



RESILIENT HOUSING DESIGN IN FRAGILE SETTINGS_RES-HOUSE

SITE

LOCATION: SUJAWAL, THATTA
PLOT SIZE: 44'-6" X 29'-0"



SUJAWAL IS A DISTRICT IN SINDH, PAKISTAN, HAVING A POPULATION OF 2.2 MILLION. THE SOCIO-ECONOMIC CONDITION IS GENERALLY POOR. IT TYPICALLY RECEIVES 15.58 MILLIMETERS OF PRECIPITATION AND HAS 19.48 RAINY DAYS ANNUALLY.

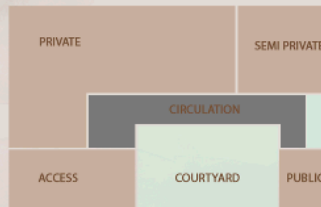
CONCEPT

VERNACULAR-TRADITIONAL ARCHITECTURE

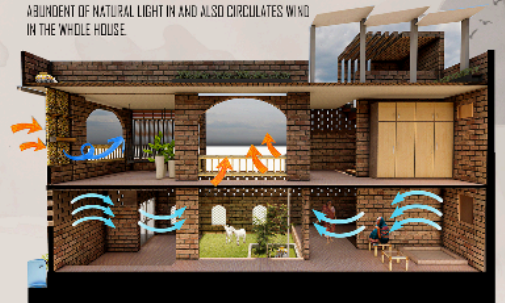
This concept is to create a design based on vernacular traditional architecture. The house would be constructed to support communal life and local traditions while also providing flood resistance, nature inclusivity, and cultural rejuvenation. Though situated in a low-lying region susceptible to inundation by the flood, the undertaking shall be established within the location. The house would be designed to be energy-efficient, comfortable, and long-lasting. It would also be flood-resistant, with locally sourced materials and design elements that serve to lessen the consequences of floods.

ZONING

Zoning is done keeping in mind the privacy factor required in Rural Areas. The central courtyard which connects the whole house together is adapted by seeing the traditional 'Sehaans' in rural areas which enhances the privacy of house and can be used for multiple purposes. The Baithak area is placed near the entrance so guests can easily access it without overlooking the private spaces of residence. Courtyard is oriented towards West to bring more wind in.



COURTYARD SERVES MORE THAN AESTHETICS. IT BRINGS ABUNDANCE OF NATURAL LIGHT IN AND ALSO CIRCULATES WIND IN THE WHOLE HOUSE.



STACK EFFECT IS CREATED DUE TO THE USE OF PERFORATED BRICKS, WHICH ASSURES THE THERMAL COMFORT OF RESIDENTS.

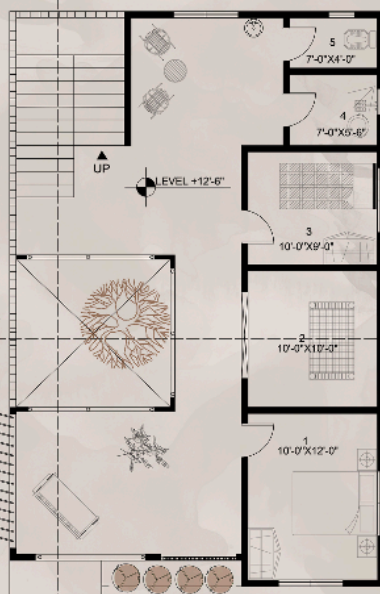


GROUND FLOOR PLAN



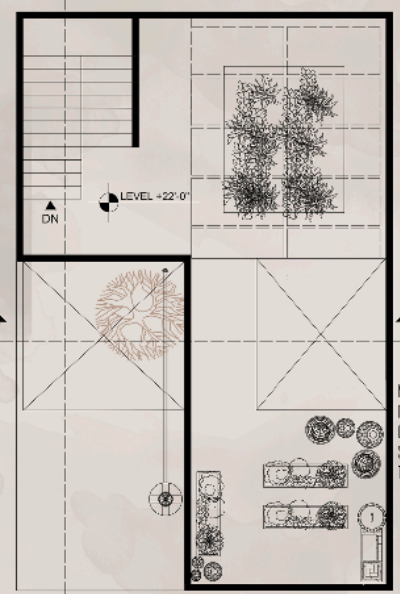
- 1-COURTYARD
- 2-LIVING/BAITHAK
- 3-BEDROOM
- 4-KITCHEN
- 5-BATH
- 6-TOILET
- 7-HAUDI

FIRST FLOOR PLAN



- 1-BEDROOM
- 2-BAITHAK
- 3-BEDROOM
- 4-BATH
- 5-TOILET

ROOF PLAN



MULTIFUNCTIONAL ROOF HAVING ROOF GARDENS, SITTING SPACES AND TANDOOR

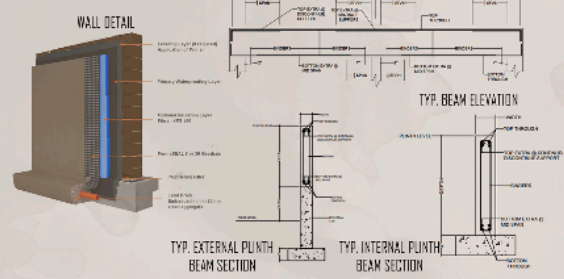


SCALE 1"=3/16"

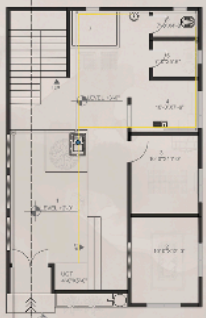
ELECTRICAL LAYOUT

PLUMBING LAYOUT

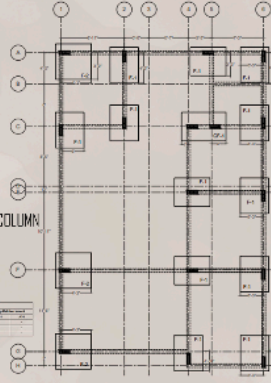
STRUCTURAL LAYOUT



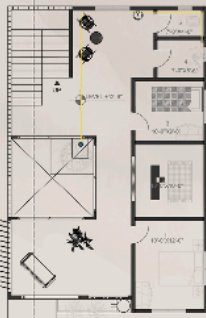
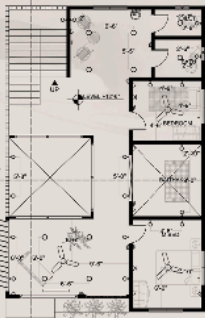
NO.	DESCRIPTION	AMOUNT
1	SWITCH	10
2	PLUG POINT	15
3	WATER HEATER	1
4	WATER TAP	10
5	WATER TAP	10
6	WATER TAP	10
7	WATER TAP	10
8	WATER TAP	10
9	WATER TAP	10
10	WATER TAP	10



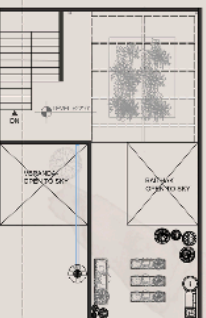
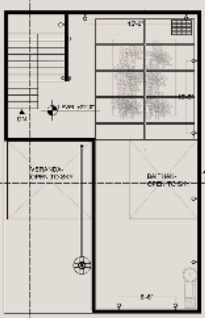
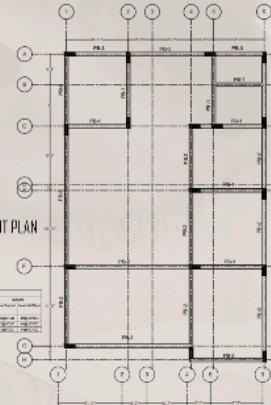
NO.	DESCRIPTION	AMOUNT
1	WATER SUPPLY PIPE	100
2	WATER SUPPLY PIPE	100
3	WATER SUPPLY PIPE	100
4	WATER SUPPLY PIPE	100
5	WATER SUPPLY PIPE	100
6	WATER SUPPLY PIPE	100
7	WATER SUPPLY PIPE	100
8	WATER SUPPLY PIPE	100
9	WATER SUPPLY PIPE	100
10	WATER SUPPLY PIPE	100



NO.	DESCRIPTION	AMOUNT
1	FOUNDATION	10
2	FOUNDATION	10
3	FOUNDATION	10
4	FOUNDATION	10
5	FOUNDATION	10
6	FOUNDATION	10
7	FOUNDATION	10
8	FOUNDATION	10
9	FOUNDATION	10
10	FOUNDATION	10



NO.	DESCRIPTION	AMOUNT
1	PLINTH BEAM	10
2	PLINTH BEAM	10
3	PLINTH BEAM	10
4	PLINTH BEAM	10
5	PLINTH BEAM	10
6	PLINTH BEAM	10
7	PLINTH BEAM	10
8	PLINTH BEAM	10
9	PLINTH BEAM	10
10	PLINTH BEAM	10



NO.	DESCRIPTION	AMOUNT
1	SLAB REINFORCEMENT	10
2	SLAB REINFORCEMENT	10
3	SLAB REINFORCEMENT	10
4	SLAB REINFORCEMENT	10
5	SLAB REINFORCEMENT	10
6	SLAB REINFORCEMENT	10
7	SLAB REINFORCEMENT	10
8	SLAB REINFORCEMENT	10
9	SLAB REINFORCEMENT	10
10	SLAB REINFORCEMENT	10

