

**LOCATION**  
COORDINATES  
YEAR COMPLETED  
AREA  
ARCHITECTS  
CLIENTS

- LANGKAWI ISLAND  
- 6.286186, 99.737602  
- 2009  
- 580.6 sqm  
- WHBC ARCHITECTS  
- BOB GABRIEL &  
ANGELA GABRIEL

**CLIENTS' BRIEF**  
- A FORM OF SARAWAK LONG HOUSE  
- AVOID FROM CUTTING DOWN TREES

**ARCHITECTS PROPOSALS**  
- ONE ROOM WIDE DWELLING  
- ROOMS RAISED ON STILTS  
- GROUND FLOOR OPEN TO BREEZE  
- HUGE OVERHANG  
- WIDE VERANDAHS ON LONG ELEVATIONS  
- TIMBER STAIRS WITH STEEL RODS WITH LOCKABLE GATE

**CLIENTS AND ARCHITECTS APPROVALS**  
- BUILDING MAINLY FROM RECLAIMED TIMBER MATERIALS  
- UPHILL ENTRANCE ROAD TO MINIMISE DEFORESTATION



SITE DATA : LANGKAWI ISLAND

| SUN PATH                                  | TEMPERATURE  | WIND SPEED   | RELATIVE HUMIDITY & PRECIPITATION   |
|---|--|--|---|
| SUNRISE DURATION<br>• WITHIN 0700 TO 0730 | AVERAGE HIGH TEMPERATURE<br>• 30°C TO 33°C<br>• HIGHEST : 33°C | APRIL TO NOVEMBER<br>• LIGHT BREEZE<br>• ~4 KNOTS (7.4 km/h)             | RAINY SEASON (≥15 DAYS / MONTH)<br>• APRIL TO NOVEMBER<br>• AVG. PPT : 110mm - 380mm<br>• HUMIDITY: 81% - 85% |
| SUNSET DURATION<br>• WITHIN 1900 TO 1940  | AVERAGE LOW TEMPERATURE<br>• 24°C TO 25°C<br>• LOWEST : 19°C   | DECEMBER TO MARCH<br>• MODERATE BREEZE<br>• ~5-6 KNOTS (9.0 - 11.0 km/h) | DRY SEASON (≤10 DAYS / MONTH)<br>• DECEMBER TO MARCH<br>• AVG. PPT : 57mm - 105mm<br>• HUMIDITY: 76% - 78%    |

S.W.O.T ANALYSIS

**STRENGTH**

- HIGH GROUNDS
- LUSH GREENS

**WEAKNESS**

- ACCESS ISSUES

**OPPORTUNITY**

- EXCELLENT SCENERY
- PEACEFUL ENVIRONMENT

**THREAT**

- PESTS & WILD ANIMALS
- POSSIBLE LANDSLIDES

**DESIGN PROS**

- FULFILLS VERNACULAR DESIGN
- FULLY UTILIZE USED MATERIALS
- PEACE & SERENITY ACHIEVED

**DESIGN CONS**

- PESTS
- HIGHER FIRE OUTBREAK RISK
- NO WORKING SPACE

CONSTRUCTION MATERIALS

**RUSTIC MATERIALS**  
THE TELEGRAPH POLE HOUSE IS MAINLY BUILT BY RECLAIMED TIMBER WITH A RAW PATINA GREY TEXTURE, EXPRESSING A RUSTIC AESTHETICS.

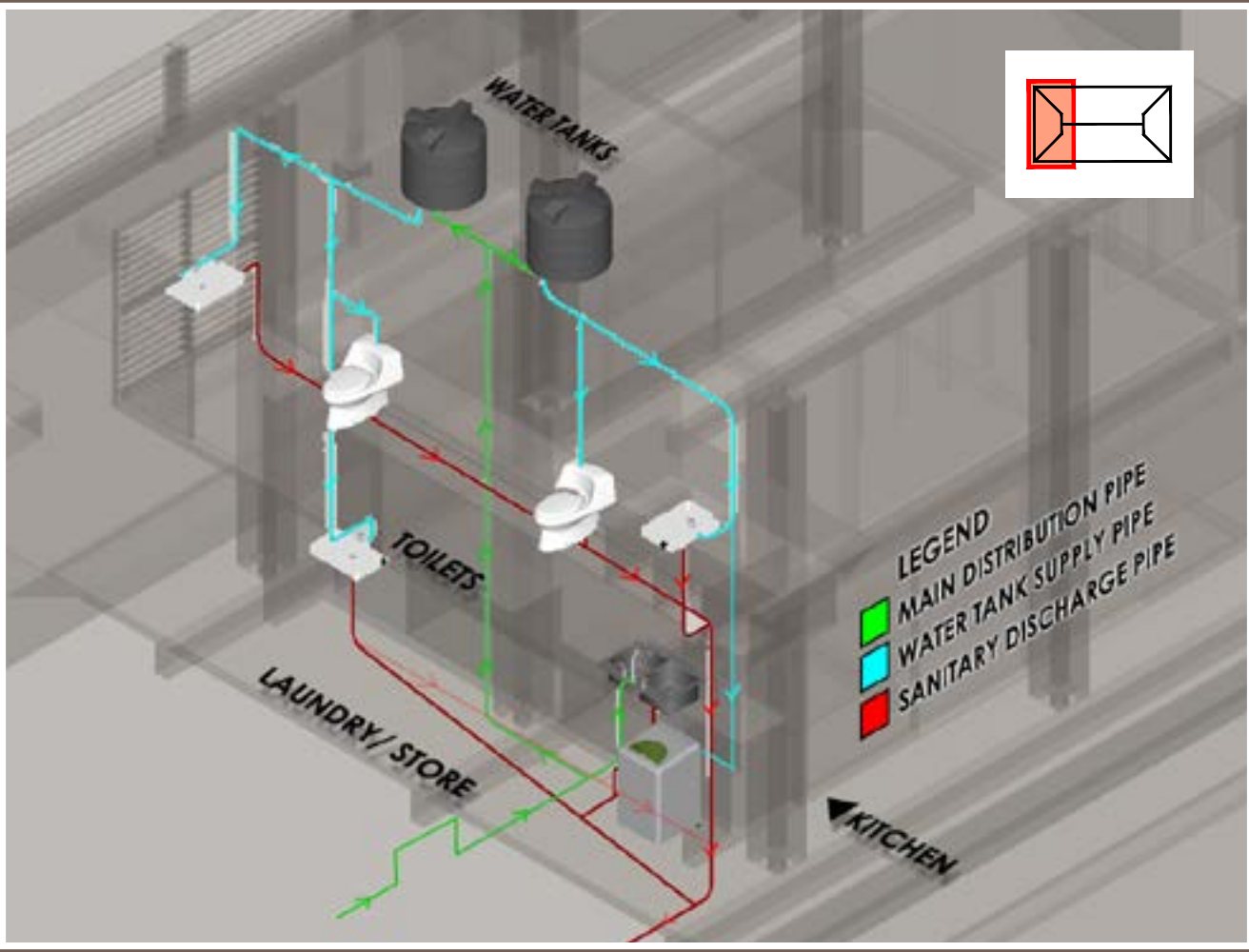
USED TIMBER TELEGRAPH POLE  
USED BELIAN WOOD SHINGLES  
STEEL RODS

SCARF JOINT CONNECTION

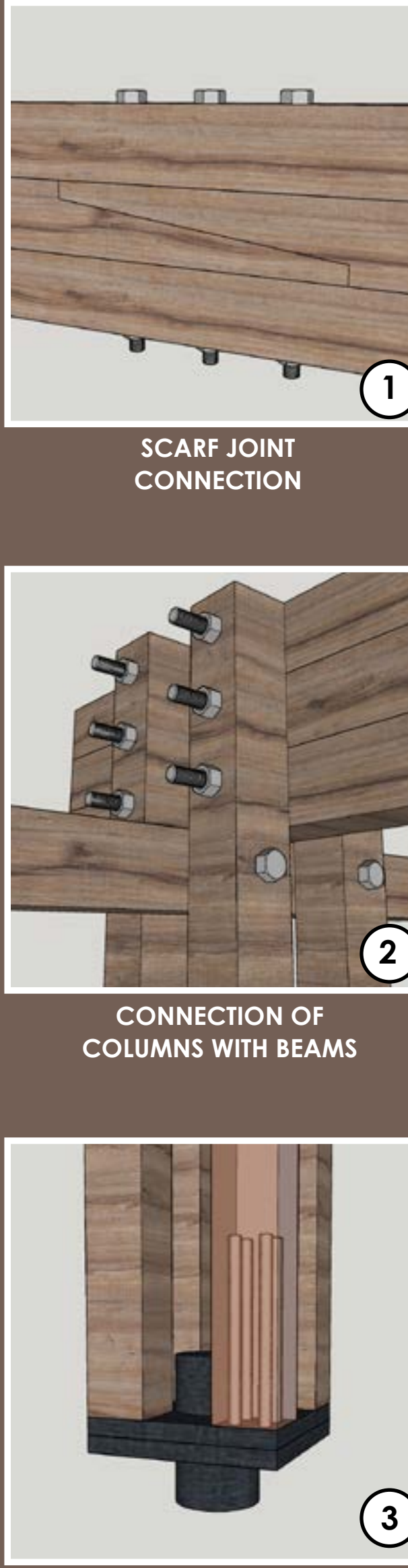
EXPOSED CLAY BRICKS  
SMOOTH CONCRETE FINISH  
GLASS WITH ALUMINUM FRAMING

CONNECTION OF COLUMNS WITH BEAMS

SERVICES DIAGRAMS



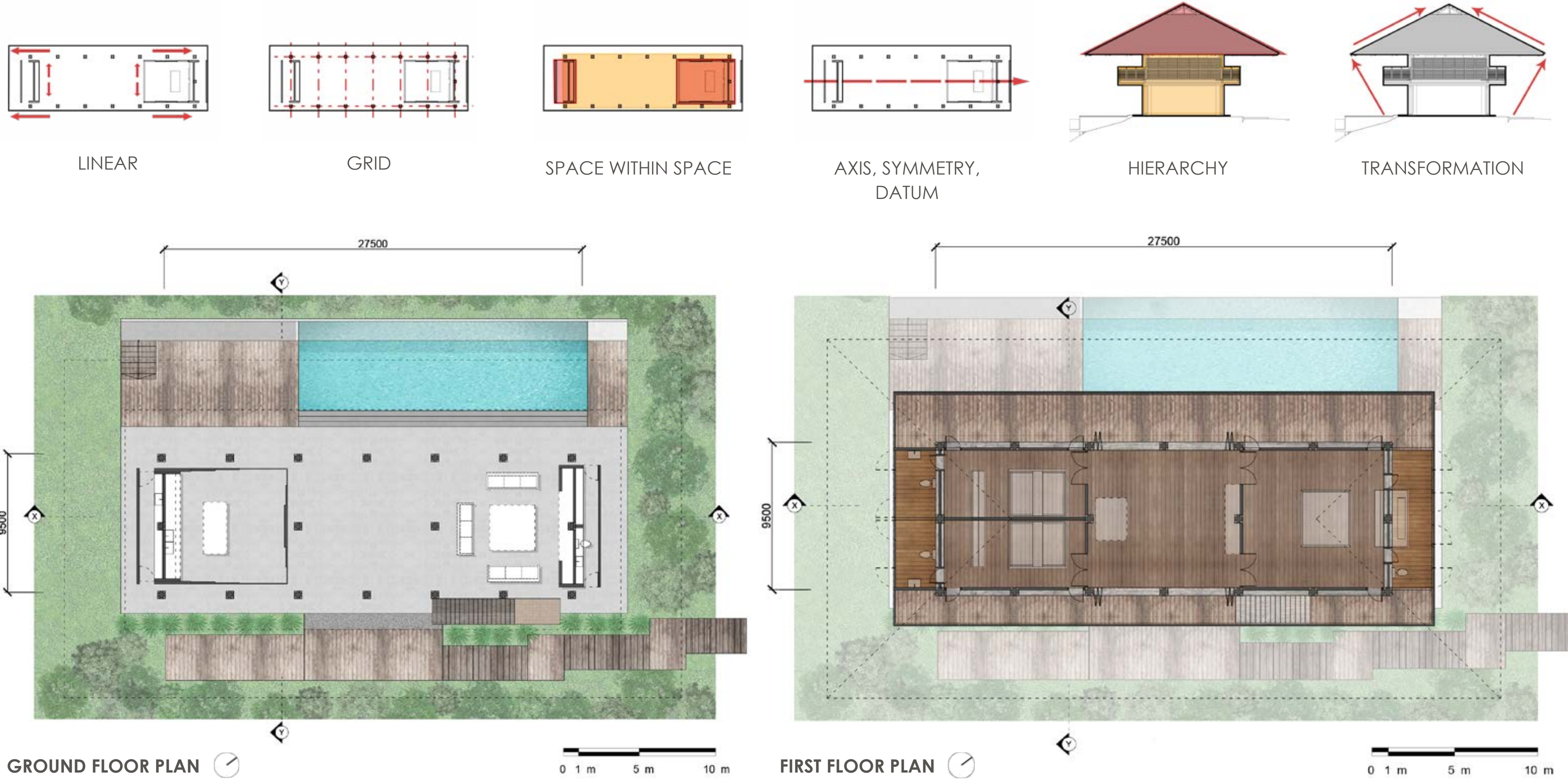
CONSTRUCTION DETAILS



PRECEDENT STUDY :  
TELEGRAPH POLE HOUSE



DESIGN FEATURES AND ORDERING PRINCIPLES



PASSIVE DESIGN FEATURES

