ISS Facilities Master Plan: 2020-2030

Future-proofing for school growth (10 year projection)

Introduction

This Plan is a 10-year projection of future school demands including new buildings for classrooms, offices, or specialised learning spaces in primary, middle and high schools. It identifies needs for space and projects future plans, some of which will have significant cost implications, for redesigning an integrated infrastructure to cater for growth, both enrolment and program, within our constrained campus and perhaps in some cases, beyond our current campus. The recommendations in this Plan are designed to be flexible, with a process defined for next steps and for periodic updates by the Facilities Committee.

The Plan will provide a roadmap for facilities development at ISS in order to support the Strategic Plan 2019 – 2023, specifically the goals of which are encapsulated under Strategic Direction III: Facilities, Finances and Technology. This provides the platform for goals 1 – 6, namely: improving financial support for quality programmes, improving safety and outdoor infrastructure, completing J Block, improving early childhood (ECH) facilities, improving and developing IT systems, and improving secondary facilities. The Plan will:

- Provide a strategy for facilities improvement, renovation, replacement, and new construction over the next 10 years.
- Build a 21st century ECH to Year 12 world class school that meets the needs of students today and into the future.
- Provide for student needs for community space, autonomous space, outdoor space, and natural environments.
- Develop facilities that anticipate the needs of students and staff for the 21st Century.
- Modernise ISS facilities in order to serve education needs of the community for the next 10 years and beyond.

Existing Facility Management and Planning

Coordinating the physical workspace with the people and work of the school integrating the Strategic Plan goals and core needs of the school is the responsibility of the school administration. Several school employees have direct responsibility for managing, maintaining, supervising, and scheduling facilities. That work encompasses input from multiple key stakeholders to ensure functionality of the environment by integrating people (students and staff), spaces, processes and technology.

Facility Development Process

The FC with additional resource members (as required) will guide the design, compilation, and ongoing revision of the Plan in a process that is Comprehensive, Actionable, Participatory, and Transparent. This is an advisory committee of the Board made up of Board members, senior management team, staff representatives (including consultation with specific subject-area teachers when required), association members (parents), and business/project administrators. The FC in conjunction with the Senior Leadership Team (SLT) follows this process:

- NEEDS – Analyse existing facilities and identify needs linked to futureproofing under current Strategic Plan
- OPTIONS - Consider a variety of options based on these needs at SLT and FC meetings
- RECOMMENDATION - Develop a recommended solution to address the needs and document in this Plan

ISS facility projects are developed following this general process. It is assumed that ISS facility needs will arise based on the following factors:

I. Enrolment changes;
II. Aging buildings;
III. Strategic planning goals; and
IV. Changes in program offerings and instructional approaches.

I. Enrolment Changes

As we look at peak enrolments, we also must look at annual enrolment trend data to help predict future needs. This is needed for both budget and facility planning. To that end, please note the following **Six-Year Enrolment Trends**, and two earlier sample years to provide perspective on longer term trends, specifically a 15-year view. This analysis does not include the recent COVID-19 reduction in enrolment as it is too soon to know if this a temporary change or not, but it is based on long term trends prior to COVID-19. Note that ISS enrolment has increased nearly 6% per year over the last six years. However, the previous ten years had less than 1% increase per year on average. Analysis and interpretation of that could go several directions and is not in the scope of this plan.

The trend data is as follows:

Years Ago	Year	Enrolment	% change from previous year	Cumulative average % change/year since 2013	Cumulative average % change/year since 2004	Total years of trend indication
Current	2019	658	3.5%	**5.8%**	**+2.1%**	**15**
1	2018	636	3.9%	**6.1%**	**+1.9%**	**14**
2	2017	612	1.0%	**6.4%**	**+1.7%**	**13**
3	2016	606	5.0%	**8.1%**	**+1.9%**	**12**
4	2015	577	10.3%	**9.1%**	**+1.4%**	**11**
5	2014	523	7.2%	**7.2%**	**+0.4%**	**10**
6	2013	488	-	-	**-0.3%**	**9**
Earlier Enrolment Data				**Current % increase since 2004/2007**		
12	2007	516	**% increase since 2007**	**27.5%**	**+0.9%**	**3**
15	2004	502	**% increase since 2004**	**31.1%**	-	-

For the purposes of this Plan, Enrolment Assumptions will follow three scenarios: a) ISS will average 0 growth over the next 10 years; b) ISS will average 3% growth over the next 10 years; and c) ISS will average 5% growth over the next 10 years. Planning for facilities should adapt and be responsive to enrolment changes over time rather than to short-term enrolment fluctuations**.**

II. Aging Buildings

ISS was developed with buildings that were re-purposed or built hastily to address immediate needs to house students. That is evident from the design and quality of many of the older buildings such as the ECH Buildings, the K Block Building, the Maintenance Building, the C Block Building, and the High School building. This inadequacy has been seen, and can be seen, in such features as the following:

- ECH classrooms are in re-purposed residential homes,
- K Block has non-working fire systems (hoses), household-style air conditioners with surface mount electrical wiring (now removed following a fire caused by an old air conditioner),
- The maintenance Building is a re-purposed residence turned into a “garage” with upper floor office space,
- C Block is a long one-story building with connection doors and back room office space,

- The High School building has inadequate ventilation, classroom collaboration options, student autonomous workspace, science labs, and teacher planning spaces.

III. Strategic Planning goals

The Strategic Plan requires world class instruction in world class spaces with world class technology. This is relevant if the Strategic Plan is a serious template for the school's development as facilities are a fundamental teaching resource. Currently, the school has very few specialised facilities, the exceptions being high school labs (which need improvement to meet current standards), the MPH (or gymnasium), the Amphitheatre, and the aquarium. The school may choose to consider developing some specialised facilities that are typical of world class schools such as some of the following:

a) STEM/
Robotics lab space,
b) wet lab,
c) modern physics lab,
d) modern life sciences lab,
e) boarding facilities,
f) athletic field,
g) high quality cafeteria or canteen,
h) teacher professional library and training space,
i) parent resource center,
j) adequate and safe parent and bus drop-off area,
k) protect and create outdoor community space for students,
l) autonomous student study and collaboration space,
m) a camp facility,
n) a second gymnasium,
o) activity bus(es),
p) marine science research vessel,
q) swimming pool,
r) tennis and/or badminton courts
s) second campus (to accommodate growth, to house a program in a different geographical area, or to house a program with a specialised focus), and
t) adequate parking

IV. Changes in Programs or Instructional Approaches

World class pedagogy is much different from that of 30, or 100, years ago. The demands of 21st Century Learning require some skills that were not recognized in the industrial age but are increasingly important now. Some of those require facilities and resources that are somewhat different from the traditional four-walled classroom with rows of desks as much of our instructional space is. Examples of this need for upgraded instructional facility resources are:

1) IB programs, which we have, require collaborative space for instruction,

2) IB programs require student workspace for projects and group work,
3) Teacher collaborative planning space is essential for the IB, accreditation, and for curriculum integration,
4) Technology use in teaching requires a purposeful and adequate technology infrastructure,
5) Expectations for supervision, pastoral care, and student safety require designs that can be monitored, are conducive to positive interaction, encourage positive socializing, and allow for rapid and safe responses in emergencies, and
6) Facilities that have accessibility for all.

Master Plan Critical Disclaimers

An effective Facilities Master Plan should emphasize the following planning realities:

1. The plan must be reviewed annually (by the Facilities Committee and SLT) and adjusted to account for the variables just identified and the plan assumptions;
2. The planners should maintain an open mind as to how to acquire needed facilities and not presume new construction or purchase when a remodel or other means of meeting the school's needs may be desirable;
3. A new or revised Strategic Plan may require significant revision and alterations to this Plan;
4. This Plan is intended to be a long-range planning instrument to guide purposeful development and should not become a hindrance or burden to the school.

Assumptions for this Revised Plan

This revised Plan establishes anticipated capital project and acquisition needs and timelines for development of those projects and capital acquisitions for the school in future years. The Plan makes explicit assumptions regarding key variables and proposes three timelines that hinge on different growth rates. The Plan is not intending to promote any particular level of growth but rather to respond to growth reasonably.

An Ongoing Process

The process of strategic facility planning is ongoing as facilities, real estate and infrastructure are constantly changing and consistently need to be evaluated. This ensures that ISS buildings and other infrastructure assets are optimised in a way that is best suited to match our vision, and to meet the strategic goals of the school. As such, our planning model requires a life-cycle analysis, which includes an evaluation of total ownership cost and life-cycle cost. This is in contrast to the relative value of building assets in economic terms but considering social factors as well. ISS must proceed wisely and responsibly but also be part of the larger community.

Identifying Required Inventory and Equipment

The Facilities Committee recognises the importance and cost of equipping new facilities as well as building them. Some facilities will require considerable expense in order to fully equip them to our school needs. The school must identify all potential costs, both to complete the facility and to provide fixtures, furnishings, and equipment needed in the facility for long-term use. The more accurate our costings, the more effective our Plan will be.

ISS Facilities Master Plan: 2020-2030 (Summary)

Revision 1 Endorsed by the ISS Board 20 August 2020

$ = Completed; # = In progress; * = planning stage; > = ongoing; - on hold/under review

Ten-Year Master Plan Proposed Timetable: Assuming level enrolment

Proposed Projects	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Future Outlook
J Block completion	#	$ Mar										
Admissions-Marketing office	*	* Jan >										
Breezeway Enhancement/Parent-	*	* Jan >										
Middle School classroom space	$ Jan											
Acquire and develop ocean-front	*	>	>									
ECH building	*	# > Jan										
Nokonoko Rd Access and parking	* #	* > Jan										
Primary cooking room		*										
Senior study areas	*	#Mar	>									
Media rooms		*		>								
Science labs	#	$ Jan										
Wet labs/ocean science lab	*	* > Jun	*									
Touch Tank	*	* > Jun										
Conjoined rooms for IB	*	Jan										
Canteen upgrade/lunch facilities		> *										
Design Lab		# Feb	*									
School/activity bus*		*										
Resource room		*										
Ocean science boat*	-	*										
Swimming pool		-										
Athletic field with track		* >										
Conference/meeting room(s)	$ Jan >											
Parent room		*										
Counselling room		*										
Breezeway “Café”		*										
ESL fit-for-purpose facility	-	-										
Boarding dorm		-										
High school new facility		-										
High School Remodel		$Jan >	*	* >								

ISS FACILITIES DEVELOPMENT PROCESS FOR BOARD LEVEL ENGAGEMENT
(Simplified from 25-step process)

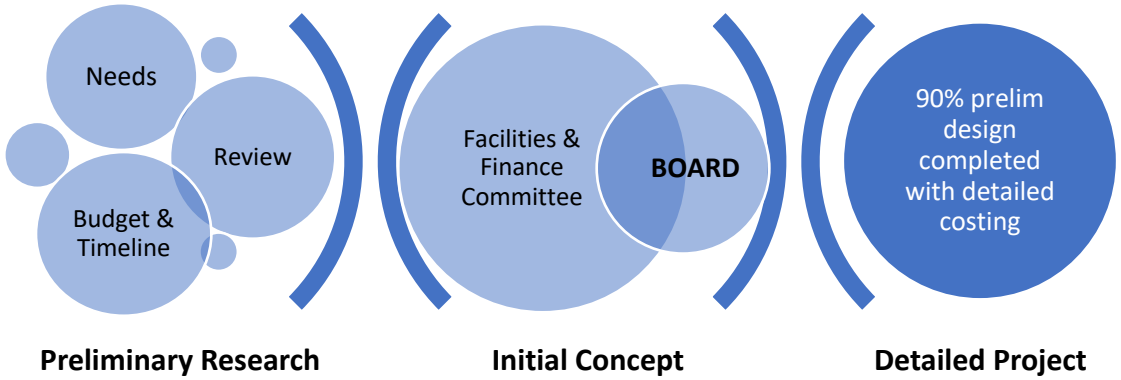

Table of Facilities Development approval Process

PRELIMINARY RESEARCH	INITIAL CONCEPT	DETAILED PROJECT
1. Needs identified	Facilities and Finance seek **Board approval** of concept with **initial estimates**	**Detailed** project presented for **Board approval** (with **revised detailed budget estimate**)
2. **SLT** review and in detail if appropriate	If approved, 95% detailed design works go ahead with Engineering drawings. *[If not approved, go back to **SLT** and **Facilities Committee** steps]*	5% variation and/or scope adjustment flexibility acknowledged for detailed planning
3. **Facilities Committee** input. *[Board acknowledges that preliminary research incurs costs that are assumed approved if project is part of prioritised FDMP list]*	Detailed budget estimates: ▪ QS estimates ▪ ISS costings to self-build ▪ Subcontractor cost review ▪ 15% contingency built in	If approved, lodge permit applications, tender for Engineering oversight and project management. *[If not approved, go back to **SLT** and **Facilities Committee** steps]*
4. **Approximate budget** and timeline developed	Project plan drafted	Finalise project planning

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PRELIMINARY RESEARCH	INITIAL CONCEPT	DETAILED PROJECT
5. **Facilities Committee** considers concept again	Facilities and Finance Committees regularly meet or share minutes to track ongoing approved projects	Programme materials, sub-contractors, OHS etc with Engineers
6. **Finance Committee** explores financing options	Finance Committee approval of budget estimates noted	Start-up planned based on feasibility issues
7.		Commence project start
8.		Ongoing monitoring, mitigation of risks, variation planning
9.		If variations amount to over 5% of total project cost, then **Board approval** is sought
10.		Project completion and occupancy certification
11.		Project opening and/or use

Two step Board approval for Major Projects:

1. Floor Plan – **Board approval of major project concept** (linked to FDMP priority) and **initial budget estimate** to get Engineering Drawings done
2. Engineering Drawings – revised budget estimate, Finance Committee recommendations of financing options then **Board approval** to proceed or not, **acknowledging 5% detailed costing yet to be determined** based on retaining flexibility for scope adjustment and/or variations.
3. Secure financing, final design then lodge permit applications.
4. Project planning finalised – commencement – monitoring and mitigation.
5. Variations and/or scope adjustment: up to 5% within contingency sum overspend of overall project budget estimate is acceptable.

Definitions:

a. Minor Project – costs up to FJ$0.5 million and can go ahead with Facilities and Finance Committee approval if already listed as a priority in the FDMP.
b. Major Project – costs over FJ$0.5 million and requires Board approval.
c. Contingency is money set aside to cover costs that can arise throughout the project and acts as an insurance against other unforeseen costs (for all projects = 15%).
d. Scope adjustment or variation is defined as an intentional change in project design to take advantage of the opportunity to improve projects or respond to evolving circumstances that impact the school (up to 5% permissible within contingency sum).

Notes:

1. Preliminary research incurs costs to get concepts drafted and amended as floor plans – acknowledged costs incurred when project is listed and prioritised on Board approved FDMP.
2. All Earthworks are scheduled during holidays or after school hours and weekends to minimise learning disruptions.

ISS High Priority Facility Needs
(established September 2019)

Project Name	Priority/Urgency	2021 Status
MS classroom space	1	Completed
Complete J Block	1	90% Completed
Admissions-Marketing office	1	Planning
Deputy Head office	1	Completed
Access road (Nokonoko Rd.) and parking	1	To complete in 2021
Science lab upgrades	1	Completed