

INFRASTRUCTURE ASSESSMENT AUDIT FOR SUVA – NAUSORI URBAN SCHOOLS

MAHATMA GANDHI MEMORIAL HIGH SCHOOL (REG 2337)



SUMMARY REPORT



TABLE OF CONTENTS

1)	INSPECTION SUMMARY	3
2)	ASSESSMENT OF OVERCROWDING	4
3)	EXISTING INFRASTRUCTURE CONDITIONS	5
4)	WATER SANITATION HYGIENE (WASH) FACILITIES	7
5)	DISASTER RESILIENCE ASSESSMENT	8
6)	ACCESSIBILITY ASSESSMENT	8
7)	RECOMMENDATIONS	10
8)	COMPLIANCE.....	10
9)	APPENDIX.....	11

1) INSPECTION SUMMARY

School Inspection Summary	
School name:	MAHATMA GANDHI MEMORIAL HIGH SCHOOL
Overall condition state:	FAIR
Key recommendations: <ul style="list-style-type: none"> - Overcrowding – 12 new classrooms required based on FNBC standards - WASH – 8 new toilet cubicles required for girls and 3 required for boys / maintenance of ablution blocks required - Accessibility –All buildings require accessibility ramps, accessible doorways - Disaster resilience – Windows to include cyclone shutters and roof cladding fastened with Cyclone roofing screws. 	
Comments: <p>Major defects were noted as follows:</p> <ul style="list-style-type: none"> • Missing ramps (All buildings) • Inconsistent stairway width • Upkeep of wash facilities needs priority. 	
Aerial view of school	General view of school
	  

School type:	Primary		Secondary	✓	Year levels	9,10,11,12,13
School address:	FLETCHER ROAD NABUA					
School enrolment and staff figures	No. of Students (Male)	No. of Students (Female)	No. of Students with Disability	No. of Teachers (Male)	No. of Teachers (Female)	
	520	552	0	34	19	
School building arrangement	TOTAL NUMBER OF BUILDINGS: 6 BLOCK 1 – 3 STOREYS / BLOCK 2 – 2 STORYS / BLOCK 3 – 3 STOREYS / BLOCK 4 – 2 STOREYS / BLOCK 5 – 1 STORY					
Local government area:	FLETCHER ROAD NABUA					
Date of inspection:	11 TH JUNE 2024 & 5 TH AUGUST 2024					
Inspection team:	RAJIV KUMAR FREDDY TURAQA ALEKSIO MANOA LAITE TELAWA					
Data collection methods	Visual inspection		✓	Onsite measurement		✓
	Interviews with school staff		✓	Drone / aerial imagery		✓
	Survey form		✓	Desktop research		✓
	Other:					
Assumptions:	SCHOOL HAS A BOUNDARY PLAN, FEMIS IS UPDATED					
Limitations:	UNAVAILABILITY OF ALL SCHOOL DOCUMENTS SUCH AS BOUNDARY AREA.					

2) ASSESSMENT OF OVERCROWDING

An assessment for overcrowding was undertaken based on FNBC standards and 2024 enrolment data. The table below summarises the data collected through visual inspection and interrogation of enrolment data and compares this against the FNBC standard student to classroom size ratio of 2 m² per student.

The results of the assessment are based on the recommended sizing (1.5m²), according to 2024 data, an additional 1 classroom is required across each year levels for MGM High School.

Year	Stream	Number of students	Current number of classrooms	Number of extra classrooms required based on FNBC on 2024 data
9	901	47	5	1
	902	48		
	903	47		
	904	47		
	905	37		
10	1001	47	5	1
	1002	46		
	1003	46		
	1004	47		
	1005	45		
11	1101	30	5	1
	1102	33		
	1103	42		
	1104	43		
	1105	43		
12	1201	36	6	1

	1202	33		
	1203	34		
	1204	38		
	1205	40		
	1206	36		
13	1301	27	6	1
	1302	25		
	1303	31		
	1304	36		
	1305	28		
	1306	32		

3) EXISTING INFRASTRUCTURE CONDITIONS

Given the outlined procedure, the following observations were made:

Block Code	Length (m)	Width (m)	Height (m)	No. of Levels	Type	Room List
BLOCK 1	97	20.5	10.5	3	Concrete with cladding on timber framed roof structure	<p>Ground floor level contains; Physics Lab – 10.7m x 6.3m, Chemistry Lab – 16.2m x 7.9m, Biology Lab – 16.2m x 7.9m.</p> <p>Block 1 – 1st Floor contains; Staff Room – 16.3m x 18.3m, Tea/Conference Room – 15m x 6m, YR1305 – 7.9m x 7.6m, YR1304 – 7.4m x 6m, YR1301 – 7.5m x 6m, Main Office – 13m x 6m, Jnr Boys Toilet (6 WC, 2 Shower, 1 Urinal Channel and 6 hand Basin) – 7.5m x 3.7m.</p> <p>Block 1 – 2nd Floor – Canteen – 6m x 6.5m, YR1303 – 9m x 6.5m, YR1306 – 9m x 6.5m, Yr1302 – 6.1m x 6m, Yr1201 – 7.6m x 6m, YR1202 – 7.6m x 6m, YR1203 – 7.6m x 6m, YR1204 – 7.6m x 6m, YR1205 – 7.6m x 6m, YR1206 – 7.6m x 6m.</p> <p>Block 1 – 3rd Floor Contains – Computer Lab – 12.1m x 11.8m, TD Room 1 – 9.11m x 11.8m, TD Room 2 – 9.11m x 14.7m.</p>
BLOCK 2	50.53	810	7.50	2	Concrete with cladding on timber framed roof structure	<p>Ground floor level contains; Hall – 17.4m x 9.8m, Spare Room – 7.8m x 6.7m, YR1005 – 11.7m x 6.7m, YR1004 – 11.7m x 6.7m, GYM – 9m x 9.8m,</p> <p>Block 2 – 1st level contains; GS Office – 8.9m x 10m, YR1003 – 7.7m x 6.8m, YR1002 – 7.6m x 7.6m x 6.8m, YR1001 – 7.6m x 6.8m, YR905 – 7.6m x 6.8m, YR904, 8m x 6.8m</p>
BLOCK 3	32	10.50	7.50	2	Concrete with cladding on timber framed roof structure	<p>Block 3 – Ground floor level contains; PEMAC – 14m x 6.6m, Junior Girls Toilet (4 WC, 1 Shower, 2 Hand Basin) – 8m x 6.6m</p> <p>Block 3 – 1st level contains; Office – 3.5m x 6.6m, YR901 – 9.1m x 6.6m, YR902 – 9.1m x 6.6m, YR903 – 9.2m x 6.6m.</p>

BLOCK 4	32.8	11.35	7.50	2	Concrete with cladding on timber framed roof structure	Block 4 – floor level contains; Woodwork – 14.5m x 7.7m, Agri Science – 15.2m x 7.7m, Toolroom – 2.8m x 4m, Vernacular – 7.5m x 4m, Handyman – 3.5m x 4m Block 4 – 1 st level contains; Home Economics – 15.3m x 7.5m, Food Lab – 15.2m x 7.5m.
BLOCK 5	59	11.40	2.6	1	Concrete with cladding on timber framed roof structure	Block 5 – floor level contains; Caretaker Room – 4m x 7.9m, YR1105 – 7.7m x 7.6m, Yr1104 – 7.6m x 7.6m, YR1103 – 7.7m x 7.6m, YR1102 – 7.7m x 7.6m, YR1101 – 7.6m x 7.6m. Senior Girls Toilet (16 WC, 10 HB, 2 Shower) – 6.4m x 9.4m, Senior Boys Toilet (9 WC, 5 hand basin, 1 urinal, 2 Shower) – 7m x 9.4m.

NOTE: Toilets mentioned refers to a set of cubicles.

Summary Table for Classrooms

This table provides a quick overview of the assessment findings, helping to identify areas that need immediate attention and those that are in good condition. The following criteria was used:

- Good - No additional works / intervention required
- Fair - Remedial works required
- Poor - Demolition and replace with new

Assessment Area	Criteria	Conditions
Structural Integrity	Walls, ceiling, floor, foundation and roofs	Good
General upkeep	Exterior, interior, furniture and fixtures	Fair
Safety compliance	Fire safety, electrical safety,	Fair
Disability	Accessibility	Poor
Ventilation and lighting	Ventilations, Natural Lighting, Artificial Lighting.	Fair

Observations on Structural Elements

- **Walls and Ceiling** – There were no signs of wear and tear on walls. The walls and ceiling were well painted.
- **Floors and Foundation** – the floor and foundation for the entire school is found to be stable. There were no visible or sign of cracks or uneven surface. However, the floor is mostly covered with tiles.
- **Roofs** – the school reported that there are no leaks. It was found that roof materials are in good condition. However, some roof cladding and fastenings are partially rusted and requires upgrading works.
- **Windows** – some missing window louvre blades were recorded at various buildings
- **Earthquake** – Not applicable, as buildings less than 4 storey
- **Cyclone** – minor roof upgrading works required to increase cyclone resilient capacity of the structures.

Existing Conditions of Building and Maintenance

- **Exterior** – the building is in fair condition as the wall, beam, column, window seal, doors, eaves, fascia boards and gutters are intact and coated with paint. The school executes periodical maintenance.
- **Interior** – the building is in fair condition as the walls, beams, columns windows, doors and ceiling are intact and coated with paint. The school executes periodical maintenance. The classrooms were found to be clean with proper waste disposal.
- **Furniture and Fixtures** – the classrooms and offices have adequate furniture and fixtures that do not impede on the function of the buildings.

Safety and compliance with standards

- **Fire Safety** – the school does not possess adequate fire safety mechanisms. Present fire Extinguishers need maintenance and commissioning. No fire hydrants and alarm systems were found. The school has Emergency exit plan and designated assembly area provisioned.
- **Electrical Safety** – The school is connected to EFL Grid. The school has surface wiring with no fault outlets. All electrical systems are measured to be safe.
- **Accessibility** – the school does not meet disability accessibility standards. The school does not have facilities such as ramps, handrails and accessible restrooms.

Lighting and Ventilation

- **Ventilation** – HVAC system (Heating, Ventilation, and Air Conditioning) is centrally located in the school, in particular, offices and Computer Labs.
- **Natural Lighting** – there are adequate number of windows installed in classrooms, that are regularly cleaned to allow natural light to enter into classrooms unobstructed.
- **Artificial Lighting** – it was found that all light fixtures are working and provides adequate illumination.

4) WATER SANITATION HYGIENE (WASH) FACILITIES

Condition of Toilets and Washrooms

Mahatma Gandhi Memorial High School has 3 blocks with toilet facilities. The facilities had no major defects, except for the up keep of the facilities

TOILET CUBICLE(S)	No. of Cubicles		Toilet Ratio (1 cubicle: students)		Compliance of Student to Toilet Cubicle Ratio (FNBC).	
	Female	Male	Female	Male	Female Requirement (1:20) Extra Toilets?	Male Requirement (1:30) Extra Toilets?
Building Index						
Block 1, 3 & 5	20	15	28	35	8	3
HAND BASINS IN THE TOILET	No. of Hand Basins		Handbasin Ratio 1:		Compliance of Student to Hand Basin Ratio (FNBC).	
	Female	Male	Female	Male	Female Requirement (1:60) Extra Handbasins?	Male Requirement (1:60) Extra Handbasins?
Building Index						
Block 1, 3 & 5	17	11	10	9	0	0
GENERAL OUTDOOR TAPS	No. of General Outdoor Taps		Outdoor Taps Ratio 1:		Compliance of Student to Outdoor Taps Ratio Requirement (1:60) (FNBC) Does it require additional hand basins?	
Building Index						
Block 1, 2, 3, 4 & 5	28		39		0	

5) DISASTER RESILIENCE ASSESSMENT

This infrastructure condition assessment aims to evaluate the architectural, structural, and non-structural features of the school to ensure it is resilient to natural disasters and provides a safe learning environment for students. The assessment also identifies areas for improvement and highlights the measures already in place to enhance overall resilience. FNBC 1990 and basic loading, wind and seismic AS/NZS codes typical details were utilized during and after inspection.

Architectural

- **Cyclonic Roof:** The school has a cyclonic roof designed to withstand strong winds and seismic activity. However, replacement with new roof cladding and roofing screws is needed.
- **Central Location:** The school is centrally located, allowing easy access to main streets and relief services.

Structural

- **Material Quality:** The school buildings are constructed using reinforced concrete and follow acceptable engineering design principles.
- **Structural Integrity:** Buildings have demonstrated the capability to withstand and recover from natural disasters like earthquakes, category 3 cyclones, and floods.

Non-Structural

- **Disaster Preparedness:** Implementation of disaster evacuation plans, emergency exit routes, and safety protocols.
- **Fire Safety:** Equipped with a fire alarm system and strategically placed fire extinguishers to mitigate fire-related risks.

6) ACCESSIBILITY ASSESSMENT

1. **Compliance with Accessibility Standards:**

- Educational facilities did not meet accessibility standards, such as the Fiji Disable People Federation Access Audit Tool 1.0. This toolkit covers aspects like ramps, door widths, signage, and accessible routes, also the noncompliance extends beyond physical structures to digital accessibility.

2. **Facilities for Students with Disabilities:**

- Classrooms did not have adjustable seating arrangements, clear sightlines, and adequate space for mobility aids also including accessible desks and adjustable podiums.
- Laboratories are not able to accommodate students with various disabilities with the absence of adjustable lab benches, accessible sinks, and clear pathways.
- Libraries require accessible shelving, reading stations, and assistive technology (such as screen readers) to enhance library usability.
- Restrooms (WASH facilities) were not wheelchair-accessible or have grab bars and sinks at an appropriate height.
- Common Areas: the cafeterias and outdoor spaces were not designed inclusively. Benches, seating areas, and a few pathways are not able to accommodate everyone.

3. **Access to Classrooms, WASH Facilities, and Common Areas:**

- Classrooms do not have wide doorways and ramps to ensure access to classrooms. Additionally, acoustics are not considered for students with hearing impairments.
- WASH Facilities do not have accessible restrooms with proper signage and a clear pathway to the wash facilities.
- Common Areas like corridors, courtyards, and gathering spaces are not barrier-free and are without proper lighting and contrasting floor materials to aid navigation.

SUMMARY OF FINDINGS

The following summarizes the individual characteristics assessed during the Suva-Nausori school audit for Jai Narayan College:

Categories of Assessment	Existing Condition / State	Required as per Standards	Gaps Observed
Existing Infrastructure Condition	<ul style="list-style-type: none"> - Structural Integrity – Columns, slabs, beams, rafters, purlins of adequate size. - General upkeep – Minor irregular maintenance. - Safety compliance- handrails where necessary. - Disability- no consideration when constructed. - Ventilation and lighting – damaged and missing lights at some sections of buildings. 	<ul style="list-style-type: none"> - Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990. - General upkeep –routine checkup as per MOE policies with major defects requiring immediate intervention. - Safety compliance- handrails, extra doors and signage where necessary. - Disability- to comply with FDPF Disability audit tool - Ventilation and lighting – adequate windows and doors required as per FNBC 1990. 	<ul style="list-style-type: none"> - Structural Integrity – Columns, slabs, beams, rafters, purlins sizes to follow FNBC 1990. - General upkeep –requires immediate intervention to major defects. - Safety compliance- safety handrails were only present in suspended floors while ground floor rails beside drain had missing rails (not fully safety compliant). FDPF requires signage which was absent from the school. - Disability- not fully compliant with FDPF Disability audit tool - Ventilation and lighting – limitations in the count of windows and lightings compared to required FNBC.
Assessment of Overcrowding	<ul style="list-style-type: none"> - The classrooms are accommodating an average of 1072 roll/27 classrooms of 40 students. 	<ul style="list-style-type: none"> - FNBC 1990 requires classroom occupancy to have 2m² per person. Based on that, the required roll per classroom was calculated. 	<ul style="list-style-type: none"> - 17/27 classrooms were accommodating more roll than required. - Given the recommended sizing (1.5m²), about 5 extra classrooms are required to address overcrowding in school.
Water Sanitation Hygiene (WASH) facilities	<p>Toilets (students: Cubicle)</p> <ul style="list-style-type: none"> - Boys – 35:1 (15 cubicles) - Girls – 28:1 (20 cubicles) <p>Taps (students: tap)</p> <ul style="list-style-type: none"> - Students – 39:1 (28 taps) <ul style="list-style-type: none"> - Menstrual Hygiene was present in every female washroom block 	<p>Toilets Ratio (students: Cubicle)</p> <ul style="list-style-type: none"> - Boys – 30:1 (18 cubicles) - Girls – 20:1 (28 cubicles) <p>Taps Ratio (students: tap)</p> <ul style="list-style-type: none"> - Students – 60:1 (18 taps) <p>Please note: Above number of cubicles and taps are respective of 2024 enrolment numbers. Due to variation of ratio with student population in FNBC, the initial ratio is referred ONLY for reporting.</p> <ul style="list-style-type: none"> - Menstrual Hygiene to be present in every female washroom block 	<ul style="list-style-type: none"> - The boys toilet ratio exceeded the FNBC requirement indicating not enough toilet cubicles are in the school. Given the roll of boys, a total of 3 extra cubicles is required. - The girls toilet ratio exceeded the FNBC requirement indicating not enough toilet cubicles are in the school. Given the roll of girls, a total of 8 extra cubicles is required - The tap ratio was below the FNBC requirement indicating extra taps are in the school. - school require maintenance of rusting pipes and algae buildup in WASH facilities.
Disaster Resilience Assessment	<ul style="list-style-type: none"> - columns, beams, slabs had hairline cracks. - All roof had truss roof frames. - The windows only have burglar shutters at some sections. - Roof cladding are showing rust. - roofing nails show rusting. 	<p>Fiji Building Code 1990. Requirement is that roof cladding be free of rust and fastened securely with type 17 cyclonic screws with neoprene washers. Additionally, cyclone brackets to be fixed on every window frame.</p>	<ul style="list-style-type: none"> - Rusting of cladding contradicts to the cyclone certification requirement requiring replacement. - Absence of cyclone brackets are not acceptable as per the cyclone certification.
Accessibility Assessment	<ul style="list-style-type: none"> -Handrails partially damaged in corridors. - Classrooms and labs have typical door size of 0.8 – 0.9m width. 	<p>The following are requirements from Fiji Disabled People's Federation Access Audit Tool</p> <ul style="list-style-type: none"> - Ramps – required wherever elevation with minimum 1:8 maximum 1:20 	<p>The following facilities are missing.</p> <ul style="list-style-type: none"> - Ramps and elevators for vertical access - Wide doorways and clear pathways - Proper signage - Wheelchair-accessible restrooms

	- Stairway – average 0.9m width.	- Walkway clearance - minimum 1.8m. - Handrails to be 0.76m to 0.9m. - Doors and Door size – minimum 0.9m. - Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)	- Grab bars - Proper signage - Inclusive seating areas and pathways - Proper lighting - Contrasting floor materials
--	----------------------------------	--	---

7) RECOMMENDATIONS

- In order to comply with the FNBC, the school will require the following:
 - Classrooms: An additional 12 new classrooms for students in years 9-13. This expansion aims to accommodate the growing number of students and provide them with an enhanced learning environment.
- WASH Facilities: An additional 8 cubicles for girls and 3 cubicles for boys are required, equipped with up-to-date WASH facilities (handbasins), catering particularly to the needs of female students. These new facilities are essential to ensure hygiene and comfort. Additionally, some consideration could also be given to the boys' toilet cubicles as the ratio is in par with the FNBC ratio. The exact number could be discussed upon further analysis.

Weekly routine maintenance work and daily cleanup directive from MOE is also a critical component of the plan which includes:

- Roof repairs due to rusting of cladding, roofing nails, gutter and gutter straps.
- Plumbing fixes due to algae buildup.
- New paint application on rails and walls

These maintenance activities are designed to address existing wear and tear and to ensure that the school buildings remain in good condition. It is recommended that maintenance be carried out at regular intervals, ideally every 12 months, to prevent deterioration and to maintain a safe and functional environment.

- Accessibility: Prioritize building accessibility features, such as ramps and handrails, to ensure compliance with standards. These features are vital for providing all students, including those with disabilities, with equal access to the school's facilities.

8) COMPLIANCE

Upon inspecting Jai Narayan College, the following conclusions were drawn:

- **MEHA Compliance:** Compliant
- **WASH Facilities:** The school has ample taps. Additional 8 girls toilet cubicles and 3 boys toilet cubicles required to comply with FNBC 1990.
- **Land Availability:** There is sufficient land for additional.
- **NFA Compliance:** Compliant with NFA basic guidelines but does not have NFA certification.
- **WAF Compliance:** Adequate water supply, but no backup system for water cuts.
- **FNBC Compliance:** The school is not fully compliant with the occupancy requirements as well as the category 5 cyclone standards based on the windows and roofing requirements.
- **NDMO Compliance:** Targeting NFA and NBC compliance for safety.
- **EFL Compliance:** Assumed to be compliant with EFL standards.
- **DISABILITY Accessibility:** non-compliant

9) APPENDIX

Appendix A - Site Inspection Report

Appendix B – Excel Scoring Sheet

Appendix C – Land Available for Expansion

Appendix A - Site Inspection Report

INFRASTRUCTURE ASSESSMENT AUDIT FOR SUVA – NAUSORI URBAN SCHOOLS

MAHATMA GANDHI MEMORIAL HIGH SCHOOL (REG 2337)

SITE INSPECTION REPORT



TABLE OF CONTENTS

List of Tables	3
List of Figures	4
List of Abbreviations	4
1) SCHOOL BACKGROUND	5
2) SCHOOL SITE PLAN (DRONE IMAGERY OF SCHOOL)	8
3) VISUAL INSPECTION RESULTS	9
a) EXISTING BUILDING INFORMATION	9
b) EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS ...	15
c) TOILET BLOCKS (BOYS and GIRLS)	20
4) PHOTOGRAPHIC REPORT	23

List of Tables

Table 1 :	SCHOOL DETAILS
Table 2 :	SCHOOL ENROLMENT FIGURES
Table 3 :	2024 CLASSROOM ENROLLMENT DETAILS
Table 4:	EXISTING BUILDING INFORMATION FOR BLOCK 1
Table 5:	EXISTING BUILDING INFORMATION FOR BLOCK 2
Table 6:	EXISTING BUILDING INFORMATION FOR BLOCK 3
Table 7:	EXISTING BUILDING INFORMATION FOR BLOCK 4
Table 8:	EXISTING BUILDING INFORMATION FOR BLOCK 5
Table 9:	EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS FOR BLOCK 1
Table 10:	EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS FOR BLOCK 2
Table 11:	EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS FOR BLOCK 3
Table 12:	EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS FOR BLOCK 4
Table 13:	EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS FOR BLOCK 5
Table 14:	TOILET BLOCKS (BOYS and GIRLS) FOR BLOCK 1
Table 15:	TOILET BLOCKS (BOYS and GIRLS) FOR BLOCK 3
Table 16:	TOILET BLOCKS (BOYS and GIRLS) FOR BLOCK 5

List of Figures

- Figure 1: PHOTOGRAPHIC VIEW OF BLOCK 1
- Figure 2: PHOTOGRAPHIC VIEW OF TOILET AT BLOCK 1
- Figure 3: PHOTOGRAPHIC VIEW OF BLOCK 2
- Figure 4: PHOTOGRAPHIC VIEW OF BLOCK 3
- Figure 5: PHOTOGRAPHIC VIEW OF TOILET ST BLOCK 3
- Figure 6: PHOTOGRAPHIC VIEW OF BLOCK 4
- Figure 7: PHOTOGRAPHIC VIEW OF BLOCK 5
- Figure 8: PHOTOGRAPHIC VIEW OF TOILET AT BLOCK 5

List of Abbreviations

NRWM	NRW Macallan (Fiji) Pte Ltd
MOE	Ministry of Education
TT	Tetra Tech International Development Pty Ltd
DFAT	Department of Foreign Affairs and Trade (Australia)
FEG	Free Education Grant
OHS	Occupational Health and Safety
NFA	National Fire Authority
WAF	Water Authority of Fiji
FNBC	Fiji's National Building Code 1990
NDMO	National Disaster Management Office
EFL	Energy Fiji Limited

1) SCHOOL BACKGROUND

This inspection report documents our findings or the data gathered during our inspection to Mahatma Gandhi Memorial Primary School. Mahatma Gandhi High School was founded by the Gujarat Education Society in 1960. The society's first school was MGM Primary. MGM High School was opened in mid-1960 with Dhansukh Patel as the head teacher. A year later, Divesh Patel became the principal.

The Gujarat Education Society constructed six classrooms and a basement for the school students in 1996. Another two-story building was built for senior students along with classrooms, offices and washroom facilities. In 2003, the new technological block was built. After a few years, the management built a new block consisting of a Home Economics Room, Agriculture Room, and Basic Technology Workshop. In 2011 a new administrative room and a PEMAC department room were added. In November 2020, a new complex costing over 5 million dollars. The complex included a new pavilion, new labs with modern equipment as well as a new library and extra classrooms for technical drawing and other classes.

The school is run through FEG funding, which is given to school under different allocations from ministry. But than again the funding is not sufficient, as the school is a very high-profile school, and requires huge amount of money for the upkeep. Gujrat Society runs the school and funds all major work.

Table 1: SCHOOL DETAILS

NAME OF SCHOOL	MAHATMA GANDHI MEMORIAL HIGH SCHOOL
SCHOOL REGISTRATION NUMBER	2337
SCHOOL LOCATION	FLETCHER ROAD NABUA
SCHOOL TYPE	SECONDARY SCHOOL
FEEDER SCHOOL	NOT APPLICABLE
DATE OF INSPECTION	11 TH JUNE 2024 & 5 TH AUGUST 2024
MILESTONE	21/ 86 SCHOOLS
INSPECTED BY (TEAM 4)	RAJIV KUMAR (RK)
	FREDDY TURAQA (FT)
	ALEKSIO MANOA (AM)
	LAITE TELAWA (LT)

Table 2: SCHOOL ENROLMENT FIGURES

Year of Enrolment	Number of Students			Students with Disability	Number of Teachers		Total	Comments
	Male	Female	Total		Male	Female		
2024	520	552	1072	0	34	19	53	<ul style="list-style-type: none"> 27 classrooms Student to stream is 1072 roll / 27 classrooms = 40 :1 for 2024 school calendar Total taps count = 28 - WASH ratio (Taps) = 39:1 < 60:1 WASH ratio (Toilets) - total boys toilet cubicle count = 15 - Male = 35:1 = 30:1 - total girls toilet cubicle count = 20 - Female = 28:1 > 20:1 EVACUATION CENTRE = NO
2023	530	540	1070	0	34	19	53	
2022	478	503	981	0	34	17	51	
2021	434	508	942	1	34	14	48	
2020	387	460	847	1	28	13	41	
2019	370	449	819	1	28	12	40	

Table 3: 2024 CLASSROOM ENROLLMENT DETAILS

GRADE	CLASS NUMBER	TOTAL STUDENT ROLL	NUMBER OF TEACHERS	DIMENSIONS (m)		ACCESS WAY COUNT		OVERCROWDING
				LENGTH	WIDTH	NO. OF DOORS	NO. OF WINDOWS	
Year 9	901	47	7	9.1	6.6	1	19	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	902	48	7	9.3	6.6	1	16	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	903	47	7	9.2	6.6	1	17	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	904	47	7	8	6.8	1	18	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	905	47	7	7.6	6.8	1	18	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Year 10	1001	47	7	7.6	6.8	1	18	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1002	46	7	7.6	6.8	1	18	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1003	46	7	7.7	6.8	1	18	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1004	47	7	11.7	6.7	1	29	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1005	45	7	11.7	6.7	1	29	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Year 11	1101	30	5	7.6	7.6	1	17	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1102	33	5	7.7	7.6	1	17	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1103	42	5	7.7	7.6	1	17	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1104	43	5	7.6	7.6	1	17	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1105	43	5	7.7	7.6	1	17	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Year 12	1201	36	5	7.6	6	1	14	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1202	33	5	7.6	6	1	14	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1203	34	5	7.6	6	1	14	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1204	38	5	7.6	6	1	14	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1205	40	5	7.6	6	1	14	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	1206	36	5	8	7.7	1	24	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Year 13	1301	27	5	7.5	6	1	14	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1302	25	5	6.1	6	2	12	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1303	31	5	9	6.5	2	24	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1304	36	5	7.4	6	1	14	<input checked="" type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1305	28	5	7.9	7.6	1	28	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	1306	32	5	9	6.5	2	24	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

2) SCHOOL SITE PLAN (DRONE IMAGERY OF SCHOOL)

AERIAL VIEW



LEGEND

B#	BUILDINGS	DR#	PONDS/CREEKS/DRAINAGE
PG#	PLAYGROUND	H#	HOSTELS
WC#	TOILETS	ST#	STAFF QUARTERS
T#	TAP / WASH AREA	F#	DINING/FOOD AREA
WS#	WATER STORAGE FACILITY	EFL#	EFL POSTS/ JUNCTION BOX
SEP#	SEPTIC TANK	CP	CAR PARK
LA#	LAND AVAILABILITY	WW#	WALKWAY

3) VISUAL INSPECTION RESULTS

a) EXISTING BUILDING INFORMATION

Table 4: EXISTING BUILDING INFORMATION FOR BLOCK 1

Building Index		BLOCK 1				Year built: - 1960 & 2015 (Age: 64 & 9)	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE:						No. of Levels: Average of 3 at any point
	➤ Ground floor: 3 Science Labs						
	➤ 1 ^s Floor – Main Office, Staffroom, Tea Room, 3 Classroom, Toilet						
	➤ 2 nd Floor – 9 Classroom, Library, Canteen						
	➤ 3 rd Floor – 2 TD Room, Computer Lab						
Dimensions		Length (m):97		Width (m): 20.5		Height (m): 10.50	
Existing State of Building							
REF. No.	Building Component	Good ₁	Fair ²	Poor ³	Structure Type ⁴	Comments	
1	Roof Lining	✓			Matel Cladding	Roof needs a paint job	
2	Roof Structure	✓			Timber Frame	Connection Concealed	
3	Walls	✓			Concrete	No Sign of Cracks. Paint Finish	
4	Columns	✓			Concrete	No Sign of Cracks. Paint Finish	
5	Beams	✓			Concrete	No Sign of Cracks. Paint Finish	
6	Floor	✓			Concrete	No Sign of Cracks. Paint Finish	
7	Handrails	✓			Metal pipes	Safe height, need painting	
8	Walkway(s)	✓			Concrete	2.6m walkway and 2 stairs	
9	Services – water supply	✓				Connected to WAF Grid with Back up Water Tanks	
10	Available taps for general use	✓				6 of taps	Student – tap ratio = 40: 1
11	Services – electricity	✓				Connected to EFL grid	
12	Services – communication	✓				Internet limited to Computer Labs; Adequate PA system installed. Safety signs displayed	
13	Drainage	✓				All Drainage directed to SCC Drains	

Block 1 is constructed out of concrete beams and column with slab on ground and suspended floor slab for 1st, 2nd and 3rd floor. Block walls for external load bearing. Partition walls are split in to 2 types, it is either concrete or timber framed. Doors and windows present on length wise of the structure. Gable roof with metal cladding, old building with timber framed and new building with steel framed roof members. Staircase present at strategic locations with hand railing in entire building. Ventilation is satisfactory with adequate lighting. Classrooms are well maintained.

Block 01 is not a disable friendly, all office, labs, classrooms, entry and exit points has floor split levels.

There is a presence of fire extinguishers and fire hose reels, but require immediate maintenance and commissioning.

Block 1 – Ground floor level contains; Physics Lab – 10.7m x 6.3m, Chemistry Lab – 16.2m x 7.9m, Biology Lab – 16.2m x 7.9m.

Block 1 – 1st Floor contains; Staff Room – 16.3m x 18.3m, Tea/Conference Room – 15m x 6m, YR1305 – 7.9m x 7.6m, YR1304 – 7.4m x 6m, YR1301 – 7.5m x 6m, Main Office – 13m x 6m, Jnr Boys Toilet (6 WC, 2 Shower, 1 Urinal Channel and 6 hand Basin) – 7.5m x 3.7m.

¹ Good - No additional works / intervention required

² Fair - Remedial works required – min CAT 3 standard

³ Poor - Demolition and replace with new - min CAT 4 standard

⁴ Type of structure - Timber/concrete/steel

Block 1 – 2nd Floor – Canteen – 6m x 6.5m, YR1303 – 9m x 6.5m, YR1306 – 9m x 6.5m, Yr1302 – 6.1m x 6m, Yr1201 – 7.6m x 6m, YR1202 – 7.6m x 6m, YR1203 – 7.6m x 6m, YR1204 – 7.6m x 6m, YR1205 – 7.6m x 6m, YR1206 – 7.6m x 6m.

Block 1 – 3rd Floor Contains – Computer Lab – 12.1m x 11.8m, TD Room 1 – 9.11m x 11.8m, TD Room 2 – 9.11m x 14.7m.

Block 1 is directly joined with block 2 and Block 5

Classrooms has fan and adequate exterior and interior electricity lighting. All switches are working

Table 5: EXISTING BUILDING INFORMATION FOR BLOCK 2

Building Index		BLOCK 2				Year built: - 1960 (Age: 64)	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: Hall, Spare room, 2 Classroom, Gym ➤ 1 st floor: Gujrati Society Office, 5 Classrooms						No. of Levels: 2
Dimensions		Length(m):50.53		Width (m): 10		Height (m): 7.50	
Existing State of Building							
REF. No.	Building Component	Good ₅	Fair ⁶	Poor ⁷	Structure Type ⁸	Comments	
1	Roof Lining	✓			Matel Cladding	Roof needs a paint job	
2	Roof Structure	✓			Timber Frame	Connection Concealed	
3	Walls	✓			Concrete	No Sign of Cracks. Paint Finish	
4	Columns	✓			Concrete	No Sign of Cracks. Paint Finish	
5	Beams	✓			Concrete	No Sign of Cracks. Paint Finish	
6	Floor	✓			Concrete	No Sign of Cracks. Paint Finish	
7	Handrails	✓			Metal pipes	Safe height, need painting	
8	Walkway(s)	✓			Concrete	2.4m walkway and 3 stairs	
9	Services – water supply	✓				Connected to WAF Grid with Back up Water Tanks	
10	Available taps for general use	✓				12 of taps	Student – tap ratio = 40: 1
11	Services – electricity	✓				Connected to EFL grid	
12	Services – communication	✓				Internet limited to Computer Labs; Adequate PA system installed. Safety signs displayed	
13	Drainage	✓				All Drainage directed to SCC drains	

Block 2 is constructed out of concrete beams and column with slab on ground and suspended floor slab for 1st floor. Block walls for external load bearing. Partition walls are split in to 2 types, it is either concrete or timber framed. Doors and windows present on length wise of the structure. Gable roof with metal cladding and timber framed roof members. Staircase present at 1 location with hand railing in entire building. Ventilation is satisfactory with adequate lighting. Classrooms are well maintained.

Block 02 is not a disable friendly, all office, labs, classrooms, entry and exit points has floor split levels.

There is a presence of fire extinguishers and fire hose reels, but require immediate maintenance and commissioning.

Block 2 – Ground floor level contains; Hall – 17.4m x 9.8m, Spare Room – 7.8m x 6.7m, YR1005 – 11.7m x 6.7m, YR1004 – 11.7m x 6.7m, GYM – 9m x 9.8m,

Block 2 – 1st level contains; GS Office – 8.9m x 10m, YR1003 – 7.7m x 6.8m, YR1002 – 7.6m x 7.6m x 6.8m, YR1001 – 7.6m x 6.8m, YR905 – 7.6m x 6.8m, YR904, 8m x 6.8m

Block 2 is directly joined with block 1 and Block 3.

Classrooms has fan and adequate exterior and interior electricity lighting. All switches are working

⁵ Good - No additional works / intervention required⁶ Fair - Remedial works required – min CAT 3 standard⁷ Poor - Demolition and replace with new - min CAT 4 standard⁸ Type of structure - Timber/concrete/steel

Table 6: EXISTING BUILDING INFORMATION FOR BLOCK 3

Building Index		BLOCK 3				Year built: - 1960 (64years)	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: PEMAC Room, Girls Toilet ➤ 1 st floor: Office, 3 Classroom					No. of Levels: 2	
Dimensions		Length(m):32		Width (m): 10.50		Height (m): 7.50	
Existing State of Building							
REF. No.	Building Component	Good ⁹	Fair ¹⁰	Poor ¹¹	Structure Type ¹²	Comments	
1	Roof Lining	✓			Matel Cladding	Roof needs a paint job	
2	Roof Structure	✓			Timber Frame	Connection Concealed	
3	Walls	✓			Concrete	No Sign of Cracks. Paint Finish	
4	Columns	✓			Concrete	No Sign of Cracks. Paint Finish	
5	Beams	✓			Concrete	No Sign of Cracks. Paint Finish	
6	Floor	✓			Concrete	No Sign of Cracks. Paint Finish	
7	Handrails	✓			Metal pipes	Safe height, need painting	
8	Walkway(s)	✓			Concrete	2.4m walkway and 2 stairs	
9	Services – water supply	✓				Connected to WAF Grid with Back up Water Tanks	
10	Available taps for general use	✓				-	-
11	Services – electricity	✓				Connected to EFL grid	
12	Services – communication	✓				Internet limited to Computer Labs; Adequate PA system installed. Safety signs displayed	
13	Drainage	✓				All Drainage directed to SCC Drainage Network	

Block 3 is constructed out of concrete beams and column with slab on ground and suspended floor slab for 1st floor. Block walls for external load bearing. Partition walls are split in to 2 types, it is either concrete or timber framed. Doors and windows present on length wise of the structure. Gable roof with metal cladding and timber framed roof members. Ventilation is satisfactory with adequate lighting. Classrooms are well maintained.

Block 3 is not a disable friendly, all office, labs, classrooms, entry and exit points has floor split levels.

There is a presence of fire extinguishers and fire hose reels, but require immediate maintenance and commissioning.

Block 3 – Ground floor level contains; PEMAC – 14m x 6.6m, Junior Girls Toilet (4 WC, 1 Shower, 2 Hand Basin) – 8m x 6.6m

Block 3 – 1st level contains; Office – 3.5m x 6.6m, YR901 – 9.1m x 6.6m, YR902 – 9.1m x 6.6m, YR903 – 9.2m x 6.6m.

Block 3 is directly joined with block 2, Block 4 and Block 5 through a Walkway

Classrooms has fan and adequate exterior and interior electricity lighting. All switches are working.

⁹ Good - No additional works / intervention required¹⁰ Fair - Remedial works required – min CAT 3 standard¹¹ Poor - Demolition and replace with new - min CAT 4 standard¹² Type of structure - Timber/concrete/steel

Table 7: EXISTING BUILDING INFORMATION FOR BLOCK 4

Building Index		BLOCK 4				Year built: - 1960 – 64 years	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: Woodwork, Agri science, Toolroom, Vernacular, Handyman, toilet ➤ 1 st floor: Home Economics, Food Lab					No. of Levels: 2	
Dimensions		Length(m):32.8		Width (m): 11.35		Height (m): 7.50	
Existing State of Building							
REF. No.	Building Component	Good ¹³	Fair ¹⁴	Poor ¹⁵	Structure Type ¹⁶	Comments	
1	Roof Lining	✓			Matel Cladding	Roof needs a paint job	
2	Roof Structure	✓			Timber Frame	Connection Concealed	
3	Walls	✓			Concrete	No Sign of Cracks. Paint Finish	
4	Columns	✓			Concrete	No Sign of Cracks. Paint Finish	
5	Beams	✓			Concrete	No Sign of Cracks. Paint Finish	
6	Floor	✓			Concrete	No Sign of Cracks. Paint Finish	
7	Handrails	✓			Metal pipes	Safe height, need painting	
8	Walkway(s)	✓			Concrete	1.4 walkway and 2 stairs	
9	Services – water supply	✓				Connected to WAF Grid with Back up Water Tanks	
10	Available taps for general use	✓					
11	Services – electricity	✓				Connected to EFL grid	
12	Services – communication	✓				Internet limited to Computer Labs; Adequate PA system installed. Safety signs displayed	
13	Drainage	✓				All Drainage directed to SCC Drains	

Block 4 is constructed out of concrete beams and column with slab on ground and suspended floor slab for 1st floor. Block walls for external load bearing. Partition walls are split in to 2 types, it is either concrete or timber framed. Doors and windows present on length wise of the structure. Gable roof with metal cladding and timber framed roof members. Staircase present at both end and in the middle of the building with hand railing in entire building. Ventilation is satisfactory with adequate lighting. Classrooms are well maintained.

Block 4 is not a disable friendly, all office, labs, classrooms, entry and exit points has floor split levels.

There is a presence of fire extinguishers and fire hose reels, but require immediate maintenance and commissioning.

Block 4 – floor level contains; Woodwork – 14.5m x 7.7m, Agri Science – 15.2m x 7.7m, Toolroom – 2.8m x 4m, Vernacular – 7.5m x 4m, Handyman – 3.5m x 4m

Block 4 – 1st level contains; Home Economics – 15.3m x 7.5m, Food Lab – 15.2m x 7.5m.

Block is directly joined with block 3.

Classrooms has fan and adequate exterior and interior electricity lighting. All switches are working.

¹³ Good - No additional works / intervention required¹⁴ Fair - Remedial works required – min CAT 3 standard¹⁵ Poor - Demolition and replace with new - min CAT 4 standard¹⁶ Type of structure - Timber/concrete/steel

Table 8: EXISTING BUILDING INFORMATION FOR BLOCK 3

Building Index		BLOCK 5				Year built: - 1960 – 64 YEARS	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: 5 Classroom, Caretaker Room, Senior Girls and Boys Toilet					No. of Levels: 1	
Dimensions		Length(m):59		Width (m): 11.40		Height (m): 2.6	
Existing State of Building							
REF. No.	Building Component	Good ¹⁷	Fair ¹⁸	Poor ¹⁹	Structure Type ²⁰	Comments	
1	Roof Lining	✓			Matel Cladding	Roof needs a paint job	
2	Roof Structure	✓			Timber Frame	Connection Concealed	
3	Walls	✓			Concrete	No Sign of Cracks. Paint Finish	
4	Columns	✓			Concrete	No Sign of Cracks. Paint Finish	
5	Beams	✓			Concrete	No Sign of Cracks. Paint Finish	
6	Floor	✓			Concrete	No Sign of Cracks. Paint Finish	
7	Handrails	✓			Metal pipes	Safe height, need painting	
8	Walkway(s)	✓			Concrete	2.6m walkway	
9	Services – water supply	✓				Connected to WAF Grid with Back up Water Tanks	
10	Available taps for general use	✓					
11	Services – electricity	✓				Connected to EFL grid	
12	Services – communication	✓				Internet limited to Computer Labs; Adequate PA system installed. Safety signs displayed	
13	Drainage	✓				All Drainage directed to SCC Drainage Network.	

Block 5 is constructed out of concrete beams and slab. Block walls for external load bearing. Partition walls are concrete. Doors and windows present on length wise of the structure. Gable roof with metal cladding and timber framed roof members. Ventilation is satisfactory with adequate lighting. Classrooms are well maintained.

Block 5 is not a disable friendly, entry and exit points has floor split levels.

There is a presence of fire extinguishers, but require immediate maintenance and commissioning.

Block 5 – floor level contains; Caretaker Room – 4m x 7.9m, YR1105 – 7.7m x 7.6m, Yr1104 – 7.6m x 7.6m, YR1103 – 7.7m x 7.6m, YR1102 – 7.7m x 7.6m, YR1101 – 7.6m x 7.6m. Senior Girls Toilet (16 WC, 10 HB, 2 Shower) – 6.4m x 9.4m, Senior Boys Toilet (9 WC, 5 hand basin, 1 urinal, 2 Shower) – 7m x 9.4m.

Block 5 is directly joined with block 1, and joined with Block 3 through Walkway.

Classrooms has fan and adequate exterior and interior electricity lighting. All switches are working.

¹⁷ Good - No additional works / intervention required¹⁸ Fair - Remedial works required – min CAT 3 standard¹⁹ Poor - Demolition and replace with new - min CAT 4 standard²⁰ Type of structure - Timber/concrete/steel

b) EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS**Table 9: EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS FOR BLOCK 1**

Building Index		BLOCK 1				Year built: - 1960 & 2015 (Age: 64 & 9)	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: <ul style="list-style-type: none">➤ Ground floor: 3 Science Labs➤ 1^s Floor – Main Office, Staffroom, Tea Room, 3 Classroom, Toilet➤ 2nd Floor – 9 Classroom, Library, Canteen➤ 3rd Floor – 2 TD Room, Computer Lab						No. of Levels: Average of 3 at any point
Dimensions		Length (m):97	Width (m): 20.5			Height (m): 10.50	
Existing State of Building							
REF. No.	Building Component	Good ²¹	Fair ²²	Poor ²³	Structure Type ²⁴	Dimension s (m)	Comments
1	Ramps			✓	N/A	N/A	No ramps on site
2	Walkway clearance space	✓			Concrete floor tiled	1.1 – 2	Accessible for wheelchair user
3	Handrails		✓		Steel	0.9	Paint peel and minor rusting.
4	Doors and Door Size (typical)		✓		Timber	0.8 0.6 – 0.9	Interior Door Exterior Door
5	Stairway		✓		Concrete	0.9	Not accessible for wheelchair users
Comments							
Ramps <ul style="list-style-type: none">➤ Absence of ramps throughout the building.							
Handrails <ul style="list-style-type: none">➤ Partially damaged/denting requiring intervention.							
Doors and Door Size (typical) <ul style="list-style-type: none">➤ Not accommodating to wheelchair users who require a minimum of 1m clearance.							
Stairway <ul style="list-style-type: none">➤ No accessible to disable students. Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)							

²¹ Good - No additional works / intervention required²² Fair - Remedial works required – min CAT 3 standard²³ Poor - Demolition and replace with new - min CAT 4 standard²⁴ Type of structure - Timber/concrete/steel

**Table 10: EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS
FOR BLOCK 2**

Building Index	BLOCK 2					Year built: - 1960 (Age: 64)	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: Hall, Spare room, 2 Classroom, Gym ➤ 1 st floor: Gujrati Society Office, 5 Classrooms						No. of Levels: 2
Dimensions	Length(m):50.53	Width (m): 10				Height (m): 7.50	
Existing State of Building							
REF. No.	Building Component	Good ²⁵	Fair ²⁶	Poor ²⁷	Structure Type ²⁸	Dimensions (m)	Comments
1	Ramps			✓	N/A	N/A	No ramps on site
2	Walkway clearance space	✓			Concrete floor tiled	1.2 - 1.5	Accessible for wheelchair user
3	Handrails		✓		Steel	0.9	major denting at left end.
4	Doors and Door Size (typical)		✓		Timber	0.8	All doors same size.
5	Stairway		✓		Concrete	0.9	Not accessible for wheelchair users
Comments Ramps ➤ Absence of ramps throughout the building. Handrails ➤ Major damaged/denting and rusting requiring intervention. Doors and Door Size (typical) ➤ Not accommodating to wheelchair users who require a minimum of 1m clearance. Stairway ➤ No accessible to disable students. Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)							

²⁵ Good - No additional works / intervention required

²⁶ Fair - Remedial works required – min CAT 3 standard

²⁷ Poor - Demolition and replace with new - min CAT 4 standard

²⁸ Type of structure - Timber/concrete/steel

**Table 11: EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS
FOR BLOCK 3**

Building Index	BLOCK 3					Year built: - 1960 (64years)	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: PEMAC Room, Girls Toilet ➤ 1 st floor: Office, 3 Classroom					No. of Levels: 2	
Dimensions	Length(m):32	Width (m): 10.50			Height (m): 7.50		
Existing State of Building							
REF. No.	Building Component	Good ²⁹	Fair ³⁰	Poor ³¹	Structure Type ³²	Dimensions (m)	Comments
1	Ramps			✓	N/A	N/A	No ramps on site
2	Walkway clearance space	✓			Concrete floor tiled	2	Accessible for wheelchair user
3	Handrails		✓		Steel	0.9	Paint peel and partial rusting.
4	Doors and Door Size (typical)		✓		Timber	0.6 0.8	Interior Exterior
5	Stairway		✓		Concrete	0.9	Not accessible for wheelchair users
Comments Ramps ➤ Absence of ramps throughout the building. Handrails ➤ Paint peel and rusting. Doors and Door Size (typical) ➤ Not accommodating to wheelchair users who require a minimum of 1m clearance. Stairway ➤ No accessible to disable students. Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)							

²⁹ Good - No additional works / intervention required

³⁰ Fair - Remedial works required – min CAT 3 standard

³¹ Poor - Demolition and replace with new - min CAT 4 standard

³² Type of structure - Timber/concrete/steel

**Table 12: EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS
FOR BLOCK 4**

Building Index		BLOCK 4				Year built: - 1960 – 64 years	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: Woodwork, Agri science, Toolroom, Vernacular, Handyman, toilet ➤ 1 st floor: Home Economics, Food Lab						No. of Levels: 2
Dimensions		Length(m):32.8	Width (m): 11.35			Height (m): 7.50	
Existing State of Building							
REF. No.	Building Component	Good ₃₃	Fair ³⁴	Poor ³⁵	Structure Type ³⁶	Dimensions (m)	Comments
1	Ramps			✓	N/A	N/A	No ramps on site
2	Walkway clearance space	✓			Concrete	2	Accessible for wheelchair user
3	Handrails	✓			Steel	1	Paint peel and surface rusting.
4	Doors and Door Size (typical)		✓		Timber	0.88	all doors
5	Stairway		✓		Concrete	0.9	Not accessible for wheelchair users
Comments Ramps ➤ Absence of ramps throughout the building. Handrails ➤ Paint peel and surface rusting. Doors and Door Size (typical) ➤ Not accommodating to wheelchair users who require a minimum of 1m clearance. Stairway ➤ No accessible to disable students. Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)							

³³ Good - No additional works / intervention required

³⁴ Fair - Remedial works required – min CAT 3 standard

³⁵ Poor - Demolition and replace with new - min CAT 4 standard

³⁶ Type of structure - Timber/concrete/steel

**Table 13: EXISTING BUILDING AND TOILET BLOCKS ACCESS INFORMATION FOR DISABILITY AUDITS
FOR BLOCK 5**

Building Index		BLOCK 5				Year built: - 1960 – 64 YEARS	
Type:	MENTION THE CONTENTS OF EACH LEVEL. EXAMPLE: ➤ Ground floor: 5 Classroom, Caretaker Room, Senior Girls and Boys Toilet					No. of Levels: 1	
Dimensions		Length(m):59	Width (m): 11.40			Height (m): 2.6	
Existing State of Building							
REF. No.	Building Component	Good ³⁷	Fair ³⁸	Poor ³⁹	Structure Type ⁴⁰	Dimension s (m)	Comments
1	Ramps			✓	N/A	N/A	No ramps on site
2	Walkway clearance space	✓			Concrete	2.25	Accessible for wheelchair user
3	Handrails	✓			Steel / concrete	0.9	Paint peel
4	Doors and Door Size (typical)		✓		Timber	0.8 1.2	all classroom doors school hall door
5	Stairway		✓		Concrete	0.9	Not accessible for wheelchair users
Comments							
Ramps							
➤ Absence of ramps throughout the building.							
Handrails							
➤ Paint peel.							
Doors and Door Size (typical)							
➤ Classrooms not accommodating to wheelchair users who require a minimum of 1m clearance.							
Stairway							
➤ No accessible to disable students. Clearance required of 1.2m and tread width of minimum 310mm. (National Building Code Table D2.1)							

³⁷ Good - No additional works / intervention required

³⁸ Fair - Remedial works required – min CAT 3 standard

³⁹ Poor - Demolition and replace with new - min CAT 4 standard

⁴⁰ Type of structure - Timber/concrete/steel

c) TOILET BLOCKS (BOYS and GIRLS)

Table 14: TOILET BLOCKS (JUNIOR BOYS) FOR BLOCK 1

Building Index	B 1						
Type:	Ground floor: <ul style="list-style-type: none">Junior Boys Toilet (6 Toilets, 1 Urinal Bowels, 2 Shower and 6 Taps) – 7.5m x 3.7m					No. of Levels: 1	
Dimensions	Length (m): 7.5		Width (m): 3.7		Height (m): 2.4		
Existing State of Building							
REF. No.	Building Component	Good ⁴¹	Fair ⁴²	Poor ⁴³	Structure Type ⁴⁴	Count ⁴⁵	Comments
1	Toilet Bays – male		✓			6	With 3 urinal channels
2	Toilet Bays – female					-	
3	Toilet Partition between boys and girls.		✓				Concrete
4	Shower bay		✓			1	
5	Toilet Bays – accessible		✓				Not disable friendly
6	Entry to toilet building		✓				1 door
7	Exit to toilet building		✓				1 door
8	Menstrual Hygiene facilities						
9	Students to WASH ratio	Toilet taps: 6	6	5	Female		
Each student water closet cubicles measured to be 1.6m long and width of 1m. all water closet are operational, shall there be any damages or mis-function, handyman of the school is tasked to execute repairs. All cubicles have swing doors on hinges. Whole floor provided with tiles. 2 wash tub with taps are installed outside toilet.							

⁴¹ Good - No additional works / intervention required⁴² Fair - Remedial works required – min CAT 3 standard⁴³ Poor - Demolition and replace with new - min CAT 4 standard⁴⁴ Type of structure - Timber/concrete/steel⁴⁵ Count - Used for identifying number of toilet bays and menstrual hygiene facilities

Table 15: TOILET BLOCKS (GIRLS) FOR BLOCK 3

Building Index	B 3							
Type:	Ground floor: <ul style="list-style-type: none">Girls Toilet (15 Toilets, 1 shower & 6 Hand Basin) – 8m x 6.6m,						No. of Levels: 1	
Dimensions	Length (m): 8			Width (m): 6.6		Height (m): 2.6		
Existing State of Building								
REF. No.	Building Component	Good ⁴⁶	Fair ⁴⁷	Poor ⁴⁸	Structure Type ⁴⁹	Count ⁵⁰	Comments	
1	Toilet Bays – male							
2	Toilet Bays – female		✓			4		
3	Toilet Partition between boys and girls.		✓				Concrete	
4	Shower bay		✓					
5	Toilet Bays – accessible		✓				Not disable friendly	
6	Entry to toilet building		✓				1 door	
7	Exit to toilet building		✓				1 door	
8	Menstrual Hygiene facilities		✓				Kit present in admin office	
9	Students to WASH ratio	Toilet taps: 4		Male		Female		4

Each student water closet cubicles measured to be 1.6m long and width of 1m. all water closet are operational, shall there be any damages or mis-function, handyman of the school is tasked to execute repairs. All cubicles have swing doors on hinges. Whole floor provided with tiles.

⁴⁶ Good - No additional works / intervention required⁴⁷ Fair - Remedial works required – min CAT 3 standard⁴⁸ Poor - Demolition and replace with new - min CAT 4 standard⁴⁹ Type of structure - Timber/concrete/steel⁵⁰ Count - Used for identifying number of toilet bays and menstrual hygiene facilities

Table 16: TOILET BLOCKS (BOYS and GIRLS) FOR BLOCK 5

		B 5					
Type:	Ground floor: <ul style="list-style-type: none">Girls Toilet (16 Toilets, 2 shower & 10 Hand Basin) – 6.4m x 9.4m,Boys Toilet (9 Toilets, 2 Showers, 5 Hand Basin, 1 Urinal) – 7m x 9.4m.						No. of Levels: 1
Dimensions	Length (m): 59		Width (m): 11.40		Height (m): 2.6		
Existing State of Building							
REF. No.	Building Component	Good ⁵¹	Fair ⁵²	Poor ⁵³	Structure Type ⁵⁴	Count ⁵⁵	Comments
1	Toilet Bays – male		✓			9	
2	Toilet Bays – female		✓			16	
3	Toilet Partition between boys and girls.		✓				Concrete
4	Shower bay		✓			4	2 Each
5	Toilet Bays – accessible		✓				Not disable friendly
6	Entry to toilet building		✓				1 door
7	Exit to toilet building		✓				1 door
8	Menstrual Hygiene facilities		✓				Kit present in admin office
9	Students to WASH ratio	Toilet taps: 4		Male	9	Female	16

Each student water closet cubicles measured to be 1.6m long and width of 1m. all water closet are operational, shall there be any damages or mis-function, handyman of the school is tasked to execute repairs. All cubicles have swing doors on hinges. Whole floor provided with tiles.

⁵¹ Good - No additional works / intervention required⁵² Fair - Remedial works required – min CAT 3 standard⁵³ Poor - Demolition and replace with new - min CAT 4 standard⁵⁴ Type of structure - Timber/concrete/steel⁵⁵ Count - Used for identifying number of toilet bays and menstrual hygiene facilities

4) PHOTOGRAPHIC REPORT

FIGURE 1: PHOTOGRAPHIC VIEW OF BLOCK 1






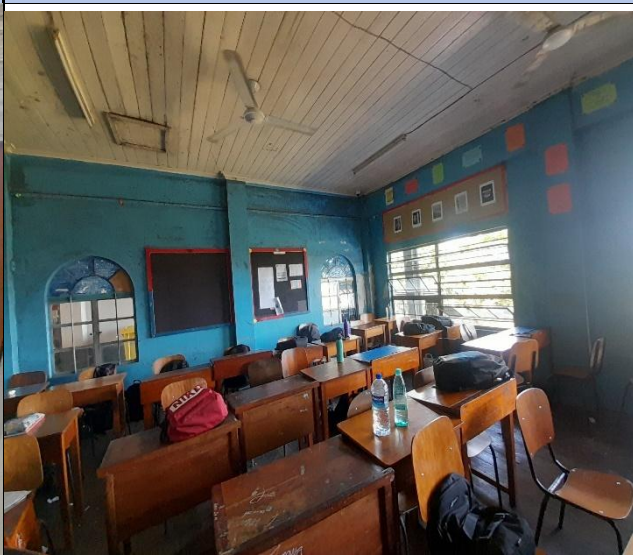
Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B1
			
PHOTOGRAPH No. 1: FRONT		PHOTOGRAPH No. 2: LEFT SIDE	
			
PHOTOGRAPH No. 3: BACK		PHOTOGRAPH No. 4: RIGHT SIDE	
			
PHOTOGRAPH No. 5: LIBRARY		PHOTOGRAPH No. 6: CLASSROOM	

FIGURE 2: PHOTOGRAPHIC VIEW OF TOILET AT BLOCK 1

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B1
			
PHOTOGRAPH No. 1: CUBICLES		PHOTOGRAPH No. 2: URINAL	
			
PHOTOGRAPH No. 3: TAPS		PHOTOGRAPH No. 4: SHOWER	
			
PHOTOGRAPH No. 5: FRONT VIEW		PHOTOGRAPH No. 6: OUTSIDE TAPS	

FIGURE 3: PHOTOGRAPHIC VIEW OF BLOCK 2

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B2
			
PHOTOGRAPH No. 1: FRONT		PHOTOGRAPH No. 2: LEFT SIDE	
			
PHOTOGRAPH No. 3: BACK		PHOTOGRAPH No. 4:	
			
PHOTOGRAPH No. 5: INTERIOR		PHOTOGRAPH No. 6: FIRE HOSE REEL	

FIGURE 4: PHOTOGRAPHIC VIEW OF BLOCK 3

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B3
			
PHOTOGRAPH No. 1: FRONT		PHOTOGRAPH No. 2: LEFT SIDE	
			
PHOTOGRAPH No. 3: BACK		PHOTOGRAPH No. 4: RIGHT SIDE	
			
PHOTOGRAPH No. 5: INTERIOR		PHOTOGRAPH No. 6: FIRE HOSE REEL	

FIGURE 5: PHOTOGRAPHIC VIEW OF TOILET AT BLOCK 3



Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B3
			
PHOTOGRAPH No. 1: GIRLS TOILET		PHOTOGRAPH No. 2:	

FIGURE 6: PHOTOGRAPHIC VIEW OF BLOCK 4

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B4
			
PHOTOGRAPH No. 1: FRONT		PHOTOGRAPH No. 2: LEFT SIDE	
			
PHOTOGRAPH No. 3: BACK		PHOTOGRAPH No. 4: RIGHT SIDE	
			
PHOTOGRAPH No. 5: INTERIOR		PHOTOGRAPH No. 6: FIRE HOSE REEL	

FIGURE 7: PHOTOGRAPHIC VIEW OF BLOCK 5

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B5
			
PHOTOGRAPH No. 1: FRONT		PHOTOGRAPH No. 2: CLADDING	
			
PHOTOGRAPH No. 3: BACK		PHOTOGRAPH No. 4: RIGHT SIDE	
			
PHOTOGRAPH No. 5: INTERIOR		PHOTOGRAPH No. 6: Cladding	

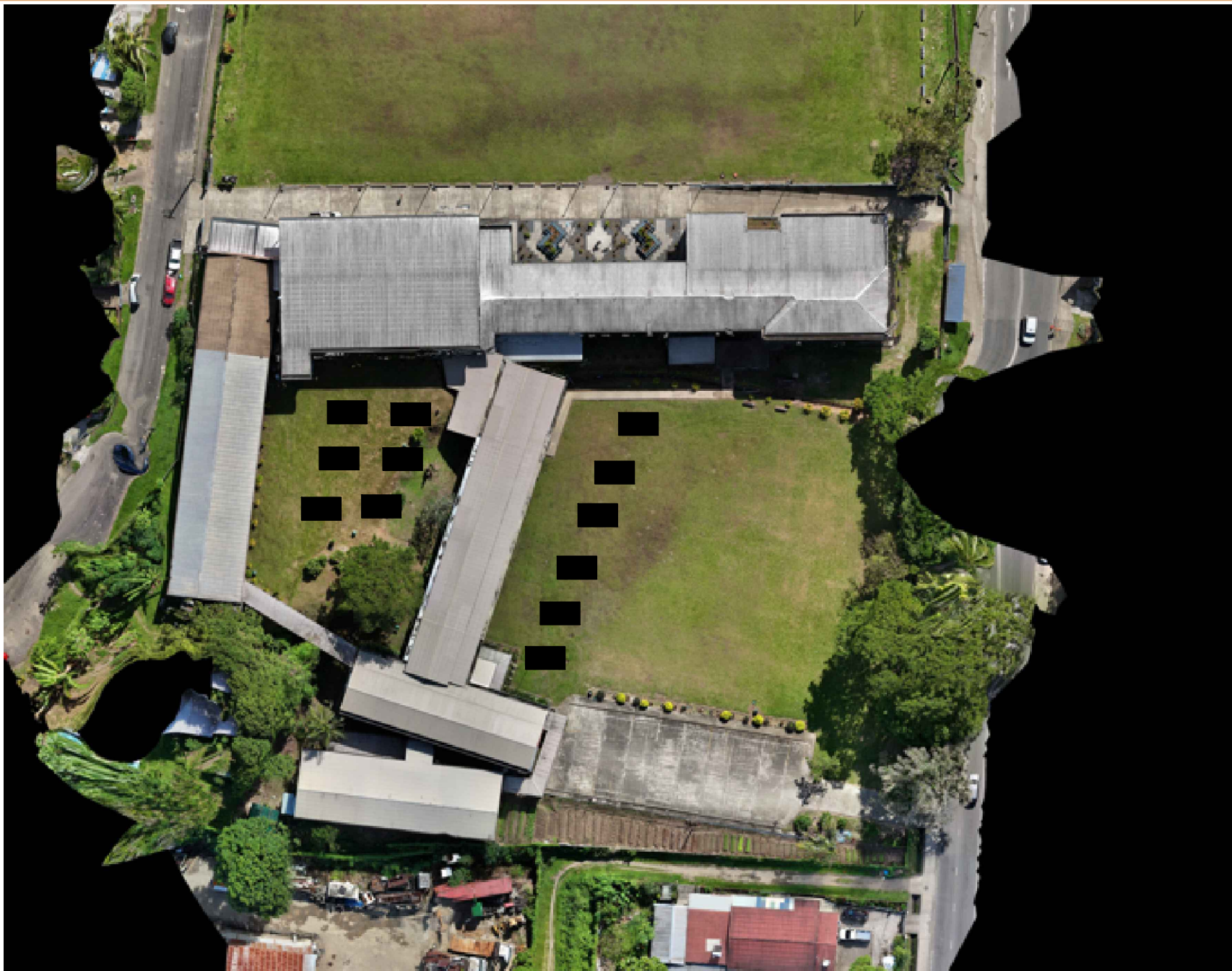
FIGURE 1: PHOTOGRAPHIC VIEW OF TOILET AT BLOCK 5

Client:	TETRA TECH INTERNATIONAL DEVELOPMENT (PTY) LTD	School Name:	MGM High School
Project:	INFRASTRUCTURE PLAN FOR SUVA – NAUSORI URBAN SCHOOL.	Building Index:	B5
			
PHOTOGRAPH No. 1: INTERIOR		PHOTOGRAPH No. 2: OUTSIDE TAPS	
			
PHOTOGRAPH No. 3: ENTRY		PHOTOGRAPH No. TOILET HAND BASIN	
			
PHOTOGRAPH No. 5:		PHOTOGRAPH No. 6: BACK UP WATER TANK	

Appendix B – Excel Scoring Sheet

WEIGHTED CRITERIA		
PART A - CLASSROOM OVERCROWDING (40%)		
1	Classrooms facilitating students beyond room capacity, determined through number of students per classroom and classroom size	
	Fair - some classrooms are accommodating students above capacity.	24 to 31
	Criteria Item Score	26
PART B - WASH FACILITIES (20%)		
2	WASH- Student ratio based on the Fiji National Building Code (FNBC) Infrastructure Standards (10%)	
	Good - WASH-Student ratio for school toilet blocks meets or exceeds the ratio in the standard specified by FNBC.	0 to 5.9
2.1	Quality of facilities and current condition such as functionality and maintenance (10%)	
	Good - generally school toilet facilities are maintained well with minimal disturbances from the physical infrastructure to the end users.	0 to 5.9
	Criteria Item Score	10.0
PART C - CONDITION OF INFRASTRUCTURE (20%)		
3	Building structure and condition of walls, floors, ceilings, overall structural integrity (10%)	
	Good - most building structures are in good condition, however some may need repairs to improve structural integrity.	0 to 5.9
3.1	Maintenance and assessment of the upkeep of facilities including painting and repairs (10%)	
	Good - generally school facilities are maintained well with minimal disturbances from the physical infrastructure to the end users.	0 to 5.9
	Criteria Item Score	10.0
PART D - DISABILITY ACCESSIBILITY (10%)		
4	Accessibility features such as the presence of existing ramps, handrails, accessible toilets etc	
	Poor - School buildings and facilities do not have accessibility features.	8 to 10
	Criteria Item Score	10.0
PART E - DISASTER RESILIENCE (10%)		
5	Presence and quality of measures for disaster resilience of buildings including structural measures, cyclone shutters and fire safety systems	
	Good - most or all school buildings structures are resilient to natural disasters and have partial safety systems in place. More systems or structural intervention would need to be implemented	0 to 5.9
	Criteria Item Score	5.0
TOTAL CRITERIA SCORE		61.0

Appendix C – Land Available for Expansion



NRW MACALLAN (FIJI) LTD CONSULTING ENGINEERS

CIVIL, STRUCTURAL, ELECTRICAL, MECHANICAL & PROJECT MANAGEMENT
79 RATU MARA ROAD, SAMABULA, SUVA.
P O BOX 1208, SUVA. PHONE: (679) 3313 388, FAX (679) 3302903
EMAIL: info@nrwmacallan.com.fj

SCHOOL NAME:

MGM High School