

#### PROJECT BRIEF

The Monsoon/ Floods 2022 in Pakistan, particularly in Sindh had devastation resulting in loss of human lives as well as infrastructural loss in all sectors. The education sector in Sindh was also badly affected damaging the schools either partially or fully.

The Government of Sindh has received emergency assistance loan (4409-PAK) from the Asian Development Bank (ADB) for the additional financing of the Sindh Secondary Education Improvement Project in response to the Government of Pakistan's request to the Asian Development Bank (ADB) to support its post-flood recovery processes.

#### PROJECT BRIEF

The Project involves reconstruction of 722 flood damaged schools in 15 most affected tehsils of 05 districts (Dadu, Naushehro Feroze, Khairpur, Larkana and Kamber-Shehdadkot) of Sindh, with disaster & climate-resilient, and gender-responsive designs, based upon upto 12 prototypes to be replicated for recovery of serious learning loss of girls and boys in the province.



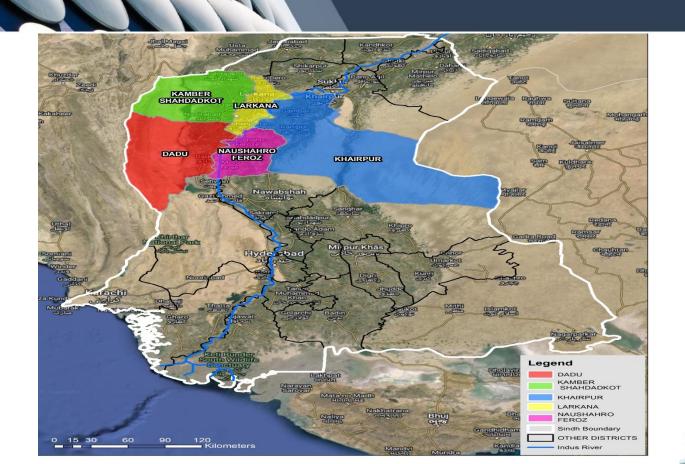
#### PROJECT HIGHLIGHTS

- Project: Sindh Secondary Education Improvement Project (SSEIP) ADB additional financing.
- Client: Project Implementation unit (PIU), SSEIP, School education and literacy dept (SELD), Government of Sindh
- No. of Schools: 722 (Fully Damaged Schools)
- No. of Districts: 05 (Dadu, Naushehro Feroze, Khairpur, Larkana and Kamber-Shehdadkot)

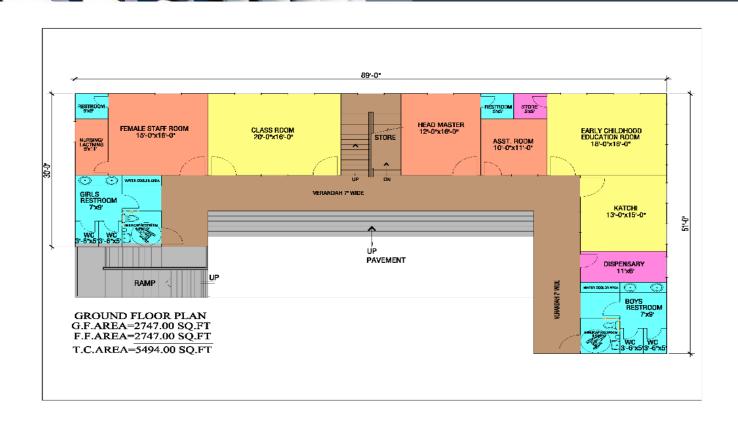
## Categorisation of Schools

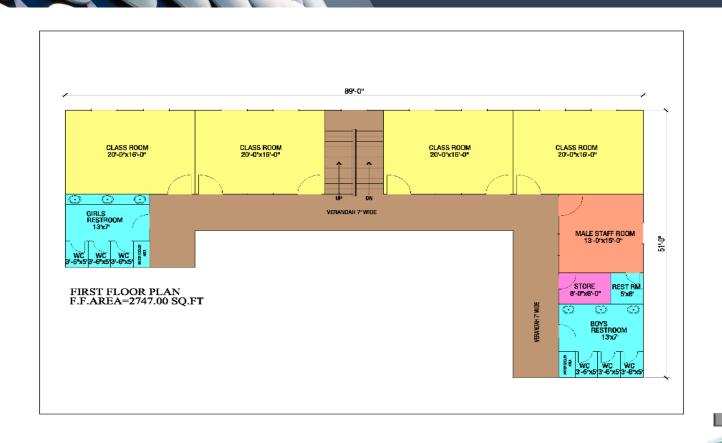
S.No	District	Talukas	Primary	Elementary	Secondary	Total
1	Dadu	Dadu	6	22	6	34
2	Kamber Shahdatkot	Kamber, Naseerabad,	4	39	14	57
3	Khairpur	Faiz Ganj, Khairpur Mirs, Kingri, Kot Digi, Mirwah, Sobhodero	44	213	104	361
4	Larkana	Larkana	5	18	5	28
5	Naushero Feroze	Bhirya, Kandiaro, Mehrabpur, Moro, Naushero Feroz	30	159	53	242
	TOTAL		89	451	182	722

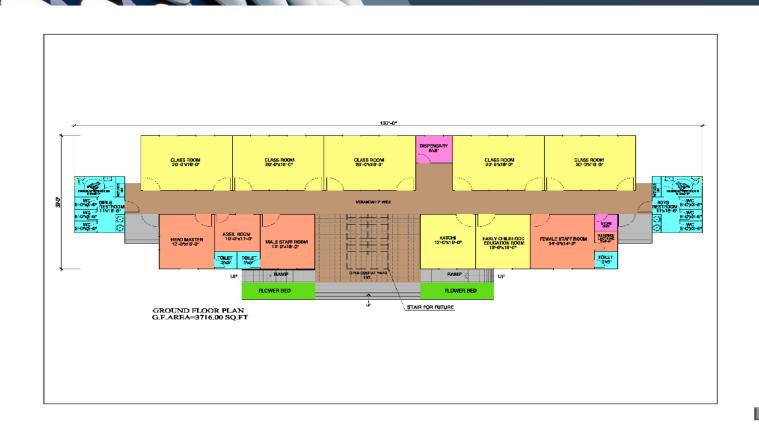
#### PROJECT GEOGRAPHICAL MAP

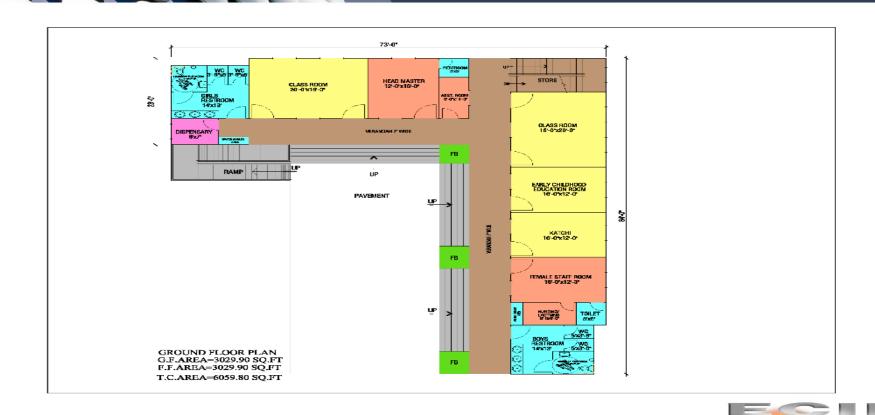


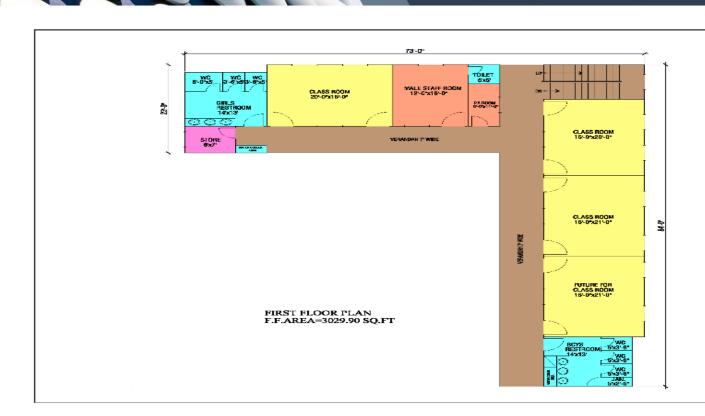


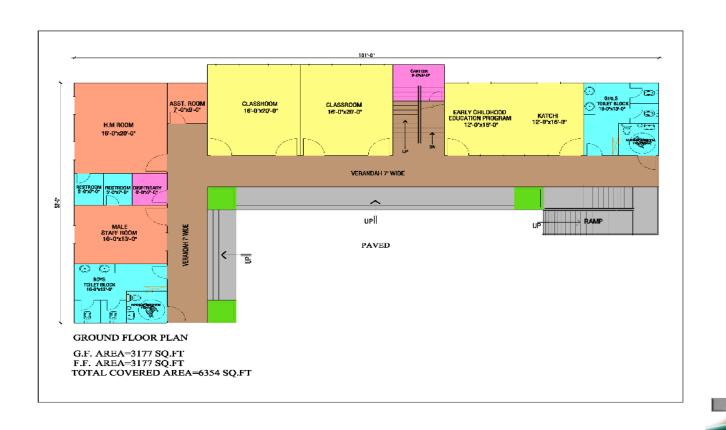


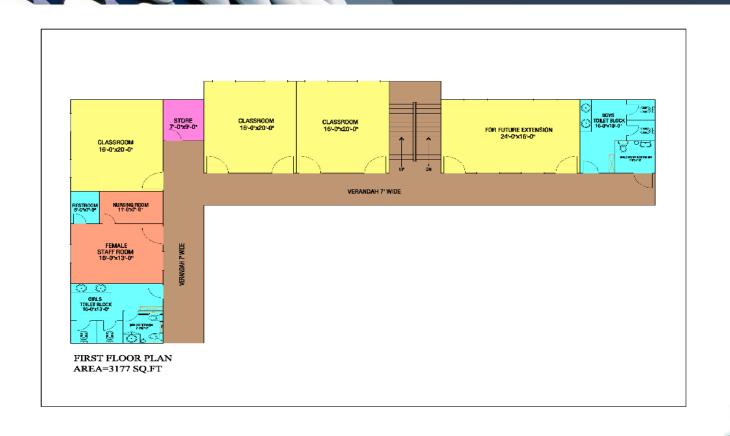


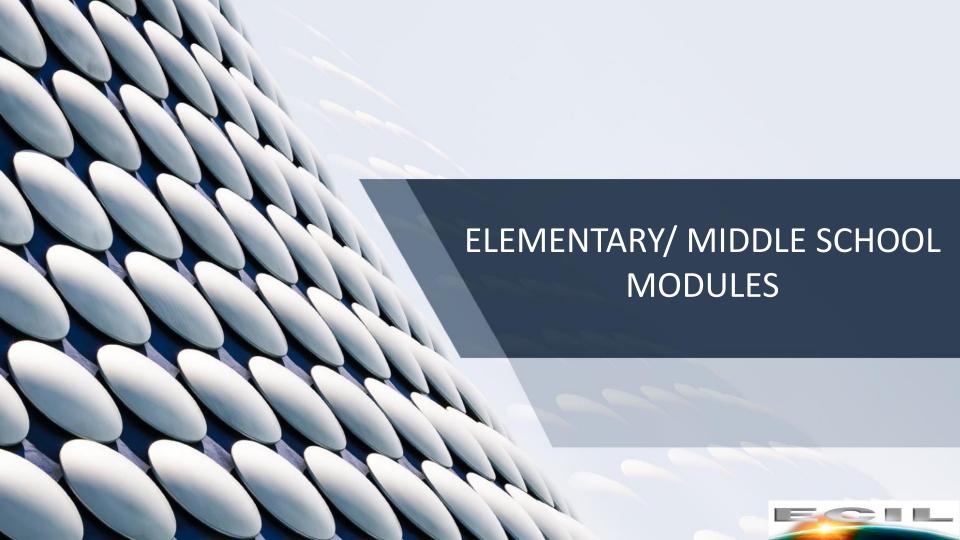










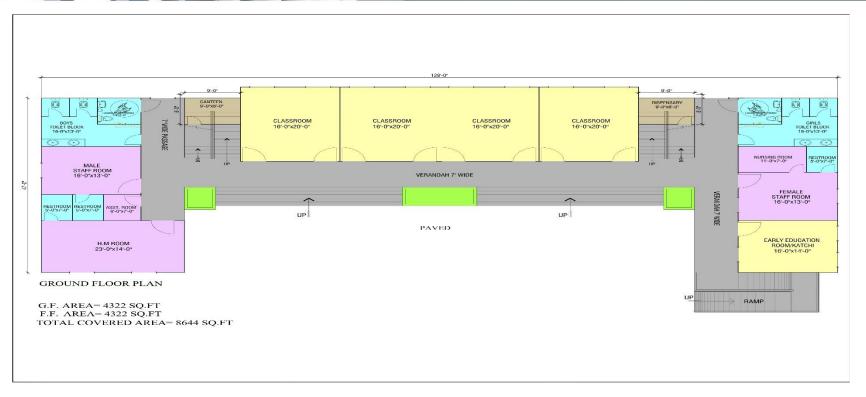


## **ES-01**



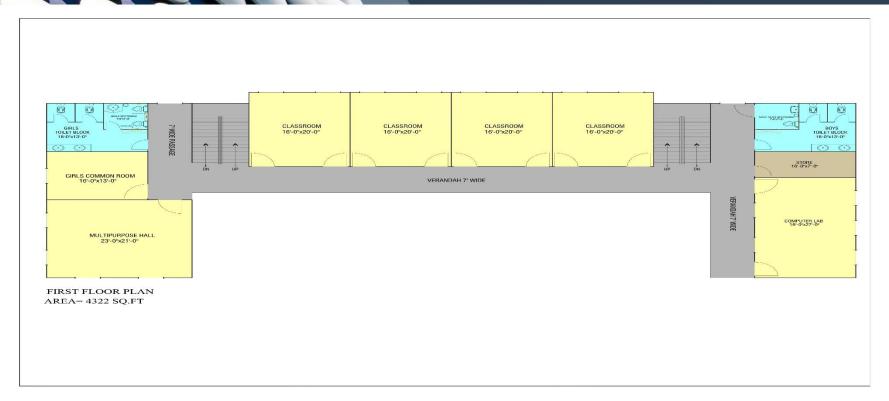


### **ES-02**





## ES-02

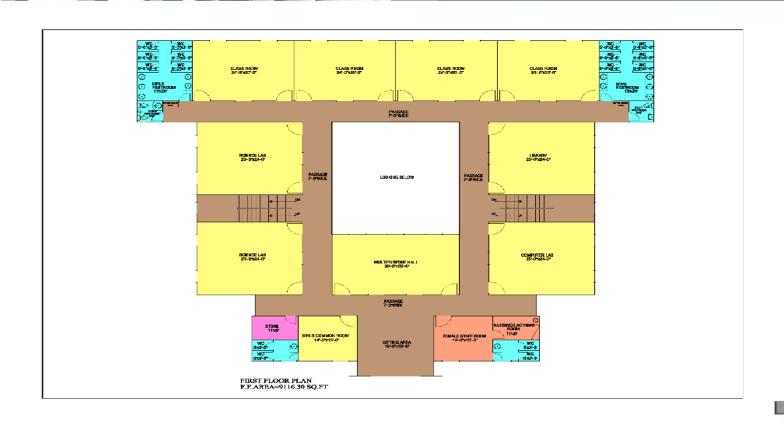


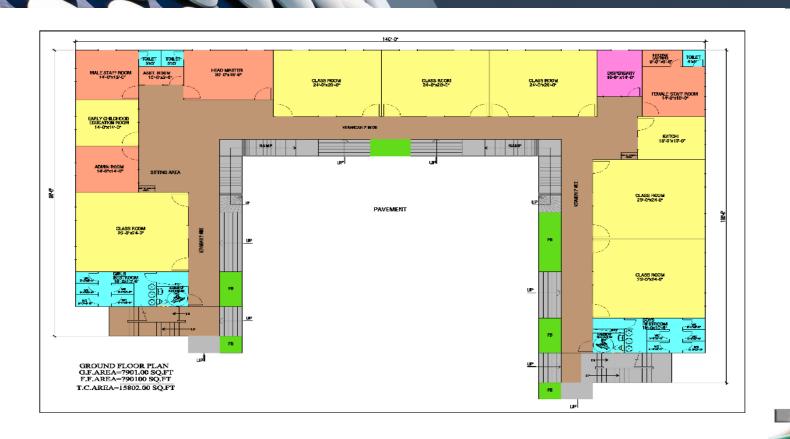


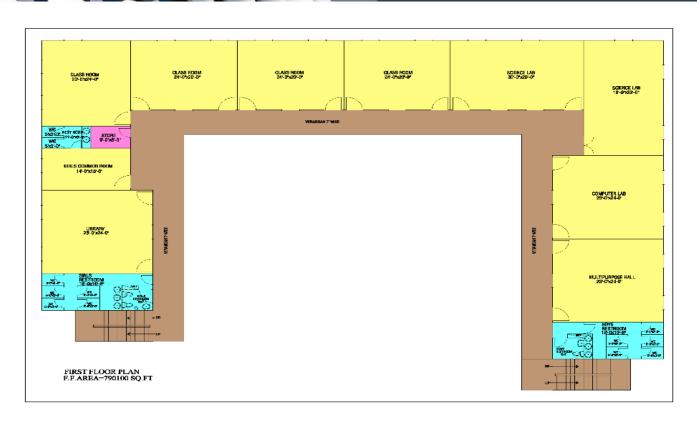






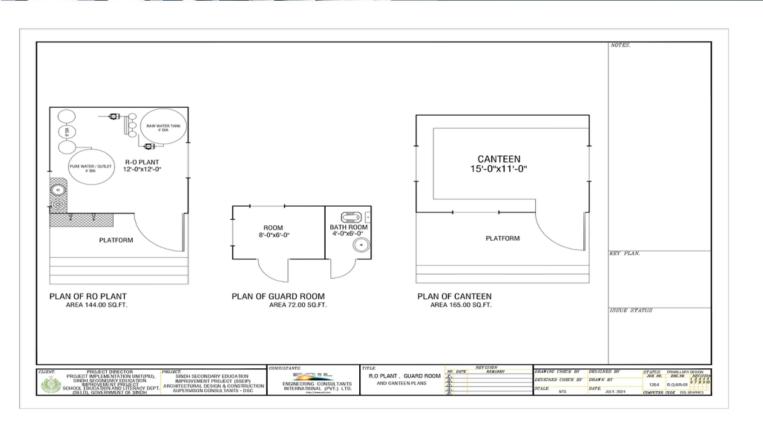








#### MISCELLANEOUS MODULE







# A- Design and Engineering Phase (Flood & climate resilient)

- Topo graphic survey
- Geo-technical investigation
- Environmental studies (IEE)
- Social safeguard study
- Gender responsiveness study
- Community Consultations
- HSE management planning

- Master planning
  - Architectural Design
  - Sub & Super Structural Design (LGSF)
  - MEP Design

RO Plant

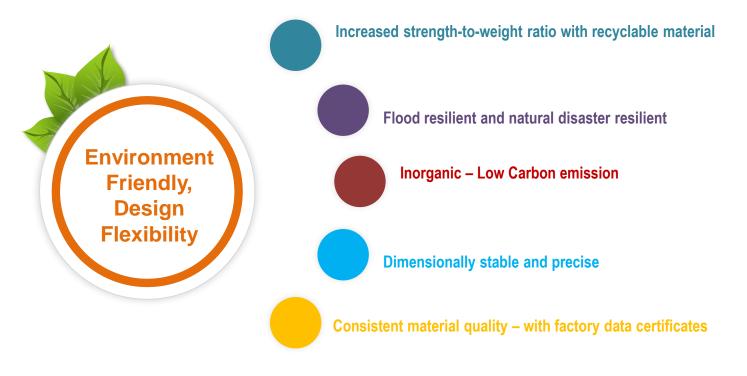
- External infra-structure Design
- Solar power system Design
- Flood resilient & climate resilient design

#### **B- Construction Phase**

- HSE management at sites
- Social safeguards at sites
- QA/QC assurance
- Effective scheduling and progress assessment mechanism.
- Availability of skilled workers and specialized equipment.
- Material procurement, fabrication and erection.

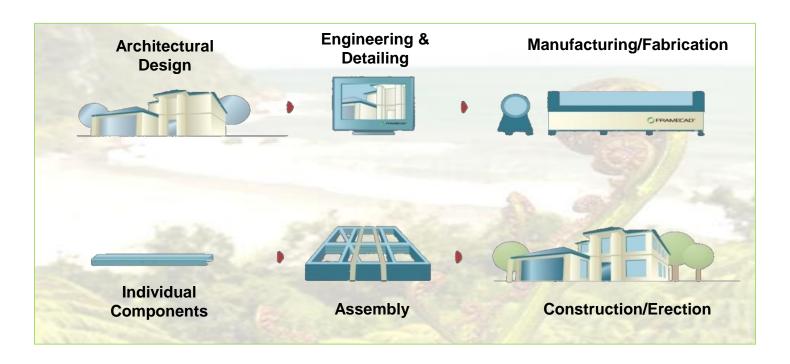
- Environment Protection
- Defect Liability

#### **SMART & GREEN CONSTRUCTION**





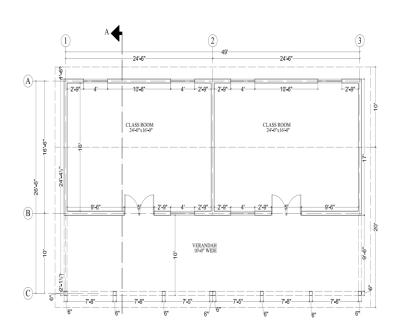
#### **PROJECT CYCLE**



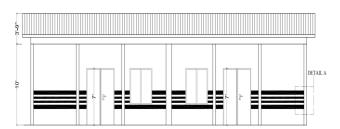


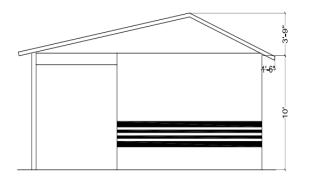


#### ARCHITECTURAL DESIGN



**FLOOR PLAN** 



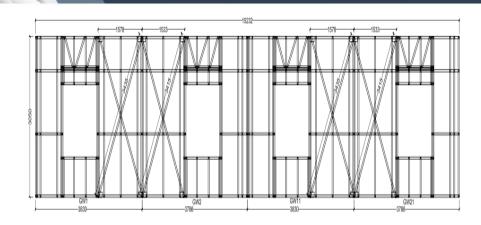




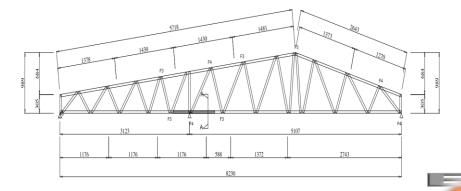


#### STRUCTURAL DESIGN

#### **WALL SECTION**



#### **TRUSS SECTION**



# LGSF STRUCTURE – MODEL SCHOOL BUILDINGS







#### COMPLETED MODEL SCHOOL BUILDINGS





# PROCUREMENT PROCCESS (Single Stage One Envelope – 1S1E)

Submission of Combined Technical & Financial Bids

& Financial Evaluation of Bids



#### **EPC/Turnkey/Design Build contract**

- Engineering, Procurement and Construction (EPC): providing a fully-equipped facility, ready for operation (at the turn of the key).
- The Contractor does most of the design and takes total responsibility for the design and construction of the infrastructure or other facility.
- The Contractor to assume responsibility for a wider range of risks. The Contractor bears the extra risks associated with enhanced certainty of final price and time.
- The final price is certain and the completion date is of extreme importance.



#### **EPC/Turnkey/Design Build contract**

- The project is required to fulfil the "Employer's Requirements",i.e., an outline or performance specification specified by the Employer.
- The "Employer's Requirements" describe the principle and basic design of the Works on functional basis.
- The project result meets the performance criteria specified by the Employer. The Employer will wish to know and follow progress of the work and be assured that the time programme is being followed. He will also wish to know that the work quality is as specified, that performance tests are met, and otherwise that the "Employer's Requirements" are being complied with.



#### EPC/Turnkey/Design Build contract

- Final Price is certain being Lump sum contract. The Contractor is to cover such risks as the occurrence of poor or unexpected ground conditions.
- The Project Manager (Employer's Representative) administers the Contract, monitors the manufacturing and erection on site or construction work.
- where there is a higher degree of certainty that the agreed contract price and time
  will not be exceeded and the Employer does not wish to be involved in the day-today progress of the work, provided the end result meets the performance criteria
  he has specified.



