	2,530	2,530	2,530	100.0%		
17.00	Total Fire Services			3	50%							2,530					2,530	8,374	31,928	13,434	5,060	13,434	31,928	13,434	237.7%		
18.00	Electrical Services																		0	0	0	0	0	0.0%			
18.01	Main Distribution Boards	Good condition		2	30%														9,488	0	0	9,488	9,488	9,488	100.0%		
18.02	Sub-Main Distribution Boards	Good condition		2	30%														8,855	0	0	8,855	8,855	8,855	100.0%		
18.03	Electrical Wiring/Reticulation	Some loose wiring	Fixs loose wiring	2	30%														16,748	0	0	16,748	16,748	16,748	100.0%		
18.04	General Power Outlet	Good condition		2	30%														22,331	0	0	22,331	22,331	22,331	100.0%		
18.06	Lighting (External) - Incandescent	Good condition		2	30%														1,265	0	0	1,265	1,265	1,265	100.0%		
18.09	Lighting (Internal) - Incandescent	Good condition		2	30%														4,428	0	0	4,428	4,428	4,428	100.0%		
18.10	Lighting (Internal) - Fluorescant	Good condition	Replace tubes that are not working	2	30%														37,950	0	0	37,950	37,950	37,950	100.0%		
18.00	Total Electrical Services			2	30%														101,064	0	0	101,064	101,064	101,064	100.0%		
19.00	Vertical Transportation																		0	0	0	0	0	0.0%			
19.01	None	None		0	0%														0	0	0	0	0	0.0%			
19.00	Total Vertical Transportation			0	0%														0	0	0	0	0	0.0%			
20.00	Special Services																		0	0	0	0	0	0.0%			
20.01	Telecommunication/Data Network	Good but loose wiring	Tidy up loose wiring	2	30%														22,331	0	22,331	0	22,331	22,331	100.0%		
20.02	Security Services - Cameras	Good condition	Clean and sevice	2	30%														7,590	0	7,590	0	7,590	7,590	100.0%		
20.00	Total Special Services			2	30%														29,921	0	29,921	0	29,921	29,921	100.0%		
C	TOTAL BUILDING SERVICES			3	50%								2,530	53,130				2,530	8,374	629,799	66,564	275,096	288,138	629,799	340,260	185.1%	
	TOTAL BUILDING			3	50%								2,530	53,130				2,530	8,374	925,260	66,564	520,030	338,666	925,260	1,204,613	76.8%	

66,564
 Year 1 - 10 Consolidated Capital Replacement Cost

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

G - ADMINISTRATION

Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN

Audit Date: October 2013

Revision: Final



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Asset Renewal Cost																
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
15.04	WHB (Single)	General wear and tear	Clean	3	50%														5,693	0	5,693	0	5,693	5,693	100.0%		
15.13	Cleaners Sink - Insitu Concrete	Poor appearance but OK condition	repairs to concrete wall and sealant	3	50%								300	0	0	0	0	0	1,565	300	0	1,265	1,565	1,265	123.7%		
15.14	Drinking Fountain	Poor appearance but OK condition	Major clean	4	70%								300	0	0	0	0	0	2,198	300	1,898	0	2,198	1,898	115.8%		
15.00	Total Sanitary Plumbing			4	70%								600	0	0	0	0	0	25,268	600	23,403	1,265	25,268	24,668	102.4%		
16.00	Mechanical Services																		0	0	0	0	0	0	0.0%		
16.01	Air-Conditioning - DX/Split System	Manual remote control - day time use only set to various temps, all in OK condition	Service and clean	3	50%								97,405	0	0	0	0	0	389,620	97,405	194,810	97,405	389,620	97,405	400.0%		
16.04	Air-Conditioning - Window Mounted Unit	Manual remote control - day time use only, most in OK condition, 1 or 2 need replacing	Replace 2, service and clean others	4	70%								17,078	0	0	0	0	0	51,233	17,078	17,078	17,078	51,233	17,078	300.0%		
16.07	Ventilation - W/C Extract	Presidents office only - in good condition	Service and clean	2	30%														949	0	949	0	949	949	100.0%		
16.00	Total Mechanical Services			3	50%								17,078	97,405	0	0	0	0	441,801	114,483	212,836	114,483	441,801	115,431	382.7%		
17.00	Fire Services																		0	0	0	0	0	0	0.0%		
17.01	Smoke Detection & Alarm Systems	All looks OK - not tested	Test	3	50%														15,578	15,578	0	15,578	31,156	15,578	200.0%		
17.06	Fire Hose Reel	Good (new) condition	Test	2	30%														1,265	0	0	1,265	1,265	100.0%			
17.07	Fire Extinguisher	Good	Test and maintain	3	50%									1,898	0	0	0	0	9,488	3,795	3,795	1,898	9,488	1,898	500.0%		
17.00	Total Fire Services			3	50%								1,898	0	0	0	0	0	17,476	41,909	19,373	3,795	18,741	41,909	18,741	223.6%	
18.00	Electrical Services																		0	0	0	0	0	0	0.0%		
18.01	Main Distribution Boards	OK	none	2	30%														9,488	0	0	9,488	9,488	9,488	100.0%		
18.03	Electrical Wiring/Reticulation	OK	none	3	50%														31,156	0	31,156	0	31,156	31,156	100.0%		
18.04	General Power Outlet	Some damaged plates	replace plates	3	50%														41,541	0	41,541	0	41,541	41,541	100.0%		
18.06	Lighting (External) - Incandescent	OK	check	3	50%														3,163	0	3,163	0	3,163	3,163	100.0%		
18.09	Lighting (Internal) - Incandescent	Generally OK, some missing bulbs or not working	replace bulbs or test	4	70%														3,263	100	3,163	0	3,263	3,163	103.2%		
18.10	Lighting (Internal) - Fluorescent	Generally OK, some missing tubes or not working	replace tubes or test	3	50%														41,449	400	41,049	0	41,449	41,049	101.0%		
18.12	Emergency Lighting (Individual Battery Pack)	OK - not tested	Test and maintain	3	50%														2,277	0	2,277	0	2,277	2,277	100.0%		
18.00	Total Electrical Services			4	70%								500	0	0	0	0	0	132,336	500	122,348	9,488	132,336	131,836	100.4%		
19.00	Vertical Transportation																		0	0	0	0	0	0	0.0%		
19.01	None	In Operation (Y/N) Condition:	Repair, Replace, Service Comments:	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%		
20.00	Special Services																		0	0	0	0	0	0	0.0%		
20.01	Telecommunication/Data Network	Good but untidy wiring	tidy wiring	3	50%														41,541	83,083	41,541	0	83,083	41,541	200.0%		
20.02	Security Services - Cameras	Good but insufficient coverage	more cameras	2	30%									7,789	0	0	0	0	38,945	7,789	31,156	0	38,945	31,156	125.0%		
20.03	Wireless Internet Transmitter	Good	none	2	30%														2,000	0	2,000	0	2,000	2,000	100.0%		
20.00	Total Special Services			4	70%								7,789	0	0	0	0	0	124,028	49,330	33,156	41,541	124,028	74,697	166.0%		
C	TOTAL BUILDING SERVICES			4	70%								500	0	17,078	97,405	10,267	0	59,017	765,341	184,286	395,538	185,517	765,341	365,372	209.5%	
	TOTAL BUILDING			3	50%								500	300	17,078	97,405	29,092	0	60,832	140,126	1,411,131	345,333	516,687	549,112	1,411,131	2,479,132	56.9%

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 G - ADMINISTRATION
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013

Revision: Final

ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost														
						1	2	3	4	5	6	7	8	9	10	Total	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace			
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
										345,333															
										Year 1 - 10 Consolidated Capital Replacement Cost															



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																		
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace		
						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)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace			
15.01	WC	General wear and tear	Wash down	3	50%						0	0	0	0	0	0	0	0	0	0	18,975	0	18,975	0	18,975	18,975	100.0%		
15.02	Urinal (Stall)	General wear and tear	Wash down	3	50%						0	0	0	0	0	0	0	0	0	0	2,277	0	2,277	0	2,277	2,277	100.0%		
15.04	WHB (Single)	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	9,488	0	9,488	0	9,488	9,488	100.0%		
15.07	Hot Water System			2	30%						0	0	0	0	0	0	0	0	0	0	5,060	0	0	5,060	5,060	100.0%			
15.10	Cold Water			2	30%						0	0	0	0	0	0	0	0	0	0	13,915	0	0	13,915	13,915	100.0%			
											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	49,715	0	30,740	18,975	49,715	49,715	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	Good condition	Service and clean	3	50%						0	0	0	132,825	0	0	0	0	0	0	0	531,300	132,825	265,650	132,825	531,300	132,825	400.0%	
15.02	Ventilation - W/C Extract	Good condition	Service and clean	2	30%						0	0	0	0	0	0	0	0	0	0	3,795	0	3,795	0	3,795	3,795	100.0%		
16.03	Ceiling Mounted Fan	OK condition	clean	3	50%						0	0	0	0	0	0	0	0	0	0	6,958	13,915	6,958	0	6,958	13,915	200.0%		
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%			
16.00	Total Mechanical Services			3	50%						0	0	0	132,825	0	0	0	0	0	0	6,958	549,010	139,783	269,445	139,783	549,010	143,578	382.4%	
17.00	Fire Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%			
17.01	Smoke Detection & Alarm Systems	Working condition	Service and monitor	3	50%						0	0	0	0	0	0	0	0	0	0	30,520	61,040	30,520	0	30,520	61,040	200.0%		
17.02	9lb Carbon Dioxide Fire Extinguisher	Good condition	Cheek expiry dates	2	30%						0	0	0	6,325	0	0	0	0	0	6,325	0	31,625	12,650	12,650	6,325	31,625	6,325	500.0%	
17.03	Fire Hose Reel	Working condition	Service and monitor	3	50%						0	0	0	0	0	0	0	0	0	0	2,530	0	2,530	0	2,530	2,530	100.0%		
											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	6,325	0	0	0	0	0	0	6,325	30,520	95,195	43,170	15,180	36,845	95,195	39,375	241.8%
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	Good condition		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	Good condition		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	Good condition	Tidy up loose wiring	3	50%						0	0	0	0	0	0	0	0	0	0	61,040	0	61,040	0	61,040	61,040	100.0%		
18.04	General Power Outlet	Good condition	Tidy up loose wiring	3	50%						0	0	0	0	0	0	0	0	0	0	81,387	0	81,387	0	81,387	81,387	100.0%		
18.06	Lighting (External) - Incandescent	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	3,163	0	3,163	0	3,163	3,163	100.0%		
18.09	Lighting (Internal) - Incandescent	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	3,795	0	3,795	0	3,795	3,795	100.0%		
18.10	Lighting (Internal) - Fluorescent	General wear and tear		3	50%						0	0	0	0	0	0	0	0	0	0	158,125	0	158,125	0	158,125	158,125	100.0%		
											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	334,707	0	334,707	0	334,707	334,707	100.0%			
19.00	Vertical Transportation										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%			
19.01	Passenger Lifts	Wheel chair lift - working order, internal panel missing		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%			
19.00	Total Vertical Transportation			3	50%						0	0	0	0	0	0	0	0	0	63,250	0	63,250	0	63,250	63,250	100.0%			
20.00	Special Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%			
20.01	Telecommunication/Data Network	Good but loose wiring	Tidy up loose wiring	2	30%						0	0	0	0	0	0	0	0	0	0	81,387	0	81,387	0	81,387	81,387	100.0%		
20.02	Security Services - Cameras	New, but require additional cameras	Clean and service	2	30%						0	0	0	0	0	0	0	0	0	0	50,867	0	50,867	0	50,867	50,867	100.0%		
20.03	Other										0	0	0	0	0	0	0	0	0	0	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			2	30%						0	0	0	0	0	0	0	0	0	132,254	0	132,254	0	132,254	132,254	100.0%			
C	TOTAL BUILDING SERVICES			3	50%						0	0	0	139,150	0	0	0	0	6,325	37,478	1,224,131	182,953	845,575	195,603	1,224,131	762,878	160.5%		

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 H - LEARNING RESOURCE CENTRE
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013

Revision: Final

ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
		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 %	1 2013 (\$ USD)	2 2014 (\$ USD)	3 2015 (\$ USD)	4 2016 (\$ USD)	5 2017 (\$ USD)	6 2018 (\$ USD)	7 2019 (\$ USD)	8 2020 (\$ USD)	9 2021 (\$ USD)	10 2022 (\$ USD)	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
	TOTAL BUILDING			3	50%						0	0	0	139,150	0	0	0	0	6,325	247,580	2,537,520	393,055	1,485,258	659,207	2,537,520	3,409,263	74.4%
											393,055																
											Year 1 - 10 Consolidated Capital Replacement Cost																



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge					Asset Renewal Cost																	
				Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	
A	TOTAL STRUCTURE			3	50%						0	0	0	0	3,036	0	0	0	0	0	0	58,808	3,036	6,679	49,092	58,808	348,203	16.9%
8.00	Stairs, Balustrades & Handrails										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
8.01	Timber Framed Balustrades to patio	Evidence of stains	Wash and repaint	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,135	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			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,135	0.0%
9.00	Internal Walls/Partitions										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.01	Timber Framed Partition Walls	Not observed	Monitor	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,382	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			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,382	0.0%
10.00	Internal Doors										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.01	Timber Door - Single	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,554	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			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,554	0.0%
11.00	Floor Finishes										0	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 bubbles due to poor workmanship	Clean and wash thoroughly. Monitor floor	2	30%						0	0	0	0	0	0	0	0	0	0	0	18,405	0	18,405	0	18,405	18,405	100.0%
11.02	Tiled Floor Finishes			2	30%						0	0	0	0	0	0	0	0	0	0	0	6,202	0	0	6,202	6,202	6,202	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.00	Total Floor Finishes			2	30%						0	0	0	0	0	0	0	0	0	0	0	24,607	0	18,405	6,202	24,607	24,607	100.0%
12.00	Wall Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.01	Plasterboard Wall Linings with Painted Finishes	Evidence of impact damage, marks, etc Comments:	Paint, Clean	2	30%						0	0	0	0	0	0	0	0	0	0	0	35,841	0	35,841	0	35,841	35,841	100.0%
12.02	Tiled Wall Finishes	Evidence of lifting tiles, marks,	Repair, Clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	13,215	0	13,215	0	13,215	13,215	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.00	Total Wall Finishes			3	50%						0	0	0	0	0	0	0	0	0	0	0	49,056	0	49,056	0	49,056	49,056	100.0%
13.00	Ceiling Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.01	Fibre Cement Soffit Lining with Painted Finishes	Evidence of stains	Clean and paint	3	50%						0	0	0	0	0	0	0	0	0	0	0	4,262	0	4,262	0	4,262	4,262	100.0%
13.02	Fibre Cement Soffit Lining with Painted Finishes	Evidence of stains, growing plants	Remove and replace	5	90%						0	0	1,065	0	0	0	0	0	0	0	0	1,065	1,065	0	0	1,065	1,065	100.0%
13.03	Fibre Cement soffits to patio	Evidence of stains	Repair, Replace, Paint, Clean Comments:	3	50%						0	0	0	0	0	0	0	0	0	0	0	9,202	0	9,202	0	9,202	9,202	100.0%
13.04	Fibre Cement soffits to patio	Evidence of stains, growing plants	Remove and replace	5	90%						0	0	1,022	0	0	0	0	0	0	0	0	1,022	1,022	0	0	1,022	1,022	100.0%
13.05	Plasterboard Ceiling Lining with Painted Finishes	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	0	16,445	0	0	16,445	16,445	16,445	100.0%
13.06	Timber framed vents to soffits	Evidence of stains	Clean, Paint	2	30%						0	0	0	0	0	0	0	0	0	0	0	1,898	0	0	1,898	1,898	1,898	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.00	Total Ceiling Finishes			4	70%						0	0	2,088	0	0	0	0	0	0	0	0	33,894	2,088	13,463	18,343	33,894	33,894	100.0%
14.00	Fixed Joinery Units										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.01	White Boards	Evidence of stains	Clean	2	30%						0	0	0	0	0	0	0	0	0	0	0	1,518	0	0	1,518	1,518	1,518	100.0%
14.02	Mirrors	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	0	759	0	0	759	759	759	100.0%
14.03	Built-in Joinery - Vanity Unit to toilets	Evidence of impact damage, marks, etc	Repair, Replace	4	70%						0	0	0	0	0	0	0	0	0	3,795	0	3,795	3,795	0	0	3,795	3,795	100.0%
14.04	Built-in Joinery - Vanity to art classroom	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	0	949	0	0	949	949	949	100.0%
14.05	Built-in Joinery - Kitchen (Medium)	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	0	18,975	0	0	18,975	18,975	18,975	100.0%
											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			3	50%						0	0	0	0	0	0	0	0	3,795	0	25,996	3,795	0	22,201	25,996	25,996	100.0%	

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

J - A+ CENTRE

Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN

Audit Date: October 2013

Revision: Final



ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
		Condition Observations	Recommended Course of Action & Maintenance	Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
B	TOTAL INTERNAL FIT-OUT			3	50%						0	0	2,088	0	0	0	0	0	3,795	0	133,553	5,883	80,925	46,745	133,553	154,624	86.4%
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	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	6,325	0	0	6,325	6,325	6,325	100.0%
15.02	Urinal (Stall)	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	2,277	0	0	2,277	2,277	2,277	100.0%
15.03	WHB (Single)	Evidence of stains, corrosion	Clean	3	50%						0	0	0	0	0	0	0	0	0	0	3,795	0	3,795	0	3,795	3,795	100.0%
15.04	Kitchen sink	Good condition	No maintenance required	2	30%						0	0	0	0	0	0	0	0	0	0	3,163	0	0	3,163	3,163	3,163	100.0%
15.00	Total Sanitary Plumbing			3	50%						0	0	0	0	0	0	0	0	0	15,560	0	3,795	11,765	15,560	15,560	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, mould on external unit	Service, Clean, Paint	3	50%						0	0	0	35,420	0	0	0	0	0	0	141,680	35,420	70,840	35,420	141,680	35,420	400.0%
16.02	Air-Conditioning - Window Mounted Unit	Evidence of corrosion	Service, Clean, Paint	3	50%						0	0	0	0	11,385	0	0	0	0	34,155	11,385	11,385	11,385	34,155	11,385	300.0%	
16.03	Ceiling Mounted Fan	Good condition	Service	2	30%						0	0	0	0	0	0	0	0	0	2,783	0	2,783	0	2,783	2,783	100.0%	
16.00	Total Mechanical Services			3	50%						0	0	0	35,420	11,385	0	0	0	0	178,618	46,805	85,008	46,805	178,618	49,588	360.2%	
17.00	Fire Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
17.01	Smoke Detection & Alarm Systems	Generally ok	Monitor	2	30%						0	0	0	0	0	0	0	0	0	4,175	0	4,175	0	4,175	4,175	100.0%	
17.02	9lb Carbon Dioxide Fire Extinguisher	None Evident	Recommend installation of fire extinguishers	0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
17.03	Fire Hose Reel	Generally ok	Door to fire hose reel cupboard needs to be repainted	2	30%						0	0	0	0	0	0	0	0	0	1,265	0	0	1,265	1,265	1,265	100.0%	
17.00	Total Fire Services			2	30%						0	0	0	0	0	0	0	0	0	5,440	0	4,175	1,265	5,440	5,440	100.0%	
18.00	Electrical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
18.01	Main Distribution Boards	Not inspected. Assumed ok	Monitor	2	30%						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	Not inspected. Assumed ok	Monitor	2	30%						0	0	0	0	0	0	0	0	0	4,428	0	0	4,428	4,428	4,428	100.0%	
18.03	Electrical Wiring/Reticulation	Ok	Monitor	2	30%						0	0	0	0	0	0	0	0	0	8,349	0	0	8,349	8,349	8,349	100.0%	
18.04	General Power Outlet	Generally ok. Damaged faceplate.	Replace face plate and clean remainder	3	50%						0	0	0	0	0	0	0	0	0	11,132	0	11,132	0	11,132	11,132	100.0%	
18.05	3 Phase Power Outlet	Generally ok	Monitor	2	30%						0	0	0	0	0	0	0	0	0	13,915	0	0	13,915	13,915	13,915	100.0%	
18.06	Lighting (External) - Fluorescent	Evidence of water, dirty	Replace	5	90%						0	0	0	10,120	0	0	0	0	0	10,120	10,120	0	0	10,120	10,120	100.0%	
18.07	Lighting (Internal) - Incandescent	Electrical/store not accessible. Assumed one Incandescent in each	Monitor	2	30%						0	0	0	0	0	0	0	0	0	633	0	0	633	633	633	100.0%	
18.08	Lighting (Internal) - Fluorescent	Operating	Monitor	2	30%						0	0	0	0	0	0	0	0	0	18,343	0	0	18,343	18,343	18,343	100.0%	
18.00	Total Electrical Services			3	50%						0	0	0	10,120	0	0	0	0	0	76,406	10,120	11,132	55,154	76,406	76,406	100.0%	
19.00	Vertical Transportation										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
19.01	No Passenger Lifts to this building			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%	
20.00	Special Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
20.01	Telecommunication/Data Network	In Operation	Service and tidy wiring and clean phone ports	2	30%						0	0	0	0	0	0	0	0	0	11,153	0	11,153	0	11,153	11,153	100.0%	
20.00	Total Special Services			2	30%						0	0	0	0	0	0	0	0	0	11,153	0	11,153	0	11,153	11,153	100.0%	
C	TOTAL BUILDING SERVICES			3	50%						0	0	0	45,540	11,385	0	0	0	0	287,176	56,925	115,262	114,989	287,176	158,146	181.6%	

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 J - A+ CENTRE
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013

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ID Code	Element	Condition Assessment		Condition Grading		Condition Gauge					Asset Renewal Cost																
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
											2013 (\$ USD)	2014 (\$ USD)	2015 (\$ USD)	2016 (\$ USD)	2017 (\$ USD)	2018 (\$ USD)	2019 (\$ USD)	2020 (\$ USD)	2021 (\$ USD)	2022 (\$ USD)							
	TOTAL BUILDING			3	50%						0	0	2,088	45,540	14,421	0	0	0	3,795	0	479,536	65,844	202,866	210,826	479,536	660,973	72.6%
											65,844																
											Year 1 - 10 Consolidated Capital Replacement Cost																

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE

K - STUDENT SERVICES

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

Audit Date: October 2013

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ID Code	Element	Condition Assessment	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge					Asset Renewal Cost																
					Condition Grade	% Deterioration	0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
							VG	G	A	P	VP	2013 (\$ USD)	2014 (\$ USD)	2015 (\$ USD)	2016 (\$ USD)	2017 (\$ USD)	2018 (\$ USD)	2019 (\$ USD)	2020 (\$ USD)	2021 (\$ USD)	2022 (\$ USD)							
9.00	Total Internal Walls/Partitions				2	30%													0	0	0	0	0	0	64,515	0.0%		
10.00	Internal Doors																		0	0	0	0	0	0	0	0.0%		
10.01	Timber Door - Single	General wear and tear, impact damage	Repair and repaint		3	50%													0	0	0	15,180	15,180	15,180	100.0%			
10.02	Timber Door - Sliding	General wear and tear, impact damage	Repaint		2	30%													0	0	0	0	0	0	1,771	0.0%		
10.00	Total Internal Doors				3	50%													0	0	0	15,180	15,180	16,951	89.6%			
11.00	Floor Finishes																		0	0	0	0	0	0	0.0%			
11.01	Vinyl Floor Finishes	Normal wear and tear, including some chipping to vinyl	Uplift and repair damage portions		4	70%													0	0	0	0	0	0	0.0%			
11.02	Tiled Floor Finishes	Impact damage, broken tiles	Remove and replace damage tiles		4	70%													0	0	0	0	0	0	0.0%			
11.00	Total Floor Finishes				4	70%													0	0	0	0	0	0	0.0%			
11.01	Vinyl Floor Finishes	Normal wear and tear, including some chipping to vinyl	Uplift and repair damage portions		4	70%													0	0	0	0	0	0	0.0%			
11.02	Tiled Floor Finishes	Impact damage, broken tiles	Remove and replace damage tiles		4	70%													0	0	0	0	0	0	0.0%			
11.00	Total Floor Finishes				4	70%													0	0	0	0	0	0	0.0%			
12.00	Wall Finishes																		0	0	0	0	0	0	0.0%			
12.01	Solid Plaster Wall Lining with Painted Finishes	Minor water damage marks	Strip, plaster and repaint		3	50%													0	0	0	0	0	0	0.0%			
12.00	Total Wall Finishes				3	50%													0	0	0	0	0	0	0.0%			
13.00	Ceiling Finishes																		0	0	0	0	0	0	0.0%			
13.01	Fibre Cement Soffit Lining with Painted Finishes				3	50%													0	0	0	0	0	0	0.0%			
13.02	Plywood Ceiling Lining with Painted Finishes	Good condition	Clean down		3	50%													0	0	0	0	0	0	0.0%			
13.03	Proprietary Suspended Ceilings (Exposed Grid Suspension System)	Damaged ceiling tiles	remove and replace		4	70%													0	0	0	0	0	0	0.0%			
13.00	Total Ceiling Finishes				4	70%													0	0	0	0	0	0	0.0%			
14.00	Fixed Joinery Units																		0	0	0	0	0	0	0.0%			
14.01	Toilet Partitions	Impact damage	Repair and wash down		3	50%													0	0	0	0	0	0	0.0%			
14.02	White Boards	General wear and tear	Clean		3	50%													0	0	0	0	0	0	0.0%			
14.03	Mirrors	Good condition			3	50%													0	0	0	0	0	0	0.0%			
14.04	Built-in Joinery - Bench Unit	Good condition, General wear and tear			3	50%													0	0	0	0	0	0	0.0%			
14.05	Built-in Joinery - Shelving Unit	Good condition, General wear and tear			3	50%													0	0	0	0	0	0	0.0%			
14.06	Built-in Joinery - Kitchen (Medium)	Good condition, General wear and tear			3	50%													0	0	0	0	0	0	0.0%			
14.00	Total Fixed Joinery Units				3	50%													0	0	0	0	0	0	0.0%			
B	TOTAL INTERNAL FIT-OUT				4	70%													0	0	0	0	0	0	0.0%			
15.00	Sanitary Plumbing																		0	0	0	0	0	0	0.0%			
15.01	WC	General wear and tear	Repair damage seat and lean		3	50%													0	0	0	0	0	0	0.0%			
15.04	WHB (Single)	General wear and tear	Wash		3	50%													0	0	0	0	0	0	0.0%			
15.10	Cold Water	General wear and tear	Wash		3	50%													0	0	0	0	0	0	0.0%			
15.00	Total Sanitary Plumbing				3	50%													0	0	0	0	0	0	0.0%			
16.00	Mechanical Services																		0	0	0	0	0	0	0.0%			
16.01	Air-Conditioning - DX/Split System	Tired by appearance.	Service, overhaul or consider replacement		3	50%													0	0	0	0	0	0	0.0%			
16.02	Ventilation - W/C Extract	Tired by appearance.	Service, overhaul or consider replacement		3	50%													0	0	0	0	0	0	0.0%			



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Asset Renewal Cost																	
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace	
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)
8.01	18m wide Insitu Reinforced Concrete Stairs	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37,950	0.0%
8.01a	Smaller Pre-cast Reinforced Concrete Stairs	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88,550	0.0%
8.04	Metal Framed Balustrades (with Metal Infill Panels)	OK condition, some minor paint		3	50%						0	0	0	0	0	0	0	0	0	0	0	71,726	0	0	71,726	71,726	71,726	100.0%
8.04a	Stainless Steel Balustrades (with SS Infill Panels)	OK condition, some denting		3	50%						0	0	0	0	0	0	0	0	0	0	0	91,080	0	0	91,080	91,080	91,080	100.0%
											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			3	50%						0	0	0	0	0	0	0	0	0	0	0	162,806	0	0	162,806	162,806	289,306	56.3%
9.00	Internal Walls/Partitions										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
9.03	Un-Reinforced Brick Masonry Walls	Hard to tell - looks OK but some damage evident		3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268,686	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			3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268,686	0.0%
10.00	Internal Doors										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.01	Timber Door - Single	Some in very poor condition - vandalised or chipped, others are reasonable		4	70%						0	0	0	0	0	0	0	0	0	0	0	45,540	0	45,540	0	45,540	45,540	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
10.00	Total Internal Doors			4	70%						0	0	0	0	0	0	0	0	0	0	0	45,540	0	45,540	0	45,540	45,540	100.0%
11.00	Floor Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.06	Concrete Screed Floor Finish	Worse for wear, cracks and chips		4	70%						0	0	0	0	0	0	0	0	0	0	0	99,681	0	99,681	0	99,681	99,681	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
11.00	Total Floor Finishes			4	70%						0	0	0	0	0	0	0	0	0	0	0	99,681	0	99,681	0	99,681	99,681	100.0%
12.00	Wall Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.03	Solid Plaster Wall Lining with Painted Finishes	Chipping and cracking		4	70%						0	0	0	0	0	0	0	0	0	0	0	324,766	324,766	0	0	324,766	324,766	100.0%
12.04	Tiled Wall Finishes	OK but poorly maintained		4	70%						0	0	0	0	0	0	0	0	0	0	0	76,507	76,507	0	0	76,507	76,507	100.0%
12.06	Steel Strapping with Acoustic Panel	OK generally but some areas of impact damage		4	70%						0	0	0	0	0	0	0	0	0	0	0	338,818	338,818	0	0	338,818	338,818	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
12.00	Total Wall Finishes			4	70%						0	0	0	0	0	0	0	0	0	0	0	740,091	740,091	0	0	740,091	740,091	100.0%
13.00	Ceiling Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.06	Proprietary Suspended Ceilings (Exposed Grid and Tile Suspension System)	OK with some damage		3	50%						0	0	0	0	0	0	0	0	0	0	0	40,379	0	40,379	0	40,379	40,379	100.0%
13.07	Feature Ceiling Panels to Gymnasium and Practice Court	Hard to see. From above they look dirty and tired		3	50%						0	0	0	0	0	0	0	0	0	0	0	237,005	0	237,005	0	237,005	237,005	100.0%
13.07	Metal Sheet Soffit Cladding	Evidence of corrosion to edges of panels	Requires cleaning, some rust treatment and painting	3	50%						0	0	0	0	0	0	0	0	0	0	0	261,855	0	261,855	0	261,855	261,855	100.0%
13.08	Paint Finish To Staggered Concrete Seating	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	0	5,313	0	5,313	0	5,313	5,313	100.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
13.00	Total Ceiling Finishes			3	50%						0	0	0	0	0	0	0	0	0	0	0	544,552	0	544,552	0	544,552	544,552	100.0%
14.00	Fixed Joinery Units										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
14.01	Toilet Partitions	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	0	13,662	0	13,662	0	13,662	13,662	100.0%
14.01a	Urinal Partitions - Half Height	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	0	2,530	0	2,530	0	2,530	2,530	100.0%
14.01b	Shower Partitions	OK condition		3	50%						0	0	0	0	0	0	0	0	0	0	0	49,790	0	49,790	0	49,790	49,790	100.0%
14.05	Mirrors	OK		3	50%						0	0	0	0	0	0	0	0	0	0	0	3,036	0	3,036	0	3,036	3,036	100.0%
14.07	Built-in Joinery - Bench Unit	OK		3	50%						0	0	0	0	0	0	0	0	0	0	0	9,488	0	9,488	0	9,488	9,488	100.0%
14.12	Built-in Joinery - Water Bottle Filling Basins	OK but 50% of tapware missing		4	70%						0	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	0.0%



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Asset Renewal Cost																
				Condition Grading		VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
				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)							
14.00	Total Fixed Joinery Units			4	70%						0	0	0	0	0	0	0	0	9,488	0	87,993	9,488	78,506	0	87,993	87,993	100.0%
B	TOTAL INTERNAL FIT-OUT			4	70%						0	0	0	0	0	0	0	0	749,579	0	1,680,664	749,579	768,280	162,806	1,680,664	2,075,850	81.0%
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		3	50%						0	0	0	0	0	0	0	0	28,463	0	28,463	0	28,463	28,463	100.0%		
15.02	Urinal (Single)	OK		3	50%						0	0	0	0	0	0	0	0	11,385	0	11,385	0	11,385	11,385	100.0%		
15.04	WHB (Single)	OK but tapware corroded and some wastes damaged		3	50%						0	0	0	0	0	0	0	0	15,180	0	15,180	0	15,180	15,180	100.0%		
15.06	Shower Including Overhead HWC, Taps and Head (Partitions Measured Separately)	OK		3	50%						0	0	0	0	0	0	0	0	31,625	0	31,625	0	31,625	31,625	100.0%		
15.12	Cold Water Pump	OK		3	50%						0	0	0	0	0	0	0	0	12,650	0	12,650	0	12,650	12,650	100.0%		
15.13	Drinking Fountains	Corroded		4	70%						0	0	0	0	0	0	0	7,590	7,590	0	7,590	0	7,590	7,590	100.0%		
											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	7,590	7,590	0	106,893	7,590	99,303	0	106,893	106,893	100.0%
16.00	Mechanical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
16.01	Air-Conditioning - DX/Split System	OK		3	50%						0	0	0	61,985	0	0	0	0	247,940	61,985	123,970	61,985	247,940	61,985	400.0%		
16.05	AHU Ventilation - Supply Only	Not working		5	90%						0	43,236	0	0	0	0	0	0	86,472	43,236	0	43,236	86,472	43,236	200.0%		
											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	43,236	0	61,985	0	0	0	0	334,412	105,221	123,970	105,221	334,412	105,221	317.8%		
17.00	Fire Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
17.06	Cabinet Fire Hose Reel	OK		3	50%						0	0	0	0	0	0	0	0	5,060	0	5,060	0	5,060	5,060	100.0%		
17.07	Fire Extinguisher	OK		3	50%						0	0	0	0	2,530	0	0	0	12,650	5,060	5,060	2,530	12,650	2,530	500.0%		
											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	2,530	0	0	0	17,710	5,060	10,120	2,530	17,710	7,590	233.3%		
18.00	Electrical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
18.01	Main Distribution Boards	OK		3	50%						0	0	0	0	0	0	0	0	18,975	0	18,975	0	18,975	18,975	100.0%		
18.03	Electrical Wiring/Reticulation	OK		3	50%						0	0	0	0	0	0	0	0	109,065	0	109,065	0	109,065	109,065	100.0%		
18.04	General Power Outlet	OK		3	50%						0	0	0	0	0	0	0	0	145,420	0	145,420	0	145,420	145,420	100.0%		
18.05	3 Phase Power Supply	OK		3	50%						0	0	0	0	0	0	0	0	10,000	0	10,000	0	10,000	10,000	100.0%		
18.06	Lighting (External)	Corroded		4	70%						0	0	0	0	0	0	0	0	36,355	0	36,355	0	36,355	36,355	100.0%		
18.09	Lighting (Internal)	OK		3	50%						0	0	0	0	0	0	0	0	145,420	0	145,420	0	145,420	145,420	100.0%		
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
18.00	Total Electrical Services			4	70%						0	0	0	0	0	0	0	0	465,236	0	465,236	0	465,236	465,236	100.0%		
19.00	Vertical Transportation										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%	
19.00	Total Vertical Transportation			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%	
20.01	Telecommunication/Data Network	Unknown		0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
20.02	Security Services	Unknown		0	0%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
20.03	Other										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 L - GYMNASIUM
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013
 Revision: Final

ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Gauge					Asset Renewal Cost										Full Replace	% Full Replace							
				Condition Grading		0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	1	2	3	4	5	6	7	8			9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total
				Condition Grade	% Deterioration						2013 (\$ USD)	2014 (\$ USD)	2015 (\$ USD)	2016 (\$ USD)	2017 (\$ USD)	2018 (\$ USD)	2019 (\$ USD)	2020 (\$ USD)			2021 (\$ USD)	2022 (\$ USD)					
20.00	Total Special Services			0	0%														0	0	0	0	0	0	0.0%		
C	TOTAL BUILDING SERVICES			4	70%														924,251	117,871	698,629	107,751	924,251	684,940	134.9%		
	TOTAL BUILDING			4	70%														4,320,537	1,902,290	2,147,690	270,557	4,320,537	9,442,394	45.8%		
										1,902,290																	
										Year 1 - 10 Consolidated Capital Replacement Cost																	



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Asset Renewal Cost																
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace
						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)							
14.00	Total Fixed Joinery Units			4	70%						0	0	0	0	0	0	0	9,488	0	11,385	9,488	1,898	0	11,385	11,385	100.0%	
B	TOTAL INTERNAL FIT-OUT			3	50%						0	0	19,392	0	900	14,330	0	0	9,488	0	152,572	44,110	31,642	76,820	152,572	194,231	78.6%
15.00	Sanitary Plumbing										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
15.13	Exterior tap	Worn but working	Replace washer, maintain	3	50%						0	0	0	0	0	0	0	0	0	0	253	0	0	253	253	253	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	253	0	0	253	253	253	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	Manual remote control - daytime use only, set at 22 degrees, OK condition	Service and clean	3	50%						0	0	0	17,710	0	0	0	0	0	0	70,840	17,710	35,420	17,710	70,840	17,710	400.0%
16.04	Air-Conditioning - Window Mounted Unit	Manual remote control - day time only, poor condition, leaking water and rusted	Replace	5	90%						1,898	0	0	0	0	0	0	0	0	0	5,693	1,898	1,898	1,898	5,693	1,898	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%						1,898	0	0	17,710	0	0	0	0	0	0	76,533	19,608	37,318	19,608	76,533	19,608	390.3%
17.00	Fire Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
17.07	Fire Extinguisher	Good condition	monitor & service	2	30%						0	0	0	0	633	0	0	0	0	633	3,163	1,265	1,265	633	3,163	633	500.0%
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
17.00	Total Fire Services			2	30%						0	0	0	0	633	0	0	0	0	633	3,163	1,265	1,265	633	3,163	633	500.0%
18.00	Electrical Services										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
18.02	Sub-Main Distribution Boards	Loose wiring, messy board	Repair and sort	4	70%						0	0	0	0	0	0	0	0	0	0	4,428	0	4,428	0	4,428	4,428	100.0%
18.03	Electrical Wiring/Reticulation	OK, some untidy wiring	Tidy wiring	3	50%						0	0	0	0	0	0	0	0	0	0	22,644	0	22,644	0	22,644	22,644	100.0%
18.04	General Power Outlet	OK	Clean	3	50%						0	0	0	0	0	0	0	0	0	0	30,192	0	30,192	0	30,192	30,192	100.0%
18.06	Lighting (External) - Incandescent	OK condition	Clean	3	50%						0	0	0	0	0	0	0	0	0	0	2,214	0	2,214	0	2,214	2,214	100.0%
18.09	Lighting (Internal) - Incandescent	Good condition	Clean	3	50%						0	0	0	0	0	0	0	0	0	0	3,163	0	3,163	0	3,163	3,163	100.0%
18.10	Lighting (Internal) - Fluorescent	Generally in good condition, some diffusers missing	Replace tubes, install diffusers, clean	3	50%						0	0	0	0	0	0	0	0	0	0	13,915	0	13,915	0	13,915	13,915	100.0%
18.10	Lighting (Internal) - High Bay lights	To Weights room, good condition	Clean and maintain	3	50%						0	0	0	0	0	0	0	0	0	0	5,060	0	5,060	0	5,060	5,060	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			4	70%						0	0	0	0	0	0	0	0	0	0	81,615	0	81,615	0	81,615	81,615	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	Passenger Lifts	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	Working condition - no issues	Maintenance only - tidy wiring	3	50%						0	0	0	0	0	0	0	0	0	7,590	15,180	7,590	0	7,590	15,180	7,590	200.0%
20.01a	Server Room	Recently installed	Maintenance only	2	30%						0	0	0	0	0	0	0	0	0	0	12,650	0	12,650	0	12,650	12,650	100.0%
20.02	Security Services	Recently installed surveillance camera	Maintenance only	2	30%						0	0	0	0	0	0	0	0	0	0	76	0	76	0	76	76	100.0%
											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	7,590	27,906	7,590	12,726	7,590	27,906	20,316	137.4%
C	TOTAL BUILDING SERVICES			3	50%						1,898	0	0	17,710	633	0	0	0	0	8,223	189,469	28,463	132,923	28,083	189,469	122,424	154.8%
	TOTAL BUILDING			3	50%						1,898	569	52,331	17,710	47,583	14,330	0	0	9,488	13,133	545,415	157,041	273,586	114,789	545,415	819,164	66.6%

157,041
 Year 1 - 10 Consolidated Capital Replacement Cost

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 N - MAINTENANCE SHOP, OFFICES & MUSIC ROOMS

Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN

Audit Date: October 2013

Revision: Final



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Assessment		Condition Gauge					Condition Grading										Asset Renewal Cost											
				Condition Grade	% Deterioration	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Renewal Total	Full Replace	% Full Replace					
						0-20 %	20-40 %	40-60 %	60-80 %	80-100 %	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)	(\$ USD)				
7.00	Total Windows & Doors			5	90%						0	0	0	0	25,300	1,943	0	0	0	0	0	0	0	0	93,147	27,243	63,961	1,943	93,147	91,204	102.1%	
A	TOTAL STRUCTURE			4	70%						0	2,530	0	0	25,300	1,943	0	0	23,557	0	212,999	53,330	157,726	1,943	212,999	501,269	42.5%					
8.00	Stairs, Balustrades & Handrails										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
8.03	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%	
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	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	0	0	0.0%	
9.05	Reinforced Concrete Block Masonry Walls	All walls in very good condition	none	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61,555	0.0%
9.00	Total Internal Walls/Partitions			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61,555	0.0%
10.00	Internal Doors										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
10.01	Timber Door - Single	Generally good condition, paint faded with some marks	Clean and repaint	3	50%						0	0	0	0	600	0	0	0	0	0	0	0	0	0	14,262	600	0	13,662	14,262	13,662	104.4%	
10.00	Total Internal Doors			3	50%						0	0	0	0	600	0	0	0	0	0	0	0	0	0	14,262	600	0	13,662	14,262	13,662	104.4%	
11.00	Floor Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
11.02	Vinyl Floor Finishes	Generally good condition. Some discolouration and uplift in places	Replace loose tiles. Clean remainder	3	50%						0	0	0	0	0	0	0	0	0	0	0	21,950	43,901	21,950	0	21,950	43,901	21,950	200.0%			
11.06	U3 Floated Concrete	General wear and tear	Clean and repaint	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,916	0.0%
11.00	Total Floor Finishes			3	50%						0	0	0	0	0	0	0	0	0	0	21,950	43,901	21,950	0	21,950	43,901	38,867	113.0%				
12.00	Wall Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
12.06	Exposed Blockwork Painted	Very good condition	none	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,389	0	0	15,389	15,389	15,389	100.0%	
12.00	Total Wall Finishes			2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,389	0	0	15,389	15,389	15,389	100.0%	
13.00	Ceiling Finishes										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
13.07	Profiled Metal Sheet Soffit Lining (Pre-Finished)	Corrosion to fixings and edges.	Remove and replace	5	90%						0	0	19,544	0	0	0	0	0	0	0	0	0	0	0	19,544	19,544	0	0	19,544	19,544	100.0%	
13.06	Proprietary Suspended Ceilings (Exposed Grid Suspension System)	To offices - generally OK, some tiles out of position or marked	Re-fit tiles and clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,463	0	16,463	0	16,463	16,463	100.0%	
13.07	Roof Space Insulation and Vapour Barrier	To store - barrier damaged most everywhere with some insulation hanging down	Re-fit insulation, repair barrier	4	70%						0	0	0	0	4,614	0	0	0	0	0	0	0	0	0	9,227	4,614	4,614	0	9,227	9,227	100.0%	
13.00	Total Ceiling Finishes			4	70%						0	0	19,544	0	4,614	0	0	0	0	0	0	0	0	0	45,234	24,158	21,076	0	45,234	45,234	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	0	0	0.0%	
14.04	White Boards	Good condition - general wear & tear	Clean	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,518	0	1,518	0	1,518	1,518	100.0%	
14.03	Pin Board	Good condition - general wear & tear	none	2	30%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,518	0	759	759	1,518	759	200.0%	
14.08	Built-in Joinery - Shelving Unit	Rough timber frame & ply shelves to maint. Shop. Rough unfinished condition	none	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,530	0	2,530	0	2,530	2,530	100.0%	
14.00	Total Fixed Joinery Units			3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,566	0	4,807	759	5,566	4,807	115.8%	
B	TOTAL INTERNAL FIT-OUT			3	50%						0	0	19,544	0	5,214	0	0	0	0	0	21,950	124,351	46,708	25,883	51,760	124,351	179,513	69.3%				
15.00	Sanitary Plumbing										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	
15.14	Tap - exterior and interior	Worn and dirty but working	Replace washer, maintain	3	50%						0	0	0	0	0	0	0	0	0	0	0	0	0	0	759	0	0	759	759	759	100.0%	
											0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge										Asset Renewal Cost											
				Condition Grade	% Deter.	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Total	Full Replace	% Full Replace
						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)							
1.00	Roading			3	50%														0	0	0	0	0	0.0%			
1.01	Gravel Roads	Evidence of rutting, scour and potholes as access road to Pig Pens and Agricultural area	Review by Civil Engineer, repair pot holes and scour and level surface	3	50%													14,483	5,793	5,793	2,897	14,483	2,897	500.0%			
1.02	Asphalt Concrete Roads - resurface	Ok	Monitor	2	30%													336,763	0	336,763	0	336,763	336,763	100.0%			
1.03	Asphalt Concrete Roads - rebuild pavement	Ok	Monitor	2	30%													0	0	0	0	0	471,469	0.0%			
1.04	Reinforced Concrete Roads	To Gymnasium. Significant amount of cracking and damaged concrete	Uplift and replace worst damaged areas, repair other areas	3	50%													0	0	0	0	0	188,518	0.0%			
1.05	Reinforced Concrete Kerbs & Channels	With rebated edge near gym. Ok	Monitor	2	30%													0	0	0	0	0	1,455	0.0%			
																		0	0	0	0	0	0	0.0%			
1.00	Total Roothing			3	50%													351,246	5,793	342,557	2,897	351,246	1,001,101	35.1%			
2.00	Car Parks																	0	0	0	0	0	0.0%				
2.01	Asphalt Concrete Car Parks - Resurface asphalt	Ok	Monitor	2	30%													134,994	0	134,994	0	134,994	134,994	100.0%			
2.02	Asphalt Concrete Car Parks - Rebuild pavement	Ok	Monitor	2	30%													0	0	0	0	0	188,992	0.0%			
2.02	Reinforced Concrete Car Parks	Evidence of cracking, spalling and chipped concrete	Uplift and remove worst affected areas. Repair remainder	4	70%													318,517	0	0	318,517	318,517	318,517	100.0%			
2.03	Reinforced Concrete Car Parks	Evidence of minor cracks and heavily used	Wash down thoroughly and monitor	3	50%													0	0	0	0	0	171,509	0.0%			
2.04	Painted wheel stops to Carparks	Evidence of displacement, chipped and flaking paint finish but in sound condition for thos inspected.	Move into desired position on carpark. Wash and paint finish	2	30%													0	0	0	0	0	52,181	0.0%			
																		0	0	0	0	0	0	0.0%			
2.00	Total Car Parks			3	50%													453,511	0	134,994	318,517	453,511	866,193	52.4%			
3.00	Foot Paths & Circulation Areas																	0	0	0	0	0	0.0%				
3.01	Gravel Foot Paths & Circulation Areas	From Gym carpark to Agriculture building. Narrow but otherwise ok	Monitor and recommend widening	2	30%													1,453	581	581	291	1,453	291	500.0%			
3.02	Asphalt Concrete Foot Paths & Circulation Areas	Part has been screeded over recently with a cement concrete screed and the other section is the walkway from road between Cafeteria and Library up to A+ center. Appears ok.	Monitor	2	30%													22,414	0	0	22,414	22,414	22,414	100.0%			
3.03	Reinforced Concrete Foot Paths & Circulation Areas	Evidence of cracks, spalling and settlement in certain areas	Uplift and replace worst affected areas. Repair remainder.	3	50%													0	0	0	0	0	275,999	0.0%			
3.04	Concrete Screed Floor Finish	Recently installed over asphalt surface. Ok	Monitor	2	30%													0	0	0	0	0	24,635	0.0%			
3.05	Gravel chip feature bed to front of Gym on compacted base	Appears ok. Some evidence of grass and weeds growing through	Deweved and spray.	2	30%													9,473	0	9,473	0	9,473	9,473	100.0%			
3.06	Painted wheel stop as kerb to bottom of walkway from carpark up to Library	Evidence of chipped and flaking paint	Wash down and repaint	2	30%													0	0	0	0	0	759	0.0%			
																		0	0	0	0	0	0	0.0%			
3.00	Total Foot Paths & Collection Areas			3	50%													33,339	581	10,054	22,704	33,339	333,571	10.0%			
4.00	Fences & Gates																	0	0	0	0	0	0.0%				
4.01	Chain Link Fences / Gate	Chainlink with three rows of barbed wire to top. Generally ok. Some evidence of rust and marks	Clear overgrown vegetation from around parts of the fence	2	30%													0	0	0	0	0	60,160	0.0%			
4.02	Chain Link Fences / Gate	Fence enclosure to Classroom A unused gas store. Dirty fence and enclosure and dust and grime buildup on fence but	Clear out dirty enclosure. Wash down fence	2	30%													0	0	0	0	0	512	0.0%			
4.03	Metal Framed Fences / Gate	Large entry gate to Agriculture area. Some evidence of dirt and grime buildup particularly at bottom left hand corner of fence. Single gate to Classroom A.	Wash down thoroughly	2	30%													0	0	0	0	0	1,423	0.0%			
4.04	Metal framed fences/gate to old Satellite Station surround	Rusted top railed and damaged entry gate	Demolish and remove	5	90%													1,518	1,518	0	0	1,518	1,518	100.0%			
4.05	Metal framed fences/gate to old new Satellite station surround	Detached bottom rail noticed but generally ok	Fix up detached bottom rail and monitor	2	30%													0	0	0	0	0	1,973	0.0%			
																		0	0	0	0	0	0	0.0%			
4.00	Total Fences & Gates			3	50%													1,518	1,518	0	0	1,518	65,587	2.3%			
5.00	Structures																	0	0	0	0	0	0.0%				
5.01	Steel posts on raised concrete columns and timber roof framed Covered Ways (Profiled Metal Roof)	Recent installation and in good condition. One section of downpipe detached from guttering and some displaced downpipe concrete splashbacks	Reinstate in right location the concrete downpipe splashbacks (suggest grouting into ground) and refix downpipes to guttering where detached or loosely fitted	2	30%													0	0	0	0	0	1,110,630	0.0%			
5.02	Metal Framed Balustrades	Worn paint finish and evidence of rusting	Wash and remove rust. Apply paint finish	2	30%													0	0	0	0	0	44,718	0.0%			

Project: COLLEGE OF MICRONESIA - FSM
 Campus: NATIONAL CAMPUS AT PALIKIR, POHNPEI STATE
 SITE INFRASTRUCTURE
 Document: CONDITION ASSESSMENT & ASSET MANAGEMENT PLAN



Audit Date: October 2013

Revision: Final

ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge										Asset Renewal Cost											
				Condition Grade	% Deter.	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Total	Full Replace	% Full Replace
						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)							
5.32	Abandoned container near Agriculture building	Rusted through and abandoned	Demolish and remove	5	90%														5,882	5,882	5,882	0	0	5,882	5,882	100.0%	
5.33	Storage building comprising two containers and a central open store area near Gym	Located on a 1m high concrete platform constructed from two long containers with central storage area. Roof constructed from timber framing and corrugated iron roof cladding. Evidence of rusted through roof cladding, rust and graffiti to containers with part rusted through.	Repair rusted through areas of container at base. Wash down thoroughly and repaint. Replace roof cladding. Enclose front storage area and roof space recommended	4	70%														296,010	296,010	0	0	296,010	296,010	100.0%		
5.34	Storage Container behind IT shop/Security office/Weight lifting room fixed on concrete blocks at corners	Generally ok, offset about the ground. Evidence of rust and marks to container	Wash down and paint finish	2	30%														0	0	0	0	0	5,882	0.0%		
5.35	Storage Container behind Maintenance Shop sitting on concrete slabs to corners.	Insufficient clearance above ground particularly to front face. Marks and evidence of rust but generally ok	Wash down and paint finish	3	50%														0	0	0	0	0	5,882	0.0%		
5.36	Store and toilet block behind Maintenance building. Comprising two containers with central toilet block. Toilet block is blockwork walled with concrete slab and ply ceiling.	Evidence of rust to roof cladding. Water damaged ply to toilet and shower ceiling. Damaged louvre external windows. Graffiti to rear of building. Advanced corrosion to base of containers.	Demolish and rebuild with a structure more elevated above ground.	5	90%													280,109	280,109	280,109	0	0	280,109	280,109	100.0%		
5.37	Sand bedded volleyball court	Evidence of grass and soil layer on top to parts.	Remove grass and soil from areas where present. Churn up and recompact bedding	3	50%														0	0	0	0	0	11,532	0.0%		
5.38	LPG Gas store	Painted concrete blockwork walls. Timber framed, prefinished metal roof. PVC gutters and downpipes and serviced for LPG gas bottle connections	Wash down and repaint, particularly internally. Ease and adjust opening metal door	2	30%														0	0	0	0	0	45,301	0.0%		
5.39	Recreational building using traditional techniques and materials near Male Dormitory	Partially abandoned and deteriorating. No roof covering and missing or damaged seating boards	Remove remains of roof cladding and install new. Remove and replace seating boards	4	70%														15,370	15,370	0	0	15,370	15,370	100.0%		
5.40	Recreational building using traditional techniques and materials near Female Dormitory	Low height, steel plank laid on timber as seating. Looking tired and in need of attention.	Strengthen framing, Replace roof cladding and fixed seating	4	70%														3,416	3,416	0	0	3,416	3,416	100.0%		
5.41	Rest area buildings in Cultural Hub near carpark built using traditional techniques	Well built using local construction techniques with thatched roof and timber framing.	Monitor roof and framing members	2	30%														0	0	0	0	0	37,191	0.0%		
5.42	Old rainwater header tank on steel support structure and concrete pads	Advanced rust and corrosion to header tank and steel work. Appears to no longer be used	Demolish and remove	4	70%														11,385	11,385	0	0	11,385	11,385	100.0%		
5.42	Unidentified concrete structures to the Campus - mostly embedded in the ground including those near the Gymnasium	Not inspected, unsure what they are used for	Inspect and monitor	2	30%														0	0	0	0	0	37,950	0.0%		
5.43	Carpark Solar Panel Structures	Well built using Solar panel to the roof, supported on structural steel members, with a central metal gutter and downpipes feeding into a soak pit channel. Approximate length and width as no drawing provided or measured for this item.	Wash down. Recoat and protect steelwork	1	10%														0	0	0	0	0	5,851,258	0.0%		
5.44	Canopy Solar Panel Structure	Well built using Solar panel to the roof, supported on structural steel members	Wash down. Recoat and protect supporting steel work.	1	10%														0	0	0	0	0	717,635	0.0%		
5.45	Solar Panel Gear and Equipment housed inside the Library	Not inspected but assumed ok		1	10%														63,250	63,250	0	0	63,250	63,250	100.0%		
5.46	Generator Buildings	Combination of blockwork walls and metal posts and rail fence type cladding. Timber framed, prefinished metal walls with plastic guttering and spouting	Wash down and paint roof. Clean out guttering and downpipes. Wash and paint blockwork	2	30%														0	0	0	0	0	571,129	0.0%		
5.47	Water well and pump 1	Constructed and maintained by Utility company. Not valued as part of this Condition Assessment but note condition is good		0															0	0	0	0	0	0	0.0%		
5.48	Water well and pump 2	Constructed and maintained by Utility company. Not valued as part of this Condition Assessment but note condition is good		0															0	0	0	0	0	0	0.0%		
5.49	Water well and pump 3	Constructed by COM but operated and utilised by the utility company. Not valued as part of this Condition Assessment but not condition as ok and in operation	Wash down and repaint steelwork. Monitor performance and replace parts as required.	0															0	0	0	0	0	0	0.0%		
5.00	Total Structures			3	50%														475,762	994,380	475,762	0	518,618	994,380	9,649,455	10.3%	
6.00	Retaining Walls																		0	0	0	0	0	0	0.0%		
	Reinforced Concrete Retaining Walls																		0	0	0	0	0	0	0.0%		
6.01	Reinforced Concrete Retaining Walls to seating area below Library	Evidence of cracked and damaged plaster to blockwork retaining wall.	Repair cracked and damaged plaster to blockwork. Wash down	3	50%														13,460	13,460	0	0	13,460	13,460	100.0%		
6.02	Reinforced concrete retaining wall to flower bed below Administration area	Ok generally, some evidence of a rough plaster finish	Wash down and monitor	2	30%														0	0	0	0	0	21,766	0.0%		
6.03	Reinforced Concrete Retaining Walls to rear of new Faculty building below carpark	Ok	Wash down and monitor	2	30%														0	0	0	0	0	27,857	0.0%		
6.04	Raised nib wall/feature seating wall to front of F2 building	Good condition no evidence of any damage	Wash down and monitor	2	30%														0	0	0	0	0	12,031	0.0%		
6.05	Terraced seating retaining wall below Library	Well used but ok	Wash and clean regularly	2	30%														0	0	0	0	0	56,176	0.0%		



ID Code	Element	Condition Observations	Recommended Course of Action & Maintenance	Condition Grading		Condition Gauge										Asset Renewal Cost											
				Condition Grade	% Deter.	VG	G	A	P	VP	1	2	3	4	5	6	7	8	9	10	Total (\$ USD)	Year 1-10 Total	Year 11-20 Total	Year 21-30 Total	Grand Total	Full Replace	% Full Replace
						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)							
9.05	Concrete water storage tank to Agriculture building	No longer utilised. Some cracking evident to base of tank.	Repair cracks. Wash down and paint door. Consider utilising as a backup water supply to site	3	50%															8,223	0	0	8,223	8,223	8,223	100.0%	
9.06	Pumps	Assume a Pump to above is no longer in use		0	0%															0	0	0	0	0	0	0.0%	
9.07	Standard Hydrant	Some marks and worn paint finish	Wash down and paint. Service and inspect hydrants	2	30%															0	0	0	0	0	18,975	0.0%	
9.08	Large Hydrant to Main entrance below Library	Some marks and worn paint finish	Wash down and paint. Service and inspect hydrants	2	30%															0	0	0	0	0	0	0.0%	
9.00	Total Water Services			3	50%															8,223	0	0	8,223	8,223	114,483	7.2%	
10.00	Site Furniture																			0	0	0	0	0	0	0.0%	
10.01	Concrete Planter Boxes	Either side of Ramp up to main entrance to Gym. Appears ok	Monitor	2	30%															0	0	0	0	0	12,650	0.0%	
10.02	Moveable bollards to Solar panel canopy carpark	Appears ok	Wash and monitor	2	30%															886	0	0	886	886	886	100.0%	
10.03	Clothesline post and line	Worn paint finish to steelwork. Damaged line	Wash down and paint steelwork. Install new line	3	50%															3,416	0	3,416	0	3,416	3,416	100.0%	
10.04	Asphalt filled bollards around Fire Hydrant at top of carpark near flag poles	Some evidence of chipped and damaged paint to the stripped paint bollards	Wash down and paint finish	2	30%															1,771	0	0	1,771	1,771	1,771	100.0%	
10.05	Steel bollards to entry road to Agriculture building	2No to Entrance to Agriculture carpark. Both are damaged and on a lean. Link chain rusty and on the ground	Remove and replace	5	90%															1,139	1,139	0	0	1,139	1,139	100.0%	
10.06	Steel bollards to entry roads to top level carpark above new faculty building	Evidence of marks and scarathed paint, no link chain evident.	Wash down and repaint	2	30%															2,277	0	0	2,277	2,277	2,277	100.0%	
10.07	Steel bollards to entry roads and carpark to Gymnasium building	To Gymnasium entry and to protect Fire Hydrants. Vertical and still functioning as intended generally. Bollards protecting Fire	Wash down and repaint. Concrete fill bollards	4	70%															4,554	4,554	0	0	4,554	4,554	100.0%	
10.08	Steel bollards to either side of road into Building M and N	Vertly dirty appearance, no chain apparent but ok	Wash down and paint	2	30%															1,139	0	0	1,139	1,139	1,139	100.0%	
10.09	Commemorative plaque and stand for the Solar electricity generation system	Located near carpark below Library. Good condition	Clean and monitor	2	30%															3,163	0	0	3,163	3,163	3,163	100.0%	
10.10	Concrete raised seats under chairs typically in sets of three	Aged and well used seats but performing, some evidence of graffiti	Wash down and paint finish	2	30%															0	0	0	0	0	19,924	0.0%	
10.11	Exterior Basketball Hoops	Well used. Worn paint finish to backboard. Part torn hoop nets	Wash down and paint finish including remarking lines to boackboard.	2	30%															3,795	0	0	3,795	3,795	3,795	100.0%	
10.12	College of Micronesia Sign at front entrance	Good condition.	Wash down and monitor	1	10%															12,650	0	0	12,650	12,650	12,650	100.0%	
10.13	Fixed bench seating to Administration building	Good condition	Wash down and monitor	1	10%															1,265	0	0	1,265	1,265	1,265	100.0%	
10.14	Fixed signage consisting of stainless steel posts and frame and infill signage panel. Posts set in concrete footing	Ok, general wear and tear.	Wash down and clean frame and signage panel	2	30%															60,088	0	0	60,088	60,088	60,088	100.0%	
10.15	Fixed signage consisting of stainless steel posts and frame and infill signage panel. Posts set in concrete	One of the A+ Center (building I) signs has been cut off near base of post.	Uplift and remove damaged posts above ground. Supply and install replacement sign	5	90%															3,163	3,163	0	0	3,163	3,163	100.0%	
10.16	Fixed signage consisting of stainless steel posts and frame and infill signage panel. Posts set in concrete	Damaged backing to sign panel to one of the Administration signs and graffiti evident	Remove panel, repair or replace as required	4	70%															3,163	3,163	0	0	3,163	3,163	100.0%	
10.17	Fixed signage consisting of stainless steel posts and frame and infill signage panel. Posts set in concrete	No sign appears to be install for either Agriculture building I or the Female Dormitory Building E	Consider installing signs in front of these buildings	0	0%															0	0	0	0	0	0	0.0%	
10.18	400mm high approximately elevated seating area to front of Library	Well used and in ok condition	Wash down and paint blockwork sides and seal top	2	30%															13,283	0	0	13,283	13,283	13,283	100.0%	
10.19	Flagpoles to Main Entry below Library	In use at time of visit and ok	Wash down and recoat with corrosion protection system recommended	2	30%															15,813	0	0	15,813	15,813	15,813	100.0%	
10.00	Total Site Furniture			3	50%															131,560	12,018	3,416	116,127	131,560	164,134	80.2%	
TOTAL SITE INFRASTRUCTURE																				4,077,302	759,424	617,520	2,700,357	4,077,302	16,063,199	25.4%	

759,424
 Year 1 - 10 Consolidated Capital Replacement Cost

Appendix D

Energy Use Analysis





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 with few buildings using electric hot water heating.
Electrical System	Over head and underground metered connection to town main. Single and 3 phase.

Plant Item	Description	Location	Operation	Condition	Current maintenance	Recommendations	Current Operational Status
AC Units	Indoor Units	Internal	Manual operation	Varied	Monthly cleaning, weekly leak checking. Upcoming planned upgrades to replace old units with more efficient ones.	Replace damaged units with higher efficiency units.	
		Internal	Manual operation	Varied	Monthly cleaning, weekly leak checking. Upcoming planned upgrades to replace old units with more efficient ones.	Set all units to 24degC.	
	Some outdoor units have debris in their filters.	External		Poor		These units require immediate filter cleaning.	
	Some outdoor units are heavily rusting.	External		Poor		Consider replacing old/damaged units with more efficient ones.	
	Dirty outdoor units	External		Poor		Wipe down to avoid excess dirt getting into filters.	
Lighting	Internal lighting	Internal		Good		Turn off lights when not required or room not in use.	
General	Room infiltration	All areas		Poor		Properly seal all holes into the building.	
General	Louvered windows left open or have louvers missing completely.			Poor		Ensure that these are not near AC units. If they are they should be closed/fixd	
General	Roof Insulation			Average		Replace where missing	
General	Closed curtains/blinds during daylight hours.	Internal		Average		Open curtains to increase natural lighting.	
General	Air circulation	Internal		Good		Arrange furniture and storage to promote better airflow	

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.



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 with few buildings using electric hot water heating.
Electrical System	Over head and underground metered connection to town main. Single and 3 phase.

Plant Item	Description	Location	Operation	Condition	Current maintenance	Recommendations	Current Operational Status
A Classroom							
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	
Ceiling fan	Rust on fan blades	Internal	-	Average	-	Replace old/damaged fans with new ones to increase efficiency. Alternatively, remove flaking paint.	
B Classroom							
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	
Ceiling fan	Rust on fan blades	Internal	-	Average	-	Replace old/damaged fans with new ones to increase efficiency. Alternatively, remove flaking paint.	
C Cafeteria							
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.	
Extract	Kitchen Extract Hood	Internal	-	Average	-	Regular cleaning and replacement of extract filters	
Electrical	Hot water cylinder	Internal	-	Good	-	Turn off unit when not in use for extended periods alternatively install a solar hot water cylinder	
General	Freezers	Internal	-	Poor	-	Reseal and implement maintenance plan.	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	
Solar Hot Water Heating	A solar hot water heating system would considerably reduce electricity used to heat hot water.						
D Male Residence 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. Daylight sensors.	Average	To replace magnetic ballast fluorescent fixtures with electronic	Turn off lights when not in use	
General	Roof insulation	Internal	-	Average	-	Add insulation where missing.	
General	Room infiltration	Internal	-	Average	-	Install window curtains on A/C spaces	
General	Air circulation	Internal	-	Good	-	Arrange furniture to promote better airflow	
Ceiling fan	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	
E Female Residence Hall							

Plant Item	Description	Location	Operation	Condition	Current maintenance	Recommendations	Current Operational Status
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. Daylight sensors.	Average	To replace magnetic ballast fluorescent fixtures with electronic	Turn off lights when not in use. Consider installing Sun-Tube	
General	Roof insulation	Internal	-	Average	-	Add insulation where missing.	
General	Room infiltration	Internal	-	Average	-	Install window curtains on A/C spaces	
Ceiling fan	Rust on fan blades	Internal	-	Average	-	Replace old/damaged fans with new ones to improve efficiency.	
General	Furniture and storage	Internal	-	Good	-	Promote better airflow by moving unnecessary items into storage areas and large objects away from AC air stream	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	
Electrical	Appliance standby	Internal	manual operation	Average	-	Switch off after hours	
F Faculty Office							
AC Units	Split-units	Internal	Manual Operation	Good	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units to 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	-	Repair and replace window shades as needed	
Electrical	Incomplete wall-sockets	Internal	-	Poor	-	Replace or fix sockets.	
F2 Faculty Office							
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. Consider Skylight	
General	Roof insulation	Internal	-	Average	-	Install and replace insulation and ceiling tiles as needed	
General	Thermometer	Internal	-	Average	-	Relocate thermometer on wall to 1500mm above floor to give more accurate room temp	
Extract	Toilet extract	Internal	-	Average	-	Install security stays on toilet windows. To allow natural ventilation	
General	Room infiltration	Internal	-	Average	-	Repair door frame and self closing mechanism	
General	Window shade	Internal	-	Poor	-	Repair and replace window shades as needed	
Electrical	Incomplete wall-sockets	Internal	-	Poor	-	Replace or fix sockets.	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	
G Administration							
AC Units	Split-units	Internal	Manual Operation	Good	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units to 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. Consider Skylight	
General	Roof insulation	Internal	-	Average	-	Install and replace insulation and ceiling tiles as needed	
Extract	Toilet extract	Internal	-	Good	-	Install security stays on toilet windows.	
General	Room infiltration	Internal	-	Poor	-	Repair door frame and self closing mechanism	
General	Window shade	Internal	-	Poor	-	Repair and replace window shades as needed	
Electrical	Incomplete wall-sockets	Internal	-	Poor	-	Replace or fix sockets.	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	
H Learning Resource Centre							
AC Units	Split-units	Internal	Manual Operation	Good	Monthly filter cleaning, quarterly condenser unit cleaning	Set all units to 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. Consider Sun-Tube	
General	Roof insulation	Internal	-	Average	-	Install and replace insulation and ceiling tiles as needed	

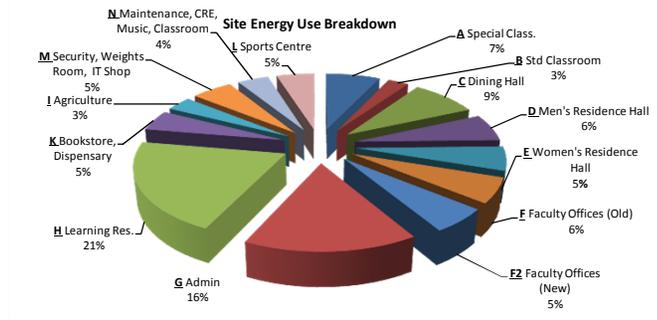
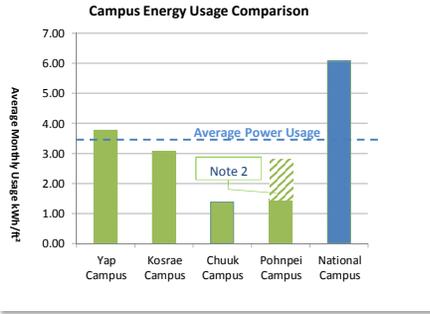
Plant Item	Description	Location	Operation	Condition	Current maintenance	Recommendations	Current Operational Status
General	Room infiltration	Internal	-	Average		Repair door frame and self closing mechanism	
I Agriculture							
AC Units	Split-units	Internal	Manual Operation	Poor	Monthly filter cleaning, 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. Consider Sun-Tube	
General	Roof insulation	Internal	-	Average	-	Install and replace insulation and ceiling tiles as needed	
General	Room infiltration	Internal	-	Average		Repair door frame and self closing mechanism	
General	Window shade	Internal		Poor		Repair and replace window shades as needed	
J A+ Centre							
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. Consider Sun-Tube	
General	Room infiltration	Internal	-	Good		Repair door frame and self closing mechanism	
K Student Services							
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. Consider Sun-tube	
General	Roof insulation	Internal	-	Average	-	Install and replace insulation and ceiling tiles as needed	
General	Room infiltration	Internal	-	Poor		Repair door frame and install self closing mechanisms on doors to outside and restrooms	
Electrical	Hot water cylinder	Internal	-	Good		Turn off cylinders when hot water not required for extended periods	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	
L Gymnasium							
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.	
AC Units	Split-units	External		Average		Clean dirty outdoor units to avoid clogging filters	
General	Roof insulation	Internal	-	Good	-	Install and replace insulation and ceiling tiles as needed	
General	Room infiltration	Internal	-	Poor		Repair door frame and install self closing mechanisms on doors to outside and restrooms	
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	Roofing sheet beginning to rust		-	Poor	-	Replace with new light color sheet	
Solar Hot Water Heating	A solar hot water heating system would considerably reduce electricity used to heat hot water.						
M IT Shop, Fitness Room and Storage							
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. Consider Sun-Tube	
General	Roof insulation	Internal	-	Poor	-	Install and replace insulation and ceiling tiles as needed	
General	Room infiltration	Internal	-	Poor		Repair door frame and install self closing mechanisms on doors to AC spaces	
General	Furniture and storage	Internal	-	Good	-	Promote better airflow by moving unnecessary items into storage areas and large objects away from AC air stream	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	

Plant Item	Description	Location	Operation	Condition	Current maintenance	Recommendations	Current Operational Status
N Maintenance Office and Shop							
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.	
AC Units	Split-units	External		Average		Clean dirty outdoor units to avoid clogging filters	
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.. Consider Sun-Tube	
General	Roof insulation	Internal	-	Poor	-	Install and replace insulation and ceiling tiles as needed	
General	Room infiltration	Internal	-	Poor		Repair door frame and install self closing mechanisms on doors to outside and restrooms	
Electrical	Appliance standby	Internal	manual operation	Average		Switch off after hours	
Electrical	Exposed wiring	Internal	-	Poor	-	Replace or fix wiring.	
General	Window shade	Internal	-	Poor		Install curtains or similar over windows	
Ceiling fan	Rust on fan blades	Internal	-	Average	-	Replace old/damaged fans with new ones to improve efficiency.	
Outbuildings							
Lighting	Compact fluorescent bulbs	All areas	Manual operation	Average		Consider using faculty during daylight hours	
Photovoltaic Solar Panels	Consider installing a photovoltaic array on the roof of the building. This will generate sustainable electricity on-site to reduce your energy consumption.					\$20,000	

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.



Campus Summary



Campus Summary:

Although the energy usage over recent years has been falling, the National Campus still uses more energy per unit of floor area than other sites.

Promoting energy efficiency across the site, and ensuring plant is kept running efficiently will be key to sustaining the downward trend in energy use.

As the campus has several high energy use areas such as server rooms and a dining hall, the higher energy use is not surprising, and it offers the potential for energy savings

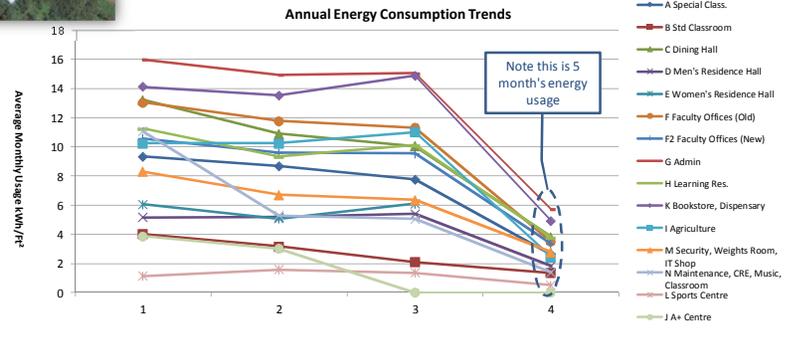
The dining hall and sports centre areas have a very high energy usage per unit area- these buildings may benefit from a solar hot water heater to reduce electricity consumed in generating hot water.

The National Campus has by far the best record keeping and energy metering across all campuses, and this should be used as an example to other sites. Provision of metering and monitoring of these meters in all campuses to a similar level as that present at National Campus is highly recommended.

As with many sites, the permanently occupied areas (e.g. offices) account for a large amount of energy use, and these would be good areas to target first with energy efficiency measures

Energy Efficiency Recommendations:

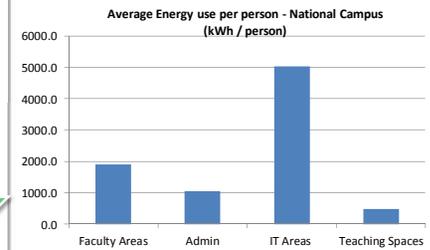
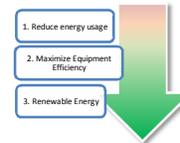
- Adjust the set point control of the AC units to 24 or 25°C
- Turn off cooling units when spaces are un-occupied
- Ensure units are free from obstructions, filters are clean, and pipework runs are straight to reduce loads on units
- Provide occupancy sensor lighting control where appropriate, with linked control of cooling units
- Close windows to air conditioned spaces when cooling systems are operating
- Seal holes and penetrations from conditioned areas to outside or non-air conditioned areas
- Keep doors leading to air conditioned spaces closed - employ automatic door closers where possible
- Turn off lights when leaving a room
- Replace ceiling insulation where missing, improve insulation thickness in new build areas.
- Provide insulation below the roof of any occupied areas without roof insulation



Reducing Your Energy Usage

There are many energy efficiency measures that can be undertaken with minimal capital cost. The following procedure will help to ensure that the most cost efficient measures are undertaken first.

- Reduce how much energy you use:
e.g. (a), (b) & (c) above.
Use of available energy saving resources to engage and educate staff and students.
- Maximize Equipment Efficiency
e.g. Replacing air conditioning units with more efficient models when appropriate, provide high efficiency lighting when replacing fittings
- Consider using renewable energy resources where appropriate, e.g. solar hot water, photovoltaic cells



Notes:
1: Classroom Occupancy Data based on Sandy Pond Associates' room capacities and occupancy rates
2: Refer to Pohnpei Campus summary for details of energy usage

Appendix E

Planting Palette



The below 'Planting Palette' information provided by:

Lee Ling, Dana
Math/Science
B.S., University of Illinois
M.S., University of Illinois

	Botanical name	Commonly known as
Feature trees	1. <i>Ponapea ledermanniana</i>	Kedei
	2. <i>Ravenala madagascarensis</i>	Traveller's palm
	3. <i>Saraca asoca</i>	Ashoka tree
	4. <i>Roystonea elata</i>	Cuban royal palm
	5. <i>Araucaria heterophyll</i>	Norfolk island pines
	6. <i>Metroxylon americanum</i>	Ivory nut palm
	7. <i>Adenita</i>	Adenita Palm
Secondary trees	1. <i>Pterocarpus indicus</i>	Narra tree
	2. <i>Cinnamomum carolinense</i>	Caroline Island Cinnamon tree
	3. <i>Terminalia catappa</i>	Tropical almond
	4. <i>Cocos nucifera</i>	Coconut
	5. <i>Plumeria</i>	Frangipani
	6. <i>Guava</i>	Guava
Hedge planting	1. <i>Gardenia jasminoides</i>	Gardenia
	2. <i>Gardenia taitensis</i>	Tahitian Gardenia
	3. <i>Eugenia uniflora</i>	Surinam Cherry
	4. <i>Ixora casei</i>	Ketieu
Garden planting	1. <i>Jasminum sambac</i>	Jasmine
	2. <i>Clerodendrum inerme</i>	Clerodendrum

A.1 Feature Trees

1. *Ponapea ledermanniana*

http://farm4.static.flickr.com/3236/2879186400_7055bd22ed.jpg



2. *Ravenala madagascarensis*

http://farm6.staticflickr.com/5007/5331445493_d83d834e22_b.jpg



3. *Saraca asoca*

<http://www.flowersofindia.net/extrapics/Sita%20Ashok-1.jpg>



4. *Roystonea elata*

<http://www.graines.be/photos/Roystonea-regia.jpg>



5. *Araucaria heterophyll*

http://upload.wikimedia.org/wikipedia/commons/f/f2/Araucaria_heterophylla_02.jpg



6. *Metroxylon americanum*

http://www.nanaplants.com/images/column_1270294889/Untitled-1.jpg



A.2 Secondary Trees

1. *Pterocarpus indicus*

http://farm3.static.flickr.com/2749/4459881122_46452a7d05.jpg



2. *Cinnamomum carolinense*

http://www.comfsm.fm/~dleeling/ethnobotany/63images/092175cinnamomum_verum.jpg



3. Terminalia catappa

http://upload.wikimedia.org/wikipedia/commons/b/b4/Starr_080609-7899_Terminalia_catappa.jpg



4. Cocos nucifera

http://upload.wikimedia.org/wikipedia/commons/thumb/8/89/Cocos_nucifera_-_Fairchild_Tropical_Botanic_Garden.jpg/768px-Cocos_nucifera_-_Fairchild_Tropical_Botanic_Garden.jpg



5. Plumeria

<http://images.fineartamerica.com/images-medium-large/plumeria-tree-pierre-leclerc.jpg>



6. Guava

<http://jerlalou.blogspot.co.nz/2012/12/guava-tree.html>



A.3 Hedge Planting

1. Gardenia jasminoides

http://www.woodlanders.net/_ccLib/image/plants/DETA-367.jpg



2. *Gardenia taitensis*

http://upload.wikimedia.org/wikipedia/commons/b/b6/Starr_070221-4638_Gardenia_sp..jpg



3. *Eugenia uniflora*

http://selectree.calpoly.edu/Photos/Eugenia_uniflora/images/tree.jpg



4. *Ixora casei*

<https://www.plantant.com/supplierimages/image.php/ixora-casei-super-king-ixora-duffii-super-king-1000355150-1383329968.jpg?width=1000&height=1000&image=/public/supplierimages/plants/1000355150-1383329968.jpg>



A.4 Garden Planting

1. *Jasminum sambac*

<http://petalsandwings.files.wordpress.com/2011/07/jasmine-4.jpg>



2. *Clerodendrum inerme*

http://endigital-kinmen.kmnp.gov.tw/ezfiles/1/1001/plugin/o_kmnp/pictures/28/3628/big2_2_1.jpg

