



Society of Nepalese Architects (SONA) COUNTRY REPORT



ARCASIA 36th Council Meeting

Ayutthaya, Thailand
12-13 November 2015



Society of Nepalese Architects (SONA) COUNTRY REPORT



About SONA

- Society of Nepalese Architects (SONA) was formally established on 30 October 1990 by a team of practicing Nepalese architects. It is an independent nonprofit organization of architectural professionals of Nepal. It was founded for the dignified aim to promote national development through architecture and to maintain the companionship, support and professional ethics within the architects and safeguard their professional rights.
- SONA has its own office space at the top floor of Churchill Complex, Sundhara, Kathmandu.



Society of Nepalese Architects (SONA) COUNTRY REPORT



Membership of Regional & Asian Forums

- **ARCASIA**
- **SAARCH**



Society of Nepalese Architects (SONA) COUNTRY REPORT



Types of Members & non-members

■ Current Membership

■ Total Members	759
■ General Members	565
■ Life Members	194
■ Associate Members	1
■ Honorary Members	0



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SONA Committees

- **Committee on Council Advocacy**
- **Committee on International Relations**
- **Committee on Architecture Education**
- **Committee on Green and Sustainable Architecture**
- **Committee on Professional Practice**
- **Committee on Social Responsibility**
- **Committee on Policy**
- **Committee on Publication, Communication and Outreach**
- **Committee on Young Architects**



Society of Nepalese Architects (SONA) COUNTRY REPORT



Representation in Government

- National Planning Commission
- Ministry of Urban Development
- Local Authorities
- National Building Code Revision Committee
- Post-disaster Need Assessment (PDNA)



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Training Programs

- Detailed Damage Assessment
- Building Code Implementation
- Risk Sensitive Land-use Planning
- Earthquake Resistant Building Design
- Training for Masons, etc



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SOPNA's Series of Discussion Program

- 1. Urban regeneration of historic settlements of Kathmandu Valley.
- 2. Reconstruction of Dharahara (Bhimsen Tower)
- 3. Earthquake memorial and parks
- 4. Reconstruction of heritage sites and cultural monuments.
- 5. Recovery of private housing colonies.
- 6. Reconstruction of Rural housing



Society of Nepalese Architects (SONA)

Post-disaster Reconstruction of Nepal

SONA's Response

- **Immediate Relief Operation**
 - **Rapid Damage Assessment**
 - **Debris Removal & Management**
 - **Training / Workshop / Orientation Programs**
 - **Damage Assessment & Repair**
 - **Establishing Common Opinion & Commitment**
 - **Damage Assessment of Pilot Settlements/
Documentation with Recommendations**
 - **Information Dissemination**



Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

25 April 2015: Extent of Damage





Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

25 April 2015: Extent of Damage





Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

25 April 2015: Extent of Damage



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Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

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25 April 2015: Extent of Damage





Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

SONA's Immediate Response

- Health Camps
- Debris Management





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ARCASIA President Ar. Nui's Visit to Kathmandu

- 8-10 May 2015





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IIA President Ar. Dibya Kush's Visit to Ktm.

- 16-18 July 2015





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Post-disaster Reconstruction of Nepal

Donations Received from ARCASIA Family

Association of Siamese Architects (ASA)	US\$ 10,800
Association of Lao Architects & Civil Engineers (ALACE)	US\$ 3,384
Korea Institute of Architects (KIRA)	US\$21,025
Singapore Institute of Architects (SIA)	US\$ 15,557
Bangladesh	US\$ 1,900
Malaysia	US\$ 8,000
Institute of Architects, Pakistan (IAP)	US\$ 10,012
Srilanka	SP 3,200
Philippines	US\$ 2,000
<hr/>	
TOTAL Approx. US\$ 68,000	



Society of Nepalese Architects (SONA)

Post-disaster Reconstruction of Nepal

The Response Strategy of SONA

- **Early Recovery**
 - **Temporary / Transitional Shelters**
 - **Design /Construction of Temporary Shelters**
 - **Design Competition**
 - **Type Designs**
 - **To withstand rainy season, using locally available materials**
 - **Mobilization of 50 Architects Volunteers for preparing measured drawings of cultural minuments**



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Post-disaster Reconstruction of Nepal

The Response Strategy of SONA

- **The Reconstruction and Recovery Efforts**
 - **Detailed Need Assessment**
 - **Promoting & utilization of local resources**
 - **Mobilization of teams in 4 Pilot Areas**
 - I. Rural Area**
 - II. Urban & Peri-urban Area**
 - III. Historical Settlements**
 - IV. Built-heritage / Monuments**



BUNGMATI

SITE SPECIFIC DESIGN





Urban Regeneration in Sankhu

Post-disaster Reconstruction of Nepal

Case Study: Historic Town of SANKHU

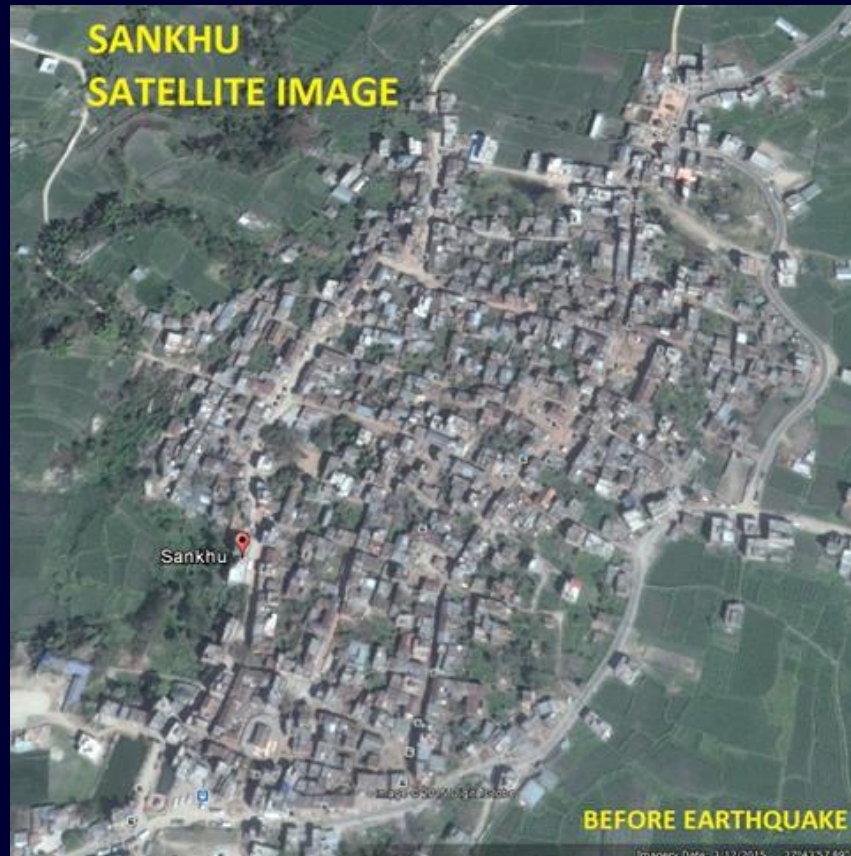




Urban Regeneration in Sankhu

Post-disaster Reconstruction of Nepal

SANKHU: Before After





Urban Regeneration in Sankhu Post-disaster Reconstruction of Nepal

SANKHU: Damage Assessment

DAMAGE ASSESSMENT OF SANKHU, KATHMANDU VALLEY, NEPAL

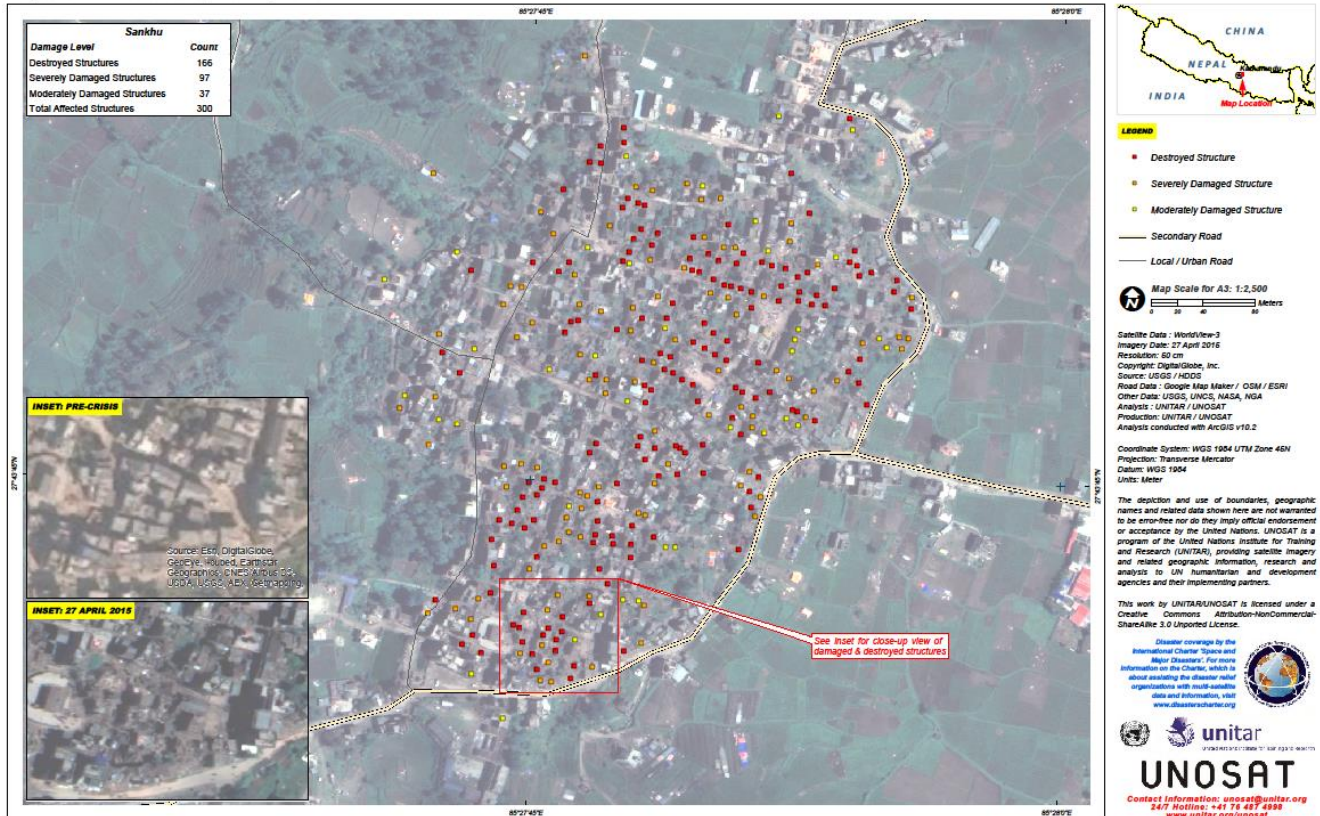
Analysis with WorldView-3 Data Acquired 27 April 2015

This map illustrates satellite-detected damage and destruction in the town of Sankhu, Kathmandu Valley, Nepal. Located northeast of Kathmandu city, Sankhu was significantly impacted by the 25 April 2015 earthquake in Nepal. Using satellite imagery acquired 27 April 2015, UNITAR / UNOSAT identified a total of 300 affected structures.

Approximately 166 of these were destroyed, 97 severely damaged, and 37 moderately damaged. This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR / UNOSAT.

Earthquake

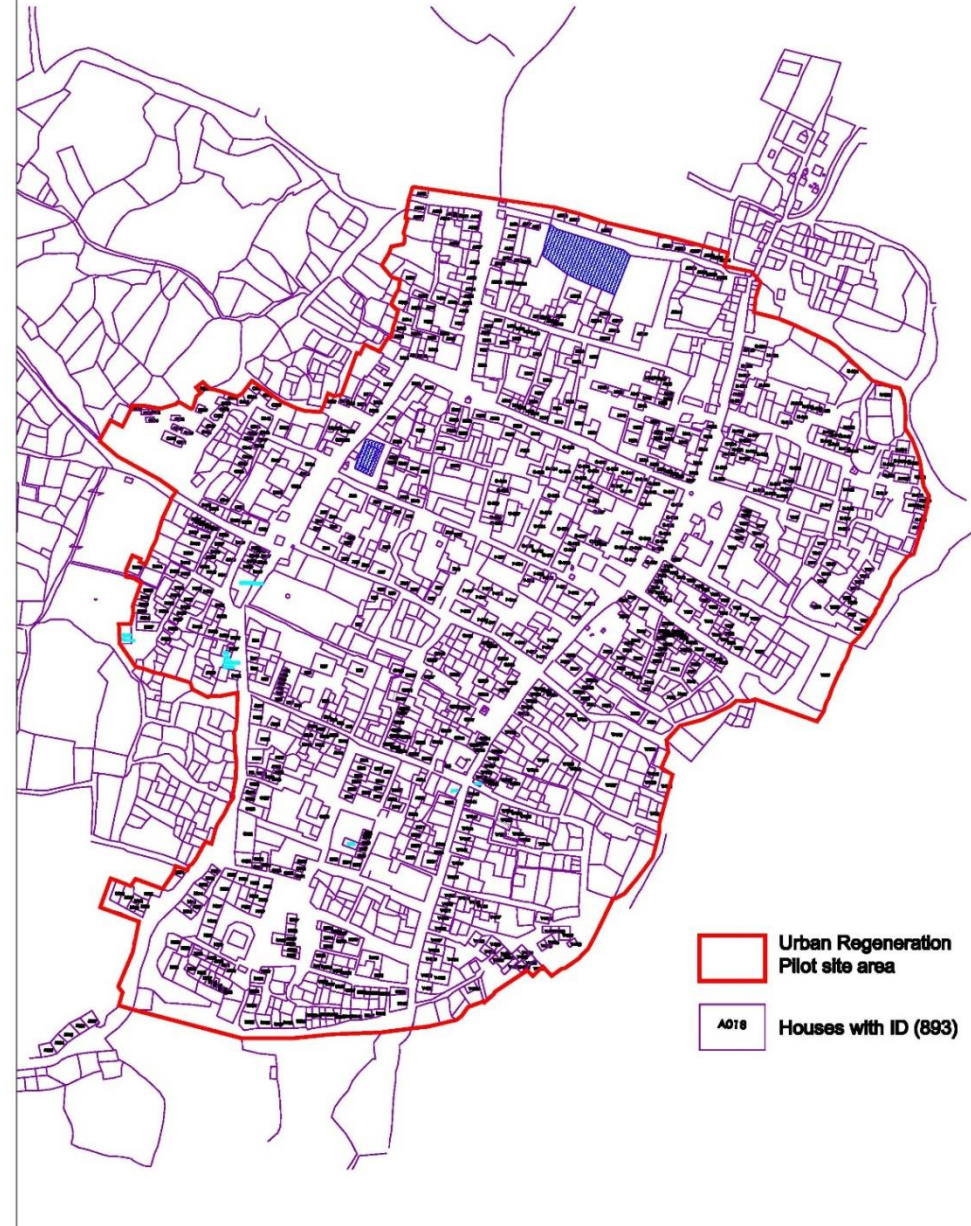
 Production Date: 4/20/2015
 Version 1.0
 Activation Number: EQ20150425NPL





HOUSE ID MAP OF SANKHU

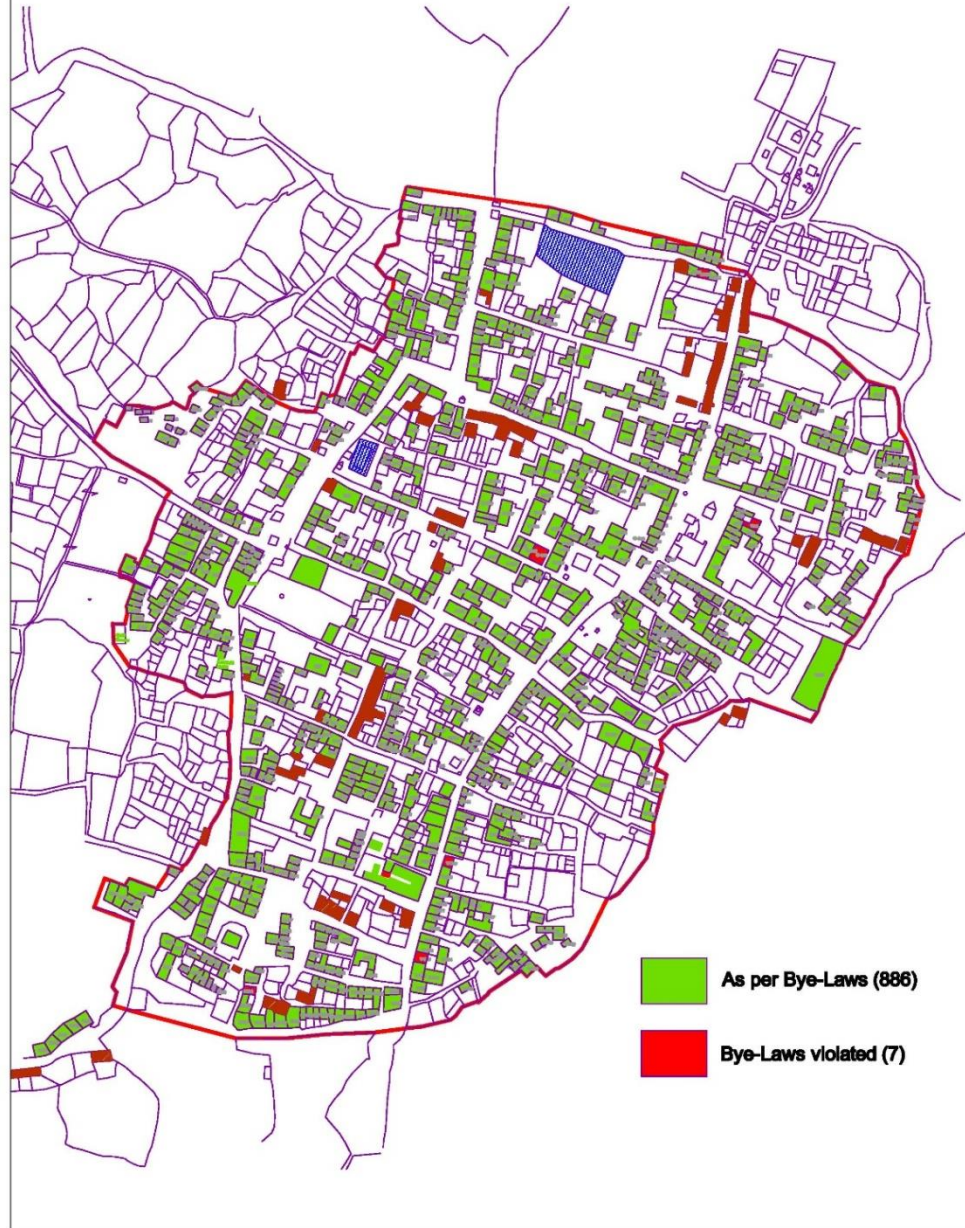
JULY 2015



-  Urban Regeneration Pilot site area
-  Houses with ID (893)



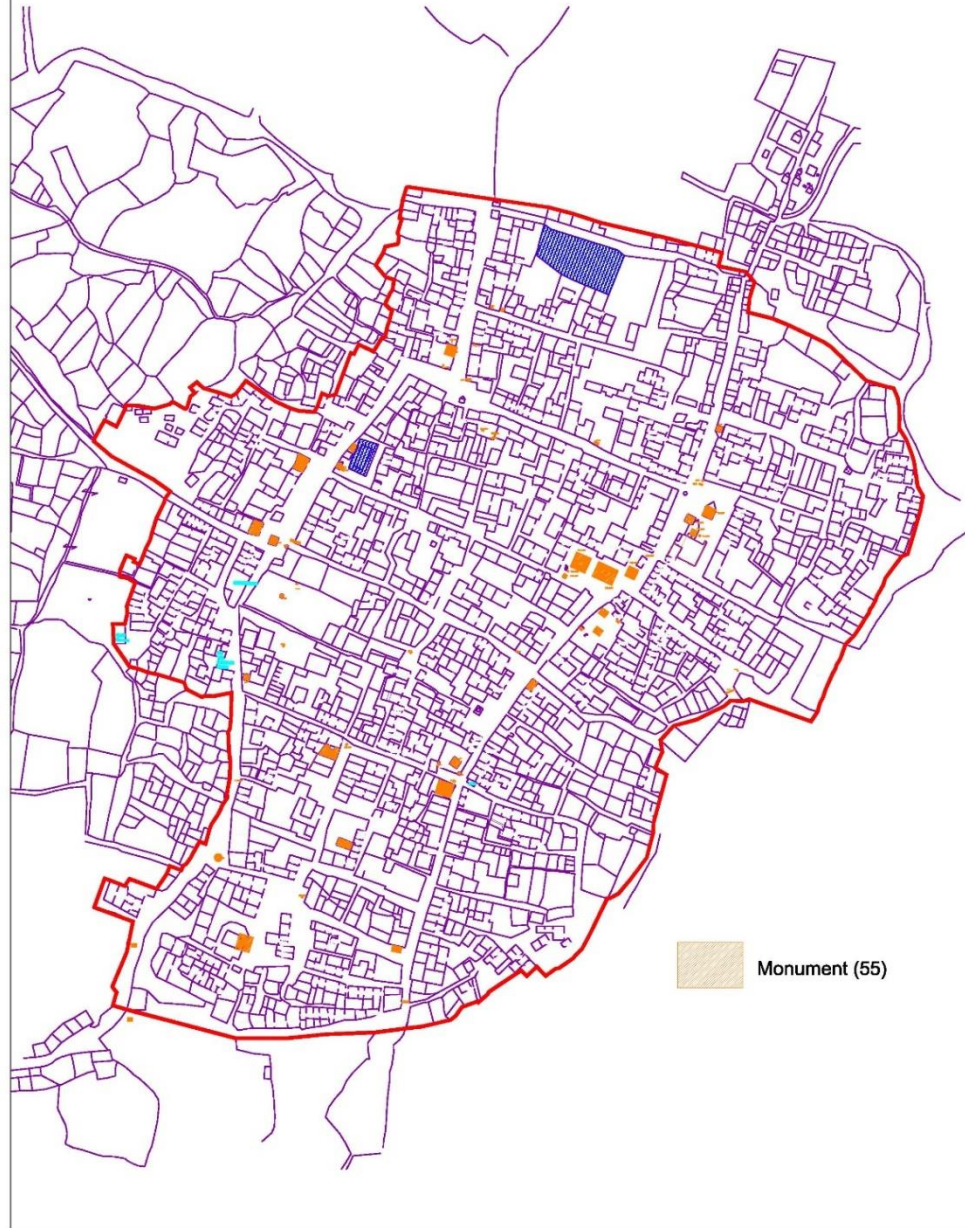
BUILDING BYE LAWS VIOLATION MAP OF SANKHU JULY 2015





MONUMENT MAP OF SANKHU

JULY 2015

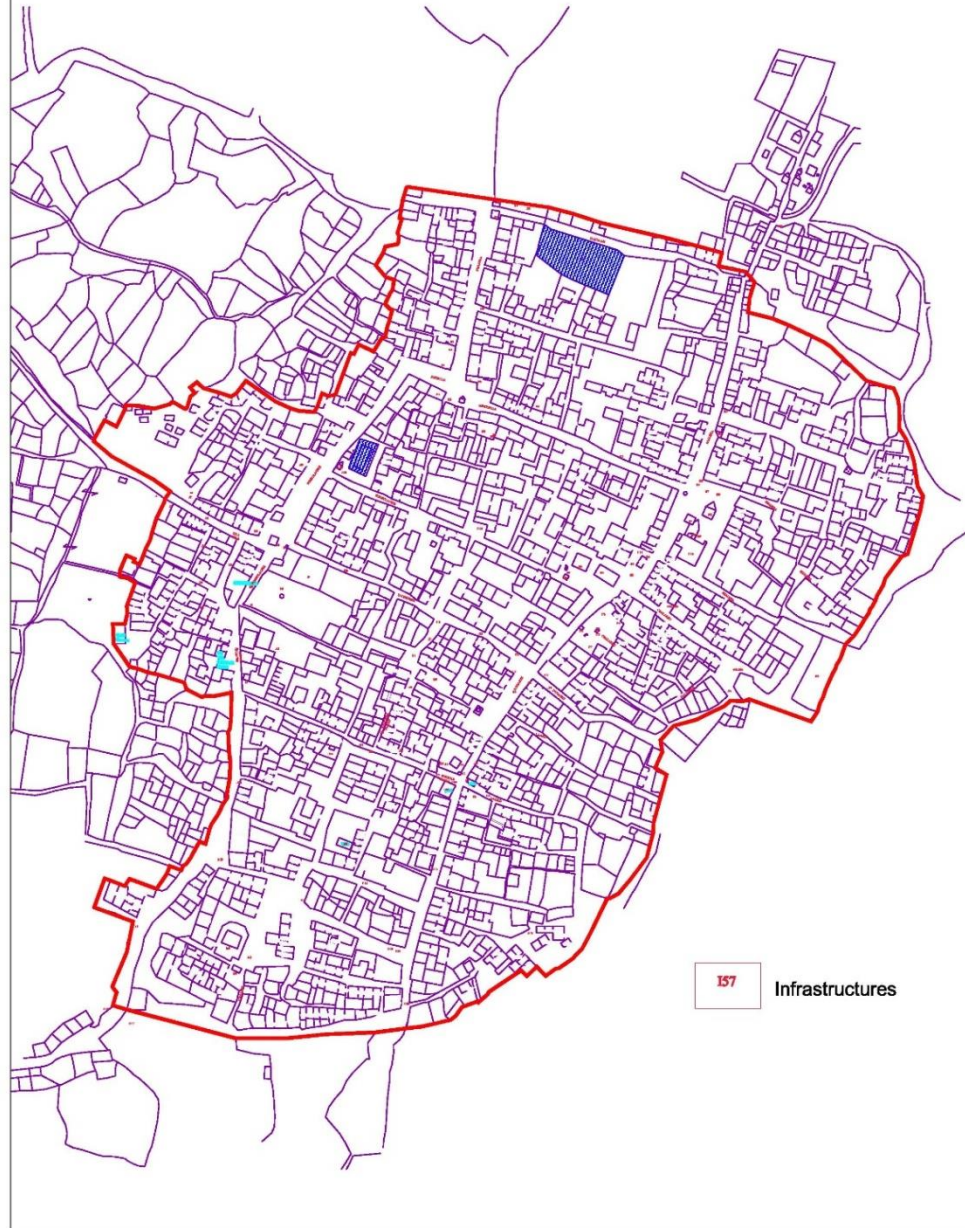


Monument (55)



INFRASTRUCTURE MAP OF SANKHU

JULY 2015

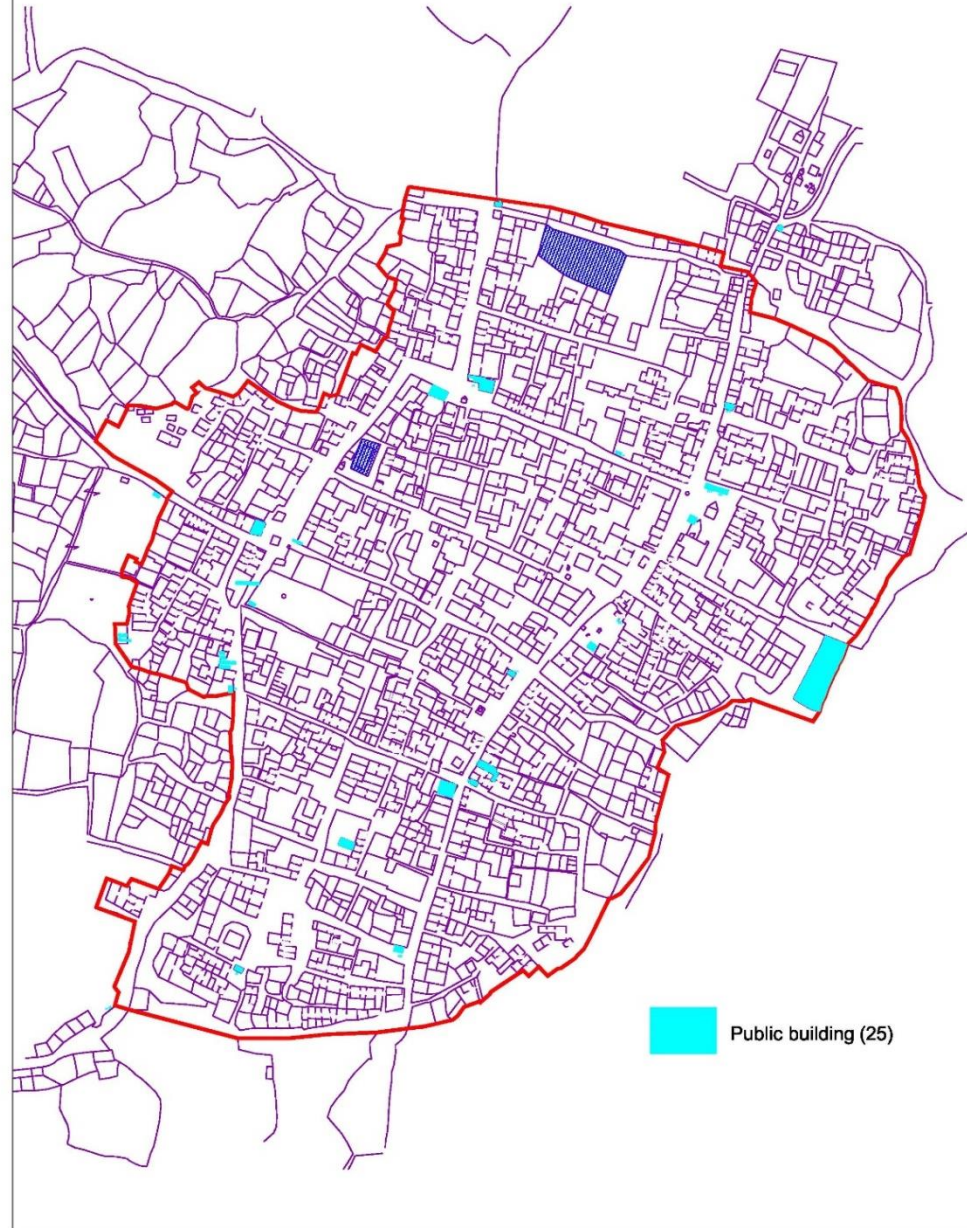


157 Infrastructures



PUBLIC BUILDING MAP OF SANKHU

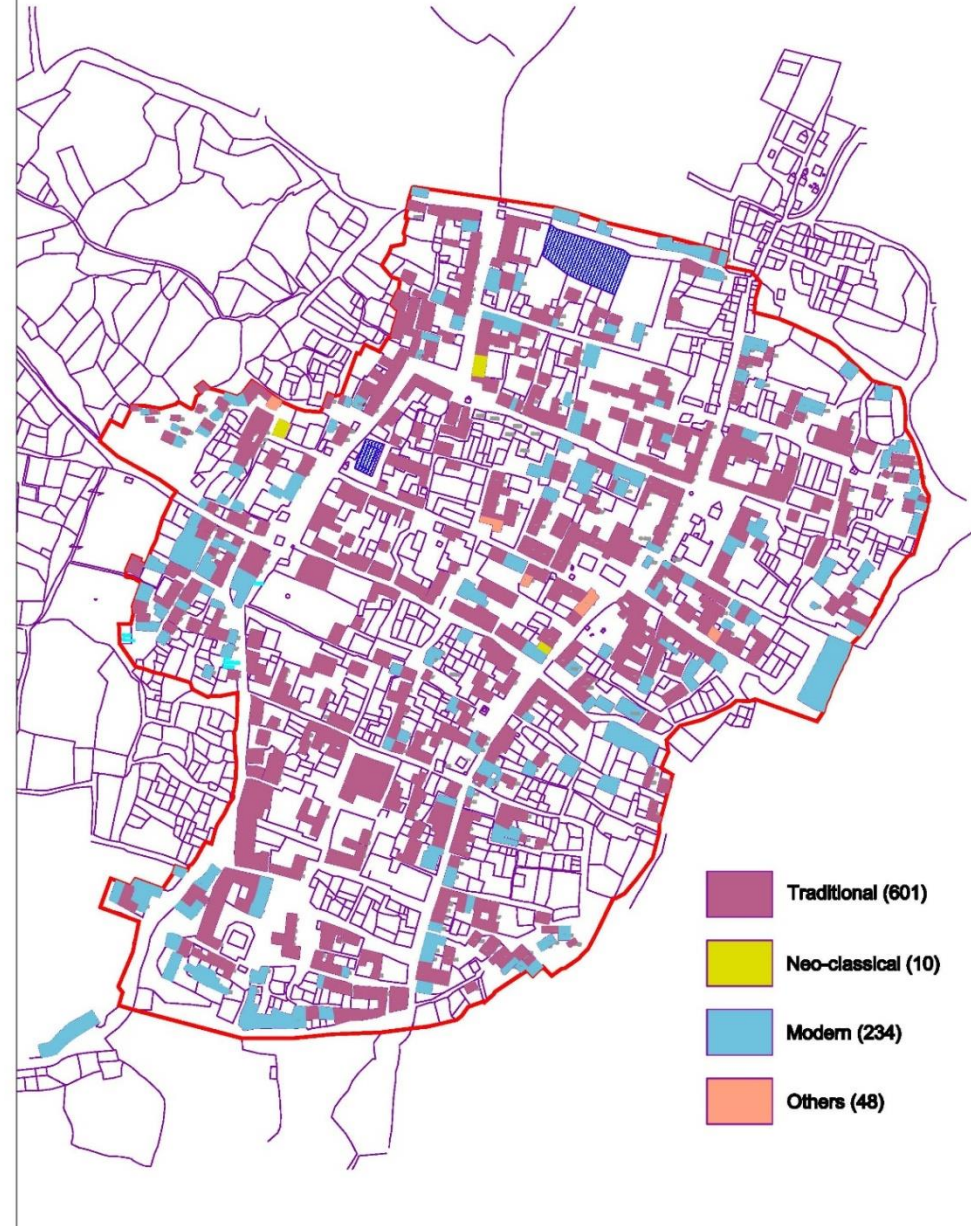
JULY 2015





BUILDING TYPOLOGY MAP OF SANKHU

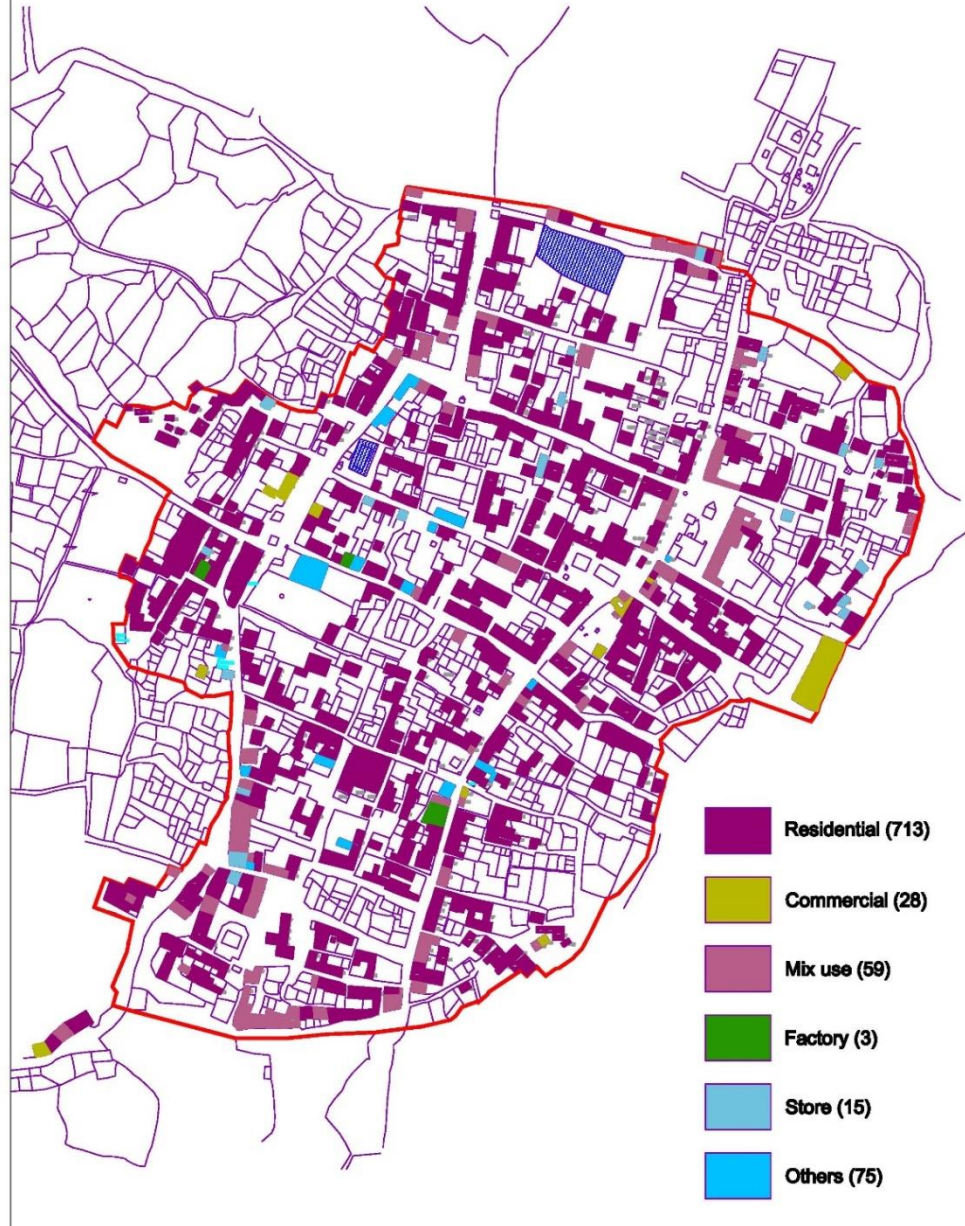
JULY 2015





BUILDING USE MAP OF SANKHU

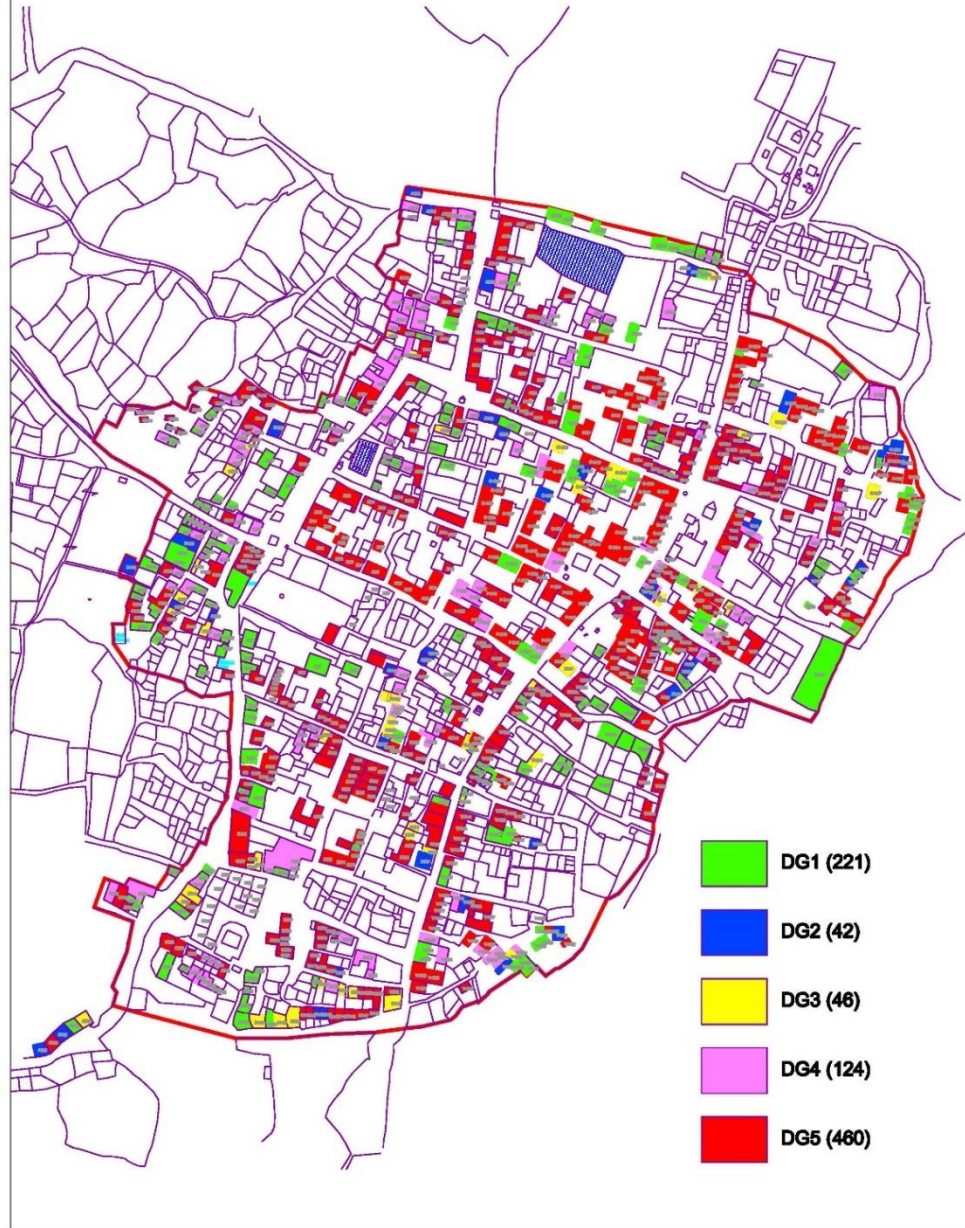
JULY 2015





DAMAGE GRADE MAP OF SANKHU

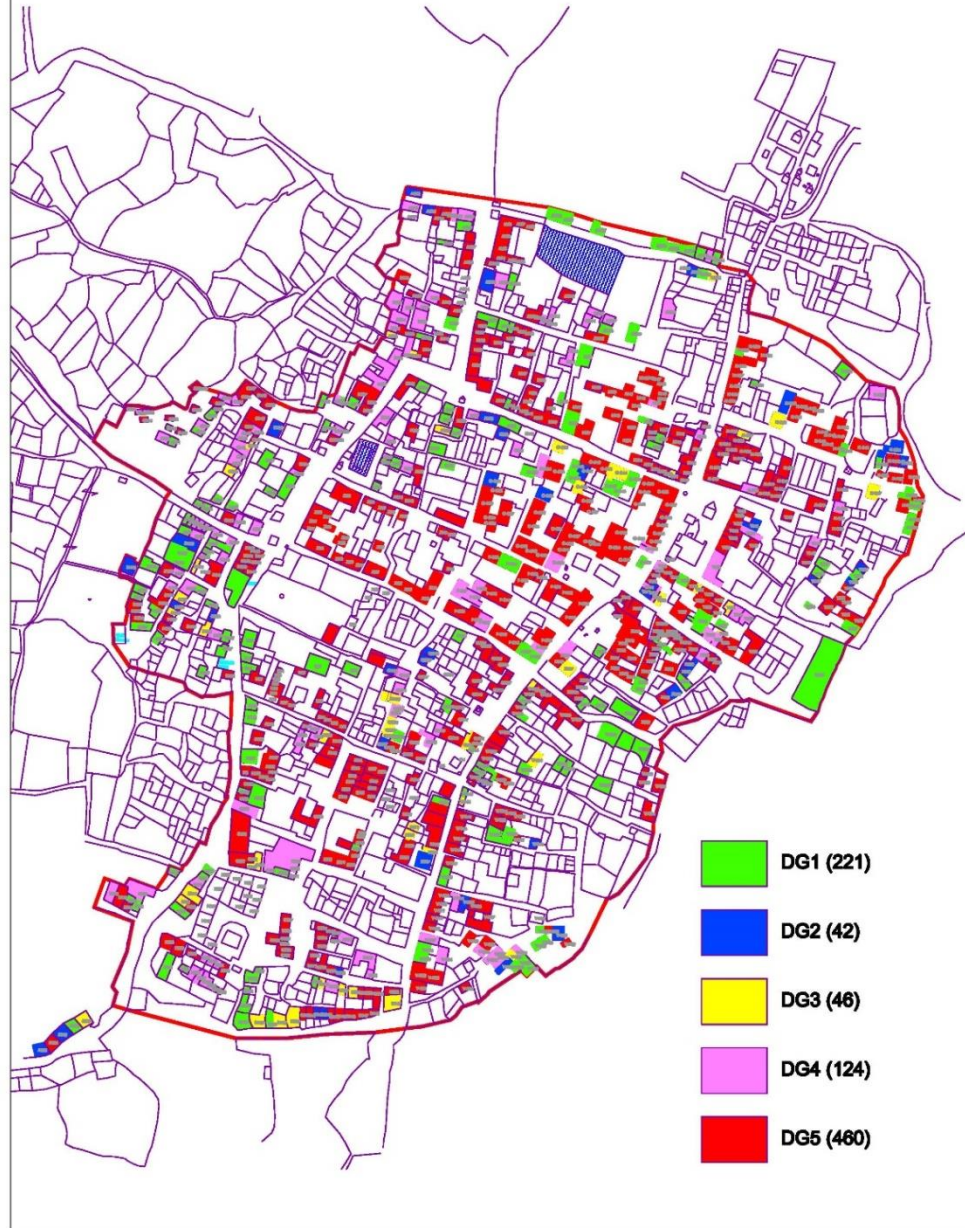
JULY 2015





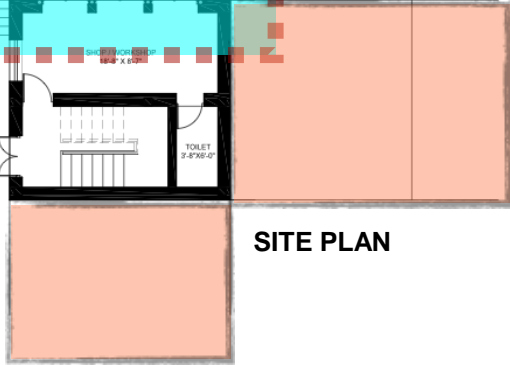
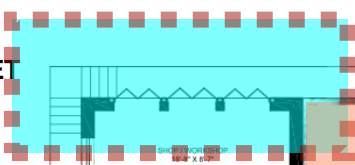
DAMAGE GRADE MAP OF SANKHU

JULY 2015



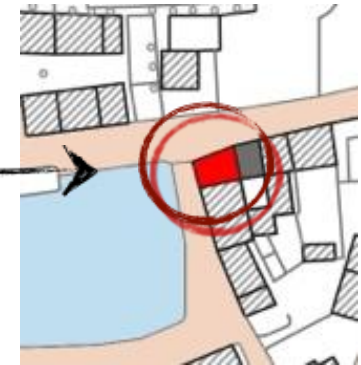
MAXIMUM FRONTAGE FOR SHOP TOWARDS MAIN STREET

MAIN STREET

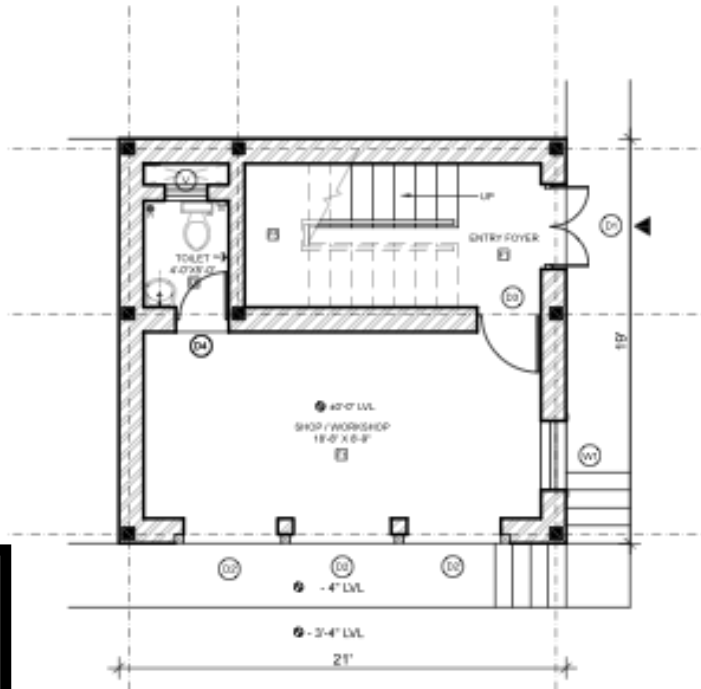


SITE PLAN

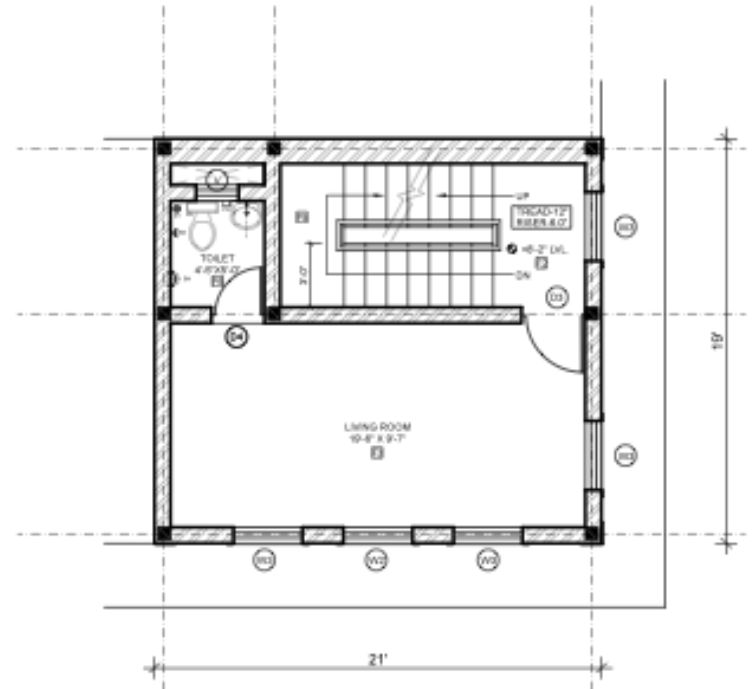
SIDE STREET



LOCATION PLAN



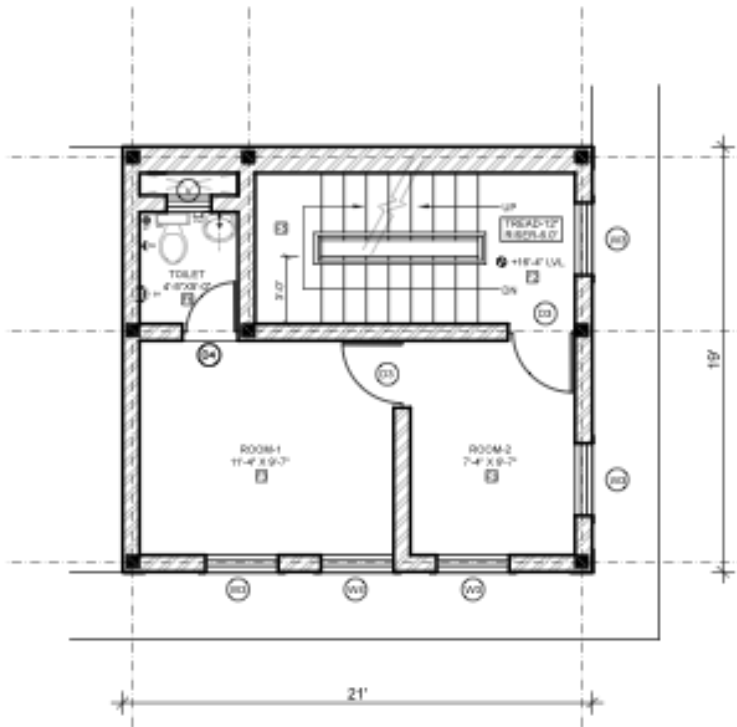
GROUND FLOOR PLAN



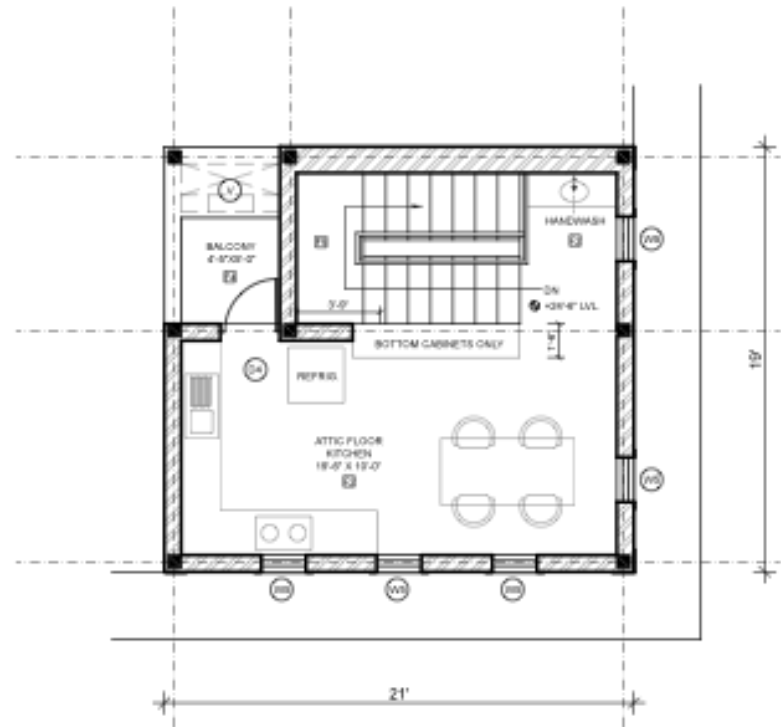
FIRST FLOOR PLAN

FLOOR AREA 399 SFT.





SECOND FLOOR PLAN



ATTIC FLOOR PLAN

FLOOR AREA 399 SFT.

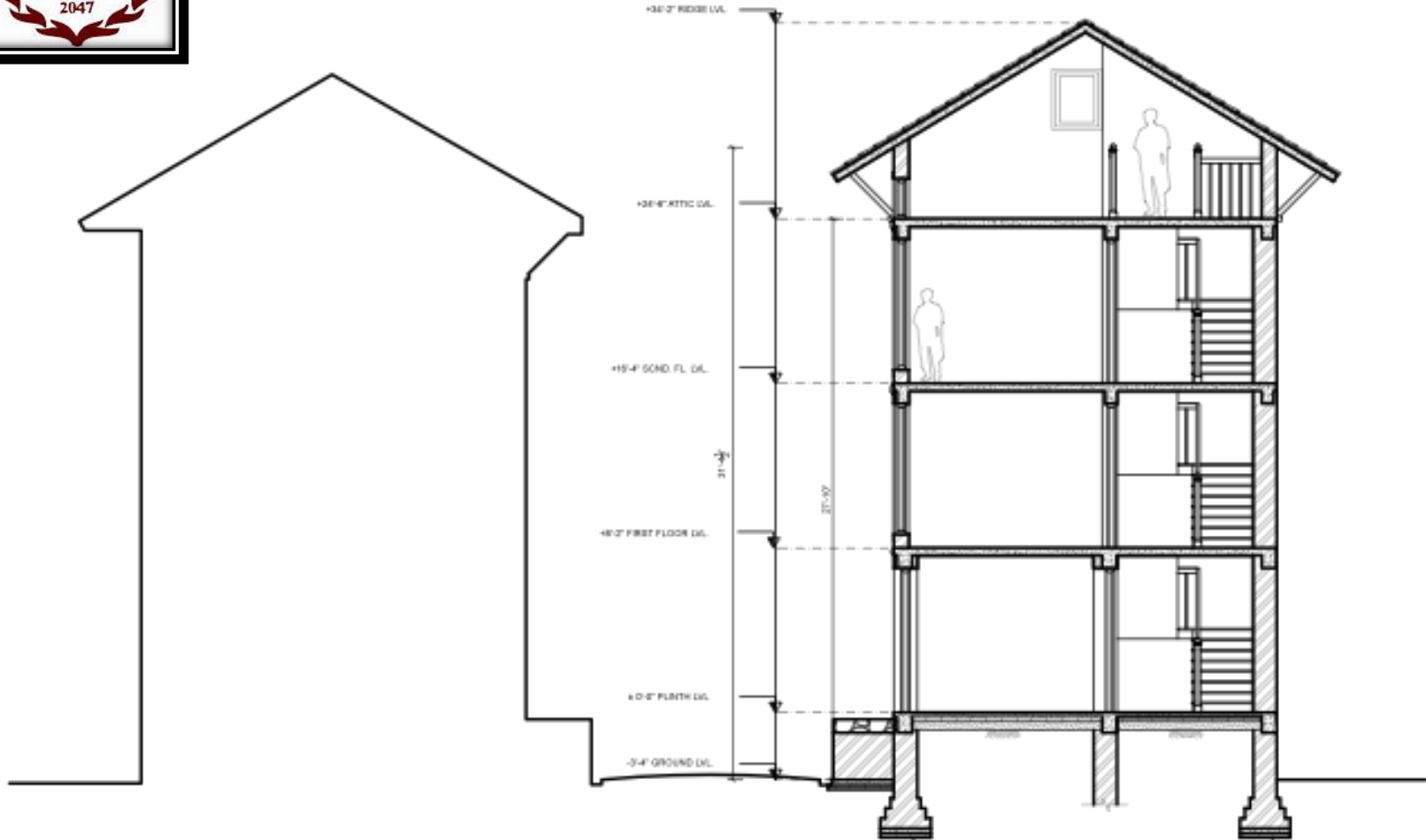


FRONT ELEVATION



SIDE ELEVATION

PROPOSED ELEVATION



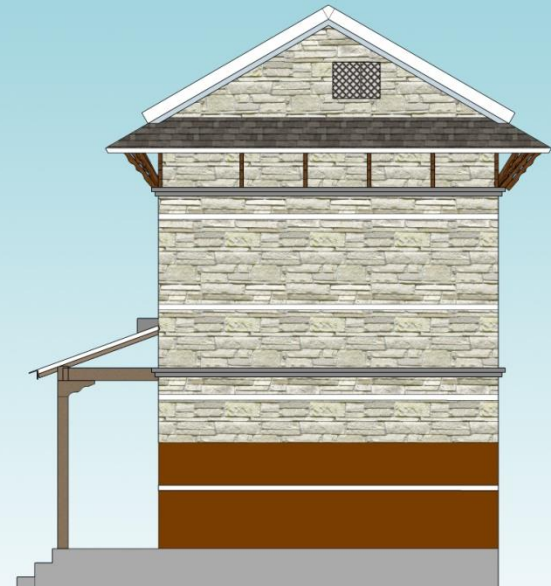
SECTION THROUGH PROPOSED
BUILDING



Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

Typical Residential Building Design

- Rural Areas
 - Stone Masonry

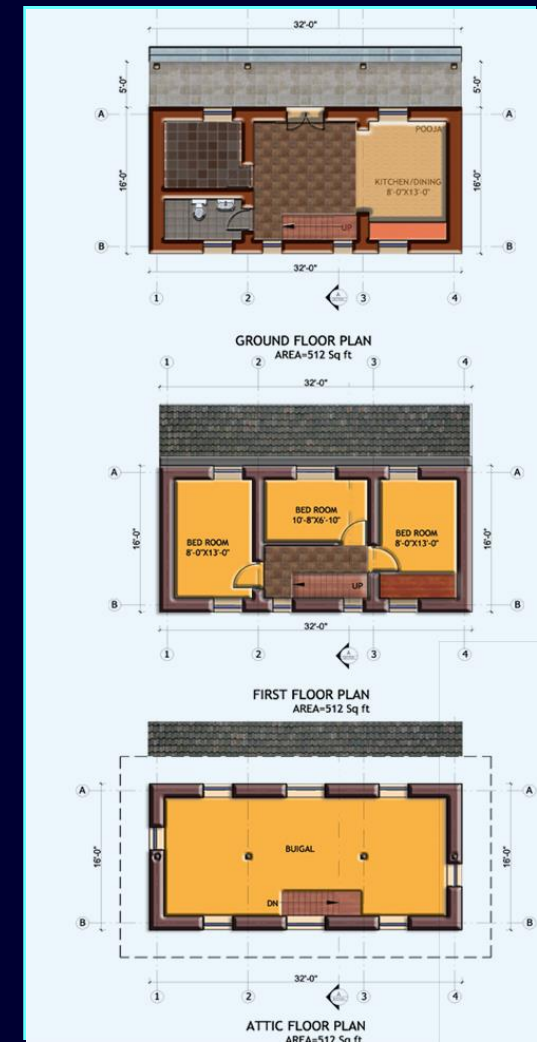
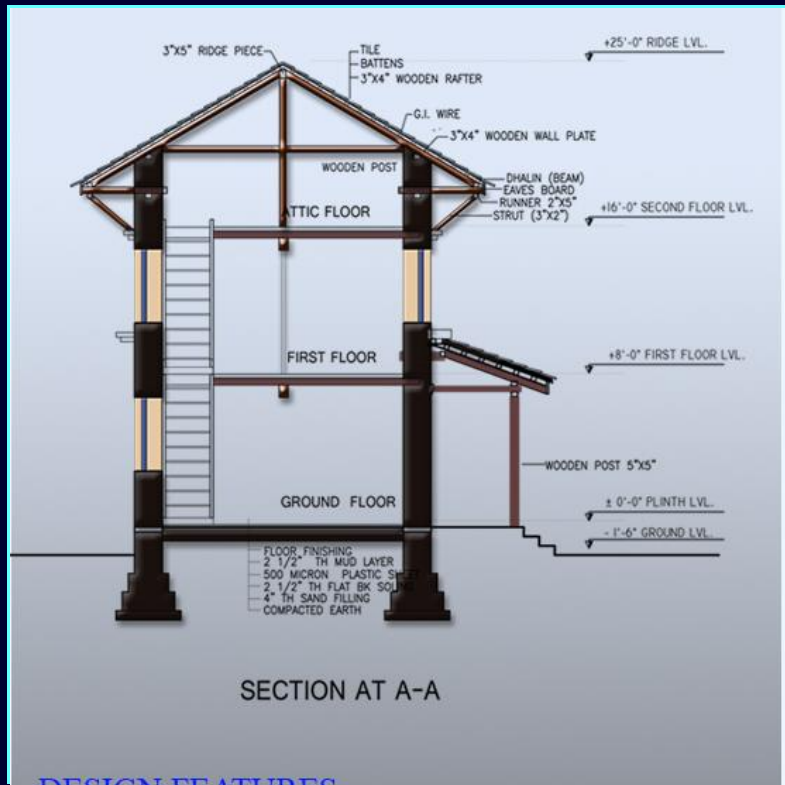




Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

Typical Residential Building Design

- Appropriateness





Society of Nepalese Architects (SONA) Post-disaster Reconstruction of Nepal

Typical Residential Building Design

- The Settlement





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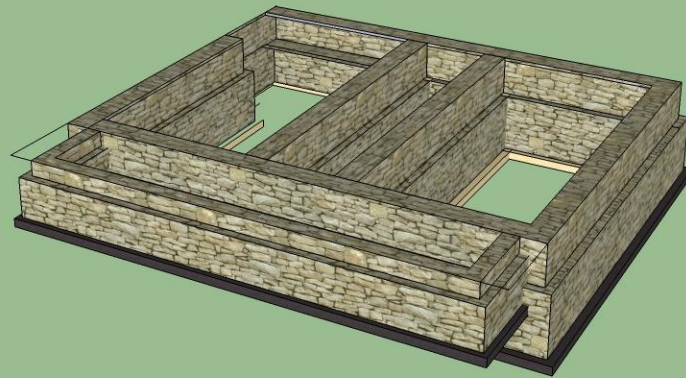


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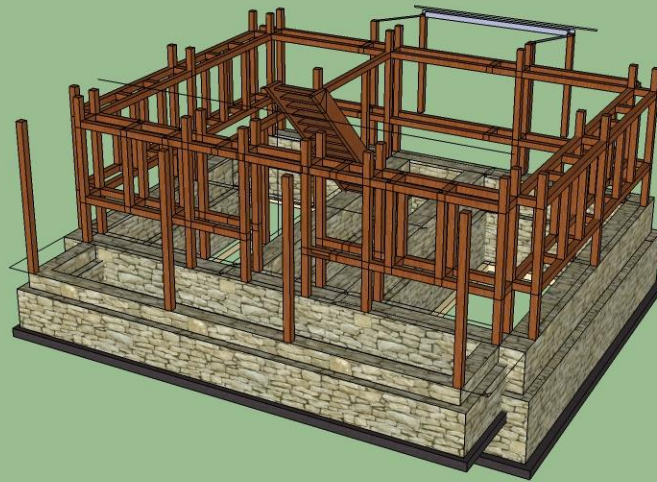


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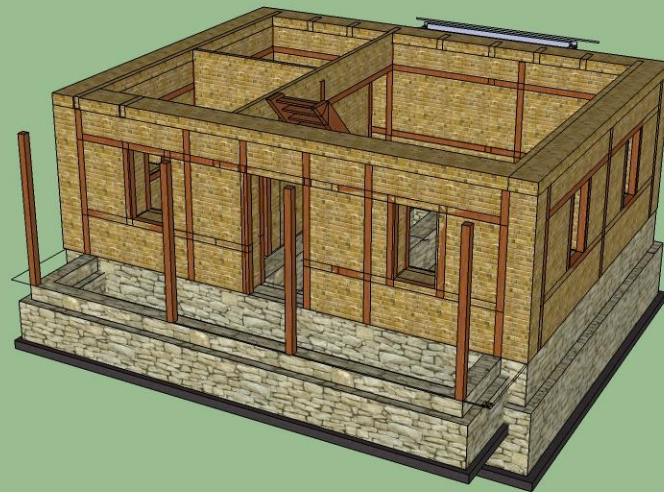


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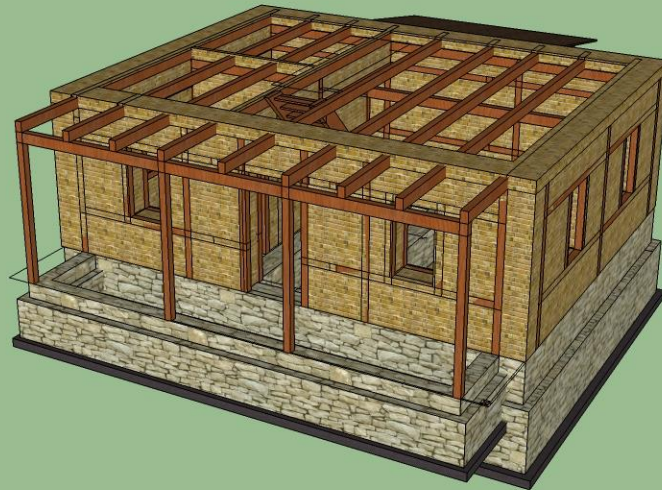


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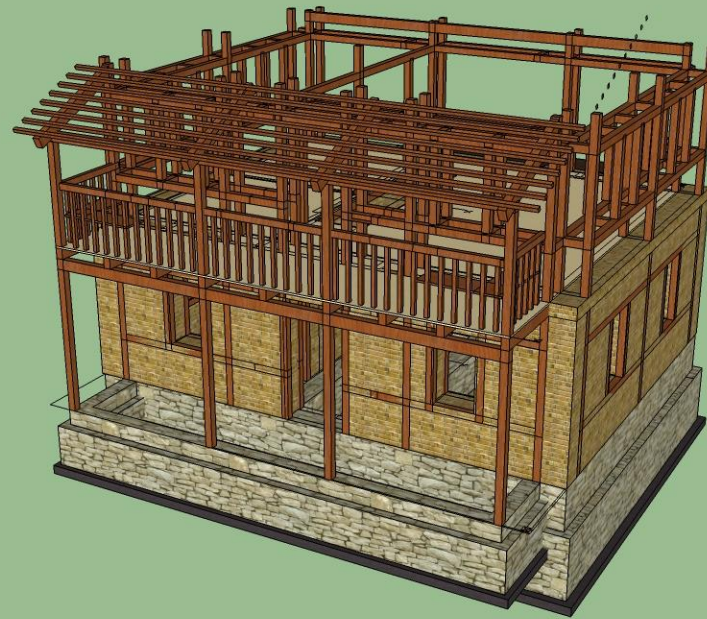


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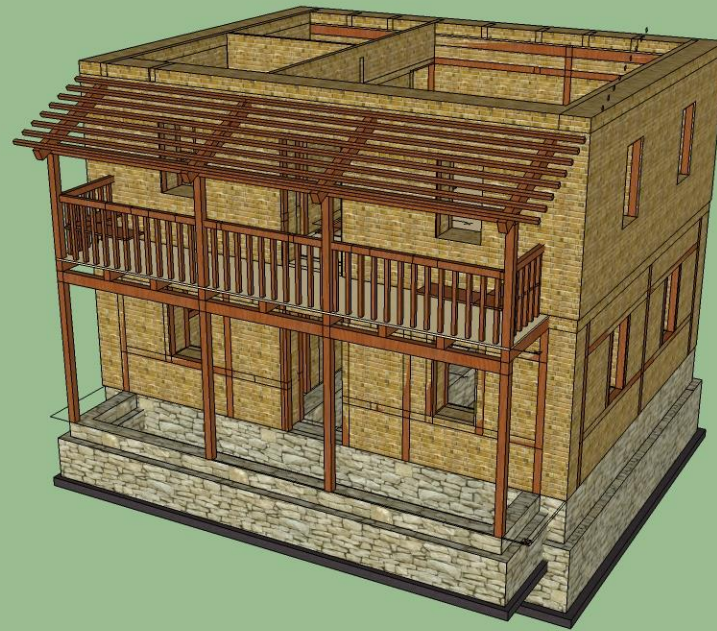


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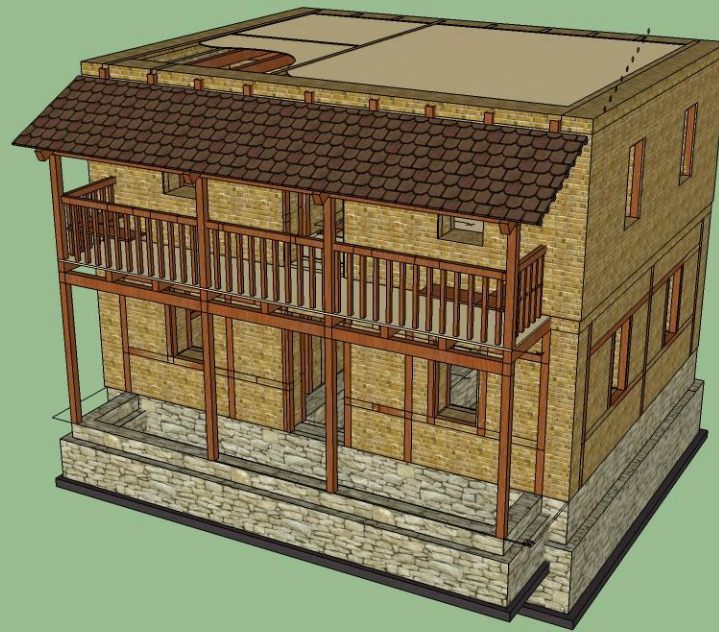


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Society of Nepalese Architects (SONA)

Post-disaster Reconstruction of Nepal

The Response of SONA

- **Forthcoming Activities**
 - **Strengthening the Capacity for Disaster Resilient Communities**
 - **Demonstration Work in each of pilot areas**
 - **Capacity Building Program**
 - I. Training for Architects/ Engineers on Reconstruction**
 - II. Prepare Building Design Guidelines**
 - III. Assisting in the Revision of Building Code & Municipal By-laws**
 - IV. Technical Assistance**



Society of Nepalese Architects (SONA)

Post-disaster Reconstruction of Nepal

SAARCH Conference 2016

- **Freeze the date for the conference**
- **Tentatively re-scheduled for the month February 2016**
- **Conference Theme / Finalized and Circulated**
- **THEME: 'Resilient Architecture: *Responding to Disasters through the Course of Time*'**
 - I. **Sub-theme: Resilience against Calamities**
 - II. **Sub-theme: Resilience against Time**
 - III. **Sub-theme: Resilience against Environmental Changes**
- **Call for Papers**



Thank you

